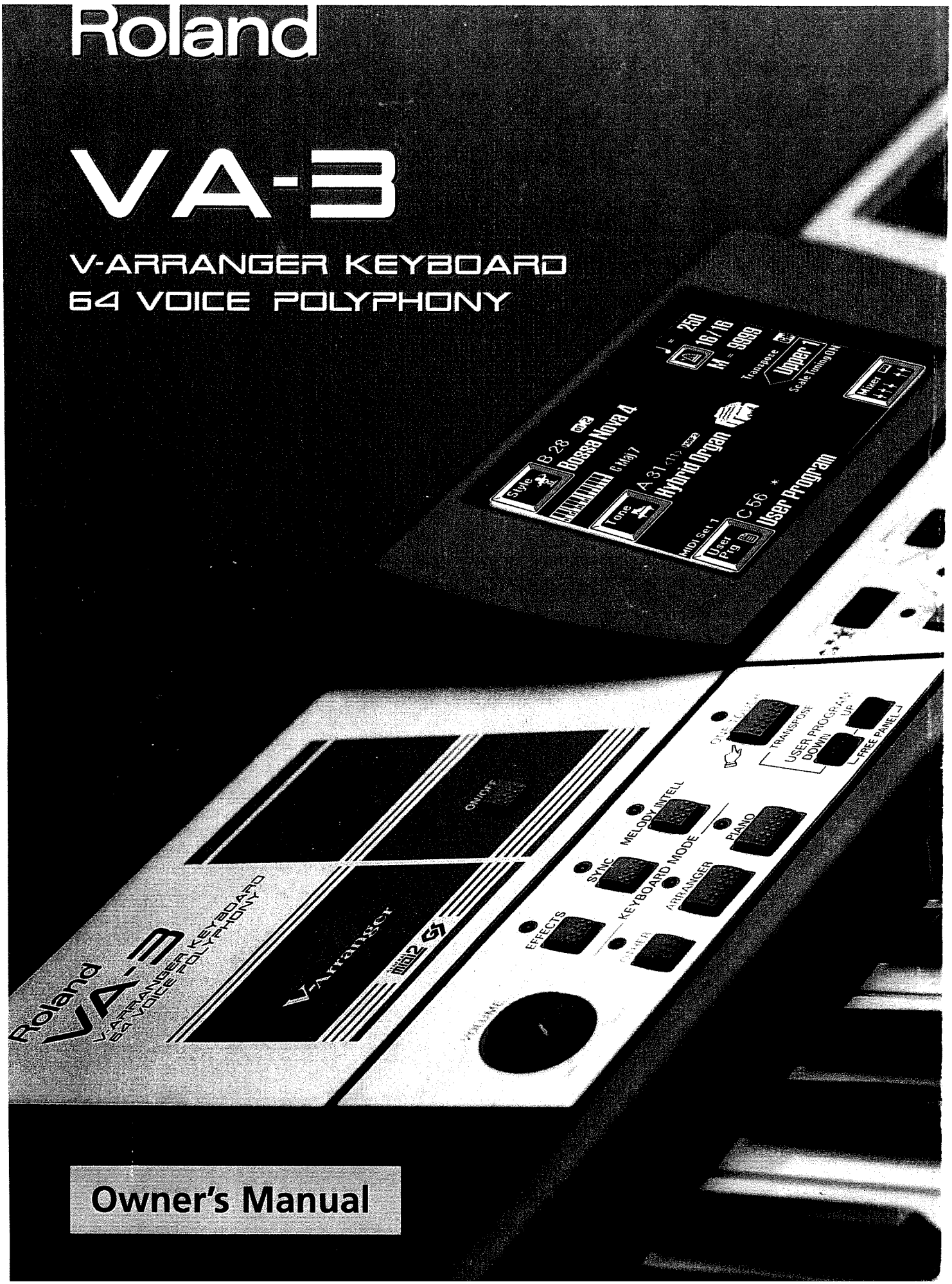
Roland

VA-3

V-ARRANGER KEYBOARD
64 VOICE POLYPHONY



Owner's Manual

For E.C. Countries

This product complies with EC directives
- LOW VOLTAGE 73/23
- EMC 89/336"

Dieses instrument entspricht folgenden EG-Verordnungen:
- NIEDRIGE SPANNUNG 73/23
- EMC 89/336"

Cet instrument est conforme aux directives CE suivantes:
- BASSE TENSION 73/23
- EMC 89/336"

CE

Questo prodotto é conforme alle seguenti direttive CEE
- BASSA TENSIONE 73/23
- EMC 89/336"

Dit instrument beantwoordt aan de volgende EG richtlijnen:
- LAGE SPANNING 73/23
- EMC 89/336"

Este producto cumple con las siguientes directrices de la CE
- BAJO VOLTAJE 73/23
- EMC 89/336"

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

CLASS B **NOTICE**

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

CLASS B **AVIS**

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Réglement des signaux parasites par le ministère canadien des Communications.

Roland

V-Arranger

VA-3

V-ARRANGER KEYBOARD
64-VOICE POLYPHONY

Owner's Manual

Thank you, and congratulations on your choice of the Roland VA-3 V-Arranger Keyboard.

The VA-3 is part of a new generation of arranger keyboards with a host of novelties. Brandnew and strikingly realistic sounds and Drum Sets, all-new Music Styles, an animated touch screen, and a sober, intuitive user interface are just the most exciting new features.

To get the most out of the VA-3 and to ensure many years of trouble-free service, we urge you to read through this Owner's Manual thoroughly.

- To avoid confusion, let's agree to use the word "button" for all keys on the front panel, and only use "key" when referring to the VA-3's keyboard. Also, in order to avoid mixups between the "real" buttons on the front panel and the "software buttons" on the touch screen, we shall use the word "field" for the on-screen buttons.
- The contents of the pictures illustrating the screen displays in this manual can be slightly different from those you'll actually see while using your instrument. Therefore, they are to be considered as merely indicative references.

Before using this instrument, carefully read the sections entitled, "Using the unit safely", and "Important notes". These sections provide important information concerning the proper operation of the VA-3. Be sure to keep this manual in a safe place for future reference.

All other trademarks in this manual are the property of the respective companies.

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △ symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
⃠	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Before using this instrument, make sure to read the instructions below, and the Owner's Manual.
- Do not open (or modify in any way) the instrument, and avoid damaging the supplied adapter.
- Do not attempt to repair the instrument, or replace parts within it. Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.
- Make sure the line voltage at the installation matches the input voltage specified on the name plate.
- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard.
- This instrument may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the instrument and consult an audiologist.

⚠WARNING

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the instrument.
- Immediately turn the power off, remove the adapter from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The power cord has been damaged; or
  - Objects have fallen into, or liquid has been spilled onto the instrument; or
  - The instrument has been exposed to rain (or otherwise has become wet); or
  - The instrument does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.
- Protect the instrument from strong impact. Do not drop it!
- Do not force the instrument to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.
- Before using the instrument in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

⚠ CAUTION

- The instrument and the power cord should be located so their position does not interfere with their proper ventilation.

- Always grasp only the plug or the body of the power cord when plugging into, or unplugging from, an outlet or this instrument.

- Whenever the instrument is to remain unused for an extended period of time, disconnect the power cord.

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, nor place heavy objects on the instrument.

- Never handle the power cord with wet hands when plugging into, or unplugging from, an outlet or this unit.

⚠ CAUTION

- Before cleaning the unit, turn off the power and unplug the power cord from the outlet.

- Whenever you suspect the possibility of lightning in your area, disconnect the power cord from the outlet.

Features

D-Beam Controller

The VA-3 boasts the acclaimed D-Beam Controller* for intuitive Tone and Arranger control via movements over an invisible beam of infrared light. And, of course, the BENDER/MODULATION lever is there, too.

New sound source

The VA-3 comes with a 64-voice polyphonic sound source with 3,641 instrument sounds and 116 Drum Sets that cover everything from incredibly realistic acoustic instruments to cooking Techno sounds. Never before has an electronic instrument produced such true-to-life instrument and drum sounds, including subtle tonal changes and all the "noises" associated with acoustic instruments (scraping for guitar sounds, resonance for drum sounds, etc.).

Effects galore

In addition to the indispensable digital Chorus and Reverb, the VA-3 also features a multi-effector with 47 effects and combinations (called "algorithms").

Customizable even without using the User Programs

The VA-3 is the first Roland instrument that allows you to select your favorite sounds using five convenient SUPER TONES buttons on the front panel. The preset assignments for these buttons can be changed.

Furthermore, the One Touch Program functionality already available on previous models has been expanded to include four memories per Music Style – including the Disk Link Styles – and the possibility to assign your favorite settings to these memories.

Of course, the VA-3 also sports 128 User Programs where you can save your own panel registrations.

128 User Programs

Apart from allowing you to customize existing Styles quickly, the User Programs are also used to save all panel settings. If you need more than 128 memories, you can save the contents of the User Programs to floppy disk and load them whenever necessary.

If you do not wish to program Styles, or if you are too busy to delve into this matter, you can personalize existing Styles by modifying the instrument assignments to any given Arranger part (bass, drums, chord backing, etc.), and then save these changes to one of the 128 User Programs in RAM.

64 High-definition Music Styles, plus 64 Music Styles on floppy disk

The VA-3 comes loaded with an impressive 64 high-definition Music Styles covering every musical genre you need. Each Style comprises four versions (Basic, Advanced, Original, and Variation), two Intros, two Endings, four orchestrations, and various other elements that actually add up to far more than 128 accompaniments.

64 "Disk Link" memories allow you to assign Music Styles on floppy disk to the front-panel buttons for quick recall.

And if this impressive offer still isn't enough, the supplied floppy disk provides 64 additional Music Styles to choose from.

Of course, the VA-3 also allows you to program your own Music Styles (called *User Styles*). They even provide a nifty function that allows you to convert carefully selected sections of a Standard MIDI File into a Style.

Virtual Band for interactive registration

The Virtual Band button provides access to a step-by-step help function that asks you a few questions and then configures the VA-3 according to your answers. Registering an arranger keyboard has never been easier.

16-track sequencer

The VA-3 comes with a 16-track sequencer with a host of edit functions.

Three trigger modes

The Music Styles of your VA-3 can be triggered in one of three modes: Standard, Intelligent or Piano Style. In Standard mode, the chord recognition of the Arranger works the way you would expect an intelligent keyboard to operate.

In *Intelligent* mode, you do not have to play complete chords in order to hear them. Pressing one, two, or three keys will produce even the most complex chords you can think of.

The *Piano Style* mode, finally, is provided for those with a "pianistic" background even though it can be used for playing any sound, i.e. not just piano.

Intuitive user interface

The large touch screen keeps you posted about the status of the VA-3 and allows you to almost all functions by touching the on-screen fields.

Lyrics display The VA-3 displays Standard MIDI File (SMF) lyrics and can also transmit Lyrics data to an optional LVC-1 Lyrics Converter. This should help you remember the words of every song you wish to sing.

Unpacking your VA-3

Your VA-3 comes with the following items. Please check the contents of the cardboard box and report any problems to the Roland dealer you purchased the VA-3 from.

- This Owner's Manual.
- Two floppy disks. The *first floppy disk* contains Music Styles (Disk Link memories B11~B48), the Factory User Programs, the Tone Demos, and the Style Demos, and the Factory MIDI Sets; the *second* also contains Music Styles (Disk Link memories B51~B88) plus the same User Programs, Tone Demos, etc.
- A metal music stand.
- An adapter.

Useful options

EV-5 or BOSS FV-300L expression pedal or a DP-2, DP-6, or BOSS FS-5U

An optional EV-5 or BOSS FV-300L expression pedal can be used to perform various tasks, such as master volume changes. Alternatively, you can connect a DP-2, DP-6, or BOSS FS-5U footswitch and use it as Hold/Sustain pedal.

MSA, MSD, and MSE series Style Disks

The MSA, MSD, and MSE series Music Style disks contain new Styles. The MSE Music Style series was specially developed for the VA-3, VA-7, VA-5, G-1000, EM-2000, G-800, G-600, E-96, and RA-800. MSE series Styles take advantage of the VA-3's new sounds. You you can also use MSA and MSD series Style disks on your VA-3 (upward compatibility).

RH series headphones

A pair of Roland RH series headphones (RH-25 or RH-50) can be connected to the PHONES sockets (2 sockets are provided).

Compatibility note

Though Music Styles for previous Roland arranger instruments (E, EM, and G series) can be used with the VA-3, Performance Memories (G-1000) or User Programs (EM-2000) are not compatible.

General MIDI 2

The upwardly compatible General MIDI 2 (GENERAL MIDI2) recommendations pick up where the original General MIDI left off, offering enhanced expressive capabilities, and even greater compatibility. Issues that were not covered by the original General MIDI recommendations, such as how sounds are to be edited, and how effects should be handled, have now been precisely defined. Moreover, the available sounds have been expanded. General MIDI 2-compliant sound generators are capable of reliably playing back music files that carry either the General MIDI or General MIDI 2 logo. In some cases, the conventional form of General MIDI, which does not include the new enhancements, is referred to as "General MIDI 1" as a way of distinguishing it from General MIDI 2.

Note: Only the VA-3's Song Composer is fully GM2 compatible.

Important notes

In addition to the items listed under "USING THE UNIT SAFELY" (see page 4), please read and observe the following:

Power supply

- Do not use this instrument on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting the VA-3 to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.
- Be sure to only use the supplied adapter. Replace it with the same model in case it is damaged or fails to operate.

Placement

- Using the VA-3 near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this instrument; or move it farther away from the source of interference.
- This instrument may interfere with radio and television reception. Do not use it in the vicinity of such receivers.
- Do not expose the VA-3 to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the instrument.

Maintenance

- For everyday cleaning wipe the VA-3 with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a mild, non-abrasive detergent. Afterwards, be sure to wipe the instrument thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and data

- Please be aware that all data contained in the instrument's memory may be lost when it is sent for repairs. Important data should always be saved to floppy disk. In certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data. Roland assumes no liability concerning such loss of data.

Additional precautions

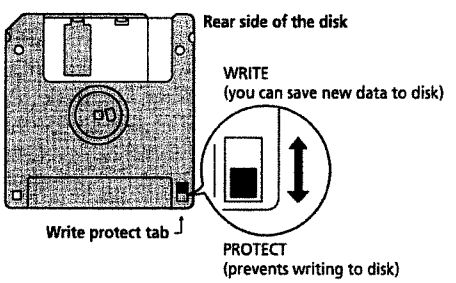
- Please be aware that the memory contents can be irretrievably lost as a result of a malfunction, or the improper operation of the instrument. To protect yourself against the risk of losing important data, we recommend that you periodically save a backup copy of important data in the instrument's memory.
- Use a reasonable amount of care when using the instrument's buttons, other controls, and jacks/connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- When connecting/disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the instrument during normal operation. This is perfectly normal.
- To avoid disturbing your neighbors, try to keep the volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially late at night).
- When you need to transport the instrument, package it in the box (including padding) that it came in. Otherwise, you will need to use equivalent packaging materials, or a flightcase.

About the touch screen

- Wipe off stains on the touch screen using ethanol, but do not allow the ethanol to soak into the joint of the upper fume and the bottom glass, for it may otherwise cause peeling or malfunction. Do not use organic solvents or detergents other than ethyl alcohol (ethanol).

Handling floppy disks

- Floppy disks contain a plastic disk with a thin magnetic coating. Microscopic precision is required to enable storage of large amounts of data on such a small surface area. To preserve their integrity, please observe the following when handling floppy disks:
- Never touch the magnetic medium inside the disk.
- Do not use or store floppy disks in dirty or dusty areas.
- Do not subject floppy disks to temperature extremes (e.g., direct sunlight in an enclosed vehicle). Recommended temperature range: 10 to 50° C (50 to 122° F).
- Do not expose floppy disks to strong magnetic fields, such as those generated by loudspeakers.
- Floppy disks have a "write protect" tab which can protect the disk from accidental erasure. It is recommended that the tab be kept in the PROTECT position, and moved to the WRITE position only when you wish to write new data onto the disk.



- Disks containing important performance data for this instrument should always be locked (have their write protect tab slid to the PROTECT position) before you insert them into the drive of another instrument.
- The identification label should be firmly affixed to the disk. If the label comes loose while the disk is in the drive, it may be difficult to remove the disk.
- Put the disk back into its case for storage.

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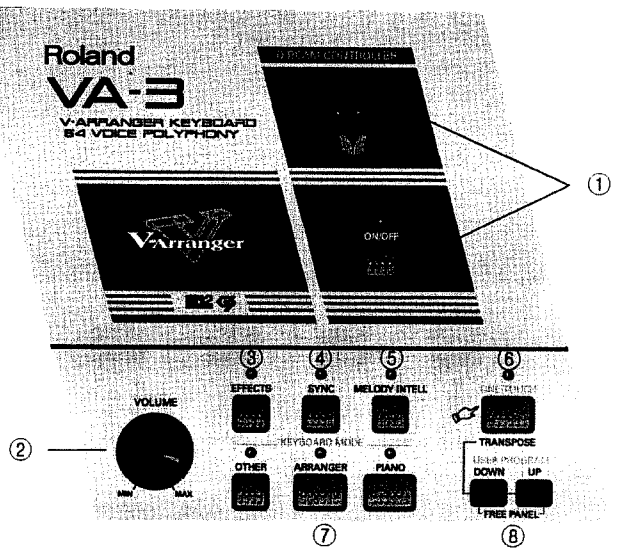
1. Panel descriptions

1.1 Front panel



① D BEAM CONTROLLER section

Use the [ON/OFF] button to switch the D Beam Controller on (the button lights) or off (button dark). By holding down the [ON/OFF] button for more than a second, you call up the display page where you can select the parameter to be controlled via the D Beam. (These parameters can also be selected by pressing the [FUNCTION MENU] button.)

Note: The D Beam technology has been licensed from Interactive Light, Inc.

Move your hand or body over the two "eyes" to control the volume, filter setting, modulation depth, etc., of the currently active Keyboard parts.

② VOLUME knob

Use this knob to set the VA-3's global output volume (all sections) both in the speakers and the headphones you may have connected. The setting of this knob also determines the volume of the signals sent to the STEREO OUT connectors.

③ EFFECTS button

Press this button to switch the Insert effect (M-FX) on or off. Hold it down to call up the display page where you can set all effects parameters.

④ SYNC button

Press this button to activate one (or two) SYNC functions. By default, SYNC START is selected. Hold this button down to call up a display page where you can select another SYNC option.

⑤ MELODY INTELL button

Press this button (indicator lights) to add an automatic counter-melody (second and third voice) to your solos or melodies. Press and hold this button to call up a page where you can select the harmony type.

⑥ ONE TOUCH button

This button has two functions: when pressed in isolation, it takes you to the display page where you can select a so-called One-Touch memory for the currently selected Music Style (see page 27).

By holding it down while pressing the USER PROGRAM [DOWN] or [UP] button, you transpose the VA-3 in semitone steps.

⑦ KEYBOARD MODE section

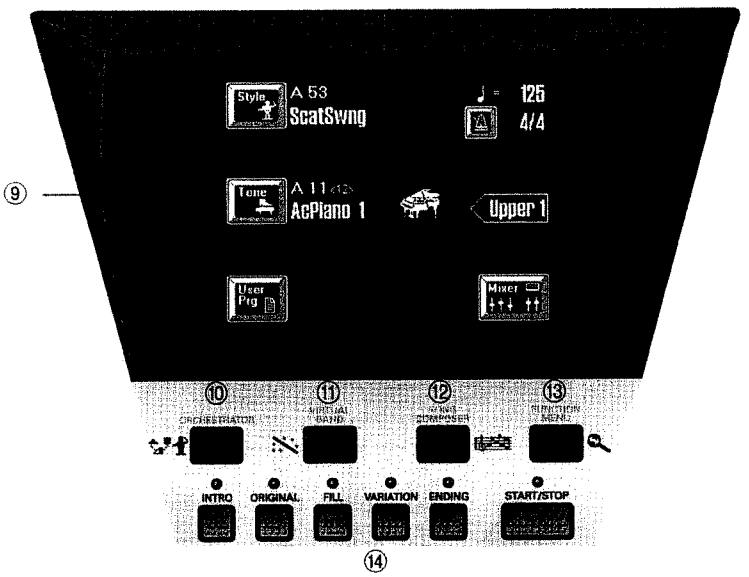
These three buttons are used to specify whether the keyboard will be split or whether one sound can be played using the entire keyboard. Press the [OTHER] button if you want to use other configurations than "Arranger left/melody right" (ARRANGER) or "one sound for the entire keyboard" (PIANO).

[OTHER] also provides access to other keyboard-related functions, such as transposition, the Octave function, and parameters for fine-tuning Arranger response.

⑧ USER PROGRAM [DOWN]/[UP] buttons

These buttons allow you to select the previous (DOWN) or next (UP) User Program. User Programs are registration memories.

Press either or both of them while holding down the [ONE TOUCH] button (see page 13) to transpose the VA-3 in semitone steps.



⑨ Display
This is a so-called touch screen that allows you to select functions, parameter values, etc., simply by touching the corresponding fields. Please note that the bulk of the VA-3's functions can only be selected via the display.

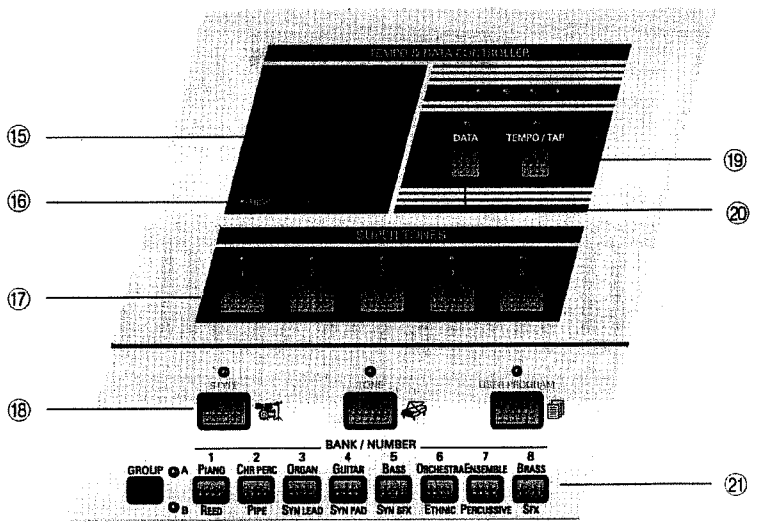
⑩ ORCHESTRATOR button
This button allows you to call up a display page where you can select another orchestration for the currently selected Music Style and/or take advantage of the Style Morphing feature. See page 50 for details.

⑪ VIRTUAL BAND button
Press this button if you wish to listen to the VA-3's demo songs, or take advantage of a very powerful feature that allows you to configure the VA-3 simply by answering a few questions. This is called "Easy Routing" and is available in 6 languages.

⑫ SONG COMPOSER button
Press this button if you want to play back, or record and edit your music with the VA-3's digital recording function called "Song Composer".

⑬ FUNCTION MENU button
This button allows you to access the VA-3's function menu where you can find all functions you probably only need sporadically.
Note: The FUNCTION MENU page also contains a **PANEL INFO** *field. Press this field to get at-a-glance information about the special functions assigned to the front-panel buttons.*

⑭ Arranger control buttons
Use these buttons to select the desired Music Style pattern, and to start/stop Music Style playback.



⑮ TEMPO/DATA dial

The function of this dial depends on the status of the [TEMPO/TAP] and [DATA] buttons. If the [TEMPO/TAP] button lights, the dial can be used to set the desired tempo. If the [DATA] button lights, the dial can be used for setting the value of the currently selected parameter.

⑯ DISK indicator

This indicator lights when the VA-3 reads or writes data from/to disk.

⑰ SUPER TONES buttons

Use these buttons to select one of the five so-called "Super Tones". These are sounds for the Upper 1 part you may want to use more often than others. There are two sets of five that can both be edited: the FACTORY and the USER group. You can thus prepare 10 favorite Tones. See page 37 for details.

⑱ STYLE, TONE and USER PROGRAM buttons

These buttons allow you to specify the function of number buttons (1~8). Press [STYLE] if you wish to select a Music Style, [TONE] for selecting sounds, or [USER PROGRAM] to recall settings you wrote to a User Program.

⑲ DATA button

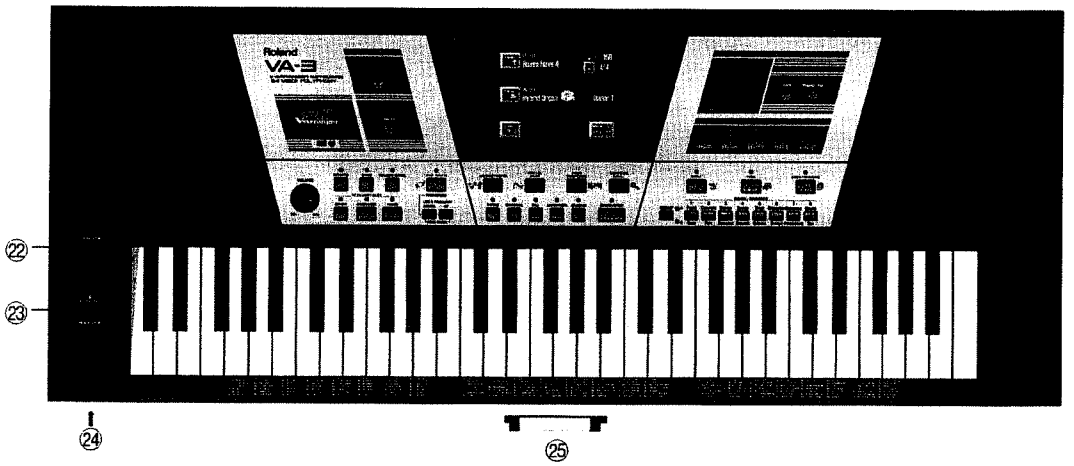
When this button lights (which is sometimes the case every time you select an adjustable parameter), you can press it to call up an on-screen 10-key pad. Use this pad for entering the desired parameter value.

⑳ TEMPO/TAP button

If the [DATA] button lights, press this button (indicator lights) whenever you need to change the Style or Song tempo. Then use the [TEMPO/DATA] dial to set the desired value. Press and hold this button to have access to various tempo options. You can also press it rhythmically to enter the tempo like musicians do: by tapping it.

㉑ GROUP, number buttons

This section allows you to select the desired Music Style, Tone, or User Program memory.



㉒ POWER switch

Press this button to switch the VA-3 on and off.

㉓ BENDER/MODULATION lever

When pushed towards the back of the VA-3, this lever will add modulation to the notes of the Keyboard parts you are playing at that time. Move it to the left or right to temporarily lower or increase the pitch of the Keyboard part notes you are playing.

㉔ PHONES sockets

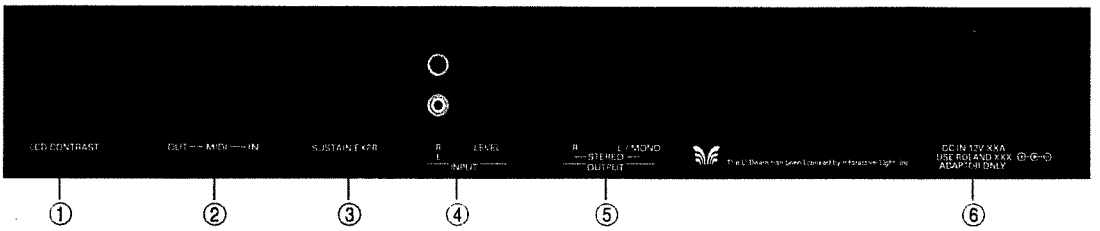
The VA-3 comes with two headphone sockets. Be sure to connect high-quality headphones to these sockets (Roland RH-25 or RH-50, optional). The speakers are switched off when you connect a phone jack to either socket.

㉕ Floppy disk drive

This is where you can insert 2DD or 2HD disks for external storage of your Music Styles, User Programs, Composer Songs, and MIDI Sets. Press the eject button to remove the disk from the drive.

Note: Do not remove the floppy disk while the DISK indicator on the front panel lights or flashes. Doing so may indeed damage both the floppy disk and the drive's head.

1.2 Rear panel



① LCD CONTRAST knob

Use this knob to set the contrast when you are having problems reading what is written on the display.

Note: The LCD may take some time to warm up. That is why you may have to change the contrast several times after powering on.

② MIDI connectors

These connectors allow you to use your VA-3 along with other MIDI instruments.

③ SUSTAIN/EXPRE socket

Connect an optional DP-2, DP-6, or BOSS FS-5U footswitch or an EV-5/FV-300L expression pedal to this socket to sustain the notes you play, or to control other sound parameters.

④ INPUT sockets

This is where you can connect an external signal source (synthesizer, module, CD player etc.) that you wish to amplify via the VA-3's speakers. If the signal source is mono, connect its output to the L/MONO socket. Use the [LEVEL] knob to set the input level of the external signal source.

⑤ STEREO OUTPUT R, L/MONO sockets

These sockets allow you to connect the VA-3 to a mixing console, PA system, or audio recorder. We recommend you always use both sockets so as to transmit the VA-3's audio signals in stereo. Connecting jacks to these sockets does not switch off the VA-3's speaker system.

⑥ DC IN 12V

This is where you need to connect the supplied adapter. Be sure to connect it to a suitable wall outlet.

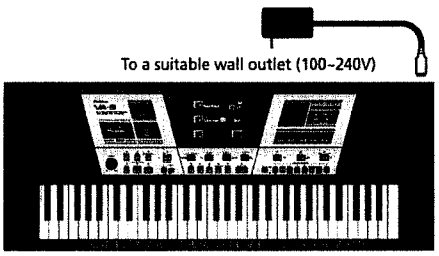
2. Listening to the demo songs

Your VA-3 comes with a number of demonstration songs that give you an accurate impression of what you can do with your V-Arranger Keyboard. Here is how to listen to the demo songs:

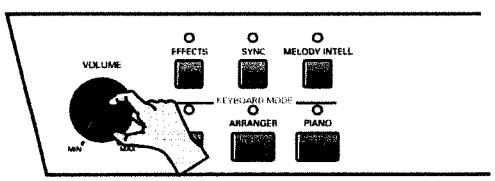
Note: All demosongs © 2000 by Roland Europe in collaboration with Luigi Bruti and Roberto Lanciotti. All rights reserved.

1. Unpack the VA-3 and place it on a stable surface.

2. Connect the supplied adapter to the VA-3's DC 12V IN socket, and the other end to a suitable wall outlet.



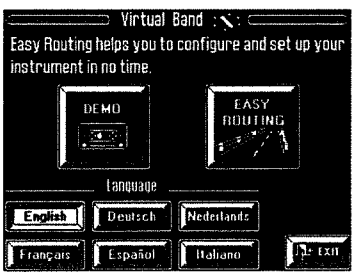
3. Set the [VOLUME] knob to the MIN position.



Set to the MIN position

4. Press the [POWER] switch to the left of the keyboard.

Once the internal circuit tests have been completed, the display looks as follows:



This page will be displayed automatically whenever you leave the VA-3 unattended for more than five minutes.

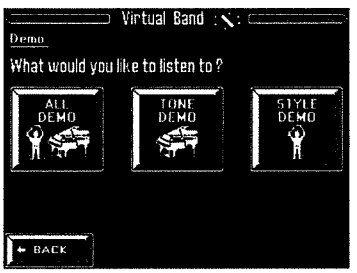
Note: You can prevent the VA-3 from automatically selecting this display page at start-up, or from returning to it at power-on. See page 147 for details.

Note: If you want to select this page at a later stage (after playing the VA-3), press the [VIRTUAL BAND] button.

If you like, you can press a language field. That way, all demo song messages will be displayed in your language (if supported).

Note: Depending on the country where you bought the VA-3, other language options than the above may be available.

5. Press the [DEMO] field. The display now looks as follows:



Note: If you selected another language, the question is displayed in that language. All other functions are the same, however.

6. Slightly increase the setting of the [VOLUME] knob. You may have to adjust it once demo song playback is up and running.

7. Insert a supplied floppy disk into the drive.

The demo songs do not reside in the VA-3's internal memory but on the supplied floppy disk. If you do not insert that disk before proceeding, the following message is displayed:

8. Press a "DEMO" field to select the demo songs you want to listen to:

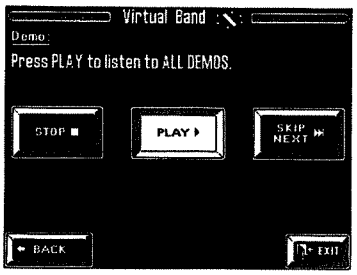
ALL DEMO— The VA-3 plays back all of the following demo songs.

TONE DEMO— The VA-3 plays back the demonstration songs that illustrate the variety and realism of its sounds.

STYLE DEMO— The VA-3 plays back the demo songs that illustrate the quality of its automatic accompaniments (called "Music Styles").

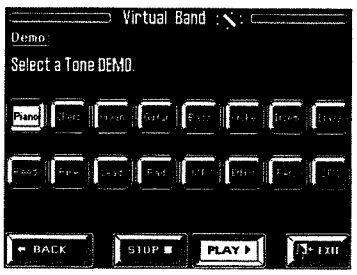
What happens now depends on the selected demo option:

If you selected ALL DEMO



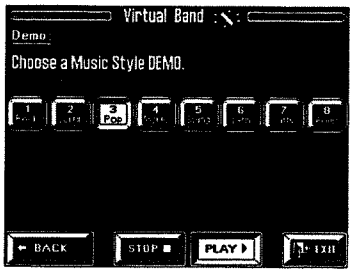
- Playback starts automatically. If you don't want to wait until the end of the current song, press [SKIP NEXT ▶▶]. This takes you to the beginning of the next demo song.
- Press the [STOP ■] field to stop demo song playback.
- You can continue playback from the beginning of the current or next song (after pressing the [SKIP NEXT ▶▶] field) by pressing [PLAY ▶].
- Press the [◀BACK] field to return to the demo song selection page.
- Press [EXIT] to leave the Virtual Band mode and to jump to the Master page (see page 22).

If you selected TONE DEMO:



- Demo playback starts automatically. But you can press a Tone family field ("Piano", "CPerc", etc.) to select another demo song that features the Tones of that family. Playback starts right away.
  The abbreviations on the above display page reflect the names of the BANK buttons on the front panel (right side). Some demo songs feature several Tones.
  Note: You can select another Tone demo while demo playback of the current Tone demo is still running.
- Press the [STOP ■] field to stop demo song playback. Press [PLAY ▶] to start it again.
- Press the [◀BACK] field to return to the demo song selection page.
  Press [EXIT] to leave the Virtual Band mode and to jump to the Master page (see page 22).

If you selected STYLE DEMO



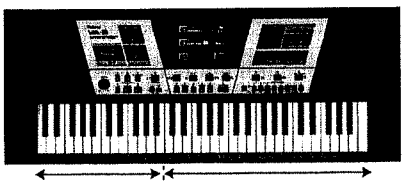
- Demo playback starts automatically. But you can press a Style name field ("Rock", "Cont", etc.) to start the demonstration of another Music Style.
  "Music Styles" are the VA-3 accompaniment patterns. These can be transposed and varied in realtime.
- Press the [STOP ■] field to stop demo song playback. Press [PLAY ▶] to start it again.
- Press the [◀BACK] field to return to the demo song selection page.
- Press [EXIT] to leave the Virtual Band mode and to jump to the Master page (see page 22).

9. Press [◀BACK] to return to the demo selection page, and again to return to the first Virtual Band page.

3. Scratching the surface

3.1 The general idea

Your VA-3 is two instruments in one: one half provides the backing for the melody you play in the other half.



There are two main sections you can use for playing live. (The third section, the Song Composer, can also be used for live applications, but is mainly intended for recording and playing back your music.)

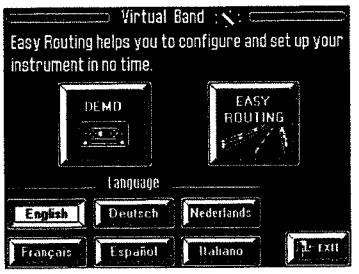
① **Keyboard section:**
This section consists of parts you need to play via the keyboard, hence the name "Keyboard". The VA-3 provides seven Keyboard parts, five of which can be used simultaneously: Upper 1/2, Lower 1 & 2, and Manual Bass (called M.Bass or just MBS). The sixth part, Manual Drums (called M.Drums or MDR), can only be played in isolation, i.e. you cannot combine it with Upper1/2 part, though you can assign it to only the right half of the keyboard and use it along with Lower1/2 (that can be played in the left half). See page 39 for details. The seventh part, "MInt", is what computer buffs would call a "cross-platform part": it belongs to the Keyboard section but it is in part controlled by the Arranger. See "Melody Intelligence" on page 69.

② **Arranger/Style section:**
The Arranger is your backing band. It plays an accompaniment (called *Music Style*) recorded by Roland, third-party suppliers, friends/colleagues, or yourself. In a way, the Arranger works like a drum machine because it uses accompaniment patterns.

Unlike a drum machine, however, you can easily select the desired pattern while you play. So you do not need to program the order in which you intend to use the patterns. Furthermore, the Arranger not only provides a rhythm section but also chords, guitar and synthesizer riffs, and so on. The accompaniment can be transposed in realtime. All you have to do is play a different chord (usually with your left hand).

3.2 Easy Routing: quick registration

The Virtual Band page is the first page that is displayed after switching on the VA-3:

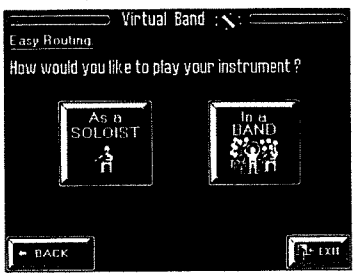


You already know what the [DEMO] field is for. Let us therefore have a look at the VA-3's Easy Routing function. It allows you to tell your V-Arranger Keyboard how to behave simply by answering a series of interactive questions.

1. If the above Virtual Band page is not displayed, either switch your VA-3 off and back on again, or press the [VIRTUAL BAND] button.
Note: You can prevent the VA-3 from automatically selecting this display page at start-up, or from returning to it at power-on. See page 147 for details.

2. Choose your language by pressing the appropriate field.
If your language is supported, it would be a good idea to select it, as that will further simplify the interactive selection process.
Note: This language selection is stored and will be used again next time you switch on the VA-3.

3. Press the [EASY ROUTING] field.
The display now looks as follows:



Given the number of options and the "easy" character of this interactive function, describing every possibility would confuse you and make the Easy Routing function look extremely intricate.

Here is how it is structured:

- Specify whether you want to play *with* ([**In a BAND**]) or *without* accompaniment ([**As a SOLOIST**]). This is important for the remaining questions and answers.

If you press the [As a SOLOIST] field, there are two options:

- **ORGANIST** means that you can play two different sounds with your left and right hands (the keyboard is split). Despite the name, you can also select other combinations, such as a synthesizer sound for the left hand and a saxophone sound for the right.
- **PIANIST** means that one sound will be assigned to all keys. Again, you'll be offered a wider choice than just piano sounds.
  Note: After selecting the "As a SOLOIST" option, you can still use the Arranger's drum patterns for rhythm backing simply by pressing the [START/STOP] button.
  Note: Once you are more familiar with the VA-3, you will realize that this specifies the Keyboard Mode (see page 31).

If you pressed [In a BAND]:

The keyboard will be split into a left section for Arranger control and a right section for playing a live melody to the accompaniment.

- You then need to specify how many instruments the accompaniment should contain: **Drums, Drm&Bass** (drums & bass), **Combo** (small band), or **Big Band** (which can also be an orchestra).
  Note: Once you are more familiar with the VA-3, you will realize that this selects the Orchestrator version (see page 50).
- You are then given three options for the kind of music you want to play: **ROMANTIC, BALL ROOM**, or **HEAVY.** Again, these should be taken as generic terms, for ROMANTIC also includes musical genres like HipHop, for example.
- Finally, you can choose an automatic accompaniment ("Music Style") and select a sound for your right hand. There are eight Tone suggestions for every Style for you to choose from.

Other steps and tips:

- The [**←BACK**] field takes you back to the previous display page. Press it whenever you wish to change a previous selection.
- If the [**FINISH**] field is displayed, you can press it to confirm your settings and use them right away.
- Press [EXIT] to jump to the Master page (see page 22). If you pressed this field by accident, you can return to the Virtual Band page by pressing the [VIRTUAL BAND] button below the display.

Note: If you press [EXIT], the selected settings will not be used. You need to press [FINISH] to confirm your choices.

- If one or both arrows (← and →) are displayed in "solid", you can call up additional options by pressing the arrow field in question.

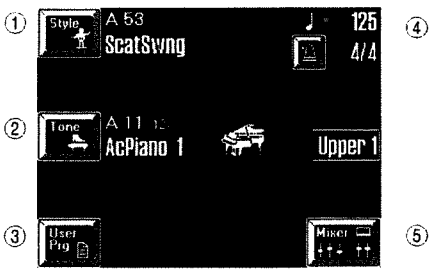
4. Start playing on the VA-3.

You probably want to try out the VA-3 straight away without first reading the following pages. Just remember the following:

- You can start and stop Arranger playback (automatic accompaniments) by pressing the [START/STOP] button.
- In some cases, the melodic accompaniment (bass, chords, etc.) may not be audible. This is due to the settings you have selected. Later on in this manual, we will show you how to change these settings.
  Note: Though the VA-3 contains a lot more parameters for fine-tuning the Arranger's behavior, you could already decide to write the current settings to a User Program (see page 91). That way, you can return to them time and again without having to use the Easy Routing function.

3.3 The Master page

Whenever you leave the DEMO or EASY ROUTING mode by pressing [EXIT] or [FINISH], the display looks more or less as follows:



① Press this field if you want to select another Music Style (see page 47).

② Press this field if you want to select other Tones (sounds) (see page 34).

③ Press this field if you want to select a User Program (see page 92).

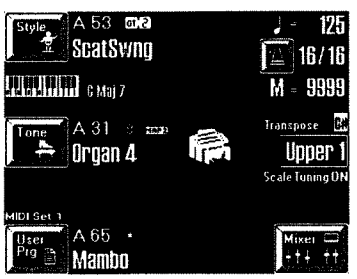
④ The metronome field allows you to switch the metronome on/off.

⑤ Press this field to call up the Mixer functions (see page 81).

Let us agree to call this the *Master page*. There are, in fact, two Master pages: one for Arranger playback, and another for the Song Composer. The difference between these two will be explained later on in this manual.

Note: If you switched off the automatic jump to the Virtual Band mode (see page 147), the Master page appears immediately after switching on the VA-3.

The number of items displayed on the Master page varies. Here is what it can look like in some situations:



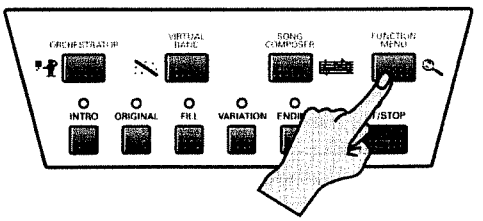
That way, you know exactly which functions are currently active.

Which button does what? (Panel Info)

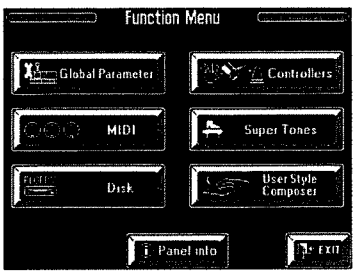
There may be situations where you don't remember exactly what you need to do in order to select a given function. The VA-3 provides a display page where you can check the (usually) "second" function of certain buttons. Note that not all button functions are explained on that page, so you still need to read the rest of this manual...

Here is how to select the *Panel Info* function:

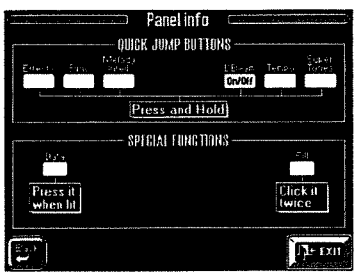
1. Press the [FUNCTION MENU] button.



The display now looks as follows:



2. Press the [(i) Panel Info] field.



This page provides an overview of the display pages that can be selected by holding down a given button, by pressing it when it lights, or when pressed in combination with other buttons. Try to remember that it exists, and how to select it, because it may come in handy.

3. Press [EXIT] to return to the Master page.

You can also press [←BACK] to return to the Function Menu, if you like, but that is not what we need here.

3.4 Using the VA-3's Arranger

The Arranger is an interactive "playback sequencer" that provides the accompaniments. These accompaniments are called "Music Styles", because they provide an 8-track backing for a given musical genre (Rock, Pop, Dance, Waltz, etc.).

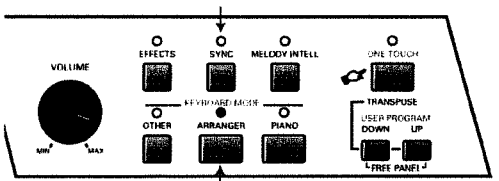
The Arranger is interactive because it allows you to transpose the melodic accompaniment parts (bass, piano, guitar, etc.) simply by playing chords. In most instances, you will probably do so with your left hand. Each Music Style comprises several patterns so that you can vary the accompaniment by starting with an introduction, using a simple accompaniment for the verses, a more elaborate one for the choruses, and by ending your songs with an "Ending" pattern.

Let us first look at the most important aspects for operating the Arranger:

1. Switch on the VA-3 and use the Easy Routing function (see page 20) to select a "In a BAND" registration with a "Combo" or "Big Band" option.
Of course, you can also register the VA-3 manually. But using the Easy Routing function is probably quicker.

2. If the [SYNC] indicator lights (which is probably the case), press its key to switch it off.

The [SYNC] indicator must be off.

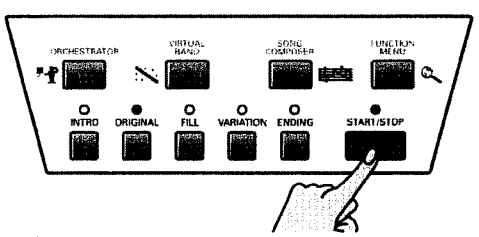


The [ARRANGER] indicator must light.

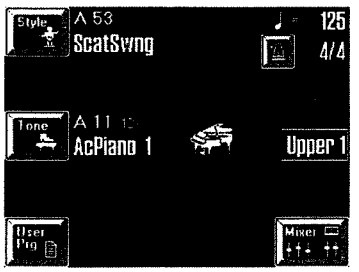
3. Set the [VOLUME] knob to a reasonable level (e.g. about "1/4").

4. Check whether the Keyboard Mode [ARRANGER] indicator lights, and press the button if it doesn't.

5. Play a chord in the left half of the keyboard (to the left of the C key below the USER PROGRAM [UP] button), then press the [START/STOP] button.



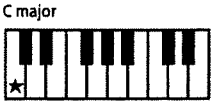
The [START/STOP] indicator lights, and the Arranger starts playing the accompaniment of the selected Music Style. The accompaniment pattern ("Music Style") is sounded in the key that corresponds to the chord you played. The name of the chord you are playing is displayed below the name of the currently selected Music Style:



6. Play another chord in the left half of the keyboard.
The same pattern is now played in that key. In fact, you don't even have to play full chords:

- For *major* chords, playing just the root note is enough (e.g. "C" for C major, "A" for A major, etc.)
- For *minor* chords, playing the root note and the third key to its right will do.
- For *seventh* chords, playing the root and the second key to its left is enough.

C major



Only the key that corresponds to the chord's name.

C minor

Root note + third key to the right.

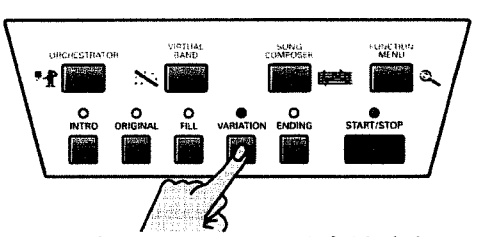
C 7

Root note + second key to the left.

Note: The function that takes care of this easy fingering is called "Intelligent" (see page 72). See also page 200 for a list of other chords that can be played using this system (augmented, diminished, etc.).

What you hear now is the "ORIGINAL" pattern (the [ORIGINAL] button lights). This is the simple accompaniment of the selected Music Style. Let's listen to the accompaniment your could use for your choruses:

7. Press the [VARIATION] button.



As soon as the ORIGINAL pattern is finished, the [VARIATION] indicator lights steadily, and the Arranger plays a different accompaniment called VARIATION.

Note: There are four more patterns for the ORIGINAL and VARIATION levels. See "Orchestrator" on page 50 for how to select them.

Professional transitions: Fill

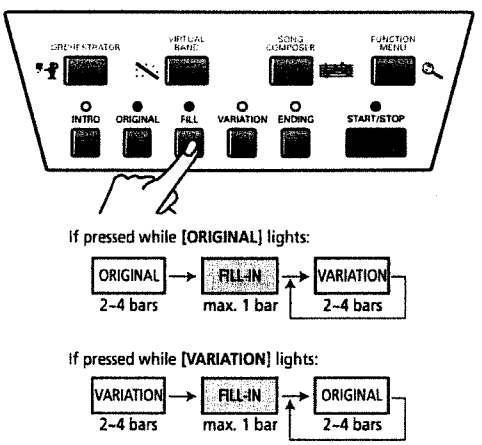
So far, we have only used the ORIGINAL and VARIATION patterns. ORIGINAL is great for verses, while VARIATION could be used for choruses. Switching between these two is a matter of pressing the [ORIGINAL] and [VARIATION] buttons. Yet, that will produce instant changes of the accompaniment, while "real" musicians tend to "announce" new song parts by means of roll in the drums, or slightly different accompaniment notes.

The VA-3 allows you to make such "announcements" in the following way:

1. Start playback of the ORIGINAL pattern (see above).

2. Play a chord in the left half of the keyboard.

3. Press the [FILL] button.



What happens now, depends on *when* you press the [FILL] button:

- If you press it on any beat before the last one of the current bar, the Arranger plays a Fill-In pattern that lasts *until the end of the current bar.* It then changes to the VARIATION pattern.
- If you press it on the last beat of the current bar, the Fill-In will start *on the next downbeat and last an entire bar,* after which the Arranger automatically selects the VARIATION pattern.
  The [FILL] button can also be used for transitions from the VARIATION pattern to the ORIGINAL accompaniment. All you need to do is press it while the [VARIATION] indicator lights.
- If you press the [FILL] button twice in succession, you select the fill that usually leads to the "other" pattern, but here once again selects the previously chosen pattern. This is called "Fill In To Previous".
  Note: The length of a Fill-In can be halved. See page 68.

Intro & Ending

Now that we've got the transitions covered, you may start wondering how to create more professional intros for your songs – and indeed how to end them in style. That is what the [INTRO] and [ENDING] buttons are for.

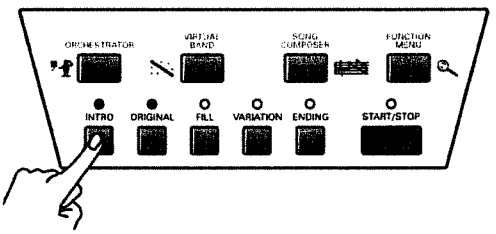
While the VARIATION and ORIGINAL patterns (as well as their ORCHESTRATOR versions) keep repeating the same accompaniment until you select another one, or until you stop Arranger playback, Fill-Ins (see above), Intros, and Endings are played only once.

Once the *Intro* pattern is finished, the Arranger automatically proceeds with the ORIGINAL or VARIATION pattern (depending on which of these two buttons flashes). At the end of the *Ending* pattern, however, the Arranger stops.

1. Stop Arranger playback by pressing the [START/STOP] button (indicator goes dark).

2. Play a chord in the left half half of the keyboard to select the key of the Intro pattern.

3. Press the [INTRO] button.



4. Press the [START/STOP] button to start Arranger playback.
The Arranger plays the introduction of the currently selected Music Style.
Note: Avoid playing chords while the Intro is running. Most Intro patterns indeed contain chord changes, so that playing different chords may lead to highly annoying results.

5. Press the [ORIGINAL] or [VARIATION] button while the Intro is still running.
The indicator in question starts flashing to signal that the corresponding pattern is ready to take over once the Intro is finished.

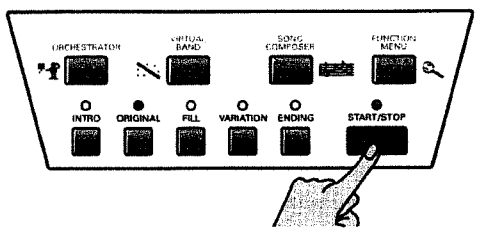
6. Wait until the ORIGINAL or VARIATION pattern is playing, then press the [ENDING] button.
At the end of the current pattern cycle, the Arranger starts playing the Ending pattern and then stops.
Note: Here again, it would be wiser not to play chords during playback of the Ending phrase.
Note: See "Arranger/Music Style clinic" on page 47 for other Arranger functions.

3.5 Adding a melody to the accompaniment

When you set up the VA-3 using the Easy Routing function, you not only select a Music Style but also a sound for your right hand. Let's add a live melody to the accompaniment.

1. Press the [ORIGINAL] or [VARIATION] button and play a chord in the left half of the keyboard.
It doesn't matter which of these two patterns you select as long as it keeps playing all the time. Also note that you could play only one note in the left half, because the Intelligent function is currently on.

2. Press the [START/STOP] button to start Arranger playback.



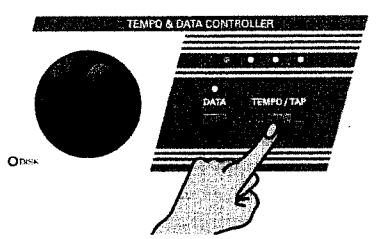
3. Play a melody in the right half of the keyboard.

4. While doing so, try to play the chords (or notes) that match the melody you are playing.
Note: There is no need to hold down the chord notes all the time, because the Arranger does this automatically. Briefly pressing the appropriate left-hand notes is thus enough. The function that takes care of this is called "ARR Hold" (see page 71).

Changing the tempo

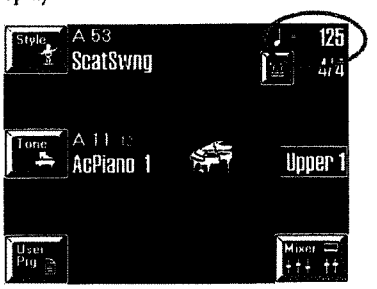
If the Arranger is too fast (or too slow), here is how to change the Music Style tempo:

1. If the [TEMPO/TAP] indicator does not light, press it.



2. Use the [TEMPO/DATA] dial to set the desired tempo value.

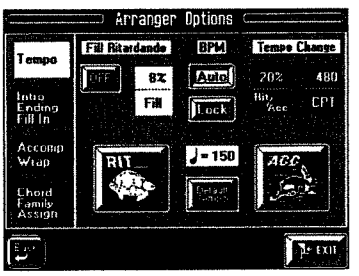
The new tempo is displayed in the upper right corner of the display:



You can also press the [TEMPO/TAP] button several times in the rhythm of the desired tempo. This is called the *Tap Tempo* function. It sets the tempo based on the speed at which you press the button.

To quickly return to the default tempo, do the following:

3. Press and hold the [TEMPO/TAP] button.
The display now looks as follows:



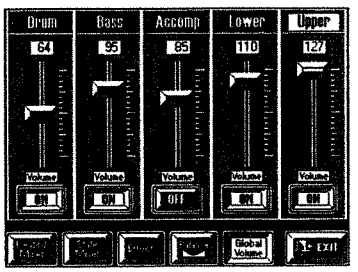
4. On this page, press the [Default Tempo] field.
See page 74 for the remaining tempo options.

5. Press [EXIT] to return to the Master page.

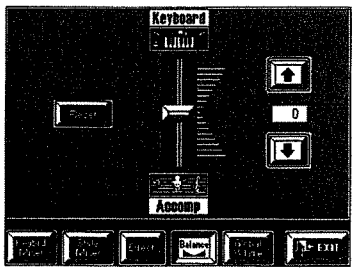
Balance: if the melody is too soft or too loud

You may find that the melody sound is too soft, or too loud, with respect to the Music Style accompaniment. In that case...

1. Press the [Mixer] field on the Master page.
If it is not displayed in the lower right corner, press the [EXIT] field until you see it. After pressing the [Mixer] field, the display looks as follows:



2. Press the [Balance] field to jump to the following page:



3. Use the on-screen slider or the [↑][↓] fields to select the desired balance.
Press the [Reset] field to return the on-screen slider to the central position (same volume for the "Keyboard" and "Accomp" sections).

Selecting sounds for the right hand

Suppose you like the sound for the right hand but think that it is not really suited for the currently selected Music Style. Here are two easy ways of assigning a different sound to the right hand.

Let's agree to use the word "Tones" for the VA-3's sounds.

Note: In the following, we'll assume that the Arranger is still active (the [ARRANGER] indicator should light).

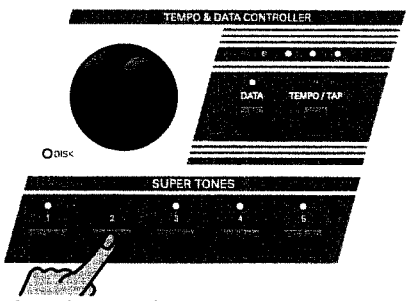
Note: There is also the "classic" way of selecting Tones that we'll skip here. See page 34 for details.

Super Tones

One of the VA-3's user-friendly functions is the possibility to "earmark" 5 (Factory) + 5 (User) Tones and to select them almost instantly. Here is how this works:

1. Stop Arranger playback by pressing the [START/STOP] button (indicator goes dark).

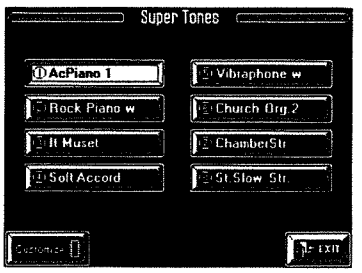
2. Press a SUPER TONES [1]~[5] button.



This selects the Tone that is currently assigned to the button you pressed (see the display page below). This Tone is assigned to the Upper1 part.

Note: See "What are 'parts'?" on page 32 for more information about Upper1. For now, it is enough to know that Upper1 is the part that is assigned to the right half of the keyboard.

The display now looks as follows:



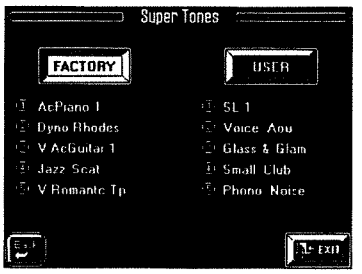
The above illustration shows the Factory Tones that can be assigned to the SUPER TONES [1] button.

There are two assignment sets: "FACTORY" and "USER". See page 57 for details. "Factory" only means that the number of possible options is restricted to 40 Tones (rather than 3,641).

3. Play a few notes in the right half of the keyboard.

4. If you like, you can try out a different sound by pressing another field (e.g. "Vibraphone w").
There is a second set called USER where you can assign one of the 3,641 Tones to each SUPER TONES button. See page 57.

5. You may want to press the [START/STOP] button to find out whether the newly selected Tone is better suited for the Music Style.
Just for your reference: if you hold down a SUPER TONES button, the following display page appears:



In that case, press the [EXIT] field as we do not need this function here. See page 57 for details.

6. Press another SUPER TONES button.
Again, there are 8 possibilities, one of which is already selected. Press another displayed field to change the assignment for the active SUPER TONES button.
Note: The [CUSTOMIZE] field allows you to store a new assignment (after pressing another instrument field on the display). The Tone in question will then be selected next time you press the corresponding SUPER TONES button.

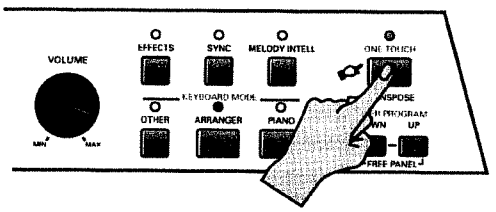
7. Stop Arranger playback by pressing the [START/STOP] button (indicator goes dark).

One Touch

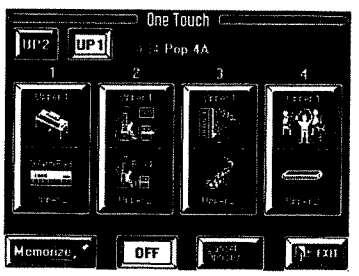
Another way of selecting a suitable Tone for the right-hand part while working with the Arranger is by using the ONE TOUCH feature. In fact, One Touch does a lot more than selecting a Tone for Upper1. See page 69 for details.

Note: One Touch is intended for quick registration of the Upper1 and Upper2 parts when used in conjunction with the Arranger. If you then select a One Touch memory, the Keyboard Mode [ARRANGER] indicator lights. This means that the Arranger has been switched on.

1. Press the [ONE TOUCH] button.



The display now changes to:

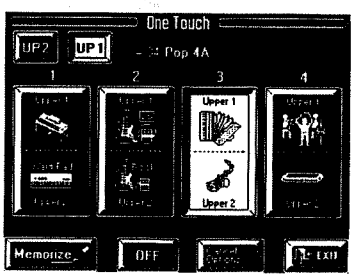


Of course, the Music Style name is probably different on your VA-3. The important thing to note, however, is that there are four One Touch memories per Music Style (for the 64 ROM Styles, the 64 Disk Link memories and the Disk User memory).

The [UP2] and [UP1] fields allow you to quickly switch the related Upper part (1 or 2) on (white) or off (dark). You can also switch on both Upper parts for even richer textures.

2. Press one of the big [1]~[4] fields to select the corresponding One Touch memory.

If you press the third field, the display looks as follows:



Note: If the Arranger suddenly starts playing, first press the [START/STOP] button and then the [SYNC] button. One Touch indeed activates the SYNC function.

3. Press the [OFF] field if you no longer need the One Touch setting.

If you do not press the [OFF] field, the [ONE TOUCH] indicator keeps lighting to signal that you are still using a One Touch program.

4. Press [EXIT] to return to the Master page.

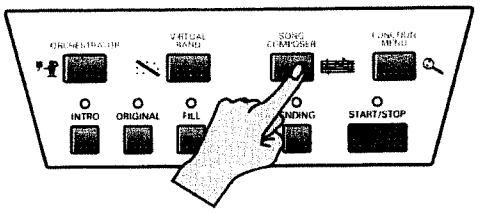
3.6 Listening to Standard MIDI Files

Standard MIDI Files are sequences almost any sequencer can read. Though you can use your VA-3 as "playback machine" of such Standard MIDI Files, it is also possible to mute the melody part and to play it yourself.

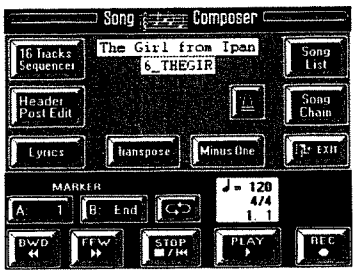
1. Insert the supplied floppy disk into the drive.

2. If necessary, press the [START/STOP] button to stop Arranger playback.

3. Press the [SONG COMPOSER] button.

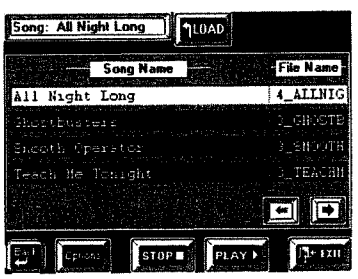


The display now looks as follows:



(There may be a different name or no name at all in the upper white field on your VA-3.)

4. Press the [Song List] field.



Wait for the floppy drive to read what is on the disk.

5. Use the [◄][►] fields to select the next or previous group of four songs if the one you want to listen to is not displayed.
You can also use the [TEMPO/DATA] dial for doing so.

6. Press a song field to select the song you want to listen to.
The RAM information field is still empty.

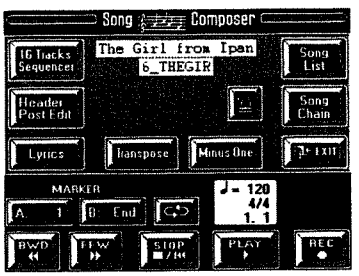
RAM information field

That is because the selected song has not yet been loaded into the VA-3's RAM memory and thus cannot be played back straight away.

7. Press the [Load] field.
This time, the name of the selected song is displayed in the RAM information field.

8. Press the [PLAY ►] field to start playback.
If you like, you can now play along to this Standard MIDI File. The Arranger, however, cannot be used while the Song Composer is running.

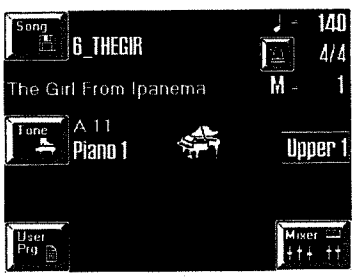
9. Press the [STOP ■|◄] field to stop playback.
If you like, you can press the [◄Back] field to return to the initial Song Composer page:



You can then use [◄◄ BWD] and [FFW ►►] to rewind to an earlier measure or fast forward to a later one. See "Song Composer clinic" on page 52, for details.

You could also press the [EXIT] field to return to the Master page, though that would not be practical.

- During Song Composer playback the Master page looks as follows:



Pressing the [Song] field takes you back to the display page where you can select another song. However, on the Master page you cannot control Song Composer playback (Start, Stop, REW, FFW, etc.).

- If Song Composer playback is stopped, selecting the Master page switches off the Song Composer mode and takes you back to Arranger mode where you can use the automatic accompaniment function.

Minus One playback

Your VA-3 allows you to mute any given part of the song you are currently playing back. You could use this feature to mute the solo part on disk so that you can play it yourself. This is called *Minus One playback* (because one part of the original song is muted).

You can solo whichever part you like, and even mute several parts simultaneously.

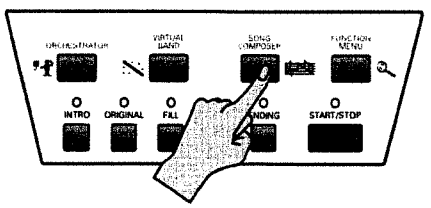
All Keyboard parts remain active. In other words, you are free to use the Upper1/2, Lower1/2, and M.Bass parts in whichever split or layer combination (see page 33) you like. The MDR part is also available but, as you remember, selecting this part means that some or all other Keyboard parts are temporarily deactivated.

Note: Whenever you start playing back a new song or return to the beginning of the current song (by pressing the [STOP ■|◄] *field), all Keyboard parts, except Upper1, will be switched off and the VA-3 will select the Whole Keyboard mode. This is not the case however, if you select a User Program memory.*

1. Insert the supplied floppy disk into the drive.
You can also use any other floppy disk, of course. It must contain a Standard MIDI File, though.

2. If necessary, press the [START/STOP] button to stop Arranger playback.

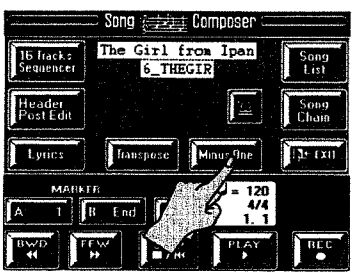
3. Press the [SONG COMPOSER] button.



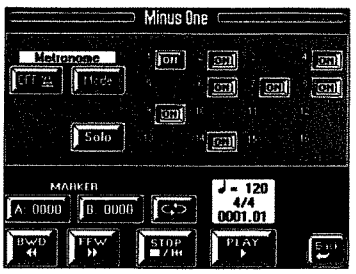
4. See steps (4)~(7) above for how to select the desired song on disk.
It would be a good idea to start playback and to stop it after a few measures.

Note: If the field in the upper left corner on the Master page reads [Song], you can press it to jump to the page where you can select a Standard MIDI File.

5. On the *Song Composer* page, press the [Minus One] field.



The display now looks as follows:



The numbers 1~16 represent the tracks of the selected Standard MIDI File. Standard MIDI Files can contain up to 16 different parts that each receive on a different MIDI channel.

The [ON]/[OFF] fields next to the numbers indicate whether the tracks in question will be played back or not. No field means that the track in question contains no data.

6. Press the [ON] field next to track/channel [4].
In most Standard MIDI Files, the melody part is assigned to track/channel 4. Pressing this field (to make it read [OFF]) is thus a good guess. This channel corresponds to the VA-3's UP1 part.

Note: The on/off status of the tracks can be written to a User Program (see page 91).

7. Select a Tone for the Upper1 (UP1) part.
See "Super Tones" on page 26 or "Selecting Tones for the Keyboard parts" on page 34. There is a function that allows you to link Tone selection for the Upper1 part to the parameter settings of the selected song so that your melody will sound exactly like the original part. See below.

8. Press the [STOP ■|◄] field twice to return to the beginning of the song.

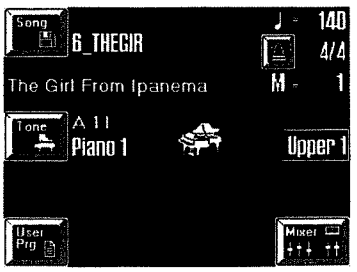
9. Press the [PLAY ►] field to start playback, and play along to the Standard MIDI File.
Feel free to use the performance functions (see page 42). If necessary, use the [TEMPO/DATA] dial or the [TEMPO/TAP] button to change the tempo.

10. Press the [STOP ■|◄] field to stop playback.

11. Press the [◄Back] field to return to the *Song Composer* page.

12. Press [EXIT] to return to the Master page.

The Master page now looks different, because the field in the upper left corner is called [Song]. See page 28.



13. Press the Keyboard Mode [ARRANGER] button if you once again want to use the Arranger.

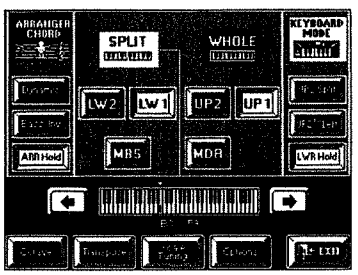
UP1 linked to Song

Here is a function that may come in handy when playing back Standard MIDI Files with the melody part muted (something we call "Minus One") so that you can play it yourself. See page 29 for details about Minus One performances.

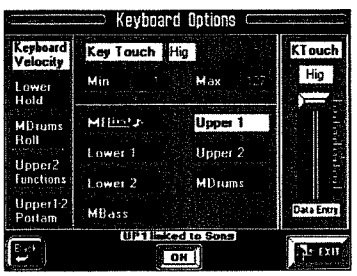
Linking the Upper1 part to the Song Composer means that it will use the same Tone as the original melody part (on track 4) of the Standard MIDI File/song. Pitch Bends, Modulation, and other performance effects will also be muted.

1. Press the Keyboard Mode [OTHER] button.

2. On the display page that appears now, press the [KEYBOARD MODE] field in the upper right corner (if it is not displayed in white).



Press the [Options] field. The display now looks as follows:



3. Press the UP1 Linked to Song [OFF] field to make it read [ON].

The Upper1 part is now linked to track 4 of the Standard MIDI File you are playing back. In some cases, this may mean that the sound changes somewhere in the middle of the song – but at least it does so in perfect sync with the accompaniment so that you don't have to worry about it.

Note: The default setting for this parameter is "ON".

4. Press [EXIT] to return to the Master page.

5. Press [SONG COMPOSER] to return to the song page.

4. VA-3 clinics

In this chapter, we will have a closer look at some of the VA-3's functions. While "Scratching the surface" on page 20 only showed you what to expect and how to obtain instant gratification, this chapter is already a little more technical. But again, not all parameters and functions will be covered here so as not to overwhelm you. So be sure to also read the rest of this manual.

Note: The alphabetic index at the end of this manual may prove invaluable for locating the desired information at a later stage.

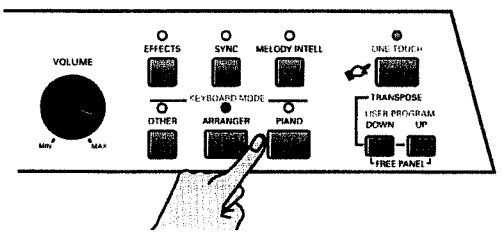
4.1 Keyboard Mode clinic

The KEYBOARD MODE setting is the singlemost important parameter of your VA-3 because it determines which parts (or Tones) and sections are available. Though the Easy Routing function (see page 20) sets these parameters automatically based on your answers, you should familiarize yourself with the KEYBOARD MODE concept.

Arranger and Piano modes

The VA-3 has two major keyboard modes: ARRANGER and PIANO. These can be selected using the [ARRANGER] and [PIANO] buttons.

In many instances, pressing [ARRANGER] or [PIANO] provides a nice starting point for further fine-tuning. Select ARRANGER when you need the automatic accompaniment function and wish to activate its chord recognition in the left half (see page 72 for details). Select PIANO to switch off the Arranger's chord recognition.



Note: Pressing either button not only selects the desired Keyboard Mode but also sets a series of other parameters. In some cases, the parts you may have been using up to that point are suddenly muted. Another important aspect is that the split point (see below) will be set to "C4" when you press [ARRANGER].

In **ARRANGER mode**, the keyboard is split into two halves. The *left* half is used for playing chords that the Arranger uses for transposing the Music Style patterns in realtime. The *right* half, on the other hand, can be used for adding a live melody to the Arranger's automatic accompaniment. This melody can be played using the Upper1 (UP1) part. Feel free to add other parts for creating richer sounds. See page 33.

The settings affected by the KEYBOARD MODE [ARRANGER] button are:

Split mode with the split point at the C4.
Only the UP1 part is active in the right half of the keyboard (see "What are 'parts'?" below for an explanation of this concept).
Arranger Chord= *Left* (see page 72).
Intelligent chord recognition (see page 71).
This means that one button (here [ARRANGER]) allows you to prepare the main parameters for working with the automatic accompaniment (called "Arranger").

In **PIANO mode**, the Upper1 part is assigned to the entire keyboard.

Upper 1 (UP1) using the *A11 Piano 1* Tone

Later on, you will discover that this way of using the keyboard is also called *Whole*, and that you do not need to work with a piano sound all the time.

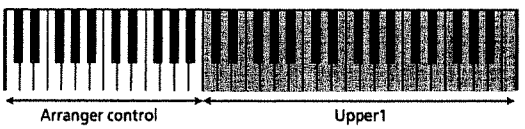
The settings affected by the KEYBOARD MODE [PIANO] button are:

Whole mode with only UP1 active.
The *A11 Piano 1* Tone is assigned to UP1.
Arranger Chord= *Off* (see page 72).
This means that the Arranger cannot be transposed in realtime while the [PIANO] button lights. You could, however, use the Arranger's drum accompaniment for rhythmic backing. Press the [START/STOP] button to start and stop it.

Note: There is a Global Parameter that allows you to block the selection of the piano Tone for UP1 and go on using the Tone that is currently assigned to the Upper1 part. See page 147.

Split point in Arranger mode

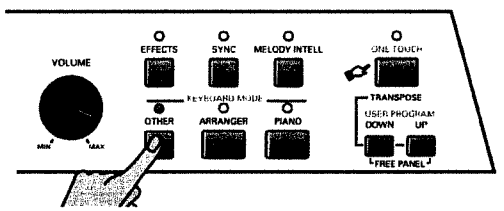
When the [ARRANGER] button lights, the keyboard is split in two halves. The split point is located at a C key. This key is called the "C4":



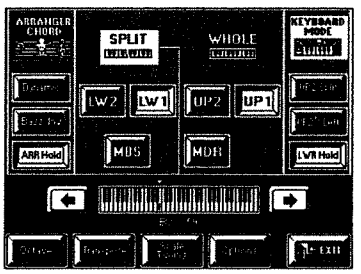
There may be situations where the automatically assigned range is not what you need. In that case, you can change the split point:

1. Press the Keyboard Mode [ARRANGER] button (indicator lights).
This switches on the Arranger and splits the keyboard.

2. Press the Keyboard Mode [OTHER] button.



The display now looks more or less as follows:



If this page is not displayed, press the [SPLIT] field so that it is displayed in white.

3. Use the [←][→] fields to the left and right of the displayed keyboard to select the new split point.
Note: Your settings can be written to a User Program and recalled at a later stage. See page 91.

Other

Note: As soon as you change any of the Other parameters, the [ARRANGER] or [PIANO] indicator goes dark (if it was on). This is done to signal that the current settings no longer correspond to the preset settings of the Arranger or Piano mode.

As stated above, the Keyboard Mode [ARRANGER] and [PIANO] buttons select the Arranger or Piano mode and also make a number of preset settings. In most instances, these settings work just fine. There are, however, other possibilities that allow you to use the VA-3 in an even more flexible way. Before looking at them we'd like to clarify the following:

What are 'parts'?

The VA-3 allows you to use several sounds simultaneously. Some of these sounds can be played in real-time. These are the *Keyboard parts*. Other parts are played by the Arranger/Music Styles and are called *Style parts*. And finally, there are the *Song parts* that are controlled by the Song Composer function.

Below please find an explanation of the Keyboard parts. (See page 77 for the Style parts.)

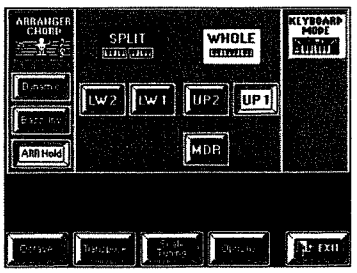
- **UP1** (Upper1): Though there are only slight differences between Upper1 and Upper2, Upper1 is normally the main solo part (and switched on automatically in Piano mode).
- **UP2**: The Upper2 part can be used as additional solo part to be layered with the Upper1 part, or as an alternative melody sound. Except when the UP2 Split function is activated (see page 58), it is perfectly possible to switch on Upper2 while Upper1 is off.
- **MEL Int** (Melody Intelligence): This part is triggered by the Arranger and plays automatic harmonies. You cannot play it yourself. You can choose from among 18 harmony types (see page 69).
- **LW1**: The Lower1 part allows you to play chords with your left hand. Use it whenever you want to add live chords, such as strings, to your right-hand melody.
- **LW2**: The Lower2 part is to Lower1 what Upper2 is to Upper1, i.e. it allows you to add a second sound to the notes you play with your left hand, or to alternate between two sounds.
- **MBS**: The Manual Bass part can supply a semi-automatic bass part to your left-hand notes. It is only available in SPLIT mode (see below). If activated while the Lower parts are off, it is no longer triggered automatically, in which case you can also play chords.
- **MDR**: The Manual Drums part is somewhat different from the other Keyboard parts in that you can only select Drum Sets for this part. It does not allow you to play melodies because every key is assigned to a different sound. Select this part whenever you feel like drumming on the keyboard. See page 39.

Using the WHOLE Keyboard Mode

Whole means that all keys trigger the same part(s). There is thus no split. You can assign up to four parts to the entire keyboard: LW1, LW2, UP2, UP1. The MDR part cannot be layered with (added to) the other parts.

1. Press the Keyboard Mode [OTHER] button.

2. Press the [KEYBOARD MODE] field in the upper right corner (so that it is displayed in white).
The display now looks as follows (the [KEYBOARD MODE] field must be white):



3. If the [WHOLE] field is not displayed in white, press it to make the display look like in the above illustration.
In the central part of this page, you can switch on all Keyboard parts you need, and switch off those you don't need.

Switching parts on and off

4. Press the fields of the parts (LW2, LW1, etc.) you want to play via the keyboard and switch off the parts you do not need.
Active parts are displayed in white fields, while switched-off parts are displayed in blue.

Be aware, however, that activating the [MDR] field means that [LW1], [LW2], and [UP1] will be switched off.

Note: If none of the part fields is displayed in white, the notes you play on the keyboard will not be audible. (It would, however, be possible to go on controlling the Arranger.)

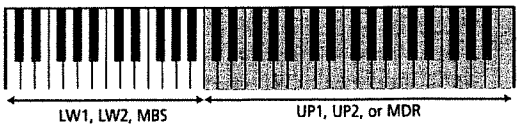
By the way: selecting WHOLE does not mean that the Arranger is automatically switched off, or can no longer be used. See "Arranger Chord Mode" on page 72 for details.

Note: Your settings can be written to a User Program and recalled at a later stage. See page 91.

Note: See also page 27 for another way of switching the Upper 1/2 parts on or off.

Using the SPLIT Keyboard Mode

Split means that the keyboard is divided into two halves (at the C4 mentioned above). You can use the LW1, LW2, and MBS parts in the left half, and the UP1 and UP2 parts in the right. (It is also possible to use an additional split between UP1 and UP2, see "Upper 2 Split" on page 58.)

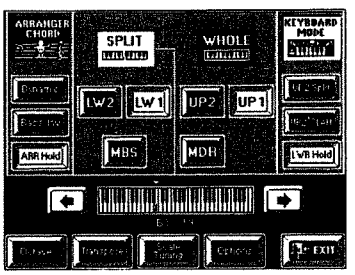


Alternatively, you can use the MDR part in the right half and drum to the chords you play with the LW parts.

Here's how to activate the SPLIT keyboard mode:

1. Press the Keyboard Mode [OTHER] button.

2. Press the [KEYBOARD MODE] field in the upper right corner (so that it is displayed in white).
The display now looks as follows (the [KEYBOARD MODE] field must be white):



3. If the [SPLIT] field is not displayed in white, press it to make the display look like in the above illustration.
In the central part of this page, you can switch on all Keyboard parts you need, and switch off those you don't need.

Note the line that separates the LW1, LW2, and MBS parts from the UP1, UP2 and MDR parts. Unlike previous Roland arranger instruments, the VA-3 allows you to play chords (and add an automatic bass part) with your left hand, while drumming with your right. In the past, the MBS (or M. Drums) part used to be automatically assigned to the entire keyboard, which is still possible (in WHOLE mode) but not mandatory.
Note: See "Drumming on the keyboard" on page 39 for more information about the MDR part.

4. Press the fields of the parts (LW2, LW1, etc.) you want to play via the keyboard and switch off the parts you do not need.
Active parts are displayed in white fields, while switched-off parts are displayed in blue.

5. If necessary, change the split point. See "Split point in Arranger mode" on page 32.

This split point indeed applies both to the chord recognition area of the Arranger and the SPLIT keyboard mode.

Note: If you like, you can activate a Hold function for the LW1/2 parts. That way, briefly pressing the notes to be played by the LW1/2 parts is enough. The Arranger has a similar function (called ARR Hold). See also "LWR Hold" on page 62.

Note: If none of the part fields is displayed in white, the notes you play on the keyboard will not be audible. (It would, however, be possible to go on controlling the Arranger.)

Note: Your settings can be written to a User Program and recalled at a later stage. See page 91.

4.2 Tone clinic

Selecting Tones for the Keyboard parts

On page 26 we already mentioned the SUPER TONES buttons that can be used for selecting one of 40 Tones for the UP1 part, and the One Touch function that prepares 4 different Tones for both the UP1 and UP2 parts. See also "One Touch" on page 69.

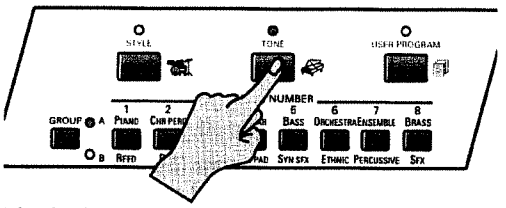
Let us now have a look at the "classic" way of selecting Tones. This selection method is available for all Keyboard parts.

In fact, there are two possibilities that can be used indiscriminately at any stage, except for selecting a Variation (only via the display). For the sake of clarity, however, we shall treat them as separate items.

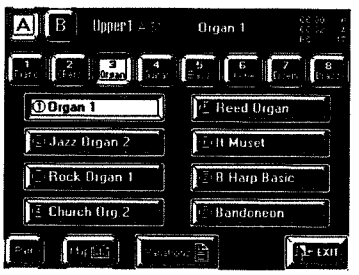
Tone selection via the front panel

Note: All button actions are also reflected by the display. See "Tone selection via the display" on page 36 for the information that appears on-screen.

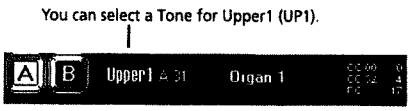
1. Tell the VA-3 that you wish to select a Tone (sound): press the [TONE] button.



The display now looks as follows:

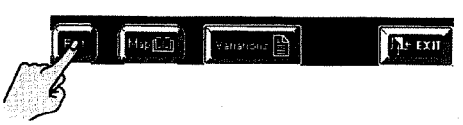


The name next to the [A]/[B] fields tells you which Keyboard part is currently active for Tone selection:

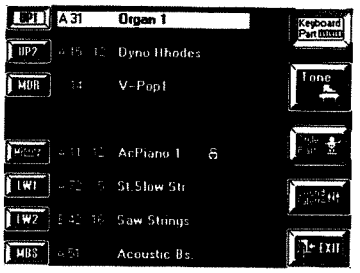


Note: The numbers in the upper right corner of the display indicate the MIDI address of the selected Tone ("Organ 1").

2. Press the [Part] field in the lower left corner of the display.

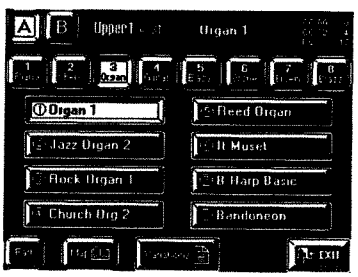


The display now looks as follows. The currently selected part (the one whose name appears inside the arrow on the Master page, see above) is highlighted:



3. Press the field of the Keyboard part you wish to select (UP1, UP2, etc. – left column).
That field is now displayed white-on-blue.

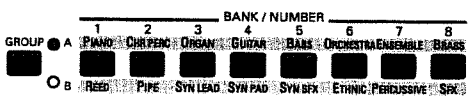
4. Press the [GROUP] button to select the group that contains the desired Tone (A or B, the corresponding indicator lights).



The above display contains eight Bank selection fields that tell you more about the contents of the Tone banks in the selected Group.
Note: See also the Tone lists starting on page 170 for the address of the desired Tone.

When you select a GROUP, the VA-3 automatically activates the BANK that was active in the previous group. Here is an example: if the Upper1 part currently uses the "A31 Organ 1" Tone, selecting group B means that bank 3 (SYN LEAD) is automatically suggested (but you still hear the organ).

Another way of deciding which group you need is by looking at the number buttons on the front panel. The banks of group A are printed above these buttons, and the banks of group B appear below these buttons:



5. Press a BANK/NUMBER [1]~[8] button to select a Tone bank within the active group.
Each Tone group (A and B) contains eight banks.

Here are two examples:

a) for a solo synthesizer sound, select GROUP B and BANK 3 (SYN LEAD);

b) for a trumpet sound, select GROUP A and BANK 8.

6. Press a second BANK/NUMBER [1]~[8] button to select a Tone within the active bank.
Only now will the new Tone be loaded. You could take advantage of this system to prepare the group and bank with your left hand, while continuing to play the melody with your right hand. Then, all you need to do is press the second desired BANK/NUMBER button just before the beat where you wish the new Tone to take effect.

7. Play a few notes on the keyboard to check whether you like the Tone you have just selected.
In many instances, the VA-3 does not select the requested Tone but an even better one (our "favorite" for that particular Tone family). That is because there is yet another Tone category called "Variation".

Let us briefly summarize the various Tone categories:

Tone category	Meaning
Group [Example: B]	The highest level that specifies which 8 Tone banks are available.
Bank [Example: B3–]	The second level whose contents depend on the selected group. Each bank contains 8 Tones (numbers).
Number [Example: B38]	A memory within the selected bank. This specifies the desired Tone.
Variation [Example: B38 <2>]	An alternative sound for the selected Tone/number that is either directly or indirectly related to the same Tone family.

8. If necessary, select another Variation. This is only possible via the display. See step (8) under "Tone selection via the display" on page 36.
The number of Variations depends on the selected Tone number. There may be as many as 30. It is also possible to select "no Variation". This is the Tone proper, referred to as *Capital* (it is displayed without a number between < >).

Note: It is possible to change the "preset" Variation (or Capital) that is recalled when you select a Tone. You can take advantage of this when you don't agree with our "favorite" selection. See "Choosing your own Tone favorites (Customize Preferred Tone)" on page 37.

Note: Apart from the Variations, there are also Tone Maps. See page 38 for details.

The Tone selection display behaves as follows:

a) If you only select a number (using the BANK/NUMBER pad), the Tone selection page is not displayed.

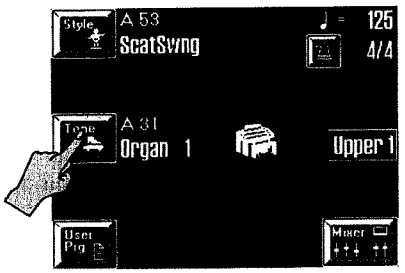
b) If you only select a bank, the Tone selection display waits until you have specified a number, after which it disappears.

c) If you press the [TONE] button (or [Tone] field) and then select a Tone, the Tone selection display does not disappear automatically. In that case, you need to press [EXIT].

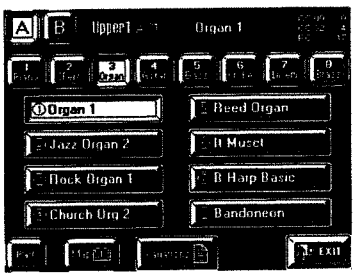
Tone selection via the display

Let us now look at how to use the display for selecting Tones. For details about the terms used in this paragraph, see "Tone selection via the front panel" on page 34.

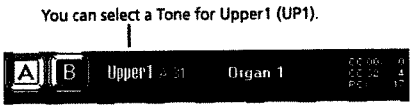
1. Press the [Tone] field in the display.



The display now looks as follows:



The name next to the [A]/[B] fields tells you which Keyboard part is currently active for Tone selection:



Note: The numbers in the upper right corner of the display indicate the MIDI address of the selected Tone ("Organ 1").

2. Press the [Part] field in the lower left corner of the display.

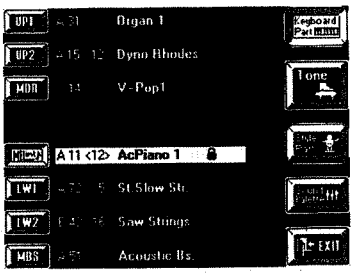
See page 34.

3. Press the field of the Keyboard part you wish to select (UP1, UP2, etc. – left column).

That field is now displayed white-on-blue.

Note: If this page is not displayed, press the [Keyboard] field. It must be displayed in white.

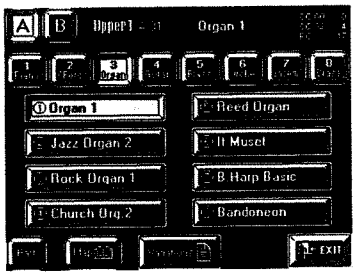
If you select the MEL Int (M Int) part, the display looks somewhat different:



The lock allows you to override the preset settings. See page 69 for details. It is also displayed for the Arranger parts.

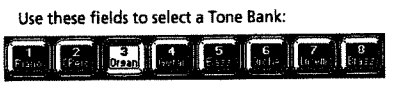
4. Press the [Tone] field to return to the Tone selection page.

Now we're back on the following display page:



5. Press the [A] or [B] field to select the desired Tone group.

6. Press one of the following fields to select a bank within that group:

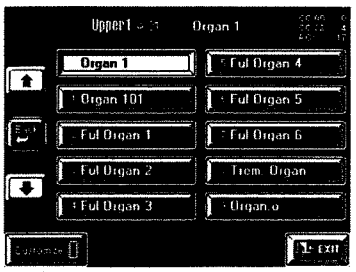


7. Press a Tone field to select a Tone (number).

Again, the VA-3 may actually load another Tone than the one you selected. We believe that Tone is even better than the one you set out to recall. If you disagree, see "Choosing your own Tone favorites (Customize Preferred Tone)" for how to change that particular "favorite" Tone.

If the Tone name is followed by a number in angled brackets < >, a Variation Tone has been selected. If there are no angled brackets, the Capital has been selected.

8. Press the [Variations] field to call up the following display page:



The field of the currently selected Variation is highlighted.

There are 28 Variations for the A31 Tone (note the numbers inside the selection fields).

a) Press another Variation field on this page to select that Variation.

b) If none of the Variations on offer corresponds to what you have in mind, press the upward arrow ([⬆]) to select the page that contains Variations 1~9 (if that is possible).
You will have guessed that the downward arrow ([⬇]) usually allows you to select the next page – unless it is grayed out, as is the case here.

c) To use the "main" Tone (*Capital*), press the Variation field on the first page that has no little number (the topmost field in the left column on the first Variation page). The angled brackets < > next to the Tone address disappear.
Note: Just for your reference: the term "Variation" refers to Tones here, and has nothing to do with the [VARIATION] button on the front panel, or the Music Style pattern of the same name.

9. Press the [◀Back] field to select another Tone (because none of the Variations fits the bill).

10. Press the [EXIT] field to return to the Master page.

Choosing your own Tone favorites (Customize Preferred Tone)

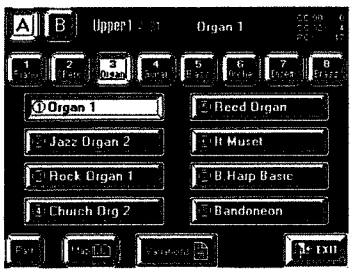
As stated earlier, selecting a Tone via the display or the BANK/NUMBER buttons very often means that the VA-3 uses an even better sound than the one you requested— or so the Roland engineers think.

You may not agree with the automatic substitutions and get weary of always having to select correct Variation you do actually mean when you select the address in question (group, bank number).

Here is how to substitute your "favorites" for Roland's preselections. Note that this can be programmed for all 128 Tone addresses (A11~A88, B11~B88). Here, we shall only show you how to do it for one Tone.

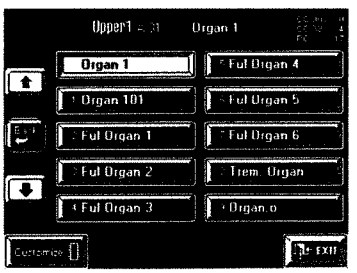
Note: This selection is stored automatically. So be sure to either select the Variation you do wantto act as "preferred Tone", or change the setting back to the previous version before continuing.

1. See "Tone selection via the front panel" on page 34 and "Tone selection via the display" on page 36 for how to select the desired Tone.
For this example, select Tone A31, so that the display looks as follows:



The *Organ 1* Tone is automatically selected. Suppose you prefer Variation <8> *Trem Organ* and want that to be selected when you enter the "A31" address.

2. Press the [Variations] field to call up the following display page:



(Press the [⬇] field to select the page with Variations 10~19 or 20~28.)

3. Press the [8 Trem Organ] field to select that Variation.
Note: Press the Variation field without a number ("Organ 1" in our example) to preset the Capital Tone as "Preferred Tone".

4. Press the [Customize] field to store this Variation as your new favorite.
The display responds with:

This means that your selection has been stored. After a brief interval, the display returns to the Group/Bank/Number page.

5. Repeat this operation for all other Tone addresses you wish to assign a different preferred Tone to.

6. Press the [EXIT] field to return to the Master page.

Selecting different Tone Maps

As you know, the VA-3 comes with 3,641 Tones, which is an impressive number, especially when it comes to selecting a Tone.

That is why there are not only groups (A, B), banks (1~8), numbers (1~8), and Variations (varying number), but also "Tone Maps".

Tone Maps emulate the behavior of a given tone generator. By selecting Tone Map "1", for example, you tell the VA-3 to use the SC-55 Tones rather than the brand-new Tones especially developed for this V-Arranger Keyboard.

Note: This Tone Map system can also be used for editing Standard MIDI Files. See "Change" on page 114.

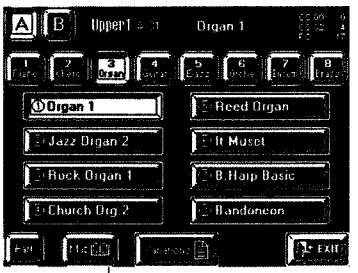
There are four Tone Maps that correspond to the following instrument models:

Tone Map	Correspondence
1	The Tones found on the E-86 and SC-55 Sound Canvas.
2	The Tones found on the G-800, RA-800, and the SC-88 Sound Canvas.
3	The Tones found on the G-1000, EM-2000 and SC-88 Pro Sound Canvas.
4	New Tones especially developed for the VA-3; some of them can also be found on the SC-8850.

- Tone Maps 1~3 ensure perfect compatibility with older Music Styles and Standard MIDI Files. Besides, these Maps contain some "classic" sounds you wouldn't want to miss.
- Tone Map 4 (the brand-new sounds) contains 1,612 new Tones with the best material ever released by Roland.

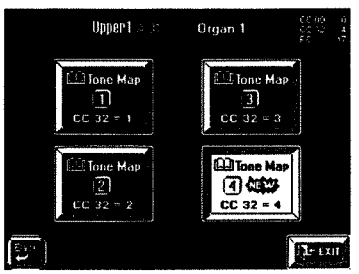
Here's how to select the desired Tone Map:

1. On the Tone selection page, press the [Map] field.



Press to open the Map selection page

The display now looks as follows:



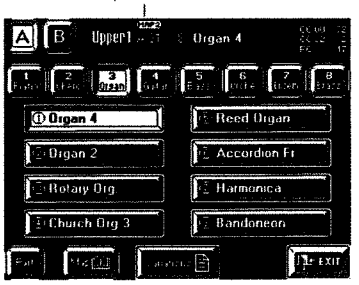
The "CC32" messages refer to a MIDI control change that allows you to select the Maps from an external MIDI sequencer or any other MIDI instrument capable of sending these messages.

This information is also important for you when you browse through the Tone Lists on page 170 in search of a given Tone. Always look at what it says behind the "CC32=". That number (1~4) tells you which Tone Map to select.

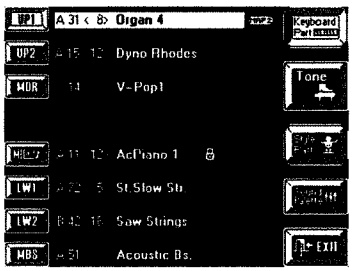
2. Press the [Tone Map] field you wish to select.
This means that all Tones you select from now on belong to that Tone Map until you change this setting again.

Here's how you can tell which Tone Map is currently being used:

Map information



This information is also displayed on other pages (mark the "Map" field). Here is another example:



Note: Tones without a "Map" indication belong to Map 4 (the new VA-3 sounds).

A word about the new Tones

All new VA-3 Tones (Map 4) are fantastic, of course, but some of them are truly amazing. In the Tone List on page 170 (and on the display pages), look out for Tones that start with a "V" (for "virtual").

Select them and try playing at different velocities (strengths) to find out the rich nuances that can be obtained. There is a trumpet Tone, for example ("V Trumpet", A81, Variation 13) that allows you to alternate between a muted and a "full blown" trumpet simply by hitting the keys softer or harder. Various guitar Tones provide a hammering-on/bending sounds when you strike the keys as hard as you can. And there's more.

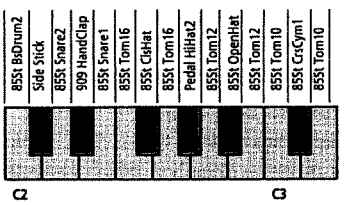
On top of that, transposing the keyboard to the lowest octave sometimes provides access to some typical noises (scraping over the strings, hitting the body of an acoustic guitar, etc.). See page 44 for how to select the lowest octave. Though these "beautiful noises" are probably too far away for live use, consider throwing them in when recording your own songs. Your sequences will sound even better!

Alternatively...
Assign the same "V" guitar Tone to the UP1 (or UP2) and LW1 (or LW2) part, select the SPLIT Keyboard mode (see page 33), and transpose the LW1 (or LW2) part 4 octaves down using the Octave function (see page 44). That should allow you to throw in the odd scrape or knock. You may want to select a relatively low split point (see page 32). This approach "works" because most Tones are musically useless below a certain note, so why not use the remaining notes to the left for the playing noises?

Drumming on the keyboard

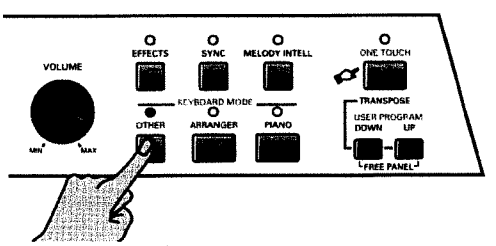
The MDR (M. Drums) part allows you to drum on the keyboard. As stated above, this part is available in both SPLIT and WHOLE modes. When used in SPLIT Keyboard Mode, it is assigned to the right half of the keyboard (which means that the notes pictured below are masked until you select another Octave for the MDR part).

The MDR part differs from the other Keyboard parts in that it assigns different sounds to every key. If you select the WHOLE mode and press the C2 (second C from the left), you trigger a bass drum sound. Press the D2 key (the D to the right of the C2) to trigger a snare drum sound, and so on. Consequently, you won't be able to play melodies. Consider the following illustration:

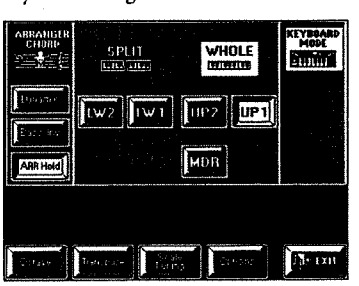


Here's how to activate the MDR part:

1. Press the Keyboard Mode [OTHER] button.



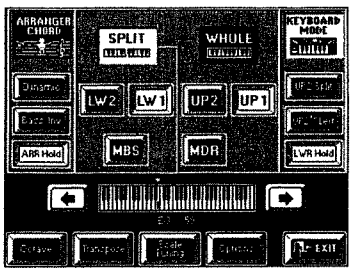
The display now changes to:



This page means that the WHOLE Keyboard Mode is currently selected (see page 33). If you don't see this page, press the [KEYBOARD MODE] field in the upper right corner.

2. Press the [SPLIT] or the [WHOLE] field, depending on whether you wish to assign the MDR part to the entire keyboard (WHOLE), or just the right half (SPLIT).

If you press [SPLIT], the display now looks more or less as follows:



SPLIT would be a good choice if you wanted to control the Arranger with your left hand, while adding a percussion solo with your right.

If you work in SPLIT mode and need to play the Kick, Snare, HiHat, etc. sounds (assigned to the keys that cannot be triggered by the MDR part), consider using the Octave function (see page 44).

3. Press the [MDR] field.
All part fields (WHOLE mode), or all part fields to the right of the dividing line (SPLIT) turn blue, while the [MDR] field turns white. That is because you cannot use both the MDR part and UP1, UP2, etc. This wouldn't make sense: playing a drum part often means that you have to play semitone intervals (e.g. C4 → C#4, etc.), while playing a melody would lead to surprising percussion or drum lines if the MDR was also on.

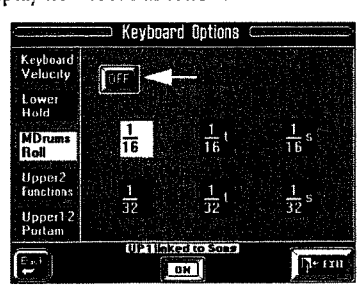
4. Play a few notes on the keyboard to try out the drum sounds.
You may also want to try out the following:

Roll

The Roll function allows you to play perfect drum rolls whose tempo is synchronized with the Arranger or a Composer Song.

1. On the above display page (in SPLIT or WHOLE mode), press the [Options] field.
If you lost the above display page, first press the [OTHER] button on the front panel.

2. Press the [MDrums Roll] field (left column, central field).
The display now looks as follows:



3. Press the indicated [ON/OFF] field so that it reads "ON" and is displayed in white.

4. Again play a note.
The drum sound will now be played as a roll. Rolls are always played in time with the tempo displayed on the Master page. Try this out by changing the tempo using the [TEMPO/DATA] dial.

Using the Modulation lever (press the lever away from you), you can modify the volume of the drum roll. Try this out now.

Setting the Roll resolution (speed)

You can specify the number of notes per beat for the Roll function.

5. Press another note value field than the one that is currently active.
There are six options that have the following meaning:

Symbol	Meaning
1/16	Sixteenth notes.
1/32	Thirty-second notes (half the duration of 1/16 notes).
t	Triplet (three notes in the space of 2).
s	Swing (syncopated notes, where the second note of a pair drags a little).

The default value is "1/32". Selecting shorter values may result in machine-gun type rolls at high tempo values. Always specify the resolution after setting the Style or Song tempo, or change it to a more usable value if your setting turns out to be too optimistic to produce natural rolls.

6. Press [EXIT] to return to the Master page.

Selecting Drum Sets for the MDR part

The MDR part may already be a remarkable function by itself. But things really become interesting when we tell you that the VA-3 comes with 116 different Drum Sets to choose from.

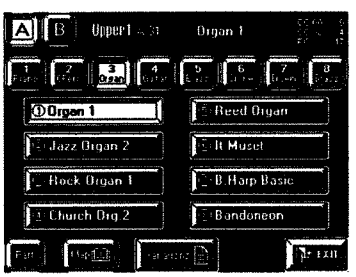
There are Drum Sets for just about any musical genre you can think of – and usually, you can even choose among several alternatives. See page 181 for a list of the available Drum Sets. While looking at that list, remember that every note plays a different drum sound.

The notes have two "addresses" (see also the chapter about MIDI): a note number (0~127), and a note name (C–1~G9). The sounds that can be triggered in WHOLE mode without transposing the keyboard are C1 (24)~C6 (84). Lower and higher notes require that you transpose the MDR part using the Octave function (see page 44).

The readily available drum sounds are indicated by means of greyed keys in the list for easy identification. Remember, however, that in SPLIT mode, only the notes C3 (48)~C6 (84) are available – unless you change the split point (see page 32).

1. See "Selecting Tones for the Keyboard parts" on page 34 for the basic operation.

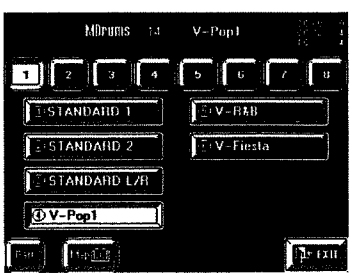
Remember that you can either work via the display or with the BANK/NUMBER pad after pressing the [TONE] button. The display should look as follows:



2. Select the MDR part:

- Either hold down the [PART] button while pressing NUMBER [3]; —or—
- Press the [Part] field on the above page, and then press the [MDR] field. (Then press the [Tone] field to return to the above page.)

3. Select the desired Drum Set (here you only need to select a bank and a number).



See "Tone selection via the front panel" on page 34 and "Tone selection via the display" on page 36.

Be sure to try out at least the Drum Sets whose names start with a "V". The *V-VoxDrum* Set (Tone Map 4, 88) is especially interesting with voice percussion. If you take a close look at the table below, you will recognize that they follow a pattern: bank "1" of all Maps contains generally usable Drum Sets, bank "2" Drum Sets with effects (ambience, special Dance noises), bank "3" rock kits, etc.

Note: The Drum Sets labelled CC32= 122 (General MIDI 2) and CC32= 119 (XG) cannot be selected via the front panel. You need to play back a Standard MIDI File using the Composer, or transmit these CC32 values to the VA-3 via MIDI.

Tone Map 4			
11 STANDARD 1	74 KICK&SNARE 2	71 ORCHESTRA	41 ELECTRONIC
12 STANDARD 2	75 ASIA	72 ETHNIC	42 TR-808
13 STANDARD L/R	76 CYMBAL&CLAP	73 KICK & SNARE	51 JAZZ
14 V-Pop1	77 GAMELAN 1	75 ASIA	61 BRUSH
15 V-R&B	78 GAMELAN 2	76 CYMBAL&CLAP	71 ORCHESTRA
16 V-Fiesta	81 SFX	81 SFX	81 SFX
21 ROOM	82 RHYTHM FX	82 RHYTHM FX	88 CM-64 / 32L
22 HIP HOP	83 RHYTHM FX 2	83 RHYTHM FX 2	
23 JUNGLE	84 RHYTHM FX 3	128 CM-64/32L	**CC32= 122**
24 TECHNO	85 SFX 2		**(General MIDI 2)**
25 ROOM L/R	87 CYM&CLAPS 2	**Tone Map 2**	1 GM2 STANDARD
26 HOUSE	88 V-VoxDrum	11 STANDARD 1	9 GM2 ROOM
31 POWER	128 CM-64/32L	12 STANDARD 2	17 GM2 POWER
32 V-Rock1		21 ROOM	25 GM2 ELECTRIC
33 V-Rock2	**Tone Map 3**	31 POWER	26 GM2 ANALOG
41 ELECTRONIC	11 STANDARD 1	41 ELECTRONIC	33 GM2 JAZZ
42 TR-808	12 STANDARD 2	42 TR-808/909	41 GM2 BRUSH
43 DANCE	13 STANDARD 3	43 DANCE	49 GM2 ORCHESTRA
44 CR-78	21 ROOM	51 JAZZ	57 GM2 SFX
45 TR-606	22 Hip-Hop	61 BRUSH	
46 TR-707	23 JUNGLE	71 ORCHESTRA	**CC32= 119 (XG)**
47 TR-909	24 TECHNO	72 ETHNIC	1 standard kit
51 JAZZ	31 POWER	73 KICK&SNARE	2 standrd kit2
52 JAZZ L/R	41 ELECTRONIC	74 Oriental	9 room kit
61 BRUSH	42 TR-808	81 SFX	17 rock kit
62 BRUSH 2	43 DANCE	82 RHYTHM FX	25 electro kit
63 BRUSH 2 L/R	44 CR-78	128 CM-64/32L	26 analog kit
64 V-JazzBrush	45 TR-606		33 jazz kit
71 ORCHESTRA	46 TR-707	**Tone Map 1**	41 brush kit
72 ETHNIC	47 TR-909	11 STANDARD1	49 classic kit
73 KICK & SNARE	51 JAZZ	21 ROOM	121 SFX 1 kit
	61 BRUSH	31 POWER	122 SFX 2 kit

► Numbers indicated as "123" are MIDI Program Change numbers

Note: As you see, the Sets are divided over several Tone Maps. See also page 38.

Note: There are no Variation Drum Sets, which is why the [Variations] field is not displayed when the MDR part is selected.

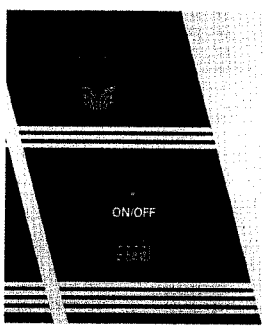
4.3 Expression clinic

Let us now have a look at the VA-3's performance functions. Also called *Controllers*, they allow you to add expression to your playing, which is a very important aspect for simulating glissando's, bendings, and other changes to the timbre that will make your melodies even more convincing.

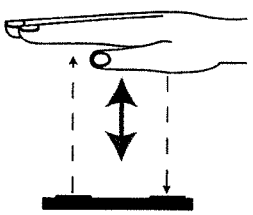
Note: See page 63 for details about the VA-3's velocity sensitivity and related possibilities.

D Beam Controller

The D Beam Controller is no doubt the most exciting and spectacular performance function of your VA-3. You can use it to modify various aspects of your V-Arranger Keyboard, such as bending the notes, intensify their vibrato, change the filter frequency (to make the sound brighter or mellower), and even to play arpeggios or chords.



The D Beam Controller has two sensors that detect motion (such as your hand or body movements) in front of it. These "sensed" positions are translated into MIDI messages that can be assigned to a variety of parameters. See page 144.



1. Press the D Beam Controller [ON/OFF] button (indicator must light) to activate the D Beam Controller.

2. Activate the UP1 part.

The easiest way to do so is by pressing the Keyboard Mode [ARRANGER] or [PIANO] button. See also page 31.

Note that the D Beam Controller also applies to the other Keyboard parts, while it also allows you to control certain Arranger functions. Here, however, we'll keep things simple by showing you how it influences the UP1 part.

3. Move your hand over the "eyes" while playing something.

Listen to how the UP1 sound becomes brighter and mellower as you move your hand up or down. Furthermore, the sound becomes more synthesizer-like. That is because the "Cut & Reso Up" function is assigned, which means that you can change the filter setting.

4. If you no longer need the D Beam Controller, press its [ON/OFF] button again (indicator goes dark).

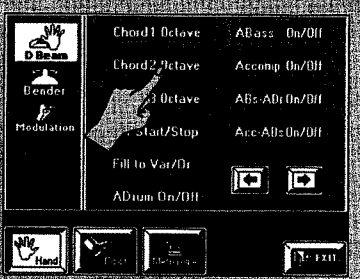
Example (Flamenco Roll)

Here's another spectacular use for the D Beam Controller:

1. Assign the *A41 <9> V FL GtrRoll* Tone to the Lower2 part (LW2).

2. Press the [FUNCTION MENU] button. On the display page that appears now, press the [Controllers] field, followed by the [D Beam] field.

3. Use the [◄][►] fields to select the following display page:



4. Press the [Chord 2 Octave] field.

5. Press the Keyboard Mode [ARRANGER] button so that its indicator lights.

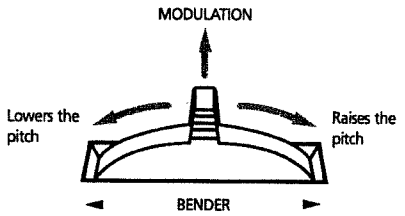
6. Switch on the D Beam with its [ON/OFF] button, play a note in the left half, hold your hand over the D Beam... and olé!

Depending on where the chord recognition area is located (see page 71), you can change the pitch of the rolls by playing single notes in the chord recognition area (probably in the left half of the keyboard).

Note: Be sure to switch off the LW2 part so that you can't trigger it via the keyboard.

Note: The values generated by the D Beam Controller can be recorded by the Composer and are transmitted to the VA-3's MIDI OUT port.

Pitch Bend/Modulation



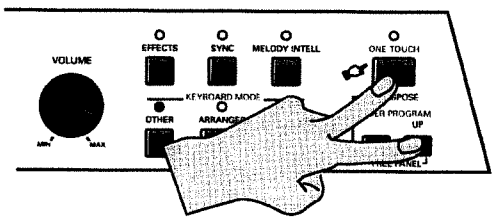
Turn the BENDER/MODULATION lever towards the right to bend the notes you are playing upwards, or to the left to lower the pitch. Release the lever to return to the standard pitch.

Push the lever away from you to add vibrato to the notes you are playing (Modulation). Release the lever to remove the vibrato. See page 146 for how to set the Pitch Bend interval.

Transposition

If you are used to playing a song in a particular key, the Transpose function will help you go on playing in that key while sounding in another one. That way, you can accompany a singer or instrument without changing your fingering.

Hold down the [ONE TOUCH] button while pressing User Program [DOWN] or [UP].
Press [DOWN] to lower the pitch in semitone steps (a C to B, an E to E♭, etc.).

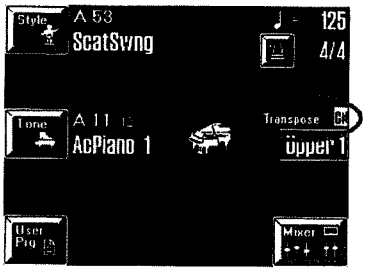


Note: Transposition applies to all parts except the MDR (Manual Drums) and ADR (Accompaniment Drums) parts.

To transpose from the key of C to G, hold down [ONE TOUCH] and press User Program [UP] seven times (or User Program [DOWN] five times).

Be sure to return to the original setting (no transposition) by pressing the "opposite" User Program button ([DOWN] or [UP]) the same number of times as the one ([UP] or [DOWN]) you pressed first.

The transposition is indicated on the Master page:



The "C♯" actually refers to a semitone increase of the pitch, so that you hear a "C sharp" every time you play a C. It also means that, rather than the A you press, you will hear "A sharp" (or "B flat"). The above setting corresponds to pressing User Program [UP] once while holding down the [ONE TOUCH] button.
Note: This setting is also reflected on the Transpose display page (see below).

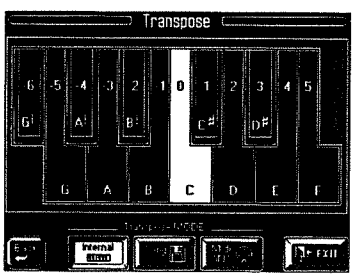
Setting the transposition interval via the display

If you prefer to set the transposition interval via the touch screen with a nice graphic, way, here is how to.

1. Press the Keyboard Mode [OTHER] button.
What you see now, depends on the currently selected keyboard mode. The things to look out for here are the [ARRANGER CHORD] and [KEYBOARD MODE] fields in the upper left and right corners.

2. Press the [KEYBOARD MODE] field in the upper right corner (so that it is displayed in white).

3. Press the [Transpose] field.



4. In the display, press the key that corresponds to the note you would like to hear every time you play a C.
Note: Selecting "0" means that the transposition is off. This is the only way to activate or switch off this function. Your setting can, however, be written to a User Program (see page 91).

See below for details about the Transpose Mode options. You can activate all three simultaneously, if you like.

Note: The MDR and ADR parts are never transposed. Every key (note) of the MDR/ADR parts is assigned to a different percussion sound. It is thus in your best interest to leave the Manual and Accompaniment Drum parts alone.

Selecting the sections to be transposed

The three fields below the keyboard allow you to specify which parts should be affected by the Transpose setting:

Internal— The Keyboard and Arranger parts will be transposed. Notes received via MIDI, however, will be played without change.

Song— Only the Song parts will be transposed. This is only meaningful when you play back a Standard MIDI File or one of your own songs with the VA-3's Song Composer.

MIDI "IN"— Only the notes received via MIDI IN will be transposed. In a way, this is the same as the *Rx Shift* parameter in MIDI mode (see page 153).

Though it is perfectly possible to switch on all three options, you can never switch off all three of them. At least one of them must be on. *Internal* could be useful to transpose only the Keyboard parts so that you can play to a Composer song in "your" key but sound in the song's key.

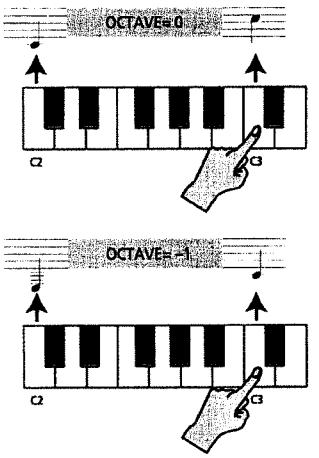
5. Press [← BACK] to return to the previous display page, or [EXIT] to return to the Master page.

Octave

The Octave function is another useful parameter that allows you to change the pitch of the selected part in octave steps (12 semitones).

You could take advantage of this function for solo parts where you need the UP1 and UP2 parts to trigger the same Tone, while UP2 plays one octave above or below UP1. Another use for this function is to provide access to the "noises" of the VA-3's new "V" Tones so as to be able to trigger the scraping, knocking, etc.

This probably only works when you use a Keyboard part (UP1, UP2, LW1, or LW2) in WHOLE Keyboard Mode (see page 33). Working in SPLIT mode indeed means that you can only play the notes up to a certain point (the split point). For the "noises", you need to select the setting "–3". Note that this also means that you need to play the "real" notes at the right end of the keyboard, because the entire part/Tone is transposed down.

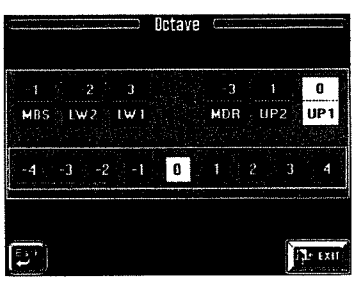


This parameter also comes in handy when you wish to trigger Drum Set sounds (using the MDR part) that are not accessible via the keyboard in its normal state. Remember that there are only 61 keys, while some Drum Sets provide drum/percussion sounds for all 128 notes supported by the MIDI standard.

1. Press the Keyboard Mode [OTHER] button.

2. Press the [KEYBOARD MODE] field in the upper right corner (so that it is displayed in white).

3. Press the [Octave] field.



4. Press the field that corresponds to the Keyboard part you wish to transpose in octave steps (UP1, UP2, etc.).
As you see, the display also indicates the current Octave settings for all Keyboard parts.

5. Now press the field that corresponds to the desired Octave setting.
"–" values mean "down/lower". Example: "–3" means that the part in question is transposed three octaves down. All other values (except "0") mean "up/higher".

6. Press [←BACK] to return to the previous display page, or [EXIT] to return to the Master page.

Sustain Footswitch (Hold)

The SUSTAIN/EXPR socket on the VA-3's rear panel allows you to connect an optional DP-2, DP-6, or BOSS FS-5U footswitch or an expression pedal. It detects automatically which kind of controller you connect.

The Sustain function can be used for the following parts in isolation or in combination: Upper 1/2, Lower 1/2, and M.Bass, on condition that you select the WHOLE keyboard mode. In SPLIT mode, the sustain pedal's Hold function only works for the right-most part. When Upper 1 and 2 are layered, the Hold effect will work for both of them. In UP2 Split (see page 58) and UP2-to-Left modes, the Hold function only applies to the Upper1 part.
Note: Do not forget to connect an optional DP-2, DP-6, or BOSS FS-5U footswitch to the SUSTAIN/EXPR socket.

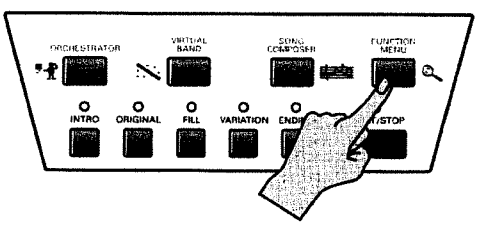
Expression (Foot Pedal)

An optional EV-5 or BOSS FV-300L expression pedal connected to the SUSTAIN/EXPR socket allows you to control the volume of all parts by foot. You can reverse the expression pedal's effect and specify that certain parts are not to be controlled by the expression pedal.

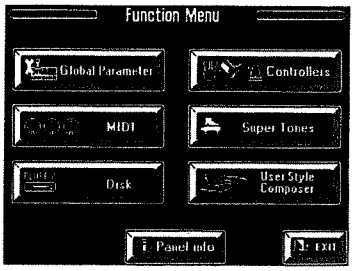
Master Tune

This is not really a performance function, but it allows you to tune your VA-3 to acoustic instruments that cannot be tuned.

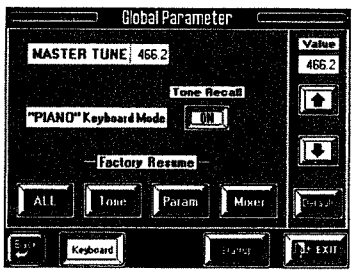
1. Press the [FUNCTION MENU] button.



The display now looks as follows:



2. Press the [Global Parameter] field.



If this page is not displayed, press the [Keyboard] field so that it is displayed in white.

3. Play the A between the [ENDING] and [START/STOP] buttons while using the [↑][↓] fields to set the desired tuning.
The default value is "440.0". You can return to this value by pressing the [Default] field.

Alternatively, you can press the [Value] field and set the desired value using the [TEMPO/DATA] dial.

4. Press the [EXIT] field to return to the Master page.
Press the [←Back] field to return to the Function Menu if you need to set other functions.

Scale Tuning

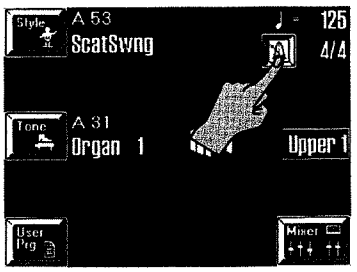
Another useful function is called Scale Tuning. This allows you to use oriental, asian, and other scales in much the same way as on an oriental keyboard (EM-50 OR, etc.). See page 64 for details.

Metronome

The VA-3 is equipped with three metronomes: one for Style playback, one for Song Composer recording/playback, and one for User Style Composer programming.

If you wish to hear a metronome during Style playback, here is what you need to do:

1. On the Master page, press the metronome field (so that it turns white).



2. Start Arranger playback, and you will hear the metronome.

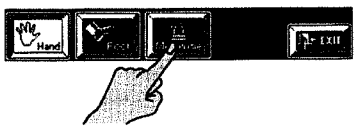
3. Press the metronome field again to switch off the metronome.

Metronome Output

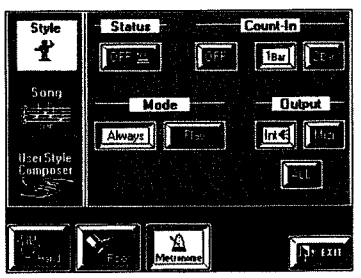
The VA-3 also allows you to select how the metronome is played back:

1. Press the [FUNCTION MENU] button and the [Controllers] field.

This selects a display page with controller options. The exact look of that page is of little importance, for you need to press the [Metronome] field at the bottom of the screen, which is available on all pages:



The display now looks as follows:



If it doesn't, press the [Style] field (it must be displayed in white).

2. Select one of the following options:

Int— The metronome signal is played by the Drum Set currently assigned to the MDR part (see page 41) and thus audible in the VA-3's speakers or the headphones you connected to either of its headphone sockets.

Midi— The metronome signal is sent to the VA-3's MIDI OUT port and can be played by an external module. This module must receive on MIDI channel 16. The safest would be to assign MIDI channel 16 to part 10 of a multitimbral module. That way, its Drum Set is triggered by the metronome. (The MDR part transmits on MIDI channel 16.)

ALL— The metronome is played by the VA-3's MDR part and transmitted to MIDI OUT.

Metronome Mode

Yet another option on the above display page is to specify *when* the metronome should be sounded:

Always— The metronome even counts when Arranger playback is stopped. Press this field if you want to hear the metronome at all times (which is probably only useful when practising a new song).

Play— Press this field (so that it is displayed in white) if the metronome should only be sounded while the Arranger is playing back a Music Style pattern (Intro, Original, etc.).

Count-In

This parameter allows you to switch the Count-In function on or off. When on, the metronome will count in the specified number of measures (bars) before the Arranger starts playing.

Note: This count-in is also available when you are using the Sync Start function. In that case, playing a chord means that the Arranger only starts after 1 or 2 measures.

1. See "Metronome Output" for how to select the display page with the metronome options.

2. Select an option in the *Count-In* section:

OFF— The count-in function is off.

1Bar, 2Bar— Whenever you start Arranger playback, the metronome counts in 1 or 2 bars before the selected Music Style pattern starts playing.

Note: The Count-In function can be used independently from the metronome. There is thus no need to activate the metronome in order to hear it.

3. Press the [EXIT] field to return to the Master page.

4.4 Arranger/Music Style clinic

Before telling you more about the Music Styles, we'd like to explain the difference between *Music Styles* and the *Arranger*. The Arranger is in fact the function (or sequencer) that plays the accompaniments you select. These accompaniments are always related to a given musical genre (or "style"), and are therefore called *Music Styles*. As the VA-3's accompaniments are a lot more than just one pattern that goes on playing until you stop it, the Music Styles comprise several patterns (or divisions).

The Arranger is interactive in two respects: you can tell it in what key it should sound by playing chords; and you can also tell it what kind of of accompaniment it should play by selecting other divisions via the front panel or the touch screen. The Arranger (the "hardware") would be nothing without the Music Styles (the "software"), while the Music Styles would become repetitive after a while without the various divisions.

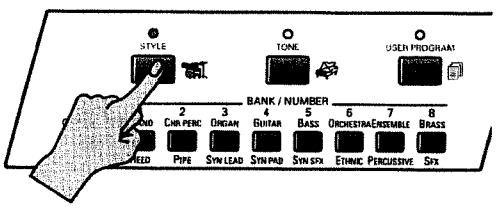
Selecting Music Styles

Like for Tone selection, there are two possibilities that can be used indiscriminately: you can work the traditional way (using the buttons), or via the display – or mix these two approaches as you see fit.

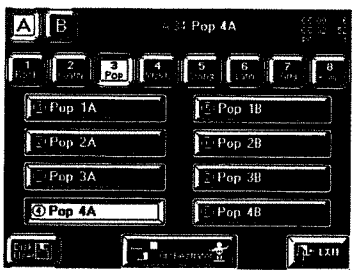
Style selection via the front panel

Note: All button actions are also reflected by the display. See "Style selection via the display" on page 47 for the information that appears on-screen.

1. Tell the VA-3 that you wish to select a Music Style: press the [STYLE] button (indicator lights).



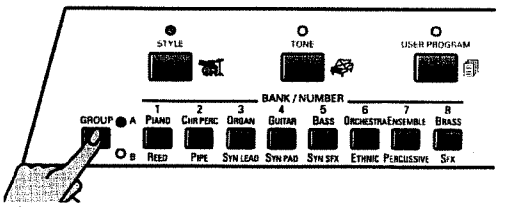
The display now looks as follows:



The name next to the [A]/[B] fields tells you which Music Style is currently selected.

Note: The numbers in the upper right corner of the display indicate the MIDI address of the currently selected Music Style ("34 Pop 4A").

2. Press the [GROUP] button to select group A (group B provides access to the Disk Lik Styles, see page 48).



There are two Music Style groups with 64 memories each (for a total of 128 Styles):

A— The Music Styles in ROM.

B— This group represents the Disk Link group. These are memories that can be selected in the same way as the ROM memories, even though they load Music Styles directly from floppy disk.

Note: See also the Music Style list starting on page 199 for the names and addresses of the Music Styles.

When you select a GROUP, the VA-3 automatically activates the BANK that was active in the previous group.

3. Press a BANK/NUMBER [1]~[8] button to select a Style bank within the active group.

Each Style group contains eight banks.

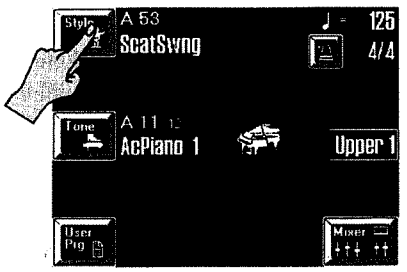
4. Press a BANK/NUMBER [1]~[8] button to select a Style within the active bank.

Only now will the new Music Style be selected. You could take advantage of this system to prepare the group and bank with your left hand, while continuing to play the melody with your right hand. Then, all you need to do is select the desired number just before the beat where you wish the new Music Style to take effect.

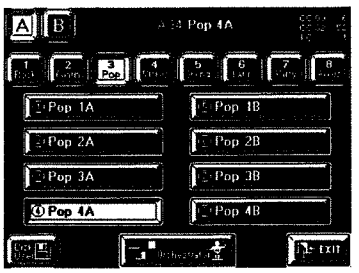
Style selection via the display

Let us now look at how to use the display for selecting Styles.

1. Press the [Style] field in the display.



The display now looks as follows:



2. Press the [A] or [B] field to select the desired Music Style group.

3. Press one of the following fields to select a bank within that group:

Use these fields for selecting a Music Style bank:

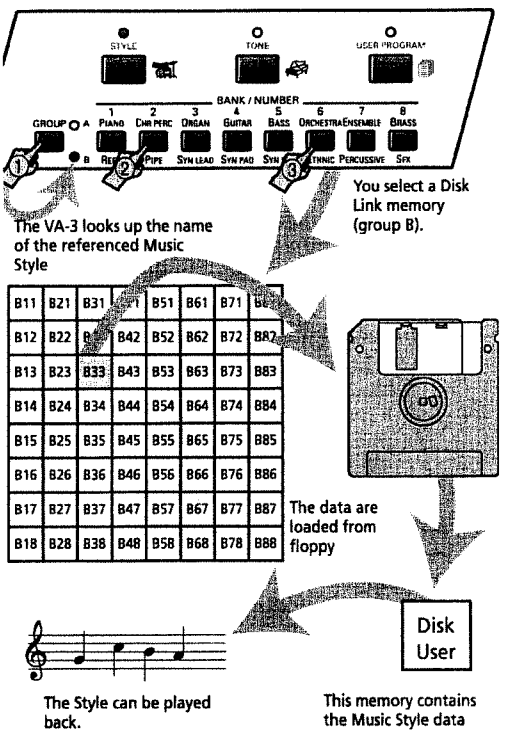
4. Press a Style field to select a Music Style (number). While you're at it, you may want to prepare the desired Orchestrator "version" so as to be all set for the next song you want to play. In that case, press the [Orchestrator] field and see page 50 for what to do next.

Working with the Disk Link memories

The VA-3 provides 64 memories (8 banks x 8 numbers) that refer to Music Styles on the supplied or any other floppy disk. Though these memories behave exactly like the memories of group A (that provides access to the 64 internal Music Styles), they only "work" if the disk in question has been inserted into the drive. Thanks to the VA-3's powerful software, loading a Disk Link Style is as swift as working with internal Styles.

The Music Style referenced by the Disk Link memory you select is automatically loaded from disk and copied to the Disk User memory (see also page 49). This is a RAM memory whose contents are erased when you switch off the VA-3, and overwritten when you select another Disk Link memory (or use the Disk User function).

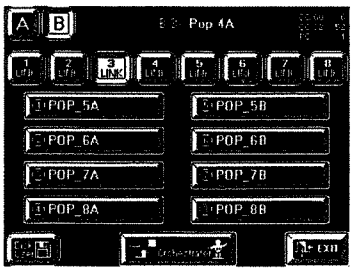
Here's in a nutshell what happens when you select a Disk Link memory. (Even though the drawing may suggest that this takes quite some time, the VA-3 performs these steps in a split second.)



After unpacking the VA-3, these memories already contain links to 64 Music Styles on the supplied floppy disks. You can also program your own references to other Music Styles on disk (see page 78).

The Disk Link memories are assigned to group B. You can use either of the above procedures for selecting them ("Style selection via the front panel", "Style

selection via the display"). Just be sure to select group B. Here's what the display looks like when group B has been selected:



Even for Music Styles on floppy, the VA-3 thus displays their names. In fact, it's the names that are important for finding the Styles on a disk. If you change the name of a Music Style that is referenced by one of the Disk Link memories (see page 78), the VA-3 can no longer find it. Conversely, if you have two floppy disks that both contain a Music Style called "Reggae1", even inserting the "wrong" disk would recall a "Reggae1" Style – but it might be the wrong one (and quite a few other Disk Link memories might not recall any Style at all, because the other names only exist on the "other" disk).

Note: See page 50 for the meaning of the [Orchestrator] field.

Be sure to insert Disk "1" for memories B11~B48, and Disk "2" for memories B51~B88. See also page 199.

Do not forget to insert the required floppy disk into the VA-3's drive. Failure to do so may lead to the following message being displayed:

In that case, press the Eject button on the floppy drive, insert the correct floppy disk, and press the [RETRY] field.

Note: If you do not wish to use the Music Style after all, press [EXIT]. In that case, the VA-3 will go on using the last Music Style it did find.

Disk User

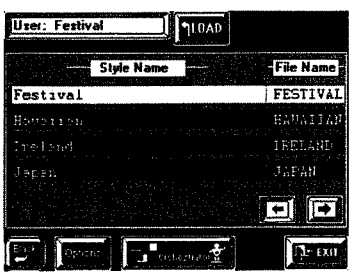
You can also load one Music Style directly into the VA-3's Disk User memory and use it as if it were a 65th Music Style. You could take advantage of this function whenever none of the 64 Disk Link memories (Group B) refer to the Music Style you need for playing a given song.

Note: The Music Style in this memory is only available until you switch off the VA-3 or load another Style. Be aware that selecting a Disk Link Style will also overwrite the last Disk User Style you selected.

1. Insert the floppy disk with the desired Music Style into the drive.

2. On the Music Style selection page (see above), press the [Disk User] field.

The display now looks as follows:



3. Press the field that contains the name of the Music Style you want to load.

4. If the desired Music Style is not displayed, use [◄][►] to select another group of 4 Styles.
You can also use the [TEMPO/DATA] dial for selecting other pages with different Music Styles on the inserted disk.

Note: See page 78 for the [Options] field.

Note: Press the [EXIT] field if you do not want to use a Style on disk after all.

5. Press the [LOAD] field to copy the data of the selected Music Style to the VA-3's Disk User memory.
The display page does not change. This was done to allow you... to select another Music Style on floppy disk. Repeat the above procedure. As soon as you press the [LOAD] field, the name of the newly selected Style will appear in the "User" field in the upper left corner. When the pattern of the currently selected Music Style is finished, the VA-3 switches to the newly selected Style on disk.

6. Start playing with the newly selected Style.
The selection of the Disk User Style will be written to a User Program (see page 91).

7. Press [EXIT] to return to the Master page.

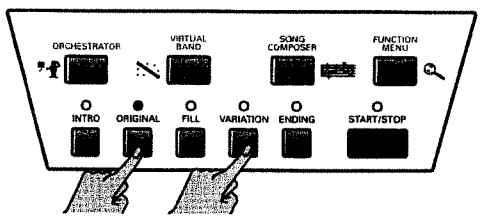
The "User" message to the right of the [Style] field alerts you to the fact that you are currently using a Disk User Style.

Orchestrator and Morphing

The VA-3's Music Styles are far more versatile than we have seen so far. For one, you can vary the repeating accompaniment patterns (Original and Variation). And you can also mix the parts of two Music Styles so as to create new Music Styles on the fly (Morphing).

Orchestrator

The Original and Variation patterns are the two "basic" Music Style patterns that can be selected by pressing the corresponding buttons on the front panel:



(Note that only one of them can be active.) Whereas [ORIGINAL] selects the simpler version of the repeating ("looped") accompaniment, [VARIATION] calls up a more "stuffed" version.

With the ORCHESTRATOR function, you can further refine and vary the Original and Variation patterns played by the Arranger. This is like orchestrating the accompaniment in realtime, because you can leave out parts, thin out the drum part, or even select a totally different accompaniment.

There are four options for both Original and Variation, while the selected Orchestrator option also affects the Intro and Ending patterns.

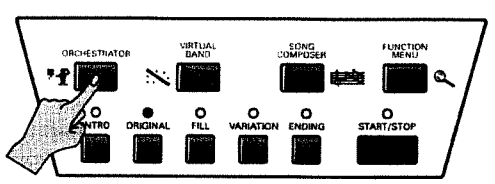
1. Activate the VA-3's Arranger and start playback of the [ORIGINAL] or [VARIATION] pattern.
See "Using the VA-3's Arranger" on page 23.

2. Do one of the following:

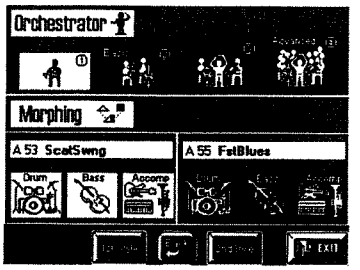
- Press the [Style] field on the Master page (as though you wanted to select a Music Style).
- On the page that appears next, press the [Orchestrator/Morphing] field.

—OR—

- Press the [ORCHESTRATOR] button.



In either case, the display now looks as follows:



3. Press an Orchestrator field to select the desired "orchestration".

As you see, there are four fields. "②" corresponds to the *Basic* level found on previous Roland arranger keyboards. "①" provides a slightly more sober version of the Basic pattern. "④" corresponds to the *Advanced* level on older Roland models, while "③" is a slightly simpler version.

With these fields, you can thus vary your accompaniments at will so as to make them sound really professional.

Note: The last version you select will be written to a User Program (see page 91), so be sure to prepare the one you want to start with next time you select that User Program.

Note: The Music Styles on the supplied floppy disk also contain suitable Orchestrator versions. Other Music Styles you can load with the VA-3, however, may not provide the same flexibility.

Morphing

The Morphing function allows you to create a mix of two Music Styles by using certain accompaniment parts from one Style, and other parts from another Style.

The mixable parts are: Drums, Bass, and Accomp. The latter includes all melodic parts (for a maximum of six) except for the bass. These may be piano, guitar, brass, etc. lines. Morphing allows you to create combinations like the following:

1st Style	2nd Style
Drums	Bass, Accomp
Bass	Drums, Accomp
Accomp	Drums, Bass

Of course, you can also use just one part of the "2nd Style" and two of the "1st Style". It is not possible, however, to switch on two identical parts (i.e. the Bass parts of the "1st Style" and the "2nd Style"). Neither can you switch off e.g. the drums altogether (neither "1st Style", nor "2nd Style"). See page 83 for how to do that.

On the other hand, it is perfectly possible to combine the drums of a waltz with the bass and accompaniment parts of a 16-beat Style, for example. Using two

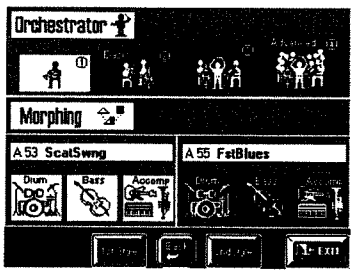
Styles with different time signatures is absolutely no problem. Be aware, though, that the result of your morphing may not be usable in a real-life situation.

If you do use two Styles with different time signatures, the "1st Style" determines the time signature of your morphed Style. In other words: if your "1st Style" is a waltz, the morphed result will use the 3/4 time signature.

The possibilities are endless, because you can not only use the internal Music Styles (group A) but also Styles on floppy disk (via the Disk Link or Disk User function).

Let us morph (i.e. create) a new Music Style now to see how it works:

1. See steps (1) and (2) above.



The "1st Style" is the one you (or the Virtual Band) selected last, while the "2nd Style" is prepared automatically. What you hear now is the "1st Style" (all three fields in the left column are white).

Note: See below for how to select other Music Styles for the Morphing function.

2. Press the [Drum] field in the right column.

The [Drum] field in the left column turns blue, while the one in the right column turns white. You are now using the drum part of the "2nd Style" with the Bass and Accompaniment of the "1st Style".

3. Press the [Bass] field in the right column.

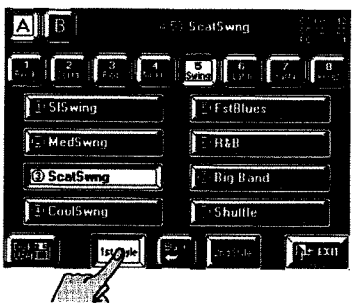
This switches off the Bass line of the "1st Style", while the Bass line of the "2nd Style" is activated.

4. Try out other combinations.

5. Press [START/STOP] to stop Arranger playback.

Let us now select other Music Styles for the "1st Style" and the "2nd Style".

6. Press the [1st Style] field in the display.

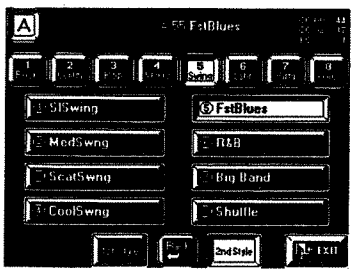


This page should look familiar. It allows you to select a Music Style.

7. Assign a Music Style to the "1st Style" memory.

Remember that it is also possible to use the BANK/NUMBER buttons. See "Selecting Music Styles" on page 47 and "Style Morphing (part 2)" on page 68 for operation details.

8. Press the [2nd Style] field.



Again a familiar display page. Note, however, that the [B] and [Disk User] fields are no longer there. While the "1st Style" can be taken from the ROM memory (group A) *or* a floppy disk (group B or Disk User), the "2nd Style" must be a ROM Style. That is why you can only select group A.

9. Assign a Music Style to the "2nd Style" memory.

10. Press the [◄Back] field to return to the Orchestrator/Morphing page, and start morphing again.

Note: Your "2nd Style" will also be stored when you write your settings to a User Program (see page 91). You thus do not have to perform the selection process every time you want to morph.

4.5 Song Composer clinic

On page 28 we already showed you how to play back a Standard MIDI File on floppy disk. Here we'll record a song using the Arranger as accompaniment.

Recording your music

You can record your music as "Songs" that can be saved to floppy disk.

Though the following series of steps may seems rather long to perform, you could skip those you do not need, while you may want to perform other actions for certain steps. Here, we will take advantage of all "automatic" functions the VA-3 contains with occasional hints for alternatives.

Note: See also "A few remarks about recording songs" on page 96.

1. Press the [VIRTUAL BAND] button.

2. Press the [EASY ROUTING] field, followed by the [In a BAND] field.

3. Now follow the on-screen instructions to select a Music Style and a Tone for your right hand.

4. After selecting the "solo instrument", press the [FINISH] field.

Here are other settings you could select:

- See page 47 for selecting another Music Style and page 23 for selecting the pattern you want to start with.
- Press [ORIGINAL] or [VARIATION] if you want to start without the introduction. Use the Orchestrator for selecting another Intro or Original/Variation version (see page 50).

If you need more than the Upper1 part, select additional Keyboard parts (see page 31). It is also possible to work with a second (see page 58) or dynamic split (see page 60).

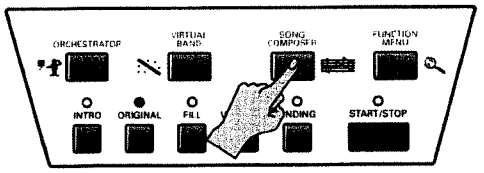
Note: Rather than performing the above steps, you could also recall a User Program with the desired settings (see page 92).

5. Press the [START/STOP] button and listen to the tempo. If it is too fast, change it now (see page 25).

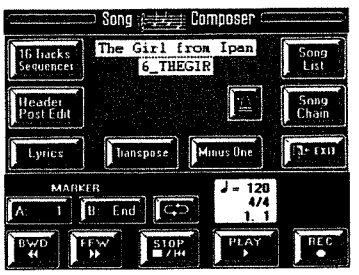
6. Press [START/STOP] again to stop playback.

This tempo will be used every time you start playback of this song. You can, however change it temporarily during playback, or edit it later (see page 119).

7. Press the [SONG COMPOSER] button.



The display now looks as follows:



See page 96 and following for an explanation of the various fields.

8. Press the [REC ●] field (so that it is displayed in white).

If you like, you can press the [SYNC] button (indicator lights). In that case, you can skip the next step.

9. Press the [START/STOP] button.

Arranger playback and recording start.

Note: You can also start recording by pressing the [PLAY ▶] field, in which case the Song Composer starts without the Arranger. Press the [START/STOP] button to add the Arranger at a later stage.

10. Play the Arranger chords with your left hand, and the melody with your right.

If you think that playing the chords for the Arranger and the melody simultaneously is too difficult, leave the melody for later (see "Redoing the melody (2nd Trk)") and only play the chords used for transposing the Arranger in realtime.

Note: You can also use the VA-3's performance functions for your melody playing. See "Expression clinic" on page 42.

11. To stop recording, do one of the following:

- Press the [ENDING] button. The Arranger will play the Ending. When it is finished, Arranger playback and Song Composer recording stop.
- Press the [START/STOP] button. This will stop Arranger playback, while recording goes on. This allows you to improvize without accompaniment. (You will also need to perform the following step.)
- Press the [STOP ■|◀] field to stop recording.

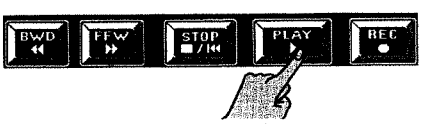
Listening to your song

You probably want to listen to your song now. If you like it, be sure to save it to floppy disk (see "Saving your song to disk").

1. Press the [STOP ■|◀] field twice.

This returns the Song Composer to the beginning of your new song.

2. Press the [PLAY ▶] field to start playback.



Playback of your freshly recorded song starts.

3. Press [STOP ■|◄] again to stop playback, and again to return to beginning of the song.
If you made a mistake in the Arranger chords and would like to record that part again, go back to step (8) above. Make sure that the [2nd Trk] field is *not* displayed in white (press it if it is), and start again.

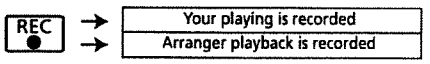
Note: This will also erase your melody, so be sure to play it again – or leave it for later (see "Redoing the melody (2nd Trk)").

Redoing the melody (2nd Trk)

Note: 2nd Trk is only available for newly recorded songs. You cannot use it for adding a new melody to a song loaded from floppy disk. You can, however, use the 16-track sequencer for doing so. See page 103.

*Note: Please be aware that 2nd Trk will erase **all Keyboard parts**, even if you only play the Upper1 part again.*

The 2nd Trk function allows you to redo part of your recording. The previous melody version is erased in the process, while the Arranger parts are left untouched. You cannot use 2nd Trk for adding notes to the melody, or for adding additional lines using other Keyboard parts.



Note: From now on, the VA-3's Song Composer takes control over the tone generator. This means that the Arranger can no longer be started/stopped or otherwise controlled. You can, however, use all Keyboard parts (in SPLIT or WHOLE mode).

Note: You could record the melody using the Upper1 and 2 parts. Even the "Keyboard Mode" WHOLE or SPLIT modes, as well as UP2 to Left (see page 60) and UP2 Split (see page 58) are available.

1. Press the [STOP ■|◄] field to return to the beginning of the song.
The measure indication above the [PLAY ►] field must read "1.1".

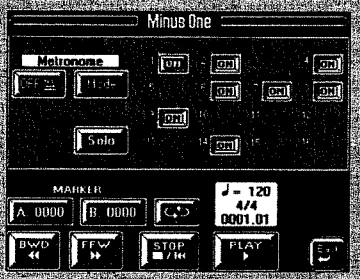
2. Select a Tone for the new melody part:
See "Super Tones" on page 26 or "Selecting Tones for the Keyboard parts" on page 34.

Count-In and/or metronome

If you need to start on the first beat of the song, it would be a good idea to switch on the Count-In function. The metronome may come in handy for accompaniments without a clearly defined rhythm.

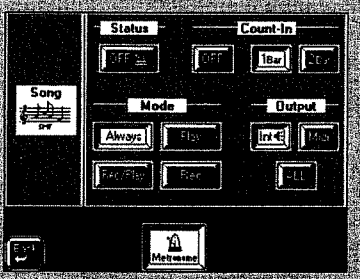
Note: Though you could also use the Controllers menu item (see page 45), that would force you to leave the Song Composer mode and to save your song to disk. The following method is therefore more practical once you are in Song Composer mode, even though it may not seem logical at first sight.

a) Press the [Minus One] field to go to the following page:



See "Minus One playback" on page 29 for details about the functions on this page. Ignore them for now.

b) Press the Metronome [Mode] field.



This page is very similar to the Metronome page that can be selected via the [Controllers] field on the Function Menu, except that only the metronome options for the Song Composer are available here. See "Metronome" on page 45 for details.

c) Set the Count-In function to "1Bar" or "2Bars".

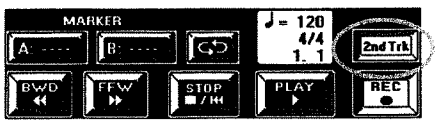
d) If you need the metronome, you can switch it on by pressing the [OFF] field so that it changes to [ON].
You can also activate/switch off the metronome by pressing the field on the Song Composer page.

e) Press the [◄Back] field once to return to the *Minus One* page, and again to return to the *Song Composer* page.

3. Press the [REC ●] field (so that it is displayed in white).

4. Press the [2nd Trk] field.

This means "redo the melody but leave the Arranger parts unchanged". The relevant part of the display now looks as follows:



5. If you're ready, press the [PLAY ►] field to start recording.
Remember that this time, there is no keyboard split (but you could select it), so that you could also play with you left hand. This is ideal for recording piano parts, for example.

6. At the end of the song, press the [STOP ■|◄] field to stop recording.

7. Listen to your song (see page 52).
If you like it, save it to disk, if you're still not happy with your melody, go back to "Redoing the melody (2nd Trk)" on page 53.
Note: See page 108 if you want to change just single notes or other aspects of your song (which is called "editing").

Saving your song to disk

A Composer song you save to disk becomes a Standard MIDI File that can be played back with the VA-3, but also with any other SMF-compatible sequencer.

Be aware that, once a song has been saved to disk, the 2nd Trk option can no longer be used for redoing the melody. You can, however, use the 16-track sequencer for achieving exactly the same effect.

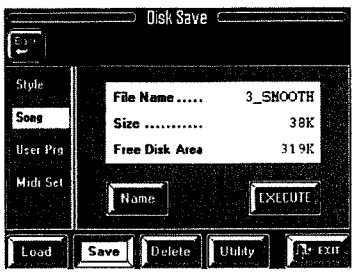
There are two ways of saving new or edited songs:

a) Via the [FUNCTION MENU] button and the Disk menu (you will have to press the [Save] field).

b) By leaving the Song Composer page.
Here, we will show you how to save your song simply by returning to the Master page.

1. On the *Song Composer* page, press the [EXIT] field.
The display now responds with:

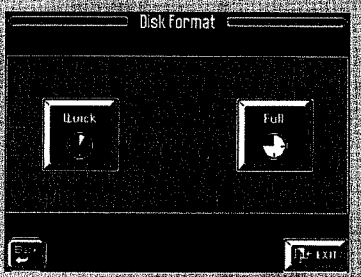
2. Press the [YES] field.



3. Insert a floppy disk into the drive.
Note: Do not use the supplied floppy disk for saving your own data. Use a new disk for your own data.

If your disk is not formatted (either for the VA-3 or for MS-DOS), the following message appears:

a) Press the [FORMAT] field. This display now looks as follows:

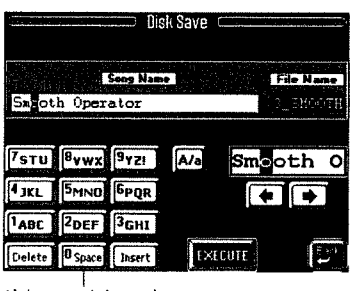


b) Press the [Quick] field. This should do in most instances. See page 96 for the [Full] option. The VA-3 starts formatting the disk. Once this has been completed, the following message appears:

The display now returns to the *Disk Save* page.

Note: If you want to save the song under its current name, or the name assigned by default (Song_001), you can skip steps (4)~(7).

4. Press the [Name] field, because you need to give your brand-new song a name.



Alphanumeric keypad

In fact, you even need to give your song two names: a *Song Name*, and a *File Name*. See page 78 for the difference.

5. Press the [Song Name] field.

6. Enter the name:

- Move the cursor to the desired position using [◄] and [►].
- Enter the character for that position using the alphanumeric keypad. In many instances, you will have to press the desired field several times to select the desired character.
- Use the [**A/a**] field to alternate between captitals and small letters.
- Press the [**Delete**] field to delete the character indicated by the cursor ("_"). Press [**Space**] to insert a space. Press [**Insert**] to insert a character at the current position. All characters behind this position move one position further to the right.

7. Press the [File Name] field and enter the file name. See page 78 for details. Here, you can only enter 8 characters. All characters will be capitals.

8. Press the [EXECUTE] field to save your song. The display tells you that the data are being saved, after which it returns to the *Save Disk* page.

4.6 Audio connections

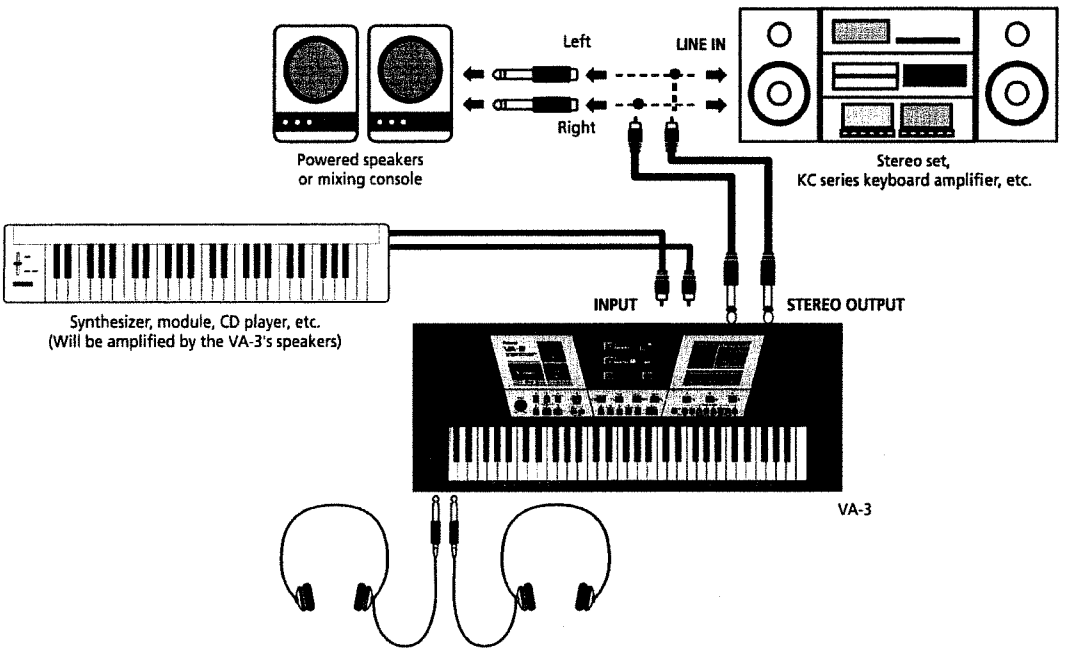
Though the VA-3's output power should be more than enough for most situations, you could also connect it to a PA system, power amplifiers, etc.

STEREO OUTPUT— Connect these sockets to the inputs of a mixing console, stage box, HiFi or power amplifier, etc. You can also connect them to the inputs of a cassette deck, etc. to make an audio recording of your playing.

Note: Connecting a cable to these sockets does not switch off the VA-3's speakers.

INPUT— This is where you can connect an external signal source (synthesizer, CD player etc.) that doesn't have speakers. The sound of this signal source will be amplified via the VA-3's speakers, and transmitted to the STEREO OUTPUT and PHONES jacks.

PHONES— The PHONES sockets are located at the front left. You can connect one or two pairs of headphones. For optimum sound quality, be sure to use Roland RH-25 or RH-50 headphones. Remember that connecting a jack to one of these sockets will switch off the VA-3's speakers.



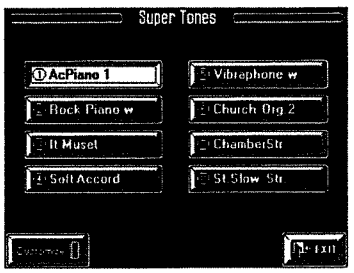
5. Advanced Keyboard part functions

5.1 Upper1 functions

More about the Super Tones

The SUPER TONES buttons are intended to help you select a Tone for the Upper1 (or UP1) part without bothering to use the [Tones] field on the Master page or the BANK/NUMBER buttons. They cannot be used for the other parts.

Whenever you press a SUPER TONES button, a page similar to the following appears:



The white field indicates the Tone that is currently assigned to the SUPER TONES button you pressed. By pressing another field, you can override this setting. But that is only temporary and cannot be written to a User Program.

You can, however, select another option by pressing the appropriate field and then press the [**Customize**] field. The display then responds with:

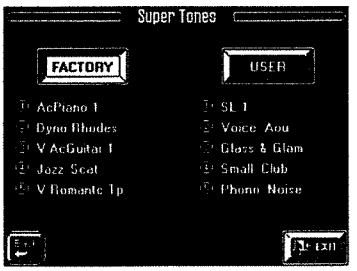
You can repeat this for the remaining SUPER TONES buttons.

As you see, there are 8 possibilities for each SUPER TONES button, for a total of 40 Tones selected by the Roland engineers.

This is the **Factory** set with fixed options for all five SUPER TONES buttons. Although you are free to select another option for a button, you cannot change the options themselves. There are eight possibilities per SUPER TONES button, and that's it.

There is, however, a **User** set with five additional SUPER TONES memories. At first, the assignments to these buttons is as shown in the illustration below. Here is how to access the User set:

1. Press and hold any SUPER TONES button.
The display now looks as follows:



You can also select this page by pressing the [FUNCTION MENU] button followed by the [Super Tones] field on the *Function Menu*.

2. Press the [USER] field so that it is displayed in white.

3. Press [EXIT] to return to the Master page.

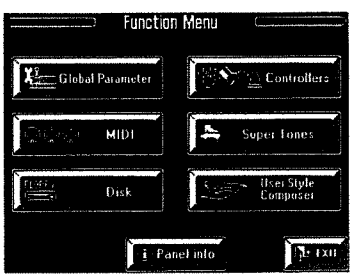
4. Use the SUPER TONES buttons for selecting one of the five User assignments.

Memorize Super Tones: programming other assignments for the buttons

As stated earlier, you are free to assign any five of the VA-3's 3,641 Tones to the User set memories for the SUPER TONES buttons.

1. Select a Tone for the Upper1 part. **See page 34.**

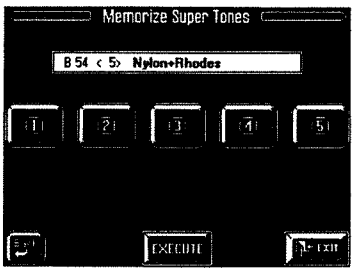
2. Press the [FUNCTION MENU] button.
The display now looks as follows:



3. Press the [Super Tones] field.

4. Press the [User] field.

5. On the page that appears now, press the [Memorize] field.
The display now looks as follows:



As you see, the name of the Tone selected for Upper1 appears above the five button icons. If you do not agree with the current selection, you can use the BANK/NUMBER buttons and/or the [TEMPO/DATA] dial for selecting another Tone. It might be a good idea to work with the [GROUP] and BANK/NUMBER buttons for selecting the Tone address (e.g. B51), while using the [TEMPO/DATA] dial to specify the desired Variation Tone (e.g. <12>).

Note: This does not allow you to change Tone Maps (see page 38), so preparing the Upper1 Tone before selecting the above page is definitely a better choice. That is also why we didn't tell you to press and hold a SUPER TONES button: doing so would already select a Tone – and probably not the one you want.

6. Press a numbered field (that corresponds to the desired SUPER TONES button).
This field is now displayed in white.

7. Press the [EXECUTE] field to save your choice.
The display now responds with:

As soon as this message disappears, the display returns to the Factory/User page.

8. Press [EXIT] to return to the Master page.
You could now try out the new assignment to check if it works. Press the SUPER TONES button whose Tone you changed.

UP1 Linked to Song

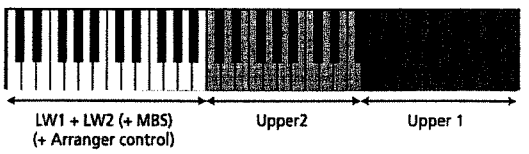
See page 30.

5.2 Upper2 functions

Upper 2 Split

On page 33, you learned how to split the keyboard into a left half with the LW1, LW2, and possibly also the MBS part, and a right half with the UP1, UP2 or the MDR part. You can program an additional split between the UP1 and the UP2 parts, which is great for playing question-and-answer types of melody lines with a brass sound for Upper2, for example, and a clarinet or flute for Upper1.

The possibilities are as follows:



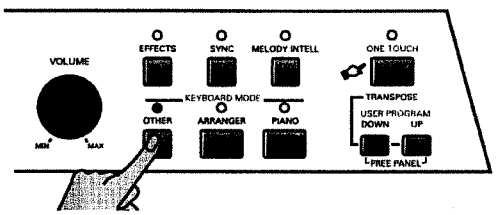
The default split point is located at the G5 (lowest note of the Upper1 part).

Note: This function is only available in SPLIT Keyboard Mode. You cannot use it in WHOLE mode.

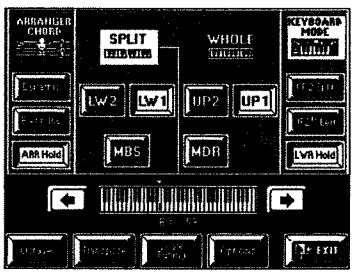
In effect, the VA-3 allows you to play at least three sounds assigned to three separate keyboard areas. On top of that, you can select the Arranger's chord recognition area, i.e. the notes that feed the Arranger (see page 71).

Here is how to activate the UP2 Split function:

1. Press the Keyboard Mode [OTHER] button.

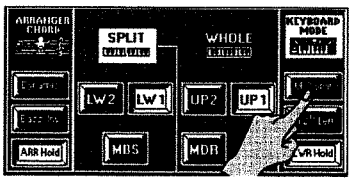


The display now looks more or less as follows:



2. If the display does not look like in the above illustration, press the [KEYBOARD MODE] field in the upper right corner, and the [SPLIT] field.
Both must be displayed in white.

3. Press the [UP2 Split] field.

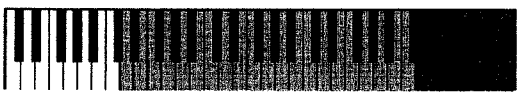


This field is now displayed in white and the keyboard is split at the G5, with the UP1 part to the right, and the UP2 part to the left of this second split point.

See page 34 for how to assign the desired Tone to the Upper2 part.

Note: UP2 Split only works if the Upper1 (UP1) part is active. It is impossible to program an Upper split without using the Upper1 part. Once UP1 has been switched on (automatically or manually), you can, however, switch it off. Furthermore, the UP2 part will be switched on as soon as you press the [UP2 Split] field.

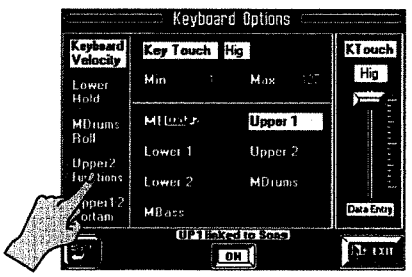
If you don't agree with this split point (G5), you can change it to any note between the C#3 and the C#6:



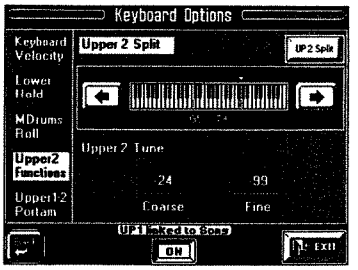
This clever system helps you to avoid that the UP2 Split zone "covers" either the LW/Arranger or the UP1 zone. There will thus always be room for the zones to the left and right of the UP2 zone.

4. Press the [Options] field.

The display now looks as follows:



5. Press the [Upper2 Functions] field to select the following display page:



As you see, the [UP2 Split] field on this page is already displayed in white. If you no longer needed this function, you could use this field to switch it back off again. But that is not what we want to do here.

6. Use the [◄][►] fields to the left and right of the keyboard for selecting the new split point.

7. Press [EXIT] to return to the Master page.

Note: If you are satisfied with your split point, you should save it to a User Program (see p. 91).

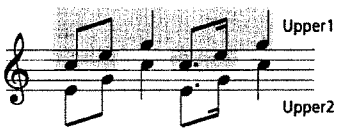
The UP2 Split function can be cancelled in two ways:

- Press the [UP2 Split] field again so that it turns blue (either on this page, or on the opening display page when the [KEYBOARD MODE] and [SPLIT] fields are displayed in white).
- After pressing the Keyboard Mode [OTHER] button, press the [WHOLE] field to switch off the SPLIT mode.

'Dynamic' second split point: UP2 to Left

While the UP2 Split function provides a static split between UP2 to the left and UP1 part to the right, there is a second way of playing two distinct melody parts in the right half of the keyboard, whereby the highest note is sounded by the Upper 1 part, while the lower notes are sounded by Upper2. This is still a split, but it can be shifted dynamically as you play in the right half of the keyboard.

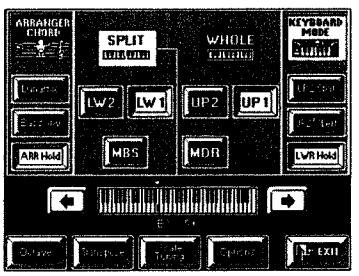
Here is an example. If you play the following notes to the right of the main split point, while [UP2 to Left] is switched on...



...the Upper1 part sounds the grayed notes, while the Upper2 part sounds the lower notes. Of course, you can also hold the top note (UP1) and play a melody to the left of it (UP2).

You could further refine this by transposing the UP2 part one octave up using the Octave function (see page 44) and by reducing the Upper1 part's volume using the Mixer. Of course, you can also turn this system around, and play the "second voice" on top (E-G-C), and the melody below. If you play three-note chords, the Upper2 part sounds two notes, while the Upper1 part sounds the highest notes.

1. Press the Keyboard Mode [OTHER] button.



2. If the display does not look like in the above illustration, press the [KEYBOARD MODE] field in the upper right corner, and the [SPLIT] field.
Note: This function is only available in SPLIT Keyboard Mode. You cannot use it in WHOLE mode.

3. Press the [UP2 to Left] field to switch on this dynamic split function.

4. Press [EXIT] to return to the Master page.
Note: Of course, UP2 Split and UP2 To Left are mutually exclusive. Selecting one means that the other is automatically switched off.

Tuning Upper2: Coarse and Fine

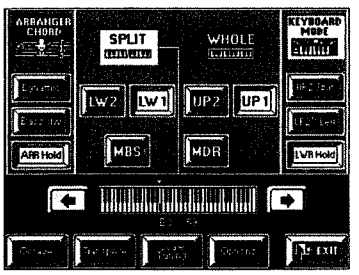
The Upper2 part can be used as full-fledged solo or melody sound or to "fatten" the sound of Upper1. Note that the latter only works when you layer Upper2 and Upper1. By *layering* we mean that every time you press a key in the right half (in SPLIT Keyboard mode, page 33) or anywhere on the keyboard (WHOLE mode), you trigger two Tones: the one assigned to Upper1 part and the one assigned to Upper2. To layer the Upper1 and Upper2 parts, you need to switch them both on. See "Keyboard Mode clinic" on page 31.

The following parameters allow you to transpose (Coarse) or to detune (Fine) the Upper2 part relative to the Upper1 part. Though this is also possible when the Upper2 and Upper1 parts are split (*UP2 Split* or *UP2 To Left*), detuning or shifting the UP2 part would not be very meaningful.

You could use **Coarse** to program an interval of a fifth (7 semitones) for Upper2, which is especially effective for brass sounds and guitar power chords. Do not forget to activate both the Upper1 and Upper2 parts when you want to take advantage of the Upper2 Coarse and Fine parameters. If only the Upper2 part is active, the solos you play either sound off or flat.

The **Fine** parameter works well when you assign the same or similar Tones to Upper1 and Upper2. In those cases, Fine creates a kind of natural Chorus effect that you could enhance by panning Upper1 to the left and Upper2 to the right (or vice versa, see page 83).

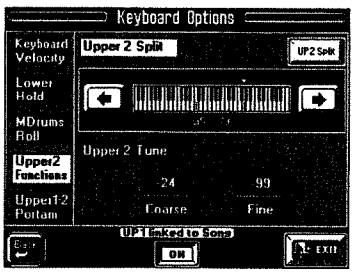
1. Press the Keyboard Mode [OTHER] button.
The display now looks as follows:



2. If the [KEYBOARD MODE] field in the upper right corner is not displayed in white, press it.

3. Press the [Options] field.

4. Press the [Upper2 Functions] field to select the following display page:



5. Press the [Coarse] field if you want to change Upper2's pitch in semitone steps.
That field is displayed in white.

6. Use the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry field to enter the desired value.
"–" means that Upper2 is transposed down, while "+" means that Upper2's pitch is shifted up. A very popular setting for UP1/UP2 layers is "+12" for Upper2, so that it sounds one octave above Upper1.

7. Press the [Fine] field if you want to change Upper2's pitch in small steps (Cents).
That field is displayed in white.

8. Use the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry field to enter the desired value.
Note: As stated earlier, (de)tuning Upper2 only makes sense when you layer the Upper2 part with the Upper1 part.

9. Press [EXIT] to return to the Master page.

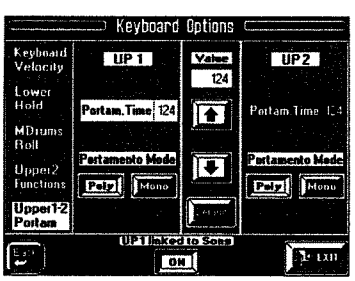
Portamento (Upper 1-2 Portam)

Here are two functions that may come in handy for even more impressive solos involving the Upper parts. Let us first select the display page and have a look at how it is structured:

1. Press the Keyboard Mode [OTHER] button.

2. Press the [KEYBOARD MODE] field in the upper right corner.

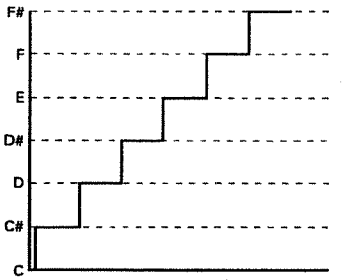
3. Press the [Options] field and the [Upper 1-2 Portam] field.



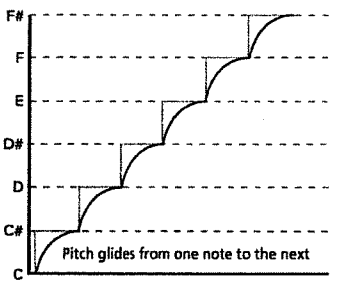
The display is split into two sections: one for the UP1 and a second for the UP2 part. The arrows in the middle (⬆ ⬇) and the [Default] field always apply to the currently selected [Portam. Time] field (i.e. the one that is displayed in white).

Portam Time

Portamento is a function that produces smoother transitions between the notes you play:



Portamento time= 0 — "Rough" pitch changes in semitone steps (normal)



Portamento time> 0 — Smooth pitch changes

Instead of jumping in semitone steps (as you would expect), the pitch glides from one note to the next whenever the Portamento time is higher than 0. The higher the value you set, the slower the glide. This effect is particularly useful for synthesizer or gypsy violin parts.

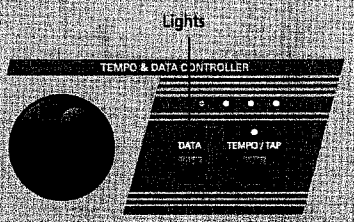
4. Press the [Portam Time] field of the Upper1 (UP1) or Upper2 (UP2) part to select it.

5. Set the desired value using the:

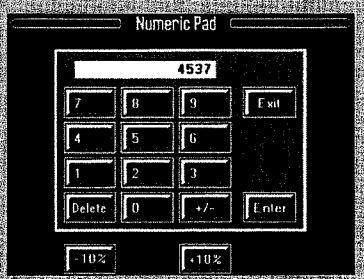
- "Value" arrows (⬆ ⬇),
- the [TEMPO/DATA] dial, or the
- [DATA] button/Numeric Entry pad.

A note about the [DATA] button

If you look at the [DATA] button, you will notice that it lights, while the [TEMPO/TAP] button is dark:



This means that you can press and hold the [DATA] button. The display now looks as follows:



Enter the desired value using the [0]–[9] fields. Press [+/–] to change a positive value into a negative one, and vice versa.

Press the [Delete] field to erase the last (rightmost) value you have entered whenever you make a mistake.

Alternatively (and rather than using [Delete]), you can use [–10%] and [+10%] to increase or decrease the current value by 10%.

Press the [Enter] field to confirm your value, and [Exit] to leave this page. Press only [Exit] if you don't want to use the new value.

Note: Though you can enter astronomical values, the VA-3 will correct them to the highest possible value for the selected parameter.

- Press the [**Default**] field to reset the Portam Time parameters of the UP1 or UP2 part back to "0". It does not change the Portamento Mode settings, however.

Portamento Mode: Mono/Poly

The VA-3 also allows you to set the Upper1 and Upper2 parts to mono(phonic) mode. *Mono* means that you can only play one note at a time. You could select the Mono mode to play a trumpet or woodwind part in a more natural way. *Poly*, on the other hand, means that you can play chords using the selected part.

6. Press the [Mono] or [Poly] field of the Upper part whose setting you want to change.

7. Press [EXIT] to jump to the Master page (see page 22).

5.3 LWR Hold

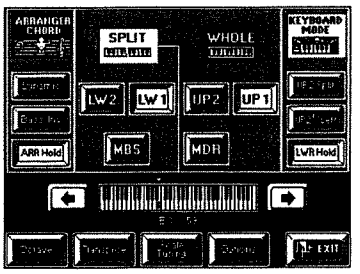
The VA-3 is an instrument that allows you to change many settings in realtime. Because you can trigger the Lower 1/2 parts and the Arranger simultaneously, selecting another Music Style pattern usually means that you have to lift your left hand from the keyboard. If the Lower (LWR) Hold function is not active in SPLIT mode, the Lower (LW) parts stop sounding as soon as you release all keys in the left area.

If you press the [LWR Hold] field, however (so that it is displayed in white), the notes of the Lower parts go on sounding until you play other notes in the left keyboard area. It is probably a good idea to leave LWR Hold on at all times.

If both the Lower and M.Bass parts are active, the LWR Hold function sustains both the Lower and M.Bass notes.

Here's how to switch the LWR Hold function on and off:

1. Press the Keyboard Mode [OTHER] button.
The display now looks as follows:



2. If the display does not look like in the above illustration, press the [KEYBOARD MODE] field in the upper right corner, and the [SPLIT] field.
Note: The LWR Hold function is only available in SPLIT mode.

3. Switch on at least one LW part (its field must be displayed in white).

4. Press the [LWR Hold] field so that it is displayed in white.
Note: This field allows you to toggle between the "Lower Hold" setting you make on the Options page and "Hold Off".

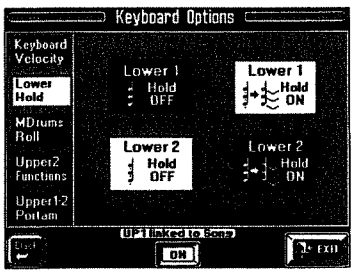
5. Play a short note in the left half of the keyboard, and release the key.
This note goes on sounding until you press another note or chord in the left half of the keyboard.

Assigning the Lower Hold function

As the VA-3 provides two Lower parts (LW1 and LW2), there is also a parameter that allows you to select whether the LWR Hold function should apply only to the LW1 or LW2, or the both Lower (LW) parts:

1. On the above display page, press the [Options] field.

2. On the page that appears now, press the [Lower Hold] field.



3. Press the desired "Lower On/Off" field to make your selection.
If you select [Lower 1 Hold On] and [Lower 2 Hold On], the [LWR Hold] field on the previous display page allows you to toggle between LW 1 & 2 Hold "On" and "Off".

4. Press [EXIT] to return to the Master page.

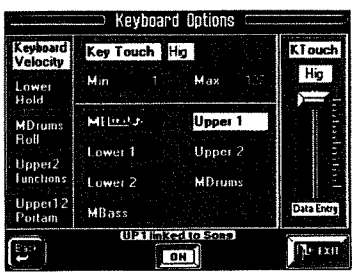
5.4 Velocity sensitivity

Of course, the VA-3's keyboard is also velocity sensitive. This allows you to control the timbre and volume of the Keyboard parts by varying the force with which you strike the keys. See page 73 for how to control the Arranger via the velocity.

1. Press the Keyboard Mode [OTHER] button.

2. Press the [KEYBOARD MODE] field in the upper right corner, and the [SPLIT] field.

3. On the page that appears now, press the [Keyboard Velocty] field.



4. Press a part field in the center of this page to select the Keyboard part whose velocity behavior you wish to change (Upper1, Upper2, etc.).
Note: See page 69 for details about the MEL Int part.

Key Touch

The [Key Touch] field allows you to specify a velocity curve for the selected Keyboard part:

High— Select this setting for maximum expressiveness: even small variations of the force with which you strike a key produce audible changes. The trade-off is, however, that you have to strike the keys forcefully to achieve the maximum volume. (This is the default setting.)

Medium— Medium velocity sensitivity. The part still responds to velocity changes, but the maximum volume can be obtained easier than with *High*.

Low— Select this setting if you are used to playing on an electronic organ or if you do not want velocity changes to bring about major volume changes.

5. Press the [Key Touch] field, and use the on-screen slider at the right (or the [TEMPO/DATA] dial) to select the desired velocity curve.

Velocity switching (Min and Max)

You can also specify the smallest (Min) and highest (Max) velocity values with which you can trigger the selected part. This is probably only useful when applied to the Upper1 and Upper2 parts, or the Upper1 part. *Do not change these values if you have no intention of using a "complementary" part* because, otherwise, you may start wondering why the LW1 part, for instance, only sounds at high or low velocity values.

Min and Max can be used effectively for switching between two Tones simply by striking the keys harder or softer. Doing so allows you to alternate between two sounds. Remember, though, that some "V" Tones already have this function built-in (see page 39). Using such Tones for velocity switching applications is thus unnecessary. But feel free to experiment.

Consider the following example:

Part	Min	Max	Tone
Upper1	1	114	A81 <14> V Romantic Trp. (Tone Map 4)
Upper2	115	127	A81 <17> V Tp Mar/Shk (Tone Map 4)

Both parts must be on. The above settings allow you to trigger the "normal" trumpet sound with velocity values between 1 and 114 (low to relatively high velocity), while velocity values above 115 only trigger the slightly more "lyrical" trumpet (a Tone, by the way, that already contains a built-in velocity switch for additional flexibility). Try this out: it sounds spectacularly real.

Of course, there are countless other possibilities, such as using Min= 90/Max= 127 for the MEL Int part (see page 69), so that the automatic harmonies are only added when you really want to hear them.

Note: See page 34 for how to select Tones for the Keyboard parts.

6. Press [EXIT] to return to the Master page.

5.5 Scale Tuning

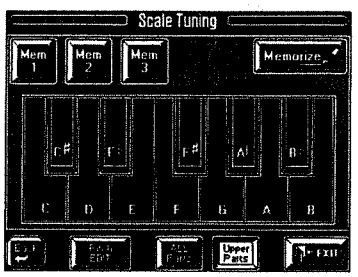
Another useful function is called Scale Tuning. It allows you to use oriental, asian, and other scales in much the same way as on an oriental keyboard (EM-50 OR, etc.).

The VA-3 contains three memories where you can store your favorite tunings. The contents of these memories can be saved to disk along with the User Program Set (see page 163) – i.e. these are three global memories.

1. Press the Keyboard Mode [OTHER] button.

2. If the [KEYBOARD MODE] field in the upper right corner is not displayed in white, press it.

3. Press the [Scale Tuning] field.

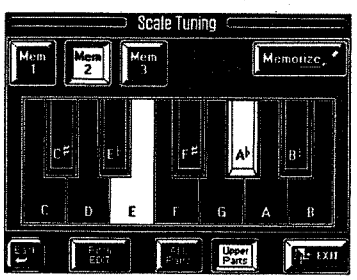


4. Press the [Upper Parts] or [All Parts] field.
All Parts means that all VA-3 parts will be affected by the Scale Tune setting. This also includes Arranger Parts. **Upper Parts**, on the other hand, means that only Upper1 and Upper2 will use the selected scale. There is also an off position (when both fields are blue).

5. Press a [Mem 1]~[Mem 3] field to select a Scale Tuning memory.
This will change the pitch of the following notes ("–50" means that the note in question is tuned a quarter tone down):

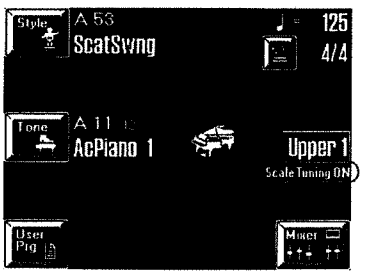
Mem 1	Mem 2	Mem 3
E (–50) B (–50)	E (–50) A (–50)	C# (–50) F# (–50)

The pitch of the other notes is left unchanged. The keys corresponding to the notes whose pitch is changed are displayed in white for easy identification. Here is an example:



You will notice that every note can be selected only once. That is because the value you specify (using Pitch EDIT, see below) applies to all notes of the same name. In other words, if you change the tuning of the C, that value will be added to or subtracted from all Cs (C1, C2, C3, etc.). The on-screen keys are used as "on/off switches".

If you now returned to the Master page, you would notice that the VA-3 alerts you to the fact that the Scale Tuning function has been switched on:



But let us not return to the Master page just yet.

Changing the pitch of other notes

Changing the pitch of other notes than the ones already highlighted is a matter of pressing the desired on-screen key in question. And defeating the pitch change of a key displayed in white is as easy as pressing that key again (it will once again be displayed in blue).

Press all white on-screen keys (or the [Mem] field that is displayed in white) to switch the Scale Tuning function off again.

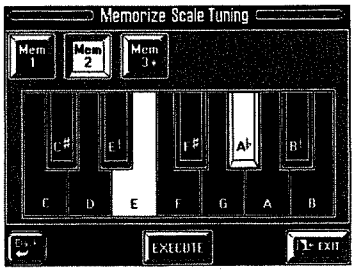
Note: See also "Customizing the pitch changes (Pitch EDIT)" if you need to change the tuning of a given note to something else than "–50".

Storing your new scale

Suppose you just switched on several on-screen keys, while the ones that were originally on are now off. If you think you'll need that scale in the future, you should save – or "Memorize"– it:

1. Program the scale you wish to save by switching the desired notes on or off (see above).

2. Press the [Memorize] field in the upper right corner of the display.
The display now looks as follows:

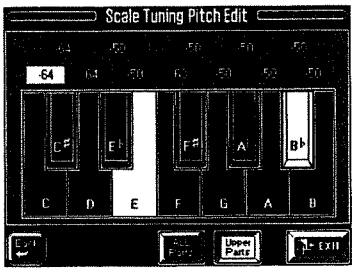


3. Press a [Mem 1]~[Mem 3] field to save your settings in the corresponding Scale Tuning memory.
The display now responds with the following message and then returns to the Scale Tuning page.

Customizing the pitch changes (Pitch EDIT)

At first, pressing an on-screen key so that it is displayed in white means that its pitch is lowered by 50 cents (1/4 tone, or "–50"). Though this system allows you to use the desired arabic tuning, there may be situations where you actually want to raise the pitch of a note, or select a different tuning:

1. On the Scale Tuning page (see above), press the [Pitch EDIT] field.
The display now looks as follows:



Here again, the white keys inform you about the notes whose pitch is actually being affected.

2. Press the value field (or the on-screen key) of the note/key whose pitch you want to change.
That field is displayed in white. As stated earlier, the pitch of all notes is at first set to "–50" (one quarter tone down). You can however, select any value between "–64" (slightly lower than a quarter tone down) and "63" (slightly higher than a quarter tone up).

3. Use the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry field to set the desired pitch.
These Pitch EDIT values only apply to the Scale Tuning memory where you save your settings (see "Storing your new scale"). Values other than "–50" or "+50" sound flat at best and are probably not really useful.

4. Repeat steps (2) and (3) for the other notes whose pitch you want to change.
Note: This pitch is only used when the corresponding on-screen key is displayed in white. Do not forget to switch it on. Also, you need to press the [Upper Parts] or [ALL Parts] field (both can indeed be switched off).

5. Press the [◄Back] field to return to the Scale Tuning page, or the [EXIT] field to jump to the Master page.
Any changes to the standard tuning of the notes will be indicated by means of the "Scale Tuning ON" message on the Master page (see also page 64).

6. More about the Arranger

6.1 Arranger and Music Styles

Think of the Arranger's Music Styles as your backing band. Your VA-3 is indeed capable of playing several "versions" of a given accompaniment. All you need to do is make up your mind about the kind of music you want to play and to select a Music Style that complements it. You can choose how many bars there are to each song part and how the melody and/or solo should be accompanied.

Arranger parts

Each accompaniment (or Music Style) can consist of up to eight parts:

A. Drums (or ADR): Accompaniment Drums. This part takes care of the rhythm. It triggers the drum and percussion sounds of the Drum Set assigned to the ADR part.

A. Bass (or ABS): Accompaniment Bass. This part plays the bass line of the Music Style you selected.

Ac1~Ac6: These are the melodic accompaniment parts. Depending on the Music Style you selected, only a few of them actually play something, which can be anything from a piano line, a guitar line, an organ line to a synth pad line. Not all Accompaniment parts play chords.

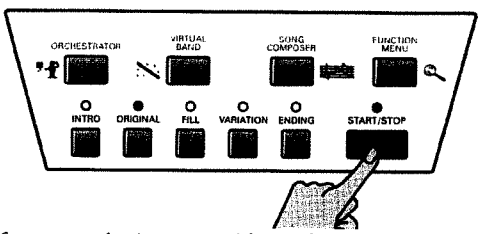
The ABS and Ac parts rely on the chord or note information you play in the *chord recognition* area (see page 71), i.e. the keyboard zone you assign to the Arranger.

Starting a Music Style

Music Styles can be started in several ways:

1. Press the Keyboard Mode [ARRANGER] button.

2. Press the [START/STOP] button (indicator lights) to start the Arranger right away.



If you start the Arranger without playing a chord in the chord recognition area, you will only hear the drums of the selected Music Style. In most cases, however, the VA-3 has already memorized a chord, so that you will hear the full accompaniment.

OR:

3. Stop playback of the current Style (see below), press the [INTRO] button (indicator lights) and then the [START/STOP] button to start Style playback with a musical introduction.

The length of the Intro depends on the Style you selected. At the end of the Intro, the Arranger starts playing the Music Style division you select while the Intro is being played. In other words, you can select whichever Type (Orchestrator Basic and Advanced) and Division (Original, Variation) you like to be played upon completion of the Intro.

OR:

4. Press the [SYNC] button (if it currently controls the Start function, see below) and play a chord (or just one note in Intelligent mode, see page 72). The Arranger starts as soon as you play a note in the chord recognition area (see page 71).

Note: Do not play chord changes while the Intro is running. Unlike the "normal" patterns (Original, Variation), Intro patterns usually contain chord changes. Chord recognition is not deactivated during Intro playback, so that the beginning of a song may jump from one key to another.

Note: You can also start and stop the Arranger with the D Beam Controller (see page 145).

Stopping a Music Style

There are three ways to stop Style playback:

1. Press [START/STOP] to stop playback right away.

OR:

2. Press [ENDING] (indicator lights) to activate the Ending function. The Ending (or coda) pattern will start at the beginning of the next measure (next downbeat).

Note: Do not play chord changes while the Ending is running. Unlike the "normal" accompaniments (Original, Variation), Ending patterns usually contain chord changes. Chord recognition is not deactivated during Intro or Ending playback, so that the ending of a song may jump from one key to another.

OR:

3. Press [SYNC] and release all keys in the chord recognition area of the keyboard. The accompaniment stops immediately.

There is no need to restart Style playback manually if you also activate Sync Start (see below). Sync Stop is only available if you activate it. See "Sync (Options)".

Sync (Options)

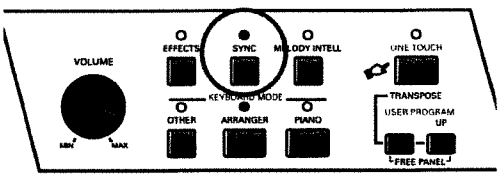
If you've never used an arranger keyboard before, the status of the [SYNC] button is the single most important function to look out for after switching on your instrument. After all, if it is on without you knowing it, playing just one note on the keyboard may cause the Arranger to start even though you don't want it to.

Once you get to know the VA-3 a little better, you will appreciate this function, and you may want to take advantage of its Sync functions. **Sync Start** means that the Arranger starts as soon as you play a note or chord in the chord recognition area of the keyboard. (If the Keyboard Mode [ARRANGER] indicator lights, this area is the left half of the keyboard. See page 71 for details.)

The VA-3 also provides a **Sync Stop** option. This will cause the Arranger to stop playback as soon as you release all keys in the chord recognition area. This is great for songs where you need breaks (i.e. one or several beats of silence).

And finally, you can choose to activate both **Sync Start and Sync Stop.**

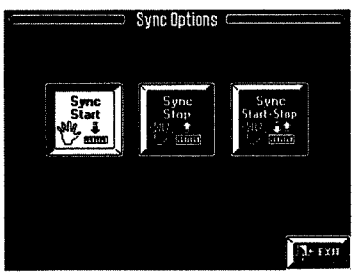
Whenever you configure the VA-3 via the Virtual Band function or by pressing the Keyboard Mode [ARRANGER] button, the [SYNC] indicator lights.



This means that the currently selected Sync Option has been switched on. As long as you do not select another Sync Option, this will be *Sync Start.*

Here's how to set another Sync option. This setting can be written to a User Program (see page 91).

1. Press and hold the [SYNC] button until the following page appears:



2. Press the Sync field that corresponds to the desired Sync function(s).

3. Press [EXIT] to return to the Master page.
You can now use the [SYNC] button to switch the selected Sync function off (indicator dark) and on (indicator lights).

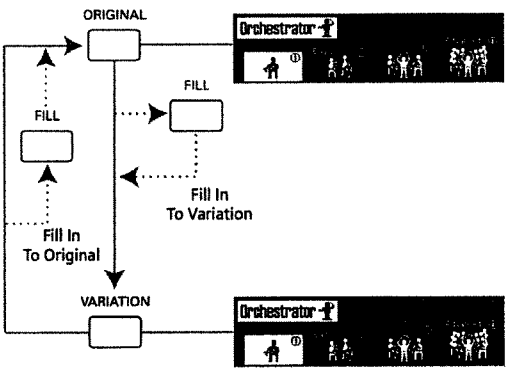
Note: Whenever you use One Touch or Virtual Band to configure the VA-3, Sync Start will be selected.

Note: See also page 70 for how to prevent the VA-3 from reverting to Sync Start and switching on the [SYNC] button when you take advantage of the One Touch memories.

6.2 Selecting other Style divisions

As stated above, you can "professionalize" your performance with the Arranger by selecting different accompaniment patterns. Let us agree to use the word *Division* for any Music Style pattern the VA-3 can play. We'll need that term for programming User Styles.

Here's a quick overview of how the VA-3's Music Styles (and the ones on floppy disk) are structured:



Press the [ORIGINAL] button to select the "normal" accompaniment. ORIGINAL ① is the simplest of the four possible accompaniment patterns, while VARIATION ④ is the most complex. The combination of ORIGINAL and VARIATION with the four ORCHESTRATOR options already provides a total of eight accompaniments per Music Style (multiplied by three, see the next paragraph).

As you see, you can use the [FILL] button to go from ORIGINAL to VARIATION, and back. In the first case, you will hear the Fill-In To Variation pattern. When going back from VARIATION to ORIGINAL, the Arranger will play the Fill-In To Original pattern.

Note that you don't have to use the [FILL] button: you can also switch divisions by pressing [VARIATION] or [ORIGINAL].

Note: See also "Using the VA-3's Arranger" on page 23.

Note: You can also press [INTRO] *in the middle of a performance. In that case, the indicator will flash until the end of the current bar and then light on the next downbeat to indicate that the Arranger is playing the introductory pattern.*

Tip: The Intro is "renewable", i.e. you can press the [INTRO] button again while the Intro is playing. Doing so on the fourth beat of the first Intro bar, for instance, will retrigger the beginning of the Intro in the second bar.

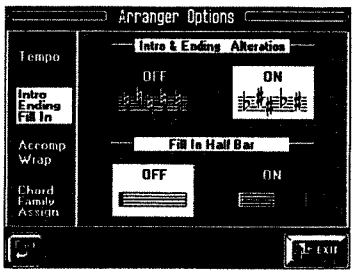
Fill In Half Bar

Certain pop songs in 4/4 contain bars that only last two beats. The usual place for such a bar is between the first and the second verse. Another favorite position for "halved" bars is at the end of a chorus or the bridge. Your VA-3 allows you to faithfully reproduce these "anomalies". Set the Fill-In Half Bar function to [ON]. This does not change Style playback right away. Only when you press the [FILL] button will the Half Bar function be active and play half the number of beats of the fill you selected.

1. On the page that appears when you press the Keyboard Mode [OTHER] button, press the [ARRANGER CHORD] field if it is not displayed in white.

2. Press the [Options] field.

3. Press the [Intro Ending Fill In] field in the left column.
The display now looks as follows:



4. Press the Fill In Half Bar [ON] field so that it is displayed in white.

5. Start Arranger playback and press the [FILL] button.
Notice how the Fill In is shortened.

6. Press the Fill In Half Bar [OFF] field to return to the normal length of the Fill-In patterns.

7. Press [EXIT] to return to the Master page.

Major, minor, seventh

This is an "invisible" Style division function of your VA-3. In time you will notice that the Intro and Ending patterns of a Music Style change according to the chord you play. There are three possibilities:

Major (M): Calls up the first (major chord) accompaniment level.

Minor (m): Calls up the second accompaniment level.

Seventh (7): By playing a seventh chord, you activate yet another accompaniment level. Try this out by first playing a major and then a seventh chord.

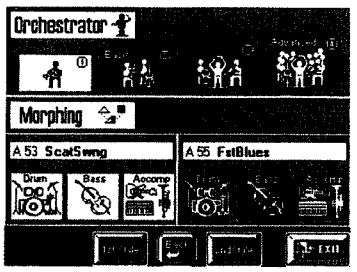
In other words, the number of certain divisions (such as the Intros and Endings) is in fact multiplied by three!

Note: The VA-3 is equipped with a function that allows you to freely assign various chord types (7/5, dim etc.) to one of these levels (see page 75).

Style Morphing (part 2)

On page 50, we showed you how to morph using two internal Styles. Morphing with one internal Style and a Style on disk is just as easy:

1. Select the following display page:

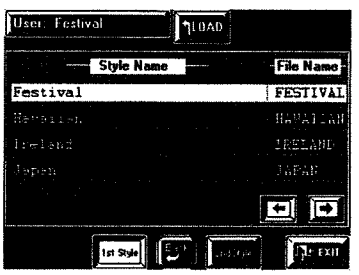


- Press the [Style] field on the Master page (as though you wanted to select a Music Style). On the page that appears next, press the [Orchestrator] field.
- Or press the [ORCHESTRATOR] button.
You can only assign a floppy disk Style to the *1st Style*.

2. Insert a floppy disk into the drive.

3. Press the [1st Style] field.

4. On the page that appears now, press the [Disk User] field in the lower left corner of the display.
The display now looks more or less as follows:



The rest is exactly the same as selecting a Disk User Style:

5. Press the field that contains the name of the Music Style you want to load.

6. If the desired Music Style is not displayed, use [←][→] to select another group of 4 Styles.

7. Press the [LOAD] field to copy the data of the selected Music Style to the VA-3's Disk User memory.

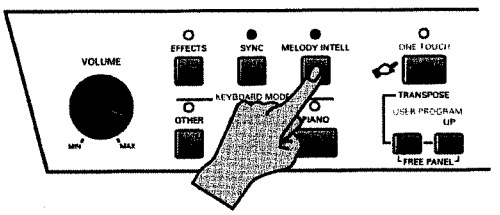
8. Start morphing with the Style in the Disk User memory (1st Style) and the internal Style (2nd Style).

9. Press [EXIT] to return to the Master page.

6.3 Melody Intelligence

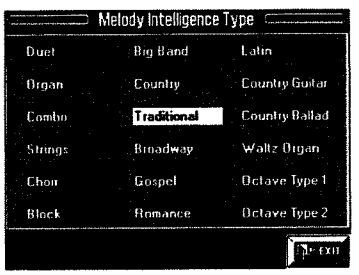
The Arranger of your VA-3 can not only play chords but also add a counter-melody to your melodies based on the chords you play in the chord recognition area (see page 71). This counter-melody will be played by the Melody Intelligence part (MEL INT) and added to the Upper1 part. You can assign whichever Tone you like to the MEL INT part. Furthermore, there are 18 harmony types to choose from.

1. Press the [MELODY INTELL] button (indicator lights).



This adds a harmony to the notes you play. Do not forget to switch on the Upper1 part (see page 33).

2. To select another harmony type, press and hold the [MELODY INTELL] button until the following page appears:



3. Press the field of the desired harmony type.
Selecting a Harmony Type also means that the VA-3 automatically assigns a suitable Tone to the MEL INT (and sometimes even to the Upper1) part (e.g. a trumpet sound for *Big Band*, etc.). You can, however, override this automatic setting (see "Selecting Tones for the Keyboard parts" on page 34) and save your own sound choice to a User Program.

Note: On the Keyboard Tone selection page, you will notice a lock when you select the MEL INT part. It allows you to specify whether or not selecting another harmony type should automatically change the Tones of the MEL INT part. See also "About the lock" on page 77. If the lock is open, your own Tone selections for MEL INT are no longer overridden by the Tone selection contained in the "Melody Intelligence Types".

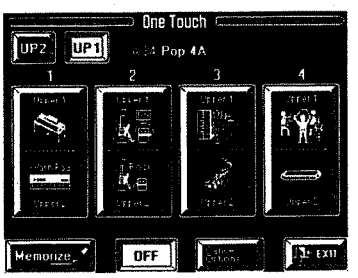
Note: For "Traditional", "Latin", "CntryBallad", "OctaveType1", and "OctaveType2", only the Upper1 part is used. All other Melody Intelligence Types, however, use both the Upper1 and the MI part.

4. Press [EXIT] to return to the Master page.

5. Press the [MELODY INTELL] button once again to switch this function off again.

6.4 One Touch

You may find yourself using the One Touch function at regular intervals because it automates quite a few tasks. Press the [ONE TOUCH] button to select the following display page:



Note: The [UP2] and [UP1] fields allow you to quickly switch the related Upper part (1 or 2) on (white) or off (dark). You can also switch on both Upper parts for even richer textures.

If the [OFF] field lights, the One Touch function is not yet active. You still need to select one of the four memories by pressing one of the large fields. The One Touch function makes a number of automatic settings for you:

- Keyboard Mode [ARRANGER]. This corresponds to pressing the button of the same name, and means that the keyboard is split into two halves, with Arranger control in the left, and Upper1 control in the right. (If Upper2 is already on, it will not be switched off, though.)
- The Music Style's default tempo is selected.
- The [SYNC] button is assigned the Start function and switched on (see also "Sync (Options)" on page 67).
- The VA-3 makes suitable settings for the Upper1 and Upper2 parts. These comprise Tone selection and appropriate Reverb, Chorus settings.
- If Arranger playback is currently stopped, the [INTRO] button is switched on, so that playing a chord in the chord recognition area of the keyboard will start Music Style playback with the Intro of the selected Style.

There are four One Touch memories for all internal Music Styles (A11~A88), all Disk Link Styles (B11~B88), and the Disk User memory.

Note: If a One Touch memory is selected when you recall a User Program, the One Touch function is switched off.

If you select a One Touch memory while another one is already active

In that case, the VA-3 selects the Tones and Reverb/Chorus settings of that One Touch memory.

It may also switch on one of the following functions if you switched them off after selecting the first One Touch memory:

- Sync Start
- [INTRO] (if Arranger playback is currently stopped).

Just for your information, the selection of a One Touch memory is also indicated on the Master page. Look out for the "OT" symbol.

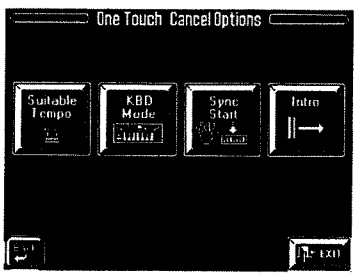
Ignoring certain One Touch settings (Cancel Options)

Now imagine that you have grown accustomed to using the One Touch memories, because they are similar (though less comprehensive) to the User Programs. What if, for a given song, you want to use the Tone and effects settings for the Upper1 and Upper2 parts without returning to the Music Style's preset tempo (because you are playing a medley)?

In that case, you can take advantage of the One Touch Cancel options. They act as filters for the functions supported by the One Touch facility.

1. While on the One Touch page, press the [Cancel Options] field.

The display now looks as follows:



2. Press the field corresponding to the settings that should *not* be loaded when you select another One Touch memory or Music Style.

If a field is displayed in white, the corresponding settings are no longer loaded:

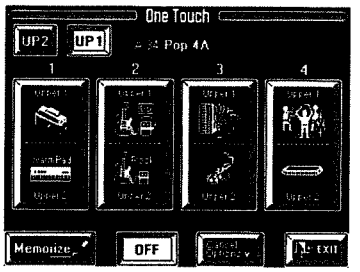
Suitable Tempo— The preset tempo of the selected Music Style.

KBD Mode— The current Keyboard Mode settings. You may have selected another chord recognition area (the entire keyboard, for example). If this field lights, the chord recognition area is not set back to the left half of the keyboard.

Sync Start— If this field is on, the function of the [SYNC] button (see page 67) does not change. So if you selected "Sync Stop", this would not be reset to "Sync Start". Also, if the [SYNC] button is currently dark, selecting another One Touch memory or Music Style does not switch it back on.

Intro— This option means that the [INTRO] button is not automatically switched on when you select a One Touch memory or Music Style while Arranger playback is stopped.

If one of the cancel functions has been activated, the [Cancel Options] field on the One Touch page contains a tick (✓):



Note: The One Touch function will be switched off whenever you select a User Program.

Programming your own Tone selections (Memorize)

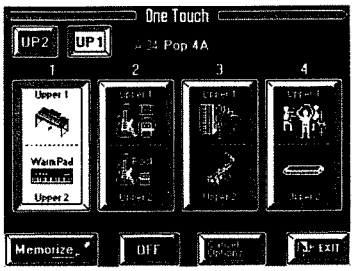
The VA-3 also allows you to memorize your own favorite Tones for the Upper1 and Upper2 parts in case none of the four One Touch memories provide the sounds you need.

Given the careful preparation of these selections, customizing the Tone assignments may not be necessary for the internal Music Styles. Yet they may come in handy for Disk Link and Disk User Styles (see pages 48 and 49) for which there are no "presets".

These customized One Touch settings are stored in a special memory area of the VA-3. Though they are not part of the User Program parameters (because User Programs and the One Touch facility are mutually exclusive), they will be saved to disk whenever you use the Save User Program Set function (see page 163).

1. If necessary, switch off the One Touch memory that is currently on:

- Press the [ONE TOUCH] button to select the following display page:



- Press the [OFF] field so that it is displayed in white. The One Touch field (1~4) that was on, will go dark.

2. Select the Music Style you want to program a Tone assignment for.
You can do so manually or by taking advantage of the Virtual Band function.

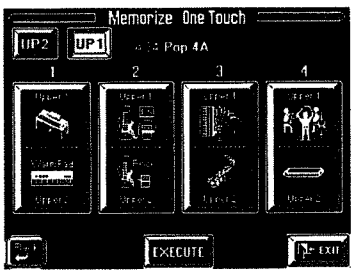
3. Switch the Upper1 part on and all other Keyboard parts off (see page 33).

4. Select a Tone for the Upper1 part (see page 34).
You could also press a SUPER TONES button.

5. Switch the Upper1 part off and the Upper2 part on.

6. Select a Tone for the Upper2 part.

7. Press the [MEMORIZE] field.



8. Press the 1~4 field that should contain your new Tone assignments for the Upper1 and Upper2 parts.
The display now shows the following message:

9. Press the [EXIT] field to return to the Master page.

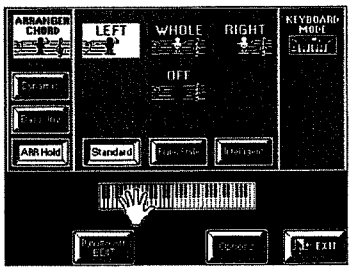
6.5 More refined Arranger settings

ARR(anger) Hold

The ARR Hold function is very similar to "LWR Hold" on page 62: It sustains the notes you play in the chord recognition area until you play other notes. At first, this function is switched on, so that you can briefly play the chord for a given bar and release all keys in the chord recognition area. If [ARR Hold] is displayed in blue, the melodic accompaniment (bass and other parts) stop as soon as you release all keys in the chord recognition area, so that only the drums keep playing.

You should try this out now – but you'll probably stick to the on status of this field, because that frees up your "chord hand" for other things (such as using the D Beam controller, Pitch Bend lever, etc.).

1. Press the Keyboard Mode [OTHER] button.



2. Press the [ARR Hold] field to switch the Arranger Hold function off (blue), or on (white).

3. Press [EXIT] to return to the Master page.
As soon as you play another chord, the accompaniment changes, but as long as you don't, the melodic accompaniment keeps playing the previously specified chord.

Chord recognition area

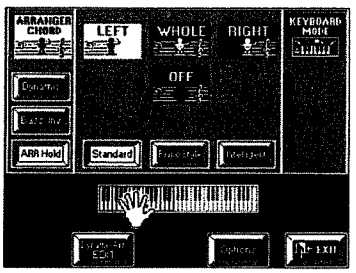
As stated on page 31, telling the VA-3 that you wish to use the Arranger is a matter of pressing the Keyboard Mode [ARRANGER] button. That, however, means that the key of the Music Style patterns can only be controlled by playing chords in the left half of the keyboard. You can also tell it to scan another part of the keyboard for usable chords. Though **Left** is probably the mode you will usually use, you could select **Right** to have the Arranger scan the right half of the keyboard. Note that it is possible to select **Whole** so that you can feed the Arranger anywhere on the keyboard. If you don't want the Arranger to scan your chords, choose **Off**.

The range of the Left or Right keyboard area depends on the current setting of the main split point (see "Split point in Arranger mode" on page 32). The split

point you set for the Keyboard parts will also be used by the Arranger to determine the upper (Left) or lower (Right) limit of the chord recognition area.

1. Press the Keyboard Mode [OTHER] button.

2. Press the [ARRANGER CHORD] field in the upper left corner of the display (so that it is displayed in white).
The display now looks more or less as follows:



3. Press the [LEFT], [WHOLE], [RIGHT] or [OFF] field in the center to select the chord recognition area.
Your choice is reflected by the keyboard below the central display section, so you can't go wrong.

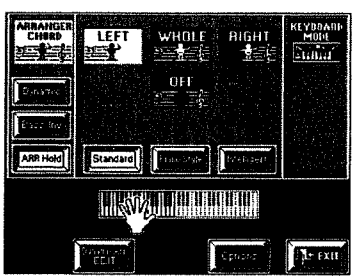
4. Press [EXIT] to return to the Master page.
Note: Every time you press the Keyboard Mode [ARRANGER] button, the [LEFT] setting is selected.

Arranger Chord Mode

Another important choice is *how* you want to transmit note information to the Arranger so that it plays the Music Style in the right key.

1. Press the Keyboard Mode [OTHER] button.

2. Press the [ARRANGER CHORD] field in the upper left corner of the display (so that it is displayed in white).
The display now looks more or less as follows:



3. Press the [Standard], [PianoStyle], or [Intelligent] field.
Standard— This is the normal chord recognition mode. In Standard mode, the melodic accompaniment sounds the chords you play in the chord recognition area of the keyboard. If you play only one note in that area, the accompaniment plays only that note, i.e. it assumes that you deliberately chose to omit the third and the fifth of your "chord".

To have the Music Style sound a major, minor or seventh chord, you can suffice to play three notes, by the way. Other, more complex, chords require that you press four keys.

Piano Style— Piano Style means that you can play on your VA-3 as you would on a piano. In this mode, it is probably a good idea to press the Keyboard Mode [PIANO] button (or to switch off all Keyboard parts except Upper1).

The Piano Style mode works as follows: the Arranger decodes every chord you play – no matter where you play it. Causing the Arranger to sound another chord requires that you play at least a triad (i.e. the three notes that make up a chord). You are free to play more than three chord notes but remember that two notes won't cause the Arranger to play another chord. Do not forget to select a chord recognition area (see above), because pressing Keyboard Mode [PIANO] selects "OFF". "WHOLE" would be a good choice here.

Intelligent— Select Intelligent when you want the Arranger to supply the missing notes of the chord you want to play. See page 200 for a chart of intelligent chords and the way to play them. The VA-3 can handle virtually any chord you can think of – and playing them requires no more than three (for minor and seventh chords only two, and for major chords only one) finger(s)! This is probably the mode you will select most of the time.

4. Press [EXIT] to return to the Master page.
Note: The choice you make here also affects the "Arpeg" and "Chord" options of the D Beam Controller. See "Arpeg 1/2/3 Octave" on page 145.

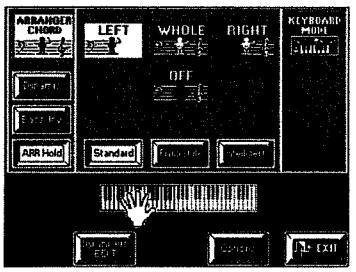
Bass Inversion

The Bass Inversion function allows you to change the way the Arranger reads the chords you play.

If the [Bass Inv] field is not displayed in white, the Accompaniment Bass part (ABS) plays the root of the chords that feed the Arranger, while the chords of the Accompaniment 1~6 parts are voiced in such a way as to avoid semitone intervals (for complex chords) that wouldn't sound very nice.

Bass Inversion gives you more artistic license because *you* specify the notes played by the ABS part. Switch on Bass Inversion for songs that rely on bass rather than on chord patterns (for example C – C/B – C/B♭, etc.).

1. Press the Keyboard Mode [OTHER] button.



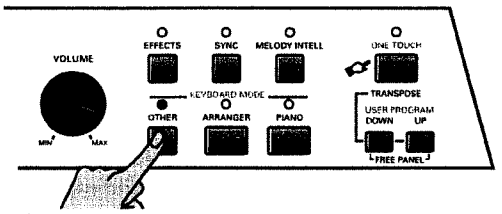
2. Press the [Bass Inv] field to switch the Bass Inversion function on (white) or off (blue).

3. Press [EXIT] to return to the Master page.

Dynamic Arranger

The Dynamic Arranger function allows you to control the volume of the Arranger parts via the way you strike the keys in the chord recognition area (velocity). If the selected Style uses a "V" Drum Set, this function also influences the timbre of the drum sounds in a far more natural way than before.

1. Press the Keyboard Mode [OTHER] button.



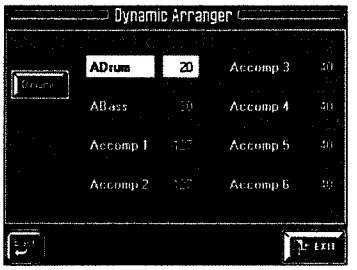
2. On the page that appears now, press the [Dynamic] field to switch the Dynamic Arranger function on (white) or off (blue).

3. To return to the Master page, press [EXIT].

"Dynamic" only becomes meaningful if you also specify how the various Arranger parts should respond to your velocity. There are eight Arranger parts: A Drum (the drums), A Bass (the bass), and Accomp 1~6 (the melodic accompaniment parts).

4. On the page that appears when you press the Keyboard Mode [OTHER] button, press the [ARRANGER CHORD] field if it is not displayed in white.

5. Press the [Dynamic Arr EDIT] field.
The display now looks more or less as follows:



6. Select the Arranger part whose velocity sensitivity you wish to change by pressing its field.

7. Specify the velocity sensitivity value with the [TEMPO/DATA] dial or using the [DATA] button/ Numeric Pad facility.
You can specify positive and negative sensitivity values. Positive values mean that the volume of the part in question increases when you strike the chord recognition area keys harder, while negative values mean that the volume of the selected Arranger part increases as your velocity becomes softer.
You could use extreme positive/negative ACCOMP pairs (i.e. "127" and "–127") to alternate between those two lines simply by varying your velocity. One part would then only be audible when you strike the keys softly, while the other would only be audible at high velocity values.

Subtler settings (i.e. 20 and –20 for a pair) can also be effective, of course. Set the value to "0" for those parts whose volume should not be affected by your velocity values.

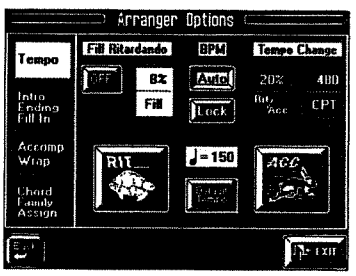
You could use the [Dynamic] field on this page to switch this function on or off. By default, it is switched off.

8. Press [EXIT] to return to the Master page.
You can also press the [◄Back] field if you still need to make other Arranger settings.

6.6 Arranger Options

1. On the page that appears when you press the Keyboard Mode [OTHER] button, press the [ARRANGER CHORD] field if it is not displayed in white.

2. Press the [Options] field.
The display now looks as follows:



You can also select this particular page by pressing and holding the [TEMPO/TAP] button.

(Arranger) Tempo

3. Press the [Tempo] field so that it is displayed in white.

Fill Ritardando

The Fill Ritardando function is suitable for ballads. It causes the next fill (To Original, To Variation) to slow down ("ritardando"). Try using this function now:

4. Start Arranger playback and press the [OFF] field below the Fill Ritardando message (so that it reads [ON]). Then press the [FILL] button on the front panel.
The tempo slows down while the Fill is being played. At the end of the fill, the Style returns to the previously set tempo (this is called "a tempo").

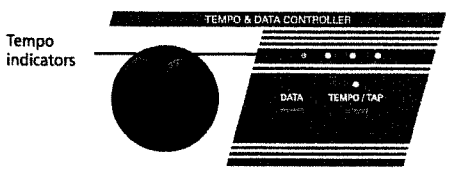
5. Press the Fill Ritardando value field (next to the [OFF/ON] field).

6. Use the [TEMPO/DATA] dial or the [DATA] button (Numeric Entry) to enter the desired tempo change value (5~92%).
The higher the value, the more dramatic the tempo change.

BPM

Before telling you what this parameter is for, let us briefly summarize everything that has already been said about the tempo:

- Every Music Style has a preset tempo that is recalled whenever you select that Style, or when you take advantage of the One Touch function (see page 69). The One Touch function, however, allows you to filter the tempo setting (by activating [Suitable Tempo], which means that the preset tempo is no longer loaded automatically).
- On the other hand, you are free to change a Music Style's tempo any time. See "Changing the tempo" on page 25. That value can be written to a User Program and will then be set every time you select that User Program.
- The Style (and also Composer Song) tempo is displayed on the Master page (upper right corner), but also by the four tempo indicators above the [DATA] and [TEMPO/TAP] buttons. The first indicator flashes red to indicate the downbeat (the beginning) of a new bar.



For time signatures like 6/8, etc. the fourth indicator flashes repeatedly to supply the "missing" beats.

[**Auto**] and [**Lock**] allow you to specify what happens when you select another Style:

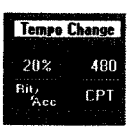
BPM field that lights	If Arranger playback is stopped when you select another Style	If the Arranger is running when you select another Style
[Auto]	The Arranger loads the preset tempo of the new Style	The new Style is played back at the tempo of the previous Style.
[Lock]	The preset tempo of the new Style is not loaded. Instead, the Style will be played at the current tempo.	
(none)	The Style's preset tempo is loaded.	

To switch off both tempo options, press the [Auto] or [Lock] field that is currently displayed in white.

RIT and ACC

The [RIT] and [ACC] fields allow you to speed up or slow down the Arranger tempo. The field you press will be displayed in white, and change to blue again as soon as the ritardando (RIT) or accelerando (ACC) is completed. After pressing the [RIT] (slow down) or [ACC] (speed up) field, you can use the "opposite" field ([ACC] or [RIT]) to return to the initial tempo value. This will gradually turn the tempo change back. To immediately return to the Style's default tempo, press the [Default] field.

The two **Tempo Change** parameters allow you to set the degree (ratio) to which the tempo changes when you press the [RIT] or [ACC] field.



Press the first field (**Rit/Acc**) and use the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad to select the ratio by which the tempo should increase/decrease.

Next, press the [CPT] field and enter the number of clocks required for executing the requested tempo change. "480" corresponds to one 4/4 measure. Enter the value "120" if the tempo change should be executed in one beat.

Chord Family Assign, Alteratn

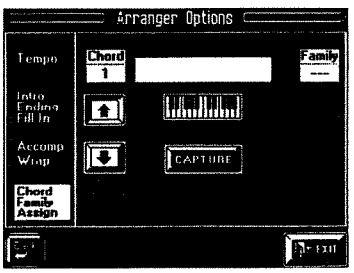
On page 68, we told you about three complete sets of Style divisions: one for major, one for minor, and one for seventh chords. If you listen very carefully to the internal Styles of your VA-3, you will notice that the accompaniment for minor chords sometimes differs from that for major and seventh chords. That is because these accompaniments can be programmed separately.

The *Chord Family Assign* function allows you to specify which pattern (major, minor or seventh) should be used for the chords you play. For instance, if you want the Arranger to use the minor accompaniment for "6" chords, you should use the Chord Family Assign function to assign the "6" chord family (for instance C6, A6 etc.) to the minor accompaniment level.

1. On the page that appears when you press the Keyboard Mode [OTHER] button, press the [ARRANGER CHORD] field if it is not displayed in white.

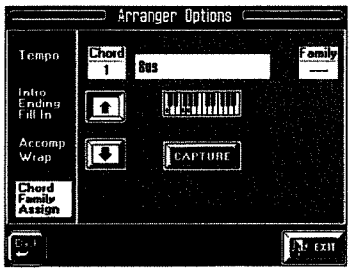
2. Press the [Options] field.

3. Press the [Chord Family Assign] field in the left column.
The display now looks more or less as follows:

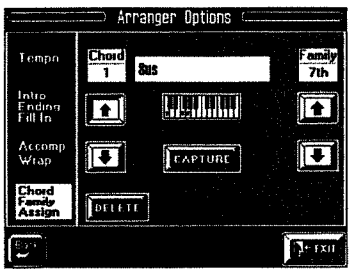


4. Press the Keyboard Mode [ARRANGER] button (this is only necessary if it doesn't light).

5. Play a chord in the left half of the keyboard.
The name of that chord now appears to the right of the "Chord" field.



6. While still holding those keys, press the [CAPTURE] field.
The display now contains two arrows that are displayed below the [Family] field. Use [↑][↓] to select the Chord division (pattern) you want to hear every time you play your "Sus" chord (for example). Select "Maj", "min", or "7th".



Note: You cannot select "Maj" in this particular case, because Sus chords are already assigned to the "Maj" family. You could assign them to the "7th" divisions, however.

Note the [DELETE] field. This means that you can delete this assignment and program a new one if you like.

7. Press the Chord [↓] field to select memory 2.
Repeat the above steps to program other Chord Family assignments. You can use [↑] to return to memory 1, and change the assignment, or delete it.

8. Press [EXIT] to return to the Master page.
You can also press the [←Back] field if you still need to make other Arranger settings... such as the following, which is related to the Chord Family Assign function.

Intro& Ending Alteration

Now suppose you like the *accompaniment* you assigned your chord to (e.g. the "7th" pattern), but think that the Intro and Ending sound odd when you start a song with that chord ("Csus4" for instance). Consider the following example: you assigned the C4 chord to the major family and the Intro of the Style you are using contains the following progression:

C→ Am→ F→ G

Starting the Intro with the C4 chord memorized would transform this progression into the following:

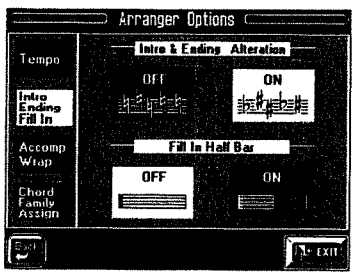
C4→ Am6→ F→ G7

The outcome is not really predictable. That is precisely why you can turn the Alteration function off. Doing so allows you to memorize the C4 chord but have the Intro or Ending play the normal progression (e.g. C, Am, F, G), and cause the Arranger to switch to the C4 chord when the Intro/Ending is finished.

1. On the page that appears when you press the Keyboard Mode [OTHER] button, press the [ARRANGER CHORD] field if it is not displayed in white.

2. Press the [Options] field.

3. Press the [Intro Ending Fill In] field in the left column.
The display now looks more or less as follows:



Press the [OFF] field if you don't want the Intro and Ending patterns to be affected by the "special" (unusual) chords you play. Press the [ON] field if your "special" chords should also be reflected by the Intro and Ending patterns.

4. Press [EXIT] to return to the Master page.
You could also stay on this page for the following function:

Musical Style playback: Wrap

The Wrap function is used to specify how the bass line and accompaniment parts should be played. If the bass, for instance, is programmed to play ascending scales, some notes may be too high or too low to sound natural in a given situation. Though perfectly possible for the built-in tone generator, playing the scales the way they were programmed affects the quality of your accompaniment.

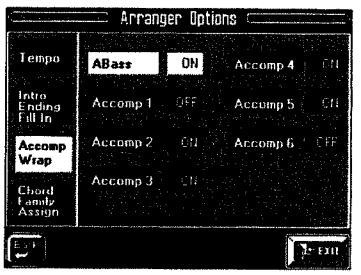
So far, you may not have noticed the difference because the default setting for the Wrap function is "ON", meaning that all parts are played in their natural range. The Wrap function transposes all accompaniment notes that are too low (for piccolo etc. sounds) or too high (for bass sounds, etc.) one octave up or down. The Wrap point is preset for each Tone and cannot be changed.

The Accomp Wrap parameter allows you to activate or cut the Wrap function. In most cases, *ON* is probably a sensible setting.

1. On the page that appears when you press the Keyboard Mode [OTHER] button, press the [ARRANGER CHORD] field if it is not displayed in white.

2. Press the [Options] field.

3. Press the [Accomp Wrap] field in the left column.
The display now looks more or less as follows:



4. Press the field of the Arranger part whose Wrap setting you wish to change.
That field is displayed in white.

5. Use the [TEMPO/DATA] dial to select "ON" or "OFF".
ON— All notes played by the selected part will sound in a "natural" range for the selected Tone, i.e. neither too low nor too high.

OFF— All notes of the selected part will be played the way you (or Roland) programmed them. Select "OFF" if the chord progression you are playing requires ascending or descending lines or consistent chord voicings (such as when the User Style function is used for sequencing).
Note: The A Drum part cannot be selected because it doesn't play melodies, so that the Wrap function wouldn't make sense.

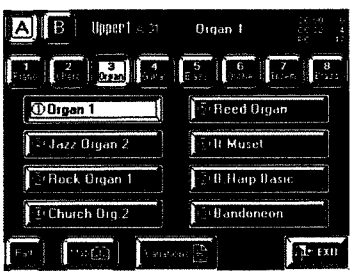
6. Press [EXIT] to return to the Master page.

6.7 Selecting Tones for the Arranger parts

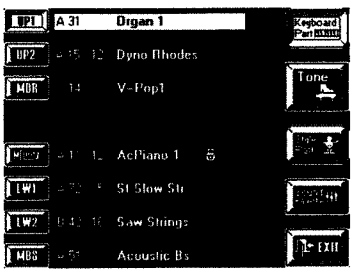
You can select other Tones for the Arranger parts of the currently selected Music Style. Assigning another Drum Set to the A. Drums part, for instance, may already dramatically change the Music Style's character. Likewise, replacing the acoustic piano by an electric one is an easy way of adapting a preset Music Style to your specific needs.

Tone selection for the Arranger parts is very similar to the procedure for the Keyboard parts. If in doubt, please see "Selecting Tones for the Keyboard parts" on page 34.

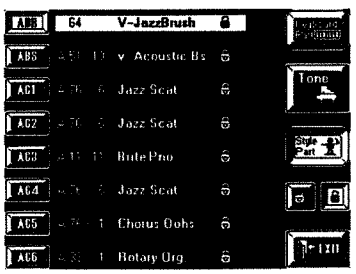
1. On the Master page, press the [Tone] field. You can also press the [TONE] button in the BANK/NUMBER section.
The display now looks more or less as follows:



2. Press the [Part] field to select the following page:



3. Press the [Style Part] field to select the following page:



4. Press one of the part fields [ADR]~[AC6] to select the part you wish to assign another Tone to.
[ADR] refers to the Accompaniment Drums part, [ABS] to the Accompaniment Bass part, and [AC1]~[AC6] to the melodic accompaniment parts.

5. Use the BANK/NUMBER buttons to select a Tone for the active Arranger part (the one that is displayed in white).
Alternatively, you can also press the [Tone] field and work via the display. See also "Selecting different Tone Maps" on page 38 if you can't seem to find the Tone you need in the current Map. See the Tone Lists on page 170 for locating the desired Tone.

About the lock

It is up to you to decide whether the VA-3 should remember which Tones you assigned to the Arranger parts. If you do not modify the setting of the lock, you will notice that, after a while, the Music Style returns to the original, preset, Tones.

Thanks to the lock, however, you can ensure that the preset Tone selection will be overridden by your own choices.

Lock closed — The Tone assignment contained in the Music Style will be recalled at the beginning of a loop. This may be after 2, 4, or even 8 measures. (There are also locks for the volume, Reverb, Chorus, etc. parameters.)

Lock open — The Arranger part in question does not change at the beginning of the loop. Selecting this option is probably wiser when you are planning to write your settings to a User Program (see page 91) and recall them at a later stage. Otherwise, you might just as well not bother selecting other Tones for the Arranger parts.

This is an intelligent function: as soon as you select another Tone (or Drum Set), the lock is automatically opened.

Note: See also "More locks" on page 84.

6. Press [EXIT] to return to the Master page.

6.8 Working with Styles on Disk

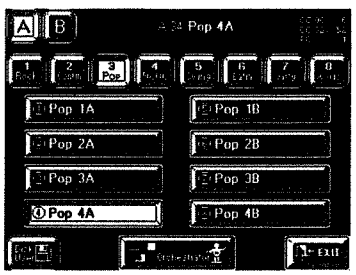
Programming your own Disk Link assignments

The VA-3 comes with 64 preprogrammed assignments to Music Styles on the supplied floppy disk, while you may in time also use other Styles on different floppy disks.

If such disks contain Music Styles you want to be able to select at the press of three buttons (without using the Disk User memory), here is how to program an assignment.

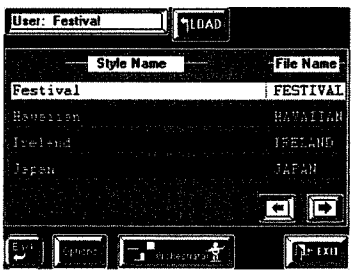
Note: If you take advantage of this, it would be wiser to have all Disk Link memories refer to the same disk. That way, you do not have to change disks while playing.

1. Press the [STYLE] button or the [Style] field on the Master page.
The display now looks more or less as follows:



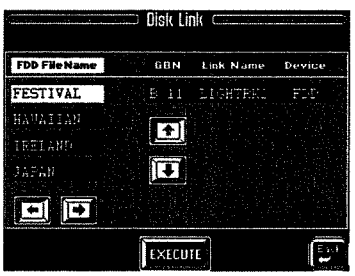
2. Insert a floppy disk into the drive.

3. Press the [Disk User] field.



4. Press the [Options] field.

5. Press the [Disk Link] field.
The display now looks more or less as follows:



6. Use the [↑][↓] fields to select the Disk Link memory you wish to assign a new Style to.
Select B21, for example. The memories are numbered from 1~8. This explains why the next Disk Link memory after "B18" is "B21" ("9" and "0" are not used).
Note: This will overwrite the current assignment of the B21 memory. You may want to write it down before proceeding, so as to be able to restore the factory setting.

7. Press the field of the Style you want to assign to this memory.
If necessary, use the [←][→] fields or the [TEMPO/DATA] dial to select another group of four Styles.

8. Press the [EXECUTE] field.
The VA-3 now briefly confirms that your selection has been registered and then returns to this page. You could now program other assignments if you wanted to.

9. Press the [←Back] field to return to the previous page and, at the first occasion, press [EXIT] to return to the Master page.
Note: Disk Link assignments are stored internally but they are not part of the User Programs. Thus, you can "only" program 64 links in all (rather than 64 per User Program).
Note: Disk Link settings are saved to a global memory whose contents are saved together with all User Program Set data (page 163). When you transfer such a Set back to the VA-3 using the "All" option of the User Program Set Load function, the internal Disk Link settings will be replaced by the settings you have just loaded. Be sure to save your settings to disk before loading an entire User Program Set. Use "Save User Program Set" on page 163 for saving the settings.

Convenient functions for files on floppy disk (Rename & Delete)

If you take a close look at the display, you'll see that there are two columns:

[Style Name]— This is the "internal" name of a Music Style. This name appears on the Master page, the Music Style selection page, etc. It is usually the "meaningful" name.

[File Name]— This is the name the Music Style has on disk and by which the VA-3 recognizes it (its "address"). If you change this name of a Music Style, the Disk Link function no longer finds the Style.

You can supply the above information for your own Styles – or change the information of the Styles on the supplied floppy disk (though the latter is probably not a very good idea).

Rename (Style Options)

The *Style Options* page contains three options: [Rename], [Delete], and [Disk Link]. You already know what the Disk Link function is for (see page 78). Here, we will have a look at the [Rename] function. As stated above, it allows you to change (or supply) the Style and/or File Name.

It is an "Option", which means that you probably won't use it every day. If you do use it, be aware of the following: **the VA-3 remembers the File Name** of the referenced Music Styles for the **Disk Link** facility. If you change the File Name (not the Style Name), the VA-3 no longer finds it when you select the Disk Link memory in question. We therefore recommend you never change the File Name.

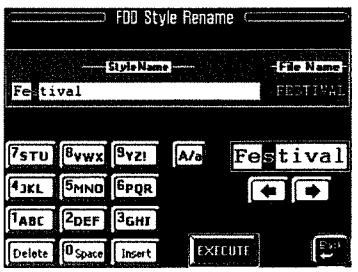
1. Press the [STYLE] button or the [Style] field on the Master page.

2. Press the [Disk User] field.

3. Press the [Options] field.

4. Select the Style you want to rename by touching it. If necessary, use the [◄][►] fields or the [TEMPO/DATA] dial to locate it.

5. Press the [Rename] field to call up the following page:



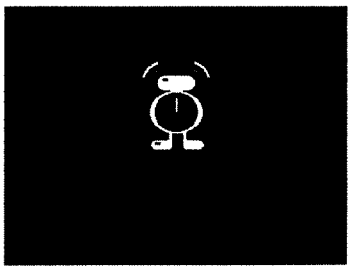
6. Touch the field for which you wish to supply or change the information.

7. Use the keypad to enter the desired name. See also page 55.

Note: The Style Name entry allows for 16 characters. For the File Name, you can only enter 8 characters.

8. Press the [EXECUTE] field.

The new information is saved to disk while the following animation is displayed:



The display now returns to the *Style Options* page.

Style Delete

It is also possible to delete a Style from floppy. You should use this as sparsely as possible – and **never for the supplied floppy disk.** Once a Style is gone, there is indeed no way to restore it. So please be careful and try to forget this function even exists.

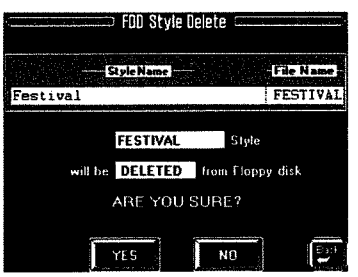
1. Press the [STYLE] button or the [Style] field on the Master page.

2. Press the [Disk User] field.

3. Press the [Options] field.

4. Select the Music Style you want to delete.
Use [◄][►] fields or the [TEMPO/DATA] to call up the Style's name, then press its field (so that it is displayed in white).

5. Press the [Delete] field to call up the following page:



6. Carefully look at the Style name that is displayed here and check whether this is the correct one.
If this is the wrong Style, press [◄Back] to return to the Style Options page and select the correct one.

7. Press the [YES] field to go ahead and delete the Style.
Press [NO] if you selected this function by accident.

If you press [YES], the Style is deleted, after which the display confirms the operation and returns to the *FDD Style Options* page.

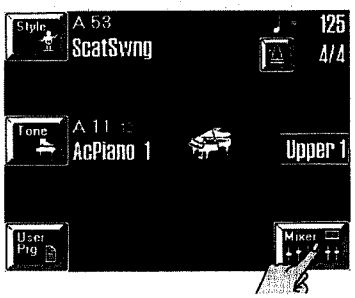
8. Press [EXIT] to return to the Master page.

7. Mixer, effects and editing

The VA-3 also allows you to set the volume, the stereo position and the amount of effect the parts should use. Of course, you can also program the effects themselves. All of these parameters can be found on the Mixer pages.

There are *two ways* to select the VA-3's Mixer. The first is the most straightforward one, the others require some additional operations.

a) Press the [Mixer] field on the Master page.



b) Press the [EFFECTS] button, followed by the [Keybrd Mixer], [Style Mixer], or [Global Volume] field.

7.1 Structure of the Mixer pages

The main pages are structured in a very logical way: The [**Keybrd Mixer**] field provides access to the VA-3's Keyboard parts: Upper1, Upper2, Lower1, Lower2, M.Bass, MEL INT, M.Drums.

The [**Style Mixer**] field allows you to set various parameters of the Arranger (or "Style") parts: A.Drums, A.Bass, Accomp 1~6.

The [**Global Volume**] field allows you to set the volume of several part groups in one go. On a mixing console, these sliders would be called the bus faders.

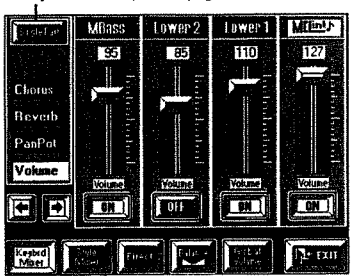
In fact, the Mixer is very similar to a mixing console, because you can not only set the volume of the above parts, but also their stereo position (PanPot) and the amount of effect they should use. In other words: this is where you can "mix" the parts so as to create a convincing sound image.

For your convenience, you can do the mixing according to two approaches:

(1) Via sliders on so-called palette pages

In this case, you can edit the selected parameter (volume, pan, effect send) for several parts at once. If the desired part is not displayed, use the [◄][►] fields to select another group of Keyboard or Style parts. A typical palette page looks like this:

Means that you are on a palette page



[Single Part] and [PALETTE] are only available on the pages you select via these fields

Press the [Palette] field (if available) so select the palette page. (If the [Single Part] field in the upper left corner is displayed, you are on a palette page.)

On such palette pages, you need to proceed as follows:

1. Select one of the VA-3's Mixer pages (see a~c).

2. Select the Mixer group that contains the part whose settings you want to change by pressing the [Keybrd Mixer] or [Style Mixer] field.

3. If the part you want to change is not displayed, use the [◄][►] fields to call up another group of four parts/sliders.

4. Select the desired parameter by pressing the [Chorus], [Reverb], [PanPot] or [Volume] field.

5. Edit the selected parameter for one or several parts in one of the following ways:

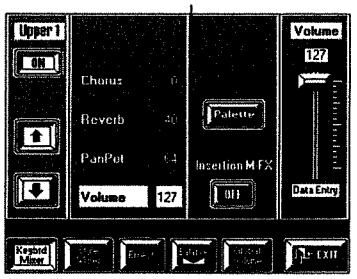
a) Use the on-screen sliders —or—

b) Press the name field (above the sliders) of the part whose setting you wish to change and use the [TEMPO/DATA] dial, or the [DATA] button/Numeric Entry pad (see page 61).

(2) Use a Single Part page

Single Part pages contain all available Mixer parameters for the currently selected part. A typical Single Part page looks like this:

Means that you are on a Single Part page



Here, you need to proceed as follows:

1. Select one of the VA-3's Mixer pages (see a, b on page 81).

2. Select the Mixer group that contains the part whose settings you want to change by pressing the [Keybrd Mixer] or [Style Mixer] field.

3. If the [Single Part] field is displayed in the upper left corner, press it.

4. Use the [⬆][⬇] fields to select the desired part.

5. Select the desired parameter by pressing the [Chorus], [Reverb], [PanPot] or [Volume] field.

6. Edit the selected parameter in one of the following ways:

a) Use the slider to the right of the parameters —or—

b) Press the field of the parameter whose setting you wish to change and use the [TEMPO/DATA] dial, or the [DATA] button/Numeric Entry pad.

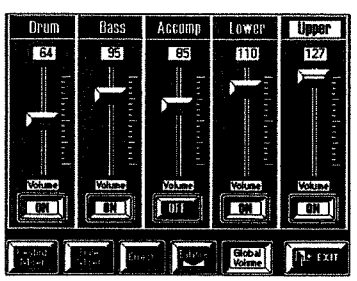
Note: The Equalizer and Insertion M-FX parameters can only be set on Single Part pages.

7.2 Volume and pan

Global Volume

1. Press the [Mixer] field in the display.

2. If necessary, press the [Global Volume] field:



Note: We strongly recommend that you first assign the Tones you need to the parts you intend to play because the character of the sounds you use affects the balance. Thus, a trumpet sound will be perceived louder than a flute because the former contains more harmonics (overtones).

Note: See page 25 for details about the [Balance] field.

The sliders on this page are group sliders that allow you to set the volume of several parts at once:

Drum— Refers to the volume of the ADrums (ADR) and MDrums parts (MDR). With this slider, you thus affect the volume of two parts.

Bass— Refers to the A Bass (Music Style bass) and the MBS (Manual Bass) parts.

Accomp— Refers to the AC1~AC6 parts of the Arranger. These are the melodic accompaniment parts.

Lower— Refers to the LW1 and LW2 parts.

Upper— Refers to the UP1, UP2, and MEL INT parts.

As the name implies, you could use this page for global changes to the volume.

3. Press the name of the VA-3 part section whose volume you wish to change.

In the above illustration, the Upper slider (group) has been selected.

4. Set the desired volume in one of the following ways:

- Using the on-screen slider;
- With the [TEMPO/DATA] dial;
- By pressing the [DATA] button and using the Numeric Pad (see page 61).

If you only need to change the balance between the Arranger (or Song) and Keyboard parts, press the [Balance] field and see page 25.

Note: The relative balance of two grouped parts is only maintained as long as you do not decrease (or increase) the volume once one of the faders on the other pages has reached the value "0" (or "127"). If you increase the volume of a group beyond the point where one of its members has reached "127", only the volume of the part(s) whose volume hasn't yet reached "127" will change. The same is true when you decrease the volume of a grouped pair after one part has reached the value "0". There is no way to restore the relative balance that was in effect before you destroyed it.

Note that obtaining the right balance is not always a matter of increasing the volume of one section. In many instances decreasing the volume of the part or section that is too loud with respect to the others, is more effective.

Muting parts

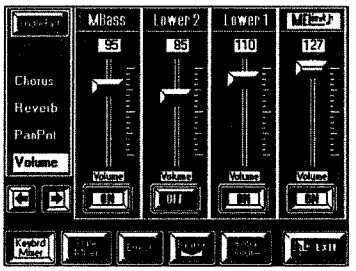
On the above page (as well as on the Keybrd Mixer and Style Mixer pages) you can press the [ON/OFF] fields below the sliders (Palette) or part name (Single Part) to mute the selected group (or part). The [ON] prompt then changes to [OFF].

Note: See below for the remaining functions on the Mixer pages.

5. Press [EXIT] to return to the Master page.

Keybrd Mixer (volume of the Keyboard parts)

After selecting a Mixer page (see page 81), press the [Keybrd Mixer] field. The display now looks as follows:



Here you can set the volume of the individual Keyboard parts. If this page is not displayed, press the [PALETTE] field in the middle of the display.

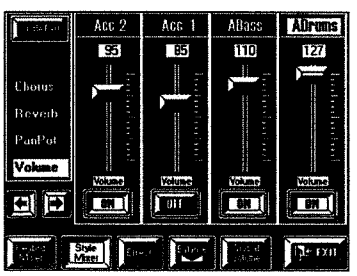
The parts whose volume you can change here are: M Drums, Upper 2, Upper 1, M Bass, Lower2, Lower1, and MEL INT.

1. Use the [◄][►] fields to select the page that contains the Keyboard part whose volume you want to change or that you wish to switch off.

2. If the [Volume] field is not displayed in white, press it. Otherwise, you'll change another parameter setting.

Style Mixer (volume of the Arranger parts)

After selecting a Mixer page (see page 81), press the [Style Mixer] field. The display now looks as follows:



Here, you can set the volume and on/off status of the Arranger parts.

1. Use the [◄][►] fields to select the page that contains the Arranger/Style part whose volume you want to change or that you wish to switch off.

2. If the [Volume] field is not displayed in white, press it. Otherwise, you'll change another parameter setting.

PanPot (stereo position)

The VA-3 allows you to specify the PanPot setting (stereo position) of every part individually. One sensible way of using the PanPot parameter could be to move the Upper1 part to the left output, while the Upper2 part is moved to the right output. If you then layer Upper1 and Upper2 (by activating [UP1] and [UP2] on the page you select with the [OTHER] button, or on the One Touch page), the Upper1 sound will come from the left speaker, while that of the Upper2 part will come from the right speaker.

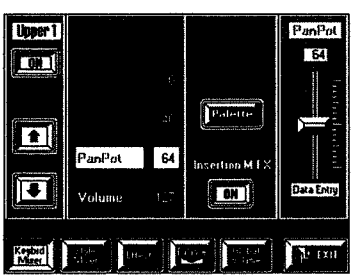
Here is how to specify the PanPot setting of a part:

1. Select a Mixer page (see page 81).

2. Select the part group (Keyboard or Style) by pressing either [Keybrd Mixer] or [Style Mixer].

3. Select the Single Part or Palette page.
On the Palette page, use the [◄][►] fields if the desired part is not displayed.

- If you chose to work with the Single Part page, select the part whose setting you wish to change by pressing [↑] or [↓].

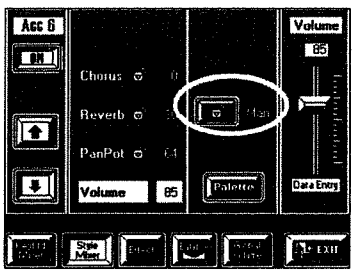


4. Set a value between 1 and 63 to move the part further to the left, or 65~127 to move the part further to the right.
Note that you can also select *Rnd* (Random), which means that the part will alternate between the left and right channels in a random way.

Note: The percussion sounds of the M.Drums and A.Drums parts are already panned in stereo. Changing the PanPot setting for these parts means that the entire stereo distribution will be shifted to the left or right.

More locks

You may have noticed the locks on the [Style Mixer] Single Part page:



They allow you to choose whether the Chorus (Send), Reverb (Send), and PanPot settings for the Arranger/Style parts will be used or not.

On the Single Part page, press the [6 Auto/ Man] field.

Man— The settings remain in effect until you change them again, until you select another User Program, or another Style. (*Man* is short for *Manual*).

Auto— In this case, the Arranger parts will use the settings contained in the Music Style patterns you select. Music Styles not only contain notes (i.e. the drum, bass and accompaniment parts) but also a series of settings that specify how the parts are to be played back. These settings include Program Change messages, Panpot, volume, etc.

Music Styles are accompaniment patterns that are repeated every so often (usually after four bars). The non-note information is located at the beginning of a pattern, so that, if you select *Auto*, the Mixer settings of the Arranger parts will be reset as soon as the pattern restarts from bar 1 – or every time you select another division (Original, Variation, Fill, etc.).

If you do not want your changes to be overwritten by the information contained in a Music Style, select Man.

Note: These locks are managed intelligently: as soon as you modify one of the above parameters for an Arranger/Style part, the lock is opened automatically (because the VA-3 assumes that you actually want to use the settings you make).

Note: The lock settings have no effect on the reception of MIDI messages via MIDI IN. However, the VA-3 is also equipped with MIDI filters that allow you to suppress the reception of certain MIDI messages.

7.3 Effects

The VA-3 is equipped with two programmable effects (Reverb, Chorus) and a multi-effector (called *Insertion M-FX*).

Note: Any changes to the effects programs apply to all parts, as there is only one Reverb and one Chorus. What can be specified for every part individually, though, is the amount of effect to be applied (effect depth/send).

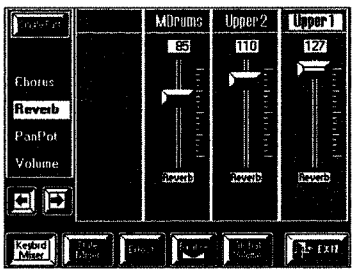
Note: The M-FX is only available for the Keyboard parts.

Applying Reverb or Chorus to a part

1. On the selected Mixer page (see page 81) select the part group ([Keybrd] or [Style]) and the part whose effect send setting you wish to change.

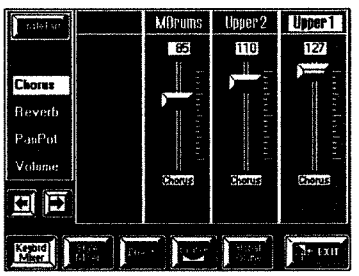
Do not forget to press the [Keybrd Mixer] or [Style Mixer] field to gain access to the desired part. The effect send settings specify the part level for the signal that is fed to the Reverb and Chorus effect respectively. Setting high Reverb and Chorus values means that you effectively increase the effect level.

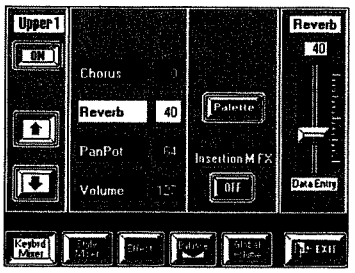
It works much the same way as a cathedral: the louder you sing, the more Reverb you hear. In the case of the cathedral, singing louder means that you increase the effect send level, i.e. the level of the signal (your voice) that will be processed by the acoustic environment.



2. Press the [Chorus] field and modify the Chorus send level.

3. Press the [Reverb] field and modify the Reverb send level.





Note: The Reverb and Chorus send levels cannot be set for Keyboard parts you assign to the M-FX effect (see page 86). The M-FX effect, however, has the same send parameters (see page 87).

Effects settings

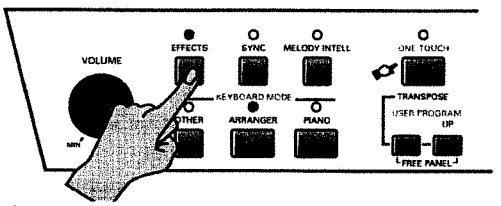
Two of the VA-3's effects can be edited and thus tailored to your needs. The settings you perform here apply to all parts that use the effect in question. Especially for the Reverb and Chorus effects, it is therefore wise to work with universally usable settings. Try to consider these two as "general" effects that will be used by several parts at once.

1. Select the effects parameters you wish to edit:

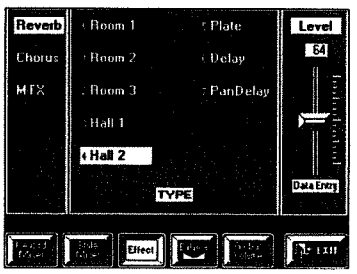
a) Select a Mixer page (see page 81) and press the [Effect] field

—or—

b) Press and hold down the [EFFECTS] button.



The display now shows the M-FX page. Press the [Reverb] field. The display now looks more or less as follows:



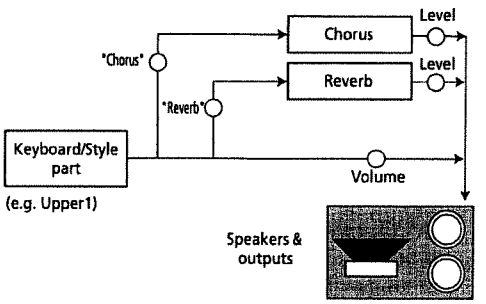
2. Press the field that is assigned to the effect you wish to edit (left column).

3. Press a field in the center of the display to select an effect type.

The number of types depends on the selected effect.

4. Use the [Level] slider in the right part of the display for setting the output level of the effect processor itself.

This parameter allows you to set the volume of the selected effects processor. The connection is as follows:



The [Level] sliders therefore allow you to change the balance between the selected effect on the one hand and the mix of the Keyboard and Style/Arranger parts plus the remaining effects on the other hand.

5. Press the field that corresponds to the desired effects type (Room1, Room 2, Room 3, etc. on the above page).

Reverb types

The available Reverb types are:

Room1, Room2, Room3	These Reverbs simulate the reverberation of a room. They provide a well-defined spacious reverberation.
Hall1, Hall2	These Reverbs simulate the reverberation of a concert hall with a deeper reverberation than the Room Reverbs.
Plate	This effect type simulates a plate Reverb (a studio device using a metal plate to simulate natural Reverb).
Delay	This is a conventional Delay that produces echo effects.
Pan Delay	This is a special Delay in which the delayed sounds move left and right. It is effective when you are listening in stereo.

Chorus types

Chorus broadens the spatial image of the sound, adding richness. You can choose from 8 types of Chorus.

Chorus 1–4	These are conventional Chorus effects that add spaciousness and depth to the sound.
Fb Chorus	This is a Chorus with a Flanger-like effect and a soft sound.
Flanger	This is an effect sounding somewhat like a jet airplane taking off and landing.
S Delay	This is a Delay with a short Delay time.
S Delay FB	This is a short Delay with many repeats.

7.4 Insertion effect (M-FX)

Using the insertion effect

Your VA-3 contains a multi-effect that can be assigned to the Keyboard parts. You can select one type and decide which Keyboard part(s) should use the effect. As applying this effect to one or several Keyboard parts also changes the way in which the Keyboard part(s) can take advantage of the remaining effects (Reverb, Chorus), this effect is called an *insertion effect* (because it is inserted into the signal path). See page 87 for details.

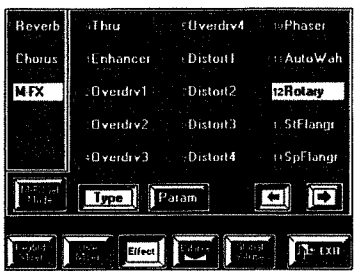
Realtime control via the display

The VA-3 provides a display page where two M-FX parameters can be controlled. For your convenience, the names of these parameters are also displayed so that you know exactly what you are doing.

Let's have a look at how you can modify the two effects parameters and add even more expression to your music:

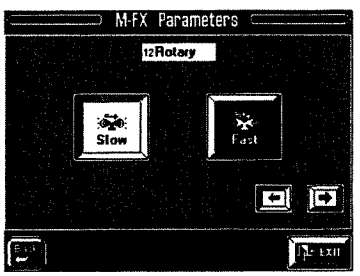
1. If the UP1 part is currently off, press the Keyboard Mode [OTHER] button followed by the [KEYBOARD MODE] field and switch it on (see page 33).

2. Press and hold the [EFFECTS] button to jump to the following display page:



Note: If this page does not appear, press the [M-FX] field in the left column so that it is displayed in white.

3. Press the [Param] field to jump to the following page:



4. Depending on the kind of parameters that can be controlled, use the two fields (called *Slow* and *Fast* for the "12 Rotary" effect).

Note: The current settings will also be written to a User Program (along with all the other panel and parameter settings).

M-FX Selection Mode: automatic Tone link for Upper1

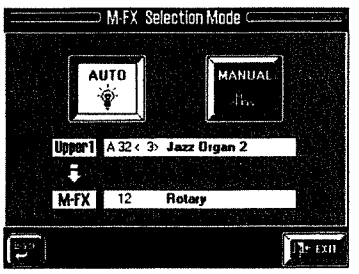
The Upper1 part is considered to be the most important part. The VA-3 therefore automatically loads the M-FX type that is linked to the Tone you assigned to the Upper1 part. A good example of this is the selection of the *12 Rotary* type for organ Tones. The status of the M-FX is also memorized and may thus change.

Though this is usually very convenient, there may be times when you wish to remain in control yourself. In that case, proceed as follows:

1. Press and hold the [EFFECTS] button.

2. On the page that appears now, press the [M-FX Sel Mode] field.

The display now looks more or less as follows:



3. Do one of the following:

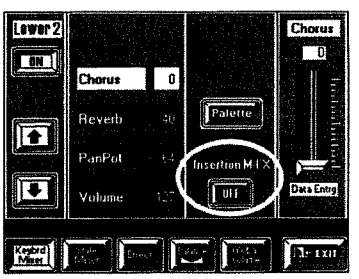
a) Press the [Auto] field if the VA-3 should choose a suitable M-FX type for you.

b) Press the [Manual] field if you do not want the M-FX to change automatically.

Note that it is perfectly possible to activate [Auto], to select a different M-FX type by hand, and to save that setting to a User Program (see page 91).

Assigning the M-FX to a Keyboard part

You may have noticed the Insertion M-FX [ON/OFF] field on the Single Part pages of the Keyboard parts (see page 82). Here is an example:

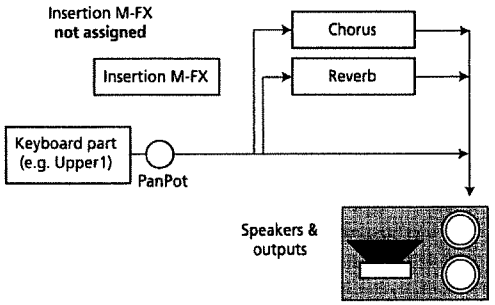


Press it (so that it reads [ON]) to assign the currently selected Keyboard part to the M-FX.

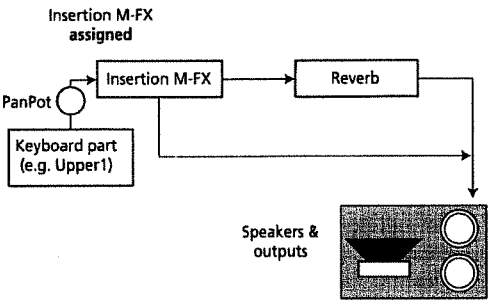
Note: This effect is not available for the Arranger/Style parts.

By the way: the M-FX is also called *Insertion* effect because this processor is located between the Keyboard parts and the other effects.

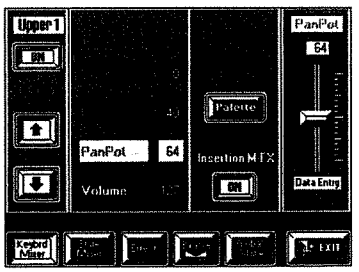
For a Keyboard part that is not assigned to the M-FX, the connection between this part and the other effects/ speakers is as follows:



When a Keyboard part is assigned to the Insertion M-FX, that part is no longer directly connected to the Outputs or the other effects:



This is also reflected in the display:



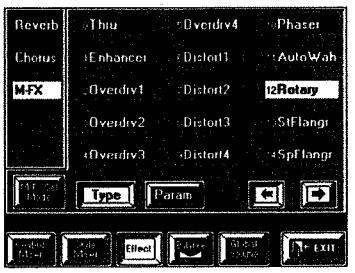
Notice how the [Chorus], and [Reverb] fields are displayed in gray. That is because they no longer influence the signal of the Keyboard part in question.

There is only one M-FX, so all Keyboard parts assigned to it will use the same type. If the M-FX effect is processed by the Reverb effect (see page 87), the assigned Keyboard parts also use the same Reverb settings.

Selecting an M-FX type

Let us now have a look at how to select a different type (effect) for the M-FX processor. Each type you select is loaded with suitable preset settings that cannot be edited on the VA-3 itself. See page 168 for a description of the types.

1. Press and hold the [EFFECTS] button to jump to the following display page:



If another field in the left column is displayed in white, press the [M-FX] field.

2. If necessary, use the [◄][►] fields to select another set of 15 types.

3. Press the field that corresponds to the M-FX type you need.

You may want to set the M-FX to Manual mode to avoid accidental changes when you select another Tone for the Upper1 part. See page 86.

M-FX Send: processing the M-FX with the Reverb effect

As you know, Keyboard parts that you assign to the M-FX lose their Reverb and Choruscapabilities.

You could, however, set the Reverb parameter for the M-FX itself, in which case, the signal is processed as follows:

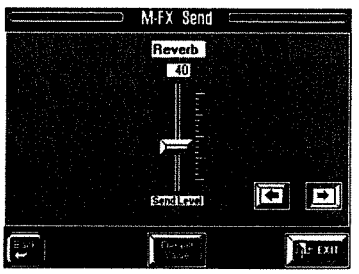
a) The signals of all Keyboard parts assigned to the M-FX are combined and transmitted to the M-FX.

b) The M-FX processes these signals.

c) By setting the parameter below, you can process the output signal of the M-FX with the Reverb.

You probably know how to do the above, so we'll leave you to it. (If not, see page 84.) Here's how to select this parameter:

1. On the above display page, press the [Param] field.
2. On the page that appears now, press the [➡] field. The display now looks more or less as follows:



3. Use the slider, the [TEMPO/DATA] dial, or the [DATA] button/Numeric Entry pad (see page 62) to set the desired Reverb send value.
4. Press the [Default Value] field to reset the slider to its factory setting ("40").

7.5 Sound Palette: editing Keyboard part parameters

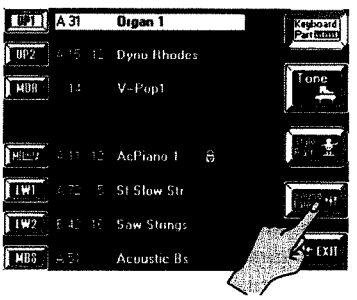
Your VA-3 allows you to edit certain parameters that affect the way a Keyboard part sounds when you play it. These parameters will help you "fine-tune" the parts by adjusting their brilliance, their modulation speed (Vibrato Rate), and so on.

Please bear in mind that the parameters discussed in this chapter only apply to the following Keyboard parts: **Upper1**, **Upper2**, **Lower1**, **M.Bass** (you must select one of these to ensure that the [Sound Palette] field is displayed). Assigning another Tone to a Keyboard part does not reset the part parameters discussed below. In other words, if you modify the envelope of the piano sound assigned to the Upper1 part, you might be inclined to think that you have changed the envelope of the piano *Tone* and that selecting another Tone for Upper1 will load other envelope settings. Though that is partly correct, the part parameter settings are added to the settings of the Tone you assign to a part.

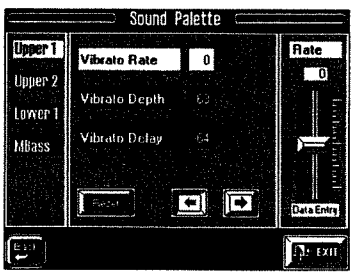
Parts are in fact containers in which you can "put" a Tone and whose sound can be modified using the parameters described below.

Note: All Part parameters are relative parameters whose values are added to or subtracted from the preset Tone parameter values. That is why you can specify both positive ("more") and negative ("less") values.

1. Press the [TONE] button above the BANK/NUMBER section, or the [Tone] field on the Master page.
2. On the page that appears now, press the [Part] field in the lower left corner.



3. Press the [Sound Palette] field.



4. In the left column, press the field of the Keyboard part you wish to edit.

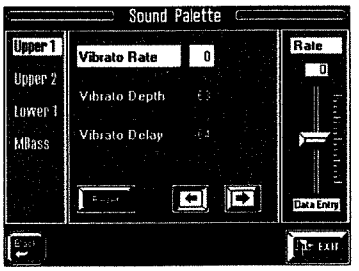
5. To quickly reset the selected parameter, press the [Reset] field.

6. To edit one of the displayed parameters, press its field and use the slider, the [TEMPO/DATA] dial, or the [DATA] button/Numeric Entry pad.

7. Use the [◄][►] fields to select the remaining Sound Palette parameters.

Here are the Part parameters you can edit:

Modulation (Vibrato)



Vibrato is an effect created by modulating the pitch. Applying vibrato makes the sound more expressive. Pitch modulation adds a pleasant "wobble" to the notes you play. Use the following three parameters if you think the part in question has too much (or could use a little more) vibrato.

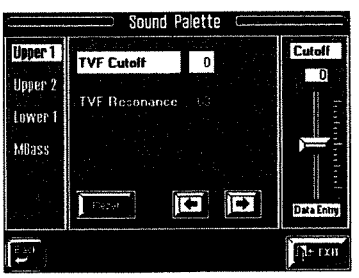
Note: Some "V" Tones contain natural (sampled) vibrato whose depth or speed cannot be changed.

Vibrato Rate [-64~63]— This parameter adjusts the speed of the pitch modulation. Positive (+) settings make the preset pitch modulation faster, and negative (–) settings make it slower.

Vibrato Depth [-64~63]— This parameter adjusts the intensity of the pitch modulation. Positive (+) settings mean that the "wobble" becomes more prominent, while negative (–) settings make it shallower.

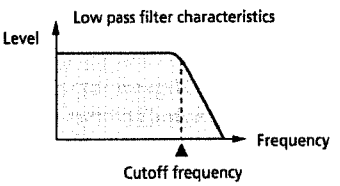
Vibrato Delay [-64~63]— This parameter adjusts the time required for the vibrato effect to begin. Positive (+) settings increase the time before vibrato will begin, and negative settings shorten the time.

Timbre (TVF)



By modifying the filter settings, you can control the timbre (tone) of the sound. The VA-3 uses *Low-Pass Filters* (LPF) that allow only frequencies below the specified frequency to pass. The frequency where the filter starts "cutting off" harmonics (or overtones) is called the *Cutoff Frequency.* By modifying the setting of the Cutoff Frequency you can make the sound brighter or darker. The Cutoff Frequency can change over time, controlled by the "envelope". By adjusting the filter and envelope settings, you can create sounds that have movement and expression.

TVF Cutoff [-64~63]— Positive Cutoff settings mean that more overtones will be allowed to pass, so that the sound becomes brighter. The further this value is set in the negative direction, the fewer overtones will be allowed to pass, and the sound will become softer (darker).

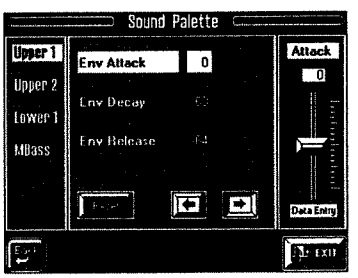


Note: For some sounds, positive (+) Cutoff settings will cause no noticeable change because the preprogrammed Cutoff parameter is already set to its maximum value.

TVF Resonance [-64~63]— This is a parameter one invariably associates with a synthesizer. When the Resonance value is increased, the overtones in the area of the cutoff frequency will be emphasized, creating a sound with a strong character.

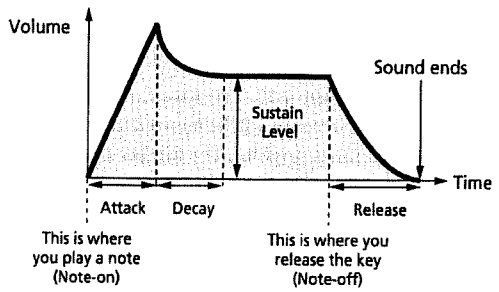
Note: For some sounds, negative (–) settings of Resonance may produce no noticeable change because the Resonance is already set to the minimum value.

Envelope



The volume of an instrument changes with time, from the moment the note begins to sound to when it disappears. This change can be indicated on a graph as shown below. The envelope shape is unique to each instrument, and is an important element in how we distinguish the sounds we hear. The envelopes of musical instrument sounds can change depending on how the instrument is played. For example if a trumpet is played sharply and strongly, the attack will be quick and the sound will be sharp. But if a trumpet is played lightly and softly, the attack will be softer. In order to adjust the attack of a sound, you can modify the Attack Time of the envelope. By modifying the values of the envelope you can simulate the characteristics of many different instruments.

The envelope parameters affect both the volume (or amplitude) and the filter. If the cutoff frequency has been lowered, it will rise as the envelope rises, and will fall as the envelope falls.



Env Attack [–64~63]— This parameter adjusts the onset of the sound. Negative values speed up the attack, so that the sound becomes more aggressive.

Env Decay [–64 ~63]— This parameter adjusts the time over which the sound will fall from the highest point of the attack down to the sustain level.
Note: Percussive sounds usually have a sustain level of 0. Piano and guitar sounds are in this category. Holding the keys for a long time will thus have little effect on the duration of the notes you are playing.

Env Release [–64~63]— This parameter adjusts the time over which the sound will decay after the note is released until it is no longer heard. The cutoff frequency will also fall according to this setting.

8. Registrations – User Programs

The VA-3 is equipped with 128 User Programs that allow you to store almost all settings (or registrations) you make on the front panel. Before taking a closer look at these User Programs, there is one thing we have to point out. *All settings relating to MIDI must be written to a MIDI Set* (see page 158).

MIDI settings are not saved to a User Program. The reason for this is simple: You probably need a lot more memories for your songs than you do for your MIDI gear. Writing the MIDI settings to a User Program would slow down the loading process.

Note: It is perfectly possible to link a MIDI Set to a User Program, so that the User Program in question also recalls the linked MIDI Set (see page 95).

For the Disk Link and the Disk User memories, your VA-3 also memorizes the name. If, at the time you recall such a User Program, that Style is not accessible, the display will respond with:

Press the eject button on the floppy disk drive and insert the proper disk. If you are sure you don't have the disk with you, press the [EXIT] field. In that case, the VA-3 will go on using the last Style you selected. Press [RETRY] if your are positive that the requested Style resides on the inserted floppy disk.

A similar system applies to Songs. A User Program can indeed be programmed to automatically prepare the desired song, so that all you have to do is press [PLAY ▶] to start playback. Here's what happens if you insert the wrong disk:

See above for what to do then.

8.1 Writing your settings to a User Program

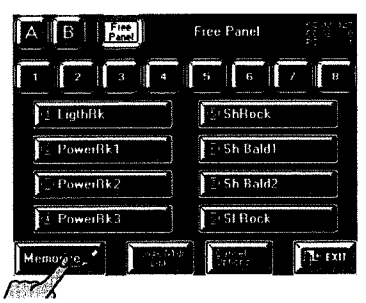
It is a good idea to save your settings frequently even if you still need to do some touching up afterwards. Those intermediary saves allow you to return to the previous stage whenever you do not like your last modifications. Try to use the User Programs as "recall buffers" to be able to return to the previously edited settings, discarding only the latest modifications.

Save your settings after...

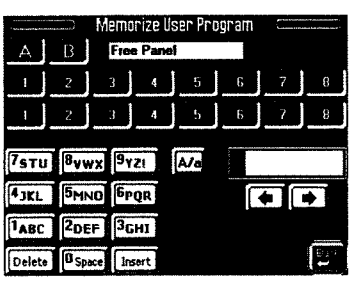
- ...selecting Tones for the Keyboard parts;
- ...selecting a Style, the first division, and after setting the tempo;
- ...assigning other Tones to the Arranger parts;
- ...editing the Mixer settings.

In short, every time you like the settings you just made. That way, subsequent modifications can be undone by loading the "provisional" User Program settings you do not want to lose.

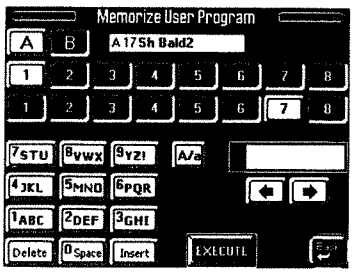
1. Press the [Usr Prg] field on the Master page.
The display now looks more or less as follows:



2. Press the [MEMORIZE] field.



3. Use the [A]/[B] and numeric fields to select the group, the bank and the memory number where you wish to write your settings.



One final step before writing your settings to a User Program is to assign a name to your settings. You only have to do this the first time you write (or "memorize") new settings to a User Program. On the other hand, you can also name your User Program at a later stage and then write it again under the same address. If you do it now, you do not have to worry about renaming your User Program.

Use a name that somehow summarizes the memory's contents. The name of the song you will use these settings for is probably the most explicit name you can think of.

4. See page 55 for how to enter the desired name.
It is perfectly possible to program several User Programs for one song. Selecting a User Program is a lot faster than calling up one of the VA-3's functions, modifying the settings, etc., while playing. You could program one User Program for the first part of a song, another one for the bridge, and a third one for the closing section. Doing so allows you to "play" with the effect settings of the Keyboard and/or Arranger parts, for example.

5. Press the [EXECUTE] field.
The display confirms that the settings have been written to the selected memory and returns to the page of step (1) on page 91.

8.2 Selecting User Programs

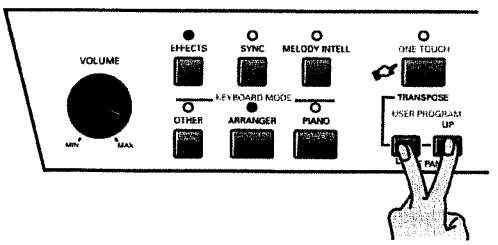
Free Panel

For Song Composer playback, or whenever you want to start anew, you should always select the factory-set *FreePanel* User Program that contains the default settings of your VA-3.

The Free Panel settings can be changed and selected any time, i.e. even after selecting a "regular" User Program.

The Free Panel memory can be selected in two ways:

a) Simultaneously press User Program [DOWN] and [UP]; —or—



b) Press the [USER PROGRAM] button followed by the [Free Panel] field on the display page that appears then.

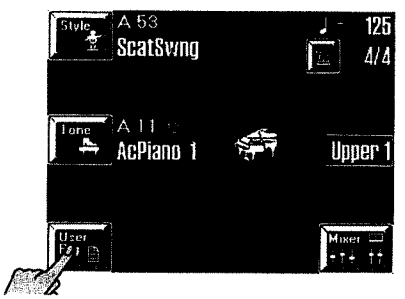
Note: Free Panel is read-only. You cannot write data to this memory.

Note: Unless you specified a User Program for the Startup function (see page 95), you can also load the Free Panel settings by powering off your VA-3 and turning it back on again.

Selecting a User Program (Group, Bank, Number)

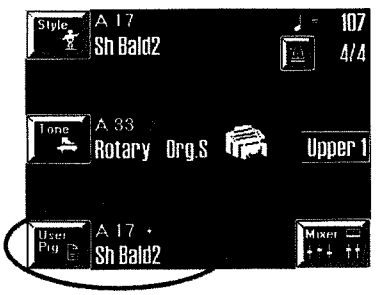
Selecting User Programs works exactly like selecting Tones: you can work with the BANK/NUMBER section (after pressing [USER PROGRAM]), via the display, or both. See pages 34 and 36 for details.

Instead of pressing the [USER PROGRAM] button, you can also press the [Usr Prg] field on the Master page.



There are two groups (A and B), with eight banks and eight memories each. You can select the group (A or B) and the bank (1~8) a little ahead of the song part where you want the new settings to take effect. Only when you specify the User Program *number* will the corresponding settings be loaded.

The name of the selected User Program is displayed on the Master page:

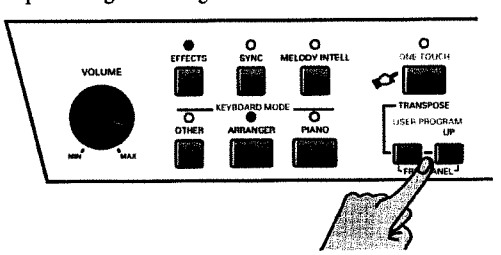


The asterisk (*) only appears when you change a parameter setting after loading a User Program. This is to alert you to the fact that the current settings no longer correspond to the ones you recalled. If you like them better than the original settings, you must write them again. See page 91.

Note: You do not need to load all User Program settings. See "Selectively loading User Program settings (User Program Cancel Options)".

Selecting User Programs using the [DOWN][UP] buttons

The following method is especially useful if you programmed two or more User Programs for a song or if the User Program sequence corresponds exactly to the song sequence you are about to play (i.e. settings of the first song or song part in memory A11, settings of the second song or song part in A12, etc.). Pressing [DOWN] or [UP] immediately selects the following or preceding User Program.



[UP]— Selects the following User Program (for example A13 if you selected A12 before pressing this button).

[DOWN]— Selects the preceding User Program (for example A11 if you selected A12 before pressing this button).

Note: If you press [UP] after selecting A88, your VA-3 will call up B11. Likewise, if you press [DOWN] after selecting B11, your VA-3 will call up A88, and so on.

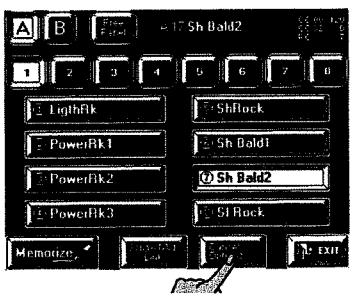
Selectively loading User Program settings (User Program Cancel Options)

The VA-3 is equipped with several options that allow you to keep certain settings of the previous User Program while selecting another User Program. You could use this to quickly assign other Tones to the Keyboard and/or Arranger parts *without* loading the Style parameters contained in the new User Program, for example.

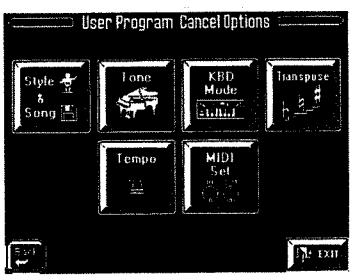
Let's have a look at the possibilities. The desired Cancel Option can be set via the display:

1. Press the [USER PROGRAM] button or the [Usr Prg] field in the display.

2. If you need a different User Program, select it, otherwise...



3. ...press the [Cancel Options] field.
The display now looks as follows:



4. Press the field that corresponds to the settings you do *not* want to recall.
To ignore the Tone selection data of a new User Program, press the [Tone] field so that it is displayed in white.

Style & Song— Press this field if the settings related to the Arranger (Style and Division) or the Song (see "Linking a Song to a User Program" on page 94) should no longer be loaded.

Tones— Press this field to ignore Tone selection for the Keyboard parts when a different User Program is recalled.

KBD Mode— Press this field to ignore the Keyboard Mode (Whole/Split) and Arranger Chord settings (Standard/Piano Style, Left/Right, etc.).

Transpose— Press this field to ignore the Transpose (value and mode) contained in every User Program.

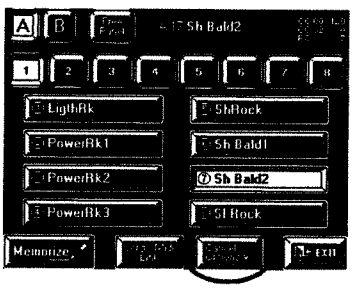
Tempo— Press this field if the tempo setting contained in every User Program should be ignored.

MIDI Set— Press this field if the linked MIDI Set (see page 95) should not be recalled. This allows you to use a User Program, that you originally programmed for a given MIDI setup, even with a different MIDI setup. The current MIDI channels, filter settings, etc., (see page 153) will thus not change.

Pressing one of the above fields without selecting a User Program afterwards has no effect. Only when you select another User Program will the selected data filter (because that is what the User Program Cancel Options are) start working.

To once again load all settings of the new User Program, press the Cancel fields that are displayed in white (so that they turn blue again).

If one of the Cancel options has been activated, the [Cancel Options] field on the User Program selection page contains a tick (✓):



8.3 Automatic functions for User Programs

Song & MIDI (Set) Link

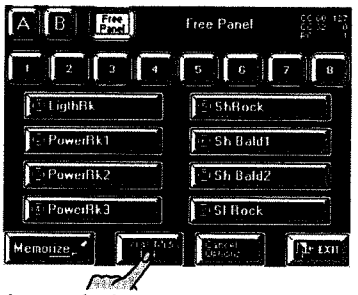
Song & MIDI (Set) Link are two functions that allow you to:

a) *link a Song to every User Program*, so that by recalling the User Program, you also prepare the song in question. Songs reside on disk, which means that the disk must be inserted. Otherwise, this system won't work. All you need to do then, is hit the Song Composer [PLAY ▶] field to start playback of that song.

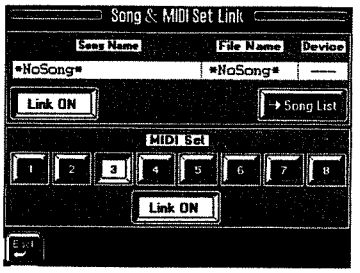
b) *link a MIDI Set to every User Program.* See page 158 for details about MIDI Sets. They contain all MIDI settings for all sections and parts of your VA-3. By linking a MIDI Set to a User Program, you could thus completely reconfigure not only the VA-3 itself, but also the way in which it (a) controls external MIDI instruments and (b) can be controlled from other MIDI instruments.

1. Press the [USER PROGRAM] button or the [Usr Prg] field in the display.

2. On the display page that appears now, press the [Song & MIDI Link] field:



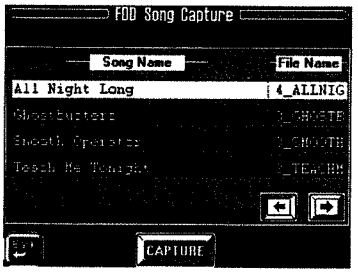
The display now looks more or less as follows:



Linking a Song to a User Program

3. Insert a floppy disk into the drive.

4. Press the [➔Song List] field to jump to the display page where you can select a song.



See page 28. Bear in mind that the Song data are not loaded into the User Program memory. You will have to insert the floppy in question into the drive before recalling this User Program. (Otherwise, an error message is displayed. See page 91.)

5. Press the Song [Link OFF] field to make it read [Link ON] if the selected Song should be prepared every time you select this User Program.

Note: Do not forget to write your User Program after changing these settings (see page 91).

Note: If the desired Song is not loaded, check the Cancel Options (see page 93). The message in question might be filtered.

Linking a MIDI Set to a User Program

MIDI Sets are "User programs for MIDI parameters". There are eight such memories (see page 158). If you regularly use the VA-3 in different MIDI environments (studio, live, band), preparing three MIDI Sets and linking them to the User Programs you usually use in the studio, on stage, etc., can be a time saver. In other situations, such a link could be **dangerous**, because it would reconfigure the VA-3's MIDI parameters without you actually knowing it.

6. Press a MIDI Set [1]~[8] field to select the desired MIDI Set.

7. Press the MIDI Set [Link OFF] field to make it read [Link ON] if the selected MIDI Set should be recalled every time you select this User Program.
Note: Do not forget to write your User Program after changing these settings (see page 91).

8. Press the [←Back] field and the [EXIT] field to return to the Master page.

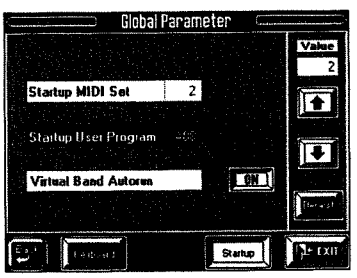
User Program selection at power-on

Whenever you switch on the VA-3, it automatically selects User Program 00 *Free Panel* (see page 92). But you may prefer to be "operational" right away (without using the Virtual Band function). In that case, tell the VA-3 which User Program it should recall whenever you switch it on:

1. Press the [FUNCTION MENU] button.

2. Press the [Global Parameter] field on the *Function Menu*.

3. Press the [Startup] field in the bottom row of the display.



4. Press the [Startup User Program] field so that it is displayed in white.

5. Use [↑][↓] or the [TEMPO/DATA] dial, to select the User Program to be recalled.
If you don't want a User Program to be recalled, select "Off".

6. Press [EXIT] to return to the Master page.

9. Song Composer (the basics)

The Song Composer of your VA-3 is a Standard MIDI File player/recorder with the additional advantage that is can double as 16-track sequencer whenever you want it to.

The VA-3's Composer reads GM/GM2/GS compatible Standard MIDI files.

Note: You may be confused by the words "Song" and "Standard MIDI File" we use in this chapter. There is absolutely no difference because the VA-3's songs are saved to disk as Standard MIDI Files.

9.1 A few remarks about recording songs

This section only contains a few hints about recording your own songs. See the "Song Composer clinic" on page 52 for hands-on information.

Formatting a disk

Songs that you record are first stored in the VA-3's Song RAM memory. When you press the [EXIT] field while a Song Composer page is displayed, however, you will be prompted to save it to disk. That is why you should to prepare a floppy disk. Always choose a reliable 2HD (high density) disk.

Though the VA-3 can also read MS-DOS-formatted disks, it would be a good idea to format all disks you intend to use with the VA-3.

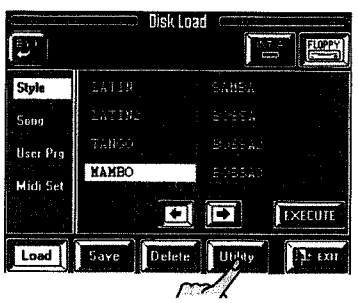
Note: Be careful never to format the floppy disk supplied with your VA-3. It would be a pity to lose all the precious material it contains.

1. Insert a floppy disk into the drive.

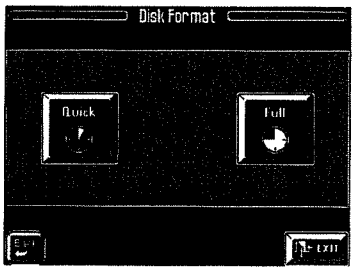
2. Press the [FUNCTION MENU] button.

3. On the display page that appears now, press the [Disk] field.

4. Press the [Utility] field in the bottom row.
The display now looks more or less as follows:



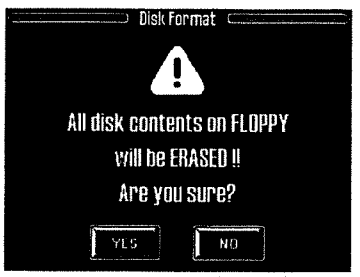
5. On the display page that appears now, press the [Format] field.



6. Press the field that corresponds to the type of formatting you want to use:
Quick— Choose this option to "initialize" new (usually MS-DOS formatted) disks. This is a lot quicker than the *Full* option.

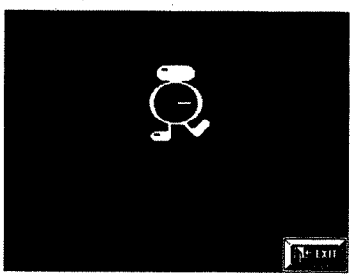
Full— This option is only necessary for disks you used on platforms with a different data and formatting structure.

The display now responds with:



7. Press the [YES] field to format your disk.
Press [NO] to return to the previous display page without formatting.

If you press [YES], the display shows an animated clock to indicate that the disk is being formatted.



You can exit this display page without interrupting the formatting process by pressing the [EXIT] field. That allows you to do something else while the VA-3 is formatting.

Before recording

Though you can record without using the Arranger, that is probably not what you want to do. Here are a few things you should do before starting to record:

1. Stop Arranger playback.
2. Assign the desired Tones to the Keyboard parts you want to use for recording.
3. Select the desired Keyboard Mode (see page 31).
4. Select the desired Arranger Chord mode (see page 72).
5. Select the Style, the division etc. you want to use.
6. Prepare the desired Orchestrator and Morphing settings (see page 50).

There are at least three other ways of configuring the VA-3:

a) Use the Virtual Band function (see page 20).

b) Select the User Program that contains all the settings you need for the song you are about to record (see page 92).

c) Select a Style while the One Touch function (see page 27) is on.

7. See page 52 for what to do now.

Note: See also "Convenient functions for files on floppy disk (Rename & Delete)" on page 78.

9.2 Song playback functions

Playing back a standard MIDI File requires that you insert a disk containing song files into the corresponding drive and that you select the desired song. See "Listening to Standard MIDI Files" on page 28 for details.

Song playback transforms the VA-3 into a GM2/GS sound module, thereby deactivating the Arranger section of your instrument. Leaving this mode is a matter of pressing the [EXIT] field.

The Keyboard parts remain active in Composer mode, and you can mute or solo any part of the song you are playing back. That way, you can also use Standard MIDI Files as backing tracks.

Before starting playback of songs for which there is no User Program, simultaneously press User Program [DOWN] and [UP] to select the factory User Program (Free Panel). The Free Panel memory contains the default settings for all parts and is the only guarantee that the songs on disk will sound exactly the way the recording artist wanted them to.

On the other hand, the VA-3 also allows you to modify the way in which Standard MIDI Files are played back (see "Header Post Edit" on page 119). You can thus "customize" Standard MIDI File playback.

Note: The VA-3 also allows you to program Song Chains (or "Song Sets" on previous models). See "Song Chains" on page 100 for details.

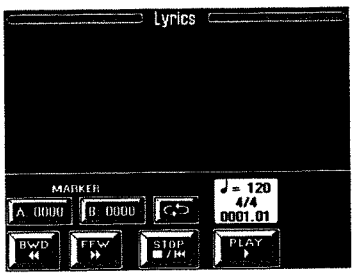
Note: Songs on floppy can be linked to a User Program, so that selecting such a User Program automatically prepares the desired song. All you have to do then is start playback. See "Song & MIDI (Set) Link" on page 94.

Lyrics function

This function was provided to allow you to read the lyrics of the song the Composer is playing back in a karaoke fashion: the words to sing will be highlighted at the right time. Note that this function is only available for Standard MIDI Files that contain lyrics. Ask your dealer for details.

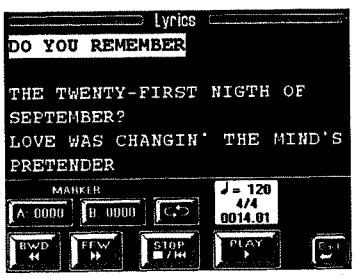
1. Insert a floppy disk into the appropriate drive and select the Standard MIDI File with lyrics data that you wish to play back.
2. Press the [SONG COMPOSER] button.
3. On the display page that appears now, press the [Lyrics] field.

The display now looks as follows:



4. Press the [PLAY ▶] field to start Song playback.

The lyrics are now displayed on screen:



5. Press the [STOP ■|◀] field to stop playback, or the [←Back] field to return to the main Song Composer page.

Fast Forward, Rewind, and Reset

To fast forward or rewind within the current song, first press the [PLAY ▶] and then [FFW ▶▶] to fast forward, or [◀◀ BWD] to rewind. Pressing [FFW ▶▶] takes you to the next measure of the current song, while [◀◀ BWD] takes you to the measure before the current one. You can hold down either field to accelerate the fast forward or rewind process. The measure indication in the display will help you locate the measure you need.

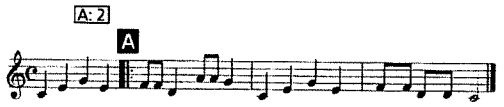
Press the [STOP ■|◄] field once more after stopping Song playback to return to the first measure of the song (Reset).

Loop playback (Markers)

Another clever feature of the Song Composer is that you can program playback loops. You can do so during playback or while the Song Composer is stopped.

1. Select a Song Composer page where the [A:] and [B:] fields are displayed.

2. Press [A:] where you want the loop to begin (that field is displayed in white).



3. Fast forward to the measure where you want the loop to end and press [B:] (this field is also displayed in white).

You can also program loops on the fly. Remember, however, that the Composer always memorizes the beginning (downbeat) of the next measure.

4. To activate the loop you have just programmed, press the [ ] field.
At the end of the B measure, the Song Composer immediately jumps back to the beginning of measure A.

5. To stop playback, press the [STOP ■|◄] field.

6. Press the [ ] field again to deactivate the loop.

Changing the song tempo

You can change the (programmed) song tempo with the [TEMPO/DATA] dial or the [TEMPO/TAP] button (by tapping the desired rhythm). Such changes are only temporary, however, and will be overridden by tempo change messages contained in the song data. Furthermore, every time you jump back to the beginning of the song using [STOP ■|◄], the preset song tempo will be recalled.
Note: You can edit the tempo using "Header Post Edit" on page 119.

Soloing and muting parts

Before muting a part for Minus One performances, you have to know which part (MIDI channel/track) plays the notes you do not want to hear. Unfortunately, the Standard MIDI File format, specific though it may about certain aspects, still leaves a considerable amount of liberty for programmers. Finding the part you want to mute is not always easy, though the VA-3 can help you find it.

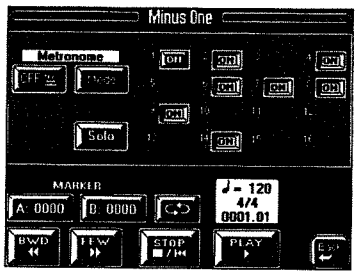
Note: See also "Tracks and MIDI channels" on page 103.

Soloing parts

To find out which part is assigned to which MIDI channel, you can use the Solo function. This function mutes all other parts except the current one. Once one part has been soloed, you can add other parts and so switch on all Song parts one after the other. You could use this facility for Dance/House "mixing" by first switching on the bass, then the drums, etc., simply by adding these tracks to the parts already soloed. The Loop function (see above) might come in handy for such DJ applications. Here is how to solo one or several parts:

1. Load a Standard MIDI File.

2. On the Song Composer page (see above), press the [Minus One] field.
The display now looks as follows:



The [1]~[16] entries refers to the 16 MIDI channels of the currently selected Standard MIDI File. The [ON] and [OFF] switches are only displayed for tracks that contain data. **Careful**, though: when you start playback of a newly loaded song, the [ON]/[OFF] indications are not always reliable. So please first start playback of the first 15 measures, reset ([STOP ■|◄]) and then solo the part(s) you need. This also possible during playback.

3. Press the [Solo] field (so that it is displayed in white). At first, this will solo track 4.

4. Now press the [OFF] field of the part you want to listen to in isolation (so that it reads [ON]).
To "un-solo" track 4, press its [ON] field, so that it reads [OFF].

It also possible to solo several tracks, which means that you only hear the track/MIDI channels whose [ON/OFF] field reads [ON].

5. Press the [Solo] field again to switch off the solo function.
Note: The Solo settings are never written to a User Program. Use the mute facility for switching off the tracks that should be switched off when you select the User Program in question.

Muting tracks/MIDI channels

On this page (and while the [Solo] field is displayed in blue) you can also *mute* tracks/MIDI channels. Muted Song parts do not sound during playback.

1. Select the above display page (see "Soloing parts").

2. Press the [ON] field of the track you wish to mute so that it reads [OFF].

Again, you can mute several tracks simultaneously. By muting 15 tracks/MIDI channels, you effectively do the same as when you press the [Solo] field and select the track you wish to solo (except that you would then have to press 15 [ON] fields, which is not very convenient).

Note: The Solo status takes precedence over the Mute status. To mute a soloed part, you must turn off the Solo function.

3. Press the [◄Back] field to return to the Song Composer page, or go on to the next section.

Note: The Mute settings can be written to a User Program (see page 91) so be sure to only mute the tracks you do not want to be active every time you select the User Program in question.

Note: See also "Header Post Edit" on page 119 for some interesting parameters you can change and save along with the song itself, as well as "In-depth editing of a 16-track song" on page 109.

Using the metronome

See page 53.

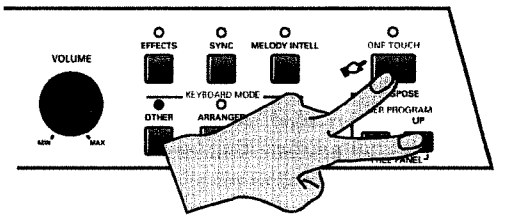
Song/Keyboard-part balance

Use the [Balance] field to modify the volume balance between the Standard MIDI File and the Keyboard parts (see page 25).

Transpose

Of course, it is also possible to take advantage of the VA-3's Transpose function, which may be convenient if you are used to playing a given song in another key than the one used by the selected Standard MIDI File. There are two methods for setting the transposition:

① Hold down the [ONE TOUCH] button while repeatedly pressing the User Program [DOWN] or [UP] button.

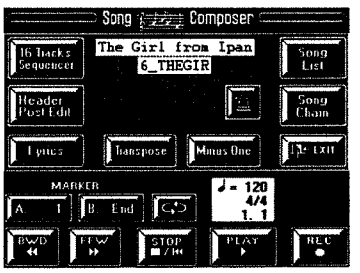


Repeat this operation with the "opposite" button (e.g. [DOWN] if you pressed [UP] above) to return to standard pitch. See also page 43.

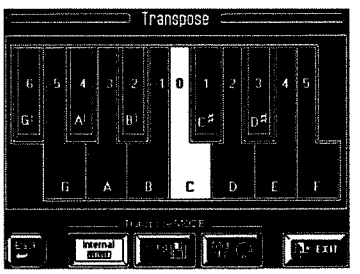
Note: Transposition applies to all parts except the MDR (Manual Drums) and track/MIDI channel 10 (plus any additional track that may use a Drum Set rather than a Tone).

② Proceed as follows:

a) Press the [SONG COMPOSER] button. The display now looks as follows:



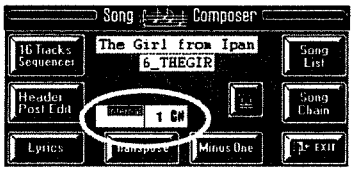
b) Press the [Transpose] field. The display now looks as follows:



c) Set the desired transposition interval (see page 43).

d) Select the desired transposition mode (see page 44). To transpose both the Keyboard parts and the song tracks, switch on the [Internal] and [Song] fields.

The transposition interval and mode are displayed as follows on the Song Composer page:



9.3 Song Chains

Song Chains (called "Song Sets" on previous Roland models) are another useful feature for performing artists because they allow you to take a break without leaving the audience without music. Song Chains are in fact sequences that specify the order in which the Standard MIDI Files on a given disk are to be played back.

Song Chains can either produce continuous playback of up to 99 songs on disk or be programmed to stop at the end of each song, which means that you have to start playback of next song manually.

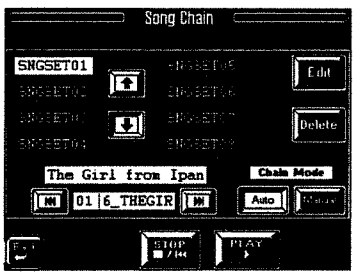
Compiling or editing a Song Chain

1. Insert the floppy disk with the songs you wish to combine to a Chain into the drive.

Note: Do not use commercial Standard MIDI File floppy disks or the supplied disk. Also, Song Chains can only refer to song files that reside on the same disk. You may want to use a Copy function before proceeding (see page 164).

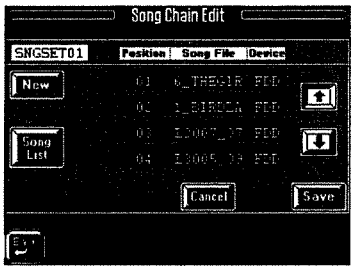
2. Press the [SONG COMPOSER] button.

3. Press the [Song Chain] field.



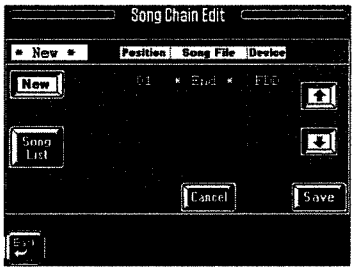
4. If you want to edit an existing Song Chain, select it here by pressing the corresponding field. Use [↑][↓] if the name of the desired Song Chain is not displayed.

5. Press the [Edit] field.



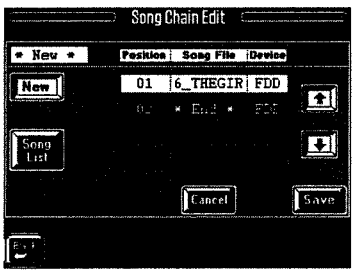
6. Press the [New] field to create a new Song Chain. Ignore this step if you want to edit (change) an existing Song Chain (the one you selected above).

The display now looks as follows:



7. Press the first list field (the one that reads "End"). The "End" entry now becomes Position "2", while Position "1" contains the name of the first Standard MIDI File on the (selected) disk.

8. Press the [Song List] field.



9. Use the [TEMPO/DATA] dial to select a song on disk that is to be played first (assigned to Position 1).

10. Press the [Capture] field.

11. Press the Position "2" field so that it is displayed in white.

12. Assign a song to this position.

13. Repeat steps (11) and (12) to compile your Song Chain.

"End" is the last entry. Any song after the End marker will not be included in your Song Chain.

14. Press the [Cancel] field to delete the currently selected Position.

This is the Position that is displayed in white. You cannot delete the "End" position.

If you are editing a Song Chain, you can use the [⬆][⬇] fields to browse through the available steps.

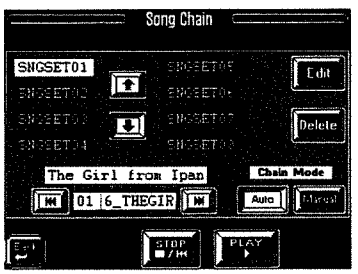
15. Press the [Save] field to save your Song Chain.
Your Song Chain will be saved under the first available number. *You cannot name your Song Chain.*
After saving the Song Chain to disk, the display returns to the *Song Chain* page.

16. Press the [⬅Back] field to return to the Song Composer page (see above).
Your new (or edited) Chain is already selected and can be played back.

Playing back a Song Chain

To play back a Song Chain, proceed as follows:

1. See steps (1)~(3) on page 100.



2. Press the field of the Song Chain you wish to play back.
Use the [⬆][⬇] fields if the desired Chain is not displayed in one of the 8 fields.

3. If you do not want to play back the entire Chain, use the ⏮ or ⏭ field to select the position where playback should start.
You can use these fields during playback or after pressing [STOP ■|◄] to jump to the next or previous step.

4. Press the [PLAY ►] field to start playback of your Song Chain.
The songs of the selected Song Chain are played back one after the other.

5. Press the [STOP ■|◄] field to stop playback.

Chain Mode

The Chain Mode allows you to specify how the selected Song Chain should be played back. This is typically a function you set after selecting the desired Song Chain but before starting playback.

Press the [**Auto**] field if playback of the next song in Chain is to start automatically when the current song is finished.

Press the [**Manual**] field if you wish to be in control of when playback of the next song should start. This means that playback stops automatically at the end of the current song. To start the next song, you need to press the [PLAY ►] field.

Note that it is perfectly possible to change this setting during Song Chain playback. If you start out with [Auto], you'll have plenty of time for a drink during a break. At the end of your break, you could press the [Manual] field and wait until playback of the currently selected song is finished. Then press [STOP ■|◄] – and go on entertaining your audience!

Deleting a Song Chain

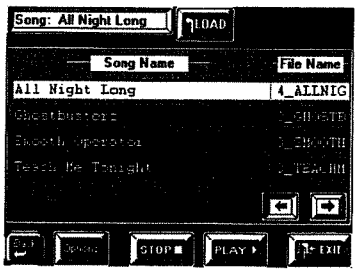
Deleting a Song Chain is a matter of pressing the [Delete] field on the Song Chain page after selecting the Song Chain you no longer need. A deleted Song Chain cannot be restored (you will have to program it again).

9.4 Song Options

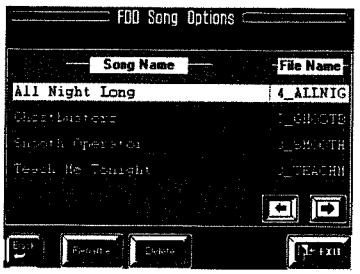
There also a number of utilities for renaming or deleting Standard MIDI Files on floppy disks. They work more or less the same as the Style Options. See therefore page 78 and following.

Here's how to select them:

1. Press the [SONG COMPOSER] button.
2. On the display page that appears now, press the [Song List] field.



3. Press the [Options] field.



4. Press the [Rename] or [Delete] field.
5. See page 78 for how to rename or delete a song.

Note: Songs referenced by a User Program (see page 94) can no longer be loaded automatically if you change the [File Name] or if you delete them.

Note: If you rename or delete a song that is referenced by a Song Chain (see page 101), the Position in question will be empty. The VA-3 will skip such empty Positions during playback of the Chain in question. (Be aware that this may shorten your break when you use the VA-3 for gigs.)

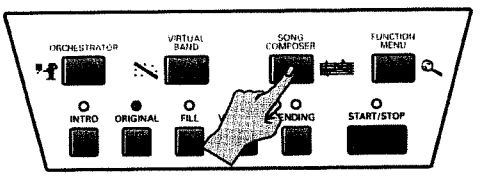
10. Song Composer (16-track, etc.)

10.1 16-track Sequencer

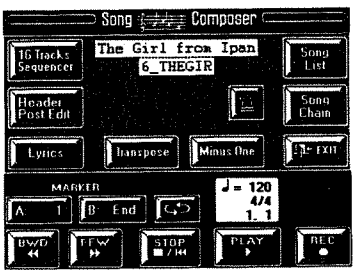
The Song Composer of your VA-3 is linked to a 16-track sequencer with full-fledged editing functions that allows you to refine your recordings in great detail.

Selecting the 16-track sequencer

1. Press the [SONG COMPOSER] button.



The display now looks as follows:



2. Press the [16 Tracks Sequencer] field to select 16-track sequencer. The display may now look like this:

General considerations

The 16-track sequencer can be used to record sequentially onto 16 tracks (one track after the other). Since the 16-track sequencer and the Song Composer share the same RAM memory, you can lay down your first tracks using the Song Composer (with or without Arranger), and then select the 16-track sequencer to add new tracks or change existing ones. The Song Composer indeed allows for simultaneous multitrack recording, which is not possible with the 16-track Sequencer where you can only record one track at a time, and where *the Arranger is not available.*

Tracks and MIDI channels

Tracks are assigned to MIDI channels on a 1:1 basis (i.e. Track 1= MIDI channel 1,... Track 12= MIDI channel 12, etc.). Since the Keyboard parts have been assigned to the MIDI channels in such a way as to allow for easy Minus-One playing using the Song Composer (see page 28), you should take a minute to study the table below.

Obviously, if you record a song with Arranger backing, the respective parts (ADR, ABS, etc.) are recorded onto the tracks that are assigned to their MIDI channels.

Track (SMF part)	MIDI channel	VA-3 parts	
		Song Composer	Arranger
10 (Drums)	10	M.Drums*	A.Drums
1 (Piano)	1	—	Accomp 1
2 (Bass)	2	M.Bass*	A. Bass
3 (Chords)	3	—	Accomp 2
4 (Solo/Melody)	4	Upper1	Upper1
5 (Not specified)	5	—	Accomp 3
6 (Counter-melody)	6	Upper2	Upper2
7 (Not specified)	7	—	Accomp 4
8 (Not specified)	8	—	Accomp 5
9 (Not specified)	9	—	Accomp 6
11 (Not specified)	11	Lower1	Lower1
12 (Not specified)	12	—	M.Bass*
13 (Not specified)	13	—	—
14 (Not specified)	14	Lower2	Lower2
15 (Not Specified)	15	MEL Int	MEL Int
16 (Not specified)	16	—	M. Drums*

(*) The MIDI channel of these parts depends on whether you are working with the Arranger (see page 52)or the Song Composer.

There is yet another track, called M, that is used for recording the time signature, the tempo, as well as general SysEx messages.

As you see, there are two Keyboard parts (M. Bass, M. Drums) whose MIDI channel (and track) assignments depend on whether you use the Song Composer for recording a song with Arranger or not. If you are used to working according to a given system, you could use Exchange to transfer the data to the desired tracks after recording them. See page 115 for details.

Example 1: Recording a track

Here's how to add a track to a song in the VA-3's Song RAM memory. This is only meaningful after recording a song using the Song Composer or after playing back a song on disk. See page 107 for how to start a new song.

Note: Though the following may seem confusing at first, you will find very quickly that the 16-track Sequencer uses a very logical structure. Please bear with us and perform all indicated steps to get a feel for how the 16-track Sequencer "ticks". Besides, what you learn here will also come in handy for recording your own Music Styles.

Note: See also "Easy editing and useful functions" on page 108 for some additional functions that are not covered here.

1. Press the [SONG COMPOSER] button and the [16 Tracks Sequencer] field.

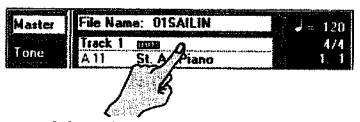
2. If the following page is not displayed, press the [Rec] field in the bottom row of the display.

① ②

3. Press the [Master] field in the upper left corner.

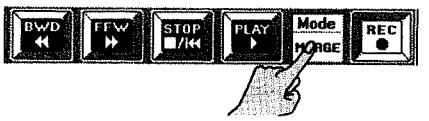
Field ① in the upper right corner informs you about the current measure and the time signature. You can use [◄◄ BWD] and [FFW ►►] to jump to another measure, or [STOP ■|◄] to return to the beginning of the song. Field ② shows which tracks contain data and are active. No switch (neither [ON] nor [OFF]) means that the track in question doesn't yet contain data.

4. Press the big [Track] field more or less in the middle and use the [TEMPO/DATA] dial to select the track you wish to record.



The name of the selected track appears in the [Track] field and is indicated by a white box (in the above example, track 1 has been selected).

Selecting the (Recording) Mode and the first measure



5. Press the [Mode] field and use the [TEMPO/DATA] dial to specify how the new data should be recorded.

Select **Erase** if a track contains data you wish to replace with new data. This erases all data of the selected track from the place where you start recording until the end. (Erase is selected by default for empty tracks.)

Select **Merge** to add new notes to the ones already recorded on the selected track. This recording mode is particularly useful for recording the rhythm track (10) because you can first record the bass and snare drums, then add a few tom hits here and there, and record the HiHat, for example.

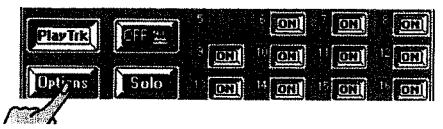
Punch In/Out allows you to re-record part of a track. Select this mode to replace a phrase you do not like with a new version. Doing so has the advantage that only the area where you punch in and out will be overwritten. See also page 106.

Setting the Metronome and the Quantize, Octave values (Options)

6. Press the [ON/OFF [■] field to switch the metronome "ON" (or "OFF" if you don't need it).

If you also wish to specify when the metronome should sound, proceed as follows:

a) Press the [Options] field:



The display now looks more or less as follows:

b) Press the Metronome [Mode] field. This takes you to a familiar display page. See page 53 for details.

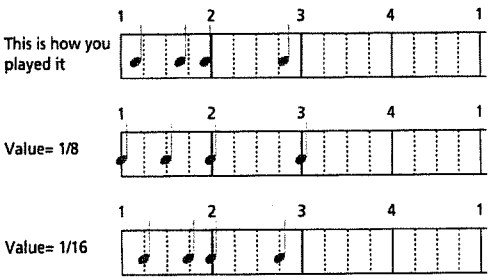
c) Select the desired Metronome Mode and press [◄Back] to return to the above page.

The following two parameters can be set by pressing the corresponding field and by using the [TEMPO/TAP] dial and the [DATA] button/Numeric Entry pad (see page 62):

7. Press the [Octave] field.
This is only necessary if you want your notes to be sounded and recorded in a different octave than the one you use for playing. This can be useful for recording a part which is just a little too low (or too high) and therefore does not "fit" into 61-note range covered by the keyboard.

Another creative use for this parameter is for recording the "noises" of the "V" Tones mentioned on page 39: select a track that already contains data, set Octave to "–4", select the *Merge* Mode (see above), and start recording (see below) for adding your scrapes, knocks, etc.

8. Press the [Quantize] field and set the desired resolution.
Quantize corrects the timing of your notes by shifting them to the nearest grid mark. Use the [TEMPO/DATA] dial to specify the number of grid marks per measure (i.e., the Quantize resolution). Here is an example:



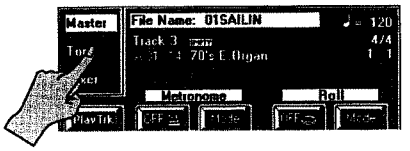
The setting range is: 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/32t, 1/64t, and Off. As this Quantize function changes the way in which your notes are recorded, you may want to select *Off* here. The 16-track sequencer has a second Quantize function that you can use more selectively (i.e., for notes that are definitely late/early). See page 112.

Roll
For a drum track (10), you can press the Roll [ON/OFF] field to switch on the Roll function. Press the [Mode] field to set the Roll resolution. Such automatic rolls are always played in sync with the selected tempo. See also page 40.

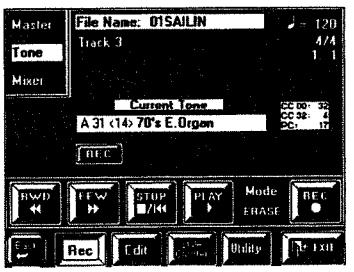
Selecting a Tone or Drum Set

The following parameter allows you to assign a Tone (normal track) or Drum Set (track 10 or the *2nd Drum Track*) for the selected track, or to modify/replace existing setting.

9. Press the [Tone] field in the upper left corner.



The display now looks more or less as follows:



For all tracks except track 10 (and another track that also uses a Drum Set), the field to look out for is called *Current Tone*. For track 10 (and any other drum track), this parameter is called *Current Drum Set*.

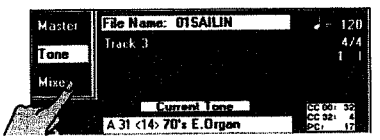
10. Press the [Current Tone/Current Drum Set] field and use the BANK/NUMBER pad to select the desired Tone/Drum Set.
Note: See "Using two drum tracks (2nd Drum Track)" on page 107 for how to select a second drum track.

11. If necessary, press the [REC] field so that it is displayed in white.
In *Merge* mode (see page 104), you can specify whether or not to record the settings made on this page by switching the [REC] field on (white) or off (blue). In *Erase* and *Punch In/Out* modes, it is automatically switched on ([REC] is displayed in white).

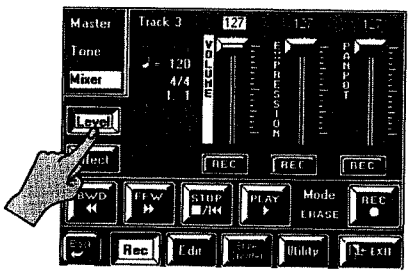
12. Play a few notes on the keyboard to check whether you like the selected Tone or Drum Set.

Volume (Level)

13. Press the [Mixer] field in the left column.



The display now looks more or less as follows:



14. Press the [Level] field in the left column so that it is displayed in white.

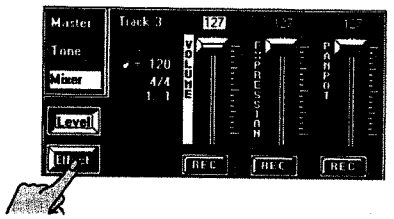
15. If necessary, use the [VOLUME] slider for setting the desired volume.
You can also touch it and use the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad for entering the value. (You can also leave this for later.)

16. If necessary, press the VOLUME [REC] field so that it is displayed in white.
These fields (like the two remaining ones on this page) follow the same system as Tone/Drum Set selection above.

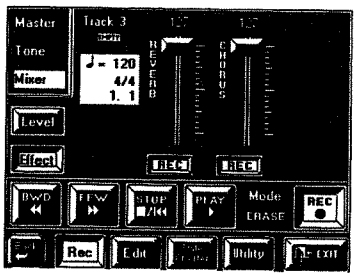
17. Play a few notes on the keyboard to check whether you like your settings.
Note: See also "Mixer: Changing the volume, adding effects" on page 108.

Want some effects?

18. Press the [Effect] field.



The display now looks as follows:



19. Use these two sliders to specify the selected track's Send level for the Reverb and Chorus effects.
These sliders set the volume of the track signal that is sent to the effect, and consequently how much effect should be added to the track. See page 84 for how to set the effects (type, parameters). Those "overall" effect settings are part of the general SysEx settings of the "M" track and must be set before recording the first track.

Use the [REC] fields to specify whether or not these settings should be recorded.

20. Play a few notes on the keyboard to check whether you like your settings.

21. Use the [FFW ►►] or [◄◄ BWD] field to select the measure where you want to start recording.
For Punch In/Out recording, select a measure that lies a little before the place where you wish to punch in.

Recording in Erase or Merge mode

Press the [REC ●] and [PLAY ►] fields. After a 1-measure count-in, recording will begin.

Recording in Punch In/Out mode

- To record in Punch In/Out mode, first press the [REC ●] field (it starts flashing). Next, press [PLAY ►] to start playback.
As soon as the VA-3 reaches the point where you want to punch in, press [REC ●] to start recording. (The [REC ●] field is now displayed steadily.)

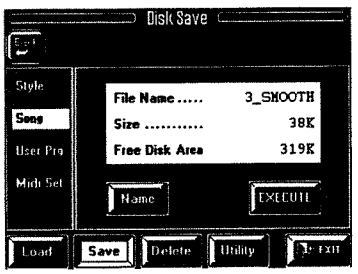
22. To stop recording, press [STOP ■|◄].
During Punch In/Out recording, you could also press [REC ●]. In that case, recording is deactivated, while playback continues.

Saving your song

The 16-track sequencer uses a special portion of the VA-3's RAM memory where all editing takes place. To ensure that you do not forget to save your song after recording and/or editing it, you are given the opportunity to do so upon leaving the Song Composer page (by pressing [EXIT]):

Note: The Song RAM memory is erased when you switch off your VA-3.

1. Press [YES] to save your changes (and the entire song). This will take you to the following display page:



If you don't want to wait until the above warning ("Song has been changed...") is displayed automatically, proceed as follows. Bear in mind that a power failure is all it takes to lose your song. Don't wait until it is too late...

a) Press the [Save] field in the bottom row.

b) Press the [Name] field.

c) On the display page that appears now, press the [Save] field in the bottom line.

2. See page 54 for details about saving your song.

Example 2: Recording a song from scratch

Let us now record a Song from scratch using the 16-track sequencer.

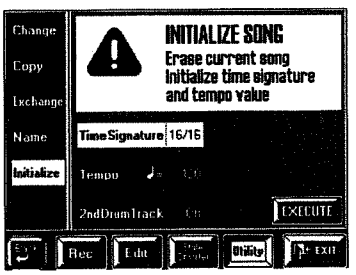
1. Press the [SONG COMPOSER] button and the [16 Tracks Sequencer] field.

Let us suppose that you already played back a Song. That means that the VA-3's Song RAM memory already contains song data we need to erase. (Even if the VA-3's Song RAM memory is still empty, using the Initialize function would be a good idea.) Here is how to:

2. Press the [Utility] field.

3. On the display page that appears now, press the [Initialize] field.

The display now looks more or less as follows:



The warning alerts you to the fact that pressing [EXECUTE] (see below) may have disastrous consequences. See "Saving your song" if you still need to save your previous song.

4. Press the following three fields and enter the desired values using the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad.

Time Signature— If your new Song uses the 4/4 time signature, there is no need to change this value. Otherwise, enter the desired time signature (1/2~32/16).

Tempo— Allows you to specify the initial tempo of the new song (♩ = 20~250). Choose a tempo which is comfortable for recording. You can set the final tempo using the Song Header Edit function (see page 119).

Using two drum tracks (2nd Drum Track)

An additional advantage of the *Initialize* function is that you can define a second track as drum track. This allows you to use two Drum Sets: the one assigned to track 10 (fixed, in accordance with GM-2/GS), and another one assigned to the track you define here. This allows you to use a "standard" drum kit alongside a "beat box", or to add orchestral percussion to a song that also requires a "regular" drum kit.

Your song data are saved in the Standard MIDI File (SMF) format. You can therefore play them back using your computer (with suitable software) and any GM/GS compatible module or synthesizer. Bear in mind though, that not all modules accept two Drum Sets. Roland instruments that *do* are: the VA-7, VA-5, SC-55MkII, SC-88 Pro, SC-88, SC-880, SC-8850,

EM-2000, and G-1000. You cannot define a second drum track for existing songs. This is only possible when you initialize the Song RAM memory. (Songs programmed on other instruments that already contain two drum tracks can be used like VA-3 songs with a "2nd Drum track", though.)

Select Off if you don't need a second Drum Set, or set the number of the desired track. "10" is not available here because it always functions as Drum track.

5. Press the [EXECUTE] field to really initialize the Song RAM memory (which you haven't done so far). The VA-3 now confirms that the Song RAM memory is initialized and then jumps to the [Master] 16-track Sequencer page.

All tracks will be initialized as follows:

Volume	100
Expression	127
Tone/ Drum Set	"Piano 1" "Standard" Set for track 10 + 2nd Drum Track
Panpot	64
Reverb	40
Chorus	0

6. See "Example 1: Recording a track" on page 104 for what to do now.

10.2 Editing 16-track songs

Easy editing and useful functions

After recording a track, you may want to do some touching up. Here are some easy things you can do. See "In-depth editing of a 16-track song" on page 109 for more elaborate functions.

[Play Trk]

If this field is displayed in blue, you are currently on the page you select with the [Options] field. Press [Play Trk] to return to the [Master] 16-track Sequencer page:

Muting tracks

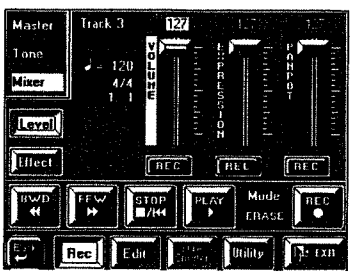
Sometimes, when recording rhythmically intricate parts, it may be necessary to mute already recorded parts that might distract you. To do so, press the [ON] field of such a track so that it reads [OFF]. This setting is not saved to disk.

Solo

If you need to listen to a track in isolation, press the [SOLO] field and the [OFF] field of the track you want to solo, and start playback. This mutes all other tracks. You can add other tracks to this Solo signal by pressing the [OFF] fields. See page 98 for details about the solo function.

Mixer: Changing the volume, adding effects

On the above display page, press the [Mixer] field.



The [Level] and [Effect] fields call up two sets of three faders you can use to specify the initial settings for the selected track, or to modify/replace existing settings. If the "Track" field next to [Master] field does not display the number of the desired track, press [Master] and select the desired track:

a) Press the [Track] field...

b) ...and use the [TEMPO/DATA] dial to select the track.

REC fields— In Merge mode (see page 104), you can specify for each parameter whether or not to record the settings made on these pages. In *Erase* and *Punch In/Out* modes, all [REC] fields are displayed in white (which means that the settings will be recorded).

1. Use the sliders to set the values.
These parameters can also be changed in realtime: select the Merge mode so as not to overwrite the notes, and start recording from the position where the new settings should take effect. You can stop recording after one beat. For continuous changes, use the slider in question to set the desired values and stop recording when no further changes are required.
Note: Such edits are also possible on the [Tone] page (see page 105). These allow you to "register" another Tone or Drum Set for a track.

2. Switch the desired [REC] fields on (white) or off (blue).
Volume— (0~127) Allows you to set the track volume (CC07). Use this parameter to specify the initial volume. You can use *Expression* to program temporary volume changes during the course of the song.

Expression— (0~127) Allows you to program relative volume changes (CC11). The value "127" means that the resulting volume will be equal to the volume set with the Volume parameter above. All other Expression values reduce the Volume value.

Panpot— Use this parameter to specify the stereo position of the selected track. "64" means dead center, values between 0 and 63 shift the sound to the left, while values between 65 and 127 shift the sound to the right.

Reverb, Chorus— Specify the Send level for the effect in question. See also page 106.

3. Start recording in Merge mode but don't play any notes.
As stated above, you can also move the sliders for realtime changes. You can also use this procedure for adding Pitch Bend, etc. to the notes of a track.

In-depth editing of a 16-track song

The Edit level of the 16-track mode provides eight functions: Erase, Delete, Insert, Transpose, Velocity, Quantize, Gate T., and Shift.

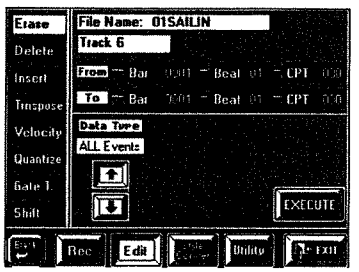
Here is how to select these Edit functions:

1. Load the song you wish to edit (if it does not yet reside in the VA-3's Song RAM memory).
See page 28.

2. Press the [SONG COMPOSER] button.

3. Press the [16 Tracks Sequencer] field.

4. Press the [Edit] field in the bottom row of the display.



5. Press a field in the left column to select the desired function.
If, after selecting one of these functions, you decide not to execute the transformation, do not press the [EXECUTE] field.

Here are a few guidelines for editing your 16-track song:

Note: Save your song to disk before continuing. That way, you can always return to the original if your changes do not work out as expected. See "Saving your song to disk" on page 54 for details.

a) Select the track(s) you wish to modify.

b) Select the range (*From* and *To*) for the edit operation.

c) Enter what should be changed and how it should be changed. Press the desired field and use the [TEMPO/DATA] dial, the [DATA] button/Numeric Entry pad, or (for notes) the keyboard.

d) Confirm the operation by pressing the [EXECUTE] field.

e) Save your song to disk.

Available options for 'Note'

For some functions, there is a *Note* parameter (called *Data Type*) with the following options. Be sure to press the correct option field one so as to achieve the desired result:

Only the selected note (note name/note number) will be affected.

Only notes above the selected one will be affected (in this case "From Note" changes to *Than Note*).

[Between] Only the notes between the [From Note] and [To Note] will be affected.

[Than] Only notes below the selected one will be affected (in this case "From Note" changes to *Than Note*).

Specify the note by pressing the [From Note] field and by playing it on the keyboard or selecting it with the [TEMPO/DATA] dial. You can also use the [DATA] button/Numeric Entry pad. For [Between], there is also a [To Note] field that allows you to set the upper limit of the desired range.

Note: If you enter "From Note" and "To Note" by pressing the desired keys, the first note you play becomes the "From Note", while the second note will be used as "To Note".

Erase

Erase allows you to selectively delete data either within a specified range of measures, beats or clocks, or from the entire track(s). When *Data Type* is set to **All**, Erase substitutes the required number of rests for the data you delete, so that you end up with the equivalent number of blank measures. If you also want to eliminate the measures themselves, use Delete (see below).

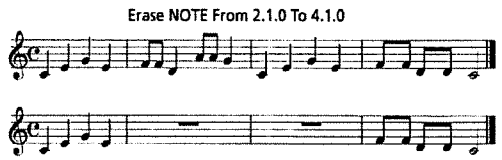
Track (1~16, ALL, M)— Allows you to select the track you wish to edit. You can also select "All" here, in which case the operation applies to all tracks except the Master track (M). The M track can only be selected in isolation.

From/To— "From" refers to the position where the edit operation is to begin. That position is specified as Bar-Beat-CPT values. "To" designates the position where the edit operation is to end (Bar-Beat-CPT value).

Bar (1~9999)— This is where you specify the bar position. By default, the "From" and "To" values are set to the beginning and end of the selected track(s). At first, the "To" value always refers to the end of the longest track.

Beat (1~[number of beats per bar])— This is where you specify the beat position. The number of selectable beats obviously depends on the time signature of the song.

CPT— This is where you specify the CPT position of the beginning and end. CPT is short for "Clock Pulse Time", the smallest step unit used by the VA-3. (There are 120 CPTs to every beat of a bar.) Change this setting only if your edit operation should not commence or end exactly on the selected beat.



Data Type

Allows you to select the data to be erased:

- **All°:** All editable parameters listed below.
- **Note:** Only note messages.
- **Modul:** Only modulation messages (CC01).
- **PBend:** Pitch Bend data (i.e. use of the BENDER/MODULATION lever).
- **Volume:** Volume (CC07) data.
- **Expre:** Only Expression messages (CC11).
- **PanPt:** Only pan (or PanPot) messages (CC10).
- **Reverb:** Only Reverb Send messages (CC91).
- **Chorus:** Only Chorus Send messages (CC93).
- **CC16:** General purpose controller.
- **CC17:** General purpose controller.
- **PChng:** Program change messages.
- **NRPN:** Non-registered-parameter-number parameters. These are parameter control functions of the GS format that are easier to use than SysEx messages (but have basically the same function).
- **RPN:** Registered-parameter-number parameters. They work the same as NRPN messages, except that they are also understood by GM and GM2-compatible sound modules.
- **CAF:** Channel Aftertouch messages. If you don't really need them, these messages should definitely be erased because they use a lot of memory.

Note: The VA-3's keyboard does not generate Channel Aftertouch.

- **SysEx°:** MIDI messages that allow you to change parameter values. For music tracks, these messages cannot be programmed on the VA-3, but songs recorded on other devices may contain them. In the case of the M track, only SysEx messages (for Reverb, Chorus setup, etc.) located after 1-1-0 can be erased.
- **Tempo°:** Tempo change messages. The initial tempo value (located at 1-1-0 of the song) cannot be erased. You can change it with *Header Post Edit*, however (see page 119).

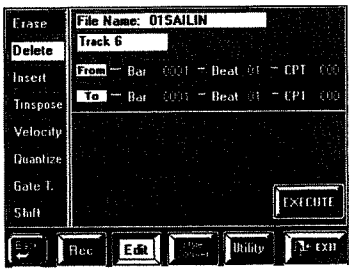
Note: Parameters marked with (°) can be selected for the M track. "Tempo" is only available for the M track.

From Note/Than Note (C-1~G9)— This parameter is only displayed if *Data Type* (see above) is set to "Note". It allows you to set the note (or lower limit of the note range) to be modified within the specified From/To time range. If you press [Higher] or [Lower], it is called "Than Note".

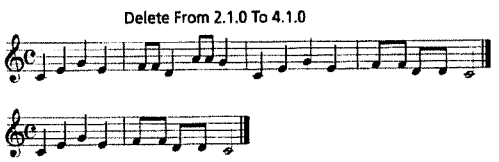
To Note (C-1~G9)— This parameter allows you to select the upper limit of the note range you wish to edit. It is only displayed if the [Between] field is displayed in white. See also "Available options for 'Note'" on page 109.

Execute— Press this field to confirm your settings and edit the data.

Delete



Unlike the Erase function, *Delete* not only erases the data but also the measures, so that all measures that lie behind the To position, will be shifted towards the beginning of the track(s). Since Delete also disposes of the *measures* themselves (see the illustration), you cannot choose the data type to be erased.



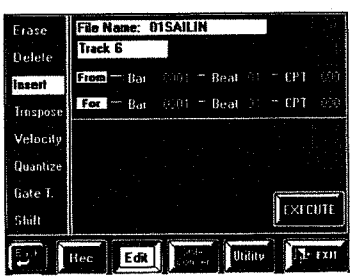
Track (1~16, ALL, M)— Allows you to select the track you wish to edit. You can also select "ALL" here, in which case the operation applies to all tracks.

From/To, Bar, Beat, CPT— See page 110.

Execute— Press this field to confirm your settings and edit the data.

Note: Not all settings of the M track are erased: the time signature, the GM/GS Reset message, and the initial tempo (all located at 1.1.0) remain. Lyrics events are only deleted if you selected ALL rather than the M track.

Insert



Insert allows you to make an existing track longer by adding rests at the specified position. This will make room for new data and shift data that lie behind the From position further to the right. New data can either be added in realtime (do select the Merge mode, see page 104) or by copying them to the specified position (see page 115).

Note: The Insert function does not provide a To pointer. Instead, you have to specify the length of the insert using the For value. "For 2 Bars, 2 Beats, 240 CPT" thus means "insert 2 bars, 2 beats and 2 beats" (because 120CPT= ♩).

Track (1~16, ALL, M)— Allows you to select the track you wish to edit. You can also select "ALL" here, in which case the operation applies to all tracks.

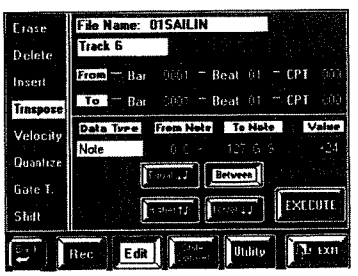
From/For— The From level allows you to specify the position where the selected number of bars, beats, and clocks is to be inserted.
For, on the other hand, specifies *how many* bars, beats, and CPTs are to be inserted.

Bar, Beat, CPT— See page 110.

Time Signature— If *Track*= ALL, you can use these fields to set the time signature of the new measures (1/2~32/16).

Execute— Press this field to confirm your settings and edit the data.

Transpose



Transpose is used to transpose the notes of the selected track (the other non-note data obviously cannot be transposed).

From/To & Bar, Beat, CPT— See page 110.

Track (1~16, ALL)— Allows you to select the track you wish to transpose. You can also select "ALL" here, in which case the operation applies to all tracks except track 10 (Drum track) and any other track that uses a Drum Set. Drum tracks can, however, be selected individually. The M track obviously cannot be transposed. When used with the [Equal] option, Transpose is also useful for drum tracks. It allows you to select another snare or kick sound, for example. Most Drum Sets provide at least two snares, one assigned to note number 38 (D2), and a second assigned to note number 40 (E2). By selecting *From Note*= 38, pressing the [Equal] field and selecting "+2", you can change your D2 snare to the E2 snare.

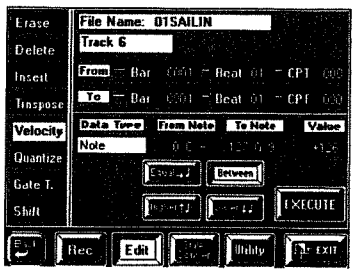
Value (-24~+24)— This is where you can set the transposition interval in semi-tone steps. If you wish to transpose a C part to D, enter the Value +2.

Note: Be careful when applying Transpose to a Drum track (track 10 or any other track that uses a Drum Set). Transposing all notes of such a track would mean that the drum part changes dramatically.

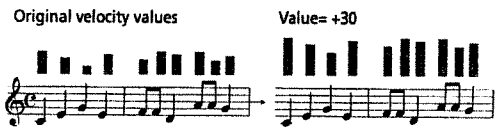
From Note/To Note (0 C-1~127 G9)— See "Available options for 'Note'" on page 109 as well as page 110.

Execute— Press this field to confirm your settings and edit the data.

Velocity



The Velocity function allows you to modify the dynamics (called *velocity*) of a track or excerpt. Increasing the velocity values means that the notes in question will be louder and brighter than before, while reducing the velocity values means the opposite. Use this function when you are happy with the timing of the notes but would like the sound to be brighter/louder or rounder/softer. Executing this function means that the velocity values will change proportionally:



From/To— "From" refers to the position where the edit operation is to begin. That position is specified as Bar-Beat-CPT values. "To" designates the position where the edit operation is to end (Bar-Beat-CPT value).

Bar, Beat, CPT— See page 110.

Track (1~16, All)— Allows you to select the track you wish to edit. You can also select "ALL" here, in which case the operation applies to all tracks.

From Note/To Note (0 C-1~127 G9)— See "Available options for 'Note'" on page 109 as well as page 110.

Value (–126~+126)— The Value parameter allows you to set the velocity change level. Select a positive value to increase the velocity of the selected track(s), or a negative value to decrease the velocity values.

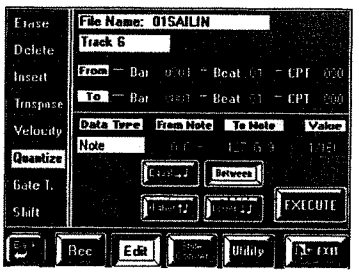
This parameter can be particularly useful for velocity switched sounds: slightly reducing or increasing the overall velocity, allows you to "shift" all notes to the "other" sound.

Note: Even the highest positive or negative Value doesn't allow you to go beyond "1" or "127". There is a reason why "0" is impossible: that value is used to indicate the end of a note (note-off). "127", on the other hand, is the highest velocity value the MIDI standard can muster. Selecting a high positive velocity value may thus lead to all notes being played at "127", which may be what you had in mind in the first place...

Execute— Press this field to confirm your settings and edit the data.

Note: A similar system is also available for other parameters. See "Change" on page 114.

Quantize



Use this function if you chose not to quantize your music during recording (see page 104) and now realize that the timing is not quite what you expected it to be. Quantizing after recording has the advantage that you can first listen to the original and then correct only those notes whose timing is definitely off.

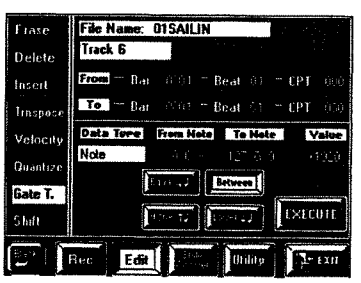
Track— See page 111 for an explanation of this parameter.

From, To, Bar, Beat, CPT, Execute— See page 110 for an explanation of these parameters.

From Note/To Note (0 C-1~127 G9)— See "Available options for 'Note'" on page 109 as well as page 110.

Value— This parameter sets the resolution of the Quantize function. The available values are: 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/32t, 1/64t. Be sure to always select the value that equals the shortest note you recorded. Otherwise, your part no longer sounds the way you played it.

Gate T



The Gate T. function allows you to modify the duration of the notes in the selected time (From/To) range. We recommend you only use this function to shorten notes that seem too long due to the Tone you assigned to the track in question. There is indeed no way to view the duration of the notes here, which makes editing the data "en bloc" a little bit hazardous.

After selecting a Tone with a slow release (i.e. a sound that lingers on after all notes have been released), however, Gate Time will help you cut the notes down to size and thus avoid overlaps. Even though your

release timing may have been correct for the original Tone, you could use Gate Time to shorten all notes to such a degree that they no longer overlap.

Track— See page 111.

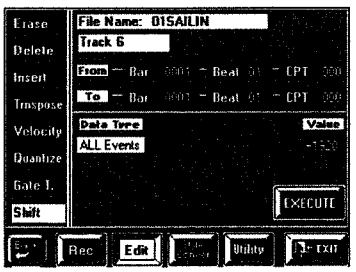
From, To, Bar, Beat, CPT— See page 110.

From Note/To Note (0 C-1~127 G9)— See "Available options for 'Note'" on page 109 as well as page 110.

Value (–1920~+1920)— This parameter sets the amount by which the duration (or gate time) of the selected notes is to be changed. The shortest possible Gate Time value is "1" (used for all drum notes), so that selecting "–1000" for notes with a Gate Time value of "1" in the specified time range still leaves you with the same value. Allowing the value "0" would effectively erase the notes, which can only be achieved with Erase (see page 110). You cannot use Gate Time to erase notes.

Execute— Press this field to confirm your settings and edit the data.

Shift

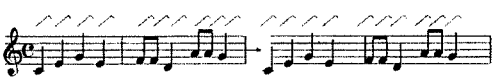


Shift allows you to shift the notes within the selected From/To range. It can be used for two things:

1. To correct "slow" notes due to a slow(er) attack.
You may want to use Shift after assigning a Tone to a track that has a considerably slower attack than the Tone you used for recording the part in question. This technique is frequently used in pop music to "time" 1/16-note string arpeggios played with a "slow" pad sound. Rather than have the notes begin at the mathematically correct time (e.g. 2-1-0), you could shift them to the left (e.g. to 1-4-110) of the previous measure, so that the peak volume of the attack is reached on the next downbeat:

Original positions (slow attack, so timing seems off)

Shift= –5 (timing sounds OK)



2. To correct the timing of notes recorded via MIDI without quantizing them.
You could use sequences, etc. as raw material for your songs. Recording such excerpts via MIDI may cause a slight delay (e.g. 5 CPT). If that is not acceptable, use Shift to "push" all notes to the left (select "–5"). That allows you to tidy up the timing and still keep any irregularities (music!) the original may contain because it was not quantized.

Track— See page 111. You can also select the M track to shift tempo changes and SysEx messages. The initial settings (located at 1.1.0), however, cannot be shifted.

From, To, Bar, Beat, CPT— See page 110.

From Note/To Note (0 C-1~127 G9)— See "Available options for 'Note'" on page 109 as well as page 110.

Value (–1920~+1920)— This parameter sets the amount by which the notes are shifted. The Value refers to CPT units (one CPT= 1/120 ♩).
Note: Notes on the first beat of the first bar cannot be shifted further to the left (that would mean shifting them to the "0" measure, which doesn't exist).

Execute— Press this field to confirm your settings and edit the data.

Utility: other useful functions

The 16-track sequencer also provides a few practical functions that help you save time. Here is how to select them:

1. **Load the song you wish to edit (if it does not yet reside in the VA-3's Song RAM memory).**
See page 28.
2. **Press the [SONG COMPOSER] button.**
3. **Press the [16 Tracks Sequencer] field.**
4. **Press the [Utility] field in the bottom row.**

Here are a few guidelines for the Utility functions:

Note: Save your song to disk before continuing. That way, you can always return to the original if your changes do not work out as expected. See "Saving your song to disk" on page 54 for details.

a) Select the track(s) you wish to modify.

b) In the left column, select the Utility function you need.

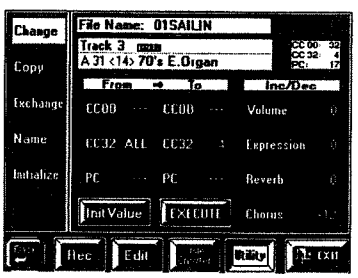
c) Press the field whose value you wish to change.

d) Enter the desired value or setting with the [TEMPO/DATA] dial or the [DATA] button/ Numeric Entry pad.

e) Confirm the operation by pressing the [EXECUTE] field.

f) Save your song to disk.

Change



This is a function that allows you to make quick changes to certain settings. The selected change always applies to entire tracks (you cannot use *Change* for changing just a few measures). Designed to help you prepare a Standard MIDI File in such a way as to achieve quick and perfect results with the Style Converter (see page 116), it is also a wonderful tool for the following applications:

- for "upgrading" older Standard MIDI Files to take advantage of the VA-3 new Tones.
- for global changes to the Reverb and/or Chorus Send values, which is downright convenient if you programmed realtime changes (see "Mixer: Changing the volume, adding effects" on page 108) and suddenly notice that the effect is too prominent or not strong enough.

Track (1~16, All)— Allows you to select the track whose data you wish to change. Though you can also select ALL, this should be done with great caution.

If you look carefully at the layout in the center of the display, you will notice that there are two kinds of changes that can be applied:

From/To (0~127, ALL)— Enter the original data value (i.e. the value that is being used right now by the selected track(s)) in the *From* column. For *To*, specify the new value that should *replace* the *From* value. This is what we call "absolute" changes: you don't add or subtract a value, you replace it with another.

Inc/Dec— These are so-called "relative" changes: the positive or negative value you set here will be added to or subtracted from the original values of the selected tracks. This works exactly like "Velocity" on page 112, except that it applies to other parameters. Use these fields to globally increase or decrease the existing values.

[Init Value]— Press this field to reset all values on this page to their initial state if you want to start again.

CC00— This control change is the so-called "MSB" Bank Select message. It allows you to select the Capital Tone (select "0") of a group/bank/number (A11~B88) address if you don't want to use Variations, or to specify another Variation level. The *To* value "0" can be useful for ensuring GM compatibility, which (unlike GM2) does not support Tone Variations.

In the Tone lists starting on page 170, you will see that most Tones are Variations. The value "8" for CC00 is probably the most popular one (as you would discover if you spent your time studying the list of 3,641 Tones). Here are a few examples:

GBN	Var	PC	CC00	Name
A11		1	0	Piano 1
	1	1	1	UprightPiano
	2	1	2	Mild Piano
	3	1	8	Upright P w
	4	1	9	Mild Piano w
	5	1	16	European Pf
	6	1	24	Piano + Str.
	7	1	25	Piano + Str2
	8	1	26	Piano+Choir1
	9	1	27	Piano+Choir2
	10	1	45	AcPiano 2
	11	1	46	BritePno
	12	1	47	AcPiano 1
	13	1	126	Piano 2
	14	1	127	Acou Piano1

GBN	Var	PC	CC00	Name
A12		2	0	Piano 2
	1	2	1	Pop Piano
	2	2	2	Rock Piano
	3	2	8	Pop Piano w
	4	2	9	Rock Piano w
	5	2	16	Dance Piano
	6	2	126	Piano 2
	7	2	127	Acou Piano2

To change *any* CC00 value to "8", for example, enter "ALL" for *From* and "8" (which corresponds to *UprightP w/Pop Piano w*) for *To*. To change all instances of the CC00 value "8" to another value (e.g. "16"), enter "8" for *From* and "16" for *To*.

Note: Most Song Composer/16-track Sequencer tracks usually only contain one CC00 value.

CC32— This control change is the so-called "LSB" Bank Select message. Most instruments (including your VA-3) use it for specifying different Tone Maps. You may want to use this parameter for changing a

Standard MIDI File in such a way that all tracks use the new Tones. To do so, select "ALL" for *From* and "4" for *To*. See also page 38.

PC (Program Change)— Use this parameter to change the group/bank/number address of a Tone (e.g. from "1" to "2").

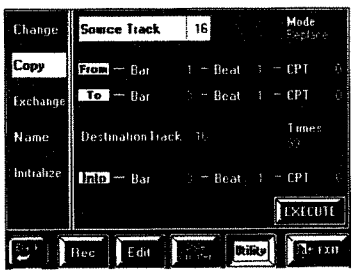
Volume, Expression, Reverb, Chorus (–127~+127)— These parameters allow you to add (+) or subtract (–) a given value to/from the current Volume, Expression, Reverb Send or Chorus Send values. This may come in handy if the realtime changes you recorded (see page 108) turn out to ne too high or too low.

Execute— Press this field to confirm your settings and edit the data.

Note: Similar functions are also available for Standard MIDI Files on disk. Though they have the advantage that they are not permanent (and can thus be restored), they are only understood by the VA-3, the VA-7, VA-5, G-1000, and the EM-2000. See "Header Post Edit" on page 119.

Copy

The Copy function allows you to copy one track to another track, or excerpts of one or all tracks to a different location. The latter is useful if you need to repeat the chorus several times at the end of the song but do not feel like recording all those notes.



Source Track (1~16, All)— Allows you to select the track whose data you wish to copy.

From/To— "From" refers to the position where the edit operation is to begin. That position is specified as Bar-Beat-CPT values. "To" designates the position where the edit operation is to end (Bar-Beat-CPT value).

Bar (1~9999)— This is where you specify the bar position. By default, the "From" and "To" values are set to the beginning and end of the selected track(s). At first, the "To" value always refers to the end of the longest track.

Beat (1~[number of beats per bar])— This is where you specify the beat position. The number of selectable beats obviously depends on the time signature of the song.

CPT— This is where you specify the CPT position of the beginning and end of the track to be copied. Unless you do not need all notes within the last bar, you should keep the default setting.

Mode (Replace, Merge)— Selects the Copy mode:

Replace: The data in the selected range will be copied to the destination track and overwrite all data (of the destination track) in the selected source track range.

Merge: The data in the selected range will be added to any existing data on the destination track.

In either case, the length of the destination track may change to include all data of the source track. You may find that the destination track is longer after executing the copy function.

Note: The VA-3 has no Undo function. Saving your song to floppy before copying it will allow you to load the previous version if something goes wrong.

Destination Track— This is where you select the track to which you want to copy the selected data.

Into— The bar, beat and CPT values the first data of the source track will be copied to.

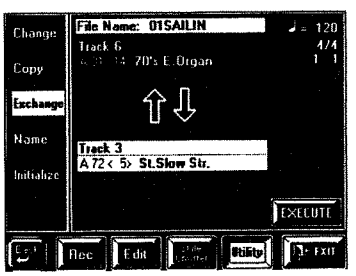
Times (1~99)— Sets the number of copies you wish to make. The value "3" means that you will end up with 3 contiguous copies, whereby the second copy is placed immediately after the first, etc.

Execute— Press this field to confirm your settings and edit the data.

Note: Though you can also copy data from track 10 (the main Drum track) to a "music" track, and vice versa, be careful. A drum track sounds odd when played by a piano, for example (and a piano part is not necessarily suited for drumming).

Exchange

Exchange allows you to copy the data of the source track (above) to the destination track (below), and –at the same time– the data from the destination track to the source track. In other words, this is a swap function.



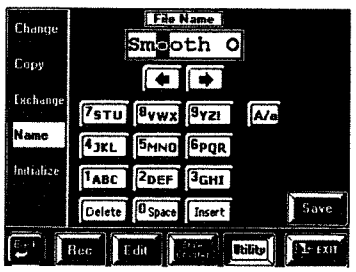
Track (1~16)— This is where you select the two tracks to be exchanged. Obviously, there is no ALL option here.

Note: Be careful when exchanging a Drum track and a "musical" track. The result may not be what you had in mind.

Name

This page allows you to program the File Name for your song. The "File Name" is the one that you see if you use the *dir* command on an MS-DOS® computer (all VA-3 disks are MS-DOS® compatible), while the "Song Name" is the name that you will see on the

respective display pages. The File Name is more important than the Song Name because the File Name is the one that is written to disk – but it can only be 8 characters in length.



See page 55 for how to enter names.

Note: For MS-DOS® compatibility reasons, only the first eight characters will be saved to disk (it's impossible to enter more than 8 characters for the File Name). Furthermore, you cannot use the same name twice on the same disk.

Save— Press this field to jump to the *Save Song* page, where you can save your song to the desired disk (see page 54). This function is very convenient for saving your new version under a different File Name without overwriting the original. That would leave you with two similar versions on disk. If you like your new version better (and wish to discard the previous version), do not change the existing File Name.

Note: If the original was referenced by a User Program and if you now wish to use the new version (saved under a different File Name), do not forget to change the Song Link setting (see page 94).

Initialize

See page 107.

10.3 Style Converter

The VA-3's Style Converter is an easy and intuitive tool for creating your own Music Styles based on one of your own songs or a Standard MIDI File. In either case, it is enough to play back the song or Standard MIDI File once to transfer its data into the VA-3's Song RAM memory where you can use the Style Converter. You may want to edit the song before converting parts of it into a Music Style. See "In-depth editing of a 16-track song" on page 109 and "Change" on page 114 for details.

General considerations

Here are a few guidelines for converting song parts to a User Style:

- See "Concept" on page 121 and "Looped vs one-shot" on page 122 for details about User Styles.
- The resulting Music Style can be used in Arranger mode (not in Song Composer/16-track Sequencer mode).
- Music Styles are accompaniment patterns. If the new Style should be generally usable, try to avoid chord changes in the "basic" patterns (Original, Variation, etc.). You can transpose your Styles in realtime by playing different chords in the chord recognition area. Also, never include the melody in your conversion.
- Try to isolate the parts that are really typical of the song.
- Transitions, rolls, etc., should be converted to Fill-Ins. The intro should be converted to an Intro pattern.
- For a really professional result, you will also have to take advantage of the VA-3's User Style mode to ensure that your new Style also "works" for minor and seventh chords. See "Programming User Styles" on page 121.
- Though pattern length (and memory capacity) is no issue, try to work in small but meaningful units. Here's an example: most songs rely on a structure based on 4-measure blocks. Converting 6 measures is thus a bit odd (though perfectly possible).
- Be sure to prepare a simple pattern for Original/Basic (Orchestrator ②) and more complex accompaniments for the remaining patterns.
- Be sure to set the right Key (see page 118). Only then will the Style really work as expected when used in the VA-3's Arranger mode.
- Your new Style resides in the VA-3 Style RAM memory (Disk User). Do not forget to save it to disk *before selecting* another Style (in Arranger mode) or switching off the VA-3.

- *Commercially available Standard MIDI Files are protected by a copyright. Please note that the Style Converter should only be used for creating Music Styles for private use. Roland assumes no responsibility for copyright infringements that may result from the use of the Style Converter.*

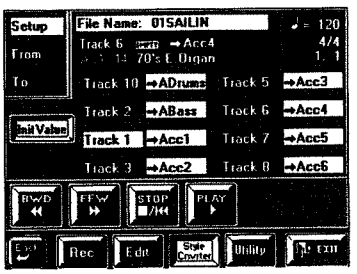
Using the Style Converter

1. If necessary, start playback of a Standard MIDI File to load the data into the VA-3's Song RAM. See "Listening to Standard MIDI Files" on page 28 for details.

2. Press the [SONG COMPOSER] button.

3. Press the [16 Tracks Sequencer] field.

4. Press the [Style Cnvrter] field in the bottom row. If [Setup] is not displayed in white, press this field.



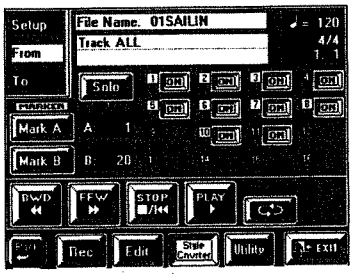
This page allows you to assign the desired song tracks to User Style tracks. Remember that a song can contain up to 16 tracks, while a User Style "only" provides eight. Be sure to select the tracks you want to include in the resulting accompaniment.

Use the numbered Track fields (1~8) to assign a song track to User Style tracks (ADrums, ABass, Acc1~Acc6). You can press [Init Value] to load the default assignments (see the above illustration).

Please note that these defaults are only based on common sense and may not yield the desired accompaniment pattern. As a rule, you should always listen carefully. But you may have noticed that track 4 (the melody) is automatically omitted. You should keep it that way.

Note: Be sure to make all desired assignments before pressing the [From] or [To] field. There, you can indeed only work with the assigned tracks.

5. Press the [From] field to go to the following page.



Here, you can listen to the song you wish to convert. Press the [PLAY ▶] field to start playback. [◀◀ BWD] and [FFW ▶▶] are also available. The **[ON/OFF]** fields denote the tracks that contain data. Press an [ON] field to switch off ("mute") a track you do not want to hear. This is only for checking purposes. The on/off status does not influence the selection of the data that will be converted.

The tracks in white squares have been assigned to User Style tracks and can be converted. The numbers 1~16 refer to SMF tracks, while the [Track] field and the [TEMPO/DATA] dial allow you to select one or all User Style tracks for conversion. That explains why the tracks you can select with [Track] are called "ADrums", "ABass", etc., rather than "1", "5", etc. You can either select the specific track to be converted ("ADrums", for example), or "ALL". The first approach (converting individual tracks) forces you to repeat the conversion for all tracks you need in your User Style, but has the advantage that only the tracks you really need will be converted. (Not all User Style patterns need to contain data for all eight tracks.) "ALL" converts all tracks surrounded by a white box to the selected User Style pattern.

You also need to specify which measures should be converted. Here, you can only select whole measures.

A: /B:— Use these fields to specify the first (A:) and last (B:) measures to be converted. If you don't remember the measure numbers, here is a convenient way to set these positions:

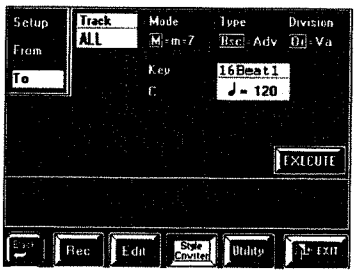
Use [◀◀ BWD] to rewind to a measure that lies before the presumed beginning. Press [PLAY ▶] to start playback.

Press the **[Mark A]** field at the beginning of first measure to be converted and **[Mark B]** when the VA-3 reaches the last measure to be converted. Alternatively, you can stop playback, use [◀◀ BWD] and [FFW ▶▶] to rewind/fast forward to the desired measures, and set the points while the sequencer is stopped.

Playback loop [ ]— Press this field to listen to the selected excerpt repeatedly. The passage between the "A:" and "B:" points will be continuously played back

(looped). This allows you to check whether the last notes of your Style-to-be allow for a smooth transition to other Music Style patterns, or sound natural when the pattern is repeated. Sometimes, quantizing the last notes of an excerpt may be helpful to avoid including notes that were played a little ahead of the beat (and are part of the last beat you convert). See page 112 for details.

6. Press the [To] field to go to the next page.



Here, you can select the destination pattern, i.e. whether the selected excerpt should become a Basic/ Original pattern, an Intro, etc. Note that you cannot select tracks here. Go back to a previous page to do so.

Key— (C, C#, D, Eb, F, F#, G, Ab, A, Bb, B) This parameter allows you to tell your VA-3 what key the track (or tracks) is in. Specifying the right key before converting is crucial for realtime use of a pattern. The chord recognition system of the Arranger is indeed based on the assumption that all patterns are in the key of C.

Thus, whenever you play a C (in Arranger Intelligent mode) or C chord in the chord recognition area, the Arranger will use the original notes of the pattern (no realtime transposition). If that pattern is in F# and if you forget to tell the VA-3 that it is, F# is what you will hear when you play a C or C chord in Arranger mode.
Note: There is no need to specify the key for ADR tracks.

Mode— Allows you to select the mode of your pattern: "M" (major), "m" (minor) or "7" (seventh). Choose the mode that matches the chord being used in the excerpt.

Type— Allows you to select the pattern Type. See page 66 for details.

Division— Allows you to select the Division of the pattern: Or (Original) or Var (Variation), FO (Fill-In To Original), FV (Fill-In To Variation), In (Intro), or Ed (Ending). Furthermore, by selecting an option indicated by "=", you create several patterns at once. That is what we call "cloning", see also page 124.

The new User Style will be copied to the Disk User memory. If that memory doesn't yet contain data, the new Style will use the current time signature and tempo. If you like, you can set the default tempo in the field next to [Key]. If the Disk User memory already contains data, the new Division(s) will have the same time signature and tempo as the Style data in the Disk User memory.

Execute— Press this field to start the conversion.

Note: Do not forget to save your new User Style to floppy-disk.

10.4 Header Post Edit

The Header Post Edit function allows you to modify certain playback parameters of the song that is currently in the VA-3's Song RAM memory. These modifications are either global or track-specific in nature and can be saved to disk along with the song data.

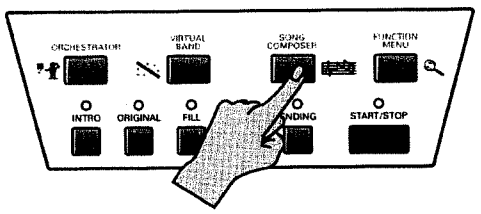
In a way, these settings are a "User Program" contained in the song itself.

These modifications are SysEx data that *alter* the actual Song Header data (without replacing them). And if we say "SysEx", we mean that only the VA-3, VA-7, VA-5, G-1000, and EM-2000 can read these data. To other SMF players, the song will still be the original SMF, i.e. they will ignore these newly added SysEx data.

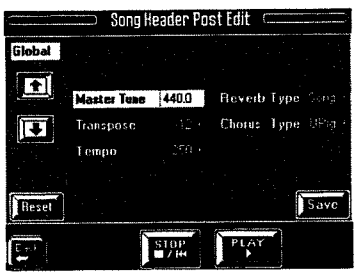
On page 93, we told you that the VA-3 allows you to ignore certain User Program settings, in which case some of the settings below will not be used. Here we go:

1. Load the song you wish to edit (if it does not yet reside in the VA-3's Song RAM memory).

2. Press the [SONG COMPOSER] button.



3. Press the [Header Post Edit] field.



The first set of parameters, called **Global**, allows you to modify settings that apply to all 16 parts (or tracks) of the song.

4. Press a field to select the parameter you wish to set and enter the desired value with the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad.
The asterisks (*) indicate all parameters whose values differ from the original Header settings.

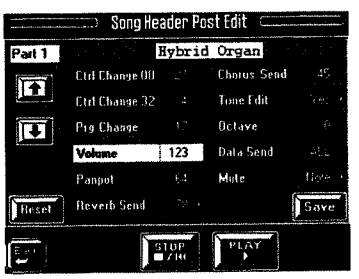
The available parameters are:

Parameter	Range	Default setting
Master Tune	415.3–466.2	Song setting
Transpose	–12–+12 semitones	0
Reverb Type	Song/UPr	Song
Chorus Type	Song/UPr	Song
Tempo	♩= 20–250	Song setting

- The *Transpose* parameter does not change the note numbers of Drum tracks (i.e. track 10 and any other track that uses a Drum Set rather than a Tone).
- The *Reverb Type* and *Chorus Type* parameters allow you to decide whether the song should use the Reverb and Chorus parameters (see also "Effects" on page 84) of the currently selected User Program, or those contained in the song data.
- *Tempo* is a relative parameter that modifies all tempo values of the song (including changes) by the same amount. Tempo changes are thus not ruined.

[Reset]— Press this field to select the default values for the Global and Part parameters.

5. Use [↑][↓] to select a specific song part (1~16) whose parameters you want to change.



You can do this for all 16 song parts.

There is a reason why we chose to use the word *Part* rather than *track*: the following parameters indeed only affect the way in which the tracks will be played back (without changing the track data themselves).

6. Press a field to select the parameter you wish to set and enter the desired value with the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad.
Be careful to select the desired Song Part before editing these parameters (watch the name in the top left field).

Note: If a given control change message for which the VA-3 provides a parameter is not available, the display will indicate "---".

CC00, CC32— (0~127) These are Bank Select messages. CC00 allows you to select other Tone/Drum Set banks, while CC32 is used to choose the Tone level. See also "Selecting different Tone Maps" on page 38.

PChange— (1~128) These are program change messages that allow you to select another Tone or Drum Set. See page 170 for a list of the VA-3's Tones and Drum Sets.

Volume (07)— Control change messages (CC07) that allow you to modify the Part volume.

Panpot— Control change messages (CC10) that allow you to set the stereo position of the selected part. Values below "64" shift the part to the left, and values above "65" shift it to the right. "64" means "dead center".

Reverb— The Reverb Send level (CC91) of the part, i.e. how strongly it is processed by the Reverb effect.

Chorus— The Chorus Send level (CC93) of the part, i.e. how strongly it is processed by the Chorus effect.

Tone Edit— (Yes/No) Allows you to specify whether or not the Part in question should execute SysEx and NRPN (CC98 and 99) messages contained in its track. If you select "No", such changes no longer affect the Part. [Default setting: Yes.]

Octave— (–3~+3) Allows you to transpose a part up to three octaves up or down, which may be necessary after you assigned a flute Tone to a bass part (see "CC00, CC32" and "PChange" above). [Default setting: 0.]

Data Send— (All, Int, Mid) This parameter allows you to specify where the data of the selected Part should be transmitted to: to the MIDI OUT port (Mid), to the VA-3's tone generator (Int), or both (All). [Default setting: All.]

Mute— This is a MIDI data filter that allows you to specify which Part data should *not* be transmitted to the Data Send destination. Select *Note* if the part should no longer transmit note messages, Pitch Bend, Modulation, Sustain, and Aftertouch messages. This is the setting to choose for Minus-One performances. *All* means that the part no longer transmits any MIDI messages at all (not even Bank Select and program change messages, etc.). Select *Off* if the Part in question should transmit all MIDI data contained in the track it is assigned to. [Default setting: Off.]

7. Press [Save] to jump to the Disk/Song Save page, where you can save the song. See page 54 for details.

11. Programming User Styles

You can program your own accompaniments (*Styles*) on the VA-3. Styles you program do not reside in ROM, which is why we call them *User Styles*, or Styles created by a user (either you or someone else).

11.1 Concept

There are three ways of creating new Styles:

- By converting portions of a Standard MIDI File into an accompaniment to be played by the Arranger (see page 116).
- By creating new accompaniments from scratch (see page 123).
- By editing existing Styles, which requires that you copy them and then alter the settings or notes you do not like (see page 130).

The third option is the fastest, because you only need to substitute those parts that, in one way or another, do not "work" for the song you want to play. Programming Styles from scratch is a lot faster than you may think because the VA-3 is equipped with a number of functions that allow you to cut down programming time to the absolute minimum.

Patterns

User Styles and internal Styles are short sequences or *patterns* (usually only four, sometimes eight measures long) you can select in realtime. That is precisely what we showed you in "Using the VA-3's Arranger" on page 23. If you have ever worked with a rhythm programmer (the BOSS DR-770, for example), the pattern concept may sound familiar. You program a pattern only once and then use it at several points in a song. In other words, one short musical phrase can go a long way.

Pattern-based accompaniments usually consist of the following elements:

- The basic *groove*, i.e. the rhythm that is the backbone of the song.
- Several alternatives for the basic groove that keep the accompaniment interesting and suggest some kind of "evolution" or "variation".
- Fill-Ins to announce the beginning of new parts.
- The beginning and ending of a song.

As a rule, programming four to eight drum patterns for a three-minute song is enough. Just use them in the right order to make them suitable for your song, and you're ready to play. In fact, what is called a "song" on a drum machine, is called "Arranger" on the VA-3. Drum machine songs have to be programmed beforehand, while the Music Style patterns can be selected on the fly by pressing the appropriate buttons or using the Orchestrator/Morphing function.

The VA-3 allows you to program 36 different patterns per Style, some of which are selectable via dedicated buttons ([ORIGINAL], [VARIATION] or via the display, see "Orchestrator and Morphing" on page 50), or that are selected on the basis of the chords you play in the chord recognition area of the keyboard (major, minor, seventh).

Tracks

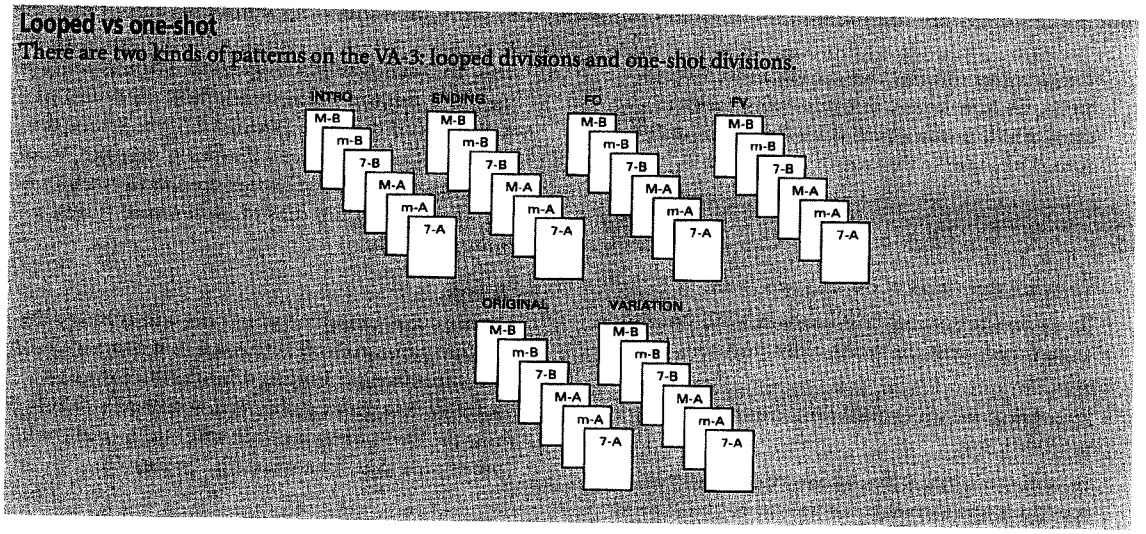
Unlike a drum machine, a Style not only contains the rhythm part (drums & percussion) but also a melodic accompaniment consisting of two to three musical parts, such as piano, guitar, bass, and strings. That is why the VA-3's divisions work with *tracks* – eight to be precise. See also "Arranger parts" on page 66.

The part-to-track assignment is fixed. You cannot assign the ADrums part to track 6, for example.

The reason why the ADrums part is assigned to track 1 and the ABass part to track 2 is that most programmers and recording artists start by laying down the rhythm section of a song.

There are exceptions to this rule, however, so feel free to start with any other part if that is easier for the Style you are programming.

Note: Though there are six Acc (or Accomp) parts, most Styles only contain two or three melodic accompaniment lines. In most cases, less means more, i.e. do not program six melodic accompaniments just because the VA-3 provides that facility; too many accompaniment lines tend to blur the arrangement. If you listen very carefully to a CD, you will discover (perhaps to your surprise) that it is not the number of instruments you use that makes a song sound "big" but rather the right notes at the right time.



Looped divisions— Looped divisions are accompaniments that are repeated for as long as you do not select another division or press [START/STOP] to stop Arranger playback. The VA-3 provides four programmable looped divisions with three variations each (levels ① and ③ of the Orchestrator function cannot be programmed). Let us agree to call the variations *modes*:

Division	Modes	Explanation
Basic/Original	Major Minor Seventh	As the name implies, this is the simplest accompaniment.
Basic/Variation	Major Minor Seventh	Basic/Variation is an alternative for the Basic accompaniment.
Advanced/Original	Major Minor Seventh	An alternative for the Basic level. Usually contains more instruments but could also be another kind of accompaniment for a given style.
Advanced/Variation	Major Minor Seventh	Variation of the Advanced/Original accompaniment.

Looped divisions do not select other divisions when they are finished: they keep playing until you select another division by hand (or by foot with an optional FC-7).

One-shot divisions— One-shot divisions are accompaniments that are only played once and then select a looped division or stop the Arranger.

Division	Modes	Explanation
Intro (Basic or Advanced)	Major Minor Seventh	Introduction. Selects the Original division of the level you selected (Basic or Advanced).
Ending (Basic or Advanced)	Major Minor Seventh	Ending (or coda). As soon as the Ending is finished, the Arranger stops.
Fill-In To Original	Major Minor Seventh	A musical transition that selects the Original division of the currently active level.
Fill-In To Variation	Major Minor Seventh	A musical transition that selects the Variation division of the currently active level.

The type of division (looped or one-shot) affects the way in which the respective tracks are played back. The Arranger will insert the required number of rests for any one-shot track that is shorter than the longest one.

Any track of a looped pattern that is shorter than the longest track, however, will be repeated until the longest track is finished. In other words, a repetitive phrase of a looped division needs to be recorded only once because it will automatically be repeated until the longest track is finished, after which the entire division (including the "sub-loops") will be repeated. For instance, if the ADrums part is only four measures long, while the ABass line is eight measures in length, the ADrums part will be repeated once while the Arranger plays measures 5–8 of the bass line.

11.2 Recording User Styles from scratch

Note: The following sections also contain comments on what we are doing and possible options. If all you want to do is program a Style, just read everything that appears in bold. You can come back to the related explanations whenever there is something you do not understand.

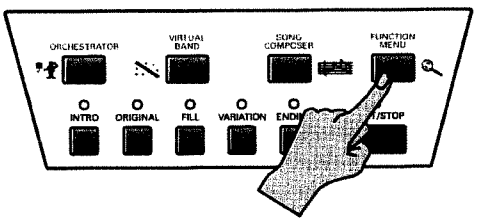
Important remark

User Style recording and editing is carried out in the VA-3's Style RAM memory (Disk User). Whenever you leave the User Style mode after recording or editing a Style (by pressing [EXIT]), the display will warn you that you need to save your Style to disk. If you haven't yet done so, you should take advantage of this security system.

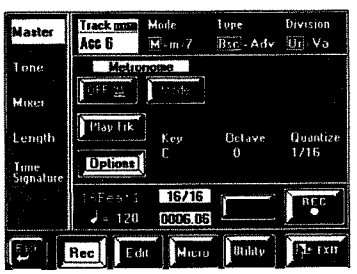
Press the [YES] field to save your Style to disk (see page 128 for details), or [NO] if you think that is not necessary.

Selecting the User Style Composer

1. Press the [FUNCTION MENU] button.



2. On the display page that appears now, press the [User Style Composer] field.
The display now looks more or less as follows:



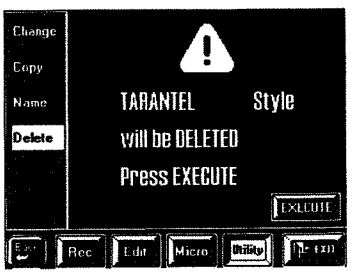
Note: If the above parameters are not visible, press the [Options] field.

Clearing the Disk User memory (Delete)

The first thing we need to do is clear the VA-3's Style RAM memory. That memory is indeed also used when you select a Disk Link, or a Disk User Style. In other words: this memory will not be empty when you select the User Style Composer. On the other hand, this "RAM sharing" system also allows you to prepare the Style you want to edit in no time: all you need to do is select it while in Arranger mode, then activate the User Style Composer.

To record a new User Style, however, you must first clear the Style RAM memory:

3. Press the [Utility] field in the bottom row.
4. Press the [Delete] field in the left column.



5. Press the [EXECUTE] field to delete the Style that is currently in the Disk User memory.

Preparations

6. Press the [Rec] field in the bottom row to jump to the User Style Composer Master page.
7. If necessary, press the [Master] field to make the display look like in step (2).

Selecting the track, the Mode, the Type and the Division

To keep things easy, let's start with the drums of the Basic/Original pattern.

8. Press the [Track] field and use the [TEMPO/DATA] dial to select the track you wish to record.
Select "ADrums". Now select a pattern. Start with the Basic/Original division (see the following steps):

9. Press the [Division] field and use the [TEMPO/DATA] dial to select "Original".

During Arranger playback (when you start using your User Style like a "regular" Style), the *Basic* and *Advanced* levels can be selected using the Orchestrator function. See page 50.

Working with clones

On this page, you can activate three clone functions that allow you to record one part and copy it to up to three divisions and three modes each. The "=" sign means that more than one pattern will be recorded.

10. Use the [Mode] field to select the mode(s), and the [Type] field to select the type(s).

Let us use the following display settings, which mean "record the Basic/Original/Major pattern and copy it to all looped divisions". Thus, by programming one pattern, you will obtain 3 *(M, m, 7)* x 2 *(Bsc, Adv)* x 2 *(Or, Va)* = 12 identical drum patterns!

Note: You can only clone five parts for one-shot divisions because there is no Original/Variation level for Intro, Ending, To Original, or To Variation: only Basic and Advanced levels (see the illustration on page 122).

Record mode

The [Merge] field allows you to select the recording mode.

Erase (if the [Merge] field is displayed in blue/gray)— Everything you record will replace the data on the selected track. This mode is automatically selected when you activate the Record function for a track that does not yet contain data. If you select a track that already contains data, the [Merge] field is automatically displayed in white but can be switched off so as to overwrite the previous version.

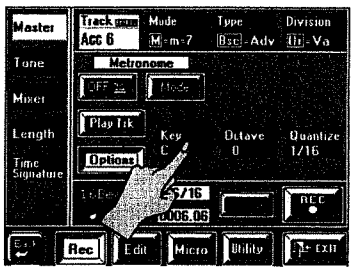
Merge (if the [Merge] field is displayed in white)— The music or data you are going to record will be added to the existing data of the selected track.

Specifying the key

If you want to use the accompaniment in a musically meaningful way (see "Remarks" on page 129), you have to tell the VA-3 what key you are recording in. That way, everything you play will be automatically transposed to C during Arranger playback, so that when you play a C (major, minor, or seventh) chord in the chord recognition area of the keyboard, you hear a C chord rather than an D chord.

The VA-3 allows you to play in the original (or your favorite) key of the song. But do set the *Key* parameter to the right value before recording.

11. Press the [Key] field and use the [TEMPO/DATA] dial to set the key.



If you want to play in F#, set this value to F#; to play in A, you must set this value to A, etc.

Note: There is no need to specify the key for the ADrums part since that part is never transposed.

Octave

The field next to [Key] allows you to transpose the keyboard in octave steps, which may be convenient for playing extremely high or low notes – or for using the special "noises" of the new "V" Tones.

12. If necessary, press the [Octave] field and use the [TEMPO/DATA] dial to transpose the keyboard up or down (–4~+4 octaves).

Quantize

Quantize is a function that corrects minor timing problems. See page 104 for details.

It shifts the notes whose timing is not exactly right to the nearest "correct" unit.

Always select a resolution value that is fine enough to accept all note values you play, yet not finer than the shortest note. If the shortest notes of your accompaniment are 1/16th note triplets, set the Quantize value to 1/16t.

Here is how to set the Quantize function:

13. Press the [Quantize] field and use the [TEMPO/DATA] dial to specify the quantize value.

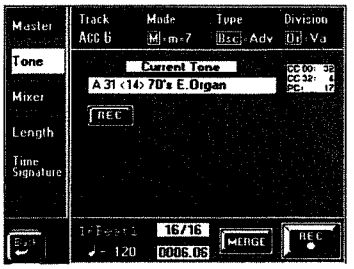
The preset value, 1/16, is OK for most situations. If you do not want quantize your music while recording, set this parameter to Off.

Off is a good choice here because you can also quantize the part after recording it (see page 137). If you quantize all parts, your User Style may sound too perfect. Remember that music is all about tiny imperfections, one of which is a somewhat "loose" timing.

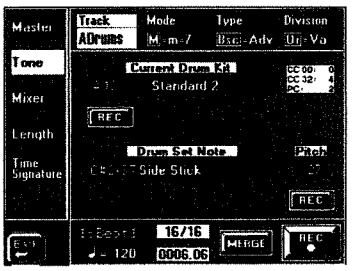
Tone selection

Another important aspect is Tone selection because the address (Group, Bank, Number, Variation) of the Tones and Drum Set you select is recorded at the beginning of every division.

14. Press the [Tone] field in the left column.



We are about to program the drums using the ADrums part. This part works the same way as the MDR part, so we now have to select a *Drum Set* rather than a Tone. In the case of the ADrums part, the display therefore looks as follows:



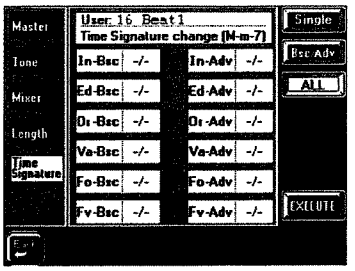
Use the GROUP & BANK/NUMBER buttons to select a Drum Set for the ADrums part (or a Tone for another part).

It is a good idea to play a few notes on the keyboard to check whether the sounds of the selected Drum Set are suitable for the accompaniment you are going to record. Try other Drum Sets until you find the one that sounds "right".

Time signature

Before you start recording, you must specify the time signature of your accompaniment. Select 4/4 for 8- or 16-beat patterns, 3/4 for waltzes, 2/4 for polkas and 6/8 (or 4/4) for marches. Note that it is also possible to select 5/4, 7/4 etc. time signatures.

15. Press the [Time Signature] field in the left column.



If 4/4 is already selected, there is no need to change it. To specify another time signature, proceed as follows:

a) Select the pattern whose time signature you wish to change by pressing the corresponding field.
In most cases, pressing the [ALL] field in the right column is the most sensible choice. That way, your change will apply to all User Style patterns. To do so, first press [ALL], then select any time signature field.

b) Use the [TEMPO/DATA] dial to enter the new time signature.

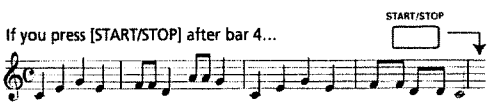
Note: You can also use this page for changing the time signature of already recorded patterns at a later stage (see page 126).

16. Confirm the (new) time signature by pressing the [EXECUTE] field.

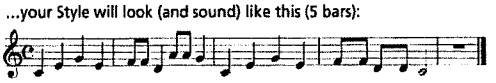
Length: specifying the pattern length

User Styles are patterns, i.e. short musical phrases, some of which will be continuously repeated during Arranger playback. Every pattern must therefore have a set length. A 5-bar Intro, for instance, is no good for a song that has only four introductory bars. Setting the length *now* will help you avoid a lot of confusion once you start recording.

The reason why we suggest you specify the length now rather than cutting the pattern to size after recording it (using the same Length function) is that the Arranger tends to add blank bars at the end of a track, which is usually due to the fact that you stopped the recording a little late (i.e. after the last bar you played). This means that you actually "record" five measures instead of 4:

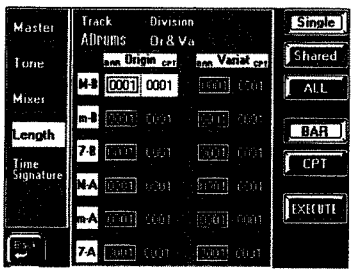


...your Style will look (and sound) like this (5 bars):



Furthermore, in User Style Record mode, all patterns are *looped*, so that the VA-3 keeps playing them back until you press the [START/STOP] button. A wrong number of measures (5 instead of 4, for example) is very likely to put you off, so do take the time to set the pattern length before you start recording.

17. Press the [Length] field. The display now looks like this:



It is perfectly possible to specify a different length value for each track and division. Remember, however, that the Basic and Advanced (Original and Variation) tracks are looped during "real-life" use, so that a 64CPT phrase will be repeated for as long as another track of the current division contains data.

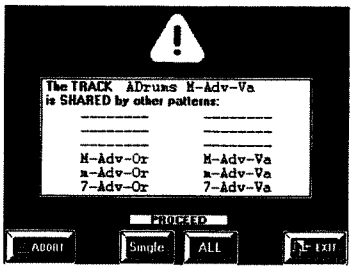
Note: Even one-shot patterns are looped by the User Style Composer. That is not the case, however, during Arranger playback (i.e. everyday use of the Styles).

18. Press the [Division] field to select the group of divisions whose length you wish to set.

The other options on this page are **[Shared]**, **[ALL]** and **[Single]**. [Shared] allows you to select all patterns that are being shared, i.e. patterns that have been –or will be– "cloned" during recording using the M=m=7, B=A etc. options (see page 123). [Single], on the other hand, allows you to treat all divisions as if they were independent patterns – and select only those whose length you wish to change after recording them. [ALL] allows you to select all currently displayed divisions. In most instances, this is the most convenient setting.

Cloning and edit functions and possible warnings (Shared)

When re-recording or editing just one pattern of a clone group, the following warning may be displayed:



It means that you are about to do something that will disrupt the uniformity of the patterns you have chosen to be identical (by cloning them).

Note that this page only appears if, after cloning several patterns, you decide to only redo or edit the M/Bsc/Or (or Or-M-Bsc) pattern, for example. Since the VA-3 "knows" which tracks are clones, it will warn you that you are about to record or edit a version without copying it to the "shared" patterns. For your reference, the names are displayed.

This should allow you to make up your mind whether to modify the selected pattern without changing the clones, or apply the changes to all clones (or shared patterns).

- Press [Single] to edit the selected pattern without changing the clones.
- Press [ALL] if the clones (or shared patterns) are to change according to the modifications of the pattern you are re-recording or editing.
- Press [ABORT] to leave this page without changing anything, or [EXIT] to leave the User Style Composer altogether.

Back to our accompaniment.

19. Start by selecting the Track whose length you wish to set (using the [Track] field and the [TEMPO/DATA] dial).

Rotating the dial fully clockwise will call up the ALL option. Select ALL to set the length for all User Style tracks (1~8).

20. Press the [Division] field and use the [TEMPO/DATA] dial to select "ALL" Divisions.

Note: Selecting "ALL" means that you can specify the length of all divisions that appear on this page.

To specify the length of only one pattern, press only the corresponding field. To specify the length of several patterns in one pass, press the field of every pattern whose length you wish to set.

21. Press the [BAR] field.

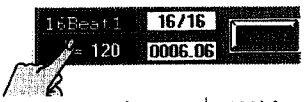
As you see the bar values are now surrounded by a box.

22. Use the [TEMPO/DATA] dial to specify the number of bars. Our pattern should be 4 measures long, so enter the value "4".
Note: You could also specify a CPT value by pressing the [CPT] field and using the [TEMPO/DATA] dial. That CPT value (♩ = 120CPT) will be added to the Bar length. Though possible, length values like 4 (bars): 96 (CPT) are probably not what you want to use every day.

23. Press [EXECUTE] to confirm the length you specified.
The display now contains an animated clock. Next, the "OK Function Complete" message is displayed to signal that the Length value has been successfully set.

24. Press the [Master] field in the upper left corner.

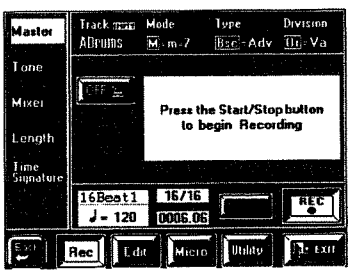
Tempo



25. The tempo (currently set to ♩=120) is probably a bit fast for recording, so change it by pressing the tempo field and using the [TEMPO/DATA] dial.
The tempo value you set here will be recorded and regarded as preset tempo. You can change the preset tempo at any stage in User Style Composer mode, so start by selecting a tempo that allows you to record the music the way you want it to sound. When all tracks and divisions are programmed, you can record the desired tempo value.

Recording

26. Press the [REC ●] field so that it is displayed in white.
The display now looks as follows:



27. Press the [START/STOP] button. The metronome counts in one measure (4 beats if you selected the 4/4 time signature), and recording starts on the next downbeat.
You could start by playing only the bass drum part. If you specified the track length (see above) before recording, the Arranger jumps back to the beginning of the pattern after four measures. The second time around you could add the snare drum, the third time the HiHat, and so on. – But you can also play the drum part in one go, of course.

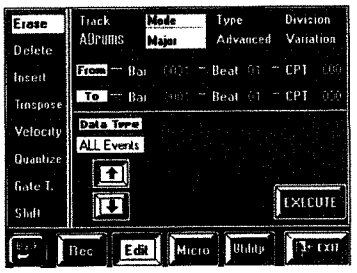
When recording another part (ABass~Accomp6), do everything you would do during a live performance. Feel free to add modulation, Pitch Bend, and use the D Beam controller as well as the hold pedal.
Note: You may notice a short delay before the Arranger jumps back to the beginning of the pattern. That delay is due to the fact that the data you record are "being processed". During playback, the loop will be perfect, however.

28. Press [START/STOP] again to stop recording.
If the above Mode, Type, and Division settings you selected for recording do not include all the patterns you wanted to clone, set the Mode, Type, and Division parameters to the desired values to supply the missing drum lines. Next, press [REC ●] and [START/STOP] to start recording. Stop recording after the first or second beat (wait until the count-in is finished before you start counting). Note that this function only *adds* clones. It does not allow you to erase existing patterns.

Audition your pattern and then keep or redo?

1. Press the [START/STOP] button again to listen to your performance.
If you like your drum part, continue with "Saving your Style to disk". If not, you probably want to give it another try.

2. Press the [Edit] field in the bottom row, followed by [Erase] in the left column.



We'll use *Erase* to erase the data because that way, the Length settings do not change. See "Erase" on page 135 for more information about this function. The ADrums track is already selected, as is the pattern that is used for cloning other tracks.

3. Press [↑] to select *ALL Events* for "Data Type".

4. Press the [EXECUTE] field to erase the pattern.

5. Press [Rec] in the bottom row to jump back to the Master page.

6. Continue with step (26) above.

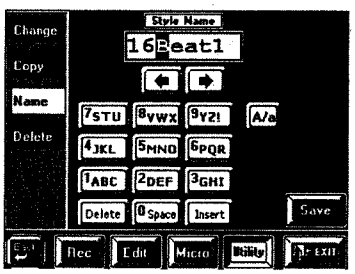
Saving your Style to disk

If you are serious about programming your own Styles, make it a habit to save them as frequently as possible. After all, if someone decided to turn off your VA-3 now, you would lose everything you have programmed so far.

That disk can also serve as backup whenever you erase or change something you actually wanted to keep.

Naming your User Style

1. Press the [Utility] field in the bottom row and the [Name] field in the left column.

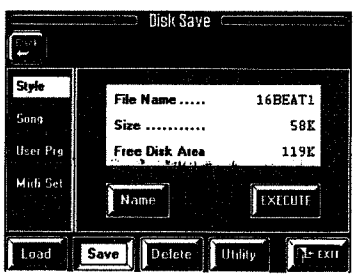


Before saving a Style to disk, you should name it. Choose a name that tells you something about the nature of the Style. The name you enter here will be displayed on the Master page every time you select this Style (via Disk Link, if assigned, or as "Disk User Style").

2. Enter the name that should be displayed whenever you select this Style. See page 55 for the available options.

Saving your Style

3. Press the [Save] field to jump to the *Save Style* page:



4. Press the [Name] field.

You have just specified the Style name, so there is no need to do so on this page.

5. Press the [File Name] field and enter the name under which your User Style should be saved.
See page 78 for the difference between Style and File Names.
Note: The [A/a] field is not displayed when you select the [File Name] field. That is because the File Name conforms to the MS-DOS standard and only allows for (eight) upper-case characters.

6. Insert a floppy disk into the drive and press [EXECUTE] to save your Style to disk.
Remember that your VA-3 is multitasking, so that you can leave this page as soon as the VA-3 starts saving the Style to disk:

7. Press [←Back] to return to the User Style Composer.

8. Press [Rec] (below) and [Master] (left column) to the User Style *Master* page.

Programming other parts and divisions

You can now record the second part – probably the bass. If you'd like to do the guided tour again, go back to page 123. Do not forget to set the key for the bass part (see page 124).

You probably know how to record other parts (Accomp1~Accomp6), so we'll leave you to it (see "Recording User Styles from scratch" on page 123).

Once the first division is finished, you can record other divisions. Use the clone function (see page 124) to record several patterns in one go.

Do not forget to record the Fills and the Intro(s)/Ending(s) to complete your User Style.
Note: The ABass part is monophonic. You will not be able to program two-note patterns.

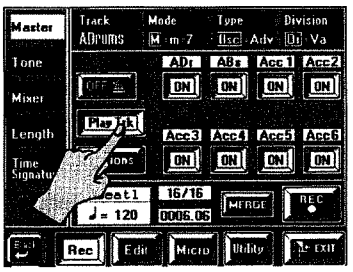
Muting parts while recording others

After programming a few tracks, you may find that certain tracks tend to confuse you. Playing a steady organ part while listening to a previously recorded syncopated part may indeed be difficult. That is why the VA-3 allows you to mute those parts that you do not want to hear during *recording*.

Note: The on/off status only applies to the User Style mode. In normal Arranger playback mode, all tracks will be played. In other words, this is a help function. To mute a part in Arranger mode, see page 83.

Here is how to mute tracks in User Style mode:

1. On the User Style *Master* page, press the [Play Trk] field:



2. Use the [ON/OFF] fields to switch the various User Style tracks On or Off (mute).

Note: Press the [Options] field if you need to set the Key, etc., parameter for a new track. You can also start recording on this page.

Speed Options— The [Fast] and [Slow] fields allow you to double or halve the playback tempo. The [Slow] option is useful for checking difficult riffs to find out whether all notes were played correctly. [Fast], on the other hand, allows for a quick check of the activated tracks. These options are only available once you have started playback of your of your User Style (by pressing the [START/STOP] button).

Remarks

Working from top to bottom – programming hints

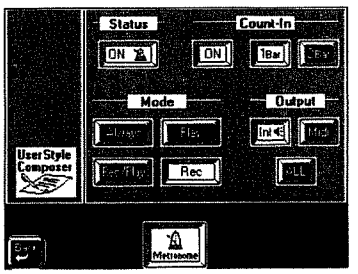
If you listen carefully to the factory Styles, you will notice that most divisions are very similar to one another and that the element of "evolution" or "amplification" between the Original/Variation and Basic/Advanced levels is usually derived from adding instruments to otherwise identical parts. The Advanced/Original division may, for instance, add an electric guitar to the drums, bass, and organ lines of the Basic level, but the drum, bass, and organ lines of the Advanced level are usually identical to those of the Basic level.

In other words, start by recording the most complex accompaniment while cloning all other looped divisions (see page 123). If you then move to the Advanced/Original level and delete the bells and whistles (see page 135), that division is already simpler than "the works".

The next step would then be to select the Basic/Original pattern and delete both the bells and whistles and the distorted guitar.

Metronome and Count-In

In User Style mode, the metronome sounds during recording, unless you switch it off using the [ON/OFF ■] field. If you also need the metronome when listening to what you have just recorded, select another metronome mode. Press the [Mode] field (only visible when [Options] is displayed in white) and see page 53 for how to select another metronome mode.



Press [←Back] to return to the "regular" User Style pages.

Playback in Arranger mode

As stated on page 121, the Arranger of your VA-3 is very similar to a drum machine, except for one thing: you do not need to program the pattern sequence beforehand. Just select the division you need while playing and feed the Arranger with the right chords so that all the lines you programmed sound in the right key. In short: use your own Styles the way you use the internal Styles.

Note: If, during playback in Arranger mode (i.e. normal VA-3 mode), the Arranger stops unexpectedly, try different chord modes. Chances are that you only programmed the major division, so that the Arranger selects an empty pattern when you play a minor or seventh chord. Remember to always set the Mode parameter to M=m=7 until you have come to grips with the possibilities of the VA-3's Arranger. That way, those three patterns will sound alike, but at least you are sure that the Arranger does not stop when you play a minor or seventh chord.

11.3 Copying existing Styles

Another way of programming User Styles is to use parts from internal Styles in ROM or User Styles on disk. The VA-3 allows you to:

- Copy entire Styles to the Style RAM memory (Disk User)
- Copy the selected division of one or all tracks
- Copy just a few notes of an existing part
- Copy tracks or notes between divisions

This allows you to create new Styles by using tracks from different existing Styles (the drums of Style A34, the bass of Style A63, etc.).

Note: You cannot copy an ADrums track to another track (ABass~Accomp6). Likewise, the bass part can only be copied to an A.Bass track. As far as the ACC tracks are concerned, you are free to copy them to whichever ACC track you like.

Note: If the Style RAM memory already contains new data, save it to disk before copying. The VA-3 has no Undo function. Saving a Style to disk before copying will allow you to load the previous version in case something goes wrong. See "Saving your Style to disk" on page 128.

Copying entire Styles using Load (all tracks)

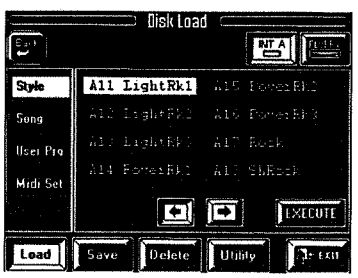
1. Press [EXIT] to return to the Master page.

2. Press the [FUNCTION MENU] button.

3. Press the [Disk] field to select the Disk mode.

4. If the [Load] field in the bottom row is not highlighted, press it.

5. Press the [Style] field.



6. Press the [INT A] field so that it is displayed in white.

INT A allows you to select any internal Music Style (A11~A88). If you wish to copy a Style from disk, press the [FLOPPY] field.

The window displays a list of Styles in the internal memory (Int) or on the disk.

7. Use the [◄][►] fields or the [TEMPO/DATA] dial to scroll through the list of available Styles.

8. Press the field of the Style you wish to copy.

9. Press [EXECUTE] to load the Style.

10. Press [◄Back] to return to the *Function Menu*.

11. Press the [User Style Composer] field to return to the User Style Composer.

Note: Pressing [◄Back] takes you back to the User Style Composer.

Note: This procedure is not really necessary because selecting a Disk Link or Disk User Style in the VA-3's Arranger mode has exactly the same effect as this function. Here, however, you know exactly what you're doing.

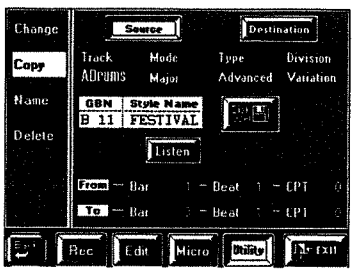
Copying individual Style tracks

While the previous function allows you to copy entire Styles, the Copy function can be used to copy individual tracks, modes, types, and divisions.

1. Press the [Utility] field in the bottom row while a User Style Composer page is displayed.

2. Press the [Copy] field in the left column.

3. Press the [Source] field.



4. Press the [Track] field and use the [TEMPO/DATA] dial to select the track to be copied.

5. Repeat this operation with the [Mode], [Type] and [Division] fields to select the Mode (Maj, Min, 7th, ALL), the Type (Bsc, Adv, ALL), and the Division (Or, Va, Fo, Fv, In, Ed, ALL).

6. Next, select the Style that contains the track(s) to be copied:

a) Press the [GBN/Style Name] field.

b) Use the [TEMPO/DATA] dial or the BANK/NUMBER pad to select the desired Style.

Note: Do not forget to insert the required disk before selecting a Style from bank B (Disk Link).

To use another Style on disk...

Here's how to use a Style on the inserted floppydisk:

a) Press the [Disk User] field. This takes you to a familiar page. See "Disk User" on page 49 for what to do now.

b) After loading the desired Style, press the [◄Back] field to return to the User Style Composer.

7. Press the [Listen] field to listen to the excerpt you are about to copy.

Note: Listen is not available when you select ALL for one of the above entries.

From

Start by specifying the position of the first event (or note) of the source track to be copied.

8. Press the [Bar], [Beat], or [CPT] field in the *From* row and use the [TEMPO/DATA] dial to set the Bar, Beat and CPT units respectively.
By default, the From parameters are set to "Bar 1, Beat 1, CPT 0".

You can also choose to copy only those notes that you need, in which case, the Beat and CPT parameters will help you select a starting point that lies behind the first beat of the track you wish to copy.

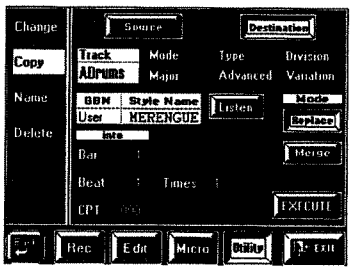
To

The *To* position indicates the end of the excerpt to be copied. By default, the To values are set to include the entire track.

9. Press the [Bar], [Beat], or [CPT] field and use the [TEMPO/DATA] dial to set the Bar, Beat and CPT units respectively.
If you wish to copy an entire bar, select the Bar-Beat-CPT "0" value of the next bar, i.e. to copy bars 1~4 specify "From 1-1-0/*To 5-1-0*".

10. Press [Listen] to listen to the excerpt again.

11. Press the [Destination] field.



Copy mode

Copying can be carried out in one of two modes:

Replace— The data in the selected range will be copied and overwrite all data of the destination track in the selected source track range.

Merge— The data in the selected range will be added to any existing data on the destination track.

In either case, the length of the destination track may change to include all data of the source track.
Note: If the Style RAM memory already contains new data, save it to disk before copying. The VA-3 has no Undo function. Saving a Style to disk before copying will allow you to load the previous version in case something goes wrong. See "Saving your Style to disk" on page 128.

12. Press the Mode [Replace] or [Merge] field.

13. Press the [Track] field and use the [TEMPO/DATA] dial to select the track you wish to copy the data to.

Note: It is impossible to copy ADrums data to other tracks than ADrums tracks. Likewise, you cannot copy ABass data to other tracks than ABass tracks.

14. Repeat this operation with the [Mode], [Type] and [Division] fields to select the Mode (Maj, Min, 7th, ALL), the Type (Bsc, Adv, ALL), and the Division (Or, Va, Fo, Fv, In, Ed, ALL).

15. Press the [Listen] field to listen to the track you are about to copy to.
The **Into** position indicates the beginning of the excerpt you are about to copy. To copy the source data to the beginning of the selected track, select Bar= 1, Beat= 1, and CPT= 0.

16. Press the [Bar], [Beat], or [CPT] field and use the [TEMPO/DATA] dial to set the Bar, Beat and CPT units respectively.

17. Press the [Times] field and use the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad to specify the number of copies to be made. Select "1" if the excerpt is to be copied only once.

18. Press the [EXECUTE] field to copy the data.
The animated clock tells you that the data are being copied.

When the data are copied, the display will tell you:

11.4 Editing User Styles

Editing on the fly by recording

Adding notes in realtime

To add notes to an existing part, press the [Merge] field so that it is displayed in white, select the track, and start recording by pressing the [REC ●] field and the [START/STOP] button. Play the notes where you want them to sound.

Note: Do not forget to select the desired Division, Mode, and Type (see page 123).

Adding controller data in realtime

To add controller data (modulation, Pitch Bend, Hold, expression) to an existing part, press the [Merge] field so that it is displayed in white. Operate the controller (Pitch Bend lever, modulation lever, optional DP-2, DP-6, or FS-5U footswitch for Hold data, optional EV-5 or BOSS FV-300L or EV-10 foot controller for expression data) where needed.

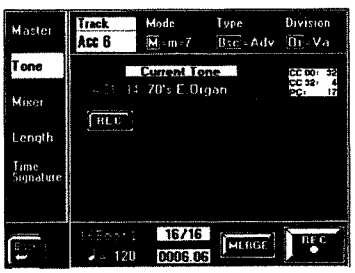
Note: Do not forget to select the right Division, Mode, and Type (see page 123).

Adding or changing settings of existing parts

The following operations require that you record in [Merge] mode without touching the keyboard or controllers, select the track and division whose settings you wish to change, press the [Merge] field, and start recording. Unless you wish to program continuous value changes (Panpot data, for example), you can stop recording after the first beat. Static settings are always written at the beginning of the track in question, so there is no need to record an entire cycle.

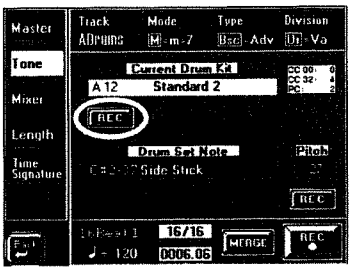
Tone/Drum Set selection— To select another Tone or Drum Set for an existing User Style track, proceed as follows:

1. Press the [Tone] field in the left column, and select the Track you wish to assign another Tone or Drum Set to.



2. Press the [Track] field and use the [TEMPO/DATA] dial to select the desired track.

If you select the ADrums track, the display looks slightly different:



That is because you can only assign Drum Sets to the ADrums track.

3. Select the division whose settings you wish to change, and possibly also all clones (see page 123).

4. Press the [MERGE] field in the bottom row. (Let us assume that your part already contains data.)

5. Select the new Tone (or Drum Set) to be assigned to the currently selected track and division by pressing the [Current Tone]/[Current Drum Set] field and using either the [TEMPO/DATA] dial or the BANK/NUMBER buttons.

6. Press the [REC] field (see the circle in the above illustration) so that it is displayed in white.
Depending on the selected track (ADrums or another one), this field is located in a different place. It does have the same function, though.

7. Press the [REC ●] field.

8. Press [START/STOP] to start recording.

9. Press [START/STOP] again after the first or second beat (but wait until the one-bar count-in is finished).
This completes Tone selection. The new Tone address (Group, Bank, Number, Variation) automatically replaces the old one.

Though you can use different Tones for every division of a User Style, beware of too much "artistic license". Using another Acc track for additional parts (if still available) will avoid a lot of confusion.

Drum Set Note & Pitch— After selecting the ADrums track, you can modify the pitch of certain sounds of the selected Drum Set. The eligible sounds and corresponding note numbers are:

C#2/37 Side Stick
D2/38 Stand.2 Snare 1
E2/40 Stand 2. Snare 2
F2/41 Low Tom 2
E3/52 Chinese Cymbal
G#3/56 Cowbell
A3/57 Crash Cymbal 2
F4/65 High Timbale

Note: The names of the drum/percussion sounds depend on the currently selected Drum Set. The sounds are usually similar in nature, however.

1. On the above display page, select the ADrums track.

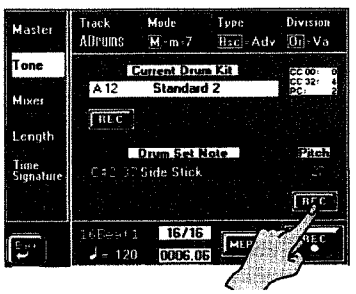
2. Select the division whose settings you wish to change, and possibly also all clones (see page 123).

3. Press the [MERGE] field in the bottom row.

4. Press the [Drum Set Note] field and select the drum sound whose pitch you wish to change with the [TEMPO/DATA] dial.

5. Press the [Pitch] field and use the [TEMPO/DATA] dial to set the desired pitch (-64~+63).
You can play on the keyboard to listen to the result.

6. Press the [REC] field below [Pitch].

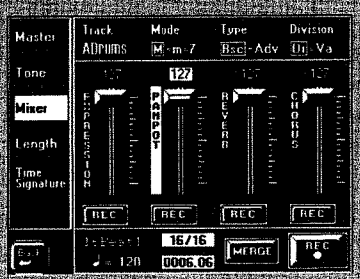


7. Press the [REC ●] field.

8. Press [START/STOP] to start recording.

9. Press [START/STOP] again after the first or second beat (but wait until the one-bar count-in is finished).
Expression, Panpot, Reverb, Chorus— Setting or modifying the Expression, Panpot, Reverb (Send), and Chorus (Send) parameters is similar to selecting another Tone for existing tracks.

a) Press the [Mixer] field on any User Style Composer page where the [Rec] field in the bottom row (left) is displayed in white.
The display now looks more or less as follows:



b) Select the track, the division, etc. whose settings you want to change. See "Tone/Drum Set selection" on page 132.

c) Press the [REC] field(s) below the slider(s) whose setting(s) you want to record. Those [REC] fields must be displayed in white.

d) Either use the on-screen-sliders or touch a slider name and use the [TEMPO/DATA] dial for setting the desired value. (You can also use the [DATA] button/Numeric Entry pad.)

The Reverb and Chorus settings represent *Send* values (see page 84). The effect settings (Type, Character, etc.) can only be saved to a User Program. In other words, a Music Style's character may change depending on the User Program you select.

You can create interesting panning effects by slowly shifting the selected track from left to right (or vice versa) in the course of a pattern. This is especially effective for synthesizer or guitar riffs. Continuous changes mean that you have to keep recording until the end of the pattern.

Expression (control change CC11) is a subsidiary volume message that works relative to the volume (control change CC07) message. Whenever you set Expression to "127" the resulting part volume will be equal to the value specified for Volume (CC07).

The Volume values of the Arranger parts can be set in Mixer (see page 81) mode.

Setting the preset tempo

The preset tempo is the tempo the Arranger selects in One Touch mode. By now, you know that the [TEMPO/DATA] dial and [AUTO/LOCK] function allow you to override the preset Style tempo and save the new tempo value to a User Program. Setting the right preset tempo is useful for those occasions where you wish to use One Touch Program (see page 27).

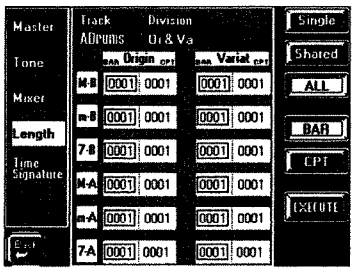
To program another preset tempo, set it using the [TEMPO/DATA] dial or the [TEMPO/TAP] button, select any part on a User Style Composer page where the [Rec] field in the bottom row is displayed in white, press the [Merge] field, and record one or two beats. *Do not play on the keyboard or use any controllers, though!*

Note: The last tempo value you record automatically becomes the Style's preset tempo.

Edit functions that are not part of the User Style Edit mode

Length

Press the [Length] field in the left column



The Length function allows you to modify the length (number of bars, beats, and clocks) both before or after recording. If used after recording, the data that lie beyond the specified end will be discarded.

Note: There is no way to recall the previous version, so think twice before executing the Length function.

See also "Length: specifying the pattern length" on page 125.

Track (ADrums~Acc6, All)— Allows you to select the track whose length setting you wish to change. If the length does not have to be the same for all tracks (which goes unnoticed for looped divisions, see "Looped divisions" on page 122), try to use only integer multiples or fractions for longer or shorter tracks (i.e. 4 bars for one track, while the others are 8 bars in length; 3-bar patterns don't loop well over 4- or 8-bar tracks).

Single— Press this field if you want to select only one pattern of a clone group.

Shared— Press this field to select all shared patterns in one pass. Doing so ensures that clones are always identical to the original.

ALL— Use the [ALL] field to select all patterns on the current display page (i.e., all Original/Variation, Intro/Ending, or Fill-In To Original/To Variation patterns).

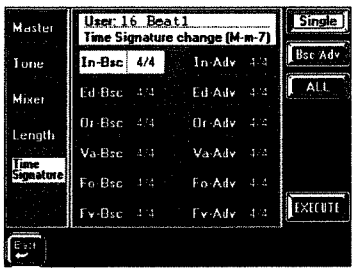
BAR— Press this field and use the [TEMPO/DATA] dial to set the length of the selected pattern(s) in steps of one bar. Note that it is perfectly possible to make an existing track longer by specifying a Bar value that lies beyond the last notes (or current end).

CPT— This is another length value that allows you to "fine tune" the length. In most cases, you will probably work with multiples of ♩ notes (i.e. 120CPT) because 120CPT represent one beat of an X/4 bar (1/4, 2/4, 3/4, 4/4, etc.). All intermediary steps are selectable, though the musical functionality of "x-bars-and-a-bit" patterns is questionable, to say the least.

EXECUTE— Press this field to apply the new length value to all selected patterns on this page.

Time Signature

Press the [Time Signature] field in the left column



The Time Signature page allows you to check and set the time signature of certain or all patterns. The time signature of the major (M), minor (m), and seventh (7) patterns must always be the same. This security system helps you avoid switching to another time signature simply by playing a major, minor, or seventh chord in the chord recognition area of the keyboard.

Use this parameter to specify the time signature of the selected pattern (Division, see below). The most commonly used time signatures are: 2/4, 3/4, 4/4, 6/8, and 12/8. Other values (such as 7/4, 13/8, etc.) are also possible.

Note: When you change the time signature of an already recorded pattern, its notes and events are "reshuffled" according to the new time signature, so that you may end up with incomplete measures. However, none of your data are deleted.

Bsc/Adv— This field (rightmost column) allows you to link the selection of a pattern in the Bsc column (left) to the corresponding pattern(s) in the right column (Adv). This is especially useful after selecting multiple patterns.

Use the [TEMPO/DATA] dial to set the desired time signature.

[Single]/[ALL]— Press [Single] if you only wish to change the currently selected pattern. Press [ALL] to select all patterns. If you want to edit multiple patterns, first pressing [ALL] and then switching off the fields of the patterns you don't want to change may be faster than selecting all desired patterns one after the other.

Execute— Press this field to confirm the new time signature and resize the selected pattern(s).

11.5 User Style Edit mode

All display pages of the User Style Edit mode feature a [←Back] field that allows you to jump back to the [Rec] page. Use it after editing a track (or all tracks) to record new material straight away.

Before discussing the various User Style Edit functions, please note the following: certain functions allow you to select the data type to be edited. Whenever that is the case, you can select one of the following messages. The field in question is called *Data Type*.

Parameter	Explanation
All	All editable parameters listed below.
Note	Note messages
Modul	Modulation messages (CC01)
PanPt	Panpot messages (stereo position, CC10)
Expre	Expression messages (relative volume, CC11)
Revrb	Reverb Send messages (CC91)
Chrus	Chorus Send messages (CC93)
PChng	Program Change messages
PBend	The Pitch Bend range (i.e. the pitch change that can be obtained by turning the Bender lever fully to the left or right).
NRPN	Non-registered parameter number. A special kind of MIDI message for setting parameter values that is only understood by GS compatible instruments.

These functions are very similar to those of the 16-track Sequencer. If you know how to use those, you will have little trouble understanding how the User Style Edit functions work.

Here are a few guidelines for editing your User Style:

Note: Save your Style to disk before continuing. That way, you can always return to the original if your changes do not work out as expected. See "Saving your Style to disk" on page 128 for details.

a) Select the track(s) and pattern(s) you wish to modify.

b) Select the range (*From* and *To*) for the edit operation.

c) Enter what should be changed and how it should be changed. Press the desired field and use the [TEMPO/DATA] dial, the [DATA] button/Numeric Entry pad, or (for notes) the keyboard.

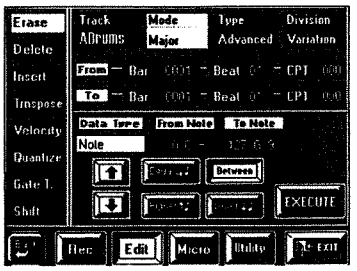
d) Execute the operation by pressing the [EXECUTE] field.

e) Save your User Style to disk.

Note: See "Available options for 'Note'" on page 109 for an explanation of the [Equal], [Between], etc. fields.

Erase

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Erase]



Erase allows you to selectively delete data either within a specified range of the pattern(s), or from the entire track(s). In *Data Type* ALL mode, Erase will substitute the required number of rests for the data you delete, so that you end up with the equivalent number of blank measures. If you also want to eliminate the measures themselves, use Delete (see page 136).

Track (ADrums~Acc6, ALL)— Allows you to select the track you wish to edit. You can also select ALL here, in which case the operation applies to all tracks of the selected pattern.

Mode— Allows you to select the mode of the pattern to be edited: Maj (major), min (minor) or 7 (seventh).

Type— Allows you to select the pattern type to be edited: Basic or Advanced.

Division— This parameter is used to select the Division of the pattern: Original or Variation.

From/To— "From" refers to the position where the edit operation is to begin. That position can be specified in a Bar-Beat-CPT format. "To" designates the position where the edit operation is to end (Bar-Beat-CPT value).

Bar (1~9999)— This is where you specify the bar position. By default, the From and To values are set to the beginning and end of the selected track(s). Note that the To value always refers to the end of the longest track.

Beat (1~[number of beats per bar])— This is where you specify the beat position. The number of selectable beats obviously depends on the time signature of the selected pattern.

CPT— This is where you specify the CPT position of the beginning and end. Unless you do not need to edit all the selected data within the last bar, you should keep the default setting. Note that the Micro mode allows you to edit the data on an event basis, which is more precise because there you see the events to be edited, which is not the case here. If you only wish to edit one event (or message), you should definitely do so in the Microscope mode (see page 138).

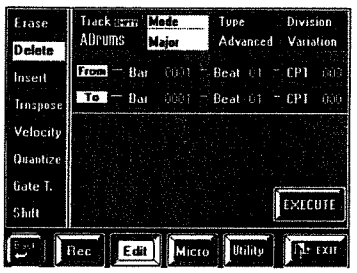
Data Type— Use [⬆][⬇] to select the data to be edited. See the table above for a list of the available data types.

From Note/Than Note, To Note— See page 110.

Execute— Press this field to confirm your settings and edit the data.

Delete

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Delete]



Unlike to the Erase function, Delete also erases the measures, so that all measures that lie behind the "To" position, will be shifted towards the beginning of the track(s). Since Delete also disposes of the *measures*, you cannot choose the data type to be erased.

Track, Mode, Type, Division— See page 135 for details.

From/To— "From" refers to the position where the edit operation is to begin. That position is specified as Bar-Beat-CPT values. "To" designates the position where the edit operation is to end (Bar-Beat-CPT value).

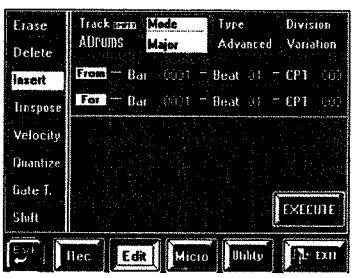
Bar, Beat, CPT— See page 135 for details.

Note that the Micro mode allows you to edit the data on an event basis, which is more precise because there you see the events to be edited, which is not the case here. If you only wish to edit one event (or message), you should definitely do so in the Microscope mode (see page 138).

Execute— Press this field to confirm your settings and edit the data.

Insert

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Insert]



The Insert function allows you to insert space in an existing pattern. This means that all data lying behind the position calculated by the "For" parameter are shifted further towards the end of the pattern, effectively making the pattern longer. You can only insert blank measures here.

Track, Mode, Type, Division— See page 135 for details.

From/For— "From" allows you to specify the position where the selected number of bars, beats, and CPT is to be inserted.

"For", on the other hand, specifies *how many* bars, beats, and CPTs are to be inserted.

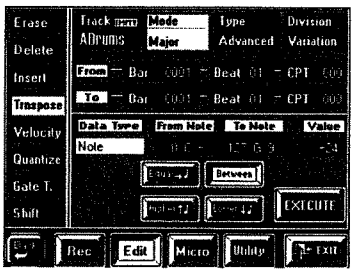
The Microscope mode also provides an Insert function (see page 140) that allows you to add events *without* shifting the subsequent events towards the end.

Bar, Beat, CPT— See page 135 for details.

Execute— Press this field to confirm your settings and insert the requested number of bars, beats, and CPTs.

Transpose

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Trnspose]



Transpose is used to change the pitch of the selected pattern (the other non-note data obviously cannot be transposed). Use this function with great caution because the Key value (see page 124) is not updated – even if you transpose entire track(s). We therefore suggest you only use it for parts of an Intro or Ending pattern – e.g. for a difficult phrase you have recorded only once and then copied using Copy (see page 142). In other words, never transpose an entire pattern as that will invariably lead to a lot of confusion in the Arranger mode.

Track, Mode, Type, Division— See page 135 for details.

When combined with "From Note/Than Note" and "To Note" (see below), Track Transpose is also useful for the ADrums track. It allows you to select another snare or kick sound, for example.

From/To— See page 136.

Bar, Beat, CPT— See page 135 for details.

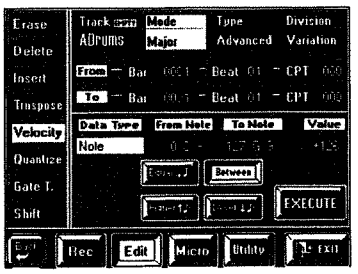
Value (–24~+24)— This parameter is used to set the transposition interval in semi-tone steps. If you wish to transpose a C pattern to D, enter the Value +2.
Note: Be careful when applying Transpose to the ADrums track. After all, transposing all notes of this track would mean that the drum part changes dramatically.

From Note/Than Note, To Note— See page 110.

Execute— Press this field to confirm your settings and edit the data.

Velocity

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Velocity]



The Velocity function allows you to modify the dynamics (called *velocity*) of a track or excerpt. See page 112 for details. Only note events can be changed, which is why you cannot select the data type.

Track, Mode, Type, Division— See page 135 for details.

From/To— See page 136.

Bar, Beat, CPT— See page 135 for details.

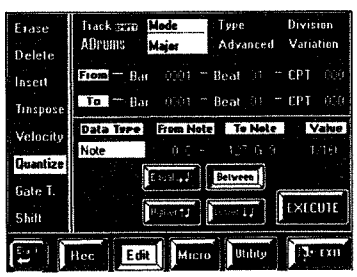
Value (–126~+126)— The Value parameter allows you to set the velocity change level. Select a positive value to increase the velocity of the selected track(s), or a negative value to decrease the velocity values. *Note: Even the highest positive or negative Value doesn't allow you to go beyond "1" or "127".*

From Note, To Note— See page 110.

Execute— Press this field to confirm your settings and edit the data.

Quantize

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Quantize]



The Quantize function can be used *after* recording a part if you don't feel comfortable with the timing of what you played. If only certain notes in a given time range need to be quantized, you should narrow down the edit range using the From/To parameters.

Track, Mode, Type, Division— See page 135 for details.

From, To, Bar, Beat, CPT— See page 135 for details.

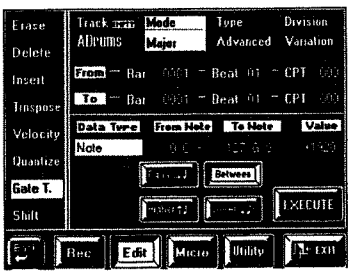
Value— This parameter sets the resolution of the Quantize function. The available values are: 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/32t, 1/64t. See also page 104 for an example.

Execute— Press this field to confirm your settings and edit the data.

Note: Be sure to always select the value that equals the shortest note you recorded. Otherwise, your part no longer sounds the way you played it.

Gate T

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Gate T]



The Gate Time function allows you to modify the duration of the notes in the selected time (From/To) range. See page 112 for details.

Track, Mode, Type, Division— See page 135 for details.

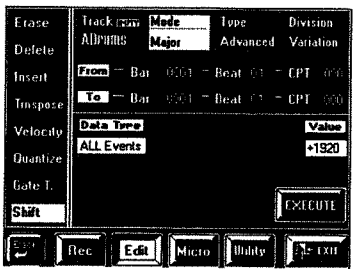
From, To, Bar, Beat, CPT— See page 135 for details.

Value (–1920~+1920)— This parameter sets the amount by which the duration (or gate time) of the selected notes is to be changed. The shortest possible Gate Time value is "1". Allowing the value "0" would effectively erase the notes, which can only be achieved with Erase (see page 135). You cannot use Gate Time to erase notes.

Execute— Press this field to confirm your settings and edit the data.

Shift

[FUNCTION MENU] button→ [User Style Composer] field→ [Edit] field→ [Shift]



Shift allows you to shift the the notes within the selected From/To range. See page 113 for details.

Note: Before selecting a Shift value, you should have a look at one track in the Microscope mode (see page 138) to determine which negative value to use. If the first note of a track starts on 1-1-6, for example, set Shift to "–6". Be sure to apply the same Shift to all tracks to maintain the timing of the original!

Track, Mode, Type, Division— See page 135 for details.

From, To, Bar, Beat, CPT— See page 135 for details.

Value (–1920~+1920)— This parameter sets the amount by which the notes are shifted. The Value refers to CPT units (one CPT= 1/120 ♩).

Note: Notes on the first beat of the first bar cannot be shifted further to the left (that would mean shifting them to the "0" measure, which doesn't exist).

Execute— Press this field to confirm your settings and edit the data.

11.6 User Style Micro mode

Select this mode whenever you need to change just one aspect of an otherwise perfect User Style (or copied ROM/Disk User Style).

In this section, we will use the word *event* for any kind of message (identical to MIDI messages that cause the Arranger to play or set something). An event is thus a command (or instruction) for the Arranger.

You can only view and edit one track at a time. In other words, do not forget to select the right track and pattern before you select a Micro function.

Here's how to select the User Style Microscope mode (steps (1)~(3) are only necessary if you have not yet selected the User Style Composer):

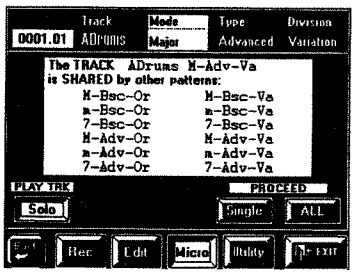
1. Press the [FUNCTION MENU] button.

2. Load the Style you want to change into the Disk User memory.

3. On the display page that appears now, press the [User Style Composer] field.

4. Press the [Micro] field.

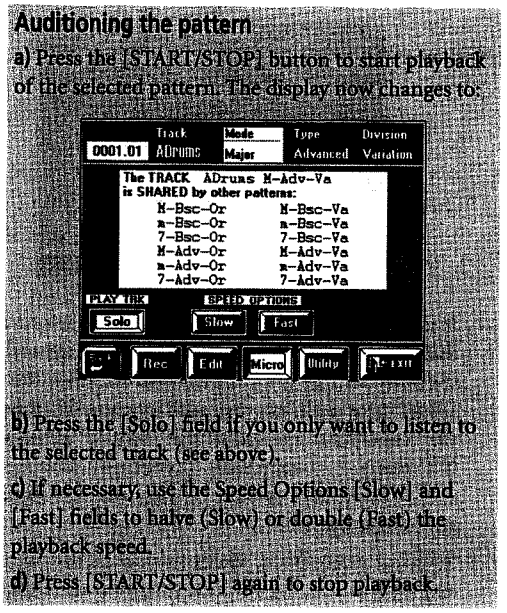
The display now looks more or less as follows:



See "Cloning and edit functions and possible warnings (Shared)" on page 126 for the meaning of the above warning. This message only appears if the selected pattern (Mode/Type/Division) is part of a cloning group.

5. Press the [Track] field and use the [TEMPO/DATA] dial to select the track you wish to record. Next, select the pattern you wish to edit.

See page 135 for details.

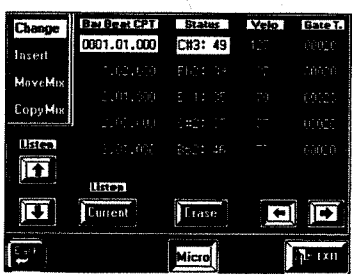


6. Press Proceed [Single] if you only want to edit the selected pattern, or [ALL] to modify all "shared" patterns simultaneously.

Note: To edit other tracks and/or patterns at a later stage, you must return to this page by pressing the [← Back] field.

Change

[FUNCTION MENU] button → [User Style Composer] field → [Micro] field → [Change]



The Microscope Change function is used to modify existing events, which may be anything from transforming a C#2 into a D2, velocity value "35" into "70", or control change CC01 into control change CC10.

Event selection (Bar-Beat-CPT)— Allows you to scroll through the events. You can only select Bar-Beat-CPT positions that already contain data. Use the [←][→] fields to scroll through the events. Press the field of the event you want to change.

Listen [↑][↓] & [CURRENT]— To scroll through the events while playing back the note events (such as "C#2" in the above example), press the [↑][↓] fields. The [Current] field allows you to sound the selected event (if it is a note). You could use this function to check the new velocity (Velo) value, and change it again if necessary until the note sounds right. This only works for notes.

Status column— This column contains all the message types you can assign to an event. See page 135 for details. Use the [TEMPO/DATA] dial for selecting an event.

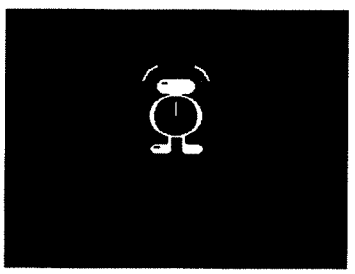
Don't look for CC64 (Hold or Sustain) events because you won't find any. The use of the pedal connected to the SUSTAIN/EXPR jack is converted into the equivalent Gate T(ime) values. To change such converted "Hold messages", you thus have to modify the duration (Gate T) of the affected notes.

Velo— Don't let the name of this column fool you. It does indeed display the velocity value of *notes*, but it also contains the values assigned to a control change number, a program change, or Pitch Bend event.

Gate T— The values in this column always represent the duration (or Gate Time) of note events. That is why all other events have no Gate T values.
Note: The Gate Time value of drum note events is always "1". The sounds being triggered are indeed one-shot samples that stop automatically. Setting a longer Gate Time value for drum notes (ADrums track) does not make them longer.

Erase— Press this field to get rid of the currently selected event. You can press any field ([Status], [Velo] or [Gate T]) to select the event you wish to erase.

You can now select another function on the menu (Insert, Move Mix, or Copy Mix) or press [← Back] to return to the opening Microscope page in order to select another track or pattern for editing. Press [EXIT] to return to the Master page. As soon as you do, the display will tell you that the new settings are being processed:

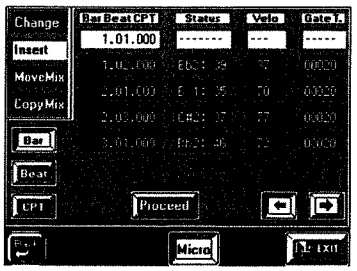


You can also decide to save your Style to disk:

There is no need to confirm your settings: all modifications will take effect as soon as you return to the opening Microscope (or Master) page.

Insert

[FUNCTION MENU] button→ [User Style Composer] field→ [Micro] field→ [Insert]



This Insert function is used to add events to an existing track – or to program a part in step time.

The Insert function consists of two pages: the first page is used to add an event at the selected position (using Bar, Beat and CPT), while the second page allows you to define the Status (note, control change, etc.) and values of that event.

Note: It is perfectly possible to insert an event at a position that already contains an event. This allows you to add the missing note of a chord, for example. Be sure, however, not to assign two control changes of the same number (e.g. Pan, CC10) and with different values to the same position.

Bar (1~9999)— As you see, the new event will at first be assigned the position "1:1:000", which is probably not where you want it to be. Press this field and use the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad to specify the bar where the new event should be inserted.

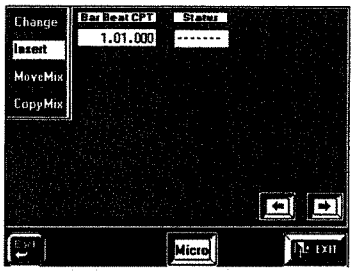
Beat (1~[number of beats per bar])— Press this field and specify the beat within the selected bar.

CPT ([BASS/BANK])— This parameter sets the CPT value of the new event. Here is a table of the most commonly used notes and their CPT values:

Note	CPT	Note	CPT
𝅝	480	♪3	90
𝅗𝅥	240	♪	60
♩	120	𝅘𝅥𝅯	30

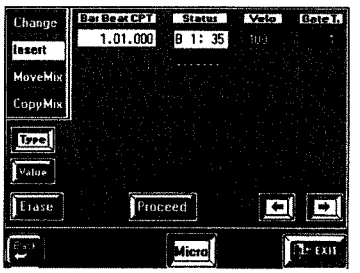
[←][→]— Use these fields to scroll through the events already recorded on the selected track/pattern. This is only for viewing purposes or for locating the approximately correct position.

Proceed— After specifying the position of the new event, press [Proceed] to select the second Insert page, where you can assign a function (Status) and value(s) to the new event:



Status— Use the [TEMPO/DATA] dial to select the Status of the new event (note, control change, etc., see the table on page 135). You may have to press the [**Type**] field if it is not displayed in white. Then press the [**Value**] field and specify the "identity" of the event (CC number, note number – [Type] only allows you to specify the kind of event to be inserted: note message, control change, etc.).

To insert a note event, you can also press the corresponding key on the VA-3's keyboard. If the velocity value is not the one you need, either press the same key again (harder or softer) or use the [Velo] field to set it. Depending on the selected parameter, the display now looks as follows:



Note: You can only program one note at a time. Playing a chord will only enter the last note you played.

Velo— As stated above, the Velo value does not necessarily refer to a velocity value. It is also used to indicate and (on this page) set the value assigned to the control change, etc. in question.

Gate T— The Gate T value can only be set for note events. Use it to specify the duration of the new note. Remember that Gate Time value "1" is enough for ADrums note events.

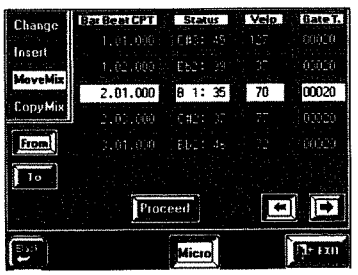
Erase— Press this field to get rid of the new event.

Note: Press [←Back] to jump back to the first Insert page if you need to change something.

Proceed— Press this field to confirm your settings and assign them to the event.

Move Mix

[FUNCTION MENU] button→ [User Style Composer] field→ [Micro] field→ [Move Mix]

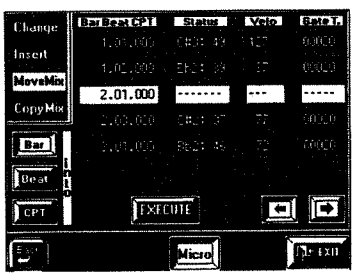


The Move function allows you to move the selected event (or events) to another position. This is similar to using the Shift function (see page 138) but it applies only to one or a few events at a time.

From— Press the [From] field in the left column and the field of the first event you wish to move (this field must be displayed in white). Use the [◄][►] fields or the [TEMPO/DATA] dial to call up other groups of 5 events (these are not selected automatically).

To— Press the [To] field. Next, scroll through the available events (using [◄][►] or the [TEMPO/DATA] dial) to jump to the page where the last event you wish to move is displayed. Press the desired field. All events between [From] and [To] are now selected.

Proceed— Now that the range of events to be moved has been selected, press the [PROCEED] field to go to the second Move page:



The parameters on this page are used to specify the new position of the first event you selected on the previous display page. All subsequent events will be positioned relative to the first event (i.e. the distance between the moved events remains the same).

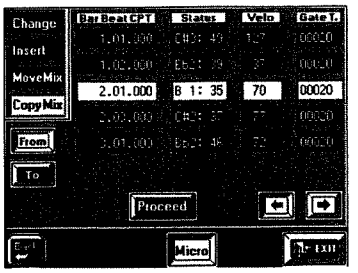
Bar, Beat, CPT— Use these fields and the [TEMPO/DATA] dial to set the position the selected event(s) is (are) to be moved to. Just for your information, the Move function is automatically set to *Mix*, which means that moving events does not overwrite events that may be present at the selected destination.

Execute— Press this field to confirm your settings and move the selected events to the new position.

You could now press [CopyMix] to jump to the Copy function, or [◄Back] to return to the opening Microscope page.

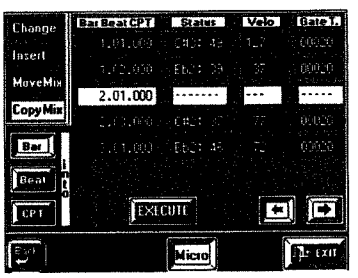
Copy Mix

[FUNCTION MENU] button→ [User Style Composer] field→ [Micro] field→ [Copy Mix]



The Copy Mix function allows you to copy the selected events to another position. This means that the events in question will be used twice.

From, To— See "Move Mix" for details. After selecting the events to be copied, press [Proceed] to jump to the second Copy Mix page:



Here, you can specify the Bar/Beat/CPT position for the first event (of the selected range). Press [Bar], [Beat], and [CPT], and use the [TEMPO/DATA] dial to set the desired position.

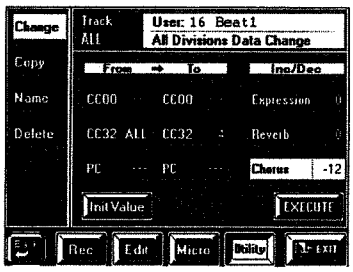
Execute— Press this field to confirm your settings and copy the selected events to the new position.

11.7 User Style Utility

The User Style Utility mode contains four functions you may need from time to time.

Change

[FUNCTION MENU] button→ [User Style Composer] field→ [Utility] field→ [Change]



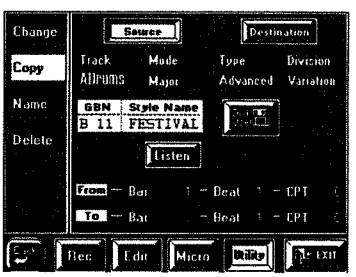
This function allows you to globally edit the Expression, Reverb Send, and/or Chorus Send values of all User Style tracks (of all Divisions, Modes, etc.). This may be necessary if you wish to change the character of your User Style, e.g. when you think these values are either too low or too high. Using this function is a lot faster than returning to the [Rec] page and re-recording these values for all tracks of all divisions. A similar function is also available for the 16-track sequencer, so please see page 114.

Track— Press this field and use the [TEMPO/DATA] dial to select the track you wish to edit. Please note the *All Division Data Change* message: your changes will apply to all patterns of the selected User Style track.

Execute— After setting the desired values, press this field to execute this global change function.

Copy

[FUNCTION MENU] button→ [User Style Composer] field→ [Utility] field→ [Copy]



The Copy function allows you to copy one or all tracks of a Style pattern to the selected User Style pattern. The two important fields here are [Source] and [Destination]. When [Source] is displayed in white, you can select the *Style to be copied.* When [Destination] is displayed in white, you can select the *track and pattern you want to copy the data to.* See "Copying individual Style tracks" on page 130 for a step-by-step tour of this function. The following does not present all parameters and settings available for the Copy function.

Track (ADrums, ABass, Acc1~6, ALL)— Allows you to select the track whose data you wish to copy (the *source* pattern). Do not forget to select the right Style (if it isn't already selected).

Mode— Allows you to specify one third of the source pattern's address: Major, Minor, 7th, or All.

Type— Allows you to specify the type of the source pattern: Basic, Advanced, or ALL.

Division— This parameter is used to select the Division of the source pattern you wish to copy: Original, Variation, or ALL.

Style — Press this field and use the [TEMPO/DATA] dial or the BANK/NUMBER pad to select the Style that contains the desired source pattern. The name of that Style is displayed in the second line.

Disk User— Press this field and select a Style on the inserted floppy disk.

The *Destination* page allows you to select the address the selected source pattern is to be copied to (the *destination* pattern). Please be aware of the following:

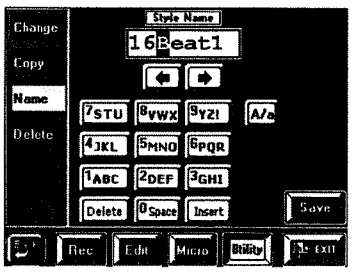
a) ADrums patterns can only be copied to ADrums tracks.
b) ABass patterns can only be copied to ABass tracks.
c) Acc patterns (e.g. Acc3~Acc6) can be copied to any Acc – but never to an ADrums or ABass track.
d) If the destination track is set to a "forbidden" value, the VA-3 automatically selects the corresponding source value.
For example: if you selected an ADrums track as source and the Acc3 track as destination, the VA-3 automatically selects "Acc3" as source track.

Times (1~99)— Sets the number of copies you wish to make. The value "3" means that you will end up with 3 contiguous copies, whereby the second copy is placed immediately after the first, etc.

Execute— Press this field to copy the data.

Name

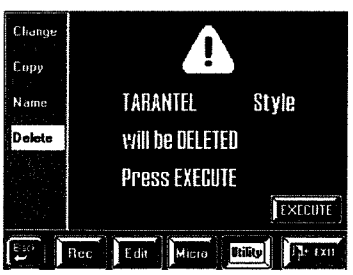
[FUNCTION MENU] button→ [User Style Composer] field→ [Utility] field→ [Name]



See "Naming your User Style" on page 128 and page 55 for details.

Delete

[FUNCTION MENU] button→ [User Style Composer] field→ [Utility] field→ [Delete]



Unlike "Delete" on page 136, the User Style Delete function is used to clear the VA-3's Disk User memory. If you are sure you no longer need a given Style, delete it using this function.

12. Miscellaneous

12.1 Setting the performance functions (Controllers)

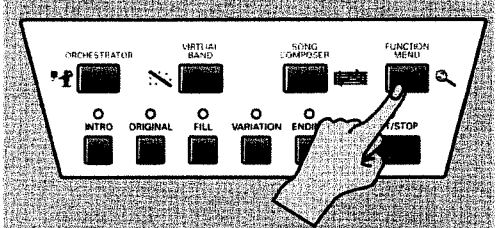
The VA-3 provides several built-in controllers as well as three sockets for connecting optional controllers that will make your life a lot easier. It would thus be a good idea to browse through this chapter. The assignments you make here can be written to a User Program (see page 91), which means that you can "reconfigure" the performance functions simply by selecting another User Program.

The available controllers are:

	D Beam controller (see right)
	Pitch Bend (see page 144)
	Modulation (see page 146)
	Sustain Switch (see page 146)
	Foot Pedal (expression) (see page 147)

Selecting the desired parameter

a) Press the [FUNCTION MENU] button.



b) On the display page that appears now, press the [Controllers] and then the [Hand] or [Foot] fields.

Note: If you select [Foot], the function you select can only be used if you connect an optional footswitch (DP-2, DP-6, or BOSS FS-5U) or expression pedal (EV-5, BOSS FV-300L or EV-10).

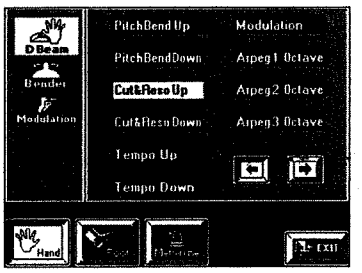
c) In the left column, press the field of the performance function (controller) you want to set.

d) If several options are available, use the [◄][►] fields to select them.

e) Press the field of the desired function.

f) In some cases, you can also set a value. Use the on-screen slider (if available), the [TEMPO/DATA] dial or the [DATA] button/Numeric Entry pad for doing so.

D Beam



The VA-3's D Beam Controller is a revolutionary function that allows you to control a selectable parameter by moving your hand over two sensors to the left of the display. On page 42, we showed you how to use the D Beam Controller. Let us now have a look at how to assign a function to it.

One final note before we get down to the available parameters: all options marked with a "°" apply to the currently active Keyboard parts.

Note: If you plan to use the D Beam Controller while controlling the Arranger, it is probably a good idea to activate its Hold function (see page 71).

Pitch Bend Up°— By moving your hand over the D Beam, you can generate a value between "64" (no Pitch Bend) and "127" (maximum upward bend). As soon as you move your hand outside the D Beam's reach (higher than ±40cm above the "eyes" or further to the left or right), the value returns to "64" (no Pitch Bend). The extent to which a Keyboard part can be controlled depends on the *Pitch* setting (see page 146).

Pitch Bend Down°— By moving your hand over the D Beam, you can generate a value between "64" (no Pitch Bend) and "0" (maximum downward bend). As soon as you move your hand outside the D Beam's reach, the value returns to "64" (no Pitch Bend). The extent to which a Keyboard part can be controlled depends on the *Pitch* setting (see page 146).

Cut&Reso Up°— (Only for Upper1 and/or 2) By moving your hand over the D Beam, you can vary the current TVF Cutoff value (see also page 89) of the Upper1 and/or 2 part. The Resonance parameter will be set to "+63" (maximum), while the Cutoff frequency can be controlled between "0" (no change) and "+63" (maximum increase). This allows you to create some nifty filter effects that are particularly useful for Dance/Techno music. When you move your hand outside the D Beam's range, both Resonance and TVF Cutoff return to their original values ("0"= no change).

Note: If TVF Cutoff is already set to "+63", you cannot increase it using the D Beam Controller. In that case, the following option is probably more useful. Also note that some Tones already use the highest possible TVF Cutoff value by default, in which case you cannot add more overtones (by opening the filter even further).

Cut&Reso Down°— (Only for Upper1 or 2) By moving your hand over the D Beam, you can vary the current TVF Cutoff value (see also page 89) of the Upper1 and/or 2 part. The Resonance parameter will be set to "+63" (maximum), while the Cutoff frequency can be controlled between "0" (no change) and "–64" (lowest possible TVF Cutoff setting). When you move your hand outside the D Beam's range, both Resonance and TVF Cutoff return to their original values ("0"= no change).

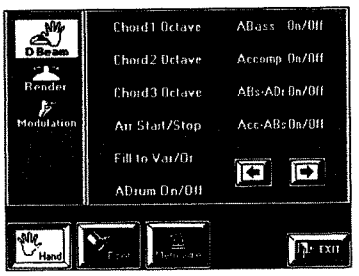
Note: See the above note. The TVF Cutoff frequency cannot be lowered if TVF Cutoff is already set to "–64".

Tempo Up/Down— Select one of these options if you want to increase (Up) or decrease (Down) the current Arranger or Song Composer tempo. By moving your hand outside the D Beam's range, you return to the previous tempo value.

Modulation°— Select this function if you want the D Beam to duplicate the modulation function of the Bender/Modulation lever.

Arpeg 1/2/3 Octave— By moving your hand over the D Beam, you cause the Lower2 part to play arpeggios (broken chords) based on the notes you play in the chord recognition area (see page 71). Depending on the setting you select here, the notes of the chord recognition area will be arpeggiated over 1, 2, or 3 octaves.

Note: Do not forget to assign a suitable Tone to the Lower2 part. See "Selecting Tones for the Keyboard parts" on page 34. Also, activate the Arranger Hold function (see page 71).



Chord 1/2/3 Octave— By positioning your hand inside the D Beam's range, you cause the Lower2 part to sound the notes of the chords you play in the chord recognition area. You could use this function to add syncopated brass or guitar "hits" to your melody. The velocity value used for playing these notes is "100". The number (1, 2, or 3) bears on the octave of this "added chord": *1*= A♭3~G4, *2*= A♭4~G5, and *3*= A♭5~G6. Move your hand outside the D Beam's range to stop the Lower2 part from sounding the chord.

Arr Start/Stop— Depending on the current condition of the Arranger (running or stopped), one move inside the D Beam's range stops (or starts) it. A second movement will start (or stop) it again.

Fill To Var/Or— Here, too, the D Beam performs two functions that depend on the currently selected Division (Original or Variation). The first time the D Beam senses your hand (or other limb), it activates the Fill-In TO VARIATION function. Upon completion of that Fill, the Arranger switches to the Variation pattern. The second time, the Fill-In TO ORIGINAL is activated.

Note: This function is only available while the Arranger is available. During Composer or 16-track Sequencer playback, you may get the impression that the D Beam Controller does not work. But as soon as you return to the Arranger (normal VA-3) mode, everything will be back to normal again.

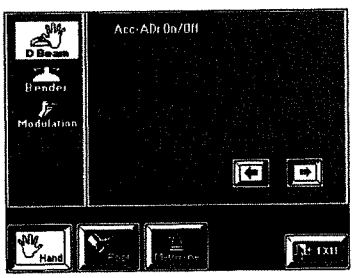
ADrum On/Off— This setting allows you to switch the Arranger's ADrums part on and off using the D Beam Controller. There are also combined on/off options (see below).

ABass On/Off— This setting allows you to switch the ABass part on and off using the D Beam Controller.

Accomp On/Off— This setting allows you to switch the Accompaniment parts (ACC1~6) on and off using the D Beam Controller.

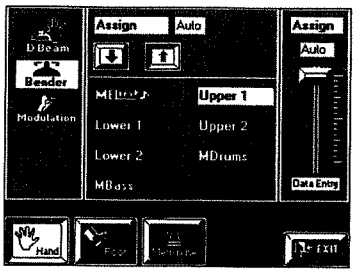
ABs+ADr On/Off— This setting allows you to use the D Beam for switching on and off the ABass and ADrums parts.

Acc&ABs On/Off— This setting allows you to use the D Beam for switching on and off the ABass and ACC1~6 parts.



Acc&ADr On/Off— This setting allows you to use the D Beam for switching on and off the ADrums and ACC1~6 parts.

Bender



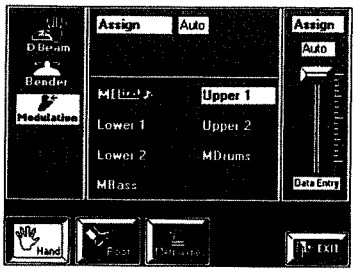
Use the fields in the center of the display to select the Keyboard part whose Pitch Bend setting you want to change. Surprising though it may be, you can also specify a Pitch Bend range for the Manual Drums part. Selecting values between "2" and "7" allows you to achieve interesting effects that work well for timpani sounds (of a 71 Orchestra set), for example.

Assign— If this parameter name is not displayed, press the [↑] field. **Auto** means that the part in question only responds to movements of the BENDER lever if it is assigned to the right half (SPLIT) or the entire keyboard (WHOLE). **On** means that the part in question always responds to BENDER messages, even if it is assigned to the left half of the keyboard. **Off**, finally, means that the part does not respond to BENDER messages.

Pitch — (0~24) Select this parameter by pressing [↓] once. It is used to specify the maximum pitch shift that can be achieved by turning the BENDER lever fully to the left or right. Since there is only one parameter, it applies to both upward and downward bends. Remember, however, that the Pitch value can be set individually for each Keyboard part, so be careful to set musically useful Pitch values. Select "0" for Keyboard parts whose pitch should not change in response to Pitch Bend messages (alternatively, you can set *Assign* to "Off").

Note: The Pitch value you set here will only be effective when you turn the Bender lever fully to the left (downward bends) or to the right (upward bends). Intermediary positions of the lever produce the resulting intermediary bend value.

Modulation

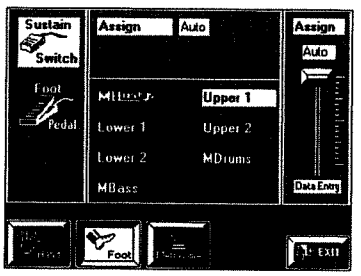


Modulation allows you to add vibrato to the notes you are playing. This is achieved via an LFO (a Low-Frequency Oscillator) whose speed is preset. By pushing the BENDER/MODULATION lever away from you, you specify the depth of this cyclic modulation.

Use the fields in the center of the display to select the Keyboard part whose modulation setting you want to change.

Assign— **Auto** means that the part in question only responds to modulation messages if it is assigned to the right half (SPLIT) or the entire keyboard (WHOLE). **On** means that the part in question always responds to modulation messages, even if it is assigned to the left half of the keyboard. **Off**, finally, means that the part does not respond to modulation messages.

Sustain Switch (CC64)



The parameters on this page are related to an optional DP-2, DP-6, or BOSS FS-5U footswitch you connect to the SUSTAIN/EXPR socket. Also called "Hold pedal" or "Damper" pedal, this switch allows you to hold the notes you play on the keyboard in much the same way as on an acoustic piano.

Though you cannot assign other functions to this footswitch, you can decide *when* a given part should respond to these messages.

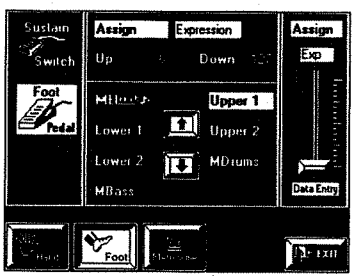
Use the fields in the center of the display to select the Keyboard part whose Sustain setting you want to change.

Assign— **Auto** means that the part in question only responds to Sustain messages if it is assigned to the right half (SPLIT) or the entire keyboard (WHOLE). **On** means that the part in question always responds to

Hold messages, even if it is assigned to the left half of the keyboard. **Off**, finally, means that the part does not respond to Hold messages.

Note: The Sustain Switch functions are not available when you connect an expression pedal to the SUSTAIN/EXPR socket.

Foot Pedal (Expression)



An expression pedal connected to the SUSTAIN/EXPR socket can be used for controlling the volume of all or some Keyboard and/or Arranger parts.

1. Press the field of a part that should respond to volume messages transmitted by the expression pedal. Press [⬇] to have access to the Arranger parts.

2. Press the [Up] or [Down] field and use the slider, the [TEMPO/DATA] dial, or the [DATA] button/ Numeric Entry pad to set the value.
These two fields refer to the volume to be obtained when the expression pedal is depressed ([Down], highest volume) or closed ([Up], lowest volume).

Up/Down (0~127)— You do not need to specify "0" for the Up position. Selecting any other value will reduce the volume of the selected parts up to the "Up" value. Likewise, you do not need to specify "127" as maximum value.

Note: The Down and Up values represent MIDI Expression (CC11) values.

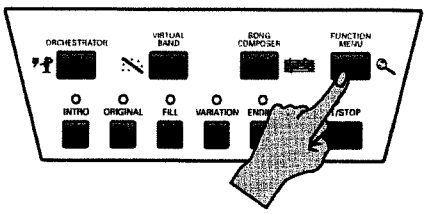
Note: It is perfectly possible to set the Up value to "127" and the Down value to "0", so that the selected part only sounds when the Expression pedal is up (closed).

The Expression function can also be used for some clever effects. Instead of alternating between Upper1 and Upper2 by varying your velocity (see page 63), which requires a considerable amount of "striking precision", you could invert Upper2's response to the expression pedal, so that Upper1 does not sound when Upper2 does, and vice versa.

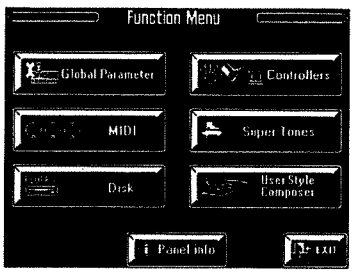
12.2 Global parameters (for the entire VA-3)

The VA-3 also provides a number of settings that apply to the entire instrument. Here's how to change the behavior of your VA-3:

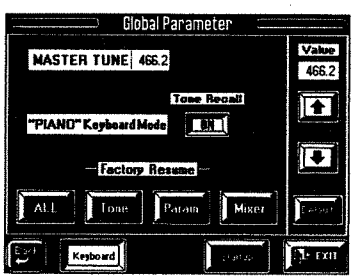
1. Press the [FUNCTION MENU] button.



The display now looks as follows:



2. Press the [Global Parameter] field.



3. If necessary, press the [Keyboard] field in the bottom row.

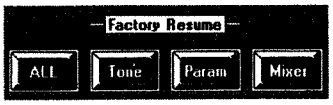
Master Tune

See page 45.

Tone Recall

When this parameter is set to [ON], the VA-3 assigns the "A11 AcPiano 1" Tone to the Upper1 part whenever you press the Keyboard Mode [PIANO] button. You can, however, block this automatic Tone selection, so that pressing the [PIANO] button only selects the WHOLE mode with only Upper1 (UP1) active. That part will go on using the last Tone you selected for it.

Factory Resume



The *Factory Resume* fields allow you to select all or only certain settings of the "Free Panel" User Program so as to initialize the section in question. Why would you need such a function since you can also select the "Free Panel" memory by simultaneously pressing User Program [UP] and [DOWN]?

Because the "Free Panel" memory is, in fact, a RAM memory where your settings are buffered. After switching on the VA-3, the Free Panel settings are identical to the ones you can recall with the [ALL] field. But just one change to the VA-3's parameters (e.g. the selection of another Tone) means that the "Free Panel" settings are different from the factory settings.

If you really want to start anew without switching the VA-3 off and back on again, you must press one of the above fields.

All— All settings of the factory "Free Panel" memory will be loaded.

Tone— Only Tone selection and the lock settings (for Arranger parts) of the factory "Free Panel" memory will be loaded (see below).

Param— Only the "parameter" settings will be initialized. These include such diverse things as the controller assignments, the UP2 Split/UP2 to Left setting, the Scale Tuning setting... In short: all parameters that are neither related to [Tone] nor to [Mixer]. This allows you to reset those slightly more "specific" parameters without changing the current Tone assignments and volume/effect settings.

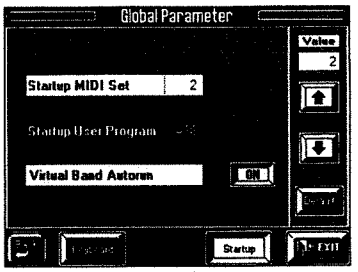
Mixer— Only the Mixer settings of the factory "Free Panel" memory will be loaded (see below).

Virtual Band Autorun

When this parameter is set to [OFF], the *Virtual Band* page is no longer displayed automatically every time you switch on the VA-3. This also means that the Virtual Band page does not automatically appear after a few moments of inactivity. It's up to you to decide whether or not the Virtual Band is solicited automatically.

Note that even if you select [OFF], you can still select the Virtual Band page by pressing the [VIRTUAL BAND] button.

1. Select a [Global Parameter] page (see page 147).
2. Press the [Startup] field.



3. **Press the [ON/OFF] field to select "On" (Virtual Band is selected automatically) or "Off" (Virtual Band can only be selected via the button of the same name).**

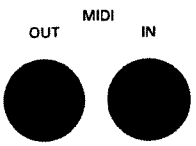
See "User Program selection at power-on" on page 95 for details about [**Startup User Program**], and "MIDI Set selection at power-on" on page 159 for [**Startup MIDI Set**].

13. MIDI

13.1 MIDI in general

MIDI connectors

MIDI messages are transmitted and received using two connectors and special MIDI cables:



MIDI IN— This connector receives messages from other MIDI devices.

MIDI OUT— This connector transmits MIDI messages generated on your VA-3.

Channels

MIDI can simultaneously transmit and receive messages on 16 channels, so that up to 16 instruments can be controlled. Nowadays, most instruments –like your VA-3– are multitimbral, which means that they can play several musical parts with different sounds.

That concept is not difficult to understand. Just think of your VA-3: it is equipped with an Arranger capable of playing the drums, the bass, and up to six accompaniment parts, while at the same time allowing you to play up to seven Keyboard parts.

MIDI data types

The most important aspect of the MIDI standard is that it allows one instrument to tell another when to play a note, for how long, and how strongly it should be played.

Other aspects of a musical performance include modulation (vibrato), Pitch Bend (bending), volume, pan-pot, etc.

Yet another group of MIDI messages is used to tell the receiver when to select another sound and which sound to select. These messages are called *Bank Select*, and *Program Change*. In fact, these are the messages that are automatically recorded at the beginning of each Style division and written to a User Program so that you can recall the Tone selection for *all* available parts simply by selecting a User Program. Program Change and Bank Select messages also allow you to select User Programs, Styles, and Drum Sets.

Still other MIDI data allow you to synchronize two MIDI instruments so that they start and stop at the same time and run at the same tempo.

MIDI messages used by the VA-3

The way a device responds when it receives MIDI messages (i.e. how it produces sound, etc.) depends on the specifications of that device. If the receiving device is not able to perform the function specified by the incoming message, the musical result will not be what you expected. What it comes down to is this: there are several levels of MIDI compatibility, and not all MIDI compatible instruments understand (i.e. receive) all existing MIDI messages.

*Note: MIDI messages for which reception capability is required by the GM system (level 1) are marked by a * sign.*

Note messages *— These messages convey notes played on the keyboard. They include the following information:

Message	Explanation
Note number	A number describing the note corresponding to the key you pressed or released.
Note-on	A message signalling that you pressed a key (i.e. "start playing now").
Note-off	A message signalling that a key was released.
Velocity	A value describing how strongly you pressed a key.

On many instruments (such as your VA-3), a note-on message with the velocity value "0" is used to signal the end of a note (i.e. velocity value "0" effectively functions as note-off message).

Pitch Bend *— This message conveys the position of the Bender lever (or pitch bend wheel). The pitch will change when this message is received.

Bank Select (CC00 and CC32), Program Change *— On the VA-3, these messages are used to select Tones, Styles, and User Programs. By using Bank Select messages (which are in fact control change messages), an even wider variety of memory locations can be selected. Control change messages were added when it became clear that the maximum number of sounds selectable using Program Change messages (128) was no longer sufficient to access all sounds of a given instrument.

Note: Do not forget to send a Program Change message after a Bank Select message because sending only Bank Select messages does nothing whatsoever. The right order for sending these messages is (pay attention to the CPT values):

1.1.0 Bank Select CC00 + value
1.1.1 Bank Select CC32 + value (0, 1, 2, 3, or 4)
1.1.2 Program Change

On the VA-3, CC32 messages are used to select the Tone Map: "0" (don't leave current Tone Map), "1" (SC-55 mode), "2" (G-800), "3" (G-1000 or EM-2000), or "4" (VA-3).

Control change messages

These messages control parameters such as modulation and pan. The function of a message is determined by its control change (e.g. ID) number.

Modulation (CC01) *— This message controls vibrato.

Volume (CC07) *— This message controls the volume of a part. When this message is received, the volume of the part receiving on that MIDI channel will change.

Expression (CC11) *— This message conveys volume changes. It can be used to add expression. The volume of a part will be affected both by Volume messages (CC07) and Expression messages (CC11). If a value of "0" is received for either of these messages, the part volume will be 0 and will not rise even if the other message is sent with a higher value.

Pan(pot) (CC10) *— This message controls the stereo position of a part.

General purpose controllers (CC16, 17)— These are control change messages that have no set function within the MIDI standard.

Hold (1) (CC64) *— This message conveys the up/down movements of the Damper (Sustain, Hold) pedal. When a Hold On message is received, notes will be sustained. In the case of decay-type instruments such as a piano, the sound will decay gradually until a Hold Off message is received. In the case of sustain-type instruments such as an organ, the sound will continue sustaining until a Hold Off message is received.

Sostenuto (CC 66)— The Sostenuto pedal on a piano sustains only the notes that were already sounding at the moment the pedal was pressed. The Sostenuto message conveys the movement of this pedal.

Soft (CC67)— The Soft pedal on a piano softens the tone during the time the pedal is pressed. When Soft On is received, the cutoff frequency will be lowered, causing a softer sound. When Soft Off is received, the previous sound will return.

Reverb Send Level (CC91)— This message adds a Reverb effect to the part.

Chorus Send Level (CC93)— This message adds a Chorus effect to the part.

Portamento (CC65), Portamento Time (CC05), Portamento Control (CC84)— See page 61 for details. When a Portamento message is received, the Portamento effect will be turned on or off. Portamento Time controls the speed of the pitch change. Portamento Control specifies the source note number (the previously played note).

RPN LSB, MSB (CC100/101) *, Data Entry (CC06/38) *— Since the function of RPN (Registered Parameter Number) messages is defined in the MIDI specification, this message can be used between devices of different types. The RPN MSB and LSB messages specify the parameter which is to be modified. Data Entry messages can be used to modify the value of that parameter. RPN can be used to adjust Pitch Bend Sensitivity, Master Coarse Tune, and Master Fine Tune.

Note: The values modified using RPN messages will not be initialized even if Program Change messages etc. are received to select other sounds.

NRPN LSB, MSB (CC98/99), Data Entry (CC06/38)— NRPN (Non-registered Parameter Number) messages can be used to modify the values of sound parameters unique to a particular device. The NRPN MSB and LSB messages specify the parameter which is to be modified, and then Data Entry messages can be used to modify the value of that parameter.

Since the GS format defines the function of several NRPN messages, GS compatible application programs can use NRPN messages to modify sound data parameters for Vibrato, Cutoff Frequency, Resonance, and Envelope values.

Note: The values modified using NRPN messages will not be initialized even if program change messages etc. are received to select other sounds.

Note: With the factory settings, the VA-3 will ignore NRPN messages. After a GS Reset message is received, NRPN messages will be received. You can also manually turn on Rx NRPN (NRPN Receive Switch), so that NRPN messages will be received.

Aftertouch (Channel Pressure only *) — Aftertouch is a message that conveys the pressure applied to the keyboard after playing a note, so that this information can be used to control various aspects of the sound. There are two types of Aftertouch message: Polyphonic Key Pressure which is transmitted separately for each note, and Channel Aftertouch which is transmitted as one value that affects all notes on the specified MIDI channel.

Note: Though the VA-3's keyboard does not generate these messages, the sound source receives them.

All Sounds Off— This message turns off all currently-sounding notes.

All Note Off message *— This message causes a note-off message to be sent to each note of the specified channel that is currently on. However, if Hold 1 or Sostenuto are on, the sound will continue until these are turned off.

Reset All Controllers *— This message returns controller values (modulation, Pitch Bend, etc.) to their initial settings. The following controller values for the specified channel will be reset to their initial values.

MIDI message	Initial value
Pitch Bend	0 (center)
Polyphonic Aftertouch	0 (minimum)
Channel Aftertouch	0 (minimum)
Modulation	0 (minimum)
Expression	127 (maximum)
Hold	0 (off)
Portamento	0 (off)
Soft	0 (off)
Sostenuto	0 (off)
RPN	no change
NRPN	no change

Note: Parameter values that were modified using RPN or NRPN will not change even when a Reset All Controller message is received.

Active Sensing— This message is used to check for broken MIDI connections, such as MIDI cables that have been disconnected, or are defective. The VA-3 transmits Active Sensing messages at set intervals. Once an Active Sensing message is received via MIDI IN, Active Sensing monitoring will begin, and if an Active Sensing message fails to arrive for more than 420ms, it is assumed that the cable has been disconnected. If this happens, all currently sounding notes will be turned off, the same procedure will be executed as if a Reset All Controller message was received, and Active Sensing monitoring will stop.

System Exclusive messages

System Exclusive (SysEx) messages are used to control functions which are unique to specific devices. Although Universal System Exclusive messages can be used even between devices of different manufacturers, most exclusive messages only apply to one type of instrument.

In order to recognize the device for which the data are intended, Roland exclusive messages contain a manufacturer ID, device ID and model ID.

Note: See the separate MIDI booklet for details about the SysEx messages recognized by the VA-3.

Universal System Exclusive— When a GM System On message is received, the VA-3 will be set to the basic GM settings. Also, NRPN and Bank Select messages will no longer be received once GM System On is received. The beginning of song data bearing the GM logo contains a GM System On message. This means that if you playback the data from the beginning, the sound generator will be automatically initialized to the basic settings.

GS Reset (GS Format System Exclusive)— When GS Reset is received, the VA-3 will be set to the basic GS settings. The beginning of song data bearing the GS logo contains a GS System Reset message. This means that if you play back the data from the beginning, the sound generating device will be automatically initialized to the basic settings.

Master Volume (Universal System Exclusive)— This is an exclusive message common to all newer MIDI devices. It controls the master volume of the entire VA-3.

Other System exclusive (SysEx) messages— The VA-3 can receive GS format exclusive messages (model ID 42H) that are common to all GS sound generators.

About MIDI implementation charts

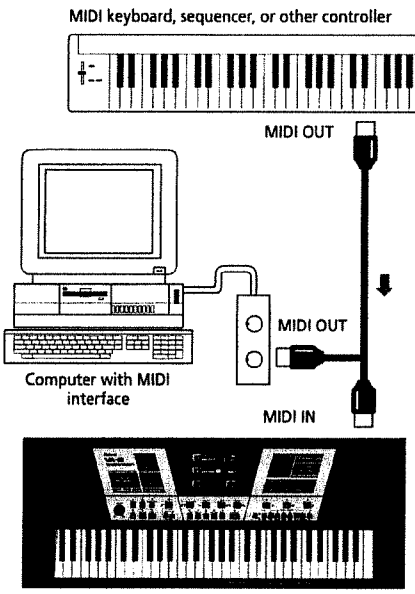
MIDI allows many different types of instruments to be connected, but in some cases there will be messages that cannot be conveyed meaningfully. For example, if you wish to use Aftertouch of an external instrument to control the sound, while the sound generator connected to the keyboard does not receive Aftertouch messages, you will not get the musical result you intend. Only messages that are used by both devices will actually be executed.

The MIDI specification requires that the owner's manual for each MIDI device include a "MIDI Implementation Chart" that shows the types of MIDI messages which are actually transmitted and received by a device. Put the *Transmitted* column of the transmitting device's implementation chart side by side with the *Received* column of the receiving device's implementation chart. Messages which are marked as "0" in both charts can be conveyed successfully. If either chart shows a "X" for a certain type of message, that message cannot be conveyed.

13.2 Preparations for using the MIDI functions

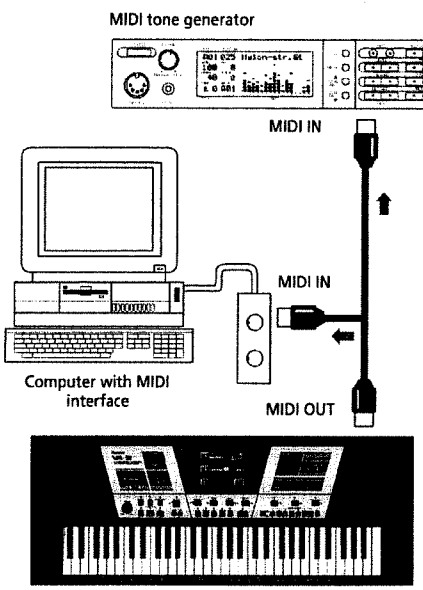
Receiving MIDI data (RX)

To take advantage of the VA-3's sounds while playing on an external keyboard or using a computer or sequencer, you must make the following connections:



Transmitting MIDI data (TX)

To have another instrument sound in response to the notes you play on the VA-3, or to record your music with a computer or external sequencer, you must make the following connections:



Note: Use only dedicated MIDI cables (optional) for establishing the connections.

The how-to's...

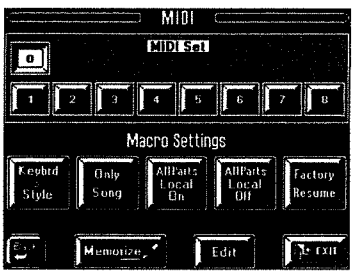
Selecting the MIDI mode

Do the following to gain access to the MIDI functions:

1. Press the [FUNCTION MENU] button.

2. On the display page that appears now, press the [MIDI] field.

The display now looks more or less as follows:



Working with Macros (this is optional)

The opening "MIDI" page contains five big fields with preset settings that you can select by pressing the corresponding fields. In fact, these fields perform the same function as the Resume fields for User Program 00 (see page 148). All you need to do is press them to restore the default settings for the sections or aspects in question.

Keybrd & Style— This field recalls the factory MIDI settings for the *Keyboard* (Upper 1/2, Lower 1/2, MEL Int, M.Drums) and *Arranger* parts (ADrums, ABass, Acc1~6). The most important (and practical) use for this field is to select the default MIDI channels after trying out several possibilities.

Note: This field applies to both reception (RX) and transmission (TX). The VA-3 indeed allows you to set separate TX and RX channels for each part.

Only Song— This field restores the factory settings for the VA-3's Song Composer parts. You may not have noticed it so far, but these are separate parts. Your VA-3 is indeed 32-part multitimbral.

All Parts Local On— See page 153 for details about the meaning of "Local". This parameter allows you to once again establish the connection between all VA-3 parts and the internal tone generator. This can be a big time saver if you don't remember which parts were set to Local "Off".

All Parts Local Off— Does the opposite of the above: it breaks the connections between all VA-3 parts and the internal tone generator.

Factory Resume— This field does all of the above (except Local Off) in one pass.

As soon as you press one of these fields, the number of the currently selected MIDI Set is indicated with an asterisk (*) to signal that the current settings no longer

correspond to the written settings. See page 158 for details about the MIDI Sets. **MIDI Set [0]** behaves exactly like the Free Panel buffer for User Programs: it is a buffer memory where your changes are stored temporarily. The VA-3's ROM chip also contains preset settings for this memory: those are the ones you select by pressing the [Factory Resume] field. See page 148 for a more detailed description. The explanations about the User Programs there are also true of the MIDI Sets and Macro Settings.

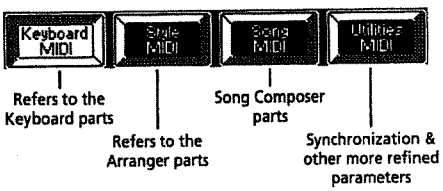
After setting the MIDI parameters, you may wish to write them to a MIDI Set (see page 158), so that they can be recalled when required. Selecting another MIDI Set may have a drastic effect on the way your VA-3 behaves in a MIDI setup.

What's next?

After performing step (3) below, you will notice four fields in the bottom row of the display.

3. Press the [Edit] field.

4. Press one of these fields to select the desired part group or the Utility functions:



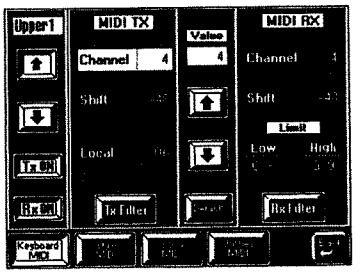
5. On the first three pages (Keyboard MIDI, Style MIDI, Song MIDI), use the [⬆][⬇] fields in the left column to select the part whose MIDI parameters you wish to set.

6. Press the parameter fields in the "TX" or "RX" column and choose the desired setting with the VALUE [⬆][⬇] fields at the center of the display.
You can also use the [TEMPO/DATA] dial.
TX is short for "transmission" (the data the VA-3 sends), while **RX** refers to "reception".

Press the [Default] field to select the preset (factory) values for the selected parameter.

13.3 Keyboard MIDI, Style MIDI, Song MIDI

Keyboard parts: [FUNCTION MENU]→ [MIDI] field→ [Keyboard MIDI] field
Arranger parts: [FUNCTION MENU]→ [MIDI] field→ [Style MIDI] field
Song parts: [FUNCTION MENU]→ [MIDI] field→ [Song MIDI] field



Seeing that these three pages feature the same parameters, we will discuss them together. Just remember to press the right field.

Part (left column)— This is where you select the part whose MIDI settings you wish to change. The selectable parts are:

Field	Available parts
Keyboard MIDI	Upper1, Upper2, Lower1, Lower2, M.Bass, M.Drums, MEL Int
Style MIDI	ADrums, ABass, Acc1~Acc6
Song MIDI	Part 1~Part 16

The Song parts are 16 additional parts that are available at all times for MIDI control. Of course, these parts are also used by the Song Composer and the 16-track Sequencer, in which case they also *transmit* data.

Channel (1~16)— Allows you to assign a MIDI receive (RX) or transmit channel (TX).
Note: Unless you have a very good reason to do otherwise, we suggest you always select the same TX (transmit) and receive (RX) channel numbers for a part.

Press the [Tx ON] or [Rx ON] field in the left column to select "Off" if the selected part must not transmit or receive MIDI data.

Shift— (–48~48) This parameter allows you to transpose the received or transmitted note messages before sending them to the VA-3's tone generator (RX) or an external instrument (TX). You could change the pitch of the received MIDI note messages, which may be useful if you are used to playing a song (that is being received via MIDI) in another key than the one the data were programmed in. The maximum possible transposition is four octaves up (48) or down (–48), each step representing a semitone.

Local

(On, Off – TX only) Set Local to On (default setting) whenever you want the VA-3 to respond to the notes you play on the keyboard. Setting Local to Off means that the part in question no longer controls the internal tone generator. When working with a sequencer

equipped with a *Soft Thru* (MIDI echo) function – and *only* if (i) you connect the VA-3's MIDI IN *and* OUT connectors to the external sequencer or computer, and (ii) use the VA-3 as MIDI master keyboard for sequencing – you may have to set this parameter to Off to avoid that each note is sounded twice (producing an unpleasant sound called *MIDI loop*). In all other cases, select On.

Note: A setting tantamount to Local Off can be achieved by muting a part (see page 83) and setting the Part Switch (see page 157) to Int.

Limit

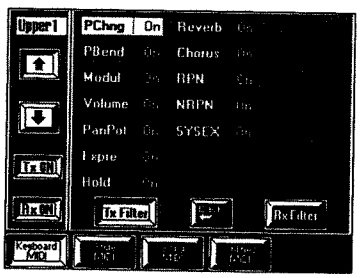
(High, Low: C-1~G9, RX only) High and Low allow you to set the note range to be received. If not all note messages on the selected MIDI channel should be received by the selected part, set the range to the desired values. This may be necessary when controlling the VA-3 from a MIDI accordion that sends the chord and bass notes on the same channel.

Note: The Low Limit cannot be set to a higher value than the High Limit (and vice versa).

Note: Some instruments start at C-2 and end at G8 (instead of C-1 and G9). You may have to "add an octave" to the value you see on the screen of your computer or external sequencer.

Filter

Press the [Tx Filter] field to filter outgoing MIDI messages. Press the [Rx Filter] field to prevent the reception of certain MIDI messages.



Here, you can specify for each parameter whether (On) or not (Off) the selected message should be received or transmitted. The MIDI messages you can filter are:

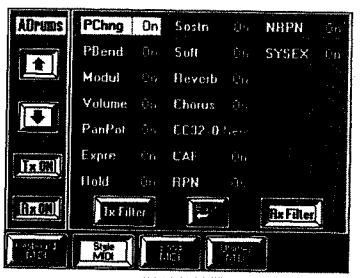
PChng— Program change messages (including Bank Select)
PBend— Pitch Bend messages
Modul— Modulation messages (CC01)
Volume— Volume messages (CC07)
PanPot— Pan(pot) messages (CC10)
Expre— Expression messages (CC11)
Hold— Hold (Sustain, Damper) messages (CC64)
Sostn— (RX only) Sostenuto messages (CC66)
Soft— (RX only) Soft messages (CC67)
Revrb— Reverb Send messages (CC91)
Chrus— Chorus Send messages (CC93)
CAF— (RX only) Channel Aftertouch
RPN— Registered parameter number (CC100/101)
NRPN— Non-registered parameter number (CC98/99)
SysEx— SysEx messages (system exclusive)
CC32= 0— (RX only) What to do when the received CC32 message equals 0 or is missing. For this parameter, you can select "4" (VA-3), "1", "2", or "3". You cannot filter this Bank Select message.

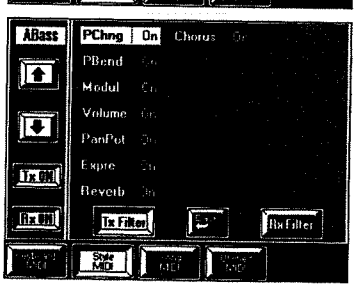
Note: See "MIDI messages used by the VA-3" on page 149 for details about these MIDI messages.

Press the [◄Back] field to return to the "regular" MIDI parameters.

Tx Filter page of the Style parts

The Style/Arranger parts only transmit and receive the following MIDI messages, which is why the list of parameters that can be filtered is a lot shorter:



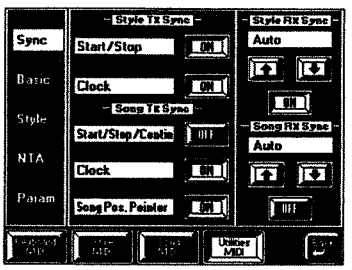


Note that the [NRPN] parameter is only available for the ADrums part – not for the melodic Arranger parts. The NRPN messages are used for "Drum Set Note & Pitch" (see page 132).

13.4 Utilities MIDI

MIDI Sync RX/TX

[FUNCTION MENU]→ [MIDI] field→ [Utilities MIDI] field→ [Sync] field



Style TX Sync

The Style TX Sync parameters allow you to specify whether or not the VA-3 should send MIDI realtime messages whenever you start the Arranger. Sending MIDI realtime (start, stop, clock) messages has the advantage that you can synchronize external instruments or computers with your VA-3.

Start/Stop— If you activate this option, the VA-3 will only send start or stop messages whenever you start (or stop) Arranger playback. In this case, no Clock messages are sent.

Clock— This option means that the Arranger sends Clock messages (usual synchronization method).

Use the [ON/OFF] fields to specify whether or not these messages should be transmitted.

Song TX Sync

Here are the switches for the transmission of MIDI realtime messages whenever you play back a Song using the VA-3's Song Composer:

Start/Stop/Continue— If you activate this option, the VA-3's Song Composer sends only Start/Stop and Continue messages. *Continue*, by the way, is a message used to signal that playback is not started from the beginning of a Song.

Clock— This option means that the Song Composer sends Clock messages. These are used to specify the tempo.

Song Position Pointer— If you select [ON], the Song Composer sends Song Position Pointer (SPP) messages. These messages are used to signal the current playback position, so that the slaved (synchronized) drum machine, sequencer, etc., automatically jumps to the correct position upon receiving a Song Position Pointer message.

Note: See your sequencer's etc. manual to find out whether it accepts Song Position Pointer messages.

Style RX Sync, Song RX Sync

The Style RX Sync and Song RX Sync parameters are used to specify whether and how the Arranger or Composer should be synchronized to external sequencers or drum machines. The available options are:

Internal— The Arranger or Song Composer will follow its own internal tempo.

Auto— This is a function for remote control of Arranger/Song Composer playback (using a PK-5, for example). If the VA-3 receives a MIDI Start message (FA), it looks out for Clock messages. If those Clock messages are *not* received (a PK-5, for instance, doesn't send them), the VA-3 starts playback using its internal tempo. If those Clock messages (F8) follow the Start message, the VA-3 uses the external tempo. You can, however, go on using the Arranger/Song Composer without MIDI Start/Clock messages, which is not possible when you select *MIDI*.

MIDI— The Arranger or Song can only be started or stopped with MIDI realtime messages (Start, Stop, Clock) coming from an external clock source.

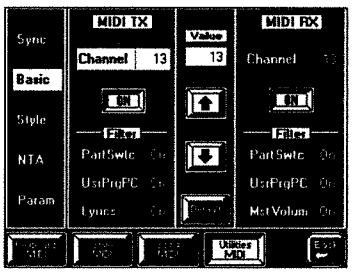
Remote— The Arranger or Song Composer waits for a start message to start playback at its own tempo. As soon as it receives a stop message, playback will stop.

On/Off

Use these switches to enable (On) or disable (Off) the reception of these messages.

Basic

[FUNCTION MENU]→ [MIDI] field→ [Utilities MIDI] field→ [Basic] field



The Basic Channel is used for several things: to receive and transmit Program Change and Bank Select messages for selecting User Programs, as well as for the reception and transmission of other kinds of messages that are not directly related to a specific MIDI channel but may affect the VA-3's parts (such as the Part Switch function, for example). That doesn't mean that the MIDI channel assigned to the Basic Channel function is of no importance. Only, the messages received on that channel may also apply to other aspects of your VA-3.

TX/RX Channel

(1~16) Use these parameters to assign an RX (receive) or transmit (TX) channel to the Basic Channel function. If you do not want the Basic Channel messages to be received (or transmitted), press the [ON/OFF] field so that it reads [OFF].

Filter

There are three functions for which you can specify whether (On) or not (Off) the corresponding MIDI messages should be received (or transmitted):

PartSwtc— Whenever you mute or un-mute a part on the Mixer pages, your VA-3 sends an NRPN message that describes your action. The VA-3 allows you to keep it from sending that message (or to respond to it whenever it is received from an external instrument). Filtering these messages on the TX side may be useful to keep your external sequencer from recording them – or the receiving GS module from muting the part assigned to that channel.

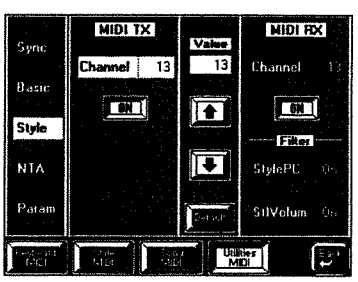
UsrPrgPC— This parameter is used to filter the transmission (TX) or reception (RX) of program change and bank select messages relative to User Program selection.

MstVolum (RX only)— This parameter allows you to enable or disable the reception of Master Volume messages (see page 151) that would change the volume of the entire VA-3.

Lyrics (TX only)— The Lyrics function of your VA-3 is MIDI message used to transmit the words (or lyrics) contained in a Standard MIDI File (as meta-text events). Playing back Standard MIDI Files that contain lyrics data causes the VA-3 to send these data on the Basic Channel – unless you set this filter to [OFF]. Select [ON] if you want to transmit Lyrics data to an LVC-1 Lyrics-to-Video Converter.

Style

[FUNCTION MENU]→ [MIDI] field→ [Utilities MIDI] field→ [Style] field



The Style Channel is a MIDI channel used for receiving and transmitting Program Change and Bank Select messages allowing you to select Styles via MIDI, and volume messages that change the volume of a Style. Note that these two message types can only be filtered individually in the RX column (i.e. you can select whether or not to *receive* them).

Style selection via MIDI

The MIDI address of a Music Style consists of three elements: a Program Change number, a CC00 number, and a CC32 number. CC00 and CC32 are Bank Select messages. The values assigned to CC00 and CC32 define the Style, whereas the Program Change number defines the pattern (Intro, Ending, etc.). Sending only a Program Change number will select another pattern of the currently active Style. Only when the Program Change number is preceded by two values (for CC00 and CC32) will the VA-3 select another Music Style.

Note: Whenever you select another Style on your VA-3, it transmits a CC00-CC32-PC cluster on the Style channel.

Channel

(1~16) Allows you to assign a MIDI channel to the Style select feature. If you don't want the Style Channel messages to be received (or transmitted), press the [ON/OFF] field in question so that it reads [OFF].

Filter (RX only)

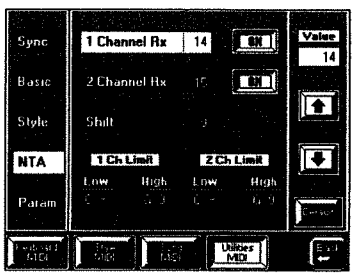
You can filter two types of messages:

StlVolum— Volume messages relating to the Music Styles. Select Off if the VA-3 must not receive them.

StylePC— Program Change and Bank Select messages for Style selection. Select Off if the VA-3 must not select other Styles or patterns in response to these incoming messages.

NTA: Note-to-Arranger

[FUNCTION MENU]→ [MIDI] field→ [Utilities MIDI] field→ [NTA] field



NTA notes are only received from an external MIDI instrument. Whatever you play in the chord recognition area of the keyboard to feed the Arranger is automatically converted to the corresponding MIDI note numbers. Unlike other arranger instruments, your VA-3 is blessed with the capability of sending the note numbers of all Arranger parts, so that you could use the internal or your own Styles to quickly record a song with band backing on an external sequencer. As every single note of the Music Style is recorded, there is no need to transmit the note messages used to feed the Arranger (the NTA notes).

1 Channel Rx/2 Channel Rx

(1~16) The NTA notes can be received on two MIDI channels, so that you could control the VA-3's Arranger using a MIDIfied accordion or any other instrument capable of sending accompaniment data (or data used to control the accompaniment) on two channels (such as organs with bass pedals, for example). Use the [⬆][⬇] fields in the right column to set the desired value. Either channel can be switched off using its [ON/OFF] field.

Note: You cannot assign the same MIDI channel to 1 & 2 Channl Rx.

Shift

(–48~48) This parameter allows you to transpose the received note messages before sending them to the Arranger. The maximum possible transposition is four octaves up (48) or down (–48), each step representing a semitone.

1 Ch Limit, 2 Ch Limit (C-1~G9)

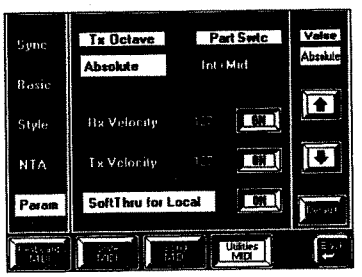
High and Low allow you to set the note range to be received. If not all note messages on the selected MIDI channel should be received by the NTA "part", set the range to the desired values.

Note: The Low Limit cannot be set to a higher value than the High Limit (and vice versa).

Note: Some instruments start at C-2 and end at G8 (instead of C-1 and G9). You may have to "add an octave" to the value you see on the screen of your computer or external sequencer.

MIDI parameters (Param)

[FUNCTION MENU]→ [MIDI] field→ [Utilities MIDI] field→ [Param] field



This page contains several parameters that are not related to one other (the other MIDI pages always concentrate on one aspect).

Tx Octave

(Absolute, Relative) The TX Octave parameter can be set to **Absolute** or **Relative**. It applies to Tone selection. You may have noticed that whenever you assign a bass sound to the Upper1 part in SPLIT mode, the notes are transposed in such a way that you can play a meaningful bass line using the Upper1 part. *Relative* means that this internal (and automatic) transposition is translated into note numbers, so that playing a C4 (note number 60) may actually result in note number 36 being used and sent to the MIDI OUT port. This, of course, depends on the Tone you assign to the Upper1 part.

In *Absolute* mode, however, the MIDI note number sent to the MIDI OUT port will be the one assigned to the key you press (e.g. note number 60). The advantage of Absolute is that you can play a bass line using the VA-3's Upper1 part and double it with a trumpet of an external instrument.

PartSwtc

The Part Switch parameter allows you determine what happens when you mute a part (see "Muting parts" on page 83). One thing you *know* will happen is that the part in question no longer sounds when you play on the keyboard – even though its field on the KEYBOARD MODE page (accessible via the [OTHER] button) is displayed in white, or even though the Arranger is playing. What you do *not* see, however, is whether a muted part still sends MIDI data. *PartSwtc* allows you to specify whether or not a muted part should go on sending MIDI messages:

Int— A muted part can no longer be played via the VA-3's keyboard or Arranger but continues to send MIDI messages to MIDI OUT.

Int+Mid— A muted part can no longer be played via the VA-3's keyboard or Arranger and no longer sends MIDI messages.

Selecting *Int* and muting a part thus has the same effect as selecting Local Off (see page 153). Choose whichever is more convenient in a given situation: part mute can be saved to a User Program, while Local and Part Switch can only be saved to a MIDI Set.

Rx Velocity, Tx Velocity

Your VA-3 is equipped with a velocity-sensitive keyboard and a tone generator capable of responding to velocity messages. Velocity messages are an important element for musical expression because the way you strike a key results in a loud/bright or soft/round note, telling the listener something about your feelings.

In some cases, however, it may be wiser not to convey the velocity aspect of music making to emulate instruments that are not velocity sensitive (such as organs, for example). The VA-3 allows you to activate or deactivate the transmission and/or reception of velocity messages. Use the associated [ON/OFF] fields to switch the reception (RX) or transmission (TX) of velocity messages on or off.

If you select [OFF], you have to tell your VA-3 which velocity value to use instead of the continuous flux normally received (in this case, the word *receive* applies to both incoming MIDI data and the messages received from the VA-3's keyboard). That is what **Rx Velocity** and **Tx Velocity** are for. The value you set will

be used for all notes received via MIDI IN (RX) or sent to MIDI OUT (TX) – but only when the corresponding velocity filter is set to [OFF].

SoftThru for Local

This function actually overrides the MIDI specifications, according to which the MIDI OUTput of an instrument only sends messages generated on the instrument itself (e.g. your VA-3). When you set Soft Thru to On, all notes received on the NTA channel beyond the NTA's High and Low Limits are re-transmitted to the MIDI OUTput. Use the Soft Thru feature for a digital piano or other keyboard instrument without split function.

When you set Soft Thru to On, The VA-3 sends a Local message (CC122) with a value "0" to the digital piano, so that the piano's sound source no longer responds to the notes you play on its keyboard. Seeing that the VA-3 echoes back all notes that are not used to trigger the Arranger, you hear what you play on the piano – except in the zone set apart for the Arranger. (This requires that you also connect the VA-3's MIDI OUTput to the digital piano's MIDI INput.)

When you set Soft Thru back to Off, the VA-3 sends a Local message with a value "127", thereby switching the piano's Local function back on.

13.5 MIDI Sets

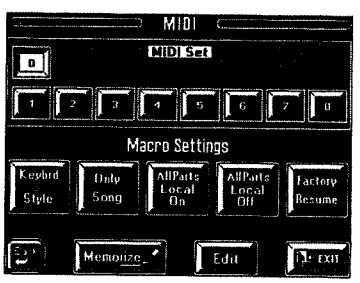
MIDI Sets are memories for the settings you make in MIDI mode. The VA-3 has eight MIDI Set memories on board that you can use to change your MIDI configuration. You can also save your MIDI Sets to disk and load them whenever necessary. Furthermore, you can link a MIDI Set to a User Program (see page 95), and specify which MIDI Set should be loaded each time you switch on the VA-3 (see below). If you need to reset some or all MIDI parameters to their default values, loading the *Macro Settings* (see page 152) may be a wiser choice than selecting a MIDI Set.

Saving a MIDI Set

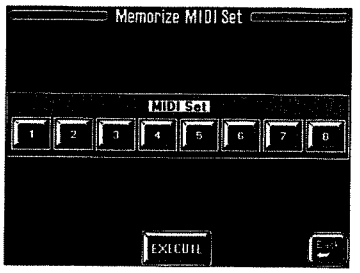
1. Press the [FUNCTION MENU] button.

2. On the display page that appears now, press the [MIDI] field.

The display now looks more or less as follows:



3. Press the [Memorize] field.



4. Press the field that corresponds to the MIDI Set that should contain your MIDI settings ([1]~[8]).

5. Press the [EXECUTE] field.

The display confirms that the settings have been written to the selected memory and returns to the page of step (1) on page 91.

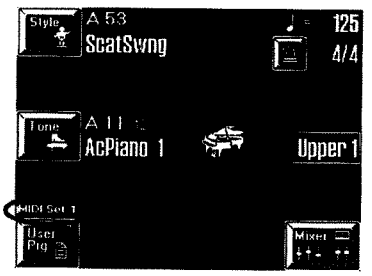
Selecting a MIDI Set

1. See steps (1) and (2) under "Saving a MIDI Set".

2. Press a [1]~[8] field that corresponds to the MIDI Set you need.

You can also select MIDI Set [0] so as to work with the (temporary) setting in that memory. See also page 152.

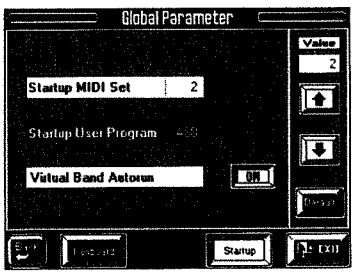
The Master page looks as follows when you work with a MIDI Set:



MIDI Set selection at power-on

Whenever you switch on the VA-3, it automatically selects MIDI Set 0. But maybe you prefer to be "operational" right away. In that case, tell the VA-3 which MIDI Set it should recall whenever you switch it on:

1. Press the [FUNCTION MENU] button.
2. Press the [Global Parameter] field on the *Function Menu.*
3. Press the [Startup] field in the bottom row of the display.

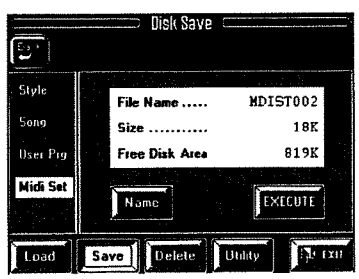


4. Press the [Startup MIDI Set] field so that it is displayed in white.
5. Use [⬆][⬇] or the [TEMPO/DATA] dial to select the MIDI Set to be recalled.
If you don't want a MIDI Set to be recalled, select "Off".
6. Press [EXIT] to return to the Master page.

Saving MIDI Sets to disk

After programming 8 MIDI Sets, you may find that you need a few more and that you have to make room for the new MIDI Sets. To do so without losing the previously saved MIDI Sets, you must save the "old" set to disk. Even if you do not program more than 8 MIDI Sets, it is a good idea to make a backup copy of your MIDI Sets in case someone else starts fiddling around with your settings.

1. Press the [FUNCTION MENU] button.
2. Press the [Disk] field.
3. On the display page that appears now, press the [Save] field in the bottom row and the [Midi Set] field in the left column.



Before saving a MIDI Set to disk, you should name it. Press the [Name] field and choose a name that tells you something about the contents. (You can only program a "File Name", because the names of the MIDI Sets are never displayed.) See page 55 for how to enter the name.

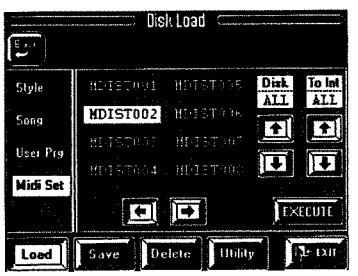
4. Insert a formatted floppy disk into the drive.
5. Press [EXECUTE] to save your MIDI Set to disk.
Remember that your VA-3 is multitasking, so that you can leave this page as soon as the VA-3 starts saving the MIDI Set to disk.
6. Press [EXIT] to return to the Master page.

Note: When saving, the term "Set" is used to refer to all 8 MIDI Set memories. When you save "a" MIDI Set to disk, you save in fact the contents of all eight MIDI Set memories. Loading, on the other hand can be carried out selectively.

Loading a MIDI Set from disk

As stated in the above note, you are free to load just one MIDI Set container of a given MIDI Set on the selected disk. Feel free to only load MIDI Set container 3 from a given MIDI Set if you do not need the other 7 settings of that Set.

1. Press the [FUNCTION MENU] button.
2. Press the [Disk] field.
3. On the display page that appears now, press the [Load] field in the bottom row and the [Midi Set] field in the left column.

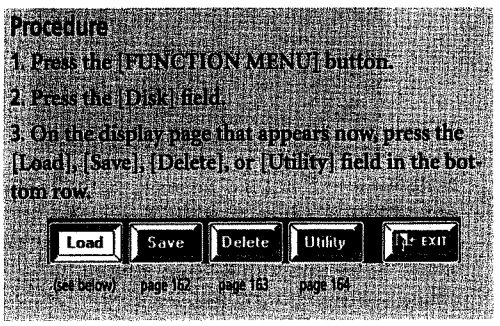


4. Press the field that corresponds to the MIDI Set whose data you wish to (partially) load.
If the name of the desired MIDI Set is not displayed, use the [⬅][➡] fields to select another group of eight MIDI Set names.
5. Use the "Disk" [⬆][⬇] fields to select the MIDI Set container to be loaded from disk.
You can also select ALL, which means that all eight containers of the selected MIDI Set will be loaded. In that case, you cannot select the destination memory (see below).
6. Use the "To Int" [⬆][⬇] fields to select the internal MIDI Set memory you wish to load the selected settings to.
You can select "To Int"= 1, =2, =3..., =8. Note that this is only possible if you did not select "ALL" for "Disk".
7. Press the [EXECUTE] field to load the MIDI Set data.
8. Press [EXIT] to return to the Master page.

The possibility to selectively load MIDI Set containers allows you to compile "Best Of" MIDI settings by loading them to different internal MIDI Set memories. After loading your 8 favorite MIDI settings, use the Save function to save the "Best Of" MIDI Set to disk.

14. Disk functions

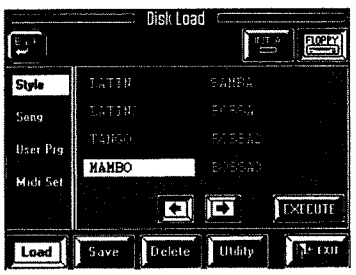
This is where you will find functions and parameters relating to saving, loading, deleting files, and to formatting new disks or disks previously used on other instruments or devices.



14.1 Disk Load (loading data from disk)

Load Style/copy Style

[FUNCTION MENU]→ [Disk] field→ [Load] field→ [Style] field



This page allows you to load Styles from disk or to copy a ROM Style to the Style RAM memory (Disk User).

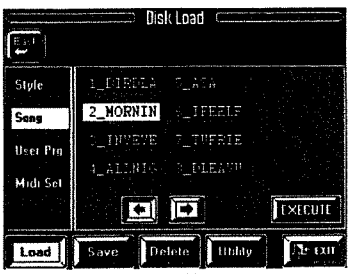
(**source**)— These fields allow you to select the internal memory (ROM Styles) or a disk. Press [INT A] to copy a ROM Style (i.e. one of the 64 factory Styles) to the Disk User memory. When you press [INT A], the Style names in the Music Style window are preceded by a number (A11~A88). When you select a disk, only the Style name is displayed.

Selection— Press the field of the Style you wish to load (or copy). If the desired Style is not displayed, use the [◄][►] fields to scroll through the list of available Styles. You can also use the [TEMPO/DATA] dial and –for ROM Styles– the BANK/NUMBER pad.

Execute— Press this field to confirm your settings and load the data.

Load Song

[FUNCTION MENU]→ [Disk] field→ [Load] field→ [Song] field



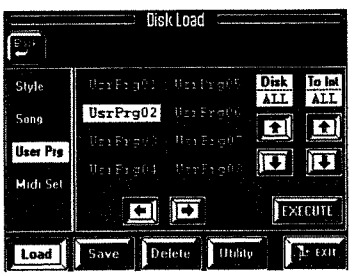
This function allows you to load a song from disk, thereby overwriting the song currently in the VA-3's Song RAM memory.

Selection— Press the field of the song you wish to load. If the desired song is not displayed, use the [◄][►] fields to scroll through the list of available songs. You can also use the [TEMPO/DATA] dial.

Execute— Press this field to confirm your settings and load the data.

Load User Prg

[FUNCTION MENU]→ [Disk] field→ [Load] field→ [User Prg] field



This where you can load User Program *Sets*. These are groups of 128 User Programs whose main use is for archiving your internal settings. Loading User Program Sets from disk can be selective, i.e. feel free to load only one User Program, or comprehensive (the contents of all 128 User Programs).

Selection— Press the field of the User Program Set whose data you wish to load. If the desired name is not displayed, use the [◄][►] fields to scroll through the list. You can also use the [TEMPO/DATA] dial.

Disk (1~128, All)— Use these two [▲][▼] fields to select a specific User Program from the selected User Program Set on disk, or select "ALL" to load all User Programs of that Set.

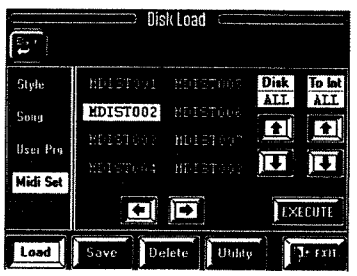
To Int (1~128, ALL)— Use these two [▲][▼] fields to specify the User Program memory that should contain the selected data. If you select ALL for *Disk*, ALL is the only option here. Furthermore, ALL cannot be selected when you selected a specific User Program for *Disk*.

Note: By selecting ALL, you not only load the User Program Set data but also the Disk Link settings it contains. These will replace the internal settings, so be sure to save the current Disk Link settings to disk before loading an entire User Program Set. Use "Save User Program Set" on page 163 to do so.

Execute— Press this field to confirm your settings and load the data.

Load MIDI Set

[FUNCTION MENU]→ [Disk] field→ [Load] field→ [Midi Set] field



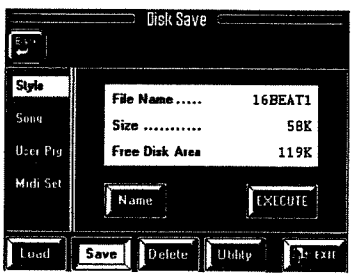
Loading MIDI Sets from disk can be selective, i.e. feel free to load only one MIDI Set of a "MIDI Set-Set" (consisting of eight MIDI Sets). See page 159 for details. If you select ALL for *Disk*, all 8 MIDI Set memories will be overwritten.

14.2 Disk Save (saving data to disk)

In this manual and while designing the VA-3, we tried to make a clear distinction between *saving* and *writing/memorizing* data. The terms *write/memorize* are used to describe actions that cause certain settings to be saved to an internal memory. *Save*, on the other hand refers to the act of copying internal memory settings to disk.

Save Style

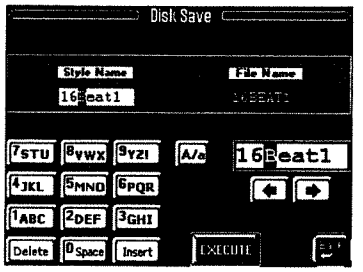
[FUNCTION MENU]→ [Disk] field→ [Save] field→ [Style] field



Use this function to save a newly programmed or edited User Style to disk. You should do so as frequently as possible.

Execute— Press [EXECUTE] to confirm your settings and save the data to disk.

Press the [Name] field if you want to name your Style



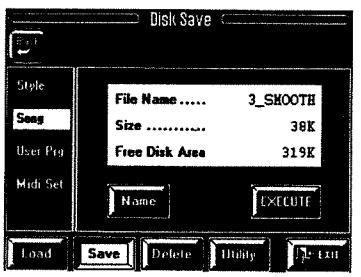
Style Name— This is the "internal" name of a Music Style. This name appears on the Master page, the Music Style selection page, etc. It is usually the "meaningful" name. Press this field and enter the Style Name. See page 55 for details.

File Name— This is the name the Music Style has on disk and by which the VA-3 recognizes it (its "address"). If you change this name of a Music Style, the Disk Link function no longer finds the Style. Press this field and enter the desired name. See also page 55.

See page 128 for details.

Save Song

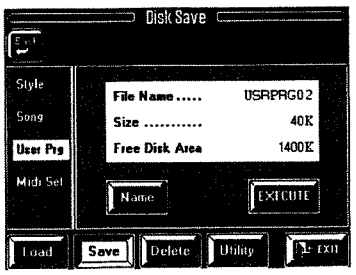
[FUNCTION MENU]→ [Disk] field→ [Save] field→ [Song] field



This page allows you to save the Song that is currently in the VA-3's Song RAM memory to disk. See page 54 for details.

Save User Program Set

[FUNCTION MENU]→ [Disk] field→ [Save] field→ [User Prg] field



This function allows you to save all 128 User Programs as a set. This also includes the Scale Tuning memories, One Touch assignments, and Disk Link Style assignments. The *Size* value indicates the capacity required to save the User Program Set to disk, while *Free Disk Area* tells you something about the remaining disk capacity.

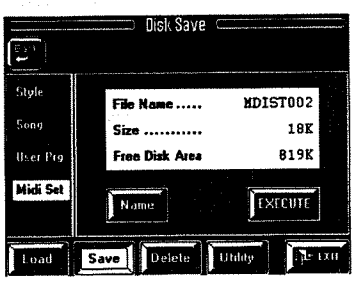
[Name]— Press this field to name your User Program Set.

File Name— See above for details.

Execute— Press [EXECUTE] to confirm your settings and save the data to disk.

Save MIDI Set

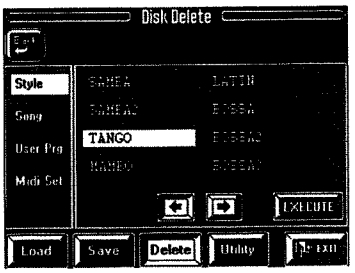
[FUNCTION MENU]→ [Disk] field→ [Save] field→ [Midi Set] field



This function allows you to save all 8 MIDI Sets as a set. The *Size* value indicates the capacity required to save the "MIDI Set-Set" to disk, while Free Disk tells you something about the remaining disk capacity. See also "Saving MIDI Sets to disk" on page 159.

14.3 Delete

[FUNCTION MENU]→ [Disk] field→ [Delete] field



The Delete function allows you to erase the selected file, which may be necessary if the "Disk Full" message is displayed when you try to save a file to disk. Be careful to select the right file type using the fields in the left column before pressing [EXECUTE]. Also note that User Program and MIDI Sets contain 128 or 8 different settings, which means that you may lose a lot more than originally intended.

Here's what the Delete functions allow you to throw away:

File Type (field)	What's deleted
Style	One Style on the selected disk.
Song	One song on the selected disk.
User Prg	A User Program Set that contains 128 User Programs (plus the Disk Link assignments, 3 Scale Tuning memories, plus other settings).
Midi Set	A MIDI Set (8 MIDI Set memories).

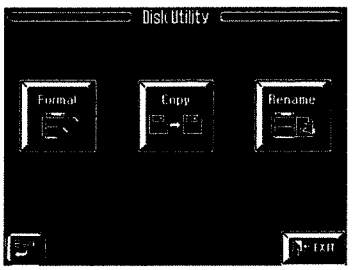
Selection— Press the field of the file you wish to delete. If the desired file is not displayed, use the [←][→] fields to scroll through the list. You can also use the [TEMPO/DATA] dial.

Execute— Check again whether you really selected the file you wanted to delete, then press [EXECUTE] to delete the file.

Note: The Delete operation cannot be undone.

14.4 Disk Utility

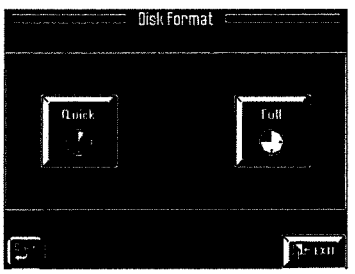
1. Press the [FUNCTION MENU] button.
2. Press the [Disk] field.
3. Press the [Utility] field.
The display now looks as follows:



4. Press the field that corresponds to the desired option.

Format

[FUNCTION MENU]→ [Disk] field→ [Utility] field→ [Format]



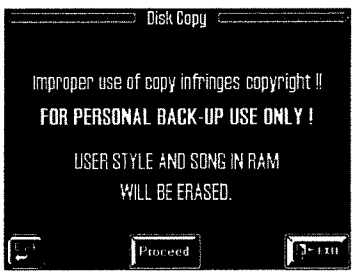
This function allows you to format the disk. It would be a good idea to also format floppy disks formatted for MS-DOS® because that speeds up disk access. All other disks must be formatted by the VA-3 to be usable. To this end, the VA-3 provides two formatting options. See "Formatting a disk" on page 96 for details.

Copy functions

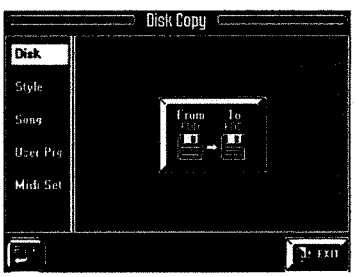
Copying an entire floppy disk to another floppy

WARNING— Copying files from a disk means that the VA-3's Style RAM and Song RAM memories are erased. If you haven't yet saved your last song to disk, you should do so before proceeding. See page 54 for details.

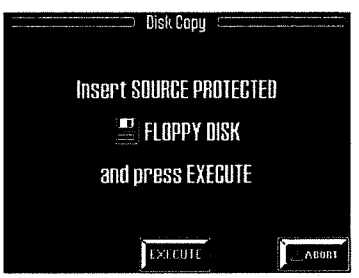
1. On the Disk Utility menu, press the [Copy] field.
The display now responds with a warning regarding copyright legislation.



2. Press the [Proceed] field.
3. On the page that appears now, press the [Disk] field in the left column.



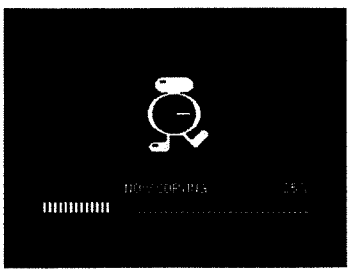
4. Press the [From FDD→ To FDD] field.
The display now responds with *Insert Source Protected Disk*.
5. Slide the protect tab of the disk you wish to copy in the Protect position and insert the floppy into the floppy disk drive.
Note: It will be impossible to copy the desired floppy disk if you do not write-protect it. In that case, the message "Source Disk unprotected" appears and the display returns to the following page.



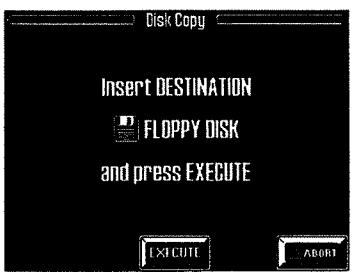
6. Press the [EXECUTE] field to start the copy operation.

Note: Press the [ABORT] field if you do not want to copy the floppy disk after all.

The display now displays an animated clock to signal that some (or all) data are being copied to the VA-3's RAM memory.



Once the first chunk of data has been loaded, following message appears:



7. Remove the original floppy (the SOURCE disk) from the drive and insert the one (DESTINATION) you wish to copy the data to.

Note: Be careful to set the PROTECT tab of the Destination disk to the WRITE (or OFF) position.

Note: You need to use the same disk type as the one of the Source disk. If that was a 2DD disk, insert a 2DD disk. If the Source disk is a 2HD disk, use a 2HD disk.

8. Press [EXECUTE] again.

This time, the data in the VA-3's RAM memory are copied (saved) to the destination disk. If all data were copied in one go, the "Function complete" message appears and you're done. If only part of the data was loaded from the source disk, the "Insert SOURCE Protected Floppy Disk" message appears again. In that case, go back to step (5) and continue until the message "OK Function Complete" is displayed.

9. Press [EXIT] to jump to the Master page (see page 22).

Copying single files from floppy to floppy (example: copying songs)

WARNING— Copying files from a disk means that the VA-3's Style RAM and Song RAM memories are erased. If you haven't yet saved your last song to disk, you should do so before proceeding. See page 54 for details.

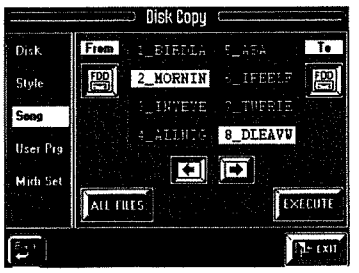
1. On the Disk Utility menu, press the [Copy] field.

The display now responds with a warning regarding copyright legislation.

2. Press the [Proceed] field.

3. Insert the floppy disk that contains data you wish to copy into the drive.

4. Press the field that corresponds to the file type you wish to copy. To copy songs, for example, press the [Song] field:



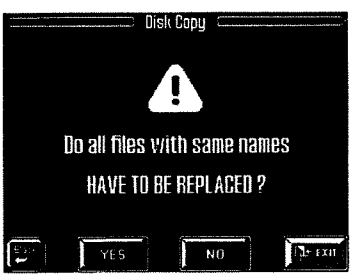
5. Press the fields of all songs you wish to copy.

Press the [ALL FILES] field to select all songs on the inserted floppy disk. Use the [◄][►] fields or the [TEMPO/DATA] dial to select other groups of 8 files.

Note: Pressing a white field again will "unmark" the song file in question. Files whose fields are blue are not copied.

6. Press the [EXECUTE] field to start the copy operation.

You are now asked whether it is OK to overwrite all files on the Destination disk that have the same file names as the Songs you are about to copy.



7. Press the [YES] field if it is OK to overwrite any song with the same file name on the destination disk.

Press the [NO] field if files on the Source disk that have the same name as existing files on the Destination disk should not be copied (only files with "original" names will be copied in that case). Press [EXIT] to abort the Copy operation.

If you press [YES] or [NO], the VA-3 copies the first chunk of data to its RAM memory, after which the display asks you to insert the destination disk.

Note: If the display tells you "Disk busy, can't execute", you should stop Arranger or Song Composer playback. This message means that the function cannot be executed because that RAM memory (Style or Song) is being accessed for playback, which is why it is impossible to copy the Song.

8. Remove the original floppy (the SOURCE disk) from the drive and insert the one (DESTINATION) you wish to copy the data to.

9. Press [EXECUTE] again.
The song file(s) is/are now transferred from the VA-3's internal memory to the Destination floppy disk.

Copying other file types

You can also copy other file types, either individually or as a bunch (with the [ALL FILES] field):

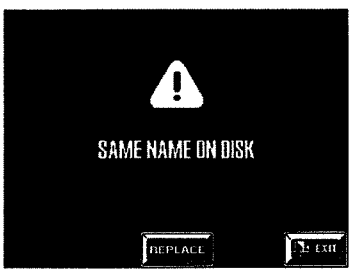
- Styles (Style),
- User Program Sets (User Prg),
- MIDI Sets (Midi Set),

With the exception of the fact that you need to select the desired file type using the fields in the left column, the procedure is exactly the same as for copying songs. Please see above for details.

Rename

The Rename functions allow you to modify the name of a file on the disk you inserted into the VA-3's disk drive. Please be aware that the selected file cannot be assigned the same name as that of another file on the same disk.

If you try to assign an already existing name to another file on the same disk, the display will respond with a message telling you that this is impossible:



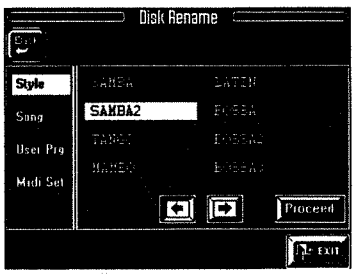
Press the [REPLACE] field to overwrite the other file, or the [EXIT] field if you wish to assign another name to the currently selected file.

1. Press the [FUNCTION MENU] button.

2. Press the [Disk] field.

3. Press the [Utility] field.

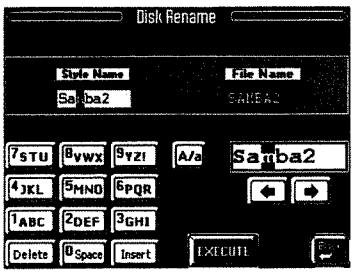
4. Press the [Rename] field.



5. Press the field of the file type you wish to rename (left column):
Styles (Style), User Program Sets (User Prg), MIDI Sets (Midi Set).

6. Press the field of the file you wish to rename.
Use the [◄][►] fields or the [TEMPO/DATA] dial to select other groups of 8 files.

7. Press the [PROCEED] field.



For Styles, and Songs, you can enter two names: the File Name and the Style/Song Name. The first is the file's "address" on the disk, while the second sometimes appears on the VA-3's display (see also page 55). For the remaining files, only the File Name can be set.

8. Press the [EXECUTE] field to save the file under the new name.

9. Press [EXIT] to return to the Master page.

15. Specifications

	VA-3 V-Arranger Keyboard
Keyboard	61 keys, synthesizer action, velocity-sensitive
Controllers	Tempo/Data dial, D Beam Controller, Bender/Modulation Lever, Master Volume knob
Tone generation / PCM	64-voice polyphonic, GM2/GS compatible, 32 multitimbral parts 3,641 sounds (20 MB worth of PCM samples) 116 Drum Sets incl. oriental Drum Sets
Digital effects	Reverb (8 types), Chorus (8 types), M-FX (DSP 47 types)
Arranger (automatic accompaniment)	64 Music Styles in ROM, 64 Disk Link Styles from floppy disk (incl. 16 Acoustic Styles), Disk User Style (instant access to one Style on floppy disk), Style Orchestrator & Morphing
	8-track User Styles Composer, SMF-to-Style Converter
Memories	128 User Programs, 4 programmable One Touch memories for each Style 5 Super Tone memories for instant Tone access (with programmable User level)
Display	Backlit VGA Touch Screen (LCD), new graphic user interface with animated icons
Navigation	Virtual Band (interactive Easy Routing), automatic and/or via button
Sequencer	Realtime SMF Player (with Minus-One function), Easy 2-track Recorder, Song Chain mode, 16-track sequencer with extensive editing functions, Song Header Post Edit, Lyrics display
Data storage	Floppy disk drive (2DD/2HD), realtime load, File types managed: Styles, Song SMF, User Program, MIDI Sets
Amplification	7 + 7W output power, 2-way Bass Reflex System
Connections	Output (L/mono, Right), Input (L/mono, Right), Sustain/Expression, 2x Phones
Power supply	ACJ 12V adapter
Dimensions	1016 (W) x 400 (D) x 142 (H) mm
Weight	9, 8 kg
Accessories	2 Floppy disks with additional Music Styles, User Programs, MIDI Sets & Demo Songs, Owner's Manual
Options	PK-5 Dynamic MIDI Pedal, MSA/MSD/MSE series floppy disks (Roland & third-party), RH-25/50 Headphones, DP-2 Pedal switch, DP-6 Pedal switch (piano type), BOSS FS-5U Foot Switch, EV-5 Expression pedal, BOSS FV-300L Foot Volume/Expression Pedal, KC-100/300/500 Keyboard Amplifiers

Specifications subject to change without prior notice.
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16. M-FX Types

Below please find a list of the M-FX types available on the VA-3.

TONE COLOR (filter type)

01 Enhancer

The Enhancer controls the overtone structure of the high frequencies, adding sparkle and tightness to the sound.

GUITAR AMPLIFIER EFFECTS

Here is what the abbreviations mean:

Small:	small amp
BItIn:	single-unit type amp
2-Stk:	large double-stack amp
3-Stk:	large triple-stack amp

02 Overdrv1 (Small)

Overdrive creates a soft distortion similar to that produced by tube amplifiers. Several types of overdrive are available (see the names between brackets).

03 Overdrv2 (BItIn)

04 Overdrv3 (2-Stk)

05 Overdrv4 (3-Stk)

06 Distort1 (Small)

This effect produces a more intense distortion than Overdrive.

07 Distort2 (BItIn)

08 Distort3 (2-Stk)

09 Distort4 (3-Stk)

MODULATION EFFECTS (EXCEPT CHORUS)

10 Phaser

A phaser adds a phase-shifted sound to the original sound, producing a twisting modulation that creates spaciousness and depth.

11 Auto Wah

The Auto Wah cyclically controls a filter to create cyclic change in timbre.

12 Rotary

The Rotary effect simulates the sound of a classic rotary speaker. The unique type of modulation characteristic of these speakers is of a striking realism. This effect is most suitable for electric organ.

13 StFlangr

This is a stereo Flanger. It produces a metallic resonance that rises and falls like a jet airplane taking off or landing.

14 SpFlangr

A Step Flanger is an effect in which the Flanger pitch changes in audible steps.

DYNAMICS EFFECTS

15 Compress

A compressor reduces signal peaks and boosts low levels, smoothing out unevenness in volume.

16 Limiter

A limiter prevents the volume from exceeding a certain level (Threshold) without boosting low levels.

CHORUS EFFECTS

"D" means *dry* (no effect), while "E" means *effect* (no unprocessed signal); "0" refers to the level.

17 Hexa Cho

Hexa chorus uses a six-phase chorus (six layers of chorused sound) to give richness and spatial spread to the sound.

18 Trem Cho

Tremolo chorus is a chorus effect with added Tremolo (cyclic modulation of the volume).

19 StChorus

This is a stereo chorus.

20 Space D

Space-D is a multiple chorus that applies two-phase modulation in stereo. It gives no impression of modulation, but produces a transparent chorus effect (the perfect "stereo maker").

DELAY & REVERB EFFECTS

"D" means *dry* (no effect), while "E" means *only effect* (no unprocessed signal).

21 St Delay

Delay is an effect that allows you repeat the input signal. By increasing the Feedback value (M-Val 1), you can control the number of repetitions. Negative values (–) invert the phase of the repeated signals.

22 Mod Dly

This effect adds modulation to the delayed sound, producing an effect similar to a Flanger.

23 3Tap Dly

The Triple Tap Delay produces three delay sounds; center, left and right.

24 4Tap Dly

The Quadruple Tap Delay has four delays.

25 TmCtrDly

This effect allows you to use M-Val 1 to control the delay time and pitch in realtime. Lengthening the delay time will lower the pitch, and shortening it will raise the pitch.

26 Reverb

27 GteRevNr

(Normal gated reverb)

Gate Reverb is a special type of reverb in which the reverberant sound is suddenly cut off (and does not gradually decrease).

28 GteRevRv
(Reversed gated reverb)

29 GteRevS1
(Sweep 1)

The reverberant sound moves from right to left.

30 GteRevS2
(Sweep 2)

The reverberant sound moves from left to right.

PITCH SHIFT (TRANSPOSITION) EFFECTS

31 2PitchShf

A Pitch Shifter shifts the pitch of the original sound. This 2-voice effect has two pitch shifters, and can add two pitch shifted sounds to the original sound.

32 Fb P.Shf

OTHER EFFECTS

33 OD►Chors

This effect connects an Overdrive and a Chorus in series.

34 OD►Flger

This effect connects an Overdrive and a Flanger in series.

35 OD►Delay

This effect connects an Overdrive and a Delay in series.

36 DS►Chors

This effect connects a Distortion effect and a Chorus in series.

37 DS►Flger

This effect connects a Distortion effect and a Flanger in series.

38 DS►Delay

This effect connects a Distortion effect and a Delay in series.

39 EH►Chors

This effect connects an Enhancer and a Chorus in series.

40 EH►Flger

This effect connects an Enhancer and a Flanger in series.

41 EH►Delay

This effect connects an Enhancer and a Delay in series.

42 Cho►Dly

This effect connects a Chorus and a Delay in series.

43 FL►Delay

This effect connects a Flanger and a Delay in series.

44 Cho►Flgr

This effect connects a Chorus and a Flanger in series.

EFFECTS CONNECTED IN PARALLEL

45 Cho/Dly

This effect connects a Chorus and a Delay in parallel.

46 FL/Delay

This effect connects a Flanger and a Delay in parallel.

47 Cho/Flgr

This effect connects a Flanger and a Chorus in parallel.

17. Reference

17.1 Tones

VA-3 Tones (Tone Map 4)

GBN	Var	PC	CC00	CC32	Name
A11		1	0	4	Piano 1
	1	1	1	4	UprightPiano
	2	1	2	4	Mild Piano
	3	1	8	4	Upright P w
	4	1	9	4	Mild Piano w
	5	1	16	4	European Pf
	6	1	24	4	Piano + Str.
	7	1	25	4	Piano + Str2
	8	1	26	4	Piano+Choir1
	9	1	27	4	Piano+Choir2
	10	1	45	4	AcPiano 2
	11	1	46	4	BritePno
	12	1	47	4	AcPiano 1
	13	1	126	4	Piano 2
	14	1	127	4	Acou Piano1
A12		2	0	4	Piano 2
	1	2	1	4	Pop Piano
	2	2	2	4	Rock Piano
	3	2	8	4	Pop Piano w
	4	2	9	4	Rock Piano w
	5	2	16	4	Dance Piano
	6	2	126	4	Piano 2
	7	2	127	4	Acou Piano2
A13		3	0	4	Piano 3
	1	3	1	4	EG+Rhodes 1
	2	3	2	4	EG+Rhodes 2
	3	3	8	4	Piano 3w
	4	3	47	4	StackedPiano
	5	3	126	4	Piano 2
	6	3	127	4	Acou Piano3
A14		4	0	4	Honky-tonk
	1	4	8	4	Honky-tonk 2
	2	4	126	4	Honky-tonk
	3	4	127	4	Elec Piano1
A15		5	0	4	E.Piano 1
	1	5	8	4	St.Soft EP
	2	5	9	4	Cho. E.Piano
	3	5	10	4	SilentRhodes
	4	5	16	4	FM+SA EP
	5	5	17	4	Dist E.Piano
	6	5	24	4	Wurly
	7	5	25	4	Hard Rhodes
	8	5	26	4	MellowRhodes
	9	5	44	4	PhaseRhodes
	10	5	45	4	SA E.Piano
	11	5	46	4	Tremolo Dyno
	12	5	47	4	Dyno Rhodes
	13	5	126	4	Piano 1
	14	5	127	4	Elec Piano2
A16		6	0	4	E.Piano 2
	1	6	1	4	E.Piano 3
	2	6	8	4	Detuned EP 2
	3	6	9	4	Detuned EP 3
	4	6	10	4	EP Legend
	5	6	16	4	St.FM EP
	6	6	24	4	Hard FM EP
	7	6	32	4	EP Phase
	8	6	47	4	Stack EPiano
	9	6	126	4	Piano 2
	10	6	127	4	Elec Piano3
A17		7	0	4	Harpsichord
	1	7	1	4	Harpsichord2
	2	7	2	4	Harpsichord3
	3	7	8	4	Coupled Hps.
	4	7	16	4	Harpsi.w
	5	7	24	4	Harpsi.o
	6	7	32	4	Synth Harpsi
	7	7	126	4	Piano 2
	8	7	127	4	Elec Piano4
A18		8	0	4	Clav.
	1	8	1	4	Clav. 2
	2	8	2	4	Atk Clav.1
	3	8	3	4	Atk Clav.2
	4	8	8	4	Comp Clav.
	5	8	16	4	Reso Clav.
	6	8	17	4	Phase Clav
	7	8	24	4	Clav.o
	8	8	32	4	Analog Clav.
	9	8	33	4	JP8 Clav. 1
	10	8	35	4	JP8 Clav. 2
	11	8	36	4	SynRingClav.
	12	8	37	4	SynDistClav.
	13	8	38	4	JP8000 Clav.

GBN	Var	PC	CC00	CC32	Name
A18	14	8	39	4	Pulse Clav
	15	8	126	4	E.Piano 1
	16	8	127	4	Honkytonk
A21		9	0	4	Celesta
	1	9	1	4	Pop Celesta
	2	9	47	4	CelestaBell
	3	9	126	4	Cho. E.Piano
	4	9	127	4	Elec Org 1
A22		10	0	4	Glockenspl
	1	10	126	4	E.Piano 2
	2	10	127	4	Elec Org 2
A23		11	0	4	Music Box
	1	11	1	4	Music Box 2
	2	11	8	4	St.Music Box
	3	11	126	4	Steel-str.Gt
	4	11	127	4	Elec Org 3
A24		12	0	4	Vibraphone
	1	12	1	4	Pop Vibe.
	2	12	8	4	Vib.w
	3	12	9	4	Vibraphones
	4	12	126	4	Steel-str.Gt
	5	12	127	4	Elec Org 4
A25		13	0	4	Marimba
	1	13	8	4	Marimba w
	2	13	16	4	Barafon
	3	13	17	4	Barafon 2
	4	13	24	4	Log drum
	5	13	126	4	12-str.Gt
	6	13	127	4	Pipe Org 1
A26		14	0	4	Xylophone
	1	14	8	4	Xylophone w
	2	14	126	4	Funk Gt.
	3	14	127	4	Pipe Org 2
A27		15	0	4	Tubular-bell
	1	15	8	4	Church Bell
	2	15	9	4	Carillon
	3	15	10	4	Church Bell2
	4	15	16	4	Tubularbellw
	5	15	126	4	Muted Gt.
	6	15	127	4	Pipe Org 3
A28		16	0	4	Santur
	1	16	1	4	Santur 2
	2	16	2	4	Santur 3
	3	16	8	4	Cimbalom
	4	16	16	4	Zither 1
	5	16	17	4	Zither 2
	6	16	24	4	Dulcimer
	7	16	126	4	Slap Bass 1
	8	16	127	4	Accordion
A31		17	0	4	Organ 1
	1	17	1	4	Organ 101
	2	17	2	4	Ful Organ 1
	3	17	3	4	Ful Organ 2
	4	17	4	4	Ful Organ 3
	5	17	5	4	Ful Organ 4
	6	17	6	4	Ful Organ 5
	7	17	7	4	Ful Organ 6
	8	17	8	4	Detuned Or1
	9	17	9	4	Organ o
	10	17	10	4	Ful Organ 7
	11	17	11	4	Ful Organ 8
	12	17	12	4	Ful Organ 9
	13	17	16	4	60's Organ1
	14	17	17	4	60's Organ 2
	15	17	18	4	60's Organ 3
	16	17	19	4	Farf Organ
	17	17	24	4	Cheese Organ
	18	17	25	4	D-50 Organ
	19	17	26	4	JUNO Organ
	20	17	27	4	Hybrid Organ
	21	17	28	4	VS Organ
	22	17	29	4	Digi Church
	23	17	30	4	JX-8P Organ
	24	17	31	4	FM Organ
	25	17	32	4	Organ 4
	26	17	33	4	Even Bar
	27	17	40	4	Organ Bass
	28	17	48	4	5th Organ
	29	17	126	4	Slap Bass 1
	30	17	127	4	Harpsi 1

GBN	Var	PC	CC00	CC32	Name
A32		18	0	4	Organ 2
	1	18	1	4	Jazz Organ
	2	18	2	4	E.Organ 16+2
	3	18	3	4	Jazz Organ 2
	4	18	4	4	Jazz Organ 3
	5	18	5	4	Jazz Organ 4
	6	18	6	4	Jazz Organ 5
	7	18	7	4	Jazz Organ 6
	8	18	8	4	Detuned Or2
	9	18	9	4	Octave Organ
	10	18	32	4	Organ 5
	11	18	33	4	Perc.Organ 2
	12	18	34	4	Perc.Organ 3
	13	18	35	4	Perc.Organ 4
	14	18	126	4	Slap Bass 1
	15	18	127	4	Harpsi 2
A33		19	0	4	Organ 3
	1	19	8	4	Rotary Org.
	2	19	16	4	Rotary Org.S
	3	19	17	4	Rock Organ 1
	4	19	18	4	Rock Organ 2
	5	19	24	4	Rotary Org.F
	6	19	47	4	L-Organ
	7	19	126	4	Slap Bass 1
	8	19	127	4	Harpsi 3
A34		20	0	4	Church Org1
	1	20	8	4	Church Org2
	2	20	16	4	Church Org3
	3	20	24	4	Organ Flute
	4	20	32	4	Trem.Flute
	5	20	33	4	Theater Org.
	6	20	126	4	Slap Bass 2
	7	20	127	4	Clavi 1
A35		21	0	4	Reed Organ
	1	21	8	4	Wind Organ
	2	21	16	4	Puff Organ
	3	21	126	4	Slap Bass 2
	4	21	127	4	Clavi 2
A36		22	0	4	Accordion F
	1	22	8	4	Accordion I
	2	22	9	4	Dist. Accord
	3	22	16	4	Cho. Accord
	4	22	24	4	Hard Accord
	5	22	25	4	Soft Accord
	6	22	47	4	It. Musette
	7	22	126	4	Slap Bass 2
	8	22	127	4	Clavi 3
A37		23	0	4	Harmonica
	1	23	1	4	Harmonica 2
	2	23	8	4	B.Harp Basic
	3	23	9	4	B.Harp Suppl
	4	23	126	4	Slap Bass 2
	5	23	127	4	Celesta 1
A38		24	0	4	Bandoneon
	1	24	8	4	Bandoneon 2
	2	24	16	4	Bandoneon 3
	3	24	126	4	Fingered Bs
	4	24	127	4	Celesta 2
A41		25	0	4	Nylon-str.Gt
	1	25	8	4	Ukulele
	2	25	16	4	Nylon Gt.o
	3	25	24	4	Velo Harmnix
	4	25	32	4	Nylon Gt.2
	5	25	40	4	Requint Gt.
	6	25	48	4	V Fl.Gtr 1
	7	25	49	4	V Fl.Gtr 2
	8	25	50	4	V Fl.Gtr 3
	9	25	51	4	V Fl.GtrRoll
	10	25	52	4	V RequintGt2
	11	25	126	4	Fingered Bs
	12	25	127	4	Syn Brass 1
A42		26	0	4	Steel-str.Gt
	1	26	8	4	12-str.Gt
	2	26	9	4	Nylon+Steel
	3	26	10	4	Atk Steel Gt
	4	26	16	4	Mandolin
	5	26	17	4	Mandolin 2
	6	26	18	4	MandolinTrem
	7	26	32	4	Steel Gt.2
	8	26	33	4	Steel + Body
	9	26	48	4	V Ac.Guitar1
	10	26	49	4	V Ac.Guitar2
	11	26	50	4	V Ac.Guitar3

GBN	Var	PC	CC00	CC32	Name
	12	26	51	4	V Ac.Gtr Hrm
	13	26	52	4	v Steel.Gt
	14	26	126	4	Picked Bass
	15	26	127	4	Syn Brass 2
A43		27	0	4	Jazz Gt.
	1	27	1	4	Mellow Gt.
	2	27	8	4	Pedal Steel
	3	27	48	4	v Jazz Gt.
	4	27	49	4	v Mellow Gt.
	5	27	50	4	v PedalSteel
	6	27	126	4	Picked Bass
	7	27	127	4	Syn Brass 3
A44		28	0	4	Clean Gt.
	1	28	1	4	Clean Half
	2	28	2	4	Open Hard 1
	3	28	3	4	Open Hard 2
	4	28	4	4	JC Clean Gt.
	5	28	5	4	Atk CleanGt.
	6	28	8	4	Chorus Gt.
	7	28	9	4	JC Chorus Gt
	8	28	16	4	TC FrontPick
	9	28	17	4	TC Rear Pick
	10	28	18	4	TC Clean ff
	11	28	19	4	TC Clean 2
	12	28	20	4	LP Rear Pick
	13	28	21	4	LP Rear 2
	14	28	22	4	LP RearAtack
	15	28	23	4	Mid Tone GTR
	16	28	24	4	Chung Ruan
	17	28	25	4	Chung Ruan 2
	18	28	48	4	v Clean Gt.
	19	28	49	4	v Clean Half
	20	28	50	4	v OpenHard 1
	21	28	51	4	v OpenHard 2
	22	28	52	4	v JC CleanGt
	23	28	53	4	v AtkCleanGt
	24	28	54	4	v Chorus Gt
	25	28	55	4	v JC ChrusGt
	26	28	56	4	v TCFrntPick
	27	28	57	4	v TC RearPk
	28	28	58	4	v TC Cln ff
	29	28	59	4	v LP Rear Pk
	30	28	60	4	v LP Rear 2
	31	28	61	4	v LP RearAtk
	32	28	126	4	Fretless Bs
	33	28	127	4	Syn Brass 4
A45		29	0	4	Muted Gt.
	1	29	1	4	Muted Dis.Gt
	2	29	2	4	TC Muted Gt.
	3	29	8	4	Funk Gt.
	4	29	16	4	Funk Gt.2
	5	29	24	4	Jazz Man
	6	29	48	4	v Muted Gt.
	7	29	49	4	v MuteDistGt
	8	29	50	4	v TC MutedGt
	9	29	51	4	v Funk Pop
	10	29	52	4	v Funk Gt.2
	11	29	126	4	Acoustic Bs.
	12	29	127	4	Syn Bass 1
A46		30	0	4	OverdriveGt
	1	30	1	4	Overdrive 2
	2	30	2	4	Overdrive 3
	3	30	3	4	More Drive
	4	30	4	4	Guitar Pinch
	5	30	5	4	Attack Drive
	6	30	8	4	LP OverDrvGt
	7	30	9	4	LP OverDrv
	8	30	10	4	LP Half Drv
	9	30	11	4	LP Half Drv2
	10	30	12	4	LP Chorus
	11	30	48	4	v Overdrv Gt
	12	30	49	4	v Overdrive2
	13	30	50	4	v Overdrive3
	14	30	51	4	v More Drive
	15	30	52	4	v LP OvDrvGt
	16	30	53	4	v LP HalfDrv
	17	30	54	4	vLP HalfDrv2
	18	30	55	4	v LP Chorus
	19	30	126	4	Choir Aahs
	20	30	127	4	Syn Bass 2
A47		31	0	4	DistortionGt
	1	31	1	4	Dist. Gt2
	2	31	2	4	Dazed Guitar
	3	31	3	4	Distortion
	4	31	4	4	Dist.Fast

GBN	Var	PC	CC00	CC32	Name
A47	5	31	5	4	Attack Dist
	6	31	8	4	Feedback Gt
	7	31	9	4	Feedback Gt2
	8	31	16	4	Power Guitar
	9	31	17	4	Power Gt.2
	10	31	18	4	5th Dist.
	11	31	24	4	Rock Rhythm
	12	31	25	4	Rock Rhythm2
	13	31	26	4	Dist Rtm GTR
	14	31	48	4	v Dist. Gt
	15	31	49	4	v Dazed Gtr
	16	31	50	4	v FeedbackGt
	17	31	51	4	v FeedbkGt2
	18	31	52	4	v Power Gtr
	19	31	53	4	v Power Gt.2
	20	31	54	4	v 5th Dist.
	21	31	55	4	v RockRhythm
	22	31	56	4	vRockRhythm2
	23	31	126	4	Choir Aahs
	24	31	127	4	Syn Bass 3
A48		32	0	4	Gt.Harmonics
	1	32	8	4	Gt. Feedback
	2	32	9	4	Gt.Feedback2
	3	32	16	4	Ac.Gt.Harmnx
	4	32	24	4	E.Bass Harm.
	5	32	126	4	Choir Aahs
	6	32	127	4	Syn Bass 4
A51		33	0	4	Acoustic Bs.
	1	33	1	4	Rockabilly
	2	33	8	4	Wild A.Bass
	3	33	9	4	Atk A.Bass
	4	33	16	4	Bass + OHH
	5	33	17	4	Bass + Ride
	6	33	45	4	AcBass 55
	7	33	46	4	AcBass 88Pro
	8	33	47	4	AcBass 88
	9	33	48	4	V Guitaron
	10	33	49	4	v AcoustkBs
	11	33	50	4	v Rockabilly
	12	33	51	4	v Wild Ac.Bs
	13	33	126	4	Choir Aahs
	14	33	127	4	Fantasy
A52		34	0	4	Fingered Bs
	1	34	1	4	Fingered Bs2
	2	34	2	4	Jazz Bass
	3	34	3	4	Jazz Bass 2
	4	34	4	4	Rock Bass
	5	34	5	4	Heart Bass
	6	34	6	4	AttackFinger
	7	34	7	4	Finger Slap
	8	34	8	4	ChorusJazzBs
	9	34	16	4	F.Bass/Harm.
	10	34	48	4	V Baby Bass
	11	34	126	4	Slow Strings
	12	34	127	4	Harmo Pan
A53		35	0	4	Picked Bass
	1	35	1	4	Picked Bass2
	2	35	2	4	Picked Bass3
	3	35	3	4	Picked Bass4
	4	35	4	4	Double Pick
	5	35	8	4	Muted PickBs
	6	35	16	4	P.Bass/Harm.
	7	35	126	4	Strings
	8	35	127	4	Chorale
A54		36	0	4	Fretless Bs.
	1	36	1	4	Fretless Bs2
	2	36	2	4	Fretless Bs3
	3	36	3	4	FretlessBs4
	4	36	4	4	Syn Fretless
	5	36	5	4	Mr.Smooth
	6	36	8	4	Wood+FlessBs
	7	36	126	4	Syn.Strings3
	8	36	127	4	Glasses
A55		37	0	4	Slap Bass 1
	1	37	1	4	Slap Pop
	2	37	8	4	Reso Slap
	3	37	9	4	Unison Slap
	4	37	126	4	Syn.Strings3
	5	37	127	4	Soundtrack
A56		38	0	4	Slap Bass 2
	1	38	1	4	Slap Bass 3
	2	38	8	4	FM Slap
	3	38	126	4	Organ 1
	4	38	127	4	Atmosphere
A57		39	0	4	Synth Bass 1
	1	39	1	4	SynthBass101
	2	39	2	4	CS Bass
	3	39	3	4	JP-4 Bass
	4	39	4	4	JP-8 Bass
	5	39	5	4	P5 Bass
	6	39	6	4	JPMG Bass
	7	39	8	4	Acid Bass

GBN	Var	PC	CC00	CC32	Name
A57	8	39	9	4	TB303 Bass
	9	39	10	4	Tekno Bass
	10	39	11	4	TB303 Bass 2
	11	39	12	4	Kicked TB303
	12	39	13	4	TB303 Saw Bs
	13	39	14	4	Rubber303 Bs
	14	39	15	4	Reso 303 Bs
	15	39	16	4	Reso SH Bass
	16	39	17	4	TB303 Sqr Bs
	17	39	18	4	TB303 DistBs
	18	39	19	4	Clavi Bass
	19	39	20	4	Hammer
	20	39	21	4	Jungle Bass
	21	39	22	4	Square Bass
	22	39	23	4	Square Bass2
	23	39	24	4	Arpeggio Bs
	24	39	32	4	Hit&Saw Bass
	25	39	33	4	Ring Bass
	26	39	34	4	AtkSineBass
	27	39	35	4	OB sine Bass
	28	39	36	4	Auxillary Bs
	29	39	40	4	303SqDistBs
	30	39	41	4	303SqDistBs2
	31	39	42	4	303SqDistBs3
	32	39	43	4	303Sqr.Rev
	33	39	44	4	TeeBee
	34	39	126	4	Organ 1
	35	39	127	4	Warm Bell
A58		40	0	4	Synth Bass 2
	1	40	1	4	SynthBass201
	2	40	2	4	Modular Bass
	3	40	3	4	Seq Bass
	4	40	4	4	MG Bass
	5	40	5	4	Mg Oct Bass1
	6	40	6	4	MG Oct Bass2
	7	40	7	4	MG Blip Bs
	8	40	8	4	Beef FM Bass
	9	40	9	4	Dly Bass
	10	40	10	4	X Wire Bass
	11	40	11	4	WireStr Bass
	12	40	12	4	Blip Bass
	13	40	13	4	RubberBass 1
	14	40	14	4	Syn Bell Bs
	15	40	15	4	Odd Bass
	16	40	16	4	RubberBass 2
	17	40	17	4	SH101 Bass 1
	18	40	18	4	SH101 Bass 2
	19	40	19	4	Smooth Bass
	20	40	20	4	SH101 Bass 3
	21	40	21	4	Spike Bass
	22	40	22	4	House Bass
	23	40	23	4	KG Bass
	24	40	24	4	Sync Bass
	25	40	25	4	MG 5th Bass
	26	40	26	4	RND Bass
	27	40	27	4	WowMG Bass
	28	40	28	4	Bubble Bass
	29	40	29	4	Attack Pulse
	30	40	30	4	Sync Bass 2
	31	40	31	4	Pulse Mix Bs
	32	40	32	4	MG Dist Bass
	33	40	33	4	Seq Bass 2
	34	40	34	4	3rd Bass
	35	40	35	4	MG Oct Bass
	36	40	36	4	SlowEnvBass
	37	40	37	4	Mild Bass
	38	40	38	4	DistEnvBass
	39	40	39	4	MG LightBass
	40	40	40	4	DistSynBass
	41	40	41	4	Rise Bass
	42	40	42	4	Cyber Bass
	43	40	45	4	LightSynBass
	44	40	46	4	PopSynthBass
	45	40	47	4	101 Bass
	46	40	126	4	Organ 1
	47	40	127	4	Funny Vox
A61		41	0	4	Violin
	1	41	1	4	Violin Atk
	2	41	8	4	Slow Violin
	3	41	126	4	Organ 2
	4	41	127	4	Echo Bell
A62		42	0	4	Viola
	1	42	1	4	Viola Atk.
	2	42	126	4	Organ 1
	3	42	127	4	Ice Rain
A63		43	0	4	Cello
	1	43	1	4	Cello Atk.
	2	43	126	4	Organ 1
	3	43	127	4	Oboe 2001
A64		44	0	4	Contrabass
	1	44	126	4	Organ 2
	2	44	127	4	Echo Pan

GBN	Var	PC	CC00	CC32	Name
A65		45	0	4	Tremolo Str
	1	45	2	4	Trem Str.St.
	2	45	8	4	Slow Tremolo
	3	45	9	4	Suspense Str
	4	45	10	4	SuspenseStr2
	5	45	126	4	Organ 2
	6	45	127	4	Doctor Solo
A66		46	0	4	Pizzicato
	1	46	1	4	Vcs&Cbs Pizz
	2	46	2	4	Chamber Pizz
	3	46	3	4	St.Pizzicato
	4	46	8	4	Solo Pizz.
	5	46	16	4	Solo Spic.
	6	46	17	4	StringsSpic.
	7	46	126	4	Organ 2
	8	46	127	4	School Daze
A67		47	0	4	Harp
	1	47	1	4	Harp&Strings
	2	47	2	4	Harp St.
	3	47	8	4	Uillean Harp
	4	47	16	4	Synth Harp
	5	47	24	4	Yang Qin
	6	47	25	4	Yang Qin 2
	7	47	26	4	SynthYangQin
	8	47	126	4	Trumpet
	9	47	127	4	Bellsinger
A68		48	0	4	Timpani
	1	48	126	4	Trumpet
	2	48	127	4	Square Wave
A71		49	0	4	Strings
	1	49	1	4	Bright Str
	2	49	2	4	ChamberStr
	3	49	3	4	Cello sect.
	4	49	4	4	Bright Str.2
	5	49	5	4	Bright Str.3
	6	49	6	4	Quad Strings
	7	49	7	4	Mild Strings
	8	49	8	4	Orchestra
	9	49	9	4	Orchestra 2
	10	49	10	4	Tremolo Orch
	11	49	11	4	Choir Str.
	12	49	12	4	Strings+Horn
	13	49	13	4	Str.+Flute
	14	49	14	4	Choir Str.2
	15	49	15	4	Choir Str.3
	16	49	16	4	St. Strings
	17	49	17	4	St.Strings 2
	18	49	18	4	St.Strings 3
	19	49	19	4	Orchestra 3
	20	49	20	4	Orchestra 4
	21	49	24	4	Velo Strings
	22	49	32	4	Oct Strings1
	23	49	33	4	Oct Strings2
	24	49	34	4	ContraBsSect
	25	49	40	4	60s Strings
	26	49	126	4	Trombone
	27	49	127	4	Str Sect 1
A72		50	0	4	Slow Strings
	1	50	1	4	SlowStrings2
	2	50	2	4	SlowStrings3
	3	50	8	4	Legato Str.
	4	50	9	4	Warm Strings
	5	50	10	4	St.Slow Str.
	6	50	11	4	St.Slow Str2
	7	50	12	4	Str+Choir
	8	50	13	4	Str+Choir2
	9	50	126	4	Trombone
	10	50	127	4	Str Sect 2
A73		51	0	4	Syn.Strings1
	1	51	1	4	OB Strings
	2	51	2	4	StackStrings
	3	51	3	4	JP Strings
	4	51	4	4	Chorus Str.
	5	51	8	4	Syn.Strings3
	6	51	9	4	Syn.Strings4
	7	51	10	4	Syn.Strings6
	8	51	11	4	Syn.Strings7
	9	51	12	4	LoFi Strings
	10	51	16	4	High Strings
	11	51	17	4	Hybrid Str.
	12	51	24	4	Tron Strings
	13	51	25	4	Noiz Strings
	14	51	126	4	Trombone
	15	51	127	4	Str Sect 3
A74		52	0	4	Syn.Strings2
	1	52	1	4	Syn.Strings5
	2	52	2	4	JUNO Strings
	3	52	3	4	FilteredOrch
	4	52	4	4	JP Saw Str.
	5	52	5	4	Hybrid Str.2
	6	52	6	4	DistStrings
	7	52	7	4	JUNOFullStr.
	8	52	8	4	Air Strings

GBN	Var	PC	CC00	CC32	Name
	9	52	9	4	Atk Syn Str.
	10	52	10	4	StraightStr.
	11	52	126	4	Trombone
	12	52	127	4	Pizzicato
A75		53	0	4	Choir Aahs
	1	53	8	4	St.ChoirAahs
	2	53	9	4	Melted Choir
	3	53	10	4	Church Choir
	4	53	11	4	Boys Choir 1
	5	53	12	4	Boys Choir 2
	6	53	13	4	St.BoysChoir
	7	53	14	4	Rich Choir
	8	53	16	4	Choir Hahs
	9	53	24	4	Chorus Lahs
	10	53	32	4	Chorus Aahs
	11	53	33	4	Male Aah+Str
	12	53	48	4	v Choir Aahs
	13	53	49	4	v Melted Chr
	14	53	50	4	v Church Chr
	15	53	51	4	v Choir Hahs
	16	53	52	4	v ChorusLahs
	17	53	53	4	v ChorusAahs
	18	53	54	4	vMaleAah+Str
	19	53	126	4	Trombone
	20	53	127	4	Violin 1
A76		54	0	4	Voice Oohs
	1	54	1	4	Chorus Oohs
	2	54	2	4	Voice Oohs 2
	3	54	3	4	Chorus Oohs2
	4	54	4	4	OohsCodeMaj7
	5	54	5	4	OohsCodeSus4
	6	54	6	4	Jazz Scat
	7	54	8	4	Voice Dahs
	8	54	9	4	JzVoice Dat
	9	54	10	4	JzVoice Bap
	10	54	11	4	JzVoice Dow
	11	54	12	4	JzVoice Thum
	12	54	16	4	VoiceLah Fem
	13	54	17	4	ChorusLahFem
	14	54	18	4	VoiceLuh Fem
	15	54	19	4	ChorusLuhFem
	16	54	20	4	VoiceLan Fem
	17	54	21	4	ChorusLanFem
	18	54	22	4	VoiceAah Fem
	19	54	23	4	VoiceUuh Fem
	20	54	24	4	Fem Lah&Lan
	21	54	32	4	VoiceWah Mal
	22	54	33	4	ChorusWahMal
	23	54	34	4	VoiceWoh Mal
	24	54	35	4	ChorusWohMal
	25	54	36	4	VoiceAah Mal
	26	54	37	4	VoiceOoh Mal
	27	54	40	4	Humming
	28	54	48	4	v Voice Oohs
	29	54	49	4	v VoiceOohs2
	30	54	50	4	v OohsMaj7
	31	54	51	4	v OohsSus4
	32	54	52	4	v Voice Dahs
	33	54	53	4	v JzVoiceDat
	34	54	54	4	v JzVoiceBap
	35	54	55	4	v JzVoiceDow
	36	54	56	4	v JzVox Thum
	37	54	126	4	Trombone
	38	54	127	4	Violin 2
A77		55	0	4	SynVox
	1	55	1	4	SynVox 2
	2	55	2	4	SynVox 3
	3	55	8	4	Syn.Voice
	4	55	9	4	Silent Night
	5	55	10	4	Syn.Voice 2
	6	55	16	4	VP330 Choir
	7	55	17	4	Vinyl Choir
	8	55	18	4	JX8P Vox
	9	55	19	4	Analog Voice
	10	55	126	4	Alto Sax
	11	55	127	4	Cello 1
A78		56	0	4	OrchestraHit
	1	56	1	4	Bass Hit
	2	56	2	4	6th Hit
	3	56	3	4	Euro Hit
	4	56	8	4	Impact Hit
	5	56	9	4	Philly Hit
	6	56	10	4	Double Hit
	7	56	11	4	Perc. Hit
	8	56	12	4	Shock Wave
	9	56	13	4	Bounce Hit
	10	56	14	4	Drill Hit
	11	56	15	4	Thrill Hit
	12	56	16	4	Lo Fi Rave
	13	56	17	4	Techno Hit
	14	56	18	4	Dist. Hit
	15	56	19	4	Bam Hit
	16	56	20	4	Bit Hit
	17	56	21	4	Bim Hit
	18	56	22	4	Technorg Hit

GBN	Var	PC	CC00	CC32	Name
A77	19	56	23	4	Rave Hit
A78		20	56	24	4Strings Hit
	21	56	25	4	Stack Hit
	22	56	26	4	Industry Hit
	23	56	27	4	Clap Hit
	24	56	126	4	Tenor Sax
	25	56	127	4	Cello 2
A81		57	0	4	Trumpet
	1	57	1	4	Trumpet 2
	2	57	2	4	Trumpet
	3	57	3	4	Dark Trumpet
	4	57	4	4	Trumpet & Nz
	5	57	8	4	Flugel Horn
	6	57	16	4	4th Trumpets
	7	57	24	4	Bright Tp.
	8	57	25	4	Warm Tp.
	9	57	26	4	Warm Tp.2
	10	57	27	4	Twin Tp.
	11	57	32	4	Syn. Trumpet
	12	57	47	4	Atk Trumpet
	13	57	48	4	V Trumpet
	14	57	49	4	V Romantc Tp
	15	57	50	4	V MariachiTp
	16	57	51	4	V RomMar Tp
	17	57	52	4	V Tp Mar/Shk
	18	57	53	4	V Tp Shake
	19	57	54	4	v Trumpet 2
	20	57	55	4	v FlugelHorn
	21	57	56	4	v 4th Tpts
	22	57	126	4	Baritone Sax
	23	57	127	4	Contrabass
A82		58	0	4	Trombone
	1	58	1	4	Trombone 2
	2	58	2	4	Twin bones
	3	58	3	4	Bones & Tuba
	4	58	4	4	Bright Tb
	5	58	8	4	Bs. Trombone
	6	58	16	4	Euphonium
	7	58	48	4	v Trombone
	8	58	49	4	v Trombone 2
	9	58	50	4	v Twin bones
	10	58	51	4	v Bs. Tbn
	11	58	52	4	v Euphonium
	12	58	126	4	Alto Sax
	13	58	127	4	Harp 1
A83		59	0	4	Tuba
	1	59	1	4	Tuba 2
	2	59	8	4	Tuba + Horn
	3	59	47	4	Tuba 3
	4	59	126	4	Brass 1
	5	59	127	4	Harp 2
A84		60	0	4	MutedTrumpet
	1	60	1	4	Cup Mute Tp
	2	60	2	4	MuteTrumpet2
	3	60	3	4	MuteTrumpet3
	4	60	8	4	Muted Horns
	5	60	48	4	V Muted Tp 1
	6	60	49	4	V Muted Tp 2
	7	60	126	4	Brass 1
	8	60	127	4	Guitar 1
A85		61	0	4	French Horns
	1	61	1	4	Fr.Horn 2
	2	61	2	4	Horn + Orche
	3	61	3	4	Wide FreHrns
	4	61	8	4	F.Hrn Slow
	5	61	9	4	Dual Horns
	6	61	16	4	Synth Horn
	7	61	24	4	F.Horn Rip
	8	61	126	4	Brass 2
	9	61	127	4	Guitar 2
A86		62	0	4	Brass 1
	1	62	1	4	Brass ff
	2	62	2	4	Bones Sect.
	3	62	3	4	St. Brass ff
	4	62	4	4	Quad Brass1
	5	62	5	4	Quad Brass2
	6	62	8	4	Brass 2
	7	62	9	4	Brass 3
	8	62	10	4	Brass sfz
	9	62	12	4	Brass sfz 2
	10	62	14	4	FatPop Brass
	11	62	16	4	Brass Fall
	12	62	17	4	Trumpet Fall
	13	62	24	4	Octave Brass
	14	62	25	4	Brass + Reed
	15	62	26	4	Fat + Reed
	16	62	32	4	Orch Brass
	17	62	33	4	Orch Brass 2
	18	62	35	4	St.FatPopBrs
	19	62	36	4	St.Orch Brs
	20	62	37	4	St.Orch Brs2
	21	62	38	4	St.Orch Brs3
	22	62	43	4	2Tps+Tb

GBN	Var	PC	CC00	CC32	Name
A86	23	62	44	4	2Tps+Tb+Sax
	24	62	45	4	BigBand
	25	62	46	4	BriteBrass
	26	62	47	4	PowerBrass
	27	62	126	4	Brass 2
	28	62	127	4	Elec Gtr 1
A87		63	0	4	Synth Brass1
	1	63	1	4	JUNO Brass
	2	63	2	4	Stack Brass
	3	63	3	4	SH-5 Brass
	4	63	4	4	MKS Brass
	5	63	5	4	Jump Brass
	6	63	8	4	Pro Brass
	7	63	9	4	P5 Brass
	8	63	10	4	OrchSynBrass
	9	63	16	4	Oct SynBrass
	10	63	17	4	Hybrid Brass
	11	63	18	4	OctSynBrass2
	12	63	19	4	BPF Brass
	13	63	126	4	Brass 1
	14	63	127	4	Elec Gtr 2
A88		64	0	4	Synth Brass2
	1	64	1	4	Soft Brass
	2	64	2	4	Warm Brass
	3	64	3	4	Synth Brass3
	4	64	4	4	Sync Brass
	5	64	5	4	Fat SynBrass
	6	64	6	4	DeepSynBrass
	7	64	8	4	SynBrass sfz
	8	64	9	4	OB Brass
	9	64	10	4	Reso Brass
	10	64	11	4	DistSqrBrass
	11	64	12	4	JP8000SawBrs
	12	64	16	4	Velo Brass 1
	13	64	17	4	Transbrass
	14	64	46	4	SoaringHorns
	15	64	47	4	Henry IV
	16	64	126	4	OrchestraHit
	17	64	127	4	Sitar
B11		65	0	4	Soprano Sax
	1	65	8	4	Soprano Exp.
	2	65	127	4	Acou Bass 1
B12		66	0	4	Alto Sax
	1	66	8	4	AltoSax Exp.
	2	66	9	4	Grow Sax
	3	66	16	4	AltoSax + Tp
	4	66	17	4	Sax Section
	5	66	46	4	AltoSax Soft
	6	66	47	4	Alto Sax 2
	7	66	127	4	Acou Bass 2
B13		67	0	4	Tenor Sax
	1	67	1	4	Tenor Sax
	2	67	8	4	BreathyTn.
	3	67	9	4	St.Tenor Sax
	4	67	44	4	Latin Tenor
	5	67	45	4	Tenor Sax F
	6	67	46	4	Blown Tenor
	7	67	47	4	Super Tenor
	8	67	127	4	Elec Bass 1
B14		68	0	4	Baritone Sax
	1	68	1	4	Bari. Sax
	2	68	8	4	Bari & Tenor
	3	68	127	4	Elec Bass 2
B15		69	0	4	Oboe
	1	69	8	4	Oboe Exp.
	2	69	16	4	Multi Reed
	3	69	127	4	Slap Bass 1
B16		70	0	4	EnglishHorn
	1	70	127	4	Slap Bass 2
B17		71	0	4	Bassoon
	1	71	127	4	Fretless 1
B18		72	0	4	Clarinet
	1	72	8	4	Bs Clarinet
	2	72	16	4	Multi Wind
	3	72	17	4	Quad Wind
	4	72	127	4	Fretless 2
B21		73	0	4	Piccolo
	1	73	1	4	Piccolo
	2	73	8	4	Nay
	3	73	9	4	Nay Tremolo
	4	73	16	4	Di
	5	73	127	4	Flute 1
B22		74	0	4	Flute
	1	74	1	4	Flute 2
	2	74	2	4	Flute Exp.
	3	74	3	4	Flt Traverso
	4	74	8	4	Flute + Vln
	5	74	9	4	Pipe & Reed

GBN	Var	PC	CC00	CC32	Name
B22	6	74	16	4	Tron Flute
	7	74	17	4	Indian Flute
	8	74	48	4	v Flute
	9	74	49	4	v Flute Exp
	10	74	50	4	v FlTraverso
	11	74	51	4	v Tron Flute
	12	74	127	4	Flute 2
B23		75	0	4	Recorder
	1	75	127	4	Piccolo 1
B24		76	0	4	Pan Flute
	1	76	8	4	Kawala
	2	76	16	4	Zampona
	3	76	17	4	Zampona Atk
	4	76	24	4	Tin Whistle
	5	76	25	4	TinWhtsle Nm
	6	76	26	4	TinWhtsle Or
	7	76	46	4	TinWhtsle2
	8	76	47	4	Pan Flute2
	9	76	127	4	Piccolo 2
B25		77	0	4	Bottle Blow
	1	77	46	4	The Bottle
	2	77	47	4	BottleBlow2
	3	77	127	4	Recorder
B26		78	0	4	Shakuhachi
	1	78	1	4	Shakuhachi
	2	78	47	4	ShakuBamboo
	3	78	127	4	Pan Pipes
B27		79	0	4	Whistle
	1	79	1	4	Whistle 2
	2	79	127	4	Sax 1
B28		80	0	4	Ocarina
	1	80	127	4	Sax 2
B31		81	0	4	Square Wave
	1	81	1	4	MG Square
	2	81	2	4	Hollow Mini
	3	81	3	4	Mellow FM
	4	81	4	4	CC Solo
	5	81	5	4	Shmoog
	6	81	6	4	LM Square
	7	81	7	4	JP8000 TWM
	8	81	8	4	2600 Sine
	9	81	9	4	Sine Lead
	10	81	10	4	KG Lead
	11	81	11	4	Twin Sine
	12	81	16	4	P5 Square
	13	81	17	4	OB Square
	14	81	18	4	JP-8 Square
	15	81	19	4	Dist Square
	16	81	20	4	303SquarDst1
	17	81	21	4	303SquarDst2
	18	81	22	4	303 Mix Sqr
	19	81	23	4	Dual Sqr&Saw
	20	81	24	4	Pulse Lead
	21	81	25	4	JP8 PulseLd1
	22	81	26	4	JP8 PulseLd2
	23	81	27	4	MG Reso. Pls
	24	81	28	4	JP8 PulseLd3
	25	81	29	4	260RingLead
	26	81	30	4	303DistLead
	27	81	31	4	JP8000DistLd
	28	81	32	4	HipHop SinLd
	29	81	33	4	HipHop SqrLd
	30	81	34	4	HipHop PlsLd
	31	81	35	4	Flux Pulse
	32	81	127	4	Sax 3
B32		82	0	4	Saw Wave
	1	82	1	4	OB2 Saw
	2	82	2	4	Pulse Saw
	3	82	3	4	Feline GR
	4	82	4	4	Big Lead
	5	82	5	4	Velo Lead
	6	82	6	4	GR-300
	7	82	7	4	LA Saw
	8	82	8	4	Doctor Solo
	9	82	9	4	Fat Saw Lead
	10	82	10	4	JP8000 Saw
	11	82	11	4	D-50 Fat Saw
	12	82	12	4	OB DoubleSaw
	13	82	13	4	JP DoubleSaw
	14	82	14	4	FatSawLead 2
	15	82	15	4	JP SuperSaw
	16	82	16	4	Waspy Synth
	17	82	17	4	PM Lead
	18	82	18	4	CS Saw Lead
	19	82	24	4	MG Saw 1
	20	82	25	4	MG Saw 2
	21	82	26	4	OB Saw 1
	22	82	27	4	OB Saw 2
	23	82	28	4	D-50 Saw
	24	82	29	4	SH-101 Saw
	25	82	30	4	CS Saw
	26	82	31	4	MG Saw Lead

GBN	Var	PC	CC00	CC32	Name
B32	27	82	32	4	OB Saw Lead
	28	82	33	4	P5 Saw Lead
	29	82	34	4	MG unison
	30	82	35	4	Oct Saw Lead
	31	82	36	4	Natural Lead
	32	82	38	4	Synchronized
	33	82	39	4	MG SawLead 2
	34	82	40	4	SequenceSaw1
	35	82	41	4	SequenceSaw2
	36	82	42	4	Reso Saw
	37	82	43	4	Cheese Saw 1
	38	82	44	4	Cheese Saw 2
	39	82	45	4	Rhythmic Saw
	40	82	46	4	SequencedSaw
	41	82	47	4	Techno Saw
	42	82	127	4	Sax 4
B33		83	0	4	Syn.Calliope
	1	83	1	4	Vent Synth
	2	83	2	4	Pure PanLead
	3	83	8	4	LM Pure Lead
	4	83	9	4	LM Blow Lead
	5	83	127	4	Clarinet 1
B34		84	0	4	Chiffer Lead
	1	84	1	4	TB Lead
	2	84	2	4	Hybrid Lead
	3	84	3	4	Unison SqrLd
	4	84	4	4	FatSolo Lead
	5	84	5	4	ForcefulLead
	6	84	6	4	Oct.UnisonLd
	7	84	7	4	Unison SawLd
	8	84	8	4	Mad Lead
	9	84	9	4	CrowdingLead
	10	84	10	4	Double Sqr.
	11	84	47	4	PureFlatLead
	12	84	127	4	Clarinet 2
B35		85	0	4	Charang
	1	85	1	4	Wire Lead
	2	85	2	4	FB.Charang
	3	85	3	4	Fat GR Lead
	4	85	4	4	Windy GR Ld
	5	85	5	4	Mellow GR Ld
	6	85	6	4	GR & Pulse
	7	85	8	4	Dist.Lead
	8	85	9	4	Acid Guitar1
	9	85	10	4	Acid Guitar2
	10	85	11	4	Dance Dst.Gt
	11	85	12	4	DanceDst.Gt2
	12	85	16	4	P5 Sync Lead
	13	85	17	4	Fat SyncLead
	14	85	18	4	Rock Lead
	15	85	19	4	5th DecaSync
	16	85	20	4	Dirty Sync
	17	85	21	4	DualSyncLead
	18	85	22	4	LA Brass Ld
	19	85	24	4	JUNO Sub Osc
	20	85	25	4	2600 Sub Osc
	21	85	26	4	JP8000Fd Osc
	22	85	127	4	Oboe
B36		86	0	4	Solo Vox
	1	86	1	4	Solo Vox 2
	2	86	8	4	Vox Lead
	3	86	9	4	LFO Vox
	4	86	10	4	Vox Lead 2
	5	86	127	4	Engl Horn
B37		87	0	4	5th Saw Wave
	1	87	1	4	Big Fives
	2	87	2	4	5th Lead
	3	87	3	4	5th Ana.Clav
	4	87	4	4	5th Pulse
	5	87	5	4	JP 5th Saw
	6	87	6	4	JP8000 5thFB
	7	87	8	4	4th Lead
	8	87	127	4	Bassoon
B38		88	0	4	Bass & Lead
	1	88	1	4	Big & Raw
	2	88	2	4	Fat & Perky
	3	88	3	4	JUNO Rave
	4	88	4	4	JP8 BsLead 1
	5	88	5	4	JP8 BsLead 2
	6	88	6	4	SH-5 Bs.Lead
	7	88	7	4	Delayed Lead
	8	88	127	4	Harmonica
B41		89	0	4	Fantasia
	1	89	1	4	Fantasia 2
	2	89	2	4	New Age Pad
	3	89	3	4	Bell Heaven
	4	89	4	4	Fantasia 3
	5	89	5	4	Fantasia 4
	6	89	6	4	After D !
	7	89	7	4	260HarmPad
	8	89	44	4	EP Heaven
	9	89	45	4	HeavenKey
	10	89	46	4	BriteSawKey

GBN	Var	PC	CC00	CC32	Name
B41	11	89	47	4	Sugar Key
	12	89	127	4	Trumpet 1
B42		90	0	4	Warm Pad
	1	90	1	4	Thick Matrix
	2	90	2	4	Horn Pad
	3	90	3	4	Rotary Strng
	4	90	4	4	OB Soft Pad
	5	90	5	4	Sine Pad
	6	90	6	4	OB Soft Pad2
	7	90	8	4	Octave Pad
	8	90	9	4	Stack Pad
	9	90	10	4	Human Pad
	10	90	11	4	Sync Brs.Pad
	11	90	12	4	Oct.PWM Pad
	12	90	13	4	JP Soft Pad
	13	90	43	4	PWM Soft Pad
	14	90	44	4	LFO Sweep
	15	90	45	4	Stacked Pad
	16	90	46	4	Saw Strings
	17	90	47	4	Warm JP STR
	18	90	127	4	Trumpet 2
B43		91	0	4	Polysynth
	1	91	1	4	80's PolySyn
	2	91	2	4	Polysynth 2
	3	91	3	4	Poly King
	4	91	4	4	Super Poly
	5	91	8	4	Power Stack
	6	91	9	4	Octave Stack
	7	91	10	4	Reso Stack
	8	91	11	4	Techno Stack
	9	91	12	4	Pulse Stack
	10	91	13	4	TwinOct.Rave
	11	91	14	4	Oct.Rave
	12	91	15	4	Happy Synth
	13	91	16	4	ForwardSweep
	14	91	17	4	ReverseSweep
	15	91	24	4	Minor Rave
	16	91	46	4	Unison Saws
	17	91	47	4	SuperSaws
	18	91	127	4	Trombone 1
B44		92	0	4	Space Voice
	1	92	1	4	Heaven II
	2	92	2	4	SC Heaven
	3	92	3	4	Itopia
	4	92	4	4	Water Space
	5	92	5	4	Cold Space
	6	92	6	4	Noise Peaker
	7	92	7	4	Bamboo Hit
	8	92	8	4	Cosmic Voice
	9	92	9	4	Auh Vox
	10	92	10	4	AuhAuh
	11	92	11	4	Vocorderman
	12	92	12	4	Holy Voices
	13	92	43	4	JP8Haunting
	14	92	44	4	JP8 Hollow
	15	92	45	4	Square Pad
	16	92	46	4	Pipe Pad
	17	92	47	4	Warm Sqr Pad
	18	92	127	4	Trombone 2
B45		93	0	4	Bowed Glass
	1	93	1	4	SoftBellPad
	2	93	2	4	JP8 Sqr Pad
	3	93	3	4	7thBelPad
	4	93	4	4	Steel Glass
	5	93	5	4	Bottle Stack
	6	93	47	4	Gtr Pad
	7	93	127	4	Fr Horn 1
B46		94	0	4	Metal Pad
	1	94	1	4	Tine Pad
	2	94	2	4	Panner Pad
	3	94	3	4	Steel Pad
	4	94	4	4	Special Rave
	5	94	5	4	Metal Pad 2
	6	94	127	4	Fr Horn 2
B47		95	0	4	Halo Pad
	1	95	1	4	Vox Pad
	2	95	2	4	Vox Sweep
	3	95	8	4	Horror Pad
	4	95	9	4	SynVox Pad
	5	95	10	4	SynVox Pad 2
	6	95	11	4	Breath&Rise
	7	95	12	4	Tears Voices
	8	95	127	4	Tuba
B48		96	0	4	Sweep Pad
	1	96	1	4	Polar Pad
	2	96	2	4	Ambient BPF
	3	96	3	4	Sync Pad
	4	96	4	4	Warriors
	5	96	8	4	Converge
	6	96	9	4	Shwimmer
	7	96	10	4	Celestial Pd
	8	96	11	4	Bag Sweep
	9	96	12	4	Sweep Pipe

GBN	Var	PC	CC00	CC32	Name
B48	10	96	13	4	Sweep Stack
	11	96	14	4	Deep Sweep
	12	96	15	4	Stray Pad
	13	96	46	4	Soft Sweep
	14	96	47	4	SawsSweep
	15	96	127	4	Brs Sect 1
B51		97	0	4	Ice Rain
	1	97	1	4	Harmo Rain
	2	97	2	4	African wood
	3	97	3	4	Anklung Pad
	4	97	4	4	Rattle Pad
	5	97	5	4	Saw Impulse
	6	97	6	4	Strange Str.
	7	97	7	4	FastFWD Pad
	8	97	8	4	Clavi Pad
	9	97	9	4	EP Pad
	10	97	10	4	Tambra Pad
	11	97	11	4	CP Pad
	12	97	127	4	Brs Sect 2
B52		98	0	4	Soundtrack
	1	98	1	4	Ancestral
	2	98	2	4	Prologue
	3	98	3	4	Prologue 2
	4	98	4	4	Hols Strings
	5	98	5	4	HistoryWave
	6	98	8	4	Rave
	7	98	127	4	Vibe 1
B53		99	0	4	Crystal
	1	99	1	4	Syn Mallet
	2	99	2	4	Soft Crystal
	3	99	3	4	Round Glock
	4	99	4	4	Loud Glock
	5	99	5	4	GlockenChime
	6	99	6	4	Clear Bells
	7	99	7	4	ChristmasBel
	8	99	8	4	Vibra Bells
	9	99	9	4	Digi Bells
	10	99	10	4	Music Bell
	11	99	11	4	Analog Bell
	12	99	12	4	Blow Bell
	13	99	13	4	Hyper Bell
	14	99	16	4	Choral Bells
	15	99	17	4	Air Bells
	16	99	18	4	Bell Harp
	17	99	19	4	Gamelimba
	18	99	20	4	JUNO Bell
	19	99	21	4	JP Bell
	20	99	22	4	Pizz Bell
	21	99	23	4	Bottom Bell
	22	99	127	4	Vibe 2
B54		100	0	4	Atmosphere
	1	100	1	4	Warm Atmos
	2	100	2	4	Nylon Harp
	3	100	3	4	Harpvox
	4	100	4	4	HollowReleas
	5	100	5	4	Nylon+Rhodes
	6	100	6	4	Ambient Pad
	7	100	7	4	Invisible
	8	100	8	4	Pulsey Key
	9	100	9	4	Noise Piano
	10	100	10	4	Heaven Atmos
	11	100	11	4	Tambra Atmos
	12	100	127	4	Syn Mallet
B55		101	0	4	Brightness
	1	101	1	4	Shining Star
	2	101	2	4	OB Stab
	3	101	3	4	Brass Star
	4	101	4	4	Choir Stab
	5	101	5	4	D-50 Retour
	6	101	6	4	SouthernWind
	7	101	7	4	SymbolicBell
	8	101	8	4	Org Bell
	9	101	127	4	Windbell
B56		102	0	4	Goblin
	1	102	1	4	Goblinson
	2	102	2	4	50's Sci-Fi
	3	102	3	4	Abduction
	4	102	4	4	Auhbient
	5	102	5	4	LFO Pad
	6	102	6	4	Random Str
	7	102	7	4	Random Pad
	8	102	8	4	LowBirds Pad
	9	102	9	4	Falling Down
	10	102	10	4	LFO RAVE
	11	102	11	4	LFO Horror
	12	102	12	4	LFO Techno
	13	102	13	4	Alternative
	14	102	14	4	UFO FX
	15	102	15	4	Gargle Man
	16	102	16	4	Sweep FX
	17	102	17	4	LM Has Come
	18	102	18	4	FallinInsect
	19	102	19	4	LFO Oct.Rave

GBN	Var	PC	CC00	CC32	Name
B56	20	102	20	4	Just Before
	21	102	21	4	RND Fl.Chord
	22	102	22	4	RandomEnding
	23	102	23	4	Random Sine
	24	102	24	4	EatingFilter
	25	102	25	4	Noise&SawHit
	26	102	26	4	Pour Magic
	27	102	27	4	DancingDrill
	28	102	28	4	Dirty Stack
	29	102	29	4	Big Blue
	30	102	30	4	Static Hit
	31	102	31	4	Atl.Mod.FX
	32	102	32	4	Acid Copter
	33	102	127	4	Glock
B57		103	0	4	Echo Drops
	1	103	1	4	Echo Bell
	2	103	2	4	Echo Pan
	3	103	3	4	Echo Pan 2
	4	103	4	4	Big Panner
	5	103	5	4	Reso Panner
	6	103	6	4	Water Piano
	7	103	7	4	Echo SynBass
	8	103	8	4	Pan Sequence
	9	103	9	4	Aqua
	10	103	10	4	Panning Lead
	11	103	11	4	PanningBrass
	12	103	127	4	Tube Bell
B58		104	0	4	Star Theme
	1	104	1	4	Star Theme 2
	2	104	2	4	Star Mind
	3	104	3	4	Star Dust
	4	104	4	4	Rep.Trance
	5	104	5	4	Etherality
	6	104	6	4	Mystic Pad
	7	104	8	4	Dream Pad
	8	104	9	4	Silky Pad
	9	104	10	4	Dream Pad 2
	10	104	11	4	Silky Pad 2
	11	104	16	4	New Century
	12	104	17	4	7th Atmos.
	13	104	18	4	Galaxy Way
	14	104	19	4	Rising OSC.
	15	104	127	4	Xylophone
B61		105	0	4	Sitar
	1	105	1	4	Sitar 2
	2	105	2	4	Detune Sitar
	3	105	3	4	Sitar 3
	4	105	4	4	Sitar/Drone
	5	105	5	4	Sitar 4
	6	105	8	4	Tambra
	7	105	16	4	Tamboura
	8	105	127	4	Marimba
B62		106	0	4	Banjo
	1	106	1	4	Muted Banjo
	2	106	8	4	Rabab
	3	106	9	4	San Xian
	4	106	16	4	Gopichant
	5	106	24	4	Oud
	6	106	28	4	Oud+Strings
	7	106	32	4	Pi Pa
	8	106	127	4	Koto
B63		107	0	4	Shamisen
	1	107	1	4	Tsugaru
	2	107	8	4	Syn Shamisen
	3	107	127	4	Sho
B64		108	0	4	Koto
	1	108	1	4	Gu Zheng
	2	108	8	4	Taisho Koto
	3	108	16	4	Kanoon
	4	108	19	4	Kanoon+Choir
	5	108	24	4	Oct Harp
	6	108	127	4	Shakuhachi
B65		109	0	4	Kalimba
	1	109	8	4	Sanza
	2	109	9	4	Bodhran
	3	109	10	4	Bodhran Mute
	4	109	127	4	Whistle 1
B66		110	0	4	Bagpipe
	1	110	8	4	Didgeridoo
	2	110	9	4	Uillean Pipe
	3	110	10	4	UillnPipe Nm
	4	110	11	4	UillnPipe Or
	5	110	127	4	Whistle 2
B67		111	0	4	Fiddle
	1	111	8	4	Er Hu
	2	111	9	4	Gao Hu
	3	111	127	4	Bottleblow
B68		112	0	4	Shanai
	1	112	1	4	Shanai 2
	2	112	8	4	Pungi

GBN	Var	PC	CC00	CC32	Name
B68	3	112	16	4	Hichiriki
	4	112	24	4	Mizmar
	5	112	32	4	Suona 1
	6	112	33	4	Suona 2
	7	112	127	4	Breathpipe
B71		113	0	4	Tinkle Bell
	1	113	8	4	Bonang
	2	113	9	4	Gender
	3	113	10	4	Gamelan Gong
	4	113	11	4	St.Gamelan
	5	113	12	4	Jang Gu
	6	113	13	4	Jegogan
	7	113	14	4	Jublag
	8	113	15	4	Pemade
	9	113	16	4	RAMA Cymbal
	10	113	17	4	Kajar
	11	113	18	4	Kelontuk
	12	113	19	4	Kelontuk Mt
	13	113	20	4	Kelontuk Sid
	14	113	21	4	Kopyak Op
	15	113	22	4	Kopyak Mt
	16	113	23	4	Ceng Ceng
	17	113	24	4	Reyoung
	18	113	25	4	Kempur
	19	113	32	4	Jngl Crash
	20	113	40	4	Crash Menu
	21	113	41	4	RideCym Menu
	22	113	42	4	RideBellMenu
	23	113	47	4	Cymbal Roll
	24	113	127	4	Timpani
B72		114	0	4	Agogo
	1	114	8	4	Atarigane
	2	114	16	4	Tambourine
	3	114	127	4	Melodic Tom
B73		115	0	4	Steel Drums
	1	115	1	4	Island Mlt
	2	115	127	4	Deep Snare
B74		116	0	4	Woodblock
	1	116	8	4	Castanets
	2	116	16	4	Angklung
	3	116	17	4	Angkl Rhythm
	4	116	24	4	Finger Snaps
	5	116	32	4	909 HandClap
	6	116	40	4	HandClapMenu
	7	116	127	4	Elec Perc 1
B75		117	0	4	Taiko
	1	117	1	4	Small Taiko
	2	117	8	4	Concert BD
	3	117	9	4	ConcertBD Mt
	4	117	16	4	Jungle BD
	5	117	17	4	Techno BD
	6	117	18	4	Bounce
	7	117	24	4	KendangWadon
	8	117	25	4	Bebarongan
	9	117	26	4	Pelegongan
	10	117	27	4	Dholak 1
	11	117	28	4	Dholak 2
	12	117	32	4	Jngl BD Roll
	13	117	40	4	Kick Menu 1
	14	117	41	4	Kick Menu 2
	15	117	42	4	Kick Menu 3
	16	117	43	4	Kick Menu 4
	17	117	127	4	Elec Perc 2
B76		118	0	4	Melo. Tom 1
	1	118	1	4	Real Tom
	2	118	2	4	Real Tom 2
	3	118	3	4	Jazz Tom
	4	118	4	4	Brush Tom
	5	118	8	4	Melo. Tom 2
	6	118	9	4	Rock Tom
	7	118	16	4	Rash SD
	8	118	17	4	House SD
	9	118	18	4	Jungle SD
	10	118	19	4	909 SD
	11	118	24	4	Jngl SD Roll
	12	118	40	4	SD Menu 1
	13	118	41	4	SD Menu 2
	14	118	42	4	SD Menu 3
	15	118	43	4	SD Menu 4
	16	118	44	4	SD Menu 5
	17	118	127	4	Taiko
B77		119	0	4	Synth Drum
	1	119	8	4	808 Tom
	2	119	9	4	Elec Perc
	3	119	10	4	Sine Perc.
	4	119	11	4	606 Tom
	5	119	12	4	909 Tom
	6	119	13	4	606 Dist.Tom
	7	119	127	4	Taiko Rim
B78		120	0	4	Reverse Cym.
	1	120	1	4	Reverse Cym2
	2	120	2	4	Reverse Cym3

GBN	Var	PC	CC00	CC32	Name
B78	3	120	3	4	Reverse Cym4
	4	120	8	4	Rev.Snare 1
	5	120	9	4	Rev.Snare 2
	6	120	16	4	Rev.Kick 1
	7	120	17	4	Rev.ConBD
	8	120	24	4	Rev.Tom 1
	9	120	25	4	Rev.Tom 2
	10	120	26	4	Rev.Tom 3
	11	120	27	4	Rev.Tom 4
	12	120	40	4	Rev.SD Menu1
	13	120	41	4	Rev.SD Menu2
	14	120	42	4	Rev.SD Menu3
	15	120	43	4	Rev.BD Menu1
	16	120	44	4	Rev.BD Menu2
	17	120	45	4	Rev.BD Menu3
	18	120	46	4	Rev.ClapMenu
	19	120	127	4	Cymbal
B81		121	0	4	Gt.FretNoise
	1	121	1	4	Gt.Cut Noise
	2	121	2	4	String Slap
	3	121	3	4	Gt.CutNoise2
	4	121	4	4	Dist.CutNoiz
	5	121	5	4	Bass Slide
	6	121	6	4	Pick Scrape
	7	121	8	4	Gt. FX Menu
	8	121	9	4	Bartok Pizz.
	9	121	10	4	Guitar Slap
	10	121	11	4	Chord Stroke
	11	121	12	4	Biwa Stroke
	12	121	13	4	Biwa Tremolo
	13	121	16	4	A.Bs.Nz Menu
	14	121	17	4	D.Gt.Nz Menu
	15	121	18	4	E.Gt.NzMenu1
	16	121	19	4	E.Gt.NzMenu2
	17	121	20	4	G.StrokeMenu
	18	121	21	4	Gt.SlideMenu
	19	121	22	4	A.Bs.Mute Nz
	20	121	23	4	A.Bs.TouchNz
	21	121	24	4	A.Bs.AtackNz
	22	121	25	4	TC Up Nz
	23	121	26	4	TC DownMt.Nz
	24	121	27	4	TC UpMt.Nz
	25	121	28	4	TC Down Nz
	26	121	29	4	DstGT.Up Nz
	27	121	30	4	DstGT.DwnNz1

GBN	Var	PC	CC00	CC32	Name
	28	121	31	4	DstGT.DwnNz2
B81	29	121	32	4	DstGT.MuteNz
	30	121	34	4	Gt.StrokeNz5
	31	121	35	4	StlGt.SldNz1
	32	121	36	4	StlGt.SldNz2
	33	121	37	4	StlGt.SldNz3
	34	121	38	4	StlGt.SldNz4
	35	121	39	4	Gt.StrokeNz1
	36	121	40	4	Gt.StrokeNz2
	37	121	41	4	Gt.StrokeNz3
	38	121	42	4	Gt.StrokeNz4
	39	121	44	4	EGtrNzMenu
	40	121	45	4	AcGtrNzMenu
	41	121	46	4	BassNzMenu
	42	121	47	4	BassSlide
	43	121	127	4	Castanets
B82		122	0	4	Breath Noise
	1	122	1	4	Fl.Key Click
	2	122	2	4	Brth Nz Menu
	3	122	3	4	Fl.Breath 1
	4	122	4	4	Fl.Breath 2
	5	122	5	4	Fl.Breath 3
	6	122	6	4	Vox Breath 1
	7	122	7	4	Vox Breath 2
	8	122	8	4	Trombone Nz
	9	122	9	4	Trumpet Nz
	10	122	47	4	BrthNzMenu
	11	122	127	4	Triangle
B83		123	0	4	Seashore
	1	123	1	4	Rain
	2	123	2	4	Thunder
	3	123	3	4	Wind
	4	123	4	4	Stream
	5	123	5	4	Bubble
	6	123	6	4	Wind 2
	7	123	7	4	Cricket
	8	123	16	4	Pink Noise
	9	123	17	4	White Noise
	10	123	47	4	Winds Hit
	11	123	127	4	Orche Hit
B84		124	0	4	Bird
	1	124	1	4	Dog
	2	124	2	4	Horse-Gallop

GBN	Var	PC	CC00	CC32	Name
B83	3	124	3	4	Bird 2
	4	124	4	4	Kitty
B84	5	124	5	4	Growl
	6	124	6	4	Growl 2
	7	124	7	4	Fancy Animal
	8	124	8	4	Seal
	9	124	127	4	Telephone
B85		125	0	4	Telephone 1
	1	125	1	4	Telephone 2
	2	125	2	4	DoorCreaking
	3	125	3	4	Door
	4	125	4	4	Scratch
	5	125	5	4	Wind Chimes
	6	125	7	4	Scratch 2
	7	125	8	4	ScratchKey
	8	125	9	4	TapeRewind
	9	125	10	4	Phono Noise
	10	125	11	4	MC-500 Beep
	11	125	12	4	Scratch 3
	12	125	13	4	Scratch 4
	13	125	14	4	Scratch 5
	14	125	15	4	Scratch 6
	15	125	16	4	Scratch 7
	16	125	127	4	Bird Tweet
B86		126	0	4	Helicopter
	1	126	1	4	Car-Engine
	2	126	2	4	Car-Stop
	3	126	3	4	Car-Pass
	4	126	4	4	Car-Crash
	5	126	5	4	Siren
	6	126	6	4	Train
	7	126	7	4	Jetplane
	8	126	8	4	Starship
	9	126	9	4	Burst Noise
	10	126	10	4	Calculating
	11	126	11	4	Perc. Bang
	12	126	12	4	Burner
	13	126	13	4	Glass & Glam
	14	126	14	4	Ice Ring
	15	126	15	4	Over Blow
	16	126	16	4	Crack Bottle
	17	126	17	4	Pour Bottle
	18	126	18	4	Soda
	19	126	19	4	Open CD Tray

GBN	Var	PC	CC00	CC32	Name
B85	20	126	20	4	Audio Switch
	21	126	21	4	Key Typing
	22	126	22	4	SL 1
B86	23	126	23	4	SL 2
	24	126	24	4	Car Engine 2
	25	126	25	4	Car Horn
	26	126	26	4	Boeeeen
	27	126	27	4	R.Crossing
	28	126	28	4	Compresser
	29	126	29	4	Sword Boom!
	30	126	30	4	Sword Cross
	31	126	31	4	Stab! 1
	32	126	32	4	Stab! 2
	33	126	127	4	OneNote Jam
B87		127	0	4	Applause
	1	127	1	4	Laughing
	2	127	2	4	Screaming
	3	127	3	4	Punch
	4	127	4	4	Heart Beat
	5	127	5	4	Footsteps
	6	127	6	4	Applause 2
	7	127	7	4	Small Club
	8	127	8	4	ApplauseWave
	9	127	9	4	BabyLaughing
	10	127	16	4	Voice One
	11	127	17	4	Voice Two
	12	127	18	4	Voice Three
	13	127	19	4	Voice Tah
	14	127	20	4	Voice Whey
	15	127	22	4	Voice Kikit
	16	127	23	4	Voice ComeOn
	17	127	24	4	Voice Aou
	18	127	25	4	Voice Oou
	19	127	26	4	Voice Hie
	20	127	127	4	Water Bell
B88		128	0	4	Gun Shot
	1	128	1	4	Machine Gun
	2	128	2	4	Lasergun
	3	128	3	4	Explosion
	4	128	4	4	Eruption
	5	128	5	4	Big Shot
	6	128	6	4	Explosion 2
	7	128	127	4	Jungle Tune

Tone Map 3

GBN	Var	PC	CC00	CC32	Name
A11		1	0	3	Piano 1
	1	1	8	3	Upright P w
	2	1	16	3	European Pf
	3	1	24	3	Piano + Str.
	4	1	126	3	Piano 2
	5	1	127	3	Acou Piano1
A12		2	0	3	Piano 2
	1	2	8	3	Pop Piano w
	2	2	16	3	Dance Piano
	3	2	126	3	Piano 2
	4	2	127	3	Acou Piano2
A13		3	0	3	Piano 3
	1	3	1	3	EG+Rhodes 1
	2	3	2	3	EG+Rhodes 2
	3	3	8	3	Piano 3w
	4	3	126	3	Piano 2
	5	3	127	3	Acou Piano3
A14		4	0	3	Honky-tonk
	1	4	8	3	Honky-tonk 2
	2	4	126	3	Honky-tonk
	3	4	127	3	Elec Piano1
A15	5	0	3	E.Piano 1	
	1	5	8	3	St.Soft EP
	2	5	9	3	Cho. E.Piano
	3	5	10	3	SilentRhodes
	4	5	16	3	FM+SA EP
	5	5	17	3	Dist E.Piano
	6	5	24	3	Wurly
	7	5	25	3	Hard Rhodes
	8	5	26	3	MellowRhodes
	9	5	126	3	Piano 1
	10	5	127	3	Elec Piano2
A16		6	0	3	E.Piano 2
	1	6	8	3	Detuned EP 2
	2	6	16	3	St.FM EP
	3	6	24	3	Hard FM EP
	4	6	126	3	Piano 2
	5	6	127	3	Elec Piano3
A17		7	0	3	Harpsichord
	1	7	1	3	Harpsichord2
	2	7	8	3	Coupled Hps.

GBN	Var	PC	CC00	CC32	Name
A17	3	7	16	3	Harpsi.w
	4	7	24	3	Harpsi.o
	5	7	32	3	Synth Harpsi
	6	7	126	3	Piano 2
	7	7	127	3	Elec Piano4
A18		8	0	3	Clav.
	1	8	8	3	Comp Clav.
	2	8	16	3	Reso Clav.
	3	8	24	3	Clav.o
	4	8	32	3	Analog Clav.
	5	8	33	3	JP8 Clav. 1
	6	8	35	3	JP8 Clav. 2
	7	8	126	3	E.Piano 1
	8	8	127	3	Honkytonk
A21		9	0	3	Celesta
	1	9	1	3	Pop Celesta
	2	9	126	3	Cho. E.Piano
	3	9	127	3	Elec Org 1
A22		10	0	3	Glockenspl
	1	10	126	3	E.Piano 2
	2	10	127	3	Elec Org 2
A23		11	0	3	Music Box
	1	11	126	3	Steel-str.Gt
	2	11	127	3	Elec Org 3
A24		12	0	3	Vibraphone
	1	12	1	3	Pop Vibe.
	2	12	8	3	Vib.w
	3	12	9	3	Vibraphones
	4	12	126	3	Steel-str.Gt
	5	12	127	3	Elec Org 4
A25		13	0	3	Marimba
	1	13	8	3	Marimba w
	2	13	16	3	Barafon
	3	13	17	3	Barafon 2
	4	13	24	3	Log drum
	5	13	126	3	12-str.Gt
	6	13	127	3	Pipe Org 1

GBN	Var	PC	CC00	CC32	Name
A26	14	0	3	Xylophone	
	1	14	126	3	Funk Gt.
	2	14	127	3	Pipe Org 2
A27		15	0	3	Tubular-bell
	1	15	8	3	Church Bell
	2	15	9	3	Carillon
	3	15	126	3	Muted Gt.
	4	15	127	3	Pipe Org 3
A28		16	0	3	Santur
	1	16	1	3	Santur 2
	2	16	8	3	Cimbalom
	3	16	16	3	Zither 1
	4	16	17	3	Zither 2
	5	16	24	3	Dulcimer
	6	16	126	3	Slap Bass 1
	7	16	127	3	Accordion
A31	17	0	3	Organ 1	
	1	17	1	3	Organ 101
	2	17	8	3	Detuned Or1
	3	17	9	3	Organ o
	4	17	16	3	60's Organ1
	5	17	17	3	60's Organ 2
	6	17	18	3	60's Organ 3
	7	17	19	3	Farf Organ
	8	17	24	3	Cheese Organ
	9	17	25	3	D-50 Organ
	10	17	26	3	JUNO Organ
	11	17	27	3	Hybrid Organ
	12	17	28	3	VS Organ
	13	17	29	3	Digi Church
	14	17	32	3	Organ 4
	15	17	33	3	Even Bar
	16	17	40	3	Organ Bass
	17	17	48	3	5th Organ
	18	17	126	3	Slap Bass 1
	19	17	127	3	Harpsi 1
A32		18	0	3	Organ 2
	1	18	1	3	Jazz Organ
	2	18	2	3	E.Organ 16+2
	3	18	8	3	Detuned Or2
	4	18	9	3	Octave Organ
	5	18	32	3	Organ 5

GBN	Var	PC	CC00	CC32	Name
A32	6	18	126	3	Slap Bass 1
	7	18	127	3	Harpsi 2
A33		19	0	3	Organ 3
	1	19	8	3	Rotary Org.
	2	19	16	3	Rotary Org.S
	3	19	17	3	Rock Organ 1
	4	19	18	3	Rock Organ 2
	5	19	24	3	Rotary Org.F
	6	19	126	3	Slap Bass 1
	7	19	127	3	Harpsi 3
A34		20	0	3	Church Org1
	1	20	8	3	Church Org2
	2	20	16	3	Church Org3
	3	20	24	3	Organ Flute
	4	20	32	3	Trem.Flute
	5	20	33	3	Theater Org.
	6	20	126	3	Slap Bass 2
	7	20	127	3	Clavi 1
A35		21	0	3	Reed Organ
	1	21	8	3	Wind Organ
	2	21	126	3	Slap Bass 2
	3	21	127	3	Clavi 2
A36		22	0	3	Accordion F
	1	22	8	3	Accordion I
	2	22	9	3	Dist. Accord
	3	22	16	3	Cho. Accord
	4	22	24	3	Hard Accord
	5	22	25	3	Soft Accord
	6	22	126	3	Slap Bass 2
	7	22	127	3	Clavi 3
A37		23	0	3	Harmonica
	1	23	1	3	Harmonica 2
	2	23	126	3	Slap Bass 2
	3	23	127	3	Celesta 1
A38		24	0	3	Bandoneon
	1	24	8	3	Bandoneon 2
	2	24	16	3	Bandoneon 3
	3	24	126	3	Fingered Bs
	4	24	127	3	Celesta 2

GBN	Var	PC	CC00	CC32	Name
A41		25	0	3	Nylon-str.Gt
	1	25	8	3	Ukulele
	2	25	16	3	Nylon Gt.o
	3	25	24	3	Velo Harmnix
	4	25	32	3	Nylon Gt.2
	5	25	40	3	Requint Gt.
	6	25	126	3	Fingered Bs
	7	25	127	3	Syn Brass 1
A42		26	0	3	Steel-str.Gt
	1	26	8	3	12-str.Gt
	2	26	9	3	Nylon+Steel
	3	26	16	3	Mandolin
	4	26	17	3	Mandolin 2
	5	26	18	3	MandolinTrem
	6	26	32	3	Steel Gt.2
	7	26	126	3	Picked Bass
	8	26	127	3	Syn Brass 2
A43		27	0	3	Jazz Gt.
	1	27	1	3	Mellow Gt.
	2	27	8	3	Pedal Steel
	3	27	126	3	Picked Bass
	4	27	127	3	Syn Brass 3
A44		28	0	3	Clean Gt.
	1	28	1	3	Clean Half
	2	28	2	3	Open Hard 1
	3	28	3	3	Open Hard 2
	4	28	4	3	JC Clean Gt.
	5	28	8	3	Chorus Gt.
	6	28	9	3	JC Chorus Gt
	7	28	16	3	TC FrontPick
	8	28	17	3	TC Rear Pick
	9	28	18	3	TC Clean ff
	10	28	19	3	TC Clean 2
	11	28	126	3	Fretless Bs
	12	28	127	3	Syn Brass 4
A45		29	0	3	Muted Gt.
	1	29	1	3	Muted Dis.Gt
	2	29	2	3	TC Muted Gt.
	3	29	8	3	Funk Gt.
	4	29	16	3	Funk Gt.2
	5	29	126	3	Acoustic Bs.
	6	29	127	3	Syn Bass 1
A46		30	0	3	OverdriveGt
	1	30	1	3	Overdrive 2
	2	30	2	3	Overdrive 3
	3	30	3	3	More Drive
	4	30	8	3	LP OverDrvGt
	5	30	9	3	LP OverDrv
	6	30	126	3	Choir Aahs
	7	30	127	3	Syn Bass 2
A47		31	0	3	DistortionGt
	1	31	1	3	Dist. Gt2
	2	31	2	3	Dazed Guitar
	3	31	3	3	Distortion
	4	31	4	3	Dist.Fast
	5	31	8	3	Feedback Gt
	6	31	9	3	Feedback Gt2
	7	31	16	3	Power Guitar
	8	31	17	3	Power Gt.2
	9	31	18	3	5th Dist.
	10	31	24	3	Rock Rhythm
	11	31	25	3	Rock Rhythm2
	12	31	126	3	Choir Aahs
A48		32	0	3	Gt.Harmonics
	1	32	8	3	Gt. Feedback
	2	32	9	3	Gt.Feedback2
	3	32	16	3	Ac.Gt.Harmnx
	4	32	24	3	E.Bass Harm.
	5	32	126	3	Choir Aahs
	6	32	127	3	Syn Bass 4
A51		33	0	3	Acoustic Bs.
	1	33	1	3	Rockabilly
	2	33	8	3	Wild A.Bass
	3	33	16	3	Bass + OHH
	4	33	126	3	Choir Aahs
	5	33	127	3	Fantasy
A52		34	0	3	Fingered Bs
	1	34	1	3	Fingered Bs2
	2	34	2	3	Jazz Bass
	3	34	3	3	Jazz Bass 2
	4	34	4	3	Rock Bass
	5	34	8	3	ChorusJazzBs
	6	34	16	3	F.Bass/Harm.
	7	34	126	3	Slow Strings
	8	34	127	3	Harmo Pan
A53		35	0	3	Picked Bass
	1	35	1	3	Picked Bass2
	2	35	2	3	Picked Bass3
	3	35	3	3	Picked Bass4
	4	35	8	3	Muted PickBs

GBN	Var	PC	CC00	CC32	Name
A53	5	35	16	3	P.Bass/Harm.
	6	35	126	3	Strings
	7	35	127	3	Chorale
A54		36	0	3	Fretless Bs.
	1	36	1	3	Fretless Bs2
	2	36	2	3	Fretless Bs3
	3	36	3	3	FretlessBs4
	4	36	4	3	Syn Fretless
	5	36	5	3	Mr.Smooth
	6	36	8	3	Wood+FlessBs
	7	36	126	3	Syn.Strings3
	8	36	127	3	Glasses
A55		37	0	3	Slap Bass 1
	1	37	1	3	Slap Pop
	2	37	8	3	Reso Slap
	3	37	9	3	Unison Slap
	4	37	126	3	Syn.Strings3
	5	37	127	3	Soundtrack
A56		38	0	3	Slap Bass 2
	1	38	8	3	FM Slap
	2	38	126	3	Organ 1
	3	38	127	3	Atmosphere
A57		39	0	3	Synth Bass 1
	1	39	1	3	SynthBass101
	2	39	2	3	CS Bass
	3	39	3	3	JP-4 Bass
	4	39	4	3	JP-8 Bass
	5	39	5	3	P5 Bass
	6	39	6	3	JPMG Bass
	7	39	8	3	Acid Bass
	8	39	9	3	TB303 Bass
	9	39	10	3	Tekno Bass
	10	39	11	3	TB303 Bass 2
	11	39	12	3	Kicked TB303
	12	39	13	3	TB303 Saw Bs
	13	39	14	3	Rubber303 Bs
	14	39	15	3	Reso 303 Bs
	15	39	16	3	Reso SH Bass
	16	39	17	3	TB303 Sqr Bs
	17	39	18	3	TB303 DistBs
	18	39	24	3	Arpeggio Bs
	19	39	126	3	Organ 1
	20	39	127	3	Warm Bell
A58		40	0	3	Synth Bass 2
	1	40	1	3	SynthBass201
	2	40	2	3	Modular Bass
	3	40	3	3	Seq Bass
	4	40	4	3	MG Bass
	5	40	5	3	Mg Oct Bass1
	6	40	6	3	MG Oct Bass2
	7	40	7	3	MG Blip Bs
	8	40	8	3	Beef FM Bass
	9	40	9	3	Dly Bass
	10	40	10	3	X Wire Bass
	11	40	11	3	WireStr Bass
	12	40	12	3	Blip Bass
	13	40	13	3	RubberBass 1
	14	40	16	3	RubberBass 2
	15	40	17	3	SH101 Bass 1
	16	40	18	3	SH101 Bass 2
	17	40	19	3	Smooth Bass
	18	40	20	3	SH101 Bass 3
	19	40	21	3	Spike Bass
	20	40	22	3	House Bass
	21	40	23	3	KG Bass
	22	40	24	3	Sync Bass
	23	40	25	3	MG 5th Bass
	24	40	26	3	RND Bass
	25	40	27	3	WowMG Bass
	26	40	28	3	Bubble Bass
	27	40	126	3	Organ 1
	28	40	127	3	Funny Vox
A61		41	0	3	Violin
	1	41	1	3	Violin Atk
	2	41	8	3	Slow Violin
	3	41	126	3	Organ 2
	4	41	127	3	Echo Bell
A62		42	0	3	Viola
	1	42	1	3	Viola Atk.
	2	42	126	3	Organ 1
	3	42	127	3	Ice Rain
A63		43	0	3	Cello
	1	43	1	3	Cello Atk.
	2	43	126	3	Organ 1
	3	43	127	3	Oboe 2001
A64		44	0	3	Contrabass
	1	44	126	3	Organ 2
	2	44	127	3	Echo Pan
A65		45	0	3	Tremolo Str
	1	45	8	3	Slow Tremolo
	2	45	9	3	Suspense Str

GBN	Var	PC	CC00	CC32	Name
A65	3	45	126	3	Organ 2
	4	45	127	3	Doctor Solo
A66		46	0	3	Pizzicato
	1	46	1	3	Vcs&Cbs Pizz
	2	46	2	3	Chamber Pizz
	3	46	3	3	St.Pizzicato
	4	46	8	3	Solo Pizz.
	5	46	16	3	Solo Spic.
	6	46	126	3	Organ 2
	7	46	127	3	School Daze
A67		47	0	3	Harp
	1	47	16	3	Synth Harp
	2	47	126	3	Trumpet
	3	47	127	3	Bellsinger
A68		48	0	3	Timpani
	1	48	126	3	Trumpet
	2	48	127	3	Square Wave
A71		49	0	3	Strings
	1	49	1	3	Bright Str
	2	49	2	3	ChamberStr
	3	49	3	3	Cello sect.
	4	49	8	3	Orchestra
	5	49	9	3	Orchestra 2
	6	49	10	3	Tremolo Orch
	7	49	11	3	Choir Str.
	8	49	12	3	Strings+Horn
	9	49	16	3	St. Strings
	10	49	24	3	Velo Strings
	11	49	32	3	Oct Strings1
	12	49	33	3	Oct Strings2
	13	49	126	3	Trombone
	14	49	127	3	Str Sect 1
A72		50	0	3	Slow Strings
	1	50	1	3	SlowStrings2
	2	50	8	3	Legato Str.
	3	50	9	3	Warm Strings
	4	50	10	3	St.Slow Str.
	5	50	126	3	Trombone
	6	50	127	3	Str Sect 2
A73		51	0	3	Syn.Strings1
	1	51	1	3	OB Strings
	2	51	2	3	StackStrings
	3	51	3	3	JP Strings
	4	51	8	3	Syn.Strings3
	5	51	9	3	Syn.Strings4
	6	51	16	3	High Strings
	7	51	17	3	Hybrid Str.
	8	51	24	3	Tron Strings
	9	51	25	3	Noiz Strings
	10	51	126	3	Trombone
	11	51	127	3	Str Sect 3
A74		52	0	3	Syn.Strings2
	1	52	1	3	Syn.StringsS
	2	52	2	3	JUNO Strings
	3	52	8	3	Air Strings
	4	52	126	3	Trombone
	5	52	127	3	Pizzicato
A75		53	0	3	Choir Aahs
	1	53	8	3	St.ChoirAahs
	2	53	9	3	Melted Choir
	3	53	10	3	Church Choir
	4	53	16	3	Choir Hahs
	5	53	24	3	Chorus Lahs
	6	53	32	3	Chorus Aahs
	7	53	33	3	Male Aah+Str
	8	53	126	3	Trombone
	9	53	127	3	Violin 1
A76		54	0	3	Voice Oohs
	1	54	8	3	Voice Dahs
	2	54	126	3	Trombone
	3	54	127	3	Violin 2
A77		55	0	3	SynVox
	1	55	8	3	Syn.Voice
	2	55	9	3	Silent Night
	3	55	16	3	VP330 Choir
	4	55	17	3	Vinyl Choir
	5	55	126	3	Alto Sax
	6	55	127	3	Cello 1
A78		56	0	3	OrchestraHit
	1	56	8	3	Impact Hit
	2	56	9	3	Philly Hit
	3	56	10	3	Double Hit
	4	56	11	3	Perc. Hit
	5	56	12	3	Shock Wave
	6	56	16	3	Lo Fi Rave
	7	56	17	3	Techno Hit
	8	56	18	3	Dist. Hit
	9	56	19	3	Bam Hit
	10	56	20	3	Bit Hit

GBN	Var	PC	CC00	CC32	Name
A78	11	56	21	3	Bim Hit
	12	56	22	3	Technorg Hit
	13	56	23	3	Rave Hit
	14	56	24	3	Strings Hit
	15	56	25	3	Stack Hit
	16	56	126	3	Tenor Sax
	17	56	127	3	Cello 2
A81		57	0	3	Trumpet
	1	57	1	3	Trumpet 2
	2	57	2	3	Trumpet
	3	57	8	3	Flugel Horn
	4	57	16	3	4th Trumpets
	5	57	24	3	Bright Tp.
	6	57	25	3	Warm Tp.
	7	57	32	3	Syn. Trumpet
	8	57	126	3	Baritone Sax
	9	57	127	3	Contrabass
A82		58	0	3	Trombone
	1	58	1	3	Trombone 2
	2	58	2	3	Twin bones
	3	58	8	3	Bs. Trombone
	4	58	126	3	Alto Sax
	5	58	127	3	Harp 1
A83		59	0	3	Tuba
	1	59	1	3	Tuba 2
	2	59	126	3	Brass 1
	3	59	127	3	Harp 2
A84		60	0	3	MutedTrumpet
	1	60	8	3	Muted Horns
	2	60	126	3	Brass 1
	3	60	127	3	Guitar 1
A85		61	0	3	French Horns
	1	61	1	3	Fr.Horn 2
	2	61	2	3	Horn + Orche
	3	61	3	3	Wide FreHrns
	4	61	8	3	F.Hrn Slow
	5	61	9	3	Dual Horns
	6	61	16	3	Synth Horn
	7	61	24	3	F.Horn Rip
	8	61	126	3	Brass 2
	9	61	127	3	Guitar 2
A86		62	0	3	Brass 1
	1	62	1	3	Brass ff
	2	62	2	3	Bones Sect.
	3	62	8	3	Brass 2
	4	62	9	3	Brass 3
	5	62	10	3	Brass sfz
	6	62	16	3	Brass Fall
	7	62	17	3	Trumpet Fall
	8	62	24	3	Octave Brass
	9	62	25	3	Brass + Reed
	10	62	126	3	Brass 2
	11	62	127	3	Elec Gtr 1
A87		63	0	3	Synth Brass1
	1	63	1	3	JUNO Brass
	2	63	2	3	Stack Brass
	3	63	3	3	SH-5 Brass
	4	63	4	3	MK5 Brass
	5	63	8	3	Pro Brass
	6	63	9	3	P5 Brass
	7	63	16	3	Oct SynBrass
	8	63	17	3	Hybrid Brass
	9	63	126	3	Brass 1
	10	63	127	3	Elec Gtr 2
A88		64	0	3	Synth Brass2
	1	64	1	3	Soft Brass
	2	64	2	3	Warm Brass
	3	64	8	3	SynBrass sfz
	4	64	9	3	OB Brass
	5	64	10	3	Reso Brass
	6	64	16	3	Velo Brass 1
	7	64	17	3	Transbrass
	8	64	126	3	OrchestraHit
	9	64	127	3	Sitar
B11		65	0	3	Soprano Sax
	1	65	8	3	Soprano Exp.
	2	65	127	3	Acou Bass 1
B12		66	0	3	Alto Sax
	1	66	8	3	AltoSax Exp.
	2	66	9	3	Grow Sax
	3	66	16	3	AltoSax + Tp
	4	66	127	3	Acou Bass 2
B13		67	0	3	Tenor Sax
	1	67	1	3	Tenor Sax
	2	67	8	3	BreathyTn.
	3	67	9	3	St.Tenor Sax
	4	67	127	3	Elec Bass 1

GBN	Var	PC	CC00	CC32	Name
B14		68	0	3	Baritone Sax
	1	68	1	3	Bari. Sax
	2	68	127	3	Elec Bass 2
B15		69	0	3	Oboe
	1	69	8	3	Oboe Exp.
	2	69	16	3	Multi Reed
	3	69	127	3	Slap Bass 1
B16		70	0	3	EnglishHorn
	1	70	127	3	Slap Bass 2
B17		71	0	3	Bassoon
	1	71	127	3	Fretless 1
B18		72	0	3	Clarinet
	1	72	8	3	Bs Clarinet
	2	72	16	3	Multi Wind
	3	72	127	3	Fretless 2
B21		73	0	3	Piccolo
	1	73	1	3	Piccolo
	2	73	8	3	Nay
	3	73	9	3	Nay Tremolo
	4	73	16	3	Di
	5	73	127	3	Flute 1
B22		74	0	3	Flute
	1	74	1	3	Flute 2
	2	74	2	3	Flute Exp.
	3	74	3	3	Flt Traverso
	4	74	8	3	Flute + Vln
	5	74	16	3	Tron Flute
	6	74	127	3	Flute 2
B23		75	0	3	Recorder
	1	75	127	3	Piccolo 1
B24		76	0	3	Pan Flute
	1	76	8	3	Kawala
	2	76	16	3	Zampona
	3	76	17	3	Zampona Atk
	4	76	127	3	Piccolo 2
B25		77	0	3	Bottle Blow
	1	77	127	3	Recorder
B26		78	0	3	Shakuhachi
	1	78	1	3	Shakuhachi
	2	78	127	3	Pan Pipes
B27		79	0	3	Whistle
	1	79	1	3	Whistle 2
	2	79	127	3	Sax 1
B28		80	0	3	Ocarina
	1	80	127	3	Sax 2
B31		81	0	3	Square Wave
	1	81	1	3	MG Square
	2	81	2	3	Hollow Mini
	3	81	3	3	Mellow FM
	4	81	4	3	CC Solo
	5	81	5	3	Shmoog
	6	81	6	3	LM Square
	7	81	8	3	2600 Sine
	8	81	9	3	Sine Lead
	9	81	10	3	KG Lead
	10	81	16	3	P5 Square
	11	81	17	3	OB Square
	12	81	18	3	JP-8 Square
	13	81	24	3	Pulse Lead
	14	81	25	3	JP8 PulseLd1
	15	81	26	3	JP8 PulseLd2
	16	81	27	3	MG Reso. Pls
	17	81	127	3	Sax 3
B32		82	0	3	Saw Wave
	1	82	1	3	OB2 Saw
	2	82	2	3	Pulse Saw
	3	82	3	3	Feline GR
	4	82	4	3	Big Lead
	5	82	5	3	Velo Lead
	6	82	6	3	GR-300
	7	82	7	3	LA Saw
	8	82	8	3	Doctor Solo
	9	82	9	3	Fat Saw Lead
	10	82	11	3	D-50 Fat Saw
	11	82	16	3	Waspy Synth
	12	82	17	3	PM Lead
	13	82	18	3	CS Saw Lead
	14	82	24	3	MG Saw 1
	15	82	25	3	MG Saw 2
	16	82	26	3	OB Saw 1
	17	82	27	3	OB Saw 2
	18	82	28	3	D-50 Saw
	19	82	29	3	SH-101 Saw
	20	82	30	3	CS Saw
	21	82	31	3	MG Saw Lead
	22	82	32	3	OB Saw Lead
	23	82	33	3	P5 Saw Lead

GBN	Var	PC	CC00	CC32	Name
B32	24	82	34	3	MG unison
	25	82	35	3	Oct Saw Lead
	26	82	40	3	SequenceSaw1
	27	82	41	3	SequenceSaw2
	28	82	42	3	Reso Saw
	29	82	43	3	Cheese Saw 1
	30	82	44	3	Cheese Saw 2
	31	82	45	3	Rhythmic Saw
	32	82	127	3	Sax 4
B33		83	0	3	Syn.Calliope
	1	83	1	3	Vent Synth
	2	83	2	3	Pure PanLead
	3	83	127	3	Clarinet 1
B34		84	0	3	Chiffer Lead
	1	84	1	3	TB Lead
	2	84	8	3	Mad Lead
	3	84	127	3	Clarinet 2
B35		85	0	3	Charang
	1	85	8	3	Dist.Lead
	2	85	9	3	Acid Guitar1
	3	85	10	3	Acid Guitar2
	4	85	16	3	P5 Sync Lead
	5	85	17	3	Fat SyncLead
	6	85	18	3	Rock Lead
	7	85	19	3	5th DecaSync
	8	85	20	3	Dirty Sync
	9	85	24	3	JUNO Sub Osc
	10	85	127	3	Oboe
B36		86	0	3	Solo Vox
	1	86	8	3	Vox Lead
	2	86	9	3	LFO Vox
	3	86	127	3	Engl Horn
B37		87	0	3	5th Saw Wave
	1	87	1	3	Big Fives
	2	87	2	3	5th Lead
	3	87	3	3	5th Ana.Clav
	4	87	8	3	4th Lead
	5	87	127	3	Bassoon
B38		88	0	3	Bass & Lead
	1	88	1	3	Big & Raw
	2	88	2	3	Fat & Perky
	3	88	3	3	JUNO Rave
	4	88	4	3	JP8 BsLead 1
	5	88	5	3	JP8 BsLead 2
	6	88	6	3	SH-5 Bs.Lead
	7	88	127	3	Harmonica
B41		89	0	3	Fantasia
	1	89	1	3	Fantasia 2
	2	89	2	3	New Age Pad
	3	89	3	3	Bell Heaven
	4	89	127	3	Trumpet 1
B42		90	0	3	Warm Pad
	1	90	1	3	Thick Matrix
	2	90	2	3	Horn Pad
	3	90	3	3	Rotary Strng
	4	90	4	3	OB Soft Pad
	5	90	8	3	Octave Pad
	6	90	9	3	Stack Pad
	7	90	127	3	Trumpet 2
B43		91	0	3	Polysynth
	1	91	1	3	80's PolySyn
	2	91	2	3	Polysynth 2
	3	91	3	3	Poly King
	4	91	8	3	Power Stack
	5	91	9	3	Octave Stack
	6	91	10	3	Reso Stack
	7	91	11	3	Techno Stack
	8	91	127	3	Trombone 1
B44		92	0	3	Space Voice
	1	92	1	3	Heaven II
	2	92	2	3	SC Heaven
	3	92	8	3	Cosmic Voice
	4	92	9	3	Auh Vox
	5	92	10	3	AuhAuh
	6	92	11	3	Vocorderman
	7	92	127	3	Trombone 2
B45		93	0	3	Bowed Glass
	1	93	1	3	SoftBellPad
	2	93	2	3	JP8 Sqr Pad
	3	93	3	3	7thBelPad
	4	93	127	3	Fr Horn 1
B46		94	0	3	Metal Pad
	1	94	1	3	Tine Pad
	2	94	2	3	Panner Pad
	3	94	127	3	Fr Horn 2

GBN	Var	PC	CC00	CC32	Name
B47		95	0	3	Halo Pad
	1	95	1	3	Vox Pad
	2	95	2	3	Vox Sweep
	3	95	8	3	Horror Pad
	4	95	127	3	Tuba
B48		96	0	3	Sweep Pad
	1	96	1	3	Polar Pad
	2	96	8	3	Converge
	3	96	9	3	Shwimmer
	4	96	10	3	Celestial Pd
	5	96	11	3	Bag Sweep
	6	96	127	3	Brs Sect 1
B51		97	0	3	Ice Rain
	1	97	1	3	Harmo Rain
	2	97	2	3	African wood
	3	97	3	3	Anklung Pad
	4	97	4	3	Rattle Pad
	5	97	8	3	Clavi Pad
	6	97	127	3	Brs Sect 2
B52		98	0	3	Soundtrack
	1	98	1	3	Ancestral
	2	98	2	3	Prologue
	3	98	3	3	Prologue 2
	4	98	4	3	Hols Strings
	5	98	8	3	Rave
	6	98	127	3	Vibe 1
B53		99	0	3	Crystal
	1	99	1	3	Syn Mallet
	2	99	2	3	Soft Crystal
	3	99	3	3	Round Glock
	4	99	4	3	Loud Glock
	5	99	5	3	GlockenChime
	6	99	6	3	Clear Bells
	7	99	7	3	ChristmasBel
	8	99	8	3	Vibra Bells
	9	99	9	3	Digi Bells
	10	99	10	3	Music Bell
	11	99	11	3	Analog Bell
	12	99	16	3	Choral Bells
	13	99	17	3	Air Bells
	14	99	18	3	Bell Harp
	15	99	19	3	Gamelimba
	16	99	20	3	JUNO Bell
	17	99	127	3	Vibe 2
B54		100	0	3	Atmosphere
	1	100	1	3	Warm Atmos
	2	100	2	3	Nylon Harp
	3	100	3	3	Harpvox
	4	100	4	3	HollowReleas
	5	100	5	3	Nylon+Rhodes
	6	100	6	3	Ambient Pad
	7	100	7	3	Invisible
	8	100	8	3	Pulsey Key
	9	100	9	3	Noise Piano
	10	100	127	3	Syn Mallet
B55		101	0	3	Brightness
	1	101	1	3	Shining Star
	2	101	2	3	OB Stab
	3	101	8	3	Org Bell
	4	101	127	3	Windbell
B56		102	0	3	Goblin
	1	102	1	3	Goblinson
	2	102	2	3	50's Sci-Fi
	3	102	3	3	Abduction
	4	102	4	3	Auhbient
	5	102	5	3	LFO Pad
	6	102	6	3	Random Str
	7	102	7	3	Random Pad
	8	102	8	3	LowBirds Pad
	9	102	9	3	Falling Down
	10	102	10	3	LFO RAVE
	11	102	11	3	LFO Horror
	12	102	12	3	LFO Techno
	13	102	13	3	Alternative
	14	102	14	3	UFO FX
	15	102	15	3	Gargle Man
	16	102	16	3	Sweep FX
	17	102	127	3	Glock
B57		103	0	3	Echo Drops
	1	103	1	3	Echo Bell
	2	103	2	3	Echo Pan
	3	103	3	3	Echo Pan 2
	4	103	4	3	Big Panner
	5	103	5	3	Reso Panner
	6	103	6	3	Water Piano
	7	103	8	3	Pan Sequence
	8	103	9	3	Aqua
	9	103	127	3	Tube Bell
B58		104	0	3	Star Theme
	1	104	1	3	Star Theme 2
	2	104	8	3	Dream Pad

GBN	Var	PC	CC00	CC32	Name
B58	3	104	9	3	Silky Pad
	4	104	16	3	New Century
	5	104	17	3	7th Atmos.
	6	104	18	3	Galaxy Way
	7	104	127	3	Xylophone
B61		105	0	3	Sitar
	1	105	1	3	Sitar 2
	2	105	2	3	Detune Sitar
	3	105	3	3	Sitar 3
	4	105	8	3	Tambra
	5	105	16	3	Tamboura
	6	105	127	3	Marimba
B62		106	0	3	Banjo
	1	106	1	3	Muted Banjo
	2	106	8	3	Rabab
	3	106	9	3	San Xian
	4	106	16	3	Gopichant
	5	106	24	3	Oud
	6	106	28	3	Oud+Strings
	7	106	32	3	Pi Pa
	8	106	127	3	Koto
B63		107	0	3	Shamisen
	1	107	1	3	Tsugaru
	2	107	8	3	Syn Shamisen
	3	107	127	3	Sho
B64		108	0	3	Koto
	1	108	1	3	Gu Zheng
	2	108	8	3	Taisho Koto
	3	108	16	3	Kanoon
	4	108	19	3	Kanoon+Choir
	5	108	24	3	Oct Harp
	6	108	127	3	Shakuhachi
B65		109	0	3	Kalimba
	1	109	8	3	Sanza
	2	109	127	3	Whistle 1
B66		110	0	3	Bagpipe
	1	110	8	3	Didgeridoo
	2	110	127	3	Whistle 2
B67		111	0	3	Fiddle
	1	111	8	3	Er Hu
	2	111	9	3	Gao Hu
	3	111	127	3	Bottleblow
B68		112	0	3	Shanai
	1	112	1	3	Shanai 2
	2	112	8	3	Pungi
	3	112	16	3	Hichiriki
	4	112	24	3	Mizmar
	5	112	32	3	Suona 1
	6	112	33	3	Suona 2
	7	112	127	3	Breathpipe
B71		113	0	3	Tinkle Bell
	1	113	8	3	Bonang
	2	113	9	3	Gender
	3	113	10	3	Gamelan Gong
	4	113	11	3	St.Gamelan
	5	113	12	3	Jang Gu
	6	113	16	3	RAMA Cymbal
	7	113	127	3	Timpani
B72		114	0	3	Agogo
	1	114	8	3	Atarigane
	2	114	16	3	Tambourine
	3	114	127	3	Melodic Tom
B73		115	0	3	Steel Drums
	1	115	1	3	Island Mlt
	2	115	127	3	Deep Snare
B74		116	0	3	Woodblock
	1	116	8	3	Castanets
	2	116	16	3	Angklung
	3	116	17	3	Angkl Rhythm
	4	116	24	3	Finger Snaps
	5	116	32	3	909 HandClap
	6	116	127	3	Elec Perc 1
B75		117	0	3	Taiko
	1	117	1	3	Small Taiko
	2	117	8	3	Concert BD
	3	117	16	3	Jungle BD
	4	117	17	3	Techno BD
	5	117	18	3	Bounce
	6	117	127	3	Elec Perc 2
B76		118	0	3	Melo. Tom 1
	1	118	1	3	Real Tom
	2	118	8	3	Melo. Tom 2
	3	118	9	3	Rock Tom
	4	118	16	3	Rash SD
	5	118	17	3	House SD
	6	118	18	3	Jungle SD
	7	118	19	3	909 SD

GBN	Var	PC	CC00	CC32	Name
B76	8	118	127	3	Taiko
B77		119	0	3	Synth Drum
	1	119	8	3	808 Tom
	2	119	9	3	Elec Perc
	3	119	10	3	Sine Perc.
	4	119	11	3	606 Tom
	5	119	12	3	909 Tom
	6	119	127	3	Taiko Rim
B78		120	0	3	Reverse Cym.
	1	120	1	3	Reverse Cym2
	2	120	2	3	Reverse Cym3
	3	120	8	3	Rev.Snare 1
	4	120	9	3	Rev.Snare 2
	5	120	16	3	Rev.Kick 1
	6	120	17	3	Rev.ConBD
	7	120	24	3	Rev.Tom 1
	8	120	25	3	Rev.Tom 2
	9	120	127	3	Cymbal
B81		121	0	3	Gt.FretNoise
	1	121	1	3	Gt.Cut Noise
	2	121	2	3	String Slap
	3	121	3	3	Gt.CutNoise2
	4	121	4	3	Dist.CutNoiz
	5	121	5	3	Bass Slide

GBN	Var	PC	CC00	CC32	Name
B81	6	121	6	3	Pick Scrape
	7	121	8	3	Gt. FX Menu
	8	121	9	3	Bartok Pizz.
	9	121	10	3	Guitar Slap
	10	121	11	3	Chord Stroke
	11	121	12	3	Biwa Stroke
	12	121	13	3	Biwa Tremolo
	13	121	127	3	Castanets
B82		122	0	3	Breath Noise
	1	122	1	3	Fl.Key Click
	2	122	127	3	Triangle
B83		123	0	3	Seashore
	1	123	1	3	Rain
	2	123	2	3	Thunder
	3	123	3	3	Wind
	4	123	4	3	Stream
	5	123	5	3	Bubble
	6	123	6	3	Wind 2
	7	123	16	3	Pink Noise
	8	123	17	3	White Noise
	9	123	127	3	Orche Hit
B84		124	0	3	Bird
	1	124	1	3	Dog
	2	124	2	3	Horse-Gallop
	3	124	3	3	Bird 2
B84	4	124	4	3	Kitty
	5	124	5	3	Growl
	6	124	127	3	Telephone

GBN	Var	PC	CC00	CC32	Name
B85		125	0	3	Telephone 1
	1	125	1	3	Telephone 2
	2	125	2	3	DoorCreaking
	3	125	3	3	Door
	4	125	4	3	Scratch
	5	125	5	3	Wind Chimes
	6	125	7	3	Scratch 2
	7	125	8	3	ScratchKey
	8	125	9	3	TapeRewind
	9	125	10	3	Phono Noise
	10	125	11	3	MC-500 Beep
	11	125	127	3	Bird Tweet
B86		126	0	3	Helicopter
	1	126	1	3	Car-Engine
	2	126	2	3	Car-Stop
	3	126	3	3	Car-Pass
	4	126	4	3	Car-Crash
	5	126	5	3	Siren
	6	126	6	3	Train
	7	126	7	3	Jetplane
	8	126	8	3	Starship
	9	126	9	3	Burst Noise
	10	126	10	3	Calculating
	11	126	11	3	Perc. Bang
	12	126	127	3	OneNote Jam
B87		127	0	3	Applause
	1	127	1	3	Laughing
	2	127	2	3	Screaming
	3	127	3	3	Punch
	4	127	4	3	Heart Beat

GBN	Var	PC	CC00	CC32	Name
B87	5	127	5	3	Footsteps
	6	127	6	3	Applause 2
	7	127	7	3	Small Club
	8	127	8	3	ApplauseWave
	9	127	16	3	Voice One
	10	127	17	3	Voice Two
	11	127	18	3	Voice Three
	12	127	19	3	Voice Tah
	13	127	20	3	Voice Whey
	14	127	127	3	Water Bell
B88		128	0	3	Gun Shot
	1	128	1	3	Machine Gun
	2	128	2	3	Lasergun
	3	128	3	3	Explosion
	4	128	4	3	Eruption
	5	128	5	3	Big Shot
	6	128	127	3	Jungle Tune

Tone Map 2

GBN	Var	PC	CC00	CC32	Name
A11		1	0	2	Piano 1
	1	1	8	2	Upright P w
	2	1	16	2	European Pf
	3	1	126	2	Piano 2
	4	1	127	2	Acou Piano1
A12		2	0	2	Piano 2
	1	2	8	2	Pop Piano w
	2	2	126	2	Piano 2
	3	2	127	2	Acou Piano2
A13		3	0	2	Piano 3
	1	3	1	2	EG+Rhodes 1
	2	3	2	2	EG+Rhodes 2
	3	3	8	2	Piano 3w
	4	3	126	2	Piano 2
	5	3	127	2	Acou Piano3
A14		4	0	2	Honky-tonk
	1	4	8	2	Honky-tonk 2
	2	4	126	2	Honky-tonk
	3	4	127	2	Elec Piano1
A15		5	0	2	E.Piano 1
	1	5	8	2	St.Soft EP
	2	5	9	2	SA E.Piano
	3	5	16	2	FM+SA EP
	4	5	17	2	StikyRhodes
	5	5	24	2	Wurly
	6	5	25	2	Hard Rhodes
	7	5	26	2	MellowRhodes
	8	5	27	2	60'sEPiano2
	9	5	126	2	Piano 1
	10	5	127	2	Elec Piano2
A16	6	0	2	E.Piano 2	
	1	6	8	2	Detuned EP 2
	2	6	16	2	St.FM EP
	3	6	24	2	Hard FM EP
	4	6	126	2	Piano 2
	5	6	127	2	Elec Piano3
A17		7	0	2	Harpsichord
	1	7	8	2	Coupled Hps.
	2	7	16	2	Harpsi.w
	3	7	24	2	Harpsi.o
	4	7	126	2	Piano 2
	5	7	127	2	Elec Piano4
A18		8	0	2	Clav.
	1	8	126	2	E.Piano 1
	2	8	127	2	Honkytonk
A21		9	0	2	Celesta
	1	9	126	2	Cho. E.Piano
	2	9	127	2	Elec Org 1
A22		10	0	2	Glockenspl
	1	10	126	2	E.Piano 2
	2	10	127	2	Elec Org 2

GBN	Var	PC	CC00	CC32	Name
A23		11	0	2	Music Box
	1	11	126	2	Steel-str.Gt
	2	11	127	2	Elec Org 3
A24		12	0	2	Vibraphone
	1	12	1	2	Pop Vibe.
	2	12	8	2	Vib.w
	3	12	126	2	Steel-str.Gt
	4	12	127	2	Elec Org 4
A25		13	0	2	Marimba
	1	13	8	2	Marimba w
	2	13	16	2	Barafon
	3	13	17	2	Barafon 2
	4	13	24	2	Log drum
	5	13	126	2	12-str.Gt
	6	13	127	2	Pipe Org 1
A26		14	0	2	Xylophone
	1	14	126	2	Funk Gt.
	2	14	127	2	Pipe Org 2
A27		15	0	2	Tubular-bell
	1	15	8	2	Church Bell
	2	15	9	2	Carillon
	3	15	126	2	Muted Gt.
	4	15	127	2	Pipe Org 3
A28	16	0	2	Santur	
	1	16	1	2	Santur 2
	2	16	8	2	Cimbalom
A31		17	0	2	Organ 1
	1	17	1	2	Organ 101
	2	17	8	2	Detuned Or1
	3	17	9	2	Organ o
	4	17	16	2	60's Organ1
	5	17	17	2	60's Organ 2
	6	17	18	2	60's Organ 3
	7	17	24	2	Cheese Organ
	8	17	32	2	Organ 4
	9	17	33	2	Even Bar
	10	17	40	2	Organ Bass
	11	17	48	2	Organ Oct 1
	12	17	126	2	Slap Bass 1
	13	17	127	2	Harpsi 1
A32		18	0	2	Organ 2
	1	18	1	2	Jazz Organ
	2	18	8	2	Detuned Or2
	3	18	32	2	Organ 5
	4	18	126	2	Slap Bass 1
	5	18	127	2	Harpsi 2
A33		19	0	2	Organ 3
	1	19	8	2	Rotary Org.
	2	19	16	2	Rotary Org.S
	3	19	24	2	Rotary Org.F
	4	19	126	2	Slap Bass 1
	5	19	127	2	Harpsi 3

GBN	Var	PC	CC00	CC32	Name
A34		20	0	2	Church Org1
	1	20	8	2	Church Org2
	2	20	9	2	Organ Oct 2
	3	20	16	2	Church Org3
	4	20	24	2	Organ Flute
	5	20	32	2	Trem.Flute
	6	20	126	2	Slap Bass 2
	7	20	127	2	Clavi 1
A35		21	0	2	Reed Organ
	1	21	126	2	Slap Bass 2
	2	21	127	2	Clavi 2
A36		22	0	2	Accordion F
	1	22	8	2	Accordion I
	2	22	16	2	Detuned Acc
	3	22	24	2	Accordion 1
	4	22	25	2	Accordion 2
	5	22	126	2	Slap Bass 2
	6	22	127	2	Clavi 3
A37		23	0	2	Harmonica
	1	23	1	2	Harmonica 2
	2	23	126	2	Slap Bass 2
	3	23	127	2	Celesta 1
A38		24	0	2	Bandoneon
	1	24	8	2	AccJuno-106
	2	24	16	2	DetunedAcc2
	3	24	17	2	It. Musette
	4	24	126	2	Fingered Bs
	5	24	127	2	Celesta 2
A41		25	0	2	Nylon-str.Gt
	1	25	8	2	Ukulele
	2	25	16	2	Nylon Gt.o
	3	25	24	2	Velo Harmnix
	4	25	32	2	Nylon Gt.2
	5	25	40	2	Requint Gt.
	6	25	126	2	Fingered Bs
	7	25	127	2	Syn Brass 1
A42		26	0	2	Steel-str.Gt
	1	26	8	2	12-str.Gt
	2	26	9	2	Nylon+Steel
	3	26	16	2	Mandolin
	4	26	17	2	Mandolin 2
	5	26	18	2	Mandolin Tr
	6	26	32	2	Steel Gt.2
	7	26	126	2	Picked Bass
	8	26	127	2	Syn Brass 2
A43		27	0	2	Jazz Gt.
	1	27	1	2	Mellow Gt.
	2	27	8	2	Pedal Steel
	3	27	126	2	Picked Bass
	4	27	127	2	Syn Brass 3
A44		28	0	2	Clean Gt.
	1	28	1	2	Clean Gt. 2
	2	28	2	2	OpenHard Gt
	3	28	8	2	Chorus Gt.

GBN	Var	PC	CC00	CC32	Name
A44	4	28	9	2	JC Strat Gt
	5	28	126	2	Fretless Bs
	6	28	127	2	Syn Brass 4
A45		29	0	2	Muted Gt.
	1	29	1	2	Muted Dis.Gt
	2	29	8	2	Funk Gt.
	3	29	16	2	Funk Gt.2
	4	29	126	2	Acoustic Bs.
	5	29	127	2	Syn Bass 1
A46		30	0	2	OverdriveGt
	1	30	126	2	Choir Aahs
	2	30	127	2	Syn Bass 2
A47		31	0	2	DistortionGt
	1	31	1	2	Dist. Gt2
	2	31	2	2	Dazed Guitar
	3	31	8	2	Feedback Gt
	4	31	9	2	Feedback Gt2
	5	31	16	2	Power Guitar
	6	31	17	2	Power Gt.2
	7	31	18	2	5th Dist.
	8	31	24	2	Rock Rhythm
	9	31	25	2	Rock Rhythm2
	10	31	126	2	Choir Aahs
	11	31	127	2	Syn Bass 3
A48		32	0	2	Gt.Harmonics
	1	32	8	2	Gt. Feedback
	2	32	16	2	Ac.Gt.Harmnx
	3	32	126	2	Choir Aahs
	4	32	127	2	Syn Bass 4
A51		33	0	2	Acoustic Bs.
	1	33	126	2	Choir Aahs
	2	33	127	2	Fantasy
A52		34	0	2	Fingered Bs
	1	34	1	2	Fingered Bs2
	2	34	2	2	Jazz Bass
	3	34	126	2	Slow Strings
	4	34	127	2	Harmo Pan
A53		35	0	2	Picked Bass
	1	35	8	2	Muted PickBs
	2	35	126	2	Strings
	3	35	127	2	Chorale
A54		36	0	2	Fretless Bs.
	1	36	1	2	Fretless Bs2
	2	36	2	2	Fretless Bs3
	3	36	3	2	FretlessBs4
	4	36	4	2	Syn Fretless
	5	36	5	2	Mr.Smooth
	6	36	126	2	Syn.Strings3
	7	36	127	2	Glasses
A55		37	0	2	Slap Bass 1
	1	37	8	2	Reso Slap
	2	37	126	2	Syn.Strings3
	3	37	127	2	Soundtrack

GBN	Var	PC	CC00	CC32	Name
A56		38	0	2	Slap Bass 2
	1	38	126	2	Organ 1
	2	38	127	2	Atmosphere
A57		39	0	2	Synth Bass 1
	1	39	1	2	SynthBass101
	2	39	8	2	Acid Bass
	3	39	9	2	TB303 Bass
	4	39	10	2	Tekno Bass
	5	39	16	2	Reso SH Bass
	6	39	126	2	Organ 1
	7	39	127	2	Warm Bell
A58		40	0	2	Synth Bass 2
	1	40	1	2	SynthBass201
	2	40	2	2	Modular Bass
	3	40	3	2	Seq Bass
	4	40	8	2	Beef FM Bass
	5	40	9	2	X Wire Bass
	6	40	16	2	RubberBass 2
	7	40	17	2	SH101 Bass 1
	8	40	18	2	SH101 Bass 2
	9	40	19	2	Smooth Bass
	10	40	126	2	Organ 1
	11	40	127	2	Funny Vox
A61		41	0	2	Violin
	1	41	8	2	Slow Violin
	2	41	16	2	Folk Violin
	3	41	17	2	FolkVioInVb
	4	41	126	2	Organ 2
	5	41	127	2	Echo Bell
A62		42	0	2	Viola
	1	42	126	2	Organ 1
	2	42	127	2	Ice Rain
A63		43	0	2	Cello
	1	43	126	2	Organ 1
	2	43	127	2	Oboe 2001
A64		44	0	2	Contrabass
A65		45	0	2	Tremolo Str
	1	45	8	2	Slow Tremolo
	2	45	9	2	Suspense Str
	3	45	126	2	Organ 2
	4	45	127	2	Doctor Solo
A66		46	0	2	Pizzicato
	1	46	126	2	Organ 2
	2	46	127	2	School Daze
A67		47	0	2	Harp
	1	47	126	2	Trumpet
	2	47	127	2	Bellsinger
A68		48	0	2	Timpani
	1	48	126	2	Trumpet
	2	48	127	2	Square Wave
A71		49	0	2	Strings
	1	49	1	2	Bright Str
	2	49	8	2	Orchestra
	3	49	9	2	Orchestra 2
	4	49	10	2	Tremolo Orch
	5	49	11	2	Choir Str.
	6	49	16	2	St. Strings
	7	49	24	2	Velo Strings
	8	49	32	2	Strings Oct
	9	49	126	2	Trombone
	10	49	127	2	Str Sect 1
A72		50	0	2	Slow Strings
	1	50	1	2	SlowStrings2
	2	50	8	2	Legato Str.
	3	50	9	2	Warm Strings
	4	50	10	2	St.Slow Str.
	5	50	126	2	Trombone
	6	50	127	2	Str Sect 2
A73		51	0	2	Syn.Strings1
	1	51	1	2	OB Strings
	2	51	8	2	Syn.Strings3
	3	51	126	2	Trombone
	4	51	127	2	Str Sect 3
A74		52	0	2	Syn.Strings2
	1	52	126	2	Trombone
	2	52	127	2	Pizzicato
A75		53	0	2	Choir Aahs
	1	53	8	2	St.ChoirAahs
	2	53	9	2	Melted Choir
	3	53	32	2	Chorus Aahs
	4	53	126	2	Trombone
	5	53	127	2	Violin 1
A76		54	0	2	Voice Oohs
	1	54	126	2	Trombone
	2	54	127	2	Violin 2

GBN	Var	PC	CC00	CC32	Name
A77		55	0	2	SynVox
	1	55	8	2	Syn.Voice
	2	55	126	2	Alto Sax
	3	55	127	2	Cello 1
A78		56	0	2	OrchestraHit
	1	56	8	2	Impact Hit
	2	56	9	2	Philly Hit
	3	56	10	2	Double Hit
	4	56	16	2	Lo Fi Rave
	5	56	126	2	Tenor Sax
	6	56	127	2	Cello 2
A81		57	0	2	Trumpet
	1	57	1	2	Trumpet 2
	2	57	8	2	Flugel Horn
	3	57	17	2	FolkTrumpet
	4	57	18	2	FolkTrumpVb
	5	57	24	2	Bright Tp.
	6	57	25	2	Warm Tp.
	7	57	126	2	Baritone Sax
	8	57	127	2	Contrabass
A82		58	0	2	Trombone
	1	58	1	2	Trombone 2
	2	58	126	2	Alto Sax
	3	58	127	2	Harp 1
A83		59	0	2	Tuba
	1	59	1	2	Tuba 2
	2	59	126	2	Brass 1
	3	59	127	2	Harp 2
A84		60	0	2	MutedTrumpet
	1	60	126	2	Brass 1
	2	60	127	2	Guitar 1
A85		61	0	2	French Horns
	1	61	1	2	Fr.Horn 2
	2	61	8	2	F.Hrn Slow
	3	61	16	2	Synth Horn
	4	61	126	2	Brass 2
	5	61	127	2	Guitar 2
A86		62	0	2	Brass 1
	1	62	8	2	Brass 2
	2	62	16	2	Brass Fall
	3	62	24	2	Brass Oct
	4	62	126	2	Brass 2
	5	62	127	2	Elec Gtr 1
A87		63	0	2	Synth Brass1
	1	63	1	2	JUNO Brass
	2	63	8	2	Pro Brass
	3	63	9	2	P5 Brass
	4	63	16	2	Oct SynBrass
	5	63	126	2	Brass 1
	6	63	127	2	Elec Gtr 2
A88		64	0	2	Synth Brass2
	1	64	1	2	Soft Brass
	2	64	8	2	SynBrass sfz
	3	64	16	2	Velo Brass 1
	4	64	17	2	Transbrass
	5	64	126	2	OrchestraHit
	6	64	127	2	Sitar
B11		65	0	2	Soprano Sax
	1	65	127	2	Acou Bass 1
B12		66	0	2	Alto Sax
	1	66	8	2	AltoSax Exp.
	2	66	9	2	Alto Sax 2
	3	66	17	2	Folk A.Sax
	4	66	18	2	FolkA.SaxVb
	5	66	127	2	Acou Bass 2
B13		67	0	2	Tenor Sax
	1	67	1	2	Tenor Sax 2
	2	67	8	2	BreathyTn.
	3	67	127	2	Elec Bass 1
B14		68	0	2	Baritone Sax
	1	68	127	2	Elec Bass 2
B15		69	0	2	Oboe
	1	69	127	2	Slap Bass 1
B16		70	0	2	EnglishHorn
	1	70	127	2	Slap Bass 2
B17		71	0	2	Bassoon
	1	71	127	2	Fretless 1
B18		72	0	2	Clarinet
	1	72	8	2	Bs Clarinet
	2	72	16	2	Folk Clarin
	3	72	17	2	FolkClarnVb
	4	72	127	2	Fretless 2

GBN	Var	PC	CC00	CC32	Name
B21		73	0	2	Piccolo
	1	73	8	2	Nay
	2	73	9	2	Nay Oct
	3	73	127	2	Flute 1
B22		74	0	2	Flute
	1	74	127	2	Flute 2
B23		75	0	2	Recorder
	1	75	127	2	Piccolo 1
B24		76	0	2	Pan Flute
	1	76	8	2	Kawala
	2	76	9	2	Kawala 2
	3	76	10	2	Kawala Oct
	4	76	127	2	Piccolo 2
B25		77	0	2	Bottle Blow
	1	77	127	2	Recorder
B26		78	0	2	Shakuhachi
	1	78	127	2	Pan Pipes
B27		79	0	2	Whistle
	1	79	127	2	Sax 1
B28		80	0	2	Ocarina
	1	80	127	2	Sax 2
B31		81	0	2	Square Wave
	1	81	1	2	MG Square
	2	81	2	2	Hollow Mini
	3	81	3	2	Mellow FM
	4	81	4	2	CC Solo
	5	81	5	2	Shmoog
	6	81	6	2	LM Square
	7	81	8	2	2600 Sine
	8	81	127	2	Sax 3
B32		82	0	2	Saw Wave
	1	82	1	2	OB2 Saw
	2	82	2	2	Pulse Saw
	3	82	3	2	Feline GR
	4	82	4	2	Big Lead
	5	82	5	2	Velo Lead
	6	82	6	2	GR-300
	7	82	7	2	LA Saw
	8	82	8	2	Doctor Solo
	9	82	16	2	Waspy Synth
	10	82	127	2	Sax 4
B33		83	0	2	Syn.Calliope
	1	83	1	2	Vent Synth
	2	83	2	2	Pure PanLead
	3	83	127	2	Clarinet 1
B34		84	0	2	Chiffer Lead
	1	84	127	2	Clarinet 2
B35		85	0	2	Charang
	1	85	8	2	Dist.Lead
	2	85	127	2	Oboe
B36	86	0	2	Solo Vox	
	1	86	127	2	Engl Horn
B37		87	0	2	5th Saw Wave
	1	87	1	2	Big Fives
	2	87	127	2	Bassoon
B38		88	0	2	Bass & Lead
	1	88	1	2	Big & Raw
	2	88	2	2	Fat & Perky
	3	88	127	2	Harmonica
B41		89	0	2	Fantasia
	1	89	1	2	Fantasia 2
	2	89	127	2	Trumpet 1
B42		90	0	2	Warm Pad
	1	90	1	2	Thick Matrix
	2	90	2	2	Horn Pad
	3	90	3	2	Rotary Strng
	4	90	4	2	OB Soft Pad
	5	90	127	2	Trumpet 2
B43		91	0	2	Polysynth
	1	91	1	2	80's PolySyn
	2	91	127	2	Trombone 1
B44		92	0	2	Space Voice
	1	92	1	2	Heaven II
	2	92	127	2	Trombone 2
B45		93	0	2	Bowed Glass
	1	93	127	2	Fr Horn 1
B46		94	0	2	Metal Pad
	1	94	1	2	Tine Pad
	2	94	2	2	Panner Pad
	3	94	127	2	Fr Horn 2

GBN	Var	PC	CC00	CC32	Name
B47		95	0	2	Halo Pad
	1	95	127	2	Tuba
B48		96	0	2	Sweep Pad
	1	96	1	2	Polar Pad
	2	96	8	2	Converge
	3	96	9	2	Shwimmer
	4	96	10	2	Celestial Pd
	5	96	127	2	Brs Sect 1
B51		97	0	2	Ice Rain
	1	97	1	2	Harmo Rain
	2	97	2	2	African wood
	3	97	8	2	Clavi Pad
	4	97	127	2	Brs Sect 2
B52		98	0	2	Soundtrack
	1	98	1	2	Ancestral
	2	98	2	2	Prologue
	3	98	8	2	Rave
B53		99	0	2	Crystal
	1	99	1	2	Syn Mallet
	2	99	2	2	Soft Crystal
	3	99	3	2	Round Glock
	4	99	4	2	Loud Glock
	5	99	5	2	GlockenChime
	6	99	6	2	Clear Bells
	7	99	7	2	ChristmasBel
	8	99	8	2	Vibra Bells
	9	99	9	2	Digi Bells
	10	99	16	2	Choral Bells
	11	99	17	2	Air Bells
	12	99	18	2	Bell Harp
	13	99	19	2	Gamelimba
	14	99	127	2	Vibe 2
B54		100	0	2	Atmosphere
	1	100	1	2	Warm Atmos
	2	100	2	2	Nylon Harp
	3	100	3	2	Harpvox
	4	100	4	2	HollowReleas
	5	100	5	2	Nylon+Rhodes
	6	100	6	2	Ambient Pad
	7	100	127	2	Syn Mallet
B55		101	0	2	Brightness
	1	101	127	2	Windbell
B56		102	0	2	Goblin
	1	102	1	2	Goblinson
	2	102	2	2	50's Sci-Fi
	3	102	127	2	Glock
B57		103	0	2	Echo Drops
	1	103	1	2	Echo Bell
	2	103	2	2	Echo Pan
	3	103	3	2	Echo Pan 2
	4	103	4	2	Big Panner
	5	103	5	2	Reso Panner
	6	103	6	2	Water Piano
	7	103	127	2	Tube Bell
B58		104	0	2	Star Theme
	1	104	1	2	Star Theme 2
	2	104	127	2	Xylophone
B61		105	0	2	Sitar
	1	105	1	2	Sitar 2
	2	105	2	2	Detune Sitar
	3	105	8	2	Tambra
	4	105	16	2	Tamboura
	5	105	127	2	Marimba
B62		106	0	2	Banjo
	1	106	1	2	Muted Banjo
	2	106	8	2	Rabab
	3	106	16	2	Gopichant
	4	106	24	2	Oud
	5	106	25	2	Oud 2
	6	106	28	2	Oud&Strings
	7	106	127	2	Koto
B63		107	0	2	Shamisen
	1	107	1	2	Tsugaru
	2	107	127	2	Sho
B64		108	0	2	Koto
	1	108	8	2	Taisho Koto
	2	108	16	2	Kanoon
	3	108	17	2	Kanoon 2
	4	108	18	2	Kanoon Oct.
	5	108	19	2	Knoon&Choir
	6	108	127	2	Shakuhachi
B65		109	0	2	Kalimba
	1	109	127	2	Whistle 1
B66		110	0	2	Bagpipe
	1	110	8	2	Mizmar
	2	110	9	2	Mizmar Oct

GBN	Var	PC	CC00	CC32	Name
B66	3	110	10	2	Mizmar Dual
	4	110	127	2	Whistle 2
B67		111	0	2	Fiddle
	1	111	127	2	Bottleblow
B68		112	0	2	Shanai
	1	112	1	2	Shanai 2
	2	112	8	2	Pungi
	3	112	16	2	Hichiriki
	4	112	127	2	Breathpipe
B71		113	0	2	Tinkle Bell
	1	113	8	2	Bonang
	2	113	9	2	Gender
	3	113	10	2	Gamelan Gong
	4	113	11	2	St.Gamelan
	5	113	16	2	RAMA Cymbal
	6	113	127	2	Timpani
B72		114	0	2	Agogo
	1	114	8	2	Atarigane
	2	114	127	2	Melodic Tom
B73		115	0	2	Steel Drums
	1	115	127	2	Deep Snare
B74		116	0	2	Woodblock
	1	116	8	2	Castanets

GBN	Var	PC	CC00	CC32	Name
B75	2	116	127	2	Elec Perc 1
		117	0	2	Taiko
	1	117	8	2	Concert BD
	2	117	127	2	Elec Perc 2
B76		118	0	2	Melo. Tom 1
	1	118	1	2	Real Tom
	2	118	8	2	Melo. Tom 2
	3	118	9	2	Rock Tom
	4	118	127	2	Taiko
B77		119	0	2	Synth Drum
	1	119	8	2	808 Tom
	2	119	9	2	Elec Perc
	3	119	127	2	Taiko Rim
B78		120	0	2	Reverse Cym.
	1	120	1	2	Reverse Cym2
	2	120	8	2	Rev.Snare 1
	3	120	9	2	Rev.Snare 2
	4	120	16	2	Rev.Kick 1
	5	120	17	2	Rev.ConBD
	6	120	24	2	Rev.Tom 1
	7	120	25	2	Rev.Tom 2
	8	120	127	2	Cymbal
B81		121	0	2	Gt.FretNoise
	1	121	1	2	Gt.Cut Noise
	2	121	2	2	String Slap

GBN	Var	PC	CC00	CC32	Name
B81	3	121	3	2	Gt.CutNoise2
	4	121	4	2	Dist.CutNoiz
	5	121	5	2	Bass Slide
	6	121	6	2	Pick Scrape
	7	121	127	2	Castanets
B82		122	0	2	Breath Noise
	1	122	1	2	Fl.Key Click
	2	122	127	2	Triangle
B83		123	0	2	Seashore
	1	123	1	2	Rain
	2	123	2	2	Thunder
	3	123	3	2	Wind
	4	123	4	2	Stream
	5	123	5	2	Bubble
	6	123	127	2	Orche Hit
B84		124	0	2	Bird
	1	124	1	2	Dog
	2	124	2	2	Horse-Gallop
	3	124	3	2	Bird 2
	4	124	4	2	Kitty
	5	124	5	2	Growl
	6	124	127	2	Telephone
B85		125	0	2	Telephone 1
	1	125	1	2	Telephone 2
	2	125	2	2	DoorCreaking
	3	125	3	2	Door

GBN	Var	PC	CC00	CC32	Name
B85	4	125	4	2	Scratch
	5	125	5	2	Wind Chimes
	6	125	7	2	Scratch 2
	7	125	127	2	Bird Tweet
B86		126	0	2	Helicopter
	1	126	1	2	Car-Engine
	2	126	2	2	Car-Stop
	3	126	3	2	Car-Pass
	4	126	4	2	Car-Crash
	5	126	5	2	Siren
	6	126	6	2	Train
	7	126	7	2	Jetplane
	8	126	8	2	Starship
	9	126	9	2	Burst Noise
	10	126	127	2	OneNote Jam
B87		127	0	2	Applause
	1	127	1	2	Laughing
	2	127	2	2	Screaming
	3	127	3	2	Punch
	4	127	4	2	Heart Beat
	5	127	5	2	Footsteps
	6	127	6	2	Applause 2
	7	127	127	2	Water Bell
B88		128	0	2	Gun Shot
	1	128	1	2	Machine Gun
	2	128	2	2	Lasergun
	3	128	3	2	Explosion
	4	128	127	2	Jungle Tune

Tone Map 1

GBN	Var	PC	CC00	CC32	Name
A11		1	0	1	Piano 1
	1	1	8	1	Upright P w
	2	1	16	1	European Pf
	3	1	126	1	Piano 2
	4	1	127	1	Acou Piano1
A12		2	0	1	Piano 2
	1	2	8	1	Pop Piano w
	2	2	126	1	Piano 2
	3	2	127	1	Acou Piano2
A13		3	0	1	Piano 3
	1	3	8	1	Piano 3w
	2	3	126	1	Piano 2
	3	3	127	1	Acou Piano3
A14		4	0	1	Honky-tonk
	1	4	8	1	Honky-tonk 2
	2	4	126	1	Honky-tonk
	3	4	127	1	Elec Piano1
A15		5	0	1	E.Piano 1
	1	5	8	1	St.Soft EP
	2	5	16	1	FM+SA EP
	3	5	24	1	Wurly
	4	5	126	1	Piano 1
	5	5	127	1	Elec Piano2
A16		6	0	1	E.Piano 2
	1	6	8	1	Detuned EP 2
	2	6	16	1	St.FM EP
	3	6	126	1	Piano 2
	4	6	127	1	Elec Piano3
A17		7	0	1	Harpsichord
	1	7	8	1	Coupled Hps.
	2	7	16	1	Harpsi.w
	3	7	24	1	Harpsi.o
	4	7	126	1	Piano 2
	5	7	127	1	Elec Piano4
A18		8	0	1	Clav.
	1	8	126	1	E.Piano 1
	2	8	127	1	Honkytonk
A21		9	0	1	Celesta
	1	9	126	1	Cho. E.Piano
	2	9	127	1	Elec Org 1
A22		10	0	1	Glockenspl
	1	10	126	1	E.Piano 2
	2	10	127	1	Elec Org 2
A23		11	0	1	Music Box
	1	11	126	1	Steel-str.Gt
	2	11	127	1	Elec Org 3
A24		12	0	1	Vibraphone
	1	12	8	1	Vib.w
	2	12	126	1	Steel-str.Gt
	3	12	127	1	Elec Org 4
A25		13	0	1	Marimba
	1	13	8	1	Marimba w

GBN	Var	PC	CC00	CC32	Name
A25	2	13	126	1	12-str.Gt
	3	13	127	1	Pipe Org 1
A26		14	0	1	Xylophone
	1	14	126	1	Funk Gt.
	2	14	127	1	Pipe Org 2
A27		15	0	1	Tubular-bell
	1	15	8	1	Church Bell
	2	15	9	1	Carillon
	3	15	126	1	Muted Gt.
	4	15	127	1	Pipe Org 3
A28		16	0	1	Santur
	1	16	126	1	Slap Bass 1
	2	16	127	1	Accordion
A31		17	0	1	Organ 1
	1	17	8	1	Detuned Or1
	2	17	16	1	60's Organ1
	3	17	32	1	Organ 4
	4	17	126	1	Slap Bass 1
	5	17	127	1	Harpsi 1
A32		18	0	1	Organ 2
	1	18	8	1	Detuned Or2
	2	18	32	1	Organ 5
	3	18	126	1	Slap Bass 1
	4	18	127	1	Harpsi 2
A33		19	0	1	Organ 3
	1	19	126	1	Slap Bass 1
	2	19	127	1	Harpsi 3
A34		20	0	1	Church Org1
	1	20	8	1	Church Org2
	2	20	16	1	Church Org3
	3	20	126	1	Slap Bass 2
	4	20	127	1	Clavi 1
A35		21	0	1	Reed Organ
	1	21	126	1	Slap Bass 2
	2	21	127	1	Clavi 2
A36		22	0	1	Accordion F
	1	22	8	1	Accordion I
	2	22	126	1	Slap Bass 2
	3	22	127	1	Clavi 3
A37		23	0	1	Harmonica
	1	23	126	1	Slap Bass 2
	2	23	127	1	Celesta 1
A38		24	0	1	Bandoneon
	1	24	126	1	Fingered Bs
	2	24	127	1	Celesta 2
A41		25	0	1	Nylon-str.Gt
	1	25	8	1	Ukulele
	2	25	16	1	Nylon Gt.o
	3	25	32	1	Nylon Gt.2
	4	25	126	1	Fingered Bs
	5	25	127	1	Syn Brass 1

GBN	Var	PC	CC00	CC32	Name
A42		26	0	1	Steel-str.Gt
	1	26	8	1	12-str.Gt
	2	26	16	1	Mandolin
	3	26	126	1	Picked Bass
	4	26	127	1	Syn Brass 2
A43		27	0	1	Jazz Gt.
	1	27	8	1	Pedal Steel
	2	27	126	1	Picked Bass
	3	27	127	1	Syn Brass 3
A44		28	0	1	Clean Gt.
	1	28	8	1	Chorus Gt.
	2	28	126	1	Fretless Bs
	3	28	127	1	Syn Brass 4
A45		29	0	1	Muted Gt.
	1	29	8	1	Funk Gt.
	2	29	16	1	Funk Gt.2
	3	29	126	1	Acoustic Bs.
	4	29	127	1	Syn Bass 1
A46		30	0	1	OverdriveGt
	1	30	126	1	Choir Aahs
	2	30	127	1	Syn Bass 2
A47		31	0	1	DistortionGt
	1	31	8	1	Feedback Gt
	2	31	126	1	Choir Aahs
	3	31	127	1	Syn Bass 3
A48		32	0	1	Gt.Harmonics
	1	32	8	1	Gt. Feedback
	2	32	126	1	Choir Aahs
	3	32	127	1	Syn Bass 4
A51		33	0	1	Acoustic Bs.
	1	33	126	1	Choir Aahs
	2	33	127	1	Fantasy
A52		34	0	1	Fingered Bs
	1	34	126	1	Slow Strings
	2	34	127	1	Harmo Pan
A53		35	0	1	Picked Bass
	1	35	126	1	Strings
	2	35	127	1	Chorale
A54		36	0	1	Fretless Bs.
	1	36	126	1	Syn.Strings3
	2	36	127	1	Glasses
A55		37	0	1	Slap Bass 1
	1	37	126	1	Syn.Strings3
	2	37	127	1	Soundtrack
A56		38	0	1	Slap Bass 2
	1	38	126	1	Organ 1
	2	38	127	1	Atmosphere
A57		39	0	1	Synth Bass 1
	1	39	1	1	SynthBass101
	2	39	8	1	Acid Bass
	3	39	126	1	Organ 1
	4	39	127	1	Warm Bell

GBN	Var	PC	CC00	CC32	Name
A58		40	0	1	Synth Bass 2
	1	40	8	1	Beef FM Bass
	2	40	16	1	RubberBass 2
	3	40	126	1	Organ 1
	4	40	127	1	Funny Vox
A61		41	0	1	Violin
	1	41	8	1	Slow Violin
	2	41	126	1	Organ 2
	3	41	127	1	Echo Bell
A62		42	0	1	Viola
	1	42	126	1	Organ 1
	2	42	127	1	Ice Rain
A63		43	0	1	Cello
	1	43	126	1	Organ 1
	2	43	127	1	Oboe 2001
A64		44	0	1	Contrabass
	1	44	126	1	Organ 2
	2	44	127	1	Echo Pan
A65		45	0	1	Tremolo Str
	1	45	126	1	Organ 2
	2	45	127	1	Doctor Solo
A66		46	0	1	Pizzicato
	1	46	126	1	Organ 2
	2	46	127	1	School Daze
A67		47	0	1	Harp
	1	47	126	1	Trumpet
	2	47	127	1	Bellsinger
A68	48	0	1	Timpani	
	1	48	126	1	Trumpet
	2	48	127	1	Square Wave
A71	49	0	1	Strings	
	1	49	8	1	Orchestra
	2	49	126	1	Trombone
	3	49	127	1	Str Sect 1
A72		50	0	1	Slow Strings
	1	50	126	1	Trombone
	2	50	127	1	Str Sect 2
A73		51	0	1	Syn.Strings1
	1	51	8	1	Syn.Strings3
	2	51	126	1	Trombone
	3	51	127	1	Str Sect 3
A74		52	0	1	Syn.Strings2
	1	52	126	1	Trombone
	2	52	127	1	Pizzicato
A75		53	0	1	Choir Aahs
	1	53	32	1	Chorus Aahs
	2	53	126	1	Trombone
	3	53	127	1	Violin 1
A76		54	0	1	Voice Oohs
	1	54	126	1	Trombone

GBN	Var	PC	CC00	CC32	Name
A76	2	54	127	1	Violin 2
A77		55	0	1	SynVox
	1	55	126	1	Alto Sax
	2	55	127	1	Cello 1
A78		56	0	1	OrchestraHit
	1	56	126	1	Tenor Sax
	2	56	127	1	Cello 2
A81		57	0	1	Trumpet
	1	57	126	1	Baritone Sax
	2	57	127	1	Contrabass
A82		58	0	1	Trombone
	1	58	1	1	Trombone 2
	2	58	126	1	Alto Sax
	3	58	127	1	Harp 1
A83		59	0	1	Tuba
	1	59	126	1	Brass 1
	2	59	127	1	Harp 2
A84		60	0	1	MutedTrumpet
	1	60	126	1	Brass 1
	2	60	127	1	Guitar 1
A85		61	0	1	French Horns
	1	61	1	1	Fr.Horn 2
	2	61	126	1	Brass 2
	3	61	127	1	Guitar 2
A86		62	0	1	Brass 1
	1	62	8	1	Brass 2
	2	62	126	1	Brass 2
	3	62	127	1	Elec Gtr 1
A87		63	0	1	Synth Brass1
	1	63	8	1	Pro Brass
	2	63	16	1	Oct SynBrass
	3	63	126	1	Brass 1
	4	63	127	1	Elec Gtr 2
A88		64	0	1	Synth Brass2
	1	64	8	1	SynBrass sfz
	2	64	16	1	Velo Brass 1
	3	64	126	1	OrchestraHit
	4	64	127	1	Sitar
B11		65	0	1	Soprano Sax
	1	65	127	1	Acou Bass 1
B12		66	0	1	Alto Sax
	1	66	127	1	Acou Bass 2
B13		67	0	1	Tenor Sax
	1	67	127	1	Elec Bass 1
B14		68	0	1	Baritone Sax
	1	68	127	1	Elec Bass 2
B15		69	0	1	Oboe
	1	69	127	1	Slap Bass 1
B16		70	0	1	EnglishHorn
	1	70	127	1	Slap Bass 2
B17		71	0	1	Bassoon
	1	71	127	1	Fretless 1
B18		72	0	1	Clarinet
	1	72	127	1	Fretless 2
B21		73	0	1	Piccolo
	1	73	127	1	Flute 1
B22		74	0	1	Flute
	1	74	127	1	Flute 2
B23		75	0	1	Recorder
	1	75	127	1	Piccolo 1
B24		76	0	1	Pan Flute
	1	76	127	1	Piccolo 2
B25		77	0	1	Bottle Blow
	1	77	127	1	Recorder
B26		78	0	1	Shakuhachi
	1	78	127	1	Pan Pipes
B27		79	0	1	Whistle
	1	79	127	1	Sax 1
B28		80	0	1	Ocarina
	1	80	127	1	Sax 2
B31		81	0	1	Square Wave
	1	81	1	1	MG Square
	2	81	8	1	2600 Sine
	3	81	127	1	Sax 3
B32		82	0	1	Saw Wave
	1	82	1	1	OB2 Saw
	2	82	8	1	Doctor Solo
	3	82	127	1	Sax 4
B33		83	0	1	Syn.Calliope
	1	83	127	1	Clarinet 1
B34		84	0	1	Chiffer Lead
	1	84	127	1	Clarinet 2
B35		85	0	1	Charang
	1	85	127	1	Oboe
B36		86	0	1	Solo Vox
	1	86	127	1	Engl Horn
B37		87	0	1	5th Saw Wave
	1	87	127	1	Bassoon
B38		88	0	1	Bass & Lead
	1	88	127	1	Harmonica
B41		89	0	1	Fantasia
	1	89	127	1	Trumpet 1
B42		90	0	1	Warm Pad
	1	90	127	1	Trumpet 2
B43		91	0	1	Polysynth
	1	91	127	1	Trombone 1
B44		92	0	1	Space Voice
	1	92	127	1	Trombone 2
B45		93	0	1	Bowed Glass
	1	93	127	1	Fr Horn 1
B46		94	0	1	Metal Pad
	1	94	127	1	Fr Horn 2
B47		95	0	1	Halo Pad
	1	95	127	1	Tuba
B48		96	0	1	Sweep Pad
	1	96	127	1	Brs Sect 1
B51		97	0	1	Ice Rain
	1	97	127	1	Brs Sect 2
B52		98	0	1	Soundtrack
	1	98	127	1	Vibe 1
B53		99	0	1	Crystal
	1	99	1	1	Syn Mallet
	2	99	127	1	Vibe 2
B54		100	0	1	Atmosphere
	1	100	127	1	Syn Mallet
B55		101	0	1	Brightness
	1	101	127	1	Windbell
B56		102	0	1	Goblin
	1	102	127	1	Glock
B57		103	0	1	Echo Drops
	1	103	1	1	Echo Bell
	2	103	2	1	Echo Pan
	3	103	127	1	Tube Bell
B58		104	0	1	Star Theme
	1	104	127	1	Xylophone
B61		105	0	1	Sitar
	1	105	1	1	Sitar 2
	2	105	127	1	Marimba
B62		106	0	1	Banjo
	1	106	127	1	Koto
B63		107	0	1	Shamisen
	1	107	127	1	Sho
B64		108	0	1	Koto
	1	108	8	1	Taisho Koto
	2	108	127	1	Shakuhachi
B65		109	0	1	Kalimba
	1	109	127	1	Whistle 1
B66		110	0	1	Bagpipe
	1	110	127	1	Whistle 2
B67		111	0	1	Fiddle
	1	111	127	1	Bottleblow
B68		112	0	1	Shanai
	1	112	127	1	Breathpipe
B71		113	0	1	Tinkle Bell
	1	113	127	1	Timpani
B72		114	0	1	Agogo
	1	114	127	1	Melodic Tom
B73		115	0	1	Steel Drums
	1	115	127	1	Deep Snare
B74		116	0	1	Woodblock
	1	116	8	1	Castanets
	2	116	127	1	Elec Perc 1
B75		117	0	1	Taiko
	1	117	8	1	Concert BD
	2	117	127	1	Elec Perc 2
B76		118	0	1	Melo. Tom 1
	1	118	8	1	Melo. Tom 2
	2	118	127	1	Taiko
B77		119	0	1	Synth Drum
	1	119	8	1	808 Tom
	2	119	9	1	Elec Perc
	3	119	127	1	Taiko Rim
B78		120	0	1	Reverse Cym.
	1	120	127	1	Cymbal
B81		121	0	1	Gt.FretNoise
	1	121	1	1	Gt.Cut Noise
	2	121	2	1	String Slap
	3	121	127	1	Castanets
B82		122	0	1	Breath Noise
	1	122	1	1	Fl.Key Click
	2	122	127	1	Triangle
B83		123	0	1	Seashore
	1	123	1	1	Rain
	2	123	2	1	Thunder
	3	123	3	1	Wind
	4	123	4	1	Stream
	5	123	5	1	Bubble
	6	123	127	1	Orche Hit
B84		124	0	1	Bird
	1	124	1	1	Dog
	2	124	2	1	Horse-Gallop
	3	124	3	1	Bird 2
	4	124	127	1	Telephone
B85		125	0	1	Telephone 1
	1	125	1	1	Telephone 2
	2	125	2	1	DoorCreaking
	3	125	3	1	Door
	4	125	4	1	Scratch
	5	125	5	1	Wind Chimes
	6	125	127	1	Bird Tweet
B86		126	0	1	Helicopter
	1	126	1	1	Car-Engine
	2	126	2	1	Car-Stop
	3	126	3	1	Car-Pass
	4	126	4	1	Car-Crash
	5	126	5	1	Siren
	6	126	6	1	Train
	7	126	7	1	Jetplane
	8	126	8	1	Starship
	9	126	9	1	Burst Noise
	10	126	127	1	OneNote Jam
B87		127	0	1	Applause
	1	127	1	1	Laughing
	2	127	2	1	Screaming
	3	127	3	1	Punch
	4	127	4	1	Heart Beat
	5	127	5	1	Footsteps
	6	127	127	1	Water Bell
B88		128	0	1	Gun Shot
	1	128	1	1	Machine Gun
	2	128	2	1	Lasergun
	3	128	3	1	Explosion
	4	128	127	1	Jungle Tune

17.2 Drum Sets

VA-3 Key		PC: 1 [CC32: 4] STANDARD 1	PC: 2 [CC32: 4] STANDARD 2	PC: 3 [CC32: 4] STANDARD L/R	PC: 4 [CC32: 4] V-Pop1	PC: 5 [CC32: 4] V-R&B	PC: 6 [CC32: 4] V-Fiesta	PC: 9 [CC32: 4] ROOM	PC: 10 [CC32: 4] HIP HOP	PC: 11 [CC32: 4] JUNGLE	PC: 12 [CC32: 4] TECHNO
C-1	0	Std.1 Kick1	Std.1 Kick1	---	HipHop BD1	HipHop BD1	HipHop BD1	Std.1 Kick1	Elec Kick 2	Elec Kick 2	Elec Kick 2
	1	Std.1 Kick2	Std.1 Kick2	---	Jazz Kick 1	Jazz Kick 1	Jazz Kick 1	Std.1 Kick2	Elec Kick 1	Elec Kick 1	Elec Kick 1
	2	Std.2 Kick1	Std.2 Kick1	---	Mex_Kik36	Mex_Kik36	Mex_Kik36	Std.2 Kick1	CR78 BD 1	CR78 BD 1	CR78 BD 1
	3	Std2 Kick2	Std2 Kick2	---	85RmBsDrum1B	85RmBsDrum1B	85RmBsDrum1B	Std2 Kick2	CR78 BD 2	CR78 BD 2	CR78 BD 2
	4	Kick 1	Kick 1	---	85RmBsDrum2B	85RmBsDrum2B	85RmBsDrum2B	Kick 1	TR-606 BD1	TR-606 BD1	TR-606 BD1
	5	Kick 2	Kick 2	---	909 BD	909 BD	909 BD	Kick 2	TR-707 BD	TR-707 BD	TR-707 BD
	6	Jazz Kick 1	Jazz Kick 1	---	909 BD 2	909 BD 2	909 BD 2	Jazz Kick 1	808 Kick	808 Kick	808 Kick
	7	Jazz Kick 2	Jazz Kick 2	---	Jngl BD 2	Jngl BD 2	Jngl BD 2	Jazz Kick 2	TR-808 Kick	TR-808 Kick	TR-808 Kick
	8	Room Kick 1	Rnom Kick 1	---	HipHop BD	HipHop BD	HipHop BD	Room Kick 1	808 BD	808 BD	808 BD
	9	Room Kick 2	Room Kick 2	---	HipHop BD 2	HipHop BD 2	HipHop BD 2	Room Kick 2	TR-909 Kick	TR-909 Kick	TR-909 Kick
	10	Power Kick1	Power Kick1	---	85StBsDrum1B	85StBsDrum1B	85StBsDrum1B	Power Kick1	Dance Kick 2	Dance Kick 2	Dance Kick 2
	11	Power Kick2	Power Kick2	---	NewJzKik	NewJzKik	NewJzKik	Power Kick2	909 Comp BD	909 Comp BD	909 Comp BD
C0	12	Elec Kick 2	Elec Kick 2	---	NewRockKik	NewRockKik	NewRockKik	Elec Kick 2	TR-909 BD2	TR-909 BD2	TR-909 BD2
	13	Elec Kick 1	Elec Kick 1	---	CymbalRoll	CymbalRoll	CymbalRoll	Elec Kick 1	HipHop BD2	HipHop BD2	HipHop BD2
	14	TR-808 Kick	TR-808 Kick	---	NewRkCStkMn	NewRkCStkMn	NewRkCStkMn	TR 808 Kick	JungleBD Set	JungleBD Set	JungleBD Set
	15	TR-909 Kick	TR-909 Kick	---	85RmSnare1B	85RmSnare1B	85RmSnare1B	TR-909 Kick	Techno BD1	Techno BD1	Techno BD1
	16	Dance Kick 2	Dance Kick 2	---	85RmSnare2B	85RmSnare2B	85RmSnare2B	Dance Kick 2	Bounce	Bounce	Bounce
	17	Voice One	Voice One	Voice One	85StSnare1B	85StSnare1B	85StSnare1B	Voice One	Voice One	Voice One	Voice One
	18	Voice Two	Voice Two	Voice Two	85StSnare2B	85StSnare2B	85StSnare2B	Voice Two	Voice Two	Voice Two	Voice Two
	19	Voice Three	Voice Three	Voice Three	NewJzSn2	NewJzSn2	NewJzSn2	Voice Three	Voice Three	Voice Three	Voice Three
	20	85Rm BsDrum1	---	---	NewJzSn1	NewJzSn1	NewJzSn1	85St BsDrum1	Jngl BD	HipHop BD 2	909 BD
	21	85Rm BsDrum2	---	---	NewR&BSn	NewR&BSn	NewR&BSn	85St BsDrum2	Jngl BD 2	HipHop BD	Fat BD
	22	MC-500 Beep	MC-500 Beep	MC-500 Beep	NewRockSn2mn	NewRockSn2mn	NewRockSn2mn	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep
	23	MC-500 Beep	MC-500 Beep	MC-500 Beep	NewRockSn1mn	NewRockSn1mn	NewRockSn1mn	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep
C1	24	Concert Snr	Concert Snr	Concert Snr	IPopSn38mn	IPopSn38mn	IPopSn38mn	Concert Snr	Concert Snr	Concert Snr	Concert Snr
	25	Snare Roll	Snare Roll	Snare Roll	IPopGst539mn	IPopGst539mn	IPopGst539mn	Snare Roll	Snare Roll	Snare Roll	Snare Roll
	26	FingerSnaps2	Finger Snap	FingerSnap2	IPopSn38mn	IPopSn38mn	IPopSn38mn	Finger Snap	FingerSnaps2	FingerSnaps2	FingerSnaps2
	27	High-Q	High-Q	High-Q	FingerSnaps2	FingerSnaps2	FingerSnaps2	High-Q	High-Q	High-Q	High-Q
	28	Slap	Slap	Slap	707 Claps	707 Claps	707 Claps	Slap	Slap	Slap	Slap
	29	ScratchPush	ScratchPush	ScratchPush	808clap	808clap	808clap	ScratchPush	Scrtch Push2	Scrtch Push2	Scrtch Push2
	30	ScratchPull	ScratchPull	ScratchPull	Hand clap2	Hand clap2	Hand clap2	ScratchPull	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2
	31	Sticks	Sticks	Sticks	909 HandClap	909 HandClap	909 HandClap	Sticks	Sticks	Sticks	Sticks
	32	SquareClick	SquareClick	SquareClick	IPopPHat32	IPopPHat32	Mex_PHat32	SquareClick	SquareClick	SquareClick	SquareClick
	33	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	GospelHClp1	GospelHClp1	GospelHClp1	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
	34	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	IPopSRll30st	IPopSRll30mn	Mex_SnrRol34	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
	35	BsDrum1	Std2 Kick2	85StBsDrum1B	IPopKik35	IPopKik35	Mex_Kik35	85Rm BsDrum1	HipHop BD 2	Jngl BD	808 BD
C2	36	85St BsDrum2	Std.2 Kick1	85StBsDrum2B	IPopKik36	IPopKik36	Mex_Kik36	85Rm BsDrum2	HipHop BD	Jngl BD 2	909 BD 2
	37	Side Stick	Side Stick	Side Stick	IPopCStk37st	IPopCStk37mn	IPopCStk37mn	Side Stick	808 Rimshot	Jngl SD Rim	909 SD Rim
	38	85St Snare2	Std.2 Snare1	85StSnare2B	IPopSn38st	NewR&BSn	Mex_Snr38	85Rm Snare2	LoFi SD 1	HipHop SD 1	606 SD 2
	39	909 HandClap	808clap	909 HandClap	IPopGst539st	NewR&BSnGst	Mex_Gst539	808clap	707 Claps	R&B Claps 1	909 Claps
	40	85St Snare1	Std.2 Snare2	85StSnare1B	IPopSn40st	IPopSn40mn	Mex_Snr40	85Rm Snare1	LoFi SD 2	Jngl SD	Techno SD
	41	85St Tom16	Real Tom 6	85StTom16B	IPopTomLFl41	IPopTomLFl41	IPopTomLFl41	Room Tom 5	85Jz Tom16	909 Tom	606 Dist.Tom
	42	85St ClsHat	Jazz Cbd.HH	85StClsHatB	IPopHat1_42	IPopHat1_42	Mex_Hat1_42	85Rm ClsHat	Room Chh	606 CH	TR-707 HH-c
	43	85St Tom16	Real Tom 6	85StTom16B	IPopTomL43	IPopTomL43	IPopTomL43	Room Tom 5	85Jz Tom16	909 Tom	606 Dist.Tom
	44	Pedal HiHat2	Pedal HiHat	Pedal HiHat2	IPopHat2_44	IPopHat2_44	Mex_Hat2_44	Pedal HiHat	Pedal HiHat	Jungle HH	CR-78 chh
	45	85St Tom12	Real Tom 4	85StTom12B	IPopTomMFl45	IPopTomMFl45	IPopTomMFl45	Room Tom 2	85Jz Tom13	909 Tom	606 Dist.Tom
	46	85St OpenHat	Jazz Open HH	85StOpenHatB	IPopHat3_46	IPopHat3_46	Mex_Hat3_46	85Rm OpenHat	R8 Ohh2	606 HiHat Op	909 OH
	47	85St Tom12	Real Tom 4	85StTom12B	IPopTomM47	IPopTomM47	IPopTomM47	Room Tom 2	85Jz Tom13	909 Tom	606 Dist.Tom
C3	48	85St Tom10	Real Tom 1	85StTom10B	IPopTomHFl48	IPopTomHFl48	IPopTomHFl48	Room Tom 2	85Jz Tom12	909 Tom	606 Dist.Tom
	49	85St CrsCym1	Crash Cym.1	85StCrsCym1B	IPopCym2_52	IPopCym1_49	IPopCym1_49	85Rm CrsCym1	909 Crash	Jngl Crash	909 Crash
	50	85St Tom10	Real Tom 1	85StTom10B	IPopTomH50	IPopTomH50	IPopTomH50	Room Tom 2	85Jz Tom12	909 Tom	606 Dist.Tom
	51	85St RdCym	Ride Cymbal	85StRdCym8	IPopRd1_51	IPopRd1_51	IPopRd1_51	85Rm RdCym	Ride Cymbal	Ride Cymbal	Ride Cymbal
	52	ChinaCymbal	ChinaCymbal	ChinaCymbal	IPopCym1_49	IPopCym2_52	IPopCym2_52	ChinaCymbal	ReverseCymbl	ReverseCymbl	ReverseCymbl
	53	85St RdBell	Ride Bell	85StRdBell8	IPopRd2_55	IPopRd2_55	IPopRd2_55	85Rm RdBell	Ride Bell	Ride Bell	Ride Bell
	54	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Shake Tamb	Shake Tamb	Shake Tamb
	55	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.
	56	Cowbell	Cowbell Snare	Cowbell	ChaChaCBell	ChaChaCBell	ChaChaCBell	Cowbell	808cowbe	808cowbe	808cowbe
	57	Crash Cym.2	Crash Cym.2	Crash Cym.2	NewRkCrCym2	NewRkCrCym2	NewRkCrCym2	Crash Cym.2	Crash Cym.2	Crash Cym.2	909 Crash
	58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
	59	Ride Cymbal	Ride Cymbal	Ride Cymbal	NewRkRdCym1	NewRkRdCym1	NewRkRdCym1	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal
C4	60	Bongo High	Bongo High	Bongo High	NewHiBongo	NewHiBongo	NewHiBongo	Bongo High	Bongo High	Bongo High	CR78 HiBongo
	61	Bongo Lo	Bongo Lo	Bongo Lo	NewLoBongo	NewLoBongo	NewLoBongo	Bongo Lo	Bongo Lo	Bongo Lo	CR78 LoBongo
	62	Mute H.Conga	Mute H.Conga	Mute H.Conga	NewCongaSlp	NewCongaSlp	NewCongaSlp	Mute H.Conga	Mute H.Conga	Mute H.Conga	808 Conga
	63	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	NewCongaOp	NewCongaOp	NewCongaOp	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	808 Conga
	64	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	NewLoConga	NewLoConga	NewLoConga	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	808 Conga
	65	High Timbale	High Timbale	High Timbale	NewTmblHi	NewTmblHi	NewTmblHi	High Timbale	High Timbale	High Timbale	High Timbale
	66	Low Timbale	Low Timbale	Low Timbale	NewTmblLo	NewTmblLo	NewTmblLo	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	67	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	68	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	69	Cabasa	Cabasa	Cabasa	NewShaker2	NewShaker2	NewShaker2	Cabasa	Cabasa	Cabasa	Cabasa
	70	Maracas	Maracas	Maracas	NewShaker1	NewShaker1	NewShaker1	Maracas	808marac	808marac	808marac
	71	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
C5	72	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
	73	Short Guiro	Short Guiro	Short Guiro	NewQuide1	NewQuide1	NewQuide1	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	74	Long Guiro	Long Guiro	Long Guiro	NewQuide2	NewQuide2	NewQuide2	Long Guiro	CR78 Guiro	CR78 Guiro	CR78 Guiro
	75	Claves	Claves	Claves	NewClaves	NewClaves	NewClaves	Claves	808clave	808clave	808clave
	76	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	77	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	78	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Hoo	Hoo	Hoo
	79	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Hoo	Hoo	Hoo
	80	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl
	81	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl
	82	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker 2	Jngl Shaker	626 Shaker
	83	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6	84	Bell Tree	Bar Chimes	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	85	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
	86	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	87	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
	88	Applause 2	Applause 2	Applause 2	CRcir	CRcir	CRcir	Applause 2	Small Club	Small Club	Applause 2
	89	---	---	---	NewTmblHiFlm	NewTmblHiFlm	NewTmblHiFlm	---	HipHop SD 2	Jngl BD Roll	Dance SD
	90	---		---	NewTmblLoFlm	NewTmblLoFlm	NewTmblLoFlm	---	LoFi SD Rim	Jngl SD Roll	House SD
	91	---	---	---	NewTmblPHS	NewTmblPHS	NewTmblPHS	---	HipHop Claps	606 SD 2	Rock SD Dry
	92	---	---	---	NewShekere1	NewShekere1	NewShekere1	---	85St Snare1	Dance SD	Jngl SD
	93	---	---	---	NewShekere2	NewShekere2	NewShekere2	---	85St Snare2	Techno SD	LoFi SD 1
	94	---	---	---	NHBngoMute	NHBngoMute	NHBngoMute	---	85Rm Snare1	House SD	LoFi SD 2
	95	85Rm Snare2	---	85St BsDrum1	NewLBngoMute	NewLBngoMute	NewLBngoMute	85St Snare2	85Rm Snare2	Rock SD Dry	HipHop SD 1
C7	96	85Rm Snare1	---	85St BsDrum2	CajonHi	CajonHi	CajonHi	85St Snare1	Dance SD	LoFi SD 1	HipHop SD 2

		PC: 1 [CC32: 4] STANDARD 1	PC: 2 [CC32: 4] STANDARD 2	PC: 3 [CC32: 4] STANDARD L/R	PC: 4 [CC32: 4] V-Pop1	PC: 5 [CC32: 4] V-R&B	PC: 6 [CC32: 4] V-Fiesta	PC: 9 [CC32: 4] ROOM	PC: 10 [CC32: 4] HIP HOP	PC: 11 [CC32: 4] JUNGLE	PC: 12 [CC32: 4] TECHNO
(C7)	(96)	(8SRm Snare1]	--	(8SSt BsDrumJ]	(CajonHi)	(CajonHi)	(CajonHi)	(8SSt Snare1)	(Dance SD)	(LoFi SD 1)	(HipHop SD 2)
	97	Std.1 Snare1	Std.1 Snare1	8SSt CrsCym1	CajonHiFlm	CajonHiFlm	CajonHiFlm	Std.1 Snare1	Techno Hit	Techno Hit	Techno Hit
	98	Std.1 Snare2	Std.1 Snare2	8SSt Snare2	CajonLo	CajonLo	CajonLo	Std.1 Snare2	Philly Hit	Philly Hit	Philly Hit
	99	Std.2 Snare1	Std.2 Snare1	8SSt RdCym	CajonLoFlm	CajonLoFlm	CajonLoFlm	Std.2 Snare1	Shock Wave	Shock Wave	Shock Wave
	100	Std.2 Snare2	Std.2 Snare2	8SSt Snare1	FlmncoHClp1	FlmncoHClp1	FlmncoHClp1	Std.2 Snare2	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave
	101	Tight Snare	Tight Snare	8SSt Tom16	FlmncoHClp1	FlmncoHClp1	FlmncoHClp1	Tight Snare	Bam Hit	Bam Hit	Bam Hit
	102	Standard SN1	Standard SN1	8SSt ClsHat	BongoCowBell	BongoCowBell	BongoCowBell	Standard SN1	Bim Hit	Bim Hit	Bim Hit
	103	LD Snare M	LD Snare M	8SSt Tom12	AfHey	AfHey	AfHey	LD Snare M	TapeRewind	TapeRewind	TapeRewind
	104	LD Snare C	LD Snare C	8SSt RdBell	MamboCowBell	MamboCowBell	MamboCowBell	LD Snare C	Phono Noise	Phono Noise	Phono Noise
	105	Jazz Snare 1	Jazz Snare 1	8SSt Tom10	MexFVox2	MexFVox2	MexFVox2	Jazz Snare 1	Dance Snare1	Dance Snare1	Dance Snare1
	106	Jazz Snare 2	Jazz Snare 2	8SSt OpenHat	AfFoots	AfFoots	AfFoots	Jazz Snare 2	Power Snare2	Power Snare2	Power Snare2
	107	Room Snare 1	Room Snare 1	8SStBsDrum1P	MexFVox1	MexFVox1	MexFVox1	Room Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1
C8	108	Room Snare 2	Room Snare 2	8SStBsDrum2P	MexMVox1	MexMVox1	MexMVox1	Room Snare 2	Dance Snare2	Dance Snare2	Dance Snare2
	109	Dance Snare1	Dance Snare1	8SStCrsCym1P	YodelFVox1	YodelFVox1	YodelFVox1	Dance Snare1	Elec Snare 2	Elec Snare 2	Elec Snare 2
	110	Power Snare1	Power Snare1	8SStSnare2P	MexMVox2	MexMVox2	MexMVox2	Power Snare1	Elec. Snare	Elec. Snare	Elec. Snare
	111	Rev.Snare	Rev.Snare	8SSt RdCym P	YodelMVox1	YodelMVox1	YodelMVox1	Rev.Snare	Elec Snare 3	Elec Snare 3	Elec Snare 3
	112	Power Snare2	Power Snare2	8SSt Snare1P	MexMVox3	MexMVox3	MexMVox3	Power Snare2	66sn260	66sn260	66sn260
	113	Elec Snare 1	Elec Snare 1	8SSt Tom16 P	FlmncoFVox1	FlmncoFVox1	FlmncoFVox1	Elec Snare 1	TR-707 SD	TR-707 SD	TR 707 SD
	114	Dance Snare2	Dance Snare2	8SSt ClsHatP	YodelFVox2	YodelFVox2	YodelFVox2	Dance Snare2	808 Snare 1	808 Snare 1	808 Snare 1
	115	Elec Snare 2	Elec Snare 2	8SSt Tom12 P	FlmncoFVox2	FlmncoFVox2	FlmncoFVox2	Elec Snare 2	808 Snare 2	808 Snare 2	808 Snare 2
	116	Elec. Snare	Elec. Snare	8SSt RdBellP	NewWhistle1	NewWhistle1	NewWhistle1	Elec. Snare	TR 808 SD2	TR-808 SD2	TR-808 SD2
	117	Elec Snare 3	Elec Snare 3	8SSt Tom10 P	FlmncoFVox3	FlmncoFVox3	FlmncoFVox3	Elec Snare 3	909 Snare 1	909 Snare 1	909 Snare 1
	118	TR-707 SD	TR-707 SD	8SStOpenHatP	NewWhistle2	NewWhistle2	TR-707 SD	909 Snare 2	909 Snare 2	909 Snare 2	909 Snare 2
	119	808 Snare 1	808 Snare 1	--	FlmncoMVox1	FlmncoMVox1	FlmncoMVox1	808 Snare 1	909 SD 1	909 SD 1	909 SD 1
C9	120	808 Snare 2	808 Snare 2	--	FlmncoMVox2	FlmncoMVox2	FlmncoMVox2	808 Snare 2	TR-909 SD2	TR-909 SD2	TR 909 SD2
	121	909 Snare 1	909 Snare 1	--	BrazilVox1	BrazilVox1	BrazilVox1	909 Snare 1	Rap Snare	Rap Snare	Rap Snare
	122	909 Snare 2	909 Snare 2	--	FlmncoMVox3	FlmncoMVox3	FlmncoMVox3	909 Snare 2	JungleSD1	JungleSD1	JungleSD1
	123	Rap Snare	Rap Snare	--	BrazilVox2	BrazilVox2	BrazilVox2	Rap Snare	House SD	House SD	House SD
	124	JungleSD1	JungleSD1	--	BrazilVox3	BrazilVox3	BrazilVox3	JungleSD1	House Snare	House Snare	House Snare
	125	House SD	House SD	--	AfAahhh	AfAahhh	AfAahhh	House SD	House SD	House SD	House SD
	126	House Snare	House Snare	--	p33137v	p33137v	p33137v	House Snare	Voice Tah	Voice Tah	Voice Tah
G9	127	House SD	House SD	--	p3316Bv	p3316Bv	p3316Bv	House SD	Noise Slap	Noise Slap	Noise Slap

		PC: 13 [CC32: 4] ROOM L/R	PC: 14 [CC32: 4] HOUSE	PC: 17 [CC32: 4] POWER	PC: 18 [CC32: 4] V-Rock1	PC: 19 [CC32: 4] V-Rock2	PC: 25 [CC32: 4] ELECTRONIC	PC: 26 [CC32: 4] TR-808	PC: 27 [CC32: 4] DANCE	PC: 28 [CC32: 4] CR-78	PC: 29 [CC32: 4] TR-606
(C7)	(96)	(8SRm BsDrum2)	(Ingl SD)	(--)	(CajonHi)	(CajonHi)	(--)	(--)	(HipHop SD 2)	(--)	(--)
	97	8SRm CrsCym1	Techno Hit	Std.1 Snare1	CajonHiFlm	CajonHiFlm	Techno Hit	Techno Hit	Techno Hit	Techno Hit	Techno Hit
	98	8SRm Snare2	Philly Hit	Std.1 Snare2	CajonLo	CajonLo	Philly Hit	Philly Hit	Philly Hit	Philly Hit	Philly Hit
	99	8SRm RdCym	Shock Wave	Std.2 Snare1	CajonLoFlm	CajonLoFlm	Shock Wave	Shock Wave	Shock Wave	Shock Wave	Shock Wave
	100	8SRm Snare1	Lo Fi Rave	Std.2 Snare2	FlmncoHClp1	FlmncoHClp1	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave
	101	Room Tom 5	Bam Hit	Tight Snare	FlmncoHClp1	FlmncoHClp1	Bam Hit	Bam Hit	Bam Hit	Bam Hit	Bam Hit
	102	8SRm ClsHat	Bim Hit	Standard SN1	BongoCowBell	BongoCowBell	Bim Hit	Bim Hit	Bim Hit	Bim Hit	Bim Hit
	103	Room Tom 2	TapeRewind	LD Snare M	AfHey	AfHey	TapeRewind	TapeRewind	TapeRewind	TapeRewind	TapeRewind
	104	8SRm RdBell	Phono Noise	LD Snare C	MamboCowBell	MamboCowBell	Phono Noise	Phono Noise	Phono Noise	Phono Noise	Phono Noise
	105	Room Tom 2	Dance Snare1	Jazz Snare 1	MexFVox2	MexFVox2	Dance Snare1	Dance Snare1	Dance Snare1	Dance Snare1	Dance Snare1
	106	8SRm OpenHat	Power Snare2	Jazz Snare 2	AfFoots	AfFoots	Power Snare2	Power Snare2	Power Snare2	Power Snare2	Power Snare2
	107	8SRmBsDrum1P	Elec Snare 1	Room Snare 1	MexFVox1	MexFVox1	Elec Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1
C8	108	8SRmBsDrum2P	Dance Snare2	Room Snare 2	MexMVox1	MexMVox1	Dance Snare2	Dance Snare2	Dance Snare2	Dance Snare2	Dance Snare2
	109	8SRmCrsCym1P	Elec Snare 2	Dance Snare1	YodelFVox1	YodelFVox1	Elec Snare 2	Elec Snare 2	Elec Snare 2	Elec Snare 2	Elec Snare 2
	110	8SRmSnare2 P	Elec. Snare	Power Snare1	MexMVox2	MexMVox2	Elec. Snare	Elec. Snare	Elec. Snare	Elec. Snare	Elec. Snare
	111	8SRm RdCymP	Elec Snare 3	Rev.Snare	YodelMVox1	YodelMVox1	Elec Snare 3	Elec Snare 3	Elec Snare 3	Elec Snare 3	Elec Snare 3
	112	8SRmSnare1P	66sn260	Power Snare2	MexMVox3	MexMVox3	66sn260	66sn260	66sn260	66sn260	66sn260
	113	Room Tom 5 P	TR-707 SD	Elec Snare 1	FlmncoFVox1	FlmncoFVox1	TR-707 SD	TR 707 SD	TR-707 SD	TR-707 SD	TR-707 SD
	114	8SRm ClsHatP	808 Snare 1	Dance Snare2	YodelFVox2	YodelFVox2	808 Snare 1	808 Snare 1	808 Snare 1	808 Snare 1	808 Snare 1
	115	Room Tom 2 P	808 Snare 2	Elec Snare 2	FlmncoFVox2	FlmncoFVox2	808 Snare 2	808 Snare 2	808 Snare 2	808 Snare 2	808 Snare 2
	116	8SRm RdCymP	TR-808 SD2	Elec. Snare	NewWhistle1	NewWhistle1	TR-808 SD2	TR-808 SD2	TR-808 SD2	TR-808 SD2	TR-808 SD2
	117	Room Tom 2 P	909 Snare 1	Elec Snare 3	FlmncoFVox3	FlmncoFVox3	909 Snare 1	909 Snare 1	909 Snare 1	909 Snare 1	909 Snare 1
	118	8SRmOpenHatP	909 Snare 2	TR-707 SD	NewWhistle2	NewWhistle2	909 Snare 2	909 Snare 2	909 Snare 2	909 Snare 2	909 Snare 2
	119	--	909 SD 1	808 Snare 1	FlmncoMVox1	FlmncoMVox1	909 SD 1	909 SD 1	909 SD 1	909 SD 1	909 SD 1
C9	120	--	TR-909 SD2	808 Snare 2	FlmncoMVox2	FlmncoMVox2	TR-909 SD2	TR-909 SD2	TR-909 SD2	TR-909 SD2	TR-909 SD2
	121	--	Rap Snare	909 Snare 1	BrazilVox1	BrazilVox1	Rap Snare	Rap Snare	Rap Snare	Rap Snare	Rap Snare
	122	--	JungleSD1	909 Snare 2	FlmncoMVox3	FlmncoMVox3	JungleSD1	JungleSD1	JungleSD1	JungleSD1	JungleSD1
	123	--	House SD	Rap Snare	BrazilVox2	BrazilVox2	House SD	House SD	House SD	House SD	House SD
	124	--	House Snare	JungleSD1	BrazilVox3	BrazilVox3	House Snare	House Snare	House Snare	House Snare	House Snare
	125	--	House SD	House SD	AfAahhh	AfAahhh	House SD	House SD	House SD	House SD	House SD
	126	--	Voice Tah	House Snare	p33137v	p33137v	Voice Tah	Voice Tah	Voice Tah	Voice Tah	Voice Tah
G9	127	--	Noise Slap	House SD	p3316Bv	p3316Bv	Noise Slap	Noise Slap	Noise Slap	Noise Slap	Noise Slap

VA-3 Kits	PC: 13 [CC32: 4] ROOM L/R	PC: 14 [CC32: 4] HOUSE	PC: 17 [CC32: 4] POWER	PC: 18 [CC32: 4] V-Rock1	PC: 19 [CC32: 4] V-Rock2	PC: 25 [CC32: 4] ELECTRONIC	PC: 26 [CC32: 4] TR-808	PC: 27 [CC32: 4] DANCE	PC: 28 [CC32: 4] CR-78	PC: 29 [CC32: 4] TR-606
C-1 0	---	Elec Kick 2	Std.1 Kick1	HipHop BD1	HipHop BD1	Elec Kick 2	Elec Kick 2	Elec Kick 2	Elec Kick 2	Elec Kick 2
1	---	Elec Kick 1	Std 1 Kck2	Jazz Kick 1	Jazz Kick 1	Elec Kick 1	Elec Kick 1	Elec Kick 1	Elec Kick 1	Elec Kick 1
2	---	CR78 BD 1	Std.2 Kick1	Mex_Kik36	Mex_Kik36	CR78 BD 1	CR78 BD 1	CR78 BD 1	CR78 BD 1	CR78 BD 1
3	---	CR78 BD 2	Std2 Kick2	85RmBsDrum1B	85RmBsDrum1B	CR78 BD 2	CR78 BD 2	CR78 BD 2	CR78 BD 2	CR78 BD 2
4	---	TR-606 BD1	Kick 1	85RmBsDrum2B	85RmBsDrum2B	TR-606 BD1	TR-606 BD1	TR-606 BD1	TR-606 BD1	TR-606 BD1
5	---	TR-707 BD	Kick 2	909 BD	909 BD	TR-707 BD	TR-707 BD	TR-707 BD	TR-707 BD	TR-707 BD
6	---	808 Kick	Jazz Kick 1	909 BD 2	909 BD 2	808 Kick	808 Kick	808 K-ck	808 Kick	808 Kick
7	---	TR-808 Kick	Jazz Kick 2	Jngl BD 2	Jngl BD 2	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick
8	---	808 BD	Room Kick 1	HipHop BD	HipHop BD	808 BD	808 BD	808 BD	808 BD	808 BD
9	---	TR-909 Kick	Room Kick 2	HipHop BD 2	HipHop BD 2	TR-909 Kick	TR-909 Kick	TR-909 Kick	TR-909 Kick	TR-909 Kick
10	---	Dance Kick 2	Power Kick1	85StBsDrum1B	85StBsDrum1B	Dance Kick 2	Dance Kick 2	Dance Kick 2	Dance Kick 2	Dance Kick 2
11	---	909 Comp BD	Power Kick2	NewJzKik	NewJzKik	909 Comp BD	909 Comp BD	909 Comp BD	909 Comp BD	909 Comp BD
C0 12	---	TR-909 BD2	Elec Kick 2	NewRockKik	NewRockKik	TR-909 BD2	TR-909 BD2	TR-909 BD2	TR-909 BD2	TR-909 BD2
13	---	HipHop BD2	Elec Kick 1	CymbalRoll	CymbalRoll	HipHop BD2	HipHop BD2	HipHop BD2	HipHop BD2	HipHop BD2
14	---	JungleBD Set	TR-808 Kick	NewRkCStkMn	NewRkCStkMn	JungleBD Set	JungleBD Set	JungleBD Set	JungleBD Set	JungleBD Set
15	---	Techno BD1	TR-909 Kick	85RmSnare1B	85RmSnare1B	Techno BD1	Techno BD1	Techno BD1	Techno BD1	Techno BD1
16	---	Bounce	Dance Kick 2	85RmSnare2B	85RmSnare2B	Bounce	Bounce	Bounce	Bounce	Bounce
17	Voice One	Voice One	Voice One	85StSnare1B	85StSnare1B	Voice One	Voice One	Voice One	Voice One	Voice One
18	Voice Two	Voice Two	Voice Two	85StSnare2B	85StSnare2B	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two
19	Voice Three	Voice Three	Voice Three	NewJzSn2	NewJzSn2	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three
20	---	Fat BD	---	NewJzSn1	NewJzSn1	---	---	909 BD	---	---
21	---	Dance BD	--	NewR&BSn	NewR&BSn	---	---	909 BD 2	---	---
22	MC-500 Beep	MC-500 Beep	MC-500 Beep	IPopSn40mn	IPopSn40mn	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep
23	MC-500 Beep	MC-500 Beep	MC-500 Beep	IPopSn38mn	IPopSn38mn	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep
C1 24	Concert Snr	Concert Snr	Concert Snr	IPopSn38mn	IPopSn38mn	Concert Snr	Concert Snr	Concert Snr	Concert Snr	Concert Snr
25	Snare Roll	Snare Roll	Snare Roll	IPopGstSt39mn	IPopGstSt39mn	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll
26	Finger Snap	FingerSnaps2	FingerSnaps2	IPopSn40mn	IPopSn38mn	Finger Snap	FingerSnaps2	Finger Snap	FingerSnaps2	FingerSnaps2
27	High-Q	High-Q	High-Q	FingerSnaps2	FingerSnaps2	High-Q	High-Q	High-Q	High-Q	High Q
28	Slap	Slap	Slap	707 Claps	707 Claps	Slap	Slap	Slap	Slap	Slap
29	ScratchPush	Scrtch Push2	ScratchPush	808clap	808clap	Scrtch Push2	Scrtch Push2	Scrtch Push2	Scrtch Push2	Scrtch Push2
30	ScratchPull	Scrtch Pull2	ScratchPull	Hand clap2	Hand clap2	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2
31	Sticks	Sticks	Sticks	909 HandClap	909 HandClap	Sticks	Sticks	Sticks	Sticks	Sticks
32	SquareClick	SquareClick	SquareClick	NewRkHatPdl	NewRkHatPdl	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick
33	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	GospelHClp1	GospelHClp1	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
34	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	NewRkSnRll5t	NewRkSnRll5t	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
35	85RmBsDrum1B	909 BD	Power Kick2	NewRockKik	NewRockKik	Elec Kick 2	808 BD	Fat BD	CR78 BD 2	CR78 BD 2
C2 36	85RmBsDrum2B	909 BD 2	Power Kick1	NewRockKik	NewRockKik	Elec Kick 1	TR-808 Kick	Dance BD	CR78 BD 1	TR-606 BD1
37	Side Stick	House SD Rim	Side Stick	NewRkCStk5t	NewRkCStk5t	Side Stick	808 Rimshot	Dance SD Rim	CR78 Rim	CR78 Rim
38	85RmSnare2B	House SD	Dance Snare1	NewRockSn1st	NewRockSn1st	Elec. Snare	808 Snare 1	Dance SD	CR78 SD 1	66sn160
39	808clap	909 Claps	808clap	NewRkSnGst5t	NewRkSnGst5t	808clap	808clap	Comp Claps 2	707 Claps	707 Claps
40	85RmSnare1B	House SD	Power Snare1	NewRock5n2st	NewRock5n2st	Elec Snare 2	TR-808 SD2	Rock SD Dry	CR78 SD 2	66sn260
41	Room Tom 5	909 Tom	Rock Tom 4	NewRkTomL2Fl	NewRkTomL1Fl	Synth Drum 2	808 Tom 2	Synth Drum 2	78 TOM	606 Tom
42	85RmClsHatB	TR-707 HH-c	Close HiHat2	NewRkHat1	NewRkHat1	Jazz Clsd.HH	TR-808 CHH	CR-78 chh	CR-78 chh	606 CH
43	Room Tom 5	909 Tom	Rock Tom 4	NewRkTomL2	NewRkTomL1	Synth Drum 2	808 Tom 2	Synth Drum 2	78 TOM	606 Tom
44	Pedal HiHat	CR-78 chh	Pedal HiHat2	NewRkHat2	NewRkHat2	Pedal HiHat	808_chh	808_chh	606 CH	606 CH
45	Room Tom 2	909 Tom	Rock Tom 4	NewRkTomL1Fl	NewRkTomMFl	Synth Drum 2	808 Tom 2	Synth Drum 2	78 TOM	606 Tom
46	85RmOpenHatB	909 OH	Open HiHat2	NewRkHat3	NewRkHat3	Jazz Open HH	TR-808 OHH	CR-78 ohh	CR-78 ohh	606 HiHat Op
47	Room Tom 2	909 Tom	Rock Tom 4	NewRkTomL1	NewRkTomM	Synth Drum 2	808 Tom 2	Synth Drum 2	78 TOM	606 Tom
C3 48	Room Tom 7	909 Tom	Rock Tom 1	NewRkTomMFl	NewRkTomHiFl	Synth Drum 2	808 Tom 2	Synth Drum 2	78 TOM	606 Tom
49	85RmCrsCym1B	909 Crash	Crash Cym.1	NewRkCrCym1	NewRkCrCym1	Crash Cym.1	808 Crash	808 Crash	808 Crash	808 Crash
50	Room Tom 2	909 Tom	Rock Tom 1	NewRkTomM	NewRkTomHi	Synth Drum 2	808 Tom 2	Synth Drum 2	78 TOM	606 Tom
51	85RmRdCym8	909 Ride Cym	Ride Cymbal	NewRkRdCym1	NewRkRdCym1	Ride Cymbal	606 Ride Cym	606 Ride Cym	606 Ride Cym	606 Ride Cym
52	ChinaCymbal	ReverseCymbl	ChinaCymbal	NewRkCrCym2	NewRkCrCym2	ReverseCymbl	ChinaCymbal	ReverseCymbl	ChinaCymbal	ChinaCymbal
53	85RmRdCym8	Ride Bell	Ride Bell	NewRkRdCym2	NewRkRdCym2	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell
54	Tambourine	Shake Tamb	Tambourine	Tambourine	Tambourine	Tambourine	CR78 Tmb	Shake Tamb	CR78 Tmb	CR78 Tmb
55	Splash Cym.	Splash Cym	Splash Cym	NewRkCrCym3	NewRkCrCym3	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.
56	Cowbell	808cowbe	Cowbell	ChaChaCBell	ChaChaCBell	Cowbell	808cowbe	808cowbe	CR78 Cow	CR78 Cow
57	Crash Cym.2	909 Crash	Crash Cym.2	NewRkCrCym4	NewRkCrCym4	Crash Cym.2	909 Crash	Crash Cym.2	909 Crash	909 Crash
58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
59	Ride Cymbal	Ride Cymbal	Ride Cymbal	IPopRd1_51	IPopRd1_51	Ride Cymbal	RideCym Edge	Ride Cymbal	RideCym Edge	RideCym Edge
C4 60	Bongo High	CR78 HiBongo	Bongo High	NewHiBongo	NewHiBongo	Bongo High	CR78 HiBongo	Bongo High	CR78 HiBongo	CR78 HiBongo
61	Bongo Lo	CR78 LoBongo	Bongo Lo	NewLoBongo	NewLoBongo	Bongo Lo	CR78 LoBongo	Bongo Lo	CR78 LoBongo	CR78 LoBongo
62	Mute H.Conga	808 Conga	Mute H.Conga	NewCongaSlp	NewCongaSlp	Mute H.Conga	808 Conga	Mute H.Conga	808 Conga	808 Conga
63	Conga Hi Opn	808 Conga	Conga Hi Opn	NewCongaOp	NewCongaOp	Conga Hi Opn	808 Conga	Conga Hi Opn	808 Conga	808 Conga
64	Conga Lo Opn	808 Conga	Conga Lo Opn	NewLoConga	NewLoConga	Conga Lo Opn	808 Conga	Conga Lo Opn	808 Conga	808 Conga
65	High Timbale	High Timbale	High Timbale	NewTmblHi	NewTmblHi	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
66	Low Timbale	Low Timbale	Low Timbale	NewTmblLo	NewTmblLo	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
67	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
68	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
69	Cabasa	Cabasa	Cabasa	NewShaker2	NewShaker2	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
70	Maracas	808marac	Maracas	NewShaker1	NewShaker1	Maracas	808marac	Maracas	CR78 Maracas	CR78 Maracas
71	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
C5 72	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
73	Short Guiro	Short Guiro	Short Guiro	NewQuide1	NewQuide1	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
74	Long Guiro	CR78 Guiro	Long Guiro	NewQuide2	NewQuide2	Long Guiro	CR78 Guiro	Long Guiro	CR78 Guiro	CR78 Guiro
75	Claves	808clave	Claves	NewClaves	NewClaves	Claves	808clave	Claves	CR78 Clv	CR78 Clv
76	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
77	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
78	Mute Cuica	Hon	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Hoo	Hoo	Hoo	Hoo
79	Open Cuica	Hoo	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Hoo	Hoo	Hoo	Hoo
80	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	CR78 M.Beat	CR78 M.Beat
81	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	CR78 M.Beat	CR78 M.Beat
82	Shaker	626 Shaker	Shaker	Shaker	Shaker	Shaker	626 Shaker	626 Shaker	626 Shaker	626 Shaker
83	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6 84	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
85	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
86	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
87	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
88	Applause 2	Applause 2	Applause 2	CRcir	CRcir	Small Club	Small Club	Small Club	Small Club	Small Club
89	---	606 SD 2	---	NewTmblHiFlm	NewTmblHiFlm	---	---	606 SD 2	---	---
90	---	Dance SD	---	NewTmblLoFlm	NewTmblLoFlm	---	---	Techno SD	---	---
91	---	Techno SD	---	NewTmblPHS	NewTmblPHS	---	---	House SD		---
92	---	Rock SD Dry	---	NewShekere1	NewShekere1	---	---	Jngl SD	---	---
93	---	HipHop SD 1	---	NewShekere2	NewShekere2	---	---	LoFi SD 1	---	---
94	---	LoFi SD 1	---	NHBngoMute	NHBngoMute	---	---	LoFi SD 2	---	---
95	85Rm BsDrum1	LoFi SD 2	---	NewLBngoMute	NewLBngoMute	---	---	HipHop SD 1	---	---
C7 96	85Rm BsDrum2	Jngl SD	---	CajonHi	CajonHi	---	---	HipHop SD 2	---	---

VA-3 MIDI	PC: 30 [CC32: 4]	PC: 31 [CC32: 4]	PC: 33 [CC32: 4]	PC: 34 [CC32: 4]	PC: 41 [CC32: 4]	PC: 42 [CC32: 4]	PC: 43 [CC32: 4]	PC: 44 [CC32: 4]	PC: 49 [CC32: 4]	PC: 50 [CC32: 4]
	TR-707	TR-909	JAZZ	JAZZ L/R	BRUSH	BRUSH 2	BRUSH 2 L/R	V-JazzBrush	ORCHESTRA	ETHNIC
C-1 0	Elec Kick 2	Elec Kick 2	Std.1 Kick1	---	Std 1 Kick1	Std.1 Kick1	---	HipHop BD1	Std.1 Kick1	---
1	Elec Kick 1	Elec Kick 1	Std 1 Kick2	---	Std.1 Kick2	Std 1 Kick2	---	Jazz Kick 1	Std.1 Kick2	---
2	CR78 BD 1	CR78 BD 1	Std.2 Kick1	---	Std.2 Kick1	Std.2 Kick1	---	Mex Kik36	Std.2 Kick1	---
3	CR78 BD 2	CR78 BD 2	Std2 Kick2	---	Std2 Kick2	Std2 Kick2	---	85RmBsDrum1B	Std2 Kick2	---
4	TR-606 BD1	TR-606 BD1	Kick 1	---	Kick 1	Kick 1	---	85RmBsDrum2B	Kick 1	---
5	TR-707 BD	TR-707 BD	Kick 2	---	Kick 2	Kick 2	---	909 BD	Kick 2	---
6	808 Kick	808 Kick	Jazz Kick 1	---	Jazz Kick 1	Jazz Kick 1	---	909 BD 2	Jazz Kick 1	---
7	TR-808 Kick	TR-808 Kick	Jazz Kick 2	---	Jazz Kick 2	Jazz Kick 2	---	Jngl BD 2	Jazz Kick 2	---
8	808 BD	808 BD	Room Kick 1	---	Room Kick 1	Room Kick 1	---	HipHop BD	Room Kick 1	---
9	TR-909 Kick	TR-909 Kick	Room Kick 2	---	Room Kick 2	Room Kick 2	---	HipHop BD 2	Room Kick 2	---
10	Dance Kick 2	Dance Kick 2	Power Kick1	---	Power Kick1	Power Kick1	---	85StBsDrum1B	Power Kick1	---
11	909 Comp BD	909 Comp BD	Power Kick2	---	Power Kick2	Power Kick2	---	NewJzKik	Power Kick2	---
C0 12	TR-909 BD2	TR-909 BD2	Elec Kick 2	---	Elec Kick 2	Elec Kick 2	---	NewRockKik	Elec Kick 2	---
13	HipHop BD2	HipHop BD2	Elec Kick 1	---	Elec Kick 1	Elec Kick 1	---	CymbalRoll	Elec Kick 1	---
14	JungleBD Set	JungleBD Set	TR-808 Kick	---	TR-808 Kick	TR-808 Kick	---	NewRkCtkMn	TR-808 Kick	---
15	Techno BD1	Techno BD1	TR-909 Kick	---	TR-909 Kick	TR-909 Kick	---	85RmSnare1B	TR-909 Kick	---
16	Bounce	Bounce	Dance Kick 2	---	Dance Kick 2	Dance Kick 2	---	85RmSnare2B	Dance Kick 2	---
17	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One	85StSnare1B	Voice One	---
18	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	85StSnare2B	Voice Two	---
19	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	NewJzSn2	Voice Three	---
20	---	---	85Br BsDrum1	---	---	85Jz BsDrum1	---	NewJzSn1	---	---
21	---	---	85Br BsDrum2	---	---	85Jz BsDrum2	---	NewR&BSn	---	---
22	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	IPopSn38mn	MC-500 Beep	---
23	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	IPopSn40mn	MC-500 Beep	---
C1 24	Concert Snr	Concert Snr	Concert Snr	Concert Snr	Concert Snr	Concert Snr	Concert Snr	IPopSn38mn	Concert Snr	---
25	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	IPopGstS39mn	Snare Roll	Finger Snap
26	FingerSnaps2	FingerSnaps2	Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap	IPopSn38mn	Finger Snap	Tambourine
27	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	FingerSnaps2	Jazz Clsd.HH	Castanets
28	Slap	Slap	Slap	Slap	Slap	Slap	Slap	707 Claps	Pedal HiHat	Crash Cym.1
29	Scrtch Push2	Scrtch Push2	ScratchPush	ScratchPush	ScratchPush	ScratchPush	ScratchPush	808clap	Jazz Open HH	Snare Roll
30	Scrtch Pull2	Scrtch Pull2	ScratchPull	ScratchPull	ScratchPull	ScratchPull	ScratchPull	Hand clap2	Ride Cymbal	Concert Snr
31	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	909 HandClap	Sticks	Concert Cym
32	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	NewJzHatPdl	SquareClick	Concert BD
33	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	GospelHClp1	Mtrnm.Click	Jingle Bell
34	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	IPopSRI30st	Mtrnm. Bell	Bell Tree
35	TR-707 BD 2	Techno BD2	85Jz BsDrum1	85JzBsDrum1B	Jazz Kick 2	85Br BsDrum1	85BrBsDrum1B	NewJzKik	Jazz Kick 1	Bar Chimes
C2 36	TR-707 BD	TR-909 BD2	85Jz BsDrum2	85JzBsDrum2B	Jazz Kick 1	85Br BsDrum2	85BrBsDrum2B	NewJzKik	Concert BD	Wadaiko
37	TR-707 Rim	TR-909 Rim	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	NewJzSW1	Side Stick	Wadaiko Rim
38	TR-707 SD	909 SD 1	85Jz Snare1	85JzSnare1B	Brush Swirl	85Br Snare1	85BrSnare1B	NewJzSn1	Concert Snr	Shimedaiko
39	707 Claps	909 HandClap	Hand clap2	Hand clap2	Brush Slap1	85Br Snare2	85BrSnare2B	NewJzSW2	Castanets	Atarigane
40	TR-707 SD 2	TR-909 SD2	85Jz Snare2	85JzSnare2B	Brush Swirl	Brush Swirl	Brush Swirl	NewJzSn2	Concert Snr	Hyoushigi
41	TR-707 Tom	909 Tom	85Jz Tom16	85JzTom16B	Lite Tom 4	85Br Tom1	85BrTom1B	NewJzTomLoFl	Timpani	Ohkawa
42	TR-707 HH-c	TR-707 HH-c	85Jz ClsHat	85JzClsHatB	Brs Chh	85Br ClsHat	85BrClsHatB	NewJzHat1	Timpani	H kotsuzumi
43	TR-707 Tom	909 Tom	85Jz Tom16	85JzTom16B	Lite Tom 4	85Br Tom1	85BrTom1B	NewJzTomLo	Timpani	L Kotsuzumi
44	TR-707 HH-c	TR-707 HH-c	Pedal HiHat	Pedal HiHat	Pedal HiHat	Pedal HiHat	Pedal HiHat	NewJzHat2	Timpani	Ban_Gu
45	TR-707 Tom	909 Tom	85Jz Tom13	85JzTom13B	Lite Tom 4	85Br Tom2	85BrTom2B	NewJzTomMFl	Timpani	Big Gong
46	TR-707 OHH	909 OH	85Jz OpenHat	85JzOpenHatB	Brush Ohh	85Br OpenHat	85BrOpenHatB	NewJzHat3	Timpani	Small Gong
47	TR-707 Tom	909 Tom	85Jz Tom13	85JzTom13B	Lite Tom 4	85Br Tom2	85BrTom2B	NewRkTomMid	Timpani	Bend Gong
C3 48	TR-707 Tom	909 Tom	85Jz Tom12	85JzTom12B	Lite Tom 4	85Br Tom3	85BrTom3B	NewJzTomHiFl	Timpani	RAMA Cymbal
49	909 Crash	909 Crash	85Jz CrsCym1	85JzCrsCym1B	Brush Crash	85Br CrsCym1	85BrCrsCym1B	NewJzCrCym1	Timpani	RAMA Cymbal
50	TR-707 Tom	909 Tom	85Jz Tom12	85JzTom12B	Lite Tom 4	85Br Tom3	85BrTom3B	NewJzTomHi	Timpani	Gamelan Gong
51	909 Ride Cym	909 Ride Cym	85Jz RdCym	85JzRdCymB	Ride Cym IN	85Br RdCym	85BrRdCymB	NewJzRide1	Timpani	Udo_Short
52	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	NewJzCrCym2	Timpani	Udo_Long
53	Ride Bell	Ride Bell	85Jz RdBell	85JzRdBellB	Brush RideBL	85Br RdBell	85BrRdBellB	NewJzRide2	Timpani	Udo_slap
54	344Tambourn	344Tambourn	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Bendir
55	Splash Cym	Splash Cym.	Splash Cym.	Splash Cym	Splash Cym	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Req_Dum
56	808cowbe	808cowbe	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	ChaChaCBell	Cowbell	Req_tik
57	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	NewJzCrCym1	Con.Cymbal2	Tabla_Te
58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Tabla_Na
59	RideCym Edge	RideCym Edge	RideCym Edge	RideCym Edge	RideCym Edge	RideCym Edge	RideCym Edge	NewRkRdCym1	Concert Cym	Tabla_Tun
C4 60	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	NewHiBongo	Bongo High	Tabla_Ge
61	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	NewLoBongo	Bongo Lo	Tabla Ge Hi
62	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H Conga	Mute H.Conga	Mute H.Conga	NewCongaSlp	Mute H.Conga	Talking Drum
63	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	NewCongaOp	Conga Hi Opn	Bend tik_drm
64	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	NewLoConga	Conga Lo Opn	Caxixi
65	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	NewTmbHi	High Timbale	Djembe
66	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	NewTmbLo	Low Timbale	Djembe_rim
67	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Low Timbale
68	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Timbl Paila
69	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	NewShaker2	Cabasa	High Timbale
70	808marac	808marac	Maracas	Maracas	Maracas	Maracas	Maracas	NewShaker1	Maracas	Cowbell
C5 72	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	Bongo High
	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	Bongo Lo
73	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	NewQuide1	Short Guiro	Mute H.Conga
74	Long Guiro	CR78 Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	NewQuide2	Long Guiro	Conga Hi Opn
75	Claves	808clave	Claves	Claves	Claves	Claves	Claves	NewClaves	Claves	Conga MtLow
76	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Conga Slap
77	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Conga Lo Opn
78	Hoo	Hoo	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Conga Slide
79	Hoo	Hoo	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Mut Pandiero
80	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	Opn Pandiero
81	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	Open Surdo
82	626 Shaker	626 Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Mute Surdo
83	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Tamborim
C6 84	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Agogo
85	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Agogo
86	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Shaker
87	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Low Whistle
88	Small Club	Applause 2	Applause	Applause	Applause	Applause	Applause	CRcir	Applause	Low Whistle
89	---	---	---	---	---	---	---	NewTmbHiFlm	---	Mute Cuica
90	---	---	---	---	---	---	---	NewTmbLoFlm	---	Open Cuica
91	---	---	---	---	---	---	---	NewTmbPH5	---	MuteTriangl
92	---	---	---	---	---	---	---	NewShekere1	---	OpenTriangl
93	---	---	---	---	---	---	---	NewShekere2	---	Short Guiro
94	---	---	---	---	---	---	---	NHBngoMute	---	Long Guiro
95	---	---	---	85Jz BsDrum1	---	---	85Br BsDrum1	NewLBngoMute	---	Cabasa Up
C7 96	---	---	---	85Jz BsDrum2	---	---	85Br BsDrum2	CajonH	---	Cabasa Down

		PC: 30 [CC32: 4] TR-707	PC: 31 [CC32: 4] TR-909	PC: 33 [CC32: 4] JAZZ	PC: 34 [CC32: 4] JAZZ L/R	PC: 41 [CC32: 4] BRUSH	PC: 42 [CC32: 4] BRUSH 2	PC: 43 [CC32: 4] BRUSH 2 L/R	PC: 44 [CC32: 4] V-JazzBrush	PC: 49 [CC32: 4] ORCHESTRA	PC: 50 [CC32: 4] ETHNIC
(C7)	(96)	(---)	(---)	(---)	(85Jz BsDrum2)	(---)	(---)	(85Br BsDrum2)	(CajonHi)	(---)	(Cabasa Down)
	97	Techno Hit	Techno Hit	—	85Jz CrsCym1	---	---	85Br CrsCym1	CajonHiFlm	Applause 2	Claves
	98	Philly Hit	Philly Hit	85Br Snare1	85Jz Snare1	---	85Jz Snare1	85Br Snare1	CajonLo	Small Club	Woodblock
	99	Shock Wave	Shock Wave	85Br Snare2	85Jz RdCym	---	85Jz Snare2	85Br RdCym	CajonLoFlm	Timpani	Woodblock
	100	Lo Fi Rave	Lo Fi Rave	Brush Swirl	85Jz Snare2	Brush Swirl	Brush Swirl	85Br Snare2	FlmncoHClp1	Timpani	---
	101	Bam Hit	Bam Hit	Brush Tap	85Jz Tom16	Brush Tap	Brush Tap	85Br Tom3	FlmncoHClp1	Timpani	---
	102	Bim Hit	Bim Hit	Brush Slap1	85Jz ClsHat	Brush Slap1	Brush Slap1	85Br ClsHat	BongoLowBell	Timpani	---
	103	TapeRewind	TapeRewind	Brush Slap2	85Jz Tom13	Brush Slap2	Brush Slap2	85Br Tom2	AfHey	Timpani	---
	104	Phono Noise	Phono Noise	Brush Slap	85Jz RdBell	Brush Slap	Brush Slap	85Br RdBell	MamboLowBell	Timpani	---
	105	Dance Snare1	Dance Snare1	Brush Swirl	85Jz Tom12	Brush Swirl	Brush Swirl	85Br Tom1	MexFVox2	Timpani	---
	106	Power Snare2	Power Snare2	Brush Swirl	85Jz OpenHat	Brush Swirl	Brush Swirl	85Br OpenHat	AfFoots	Timpani	---
	107	Elec Snare 1	Elec Snare 1	Long Swirl	85JzBsDrum1P	Long Swirl	Long Swirl	85BrBsDrum1P	MexFVox1	Timpani	---
C8	108	Dance Snare2	Dance Snare2	Jazz Snare 1	85JzBsDrum2P	Jazz Snare 1	Jazz Snare 1	85BrBsDrum2P	MexMVox1	Timpani	---
	109	Elec Snare 2	Elec Snare 2	Jazz Snare 2	85JzCrsCym1P	Jazz Snare 2	Jazz Snare 2	85BrCrsCym1P	YodelFVox1	Timpani	---
	110	Elec. Snare	Elec. Snare	Std.1 Snare1	85Jz Snare1P	Std.1 Snare1	Std.1 Snare1	85Br Snare1P	MexMVox2	Timpani	---
	111	Elec Snare 3	Elec Snare 3	Std.1 Snare2	85Jz RdCym P	Std.1 Snare2	Std.1 Snare2	85Br RdCym P	YodelMVox1	Timpani	---
	112	66sn260	66sn260	Std.2 Snare1	85Jz Snare2P	Std.2 Snare1	Std.2 Snare1	85Br Snare2P	MexMVox3	Timpani	---
	113	TR-707 SD	TR-707 SD	Std.2 Snare2	85Jz Tom16 P	Std.2 Snare2	Std.2 Snare2	85Br Tom3 P	FlmncoFVox1	Timpani	---
	114	808 Snare 1	808 Snare 1	Tight Snare	85Jz ClsHatP	Tight Snare	Tight Snare	85BrClsHat P	YodelFVox2	---	---
	115	808 Snare 2	808 Snare 2	Standard SN1	85Jz Tom13 P	Standard SN1	Standard SN1	85Br Tom2 P	FlmncoFVox2	---	---
	116	TR-808 SD2	TR-808 SD2	LD Snare M	85Jz RdBellP	LD Snare M	LD Snare M	85Br RdBellP	NewWhistle1	---	---
	117	909 Snare 1	909 Snare 1	LD Snare C	85Jz Tom12 P	LD Snare C	LD Snare C	85Br Tom1 P	FlmncoFVox3	---	---
	118	909 Snare 2	909 Snare 2	Room Snare 1	85JzOpenHatP	Room Snare 1	Room Snare 1	85BrOpenHatP	NewWhistle2	---	---
	119	909 SD 1	909 SD 1	Room Snare 2	---	Room Snare 2	Room Snare 2	---	FlmncoMVox1	---	---
C9	120	TR-909 SD2	TR-909 SD2	Dance Snare1	---	Dance Snare1	Dance Snare1	---	FlmncoMVox2	---	---
	121	Rap Snare	Rap Snare	Power Snare1	---	Power Snare1	Power Snare1	---	BrazilVox1	---	---
	122	JungleSD1	JungleSD1	Rev.Snare	---	Rev.Snare	Rev.Snare	---	FlmncoMVox3	---	---
	123	House SD	House SD	Power Snare2	---	Power Snare2	Power Snare2	---	BrazilVox2	---	---
	124	House Snare	House Snare	Elec Snare 1	---	Elec Snare 1	Elec Snare 1	---	BrazilVox3	---	---
	125	House SD	House SD	Dance Snare2	---	Dance Snare2	Dance Snare2	---	AfAahhh	---	---
	126	Voire Tah	Voire Tah	Elec Snare 2	---	Elec Snare 2	Elec Snare 2	---	p33137v	---	---
G9	127	Noise Slap	Noise Slap	Elec Snare 3	---	Elec Snare 3	Elec Snare 3	---	p33168v	---	---

		PC: 51 [CC32: 4] KICK & SNARE	PC: 52 [CC32: 4] KICK & SNARE 2	PC: 53 [CC32: 4] ASIA	PC: 54 [CC32: 4] CYMBAL&CLAPS	PC: 55 [CC32: 4] GAMELAN 1	PC: 56 [CC32: 4] GAMELAN 2	PC: 57 [CC32: 4] SFX	PC: 58 [CC32: 4] RHYTHM FX	PC: 59 [CC32: 4] RHYTHM FX 2	PC: 60 [CC32: 4] RHYTHM FX 3
(C7)	(96)	(HipHop SD2)	(HipHop SD2)	(---)	(---)	(---)	(---)	(Perc. Bang)	(---)	(---)	(R Boeeeen)
	97	JungleSD1	JungleSD1	—	—	---	---	---	---	---	R Bounce
	98	Jungle SD2	Jungle SD2	---	---	---	---	---	---	---	R CD Tray
	99	Slap	Slap	---	---	---	---	---	---	---	R Drill
	100	MG_Blip	MG_Blip	---	---	---	---	---	---	---	R Glass Stir
	101	House SD	House SD	---	---	---	---	---	---	---	R Ice Ring
	102	CR78 SD 1	CR78 SD 1	---	---	---	---	---	---	---	R Kinzapcm
	103	CR78 SD 2	CR78 SD 2	---	---	---	---	---	---	---	R Scratch 4
	104	66sn160	66sn160	---	---	---	---	---	---	---	R Scratch 5
	105	66sn260	66sn260	---	---	---	---	---	---	---	R Scratch 6
	106	TR-707 SD	TR-707 SD	---	---	---	---	---	---	---	R Scratch 7
	107	TR-707 SD 2	TR-707 SD 2	---	---	---	---	---	---	---	R Seal
C8	108	TR-707 SD 3	TR-707 SD 3	---	---	---	---	---	---	---	R Stab! 1
	109	TR-808 SD2	TR-808 SD2	---	---	---	---	---	---	---	R Stab! 2
	110	909 SD 1	909 SD 1	---	---	---	---	---	---	---	R Swrd Boom!
	111	TR-909 SD2	TR-909 SD2	---	---	---	---	---	---	---	R Swrd Cross
	112	---	---	---	---	---	---	---	---	---	R Thrill Hit
	113	---	---	---	---	---	---	---	---	---	R Audio Sw
	114	---	---	---	---	---	---	---	---	---	R Typing 1
	115	---	---	---	---	---	---	---	---	---	R Typing 2
	116	---	---	---	---	---	---	---	---	---	R Typing 3
	117	---	---	---	---	---	---	---	---	---	R Typing 4
	118	---	---	---	---	---	---	---	---	---	R Typing 5
	119	---	---	---	---	---	---	---	---	---	R Typing 6
C9	120	---	---	---	---	---	---	---	---	---	---
	121	---	---	---	---	---	---	---	---	---	---
	122	---	---	---	---	---	---	---	---	---	---
	123	---	---	---	---	---	---	---	---	---	---
	124	---	---	---	---	---	---	---	---	---	---
	125	---	---	---	---	---	---	---	---	---	---
	126	---	---	---	---	---	---	---	---	---	---
G9	127	---	---	---	---	---	---	---	---	---	---

		PC: 51 [CC32: 4] KICK & SNARE	PC: 52 [CC32: 4] KICK&SNARE 2	PC: 53 [CC32: 4] ASIA	PC: 54 [CC32: 4] CYMBAL&CLAPS	PC: 55 [CC32: 4] GAMELAN 1	PC: 56 [CC32: 4] GAMELAN 2	PC: 57 [CC32: 4] SFX	PC: 58 [CC32: 4] RHYTHM FX	PC: 59 [CC32: 4] RHYTHM FX 2	PC: 60 [CC32: 4] RHYTHM FX 3
C-1	0	---	---	---	---	---	---	---	---	---	---
	1	---	---	---	---	---	---	---	---	---	---
	2	---	---	---	---	---	---	---	---	---	---
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	10	---	---	---	---	---	---	---	---	---	---
	11	---	---	---	---	---	---	---	---	---	---
C0	12	---	---	---	---	---	---	---	---	---	---
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	14	---	---	---	---	---	---	---	---	---	---
	15	---	---	---	---	---	---	---	---	---	---
	16	---	---	---	---	---	---	---	---	---	---
	17	---	---	---	---	---	---	---	---	---	R Bs Mute NZ
	18	---	---	---	---	---	---	---	---	---	R Bs StQuail
	19	---	---	---	---	---	---	---	---	---	R Bs Atk NZ
	20	---	---	---	---	---	---	---	---	---	R ClnGtCutUp
	21	---	---	---	---	---	---	MC-500 Beep	---	---	R ClnGtCutDn
	22	---	---	---	---	---	---	MC-500 Beep	---	---	R ClnGtrMtUp
	23	---	---	---	---	---	---	ytwn3.xtp	---	---	R ClnGtrMtDn
C1	24	---	---	---	---	---	---	ytwn2.xtp	---	---	R DstGtCutUp
	25	CR78 BD 1	CR78 BD 1	Gamelan Gong	---	---	---	Guitar Slap	---	---	R DstGtCutDn
	26	CR78 BD 2	CR78 BD 2	Gamelan Gong	---	---	---	Chord Stroke	---	---	R DstGtrSgdn
	27	TR-606 BD1	TR-606 BD1	Gamelan Gong	---	---	---	Chord Stroke	---	---	R DstGtrMute
	28	TR-707 BD	TR-707 BD	Gamelan Gong	---	---	---	Biwa 3	---	---	R SlGtrSdNz1
	29	808 BD	808 BD	Gamelan Gong	---	---	---	Phono Noise	---	---	R SlGtrSdNz2
	30	909 Comp BD	909 Comp BD	Gamelan Gong	---	---	---	TapeRewind	---	---	R SlGtrSdNz3
	31	TR-909 BD2	TR-909 BD2	Gamelan Gong	---	---	---	Scrtch Push2	---	---	R SlGtrSdNz4
	32	HipHop BD2	HipHop BD2	Gamelan Gong	rev.hohh	---	---	Scrtch Pull2	---	---	R SlGtrStkSD
	33	HipHop BD1	HipHop BD1	Gamelan Gong	Rev. LVCHH 1	---	---	Gt.CutNoise2	---	---	R SlGtrStkU1
	34	Jungle BD2	Jungle BD2	Gamelan Gong	Rev. LVCHH 2	---	---	Gt.CutNoise2	---	---	R SlGtrStkD1
	35	JungleBD Set	JungleBD Set	Gender	Jungle HH	---	---	Dist.CutNoiz	---	---	R SlGtrStkU2
C2	36	Techno BD2	Techno BD2	Gender	Close HiHat	KendangWadon	KendangWadon	Dist.CutNoiz	Rev.Kick 1	rev.707bd	R SlGtrStkD2
	37	Techno BD1	Techno BD1	Gender	Jazz Clsd.HH	KendangWadon	KendangWadon	Bass Slide	Rev.ConBD	rev.909bd2	R Tbone NZ
	38	Mix Kick	Mix Kick	Gender	Room Chh	Bebarongan	Bebarongan	Pick Scrape	Rev.PowerK1	rev.hphp_bd1	R Tpet NZ
	39	Standard KK1	Standard KK1	Gender	Close HiHat1	Pelegongan	Pelegongan	High-Q	Rev.Elec K1	rev.jgl_bd2	R St BsDrum1
	40	Std.1 Kick1	85St BsDrum1	Bonang	Close HiHat2	Kelontuk	Kelontuk	Slap	Rev.Snare 1	rev.tech_bd2	R St BsDrum2
	41	Std.1 Kick2	85St BsDrum2	Bonang	TR-707 HH-c	Kelontuk Mt	Kelontuk Mt	ScratchPush	Rev.Snare 2	rev.606sn2	R Rm BsDrum1
	42	Std.2 Kick1	85Br BsDrum1	Bonang	606 CH	Kelontuk Sid	Kelontuk Sid	ScratchPull	Rev.Std1SD1	rev.cr78sd1	R Rm BsDrum2
	43	Std2 Kick2	85Br BsDrum2	Bonang	808__chh	Gong Wadon	Gong Wadon	Sticks	Rev.TightSD	rev.cr78sd2	R Jz BsDrum1
	44	Kick 1	85Jz BsDrum1	Bonang	TR-808 CHH	Gong Lanang	Gong Lanang	SquareClick	Rev.DanceSD	rev.jgl_sd2	R Jz BsDrum2
	45	Kick 2	85Jz BsDrum2	RAMA Cymbal	CR-78 chh	Cenq Cenq	Cenq Cenq	Mtrnm.Click	Rev.808SD	rev.tech_sd2	R Br BsDrum1
	46	Soft Kick	HipHop BD 2	RAMA Cymbal	GS Pedal HH	Kopyak Op	Kopyak Op	Mtrnm. Bell	Rev. Tom 1	rev.707sd	R Br BsDrum2
	47	Jazz Kick 1	HipHop BD	Sagat R	Pedal HiHat	Kopyak Mt	Kopyak Mt	Gt.FretNoiz	Rev. Tom 2	rev.606sn1	R HipHop BD2
C3	48	Jazz Kick 2	Concert BD Mt	Sagat L-c	Pedal HiHat2	Kajar	Kajar	Gt.CutNoise	Rev.Sticks	rev.909sd1	R HipHop BD
	49	Concert BD	Concert BD	Jaw Harp Wow	Half OpenHH1	Kempur	Kempur	Gt.CutNoise	Rev.Slap	rev.hphp_sd2	R Jngl BD
	50	Room Kick 1	85Rm BsDrum1	Wadaiko	Half OpenHH2	Jegogan	Jegogan	String Slap	ReverseCymbl	rev.jgl_sd1	R Jngl BD 2
	51	Room Kick 2	85Rm BsDrum2	Wadaiko Rim	Open Hi Hat	Jegogan13up	Jegogan40up	Fl.KeyClick	Rev.Cymbal2	Rev House SD	R 808 BD
	52	Power Kick1	Jngl BD	Taiko	Jazz Open HH	Jegogan33dw	Jegogan20dw	Laughing	Rev.Open HH	Rev. LVCHH 1	R 909 BD
	53	Power Kick2	Jngl BD 2	Shimedaiko	RB Ohh2	Jegogan33dw	Jegogan20up	Screaming	Rev.RideCym.	rev.606hicl	R 909 BD 2
	54	Elec Kick 2	Jngl BD Roll	Atarigane	Open HiHat2	Jegogan	Jegogan40up	Punch	Rev.CR-78OHH	rev.707chh	R Fat BD
	55	Elec Kick 1	Fat BD	Hyoushigi	909 OH	Jublag	Jublag	Heart Beat	Rev.Clsd.HH	rev.808chh	R Dance BD
	56	Elec. Kick	Dance BD	Ohkawa	TR-707 OHH	Jublag33up	Jublag40up	Footsteps	Rev.BendGong	rev.jgl_hh	R St Snare2
	57	TR-808 Kick	808 BD	H.kotsuzumi	606 HiHat Op	Jublag33dw	Jublag20dw	Footsteps	Rev.Belltree	rev.344tmb2	R St Snare1
	58	TR-909 Kick	909 BD	L.Kotsuzumi	808__ohh	Jublag33dw	Jublag20up	Applause	Rev.Guiro	rev.344tmb3	R Rm Snare2
	59	Dance Kick 2	909 BD 2	Yyno Dude	TR-808 OHH	Jublag	Jublag40up	Creaking	Rev.Bendir	rev.808ohh	R Rm Snare1
C4	60	Std.1 Snare1	85St Snare2	Buk_f	CR-78 ohh	Penyacah33dw	Penyacah20up	Door	Rev.GunShot	rev.707ohh	R Jz Snare1
	61	Std.1 Snare2	85St Snare1	Buk_r	Crash Cym.1	Penyacah	Penyacah40up	Scratch	Rev.Scratch	rev.hohh	R Jz Snare2
	62	Std.2 Snare1	Std.2 Snare1	Gengari_p	Crash Cym.2	Penyacah	Penyacah	Wind Chimes	Rev.Lasergun	rev.606cym	R Br Snare1
	63	Std.2 Snare2	Std.2 Snare2	Gengari_m	GS Crash	Penyacah33up	Penyacah40up	Car-Engine	Click	Rev. HynLuo	R Br Snare2
	64	Tight Snare	Tight Snare	Gengari_f	Brush Crash	Penyacah33dw	Penyacah20dw	Car-Stop	Tekno Thip	rev.707fx	R LoFi SD 1
	65	Concert Snr	Concert Snr	Gengari_m	Hard Crash	Penyacah33dw	Penyacah20up	Car-Pass	Pop Drop	Voice One	R LoFi SD 2
	66	Jazz Snare 1	85Jz Snare1	Gengari S	909 Crash	Penyacah	Penyacah40up	Car-Crash	Wood Slap	rev.one	R HipHop SD1
	67	Jazz Snare 2	85Jz Snare2	Jang-Gu_c	808 Crash	Pemade33up	Pemade40up	Siren	Dist.Kick	Voice Two	R HipHop SD2
	68	Room Snare 1	85Rm Snare2	Jang-Gu_k	Crash Mute 1	Pemade33dw	Pemade20dw	Train	Syn.Drops	rev.two	R House SD
	69	Room Snare 2	85Rm Snare1	Jang-Gu_r	Crash Mute 2	Pemade33dw	Pemade20up	Jetplane	Rev.Hi-Q	Voice Three	R Jngl SD
	70	Dance Snare1	LoFi SD 1	Jing_p	ReverseCymbl	Pemade	Pemade20up	Helicopter	ShrtWhistle	rev.three	R 606 SD 2
	71	Power Snare1	LoFi SD 2	Jing_f	Rev.Cymbal2	Pemade	Pemade	Starship	Ice Block	Voice Tah	R Techno SD
C5	72	Rev.Snare	Rev.Snare	Jing_m	Reverse Cym.	Pemade33up	Pemade40up	Gun Shot	Digi Tambrn.	rev.tah	R Dance SD
	73	Power Snare2	LoFi SD Rim	Asian Gong 1	rev.tra_crsm	Pemade33dw	Pemade20dw	Machine Gun	Alias	Voice 1	R RockSD Dry
	74	Elec Snare 1	Elec Snare 1	Big Gong	Crash Cym.1	Pemade33dw	Pemade20up	Lasergun	Mod.Bell	Voice Au	R LoFi SDRim
	75	Dance Snare2	HipHop SD 1	Small Gong	Splash Cym.	Pemade	Pemade20up	Explosion	Tambourine	Voice Whey	R 909 SD Rim
	76	Elec Snare 2	HipHop SD 2	Pai Ban	Ride Bell	Pemade33up	Pemade	Dog	Metalic Perc	Frog Vpoce	R Jngl SDRim
	77	House Snare	Dance SD	Ban_Gu	Brush RideBL	Reyong33dw	Reyong20dw	HorseGallop	Velo FX Noiz	rev.yyooh	R DanceSDRim
	78	Elec. Snare	606 SD 2	tangu60	Ride Cymbal	Reyong33dw	Reyong20up	Bird	St.NoiseClap	Douby	R HouseSDRim
	79	Elec Snare 3	Techno SD	tanm60	Ride Cymbal	Reyoung	Reyong20up	Rain	Swish	rev.douby	R Brsh Tom1
	80	808 Snare 1	House SD	Bend Gong L	Brush Ride	Reyoung	Reyoung	Thunder	Noise Slap	Baert	R Brsh Tom2
	81	808 Snare 2	Rock SD Dry	Bend Gong	Ride Cym IN	Reyong33up	Reyong40up	Wind	Voice 1	Baert	R Brsh Tom3
	82	909 Snare 1	Jngl SD	Huyin Luo L	Ride Cym IN	Reyong33dw	Reyong20dw	Seashore	Voice Au	Bounce	R 606 Tom
	83	909 Snare 2	Jngl SD Roll	hynlo60	Ride Cym IN	Reyong33dw	Reyong20up	Stream	Hoo	rev.bounce	R Jngl Crash
C6	84	Brush Swirl	Brush Swirl	Huyin Luo Mt	RideCym Edge	Reyoung	Reyong40up	Bubble	Tape Stop 1	Dist Knock	R St ClsHat
	85	Brush Tap	Brush Tap	Hu yin Luo H	RideCym Edge	Reyoung	Reyoung	Kitty	Tape Stop 2	ytwn3.xtp	R Rm ClsHat
	86	Brush Slap1	85Br Snare1	Hynlo mute	RideCym Edge	Reyong33up	Reyong40up	Bird 2	Missile	xxx	R Jz ClsHat
	87	Brush Slap2	85Br Snare2	naobo60	606 Ride Cym	Reyong33dw	Reyong20dw	Growl	Space Birds	Noise Attack	R Br ClsHat
	88	Brush Slap	Brush Slap	xaobo60	TR808 Ride	Reyong33dw	Reyong20up	Applause 2	FlyingMonstr	SpaceWorms	R 707 Claps
	89	Brush Swirl	Brush Swirl	Dholak 1	ChinaCymbal	---	---	Telephone 1	---	Emergency!	R 909 Claps
	90	Brush Swirl	Brush Swirl	Dholak 2	Chaina Cym2	---	---	Telephone 2	---	Calculating	R R&B Claps1
	91	Long Swirl	Long Swirl	---	Hand Clap	---	---	Small Club	---	SawLFOSaw	R HipHopClap
	92	Standard SN1	Standard SN1	---	Hand clap2	---	---	Small Club 2	---	---	R CompClaps2
	93	LD Snare M	LD Snare M	---	808clap	---	---	ApplauseWave	---	---	R Shaker 2
	94	LD Snare C	LD Snare C	---	909 HandClap	---	---	Eruption	---	---	R JnglShaker
	95	Rap Snare	Rap Snare	---	HC2 Claps 2	---	---	Big Shot	---	---	R Clap Hit
C7	96	HipHop SD2	HipHop SD2	---	707 Claps	---	---	Perc Bang	---	---	R Rreeeee

		PC: 61 [CC32: 4] SFX 2	PC: 63 [CC32: 4] CYM&CLAPS 2	PC: 64 [CC32: 4] V-VoxDrum	PC: 128 [CC32: 4] CM-64/32L	GM2 STANDARD	GM2 ROOM	GM2 POWER	GM2 ELECTRIC	GM2 ANALOG	GM2 JAZZ
C-1	0	---	---	HipHop BD1	---	---	---	---	---	---	---
	1	---	---	Jazz Kick 1	---	---	---	---	---	---	---
	2	---	---	p05002v	---	---	---	---	---	---	---
	3	---	---	85RmBsDrum1B	---	---	---	---	---	---	---
	4	---	---	85RmBsDrum2B	---	---	---	---	---	---	---
	5	---	---	909 BD	---	---	---	---	---	---	---
	6	---	---	909 BD 2	---	---	---	---	---	---	---
	7	---	---	Jngl BD 2	---	---	---	---	---	---	---
	8	---	---	HipHop BD	---	---	---	---	---	---	---
	9	---	---	HipHop BD 2	---	---	---	---	---	---	---
	10	---	---	85StBsDrum1B	---	---	---	---	---	---	---
	11	---	---	NewJzKik	---	---	---	---	---	---	---
C0	12	---	---	NewRockKik	---	---	---	---	---	---	---
	13	---	---	CymbalRoll	---	---	---	---	---	---	---
	14	---	---	NewRkCStkMn	---	---	---	---	---	---	---
	15	---	---	85RmSnare1B	---	---	---	---	---	---	---
	16	---	---	85RmSnare2B	---	---	---	---	---	---	---
	17	---	---	85StSnare1B	---	---	---	---	---	---	---
	18	---	---	85StSnare2B	---	---	---	---	---	---	---
	19	---	---	NewJzSn2	---	---	---	---	---	---	---
	20	---	---	NewJzSn1	---	---	---	---	---	---	---
	21	---	---	NewR&BSn	---	---	---	---	---	---	---
	22	---	---	NewRockSn2mn	---	---	---	---	---	---	---
	23	---	---	NewRockSn1mn	---	---	---	---	---	---	---
C1	24	---	---	IPopSn38mn	---	---	---	---	---	---	---
	25	---	---	IPopGst539mn	---	---	---	---	---	---	---
	26	---	---	IPopSn38mn	---	---	---	---	---	---	---
	27	---	---	FingerSnaps2	---	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q
	28	---	---	707 Claps	---	Slap	Slap	Slap	Slap	Slap	Slap
	29	---	---	808clap	---	ScratchPush	ScratchPush	ScratchPush	Scrtch Push2	Scrtch Push2	ScratchPush
	30	---	---	Hand clap2	---	ScratchPull	ScratchPull	ScratchPull	Scrtch Pull2	Scrtch Pull2	ScratchPull
	31	A.Bs.Mute Nz	---	909 HandClap	---	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
	32	A.Bt.TouchNz	Rev. LVCHH 2	IPopPHat32	---	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick
	33	A.Bs.AtackNz	Rev. LVCHH 2	GospelHClp1	---	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
	34	DtRGT.MuteNz	Rev. LVCHH 2	p35010v	---	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
	35	StGt.SldNz1	Rev. LVCHH 2	p05006v	Kick 1	85St BsDrum1	85Rm BsDrum1	Power Kick2	Elec Kick 2	808 BD	82Jz BsDrum1
C2	36	StGt.SldNz2	Close HiHat2	p33079v	Kick 1	85St BsDrum2	85Rm BsDrum2	Power Kick1	Elec Kick 1	TR-808 Kick	82Jz BsDrum2
	37	StGt.SldNz3	Jazz Clsd.HH	p33146v	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	808 Rimshot	Side Stick
	38	StGt.SldNz4	Close HiHat2	p32011v	Fat Snare	85St Snare2	82Rm Snare2	Dance Snare1	Elec. Snare	808 Snare 1	82Jz Snare1
	39	Gt.StrokeNz1	Room Chh	p43001v	Hand Clap	909 HandClap	808clap	808clap	808clap	808clap	Hand clap2
	40	Gt.StrokeNz2	TR-707 HH-c	p33137v	Elec. Snare	85St Snare1	82Rm Snare1	Power Snare1	Elec Snare 2	TR-808 SD2	82Jz Snare2
	41	Gt.StrokeNz3	606 CH	p33168v	Tom	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 6
	42	Gt.StrokeNz4	TR-808 CHH	p33012v	Close HiHat	Close HiHat2	Room Chh	Close HiHat2	Jazz Clsd.HH	TR-808 CHH	Jazz Clsd.HH
	43	Gt.StrokeNz5	CR-78 chh	p34001v	Tom	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 6
	44	Open CD Tray	GS Pedal HH	p33014v	Open HiHat2	Pedal HiHat2	Pedal HiHat	Pedal HiHat2	Pedal HiHat	808_chh	Pedal HiHat
	45	Audio Switch	Pedal HiHat	p33157v	Tom	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 4
	46	Key Typing 1	Pedal HiHat2	p33019v	Open Hi Hat	Open HiHat2	R8 OHh2	Open HiHat2	Jazz Open HH	TR-808 OHH	Jazz Open HH
	47	Key Typing 2	Half OpenHH1	p33164v	Tom	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 4
C3	48	Key Typing 3	Half OpenHH2	p33159v	Tom	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2	808 Tom 2	Real Tom 1
	49	Key Typing 4	Open HiHat2	p35029v	GS Crash	Crash Cym.1	Crash Cym.1	Crash Cym.1	Crash Cym.1	808 Crash	Crash Cym.1
	50	Key Typing 5	Open HiHat2	p33158v	Tom	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2	808 Tom 2	Real Tom 1
	51	Key Typing 6	Open Hi Hat	p43002v	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	606 Ride Cym	Ride Cym IN
	52	BabyLaughing	Jazz Open HH	cym013v	---	ChinaCymbal	ChinaCymbal	ChinaCymbal	ReverseCymbl	ChinaCymbal	ChinaCymbal
	53	Clap Hit	909 OH	p45002v	---	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell
	54	Stab! 1	TR-707 OHH	p36017v	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	CR78 Tmb	Tambourine
	55	Stab! 2	606 HiHat Op	p34109v	---	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.
	56	Bounce Hit	TR-808 OHH	p36019v	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	808cowbe	Cowbell
	57	Boiiieee	CR-78 ohh	p44001v	---	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	909 Crash	Crash Cym.2
	58	Glass & Glam	Crash Cym.1	p36009v	---	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
	59	Ice Ring	GS Crash	AfAahhh	---	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	RideCym Edge	RideCym Edge
C4	60	Crack Bottle	Hard Crash	NewHiBongo	High Bongo	Bongo High	Bongo High	Bongo High	Bongo High	CR78 HiBongo	Bongo High
	61	Pour Bottle	Brush Crash	NewLoBongo	Low Bongo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	CR78 LoBongo	Bongo Lo
	62	Soda	Hard Crash	NewCongaSlp	Mute Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	808 Conga	Mute H.Conga
	63	Car Engine 2	909 Crash	NewCongaOp	Conga	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	808 Conga	Conga Hi Opn
	64	Car Horn	Jngl Crash	NewLoConga	Conga	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	808 Conga	Conga Lo Opn
	65	R.Crossing	808 Crash	NewTmblHi	Timbales	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
	66	SL 1	Crash Mute 2	NewTmblLo	Timbales	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	67	SL 2	Crash Mute 1	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	68	Over Blow	Crash Mute 2	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	69	Sword Boom!	Crash Mute 2	NewShaker2	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
	70	Sword Cross	Crash Mute 1	NewShaker1	Maracas	Maracas	Maracas	Maracas	Maracas	808marac	Maracas
	71	Industry Hit	Crash Mute 2	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
C5	72	Drill Hit	rev.tra_crsn	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
	73	Compresser	rev.tra_crsn	NewQuide1	Vibraslap	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	74	Thrill Hit	Reverse Cym.	NewQuide2	---	Long Guiro	Long Guiro	Long Guiro	Long Guiro	CR78 Guiro	Long Guiro
	75	Explosion 2	rev.tra_crsn	NewClaves	Claves	Claves	Claves	Claves	Claves	808clave	Claves
	76	Seal	Splash Cym.	Woodblock	Laughing	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	77	Fancy Animal	Ride Bell	Woodblock	Screaming	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	78	Cricket	Ride Bell	Mute Cuica	Punch	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Hoo	Mute Cuica
	79	Baert	Ride Bell	Open Cuica	Heart Beat	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Hoo	Open Cuica
	80	Frog Vpice	Brush RideBL	MuteTriangl	Footsteps	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl
	81	Wind 2	Ride Cymbal	OpenTriangl	Footsteps	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl
	82	Scratch 3	Ride Cymbal	Shaker	Applause	Shaker	Shaker	Shaker	Shaker	626 Shaker	Shaker
	83	Scratch 4	Ride Cymbal	Jingle Bell	Creaking	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6	84	Scratch 5	Brush Ride	Bell Tree	Door	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	85	Scratch 6	606 Ride Cym	Castanets	Scratch	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
	86	Scratch 7	TR808 Ride	Mute Surdo	Wind Chimes	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	87	Noise Attack	ChinaCymbal	Open Surdo	Car-Engine	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
	88	Bounce	Chaina Cym2	CRdr	Car-Stop	---	---	---	---	---	---
	89	Dist Knock	Hand clap2	NewTmblHiFlm	Car-Pass	---	---	---	---	---	---
	90	xxx	HC2 Claps 2	NewTmblLoFlm	Car-Crash	---	---	---	---	---	---
	91	---	808clap	NewTmblPHS	Siren	---	---	---	---	---	---
	92	---	808clap	NewShekere1	Train	---	---	---	---	---	---
	93	---	HC2 Claps 2	NewShekere2	Jetplane	---	---	---	---	---	---
	94	---	909 HandClap	NHBngoMute	Helicopter	---	---	---	---	---	---
	95	---	HC2 Claps 2	NewLBngoMute	Starship	---	---	---	---	---	---
C7	96	---	707 Claps	CajonHi	Gun Shot	---	---	---	---	---	---

(CC32=122 only via MIDI)

		PC: 61 [CC32: 4] SFX 2	PC: 63 [CC32: 4] CYM&CLAPS 2	PC: 64 [CC32: 4] V-VoxDrum	PC: 128 [CC32: 4] CM-64/32L	[illegible] GM2 STANDARD	[illegible] GM2 ROOM	[illegible] GM2 POWER	[illegible] GM2 ELECTRIC	[illegible] GM2 ANALOG	[illegible] GM2 JAZZ
(C7)	(96)	(---)	(---)	(CajonHi)	(Gun Shot)	(---)	(---)	(---)	(---)	(---)	(---)
	97	---	---	CajonHiFlm	Machine Gun	---	---	---	---	---	---
	98	---	---	CajonLo	Lasergun	---	---	---	---	---	---
	99	---	---	CajonLoFlm	Explosion	---	---	---	---	---	---
	100	---	---	FlmncoHClp1	Dog	---	---	---	---	---	---
	101	---	---	FlmncoHClp1	HorseGallop	---	---	---	---	---	---
	102	---	---	BongoCowBell	Bird	---	---	---	---	---	---
	103	---	---	AfHey	Rain	---	---	---	---	---	---
	104	---	---	MamboCowBell	Thunder	---	---	---	---	---	---
	105	---	---	MexFVox2	Wind	---	---	---	---	---	---
	106	---	---	AfFoats	Seashore	---	---	---	---	---	---
	107	---	---	MexFVox1	Stream	---	---	---	---	---	---
C8	108	---	---	MexMVox1	Bubble	---	---	---	---	---	---
	109	---	---	YodelFVox1	---	---	---	---	---	---	---
	110	---	---	MexMVox2	---	---	---	---	---	---	---
	111	---	---	YodelMVox1	---	---	---	---	---	---	---
	112	---	---	MexMVox3	---	---	---	---	---	---	---
	113	---	---	FlmncoFVox1	---	---	---	---	---	---	---
	114	---	---	YodelFVox2	---	---	---	---	---	---	---
	115	---	---	FlmncoFVox2	---	---	---	---	---	---	---
	116	---	---	NewWhistle1	---	---	---	---	---	---	---
	117	---	---	FlmncoFVox3	---	---	---	---	---	---	---
	118	---	---	NewWhistle2	---	---	---	---	---	---	---
	119	---	---	FlmncoMVox1	---	---	---	---	---	---	---
C9	120	---	---	FlmncoMVox2	---	---	---	---	---	---	---
	121	---	---	BrazilVox1	---	---	---	---	---	---	---
	122	---	---	FlmncoMVox3	---	---	---	---	---	---	---
	123	---	---	BrazilVox2	---	---	---	---	---	---	---
	124	---	---	BrazilVox3	---	---	---	---	---	---	---
	125	---	---	AfAahhh	---	---	---	---	---	---	---
	126	---	---	p33137v	---	---	---	---	---	---	---
G9	127	---	---	p3316Bv	---	---	---	---	---	---	---

(CC32=122 only via MIDI)

(CC32= 119 only via MIDI)

		PC 41 (CC32: 122) GM2 BRUSH	PC 49 (CC32: 122) GM2 ORCHSTRA	PC 57 (CC32: 122) GM2 SFX	PC 1 (CC32: 119) standard kit	PC 2 (CC32: 119) standrd kit2	PC 9 (CC32: 119) room kit	PC 17 (CC32: 119) rock kit	PC 25 (CC32: 119) electro kit	PC 26 (CC32: 119) analog kit	PC 33 (CC32: 119) jazz kit
C-1	0	---	---	---	---	---	---	---	---	---	---
	1	---	---	---	---	---	---	---	---	---	---
	2	---	---	---	---	---	---	---	---	---	---
	3	---	---	---	---	---	---	---	---	---	---
	4	---	---	---	---	---	---	---	---	---	---
	5	---	---	---	---	---	---	---	---	---	---
	6	---	---	---	---	---	---	---	---	---	---
	7	---	---	---	---	---	---	---	---	---	---
	8	---	---	---	---	---	---	---	---	---	---
	9	---	---	---	---	---	---	---	---	---	---
	10	---	---	---	---	---	---	---	---	---	---
	11	---	---	---	---	---	---	---	---	---	---
C0	12	---	---	---	---	---	---	---	---	---	---
	13	---	---	---	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	14	---	---	---	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
	15	---	---	---	High-Q	High-Q	High-Q	High-Q	High Q	High-Q	High-Q
	16	---	---	---	Slap	Slap	Slap	Slap	Slap	Slap	Slap
	17	---	---	---	ScratchPush	ScratchPush	ScratchPush	ScratchPush	ScratchPush	ScratchPush	ScratchPush
	18	---	---	---	ScratchPull	ScratchPull	ScratchPull	ScratchPull	ScratchPull	ScratchPull	ScratchPull
	19	---	---	---	FingerSnaps2	FingerSnaps2	FingerSnaps2	FingerSnaps2	FingerSnaps2	FingerSnaps2	FingerSnaps2
	20	---	---	---	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick
	21	---	---	---	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
	22	---	---	---	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
	23	---	---	---	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep
C1	24	---	---	---	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep	MC-500 Beep
	25	---	---	---	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl
	26	---	---	---	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl
	27	High-Q	Jazz Chd.HH	---	Brush Slap1	Brush Slap1	Brush Slap1	Brush Slap1	Brush Slap1	Brush Slap1	Brush Slap1
	28	Slap	Pedal HiHat	---	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	ReverseCymbl	ReverseCymbl	Brush Swirl
	29	ScratchPush	Jazz Open HH	---	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll
	30	ScratchPull	Ride Cymbal	---	Castanets	Castanets	Castanets	Castanets	High-Q	High-Q	Castanets
	31	Sticks	Sticks	---	Concert Snr	Concert Snr	Concert Snr	Room Snare 1	Standard SN1	Power Snare1	Concert Snr
	32	SquareClick	SquareClick	---	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
	33	Mtrnm.Click	Mtrnm.Click	---	Jazz Kick 1	Jazz Kick 1	Jazz Kick 1	Room Kick 2	Std2 Kick2	Mix Kick	Jazz Kick 1
	34	Mtrnm. Bell	Mtrnm. Bell	---	Jazz Snare 2	Jazz Snare 2	Jazz Snare 2	Jazz Snare 2	Jazz Snare 2	Jazz Snare 2	Jazz Snare 2
	35	Jazz Kick 2	Concert BD	---	Mix Kick	Std2 Kick2	Mix Kick	Std2 Kick2	Elec Kick 2	808 BD	Mix Kick
C2	36	Jazz Kick 1	ConcertBD Mt	---	Standard KK1	Std.2 Kick1	Room Kick 1	Std.2 Kick1	Power Kick1	TR-808 Kick	Jazz Kick 2
	37	Side Stick	Side Stick	---	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	808 Rimshot	Side Stick
	38	Brush Swirl	Concert Snr	---	Standard SN1	Std.2 Snare1	Standard SN1	LD Snare M	Dance Snare1	808 Snare 1	Standard SN1
	39	Brush Slap1	Castanets	High-Q	909 HandClap	909 HandClap	909 HandClap	909 HandClap	909 HandClap	808clap	909 HandClap
	40	Brush Swirl	Concert Snr	Slap	LD Snare M	Std.2 Snare2	LD Snare M	Jazz Snare 2	Power Snare1	TR-808 SD2	LD Snare M
	41	Lite Tom 4	Timpani	ScratchPush	Real Tom 6	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 6
	42	Brs Chh	Timpani	ScratchPull	Close HiHat2	Close HiHat2	Close HiHat2	Close HiHat2	Close HiHat2	TR-808 CHH	Close HiHat2
	43	Lite Tom 4	Timpani	Sticks	Real Tom 6	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 4
	44	Pedal HiHat	Timpani	SquareClick	Pedal HiHat2	Pedal HiHat2	Pedal HiHat2	Pedal HiHat2	Pedal HiHat2	808 _chh	Pedal HiHat2
	45	Lite Tom 4	Timpani	Mtrnm.Click	Real Tom 4	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 4
	46	Brush Ohh	Timpani	Mtrnm. Bell	Open HiHat2	Open HiHat2	Open HiHat2	Open HiHat2	Open HiHat2	TR-808 OHH	Open HiHat2
	47	Lite Tom 4	Timpani	Gt.FretNoiz	Real Tom 4	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2	808 Tom 2	Real Tom 1
C3	48	Lite Tom 4	Timpani	Gt.CutNoise	Real Tom 1	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2	808 Tom 2	Real Tom 1
	49	Brush Crash	Timpani	Gt.CutNoise	Crash Cym.1	Crash Cym.1	Crash Cym.1	Crash Cym.1	Crash Cym 1	808 Crash	Crash Cym 1
	50	Lite Tom 4	Timpani	String Slap	Real Tom 1	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2	808 Tom 2	Real Tom 1
	51	Ride Cym IN	Timpani	Fl.KeyClick	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal
	52	ChinaCymbal	Timpani	Laughing	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal
	53	Brush RideBL	Timpani	Screaming	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell
	54	Tambourine	Tambourine	Punch	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
	55	Splash Cym.	Splash Cym	Heart Beat	Splash Cym.	Splash Cym.	Splash Cym	Splash Cym	Splash Cym	Splash Cym.	Splash Cym.
	56	Cowbell	Cowbell	Footsteps	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	808cowbe	Cowbell
	57	Crash Cym.2	Con.Cymbal2	Footsteps	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2
	58	Vibraslap	Vibraslap	Applause	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
	59	RideCym Edge	Concert Cym.	Creaking	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal
C4	60	Bongo High	Bongo High	Door	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High
	61	Bongo Lo	Bongo Lo	Scratch	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo
	62	Mute H.Conga	Mute H.Conga	Wind Chimes	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	808 Conga	Mute H Conga
	63	Conga Hi Opn	Conga Hi Opn	Car-Engine	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	808 Conga	Conga Hi Opn
	64	Conga Lo Opn	Conga Lo Opn	Car-Stop	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	808 Conga	Conga Lo Opn
	65	High Timbale	High Timbale	Car-Pass	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
	66	Low Timbale	Low Timbale	Car-Crash	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	67	Agogo	Agogo	Siren	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	68	Agogo	Agogo	Train	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	69	Cabasa	Cabasa	Jetplane	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
	70	Maracas	Maracas	Helicopter	Maracas	Maracas	Maracas	Maracas	Maracas	808marac	Maracas
	71	ShrtWhistle	ShrtWhistle	Starship	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
C5	72	LongWhistle	LongWhistle	Gun Shot	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
	73	Short Guiro	Short Guiro	Machine Gun	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	74	Long Guiro	Long Guiro	Lasergun	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
	75	Claves	Claves	Explosion	Claves	Claves	Claves	Claves	Claves	808clave	Claves
	76	Woodblock	Woodblock	Dog	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	77	Woodblock	Woodblock	HorseGallop	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	78	Mute Cuica	Mute Cuica	Bird	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	ScratchPush	ScratchPush	Mute Cuica
	79	Open Cuica	Open Cuica	Rain	Open Cuica	Open Cuica	Open Cuica	Open Cuica	ScratchPull	ScratchPull	Open Cuica
	80	MuteTriangl	MuteTriangl	Thunder	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl
	81	OpenTriangl	OpenTriangl	Wind	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl
	82	Shaker	Shaker	Seashore	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker
	83	Jingle Bell	Jingle Bell	Stream	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6	84	Bell Tree	Bell Tree	Bubble	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	85	Castanets	Castanets	---	---	---	---	---	---	---	---
	86	Mute Surdo	Mute Surdo	---	---	---	---	---	---	---	---
	87	Open Surdo	Open Surdo	---	---	---	---	---	---	---	---
	88	---	Applause	---	---	---	---	---	---	---	---
	89	---	---	---	---	---	---	---	---	---	---
	90	---	---	---	---	---	---	---	---	---	---
	91	---	---	---	---	---	---	---	---	---	---
	92	---	---	---	---	---	---	---	---	---	---
	93	---	---	---	---	---	---	---	---	---	---
	94	---	---	---	---	---	---	---	---	---	---
	95	---	---	---	---	---	---	---	---	---	---
C7	96	---	---	---	---	---	---	---	---	---	---

(CC32= 119 only via MIDI)

(CC32=122 only via MIDI)

		[illegible]	[illegible]	[illegible]	[illegible]	PC: 1 [CC32: 3]	PC: 2 [CC32: 3]	PC: 3 [CC32: 3]	PC: 9 [CC32: 3]	PC: 10 [CC32: 3]	PC: 11 [CC32: 3]
		brush kit	classic kit	SFX 1 kit	SFX 2 kit	STANDARD 1	STANDARD 2	STANDARD 3	ROOM	Hip-Hop	Jungle
C-1	0	---	---	---	---	Std 1 Kick 1	Std 1 Kick 1	Strd 1 Kick 1	Std 1 Kick 1	Elec Kick 2	Elec Kick 2
	1	---	---	---	---	Std 1 Kick 2	Std 1 Kick 2	Std 1 Kick 2	Std 1 Kick 2	Elec Kick 1	Elec Kick 1
	2	---	---	---	---	Std 2 Kick 1	Std 2 Kick 1	Std 2 Kick 1	Std 2 Kick 1	CR-78 Kick 1	CR78 BD 1
	3	---	---	---	---	Std 2 Kick 2	Std 2 Kick 2	Sd 2 Kick 2	Std 2 Kick 2	CR-78 Kick 2	CR78 BD 2
	4	---	---	---	---	Kick 1	Kick 1	Kick 1	Kick 1	TR-606 Kick 1	TR-606 BD1
	5	---	---	---	---	Kick 2	Kick 2	Kick 2	Kick 2	TR-707 Kick 1	TR-707 BD
	6	---	---	---	---	Jazz Kick 1	Jazz Kick 1	Jazz Kick 1	Jazz Kick 1	TR-808 Kick	808 Kick
	7	---	---	---	---	Jazz Kick 2	Jazz Kick 2	Jazz Kick 2	Jazz Kick 2	TR-808 Kick	TR-808 Kick
	8	---	---	---	---	Room Kick 1	Room Kick 1	Room Kick 1	Room Kick 1	TR-808 Kick 2	808 BD
	9	---	---	---	---	Room Kick 2	Room Kick 2	Room Kick 2	Room Kick 2	TR-909 Kick	TR-909 Kick
	10	---	---	---	---	Power Kick 1	Power Kick 1	Power Kick 1	Power Kick 1	Dance Kick	Dance Kick 2
	11	---	---	---	---	Power Kick 2	Power Kick 2	Power Kick 2	Power Kick 2	Hip-Hop Kick 2	909 Comp BD
C0	12	---	---	---	---	Ele Kick 2	Elec Kick 2	Elec Kick 2	Elec Kick 2	TR-909 Kick 1	TR-909 BD2
	13	Mute Surdo	Mute Surdo	---	---	Elec Kick 1	Elec Kick 1	Elec Kick 1	ElecKick 1	Hip Hop Kick 3	HipHop BD2
	14	Open Surdo	Open Surdo	---	---	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	Jungle BD Set	JungleBD Set
	15	High-Q	High-Q	---	---	TR 909 Kick	TR-909 Kick	TR-909 Kick	TR-909 Kick	Techno BD 1	Techno BD1
	16	Slap	Slap	---	---	Dance Kick	Dance Kick	Dance Kick	Dance Kick	Bounce	Bounce
	17	ScratchPush	ScratchPush	---	---	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One
	18	ScratchPull	ScratchPull	---	---	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two
	19	FingerSnaps2	FingerSnaps2	---	---	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three
	20	SquareClick	SquareClick	---	---	---	---	---	---	---	---
	21	Mtrnm.Click	Mtrnm.Click	---	---	---	---	---	---	---	---
	22	Mtrnm. Bell	Mtrnm. Bell	---	---	MC-500 Beep 1	MC-500 Beep 1	MC-500 Beep 1	MC-500 Beep 1	MC-500 Beep 1	MC-500 Beep
	23	MC-500 Beep	MC-500 Beep	---	---	MC-500 Beep 2	MC-500 Beep 2	MC-500 Beep 2	MC-500 Beep 2	MC-500 Beep 2	MC-500 Beep
C1	24	MC-500 Beep	MC-500 Beep	---	---	Concert SD	Concert SD	Concert SD	Concert SD	Concert SD	Concert Snr
	25	Brush Swirl	Brush Swirl	---	---	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll
	26	Brush Swirl	Brush Swirl	---	---	Finger Snap 2	Finger Snap	Finger Snap 2	Finger Snap	Finger Snap 2	FingerSnaps2
	27	Brush Slap1	Brush Slap1	---	---	High Q	High Q	High Q	High Q	High Q	High-Q
	28	Brush Swirl	Brush Swirl	---	---	Slap	Slap	Slap	Slap	Slap	Slap
	29	Snare Roll	Snare Roll	---	---	Scratch Push [EXC7]	Scratch Push	Scratch Push	Scratch Push	Scratch Push 2 [EXC7]	Scrtch Push2
	30	Castanets	Castanets	---	---	Scratch Pull [EXC7]	Scratch Pull	Scratch Pull	Scratch Pull	Scratch Pull 2 [EXC7]	Scrtch Pull2
	31	Brush Slap1	Concert Snr	---	---	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
	32	Stirks	Sticks	---	---	Square Click	Square Click	Square Click	Square Click	Square Click	SquareClick
	33	Jazz Kick 1	Jazz Kick 1	---	---	Metronome Click	Metronome Click	Metronome Click	Metronome Click	Metronome Click	Mtrnm.Click
	34	Jazz Snare 2	Jazz Snare 2	---	---	Metronome Bell	Metronome Bell	Metronome Bell	Metronome Bell	Metronome Bell	Mtrnm. Bell
	35	Mix Kick	Concert BD	---	---	Standard 1 Kick 2	Standard 2 Kick 2	Standard 3 Kick 2	Room Kick 2	Hip-Hop Kick 2	HipHop BD1
C2	36	Jazz Kick 1	Concert BD m	Gt.CutNoise	Telephone 2	Standard 1 Kick 1	Standard 2 Kick 1	[RND] Kick	Room Kick 1	Hip-Hop Kick 1	Std2 Kick2
	37	Side Stick	Side Stick	Gt.CutNoise	Creaking	Side Stick	Side Stick	Side Stick	Side Stick	TR-808 Rim Shot	Side Stick
	38	Brush Slap1	Standard SN1	Dist.CutNoiz	Door	Standard 1 Snare 1	Standard 2 Snare 1	[RND] Snare	Room Snare 1	Rap Snare	Dance Snare1
	39	909 HandClap	909 HandClap	String Slap	ScratchPush	Hand Clap	TR-808 Hand Clap	[RND] Hand Clap	TR 808 Hand Clap	Hand Clap	HC2 Claps 2
	40	Brush Swirl	LD Snare M	Bass Slide	XG Scratch2	Standard 1 Snare 2	Standard 2 Snare 2	Standard 3 Snare 2	Room Snare 2	Hip-Hop Snare 2	House SD
	41	Lite Tom 4	Real Tom 6	Pick Scrape	Wind Chimes	Low Tom2	Low Tom2	Low Tom2	Room Low Tom 2	TR-909 Low Tom 2	909 Tom
	42	Close HiHat2	Close HiHat2	---	Telephone 2	Closed Hi-Hat	Closed Hi-Hat 2	[RND] Closed Hi-Hat	Closed Hi-Hat3	Closed Hi-Hat 3	606 CH
	43	Lite Tom 4	Real Tom 4	---	---	Low Tom1	Low Tom1	Low Tom1	Room Low Tom 1	TR-909 Low Tom 1	909 Tom
	44	Pedal HiHat2	Pedal HiHat2	---	---	Pedal Hi-Hat	Pedal Hi-Hat 2	[RND] Pedal Hi-Hat	Room Pedal Hi-Hat	RoomPedal Hi-Hat	Jungle HH
	45	Lite Tom 4	Real Tom 4	---	---	Mid Tom2	Mid Tom2	Mid Tom2	Room Mid Tom 2	TR-909 Mid Tom 2	909 Tom
	46	Open HiHat2	Open HiHat2	---	---	Open Hi-Hat	Open Hi-Hat 2	[RND] Open Hi-Hat	Open Hi-Hat 3	Open Hi-Hat 3	606 HiHat Op
	47	Lite Tom 4	Real Tom 1	---	---	Mid Tom 1	Mid Tom 1	Mid Tom 1	Room Mid Tom 1	TR-909 Mid Tom 1	909 Tom
C3	48	Lite Tom 4	Real Tom 1	---	---	High Tom 2	High Tom 2	High Tom 2	Room High Tom 2	TR-909 High Tom 2	909 Tom
	49	Crash Cym.1	Concert Cym.	---	---	Crash Cymbal1	Crash Cymbal1	[RND] Crash Cymbal	Crash Cymbal1	TR-909 Crash Cymbal	Jngl Crash
	50	Lite Tom 4	Real Tom 1	---	---	High Tom 1	High Tom 1	High Tom 1	Room High Tom 1	TR-909 High Tom 1	909 Tom Snare
	51	Ride Cymbal	ConcertCymCl	---	---	Ride Cymbal 1	Ride Cymbal 1	[RND] Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal
	52	ChinaCymbal	ChinaCymbal	H.KeyClick	Car-Engine	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	Reverse Cymbal	ReverseCymbl
	53	Ride Bell	Ride Bell	---	Car-Stop	Ride Bell	Ride Bell	[RND] Ride Bell	Ride Bell	Ride Bell	Ride Bell
	54	Tambourine	Tambourine	---	Car-Pass	Tambourine	Tambourine	Tambourine	Tambourine	Shake Tambourine	Shake Tamb
	55	Splash Cym.	Splash Cym.	---	Car-Crash	Splash Cymbal	Splash Cymbal	Splash Cymbal	Splash Cymbal	Splash Cymbal	Splash Cym.
	56	Cowbell	Cowbell	---	Siren	Cowbell	Cowbell	Cowbell	Cowbell	TR-808 Cowbell	808cowbe
	57	Crash Cym.2	Concert Cym	---	Train	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2	Crash Cym.2
	58	Vibraslap	Vibraslap	---	Jetplane	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap	Vibraslap
	59	Ride Cymbal	ConcertCymCl	---	Starship	Ride Cymbal 2	Ride Cymbal 2	[RND] Ride Cymbal 2	Ride Cymbal 2	Ride Cymbal 2	Ride Cymbal
C4	60	Bongo High	Bongo High	---	Burst Noise	High Bongo	High Bongo	High Bongo	High Bongo	High Bongo	Bongo High
	61	Bongo Lo	Bongo Lo	---	Coaster	Low Bongo	Low Bongo	Low Bongo	Low Bongo	Low Bongo	Bongo Lo
	62	Mute H.Conga	Mute H Conga	---	Submarine	Mute High Conga	Mute High Conga	Mute High Conga	Mute High Conga	Mute High Conga	Mute H.Conga
	63	Conga Hi Opn	Conga Hi Opn	---	---	Open High Conga	Open High Conga	Open High Conga	Open High Conga	Open High Conga	Conga Hi Opn
	64	Conga Lo Opn	Conga Lo Opn	---	---	Open Low Conga	Open Low Conga	Open Low Conga	Open Low Conga	Open Low Conga	Conga Lo Opn
	65	High Timbale	High Timbale	---	---	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
	66	Low Timbale	Low Timbale	---	---	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	67	Agogo	Agogo	---	---	High Agogo	High Agogo	High Agogo	High Agogo	High Agogo	Agogo
	68	Agogo	Agogo	Rain	Laughing	Low Agogo	Low Agogo	Low Agogo	Low Agogo	Low Agogo	Agogo
	69	Cabasa	Cabasa	Thunder	Screaming	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
	70	Maracas	Maracas	Wind	Punch	Maracas	Maracas	Maracas	Maracas	TR-808 Maracas	808marac
	71	ShrtWhistle	ShrtWhistle	Stream	Heart Beat	Short High Whistle	Short High Whistle	Short High Whistle	Short High Whistle	Short High Whistle	ShrtWhistle
C5	72	LongWhistle	LongWhistle	Bubble	Footsteps	Long Low Whistle	Long Low Whistle	Long Low Whistle	Long Low Whistle	Long Low Whistle	LongWhistle
	73	Short Guiro	Short Guiro	Feed	ApplauseWave	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	74	Long Guiro	Long Guiro	---	---	Long Guiro	Long Guiro	Long Guiro	Long Guiro	CR-78 Guiro	CR78 Guiro
	75	Claves	Claves	---	---	Claves	Claves	Claves	Claves	TR-808 Claves	808clave
	76	Woodblock	Woodblock	---	---	High Wood Block	High Wood Block	High Wood Block	High Wood Block	High Wood Block	Woodblock
	77	Woodblock	Woodblock	---	---	Low Wood Block	Low Wood Block	Low Wood Block	Low Wood Block	Low Wood Block	Woodblock
	78	Mute Cuica	Mute Cuica	---	---	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	High Hoo	Hoo
	79	Open Cuica	Open Cuica	---	---	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Low Hoo	Hoo
	80	MuteTriangl	MuteTriangl	---	---	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Electric Mute Triangle	MuteTriangl
	81	OpenTriangl	OpenTriangl	---	---	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Electric Open Triangle	OpenTriangl
	82	Shaker	Shaker	---	---	Shaker	Shaker	Shaker	Shaker	TR 626 Shaker	626 Shaker
	83	Jingle Bell	Jingle Bell	---	---	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6	84	Bell Tree	Bell Tree	Dog	Machine Gun	Bell Tree	Bar Chimes	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	85	---	---	HorseGallop	Lasergun	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
	86	---	---	Bird 2	Explosion	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	87	---	---	Kitty	Firework	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
	88	---	---	Growl	---	Applause 2	Applause 2	Applause 2	Applause 2	Small Club 1	Small Club
	89	---	---	Huanted	---	---	---	---	---	---	---
	90	---	---	Ghost	---	---	---	---	---	---	---
	91	---	---	Maou	---	---	---	---	---	---	---
	92	---	---	---	---	---	---	---	---	---	---
	93	---	---	---	---	---	---	---	---	---	---
	94	---	---	---	---	---	---	---	---	---	---
	95	---	---	---	---	---	---	---	---	---	---
C7	96	---	---	---	---	---	---	---	---	---	---

	PC: 0 [CC32: 119] brush kit	PC: 40 [CC32: 119] classic kit	PC: 121 [CC32: 122] SFX 1 kit	PC: 122 [CC32: 122] SFX 2 kit	PC: 1 [CC32: 3] STANDARD 1	PC: 2 [CC32: 3] STANDARD 2	PC: 3 [CC32: 3] STANDARD 3	PC: 9 [CC32: 3] ROOM	PC: 10 [CC32: 3] HipHop	PC: 11 [CC32: 3] Jungle
(C7) (96)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)
97	---	---	---	---	Standard 1 Snare 1	Standard 1 Snare 1	Standard 1 Snare 1	Standard 1 Snare 1	Techno Hit	Techno Hit
98	---	---	---	---	Standard 1 Snare 2	Standard 1 Snare 2	Standard 1 Snare 2	Standard 1 Snare 2	Philly Hit	Philly Hit
99	---	---	---	---	Standard 2 Snare 1	Standard 2 Snare 1	Standard 2 Snare 1	Standard 2 Snare 1	Shock Wave	Shock Wave
100	---	---	---	---	Standard 2 Snare 2	Standard 2 Snare 2	Standard 2 Snare 2	Standard 2 Snare 2	Lo-Fi Rave Bam Hit	Lo Fi Rave
101	---	---	---	---	Snare Drum 2	Snare Drum 2	Snare Drum 2	Snare Drum 2	Bim-Hit	Bam Hit
102	---	---	---	---	Standard 1 Snare 1	Standard 1 Snare 1	Standard 1 Snare 1	Standard 1 Snare 1	Tape Rewind	Bim Hit
103	---	---	---	---	Standard 1 Snare 2	Standard 1 Snare 2	Standard 1 Snare 2	Standard 1 Snare 2	Phonograph Noise	TapeRewind
104	---	---	---	---	Standard Snare 3	Standard Snare 3	Standard Snare 3	Standard Snare 3	Power Snare 1	Phono Noise
105	---	---	---	---	Jazz Snare 1	Jazz Snare 1	Jazz Snare 1	Jazz Snare 1	Dance Snare 1	Dance Snare1
106	---	---	---	---	Jazz Snare 2	Jazz Snare 2	Jazz Snare 2	Jazz Snare 2	Dance Snare 2	Power Snare2
107	---	---	---	---	Room Snare 1	#2] Room Snare 1	Room Snare 1	Room Snare 1	Disco Snare	Elec Snare 1
C8 108	---	---	---	---	Room Snare 2	Room Snare 2	Room Snare 2	Room Snare 2	Electric Snare 2	Dance Snare2
109	---	---	---	---	Power Snare 1	Power Snare 1	Power Snare 1	Power Snare 1	Electric Snare	Elec Snare 2
110	---	---	---	---	Power Snare 2	Power Snare 2	Power Snare 2	Power Snare 2	Electric Snare 3	Elec. Snare
111	---	---	---	---	Gated Snare	Gated Snare	Gated Snare	Gated Snare	TR-606 Snare	Elec Snare 3
112	---	---	---	---	Dance Snare 1	Dance Snare 1	Dance Snare 1	Dance Snare 1	TR-707 Snare	66sn260
113	---	---	---	---	Dance Snare 2	Dance Snare 2	Dance Snare 2	Dance Snare 2	TR-808 Snare 1	TR-707 SD
114	---	---	---	---	Disco Snare	Disco Snare	Disco Snare	Disco Snare	TR-808 Snare 2	808 Snare 1
115	---	---	---	---	Electric Snare 2	Electric Snare 2	Electric Snare 2	Electric Snare 2	TR-808 Snare 2	808 Snare 2
116	---	---	---	---	Electric Snare	Electric Snare	Electric Snare	Electric Snare	TR-909 Snare 1	TR-808 SD2
117	---	---	---	---	Electric Snare 3	Electric Snare 3	Electric Snare 3	Electric Snare 3	TR-909 Snare 2	909 Snare 1
118	---	---	---	---	TR-707 Snare	TR-707 Snare	TR-707 Snare	TR-707 Snare	TR-909 Snare 1	909 Snare 2
119	---	---	---	---	TR-808 Snare 1	TR-808 Snare 1	TR-808 Snare 1	TR-808 Snare 1	TR-909 Snare 2	909 SD 1
C9 120	---	---	---	---	TR-808 Snare 2	TR-808 Snare 2	TR-808 Snare 2	TR-808 Snare 2	Rap Snare	TR-909 SD2
121	---	---	---	---	TR-909 Snare 1	TR-909 Snare 1	TR-909 Snare 1	TR-909 Snare 1	Jungle Snare 1	Rap Snare
122	---	---	---	---	TR-909 Snare 2	TR-909 Snare 2	TR-909 Snare 2	TR-909 Snare 2	House Snare 1	JungleSD1
123	---	---	---	---	Rap Snare	Rap Snare	Rap Snare	Rap Snare	House Snare	House SD
124	---	---	---	---	Jungle Snare 1	Jungle Snare 1	Jungle Snare 1	Jungle Snare 1	House Snare 2	House Snare
125	---	---	---	---	House Snare 1	House Snare 1	House Snare 1	House Snare 1	Voice Tah	House SD
126	---	---	---	---	House Snare	House Snare	House Snare	House Snare	Slappy	Voice Tah
G9 127	---	---	---	---	House Snare 2	House Snare 2	House Snare 2	House Snare 2		Noise Slap

	PC: 12 [CC32: 3] TECHNO	PC: 17 [CC32: 3] POWER	PC: 25 [CC32: 3] ELECTRONIC	PC: 26 [CC32: 3] TR-808	PC: 27 [CC32: 3] DANCE	PC: 28 [CC32: 3] CR-78	PC: 29 [CC32: 3] TR-606	PC: 30 [CC32: 3] TR-707	PC: 31 [CC32: 3] TR-909	PC: 33 [CC32: 3] JAZZ
(C7) (96)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)
97	Techno Hit	Std.1 Snare1	Techno Hit	Techno Hit	Techno Hit	Techno Hit	Techno Hit	Techno Hit	TTechno Hit	--
98	Philly Hit	Std.1 Snare2	Philly Hit	Philly Hit	Philly Hit	Philly Hit	Philly Hit	Philly Hit	Philly Hit	--
99	Shock Wave	Std.2 Snare1	Shock Wave	Shock Wave	Shock Wave	Shock Wave	Shock Wave	Shock Wave	Shock Wave	--
100	Lo-Fi Rave *	Std.2 Snare2	Lo Fi Rave	Lo-Fi Rave *	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave	Brush Swirl
101	Bam Hit	Tight Snare	Bam Hit	Bam Hit	Bam Hit	Bam Hit	Bam Hit	Bam Hit	Bam Hit	Brush Tap
102	Bim-Hit	Standard SN1	Bim Hit	Bim-Hit	Bim Hit	Bim Hit	Bim Hit	Bim Hit	Bim Hit	Brush Slap1
103	Tape Rewind	LD Snare M	TapeRewind	Tape Rewind	TapeRewind	TapeRewind	TapeRewind	TapeRewind	TapeRewind	Brush Slap2
104	Phono Noise	LD Snare C	Phono Noise	Phono Noise	Phono Noise	Phono Noise	Phono Noise	Phono Noise	Phono Noise	Brush Slap
105	Dance Snare1	Jazz Snare 1	Dance Snare1	Dance Snare1	Dance Snare1	Dance Snare1	Dance Snare1	Dance Snare1	Dance Snare1	Brush Swirl
106	Power Snare2	Jazz Snare 2	Power Snare2	Power Snare2	Power Snare2	Power Snare2	Power Snare2	Power Snare2	Power Snare2	Brush Swirl
107	Elec Snare 1	Room Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1	Elec Snare 1	Long Swirl
C8 108	Dance Snare2	Room Snare 2	Dance Snare2	Dance Snare2	Dance Snare2	Dance Snare2	Dance Snare2	Dance Snare2	Danve Snare2	Jazz Snare 1
109	Elec Snare 2	Dance Snare1	Elec Snare 2	Elec Snare 2	Elec Snare 2	Elec Snare 2	Elec Snare 2	Elec Snare 2	Elec Snare 2	Jazz Snare 2
110	Elec. Snare	Power Snare1	Elec. Snare	Elec. Snare	Elec. Snare	Elec. Snare	Elec. Snare	Elec. Snare	Elec. Snare	Std.1 Snare1
111	Elec Snare 3	Rev.Snare	Elec Snare 3	Elec Snare 3	Elec Snare 3	Elec Snare 3	Elec Snare 3	Elec Snare 3	Elec Snare 3	Std.1 Snare2
112	66sn260	Power Snare2	66sn260	66sn260	66sn260	66sn260	66sn260	66sn260	66sn260	Std.2 Snare1
113	TR-707 SD	Elec Snare 1	TR-707 SD	TR-707 SD	TR-707 SD	TR-707 SD	TR-707 SD	TR-707 SD	TR-707 SD	Std.2 Snare2
114	808 Snare 1	Dance Snare2	808 Snare 1	808 Snare 1	808 Snare 1	808 Snare 1	808 Snare 1	808 Snare 1	808 Snare 1	Tight Snare
115	808 Snare 2	Elec Snare 2	808 Snare 2	808 Snare 2	808 Snare 2	808 Snare 2	808 Snare 2	808 Snare 2	808 Snare 2	Standard SN1
116	TR-808 SD2	Elec. Snare	TR-808 SD2	TR-808 SD2	TR-808 SD2	TR-808 SD2	TR-808 SD2	TR-808 SD2	TR-808 SD2	LD Snare M
117	909 Snare 1	Elec Snare 3	909 Snare 1	909 Snare 1	909 Snare 1	909 Snare 1	909 Snare 1	909 Snare 1	909 Snare 1	LD Snare C
118	909 Snare 2	TR-707 SD	909 Snare 2	909 Snare 2	909 Snare 2	909 Snare 2	909 Snare 2	909 Snare 2	909 Snare 2	Room Snare 1
119	909 SD 1	808 Snare 1	909 SD 1	909 SD 1	909 SD 1	909 SD 1	909 SD 1	909 SD 1	909 SD 1	Room Snare 2
C9 120	TR-909 SD2	808 Snare 2	TR-909 SD2	TR-909 SD2	TR-909 SD2	TR-909 SD2	TR-909 SD2	TR-909 SD2	TR-909 SD2	Dance Snare1
121	Rap Snare	909 Snare 1	Rap Snare	Rap Snare	Rap Snare	Rap Snare	Rap Snare	Rap Snare	Rap Snare	Power Snare1
122	JungleSD1	909 Snare 2	JungleSD1	JungleSD1	JungleSD1	JungleSD1	JungleSD1	JungleSD1	JungleSD1	Rev Snare
123	House SD	Rap Snare	House SD	House SD	House SD	House SD	House SD	House SD	House SD	Power Snare2
124	House Snare	JungleSD1	House Snare	House Snare	House Snare	House Snare	House Snare	House Snare	House Snare	Elec Snare 1
125	House SD	House SD	House SD	House SD	House SD	House SD	House SD	House SD	House SD	Dance Snare2
126	Voice Tah	House Snare	Voice Tah	Voice Tah	Voice Tah	Voice Tah	Voice Tah	Voice Tah	Voice Tah	Elec Snare 2
G9 127	Noise Slap	House SD	Noise Slap	Noise Slap	Noise Slap	Noise Slap	Nose Slap	Noise Slap	Nose Slap	Elec Snare 3

Tone Map 3		PC: 12 [CC32: 3]	PC: 17 [CC32: 3]	PC: 25 [CC32: 3]	PC: 26 [CC32: 3]	PC: 27 [CC32: 3]	PC: 28 [CC32: 3]	PC: 29 [CC32: 3]	PC: 30 [CC32: 3]	PC: 31 [CC32: 3]	PC: 33 [CC32: 3]
		TECHNO	POWER	ELECTRONIC	TR-808	DANCE	CR-78	TR-606	TR-707	TR-909	JAZZ
C-1	0	Elec Kick 2	Std.1 Kick1	Elec Kick 2	Elec Kick 2	Elec Kick 2	Elec Kick 2	Elec Kick 2	Elec Kick 2	Elec Kick 2	Std.1 Kick1
	1	Elec Kick 1	Std.1 Kick2	Elec Kick 1	Elec Kick 1	Elec Kick 1	Elec Kick 1 *	Elec Kick 1 *	Elec Kick 1 *	Elec Kick 1 *	Std.1 Kick2
	2	CR78 BD 1	Std.2 Kick1	CR78 BD 1	CR78 BD 1	CR78 BD 1	CR-78 Kick 1	CR-78 Kick 1	CR-78 Kick 1	CR-78 Kick 1	Std.2 Kick1
	3	CR78 BD 2	Std2 Kick2	CR78 BD 2	CR78 BD 2	CR78 BD 2	CR-78 Kick 2	CR-78 Kick 2	CR 78 Kck 2	CR-78 Kick 2	Std2 Kick2
	4	TR-606 BD1	Kick 1	TR-606 BD1	TR-606 BD1	TR-606 BD1	TR-606 Kick 1	TR-606 Kick 1	TR-606 Kick 1	TR-606 Kick 1	Kick 1
	5	TR-707 BD	Kick 2	TR-707 BD	TR-707 BD	TR-707 BD	TR-707 Kick 1	TR-707 Kick 1	TR-707 Kick 1	TR 707 Kick 1	Kick 2
	6	808 Kick	Jazz Kick 1	808 Kick	808 Kick	808 Kick	808 Kick	808 Kick	808 Kick	808 Kick	Jazz Kick 1
	7	TR-808 Kick	Jazz Kick 2	TR 808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	Jazz Kick 2
	8	808 BD	Room Kick 1	808 BD	808 BD	808 BD	TR-808 Kick 2	TR-808 Kick 2	TR-808 Kick 2	TR-808 Kick 2	Room Kick 1
	9	TR-909 Kick	Room Kick 2	TR-909 Kick	TR-909 Kick	TR-909 Kirk	TR-909 Kick	TR-909 Kick	TR-909 Kick	TR-909 Kick	Room Kick 2
	10	Dance Kick 2	Power Kick1	Dance Kick 2	Dance Kick 2	Dance Kick 2	Dance Kick 2	Dance Kick 2	Dance Kick 2	Dance Kick 2	Power Kick1
	11	909 Comp BD	Power Kick2	909 Comp BD	909 Comp BD	909 Comp BD	909 Comp BD	909 Comp BD	909 Comp BD	909 Comp BD	Power Kick2
C0	12	TR-909 BD2	Elec Kick 2	TR-909 BD2	TR-909 BD2	TR-909 BD2	TR-909 BD2	TR-909 BD2	TR-909 BD2	TR-909 BD2	Elec Kick 2
	13	HipHop BD2	Elec Kick 1	HipHop BD2	HipHop BD2	HipHop BD2	HipHop BD2	HipHop BD2	HipHop BD2	HipHop BD2	Elec Kick 1
	14	JungleBD Set	TR-808 Kick	JungleBD Set	JungleBD Set	JungleBD Set	Jungle BD Set	Jungle BD Set	Jungle BD Set	Jungle BD Set	TR-808 Kick
	15	Techno BD1	TR-909 Kick	Techno BD1	Techno BD1	Techno BD1	Techno BD1	Techno BD1	Techno BD1	Techno BD1	TR-909 Kick
	16	Bounce	Dance Kick 2	Bounce	Bounce	Bounce	Bounce	Bounce	Bounce	Bounce	Dance Kick 2
	17	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One	Voice One
	18	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two	Voice Two
	19	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three	Voice Three
	20	--	--	--	--	--	--	--	--	--	--
	21	--	--	--	--	--	--	--	--	--	--
	22	MC-500 Beep 1	MC-500 Beep	MC-500 Beep	MC-500 Beep 1	MC-500 Beep	MC-500 Beep 1	MC-500 Beep 1	MC-500 Beep 1	MC-500 Beep 1	MC-500 Beep
	23	MC-500 Beep 2	MC-500 Beep	MC-500 Beep	MC-500 Beep 2	MC-500 Beep	MC-500 Beep 2	MC-500 Beep 2	MC-500 Beep 2	MC-500 Beep 2	MC-500 Beep
C1	24	Concert SD	Concert Snr	Concert Snr	Concert SD	Concert Snr	Concert SD	Concert SD	Concert SD	Concert SD	Concert Snr
	25	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll
	26	Finger Snap 2	FingerSnaps2	Finger Snap	Finger Snap 2	Finger Snap	Finger Snap 2	Finger Snap 2	Finger Snap 2	Finger Snap 2	Finger Snap
	27	High Q	High-Q	High-Q	High Q	High-Q	High Q	High Q	High Q	High Q	High-Q
	28	Slap	Slap	Slap	Slap	Slap	Slap	Slap	Slap	Slap	Slap
	29	Scrtch Push2	ScratchPush	Scrtch Push2	Scrtch Push2	Scrtch Push2	Scrtch Push2	Scrtch Push2	Scrtch Push2	Scrtch Push2	ScratchPush
	30	Scrtch Pull2	ScratchPull	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	ScratchPull
	31	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
	32	Square Click	SquareClick	SquareClick	Square Click	SquareClick	Square Click	Square Click	Square Click	Square Click	SquareClick
	33	Metronome Click	Mtrnm.Click	Mtrnm Click	Metronome Click	Mtrnm. Click	Metronome Click	Metronome Click	Metronome Click	Metronome Click	Mtrnm.Click
	34	Metronome Bell	Mtrnm. Bell	Mtrnm Bell	Metronome Bell	Mtrnm. Bell	Metronome Bell	Metronome Bell	Metronome Bell	Metronome Bell	Mtrnm. Bell
	35	Techno Kick 2	Power Kick2	Elec Kick 2	TR-808 Kick 2	TR-909 BD2	CR-78 Kick 2	CR-78 Kick 2	TR-707 Kick 2	Techno Kick 2	BZJz BsDrum1
C2	36	Techno BD1	Power Kick1	Elec Kick 1	TR-808 Kick 1	Techno BD2	CR-78 Kick 1	TR-606 Kick 1	TR-707 Kick 1	TR-909 BD2	BZJz BsDrum2
	37	TR-808 Rim Shot	Side Stick	Side Stick	TR-808 Rim Shot	Side Stick	CR-78 Rim Shot	CR-78 Rim Shot	TR-707 Rim Shot	TR-909 Rim	Side Stick
	38	Techno Snare 1	Dance Snare1	Elec. Snare	TR-808 Snare 1	Dance Snare1	CR-78 Snare 1	TR-606 Snare 1	TR-707 Snare 1	TR-909 Snare 1	BZJz Snare1
	39	TR-707 Hand Clap	808clap	808clap	TR-808 Hand Clap	909 HandClap	TR-707 Hand Clap	TR-707 Hand Clap	TR-707 Hand Clap	Hand Clap	Hand clap2
	40	Techno Snare 2	Power Snare1	Elec Snare 2	TR-808 Snare 2	Power Snare1	CR-78 Snare 2	TR 606 Snare 2	TR-707 Snare 2	TR-909 Snare2	BZJz Snare2
	41	TR-808 Low Tom 2 *	Rock Tom 4	Synth Drum 2	TR-808 Low Tom 2 *	Synth Drum 2	CR-78 Low Tom 2 *	TR-606 Low Tom 2	TR-707 Low Tom 2 *	TR-909 Low Tom 2	Real Tom 6
	42	TR-707 Closed Hi-Hat	Close HiHat2	Jazz Clsd HH	TR-808 Closed Hi-Hat	CR-78 chh	CR-78 Closed Hi-Hat[EXC1]	TR-606 ClosedHiHat[EXC1]	TR-707 ClosedHiHat[EXC1]	TR-707 ClosedHiHat[EXC1]	Jazz Clsd HH
	43	TR-808 Low Tom 1 *	Rock Tom 4	Synth Drum 2	TR-808 Low Tom 1 *	Synth Drum 2	CR-78 Low Tom 1 *	TR-606 Low Tom 1	TR-707 Low Tom 1 *	TR-909 Low Tom 1	Real Tom 6
	44	CR-78 Closed Hi-Hat	Pedal HiHat2	Pedal HiHat	TR-808 Closed Hi-Hat2[EXC1]	808 _chh	TR-606Closed HiHat[EXC1]	TR-606 ClosedHiHat[EXC1]	TR-707 ClosedHiHat[EXC1]	TR-707 ClosedHiHat[EXC1]	Pedal HiHat
	45	TR-808 Mid Tom 2 *	Rock Tom 4	Synth Drum 2	TR-808 Mid Tom 2 *	Synth Drum 2	CR-78 Mid Tom 2 *	TR-606 Mid Tom 2	TR-707 Mid Tom 2 *	TR-909 Mid Tom 2	Real Tom 4
	46	TR-909 Open Hi-Hat	Open HiHat2	Jazz Open HH	TR-808 Open Hi-Har	CR-78 ohh	CR-78 Open Hi-Hat[EXC1]	TR-606 OpenHiHat	TR-707 OpenHiHat[EXC1]	TR-909 OpenHiHat[EXC1]	Jazz Open HH
	47	TR-808 Mid Tom 1 *	Rock Tom 4	Synth Drum 2	TR 808 Mid Tom 1 *	Synth Drum 2	CR-78 Mid Tom 1 *	TR-606 Mid Tom 1	TR-707 Mid Tom 1 *	TR-909 Mid Tom 1	Real Tom 4
C3	48	TR-808 High Tom 2 *	Rock Tom 1	Synth Drum 2	TR 808 High Tom 2 *	Synth Drum 2	CR-78 High Tom 2 *	TR-606 High Tom 2	TR-707 High Tom 2 *	TR-909 High Tom 2	Real Tom 1
	49	TR-909 Crash Cymbal	Crash Cym 1	Crash Cym 1	TR-808 Crash Cymbal	808 Crash	TR-808 Crash Cymbal	TR-808 Crash Cymbal	TR-909 Crash Cymbal	TR-909 Crash Cymbal	Crash Cym.1
	50	TR-808 High Tom 1 *	Rock Tom 1	Synth Drum 2	TR-808 High Tom 1 *	Synth Drum 2	CR-78 High Tom 1 *	TR-606 High Tom 1	TR 707 High Tom 1 *	TR 909 High Tom 1	Real Tom 1
	51	Ride Cymbal 1	Ride Cymbal	Ride Cymbal	TR-606 Ride Cymbal	606 Ride Cym	TR-606 Ride Cymbal	TR-606 Ride Cymbal	TR-909 Ride Cymbal	TR-909 Ride Cymbal	Ride Cym IN
	52	Reverse Cymbal	ChinaCymbal	ReverseCymbl	Chinese Cymbal	ReverseCymbl	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	ChinaCymbal
	53	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell
	54	Shake Tambourine	Tambourine	Tambourine	CR-78 Tambourine	Shake Tamb	CR-78 Tambourine	CR-78 Tambourine	Tambourine 2	Tambourine 2	Tambourine
	55	Splash Cymbal	Splash Cym	Splash Cym.	Splash Cymbal	Splash Cym	Splash Cymbal	Splash Cymbal	Splash Cymbal	Splash Cymbal	Splash Cym.
	56	TR-808 Cowbell	Cowbell Snare	Cowbell	TR-808 Cowbell	808cowbe	CR-78 Cowbell	CR-78 Cowbell	TR-808 Cowbell	TR-808 Cowbell	Cowbell
	57	TR-909 Crash Cymbal	Crash Cym.2	Crash Cym.2	TR-909 Crash Cymbal	Crash Cym.2	TR 909 Crash Cymbal	TR-909 Crash Cymbal	Crash Cymbal 2	Crash Cymbal 2	Crash Cym.2
	58	Vibra-slap	Vibraslap	Vibraslap	Vibra-slap	Vibraslap	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap	Vibraslap
	59	Ride Cymbal 2	Ride Cymbal	Ride Cymbal	Ride Cymbal Edge	Ride Cymbal	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge	RideCym Edge
C4	60	CR-78 High Bongo	Bongo High	Bongo High	CR-78 High Bongo	Bongo High	CR-78 High Bongo	CR-78 High Bongo	High Bongo	High Bongo	Bongo High
	61	CR-78 Low Bongo	Bongo Lo	Bongo Lo	CR-78 Low Bongo	Bongo Lo	CR-78 Low Bongo	CR-78 Low Bongo	Low Bongo	Low Bongo	Bongo Lo
	62	808 Conga	Mute H.Conga	Mute H.Conga	808 Conga	Mute H.Conga	808 Conga	TR-808 Mute HighConga	Mute High Conga	Mute High Conga	Mute H Conga
	63	808 Conga	Conga Hi Opn	Conga Hi Opn	808 Conga	Conga Hi Opn	808 Conga	TR-808 Open HighConga	Open High Conga	Open High Conga	Conga Hi Opn
	64	808 Conga	Conga Lo Opn	Conga Lo Opn	808 Conga	Conga Lo Opn	808 Conga	TR-808 Open LowConga	Open Low Conga	Open Low Conga	Conga Lo Opn
	65	High Timbale	High Timbale	House SD	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
	66	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	67	High Agogo	Agogo	Agogo	High Agogo	Agogo	High Agogo	High Agogo	High Agogo	High Agogo	Agogo
	68	Low Agogo	Agogo	Agogo	Low Agogo	Agogo	Low Agogo	Low Agogo	Low Agogo	Low Agogo	Agogo
	69	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
	70	808maracas	Maracas	Maracas	808maracas	Maracas	CR-78 Maracas	CR-78 Maracas	808maracas	808maracas	Maracas
	71	Short High Whistle	ShrtWhistle	ShrtWhistle	Short High Whistle	ShrtWhistle	Short High Whistle	Short High Whistle	Short High Whistle	Short High Whistle	ShrtWhistle
C5	72	Long Low Whistle	LongWhistle	LongWhistle	Long Low Whistle	LongWhistle	Long Low Whistle	Long Low Whistle	Long Low Whistle	Long Low Whistle	LongWhistle
	73	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	74	CR-78 Guiro	Long Guiro	Long Guiro	CR-78 Guiro	Long Guiro	CR-78 Guiro	CR-78 Guiro	Long Guiro	CR-78 Guiro	Long Guiro
	75	808clave	Claves	Claves	808clave	Claves	CR-78 Claves	CR-78 Claves	Claves	CR-78 Claves	Claves
	76	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	77	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	78	High Hoo	Mute Cuica	Mute Cuica	High Hoo	Hoo	High Hoo	High Hoo	High Hoo	High Hoo	Mute Cuica
	79	Low Hoo	Open Cuica	Open Cuica	Low Hoo	Hoo	Low Hoo	Low Hoo	Low Hoo	Low Hoo	Open Cuica
	80	Mute Triangl	MuteTriangl	MuteTriangl	Mute Triangl	MuteTriangl	CR-78 Low Beat	CR-78 Low Beat	Mute Triangl	Mute Triangl	MuteTriangl
	81	Open Triangl	OpenTriangl	OpenTriangl	Open Triangl	OpenTriangl	CR-78 High Beat	CR-78 High Beat	Open Triangl	Open Triangl	OpenTriangl
	82	TR-626 Shaker	Shaker	Shaker	TR-626 Shaker	626 Shaker	TR-626 Shaker	TR-626 Shaker	TR-626 Shaker	TR-626 Shaker	Shaker
	83	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6	84	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	85	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
	86	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	87	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
	88	Applause 2	Applause 2	Small Club	Small Club	Small Club	Small Club	Small Club	Small Club	Applause 2	Applause
	89	--	--	--	--	--	--	--	--	--	--
	90	--	--	--	--	--	--	--	--	--	--
	91	--	--	--	--	--	--	--	--	--	--
	92	--	--	--	--	--	--	--	--	--	--
	93	--	--	--	--	--	--	--	--	--	--
	94	--	--	--	--	--	--	--	--	--	--
	95	--	--	--	--	--	--	--	--	--	--
C7	96	--	--	--	--	--	--	--	--	--	--

Note Map 3		PC: 41 [CC32: 3] BRUSH	PC: 49 [CC32: 3] ORCHESTRA	PC: 50 [CC32: 3] ETHNIC	PC: 51 [CC32: 3] KICK & SNARE	PC: 53 [CC32: 3] ASIA	PC: 54 [CC32: 3] Cymbal & Claps	PC: 57 [CC32: 3] SFX	PC: 58 [CC32: 3] Rhythm FX	PC: 59 [CC32: 3] Rhythm FX 2	PC: 128 [CC32: 3] CM-64/32L
C-1	0	Std.1 Kick1	Std.1 Kick1	---	---	---	---	---	---	---	---
	1	Std.1 Kick2	Std.1 Kick2	---	---	---	---	---	---	---	---
	2	Std.2 Kick1	Std.2 Kick1	---	---	---	---	---	---	---	---
	3	Std2 Kick2	Std2 Kick2	---	---	---	---	---	---	---	---
	4	Kick 1	Kick 1	---	---	---	---	---	---	---	---
	5	Kick 2	Kick 2	---	---	---	---	---	---	---	---
	6	Jazz Kick 1	Jazz Kick 1	---	---	---	---	---	---	---	---
	7	Jazz Kick 2	Jazz Kick 2	---	---	---	---	---	---	---	---
	8	Room Kick 1	Room Kick 1	---	---	---	---	---	---	---	---
	9	Room Kick 2	Room Kick 2	---	---	---	---	---	---	---	---
	10	Power Kick1	Power Kick1	---	---	---	---	---	---	---	---
	11	Power Kick2	Power Kick2	---	---	---	---	---	---	---	---
C0	12	Elec Kick 2	Elec Kick 2	---	---	---	---	---	---	---	---
	13	Elec Kick 1	Elec Kick 1	---	---	---	---	---	---	---	---
	14	TR-808 Kick	TR-808 Kick	---	---	---	---	---	---	---	---
	15	TR-909 Kick	TR-909 Kick	---	---	---	---	---	---	---	---
	16	Dance Kick 2	Dance Kick 2	---	---	---	---	---	---	---	---
	17	Voice One	Voice One	---	---	---	---	---	---	---	---
	18	Voice Two	Voice Two	---	---	---	---	---	---	---	---
	19	Voice Three	Voice Three	---	---	---	---	---	---	---	---
	20	---	---	---	---	---	---	---	---	---	---
	21	---	---	---	---	---	---	MC-500 Beep	---	---	---
	22	MC-500 Beep	MC-500 Beep	---	---	---	---	MC-500 Beep	---	---	---
	23	MC-500 Beep	MC-500 Beep	---	---	---	---	ytwn3.xtp	---	---	---
C1	24	Concert Snr	Concert Snr	---	---	---	---	ytwn2.xtp	---	---	---
	25	Snare Roll	Snare Roll	Finger Snap	CR78 BD 1	Gamelan Gong C#	---	Guitar Slap	---	---	---
	26	Finger Snap	Finger Snap	Tambourine	CR78 BD 2	Gamelan Gong D#	---	Chord Stroke	---	---	---
	27	High-Q	Jazz Cisd.HH	Castanets	TR-606 BD1	Gamelan Gong G	---	Chord Stroke	---	---	---
	28	Slap	Pedal HiHat	Crash Cymbal 1	TR-707 BD	Gamelan Gong A#	---	Biwa 3	---	---	---
	29	ScratchPush	Jazz Open HH	Snare Roll	808 BD	Gamelan Gong c	---	Phono Noise	---	---	---
	30	ScratchPull	Ride Cymbal	Concert SD	909 Comp BD	Gamelan Gong c#	---	TapeRewind	---	---	---
	31	Sticks	Sticks	Concert Cymbal	TR-909 BD2	Gamelan Gong d#	---	Scrtch Push2	---	---	---
	32	SquareClick	SquareClick	Concert BD 1	HipHop BD2	Gamelan Gong g	rev.hohh	Scrtch Pull2	---	---	---
	33	Mtrnm.Click	Mtrnm Click	Jingle Bell	HipHop BD1	Gamelan Gong a#	Rev. LVCHH 1	Gt.CutNoise2	---	---	---
	34	Mtrnm. Bell	Mtrnm. Bell	Bell Tree	Jungle BD2	Gamelan Gong C	Rev. LVCHH 2	Gt.CutNoise2	---	---	---
	35	Jazz Kick 2	Jazz Kick 1	Bar Chimes	JungleBD Set	Gender C#	Jungle HH	Dist.CutNoiz	---	---	Kick 1
C2	36	Jazz Kick 1	Concert BD	Wadaiko *	Techno BD2	Gender D#	Close HiHat	Dist.CutNoiz Bang	Reverse Kick 1	rev.707bd	Kick 1
	37	Side Stick	Side Stick	Wadaiko Rim *	Techno BD1	Gender G	Jazz Cisd.HH	Bass Slide	Reverse Concert Bass	rev.909bd2	Side Stick
	38	Brush Swirl	Concert Snr	Shime Taiko	Mix Kick	Gender A#	Room Chh	Pick Scrape	Reverse Power Kick 1	rev.hphp_bd1	Fat Snare
	39	Brush Slap1	Castanets	Atarigane	Standard KK1	Gender c	Close HiHat1	High-Q	Reverse Electric Kick 1	rev.jgl_bd2	Hand Clap
	40	Brush Swirl	Concert Snr	Hyoushigi	Std.1 Kick1	Bonang C#	Close HiHat2	Slap	Reverse Snare 1	rev.tech_bd2	Elec. Snare
	41	Lite Tom 4	Timpani	Ohkawa	Std.1 Kick2	Bonang D#	TR-707 HH-c	ScratchPush	Reverse Snare 2	rev.606sn2	Tom
	42	Brs Chh	Timpani	High Kotsuzumi	Std.2 Kick1	Bonang G	606 CH	ScratchPull	Reverse Standard 1	rev.cr78sd1	Close HiHat
	43	Lite Tom 4	Timpani	Low Kotsuzumi	Std2 Kick2	Bonang A#	808_chh	Sticks	Reverse Snare Drum 2	rev.cr78sd2	Tom
	44	Pedal HiHat	Timpani	Ban Gu	Kick 1	Bonang c	TR-808 CHH	SquareClick	Reverse Tight Snare	rev.jgl_sd2	Open HiHat2
	45	Lite Tom 4	Timpani	Big Gong	Kick 2	Thai Gong	CR-78 chh	Mtrnm.Click	Reverse 808 Snare	rev.tech_sd2	Tom
	46	Brush Ohh	Timpani	Small Gong	Soft Kick	Rama Cymbal	GS Pedal HH	Mtrnm. Bell	Reverse Tom 1	rev.707cd	Open Hi Hat
	47	Lite Tom 4	Timpani	Bend Gong	Jazz Kick 1	Sagat Open	Pedal HiHat	Gt.FretNoiz	Reverse Tom 2	rev.606sn1	Tom
C3	48	Lite Tom 4	Timpani	Tha. Gong	Jazz Kick 2	Sagat Closed	Pedal HiHat2	Gt.CutNoise	Reverse Kicks	rev.909sd1	Tom
	49	Brush Crash	Timpani	Rama Cymbal	Concert BD	Jaws Harp	Half OpenHH1	Gt.CutNoise	Reverse Slap	rev.hphp_sd2	GS Crash
	50	Lite Tom 4	Timpani	Gamelan Gong	Room Kick 1	Wadaiko *	Half OpenHH2	String Slap	Reverse Cymbal 1	rev.jgl_id1	Tom
	51	Ride Cym IN	Timpani	Udo Short [EXC1]	Room Kick 2	Wadaiko Rim *	Open Hi Hat	Fl.KeyClick	Reverse Cymbal 2	Rev House SD	Ride Cymbal
	52	ChinaCymbal	Timpani	Udo Long [EXC1]	Power Kick1	Taiko	Jazz Open HH	Laughing	Reverse Open Hi-Hat	Rev. LVCHH 1	---
	53	Brush RideBL	Timpani	Udo Slap	Power Kick2	Shimedaiko	RB Ohh2	Screaming	Reverse Ride Cymbal	rev.606htcl	---
	54	Tambourine	Tambourine	Bendir	Elec Kick 2	Atarigane	Open HiHat2	Punch	Reverse CR-78 Open	rev.707chh	Tambourine
	55	Splash Cym	Splash Cym	Req Dum	Elec Kick 1	Hyoushigi	909 OH	Heart Beat	Reverse Closed Hi-Hat	rev.808chh	---
	56	Cowbell	Cowbell	Req Tik	Elec. Kick	Ohkawa	TR-707 OHH	Footsteps	Reverse Gong	rev.jgl_hh	Cowbell
	57	Crash Cym 2	Con.Cymbal2	Tabla Te	TR-808 Kick	High Kotsuzumi	606 HiHat Op	Footsteps	Reverse Bell Tree	rev.344tmb2	---
	58	Vibraslap	Vibraslap	Tabla Na	TR-909 Kick	Low Kotsuzumi	808_ohh	Applause	Reverse Guiro	rev.344tmb3	---
	59	RideCym Edge	Concert Cym.	Tabla Tun	Dance Kick 2	Yyoo Dude	TR 808 OHH	---	Reverse Bendir	rev.808ohh	---
C4	60	Bongo High	Bongo High	Tabla Ge	Std.1 Snare1	Buk	CR-78 ohh	Door	Reverse Gun Shot	rev.707ohh	High Bongo
	61	Power Snare1	Bongo Lo	Tabla Ge Ht	Std.1 Snare2	Buk Rim	Crash Cym.1	Scratch	Reverse Scratch	rev.hvohh	Low Bongo
	62	Rev.Snare	Mute H.Conga	Talking Drum *	Std.2 Snare1	Gengari p	Crash Cym.2	Wind Chimes	Reverse Laser Gun	rev.606cym	Mute Conga
	63	Conga Hi Opn	Conga Hi Opn	Bend Talking Drum *	Std.2 Snare2	Gengari Mute Low	GS Crash	Car-Engine	Key Click	Rev. HynLuo	Conga
	64	Conga Lo Opn	Conga Lo Opn	Caixixi	Tight Snare	Gengari f	Brush Crash	Car-Stop	Tekno Thip	rev.707ts	Conga
	65	High Timbale	High Timbale	Djembe	Concert Snr	Gengari Mute High	Hard Crash	Car-Pass	Pop Drop	Voice One	Timbales
	66	Low Timbale	Low Timbale	Djembe Rim	Jazz Snare 1	Gengari Samit	909 Crash	Car-Crash	Woody Slap	rev.one	Timbales
	67	Agogo	Agogo	Timbales Low	Jazz Snare 2	Jang-Gu Che	808 Crash	Siren	Distortion Kick *	Voice Two	Agogo
	68	Agogo	Agogo	Timbales Paila	Room Snare 1	Jang-Gu Kun	Crash Mute 1	Train	Syn. Drops	rev.two	Agogo
	69	Cabasa	Cabasa	Timbales High	Room Snare 2	Jang Gu Rim	Crash Mute 2	Jetplane	Reverse Hi Q	Voice Three	Cabasa
	70	Maracas	Maracas	Cowbell	Dance Snare1	Jing p	ReverseCymbl	Helicopter	Pipe	rev.three	Maracas
	71	ShrtWhistle	ShrtWhistle	High Bongo	Power Snare1	Jing f *	Rev.Cymbal2	Starship	Ice Block	Voice Tah	ShrtWhistle
C5	72	LongWhistle	LongWhistle	Low Bongo	Rev.Snare	Jing Mute	Reverse Cym.	Gun Shot	Digital Tambourine *	rev.tah	LongWhistle
	73	Short Guiro	Short Guiro	Mute High Conga	Power Snare2	Asian Gong 1	rev.tra_crum	Machine Gun	Alias	Voice 1	Vibraslap
	74	Long Guiro	Long Guiro	Open High Conga	Elec Snare 1	Big Gong	Crash Cym.1	Lasergun	Modulated Bell	Voice Au	---
	75	Claves	Claves	Mute Low Conga	Dance Snare2	Small Gong	Splash Cym.	Explosion	Spark	Voice Whey	Claves
	76	Woodblock	Woodblock	Conga Slap	Elec Snare 2	Pai Ban	Ride Bell	Dog	Metallic Percussion	Frog Vpoce	Laughing
	77	Woodblock	Woodblock	Open Low Conga	House Snare	Ban Gu	Brush RideBL	HorseGallop	Velocity Noise FX	rev.yyooh	Screaming
	78	Mute Cuica	Mute Cuica	Conga Slide *	Elec. Snare	Tang Gu	Ride Cymbal	Bird	Stereo Noise Clap *	Douby	Punch
	79	Open Cuica	Open Cuica	Mute Pandiero	Elec Snare 3	Tang Gu Mute	Ride Cymbal	Rain	Swish	rev.douby	Heart Beat
	80	MuteTriangl	MuteTriangl	Open Pandiero	808 Snare 1	Shou Luo *	Brush Ride	Thunder	Sleppy *	Baert	Footsteps
	81	OpenTriangl	OpenTriangl	Open Surdo [EXC2]	808 Snare 2	Bend Gong	Ride Cym IN	Wind	Voice Ou	Baert	Footsteps
	82	Shaker	Shaker	Mute Surdo [EXC2]	909 Snare 1	HuYin Luo Low *	Ride Cym IN	Seashore	Voice Au	Bounce	Applause
	83	Jingle Bell	Jingle Bell	Tamborim	909 Snare 2	HuYin Luo Mid	Ride Cym IN	Stream	Hoo	rev.bounce	Creaking
C6	84	Bell Tree	Bell Tree	High Agogo	Brush Swirl	HuYin LuoMid Mut	RideCym Edge	Bubble	Tape Stop 1 *	Dist Knock	Door
	85	Castanets	Castanets	Low Agogo	Brush Tap	HuYin LuoHigh	RideCym Edge	Kitty	Tape Stop 2 *	ytwn3.xtp	Scratch
	86	Mute Surdo	Mute Surdo	Shaker	Brush Slap1	HuYin LuoHighMute	RideCym Edge	Bird 2	Missile *	xxx	Wind Chimes
	87	Open Surdo	Open Surdo	High Whistle [EXC3]	Brush Slap2	Nao Bo	606 Ride Cym	Growl	Space Birds	Noise Attack	Car Engine
	88	Applause	Applause	Low Whistle [EXC3]	Brush Slap	Xiao Bo	TR808 Ride	Applause 2	Flying Monster	SpaceWorms	Car-Stop
	89	---	---	Mute Cuica [EXC4]	Brush Swirl	---	ChinaCymbal	Telephone 1	---	Emergency!	Car-Pass
	90	---	---	Open Cuica [EXC4]	Brush Swirl	---	Chaina Cym2	Telephone 2	---	Calculating	Car-Crash
	91	---	---	Mute Triangle [EXC5]	Long Swirl	---	Hand Clap	Small Club	---	SawLFOSaw	Siren
	92	---	---	Open Triangle [EXC5]	Standard SN1	---	Hand clap2	Small Club 2	---	---	Train
	93	---	---	Short Guiro [EXC6]	LD Snare M	---	808clap	ApplauseWave	---	---	Jetplane
	94	---	---	Long Guiro [EXC6]	LD Snare C	---	909 HandClap	Eruption	---	---	Helicopter
	95	---	---	Cabasa Up	Rao Snare	---	HC2 Claps 2	Big Shot	---	---	Starship
C7	96	---	---	Cabasa Down	HipHop SD2	---	707 Claps	Perc. Bang	---	---	Gun Shot

		PC: 41 [CC32: 3] BRUSH	PC: 49 [CC32: 3] ORCHESTRA	PC: 50 [CC32: 3] ETHNIC	PC: 51 [CC32: 3] KICK & SNARE	PC: 53 [CC32: 3] ASIA	PC: 54 [CC32: 3] Cymbal & Claps	PC: 57 [CC32: 3] SFX	PC: 58 [CC32: 3] RHYTHM FX	PC: 59 [CC32: 3] Rhythm FX 2	PC: 128 [CC32: 3] CM-64/32L
(C7)	(96)	(---)	(---)	(Cabasa Down)	(HipHop SD2)	(---)	(707 Claps)	(Perc Bang)	(---)	(---)	(Gun Shot)
	97	---	Applause 2	Claves	JungleSD1	---	---	---	---	---	Lasergun
	98	---	Small Club	High Wood Block	Jungle SD2	---	---	---	---	---	Explosion
	99	---	Timpani	Low Wood Block	Slap	---	---	---	---	---	Dog
	100	Brush Swirl	Timpani	---	MG_Blip	---	---	---	---	---	HorseGallop
	101	Brush Tap	Timpani	---	House SD	---	---	---	---	---	Bird
	102	Brush Slap1	Timpani	---	CR78 SD 1	---	---	---	---	---	Rain
	103	Brush Slap2	Timpani	---	CR78 SD 2	---	---	---	---	---	Thunder
	104	Brush Slap	Timpani	---	66sn160	---	---	---	---	---	Wind
	105	Brush Swirl	Timpani	---	66sn260	---	---	---	---	---	Seashore
	106	Brush Swirl	Timpani	---	TR-707 SD	---	---	---	---	---	Stream
	107	Long Swirl	Timpani	---	TR-707 SD 2	---	---	---	---	---	Bubble
C8	108	Jazz Snare 1	Timpani	---	TR-707 SD 3	---	---	---	---	---	---
	109	Jazz Snare 2	Timpani	---	TR-808 SD2	---	---	---	---	---	---
	110	Std 1 Snare1	Timpani	---	909 SD 1	---	---	---	---	---	---
	111	Std 1 Snare2	Timpani	---	TR-909 SD2	---	---	---	---	---	---
	112	Std.2 Snare1	Timpani	---	---	---	---	---	---	---	---
	113	Std 2 Snare2	Timpani	---	---	---	---	---	---	---	---
	114	T-ght Snare	---	---	---	---	---	---	---	---	---
	115	Standard SN1	---	---	---	---	---	---	---	---	---
	116	LD Snare M	---	---	---	---	---	---	---	---	---
	117	LD Snare C	---	---	---	---	---	---	---	---	---
	118	Room Snare 1	---	---	---	---	---	---	---	---	---
	119	Room Snare 2	---	---	---	---	---	---	---	---	---
C9	120	Dance Snare1	---	---	---	---	---	---	---	---	---
	121	Power Snare1	---	---	---	---	---	---	---	---	---
	122	Rev.Snare	---	---	---	---	---	---	---	---	---
	123	Power Snare2	---	---	---	---	---	---	---	---	---
	124	Elec Snare 1	---	---	---	---	---	---	---	---	---
	125	Dance Snare2	---	---	---	---	---	---	---	---	---
	126	Elec Snare 2	---	---	---	---	---	---	---	---	---
G9	127	Elec Snare 3	---	---	---	---	---	---	---	---	---

	Tone Map 2	PC: 1 [CC32: 2] Standard 1	PC: 2 [CC32: 2] Standard 2	PC: 9 [CC32: 2] Room	PC: 17 [CC32: 2] Power	PC: 25 [CC32: 2] Electronic	PC: 26 [CC32: 2] TR-808/909	PC: 27 [CC32: 2] Dance	PC: 33 [CC32: 2] Jazz	PC: 41 [CC32: 2] Brush	PC: 49 [CC32: 2] Orchestra
C-1	0	--	--	--	--	--	--	--	--	--	--
	1	--	--	--	--	--	--	--	--	--	--
	2	--	--	--	--	--	--	--	--	--	--
	3	--	--	--	--	--	--	--	--	--	--
	4	--	--	--	--	--	--	--	--	--	--
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	23	--	--	--	--	--	--	--	--	--	--
C1	24	--	--	--	--	--	--	--	--	--	--
	25	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll
	26	FingerSnaps2	Finger Snap	Finger Snap	FingerSnaps2	Finger Snap	FingerSnaps2	Finger Snap	Finger Snap	Finger Snap	Finger Snap
	27	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	Jazz Cbd.HH
	28	Slap	Slap	Slap	Slap	Slap	Slap	Slap	Slap	Slap	Pedal HiNat
	29	ScratchPush	ScratchPush	ScratchPush	ScratchPush	Scrtch Push2	Scrtch Push2	Scrtch Push2	ScratchPush	ScratchPush	Jazz Open HH
	30	ScratchPull	ScratchPull	ScratchPull	ScratchPull	Scrtch Pull2	Scrtch Pull2	Scrtch Pull2	ScratchPull	ScratchPull	Ride Cymbal
	31	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
	32	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick
	33	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm Clck	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
	34	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
	35	85St BsDrum1	Std2 Kick2	85Rm BsDrum1	Power Kick2	Elec Kick 2	808 BD	TR-909 BD2	82Jz BsDrum1	Jazz Kick 2	Jazz Kick 1
C2	36	85St BsDrum2	Std.2 Kick1	85Rm BsDrum2	Power Kick1	Elec Kick 1	TR-808 Kick	Techno BD2	82Jz BsDrum2	Jazz Kick 1	Concert BD
	37	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	808 Rimshot	Side Stick	Side Stick	Side Stick	Side Stick
	38	85St Snare2	Std.2 Snare1	82Rm Snare2	Dance Snare1	Elec. Snare	808 Snare 1	Dance Snare1	82Jz Snare1	Brush Swirl	Concert Snr
	39	909 HandClap	808clap	808clap	808clap	808clap	808clap	909 HandClap	Hand clap2	Brush Slap1	Castanets
	40	85St Snare1	Std.2 Snare2	82Rm Snare1	Power Snare1	Elec Snare 2	TR-808 SD2	Power Snare1	82Jz Snare2	Brush Swirl	Concert Snr
	41	Real Tom 6	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2	808 Tom 2	Synth Drum 2	Real Tom 6	Lite Tom 4	Timpani
	42	Close HiHat2	Jazz Cbd.HH	Room Chh	Close HiHat2	Jazz Cbd.HH	TR-808 CHH	CR-78 chh	Jazz Cbd.HH	Brs Chh	Timpani
	43	Real Tom 6	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2	808 Tom 2	Synth Drum 2	Real Tom 6	Lite Tom 4	Timpani
	44	Pedal HiHat2	Pedal HiHat	Pedal HiHat	Pedal HiHat2	Pedal HiHat	808_chh	808_chh	Pedal HiHat	Pedal HiHat	Timpani
	45	Real Tom 4	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2	808 Tom 2	Synth Drum 2	Real Tom 4	Lite Tom 4	Timpani
	46	Open HiHat2	Jazz Open HH	RB Ohh2	Open HiHat2	Jazz Open HH	TR-808 OHH	CR-78 ohh	Jazz Open HH	Brush Ohh	Timpani
	47	Real Tom 4	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2	808 Tom 2	Synth Drum 2	Real Tom 4	Lite Tom 4	Timpani
C3	48	Real Tom 1	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2	808 Tom 2	Synth Drum 2	Real Tom 1	Lite Tom 4	Timpani
	49	Crash Cym.1	Crash Cym.1	Crash Cym.1	Crash Cym.1	Crash Cym.1	808 Crash	808 Crash	Crash Cym.1	Brush Crash	Timpani
	50	Real Tom 1	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2	808 Tom 2	Synth Drum 2	Real Tom 1	Lite Tom 4	Timpani
	51	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	606 Ride Cym	606 Ride Cym	Ride Cym IN	Ride Cym IN	Timpani
	52	ChinaCymbal	ChinaCymbal	ChinaCymbal	ChinaCymbal	ReverseCymbl	ChinaCymbal	ReverseCymbl	ChinaCymbal	ChinaCymbal	Timpani
	53	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Brush RideBL	Timpani
	54	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	CR78 Tmb	Shake Tamb	Tambourine	Tambourine	Tambourine
	55	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.
	56	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	808cowbe	Cowbell	Cowbell	Cowbell	Cowbell
	57	Crash Cym 2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	909 Crash	Crash Cym.2	Crash Cym.2	Crash Cym.2	Con.Cymbal2
	58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
	59	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	RideCym Edge	Ride Cymbal	RideCym Edge	RideCym Edge	Concert Cym.
C4	60	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High
	61	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo
	62	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	808 Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga
	63	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	808 Conga	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn
	64	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	808 Conga	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn
	65	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
	66	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	67	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	68	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
	69	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
	70	Maracas	Maracas	Maracas	Maracas	Maracas	808marac	Maracas	Maracas	Maracas	Maracas
	71	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
C5	72	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
	73	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	74	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	CR78 Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
	75	Claves	Claves	Claves	Claves	Claves	808clave	Claves	Claves	Claves	Claves
	76	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	77	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
	78	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Hoo	Hoo	Mute Cuica	Mute Cuica	Mute Cuica
	79	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Hoo	Hoo	Open Cuica	Open Cuica	Open Cuica
	80	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl
	81	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl
	82	Shaker	Shaker	Shaker	Shaker	Shaker	626 Shaker	626 Shaker	Shaker	Shaker	Shaker
	83	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6	84	Bell Tree	Bar Chimes	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	85	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
	86	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	87	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	--	Open Surdo
	88	--	--	--	--	--	--	--	--	--	Applause
	89	--	--	--	--	--	--	--	--	--	--
	90	--	--	--	--	--	--	--	--	--	--
	91	--	--	--	--	--	--	--	--	--	--
	92	--	--	--	--	--	--	--	--	--	--
	93	--	--	--	--	--	--	--	--	--	--
	94	--	--	--	--	--	--	--	--	--	--
	95	--	--	--	--	--	--	--	--	--	--
C7	96	--	--	--	--	--	--	--	--	--	--

Bank Select MSB	PC: 50 [CC32: 2]	PC: 51 [CC32: 2]	PC: 52 [CC32: 2]	PC: 57 [CC32: 2]	PC: 58 [CC32: 2]	PC: 128 [CC32: 2]	PC: 1 [CC32: 1]	PC: 9 [CC32: 1]	PC: 17 [CC32: 1]	PC: 25 [CC32: 1]
	Ethnic	Kick & Snare	Oriental	SFX	Rhythm FX	CM-64/32L	Standard	Room	Power	Electronic
C-1 0	--	--	--	--	--	--	--	--	--	--
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23	--	--	--	--	--	--	--	--	--	--
C1 24	--	--	--	--	--	--	--	--	--	--
25	Finger Snap	--	--	--	--	--	--	--	--	--
26	Tambourine	--	--	--	--	--	--	--	--	--
27	Castanets	--	--	--	--	--	High-Q	High-Q	High-Q	High-Q
28	Crash Cym.1	--	--	--	--	--	Slap	Slap	Slap	Slap
29	Snare Roll	--	--	--	--	--	ScratchPush	ScratchPush	ScratchPush	Scrtch Push2
30	Concert Snr	--	--	--	--	--	ScratchPull	ScratchPull	ScratchPull	Scrtch Pull2
31	Concert Cym	--	--	Scrtch Push2	--	--	Sticks	Sticks	Sticks	Sticks
32	Concert BD	--	--	Scrtch Pull2	--	--	SquareClick	SquareClick	SquareClick	SquareClick
33	Jingle Bell	--	--	Gt.CutNoise2	--	--	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
34	Bell Tree	--	--	Gt.CutNoise2	--	--	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
35	Bar Chimes	--	TR-707 BD	Dist.CutNoiz	--	Kick 1	855t BsDrum1	85Rm BsDrum1	Power Kick2	Elec. Kick 2
C2 36	Wadaiko	--	TR-707 BD	Dist.CutNoiz	Rev.Kick 1	Kick 1	855t BsDrum2	85Rm BsDrum2	Power Kick1	Elec Kick 1
37	Wadaiko Rim	--	TR-707 Rim	Bass Slide	Rev.ConBD	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick
38	Shimedaiko	--	TR-707 SD	Pick Scrape	Rev.PowerK1	Fat Snare	855t Snare2	82Rm Snare2	Dance Snare1	Elec. Snare
39	Atangane	--	Hand Clap 22	High-Q	Rev Elec.K1	Hand Clap	909 HandClap	80Rclap	80Rclap	80Rclap
40	Hyoushigi	Std.1 Kick1	TR-707 SD	Slap	Rev.Snare 1	Elec. Snare	855t Snare1	82Rm Snare1	Power Snare1	Elec Snare 2
41	Ohkawa	Std.1 Kick2	Tom	ScratchPush	Rev.Snare 2	Tom	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2
42	H Kotsuzumi	Std.2 Kick1	TR-707 HH-c	ScratchPull	Rev.Std1SD1	Close HiHat	Close HiHat2	Room Chh	Close HiHat2	Jazz Chd HH
43	L Kotsuzumi	Std2 Kick2	Tom	Sticks	Rev TightSD	Tom	Real Tom 6	Room Tom 5	Rock Tom 4	Synth Drum 2
44	Ban_Gu	Kick 1	TR-707 HH-c	SquareClick	Rev.DanceSD	Open HiHat2	Pedal HiHat2	Pedal HiHat	Pedal HiHat2	Pedal HiHat
45	Big Gong	Kick 2	Tom	Mtrnm.Click	Rev.808SD	Tom	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2
46	Small Gong	Soft Kick	TR-707 HH-o	Mtrnm. Bell	Rev Tom 1	Open Hi Hat	Open HiHat2	R8 Ohh2	Open HiHat2	Jazz Open HH
47	Bend Gong	Jazz Kick 1	Tom	Gt.FretNoiz	Rev.Tom 2	Tom	Real Tom 4	Room Tom 2	Rock Tom 4	Synth Drum 2
C3 48	RAMA Cymbal	Jazz Kick 2	Tom	Gt.CutNoise	Rev Sticks	Tom	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2
49	RAMA Cymbal	Concert BD	TR-707 Crash	Gt.CutNoise	Rev Slap	GS Crash	Crash Cym 1	Crash Cym.1	Crash Cym.1	Crash Cym.1
50	Gamelan Gong	Room Kick 1	Tom	String Slap	ReverseCymbl	Tom	Real Tom 1	Room Tom 2	Rock Tom 1	Synth Drum 2
51	Udo_Short	Room Kick 2	Ride Cymbal	Fl.KeyClick	Rev.Cymbal2	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal
52	Udo_Long	Power Kick1	Dholla2 Dom2	Laughing	Rev Open HH	--	ChinaCymbal	ChinaCymbal	ChinaCymbal	ReverseCymbl
53	Udo_slap	Power Kick2	Dholla 2 Sak	Screaming	Rev RideCym	--	Ride Bell	Ride Bell	Ride Bell	Ride Bell
54	Bendir	Elec Kick 2	Tambourine	Punch	Rev CR-78OHH	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
55	Reg_Dum	Elec Kick 1	Dholla2 Rim1	Heart Beat	Rev Clsd.HH	--	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.
56	Reg_tik	Elec. Kick	Cowbell	Footsteps	Rev.BendGong	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell
57	Tabla Te	TR-808 Kick	Dholla2 RimC	Footsteps	Rev.Belltree	--	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2
58	Tabla_Na	TR-909 Kick	Cabasa	Applause	Rev Guiro	--	Vibraslap	Vibraslap	Vibraslap	Vibraslap
59	Tabla_Tun	Dance Kick 2	Doff 2 Dom 2	Creaking	Rev.Bendir	--	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal
C4 60	Tabla Ge	Std.1 Snare1	Doff2 Sak 1B	Door	Rev.GunShot	High Bongo	Bongo High	Bongo High	Bongo High	Bongo High
61	Tabla Ge Hi	Std.1 Snare2	Low Bongo	Scratch	Rev.Scratch	Low Bongo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo
62	Talking Drum	Std.2 Snare1	Doff 2 Sak 2	Wind Chimes	Rev.Lasergun	Mute Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga
63	Bend tlk_drm	Std.2 Snare2	High Bongo	Car-Engine	Click	Conga	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn
64	Caxixi	Tight Snare	Doff 2 Rim 3	Car-Stop	Tekno Thip	Conga	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn
65	Djembe	Concert Snr	Tabla1 Dom 2	Car-Pass	Pop Drop	Timbales	High Timbale	High Timbale	High Timbale	High Timbale
66	Djembe_rim	Jazz Snare 1	Tabla Roll	Car-Crash	Wood Slap	Timbales	Low Timbale	Low Timbale	Low Timbale	Low Timbale
67	Low Timbale	Jazz Snare 2	Tabla 2 Sak	Siren	Dist.Kick	Agogo	Agogo	Agogo	Agogo	Agogo
68	Timbl Palla	Room Snare 1	Tabla Fx	Train	Syn Drops	Agogo	Agogo	Agogo	Agogo	Agogo
69	High Timbale	Room Snare 2	Tabla2 Tak1D	Jetplane	Rev.Hi-Q	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
70	Cowbell	Dance Snare1	Tabla 2 Tik	Helicopter	ShrtWhistle	Maracas	Maracas	Maracas	Maracas	Maracas
71	Bongo High	Power Snare1	Tabla2 Rim 2	Starship	Ice Block	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
C5 72	Bongo Lo	Rev.Snare	Rek 2 Dom 1B	Gun Shot	Digi Tambrn.	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
73	Mute H.Conga	Power Snare2	Rek 2 Rim 2	Machine Gun	Alias	Vibraslap	Short Guiro	Short Guiro	Short Guiro	Short Guiro
74	Conga Hi Opn	Elec Snare 1	Rek Dom 1	Lasergun	Mod.Bell	--	Long Guiro	Long Guiro	Long Guiro	Long Guiro
75	Conga MtLow	Dance Snare2	Rek 2 Tak 1	Explosion	Tambourine	Claves	Claves	Claves	Claves	Claves
76	Conga Slap	Elec Snare 2	Rek 2 Tak 2C	Dog	Metalic Perc	Laughing	Woodblock	Woodblock	Woodblock	Woodblock
77	Conga Lo Opn	House Snare	Rek 2 Sak 1	HorseGallop	Velo FX Noiz	Screaming	Woodblock	Woodblock	Woodblock	Woodblock
78	Conga Slide	Elec. Snara	Hager 2	Bird	St.NoiseClap	Punch	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica
79	Mut Pandiero	Elec Snare 3	Rek2Khan Cl2	Rain	Swish	Heart Beat	Open Cuica	Open Cuica	Open Cuica	Open Cuica
80	Opn Pandiero	808 Snare 1	Zir 2	Thunder	Noise Slap	Footsteps	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl
81	Open Surdo	808 Snare 2	Rek2Khan Op2	Wind	Voice 1	Footsteps	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl
82	Mute Surdo	909 Snare 1	Rek 2 Roll	Seashore	Voice Au	Applause	Shaker	Shaker	Shaker	Shaker
83	Tamborim	909 Snare 2	Rek 2 Sak 1	Stream	Hoo	Creaking	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6 84	Agogo	Brush Swirl	Sagat Mid	Bubble	Tape Stop 1	Door	Bell Tree	Bell Tree	Bell Tree	Bell Tree
85	Agogo	Brush Tap	Sagat Hi	Kitty	Tape Stop 2	Scratch	Castanets	Castanets	Castanets	Castanets
A6 86	Shaker	Brush Slap1	Sagat Sak	Bird 2	Missile	Wind Chimes	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
87	Low Whistle	Brush Slap2	Jingle Bell	Growl	Space Birds	Car-Engine	Open Surdo	Open Surdo	Open Surdo	Open Surdo
88	Low Whistle	Brush Slap	ZaghroutaSm3	Applause 2	FlyingMonstr	Car-Stop	--	--	--	--
89	Mute Cuica	Brush Swirl	ZaghroutaEd3	Telephone 1	--	Car-Pass	--	--	--	--
90	Open Cuica	Brush Swirl	TablaNurDom3	Telephone 2	--	Car-Crash	--	--	--	--
91	MuteTriangl	Long Swirl	Nakrazhan 1	--	--	Siren	--	--	--	--
92	OpenTriangl	--	TablaNurRim2	--	--	Train	--	--	--	--
93	Short Guiro	--	Nakrazhan 2	--	--	Jetplane	--	--	--	--
94	Long Guiro	--	TablaNurTak3	--	--	Helicopter	--	--	--	--
95	Cabasa Up	--	TR-707 BD	--	--	Starship	--	--	--	--
C7 96	Cabasa Down	--	Hand Clap 1	--	--	Gun Shot	--	--	--	--

	PC: 50 [CC32: 2] Ethnic	PC: 51 [CC32: 2] Kick & Snare	PC: 52 [CC32: 2] Oriental	PC: 57 [CC32: 2] SFX	PC: 58 [CC32: 2] Rhythm FX	PC: 128 [CC32: 2] CM-64/32L	PC: 1 [CC32: 1] Standard	PC: 9 [CC32: 1] Room	PC: 17 [CC32: 1] Power	PC: 25 [CC32: 1] Electronic
(C7) (96)	(Cabasa Down)	(---)	(---)	(---)	(---)	(Gun Shot)	(---)	(---)	(---)	(---)
97	Claves	---	---	---	---	Machine Gun	---	---	---	---
98	Woodblock	---	---	---	---	Lasergun	---	---	---	---
99	Woodblock	---	---	---	---	Explosion	---	---	---	---
100	---	---	---	---	---	Dog	---	---	---	---
101	---	---	---	---	---	HorseGallop	---	---	---	---
102	---	---	---	---	---	Bird	---	---	---	---
103	---	---	---	---	---	Rain	---	---	---	---
104	---	---	---	---	---	Thunder	---	---	---	---
105	---	---	---	---	---	Wind	---	---	---	---
106	---	---	---	---	---	Seashore	---	---	---	---
107	---	---	---	---	---	Stream	---	---	---	---
C8 108	---	---	---	---	---	Bubble	---	---	---	---
109	---	---	---	---	---	---	---	---	---	---
110	---	---	---	---	---	---	---	---	---	---
111	---	---	---	---	---	---	---	---	---	---
112	---	---	---	---	---	---	---	---	---	---
113	---	---	---	---	---	---	---	---	---	---
114	---	---	---	---	---	---	---	---	---	---
115	---	---	---	---	---	---	---	---	---	---
116	---	---	---	---	---	---	---	---	---	---
117	---	---	---	---	---	---	---	---	---	---
118	---	---	---	---	---	---	---	---	---	---
119	---	---	---	---	---	---	---	---	---	---
C9 120	---	---	---	---	---	---	---	---	---	---
121	---	---	---	---	---	---	---	---	---	---
122	---	---	---	---	---	---	---	---	---	---
123	---	---	---	---	---	---	---	---	---	---
124	---	---	---	---	---	---	---	---	---	---
125	---	---	---	---	---	---	---	---	---	---
126	---	---	---	---	---	---	---	---	---	---
G9 127	---	---	---	---	---	---	---	---	---	---

	PC: 26 [CC32: 1] TR-808	PC: 33 [CC32: 1] Jazz	PC: 41 [CC32: 1] Brush	PC: 49 [CC32: 1] Orchestra	PC: 57 [CC32: 1] SFX	PC: 128 [CC32: 1] CM-64/32L
(C7) (96)	(---)	(---)	(---)	(---)	(---)	(Gun Shot)
97	---	---	---	---	---	Machine Gun
98	---	---	---	---	---	Lasergun
99	---	---	---	---	---	Explosion
100	---	---	---	---	---	Dog
101	---	---	---	---	---	HorseGallop
102	---	---	---	---	---	Bird
103	---	---	---	---	---	Rain
104	---	---	---	---	---	Thunder
105	---	---	---	---	---	Wind
106	---	---	---	---	---	Seashore
107	---	---	---	---	---	Stream
C8 108	---	---	---	---	---	Bubble
109	---	---	---	---	---	---
110	---	---	---	---	---	---
111	---	---	---	---	---	---
112	---	---	---	---	---	---
113	---	---	---	---	---	---
114	---	---	---	---	---	---
115	---	---	---	---	---	---
116	---	---	---	---	---	---
117	---	---	---	---	---	---
118	---	---	---	---	---	---
119	---	---	---	---	---	---
C9 120	---	---	---	---	---	---
121	---	---	---	---	---	---
122	---	---	---	---	---	---
123	---	---	---	---	---	---
124	---	---	---	---	---	---
125	---	---	---	---	---	---
126	---	---	---	---	---	---
G9 127	---	---	---	---	---	---

		Tone Map 1	PC: 26 [CC32: 1] TR-808	PC: 33 [CC32: 1] Jazz	PC: 41 [CC32: 1] Brush	PC: 49 [CC32: 1] Orchestra	PC: 57 [CC32: 1] SFX	PC: 128 [CC32: 1] CM-64/32L
C-1	0		---	---	---	---	---	---
	1		---	---	---	---	---	---
	2		---	---	---	---	---	---
	3		---	---	---	---	---	---
	4		---	---	---	---	---	---
	5		---	---	---	---	---	---
	6		---	---	---	---	---	---
	7		---	---	---	---	---	---
	8		---	---	---	---	---	---
	9		---	---	---	---	---	---
	10		---	---	---	---	---	---
	11		---	---	---	---	---	---
C0	12		---	---	---	---	---	---
	13		---	---	---	---	---	---
	14		---	---	---	---	---	---
	15		---	---	---	---	---	---
	16		---	---	---	---	---	---
	17		---	---	---	---	---	---
	18		---	---	---	---	---	---
	19		---	---	---	---	---	---
	20		---	---	---	---	---	---
	21		---	---	---	---	---	---
	22		---	---	---	---	---	---
	23		---	---	---	---	---	---
C1	24		---	---	---	---	---	---
	25		---	---	---	---	---	---
	26		---	---	---	---	---	---
	27		High-Q	High-Q	High-Q	Jazz Clsd.HH	---	---
	28		Slap	Slap	Slap	Pedal HiHat	---	---
	29		Scrtch Push2	ScratchPush	ScratchPush	Jazz Open HH	---	---
	30		Scrtch Pull2	ScratchPull	ScratchPull	Ride Cymbal	---	---
	31		Sticks	Sticks	Sticks	Sticks	---	---
	32		SquareClick	SquareClick	SquareClick	SquareClick	---	---
	33		Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	---	---
	34		Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	---	---
	35		808 BD	82Jz BsDrum1	Jazz Kick 2	Jazz Kick 1	---	Kick 1
C2	36		TR-808 Kick	82Jz BsDrum2	Jazz Kick 1	Concert BD	---	Kick 1
	37		808 Rimshot	Side Stick	Side Stick	Side Stick	---	Side Strck
	38		808 Snare 1	82Jz Snare1	Brush Swirl	Concert Snr	---	Fat Snare
	39		808clap	Hand clap2	Brush Slap1	Castanets	High-Q	Hand Clap
	40		TR-808 SD2	82Jz Snare2	Brush Swirl	Concert Snr	Slap	Elec. Snare
	41		808 Tom 2	Real Tom 6	Lite Tom 4	Timpani	ScratchPush	Tom
	42		TR-808 CHH	Jazz Clsd.HH	Brs Chh	Timpani	ScratchPull	Close HiHat
	43		808 Tom 2	Real Tom 6	Lite Tom 4	Timpani	Sticks	Tom
	44		808 _chh	Pedal HiHat	Pedal HiHat	Timpani	SquareClick	Open HiHat2
	45		808 Tom 2	Real Tom 4	Lite Tom 4	Timpani	Mtrnm.Click	Tom
	46		TR-808 OHH	Jazz Open HH	Brush Ohh	Timpani	Mtrnm. Bell	Open Hi Hat
	47		808 Tom 2	Real Tom 4	Lite Tom 4	Timpani	Gt.FretNoiz	Tom
C3	48		808 Tom 2	Real Tom 1	Lite Tom 4	Timpani	Gt.CutNoise	Tom
	49		808 Crash	Crash Cym.1	Brush Crash	Timpani	Gt.CutNoise	GS Crash
	50		808 Tom 2	Real Tom 1	Lite Tom 4	Timpani	String Slap	Tom
	51		606 Ride Cym	Ride Cym IN	Ride Cym IN	Timpani	Fl.KeyClick	Ride Cymbal
	52		ChinaCymbal	ChinaCymbal	ChinaCymbal	Timpani	Laughing	---
	53		Ride Bell	Ride Bell	Brush RideBL	Timpani	Screaming	---
	54		Tambourine	Tambourine	Tambourine	Tambourine	Punch	Tambourine
	55		Splash Cym	Splash Cym	Splash Cym.	Splash Cym.	Heart Beat	---
	56		808cowbe	Cowbell	Cowbell	Cowbell	Footsteps	Cowbell
	57		909 Crash	Crash Cym.2	Crash Cym.2	Con.Cymbal2	Footsteps	---
	58		Vibraslap	Vibraslap	Vibraslap	Vibraslap	Applause	---
	59		RideCym Edge	RideCym Edge	RideCym Edge	Concert Cym.	Creaking	---
C4	60		High Bongo	Bongo High	Bongo High	Bongo High	Door	High Bongo
	61		Low Bongo	Bongo Lo	Bongo Lo	Bongo Lo	Scratch	Low Bongo
	62		808 Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Wind Chimes	Mute Conga
	63		808 Conga	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Car-Engine	Conga
	64		808 Conga	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Car-Stop	Conga
	65		High Timbale	High Timbale	High Timbale	High Timbale	Car-Pass	Timbales
	66		Low Timbale	Low Timbale	Low Timbale	Low Timbale	Car-Crash	Timbales
	67		Agogo	Agogo	Agogo	Agogo	Siren	Agogo
	68		Agogo	Agogo	Agogo	Agogo	Train	Agogo
	69		Cabasa	Cabasa	Cabasa	Cabasa	Jetplane	Cabasa
	70		808maracas	Maracas	Maracas	Maracas	Helicopter	Maracas
	71		ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	Starship	ShrtWhistle
C5	72		LongWhistle	LongWhistle	LongWhistle	LongWhistle	Gun Shot	LongWhistle
	73		Short Guiro	Short Guiro	Short Guiro	Short Guiro	Machine Gun	Vibraslap
	74		Long Guiro	Long Guiro	Long Guiro	Long Guiro	Lasergun	---
	75		808clave	Claves	Claves	Claves	Explosion	Claves
	76		Woodblock	Woodblock	Woodblock	Woodblock	Dog	Laughing
	77		Woodblock	Woodblock	Woodblock	Woodblock	HorseGallop	Screaming
	78		Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Bird	Punch
	79		Open Cuica	Open Cuica	Open Cuica	Open Cuica	Rain	Heart Beat
	80		MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	Thunder	Footsteps
	81		OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	Wind	Footsteps
	82		826 Shaker	Shaker	Shaker	Shaker	Seashore	Applause
	83		Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Stream	Creaking
C6	84		Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bubble	Door
	85		Castanets	Castanets	Castanets	Castanets	---	Scratch
	86		Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	---	Wind Chimes
	87		Open Surdo	Open Surdo	Open Surdo	Open Surdo	---	Car-Engine
	88		---	---	---	Applause	---	Car-Stop
	89		---	---	---	---	---	Car-Pass
	90		---	---	---	---	---	Car-Crash
	91		---	---	---	---	---	Siren
	92		---	---	---	---	---	Train
	93		---	---	---	---	---	Jetplane
	94		---	---	---	---	---	Helicopter
	95		---	---	---	---	---	Starship
C7	96		---	---	---	---	---	Gun Shot

17.3 Internal Music Styles & Styles on disks 1 and 2

ROM Styles

ROCK

A11 LightRk	4/4	♩= 100
A12 PowerRk1	4/4	♩= 120
A13 PowerRk2	4/4	♩= 130
A14 PowerRk3	4/4	♩= 136
A15 ShRock	4/4	♩= 135
A16 Sh Bald1	4/4	♩= 88
A17 Sh Bald2	4/4	♩= 107
A18 Sl Rock	6/8	♩= 96

CONTEMPORARY

A21 House	4/4	♩= 136
A22 Dance	4/4	♩= 135
A23 Techno	4/4	♩= 140
A24 HipHop	4/4	♩= 90
A25 FunkyPop	4/4	♩= 108
A26 70s80s	4/4	♩= 122
A27 WaveJazz	4/4	♩= 95
A28 Contemp	4/4	♩= 93

POP

A31 Pop 1A	4/4	♩= 60
A32 Pop 2A	4/4	♩= 85
A33 Pop 3A	4/4	♩= 86
A34 Pop 4A	4/4	♩= 80
A35 Pop 1B	4/4	♩= 75
A36 Pop 2B	4/4	♩= 85
A37 Pop 3B	4/4	♩= 93
A38 Pop 4B	4/4	♩= 93

50's & 60's

A41 Rock'N1	4/4	♩= 122
A42 Rock'N2	4/4	♩= 168
A43 Rock'N3	4/4	♩= 181
A44 PopRock	4/4	♩= 140
A45 Foxtrot	4/4	♩= 185
A46 Boogie	4/4	♩= 186
A47 Charlest	4/4	♩= 193
A48 Twist	4/4	♩= 160

SWING

A51 SlSwing	4/4	♩= 55
A52 MedSwng	4/4	♩= 100
A53 ScatSwng	4/4	♩= 125
A54 CoolSwng	4/4	♩= 135
A55 FstBlues	4/4	♩= 126
A56 R&B	4/4	♩= 106
A57 Big Band	4/4	♩= 140
A58 Shuffle	4/4	♩= 143

LATIN

A61 Bossa 1	4/4	♩= 125
A62 Bossa 2	4/4	♩= 173
A63 Samba	4/4	♩= 105
A64 Bomba	4/4	♩= 90
A65 Mambo	4/4	♩= 92
A66 Mereng	4/4	♩= 106
A67 Salsa	4/4	♩= 98
A68 ChaCha	4/4	♩= 168

VARIETY

A71 Son	4/4	♩= 152
A72 Mariachi	3/4	♩= 112
A73 Island	4/4	♩= 105
A74 Rhumba	4/4	♩= 97
A75 ArgTango	4/4	♩= 120
A76 SlWaltz	3/4	♩= 90
A77 March	4/4	♩= 120
A78 Polka	4/4	♩= 128

ACOUSTIC

A81 G Slow	4/4	♩= 65
A82 G Bossa	4/4	♩= 100
A83 G FstPop	4/4	♩= 90
A84 G Ballad	4/4	♩= 130
A85 P Night	4/4	♩= 60
A86 P Slow	4/4	♩= 64
A87 P Jazz	4/4	♩= 150
A88 P Shuffl	4/4	♩= 150

Disk 1

The memory numbers refer to the pre-programmed Disk Link assignments.

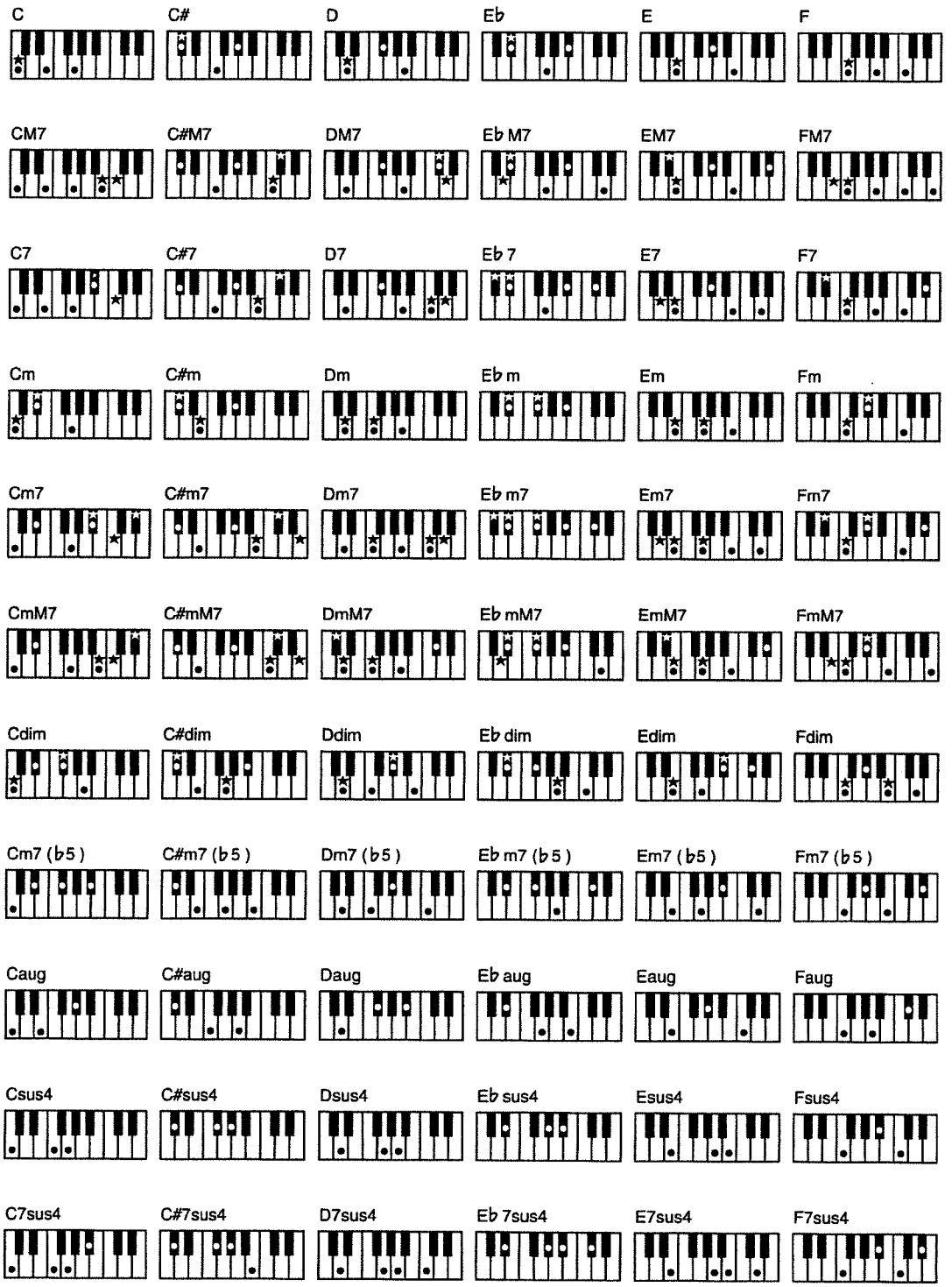
B11 LightRk2	4/4	♩= 86
B12 LightRk3	4/4	♩= 105
B13 Rock	4/4	♩= 172
B14 Sh Bald3	4/4	♩= 120
B15 Blues	4/4	♩= 60
B16 Sl Rock2	6/8	♩= 84
B17 Sl Rock3	6/8	♩= 90
B18 Sl Rock4	4/4	♩= 80
B21 House 2	4/4	♩= 134
B22 Dance 2	4/4	♩= 130
B23 Techno 2	4/4	♩= 140
B24 HipHop 2	4/4	♩= 110
B25 Funky	4/4	♩= 103
B26 70s80s 2	4/4	♩= 114
B27 ElectHop	4/4	♩= 94
B28 Contemp2	4/4	♩= 123
B31 Pop 5A	4/4	♩= 64
B32 Pop 6A	4/4	♩= 72
B33 Pop 7A	4/4	♩= 83
B34 Pop 8A	4/4	♩= 88
B35 Pop 5B	4/4	♩= 70
B36 Pop 6B	4/4	♩= 80
B37 Pop 7B	4/4	♩= 80
B38 Pop 8B	4/4	♩= 98
B41 Rock'N4	4/4	♩= 176
B42 Boogie 2	4/4	♩= 150
B43 Twist 2	4/4	♩= 158
B44 Surf	4/4	♩= 153
B45 Dixie	4/4	♩= 140
B46 SlSwing2	4/4	♩= 85
B47 MedSwng2	4/4	♩= 110
B48 Swing	4/4	♩= 180

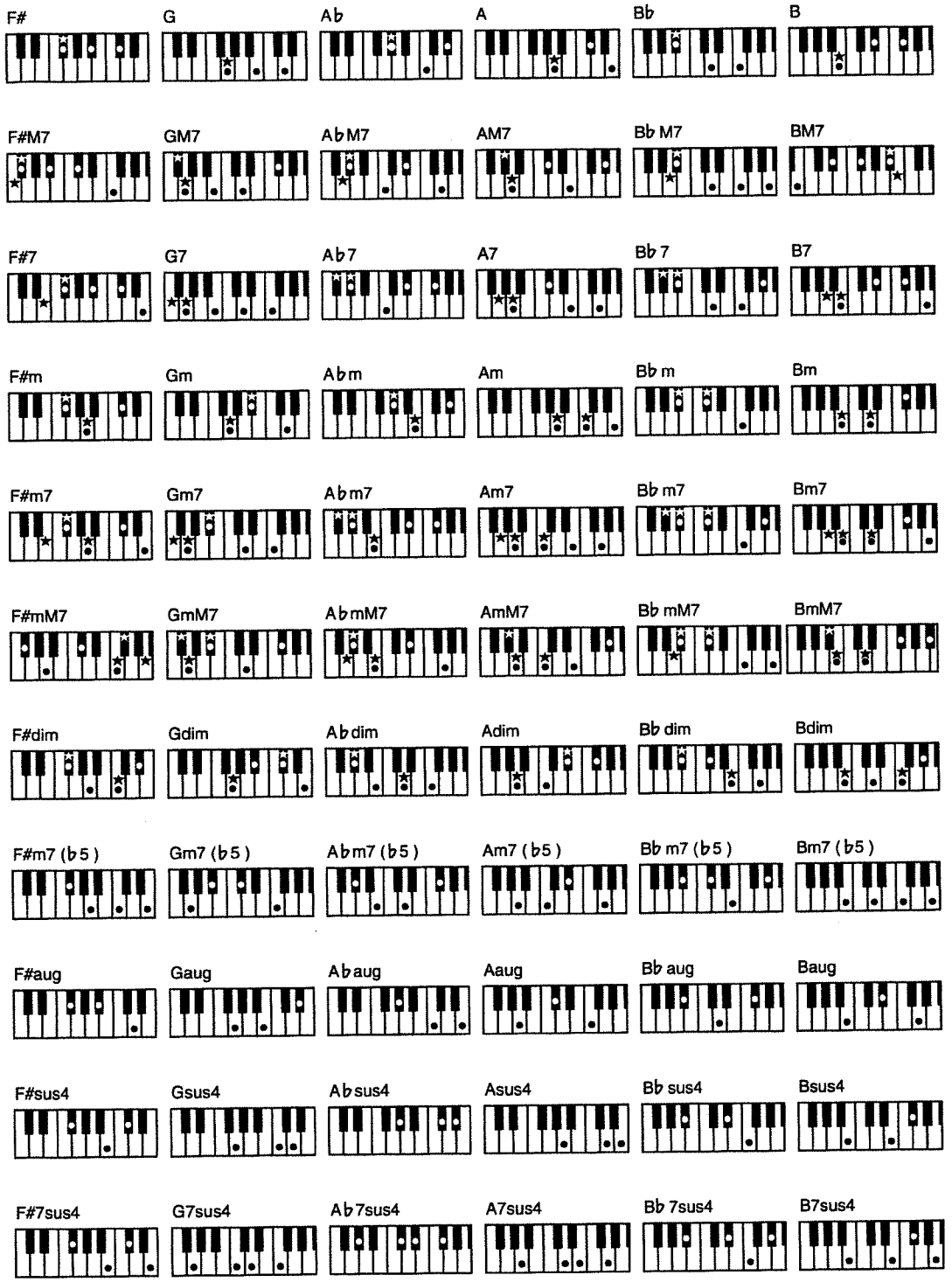
Disk 2

The memory numbers refer to the pre-programmed Disk Link assignments.

B51 FstSwing	4/4	♩= 220
B52 Bossa 3	4/4	♩= 106
B53 Bossa 4	4/4	♩= 150
B54 Samba 2	4/4	♩= 130
B55 JzLatin1	4/4	♩= 102
B56 JzLatin2	4/4	♩= 140
B57 Mambo 2	4/4	♩= 89
B58 Mereng 2	4/4	♩= 155
B61 ChaCha 2	4/4	♩= 120
B62 Son 2	4/4	♩= 125
B63 Gipsy 1	2/4	♩= 93
B64 Gipsy 2	2/4	♩= 120
B65 Plena	4/4	♩= 110
B66 Reggae	4/4	♩= 96
B67 LtDance	4/4	♩= 130
B68 LimboRck	4/4	♩= 86
B71 Calypso	4/4	♩= 165
B72 Beguine	4/4	♩= 105
B73 Cumbia	4/4	♩= 98
B74 SlWaltz2	3/4	♩= 85
B75 JzWaltz1	3/4	♩= 106
B76 JzWaltz2	3/4	♩= 120
B77 W'Waltz	6/4	♩= 185
B78 March 2	4/4	♩= 120
B81 P Pop	4/4	♩= 70
B82 P Ballad	4/4	♩= 55
B83 P Latin	4/4	♩= 100
B84 G Samba	4/4	♩= 100
B85 P Rock'N	4/4	♩= 150
B86 P Ragtim	4/4	♩= 170
B87 P Waltz	3/4	♩= 90
B88 G Waltz	3/4	♩= 110

17.4 Chord Intelligence




F#
G
Ab
A
Bb
B
F#M7
GM7
AbM7
AM7
Bb M7
BM7
F#7
G7
Ab7
A7
Bb 7
B7
F#m
Gm
Abm
Am
Bb m
Bm
F#m7
Gm7
Abm7
Am7
Bb m7
Bm7
F#mM7
GmM7
AbmM7
AmM7
Bb mM7
BmM7
F#dim
Gdim
Abdim
Adim
Bb dim
Bdim
F#m7 (b5)
Gm7 (b5)
Abm7 (b5)
Am7 (b5)
Bb m7 (b5)
Bm7 (b5)
F#aug
Gaug
Abaug
Aaug
Bb aug
Baug
F#sus4
Gsus4
Absus4
Asus4
Bb sus4
Bsus4
F#7sus4
G7sus4
Ab7sus4
A7sus4
Bb 7sus4
B7sus4

17.5 MIDI Implementation Chart

[V-Arranger Keyboard]
Model: VA-3

Date: October 2000
Version: 1.00

Function...		Transmitted		Recognized		Remarks
Basic	Default	1~16		1~16		32 Parts
Channel	Changed	1~16, Off		1~16, Off		4 Logical Parts
Mode	Default	Mode 3		Mode 3		
	Message	Mode 3, 4 (M=1)		Mode 3, 4 (M=1)		*2
	Altered	*****				
Note		0~127	*1	0~127	*1	
Number	True Voice	*****		0~127		
Velocity	Note ON	O	*1	O	*1	
	Note OFF	X		X		
After	Key's	X		O	*1	
Touch	Ch's	X		O	*1	
Pitch Bend		O	*1	O	*1	
Control Change	0,32	O	*1	O	*1	Bank Select
	1	O	*1	O	*1	Modulation
	5	O		O	*1	Portamento Time
	6, 38	O		O	*1	Data Entry
	7	O	*1	O	*1	Volume
	10	O	*1	O	*1	Panpot
	11	O	*1	O	*1	Expression
	64	O	*1	O	*1	Hold 1
	65	O		O	*1	Portamento
	66	X	*1	X		Sostenuto
	67	X	*1	X		Soft
	84	O		O	*1	Portamento Control
	91	O	*1	O (Reverb)	*1	Effect 1 Depth
	93	O	*1	O (Chorus)	*1	Effect 3 Depth
	98, 99	O	*1	O	*1	NRPN LSB, MSB
	100, 101	O	*1	O	*1	RPN LSB, MSB
Program		O	*1	O	*1	
Change	True #	*****		0~127		Program Number 1~128
System Exclusive		O	*1	O	*1	
System	Song Position Pointer	X	*1	X	*1	
Common	Song Sel	X		X		
	Tune	X		X		
System	Clock	O	*1	O	*1	
Real Time	Commands	O	*1	O	*1	
	All Sounds Off	X		O (120, 126, 127)		
	Reset All Controllers	X		O (121)		
Aux	Local On/Off	O	*1	O		
Messages	All Notes Off	X		O (123-125)		
	Active Sense	O		O		
	Reset	X		X		
Notes		*1 O X is selectable *2 Recognized as M=1 even if M≠1				

Mode 1: OMNI ON, POLY
Mode 2: OMNI ON, MONO
O: Yes
Mode 3: OMNI OFF, POLY
Mode 4: OMNI OFF, MONO
X: No

18. Index

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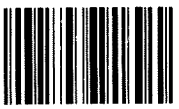

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