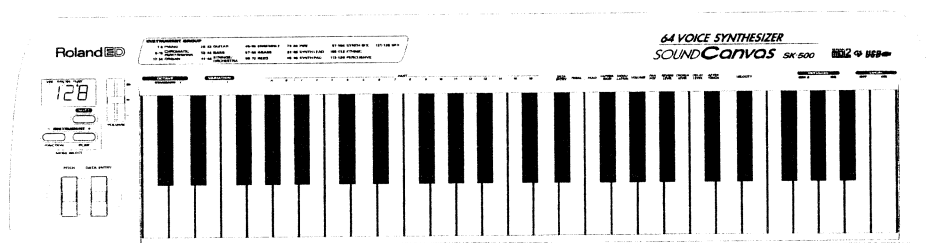


64 VOICE SYNTHESIZER
SOUND*Canvas* SK-500

Owner's Manual



Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (p. 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.



For EU Countries

This product complies with the requirements of European Directive 89/336/EEC.

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

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.




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 unit, make sure to read the instructions below, and the Owner's Manual. 


- Do not open (or modify in any way) the unit or its AC adaptor. 


- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). 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 you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces. 


- Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock. 


- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards! 

- This unit, either alone or in combination with an amplifier and headphones or speakers, 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 unit, and consult an audiologist. 

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit. 


- Immediately turn the power off, remove the AC adaptor 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 AC adaptor or the power-supply cord has been damaged; or
 - Objects have fallen into, or liquid has been spilled onto the unit; or
 - The unit has been exposed to rain (or otherwise has become wet); or
 - The unit 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 unit from strong impact.
(Do not drop it!)



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



- Do not force the unit's power-supply cord 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 unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.



- DO NOT play a CD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.



CAUTION

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.



- Always grasp only the plug or the body of the AC adaptor when plugging into, or unplugging from, an outlet or this unit.



- Whenever the unit is to remain unused for an extended period of time, disconnect the AC adaptor.



- 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 unit.



- Never handle the AC adaptor body, or its plugs, with wet hands when plugging into, or unplugging from, an outlet or this unit.



- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.



- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (p. 14).



IMPORTANT NOTES

In addition to the items listed under “USING THE UNIT SAFELY” on page 3, please read and observe the following:

Power Supply

Power Supply: Use of Batteries

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Do not expose the unit 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 unit.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.
- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.

Maintenance

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

Additional Precautions

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and 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.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
 - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
 - Use of the demo song data supplied with this product for any purpose other than private, personal enjoyment without the permission of the copyright holder is prohibited by law. Additionally, this data must not be copied, nor used in a secondary copyrighted work without the permission of the copyright holder.

Handling CD-ROMs

- Avoid touching or scratching the shiny underside (encoded surface) of the disc. Damaged or dirty CD-ROM discs may not be read properly. Keep your discs clean using a commercially available CD cleaner.

Main Features

■ 49-Key Standard Keyboard with Touch Sensitivity

The SK-500 is equipped with a 49-key standard keyboard featuring touch sensitivity. Designed for use with computers, the SK-500 keyboard provides just the right number of keys—making it both compact and easy to play.

■ Pedal and Wheel for Even Better Performance Expression

You can use the pedal, Pitch Bender Wheel, and Data Entry Wheel to add piano damper pedal hold effects and guitar bend-like pitch alterations to your keyboard performances. You can also switch the data controlled by the pedal and Data Entry Wheel.

Furthermore, while the SK-500 accommodates a pedal switch, you can connect an expression pedal to the instrument if you like.

■ Equipped with USB Connector

In addition to the serial port, the SK-500 is equipped with a USB connector, thus allowing you to connect the instrument to a computer simply and easily with a single USB cable. This eliminates the old system of having to make separate connections for the computer, MIDI keyboard, and sound generator, replacing all that with a refreshingly compact system.

■ GM (General MIDI)/GM2 (General MIDI 2)/GS Format-Compatible Sound Generator Built In

The SK-500's internal sound generator works with the GM and GM2 systems as well as GS Format.

Take music data prepared in GM, GM2, or GS Format, connect to a computer, then play back the data on the SK-500.

■ A Wealth of High-Quality Tones

The SK-500's internal sound generator comes with a huge sound palette, with 1,608 Tones and 63 different Drum Sets. Included with these sounds are nearly all the sounds offered by Roland's Sound Canvas series, so you can enjoy playing the performance data you have been using up to now, as well as commercially available music data.

(While the Tones are arranged in the same manner as in the Sound Canvas series, due to differences in the waveforms used and the number of voices used in each Tone, as well as differences in the maximum polyphony of the sound generators, precisely identical reproduction is not possible.)

When you connect the SK-500 to a computer, you can play back music data prepared in GM, GM2, or GS Format.

The SK-500 is equipped with a 49-key standard keyboard featuring touch sensitivity.

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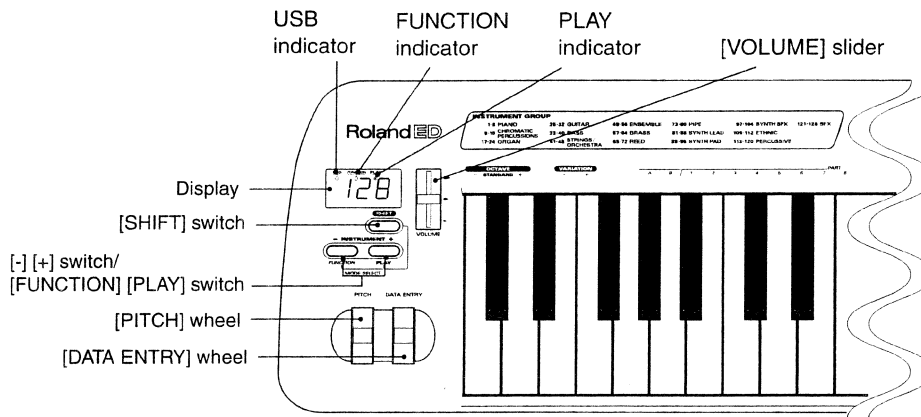
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Names and Functions

Front Panel



Display

Shows the current settings.

USB Indicator

Lights when the SK-500 is connected to a computer using a USB cable, and it is ready to send and receive data.

FUNCTION Indicator (Function Mode Indicator)

Lights when the SK-500 is in Function mode (when functions are assigned to the [DATA ENTRY] wheel or a pedal).

PLAY Indicator (Play Mode Indicator)

The keyboard can be played when this indicator is lit.

[VOLUME] Slider

Moved up and down to adjust the volume.

[SHIFT] Switch

When changing settings, this is pressed in combination with the [-] and [+] switches and the keys on the keyboard.

[-] [+] Switch (Value Switch)/[FUNCTION] [PLAY] Switch

Use these buttons to select an instrument or value. Hold down the [SHIFT] button and press the Instrument buttons ([-] or [+]). This changes the [-] and the [+] buttons into the [FUNCTION] and [PLAY] buttons. Use these buttons for switching to/from PLAY mode, and for assigning functions to the [DATA ENTRY] wheel or the pedal. (p. 72)

[PITCH] Wheel (Pitch Bend Wheel)

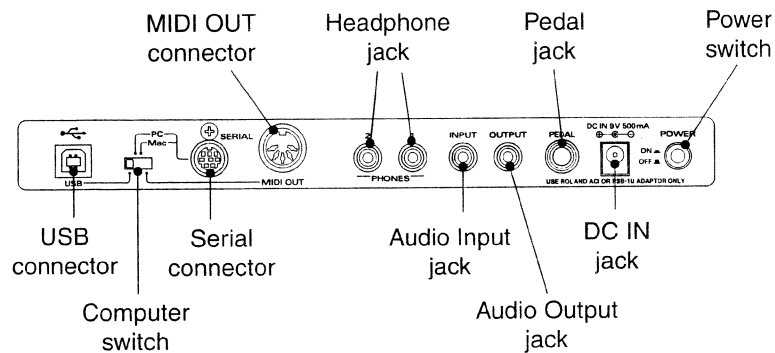
You can rotate this wheel to change the pitch of the sounds being played. You can use this to reproduce sounds such as guitar choking and bending the pitch up on a brass instrument

[DATA ENTRY] Wheel

You can use this in assigning functions used to control the tones.

When shipped from the factory, this is set to Modulation. Rotating the wheel adds vibrato to the sound.

Rear Panel



USB Connector

Serial Connector

Use the USB cable included with the SK-500 or an optional serial computer cable when connecting to these connectors. The particular cable you need may differ according to the computer being connected.

- * The USB and Serial connectors cannot be used when the computer switch is set to "MIDI OUT."

MIDI OUT connector

- * Set the Computer Switch to "MIDI OUT" when using the MIDI OUT connector.

Audio INPUT Jack

Audio OUTPUT Jack

PHONES (Headphone) Jacks (2)

POWER Switch

AC Adaptor Socket

Computer Switch

Switch this setting according to the computer being connected and the software you are using.

- * Be sure to turn off the power before changing the settings for this switch.

PEDAL Jack

Connect the pedal switch that was included with the product.

Making Connections

Try Listening to Some Sounds

The SK-500 is not equipped with an amplifier or speakers. To listen to sounds with the SK-500, connect headphones or speakers.

Connecting Headphones and Speakers

- * To prevent malfunction and/or damage to speakers, make sure to move the [VOLUME] slider towards you to lower the volume.
- * Make sure that the power to any device being connected is turned off.

1

Connect the AC Adaptor to the AC Adaptor socket.

2

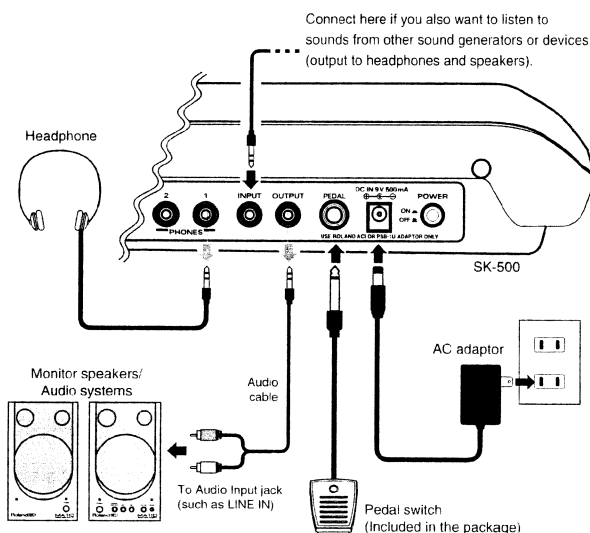
If using headphones, connect the headphones to one of the PHONES jacks.

3

If you are connecting speakers or other audio gear, use an audio cable to connect one of the SK-500's audio jacks to the Audio IN jack of the audio device being connected.

Connecting a Foot Switch

Connect the foot switch included with the SK-500, or a pedal switch (DP-2), damper pedal (DP-6), or expression pedal (EV-5) to this jack.



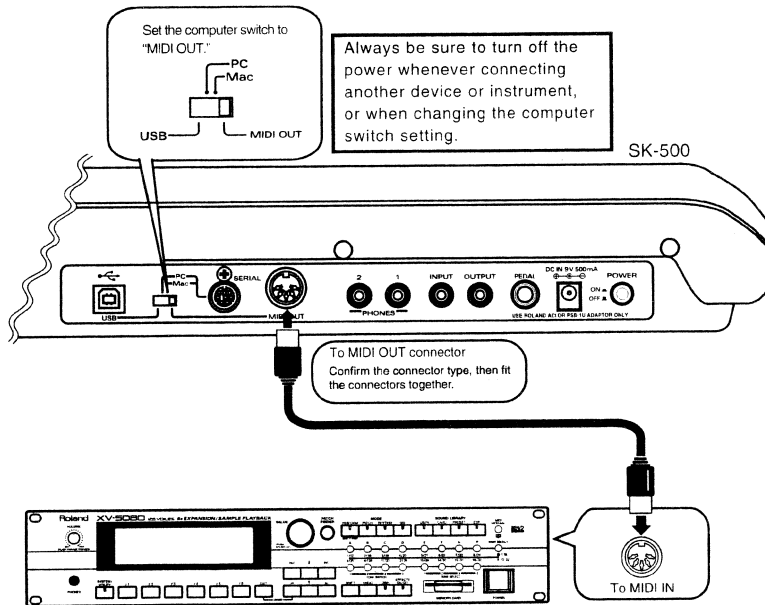
To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.



Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

Connecting to MIDI sound modules

Use a MIDI cable to connect the SK-500 to a external MIDI sound module when using the SK-500 as a master keyboard to play sounds from the sound module.



Turning On the Power

- 1** Make sure that the power to any connected device is turned off.
- 2** Bring down the SK-500's [VOLUME] slider to lower the volume.
- 3** Turn the SK-500's POWER switch to the "ON" position.
- 4** Turn on the power to connected devices.
- 5** Raise the SK-500's [VOLUME] slider to bring up the volume, then adjust to a suitable volume level.

NOTE

Once the connections have been completed (p. 12), turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

NOTE

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

Producing Sound

If you have connected to an audio device, play the keyboard to confirm that sound is coming from the speakers or headphones.

If these are connected correctly, you will be able to hear the piano sound at this point.

** If no sound is audible, refer to the Troubleshooting section (p. 84), then check to make sure all cables are properly connected.*

Turning Off the Power

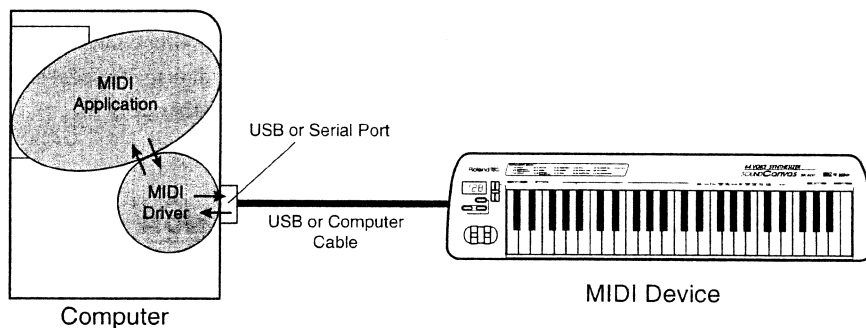
- 1 Bring down the SK-500's [VOLUME] slider to lower the volume.
- 2 Turn the SK-500's POWER switch to "OFF."

Before Connecting to a Computer

What is USB MIDI Driver/Serial MIDI Driver?

USB MIDI Driver/Serial MIDI Driver is software that allows data to be exchanged between computer applications (such as sequencer software programs) and a MIDI sound module when the computer and MIDI sound module are connected by a computer cable, or in other words, when the data is transmitted via the computer's USB/serial port (COM port).

USB MIDI Driver/Serial MIDI Driver transmits data from applications to the sound module, and, conversely, passes along MIDI signals from the sound module to applications.



Although you can play the SK-500 as a stand-alone instrument, by connecting it to a computer, you can listen to commercially available SMF (Standard MIDI File) music data and record your performances with sequencer software.

Beginning with the next chapter, this manual explains how to connect the SK-500 to computers. When initially connecting a computer, you will need to install the necessary drivers after connecting the cables.

A driver is software that acts as a kind of go-between in the transmission of data between the SK-500 and computer applications (such as sequencer software).

Procedures may vary depending on your computer and the method used for connecting the computer. Refer to the required pages according to your computing environment.

When Connecting to a USB Connector on a Computer Running Windows 95/98	p. 16
How to Uninstall the USB MIDI Driver.....	p. 21
When Connecting to a Serial Port on a Computer Running Windows 95/98	p. 23
How to Uninstall Serial MIDI Driver	p. 30
When Connecting to a Serial Port on a Computer Running Windows NT	
First, refer to the Connecting the SK-500 and the Computer section in Installing Serial MIDI Driver In Windows 95/98 (p. 23), connect the SK-500 with a serial cable. Then, refer to the "ENG\DRIVER\RSNT\Readme.txt" in the SK-500 CD-ROM, and install the driver and make necessary settings.	
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When Connecting to a Serial Port on a Computer Running Windows 2000	p. 39
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When Connecting to the USB Connector on a Macintosh Using OMS	p. 44
When Connecting to the Computer Connector on a Macintosh Using OMS	p. 52
When Using FreeMIDI on Macintosh	
If you are using FreeMIDI on a Macintosh computer, refer to "Readme SK-500 FM DriverEng" in the "FreeMIDI" folder in "English" on the SK-500 CD-ROM.	

Installing the USB MIDI Driver In Windows 98

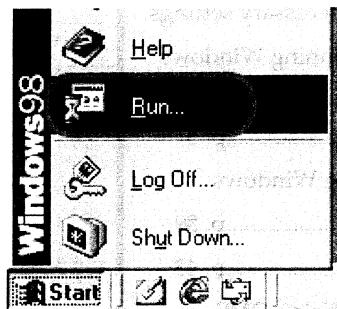
Connect the SK-500 and the computer. You will need the items listed below, so take a moment to remove them from the package before you begin.

- USB Cable
- AC Adaptor
- SK-500 CD-ROM

** Please be sure to read the software license agreement included with the software before opening the SK-500 CD- ROM package.*

Installing the USB MIDI Driver

- 1** Remove all USB cables from the computer (except for the keyboard and mouse), and start up Windows.
- 2** Before installing the driver, quit all applications.
- 3** Place the SK-500 CD-ROM in the CD-ROM drive.
- 4** Click the Windows Start button, and click "Run" from the menu that appears.

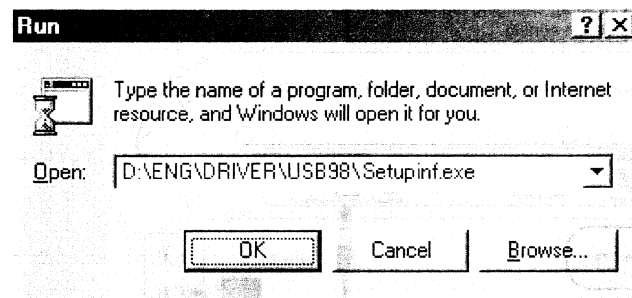


5

Type "D:\ENG\DRIVER\USB98\Setupinf.exe" in the Name box of the dialog that appears, then click the "OK" button.



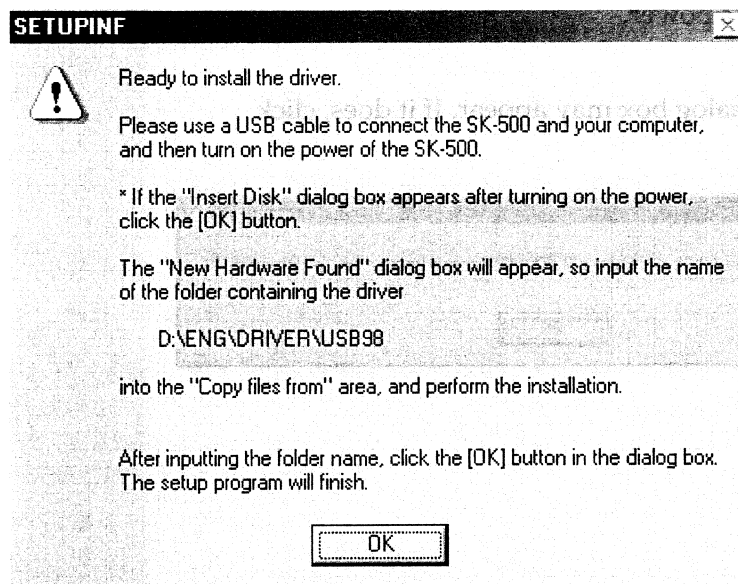
The driver name can be checked in the window displayed by double-clicking the "My Computer" icon.



* The dialog that appears may vary depending on your particular computing environment.

6

The "SETUPINF" dialog box appears, and then "Ready to install driver. -" appears in the screen.



* If "The driver is already installed. -" appears, refer to **If You Cannot Install/Uninstall/Use the Driver** (p. 84) and reinstall the driver.

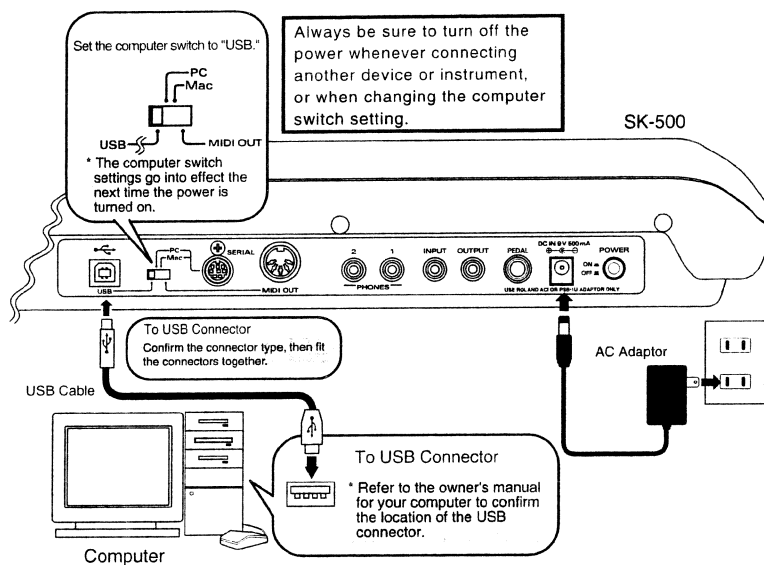
* If you are unable to use the setup even with the SK-500 connected, it may be that some other problem exists. Refer to Troubleshooting (p. 84).

7

Set the SK-500's computer switch to "USB."

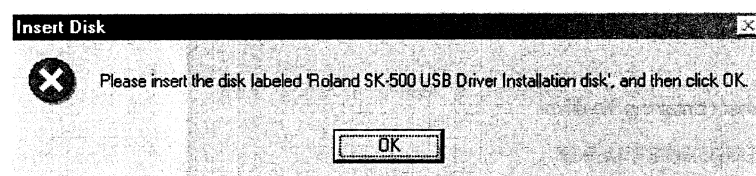
Installing the USB MIDI Driver In Windows 98

- 8** Connect the SK-500 and the computer with a USB cable.



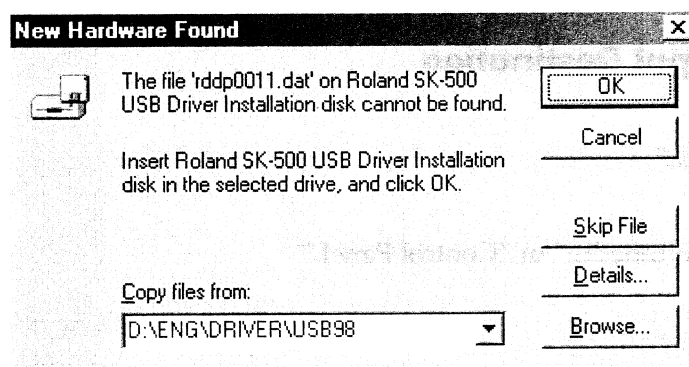
- 9** Turn on the SK-500's power.

- 10** The "Insert Disk" dialog box may appear. If it does, click "OK."



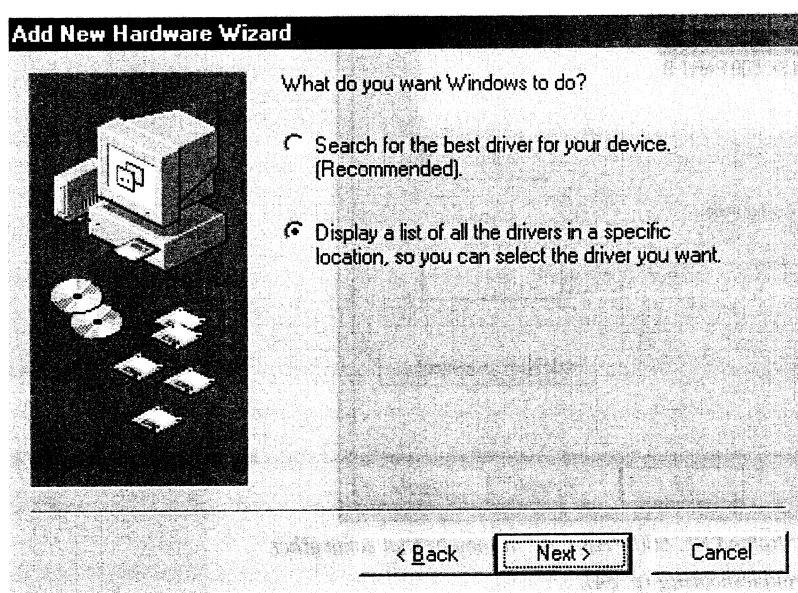
11

After the "New Hardware Found" dialog box appears, enter the name of the folder indicated in the "SETUPINF" dialog box (p. 17 Step 6) in the "Copy files from" box and click "OK."



- * If you happen to close the "SETUPINF" dialog box, enter the driver's folder name in the "Copy files from" box and click the "OK" button. Alternatively, click the "Browse" button and when the "Open" dialog box appears, go to the folder containing the drive and click the "OK" button.
- * If this dialog box does not appear, refer to **The dialog box prompting you to insert the disk does not appear during "Installing the USB MIDI Driver In Windows 98"** (p. 87).
- * If the following dialog appears, click "Cancel" and when the "SETUPINF" dialog is displayed, click "OK."

Afterwards, restart your computer and reinstall starting from Step 1.



12 Click the “SETUPINF” “OK” button and close the dialog.

* Refer to the section **Setting the MIDI Output Destination** which follows to make the settings allowing you to use the SK-500 from your computer. You will not be able to use the SK-500 without making these settings.

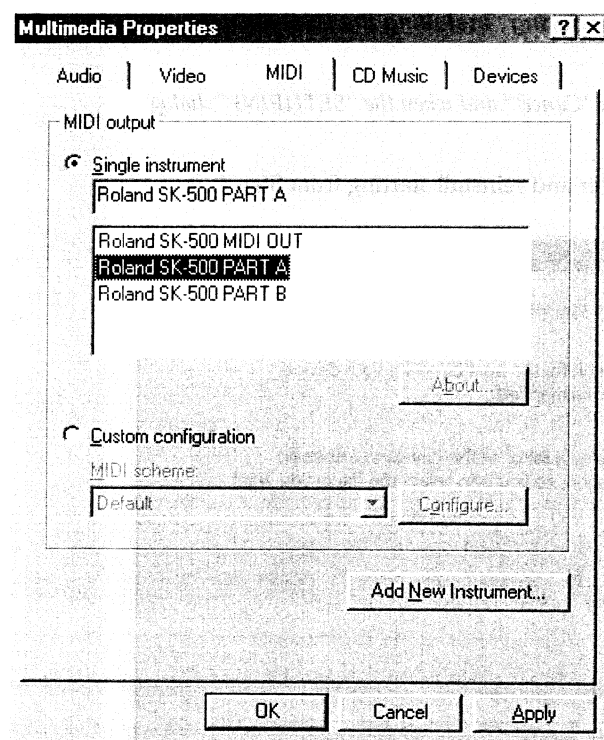
Setting the MIDI Output Destination

1 Open “Control Panel.”

2 Double-click on “Multimedia” in “Control Panel.”



3 Click on the “MIDI” tab and select “Roland SK-500 PART A” in the “MIDI output” box.



* If you are unable to select “Roland SK-500 PART A,” it may be that some other problem exists. Refer to Troubleshooting (p. 84).

4 Click the "OK" button.

This completes the setting of the MIDI data output destination.

To confirm that sound is being output, from the Windows Start button select "Program" - "Accessories" - "Entertainment" and start up Windows Media Player or Media Player, select a MIDI file, try playing it back.

Uninstalling the USB MIDI Driver

If you do not install the driver according to the procedures given, the SK-500 may not be properly recognized by the computer. In such cases, use the following method to uninstall the driver, then reinstall the driver using the procedures described on p. 16.

- 1 Disconnect all USB cables from the computer (except for the keyboard and mouse), and start up Windows.
- 2 Set the SK-500's computer switch to "USB."
- 3 Connect the SK-500 and the computer with a USB cable.
- 4 Turn on the SK-500's power.
- 5 Before uninstalling the driver, quit all applications.
- 6 Open "Control Panel" and double-click on "System."
- 7 Double-click on "Device Manager."
- 8 Double-click on "Sound, video and game controllers" to display the device list.
- 9 Select "Roland SK-500 USB Driver" from the list, then click the "Remove" button.
** If "Roland SK-500 USB Driver" does not appear in the list, see **If You Cannot Install/Uninstall/Use the Driver** (p. 84).*
- 10 In the "Confirm Device Removal" dialog box, click "OK."

- 11** After confirming that "Roland SK-500 USB Driver" does not appear below "Sound, video and game controllers," click "Close."
- 12** Disconnect the USB cable from the SK-500.
- 13** If "Folder Options" appears in the "Start - Preferences" Menu Click "Start" - "Preferences" - "Folder options" and click the "View" tab.
If "Folder Options" appears in the Control Panel
In the Control Panel, double-click "Folder Options" and click the "View" tab.
- 14** In "Advanced settings," uncheck "Hide file extensions for known file types," click "Show all files," and click "OK."
- 15** Start up Explorer, open the "C:\Windows\Inf" folder and select "Rdif0011.inf" if it is in the folder, then right-click and select "Uninstall" from the menu that appears.
** The drive name may vary depending on your computing environment.*
- 16** Open the "C:\Windows\Inf\Other" folder and select "Roland Rdif0011.inf" if it is in the folder, then right-click and select "Uninstall" from the menu that appears.
- 17** Open the "C:\Windows\System" folder and select "Rddp0011.dat," "Rddv0011.driv," "Rdvx0011.vxd," and "Rdwm0011.sys," then right-click and select "Uninstall" from the menu that appears.
- 18** Restart Windows.

Installing Serial MIDI Driver In Windows 95/98

Connect the SK-500 and the computer. You will need the items listed below, so take a moment to remove them from the package before you begin.

- Computer Cable (Sold Separately)
- AC Adaptor
- SK-500 CD-ROM

* Please be sure to read the software license agreement included with the software before opening the SK-500 CD-ROM package.

* The explanations in this chapter refer to Windows98. Screens and menu names in Windows95 may differ.

MEMO

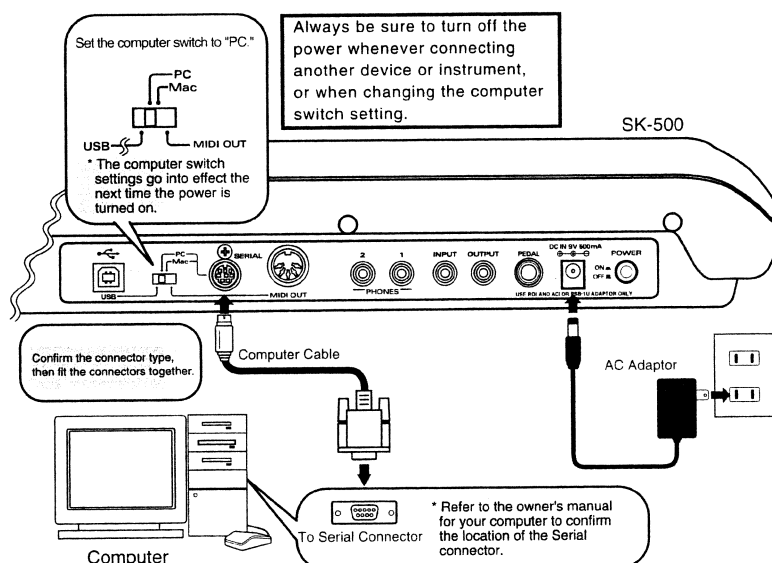
For a diagram of the pin connections on the computer cable's connectors, refer to the Appendix (in PDF format) on the SK-500 CD-ROM.

Connecting the SK-500 and the Computer

- 1 Make sure that power to the computer and all peripheral devices connected to the computer is turned off.
- 2 Set the SK-500's computer switch to "PC."
- 3 Connect the serial cable to the computer's serial port.
- 4 Connect the other end of the serial cable to the SK-500's serial connector.
- 5 Connect the AC Adaptor included with the SK-500 to the SK-500's AC Adaptor socket (AC IN), then plug the power plug of the cable into a power outlet.

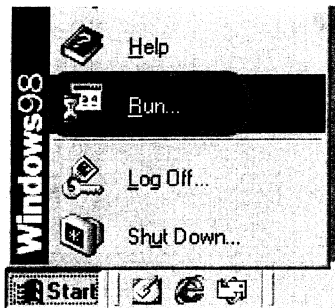
MEMO

On some computers, the serial port is indicated by a "IOIOI" symbol.

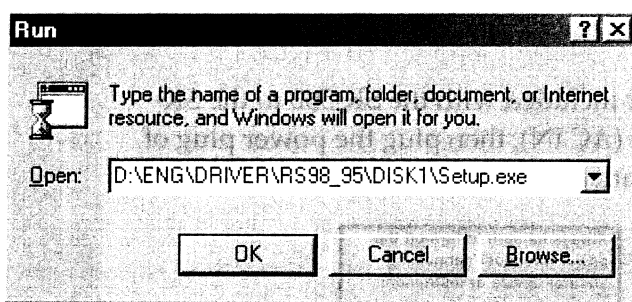


Installing Serial MIDI Driver

- 1** Turn on the computer and start up Windows.
- 2** Place the SK-500 CD-ROM in the CD-ROM drive.
- 3** Click the Windows Start button, and click "Run" from the menu that appears.



- 4** Type "D:\ENG\DRIVER\RS98_95\DISK1\Setup.exe" in the dialog that appears, then click "OK."

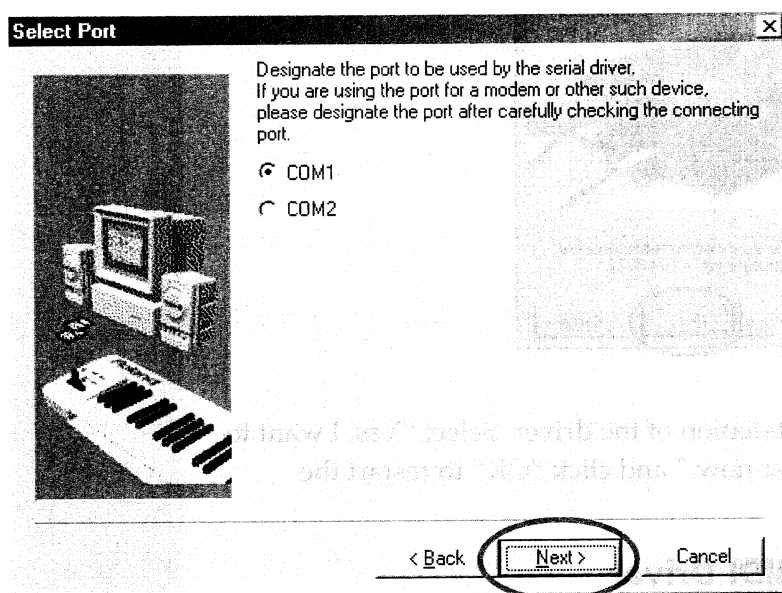


* The drive name that appears may vary depending on your computing environment. Go to the name used for your CD-ROM drive.

- 5** Start up the Installer and after the "Welcome" dialog appears, click on "Next."

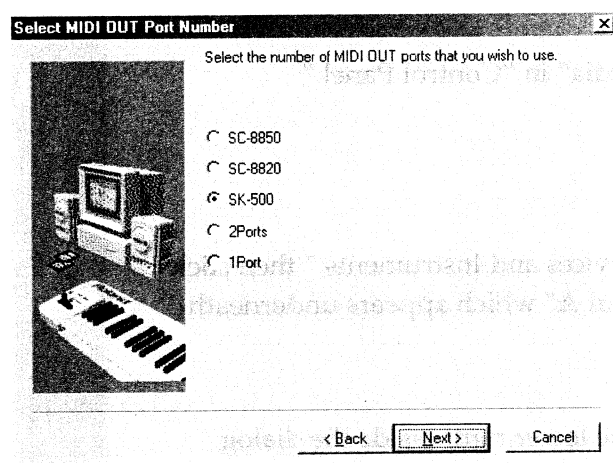
6

In the "Select port" dialog, place a check mark at the name corresponding to the serial port (COM port) to which the instrument is connected and click "Next."



7

Select the MIDI OUT port number in the "Select MIDI OUT Port Number" dialog. Check "SK-500" and click "Next."



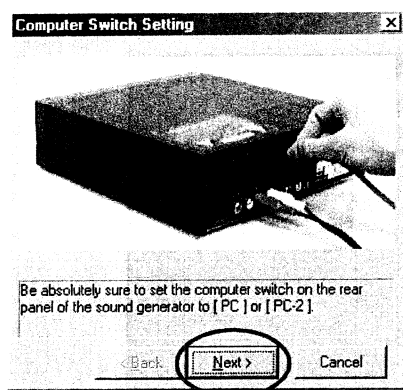
8

When the "Installation information" dialog box appears, verify the contents and click [Next] to proceed to the installation of the driver.

* Click [Back] to change settings.

9

Check the setting in the "Computer Switch Setting" dialog and click "Next."



10

This completes installation of the driver. Select "Yes, I want to restart my computer now." and click "OK" to restart the computer.

How to Set Serial MIDI Driver

Using Serial MIDI Driver requires the correct settings for the computer being used as well as the MIDI sound module connected to the computer. First, use the following procedure to open the Roland Serial MIDI Driver settings dialog.

1

Double-click on "Multimedia" in "Control Panel."

2

Click on "Devices."

3

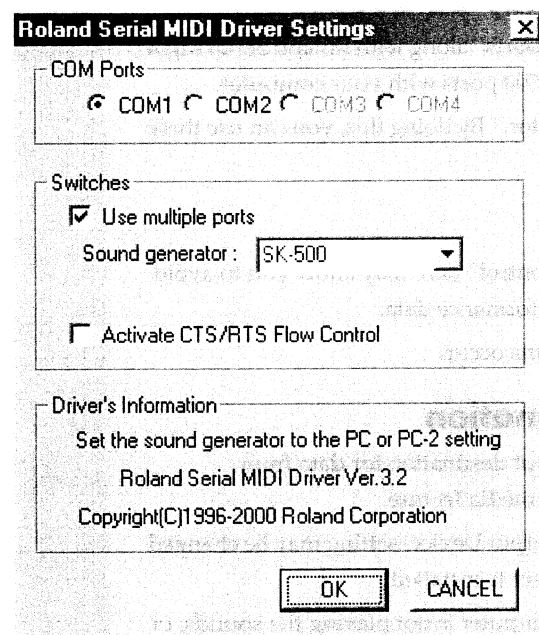
Double-click on "MIDI Devices and Instruments," then click on "Roland Serial MIDI Out A" which appears underneath this.

4

Click on "Properties" at the lower right inside the dialog.

5

In the Roland Serial MIDI Out A Properties dialog, click on [Settings]. The [Roland Serial MIDI Driver Setting] dialog appears; continue by making the following settings.



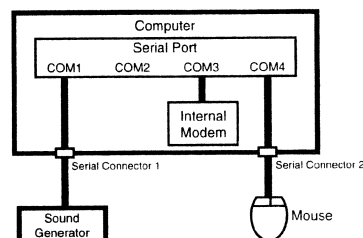
Which Serial Port Should Be Used?

Computers normally may use up to four serial ports (COM1–COM4). In “COM Ports,” select the serial port (COM port) to be used for transmitting data to and from the sound module.

At this time, note the following two points:

- You can only use a serial port that is not in use by another device.
- You must use a serial port compatible with the serial connector of the sound module being connected.

In the example below, COM3 and COM4 are already being used by other devices, and so cannot be used for Serial MIDI Driver. While COM1 and COM2 are not otherwise in use, the serial connector in this case matches that of COM1, so we will want to select COM1.



Refer to your computer owner’s manual or consult the manufacturer to find out which serial ports are compatible with sound modules. Furthermore, due to the computer’s internal connection settings, a serial connector may not be connected to any of the serial ports (COM1–COM4). In this case, follow the instruction in the computer owner’s manual to change the settings.

How Many MIDI OUT Ports May Be Used?

Placing a check mark at "Use multiple ports" along with Roland Serial MIDI Driver allows you to use multiple SK-500 ports with your computer.

Select "SK-500" for the "Sound generator." By doing this, you can use three MIDI OUT ports with your computer.

Controlling the Flow of Data

Checking "Activate CTS/RTS Flow Control" here may allow you to avoid problems with the transmission of performance data.

Uncheck this option unless the problems occur.

Setting the MIDI Output Destination

This setting determines the MIDI output destination for data from applications using the Windows Multimedia feature.

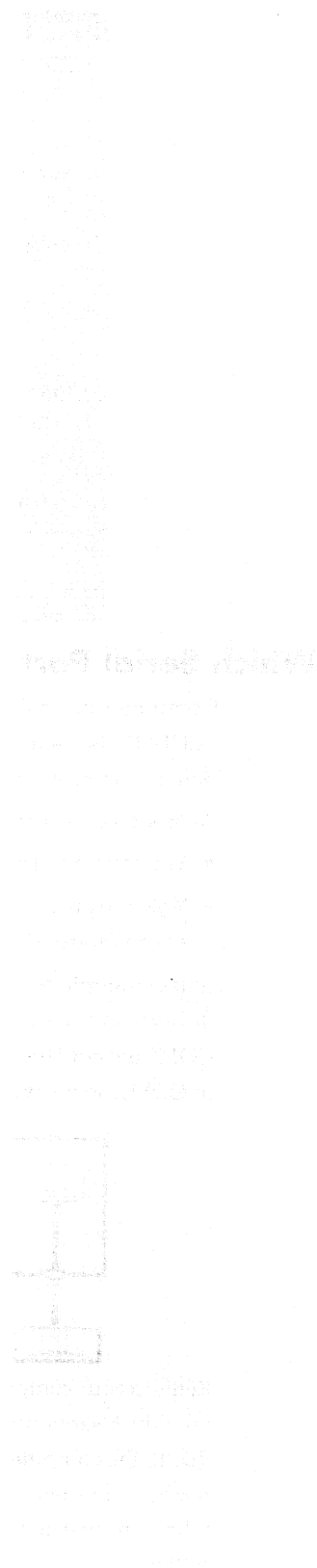
The MIDI output destination (MIDI Output Device) setting may be changed inadvertently when another MIDI driver is installed.

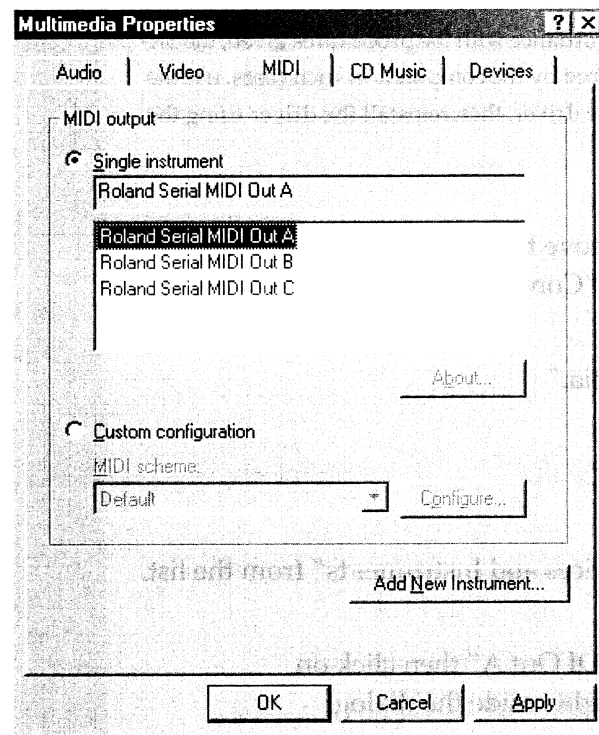
If the MIDI device connected to the computer is not playing the sounds, or if you want to use a different output device, refer to the procedure below to check the MIDI Output Device settings, and reset as required.

- 1** Double-click on "Multimedia" in "Control Panel."
- 2** Click on the "MIDI" tab.
- 3** Select "Roland Serial MIDI Out A" in the "MIDI output" box, then click "OK."

This sets the output destination for the MIDI data.

To confirm that sound is produced, from the Windows Start button select "Program" - "Accessories" - "Entertainment" and start up Windows Media Player or Media Player, select a MIDI file, try playing it back.





When Using the SK-500 With Computer Programs

Select the devices you are using from the following list.

MIDI OUT Device

- | | |
|----------------------------|---------------------------|
| • Roland Serial MIDI Out A | SK-500 Part Group A |
| • Roland Serial MIDI Out B | SK-500 Part Group B |
| • Roland Serial MIDI Out C | SK-500 MIDI OUT Connector |

MIDI IN Device

- | | |
|--------------------------|---|
| • Roland SK-500 (S) | MIDI data from SK-500 Part Groups A and B are input. |
| • Roland SK-500 Keyboard | Performance data from the SK-500's keyboard is input. |

Uninstalling Serial MIDI Driver

If the driver is not installed in accordance with the procedures given, the SK-500 may not be properly recognized by the computer. In such cases, use the following method to uninstall the driver, then reinstall the driver using the procedures described on p. 24.

- 1** Click on the Start button, move the mouse pointer to "Preferences" and click on "Control Panel."
- 2** Double-click on "Multimedia."
- 3** Click on the "Device" tab.
- 4** Double-click on "MIDI Devices and Instruments" from the list.
- 5** Click on "Roland Serial MIDI Out A" then click on "Properties" at the lower right inside the dialog.
- 6** Click on "Uninstall" at the lower right inside this dialog.
A number of confirmation dialogs appear.
Serial MIDI Driver is uninstalled after Windows is restarted.

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Installing the USB MIDI Driver In Windows 2000

* Installation of this driver requires that an Administrator or other authorized user log on to Windows. For more details, consult your computer system administrator.

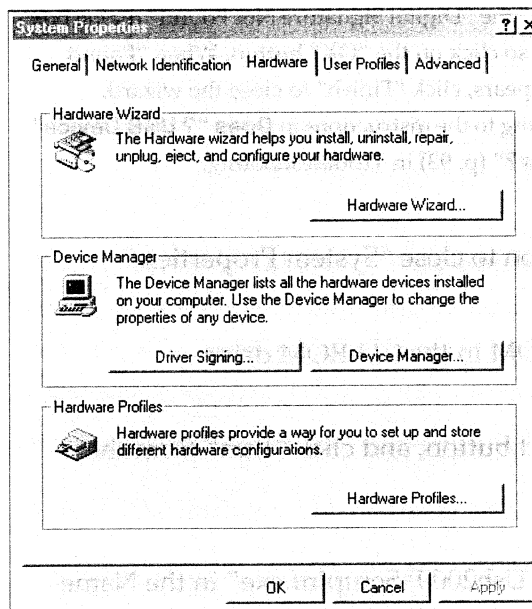
Connect the SK-500 and the computer. You will need the items listed below, so take a moment to remove them from the package before you begin.

- USB Cable
- AC Adaptor
- SK-500 CD-ROM

* Please be sure to read the software license agreement included with the software before opening the SK-500 CD-ROM package.

Installing the USB MIDI Driver

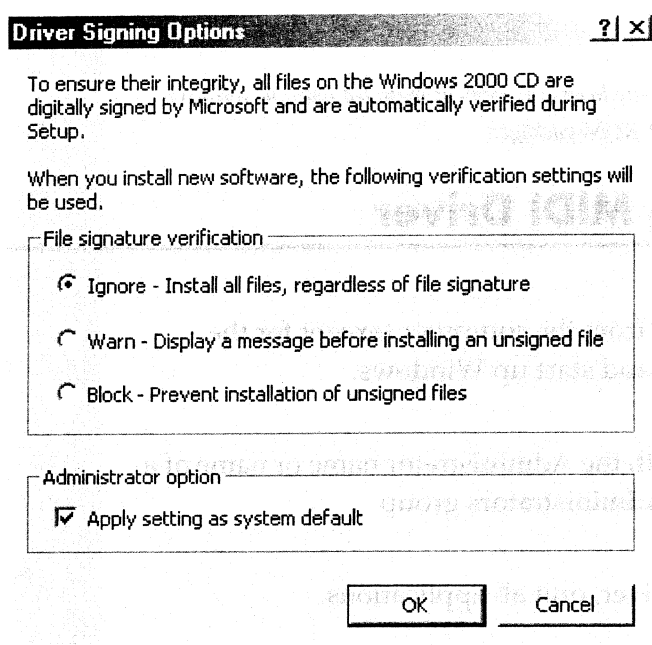
- 1** Remove all USB cables from the computer (except for the keyboard and mouse), and start up Windows.
- 2** Log on to Windows with the Administrator name or name of a user belonging to the Administrators group.
- 3** Before installing the driver, quit all applications.
- 4** Open "Control Panel" and double-click on "System."
- 5** Click on the "Hardware" tab, then click on [Driver Signing].



The "Driver Signing Options" dialog box appears.

6

Confirm that the "File signature verification" setting is set to "Ignore." If set to "Ignore," click on the "OK" button. If not set to "Ignore," note the current settings, change this setting to "Ignore," then click on the "OK" button.



* Note Regarding the "File signature verification" Setting

When the "File signature verification" settings remains at "Warn," although the "Digital Signature Not Found" dialog box appears during installation, click on "Yes" to proceed with the installation. If the "File signature verification" is set to "Block," the "Digital Signature Not Found" dialog box appears during installation, so click on the "OK" button. When "Found New Hardware Wizard" appears, click "Finish" to close the wizard. Afterwards, reinstall according to the instructions in **Does "? USB Device" appear in "Device Manager?"** (p. 93) in Troubleshooting.

7

Click on the "OK" button to close "System Properties."

8

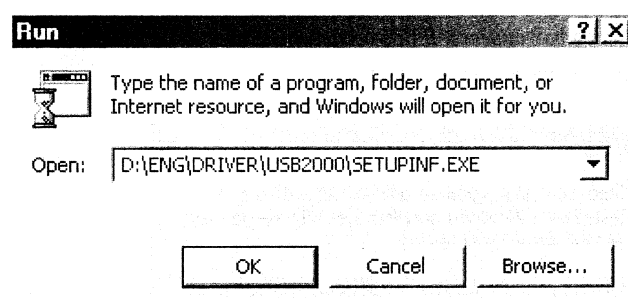
Place the SK-500 CD-ROM in the CD-ROM drive.

9

Click the Windows Start button, and click "Run" from the menu that appears.

10

Type "D:\Eng\Driver\Usb2000\Setupinf.exe" in the Name box of the dialog that appears, then click the "OK" button.



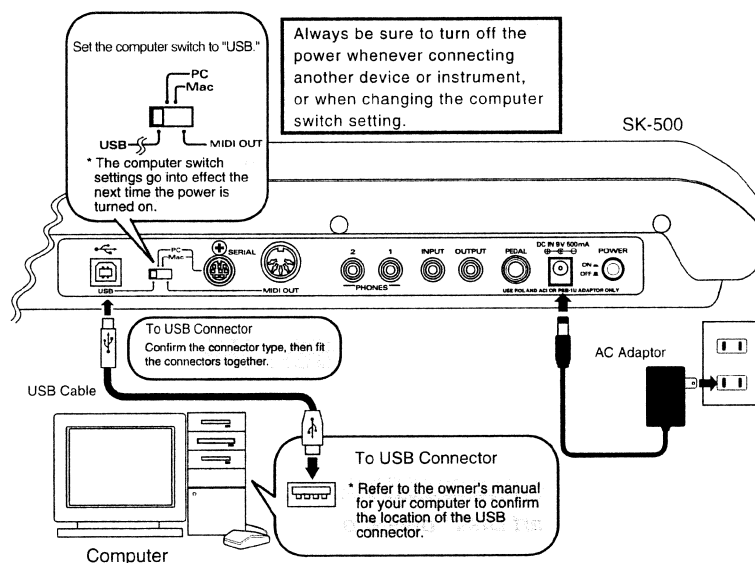
* The drive name that appears may vary depending on your computing environment. Go to the name used for your CD-ROM drive.

11

The "SETUPINF" dialog box appears.

Set the SK-500's computer switch to "USB."

Connect the SK-500 and the computer with a USB cable and turn the SK-500's [POWER] switch to "ON."



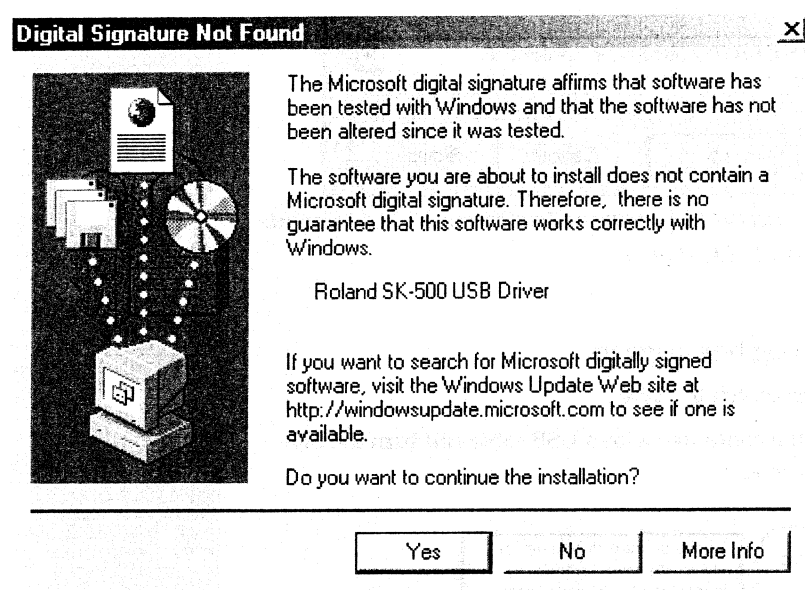
* If the message "The driver is already installed. -" appears, you can then use the setup after connecting the SK-500 to the computer.

If you are unable to use the setup even with the SK-500 connected, it may be that some other problem exists. Refer to Troubleshooting.

Refer to **If You Cannot Install/Uninstall/Use the Driver** (p. 92) when reinstalling or updating the driver.

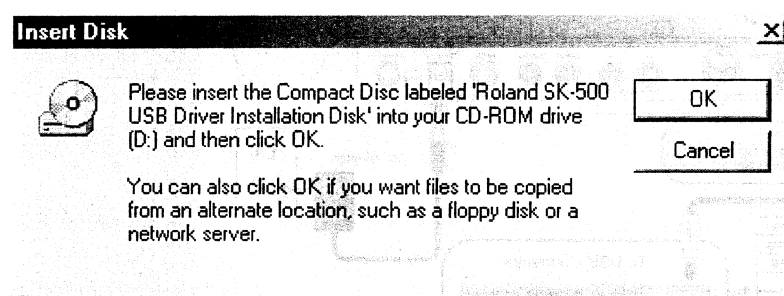
Installing the USB MIDI Driver In Windows 2000

* If the "File signature verification" setting in Step 6 above is not set to "Ignore," the "Digital Signature Not Found" dialog box appears. If this occurs, then refer to the notes in Step 6 and take the appropriate measures to continue.



12

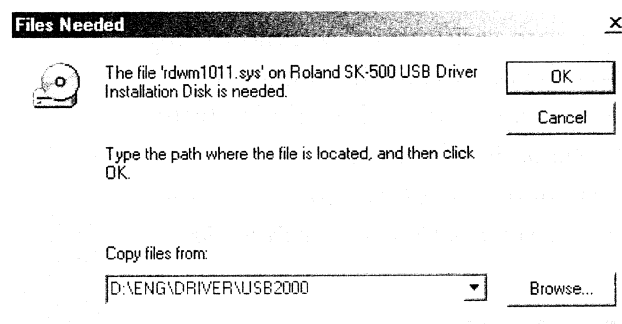
The "Insert Disk" dialog box appears; click the "OK" button.



* If this dialog box does not appear, see **The "Insert Disk" dialog box does not appear in "Installing the USB MIDI Driver"** (p. 95).

13

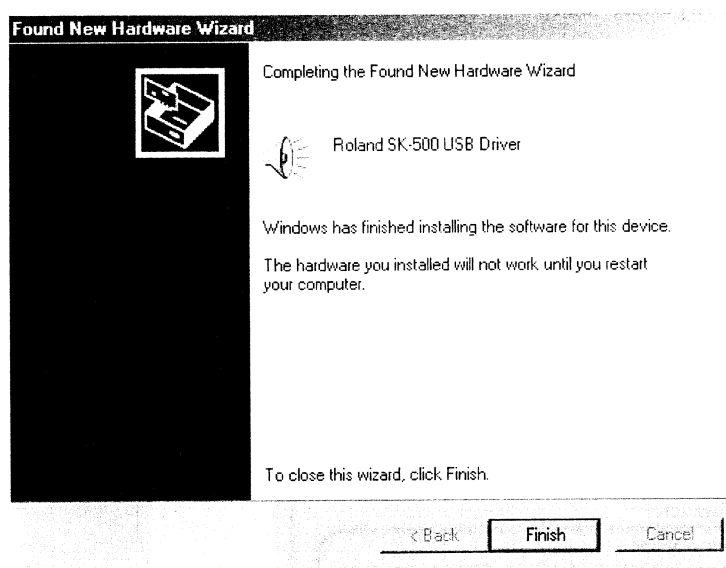
The "File Needed" dialog box appears; type "D:\Eng\Driver\Usb2000" and click on the "OK" button.



* The drive name that appears may vary depending on your computing environment. Go to the name used for your CD-ROM drive.

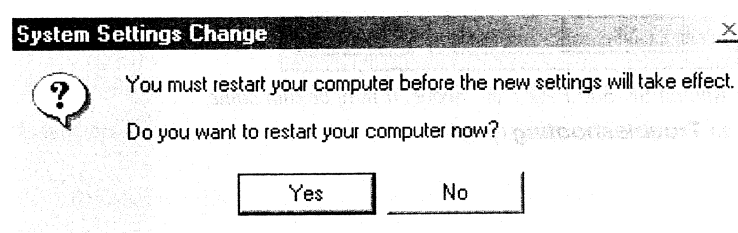
14

When "Found New Hardware Wizard" appears, confirm that "Roland SK-500 USB Driver" is selected, then click on the "Finish" button.



15

The "System Settings Change" dialog box appears; click on the "Yes" button and restart Windows.



16

If you changed the “File signature verification” settings in Step 6, restore the settings to those before any such changes were made. Changing these settings requires that the Administrator or other authorized user to log on to Windows.

* Refer to “Setting the MIDI Output Destination” to make the settings allowing you to use the SK-500 from your computer. You will not be able to use the SK-500 without making these settings.

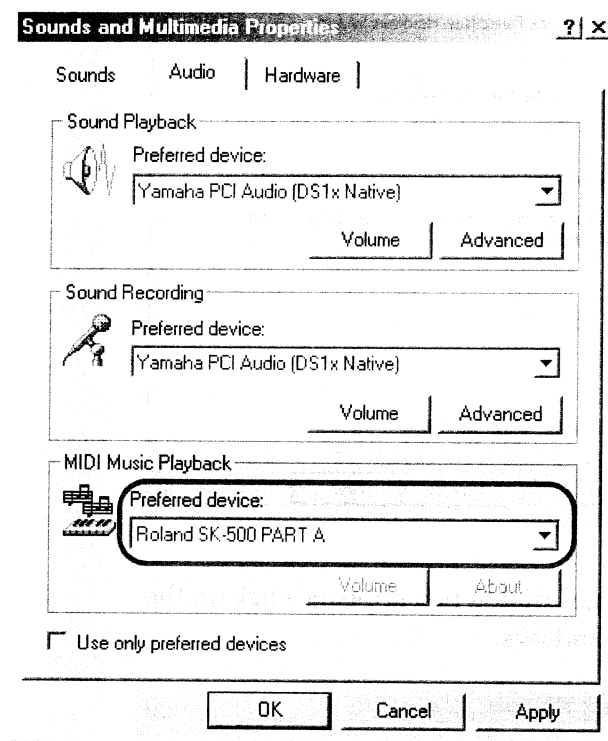
Setting the MIDI Output Destination

1

Double-click on the “Sounds and Multimedia” tab in “Control Panel.”

2

Click on the “Audio” tab and select “Roland SK-500 PART A” in the “MIDI Music Playback” box.



* If you are unable to select “Roland SK-500 PART A” above, it may be that some other problem exists. Refer to **Troubleshooting** (p. 84).

- 3** Click the "OK" button to close "Sound and Multimedia Properties."

This completes the settings.

To confirm that sound is being output, from the Windows Start button select "Programs" - "Accessories" - "Entertainment" and start up Windows Media Player or Media Player, select a MIDI file, try playing it back.

Uninstalling the Windows 2000 USB MIDI Driver

If the driver is not installed in accordance with the procedures given, the SK-500 may not be properly recognized by the computer. In such cases, use the following method to uninstall the driver, then reinstall the driver using the procedures described on p. 31.

Uninstalling this driver requires that an Administrator or other authorized user log on to Windows. For more details, consult your computer system administrator.

- 1** Remove all USB cables from the computer (except for the keyboard and mouse), and start up Windows.
- 2** Log on to Windows with the Administrator name or name of a user belonging to the Administrators group.
- 3** Set the SK-500's computer switch to "USB."
- 4** Connect the SK-500 and the computer with a USB cable.
- 5** Turn the SK-500's [POWER] switch to "ON."
- 6** Before uninstalling the driver, quit all applications.
- 7** Open "Control Panel" and double-click on "System."
- 8** Click on the "Hardware" tab and click on the "Device Manager" button in the "Device Manager" box.
- 9** Double-click on "Sound, video and game controllers" to display the device list.

- 10** Click to select “Roland SK-500 USB Driver” from the list, then right-click and select “Uninstall” from the menu that appears.

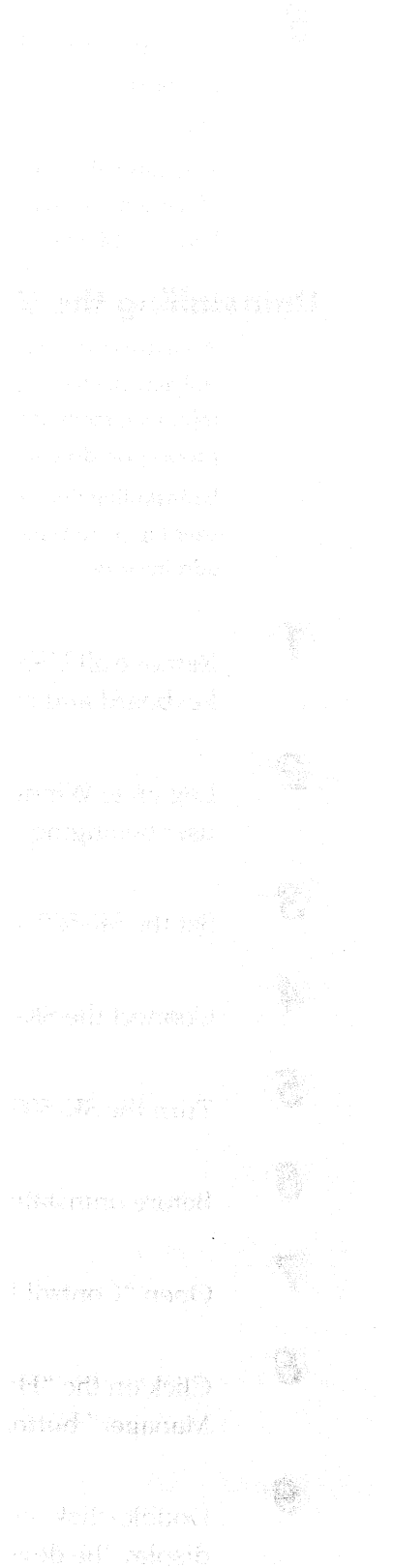
* If “Roland SK-500 USB Driver” does not appear in the list, see **If You Cannot Install/Uninstall/Use the Driver** (p. 92).

- 11** The “Confirm Device Removal” dialog box appears. After confirming that “Roland SK-500 USB Driver” appears in the dialog box, click “OK.”

- 12** Close “Device Manager” and click on the “OK” button in “System Properties.”

- 13** Disconnect the USB cable from the SK-500.

- 14** Restart Windows.



Installing the Windows 2000 Serial MIDI Driver

* Installation of this driver requires that an Administrator or other authorized user log on to Windows. For more details, consult your computer system administrator.

Connect the SK-500 and the computer. You will need the items listed below, so take a moment to remove them from the package before you begin.

- Computer Cable (Sold Separately)
- AC Adaptor
- SK-500 CD-ROM

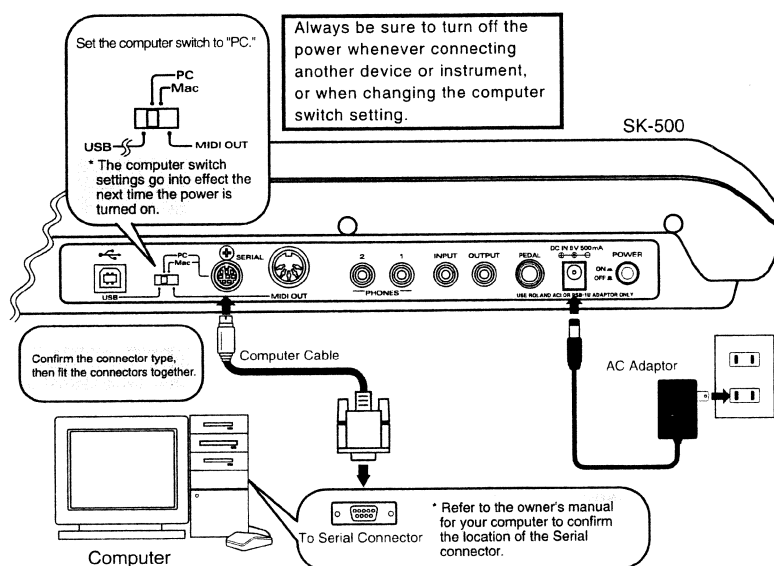
* Please be sure to read the software license agreement included with the software before opening the SK-500 CD-ROM package.

MEMO

For a diagram of the pin connections on the computer cable's connectors, refer to the SK-500 data (in PDF format) on the CD-ROM.

Connecting the SK-500 and the Computer

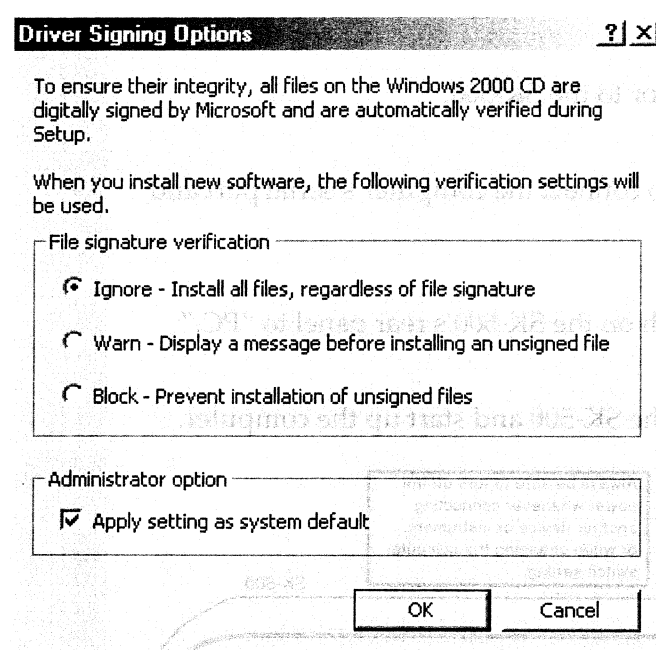
- 1 Make sure that power to the SK-500 and the computer is turned off.
- 2 Connect the AC Adaptor to the SK-500.
- 3 Use a computer cable to connect the computer's serial port and the SK-500.
- 4 Set the computer switch on the SK-500's rear panel to "PC."
- 5 Turn on the power to the SK-500 and start up the computer.



Installing Serial MIDI Driver

* Installation of this driver requires that an Administrator or other authorized user log on to Windows. For more details, consult your computer system administrator.

- 1 Open the Control Panel and double-click on "System."
- 2 Click on the "Hardware" tab, then click on the "Driver Signing" button.
The "Driver Signing Options" dialog box appears.
- 3 Confirm that the "File signature verification" setting is set to "Ignore" and click on the "OK" button.



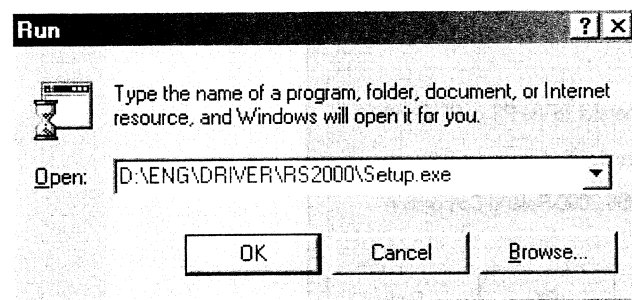
* *Notes Regarding the "File signature verification" Setting*

When the "File signature verification" settings remains at "Warn," although the "Digital Signature Not Found" dialog box appears during installation, click on "Yes" to proceed with the installation.

* If the "File signature verification" is set to "Block," the "Digital Signature Not Found" dialog box appears during installation, so the installation cannot continue. First, click on the "OK" button to cancel installation, then change the "File signature verification" settings, and reinstall.

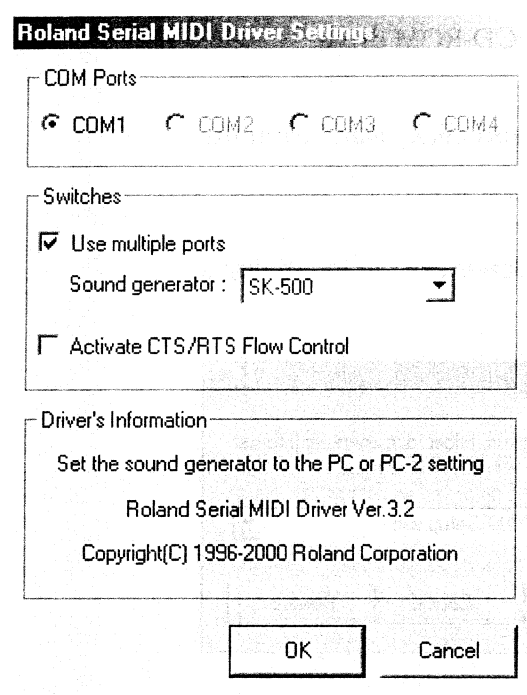
- 4 Click on the "OK" button to close "System Properties."

- 5 Place the SK-500 CD-ROM in the CD-ROM drive.
- 6 Click the Windows Start button, and click "Run" from the menu that appears.
- 7 Type "D:\Eng\Driver\RS2000\Setup.exe" in the dialog's name box, then click "OK."



- 8 Follow the instructions on the screen to carry out the installation.
- 9 If the "Roland Serial MIDI Driver Settings" dialog box appears, make settings for "COM Ports," "Use multiple ports," and "Activate CTS/RTS Flow Control." Refer to the following when making the settings.

Installing the Windows 2000 Serial MIDI Driver



- **COM Ports**
Selects the COM port to be used with the serial connector (RS-232C connector) of the computer connected to the sound module.
- **Use multiple ports**
When using a sound module that support multiple ports, such as Roland's SC-88, SC-88Pro, SC-8850, SC-8820, or SK-500, placing a check in this check box allows you to use multiple MIDI ports with a single computer cable.
- **Sound generator**
When "Use multiple ports" is checked, you can then select the sound modules to be used; here, select the SK-500.
- **Activate CTS/RTS Flow Control**
Placing a check in this check box may allow you to avoid problems with the transmission of performance data. Normally, use the setup with this box unchecked.

10 When "Restart your computer" appears, select "Yes, I want to restart my computer now," and click on the "OK" button.

11 If the "File signature verification" settings were changed in Step 3, restore the settings in effect before the changes were made after restarting. Changing these settings requires that the Administrator or other authorized user to log on to Windows.

Setting the MIDI Output Destination

When Using Windows Media Player

- 1** Double-click on the "Sound and Multimedia" tab in "Control Panel."
- 2** Click on the "Audio" tab and select "Roland SK-500 PART A" in the "MIDI Music Playback" box.
- 3** Click the "OK" button to close "Sound and Multimedia Properties." This completes the settings.
To confirm that sound is being output, start up Windows Media Player, select a MIDI file, try playing it back.

Uninstalling the Windows 2000 Serial MIDI Driver

If the driver is not installed in accordance with the procedures given, the SK-500 may not be properly recognized by the computer. In such cases, use the following method to uninstall the driver, then reinstall the driver using the procedures described on p. 37.

Uninstalling this driver requires that an Administrator or other authorized user log on to Windows. For more details, consult your computer system administrator.

- 1** Quit all applications using the serial MIDI port.
- 2** Open the Control Panel and double-click on "System."
- 3** Click on the "Hardware" tab and click on the "Device Manager" button in the "Device Manager" box.
- 4** Double-click on "Sound, video and game controllers."
- 5** Double-click on "Roland Serial MIDI Driver" and open the Properties.
- 6** Click on "Driver," then click the "Uninstall" button.
The "Confirm Device Removal" dialog box appears; click the "OK" button.
- 7** Close "Device Manager" and click on the "OK" button in "System Properties."
- 8** Restart Windows.

Installing OMS and USB MIDI Driver on Macintosh

Connecting the SK-500 and the Macintosh

You can easily connect the SK-500's USB connector and a Macintosh's USB port with a single USB cable. You will need the following:

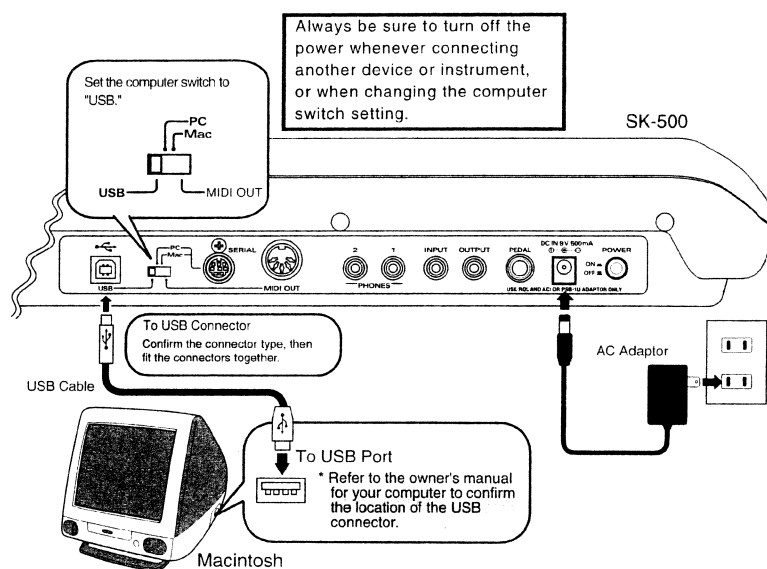
- The SK-500
- USB cable
- AC adaptor

Referring to the connection diagram below, use the following procedure to connect the devices.

1 Make sure that power to the Macintosh and all connected peripheral devices is turned off.

2 Set the SK-500's computer switch to "USB." Connect the included AC Adaptor.

(Leave the [POWER] switch in the OFF position.)



NOTE
The computer switch settings go into effect when the power is turned on. If you have changed the settings with the power on, then turn the power off for a moment, and then back on again.

3 Connect the USB cable to the Macintosh's USB port. Proceed by connecting the other end of the cable to the SK-500's USB connector.

4 After turning on the power for the connected peripheral devices, turn on the Macintosh's power.

When you turn on the SK-500, the following messages appear, but as the driver (software) required by the sound module will be installed afterwards from the included CD-ROM, use the procedures described below in response to each of the messages that come up.

When the message “Drivers needed for the USB device ‘Unnamed Device’ are not available. Would you like to look for these drivers over the Internet?” appears:

-> Click [Cancel].

When the message “The software needed to use the USB device ‘Unknown Device’ cannot be found. Please refer to the device documentation to install the necessary software.” appears:

-> Click [OK].

Installing the MIDI Driver (OMS)

Install the MIDI Driver (OMS) on the Macintosh. Place the SK-500 CD-ROM in the CD-ROM drive.

1

On the SK-500 CD-ROM, open “English” - “OMS” - “OMS2.3.8” and double-click on the “Install OMS 2.3.8” icon in the folder.

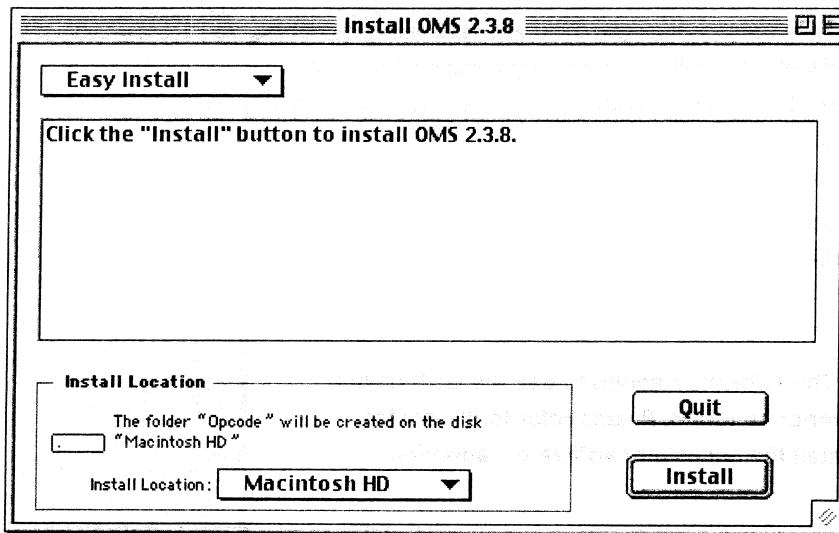


Install OMS 2.3.8

2

Confirm the location where the driver is to be installed, then click on [Install].

Installing OMS and USB MIDI Driver on Macintosh

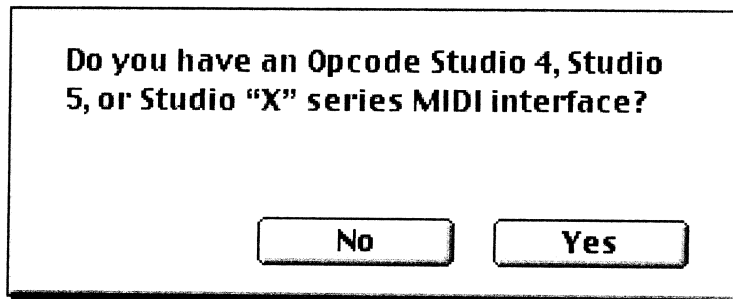


NOTE

The manner in which the location of the installed software is displayed may vary depending on your computing environment. Check to make sure that the startup drive with the system currently running is selected.

3

The following dialog appears. If you have Opcode Studio 4 or 5, or the X Series MIDI Interface, click [Yes]. Otherwise, click [No] to proceed.



NOTE

Although an error dialog may appear when the installation of OMS is finished, OMS is installed without any problems, so click "OK" in the dialog and select "Quit" from the OMS Installer "File" menu. Following this, restart the Macintosh.

4

When you have finished the installation, a dialog appears. Click [Restart] to restart your Macintosh.

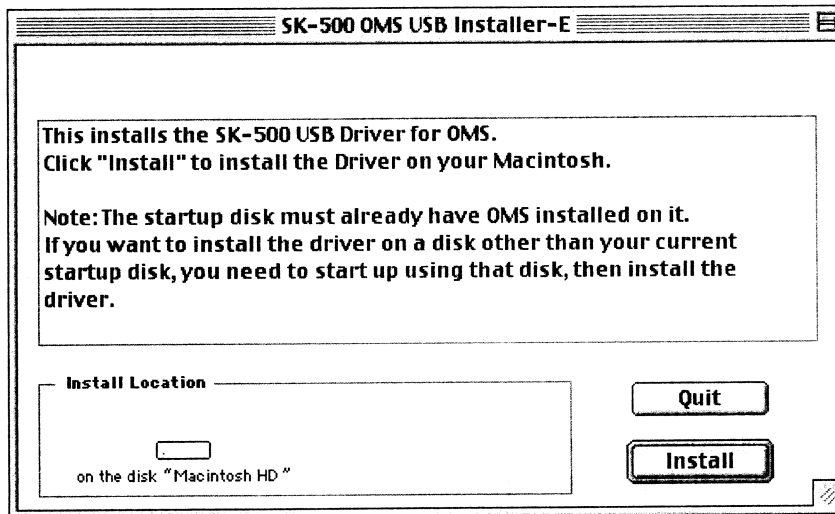
Installing the SK-500 Driver

- 1 On the SK-500 CD-ROM, open "English" - "OMS" and double-click on the "SK-500 OMS USB Installer-E" icon in the folder.

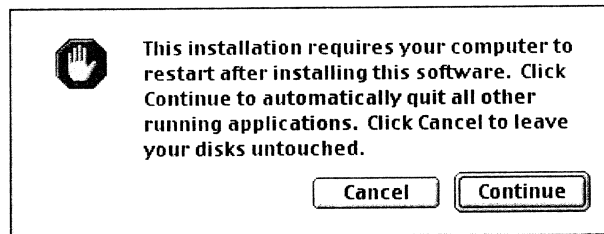


SK-500 OMS USB Installer-E

- 2 Confirm that OMS has been installed where you are going to install the SK-500 driver, then click "Install."



- 3 If the message below appears, click "Continue" to click open applications and proceed with the installation.



- 4 A dialog with the message "Installation was successful. --" appears. Click on "Restart" to restart Macintosh.



Although an error dialog may appear when the installation of OMS is finished, OMS is installed without any problems, so click "OK" in the dialog and select "Quit" from the OMS Installer "File" menu. Following this, restart the Macintosh.

Installing OMS and USB MIDI Driver on Macintosh

- 5 Press the [POWER] switch on the SK-500's rear panel to the ON position to turn on the power.

Setting OMS

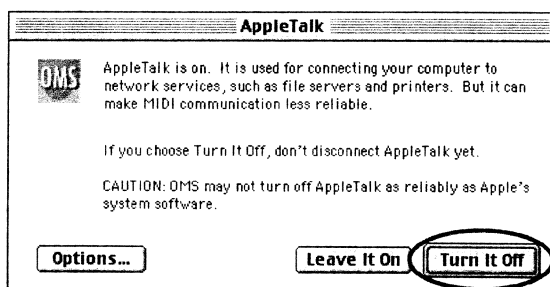
- 1 On the SK-500 CD-ROM, open "English" - "OMS" and drag the "Settings" folder to the Macintosh's hard disk to copy the folder.



- 2 Go to where OMS has been installed, open "Opcode," and then double-click on "OMS Setup" found in the "OMS Applications" folder.

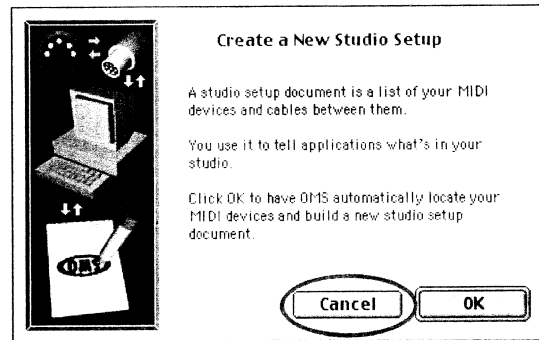


- 3 If a dialog like the following appears, click on "Turn If Off," and although a confirmation dialog appears, just click "OK."



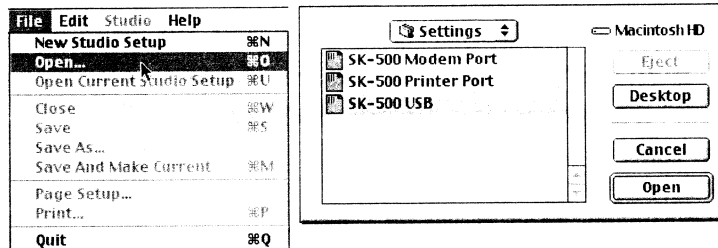
4

In the "Create a New Studio Setup" dialog, click on "Cancel."

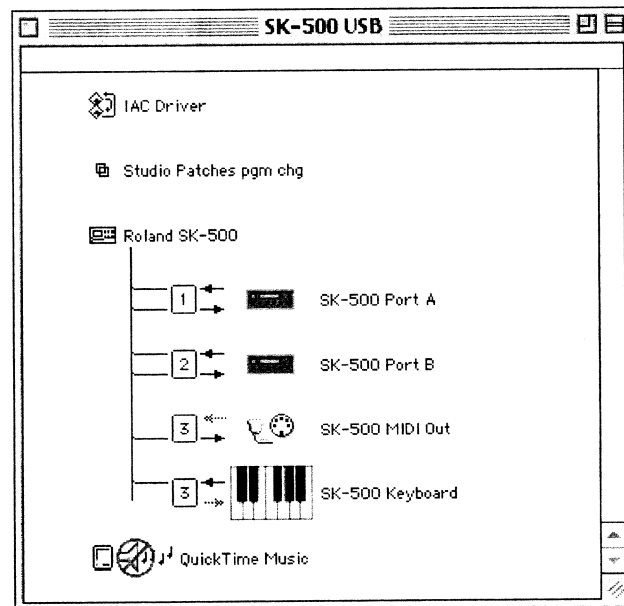


5

Select "Open" from the "File" menu, select the "SK-500 USB" file in the "Settings" folder copied in Step 1, then click on [Close].



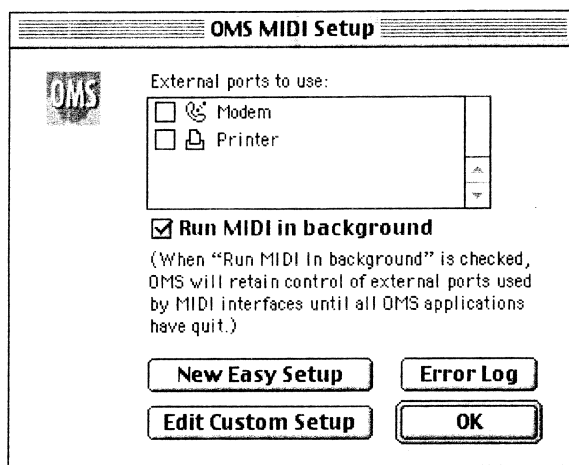
The following screen appears.



Installing OMS and USB MIDI Driver on Macintosh

6

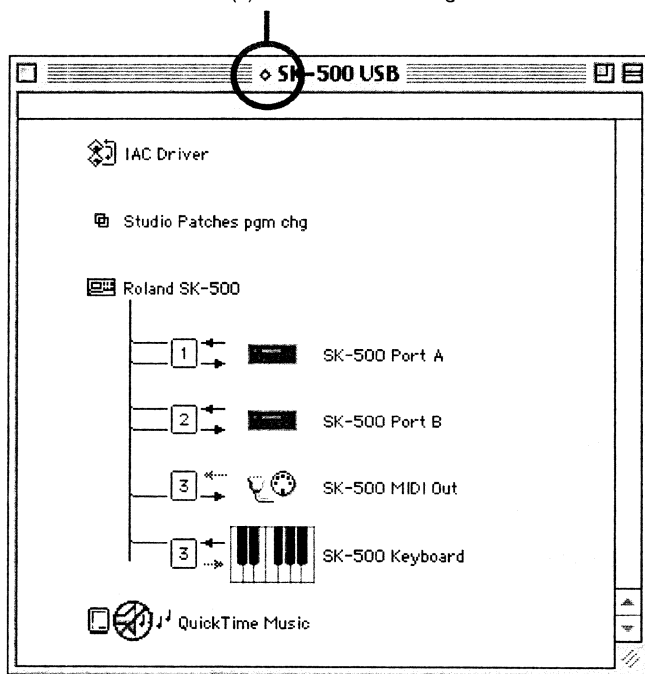
Select "OMS MIDI Setup" from the "Edit" menu, check "Run MIDI in background" in the "OMS MIDI Setup" dialog, then click "OK."



7

Select "Make Current" from the "File" menu. If you are unable to select "Make Current," it is because it is already in effect, so you may just leave it at that.

A diamond mark (◊) indicates the settings are enabled.

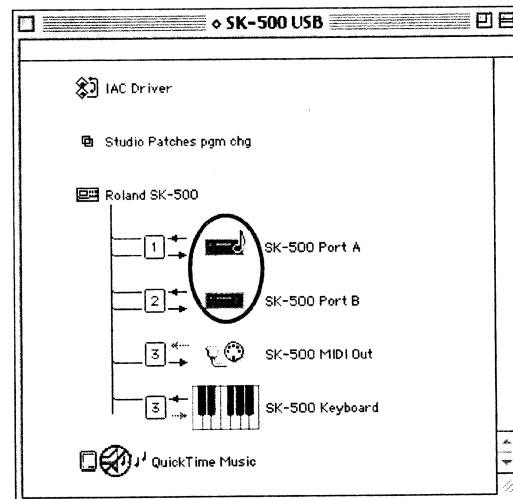


8

To confirm that MIDI transmission is working properly, select "Test Studio" from the "Studio" menu.



When the mouse cursor approaches the sound module icon, it changes to a note shape (♪); move the cursor over the sound module icons with circle marks in the figure below. If sounds from the SK-500 are being played, the settings are correct. If MIDI is not being transmitted, you will hear the alert sound from the Macintosh.



Then, press any key on the keyboard. If you hear the message "MIDI Receive," it means that the settings are appropriate.

After confirming that MIDI transmission is working properly, select "Test Studio" from the "Studio" menu again and return the mouse cursor to the arrow shape.

9

Select "Quit" from the "File" menu to quit "OMS Setup."

If the AppleTalk confirmation dialog appears, click "OK" to close the dialog. The settings made up to this point complete the connection of the SK-500 and the Macintosh and the installation of setting of the MIDI driver. You are now ready to input and output (record and play back) MIDI data.

Proceed to the **Installing GS Advanced Editor** (p. 61).

MEMO

If sounds from the SK-500 do not play, refer to "Problems With the OMS Settings" in **Troubleshooting** (p. 84).

NOTE

Although a confirmation dialog box appears when you quit OMS, at this point just click [OK].

Installing OMS and Serial MIDI Driver on Macintosh

Connecting the SK-500 and the Macintosh

You can easily connect the SK-500's Serial connector and a Macintosh's modem port or printer port with a single cable. You will need the following.

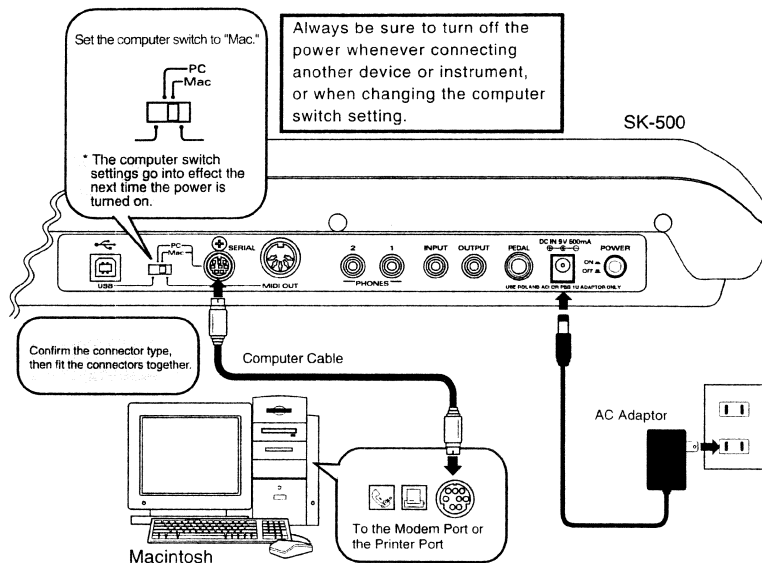
- SK-500
- Computer cable
- AC Adaptor

Referring to the connection diagram below, use the following procedure to connect the devices.



The computer switch settings go into effect when the power is turned on. If you have changed the settings with the power on, then turn the power off for a moment and then back on again.

- 1 Make sure that power to the Macintosh and all connected peripheral devices is turned off.
- 2 Set the SK-500's computer switch to "Mac." Connect the included AC Adaptor.
- 3 Connect the computer cable to the Macintosh's modem port or printer port. Follow this by connecting the other end of the cable to the SK-500's serial connector.
- 4 Connect the AC Adaptor to the SK-500's DC IN jack.



- 5 Press the SK-500's [POWER] switch to turn on the power. Then after turning on the power for the connected peripheral devices, turn on the Macintosh's power.

Installing the MIDI Driver (OMS)

Install the MIDI Driver (OMS) on the Macintosh. Place the SK-500 CD-ROM in the CD-ROM drive.

1

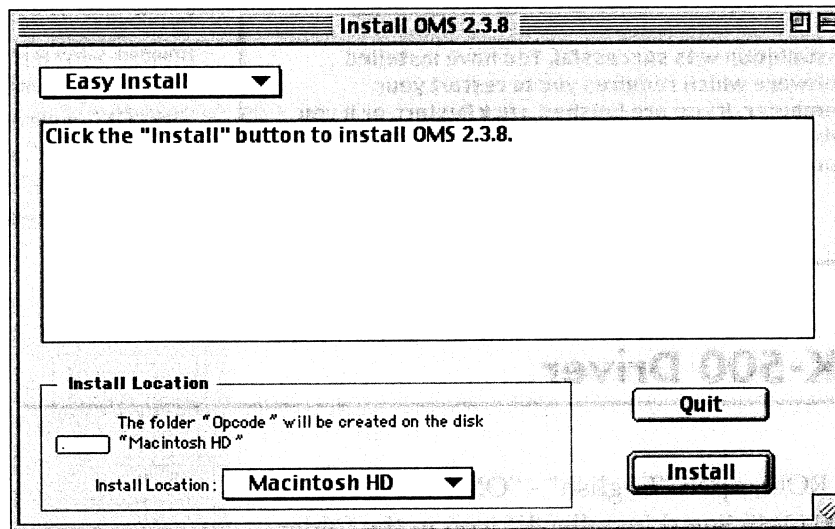
On the SK-500 CD-ROM, open "English" - "OMS" - "OMS2.3.8" and double-click on the "Install OMS 2.3.8" icon in the folder.



Install OMS 2.3.8

2

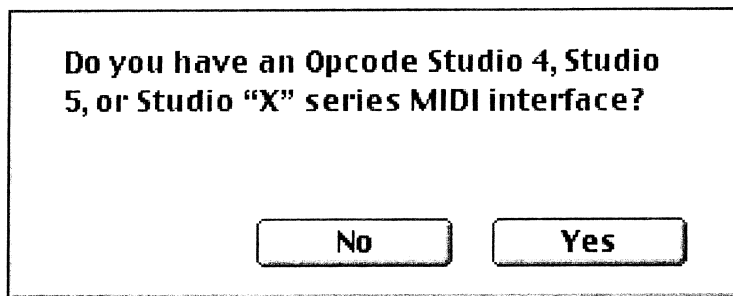
Confirm the location where the driver is to be installed, then click on [Install].



Installing OMS and Serial MIDI Driver on Macintosh

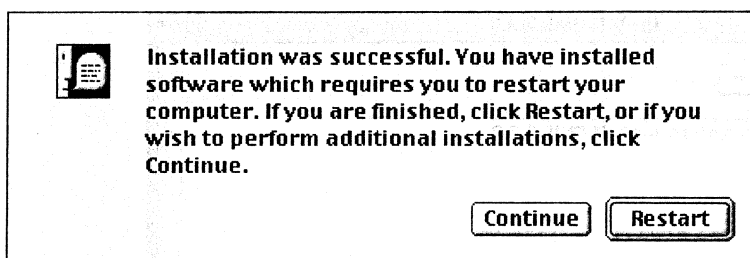
3

The following dialog appears. If you have Opcode Studio 4 or 5, or the X Series MIDI Interface, click [Yes]. Otherwise, click [No] to proceed.



4

When you have finished the installation a dialog appears. Click [Restart] to restart your Macintosh.



NOTE

Although an error dialog may appear when the installation of OMS is finished, OMS is installed without any problems, so click "OK" in the dialog and select "Quit" from the OMS Installer "File" menu. Following this, restart the Macintosh.

Installing the SK-500 Driver

1

On the SK-500 CD-ROM, open "English" - "OMS" and double-click on the "SK-500 OMS Serial Installer-E" icon in the folder.



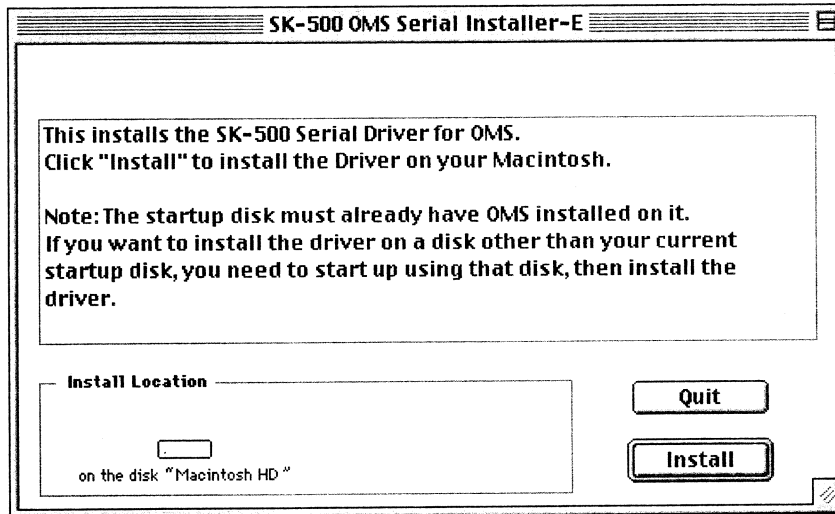
SK-500 OMS Serial Installer-E

2

Confirm that OMS has been installed where you are going to install the SK-500 driver, then click "Install."

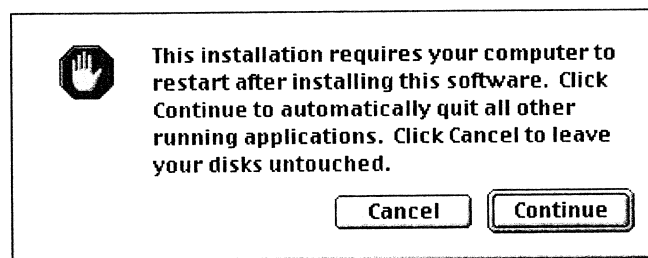


The manner in which the location of the installed software is displayed may vary depending on your computing environment. Check to make sure that the startup drive with the system currently running is selected.



3

If the message below appears, click "Continue" to click open applications and proceed with the installation.



4

A dialog with the message "Installation was successful. –" appears. Click on "Restart" to restart Macintosh.

Setting OMS

1

On the SK-500 CD-ROM, open "English" - "OMS" and drag the "Settings" folder to the Macintosh's hard disk to copy to the hard disk.



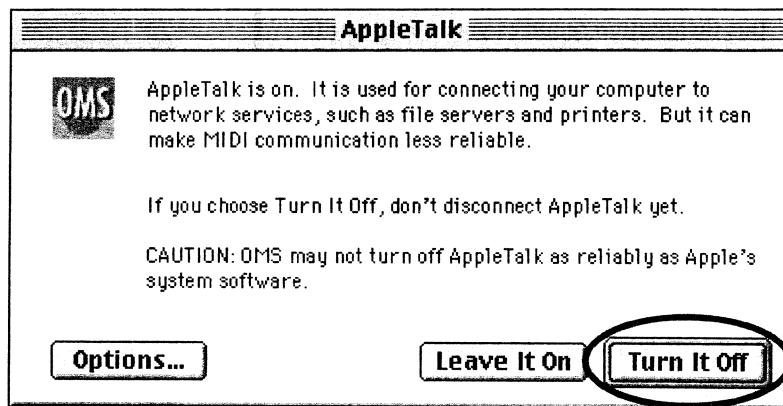
2

Go to where OMS has been installed, open "Opcode," and then double-click on "OMS Setup" found in the "OMS Applications" folder.



3

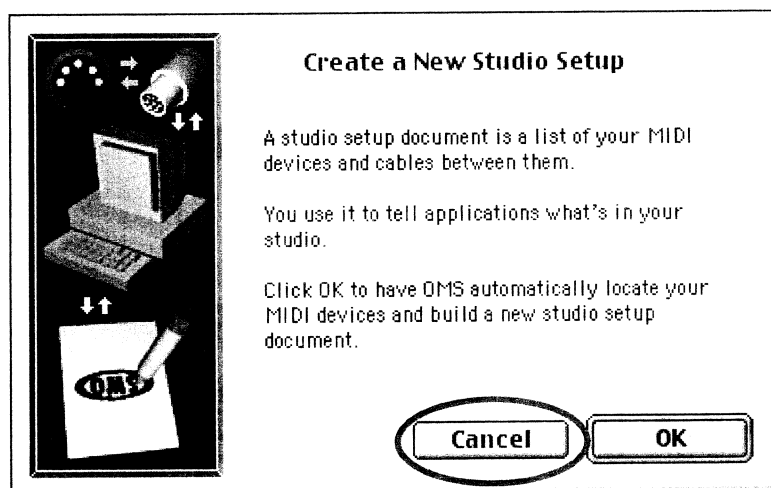
If a dialog like the following appears, click on "Turn It Off," and although a confirmation dialog appears, just click "OK."



Installing OMS and Serial MIDI Driver on Macintosh

4

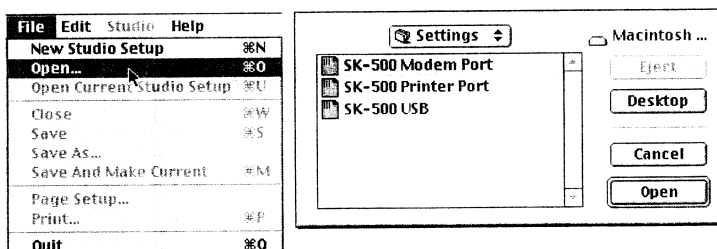
In the "Create a New Studio Setup" dialog, click on "Cancel."



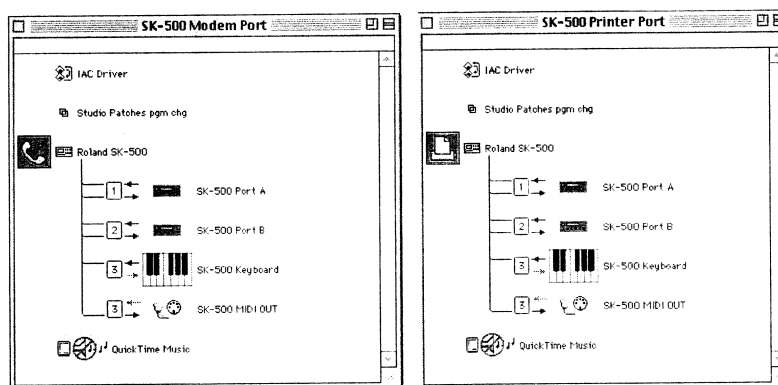
If you mistakenly click on "OK," click on "Cancel" in the screen that follows.

5

Select "Open" from the "File" menu, select the file corresponding to the name of the port in the "Settings" folder copied in Step 1, then click on [Close].



The following screen appears.



Opening the SK-500 Modem Port file

Opening the SK-500 Printer Port file

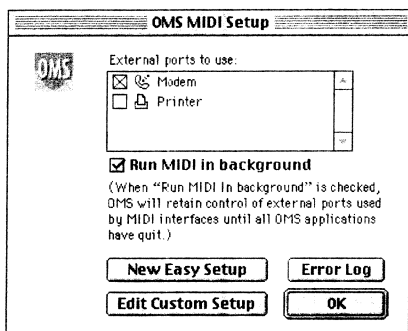


When connecting to a combined modem/printer port such as on PowerBooks, select the "SK-500 Modem Port" file.

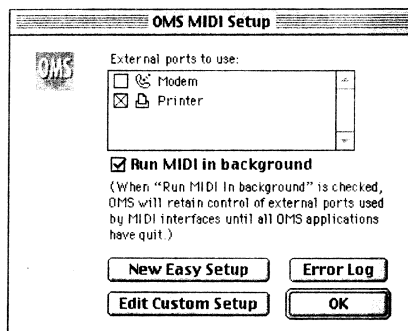
Installing OMS and Serial MIDI Driver on Macintosh

6

Select "OMS MIDI Setup" from the "Edit" menu and open the "OMS MIDI Setup" dialog. Check the item corresponding to the name of the external port used for connecting to the SK-500. Also check "Run MIDI in background" then click "OK."



Opening the SK-500 Modem Port file



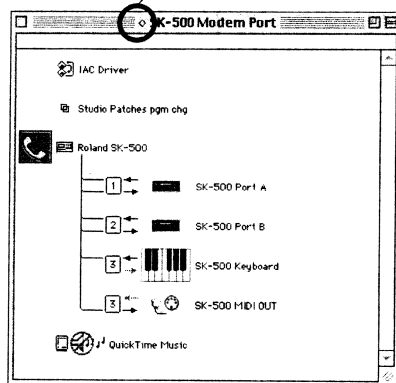
Opening the SK-500 Printer Port file

7

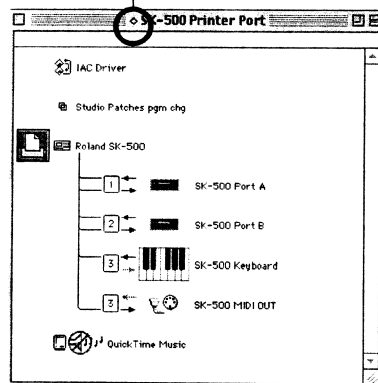
Select "Make Current" from the "File" menu. If you are unable to select "Make Current," it is because it is already in effect, so you may just leave it at that.

A diamond mark (◊) indicates the settings are enabled.

A diamond mark (◊) indicates the settings are enabled.



Opening the SK-500 Modem Port file



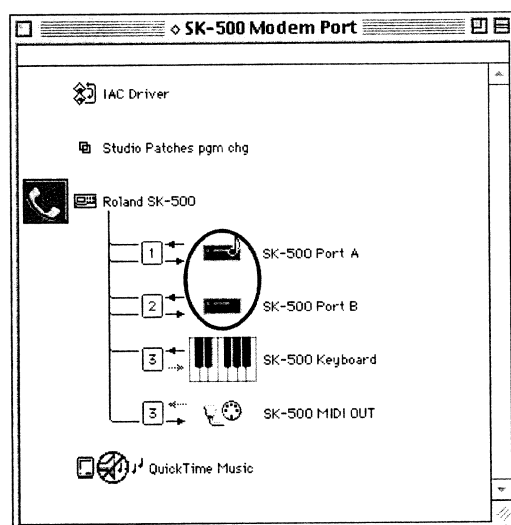
Opening the SK-500 Printer Port file

8

To confirm that MIDI transmission is working properly, select “Test Studio” from the “Studio” menu.



When the mouse cursor approaches the sound module icon, it changes to a note shape (♪); move the cursor over the sound module icons with circle marks in the figure below. If sounds from the SK-500 are being played, the settings are correct. If MIDI is not being transmitted, you will hear the alert sound from the Macintosh.



Then, press any key on the keyboard. If you hear the message “MIDI Receive,” it means that the settings are appropriate.

After confirming that MIDI transmission is working properly, select “Test Studio” from the “Studio” menu again and return the mouse cursor to the arrow shape.

9

Select "Quit" from the "File" menu to quit "OMS Setup."

The settings made up to this point complete the connection of the SK-500 and the Macintosh and the installation of setting of the MIDI driver. You are now ready to input and output (record and play back) MIDI data.

* Although a confirmation dialog appears when you quit OMS, at this point just click [OK].

Proceed to **Installing GS Advanced Editor** (p. 61).

MEMO

If sounds from the SK-500 do not play, refer to "Problems With the OMS Settings" in **Troubleshooting** (p. 84).

Installing GS Advanced Editor

GS Advanced Editor (GSAE) is tone editing software for GS sound modules. It is used for setting values that determine how tones are altered. This allows you to modify the sound in a variety of ways, which you wouldn't be able to accomplish using the SK-500 alone.

Installing

To use GS Advanced Editor, you must first have a MIDI driver installed (OMS on the Macintosh).

Windows Users

In the "Eng"—"Gsae" folder of the SK-500 CD-ROM, double-click the "Setup.exe" icon.

Follow the on-screen instructions to install the software.

Macintosh Users

In the "English"—"Gsae" folder of the SK-500 CD-ROM, double-click the "GSAE Installer" icon.

Follow the on-screen instructions to install the software.



GS Advanced Editor may not work properly without the MIDI driver installed.

Windows Users

1

Double-click the "GS Advanced Editor 4.0" icon on the desktop.

2

The "MIDI Port Setup" dialog box appears. Make necessary settings for the following items.

Using USB MIDI Driver

Model: SC-8850

* Since the SC-8850 Map is employed by the SK-500, select "SC-8850."

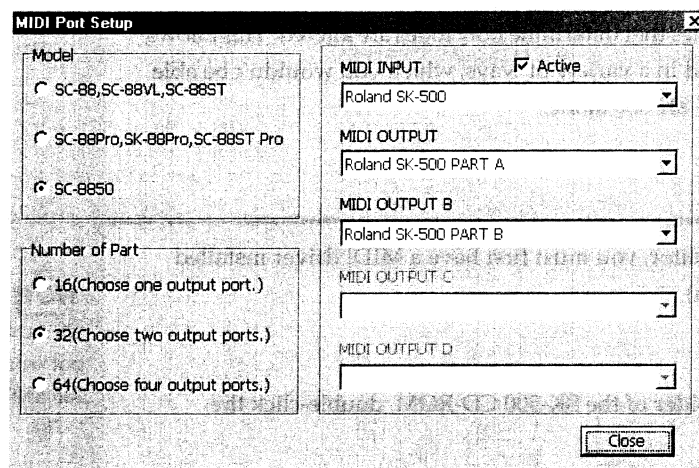
Number of Parts: [32 (choose two output ports.)]

MIDI INPUT: [Roland SK-500]

MIDI OUTPUT: [Roland SK-500 PART A]

MIDI OUTPUT B: [Roland SK-500 PART B]

Installing GS Advanced Editor



Using Serial MIDI Driver

Type of Sound Module: [SC-8850]

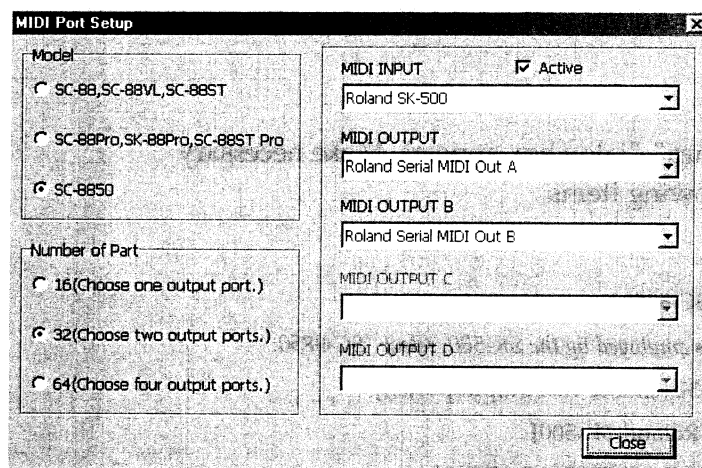
* The SC-8850 Map is employed by the SK-500.

Number of Parts: [32 (choose two output ports.)]

MIDI INPUT: [Roland SK-500]

MIDI OUTPUT A: [Roland Serial MIDI Out A]

MIDI OUTPUT B: [Roland Serial MIDI Out B]



- 3 After making the above settings, click [Close].

Macintosh Users

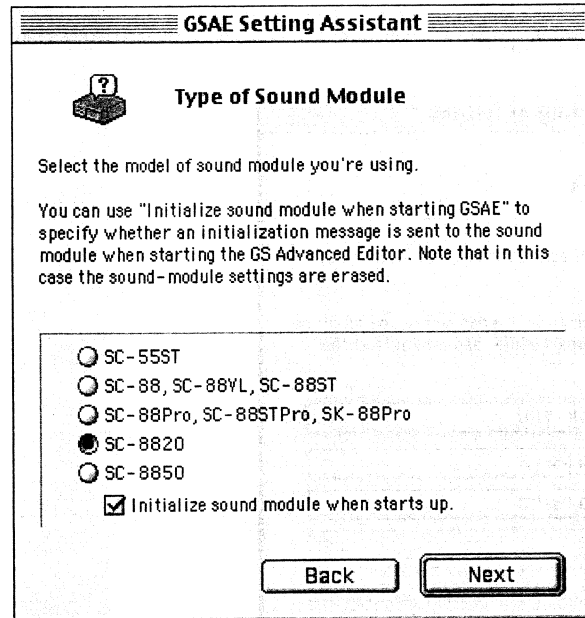
- 1 In the "GSAE" folder, double-click the "GSAE" icon.
- 2 The "GSAE Setting Assistant" dialog appears.
Click [Next] to make the settings necessary for using GSAE.



If the "AppleTalk" dialog appears, click on "Turn It Off." Then, click [Next.]

3

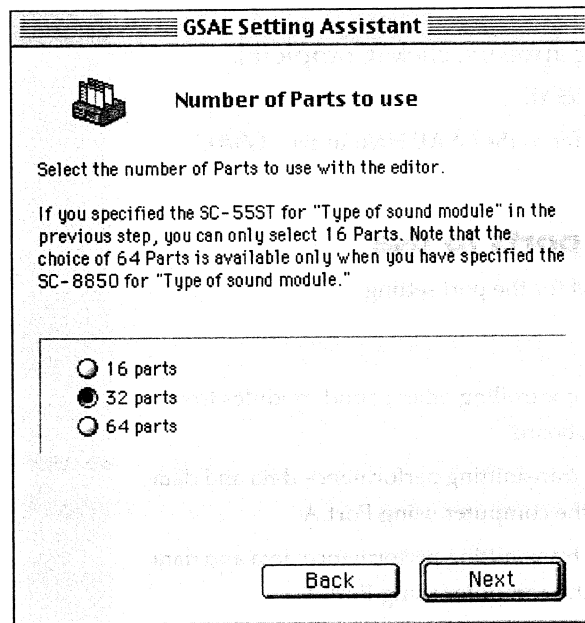
Select "SC-8820" for the "Type of Sound Module" and click [OK].



* Since the SC-8820 Map is employed by the SK-500, select "SC-8820".

4

Select "32 Parts" for the "Number of Parts to use," and click [Next].

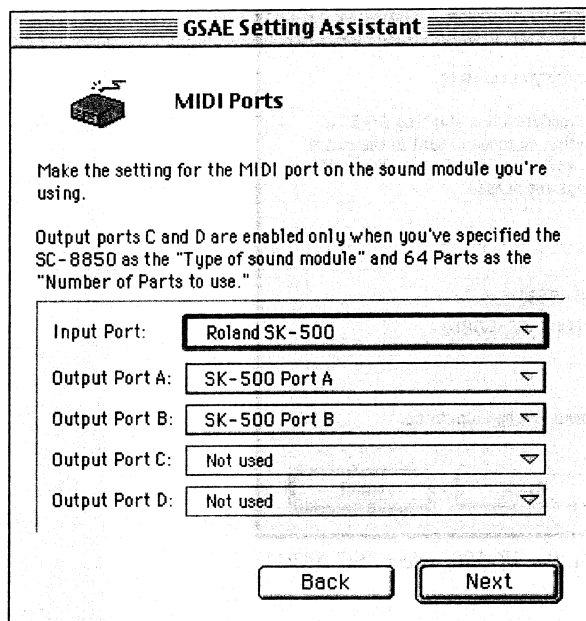


Installing GSAE Advanced Editor

5

Select the following for the "MIDI Ports" setting.

Input Port: Roland SK-500
Output Port A: Roland SK-500 Port A
Output Port B: Roland SK-500 Port B



* Items you set in the OMS Setup will be available from the pull-down menu.

After making necessary settings, click [Next].

6

When the "Complete" dialog appears, click [Complete].

It completes the initial settings of GSAE.

For more information on GSAE, refer to the GSAE Help in the "GSAE"–
"Help" folder on your hard disk.

Additional Information on ports to use

The following items can be selected for the port setting.

MIDI INPUT

SK-500 Keyboard	Select when controlling other sound modules from SK-500's keyboard
SK-500 Port A	Select when transmitting performance data and data requests to the computer using Port A
SK-500 Port B	Select when transmitting performance data and data requests to the computer using Port B
Roland SK-500	Both Part Group A and B transmit performance data and data requests

* The "(s)" in "SK-500 keyboard (s)" and "Roland SK-500 (s)" denote the serial MIDI driver. It appears only when the serial driver is installed.

MIDI OUTPUT

SK-500 Port A	Data is output from Part Group A
SK-500 Port B	Data is output from Part Group B
SK-500 MIDI OUT	Data is output from SK-500's MIDI OUT connector

Installing Acrobat Reader

In order to view PDF files, you need to install Adobe Acrobat Reader. Follow the procedure shown below to install this software.

** If you already have Acrobat Reader installed in your system, you do not need to follow this procedure.*



You can download the latest version of Acrobat Reader from the Adobe Systems' website.

Windows Users

1

Click Windows' Start button and click [Run] from the menu that appears.

2

Enter "D:\Eng\Adobe\Ar405eng.exe" in the dialog box that appears, and click [OK].

** The drive name "D:" may need to be changed to the drive name of your CD-ROM.*

3

The installer will start up. When the "Acrobat Reader 4.05 Setup" dialog box appears, click [OK].

4

A dialog box will appear, asking you to specify the location of the software installation. Verify the location of the folder where Acrobat Reader is to be installed, and click [Next]. If you need to change the destination, click [Browse] and select the folder into which you want to install the software.

5

When the installation is complete, the "Information" dialog box will appear. Click [OK].



When installing the software on Windows NT, the installer will prompt you to restart the computer. Restart the computer to complete the installation.

Macintosh Users

1

Quit all applications that may be running.

2

In the "English"-"Adobe Acrobat Reader" folder of the SK-500 CD-ROM, double-click the "Reader Installer" icon.

3

Once the starting screen of the installer appears, click [Continue].

4

Confirm the destination for the installation, and click [Install].



The latest version of Acrobat Reader can be downloaded from Adobe Systems' website.



An error message may appear, but the software is installed without any problems. Click [OK] in the dialog box.

5

When the installation is complete, the message “Installation was successful.—” will appear. Click [Quit] and restart the Macintosh.

This completes the installation of Adobe Acrobat Reader.

Controlling Sounds

The SK-500 has 128 basic tones (or instruments) and several variations of each instrument sound. In the following, you can learn how to use the preset instruments and their variations.

Switching to a different instrument

At the power-up default setting, a piano sound will be heard when the keyboard is played. If you want to play the sounds of different instruments, you need to change the instrument number, as follows.

** Instrument changes made during operation are only temporary. The next time the SK-500 is turned on, the sound of the instrument will have reverted to that of the piano.*



The Instrument numbers and the Variation numbers are listed on page 121.

1

Check if the Play Mode is selected. If not, hold down the [SHIFT] button and press [+] ([PLAY]) to select the Play Mode.

Play Mode is selected when the Play Mode Indicator is on.

2

If the current instrument number is not displayed, press [+] or [-].

3

While the instrument number is displayed, press [+] or [-] again to select the instrument you wish to use.

Hold down the [+] or the [-] button so that the number in the display will continue to change.

Hold down [+] and press [-] to fast-forward.

Hold down [-] and press [+] to go back faster.

** Refer to the chart on page 121 for the list of instruments available on the SK-500. Also, the list of numbers printed on the SK-500 can be used as a reference to find instrument groups.*

Using variation tones (variation number)

By changing the variation number, you can use an instrument sound that has a different ambiance.

1

Check if the Play Mode is selected. If not, hold down the [SHIFT] button and press [+] ([PLAY]) to select the Play Mode.

2

If the current instrument number is not displayed, press [+] or [-].

- 3 Hold down the [SHIFT] button and press the key indicated as “VARIATION +” on the keyboard to go the next variation number.

Hold down the [SHIFT] button and press [VARIATION -] to go back to the previous number.

** If the instrument number is changed, the variation number (BANK MSB) will return to 0.*

Changing to the drum set

- 1 Check if the Function Mode is selected. If not, hold down the [SHIFT] button and press [-].

Function Mode is selected when the Function Mode Indicator is on.

- 2 Press [10] on the keyboard.

“A10” is selected as the current part, and the keyboard is switched to the Drum Part.

Now, you are ready to play the drum set on the keyboard.

- 3 Press [SHIFT] or [+] to switch back to the Play Mode.

- 4 To select a different drum set, press [+] or [-].

Switching to a different part

The SK-500 offers 32 parts, any of which can be freely selected for play by the keyboard.

- 1 Check if the Function Mode is selected. If not, hold down the [SHIFT] button and press [-].

- 2 To change to port A, press the key marked with “A.” To change to port B, press the key for which “B” appears.

MEMO

The description of the drum set numbers are listed on page 127.

3

Press a numbered key on the keyboard to select the part number.

4

Go back to the Play Mode.

Modifying Tones

When you wish to bend a guitar sound or brass instrument sound, use pitch bend or modulation.

- **Bending a guitar sound (changing the pitch of the sound)**

Pitch Bend Move the Pitch Bender

- **Vibrato (changing the pitch of the sound)**

Modulation Move the DATA ENTRY slider
(Modulation is assigned as default)

- **Sustain (holds notes)**

Hold Assign "Hold" on the [Pedal] and step on a foot switch
(Modulation is assigned as default)

Example) Bending a guitar sound

Use the Pitch Bender wheel to bend the guitar sound. First, play the note you wish to bend. Then you move the Pitch Bender wheel to simulate the movement of the left hand to bend the note on a guitar.

* If the length of the note is too short, the effect you get may not be obvious.

Shifting the soundable range on the keyboard (Octave Shift)

If you wish to play notes that are not normally available with 49 keys on the keyboard, shift the soundable range by using the Octave Shift function.

If the Play Mode is not selected, hold down the [SHIFT] button and press [+].

- | | |
|-----------------------------------|---|
| • Shift one octave up | Hold down the [SHIFT] button and press [OCTAVE +]. |
| • Shift one octave down | Hold down the [SHIFT] button and press [OCTAVE -]. |
| • Return to the standard position | Hold down the [SHIFT] button and press [OCTAVE STANDARD]. |

Connecting to a Computer or other device (Local On/Off)

The SK-500 has a sound module and a keyboard, and the messages are transmitted directly from the key to the internal sound module. When the sound module and the keyboard are connected, it is called “local on.”

Connect the SK-500 to a computer with a USB cable or a computer cable to “record” MIDI information using a sequencer software. The MIDI information can be transmitted from the software to be played back with the computer, and it is called “software thru.”

If “local on” and the “software thru” are both active when recording MIDI, the sound module will receive the same message from the keyboard and the sequencer software, and produce the same notes twice.

To avoid this problem, turn local control off while “soft thru” is on. This is called “local off,” and the MIDI messages will not be transmitted directly to the sound module.



- Using the SK-500: **Local On**
- Connecting the SK-500 with a computer or other devices: **Local Off**

1

Hold down the [SHIFT] button and press [+] to select Play Mode.

Play Mode is selected when the Play Mode Indicator is on.

2

For local on, hold down the [SHIFT] button and press [Local On].

For local off, hold down the [SHIFT] button and press [Local Off].

Resetting the GS and GM settings

Here is the instruction on how to send GS RESET and GM SYSTEM ON.

- **Reset GS (GS Reset)**

Hold down the [SHIFT] key and press [Initialize GS]

- **Reset GM2 (GM2 SYSTEM ON)**

Hold down the [SHIFT] key and press [Initialize GM2].

Assigning functions to the controller. (Function Mode)

You can assign a cyclic wavering in the sound (modulation), alterations in the volume (expression), and a variety of other different functions to the [DATA ENTRY] wheel and pedal.

Assign functions to [Pedal] to use a foot switch or the expression pedal. "Hold" is the default setting.

Here is the list of the functions that can be assigned:

- Control Change Number 1-31, 33-95
 - Channel Aftertouch
 - Master Level
 - Master Pan
 - Adjustment of the strength for pressing the key on the keyboard and the loudness of the note (Velocity)
- * While in Function mode, no sound is produced even when a key is played.
- * Connect the pedal to the PEDAL jack. Here, you can use either a hold pedal (the optional DP-2 or DP-6) or an expression pedal (the optional EV-5).
- * When the power is turned on, Modulation is assigned to the [DATA ENTRY] slider and Hold to the pedal.



The following are some of the functions that can be assigned. (Names in the angle brackets are printed above the keys.)

• Aftertouch <AFTERTOUCH>

When playing notes, you can press keys down further to alter the timbre of the notes. Pressing down one key while playing chords gives the aftertouch effect on all of the notes on the same MIDI channel.

- * Aftertouch messages cannot be sent using the keyboard on the SK-500, but these messages can be transmitted if assigned to DATA ENTRY. Move the DATA ENTRY slider to determine the degree of this effect to add to the note being played.
- * As a default, the sound generating section of the SK-500 is set to ignore Channel Aftertouch messages. However, it can be changed in the software depending on the sequencer software you have. For details refer to your software manual.
- * Sending Channel Aftertouch messages do not alter the timbre of the notes if using GS Sound modules.

• Velocity <VELOCITY>

Sets the variables of velocity to correspond to the strength of pressing the key. Move the slider away from you to easily control the loudness of the note by controlling the strength of pressing the key.

MEMO

There are two types of aftertouch messages. One is "Channel pressure," which applies the effect on all of the notes being played on the same channel even when pressing down only one key in the chord.

Another is "Polyphonic key pressure," which applies the effect only on the key that was pressed down.

The type of aftertouch used with the SK-500 is "channel pressure."

- **Modulation (CC#1) <MODULATION>**

Adjust the amount of vibrato. Moving the [DATA ENTRY] wheel away from you increases the vibrato.

- **Expression (CC#11) <EXPRESSION>**

Changes the volume of the note being played. Use it for crescendo and decrescendo. Moving the [DATA ENTRY] wheel away from you increases the volume; moving it towards you decreases the volume.

- **Chorus Level (CC#93) <CHORUS LEVEL>**

Adjusts the amount of chorus effect to add to each part. Moving the [DATA ENTRY] wheel away from you increases the chorus effect.

- **Reverb Level (CC#91) <REVERB LEVEL>**

Adjusts the amount of reverb effect to add to each part. Moving the [DATA ENTRY] wheel away from you increases the reverb effect

- **Delay Level (CC#94) <DELAY LEVEL>**

Set the volume of delay to create echo effect. Move the [DATA ENTRY] slider away from you to increase the volume of delays.

- **Panpot (CC#10) <PANPOT>**

Sets the stereophonic location of the sound for stereo speakers. For example, localize the drum set and base in center, guitar on the right and keyboard on the left. Moving the [DATA ENTRY] slider away from you places the sound more to the left; moving it towards you places the sound more to the right. When the slider is positioned in the middle, the sound plays at the center.

- **Volume (CC#7) <VOLUME>**

Adjust the volume level of each part. Moving the [DATA ENTRY] slider away from you increases the volume; moving it towards you decreases the volume.

- **Hold (CC#64) <HOLD>**

Holds the sounds while they are played. Normally, this function is assigned to the pedal. When the pedal is pressed (when Hold is ON), the sound continues. When you step on the pedal and the SK-500 receives the "Hold On" message, the note will be sustained. For instruments such as piano, the sound will decay slowly until you release the pedal or the sound module receives the Hold Off message. For instruments such as organ, the note will be sustained constantly until the sound module receives the Hold Off message.

How to assign functions using keyboards

- 1 Check if the Function Mode is on. If not, hold down the [SHIFT] button and press [-].
- 2 To assign functions for DATA ENTRY, press the [DATA ENTRY] key on the keyboard.
To assign function on pedal, press the [PEDAL] key.
Note that the function you select for DATA ENTRY or PEDAL will be shown in the display.
- 3 Press the key on the keyboard to select the function.

Assign functions using the [+] and [-] buttons.

- 1 Check if the Function Mode is selected. If not, hold down the [SHIFT] button and press [-].
- 2 For changing the function for DATA ENTRY, press the [DATA ENTRY] key.
To change the function on PEDAL, press the [PEDAL] key.
- 3 Press [+] or [-] to select the function you wish to assign.
By holding down the [+] or [-] button, the available functions will appear consecutively in the display.
Hold down [+] and press [-] to move rapidly forward.
Hold down [-] and press [+] to go back faster.



Numbers shown in the display are the MIDI Controller Change Numbers.

Sound Module

The SK-500 is able to produce 32 different sounds at once. An instrument such as the SK-500, which can simultaneously produce a multiple number of sounds (even though it is a single unit) is called a multitimbral sound module. A timbre is an instrumental sound.

Being able to simultaneously play 32 sounds means that you can use 32 different instruments at once. In other words, you can create an orchestra-like ensemble of 32 musical parts.

For example, an orchestra ensemble consists of string instruments such as violin and cello, wind instruments such as trumpet and clarinet, and percussion instruments such as timpani and cymbal.

When using a computer to play these instruments, assign instruments on each part. Select "Part 1" as the part you wish to play on the keyboard.

Play Part 1 on your keyboard while having Parts 2 to 15 be played by the computer. This way, you can enjoy playing the piano along with an orchestral backing

Part	CC00	PC	Instrument	
Part 1	000	001	Piano1	Piano
Part 2	000	073	Piccolo	Piccolo
Part 3	000	074	Flute	Flute
Part 4	000	069	Oboe	Oboe
Part 5	000	072	Clarinet	Clarinet
Part 6	000	071	Bassoon	Bassoon
Part 7	000	061	French Horns	French Horn
Part 8	000	057	Trumpet	Trumpet
Part 9	000	058	Trombone	Trombone
Part 10		49	ORCHESTRA	Percussion instruments such as timpani and cymbal
Part 11	000	047	Harp	Harp
Part 12	000	049	Strings	(Use as the First violin part)
Part 13	000	049	Strings	(Use as the Second violin part)
Part 14	000	049	Strings	(Use as the viola part)
Part 15	000	049	Strings	(Use as the cello/contrabass part)

(Note that Part 10 is used for the Drum set and cannot be changed to other instruments.)

* The variation numbers (CC00) of the above example are "000" but change to the different numbers depending on the key or the nuance of the song.

MIDI Channels

MIDI uses channels numbered 1 to 16 with a single port. By assigning parts to each channel, the SK-500 will transmit a multiple number of instrument sounds at the same time.

Multiple parts can be assigned to a single MIDI channel.

Tones and Parts

Types of Part

The SK-500 has 32 Parts. Parts are organized into Group A (A01-A16) and Group B (B01-B16), with sixteen in each group.

There are two types of Parts: Normal Parts and Drum Parts. We refer to this difference as the Part Mode. Normal Parts are used for playing melody or bass lines. Drum Parts are used for playing percussion instruments.

Normal Part: A01-A09, A11-A16, B01-B09, B11-B16

Drum Part: A10, B10

Parts and Tones

Sounds or Instruments contained in the SK-500 are listed in the Instrument List (p. 121). Each instrument has two numbers, an Instrument number and a Variation number, and they are used for selecting the sound you wish to use.

How to Use the Instrument List

Strings/Orchestra

CC00	PC	SC-8820 Map	Voices
000	041	Violin :	2
001		Violin Atk:	2
008		Slow Violin	1
000	042	Viola :	2
001		Viola Atk:	2
000	043	Cello :	2
001		Cello Atk:	2
000	044	Contrabass	1

CC00 (Control Change)

Variation number (value of Controller Change 0)

Capital sounds with Variation number 0 are shown in boldface.

PC (Program Change)

Instrument number

Voices

number of voices used by the Instrument

Remark :

legato-enabled sounds (refer to **Legato-enabled Sounds** (p. 79))

Remark +

percussive sounds which cannot be played melodically.

MEMO

When changing the Variation number on the Normal part, the numbers "64" and "65" may show up in the display. Also on the drum part, numbers "065" and "066" may appear. These are the numbers used by MIDI data when temporarily changing instrument or drum sounds. They will revert to their defaults as soon as power is switched off.

Changing instruments from sequencer software by using MIDI messages

Sending MIDI messages from the sequencer program to the SK-500 can change instruments on each part. Use the instrument number and the variation number to specify the instruments. Make sure that the numbers are correct, because the list starts with different numbers depending on the software you have. On the SK-500, the instrument number starts at 0 and the variation number starts at 1.

Variation number corresponds to MIDI Bank numbers, and Instrument numbers correspond to MIDI Program numbers.

Actual MIDI Messages transmitted

Follow this procedure when sending MIDI messages you've composed on a sequencer program.

- [1] The value of Control Change 0: MIDI Bank number (upper)
(the SK-500's Variation number)
- [2] The value of Control Change 32: MIDI Bank number (lower)
(0: map setting on the panel)
- [3] Program Change value: MIDI Program Change Number

[1] and [2] are the Bank Select messages. The Bank Select message is a type of Control Change message, and the Bank Select processing will be suspended until a Program Change message is received.

For example, if you wish to select the Instrument (Piano3w) with Variation number 8, Instrument number 3, you would transmit the following data to the SK-500. (Expressed in decimal notation.)

- [1] The value of Control Change 0: 008
(Bank number (upper) 8; Variation number 8)
- [2] The value of Control Change 32: 0
- [3] Program Change value: 002
(Program number 3: Instrument number 3)

MEMO

Control Change Message is the signal used for controlling the event message, as specified with MIDI.

How to Use the Drum Set List

Each drum sound (Drum Instrument) is assigned to a different note of the Drum set.

The Drum Sets that are available on the SK-500 are listed in **Drum Set List** (p. 127), which gives the number and name of the sound in each Drum set.

	PC1 STANDARD 1	PC2 STANDARD 2	PC3 STANDARD L/R	PC9 ROOM
22	MC-500 Beep 1	←	←	←
23	MC-500 Beep 2	←	←	←
24	Concert SD	←	←	←
25	Snare Roll	←	←	←
26	Finger Snap 2	Finger Snap	←	Finger Snap
27	High Q	←	←	←
28	Slap	←	←	←
29	Scratch Push [EXC7]	←	←	←
30	Scratch Pull [EXC7]	←	←	←
31	Sticks	←	←	←
32				
33				
34				
35				

PC (Program Change)

Drum Set number

Keys

Note Number

<-

Same as the percussion sound of STANDARD 1 Set (PC1).

—

No sound

* Tones that are created using two voices

Changing drum sets from the sequencer software using MIDI messages

You can select Drum Sets by transmitting MIDI messages from sequencer software, in the same way as you select Instruments. When the sound module receives the Program Change message, the Drum Set will change. Transmit a Program Change message to the channel to which the Drum Part is assigned. With the factory pre-set, Part 10 is assigned to the Drum Part (MIDI receive channel:10). On the SK-500, Drum Set numbers (displayed under "INST.") correspond to Program numbers (p. 127).

Operation via MIDI

<Example> Setting the sound of Part 10 to the SC-8820 map 013 ROOM L/R
MIDI CH = 10

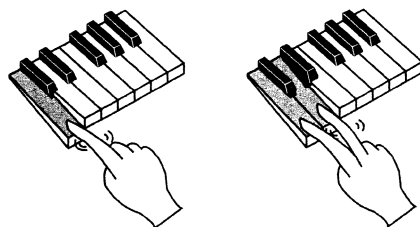
CC#00	000	Selects Variation number 000
CC#32	004	Selects the SC-8820 map
PC#	013	Selects Instrument number 013

* The SK-500 employs the SC-8820 map.

Legato-enabled Sounds

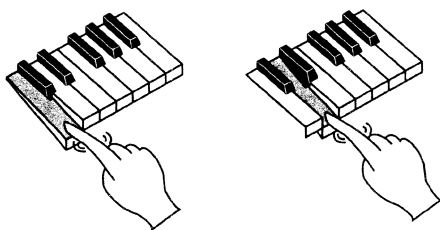
The SK-500 provides legato-enabled sounds, which are ideally suited to legato playing, and can realistically simulate this instrumental performance technique. To understand this feature, consider how most string instruments produce sound. Usually, a brief attack-like sound will be heard only at the very instant the string is plucked. After that a much mellower, attack-free sound continues to emanate during the string's vibration. The legato-enabled sounds simulate such variable attack-portion characteristics of string sounds by switching on or off certain special voices within an Instrument. It can be switched on and off by the way you play the keyboard. Try out one of these sounds to hear how it works.

Play a note and keep your finger on that key while playing another note. You should hear a distinct attack portion with the first note you play, while the second one contains almost no attack components, and sounds much smoother.



If you want to sound the attack portion each time, simply release your finger from a key before playing the next note.

Legato-enabled sounds listed on page are marked with “:” (colon). Since the use of legato cannot be turned on or off, use the legato-enabled sound or the normal sound depending on the purpose.



How the Number of Simultaneous Notes and Voices Are Related

On the SK-500, the sounds are made up of voices, the smallest unit of sound generation.

There is a limit to how many of these Voices can sound at once, and in the case of the SK-500, up to 64 simultaneous voices can be used. Some sounds (Instruments) use one voice, while others use more (Instrument List, p. 121). The main reason for using more than two voices is to allow different timbres to be produced in response to different velocity values, or to produce richer textures by layering multiple sounds. If more than 64 voices are used at once, later-sounded notes will be given priority, and notes sounded previously will be turned off, starting from the oldest. If you use only single-voice Instruments, you will be able to play 64 notes simultaneously, but if some of the Instruments are two-voice ones, you won't be able to play 64 simultaneous notes. Even if a MIDI Note Off message is received, voices will be used for as long as the sound is heard. Be aware of this especially in the case of sound with a long release.

Altering the notes being played (How to use effects)

There are two types of effects available on the SK-500 – System Effects and Insertion Effects.

What Are System Effects?

Of the System effects, the reverb/chorus/delay effects take part of the sound from each Part to create a new effect-processed sound (such as reverberation), and then add this to the original sound.

For these effects, you can specify the amount of the sound for each Part sent to the effect processor (Send Level). Higher settings will increase the level of the signal that is sent to the effect processor, causing the effect sound that is produced to be louder. The result is that the effect becomes deeper.

For the equalizer of System effects, on the other hand, you can select whether the sound of the Part will pass through the equalizer or not; i.e., make an on/off setting to modify the sound.

What Are Insertion Effects (EFX)?

Insertion effects are effects that modify the sound itself, and are able to give it a completely different character. SK-500 provides 64 types of effects.

You can select one Insertion effect, and specify for each Part whether or not the sound will be routed through the effect (on/off).

Since only one type of Insertion effect can be applied at a time, turning it on for two or more Parts will cause the sound of these Parts to be mixed. If a System effect is applied to a Part for which the Insertion effect is turned on, the Insertion effect Send Level will be used instead of the Send Level of the Part itself.

MEMO

For more information on Insertion Effects, refer to the Appendix (in PDF form) in the SK-500 CD-ROM.

?

Parameters are items that are set in order to determine the level or degree of the effect.

System Effect

As System effects, the SK-500 provides 8 types of reverb to add reverberation to the sound, 8 types of chorus to add depth, 10 types of delay to add echo-like effects, and a two-band equalizer to modify the tonal character by boosting or cutting the frequency ranges of the sound.

Reverb

Makes the sound reverberate or linger, similar to what you would hear it in a concert hall.

Chorus

Adds layers to enrich the sound.

Delay

Delays the sound to create echo.

Equalizer

An equalizer lets you boost or cut specified frequency ranges of a sound to adjust the tone. The SK-500 has a two-band equalizer (high range, low range). For each range, high and low, you can specify the frequency and the amount of boost or cut (gain).

Adds effects using GS Advanced Editor (GSAE)

GS Advanced Editor (GSAE) is the tone editing software for using sound modules that are compatible with GS. The following explains how to apply effects using GSAE.

How to use the software

1

Start up GS Advanced Editor.

A tool bar appears.

Click the button to start the editor window.

Patch

Displays the patch editor window. Selects the tone map and the instrument number here.

Part

Displays the part editor window. Select the part.

Drum

Displays the drum editor window. Select the drum set.

Altering the notes being played (How to use effects)

User Drum

Displays the user drum editor window.

Effect

Displays the effect editor window. Sets the level of effects such as reverb or chorus.

Keyboard

Displays the keyboard window. Click the keys in the keyboard window to monitor the sound.

2

Press [Effect] on the tool bar to start up the effect editor window.

Here is the list of parameters changeable in this window.

- Reverb
- Chorus
- Delay
- EQ (Equalizer)
- Insertion
- Insertion Sub

3

First, select the setting from macro.

Then, move the slider on the screen, or press the button to turn it on and off.

Troubleshooting

How do I install the driver?

When Connecting to a USB Connector on a Computer Running Windows 95/98	p. 16
How to Uninstall the USB MIDI Driver.....	p. 21
When Connecting to a Serial Port on a Computer Running Windows 95/98	p. 23
How to Uninstall Serial MIDI Driver.....	p. 30
When Connecting to a Serial Port on a Computer Running Windows NT	
First, refer to the Connecting the SK-500 and the Computer section in Installing Serial MIDI Driver In Windows 95/98 (p. 23), connect the SK-500 with a serial cable. Then, refer to the \Eng\Driver\Rsnt\Readme.txt in the SK-500 CD-ROM, and install the driver and make necessary settings.	
When Connecting to a USB Connector on a Computer Running Windows 2000	p. 31
How to Uninstall the USB MIDI Driver.....	p. 37
When Connecting to a Serial Port on a Computer Running Windows 2000	p. 39
How to Uninstall Serial MIDI Driver.....	p. 43
When Connecting to the USB Connector on a Macintosh Using OMS	p. 44
When Connecting to the Computer Connector on a Macintosh Using OMS	p. 52
When Using FreeMIDI on Macintosh	
If you are using FreeMIDI on a Macintosh computer, refer to "Readme SK-500 FM DriverEng" in the "FreeMIDI" folder in "English" on the SK-500 CD-ROM.	

If your SK-500 setup is not operating as intended, first check the following points.

Windows95/98 Driver Issues

If You Cannot Install/Uninstall/Use the Driver

Is the driver installed correctly?

If you cannot use the SK-500 even after installing the driver, it may be that the driver was not installed correctly. Use the following procedure to check.

- 1 Disconnect all USB cables (other than the keyboard and mouse cables) from the computer, then start up Windows.
- 2 Turn off the power to the SK-500 and set the computer switch to "USB."
- 3 Connect the SK-500 and the computer with a USB cable.
- 4 Turn on the SK-500's power.
- 5 Open "Control Panel" and double-click on "System."
- 6 Click on the "Device Manager" tab, then double-click on "Sound, video and game controllers" to display the device list.
- 7 Check if "Roland SK-500 USB Driver" appears.
 If it does not appear, refer to Steps 5 and afterwards in **Do "? Composite USB Device," "? USB Device," "! USB Device" and "USB Compatible Device" appear in "Device Manager?"** (p. 85).
 If it is present but has a yellow "!" or red "x" next to it, refer to Steps 7 and afterwards in **Is "Roland SK-500 USB Driver" in "Device Manager" accompanied by a yellow "!" or red "x?"** (p. 86).
 If there is no problem in showing the driver, but you still cannot use the SK-500, refer to **Is the SK-500's MIDI device name shown?** (p. 87).

Do "? Composite USB Device," "? USB Device," "! USB Device" and "USB Compatible Device" appear in "Device Manager?"

If the driver has not been installed in accordance with the procedure described in "Installing the USB MIDI Driver In Windows 98," then Windows will not properly recognize the SK-500, so it cannot operate it. Use the following procedure to reinstall the driver.

- 1 Disconnect all USB cables (other than the keyboard and mouse cables) from the computer, then start up Windows.
- 2 Set the SK-500's computer switch to "USB."
- 3 Connect the SK-500 and the computer with a USB cable.

- 4 Turn on the SK-500's power.
- 5 Open "Control Panel" and double-click on "System."
- 6 Click on the "Device Manager" tab.
- 7 Confirm that "? Composite USB Device," "? USB Device," "! USB Device" and "USB Compatible Device" appear under "Other devices," "Sound, video and game controllers," and "Universal Serial Bus Controller."
If these are not found, then the problem is likely due to some other cause, so refer to other items in Troubleshooting.
- 8 If you see "? Composite USB Device," "? USB Device," "! USB Device" and "USB Compatible Device" displayed, click on the names and click the [Remove] button.
- 9 The "Confirm Device Removal" dialog box appears. After confirming what is displayed in the dialog box, click [OK]. Remove in the same manner all of "? Composite USB Device," "? USB Device," "! USB Device" and "USB Compatible Device" that you find.
- 10 Disconnect the USB cable from the SK-500.
- 11 Restart Windows.
- 12 Follow the procedure described in **Installing the USB MIDI Driver In Windows 98** (p. 16) to reinstall the driver.

Is "Roland SK-500 USB Driver" in "Device Manager" accompanied by a yellow "!" or red "x?"

Follow the procedure below to check.

- 1 Disconnect all USB cables (other than the keyboard and mouse cables) from the computer, then start up Windows.

- 2 Turn off the power to the SK-500 and set the SK-500's computer switch to "USB."
- 3 Connect the SK-500 and the computer with a USB cable.
- 4 Turn on the SK-500's power.
- 5 Open "Control Panel" and double-click on "System."
- 6 Click on the "Device Manager" tab.
- 7 Double-click on "Sound, video and game controllers" to display the device list.
- 8 Select "Roland SK-500 USB Driver" from the list and confirm that no yellow "!" or red "x" is present.
- 9 If a yellow "!" appears, quit all applications being used by the SK-500, turn off the SK-500's power, and then turn it on again.
- 10 If this does not resolve the problem, or if the red "x" is still present, follow Steps 13 and after in **Uninstalling the USB MIDI Driver** (p. 21) to reinstall the driver.

Is the SK-500's MIDI device name shown?

If the device name does not appear, quit all applications being used by the SK-500, turn off the SK-500's power, and then turn it on again.

If this does not resolve the problem, follow the procedures in "Uninstalling the USB MIDI Driver" to reinstall the driver.

The dialog box prompting you to insert the disk does not appear during "Installing the USB MIDI Driver In Windows 98"

This may be caused by the following.

Do "? Composite USB Device," "? USB Device," "! USB Device" and "USB Compatible Device" appear in "Device Manager?"

Is "Roland SK-500 USB Driver" in "Device Manager" accompanied by a yellow "!" or red "x?"

Has the driver been completely uninstalled? Follow the procedures in "Uninstalling the USB MIDI Driver" to reinstall the driver.

If you have tried installing according to the procedures in “Troubleshooting” above, but still cannot install

While you may be able to install using the following steps, before you do, make sure that the driver is completely uninstalled first.

- 1** Disconnect all USB cables (other than the keyboard and mouse cables) and start up Windows.
- 2** Before installing the driver, quit all applications.
- 3** Confirm that the power to the SK-500 is off, then set the SK-500's computer switch to “USB.”
- 4** Connect the SK-500 and the computer with a USB cable.

- 5** Turn on the SK-500's power.
<If the selection “What would you like to do?” appears in the “Add New Hardware Wizard”>

- 1** The “Add New Hardware Wizard” dialog box appears, and “The following new hardware was found: USB Device” then is shown. If “What would you like to do?” appears, select “Specify the location of the driver (Advanced)” and click on [Next].

** If the selection “What would you like to do?” does not appear, proceed to the option “If the selection ‘What would you like to do?’ does not appear in the ‘Add New Hardware Wizard.’”*

- 2** “Windows will search for new drivers in its driver database on your hard drive” appears; select “Display a list of all the drivers in a specific location, so you can select the driver you want.” and click on [Next].
- 3** When “Select the type of device from the list below, –” appears, click on “Sound, video and game controllers” and then click on [Next].

- 4 When “Select the type of device from the list below, —” appears, click on [Have disk].
- 5 The “Install From Disk” dialog box appears; specify the folder containing the driver for “Copy manufacturer’s files from” and click on [OK]. Click on [OK] after this as well.
- 6 The “Device Selection” dialog box appears; after confirming that “Roland SK-500 USB Driver” is displayed, click on [OK].
- 7 When “Windows driver file search for the device: Roland SK-500 USB Driver” appears, click on [Next]. The driver file is copied. Please wait a moment for the copy to be completed.
- 8 Click on [Done].
- 9 Refer to **Setting the MIDI Output Destination** (p. 20) for instructions, and set Windows Media Player so it can use the SK-500.
<If the selection “What would you like to do?” does not appear in the “Add New Hardware Wizard”>
- 1 The “Add New Hardware Wizard” dialog box appears, followed by “This wizard searches for new drivers for: USB Composite Device”; click on [Next].
- 2 When “What do you want Windows to do?” appears, select “Display a list of all the drivers in a specific location, so you can select the driver you want.” and click on [Next].
- 3 When “Select the type of device from the list below, —” appears, click on [Have disk].
- 4 The “Install From Disk” dialog box appears; specify the folder containing the driver from the “Copy manufacturer’s files from” and click on [OK]. Alternatively, click the “Browse”

button and when the “Open” dialog box appears, go to the folder containing the driver and click the [OK] button.

- 5** Confirm that “Roland SK-500 USB Driver” is displayed as the model, then click on [Next].
- 6** Windows driver file search for the device: –” appears, click on [Next]. The driver file is copied. Please wait a moment for the copy to be completed.
- 7** Click on [Done].
- 8** Refer to **Setting the MIDI Output Destination** (p. 20) for instructions on setting Windows Media Player so it can use the SK-500.

The SK-500 Device Cannot Be Selected

Is the driver installed correctly?

When using a USB connection, the installation must be carried out exactly as described in **Installing the USB MIDI Driver** (p. 16) Refer to **Is the driver installed correctly?** (p. 84).

When using a serial connection, the installation must be carried out exactly as described in **Installing Serial MIDI Driver** (p. 24) Refer to **Uninstalling Serial MIDI Driver** (p. 30).

Has the computer been put into standby mode (Suspend) or sleep mode with the SK-500's power turned on?

If the computer goes into standby mode (Suspend) or Sleep mode while the SK-500's power is turned on, the system may begin to operate incorrectly.

In such instances, after restoring operation, quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

Has the USB cable been disconnected and reconnected, or has the SK-500's power been turned off and then on again while the SK-500 was in use?

If while the SK-500 is in use the USB cable is disconnected and reconnected or the SK-500's power is turned off and then on again, the system may begin to operate incorrectly. In such instances, quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

With some computers, if Windows is started up with the SK-500 connected, the driver may not be loaded correctly, and the SK-500 cannot be used with the USB connection.

In this case, turn on the SK-500's power or connect the SK-500 after first starting up Windows.

Cannot Play Back or Record

Is the driver installed correctly?

When using a USB connection, the installation must be carried out exactly as described in **Installing the USB MIDI Driver** (p. 16). Refer to **Is the driver installed correctly?** (p. 84).

When using a serial connection, the installation must be carried out exactly as described in **Installing Serial MIDI Driver** (p. 24). Refer to **Uninstalling Serial MIDI Driver** (p. 30).

Have you referred to "Setting the MIDI Output Destination" and made the settings enabling use of the SK-500 with the setup?

Unless these settings are made, the SK-500 cannot be used with Windows Media Player.

Has the computer been put into standby mode (Suspend) or sleep mode during playback or recording?

If during playback or recording the computer is put into standby mode (Suspend) or Sleep mode, the system may begin to operate incorrectly. Quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

Has the USB cable been disconnected and reconnected, or has the SK-500's power been turned off and then on again during playback or recording?

If during playback or recording the USB cable is disconnected and reconnected, or the SK-500's power is turned off and then on again, the system may not be able to record or play back data. First, stop the recording or playback, then try recording or playing back the data again. If you are still unable to play back or record, quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

Portions of Performances are Strange; Sounds Drop Out or Parts Are Missing

You may be able to improve things by placing a check in the "Light Load" check box in the Preferences dialog box.

When changing or confirming settings, follow the procedure described in **How to Set Serial MIDI Driver** (p. 26).

- * Changes in settings become effective after the SK-500's power is turned off and then on again. If not experiencing any particular problems, use with this unchecked (initial setting).

Same Device Name Appears Multiple Times

This driver can be used with only one SK-500 at a time.

Sometimes, when connecting two or more SK-500s to the computer, the same MIDI device name can be found. Disconnect the USB cable from the second and other additional SK-500s, and use with only one SK-500.

Windows 2000 Driver Issues

If You Cannot Install/Uninstall/Use the Driver

Did you confirm the authorization of the person logging on to Windows?

Installing, uninstalling, and reinstalling this driver requires that an Administrator or other user belonging to the Administrator's group log on to Windows. For more details, consult your computer system administrator.

Have the "Driver Signing" settings been made?

Installing or reinstalling the driver requires that the "File Signature settings" be made. Use Steps 1 to 4 in **Installing the USB MIDI Driver** (p. 31) and **Installing Serial MIDI Driver** (p. 40) to confirm the settings.

Is the USB driver installed correctly?

If you cannot use the SK-500 even after installing the driver, it may be that the driver was not installed correctly. Use the following procedure to check the installation.

- 1** Disconnect all USB cables (other than the keyboard and mouse cables) from the computer, then start up Windows.
- 2** Log on to Windows with the Administrator name or name of a user belonging to the Administrator's group.
- 3** Confirm that the power to the SK-500 is turned off, then set the computer switch to "USB."
- 4** Connect the SK-500 and the computer with a USB cable.
- 5** Turn on the SK-500's power.
- 6** Open "Control Panel" and double-click on "System."

- 7 Click on the "Hardware" tab, then double-click on [Device Manager].
- 8 Double-click on "Sound, video and game controllers."
- 9 Does "Roland SK-500 USB Driver" appear?
If it doesn't appear, refer to **Does "? USB Device" appear in "Device Manager?"** (p. 93).
If it is present, but with a yellow "!" or red "x" with it, refer to **Is "Roland SK-500 USB Driver" in "Device Manager" accompanied by a yellow "!" or red "x?"** (p. 94).
If there is no problem in showing the driver, but you still cannot use the SK-500, refer to **Is the SK-500's MIDI device name shown?** (p. 95).

Does "? USB Device" appear in "Device Manager?"

If the driver has not been installed in accord with the procedure described in "Installing the USB MIDI Driver In Windows 98," then Windows will not properly recognize the SK-500, and as a result, it cannot be operated. Use the following procedure to reinstall the driver.

- 1 Disconnect all USB cables (other than the keyboard and mouse cables) from the computer, then start up Windows.
- 2 Log on to Windows with the Administrator name or name of a user belonging to the Administrator's group.
- 3 Confirm that the power to the SK-500 is turned off, then set the computer switch to "USB."
- 4 Connect the SK-500 and the computer with a USB cable.
- 5 Turn on the SK-500's power.
- 6 Open "Control Panel" and double-click on "System."
- 7 Click on the "Hardware" tab, then double-click on [Device Manager].

- 8** Check to see if “? USB Device” appears under “Other Devices.” If it is not shown there, check for “? USB Device” under “Sound, video and game controllers.” If you do not find it there, the problem is due to something else, so check other entries in Troubleshooting.
- 9** If you do find “? USB Device,” click on it to select it, then right-click and select “Uninstall” from the menu that appears.
- 10** The “Confirm Device Removal” dialog box appears; after confirming the “USB Device” in the dialog box, click on the [OK] button.
- 11** Disconnect the USB cable from the SK-500.
- 12** Restart Windows.
- 13** Follow the procedure described in “Installing the USB MIDI Driver” to reinstall the driver.

Is “Roland SK-500 USB Driver” in “Device Manager” accompanied by a yellow “!” or red “x?”

Use the procedure below to check.

- 1** Disconnect all USB cables (other than the keyboard and mouse cables) from the computer, then start up Windows.
- 2** Log on to Windows with the Administrator name or name of a user belonging to the Administrator’s group.
- 3** Turn off the power to the SK-500 and set the SK-500’s computer switch to “USB.”
- 4** Connect the SK-500 and the computer with a USB cable.
- 5** Turn on the SK-500’s power.

- 6 Open "Control Panel" and double-click on "System."
- 7 Click on the "Hardware" tab, then click on [Device Manager].
- 8 Double-click on "Sound, video and game controllers" to display the device list.
- 9 Select "Roland SK-500 USB Driver" from the list and confirm that no yellow "!" or red "x" is present.
- 10 If a yellow "!" appears, quit all applications being used by the SK-500, turn off the SK-500's power, and then turn it on again.
- 11 If this does not resolve the problem, or if a red "x" is present, click on this, then right-click and select "Uninstall" from the menu that appears.
- 12 The "Confirm Device Removal" dialog box appears; after confirming the "USB Device" in the dialog box, click on the [OK] button.
- 13 Disconnect the USB cable from the SK-500.
- 14 Restart Windows.
- 15 Follow the procedure described in **Installing the USB MIDI Driver** (p. 31) to reinstall the driver.

Is the SK-500's MIDI device name shown?

If the device name does not appear, quit all applications being used by the SK-500, turn off the SK-500's power, and then turn it on again.

If this does not resolve the problem, follow the procedures in "Uninstalling the Windows 2000 USB MIDI Driver" to reinstall the driver.

The "Insert Disk" dialog box does not appear in "Installing the USB MIDI Driver"

This may be caused by the following.

Does "? USB Device" appear in "Device Manager?"

Is "Roland SK-500 USB Driver" in "Device Manager" accompanied by a yellow "!" or red "x?"

Has the driver been completely uninstalled? Follow the procedures in **Uninstalling the Windows 2000 USB MIDI Driver** (p. 37) to reinstall the driver.

You have tried installing according to the procedures above, but cannot install

While you may be able to install using the following steps, before you do, make sure that the driver is uninstalled first.

Installing the driver requires that an Administrator or other user belonging to the Administrator's group log on to Windows. For more details, consult your computer system administrator.

- 1** Remove all USB cables from the computer (except for the keyboard and mouse), and start up Windows.
- 2** Log on to Windows with the Administrator name or name of a user belonging to the Administrator's group.
- 3** Before installing the driver, quit all applications.
- 4** Open "Control Panel" and double-click on "System."
- 5** Click on the "Hardware" tab, then click on [Driver Signing].
The "Driver Signing options" dialog box appears.
- 6** Confirm that the "File signature verification" setting is set to "Ignore." If set to "Ignore," click on the [OK] button. If not set to "Ignore," note the current settings, change this setting to "Ignore," then click on the [OK] button.

** Note Regarding the "File signature verification" Setting*

When the "File signature verification" settings remains at "WARNING," although the "Digital signature not found" dialog box appears during installation, click on "Yes" to proceed with the installation.

If the "File signature verification" is set to "Block," the "Digital signature not found" dialog box appears during installation, so click on [OK]. "New Hardware Found Wizard" appears; click [Done] to close the wizard, then reinstall according to the instructions in **Does "? USB Device" appear in "Device Manager?"** (p. 93).

- 7** Click on the [OK] button to close "System properties."
- 8** Check to make sure the power to the SK-500 is off, and set the computer switch to "USB."
- 9** Connect the SK-500 and the computer with a USB cable.
- 10** Turn on the SK-500's power.
- 11** The "New Hardware Found Wizard" dialog box appears click on [Next].
- 12** Select "Display a list of the known drivers for this device so that I can choose a specific driver" and click on [Next].
- 13** Select "Sound, video and game controllers" for the hardware type and click on [Next].
- 14** Click on [Have disk], then click on [Browse]
- 15** The "File Location" dialog box appears; go to the folder containing the driver ("D:\ENG\Driver\Usb2000" when the CD-ROM drive is D:), then click on [Open]. After this, click on [OK].
- 16** Confirm that "Roland SK-500 USB Driver" is selected as the model in the box, then click on [Next]. Click on [Next] once more.
** If the "File signature verification" setting in Step 6 above is not set to "Ignore," the "Digital signature not found" dialog box appears. If this occurs, refer to the notes in Step 6 and take the appropriate measures to continue.*
- 17** Confirm that "Roland SK-500 USB Driver" appears, then click on [Done].
- 18** The "System Setting Change" dialog box appears; click on [Yes], then restart Windows.

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If you changed the “File signature verification” settings in Step 6, restore the settings to those before any such changes were made. Changing these settings requires that the Administrator or other authorized user log on to Windows.

20

Refer to **Setting the MIDI Output Destination** (p. 36) to make the settings allowing the SK-500 to be used with Windows Media Player.

Are two or more SK-500s connected?

Carry out the following procedure.

1

Quit all applications.

2

Shut down Windows.

3

Remove all USB cables from the computer (except for the keyboard and mouse), and start up Windows.

4

Connect one SK-500 to the computer, then confirm that this is operational.

The SK-500 Device Cannot Be Selected

Is the driver installed correctly?

When using a USB connection, the installation must be carried out exactly as described in **Installing the USB MIDI Driver** (p. 31). Refer to **Is the USB driver installed correctly?** (p. 92).

When using a serial connection, the installation must be carried out exactly as described in **Installing Serial MIDI Driver** (p. 40). Refer to **Uninstalling the Windows 2000 Serial MIDI Driver** (p. 43).

Has the computer been put into standby mode (Suspend) or sleep mode with the SK-500's power turned on?

If the SK-500's power is turned on and the computer is put into standby mode (Suspend) or Sleep mode, the system may begin to operate incorrectly. In such instances, after restoring operation, quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

Has the USB cable been disconnected and reconnected, or has the SK-500's power been turned off and then on again while the SK-500 was in use?

If while the SK-500 is in use the USB cable is disconnected and reconnected or the SK-500's power is turned off and then on again, the system may begin to operate incorrectly. In such instances, quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

With some computers, if Windows is started up with the SK-500 connected, the driver may not be loaded correctly, and the SK-500 cannot be used with the USB connection.

In this case, turn on the SK-500's power or connect the SK-500 after first starting up Windows.

You Cannot Play Back/Record

Is the driver installed correctly?

When using a USB connection, the installation must be carried out exactly as described in **Installing the USB MIDI Driver** (p. 31). Refer to **Is the USB driver installed correctly?** (p. 92).

When using a serial connection, the installation must be carried out exactly as described in **Installing Serial MIDI Driver** (p. 40) Refer to **Uninstalling the Windows 2000 Serial MIDI Driver** (p. 43).

Have you referred to "Setting the MIDI Output Destination" and made the settings enabling use of the SK-500 with the setup?

Unless these settings are made, the SK-500 cannot be used with Windows Media Player. Refer to p. 36 when using a USB connection; refer to p. 43 when using a serial connection.

Has the computer been put into standby mode (Suspend) or sleep mode during playback or recording?

If during playback or recording the computer is put into standby mode (Suspend) or Sleep mode, the system may begin to operate incorrectly. Quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

Has the USB cable been disconnected and reconnected, or the SK-500's power been turned off and then on again during playback or recording?

If during playback or recording the USB cable is disconnected and reconnected, or the SK-500's power is turned off and then on again, the system may not be able to record or play back data. First stop the recording or playback, then try recording or playing back the data again. If you are still unable to play back or record, quit all applications using the SK-500, turn off the SK-500's power, and then turn it on again.

Portions of Performances are Strange; Sounds Drop Out or Parts Are Missing

You may be able to improve things by placing a check in the “Light Load” check box in the Preferences dialog box.

- 1** Open “Control Panel” and double-click on “System.”
- 2** Click on the “Hardware” tab and click on “Device Manager.”
- 3** Double-click on “Sound, video and game controllers.”
- 4** Double-click on “Roland SK-500 USB Driver.”
- 5** Click on “Properties,” double-click on “MIDI Devices and Instruments.”
- 6** Click on “Roland SK-500 Serial Driver,” then click on “Properties.”
- 7** Click on [Settings].
- 8** Change the settings, then click on the [Preferences] button.
For more on the parameters that are set, refer to Step 9 on p. 41.

You may be able to improve the performance by making the following settings.

- 1** Open “Control Panel” and double-click on “System.”
- 2** Click on the “Advanced” tab and click on “Performance Options.” Select “Background services” and click on [OK].
- 3** Click on [OK], then close “System Properties.”

Driver Was Installed, But Driver File is Still Requested

If you change the USB connector to which the SK-500 is connected, you may be asked for the driver file.

This is normal behavior, and does not indicate a problem. Use the following procedure to install the driver. In this case, you will need the user authorization when logging on to Windows, and the "Driver Signing" setting must be confirmed.

- 1** When the "Insert Disk" dialog appears, click on [OK].
- 2** Enter the folder containing the driver in "Copy files from," or click the "Browse" button to display the "File Location" dialog box, go to the folder containing the driver, and click on [OK].
Example) When the CD-ROM drive is D and the folder containing the driver is "D:\Eng\Driver\Usb2000."
- 3** "New Hardware Found Wizard" appears; confirm that "Roland SK-500 USB Driver" is displayed, then click [Done].
- 4** The "System Setting Change" dialog box appears; click on [Yes] and restart the computer.

The driver file may be requested when two or more SK-500s are connected.

This driver can only be used by one SK-500 at a time.

When the "Insert Disk" dialog appears, click on "Cancel." Following this, carry out the procedure described in "Are two or more SK-500s connected?"

You Cannot Use Two or More SK-500s Simultaneously

This driver can only be used by one SK-500 at a time.

You cannot use a second or any additional SK-500. Carry out the procedure described in **Are two or more SK-500s connected?** (p. 98)

Other Issues

"The currently installed device driver does not support Plug and Play." appears.

This sort of message appears when you click on the "Roland SK-500 USB Driver Properties" "Resource" tab.

Macintosh Driver Issues

You cannot install the USB MIDI driver

Have you quit other programs?

Quit all programs during startup.

Install OMS or FreeMIDI

Before you can install the USB MIDI driver, OMS or FreeMIDI must already be installed on your computer. Following the instructions described in **Installing the MIDI Driver (OMS)** (p. 45) or "Readme SK-500 FM Driver-E" (on the SK-500 CD-ROM, open "English" then "FreeMIDI") to install OMS or FreeMIDI.

The SK-500 is Not Detected When Setting OMS or FreeMIDI

Is the SK-500 being recognized?

- Turn the SK-500's power off then on again.
- If using a serial connection, confirm that the SK-500's computer switch is set to "Mac." If it is not, set the switch to "Mac," then turn the SK-500's power off then on again.
- When using a serial connection, check to make sure that the cable is connected to the printer port or the modem port.
- Disconnect the USB cable, then reconnect it.
- If other USB devices are connected, then connect only the SK-500.
- It may be that the computer did not correctly recognize and initialize the SK-500. Leaving the SK-500's USB cable connected, restart the Macintosh. If you still cannot make the connection, shut down the Macintosh and turn off the power. Afterwards, turn on the computer and start up the Macintosh once again.
- The SK-500 is not recognized when connected to the Macintosh keyboard USB connector. Connect the SK-500 to the USB port on the computer itself.

Are you sure you are using only OMS?

The setup will not operate correctly if your system still includes the files from a previous installation of FreeMIDI when OMS is used. You will need to delete any files related to FreeMIDI from the Extensions folder.

Check the OMS Settings

Follow the procedure in **Setting OMS** (p. 48, p. 56) to check the OMS settings. Additionally, check the MIDI settings for your MIDI sequencer or other MIDI device to make sure the device is correctly matched to the SK-500's MIDI IN and OUT connectors.

Is the Studio Setup enabled?

If no diamond (◊) mark appears at the left end of the title section in the OMS Studio Setup screen, it indicates that the settings are not in effect. Enable the settings by selecting "Make Current" from the File menu.

No Sound in the OMS Test

Are the sound module settings correct?

Check the SK-500's computer switch.

Set the switch to "USB" when using a USB connection, and to "Mac" when using a serial connection.

The SK-500 does not recover correctly from sleep mode.

After your Macintosh has been in sleep mode, exit the software and re-start it.

- * We recommend that you make Energy saving settings in the Control panel so that your computer does not enter sleep mode. We recommend setting the sleep settings in the Energy Saver control panel so that the computer never sleeps.

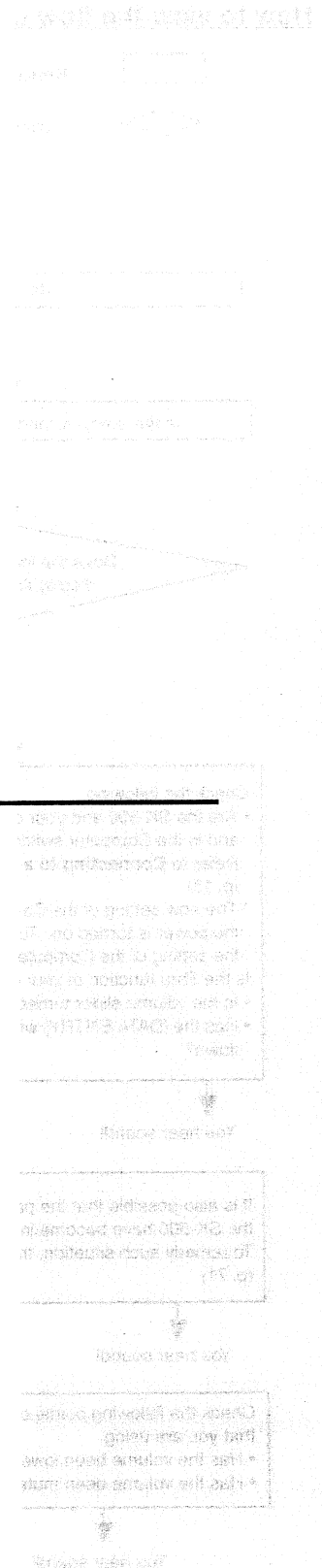
Restart the Macintosh

Restart the Macintosh, then check the settings once more.

In Other Operations

There is no sound

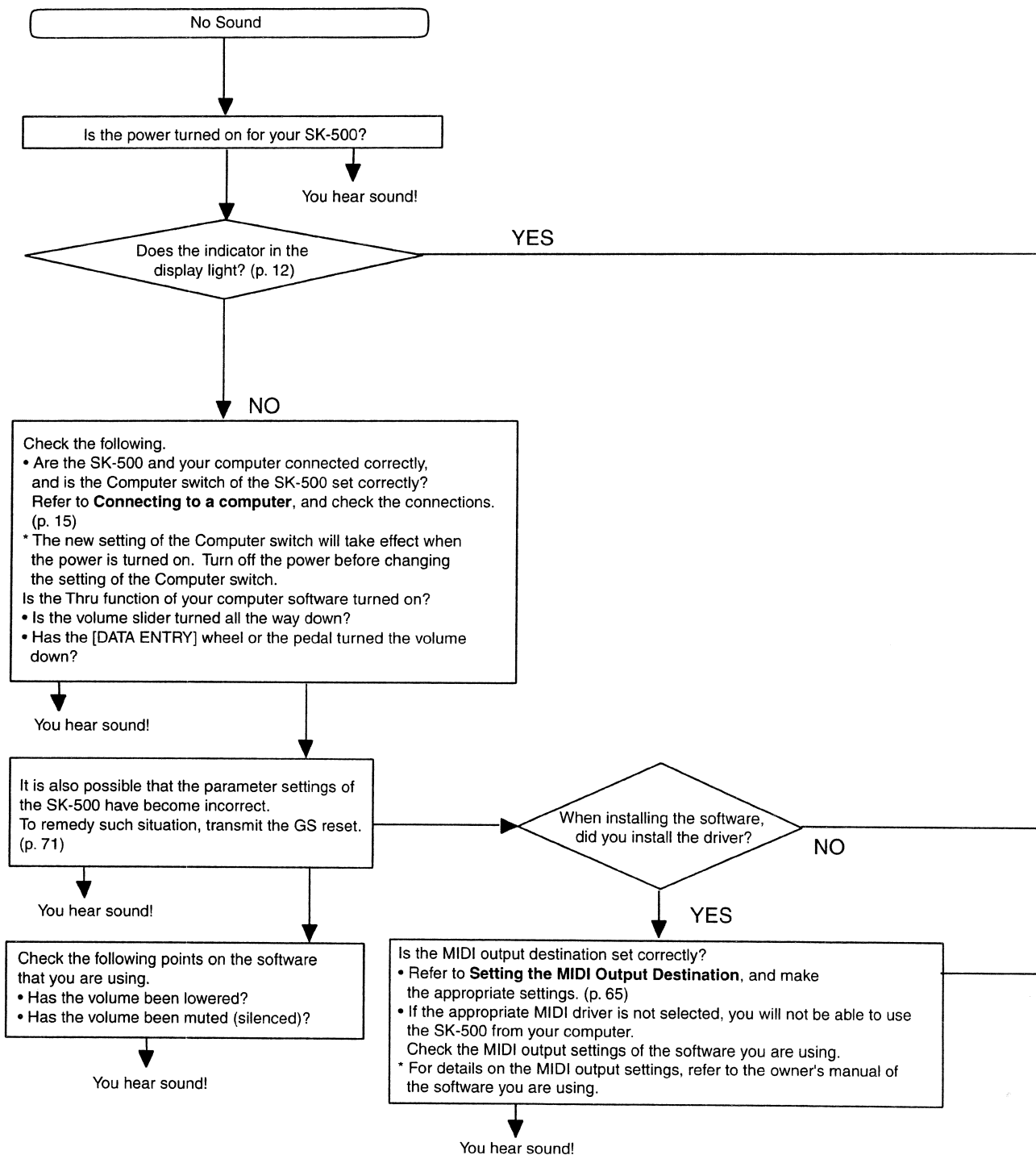
When no sound is output, the causes may include mistakes in connecting devices or in driver or software settings. Furthermore, when using the SK-500 on its own, be sure to set Local Control to ON.

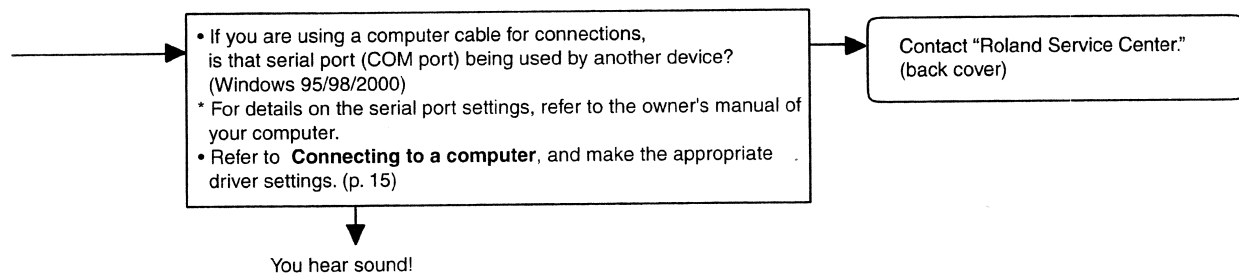
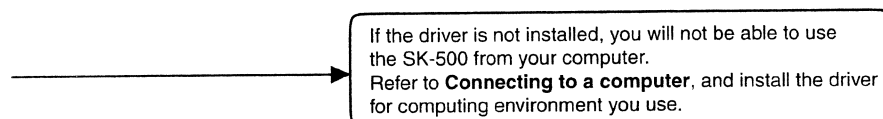
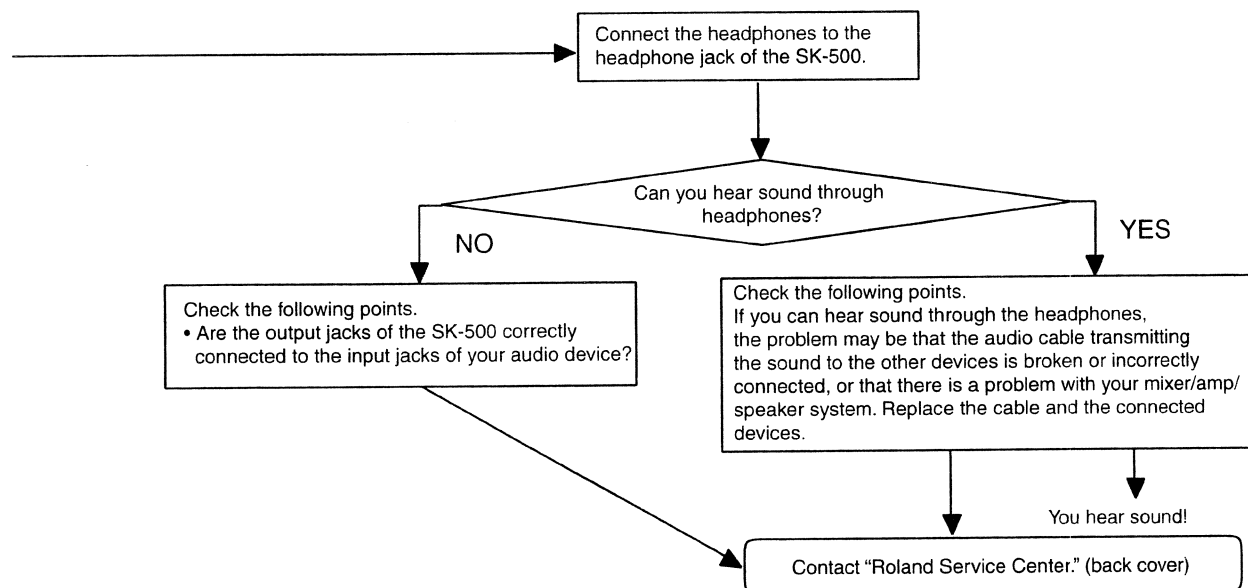


How to view the flow chart

□ --- Read the instructions in the square and continue.

◇ --- Answer the question in the rhombus.





Is the volume turned up?

Check the SK-500 and audio device volume settings.

You cannot play back more than 16 parts

- The SK-500 can play performances exceeding sixteen parts only when connected to a computer with the USB connector or serial connector.
- When connecting with the MIDI connector, sixteen parts is the maximum number.
- MIDI Mapper itself basically only handles sixteen parts.

When using seventeen or more parts, software capable of dealing with MIDI devices connected to two ports is required.

The volume level of the instrument connected to Audio output/input jacks is too low.

- Could you be using a connection cable that contains a resistor?

Use a connection cable that does not contain a resistor.

- Some audio playback devices are furnished with high-resistance cables. Using such cables can cause a reduction in the volume of the sound being played back; do not use such cables.

A specific Part does not sound

- Is any part's volume, velocity, or expression setting causing reduced volume? Assign volume, velocity, and expression to the [DATA ENTRY] wheel and raise the volume.
- Does the MIDI Receive channel of the Part match the MIDI Transmit channel of the connected MIDI device?

Assign volume, velocity, and expression to the [DATA ENTRY] wheel and raise the volume.

There is no sound, even when the [VOLUME] slider is moved

- Make sure that no MIDI signals are lowering any Part Levels (volume) or expression levels.

Cannot select the desired sound

- Are you sending an incorrect Program Change number?

To see which tones can be used with the SK-500, refer to the PDF file on the SK-500 CD-ROM ("Eng" - "Appendix"; on the Macintosh, "English" - "Appendix").

- Are you setting the SK-500 to SC-55 Map, SC-88 Map, or SC-88Pro Map?

Refer to the PDF file on the SK-500 CD-ROM ("Eng" - "Appendix"; on the Macintosh, "English" - "Appendix").

When changing the Variation number, the desired number is not displayed.

Are you playing back data or changing the instrument from your computer?

Certain data may switch to different tone maps (SC-88Pro, SC-88, SC-55, GM1). Press GS Initialize to switch to the SC-8820 tone map, or GM2 Initialize to switch to the GM2 Map.

Press GS Initialize to switch to the SC-8820 tone map, or GM2 Initialize to switch to the GM2 Map.

Notes sound twice

Is Local Control set to ON with the SK-500 connected to the computer?
Set to Local Off (p. 71).

The sound is distorted

- Is any distortion effect being added to the sound. Try lowering the effect all the way with the [DATA ENTRY] wheel or the pedal.
- If the sound of a specific tone or part is distorted, try lowering that part's volume level.
- If the entire sound is distorted, lower the overall volume level of the parts.

The pitch is incorrect

- Is the pitch of specific part or all parts, more than a half-step off? Try making adjustments in the sequencer software when starting up the software.
- Pitch Bend messages other than "0" may occur.

Sound does not stop playing

- With some sequencer software, the sound may not stop playing when, for example, the recording track is changed while the keyboard is played. In such situations, either initialize the sound module with the software or carry out GS Reset.

The tones sound strange

- Have you switched tones after making changes to tone parameters (such as filters)? Set all tone parameter settings values changes with the [DATA ENTRY] wheel or pedal to 0.
- The SK-500's parameter settings may have become corrupted. Carry out GS Reset (p. 71).

Sounds are cut off

- Sounds are cut off when the number of parts exceeds 64 voices.

Exclusive messages are not being received

- Is the Device ID number for the Exclusive data being transmitted set to "17"?
- Is the check sum wrong?

For more on Exclusive messages, refer to the PDF file on the SK-500 CD-ROM

("Eng" - "Appendix"; on the Macintosh, "English" - "Appendix").

The SK-500 does not transmit MIDI data (you cannot perform using sequencer software)

- When sending data from the SK-500 while connected to a computer, set the computer switch on the SK-500's rear panel.

Connection		Computer switch setting
USB connection		"USB"
Serial connection	Windows	"PC"
	MacOS	"Mac"

- Data is not transmitted from the USB connector or serial port when the computer switch is set to "MIDI."

The SK-500 does not play correctly when operating the controller.

- When a controller receives frequent use during playback of a song, the performance may not be played correctly. If this happens, reduce the amount of data used during the song.

I want to apply delay to a drum part, but cannot do so

- With the initial settings, the Delay Send Level of all drum instruments is set to 0.

Set the Delay Send Level for each instrument.

Since the initial setting of the Delay Level for the drum part is also 0, raise the Delay Send Level.

When the Insertion effects are turned on, all System effects (such as reverb) set up to that time are reinitialized.

- When the insertion effects are set to ON, the system effects send level settings can no longer be made with Control Change messages.

Therefore, when the Insertion effects are turned on, it becomes necessary to send settings to the System effects by a different route than the one used up to that point.

This requires making the System effects send level settings with EFX TO Rev (Cho, Dly) when EFX is set to ON (matching those used for the Insertion effects).

The sequencer plays sound immediately after startup

- Are you pressing a key immediately after startup?

It occurs with certain sequencers. Do not press any keys immediately after startup.

Certain keys on the keyboard do not sound when certain instrument sounds (such as timpani) are selected, even though the same keys do sound with other instruments.

With certain instruments, the same sound is produced when pressing keys above a certain range.

This does not indicate a problem. The instrument you've selected normally cannot play notes above a certain limit. On the SK-500, when registers above the fixed point are reached, either the sound is not played, or the same sound may be produced.

The SK-500 cannot be operated together with Windows or Mac sequencer software

- Have you installed the driver?

In order to operate the SK-500 from a computer, you need to first install the appropriate driver. Refer to **Before Connecting to a Computer** (p. 14) and install the driver for the computing environment you use.

About MIDI data

MIDI files and a variety of audio files can be employed in handling music data. Common audio file formats include “WAVE,” used with Windows, and “AIFF,” used on the Macintosh.


MIDI is a set of commands used to specify the velocity, duration, or many other elements involved in the generation of a series of musical notes. A sound module will produce sound in accord with the MIDI information (or MIDI messages) sent to it. Since MIDI files do not contain any music, a sound module is required to “play back” MIDI data.

MIDI files you create can be played back using other makes/models of sound module. However, the way the sound module plays the data may be different due to differences in the specifications of the modules.

On the other hand, audio files such as WAVE contain the sound of the music itself. Sound modules are not needed in order to play back WAVE or AIFF files, but their file size tends to be large.

- To create a WAVE file from a MIDI file, you can use specialized software (possibly shareware) that allows you to play back the MIDI data and record it at the same time.
- To create a MIDI file from a WAVE file, listen to the song and create a MIDI file using sequencer software.

What is GM?

GM (General MIDI) is a set of recommended specifications that has served in standardizing the MIDI functionality of sound generating devices, so essentially the same response can be expected regardless of the manufacturer. Any device that is equipped with a sound module supporting the General MIDI system carries the GM logo (), and will be able to accurately reproduce General MIDI Scores (Music Data created for the General MIDI System), regardless of the manufacture or the model.

What is GM2?

GM2 is a set of recommended specifications which seeks to provide for a higher degree of performance expression and compatibility by offering detailed definitions for additional functionality, such as sound editing and effects, that had not been defined under GM (General MIDI). A larger number of sounds have also been included.

Sound modules that are compatible with GM2 can play back both GM and GM2 music data.

- * *The original General MIDI, which does not incorporate the additional features added with GM2, can sometimes be called “GM1” to distinguish it from the more recent specifications.*

MEMO

MIDI and WAVE files contain completely different kinds of information, so MIDI files cannot be converted to WAVE files, nor can WAVE files be converted to MIDI files.

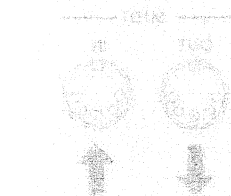
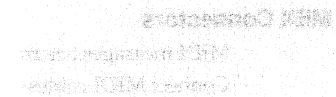
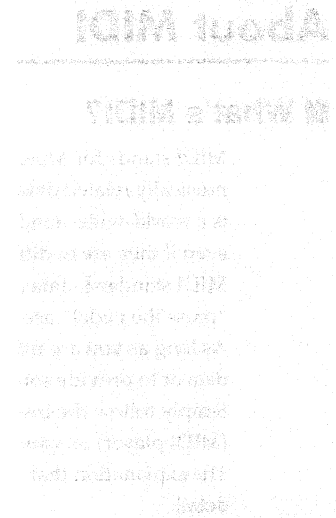
What is GS?

The GS Format, devised by Roland, is a set of standard specifications for sound generating devices. While being fully compliant with the GM1 specifications, the GS Format attempts to enhance compatibility by defining a number of additional details. These include unique specifications for sounds, and for the functions available for tone editing and effects (chorus and reverb).

Moreover, the GS Format is ready for future needs, since it is designed to be readily modified, allowing new sounds and functions to be added as needed.

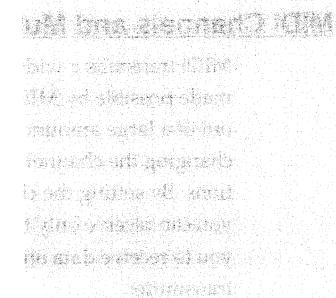
GS Format sound modules offer everything provided by GM generators, while at the same time they can offer an extended range of sounds to choose from, including numerous drum sets.

GS Format devices can faithfully reproduce both GM and GS music data.



MIDI IN and OUT

MIDI IN and OUT



MIDI Channels and Pairs

About MIDI

■ What's MIDI?

MIDI stands for Musical Instrument Digital Interface. MIDI devices can transmit musically related data such as performance data or data to select sounds. Since MIDI is a world-wide standard, musical data can be sent and received between devices even if they are of different types and were made by different manufacturers. In the MIDI standard, data describing a musical performance such as "play a note" or "press the pedal" are transmitted as MIDI messages.

As long as you are using this unit to simply play commercially available music data or to provide sound for game software, it is not necessary to know about MIDI. Simply follow the instructions in the manual for your music data playback device (MIDI player) or your software.

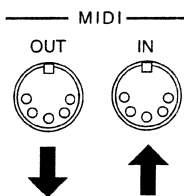
The explanation that follows will help you use MIDI to control this unit in greater detail.

How MIDI Messages are Transmitted and Received

First, we will briefly explain how MIDI messages are transmitted and received.

MIDI Connectors

MIDI messages are transmitted and received using MIDI connector on the SK-500. Connect MIDI cables to these connectors as appropriate for your setup.

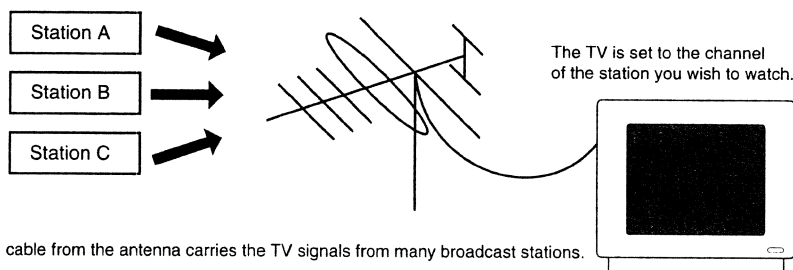


MIDI OUT: This connector transmits messages from this unit.

* SK-500 does not have MIDI IN and MIDI THRU connectors.

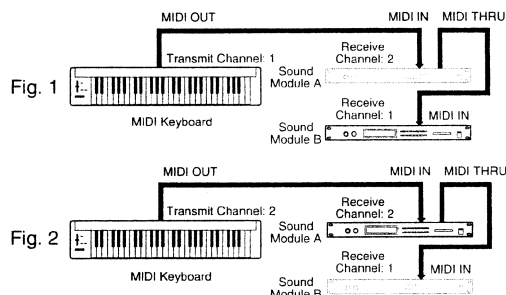
MIDI Channels and Multitimbral Sound Modules

MIDI transmits a wide variety of performance data over a single MIDI cable. This is made possible by MIDI channels. MIDI channels allow specific data to be selected out of a large amount of data. The concept is similar to the idea of TV channels. By changing the channel on a TV receiver you can view the programs of different stations. By setting the channel of the receiver to match the channel of the transmitter, you can receive only the program you wish to watch. In the same way, MIDI allows you to receive data only when the channel of the receiver matches the channel of the transmitter.



MIDI uses sixteen channels, numbered 1–16. Music data is received when the transmit channel of the transmitting device matches the receive channel of the receiving device. If you make the MIDI channel settings shown in Fig.1, only sound module B will sound when you play the keyboard, and sound module A will not sound. This is because sound module B matches the transmit channel of the keyboard, but sound module A's channel does not match.

Conversely, if you set the transmit channel of the keyboard to match sound module A, sound module A will sound (Fig.2).



By using 16 channels you can play ensembles that use 16 Parts. Sound module such as this unit, which are able to simultaneously play many parts, are called “multitimbral” sound modules. Timbre is a word meaning sound.

This unit has two types of Parts: Normal Parts and Drum Parts. Normal Parts are used to play melody or bass lines. On General MIDI/GS sound modules, the Drum Part uses channel 10.

■ What is General MIDI 2?

The General MIDI 2 is a set of recommended specifications that provide detailed definitions for functionality such as sound editing and effects that had not been defined in the GM (General MIDI) ^{GENERAL}MIDI, and extend the sound map to allow a higher degree of performance expression and compatibility.

- * The GM (General MIDI) was defined in 1991 as a recommended practice of the MIDI specification, to provide a standard for the MIDI functionality of sound modules that would allow certain types of compatibility between manufacturers. It defines basic sound module specifications such as the number of parts, polyphony, and the sound map.

Principle differences between General MIDI 2 and the GS Format (SK-500)

- Initialization message for sound source parameters

[GS] GS Reset F0 41 10 42 12 40 00 7F 00 41 F7

[General MIDI 2] GM2 System On F0 7E 7F 09 03 F7

- Sound selection

[GS] Use bank select MSB and program change.

Bank select LSB is used to change the sound map.

00H: specify INST MAP

01H: SC-55 Map

02H: SC-88 Map

03H: SC-88Pro Map

04H: SC-8820 Map

To set a part other than part 10 as the drum part, use a system exclusive message.

<Example> Setting the Part 11 to a Drum Part (Room Set).

F0 41 10 42 12 40 1A 15 02 0F F7

MIDI CH = 11

CC#00 000

CC#32 4

PC# 009

[General MIDI 2] Use bank select LSB and program change.

Bank select MSB is 121. Use 120 to set as the drum part.

<Example> Setting the Part 11 to a Drum Part (Room Set).

MIDI CH = 11

CC#00 120

CC#32 0

PC# 009

* The General MIDI 2 sound map differs from the GS format. The SK-500 will normally operate in the GS format, but if a GM2 System On message is received, it will enter General MIDI 2 mode, and will use the special sound map. In this state, it will not be possible to select the SK-500's own sounds.



Regarding General MIDI 2 Sound map, refer to the PDF file on the SK-500 CD-ROM.

Items newly defined in General MIDI 2

- Polyphony 32 (General MIDI is 24)
- Number of sounds 256 sounds / 9 drum sets (General MIDI is 128 sounds / 1 drum set)
- Messages that must be received (* indicates those added by General MIDI 2)

Note ON/OFF

Program Change

Control Change

Bank Select	(Controllers 0 & 32)
Modulation Depth	(Controller 1)
Portamento Time*	(Controller 5)
Channel Volume	(Controller 7)
Pan	(Controller 10)
Expression	(Controller 11)
Hold 1	(Controller 64)
Portamento ON/OFF*	(Controller 65)
Sostenuto*	(Controller 66)
Soft*	(Controller 67)
Harmonic Content*	(Controller 71)
Release Time*	(Controller 72)
Attack Time*	(Controller 73)
Brightness*	(Controller 74)
Decay Time*	(Controller 75)
Vibrato Rate*	(Controller 76)
Vibrato Depth*	(Controller 77)
Vibrato Delay*	(Controller 78)
Reverb Send Level*	(Controller 91)
Chorus Send Level*	(Controller 93)
Data Entry	(Controllers 6 & 38)
RPN LSB/MSB	(Controller 100 & 101)

RPN

Pitch Bend Sensitivity
Fine Tune
Coarse Tune
Modulation Sensitivity*
RPN Null

Channel Mode Message
 All Sound Off
 Reset All Controllers
 All Notes OFF
 Mono Mode ON*
 Poly Mode ON*
 Pitch Bend
 Channel Pressure
 GM System Message
 GM2 System ON*
 GM1 System ON
 GM System OFF
 Universal System Exclusive Message
 Master Volume*
 Master Fine Tuning*
 Master Coarse Tuning*
 Reverb Parameters*
 Reverb Type*
 Reverb Time*
 Chorus Parameters*
 Chorus Type*
 Modulation Rate*
 Modulation Depth*
 Feedback*
 Reverb Send Level*
 Controller Settings*
 Channel Pressure*
 Control Change*
 Scale/Octave Tuning*
 Keybased Controller*
 Level*
 Pan*
 Reverb Send Level*
 Chorus Send Level*
 Active Sensing

■ MIDI Messages That Can Be Received by the SK-500

MIDI uses many different types of message to transmit musical performance data, and there are many types of MIDI message. For example, information indicating “which key was played how strongly” is transmitted as a Note message.

The way that a device responds when it receives each type of MIDI message (such as how it produces sound) will depend on the specifications of that device. This means that if the receiving device is not able to perform the function requested by the incoming message, the musical result will not be what you expected.

The main types of MIDI message received by this unit are as follows.

* MIDI messages for which reception capability is required by the General MIDI are marked by a ☆ sign.

Note messages ☆

These messages convey notes played on the keyboard. They include the following information.

Note number: a number indicating the note (key) that was pressed or released
Note on: data indicating that the note (key) was pressed
Note off: data indicating that the note (key) was released
Velocity: a number indicating how strongly the note (key) was pressed
Note numbers are a number from 0 to 127 which indicate the keyboard key position, with middle C (C4) as note number 60.

Pitch Bend ☆

This is used to transmit message about the operation of the pitch bend wheel (or lever) usually found on synthesizers. Pitch benders can continuously change the pitch of a note over a wide range.

Program Change ☆

These messages are used to select sounds. Sounds are selected by a Program numbers 1–128. On the SK-500, these messages will select sounds (Instruments). By using Bank Select messages (which are a type of Control Change message), an even wider variety of sounds can be selected.

Control Change ☆

These messages control parameters such as modulation and pan. The function of the message is determined by its Control Change number.

Bank Select (control change number 0/32)

The tone is changed when used with a Program Change message. The tone is selected with a Program Change message after selecting the Bank Select message. The sound will not change when only a Bank Select message is received.

Modulation (control change number 1) ☆

This message controls vibrato.

Volume (control change number 7) ☆

This message controls the volume of a Part. When this message is received the volume of a Part will change.

Expression (control change number 11) ☆

This message conveys volume changes. It can be used to add expression during a song.

Using Volume and Expression

It is convenient to use Volume and Expression in distinct ways, as follows.

Volume: Adjust the volume balance between Parts.

Expression: Create volume changes during a song (crescendo, decrescendo, etc.)

The reason for this differentiation is that if you use only Volume messages to create volume changes during the song, you will have to modify all of the Volume data in the song if you later decide to adjust the volume balance between the Parts. However, if you use only Volume at the beginning of the song, and use only Expression during the song, it will be easy to adjust the volume balance between Parts for the entire song simply by modifying the Volume data at the beginning of the song, and the data for changes in dynamics during the song can remain as it was. This is very convenient when, for example, you decide to make a slight change in the balance between the piano and bass when the song is nearly completed.

MEMO

On some MIDI sequencers, control change data located at the same step (timing) is transmitted in ascending order of controller number. If you are using this type of MIDI sequencer, you must adjust the timing of the bank select data so that it is always transmitted in the correct order of Bank Select → Program Change.

NOTE

The volume of a Part will be affected both by Volume messages (control change 7) and by Expression messages (control change 11). 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. Be aware of this.

Pan (control change number 10) ☆

This message controls the stereo position of a Part.

Hold (1) (control change number 64) ☆

This message conveys the up/down movements of the damper pedal, causing the currently sounding notes to be sustained. 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 (control change number 66)

The sostenuto pedal on a piano sustains only the notes which were already sounding at the moment the pedal was pressed. The Sostenuto message conveys the movement of this pedal. When Sostenuto On is received, only the notes which were already on at that moment will be sustained. In the case of decay-type instruments such as a piano, the sound will decay gradually until a Sostenuto Off message is received. In the case of sustain-type instruments such as an organ, the sound will continue sustaining until a Sostenuto Off message is received.

Soft (control change number 67)

The soft pedal on a piano softens the tone during the time the pedal is pressed. The Soft message conveys the movement of this pedal. When Soft On is received, the cut-off frequency will be lowered, causing a softer sound. When Soft Off is received, the previous sound will return.

Reverb Send Level (control change number 91)

This message adds a reverb effect to the Part.

Chorus Send Level (control change number 93)

This message adds a chorus effect to the Part.

Delay Send Level (control change number 94)

This message adds a delay effect to the Part.

Portamento (control change number 65)**Portamento Time (control change number 5)****Portamento Control (control change number 84)**

Portamento is an effect that creates a smooth change in pitch between the previously played note and the newly played note. 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 (control change numbers 100 & 101) ☆

Data Entry (control change numbers 6 & 38) ☆

Since the function of the RPN (Registered Parameter Number) 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, and then 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.

NRPN LSB, MSB (control change numbers 98 & 99)

Data Entry (control change numbers 6 & 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 that 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.

Aftertouch (Channel Pressure only) ☆

Aftertouch is a message which 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 Key Pressure, which is transmitted as one value that affects all notes on the specified MIDI channel.

All Sounds Off

This message completely turns off the sound of all currently sounding notes. The sound of the specified channel will be forcibly turned off.

All Notes Off ☆

This message causes a Note Off to be sent to each note of the specified channel that is currently on. However, if Hold 1 or Sostenuato are on, the sound will continue until these are turned off.

MEMO

The values modified using RPN messages will not be initialized even if Program Change messages, etc. are received to select other sounds.

MEMO

After a GS Reset message is received, NRPN messages will be received.

MEMO

For details about how to use NRPN with GS sound modules, refer to **Using NRPNs with GS Sound Modules** (The PDF file on the SK-500 CD-ROM).

MEMO

With the initial settings, Aftertouch messages will have no effect when received by the SK-500. In order for Aftertouch messages to do something, you need to set Aftertouch-related parameters.

Reset All Controllers ☆

This message returns controller values to their initial settings. The following controller values for the specified channel will be reset to their initial values.

Controller	Initial value
Pitch Bend	0 (center)
Polyphonic Key Pressure	0 (minimum)
Channel Pressure	0 (minimum)
Modulation	0 (minimum)
Expression	127 (maximum)
Hold	0 (off)
Portamento	0 (off)
Soft	0 (off)
Sostenuto	0 (off)
RPN	number unset
NRPN	number unset

Active Sensing

This message is used to check for broken MIDI connections, such as MIDI connectors that have been pulled out, or MIDI cables that have been broken. The SK-500 transmits Active Sensing messages from MIDI OUT at specific intervals. Once an Active Sensing message is received at MIDI IN, Active Sensing monitoring will begin, and if an Active Sensing message fails to arrive for more than 420 [msec], 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 Controllers message was received, and Active Sensing monitoring will stop.

System Exclusive messages

Exclusive 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 cannot be used between devices of different types or different manufacturers.

In order to recognize the device for which the data is intended, Roland Exclusive messages contain a manufacturer ID, device ID and model ID.

The SK-500 manufacturer's ID is 41H. The device ID is 10H. The model ID is 42H.

GM1 System On ☆

(Universal System Exclusive)

When GM1 System On is received, the SK-500 will be set to the basic General MIDI settings. Also, NRPN Bank Select messages will no longer be received after GM1 System On is received. The beginning of song data bearing the GM logo contains a GM1 System On message. This means that if you play back the data from the beginning, the sound generator device will be automatically initialized to the basic settings.

GM2 System On

(Universal System Exclusive)

When GM2 System On is received, the SK-500 will be set to the basic General MIDI 2 settings. Refer to (p.113).

MEMO

Parameter values that were modified using RPN or NRPN will not change even when a Reset All Controller message is received.

GS Reset

(GS Format System Exclusive)

When a GS Reset is received, the SK-500 will be set to the basic GS settings. Also, NRPN messages defined by the GS format are recognized after a GS Reset has been received. A GS System Reset message is located at the beginning of song data bearing the GS logo. This means that if you play back the data from the beginning, the sound generating device will automatically be initialized to the basic settings.

Master Volume

(Universal System Exclusive)

This is an Exclusive message common to all MIDI devices that controls the master volume of all Parts.

Other Exclusive messages

The SK-500 can receive GS format Exclusive messages (model ID 42H) that are common to all GS sound generators. Exclusive messages can be used to store the SK-500 settings or to make fine adjustments to parameters.

For details of the Exclusive message transmitted and received by the SK-500, refer to the PDF file on the SK-500 CD-ROM.

About MIDI Implementation Charts

MIDI has made it possible for a wide variety of devices to exchange information, but it is not always true that all types of MIDI messages can be exchanged between all types of devices. For example, if you use a synthesizer as a master device to control a digital piano, the pitch bender (the lever or wheel that modifies the pitch) of the synthesizer will have no effect on the sound of the piano.

The important thing to keep in mind when using MIDI is that the slave device must be able to understand what the master is saying. In other words, the MIDI messages must be common to both master and slave.

To help you quickly determine what types of MIDI messages can be exchanged between master and slave, the Operation Manual of each MIDI device includes a **MIDI Implementation chart**. By looking at this chart, you can quickly see what messages the device is able to transmit and receive. The left side of the chart lists the names of a variety of MIDI messages, and the Transmitted and Recognized columns use "o" and "x" marks to indicate whether or not each of these messages can be transmitted or received. This means that a specific MIDI message can be exchanged only if there is an "o" in both the Transmitted column of the master and the Recognized column of the slave device. MIDI implementation charts are standardized, so you can fold the charts from two manuals together to see at a glance how the two devices will communicate.

A detailed explanation concerning the data format used for Exclusive messages, and the implementation of MIDI used on the SK-500 can be found in the SK-500 CD-ROM.

Appendix

Instrument List

* The SC-8820 Map is employed by the SK-500.

Piano

CC00	PC	SC-8820 Map	Voices
000	001	Piano 1	1
001		Upright Piano	1
002		Mild Piano	1
008		Upright P w	1
009		Mild Piano w	1
016		European Pf	1
024		Piano + Str.	2
025		Piano + Str2	2
026		Piano+Choir1	2
027		Piano+Choir2	2
000	002	Piano 2	2
001		Pop Piano	2
002		Rock Piano	2
008		Pop Piano w	2
009		Rock Piano w	2
016		Dance Piano	2
000	003	Piano 3	2
001		EG+Rhodes 1	2
002		EG+Rhodes 2	2
008		Piano 3w	2
000	004	Honky-tonk	2
008		Honky-tonk 2	2
000	005	E.Piano 1	1
008		St.Soft EP	2
009		Cho. E.Piano	2
010		SilentRhodes	2
016		FM+SA EP	2
017		Dist E.Piano	2
024		Wurly	2
025		Hard Rhodes	2
026		MellowRhodes	2
000	006	E.Piano 2	2
001		E.Piano 3	2
008		Detuned EP 2	2
009		Detuned EP 3	2
010		EP Legend	2
016		St.FM EP	2
024		Hard FM EP	2
032		EP Phase	2
000	007	Harpsichord	1
001		Harpsichord2	2
002		Harpsichord3	2
008		Coupled Hps.	2
016		Harpsi.w	1
024		Harpsi.o	2
032		Synth Harpsi	2
000	008	Clav.	1
001		Clav. 2	2
002		Atk Clav.1	2
003		Atk Clav.2	2
008		Comp Clav.	1
016		Reso Clav.	1
017		Phase Clav	1
024		Clav.o	2
032		Analog Clav.	2
033		JP8 Clav. 1	1
035		JP8 Clav. 2	1
036		SynRingClav.	2
037		SynDistClav.	1
038		JP8000 Clav.	1
039		Pulse Clav	1

Chromatic percussion

CC00	PC	SC-8820 Map	Voices
000	009	Celesta	1
001		Pop Celesta	2
000	010	Glockenspiel	1
000	011	Music Box	1
001		Music Box 2	2
008		St.Music Box	2

CC00	PC	SC-8820 Map	Voices
000	012	Vibraphone	1
001		Pop Vibe.	2
008		Vibraphone w	1
009		Vibraphones	2
000	013	Marimba	1
008		Marimba w	1
016		Barafon	1
017		Barafon 2	1
024		Log drum	1
000	014	Xylophone	1
008		Xylophone w	1
000	015	Tubular-bell	1
008		Church Bell	1
009		Carillon	1
010		Church Bell2	2
016		Tubularbellw	1
000	016	Santur	1
001		Santur 2	2
002		Santur 3	2
008		Cimbalom	2
016		Zither 1	1
017		Zither 2	2
024		Dulcimer	2

Organ

CC00	PC	SC-8820 Map	Voices
000	017	Organ 1	2
001		Organ 101	2
002		Ful Organ 1	2
003		Ful Organ 2	2
004		Ful Organ 3	2
005		Ful Organ 4	2
006		Ful Organ 5	2
007		Ful Organ 6	2
008		Trem. Organ	2
009		Organ o	2
010		Ful Organ 7	2
011		Ful Organ 8	2
012		Ful Organ 9	2
016		60's Organ 1	1
017		60's Organ 2	1
018		60's Organ 3	1
019		Farf Organ	1
024		Cheese Organ	1
025		D-50 Organ	2
026		JUNO Organ	2
027		Hybrid Organ	2
028		VS Organ	2
029		Digi Church	2
030		JX-8P Organ	2
031		FM Organ	2
032		70's E.Organ	2
033		Even Bar	2
040		Organ Bass1	2
048		5th Organ	2
000	018	Organ 2	2
001		Jazz Organ	2
002		E.Organ 16+2	2
003		Jazz Organ 2	2
004		Jazz Organ 3	2
005		Jazz Organ 4	2
006		Jazz Organ 5	2
007		Jazz Organ 6	2
008		Chorus Or.2	2
009		Octave Organ	2
032		Perc. Organ	2
033		Perc.Organ 2	2
034		Perc.Organ 3	2
035		Perc.Organ 4	2
000	019	Organ 3	2
008		Rotary Org.	1
016		Rotary Org.S	1
017		Rock Organ 1	2
018		Rock Organ 2	2
024		Rotary Org.F	1

CC00	PC	SC-8820 Map	Voices
000	020	Church Org.1	1
008		Church Org.2	2
016		Church Org.3	2
024		Organ Flute	1
032		Trem.Flute	2
033		Theater Org.	2
000	021	Reed Organ	1
008		Wind Organ	2
016		Puff Organ	2
000	022	Accordion Fr	1
008		Accordion It	1
009		Dist. Accord	2
016		Cho. Accord	2
024		Hard Accord	2
025		Soft Accord	2
000	023	Harmonica	1
001		Harmonica 2	1
008		B.Harp Basic	1
009		B.Harp Suppl	1
000	024	Bandoneon	2
008		Bandoneon 2	2
016		Bandoneon 3	2

Guitar

CC00	PC	SC-8820 Map	Voices
000	025	Nylon-str.Gt	2
008		Ukulele	1
016		Nylon Gt.o	2
024		Velo Harmnix	1
032		Nylon Gt.2	1
040		Lequint Gt.	1
000	026	Steel-str.Gt	1
008		12-str.Gt	2
009		Nylon+Steel	2
010		Atk Steel Gt	2
016		Mandolin	2
017		Mandolin 2	2
018		MandolinTrem	2
032		Steel Gt.2	1
033		Steel + Body	2
000	027	Jazz Gt.	1
001		Mellow Gt.	2
008		Pedal Steel	1
000	028	Clean Gt.	1
001		Clean Half	1
002		Open Hard 1	2
003		Open Hard 2	1
004		JC Clean Gt.	1
005		Atk CleanGt.	2
008		Chorus Gt.	2
009		JC Chorus Gt	2
016		TC FrontPick	1
017		TC Rear Pick	1
018		TC Clean ff	2
019		TC Clean 2:	2
020		LP Rear Pick	1
021		LP Rear 2	2
022		LP RearAtack	2
023		Mid Tone GTR	1
024		Chung Ruan	1
025		Chung Ruan 2	2
000	029	Muted Gt.	1
001		Muted Dis.Gt	1
002		TC Muted Gt.	2
008		Funk Pop	1
016		Funk Gt.2	1
024		Jazz Man	2

Appendix

PC : program number (Instrument number)
CC00 : value of controller number 0
(Bank number, Variation number)
Voices : number of voices used by the Instrument
: legato-enabled sounds
+ : a percussive sound which cannot be played melodically.
Use near C4 (note number 60).

CCC00	PC	SC-8820 Map	Voices
000	030	Overdrive Gt	2
001		Overdrive 2	2
002		Overdrive 3	2
003		More Drive	2
004		Guitar Pinch	1
005		Attack Drive	2
008		LP OverDrvGt	2
009		LP OverDrv.	2
010		LP Half Drv	2
011		LP Half Drv2	2
012		LP Chorus	2
000	031	DistortionGt	2
001		Dist. Gt2:	2
002		Dazed Guitar	2
003		Distortion:	2
004		Dist. Fast:	2
005		Attack Dist	2
008		Feedback Gt.	2
009		Feedback Gt2	2
016		Power Guitar	2
017		Power Gt.2	2
018		5th Dist.	2
024		Rock Rhythm	2
025		Rock Rhythm2	2
026		Dist Rtm GTR	1
000	032	Gt.Harmonics	1
008		Gt. Feedback	1
009		Gt.Feedback2	2
016		Ac.Gt.Harmnx	1
024		E.Bass Harm.	1

Bass

CC00	PC	SC-8820 Map	Voices
000	033	Acoustic Bs.	1
001		Rockabilly	2
008		Wild A.Bass	2
009		Atk A.Bass	2
016		Bass + OHH	2
000	034	Fingered Bs.	1
001		Fingered Bs2	2
002		Jazz Bass	1
003		Jazz Bass 2	2
004		Rock Bass	2
005		Heart Bass	1
006		AttackFinger	2
007		Finger Slap	2
008		ChorusJazzBs	2
016		F.Bass/Harm.	1
000	035	Picked Bass	1
001		Picked Bass2	2
002		Picked Bass3	2
003		Picked Bass4	2
004		Double Pick	2
008		Muted PickBs	1
016		P.Bass/Harm.	1
000	036	Fretless Bs.	1
001		Fretless Bs2	2
002		Fretless Bs3	2
003		Fretless Bs4	2
004		Syn Fretless	2
005		Mr.Smooth	2
008		Wood+FlessBs	2
000	037	Slap Bass 1	1
001		Slap Pop	1
008		Reso Slap	1
009		Unison Slap	2
000	038	Slap Bass 2	2
001		Slap Bass 3	2
008		FM Slap	2

CC00	PC	SC-8820 Map	Voices
000	039	Synth Bass 1	2
001		SynthBass101	1
002		CS Bass	2
003		JP-4 Bass	1
004		JP-8 Bass	2
005		P5 Bass	1
006		JPMG Bass	2
008		Acid Bass	1
009		TB303 Bass	1
010		Tekno Bass	2
011		TB303 Bass 2	1
012		Kicked TB303	2
013		TB303 Saw Bs	1
014		Rubber303 Bs	1
015		Reso 303 Bs	1
016		Reso SH Bass	1
017		TB303 Sqr Bs	1
018		TB303 DistBs	1
019		Clavi Bass	2
020		Hammer	2
021		Jungle Bass	1
022		Square Bass	2
023		Square Bass2	2
024		Arpeggio Bs	1
032		Hit&Saw Bass	2
033		Ring Bass	2
034		AtkSineBass	2
035		OB sine Bass	2
036		Auxiliary Bs	2
040		303SqDistBs	1
041		303SqDistBs2	2
042		303SqDistBs3	1
043		303Sqr.Rev	1
044		TeeBee	1
000	040	Synth Bass 2	2
001		SynthBass201	2
002		Modular Bass	2
003		Seq Bass	2
004		MG Bass	1
005		Mg Oct Bass1	2
006		MG Oct Bass2	2
007		MG Blip Bs:	2
008		Beef FM Bass	2
009		Dly Bass	2
010		X Wire Bass	2
011		WireStr Bass	2
012		Blip Bass:	2
013		RubberBass 1	2
014		Syn Bell Bs	2
015		Odd Bass	2
016		RubberBass 2	2
017		SH101 Bass 1	1
018		SH101 Bass 2	1
019		Smooth Bass	2
020		SH101 Bass 3	1
021		Spike Bass	1
022		House Bass:	2
023		KG Bass	2
024		Sync Bass	2
025		MG 5th Bass	2
026		RND Bass	2
027		WowMG Bass	2
028		Bubble Bass	2
029		Attack Pulse	1
030		Sync Bass 2	2
031		Pulse Mix Bs	2
032		MG Dist Bass	2
033		Seq Bass 2	2
034		3rd Bass	2
035		MG Oct Bass	2
036		SlowEnvBass	2
037		Mild Bass	2
038		DistEnvBass	2
039		MG LightBass	2
040		DistSynBass	2
041		Rise Bass	2
042		Cyber Bass	2

Strings/orchestra

CC00	PC	SC-8820 Map	Voices
000	041	Violin :	2
001		Violin Atk:	2
008		Slow Violin	1
000	042	Viola :	2
001		Viola Atk.:	2
000	043	Cello :	2
001		Cello Atk.:	2
000	044	Contrabass	1
000	045	Tremolo Str	1
002		Trem Str.St.	2
008		Slow Tremolo	1
009		Suspense Str	2
010		SuspenseStr2	2
000	046	PizzicatoStr	1
001		Vcs&Cbs Pizz	2
002		Chamber Pizz	2
003		St.Pizzicato	2
008		Solo Pizz.	1
016		Solo Spic.	1
017		StringsSpic.	2
000	047	Harp	1
001		Harp&Strings	2
002		Harp St.	2
008		Uilleann Harp	2
016		Synth Harp	1
024		Yang Qin	2
025		Yang Qin 2	2
026		SynthYangQin	2
000	048	Timpani	1

Ensemble

CC00	PC	SC-8820 Map	Voices
000	049	Strings :	2
001		Bright Str:	1
002		ChamberStr:	2
003		Cello sect.	1
004		Bright Str.2	2
005		Bright Str.3	2
006		Quad Strings	2
007		Mild Strings	2
008		Orchestra	2
009		Orchestra 2	2
010		Tremolo Orch	2
011		Choir Str.	2
012		Strings+Horn	2
013		Str.+Flute	2
014		Choir Str.2	2
015		Choir Str.3	2
016		St. Strings	2
017		St.Strings 2	2
018		St.Strings 3	2
019		Orchestra 3	2
020		Orchestra 4	2
024		Velo Strings	2
032		Oct Strings1	2
033		Oct Strings2	2
034		ContraBsSect	2
040		60s Strings	2
000	050	Slow Strings	1
001		SlowStrings2	1
002		SlowStrings3	2
008		Legato Str.	2
009		Warm Strings	2
010		St.Slow Str.	2
011		St.Slow Str2	2
012		S.Str+Choir	2
013		S.Str+Choir2	2

CC00	PC	SC-8820 Map	Voices
000	051	Syn.Strings1	2
001		OB Strings	2
002		StackStrings	2
003		JP Strings	2
004		Chorus Str.	2
008		Syn.Strings3	2
009		Syn.Strings4	2
010		Syn.Strings6	2
011		Syn.Strings7	2
012		LoFi Strings	2
016		High Strings	2
017		Hybrid Str.	2
024		Tron Strings	2
025		Noiz Strings	2
000	052	Syn.Strings2	2
001		Syn.Strings5	2
002		JUNO Strings	2
003		FilteredOrch	2
004		JP Saw Str.	2
005		Hybrid Str.2	2
006		DistStrings	2
007		JUNOFullStr.	2
008		Air Strings	2
009		Atk Syn Str.	2
010		StraightStr.	2
000	053	Choir Aahs	1
008		St ChoirAahs	2
009		Meltd Choir	2
010		Church Choir	2
011		Boys Choir 1	1
012		Boys Choir 2	2
013		St.BoysChoir	2
014		Rich Choir	2
016		Choir Hahs	1
024		Chorus Lahs	1
032		Chorus Aahs	2
033		Male Aah+Str	2
000	054	Voice Oohs	1
001		Chorus Oohs	2
002		Voice Oohs 2	2
003		Chorus Oohs2	2
004		OohsCodeMaj7	1
005		OohsCodeSus4	1
006		Jazz Scat	1
008		Voice Dahs	1
009		JzVoice Dat	1
010		JzVoice Bap	1
011		JzVoice Dow	1
012		JzVoice Thum	1
016		VoiceLah Fem	1
017		ChorusLahFem	2
018		VoiceLuh Fem	1
019		ChorusLuhFem	2
020		VoiceLan Fem	1
021		ChorusLanFem	2
022		VoiceAah Fem	1
023		VoiceUuh Fem	1
024		Fem Lah&Lan	1
032		VoiceWah Mal	1
033		ChorusWahMal	2
034		VoiceWoh Mal	1
035		ChorusWohMal	2
036		VoiceAah Mal	1
037		VoiceOoh Mal	1
040		Humming	2
000	055	SynVox	1
001		SynVox 2	2
002		SynVox 3	2
008		Syn.Voice	2
009		Silent Night	2
010		Syn.Voice 2	2
016		VP330 Choir	1
017		Vinyl Choir	2
018		JX8P Vox	2
019		Analog Voice	1

CC00	PC	SC-8820 Map	Voices
000	056	OrchestraHit	2
001		Bass Hit	2
002		6th Hit	2
003		Euro Hit	2
008		Impact Hit	2
009		Philly Hit	2
010		Double Hit	2
011		Perc. Hit	1
012		Shock Wave	2
013		Bounce Hit	1
014		Drill Hit	1
015		Thrill Hit	1
016		Lo Fi Rave	2
017		Techno Hit	1
018		Dist. Hit	1
019		Bam Hit	1
020		Bit Hit	1
021		Bim Hit	1
022		Technorg Hit	1
023		Rave Hit	2
024		Strings Hit	2
025		Stack Hit	2
026		Industry Hit	1
027		Clap Hit	1

Brass

CC00	PC	SC-8820 Map	Voices
000	057	Trumpet	1
001		Trumpet 2	1
002		Trumpet:	1
003		Dark Trumpet	1
004		Trumpet & Nz	2
008		Flugel Horn	1
016		4th Trumpets	2
024		Bright Tp.	2
025		Warm Tp.	2
026		Warm Tp.2	2
027		Twin Tp.	2
032		Syn. Trumpet	1
000	058	Trombone	1
001		Trombone 2	1
002		Twin bones	2
003		Bones & Tuba	2
004		Bright Tb	1
008		Bs. Trombone	1
016		Euphonium	2
000	059	Tuba	1
001		Tuba 2	1
008		Tuba + Horn	2
000	060	MutedTrumpet	1
001		Cup Mute Tp	1
002		MuteTrumpet2	1
003		MuteTrumpet3	2
008		Muted Horns	1
000	061	French Horns	1
001		Fr.Horn 2	2
002		Horn + Orche	2
003		Wide FreHrns	2
008		F.Hrn Slow:	1
009		Dual Horns	2
016		Synth Horn	2
024		F.Horn Rip	1

CC00	PC	SC-8820 Map	Voices
000	062	Brass 1	2
001		Brass ff	1
002		Bones Sect.	1
003		St. Brass ff	2
004		Quad Brass1	2
005		Quad Brass2	2
008		Brass 2	2
009		Brass 3	2
010		Brass sfz	2
012		Brass sfz 2	2
014		FatPop Brass	2
016		Brass Fall	1
017		Trumpet Fall	1
024		Octave Brass	2
025		Brass + Reed	2
026		Fat + Reed	2
032		Orch Brass	2
033		Orch Brass 2	2
035		St.FatPopBrs	2
036		St.Orch Brs	2
037		St.Orch Brs2	2
038		St.Orch Brs3	2

000	063	Synth Brass1	2
001		JUNO Brass	2
002		Stack Brass	2
003		SH-5 Brass	2
004		MKS Brass	2
005		Jump Brass	1
008		Pro Brass	2
009		P5 Brass	2
010		OrchSynBrass	2
016		Oct SynBrass	2
017		Hybrid Brass	2
018		OctSynBrass2	2
019		BPF Brass	2

000	064	Synth Brass2	2
001		Soft Brass	2
002		Warm Brass	2
003		Synth Brass3	2
004		Sync Brass	2
005		Fat SynBrass	2
006		DeepSynBrass	2
008		SynBrass sfz	1
009		OB Brass	2
010		Reso Brass	2
011		DistSqrBrass	2
012		JP8000SawBrs	2
016		Velo Brass 1	2
017		Transbrass	2

Reed

CC00	PC	SC-8820 Map	Voices
000	065	Soprano Sax	1
008		Soprano Exp.	1
000	066	Alto Sax	1
008		AltoSax Exp.	1
009		Grow Sax	1
016		AltoSax + Tp	2
017		Sax Section	2
000	067	Tenor Sax	2
001		Tenor Sax:	2
008		BreathyTn.:	1
009		St.Tenor Sax	2
000	068	Baritone Sax	2
001		Bari. Sax:	2
008		Bari & Tenor	2
000	069	Oboe	1
008		Oboe Exp.	1
016		Multi Reed	1
000	070	English Horn	1
000	071	Bassoon	1
000	072	Clarinet	1
008		Bs Clarinet	1
016		Multi Wind	1
017		Quad Wind	2

Appendix

PC : program number (Instrument number)
CC00 : value of controller number 0
(Bank number, Variation number)
Voices : number of voices used by the Instrument
: legato-enabled sounds
+ : a percussive sound which cannot be played melodically.
Use near C4 (note number 60).

Pipe

CC00	PC	SC-8820 Map	Voices
000	073	Piccolo	1
001		Piccolo:	1
008		Nay	2
009		Nay Tremolo	2
016		Di	2
000	074	Flute	1
001		Flute 2:	1
002		Flute Exp.	1
003		Flt Travelso	2
008		Flute + Vln	2
009		Pipe & Reed	2
016		Tron Flute	1
017		Indian Flute	1
000	075	Recorder	1
000	076	Pan Flute	2
008		Kawala	2
016		Zampona	2
017		Zampona Atk	1
024		Tin Whistle	1
025		TinWhistle Nm	1
026		TinWhistle Or	1
000	077	Bottle Blow	2
000	078	Shakuhachi	2
001		Shakuhachi:	2
000	079	Whistle	1
001		Whistle 2	2
000	080	Ocarina	1

Synth lead

CC00	PC	SC-8820 Map	Voices
000	081	Square Wave	2
001		MG Square	1
002		Hollow Mini	1
003		Mellow FM	2
004		CC Solo	2
005		Shmoog	2
006		LM Square	2
007		JP8000 TWM	2
008		2600 Sine	1
009		Sine Lead	1
010		KG Lead	1
011		Twin Sine	2
016		P5 Square	1
017		OB Square	1
018		JP-8 Square	1
019		Dist Square	1
020		303SquarDst1	1
021		303SquarDst2	1
022		303 Mix Sqr	2
023		Dual Sqr&Saw	2
024		Pulse Lead	2
025		JP8 PulseLd1	2
026		JP8 PulseLd2	1
027		MG Reso. Pls	1
028		JP8 PulseLd3	2
029		260RingLead	2
030		303DistLead	2
031		JP8000DistLd	2
032		HipHop SinLd	1
033		HipHop SqrLd	1
034		HipHop PlsLd	1
035		Flux Pulse	2

CC00	PC	SC-8820 Map	Voices
000	082	Saw Wave	2
001		OB2 Saw	1
002		Pulse Saw	2
003		Feline GR	2
004		Big Lead	2
005		Velo Lead	2
006		GR-300	2
007		LA Saw	1
008		Doctor Solo	2
009		Fat Saw Lead	2
010		JP8000 Saw	1
011		D-50 Fat Saw	2
012		OB DoubleSaw	2
013		JP DoubleSaw	2
014		FatSawLead 2	2
015		JP SuperSaw	2
016		Waspy Synth	2
017		PM Lead	1
018		CS Saw Lead	1
024		MG Saw 1	1
025		MG Saw 2	1
026		OB Saw 1	1
027		OB Saw 2	1
028		D-50 Saw	1
029		SH-101 Saw	1
030		CS Saw	1
031		MG Saw Lead	1
032		OB Saw Lead	1
033		P5 Saw Lead	2
034		MG unison	2
035		Oct Saw Lead	2
036		Natural Lead	2
040		SequenceSaw1	2
041		SequenceSaw2	1
042		Reso Saw	1
043		Cheese Saw 1	1
044		Cheese Saw 2	1
045		Rhythmic Saw	2
046		SequencedSaw	2
047		Techno Saw	2
000	083	Syn.Calliope	2
001		Vent Synth	2
002		Pure PanLead	2
008		LM Pure Lead	2
009		LM Blow Lead	2
000	084	Chiffer Lead	2
001		TB Lead	2
002		Hybrid Lead	2
003		Unison SqrLd	2
004		FatSolo Lead	2
005		ForcefulLead	2
006		Oct.UnisonLd	2
007		Unison SawLd	2
008		Mad Lead	2
009		CrowdingLead	2
010		Double Sqr.	2
000	085	Charang	2
001		Wire Lead	2
002		FB.Charang	2
003		Fat GR Lead	2
004		Windy GR Ld	2
005		Mellow GR Ld	2
006		GR & Pulse	2
008		Dist.Lead	2
009		Acid Guitar1	2
010		Acid Guitar2	2
011		Dance Dst.Gt	2
012		DanceDst.Gt2	2
016		P5 Sync Lead	1
017		Fat SyncLead	2
018		Rock Lead	2
019		5th DecaSync	2
020		Dirty Sync	1
021		DualSyncLead	2
022		LA Brass Ld	2
024		JUNO Sub Osc	1
025		2600 Sub Osc	1
026		JP8000Fd Osc	1

CC00	PC	SC-8820 Map	Voices
000	086	Solo Vox	2
001		Solo Vox 2	2
008		Vox Lead	2
009		LFO Vox	2
010		Vox Lead 2	2
000	087	5th Saw Wave	2
001		Big Fives	2
002		5th Lead	2
003		5th Ana.Clav	2
004		5th Pulse	2
005		JP 5th Saw	2
006		JP8000 5thFB	2
008		4th Lead	2
000	088	Bass & Lead	2
001		Big & Raw	2
002		Fat & Perky	2
003		JUNO Rave	1
004		JP8 BsLead 1	1
005		JP8 BsLead 2	2
006		SH-5 Bs.Lead	2
007		Delayed Lead	2

"Synth pad, etc"

CC00	PC	SC-8820 Map	Voices
000	089	Fantasia	2
001		Fantasia 2	2
002		New Age Pad	2
003		Bell Heaven	2
004		Fantasia 3	2
005		Fantasia 4	2
006		After D !	2
007		260HarmPad	2
000	090	Warm Pad	1
001		Thick Matrix	2
002		Horn Pad	2
003		Rotary Strmg	2
004		OB Soft Pad	2
005		Sine Pad	2
006		OB Soft Pad2	2
008		Octave Pad	2
009		Stack Pad	2
010		Human Pad	2
011		Sync Brs.Pad	2
012		Oct.PWM Pad	2
013		JP Soft Pad	2
000	091	Polysynth	2
001		80's PolySyn	2
002		Polysynth 2	2
003		Poly King	2
004		Super Poly	2
008		Power Stack	2
009		Octave Stack	2
010		Reso Stack	1
011		Techno Stack	2
012		Pulse Stack	2
013		TwinOct.Rave	2
014		Oct.Rave	2
015		Happy Synth	2
016		ForwardSweep	2
017		ReverseSweep	2
024		Minor Rave	2
000	092	Space Voice	1
001		Heaven II	2
002		SC Heaven	2
003		Itopia	2
004		Water Space	2
005		Cold Space	2
006		Noise Peaker	1
007		Bamboo Hit	1
008		Cosmic Voice	2
009		Auh Vox	1
010		AuhAuh	2
011		Vocorderman	2
012		Holy Voices	2

CC00	PC	SC-8820 Map	Voices
000	093	Bowed Glass	2
001		SoftBellPad	2
002		JP8 Sqr Pad	2
003		7thBelPad	2
004		Steel Glass	2
005		Bottle Stack	2
000	094	Metal Pad	2
001		Tine Pad	2
002		Panner Pad	2
003		Steel Pad	2
004		Special Rave	2
005		Metal Pad 2	2

000	095	Halo Pad	2
001		Vox Pad	2
002		Vox Sweep	2
008		Horror Pad	2
009		SynVox Pad	2
010		SynVox Pad 2	2
011		Breath&Rise	2
012		Tears Voices	2

000	096	Sweep Pad	1
001		Polar Pad	1
002		Ambient BPF	2
003		Sync Pad	2
004		Warriors	2
008		Converge	1
009		Shwimmer	2
010		Celestial Pd	2
011		Bag Sweep	2
012		Sweep Pipe	2
013		Sweep Stack	2
014		Deep Sweep	2
015		Stray Pad	2

Synth SFX

CC00	PC	SC-8820 Map	Voices
000	097	Ice Rain	2
001		Harmo Rain	2
002		African wood	2
003		Anklung Pad	2
004		Rattle Pad	2
005		Saw Impulse	2
006		Strange Str.	2
007		FastFWD Pad	2
008		Clavi Pad	2
009		EP Pad	2
010		Tambra Pad	2
011		CP Pad	2

000	098	Soundtrack	2
001		Ancestral	2
002		Prologue	2
003		Prologue 2	2
004		Hols Strings	2
005		HistoryWave	2
008		Rave	2

000	099	Crystal	2
001		Syn Mallet	1
002		Soft Crystal	2
003		Round Glock	2
004		Loud Glock	2
005		GlockenChime	2
006		Clear Bells	2
007		ChristmasBel	2
008		Vibra Bells	2
009		Digi Bells	2
010		Music Bell	2
011		Analog Bell	1
012		Blow Bell	2
013		Hyper Bell	2
016		Choral Bells	2
017		Air Bells	2
018		Bell Harp	2
019		Gamelimba	2
020		JUNO Bell	2
021		JP Bell	2
022		Pizz Bell	2
023		Bottom Bell	2

CC00	PC	SC-8820 Map	Voices
000	100	Atmosphere	2
001		Warm Atmos	2
002		Nylon Harp	2
003		Harpvox	2
004		HollowReleas	2
005		Nylon+Rhodes	2
006		Ambient Pad	2
007		Invisible	2
008		Pulsey Key	2
009		Noise Piano	2
010		Heaven Atmos	2
011		Tambra Atmos	2

000	101	Brightness	2
001		Shining Star	2
002		OB Stab	1
003		Brass Star	2
004		Choir Stab	2
005		D-50 Retour	2
006		SouthernWind	2
007		SymbolicBell	2
008		Org Bell	2

000	102	Goblin	2
001		Goblinson	2
002		50's Sci-Fi	2
003		Abduction	2
004		Auhbient	2
005		LFO Pad	2
006		Random Str	2
007		Random Pad	2
008		LowBirds Pad	2
009		Falling Down	2
010		LFO RAVE	2
011		LFO Horror	2
012		LFO Techno	2
013		Alternative	2
014		UFO FX	2
015		Gargle Man	1
016		Sweep FX	1
017		LM Has Come	2
018		FallinInsect	2
019		LFO Oct.Rave	2
020		Just Before	2
021		RND Fl.Chord	2
022		RandomEnding	2
023		Random Sine	2
024		EatingFilter	2
025		Noise&SawHit	2
026		Pour Magic	2
027		DancingDrill	2
028		Dirty Stack	2
029		Big Blue	2
030		Static Hit	2
031		Att.Mod.FX	2
032		Acid Copter	2

000	103	Echo Drops	1
001		Echo Bell	2
002		Echo Pan	2
003		Echo Pan 2	2
004		Big Panner	2
005		Reso Panner	2
006		Water Piano	2
007		Echo SynBass	2
008		Pan Sequence	2
009		Aqua	2
010		Panning Lead	2
011		PanningBrass	2

000	104	Star Theme	2
001		Star Theme 2	2
002		Star Mind	2
003		Star Dust	2
004		Rep.Trance	2
005		Etherality	2
006		Mystic Pad	2
008		Dream Pad	2
009		Silky Pad	2
010		Dream Pad 2	2
011		Silky Pad 2	2
016		New Century	1
017		7th Atmos.	2
018		Galaxy Way	2
019		Rising OSC.	2

"Ethnic, etc"

CC00	PC	SC-8820 Map	Voices
000	105	Sitar	1
001		Sitar 2	2
002		Detune Sitar	2
003		Sitar 3	2
004		Sitar/Drone	1
005		Sitar 4	2
008		Tambra	1
016		Tamboura	2

000	106	Banjo	1
001		Muted Banjo	1
008		Rabab	2
009		San Xian	2
016		Gopichant	2
024		Oud	2
028		Oud+Strings	2
032		Pi Pa	1

000	107	Shamisen	1
001		Tsugaru	2
008		Syn Shamisen	2

000	108	Koto	2
001		Gu Zheng	2
008		Taisho Koto	1
016		Kanoon	2
019		Kanoon+Choir	2
024		Oct Harp	1

000	109	Kalimba	1
008		Sanza	2
009		Bodhran	1
010		Bodhran Mute	1

000	110	Bagpipe	1
008		Didgeridoo	1
009		Uilleann Pipe	1
010		UillnPipe Nm	1
011		UillnPipe Or	1

000	111	Fiddle	1
008		Er Hu	1
009		Gao Hu	1

000	112	Shanai	1
001		Shanai 2	1
008		Pungi	1
016		Hichiriki	2
024		Mizmar	1
032		Suona 1	1
033		Suona 2	1

Percussive

CC00	PC	SC-8820 Map	Voices
000	113	Tinkle Bell	1
008		Bonang	1
009		Gender	1
010		Gamelan Gong	1
011		St.Gamelan	2
012		Jang Gu	2
013		Jegogan	2
014		Jublag	1
015		Pemade	1
016		RAMA Cymbal	1
017		Kajar	1
018		Kelontuk	1
019		Kelontuk Mt	1
020		Kelontuk Sid	1
021		Kopyak Op	1 +
022		Kopyak Mt	1 +
023		Ceng Ceng	2 +
024		Reyoung	2
025		Kempur	2
032		Jngl Crash	1 +
040		Crash Menu	1
041		RideCym Menu	1
042		RideBellMenu	1

CC00	PC	SC-8820 Map	Voices
000	114	Agogo	1
008		Atarigane	1
016		Tambourine	1 +

Appendix

PC : program number (Instrument number)
 CC00 : value of controller number 0
 (Bank number, Variation number)
 Voices : number of voices used by the Instrument
 : legato-enabled sounds
 + : a percussive sound which cannot be played melodically.
 Use near C4 (note number 60)

CC00	PC	SC-8820 Map	Voices
000	115	Steel Drums	1
001		Island Mlt	2
000	116	Woodblock	1 +
008		Castanets	1 +
016		Angklung	1
017		Angkl Rhythm	2
024		Finger Snaps	1 +
032		909 HandClap	1 +
040		HandClapMenu	1
000	117	Taiko	1 +
001		Small Taiko	1 +
008		Concert BD	1 +
009		ConcertBD Mt	1 +
016		Jungle BD	1 +
017		Techno BD	1 +
018		Bounce	1 +
024		KendangWadon	1 +
025		Bebarongan	1 +
026		Peleogongan	1 +
027		Dholak 1	1 +
028		Dholak 2	1 +
032		Jngl BD Roll	1 +
040		Kick Menu 1	1
041		Kick Menu 2	1
042		Kick Menu 3	1
043		Kick Menu 4	1
000	118	Melo. Tom 1	1 +
001		Real Tom	2 +
002		Real Tom 2	2 +
003		Jazz Tom	2 +
004		Brush Tom	2 +
008		Melo. Tom 2	1 +
009		Rock Tom	2 +
016		Rash SD	1 +
017		House SD	1 +
018		Jungle SD	1 +
019		909 SD	1 +
024		Jngl SD Roll	1 +
040		SD Menu 1	1
041		SD Menu 2	1
042		SD Menu 3	1
043		SD Menu 4	1
044		SD Menu 5	1
000	119	Synth Drum	1 +
008		808 Tom	2 +
009		Elec Perc	1 +
010		Sine Perc.	1
011		606 Tom	1 +
012		909 Tom	1 +
013		606 Dist.Tom	1 +
000	120	Reverse Cym.	1 +
001		Reverse Cym2	1 +
002		Reverse Cym3	1 +
003		Reverse Cym4	2 +
008		Rev.Snare 1	1 +
009		Rev.Snare 2	1 +
016		Rev.Kick 11	+
017		Rev.ConBD	1 +
024		Rev.Tom 1	1 +
025		Rev.Tom 2	1 +
026		Rev.Tom 3	1 +
027		Rev.Tom 4	1 +
040		Rev.SD Menu1	1
041		Rev.SD Menu2	1
042		Rev.SD Menu3	1
043		Rev.BD Menu1	1
044		Rev.BD Menu2	1
045		Rev.BD Menu3	1
046		Rev.ClapMenu	1

SFX

CC00	PC	SC-8820 Map	Voices
000	121	Gt.FretNoise	1
001		Gt.Cut Noise	1 +
002		String Slap	1 +
003		Gt.CutNoise2	1 +
004		Dist.CutNoiz	1 +
005		Bass Slide	1 +
006		Pick Scrape	1 +
008		Gt. FX Menu	1
009		Bartok Pizz.	1
010		Guitar Slap	1 +
011		Chord Stroke	1
012		Biwa Stroke	1 +
013		Biwa Tremolo	1 +
016		A.Bs.Nz Menu	1
017		D.Gt.Nz Menu	1
018		E.Gt.NzMenu1	1
019		E.Gt.NzMenu2	1
020		G.StrokeMenu	1
021		Gt.SlideMenu	1
022		A.Bs.Mute Nz	1 +
023		A.Bs.TouchNz	1 +
024		A.Bs.AtackNz	1 +
025		TC Up Nz	1 +
026		TC DownMt.Nz	1 +
027		TC UpMt.Nz	1 +
028		TC Down Nz	1 +
029		DstGT.Up Nz	1 +
030		DstGT.DwnNz1	1 +
031		DstGT.DwnNz2	1 +
032		DstGT.MuteNz	1 +
034		Gt.StrokeNz5	1 +
035		StlGt.SldNz1	1 +
036		StlGt.SldNz2	1 +
037		StlGt.SldNz3	1 +
038		StlGt.SldNz4	1 +
039		Gt.StrokeNz1	1 +
040		Gt.StrokeNz2	1 +
041		Gt.StrokeNz3	1 +
042		Gt.StrokeNz4	1 +
000	122	Breath Noise	1
001		Fl.Key Click	1 +
002		Brth Nz Menu	1
003		Fl.Breath 1	1 +
004		Fl.Breath 2	1 +
005		Fl.Breath 3	1 +
006		Vox Breath 1	1 +
007		Vox Breath 2	1 +
008		Trombone Nz	1 +
009		Trumpet Nz	1 +
000	123	Seashore	1 +
001		Rain	1 +
002		Thunder	1 +
003		Wind	1 +
004		Stream	2 +
005		Bubble	2 +
006		Wind 2	1 +
007		Cricket	1 +
016		Pink Noise	1
017		White Noise	1
000	124	Bird	2 +
001		Dog	1 +
002		Horse-Gallop	1 +
003		Bird 2	1 +
004		Kitty	1 +
005		Growl	1 +
006		Growl 2	1 +
007		Fancy Animal	1 +
008		Seal	1 +

CC00	PC	SC-8820 Map	Voices
000	125	Telephone 1	1 +
001		Telephone 2	1 +
002		DoorCreaking	1 +
003		Door	1 +
004		Scratch	1 +
005		Wind Chimes	2 +
007		Scratch 2	1 +
008		ScratchKey	2 +
009		TapeRewind	1 +
010		Phono Noise	1 +
011		MC-500 Beep	1
012		Scratch 3	1 +
013		Scratch 4	1 +
014		Scratch 5	1 +
015		Scratch 6	1 +
016		Scratch 7	1 +
000	126	Helicopter	1 +
001		Car-Engine	1 +
002		Car-Stop	1 +
003		Car-Pass	1 +
004		Car-Crash	2 +
005		Siren	1 +
006		Train	1 +
007		Jetplane	2 +
008		Starship	2 +
009		Burst Noise	2 +
010		Calculating	2 +
011		Perc. Bang	2 +
012		Burner	2 +
013		Glass & Giam	1 +
014		Ice Ring	1 +
015		Over Blow	2 +
016		Crack Bottle	1 +
017		Pour Bottle	1 +
018		Soda	1 +
019		Open CD Tray	1 +
020		Audio Switch	1 +
021		Key Typing	1
022		SL 1	1 +
023		SL 2	1 +
024		Car Engine 2	1 +
025		Car Horn	1 +
026		Boeeeen	1 +
027		R.Crossing	1 +
028		Compressor	1 +
029		Sword Boom!	1 +
030		Sword Cross	1 +
031		Stab! 1	1 +
032		Stab! 2	1 +
000	127	Applause	2 +
001		Laughing	1 +
002		Screaming	1 +
003		Punch	1 +
004		Heart Beat	1
005		Footsteps	1 +
006		Applause 2	2 +
007		Small Club	2 +
008		ApplauseWave	2 +
009		BabyLaughing	1 +
016		Voice One	1 +
017		Voice Two	1 +
018		Voice Three	1 +
019		Voice Tah	1 +
020		Voice Whey	1 +
022		Voice Kikit	1 +
023		Voice ComeOn	1 +
024		Voice Aou	1 +
025		Voice Oou	1 +
026		Voice Hie	1 +
000	128	Gun Shot	1 +
001		Machine Gun	1 +
002		Lasergun	1 +
003		Explosion	2 +
004		Eruption	1 +
005		Big Shot	2 +
006		Explosion 2	2 +

Drum Set List

The drum sets of this unit are organized as follows.

(The SC-8820 drum sets are employed by the SK-500.)

PC	SC-8820 map
001	STANDARD 1
002	STANDARD 2
003	STANDARD L/R
009	ROOM
010	HIP HOP
011	JUNGLE
012	TECHNO
013	ROOM L/R
014	HOUSE
017	POWER
025	ELECTRONIC
026	TR-808
027	DANCE
028	CR-78
029	TR-606
030	TR-707
031	TR-909
033	JAZZ
034	JAZZ L/R
041	BRUSH
042	BRUSH 2
043	BRUSH 2 L/R
049	ORCHESTRA
050	ETHNIC
051	KICK & SNARE
052	KICK & SNARE 2
053	ASIA
054	CYMBAL&CLAPS
055	GAMELAN 1
056	GAMELAN 2
057	SFX
058	RHYTHM FX
059	RHYTHM FX 2
060	RHYTHM FX 3
061	SFX 2
062	VOICE
063	CYM&CLAPS 2
128	---

PC : Program Number (Drum Set Number)

* Sounds in such as the drum set of STANDARD L/R and STANDARD 3 etc. that have "RND" appended to their name (such as Kick, Snare, and Hi-Hat) in the list on the next page are sounds which will change randomly with each note played (these changes affect the timbre and timing). The purpose of this is to create a more natural sounding performance—even if all note messages for percussive instruments are sent with absolute precision, subtle fluctuations will be applied so the performance sounds less mechanical. Note, however, that you may not always be able to obtain the desired effect, depending on the circumstances.

Appendix

PC : Program Number (Drum Set Number)
 <- : Same as the percussion sound of "STANDARD1" (PC1).
 -- : No sound
 [EXC] : Percussion sound of the same number will not be heard at the same time.
 * : Tones which are created using two voices

SC-8820 Drum Set (1)

* About Notes 0-21, and 95-127, refer to p.136.

	PC1 STANDARD 1	PC2 STANDARD 2	PC3 STANDARD L/R	PC9 ROOM	PC10 HIP HOP
22	MC-500 Beep 1	<-	<-	<-	<-
23	MC-500 Beep 2	<-	<-	<-	<-
C1 24	Concert SD	<-	<-	<-	<-
25	Snare Roll	<-	<-	<-	<-
26	Finger Snap 2	Finger Snap	<-	Finger Snap	<-
27	High Q	<-	<-	<-	<-
28	Slap	<-	<-	<-	<-
29	Scratch Push [EXC7]	<-	<-	<-	Scratch Push 2 [EXC7]
30	Scratch Pull [EXC7]	<-	<-	<-	Scratch Pull 2 [EXC7]
31	Sticks	<-	<-	<-	<-
32	Square Click	<-	<-	<-	<-
33	Metronome Click	<-	<-	<-	<-
34	Metronome Bell	<-	<-	<-	<-
35	Standard 1 Kick 2 *	Standard 2 Kick 2	[RND] Standard Kick 2	Room Kick 2	Hip-Hop Kick 2
C2 36	Standard 1 Kick 1 *	Standard 2 Kick 1	[RND] Standard Kick 1	Room Kick 1 *	Hip-Hop Kick 1
37	Side Stick	<-	<-	<-	TR-808 Rim Shot
38	Standard 1 Snare 1 *	Standard 2 Snare 1	[RND] Standard Snare 1	Room Snare 1	LoFi Snare 1
39	TR-909 Hand Clap	Hand Clap	<-	Hand Clap	TR-707 Claps
40	Standard 1 Snare 2	Standard 2 Snare 2	[RND] Standard Snare 2	Room Snare 2	LoFi Snare 2
41	Low Tom 2	<-	[RND] Low Tom 2	Room Low Tom 2 *	Jazz Low Tom 2
42	Closed Hi-Hat 1 [EXC1]	Closed Hi-Hat [EXC1]	[RND] Closed Hi-Hat [EXC1]	Room Closed Hi-Hat 3 [EXC1]	Room Closed Hi-Hat [EXC1]
43	Low Tom 1	<-	<-	Room Low Tom 1 *	Jazz Low Tom 1
44	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	<- [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]
45	Mid Tom 2	<-	<-	Room Mid Tom 2 *	Jazz Mid Tom 2
46	Open Hi-Hat 1 [EXC1]	Open Hi-Hat [EXC1]	[RND] Open Hi-Hat [EXC1]	Room Open Hi-Hat 3 [EXC1]	Room Open Hi-Hat [EXC1]
47	Mid Tom 1	<-	<-	Room Mid Tom 1 *	Jazz Mid Tom 1
C3 48	High Tom 2	<-	<-	Room High Tom 2 *	Jazz High Tom 2
49	Crash Cymbal 1 *	<-	[RND] Crash Cymbal	Room Crash Cymbal	TR-909 Crash Cymbal
50	High Tom 1	<-	<-	Room High Tom 1 *	Jazz High Tom 1
51	Ride Cymbal 1	<-	[RND] Ride Cymbal 1	Room Ride Cymbal	<-
52	Chinese Cymbal	<-	<-	<-	Reverse Cymbal
53	Ride Bell	<-	[RND] Ride Bell 1	Room Ride Bell	Ride Bell
54	Tambourine	<-	<-	<-	Shake Tambourine
55	Splash Cymbal	<-	<-	<-	<-
56	Cowbell	<-	<-	<-	TR-808 Cowbell
57	Crash Cymbal 2	<-	<-	<-	<-
58	Vibra-slap	<-	<-	<-	<-
59	Ride Cymbal 2	<-	<-	<-	<-
C4 60	High Bongo	<-	<-	<-	<-
61	Low Bongo	<-	<-	<-	<-
62	Mute High Conga	<-	<-	<-	<-
63	Open High Conga	<-	<-	<-	<-
64	Low Conga	<-	<-	<-	<-
65	High Timbale	<-	<-	<-	<-
66	Low Timbale	<-	<-	<-	<-
67	High Agogo	<-	<-	<-	<-
68	Low Agogo	<-	<-	<-	<-
69	Cabasa	<-	<-	<-	<-
70	Maracas	<-	<-	<-	TR-808 Maracas
71	Short High Whistle [EXC2]	<-	<-	<-	<-
C5 72	Long Low Whistle [EXC2]	<-	<-	<-	<-
73	Short Guiro [EXC3]	<-	<-	<-	<-
74	Long Guiro [EXC3]	<-	<-	<-	CR-78 Guiro [EXC3]
75	Claves	<-	<-	<-	TR-808 Claves
76	High Wood Block	<-	<-	<-	<-
77	Low Wood Block	<-	<-	<-	<-
78	Mute Cuica [EXC4]	<-	<-	<-	High Hoo [EXC4]
79	Open Cuica [EXC4]	<-	<-	<-	Low Hoo [EXC4]
80	Mute Triangle [EXC5]	<-	<-	<-	Electric Mute Triangle [EXC5]
81	Open Triangle [EXC5]	<-	<-	<-	Electric Open Triangle [EXC5]
82	Shaker	<-	<-	<-	Shaker 2
83	Jingle Bell	<-	<-	<-	<-
C6 84	Bell Tree	Bar Chimes	<-	<-	<-
85	Castanets	<-	<-	<-	<-
86	Mute Surdo [EXC6]	<-	<-	<-	<- [EXC6]
87	Open Surdo [EXC6]	<-	<-	<-	<- [EXC6]
88	Applause 2 *	<-	<-	<-	Small Club 1 *
89	---	---	---	---	Hip-Hop Snare 2
90	---	---	---	---	LoFi Snare Rim
91	---	---	---	---	Hip-Hop Claps
92	---	---	---	---	Standard 1 Snare 1
93	---	---	---	---	Standard 1 Snare 2
94	---	---	---	---	Room Snare 1
95	Room Snare 1	---	[L] Standard Kick 2 *	Standard 1 Snare 1 *	Room Snare 2
C7 96	Room Snare 2	---	[L] Standard Kick 1 *	Standard 1 Snare 2	Dance Snare

SC-8820 Drum Set (2)

* About Notes 0–21, and 95–127, refer to p.137.

	PC 11 JUNGLE	PC 12 TECHNO	PC 13 ROOM L/R	PC 14 HOUSE	PC 17 POWER
22	<-	<-	<-	<-	<-
23	<-	<-	<-	<-	<-
24	<-	<-	<-	<-	<-
25	<-	<-	<-	<-	<-
26	<-	<-	Finger Snap	<-	<-
27	<-	<-	<-	<-	<-
28	<-	<-	<-	<-	<-
29	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	<-	[EXC7] Scratch Push 2	[EXC7] <-
30	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	<-	[EXC7] Scratch Pull 2	[EXC7] <-
31	<-	<-	<-	<-	<-
32	<-	<-	<-	<-	<-
33	<-	<-	<-	<-	<-
34	<-	<-	<-	<-	<-
35	Jungle Kick 2	TR-808 Kick	[RND] Room Kick 2	TR-909 Kick 2	Power Kick 2
36	Jungle Kick 1	TR-909 Kick 1	[RND] Room Kick 1	TR-909 Kick 1	Power Kick 1
37	Jungle Snare Rim	TR-909 Snare Rim	<-	House Snare Rim	<-
38	HipHop Snare 1	TR-606 Snare 2	[RND] Room Snare 1	House Snare 1	Power Snare 1
39	R&B Claps	TR-909 Claps	Hand Clap	TR-909 Claps	Hand Clap
40	Jungle Snare	Techno Snare	[RND] Room Snare 2	House Snare 2	Power Snare 2
41	TR-909 Low Tom 2	TR-606 Low Tom 2	Room Low Tom 2	TR-909 Low Tom 2	Power Low Tom 2 *
42	TR-606 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]	[RND] Room Closed Hi-Hat [EXC1]	Room Closed Hi-Hat [EXC1]	<-
43	TR-909 Low Tom 1	TR-606 Low Tom 1	Room Low Tom 1	TR-909 Low Tom 1	Power Low Tom 1 *
44	Jungle Hi-Hat [EXC1]	CR-78 Closed Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	<-
45	TR-909 Mid Tom 2	TR-606 Mid Tom 2	Room Mid Tom 2	TR-909 Mid Tom 2	Power Mid Tom 2 *
46	TR-606 Open Hi-Hat [EXC1]	TR-909 Open Hi-Hat [EXC1]	[RND] Room Open Hi-Hat [EXC1]	Room Open Hi-Hat [EXC1]	<-
47	TR-909 Mid Tom 1	TR-606 Mid Tom 1	Room Mid Tom 1	TR-909 Mid Tom 1	Power Mid Tom 1 *
48	TR-909 High Tom 2	TR-606 High Tom 2	Room High Tom 2	TR-909 High Tom 2	Power High Tom 2 *
49	Jungle Crash	TR-909 Crash Cymbal	[RND] Room Crash Cymbal	TR-909 Crash Cymbal	<-
50	TR-909 High Tom 1	TR-606 High Tom 1	Room High Tom 1	TR-909 High Tom 1	Power High Tom 1 *
51	Ride Cymbal 1	Ride Cymbal 1	[RND] Room Ride Cymbal	TR-909 Ride Cymbal	<-
52	Reverse Cymbal	Reverse Cymbal	<-	Reverse Cymbal	<-
53	Ride Bell	Ride Bell	[RND] Room Ride Bell	Ride Bell	<-
54	Shake Tambourine	Shake Tambourine	<-	Shake Tambourine	<-
55	<-	<-	Splash Cymbal	<-	<-
56	TR-808 Cowbell	TR-808 Cowbell	<-	TR-808 Cowbell	<-
57	<-	TR-909 Crash Cymbal	<-	TR-909 Crash Cymbal	<-
58	<-	<-	<-	<-	<-
59	<-	<-	<-	<-	<-
60	<-	CR-78 High Bongo	<-	CR-78 High Bongo	<-
61	<-	CR-78 Low Bongo	<-	CR-78 Low Bongo	<-
62	<-	TR-808 High Conga	<-	TR-808 High Conga	<-
63	<-	TR-808 Mute Conga	<-	TR-808 Mute Conga	<-
64	<-	TR-808 Low Conga	<-	TR-808 Low Conga	<-
65	<-	<-	<-	<-	<-
66	<-	<-	<-	<-	<-
67	<-	<-	<-	<-	<-
68	<-	<-	<-	<-	<-
69	<-	<-	<-	<-	<-
70	TR-808 Maracas	TR-808 Maracas	<-	TR-808 Maracas	<-
71	<-	<-	<-	<-	<-
72	<-	<-	<-	<-	<-
73	CR-78 Guiro [EXC3]	CR-78 Guiro [EXC3]	<-	CR-78 Guiro [EXC3]	<-
74	TR-808 Claves	TR-808 Claves	<-	TR-808 Claves	<-
75	<-	<-	<-	<-	<-
76	<-	<-	<-	<-	<-
77	High Hoo [EXC4]	High Hoo [EXC4]	<-	High Hoo [EXC4]	<-
78	Low Hoo [EXC4]	Low Hoo [EXC4]	<-	Low Hoo [EXC4]	<-
79	Electric Mute Triangle [EXC5]	Electric Mute Triangle [EXC5]	<-	Electric Mute Triangle [EXC5]	<-
80	Electric Open Triangle [EXC5]	Electric Open Triangle [EXC5]	<-	Electric Open Triangle [EXC5]	<-
81	Jungle Shaker	TR-626 Shaker	<-	TR-626 Shaker	<-
82	<-	<-	<-	<-	<-
83	<-	<-	<-	<-	<-
84	<-	<-	<-	<-	<-
85	<-	<-	<-	<-	<-
86	<-	<-	<-	<-	<-
87	<-	<-	<-	<-	<-
88	Small Club 1	<-	<-	Small Club 1	<-
89	Jungle Kick Roll	Dance Snare	---	TR-606 Snare 2	---
90	Jungle Snare Roll	House Snare	---	Dance Snare	---
91	TR-606 Snare 2	Rock Snare Dry	---	Techno Snare	---
92	Dance Snare	Jungle Snare	---	Rock Snare Dry	---
93	Techno Snare	LoFi Snare 1	---	Hip-Hop Snare 1	---
94	House Snare	LoFi Snare 2	---	LoFi Snare 1	---
95	Rock Snare Dry	HipHop Snare 1	[L] Room Kick 2	LoFi Snare 2	---
96	LoFi Snare 1	HipHop Snare 2	[L] Room Kick 1	Jungle Snare	---

Appendix

PC : Program Number (Drum Set Number)
 <- : Same as the percussion sound of "STANDARD1"(PC1).
 -- : No sound
 [EXC] : Percussion sound of the same number will not be heard at the same time.
 * : Tones which are created using two voices

SC-8820 Drum Set (3)

* About Notes 0-21, and 95-127, refer to p.137, p.138.

	PC 25 ELECTRONIC	PC 26 TR-808	PC 27 DANCE	PC 28 CR-78	PC 29 TR-606	[Pro]
22	<-	<-	<-	<-	<-	
23	<-	<-	<-	<-	<-	
C1 24	<-	<-	<-	<-	<-	
25	<-	<-	<-	<-	<-	
26	Finger Snap 2	<-	Finger Snap 2	<-	<-	
27	<-	<-	<-	<-	<-	
28	<-	<-	<-	<-	<-	
29	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	
30	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	
31	<-	<-	<-	<-	<-	
32	<-	<-	<-	<-	<-	
33	<-	<-	<-	<-	<-	
34	<-	<-	<-	<-	<-	
35	Electric Kick 2	TR-808 Kick 2	Fat Kick	CR-78 Kick 2	CR-78 Kick 2	
C2 36	Electric Kick 1 *	TR-808 Kick 1	Dance Kick	CR-78 Kick 1	TR-606 Kick 1	
37	<-	TR-808 Rim Shot	Dance Rim Shot	CR-78 Rim Shot	CR-78 Rim Shot	
38	Electric Snare 1	TR-808 Snare 1	Dance Snare	CR-78 Snare 1	TR-606 Snare 1	
39	Hand Clap	Hand Clap	Comp Claps 2	TR-707 Hand Clap	TR-707 Hand Clap	
40	Electric Snare 2	TR-808 Snare 2	Rock SD Dry	CR-78 Snare 2	TR-606 Snare 2	
41	Electric Low Tom 2 *	TR-808 Low Tom 2 *	Electric Low Tom 2 *	CR-78 Low Tom 2 *	TR-606 Low Tom 2	
42	Closed Hi-Hat 2 [EXC1]	TR-808 Closed Hi-Hat 2 [EXC1]	CR-78 Closed Hi-Hat [EXC1]	CR-78 Closed Hi-Hat [EXC1]	TR-606 Closed Hi-Hat [EXC1]	
43	Electric Low Tom 1 *	TR-808 Low Tom 1 *	Electric Low Tom 1 *	CR-78 Low Tom 1 *	TR-606 Low Tom 1	
44	Pedal Hi-Hat [EXC1]	TR-808 Closed Hi-Hat [EXC1]	TR-808 Closed Hi-Hat 2 [EXC1]	TR-606 Closed Hi-Hat [EXC1]	TR-606 Closed Hi-Hat [EXC1]	
45	Electric Mid Tom 2 *	TR-808 Mid Tom 2 *	Electric Mid Tom 2 *	CR-78 Mid Tom 2 *	TR-606 Mid Tom 2	
46	Open Hi-Hat 2 [EXC1]	TR-808 Open Hi-Hat [EXC1]	CR-78 Open Hi-Hat [EXC1]	CR-78 Open Hi-Hat [EXC1]	TR-606 Open Hi-Hat [EXC1]	
47	Electric Mid Tom 1 *	TR-808 Mid Tom 1 *	Electric Mid Tom 1 *	CR-78 Mid Tom 1 *	TR-606 Mid Tom 1	
C3 48	Electric High Tom 2 *	TR-808 High Tom 2 *	Electric High Tom 2 *	CR-78 High Tom 2 *	TR-606 High Tom 2	
49	<-	TR-808 Crash Cymbal	TR-808 Crash Cymbal	TR-808 Crash Cymbal	TR-808 Crash Cymbal	
50	Electric High Tom 1 *	TR-808 High Tom 1 *	Electric High Tom 1 *	CR-78 High Tom 1 *	TR-606 High Tom 1	
51	<-	TR-606 Ride Cymbal	TR-606 Ride Cymbal	TR-606 Ride Cymbal	TR-606 Ride Cymbal	
52	Reverse Cymbal	<-	Reverse Cymbal	<-	<-	
53	<-	<-	Ride Bell	<-	<-	
54	<-	CR-78 Tambourine	Shake Tambourine	CR-78 Tambourine	CR-78 Tambourine	
55	<-	<-	<-	<-	<-	
56	<-	TR-808 Cowbell	TR-808 Cowbell	CR-78 Cowbell	CR-78 Cowbell	
57	<-	TR-909 Crash Cymbal	<-	TR-909 Crash Cymbal	TR-909 Crash Cymbal	
58	<-	<-	<-	<-	<-	
59	<-	Ride Cymbal 2	<-	Ride Cymbal Edge	Ride Cymbal Edge	
C4 60	<-	CR-78 High Bongo	<-	CR-78 High Bongo	CR-78 High Bongo	
61	<-	CR-78 Low Bongo	<-	CR-78 Low Bongo	CR-78 Low Bongo	
62	<-	TR-808 High Conga	<-	TR-808 High Conga	TR-808 High Conga	
63	<-	TR-808 Mute Conga	<-	TR-808 Mute Conga	TR-808 Mute Conga	
64	<-	TR-808 Low Conga	<-	TR-808 Low Conga	TR-808 Low Conga	
65	<-	<-	<-	<-	<-	
66	<-	<-	<-	<-	<-	
67	<-	<-	<-	<-	<-	
68	<-	<-	<-	<-	<-	
69	<-	<-	<-	<-	<-	
70	<-	TR-808 Maracas	<-	CR-78 Maracas	CR-78 Maracas	
71	<-	<-	<-	<-	<-	
C5 72	<-	<-	<-	<-	<-	
73	<-	<-	<-	<-	<-	
74	<-	CR-78 Guiro [EXC3]	<-	CR-78 Guiro [EXC3]	CR-78 Guiro [EXC3]	
75	<-	TR-808 Claves	<-	CR-78 Claves	CR-78 Claves	
76	<-	<-	<-	<-	<-	
77	<-	<-	<-	<-	<-	
78	<-	High Hoo [EXC4]	High Hoo [EXC4]	High Hoo [EXC4]	High Hoo [EXC4]	
79	<-	Low Hoo [EXC4]	Low Hoo [EXC4]	Low Hoo [EXC4]	Low Hoo [EXC4]	
80	<-	Electric Mute Triangle	Electric Mute Triangle [EXC5]	CR-78 Metallic Beat 1 [EXC5]	CR-78 Metallic Beat 1 [EXC5]	
81	<-	Electric Open Triangle	Electric Open Triangle [EXC5]	CR-78 Metallic Beat 2 [EXC5]	CR-78 Metallic Beat 2 [EXC5]	
82	<-	TR-626 Shaker	TR-626 Shaker	TR-626 Shaker	TR-626 Shaker	
83	<-	<-	<-	<-	<-	
C6 84	<-	<-	<-	<-	<-	
85	<-	<-	<-	<-	<-	
86	<-	<-	<-	<-	<-	
87	<-	<-	<-	<-	<-	
88	Small Club 1 *	Small Club 1 *	Small Club 1 *	Small Club 1 *	Small Club 1 *	
89	---	---	TR-606 Snare 2	---	---	
90	---	---	Techno Snare	---	---	
91	---	---	House Snare	---	---	
92	---	---	Jungle Snare	---	---	
93	---	---	LoFi Snare 1	---	---	
94	---	---	LoFi Snare 2	---	---	
95	---	---	HipHop Snare 1	---	---	
C7 96	---	---	Hip-Hop Snare 2	---	---	

SC-8820 Drum Set (4)

* About Notes 0–21, and 95–127, refer to p.138.

	PC 30 TR-707	PC 31 TR-909	PC 33 JAZZ	PC 34 JAZZ L/R	PC 41 BRUSH
22	<—	<—	<—	<—	<—
23	<—	<—	<—	<—	<—
C1 24	<—	<—	<—	<—	<—
25	<—	<—	<—	<—	<—
26	<—	<—	* Finger Snap 2	Finger Snap 2	Finger Snap 2
27	<—	<—	<—	<—	<—
28	<—	<—	<—	<—	<—
29	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	<—	<—	<—
30	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	<—	<—	<—
31	<—	<—	<—	<—	<—
32	<—	<—	<—	<—	<—
33	<—	<—	<—	<—	<—
34	<—	<—	<—	<—	<—
35	TR-707 Kick 2	TR-909 Kick 2	Jazz Kick 2	[RND] Jazz Kick 2	Jazz Kick 2
C2 36	TR-707 Kick 1	TR-909 Kick 1	Jazz Kick 1	[RND] Jazz Kick 1	Jazz Kick 1
37	TR-707 Rim Shot	TR-909 Rim	<—	<—	<—
38	TR-707 Snare 1	TR-909 Snare 1	Jazz Snare 1	[RND] Jazz Snare 1	Brush Tap 1
39	TR-707 Hand Clap	<—	Hand Clap 2	Hand Clap 2	Brush Slap 1
40	TR-707 Snare 2	TR-909 Snare2	Jazz Snare 2	[RND] Jazz Snare 2	Brush Swirl 1
41	TR-707 Low Tom 2 *	TR-909 Low Tom 2	Jazz Low Tom 2	<—	Brush Low Tom 2
42	TR-707 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]	Closed Hi-Hat 2 [EXC1]	[RND] Jazz Closed Hi-Hat [EXC1]	Brush Closed Hi-Hat [EXC1]
43	TR-707 Low Tom 1 *	TR-909 Low Tom 1	Jazz Low Tom 1	<—	Brush Low Tom 1 *
44	TR-707 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]
45	TR-707 Mid Tom 2 *	TR-909 Mid Tom 2	Jazz Mid Tom 2	<—	Brush Mid Tom 2 *
46	TR-707 Open Hi-Hat [EXC1]	TR-909 Open Hi-Hat [EXC1]	Open Hi-Hat 2 [EXC1]	[RND] Jazz Open Hi-Hat [EXC1]	Brush Open Hi-Hat [EXC1]
47	TR-707 Mid Tom 1 *	TR-909 Mid Tom 1	Jazz Mid Tom 1	<—	Brush Mid Tom 1 *
C3 48	TR-707 High Tom 2 *	TR-909 High Tom 2	Jazz High Tom 2	<—	Brush High Tom 2 *
49	TR-909 Crash Cymbal	TR-909 Crash Cymbal	Jazz Crash Cymbal	[RND] Jazz Crash Cymbal	Brush Crash Cymbal
50	TR-707 High Tom 1 *	TR-909 High Tom 1	Jazz High Tom 1	<—	Brush High Tom 1 *
51	TR-909 Ride Cymbal *	TR-909 Ride Cymbal *	Jazz Ride Cymbal	[RND] JAZZ Ride Cymbal	Ride Cymbal Inner
52	<—	<—	<—	<—	<—
53	<—	<—	Jazz Ride Bell	[RND] Jazz Ride Bell	Brush Ride Bell
54	Tambourine 2	Tambourine 2	<—	<—	<—
55	<—	<—	<—	<—	<—
56	TR-808 Cowbell	TR-808 Cowbell	<—	<—	<—
57	<—	<—	<—	<—	<—
58	<—	<—	<—	<—	<—
59	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge
C4 60	<—	<—	<—	<—	<—
61	<—	<—	<—	<—	<—
62	<—	<—	<—	<—	<—
63	<—	<—	<—	<—	<—
64	<—	<—	<—	<—	<—
65	<—	<—	<—	<—	<—
66	<—	<—	<—	<—	<—
67	<—	<—	<—	<—	<—
68	<—	<—	<—	<—	<—
69	<—	<—	<—	<—	<—
70	TR-808 Maracas	TR-808 Maracas	<—	<—	<—
71	<—	<—	<—	<—	<—
C5 72	<—	<—	<—	<—	<—
73	<—	<—	<—	<—	<—
74	<—	CR-78 Guiro [EXC3]	<—	<—	<—
75	<—	TR-808 Claves	<—	<—	<—
76	<—	<—	<—	<—	<—
77	<—	<—	<—	<—	<—
78	High Hoo [EXC4]	High Hoo [EXC4]	<—	<—	<—
79	Low Hoo [EXC4]	Low Hoo [EXC4]	<—	<—	<—
80	Electric Mute Triangle	Electric Mute Triangle	<—	<—	<—
81	Electric Open Triangle	Electric Open Triangle	<—	<—	<—
82	TR-626 Shaker	TR-626 Shaker	<—	<—	<—
83	<—	<—	<—	<—	<—
C6 84	<—	<—	<—	<—	<—
85	<—	<—	<—	<—	<—
86	<—	<—	<—	<—	<—
87	<—	<—	<—	<—	<—
88	Small Club 1 *	<—	Applause *	Applause	Applause *
89	---	---	---	---	---
90	---	---	---	---	---
91	---	---	---	---	---
92	---	---	---	---	---
93	---	---	---	---	---
94	---	---	---	---	---
95	---	---	---	[L] Jazz Kick 2	---
C7 96	---	---	---	[L] Jazz Kick 1	---

Appendix

PC : Program Number (Drum Set Number)
 <- : Same as the percussion sound of "STANDARD1"(PC1)
 -- : No sound
 [EXC] : Percussion sound of the same number will not be heard at the same time.
 * : Tones which are created using two voices

SC-8820 Drum Set (5)

* About Notes 0-21 and 95-127, refer to p.139.

	PC 42 BRUSH 2	PC 43 BRUSH 2 L/R	PC 49 ORCHESTRA	PC 50 ETHNIC	PC 51 KICK & SNARE
22	<-	<-	<-	---	---
23	<-	<-	<-	---	---
24	<-	<-	<-	---	---
25	<-	<-	<-	Finger Snap	CR-78 Kick 1
26	Finger Snap 2	Finger Snap 2	Finger Snap	Tambourine	CR-78 Kick 2
27	<-	<-	Closed Hi-Hat 2 [EXC1]	Castanets	TR-806 Kick
28	<-	<-	Pedal Hi-Hat [EXC1]	Crash Cymbal 1	TR-707 Kick
29	<-	<-	Open Hi-Hat 2 [EXC1]	Snare Roll	TR-808 Kick 1
30	<-	<-	Ride Cymbal 1	Concert SD	TR-909 Kick 1
31	<-	<-	<-	Concert Cymbal	TR-909 Kick 2
32	<-	<-	<-	Concert BD 1	Hip-Hop Kick 2
33	<-	<-	<-	Jingle Bell	Hip-Hop Kick 1
34	<-	<-	<-	Bell Tree	Jungle Kick 2
35	Brush Kick 2	[RND] Brush Kick 2	Jazz Kick 1	Bar Chimes	Jungle Kick 1
36	Brush Kick 1	[RND] Brush Kick 1	Concert BD 1	Wadaiko	Techno Kick 2
37	<-	<-	<-	Wadaiko Rim	Techno Kick 1
38	Brush Tap 2	[RND] Brush Tap 2	Concert SD	Shime Taiko	Standard 1 Kick 2
39	Brush Slap 2	[RND] Brush Slap 2	Castanets	Atarigane	Standard 1 Kick 1
40	Brush Swirl 1	Brush Swirl 1	Concert SD	Hyoushigi	Standard 1 Kick 1
41	Brush Low Tom 2	<-	Timpani F	Ohkawa	Standard 1 Kick 2
42	Brush Closed Hi-Hat [EXC1]	[RND] Brush Closed Hi-Hat [EXC1]	Timpani F#	High Kotsuzumi	Standard 2 Kick 1
43	Brush Low Tom 1	<-	Timpani G	Low Kotsuzumi	Standard 2 Kick 2
44	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Timpani G#	Ban Gu	Kick Drum 1
45	Brush Mid Tom 2	Brush Mid Tom 2	Timpani A	Big Gong	Kick Drum 2
46	Brush Open Hi-Hat [EXC1]	[RND] Brush Open Hi-Hat [EXC1]	Timpani A#	Small Gong	Soft Kick
47	Brush Mid Tom 1	<-	Timpani B	Bend Gong	Jazz Kick 1
48	Brush High Tom 2	<-	Timpani c	Thai Gong	Jazz Kick 2
49	Brush Crash Cymbal	[RND] Brush Crash Cymbal	Timpani c#	Rama Cymbal	Concert BD 1
50	Brush High Tom 1	<-	Timpani d	Gamelan Gong	Room Kick 1
51	Brush Ride Cymbal	[RND] Brush Ride Cymbal	Timpani d#	Udo Short [EXC1]	Room Kick 2
52	<-	<-	Timpani e	Udo Long [EXC1]	Power Kick1
53	Brush Ride Bell	[RND] Brush Ride Bell	Timpani f	Udo Slap	Power Kick2
54	<-	<-	<-	Bendir	Electric Kick 2
55	<-	<-	<-	Req Dum	Electric Kick 1
56	<-	<-	<-	Req Tik	Electric Kick
57	<-	<-	Concert Cymbal 2	Tabla Te	TR-808 Kick
58	<-	<-	<-	Tabla Na	TR-909 Kick
59	Ride Cymbal Edge	Ride Cymbal Edge	Concert Cymbal 1	Tabla Tun	Dance Kick
60	<-	<-	<-	Tabla Ge	Standard 1 Snare 1
61	<-	<-	<-	Tabla Ge Hi	Standard 1 Snare 2
62	<-	<-	<-	Talking Drum	Standard 2 Snare 1
63	<-	<-	<-	Bendi Talking Drum	Standard 2 Snare 2
64	<-	<-	<-	Caxixi	Tight Snare
65	<-	<-	<-	Djembe	Concert Snare
66	<-	<-	<-	Djembe Rim	Jazz Snare 1
67	<-	<-	<-	Timbales Low	Jazz Snare 2
68	<-	<-	<-	Timbales Paila	Room Snare 1
69	<-	<-	<-	Timbales High	Room Snare 2
70	<-	<-	<-	Cowbell	Power Snare 1
71	<-	<-	<-	High Bongo	Power Snare 2
72	<-	<-	<-	Low Bongo	Gated Snare
73	<-	<-	<-	Mute High Conga	Dance Snare 1
74	<-	<-	<-	Open High Conga	Dance Snare 2
75	<-	<-	<-	Mute Low Conga	Disco Snare
76	<-	<-	<-	Conga Slap	Electric Snare 2
77	<-	<-	<-	Open Low Conga	House Snare
78	<-	<-	<-	Conga Slide	Electric Snare 1
79	<-	<-	<-	Mute Pandiero	Electric Snare 3
80	<-	<-	<-	Open Pandiero	TR-808 Snare 1
81	<-	<-	<-	Open Surdo [EXC2]	TR-808 Snare 2
82	<-	<-	<-	Mute Surdo [EXC2]	TR-909 Snare 1
83	<-	<-	<-	Tamborim	TR-909 Snare 2
84	<-	<-	<-	High Agogo	Brush Tap 1
85	<-	<-	<-	Low Agogo	Brush Tap 2
86	<-	<-	<-	Shaker	Brush Slap 1
87	<-	<-	<-	High Whistle [EXC3]	Brush Slap 2
88	Applause	Applause	Applause	Low Whistle [EXC3]	Brush Slap 3
89	---	---	---	Mute Cuica [EXC4]	Brush Swirl 1
90	---	---	---	Open Cuica [EXC4]	Brush Swirl 2
91	---	---	---	Mute Triangle [EXC5]	Brush Long Swirl
92	---	---	---	Open Triangle [EXC5]	Standard 1 Snare 1
93	---	---	---	Short Guiro [EXC6]	Standard 1 Snare 2
94	---	---	---	Long Guiro [EXC6]	Standard 1 Snare 3
95	---	[L] Brush Kick 2	---	Cabasa Up	Rap Snare
96	---	[L] Brush Kick 1	---	Cabasa Down	Hip-Hop Snare 2

SC-8820 Drum Set (6)

* About Notes 0-21, and 95-127, refer to p.139.

	PC 52 KICK & SNARE 2	PC 53 ASIA	PC 54 CYMBAL&CLAPS	PC55 GAMELAN 1	PC56 GAMELAN 2
22	---	---	---	---	---
23	---	---	---	---	---
24	---	---	---	---	---
25	CR-78 Kick 1	Gamelan Gong 1	---	---	---
26	CR-78 Kick 2	Gamelan Gong 2	---	---	---
27	TR-606 Kick	Gamelan Gong 3	---	---	---
28	TR-707 Kick	Gamelan Gong 4	---	---	---
29	TR-808 Kick 1	Gamelan Gong 5	---	---	---
30	TR-909 Kick 1	Gamelan Gong 6	---	---	---
31	TR-909 Kick 2	Gamelan Gong 7	---	---	---
32	Hip-Hop Kick 2	Gamelan Gong 8	Reverse Open Hi-Hat	---	---
33	Hip-Hop Kick 1	Gamelan Gong 9	Reverse Closed Hi-Hat 1	---	---
34	Jungle Kick 2	Gamelan Gong 10	Reverse Closed Hi-Hat 2	---	---
35	Jungle Kick 1	Gender 1	Jungle Hi-Hat	[EXC1] ---	---
36	Techno Kick 2	Gender 2	Closed Hi-Hat	[EXC1] Kendang Wadon	Kendang Wadon
37	Techno Kick 1	Gender 3	Closed Hi-Hat 2	[EXC1] Kendang Lanang	Kendang Lanang
38	Standard 1 Kick 2	Gender 4	Closed Hi-Hat 3	[EXC1] Bebarongan	Bebarongan
39	Standard 1 Kick 1	Gender 5	Closed Hi-Hat 4	[EXC1] Pelegongan	Pelegongan
40	Standard 1 Kick 2	Bonang 1	Closed Hi-Hat	[EXC1] Kelontuk	[EXC1] Kelontuk [EXC1]
41	Standard 1 Kick 1	Bonang 2	TR-707 Closed Hi-Hat	[EXC1] Kelontuk Mute	[EXC1] Kelontuk Mute [EXC1]
42	Brush Kick 2	Bonang 3	TR-606 Closed Hi-Hat	[EXC1] Kelontuk Side	[EXC1] Kelontuk Side [EXC1]
43	Brush Kick 1	Bonang 4	TR-808 Closed Hi-Hat	[EXC1] Gamelan Gong Wadon	Gamelan Gong Wadon
44	Jazz Kick 2	Bonang 5	TR-808 Closed Hi-Hat	[EXC1] Gamelan Gong Lanang	Gamelan Gong Lanang
45	Jazz Kick 1	Rama Cymbal Low	CR-78 Closed Hi-Hat	[EXC1] Ceng-Ceng	* Ceng-Ceng *
46	Hip-Hop Kick 2	Rama Cymbal High	Pedal Hi-Hat	[EXC1] Kopyak Open	[EXC2] Kopyak Open [EXC2]
47	Hip-Hop Kick 1	Sagat Open	[EXC7] Pedal Hi-Hat	[EXC1] Kopyak Mute	[EXC2] Kopyak Mute [EXC2]
48	Concert BD 1 Mute	[EXC1] Sagat Closed	[EXC7] Pedal Hi-Hat	[EXC1] Kajar	Kajar
49	Concert BD 1	[EXC1] Jaws Harp	Half-Open Hi-Hat 1	[EXC1] Kempur	* Kempur *
50	Room Kick 2	Wadaiko	Half-Open Hi-Hat 2	[EXC1] Jegogan	* Jegogan *
51	Room Kick 1	Wadaiko Rim	Open Hi-Hat	[EXC1] Jegogan	* Jegogan *
52	Jungle Kick 2	Small Taiko	Open Hi-Hat 2	[EXC1] Jegogan	* Jegogan *
53	Jungle Kick 1	Shimetaiko	Open Hi-Hat 3	[EXC1] Jegogan	* Jegogan *
54	Jungle Kick Roll	Atarigane	Open Hi-Hat 2	[EXC1] Jegogan	* Jegogan *
55	Fat Kick	Hyoushigi	TR-909 Open Hi-Hat	[EXC1] Jublag	Jublag
56	Dance Kick	Ohkawa	TR-707 Open Hi-Hat	[EXC1] Jublag	Jublag
57	TR-808 Kick	High Kotsuzumi	TR-606 Open Hi-Hat	[EXC1] Jublag	Jublag
58	TR-909 Kick 2	Low Kotsuzumi	TR-808 Open Hi-Hat	[EXC1] Jublag	Jublag
59	TR-909 Kick 1	Yyoo Dude	TR-808 Open Hi-Hat	[EXC1] Jublag	Jublag
60	Standard 1 Snare 1	Buk	CR-78 Open Hi-Hat	[EXC1] Penyacah	Penyacah
61	Standard 1 Snare 2	Buk Rim	Crash Cymbal 1	[EXC3] Penyacah	Penyacah
62	Standard 2 Snare 1	Gengari p	[EXC1] Crash Cymbal 2	[EXC4] Penyacah	Penyacah
63	Standard 2 Snare 2	Gengari Mute Low	[EXC1] Crash Cymbal 3	Penyacah	Penyacah
64	Tight Snare	Gengari f	[EXC2] Brush Crash Cymbal	Penyacah	Penyacah
65	Concert Snare	Gengari Mute High	[EXC2] Hard Crash Cymbal	* Penyacah	Penyacah
66	Jazz Snare 1	Gengari Samll	TR-909 Crash Cymbal	Penyacah	Penyacah
67	Jazz Snare 2	Jang-Gu Che	TR-808 Crash Cymbal	Pemade	Pemade
68	Room Snare 1	Jang-Gu Kun	Mute Crash Cymbal 1	[EXC3] Pemade	Pemade
69	Room Snare 2	Jang-Gu Rim	Mute Crash Cymbal 2	[EXC4] Pemade	Pemade
70	LoFi Snare 1	Jing p	[EXC3] Reverse Crash Cymbal 1	Pemade	Pemade
71	LoFi Snare 2	Jing f	[EXC3] * Reverse Crash Cymbal 2	Pemade	Pemade
72	Gated Snare	Jing Mute	[EXC3] Reverse Crash Cymbal 3	Pemade	Pemade
73	LoFi Snare Rim	Asian Gong	Reverse TR-909 Crash Cymbal	Pemade	Pemade
74	Dance Snare 2	Big Gong	Splash Cymbal	Pemade	Pemade
75	HipHop Snare 1	Small Gong	Splash Cymbal	Pemade	Pemade
76	HipHop Snare 2	Pai Ban	Ride Bell	Pemade	Pemade
77	Dance Snare	Ban Gu	Brush Ride Bell	Reyong	Reyong
78	TR-606 Snare 2	Tang Gu	[EXC4] Ride Cymbal 1	Reyong	Reyong
79	Techno Snare	Tang Gu Mute	[EXC4] Ride Cymbal 2	Reyong	Reyong
80	House Snare	Shou Luo	* Brush Ride Cymbal	Reyong	Reyong
81	Rock Snare Dry	Bend Gong	Ride Cymbal Low Inner	Reyong	Reyong
82	Jungle Snare	Hu Yin Luo Low	* Ride Cymbal Mid Inner	Reyong	Reyong
83	Jungle Snare Roll	Hu Yin Luo Mid	[EXC5] Ride Cymbal High Inner	Reyong	Reyong
84	Brush Tap 1	Hu Yin Luo Mid 2	[EXC5] Ride Cymbal Low Edge	Reyong	Reyong
85	Brush Tap 2	Hu Yin Luo High	[EXC6] Ride Cymbal Mid Edge	Reyong	Reyong
86	Brush Tap 2	Hu Yin Luo High 2	[EXC6] Ride Cymbal High Edge	Reyong	Reyong
87	Brush Slap 2	Nao Bo	TR-606 Ride Cymbal	Reyong	Reyong
88	Brush Slap 3	Xiao Bo	TR-808 Ride Cymbal	Reyong	Reyong
89	Brush Swirl 1	Dholak 1	Chinese Cymbal	---	---
90	Brush Swirl 2	Dholak 2	Chinese Cymbal 2	---	---
91	Brush Long Swirl	---	Hand Clap	---	---
92	Standard 1 Snare 1	---	Hand Clap 2	---	---
93	Standard 1 Snare 2	---	Hand Clap	---	---
94	Standard 1 Snare 3	---	Hand Clap	---	---
95	Rap Snare	---	Hand Clap 2	---	---
96	Hip-Hop Snare 2	---	TR-707 Hand Clap	---	---

Appendix

PC : Program Number (Drum Set Number)
 <- : Same as the percussion sound of "STANDARD1"(PC1)
 -- : No sound
 [EXC] : Percussion sound of the same number will not be heard at the same time
 * : Tones which are created using two voices

SC-8820 Drum Set (7)

* About Notes 0-21, and 95-127, refer to p.139, p.140.

	PC 57 SFX	PC 58 RHYTHM FX	PC 59 RHYTHM FX 2	PC 60 RHYTHM FX 3
	22 MC-500 Beep 2	---	---	Reverse Clean Guitar Mute Up
	23 Guitar Slide	---	---	Reverse Clean Guitar Mute Down
	Guitar Wah	---	---	Reverse Distortion Guitar Cut Noise Up
C1	24 Guitar Slap	---	---	Reverse Distortion Guitar Cut Noise Down
	25 Chord Stroke Down	---	---	Reverse Distortion Guitar Stroke Noise
	26 Chord Stroke Up	---	---	Reverse Distortion Guitar Mute Noise
	27 Biwa FX	---	---	Reverse Steel Guitar Slide Noise 1
	28 Phonograph Noise	---	---	Reverse Steel Guitar Slide Noise 2
	29 Tape Rewind	---	---	Reverse Steel Guitar Slide Noise 3
	30 Scratch Push 2	[EXC1] ---	---	Reverse Steel Guitar Slide Noise 4
	31 Scratch Pull 2	[EXC1] ---	---	Reverse Steel Guitar Stroke Noise
	32 Cutting Noise 2 Up	---	---	Reverse Steel Guitar Stroke Noise Up 1
	33 Cutting Noise 2 Down	---	---	Reverse Steel Guitar Stroke Noise Down 1
	34 Distortion Guitar Cutting Noise Up	---	---	Reverse Steel Guitar Stroke Noise Up 2
	Distortion Guitar Cutting Noise Down	Reverse Kick 1	Reverse TR-707 Kick 1	Reverse Steel Guitar Stroke Noise Down 2
C2	36 Bass Slide	Reverse Concert Bass Drum	Reverse TR-909 Kick 1	Reverse Trombone Noise
	37 Pick Scrape	Reverse Power Kick1	Reverse Hip-Hop Kick 1	Reverse Trumpet Noise
	38 High Q	Reverse Electric Kick 1	Reverse Jungle Kick 2	Reverse Standard Kick 2
	39 Slap	Reverse Snare 1	Reverse Techno Kick 2	Reverse Standard Kick 1
	40 Scratch Push	[EXC7] Reverse Snare 2	Reverse TR-606 Snare 2	Reverse Room Kick 2
	41 Scratch Pull	[EXC7] Reverse Standard 1 Snare 1	Reverse CR-78 Snare 1	Reverse Room Kick 1
	42 Sticks	Reverse Tight Snare	Reverse CR-78 Snare 2	Reverse Jazz Kick 2
	43 Square Click	Reverse Dance Snare	Reverse Jungle Snare 2	Reverse Jazz Kick 1
	44 Metronome Click	Reverse 808 Snare	Reverse Techno Snare 2	Reverse Brush Kick 2
	45 Metronome Bell	Reverse Tom 1	Reverse TR-707 Snare	Reverse Brush Kick 1
	46 Guitar Fret Noise	Reverse Tom 2	Reverse TR-606 Snare 1	Reverse HipHop Kick 2
	47 Guitar Cutting Noise Up	Reverse Sticks	Reverse TR-909 Snare 1	Reverse HipHop Kick 1
C3	48 Guitar Cutting Noise Down	Reverse Slap	Reverse Hip-Hop Snare 2	Reverse Jungle Kick 2
	49 String Slap of Double Bass	Reverse Cymbal 1	Reverse Jungle Snare 1	Reverse Jungle Kick 1
	50 Flute Key Click Noise	Reverse Cymbal 2	Reverse House Snare	Reverse TR-808 Kick
	51 Laughing	Reverse Open Hi-Hat	Reverse Closed Hi-Hat	Reverse TR-909 Kick 2
	52 Screaming	Reverse Ride Cymbal	Reverse TR-606 Closed Hi-Hat	Reverse TR-909 Kick 1
	53 Punch	Reverse CR-78 Open Hi-Hat	Reverse TR-707 Closed Hi-Hat	Reverse Fat Kick
	54 Heart Beat	Reverse Closed Hi-Hat	Reverse TR-808 Closed Hi-Hat	Reverse Dance Kick
	55 Footsteps 1	Reverse Gong	Reverse Jungle Hi-Hat	Reverse Standard Snare 1
	56 Footsteps 2	Reverse Bell Tree	Reverse Tambourine 2	Reverse Standard Snare 2
	57 Applause	Reverse Guiro	Reverse Shake Tambourine	Reverse Room Snare 1
	58 Door Creaking	Reverse Bendir	Reverse TR-808 Open Hi-Hat	Reverse Room Snare 2
	59 Door	Reverse Gun Shot	Reverse TR-707 Open Hi-Hat	Reverse Jazz Snare 1
C4	60 Scratch	Reverse Scratch	Reverse Open Hi-Hat	Reverse Jazz Snare 2
	61 Wind Chimes	Reverse Laser Gun	Reverse TR-606 Open Hi-Hat	Reverse Brush Snare 1
	62 Car - Engine	Key Click	Reverse Hu Yin Luo	Reverse Brush Snare 2
	63 Car - Stop	Techno Thip	Reverse TR-707 Crash Cymbal	Reverse Lo-Fi Snare 1
	64 Car - Passing	Pop Drop	Voice One	Reverse Lo-Fi Snare 2
	65 Car - Crash	Woody Slap	Reverse Voice One	Reverse HipHop Snare 1
	66 Siren	Distortion Kick	Voice Two	Reverse HipHop Snare 2
	67 Train	Syn. Drops	Reverse Voice Two	Reverse House Snare 1
	68 Jetplane	Reverse Hi Q	Voice Three	Reverse Jungle Snare
	69 Helicopter	Pipe	Reverse Voice Three	Reverse 606 Snare 2
	70 Starship	Ice Block	Voice Tah	Reverse Techno Snare
	71 Gun Shot	Digital Tambourine	Reverse Voice Tah	Reverse Dance Snare
C5	72 Machine Gun	Alias	Voice Ou	Reverse Rock Snare Dry
	73 Laser Gun	Modulated Bell	Voice Au	Reverse Lo-Fi Snare Rim
	74 Explosion	Spark	Voice Whey	Reverse 909 Snare Rim
	75 Dog	Metallic Percussion	Frog Vpocce	Reverse Jungle Snare Rim
	76 Horse-Gallop	Velocity Noise FX	Reverse Yyoo Dude	Reverse Dance Snare Rim
	77 Birds	Stereo Noise Clap	Doubby	Reverse House Snare Rim
	78 Rain	Swish	Reverse Doubby	Reverse Brush Tom 1
	79 Thunder	Slappy	Baert High	Reverse Brush Tom 2
	80 Wind	Voice Ou	Baert Low	Reverse Brush Tom 3
	81 Seashore	Voice Au	Bounce	Reverse 606 Tom
	82 Stream	Hoo	Reverse bounce	Reverse Jungle Crash Cymbal
	83 Bubble	Tape Stop 1	Distortion Knock	Reverse Standard Closed Hi-Hat
C6	84 Kitty	Tape Stop 2	Guitar Slide	Reverse Room Closed Hi-Hat
	85 Bird 2	Missile	Sub Marine	Reverse Jazz Closed Hi-Hat
	86 Growl	Space Birds	Noise Attack	Reverse Brush Closed Hi-Hat
	87 <-	Flying Monster	Space Worms	Reverse 707 Claps
	88 Telephone 1	---	Emergency !	Reverse 909 Claps
	89 Telephone 2	---	Calculating...	Reverse R&B Claps 1
	90 Small Club 1	---	Saw LFO Saw	Reverse HipHop Claps
	91 Small Club 2	---	---	Reverse Comp Claps 2
	92 Applause Wave	---	---	Reverse Shaker 2
	93 Eruption	---	---	Reverse Jungle Shaker
	94 Big Shot	---	---	Reverse Clap Hit
C7	95 Percussion Bang	---	---	Reverse Boeeeen
	96	---	---	---

SC-8820 Drum Set (8)

	PC 61 SFX 2	PC 62 VOICE	PC 63 CYM&CLAPS 2
	22	---	---
	23	---	---
	24	---	---
C1	25	---	---
	26	---	---
	27	---	---
	28	---	---
	29	---	---
	30	---	---
	31	Acoustic Bass Mute Noise	---
	32	Acoustic Bass Touch Noise	Reverse Standard Closed Hi-Hat
	33	Acoustic Bass Attack Noise	Reverse Room Closed Hi-Hat
	34	Distortion Guitar Mute Noise	Reverse Jazz Closed Hi-Hat
	35	Steel Guitar Slide Noise 1	Reverse Brush Closed Hi-Hat
C2	36	Steel Guitar Slide Noise 2	Standard 1 Closed Hi-Hat
	37	Steel Guitar Slide Noise 3	Room Closed Hi-Hat
	38	Steel Guitar Slide Noise 4	Jazz Closed Hi-Hat
	39	Guitar Stroke Noise 1	Brush Closed Hi-Hat
	40	Guitar Stroke Noise 2	TR-707 Closed Hi-Hat
	41	Guitar Stroke Noise 3	TR-806 Closed Hi-Hat
	42	Guitar Stroke Noise 4	TR-808 Closed Hi-Hat
	43	Guitar Stroke Noise 5	CR-78 Closed Hi-Hat
	44	Open CD Tray	Pedal Hi-Hat
	45	Audio Switch	Pedal Hi-Hat
	46	Keyboard Typing 1	Pedal Hi-Hat
	47	Keyboard Typing 2	Half-Open Hi-Hat 1
C3	48	Keyboard Typing 3	Half-Open Hi-Hat 2
	49	Keyboard Typing 4	Standard 1 Open Hi-Hat
	50	Keyboard Typing 5	Room Open Hi-Hat
	51	Keyboard Typing 6	Jazz Open Hi-Hat
	52	Baby Laughing	Brush Open Hi-Hat
	53	Clap Hit	TR-909 Open Hi-Hat
	54	Stabl 1	TR-707 Open Hi-Hat
	55	Stabl 2	TR-806 Open Hi-Hat
	56	Bounce Hit	TR-808 Open Hi-Hat
	57	Boeeeen	CR-78 Open Hi-Hat
	58	Glass Stir	Standard 1 Crash Cymbal
	59	Ice Ring	Room Crash Cymbal
C4	60	Crack Bottle	Jazz Crash Cymbal
	61	Pour Bottle	Brush Crash Cymbal
	62	Soda	Hard Crash Cymbal
	63	Car Engine 2	TR-909 Crash Cymbal
	64	Car - Horn	Jungle Crash Cymbal
	65	Railroad Crossing	TR-808 Crash Cymbal
	66	SL 1	Standard 1 Mute Crash Cymbal
	67	SL 2	Room Mute Crash Cymbal
	68	Over Blow	Jazz Mute Crash Cymbal
	69	Sword Boom!	Brush Mute Crash Cymbal
	70	Sword Cross	Mute Crash Cymbal 1
	71	Industry Hit	Mute Crash Cymbal 2
C5	72	Drill Hit	Reverse Standard 1 Crash Cymbal
	73	Compressor	Reverse Room Crash Cymbal
	74	Thrill Hit	Reverse Jazz Crash Cymbal
	75	Explosion 2	Reverse Brush Crash Cymbal
	76	Seal	Splash Cymbal
	77	Fancy Animal	Standard Ride Bell
	78	Cricket	Room Ride Bell
	79	Bear	Jazz Ride Bell
	80	Frog Vpoce	Brush Ride Bell
	81	Wind 2	Standard Ride Cymbal
	82	Scratch 3	Room Ride Cymbal
	83	Scratch 4	Jazz Ride Cymbal
C6	84	Scratch 5	Brush Ride Cymbal
	85	Scratch 6	TR-806 Ride Cymbal
	86	Scratch 7	TR-808 Ride Cymbal
	87	Noise Attack	Chinese Cymbal
	88	Bounce	Chinese Cymbal 2
	89	Dist Knock	TR-707 Claps
	90	Bound	Hip-Hop Claps
	91	---	R&B Claps
	92	---	TR-909 Claps
	93	---	Comp Claps 2
	94	---	Hand Clap
	95	---	Hand Clap 2
C7	96	---	TR-707 Hand Clap

Appendix

PC : Program Number (Drum Set Number)
 <- : Same as the percussion sound of "STANDARD1"(PC1)
 -- : No sound
 [EXC] : Percussion sound of the same number will not be heard at the same time.
 * : Tones which are created using two voices

SC-8820 Drum Set (9)

* Notes 0-21 and 95-127 are as follows.

	PC1 STANDARD 1	PC2 STANDARD 2 PC17 POWER	PC3 STANDARD L/R	PC9 ROOM	PC10 HIP HOP
C-1 0	Standard 1 Kick 1	<-	---	<-	Electric Kick 2
1	Standard 1 Kick 2	<-	---	<-	Electric Kick 1 *
2	Standard 2 Kick 1	<-	---	<-	CR-78 Kick 1
3	Standard 2 Kick 2	<-	---	<-	CR-78 Kick 2
4	Kick Drum 1	<-	---	<-	TR-606 Kick1
5	Kick Drum 2	<-	---	<-	TR-707 Kick 1
6	Jazz Kick 1	<-	---	<-	TR-808 Kick
7	Jazz Kick 2	<-	---	<-	TR-808 Kick
8	Room Kick 1	<-	---	<-	TR-808 Kick 2
9	Room Kick 2	<-	---	<-	TR-909 Kick
10	Power Kick 1	<-	---	<-	Dance Kick
11	Power Kick 2	<-	---	<-	Hip-Hop Kick 2
12	Electric Kick 2	<-	---	<-	TR-909 Kick 1 *
13	Electric Kick 1 *	<-	---	<-	Hip-Hop Kick 3
14	TR-808 Kick	<-	---	<-	Jungle Kick 1
15	TR-909 Kick	<-	---	<-	Techno Kick 1
16	Dance Kick	<-	---	<-	Bounce Kick
17	Voice One	<-	<-	<-	<-
18	Voice Two	<-	<-	<-	<-
19	Voice Three	<-	<-	<-	<-
20	Room Kick 2	---	---	Standard 1 Kick 2 *	Jungle Kick 2
21	Room Kick 1 *	---	---	Standard 1 Kick 1 *	Jungle Kick 1
95	Room Snare 1	---	[L] Standard Kick 2 *	Standard 1 Snare 1 *	Room Snare 2
96	Room Snare 2	---	[L] Standard Kick 1 *	Standard 1 Snare 2	Dance Snare
97	Standard 1 Snare1	<-	[L] Standard Crash Cymbal *	<-	Techno Hit
98	Standard 1 Snare 2	<-	[L] Standard Snare 1 *	<-	Philly Hit *
99	Standard 2 Snare 1	<-	[L] Standard Ride Cymbal	<-	Impact Hit *
100	Standard 2 Snare 2	<-	[L] Standard Snare 2	<-	Lo-Fi Rave *
101	Snare Drum 2	<-	[L] Standard Low Tom	<-	Bam Hit
102	Standard 1 Snare 1	<-	[L] Standard Closed Hi-Hat [EXC8]	<-	Bim Hit
103	Standard 1 Snare 2	<-	[L] Standard Mid Tom	<-	Tape Rewind
104	Standard 1 Snare 3	<-	[L] Standard Ride Bell	<-	Phonograph Noise
105	Jazz Snare 1	<-	[L] Standard High Tom	<-	Power Snare 1
106	Jazz Snare 2	<-	[L] Standard Open Hi-Hat [EXC8]	<-	Dance Snare 1
107	Room Snare 1	<-	[R] Standard Kick 2	<-	Dance Snare 2
108	Room Snare 2	<-	[R] Standard Kick 1	<-	Disco Snare
109	Power Snare 1	<-	[R] Standard Crash Cymbal	<-	Electric Snare 2
110	Power Snare 2	<-	[R] Standard Snare 1	<-	Electric Snare
111	Gated Snare	<-	[R] Standard Ride Cymbal	<-	Electric Snare 3 *
112	Dance Snare 1	<-	[R] Standard Snare 2	<-	TR-606 Snare 2
113	Dance Snare 2	<-	[R] Standard Low Tom	<-	TR-707 Snare 1
114	Disco Snare	<-	[R] Standard Closed Hi-Hat [EXC9]	<-	TR-808 Snare 2
115	Electric Snare 2	<-	[R] Standard Mid Tom	<-	TR-808 Snare 1 *
116	Electric Snare	<-	[R] Standard Ride Bell	<-	TR-808 Snare 2
117	Electric Snare 3 *	<-	[R] Standard High Tom	<-	TR-909 Snare 1
118	TR-707 Snare 1	<-	[R] Standard Open Hi-Hat [EXC9]	<-	TR-909 Snare 2 *
119	TR-808 Snare 1	<-	---	<-	TR-909 Snare 1
120	TR-808 Snare 2 *	<-	---	<-	TR-909 Snare 2
121	TR-909 Snare 1	<-	---	<-	Rap Snare
122	TR-909 Snare 2 *	<-	---	<-	Jungle Snare
123	Rap Snare	<-	---	<-	House Snare 1
124	Jungle Snare 1	<-	---	<-	House Snare *
125	House Snare 1	<-	---	<-	House Snare 2
126	House Snare *	<-	---	<-	Voice Tah
127	House Snare 2	<-	---	<-	Slappy *

SC-8820 Drum Set (10)

* Notes 0–21 and 95–127 are as follows.

	PC 11 JUNGLE	PC 12 TECHNO	PC 13 ROOM L/R	PC 14 HOUSE	PC 25 ELECTRONIC PC 26 TR-808
C-1 0	Electric Kick 2	Electric Kick 2	---	Electric Kick 2	Electric Kick 2
1	Electric Kick 1	Electric Kick 1	---	Electric Kick 1	Electric Kick 1
2	CR-78 Kick 1	CR-78 Kick 1	---	CR-78 Kick 1	CR-78 Kick 1
3	CR-78 Kick 2	CR-78 Kick 2	---	CR-78 Kick 2	CR-78 Kick 2
4	TR-606 Kick1	TR-606 Kick1	---	TR-606 Kick1	TR-606 Kick1
5	TR-707 Kick 1	TR-707 Kick 1	---	TR-707 Kick 1	TR-707 Kick 1
6	TR-808 Kick	TR-808 Kick	---	TR-808 Kick	TR-808 Kick
7	TR-808 Kick	TR-808 Kick	---	TR-808 Kick	TR-808 Kick
8	TR-808 Kick 2	TR-808 Kick 2	---	TR-808 Kick 2	TR-808 Kick 2
9	TR-909 Kick	TR-909 Kick	---	TR-909 Kick	TR-909 Kick
10	Dance Kick	Dance Kick	---	Dance Kick	Dance Kick
11	Hip-Hop Kick 2	Hip-Hop Kick 2	---	Hip-Hop Kick 2	Hip-Hop Kick 2
C0 12	TR-909 Kick 1	TR-909 Kick 1	---	TR-909 Kick 1	TR-909 Kick 1
13	Hip-Hop Kick 3	Hip-Hop Kick 3	---	Hip-Hop Kick 3	Hip-Hop Kick 3
14	Jungle Kick 1	Jungle Kick 1	---	Jungle Kick 1	Jungle Kick 1
15	Techno Kick 1	Techno Kick 1	---	Techno Kick 1	Techno Kick 1
16	Bounce Kick	Bounce Kick	---	Bounce Kick	Bounce Kick
17	<--	<--	<--	<--	<--
18	<--	<--	<--	<--	<--
19	<--	<--	<--	<--	<--
20	HipHop Kick 2	TR-909 Kick 2	---	Fat Kick	---
21	HipHop Kick 1	Fat Kick	---	Dance Kick	---
95	Rock Snare Dry	HipHop Snare 1	[L] Room Kick 2	LoFi Snare 2	---
96	LoFi Snare 1	HipHop Snare 2	[L] Room Kick 1	Jungle Snare	---
97	Techno Hit	Techno Hit	[L] Room Crash Cymbal	Techno Hit	Techno Hit
98	Philly Hit	Philly Hit	[L] Room Snare 1	Philly Hit	Philly Hit
99	Impact Hit	Impact Hit	[L] Room Ride Cymbal	Impact Hit	Impact Hit
100	Lo-Fi Rave	Lo-Fi Rave	[L] Room Snare 2	Lo-Fi Rave	Lo-Fi Rave
101	Bam Hit	Bam Hit	[L] Room Low Tom	Bam Hit	Bam Hit
102	Bim Hit	Bim Hit	[L] Room Closed Hi-Hat [EXC8]	Bim Hit	Bim Hit
103	Tape Rewind	Tape Rewind	[L] Room Mid Tom	Tape Rewind	Tape Rewind
104	Phonograph Noise	Phonograph Noise	[L] Room Ride Bell	Phonograph Noise	Phonograph Noise
105	Power Snare 1	Power Snare 1	[L] Room High Tom	Power Snare 1	Power Snare 1
106	Dance Snare 1	Dance Snare 1	[L] Room Open Hi-Hat [EXC8]	Dance Snare 1	Dance Snare 1
107	Dance Snare 2	Dance Snare 2	[R] Room Kick 2	Dance Snare 2	Dance Snare 2
C8 108	Disco Snare	Disco Snare	[R] Room Kick 1	Disco Snare	Disco Snare
109	Electric Snare 2	Electric Snare 2	[R] Room Crash Cymbal	Electric Snare 2	Electric Snare 2
110	Electric Snare	Electric Snare	[R] Room Snare 1	Electric Snare	Electric Snare
111	Electric Snare 3	Electric Snare 3	[R] Room Ride Cymbal	Electric Snare 3	Electric Snare 3
112	TR-606 Snare 2	TR-606 Snare 2	[R] Room Snare 2	TR-606 Snare 2	TR-606 Snare 2
113	TR-707 Snare 1	TR-707 Snare 1	[R] Room Low Tom	TR-707 Snare 1	TR-707 Snare 1
114	TR-808 Snare 2	TR-808 Snare 2	[R] Room Closed Hi-Hat [EXC9]	TR-808 Snare 2	TR-808 Snare 2
115	TR-808 Snare 1	TR-808 Snare 1	[R] Room Mid Tom	TR-808 Snare 1	TR-808 Snare 1
116	TR-808 Snare 2	TR-808 Snare 2	[R] Room Ride Bell	TR-808 Snare 2	TR-808 Snare 2
117	TR-909 Snare 1	TR-909 Snare 1	[R] Room High Tom	TR-909 Snare 1	TR-909 Snare 1
118	TR-909 Snare 2	TR-909 Snare 2	[R] Room Open Hi-Hat [EXC9]	TR-909 Snare 2	TR-909 Snare 2
119	TR-909 Snare 1	TR-909 Snare 1	---	TR-909 Snare 1	TR-909 Snare 1
120	TR-909 Snare 2	TR-909 Snare 2	---	TR-909 Snare 2	TR-909 Snare 2
C9 121	Rap Snare	Rap Snare	---	Rap Snare	Rap Snare
122	Jungle Snare	Jungle Snare	---	Jungle Snare	Jungle Snare
123	House Snare 1	House Snare 1	---	House Snare 1	House Snare 1
124	House Snare	House Snare	---	House Snare	House Snare
125	House Snare 2	House Snare 2	---	House Snare 2	House Snare 2
126	Voice Tah	Voice Tah	---	Voice Tah	Voice Tah
127	Slappy	Slappy	---	Slappy	Slappy

Appendix

PC : Program Number (Drum Set Number)
 <- : Same as the percussion sound of "STANDARD"(PC1)
 -- : No sound
 [EXC] : Percussion sound of the same number will not be heard at the same time.
 * : Tones which are created using two voices

SC-8820 Drum Set (11)

* Notes 0–21 and 95–127 are as follows.

		PC 28				
		CR-78				
		PC 29				
		TR-606				
		PC 30				
		TR-707				
	PC 27	PC 31	PC 33	PC 34	PC 41	
	DANCE	TR-909	JAZZ	JAZZ L/R	BRUSH	
C-1	0	Electric Kick 2	Electric Kick 2	<-	---	<-
	1	Electric Kick 1	Electric Kick 1	<-	---	<-
	2	CR-78 Kick 1	CR-78 Kick 1	<-	---	<-
	3	CR-78 Kick 2	CR-78 Kick 2	<-	---	<-
	4	TR-606 Kick1	TR-606 Kick1	<-	---	<-
	5	TR-707 Kick 1	TR-707 Kick 1	<-	---	<-
	6	TR-808 Kick	TR-808 Kick	<-	---	<-
	7	TR-808 Kick	TR-808 Kick	<-	---	<-
	8	TR-808 Kick 2	TR-808 Kick 2	<-	---	<-
	9	TR-909 Kick	TR-909 Kick	<-	---	<-
	10	Dance Kick	Dance Kick	<-	---	<-
	11	Hip-Hop Kick 2	Hip-Hop Kick 2	<-	---	<-
C0	12	TR-909 Kick 1	TR-909 Kick 1	<-	---	<-
	13	Hip-Hop Kick 3	Hip-Hop Kick 3	<-	---	<-
	14	Jungle Kick 1	Jungle Kick 1	<-	---	<-
	15	Techno Kick 1	Techno Kick 1	<-	---	<-
	16	Bounce Kick	Bounce Kick	<-	---	<-
	17	<-	<-	<-	<-	<-
	18	<-	<-	<-	<-	<-
	19	<-	<-	<-	<-	<-
	20	TR-909 Kick 2	---	Brush Kick 2	---	---
	21	TR-909 Kick 1	---	Brush Kick 1	---	---
	:	:	:	:	:	:
	:	:	:	:	:	:
	:	:	:	:	:	:
95		HipHop Snare 1	---	[L] Jazz Kick 2	---	
		Hip-Hop Snare 2	---	[L] Jazz Kick 1	---	
96	97	Techno Hit	Techno Hit	---	[L] Jazz Crash Cymbal	---
98		Philly Hit	Philly Hit	Brush Tap 2	[L] Jazz Snare 1	---
	99	Impact Hit	Impact Hit	Brush Slap 2	[L] Jazz Ride Cymbal	---
100		Lo-Fi Rave	Lo-Fi Rave	Brush Tap 1	[L] Jazz Snare 2	Brush Tap 1
		Bam Hit	Bam Hit	Brush Tap 2	[L] Jazz Low Tom	Brush Tap 2
	102	Bim Hit	Bim Hit	Brush Slap 1	[L] Jazz Closed Hi-Hat [EXC8]	Brush Slap 1
103		Tape Rewind	Tape Rewind	Brush Slap 2	[L] Jazz Mid Tom	Brush Slap 2
	104	Phonograph Noise	Phonograph Noise	Brush Slap 3	[L] Jazz Ride Bell	Brush Slap 3
105		Power Snare 1	Power Snare 1	Brush Swirl 1	[L] Jazz High Tom	Brush Swirl 1
	106	Dance Snare 1	Dance Snare 1	Brush Swirl 2	[L] Jazz Open Hi-Hat [EXC8]	Brush Swirl 2
107		Dance Snare 2	Dance Snare 2	Brush Long Swirl	[R] Jazz Kick 2	Brush Long Swirl
C8	108	Disco Snare	Disco Snare	Jazz Snare 1	[R] Jazz Kick 1	Jazz Snare 1
	109	Electric Snare 2	Electric Snare 2	Jazz Snare 2	[R] Jazz Crash Cymbal	Jazz Snare 2
		Electric Snare	Electric Snare	Standard 1 Snare1	[R] Jazz Snare 1	Standard 1 Snare1
	111	Electric Snare 3	Electric Snare 3	Standard 1 Snare2	[R] Jazz Ride Cymbal	Standard 1 Snare2
	112	TR-606 Snare 2	TR-606 Snare 2	Standard 2 Snare1	[R] Jazz Snare 2	Standard 2 Snare1
113		TR-707 Snare 1	TR-707 Snare 1	Standard 2 Snare2	[R] Jazz Low Tom	Standard 2 Snare2
	114	TR-808 Snare 2	TR-808 Snare 2	Snare Drum 2	[R] Jazz Closed Hi-Hat [EXC9]	Snare Drum 2
115		TR-808 Snare 1	TR-808 Snare 1	Standard 1 Snare 1	[R] Jazz Mid Tom	Standard 1 Snare 1
	116	TR-808 Snare 2	TR-808 Snare 2	Standard 1 Snare 2	[R] Jazz Ride Bell	Standard 1 Snare 2
117		TR-909 Snare 1	TR-909 Snare 1	Standard 1 Snare 3	[R] Jazz High Tom	Standard 1 Snare 3
	118	TR-909 Snare 2	TR-909 Snare 2	Room Snare 1	[R] Jazz Open Hi-Hat [EXC9]	Room Snare 1
119		TR-909 Snare 1	TR-909 Snare 1	Room Snare 2	---	Room Snare 2
C9	120	TR-909 Snare 2	TR-909 Snare 2	Power Snare 1	---	Power Snare 1
	121	Rap Snare	Rap Snare	Power Snare 2	---	Power Snare 2
122		Jungle Snare	Jungle Snare	Gated Snare	---	Gated Snare
	123	House Snare 1	House Snare 1	Dance Snare 1	---	Dance Snare 1
124		House Snare	House Snare	Dance Snare 2	---	Dance Snare 2
125		House Snare 2	House Snare 2	Disco Snare	---	Disco Snare
	126	Voice Tah	Voice Tah	Electric Snare 2	---	Electric Snare 2
127		Slappy	Slappy	Electric Snare 3	---	Electric Snare 3

SC-8820 Drum Set (12)

* Notes 0-21 and 95-127 are as follows.

	PC 42 BRUSH 2	PC 43 BRUSH 2 L/R	PC 49 ORCHESTRA	PC 50 ETHNIC	PC 51 KICK & SNARE PC 52 KICK & SNARE 2
C-1 0	<-	---	<-	---	---
1	<-	---	<-	---	---
2	<-	---	<-	---	---
3	<-	---	<-	---	---
4	<-	---	<-	---	---
5	<-	---	<-	---	---
6	<-	---	<-	---	---
7	<-	---	<-	---	---
8	<-	---	<-	---	---
9	<-	---	<-	---	---
10	<-	---	<-	---	---
11	<-	---	<-	---	---
C0 12	<-	---	<-	---	---
13	<-	---	<-	---	---
14	<-	---	<-	---	---
15	<-	---	<-	---	---
16	<-	---	<-	---	---
17	<-	<-	<-	---	---
18	<-	<-	<-	---	---
19	<-	<-	<-	---	---
20	Jazz Kick 2	---	---	---	---
21	Jazz Kick 1	---	---	---	---
95	---	[L] Brush Kick 2	---	Cabasa Up	Rap Snare
96	---	[L] Brush Kick 1	---	Cabasa Down	Hip-Hop Snare 2
97	---	[L] Brush Crash Cymbal	Applause 2	Claves	Jungle Snare 1
98	Jazz Snare 1	[L] Brush Tap 2	Small Club 1	High Wood Block	Jungle Snare 2
99	Jazz Snare 2	[L] Brush Ride Cymbal	Timpani D#	Low Wood Block	Techno Snare 1
100	Brush Tap 1	[L] Brush Slap 2	Timpani E	---	Techno Snare 2
101	Brush Tap 2	[L] Brush Low Tom	Timpani F	---	House Snare 2
102	Brush Slap 1	[L] Brush Closed Hi-Hat [EXC8]	Timpani F#	---	CR-78 Snare 1
103	Brush Slap 2	[L] Brush Mid Tom	Timpani G	---	CR-78 Snare 2
104	Brush Slap 3	[L] Brush Ride Bell	Timpani G#	---	TR-606 Snare 1
105	Brush Swirl 1	[L] Brush High Tom	Timpani A	---	TR-606 Snare 2
106	Brush Swirl 2	[L] Brush Open Hi-Hat [EXC8]	Timpani A#	---	TR-707 Snare 1
107	Brush Long Swirl	[R] Brush Kick 2	Timpani B	---	TR-707 Snare 2
C8 108	Jazz Snare 1	[R] Brush Kick 1	Timpani c	---	Standard 3 Snare 2
109	Jazz Snare 2	[R] Brush Crash Cymbal	Timpani c#	---	TR-808 Snare 2
110	Standard 1 Snare1	[R] Brush Tap 2	Timpani d	---	TR-909 Snare 1
111	Standard 1 Snare2	[R] Brush Ride Cymbal	Timpani d#	---	TR-909 Snare 2
112	Standard 2 Snare1	[R] Brush Slap 2	Timpani e	---	---
113	Standard 2 Snare2	[R] Brush Low Tom	Timpani f	---	---
114	Snare Drum 2	[R] Brush Closed Hi-Hat [EXC9]	---	---	---
115	Standard 1 Snare 1	[R] Brush Mid Tom	---	---	---
116	Standard 1 Snare 2	[R] Brush Ride Bell	---	---	---
117	Standard 1 Snare 3	[R] Brush High Tom	---	---	---
118	Room Snare 1	[R] Brush Open Hi-Hat [EXC9]	---	---	---
119	Room Snare 2	---	---	---	---
C9 120	Power Snare 1	---	---	---	---
121	Power Snare 2	---	---	---	---
122	Gated Snare	---	---	---	---
123	Dance Snare 1	---	---	---	---
124	Dance Snare 2	---	---	---	---
125	Disco Snare	---	---	---	---
126	Electric Snare 2	---	---	---	---
127	Electric Snare 3	---	---	---	---

Appendix

PC : Program Number (Drum Set Number)
 <- : Same as the percussion sound of "STANDARD" (PC1).
 -- : No sound
 [EXC] : Percussion sound of the same number will not be heard at the same time.
 * : Tones which are created using two voices

SC-8820 Drum Set (13)

* Notes 0-21 and 95-127 are as follows.

	PC 57 SFX	PC 60 RHYTHM FX 3
C-1 0	---	---
1	---	---
2	---	---
3	---	---
4	---	---
5	---	---
6	---	---
7	---	---
8	---	---
9	---	---
10	---	---
11	---	---
C0 12	---	---
13	---	---
14	---	---
15	---	---
16	---	---
17	---	Reverse Bass Mute Noise
18	---	Reverse Bass Touch Noise
19	---	Reverse Bass Attack Noise
20	---	Reverse Clean Guitar Cut Noise Up
21	MC-500 Beep 1	Reverse Clean Guitar Cut Noise Down
	---	---
	---	---
95	Big Shot	* Reverse Clap Hit
96	Percussion Bang	* Reverse Boeeeen
97	---	Reverse Bounce
98	---	Reverse CD Tray
99	---	Reverse Drill
100	---	Reverse Glass Stir
101	---	Reverse Ice Ring
102	---	Reverse Industry Hit
103	---	Reverse Scratch 4
104	---	Reverse Scratch 5
105	---	Reverse Scratch 6
106	---	Reverse Scratch 7
107	---	Reverse Seal
C8 108	---	Reverse Stabl 1
109	---	Reverse Stabl 2
110	---	Reverse Sword Boom
111	---	Reverse Sword Cross
112	---	Reverse Thrill Hit
113	---	Reverse Audio Switch
114	---	Reverse Keyboard Typing 1
115	---	Reverse Keyboard Typing 2
116	---	Reverse Keyboard Typing 3
117	---	Reverse Keyboard Typing 4
118	---	Reverse Keyboard Typing 5
119	---	Reverse Keyboard Typing 6
C9 120	---	---
121	---	---
122	---	---
123	---	---
124	---	---
125	---	---
126	---	---
127	---	---

Specifications

Model: Digital Keyboard Sound Canvas SK-500

(General MIDI System/GS Format)

- **Number of parts**

32

- **Maximum Polyphony**

64 (voices)

- **Internal Sounds**

Sound Maps: 4 (SC-8820, SC-88Pro, SC-88, SC-55)

Preset Sounds: 1608

Drum sound sets: 63

User sounds: None

User drum sound sets: None

- **Effects**

Reverb (8 types)

Chorus (8 types)

Delay (10 types)

2 Band Equalizer

Insertion Effect (64 types)

- **Keyboard**

Standard 49-note keyboard (velocity sensitive)

- **Display**

7 segments, 3 digits LED

- **Connectors**

USB connector

Serial connector

MIDI OUT connector

Audio Input jack (Stereo miniature phone type)

Audio Output jack (Stereo miniature phone type)

Headphone jacks (2) (Stereo miniature phone type)

Pedal jack

- **Power Supply**

DC 9V (AC Adaptor)

- **Current Draw**

500 mA

- **Dimensions**

844 (W) x 210 (D) x 73 (H) mm

33-1/4 (W) x 8-5/16 (D) x 2-7/8 (H) inches

- **Weight (excluding AD Adaptor)**

2.8 kg

6 lb. 3 oz.

- **Accessories**

AC Adaptor

USB cable

Audio cable

Pedal switch

Owner's manual

CD-ROM

- **Options**

Computer cables

RSC-15N (D-sub 25-pin serial connectors)

RSC-15AT (D-sub 9-pin serial connectors)

RSC-15APL (Apple Macintosh)

MIDI cable

MSC-15 (1.5 m)

MSC-25 (2.5 m)

MSC-50 (5.0 m)

Damper Pedal

DP-2

DP-6

Expression pedal

EV-5

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

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