MULTI PLAY MODE

Multi mode allows the SY99 to function as sixteen completely independent synthesizers. In multi play mode you can do the following things.

- Select multis from preset, internal, or card memory.
- View a directory of the 16 multis in an internal, card, or preset memory.
- Copy the currently selected multi to any internal or card memory.
- Send a MIDI program change message to an external device.

MULTI PLAY MODE

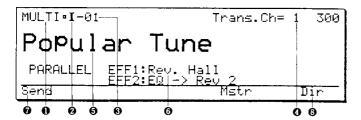
Multi mode allows the SY99 to function as sixteen completely independent synthesizers, each being controlled on its own MIDI channel. Since the keyboard of the SY99 transmits only on one MIDI channel at a time, multi mode is meaningful only when you are using a sequencer (either the SY99's built-in sequencer or an external MIDI sequencer) to send two or more channels of MIDI data to the SY99's tone generator.

Note: If a multi-contains many two-element or four-element voices, the response to Note-on messages may become slightly slower. If this is a problem, either reduce the number of voices in the multi, or select voices which use fewer elements.

Multi select

JUMP #300

Press MULTI to enter multi play mode. The following LCD will appear.



- MULTI: This indicates that you are in Multi Play mode.
- Multi memory (I, C, P): This indicates the multi memory; Internal, Card, or Preset. Preset memory contains only a single bank of 16 Multis. It makes no difference whether you press PRESET 1 or PRESET 2.
- Multi number (1–16): This indicates the number of the multi.
- Transmit channel (1-16): This indicates the MIDI transmit channel you selected in MIDI Utility 1. Channel set. The SY99 keyboard will transmit from MIDI OUT on this channel, and will play the corresponding channel of the Multi. You can also change the transmit channel at any time by holding SHIFT and pressing a program select button 1-16.
- **6** The Multi name is displayed in large characters.

- **6** Effect settings: This area displays the effect mode (OFF, SERIAL, or PARALLEL), and the effect type for each of the two effect units. For details refer to *Multi edit*, *7.Effect set*, page 192.
- Press F1 to send bank select and program change messages via MIDI. Refer to the following section Send bank select and program change.
- **③** Press F6 to jump to the master control select display. Press F6 to Refer to the following section *Master control select*.
- **9** Press F8 to view the multi directory. Refer to the following section *Multi directory*.

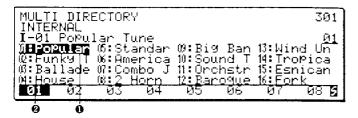
To select a multi use the following procedure. The multi does not actually change until you specify the number 1–16. If you want to play a different multi from the same multi memory, simply specify a different number 1–16.

- 1. Select the multi memory; INTERNAL, CARD (only if a card is inserted into the DATA slot), PRESET. The selected LED will blink.
- 2. Select a multi 1–16. The selected LED will light, and the LCD display will show the newly selected multi name.

Multi directory

JUMP #301

Summary: While in multi play mode you can press F8 (Dir) to view a directory of the sixteen multis in the currently selected multi memory. The following display will appear.



• The first seven characters of each twenty-character multi name will be displayed. When you select a different multi memory (internal,

card, or preset) the sixteen multis in the newly selected memory will be displayed. In addition to the usual methods of selecting a multi, you can also use the arrow keys to select a multi. When the multi directory is displayed, pressing a memory select button will immediately select a multi.

Pressing F1-F8 (01)-(08) will select a multi 1-8 from the displayed multi directory. Holding SHIFT and pressing F1-F8 (09)-(16) will select a multi 9-16.

To return to the multi play display with the name of the selected multi displayed in large characters press EXIT.

Copy multi

Summary: Anytime in multi play mode you can copy the currently selected multi to another multi memory.

Procedure:

From: multi play mode (JUMP #300, #301)

Press: COPY

Specify: the destination to which the multi will

be copied.

To execute: the copy operation press F8 (Go).

To quit: without executing press EXIT.

The names of the sixteen multis in Internal or Card memory are displayed as explained in *Multi Directory*. Press INTERNAL or CARD, and press a memory select button 1–16 to specify the copy destination.

After specifying the copy destination press F8 (Go). You will be asked "Are you sure?" If you are sure you want to copy the multi, press YES and the data will be copied. To quit without copying press NO.

Note: If you copy a multi from internal memory to card memory, all internal voice numbers used by that multi will be converted into card voice numbers. In the same way, if you copy a multi from card memory to internal memory, all card voice numbers used by that multi will be converted into internal voice numbers.

Send bank select and program change

Summary: While in multi play mode you can fransmit bank select and program change messages from MIDI OUT without affecting the SY99's own tone generator. This allows you to switch a tone generator module connected to the SY99 MIDI OUT to another memory without changing the SY99's own memory selection. (An identical function is available in voice play mode.)

Procedure:

From: multi play mode (1UMF #300)

Select: FI (Send)

Specify: a bank select number (1-16,384) and

a program change number (1–123).

To transmit: the bank select and program change

messages press ENTER.

To quit: without sending a bank select or pro-

gram change message, press EXIT.

- 1. Use the nameric key pad to enter a number between 1 and 16,384, then press ENTER to move the cursor to the program change item. (To send a program change message but no bank select message, simply press ENTER.)
- 2. Use the numeric key pad to enter a number between 1 and 128.
- Press ENTER and the specified bank select and program change messages will be transmitted on the (keyboard transmit channel (Kyb Trans Ch) specified in MIDI Utility job 1.Setting (JUMP #807).

If, for the program change, you enter a number below 1 it will be transmitted as 1. If you enter a number above 128, it will be transmitted as 128.

In addition to the program change message transmitted by this function, a program change message will be transmitted every time you select a SY99 voice or multi unless Program Change has been turned off using MID1 utility job 1. Setting, page 258

Remark: Refer to the *MIDI Data Format* booklet for details regarding the use of MIDI bank select numbers.

Note: If a master control setup is activated, the transmit filter for that setup may prevent the sending of bank select and program change messages using this function. Refer to the explanation of the Master control utility on page 284 for further details.

Master control select

Summary: While the SY99 is in multi play mode, you can jump to the master control select display (JUMP #832) by pressing a single function key. This feature makes it easy to use the MIDI master control function while playing the SY99.

Procedure:

From: multi play mode

(JUMP #300)

Select: F6 (Mstr)

The controller select display will appear, just as if you had pressed JUMP, entered 832 using the numeric keypad, and then pressed ENTER. This display can be used to send a variety of control information to MIDI instruments connected to the SY99.

If you perform live using the SY99, you will probably want to use the master control function often while playing the SY99's keyboard. You will probably find the master control function especially convenient because it is available with the press of a single button.

MULTI PLAY MODE

MULTI EDIT MODE

This section explains the details of all Multi Edit parameters.

MULTI EDIT MODE

From multi play mode press EDIT to enter multi edit mode. Unlike voice edit mode, multi edit mode has only a single job directory.

You can use the SEQUENCER control keys to playback sequencer song or sequencer pattern data while editing a multi. It is especially helpful to play a sequencer song back while editing a multi, since you will be able to hear the effect your modifications are having on each of the voices. For example you can edit multi parameters to modify the "mix", or even edit a voice, all while the song is playing.

Compare

When you are in edit mode but have have not yet modified the data, a small square \square is displayed at the left of the multi number to indicate that the voice has not yet been edited. If the data is edited in any way, this will change to a inverse "E".

If you want to see and hear the original data press EDIT (COMPARE) and the inverse "E" will change to a "C" indicating that you are in compare mode.

Note: While comparing, EXIT, mode select, page, cursor, JUMP, COPY, and some of F1-F8 will not function.

Store multi

When you press EXIT or use the JUMP button to exit Multi Edit mode after editing the data, the top line of the display will ask "AUTO-STORE MULTI?"

```
AUTO-STORE MULTI Push Return/Quit/Store BI-01 Popular Tune
INTERNAL

MEPOPULAR (5:Standar 09:Big Ban 13:Wind Un W:Funky I 06:America 10:Sound I 14:Tropica 06:Ballade (7:Combo J 11:Orchstr 15:Esnican (4:House 08:2 Horn 12:Baroque 16:Fork Ret Quit Stor
```

The LCD will show the first seven characters of the multi names in the currently selected internal or card multi memory. The multi name displayed in inverse indicates the multi memory into which the edited data will be stored.

- 1. Use INTERNAL or CARD to specify the multi memory, and select the multi memory 1-16 in which you want to store your newly edited multi.
- 2. Press F8 (Stor), and the bottom line will ask "Are you sure!" (Yes or No)".
- 3. If you are sure you want to store the edited multi, press +1/YES and the bottom line of the LCD will show "Store completed". If you decide not to store, press -1/NO and the bottom line of the LCD will show "Store cancelled".
- 4. You will then return to multi play mode or the jump destination.

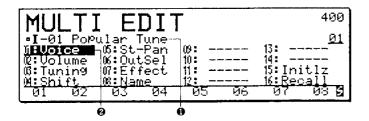
Multi edit job directory

JUMP #400

Summary: The parameters of Multi Edit mode are divided into the jobs shown in this job directory.

Procedure:

From: multi play mode (JUMP #300)
Select: EDIT (JUMP #400)
Specify: the desired multi edit job and press
ENTER.



- This area shows the number and name of the selected multi.
- **2** Move the cursor in this area to select a job and press ENTER to go to the selected job.
- Pressing F1-F8 will select the corresponding job 1-8. Holding SHIFT and pressing F7 or F8 will select job 15 or 16.
 - 01: Voice (Voice Select): A multi consist of sixteen voices which are controlled by MIDI channels 1--16. A different voice can be selected for each of the sixteen channels in the multi.

MULTI EDIT MODE

- 02: Volume (Voice Volume): The volume of the voice played by each channel of the multi can be adjusted.
- 03: Tuning (Voice Tuning): The fine tuning of the voice played by each channel of the multi can be adjusted in steps of 1.1718875 cents.
- 04: Shift (Voice Note Shift): The pitch of the voice played by each channel of the multi can be adjusted in half steps.
- 05: St-Pan (Voice Static Pan): A fixed stereo position can be specified for the voice played by each channel of the multi, or a voice can use its own pan settings.
- Ob: OutSel (Voice Output Group Select): Each voice played by the multi can be sent from output group 1 and/or 2.

- 07: Effect (Effect Set): Specify how the effect units are connected, how the sound from each voice of the multi is sent to the effect units, parameters for each effect unit, and how the effect parameters are controlled in realtime.
- 08: Name (Multi Name): The multi being edited can be given a twenty-character name. In multi play mode this name will be displayed in large characters.
- 15: Initlz (Initialize Multi): The multi data being edited can be initialized to a set of standard values.
- 16: Recall (Recall Multi): The previously edited multi data can be recalled for additional editing.

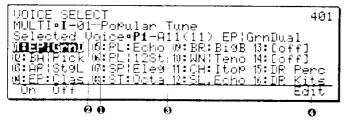
1. Voice select

JUMP #401

Summary: A multi consists of sixteen voices which are controlled by MIDI channels I-16. A different voice can be selected for each of the sixteen channels in the multi.

Procedure:

From: multi job directory (JUMP #400) Select: job 01:Voice (JUMP #401) Specify: the voice for each channel of the multi



- This displays the number and name of the multiyou are editing.
- This displays the number and name of the voice where the cursor is located.
- Move the cursor in this area and select a voice for each of the sixteen channels in the multi. This area displays only the first seven characters of the selected voice name, but the voice number and name are fully displayed in ②. Each channel of the multi can use any voice from internal, card, or preset memories, or can be set to an "off" voice. See Off Voice below for details.

A multi in card memory can use only card or preset voices. A multi in internal memory can use only internal or preset voices.

ment which uses data from a waveform card, the

card must be inserted into the WAVEFORM

If a selected voice contains an AWM ele-

slot for the voice to sound properly. If a different card is inserted, a diamond-shaped mark will appear in place of the voice number 1--16, and the voice will sound strange. (Each AWM waveform card has a unique ID number which is stored as part of the data for an AWM element.)

To edit the voice selected by the cursor, press F8 (Edit). You will enter voice edit mode. Details are the same as explained in *Voice edit mode*, but when you press EXIT to exit voice edit mode you will return to this *Multi edit 1. Voice select* job.

Since the effect unit settings in multi mode are determined by *Multi edit 7.Effect set* (JUMP #412) and are shared by all the voices of the multi, you will not be able to modify the Effect Mode, the Effect Parameters, or the Effect Control settings. You can adjust the Effect Send settings of the voice, but for these settings to be effective in a multi, the *Multi edit 7.2 Effect send* must be set to "VC" for that voice.

When you select 10:Effect from the Voice Edit Common data job directory, you will go directly to the Effect Send job. Other effect parameters cannot be accessed when editing a voice from inside a multi.

You can also edit the Element Dynamic Pan settings of the voice, but for these settings to be effective in a multi, *Multi edit 5.Voice static pan* setting must be set to "VC" for that voice.

Since the SY99's sequencer can be used at any time even while editing a voice or multi, you can use this function to edit one of the voices in a multi while that multi is being played from the sequencer. This capability is very useful, since it allows you to edit a voice while it is being played in a musical context with other instruments

Off Voice: Each channel of the multi can use any voice from internal, card, or preset memories, or can be turned off. When turned off, the multi will not play a voice in response to data on that channel.

This allows you to play an external MIDI tone generator from certain channels of the SY99's built-in sequencer without sounding the SY99's own tone generator for those channels.

If you set the output level of an unwanted channel of the multi to 0 (see *Multi edit 2. Voice*

volume) it will not be heard, but will still use the SY99's tone generator whenever notes on that MIDI channel are received, and will therefore reduce the simultaneous notes available for the other voices. This is why you should turn unneeded channels of the multi "off".

To turn a channel off, move the cursor to the corresponding voice and press F2 (Off). To retore the previous voice selection for a channel, move the cursor to the corresponding voice and press F1 (On).

Remarks: In multi play mode the SY99 keyboard will normally play only the channel of the multi which matches the Keyboard MIDI Transmit Channel setting made in MIDI utility 1. Channel set. However in multi edit mode, the SY99 keyboard will play the voice where the cursor is located in this Voice Select job. This will remain in effect as long as you are in multi edit mode.

A slight delay may occur in the sounding of some notes when a large number of notes are played simultaneously (either manually or in response to MIDI note on messages) using four-element voices. To avoid this delay in such cases, you may wish to substitute voices using fewer elements, or reduce the number of notes being played simultaneously.

2. Voice volume

JUMP #402

Summary: Set the volume of the voice played by each channel of the multi.

Procedure:

From: multi job directory (JUMP #400)

Select: job 02:Volume

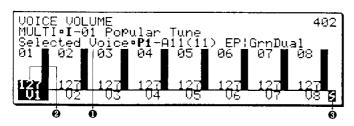
Specify: the volume for each channel

for channels 1–8 press (JUMP #402)

F1 (1-8)

for channels 9–16 press (JUMP #403)

F2 (9-16)



- Selected Voice: This displays the number and name of the voice played by the multi channel where the cursor is located.
- Voice Volume (0...127): Set the volume for each voice played by the sixteen channels of the multi. The volume for each voice is displayed as a vertical bar graph.
- Press F1-F8 to move the cursor to voices 1-8 or 9-16. Select the role of the function keys by pressing SHIFT+F1 (1-8) or SHIFT+F2 (9-16).

3. Voice tuning

JUMP #404

Summary: Adjust the fine tuning of the voice played by each channel of the multi.

Procedure:

From: multi job directory (JUMP #400)

Select: job 03:Tuning

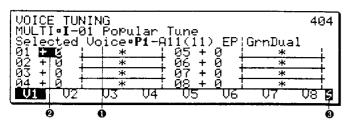
Specify: the tuning for each channel

for channels 1–8 press (JUMP #404)

F1 (1-8)

for channels 9–16 press (JUMP #405)

F2 (9-16)



Selected Voice: This displays the number and name of the voice played by the multi channel where the cursor is located. Voice Tuning (-63...+63 in steps of 1.1718875 cents): Set the tuning for each voice played by the sixteen channels of the multi. The tuning for each voice is displayed as a horizontal bar graph.

Press F1-F8 to move the cursor to voices 1-8 or 9-16. Select the role of the function keys by pressing SHIFT+F1 (1-8) or SHIFT+F2 (9-16).

Note: The actual pitch at which a voice will sound is affected by many other factors; System utility settings 1. Master tuning, Voice common data 2. Element detune, 3. Element note shift, 11. Micro tuning, AFM element data 2. AFM oscillator, 7. AFM pitch EG, and AWM element data 2. AWM waveform set, 7. AWM pitch EG.

4. Voice note shift

JUMP #406

Summary: Adjust the note shift (transposition) of the voice played by each channel of the multi.

Procedure:

From: multi job directory (JUMP #400)

Select: job 04:Shift

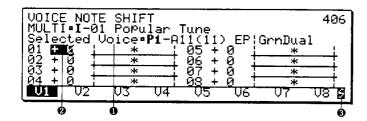
Specify: the note shift for each channel

for channels 1–8 press (JUMP #406)

F1 (1-8)

for channels 9–16 press (JUMP #407)

F2 (9-16)



• Selected Voice: This displays the number and name of the voice played by the multi channel where the cursor is located.

■ Voice Note Shift (-64...+63 in semitone steps): Set the note shift (transposition) for each voice played by the sixteen channels of the multi. The note shift setting for each voice is displayed as a horizontal bar graph.

Press F1-F8 to move the cursor to voices 1-8 or 9-16. Select the role of the function keys by pressing SHIFT+F1 (1-8) or SHIFT+F2 (9-16).

Note: This setting determines how note numbers received from the keyboard or MIDI IN are sounded, and has no effect on the data transmitted from MIDI OUT.

5. Voice static pan

JUMP #408

Summary: Specify the stereo position for the voice played by each channel of the multi.

Procedure:

From: multi job directory (JUMP #400)

Select: job 05:St-Pan

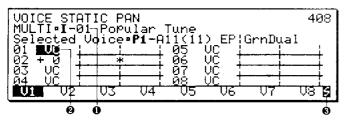
Specify: the static pan position for each channel

for channels 1–8 press (JUMP #408)

F1 (1-8)

for channels 9–16 press (JUMP #409)

F2 (9–16)



Selected Voice: This displays the number and name of the voice played by the multi channel where the cursor is located. Voice Static Pan (VC or -31...+31 = left... right): Set the static pan position for each voice played by the sixteen channels of the multi. The static pan setting for each voice is displayed as a horizontal bar graph.

It is also possible to select "VC", when the voice will use its own dynamic pan settings. Refer to *Common data 6.Eiement dynamic pan* (JUMP #207), page 99. If "VC" is not selected, the dynamic pan settings of the voice will be ignored and the static pan setting you specify here will be used. If "VC" is not selected for a drum voice, all the drum sounds will be panned to the same pan position -31...+31 you specify here.

Press F1-F8 to move the cursor to voices 1-8 or 9-16. Select the role of the function keys by pressing SHIFT+F1 (1-8) or SHIFT+F2 (9-16).

6. Voice output group select

JUMP #410

Summary: Each voice can be sent from either or both output groups.

Procedure:

From: multi job directory (JUMP #400)

Select: job 06:OutSel

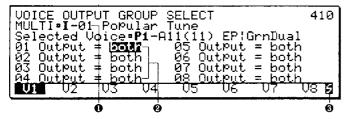
Specify: the output group for each channel

for channels 1–8 press (JUMP #410)

SHIFT + F1 (1-8)

for channels 9–16 press (JUMP #411)

SHIFT + F2 (9-16)



- Selected Voice: This displays the number and name of the voice played by the multi channel where the cursor is located.
- Output (off, grp1, grp2, both): Each voice played by a multi is independently panned by the setting of *Multi edit 5.Voice static pan*, and sent

from either or both output groups 1 and 2. For normal voices, this setting takes priority over the voice's output group setting in *Common data* 7. Output group select (page 103). Drum voices use their own output group settings for each note, as explained below.

The signal from each output group will be combined with the signal from each effect unit as specified by the "wet:dry" settings in *Multi edit* 7.1 Effect mode select (JUMP #413). Refer to the diagram on page 192.

Multi edit settings cannot specify the output group for a multi channel that plays a drum voice, and the cursor cannot be moved to these voices. The display will show "Output = drum", and the drum voice data will determine which output group is used by each drum sound. Refer to Drum set data, 2. Wave data set (JUMP #274), page 157.

Press F1-F8 to move the cursor to voices 1-8 or 9-16. Select the role of the function keys by pressing SHIFT+F1 (1-8) or SHIFT+F2 (9-16).

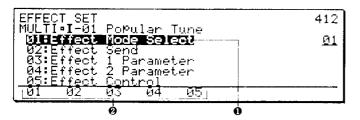
7. Effect set

JUMP #412

Summary: Specify how the effect units are connected, how the sound from each voice of the multi is sent to the effect units, parameters for each effect unit, and how the effect parameters are controlled in realtime.

Procedure:

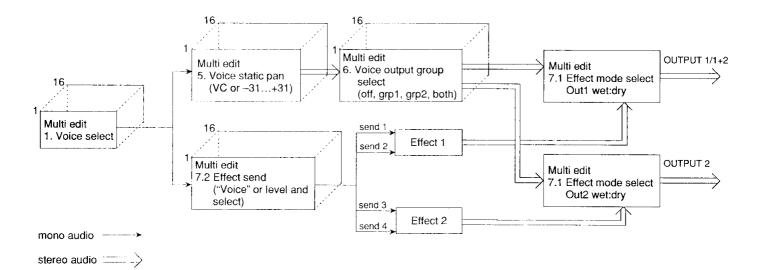
From: multi job directory (JUMP #400) Select: job 07:Effect Set (JUMP #412) Select: the effect parameters you wish to edit



- Move the cursor in this area and press ENTER to select a job.
 - 01: Effect Mode Select: Specify how the two effect units are connected, the effect type, and volume balance. This is exactly the same as for voice editing. Refer to *Common Data job 10.1 Effect Mode Select*, page 106.
 - 02: Effect Send: Specify how the sound of each voice of the multi will be sent to the effect units. Refer to the following section 7.2 *Effect Send*.

- 03: Effect 1 Parameter: Make settings for effect unit 1. This is exactly the same as for voice editing. Refer to *Common Data job 10.3 Effect 1 Parameter*, page 108.
- 04: Effect 2 Parameter: Make settings for effect unit 2. These parameters are exactly the same as for Effect 1. Refer to *Common Data job 10.3 Effect 1 Parameter*, page 108.
- 05: Effect Control: Specify how effect parameters will be affected by control change messages. This is exactly the same as for voice editing. Refer to *Common Data job 10.5 Effect Control*, page 123.
- 2 Pressing F1-F5 will select the corresponding job.

Note: Multi effect settings differ from voice effect settings only in job 2. Effect Send. A normal voice allows you to specify the effect send level for each of the one, two, or four elements. A drum voice allows you to specify the effect send level for each of the 76 keys. However in multi mode, you can either specify a send level for each voice, or specify that the voice's own effect send settings be used.



7.1 Effect mode select

JUMP #413

Summary: Specify the effect mode to determine how the two effect units are connected, the effect type for each unit, effect output levels, and the volume balance between processed and unprocessed sound.

Procedure:

From: Effect Set job directory (JUMP #412) Select: 01:Effect Mode Select (JUMP #413) Specify: the effect mode, effect types, and effect levels, and wet:dry balance.

Remarks: This function is exactly the same as that described for Voice edit mode. For details, refer to Common Data job 10.1 Effect mode select, page 106.

7.2 Effect send

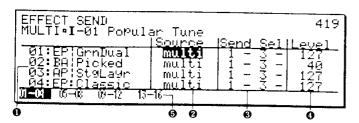
JUMP #418

Summary: Specify how the sound from the voice played by each channel of the multi will be sent to each of the one, two, three, or four effect sends.

Procedure:

From: Effect Set job directory (JUMP #412) Select: job 02:Effect Send (JUMP #418) Specify: the effect send settings for each of the 16

channels in the multi-



- This area displays the voice selected for each channel of the multi. The screen can display the settings for four voices at a time. To make settings for other voices, press F1 (1-4)-F4 (13-
- Source (voice, multi): If this is set to "voice", the voice will use its own effect send settings as specified in Voice common, 10.2 Effect send (page 107) for a normal voice or in 3.2 Effect send (page 174) for a drum voice. A dash (-) will be displayed for the Send Sel 3 and Level • parameters, and these cannot be set. If you wish to have detailed control over the effect send levels for this channel of the multi, you should set this Source parameter to "voice".

If this is set to "multi", you will be able to specify an overall effect send level 4 for the entire voice. This effect send level will apply to all elements 1-4 of a normal voice, or all 76 keys of a drum voice. You can also enable or disable the effect sends 1-4 as explained in **4**. Setting the Source parameter to "multi" is more con venient when you need to adjust the effect send levels of several channels in the multi, but does not allow as detailed control as the "voice" setting.

Effect send velocity sensitivity and scaling are available for voices as specified by the individual voice settings, regardless of whether the effect send source is set to "voice" or "multi".

3 Send Sel (send select 1–4): If the Source has been set to "multi", you can specify whether or not to send the sound from the voice to each effect send 1-4. The number of effect sends available will depend on the effect mode and the effect type. Effect sends which are not available will be indicated by a dash (--), and cannot be selected. In the above display, effect sends 1 and 2 are available.

If an effect send is turned on, its number (1-4) will be displayed, and the sound from the voice will be sent to that effect send. If an effect send is turned off, a period (.) will be displayed, and the sound of the voice will not be sent to that effect send.

- Level (0–127): If the Source has been set to "multi", you can specify how much sound will be sent from the voice to the effect unit. This value applies to all the effect sends that are enabled in Send Sel 3.
- **6** You can press F1 (1–4), F2 (5–8), F3 (9–12), F4 (13-16) to switch the display to other voices of the multi.

8. Multi name

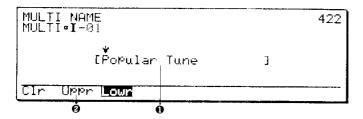
JUMP #422

Summary: The multi being edited can be given a twenty-character name. In multi play mode, this multi name will be displayed in large characters.

Procedure:

From: multi job directory (JUMP #400) Select: job 08:Name (JUMP #422)

Specify: the name for the multi



- Enter a twenty-character name for the multi.
- 2 To clear the currently entered name press F1 (Clr). To switch to upper-case characters press F2 (Uppr). To switch to lower case characters press F3 (Lowr).

Remarks: Methods of entering character data are explained in *How to enter character data*, on page 30.

15. Initialize multi

Summary: The multi data being edited can be initialized to a set of standard values.

Procedure:

From: multi job directory (JUMP #400)

Select: job 15:Initlz

To execute: the initialize operation press YES.

To quit: without executing press NO or EXIT.

INITIALIZE MULTI

ARE YOU SURE ?

(Yes on No)

This function sets all multi data values to the minimum or simplest possible settings. When you are creating a new multi it is often convenient to start with the initial settings.

If you are sure you want to initialize the multi data, press YES and the data of the multi being edited will be set to the values shown below. If you decide not to initialize, press NO.

Initialized settings for Multi data

01 Voice select Preset 1 A01(01) GrandPiano (all channels)

02 Voice volume Volume = 127 (maximum) (all channels)

03 Voice tuning Tuning = ± 0 (all channels)

04 Voice note shift Note Shift = ± 0 (all channels)

05 Voice static pan Pan = ± 0 (= center) (all channels)

06 Voice output group select Output = both (all channels)

07 Effect set

*** same as normal voice initial data except for

Effect Send ***

(for each channel)

Effect send source = multi

Effect send select = all on Effect send level = 127

08 Multi name Name = INIT MULTI VOICE

16. Recall multi

Summary: The previously edited Multi data can be

recalled for additional editing.

Procedure:

From: multi job directory (JUMP #400)

Select: job 16:Recall

To execute: the recall operation press YES.

To quit: without executing press NO or EXIT.

RECALL MULTI

ARE YOU SURE ?

(Yes or No)

If after editing a multi you exit multi edit mode without storing, the edited multi data will be lost. In such cases, you can use this function to recall the previously edited multi data into the editing buffer.

If you are sure you want to recall, press YES and the previously edited multi data will be recalled into the editing buffer. If you decide not to recall, press NO.

SONG MODE

Song mode allows you to create songs with up to 16 tracks, with each track containing an independent musical part. These tracks can be edited in different ways, and the musical data of each track can be transmitted on its own MIDI channel to play a different voice in a Multi or an external synthesizer.

Contents of this section	page
Song play	m 12
Song record	
Song edit	
Song edit jobs 1	
Song edit jobs 2	
Song setup jobs	
Transmit channel	
Song name	
Song directory	

In Song mode you can use the SY99's sequencer to record and play back up to ten songs, each of which can consist of up to 16 tracks. Tracks 1 through 15 each can contain an independent musical part extending the entire length of the song. Track 16 is a special Pattern track which consists of pattern numbers and repeat marks which specify how the patterns created in Pattern mode (page 233) will be played back along with the other tracks.

All data from the sequencer will be transmitted to the internal tone generator and also transmitted from MIDI OUT. This allows you to play external synthesizers or tone generators from the SY99's sequencer.

Song mode (sequencer) and Multi mode (tone generator)

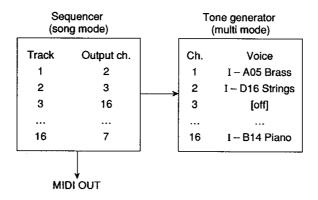
The greatest musical complexity is possible when the sequencer is in Song mode, transmitting 16 channels of musical data, and the tone generator is in Multi mode, functioning as 16 independent synthesizers.

By default, sequencer tracks 1-16 are set to transmit on the corresponding channels 1-16. However, you can change this using the *Transmit channel* function described on page 230.

A Multi consists of a voice selection and other settings for each of 16 channels. If you want to use a sequencer track to play only an external tone generator via MIDI OUT, you must select an "off" voice for the corresponding channel of the multi.

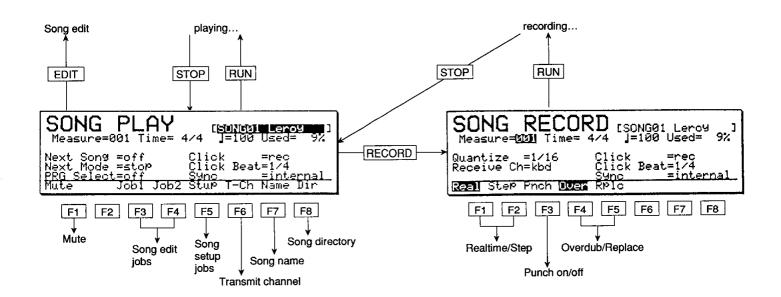
The following diagram shows an example of how the sequencer in Song mode can control the tone generator in Multi mode. Sequencer track 1 is transmitting on channel 2, and will play the "Strings" voice which has been selected for channel 2 of the multi. Sequencer track 2 is transmitting on channel 3, but since channel 3 of the multi is set to the "off" voice, track 2 will not play the multi.

Regardless of the settings of the Multi, the data of all sequencer tracks is always transmitted from MIDI OUT, and can be used to play external tone generators.



Note: The SY99 sequencer will also record MIDI data received from MIDI IN, in addition to the data from its own keyboard and controllers. However, system exclusive messages longer than 32 bytes cannot be recorded.

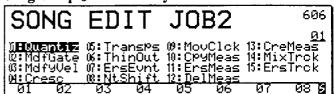
How song mode is organized



Song Edit Job Directory 1

SONG EDIT	JOB1 600	
01:Append Song 02:Cut Song 03:Copy Song	05:Clear Song	1
04:Copy rack 01 02 03 04	05	-

01:Append Song 02:Cut Song 03:Copy Song 04:Copy Track 05:Clear Song Song Setup Job Directory 2



01:Quantiz Quantize 02:MdfGate Modify gate time Modify velocity 03:MdfyVel Crescendo 04:Cresc 05:Transps Transpose 06:ThinOut Thin out 07:ErsEvnt Erase event 08:NtShift Note shift 09:MovClck Move clock 10:CpyMeas Copy measure 11:ErsMeas Erase measure 12:DelMeas Delete measure 13:CreMeas Create measure Mix track 14:MixTrck 15:ErsTrck Erase track

SONG MODE

Song Setup job directory

SONG SETUP	622
01:Receive Event	<u>01</u>
02:MIDI Control 03:Accent Level	
<u>04:Clock/Beat</u> 01	

01:Receive Event 02:MIDI Control 03:Accent Level 04:Clock/Beat

Song Name

SONG NAME			628
	Leroy]	
Clr Uppr Lo	own		

Song play

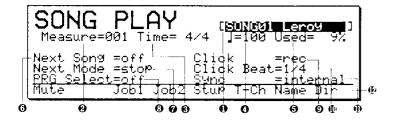
Summary: This is where you will playback the song. You can also make settings for the metronome and synchronization.

Procedure:

From: any mode

Press: SONG to enter song play mode. The SONG

LED will light red.



- Song (1...10): This shows the number of the currently selected song. The name assigned to the song is displayed after the song number.
- Measure (001...999): This determines the measure from which the song will begin play back. You can modify this by moving the cursor here and specifying the measure, or by using the sequencer location buttons (⋈, ⋈, LOCATE, or ⋈).
- Time (1/4...32/16): This displays the time signature you specified in song record mode. This cannot be modified in song play mode.
- \bullet \downarrow (30...250): This determines the tempo in quarter notes per minute.
- **6** Used (0...100%): This displays the amount of used sequencer memory.
- Next Song (1...10, Off): This determines the number of the song which is to be selected when the current song is done playing. If a next song is selected, the SY99 will automatically set itself up for the new song when the current song is finished. Also, the Mute function will be turned off and all tracks used in the new song will be turned on at this time. A setting of "Off" for Next Song means that the SY99 will remain set up for the currently selected song when it is finished playing.

The Next Song item only determines whether the SY99 will set up for another song; whether the next song will play automatically is determined by the Next Mode setting, below.

- Next Mode (Stop, Play): This determines whether the song selected using the Next Song item will play automatically when the current song is finished playing. Set this item to "Play" to chain play one or more songs.
- PRG Select (on, off): This determines whether a program change message will be executed each time the current song is selected. When this item is turned on, the currently selected voice or multi will be registered for automatic selection whenever the current song is selected, whether as a next song, by MIDI song select, or manually. (The SY99 will automatically change to Voice or Multi mode, as appropriate, when this selection is made.) When this item is set to "off," the selection of the song will not affect the tone generator setting.
- Click (off, rec, rec/play, always): This determines when the click (metronome) will sound.
 - off: The metronome will not sound.
 - rec: The metronome will sound only during recording.
 - rec/play: The metronome will sound during recording or playback.
 - always: The metronome will sound constantly.
- Click Beat (1/4, 1/6, 1/8, 1/12, 1/16, 1/24): This determines the beat on which the click will sound.
- Sync (internal, MIDI): This determines the timing source which will control the sequencer. Normally you will leave this set to internal so that the SY99's own clock will determine the tempo.

If you are using an external MIDI sequencer and want the SY99's sequencer to play in synchronization with it, set this to MIDI so that MIDI clock messages received at MIDI IN will determine the tempo.

Pressing F1 (Mute) will mute all tracks so that you will hear no sound even during playback. Notes which are already sounding when you press F1 will continue sounding for their original duration. Press F1 once again to un-mute the tracks.

Press F3 (Job1) to move to Song Edit Job Directory 1. Refer to the following section, Song edit jobs 1.

Press F4 (Job2) to move to Song Edit Job Directory 2. Refer to the following section, Song edit jobs 2.

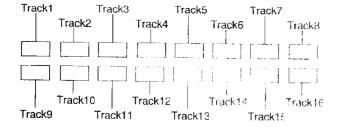
Press F5 (Stup) to move to the Song Setup job directory. (Song setup jobs are used to make settings common to all songs.) Refer to the following section, Song setup edit jobs.

Press F6 (T-Ch) to view or change the transmit channel settings for tracks 1 through 16. Refer to the following section, *Transmit channel*.

Press F7 (Name) to change the name of the currently selected song. Refer to the following section, *Song name*.

Press F8 (Dir) to view a directory of the songs contained in the SY99's memory. Refer to the following section, *Song directory*.

Select tracks for playback: Use the sixteen memory select buttons to select the tracks for playback. Each track LED will light green to indicate a track which contains data. Pressing a button will alternately turn the track on (the LED is lit) or muted (the LED is blinking). You can also press F1 (Mute) to mute all the tracks.



Start and stop playback: Press RUN and the song will begin playback from the point specified by the measure setting. To stop playback press STOP.

During playback: During playback you can move the cursor to modify the tempo, click, click beat, Next Song, Next Mode, and PGM Select settings.

Locate: Any time while in song play mode (even during playback), you can hold SHIFT and press LOCATE to mark the current measure. While the

sequencer is stopped, you can press LOCATE to instantly move to this measure.

In addition to LOCATE, the following keys can be used while the sequencer is stopped to move backwards and forwards in the song.

Move to the beginning of the song

Move backward one measure (continue pressing to move rapidly)

LOCATE Move to a previously set location

Move forward one measure (continue pressing to move rapidly)

Song edit: Any time in song play mode while the sequencer is not playing back, you can press EDIT to edit the song. For details refer to Song Edit Mode.

Simultaneous note capacity: The SY99 sequencer can playback up to 32 notes at once. During playback, any new notes which would exceed this number will be ignored.

Timing priority: Since track 16 (the pattern track) will often be used to play rhythm parts, highest priority is given to playing it on time. Timing priority is then given to tracks 1, 2, ... 15.

Cursor position: When recording begins, the cursor will automatically move to the tempo setting, allowing you to adjust the tempo even while you record.

When recording is stopped, the cursor will automatically move to Song No.

Chain songs: Songs that are chained using the Next Song and Next Mode parameters are played back-to-back with no pause in between. A program change message placed at the head of a song using the PGM Select setting can therefore cause the sound from the preceding song in the chain to cut off abruptly. To avoid this problem, you can place an empty measure or two at the beginning of the "next song", to let the notes from the previous song die off before the program change is executed. It is not necessary to introduce such a time lag if the PGM Select setting is turned off.

Song record

Summary: This is where you make settings in preparation for recording a song. You can specify the mode and type of recording, set the time signature, and make other settings as in the Song Play display.

Procedure:

From: song play display press RECORD. The RECORD LED will light.

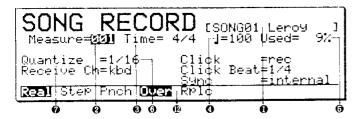
Specify: the recording mode and make recording settings.

To start: recording press RUN. To stop: recording press STOP.

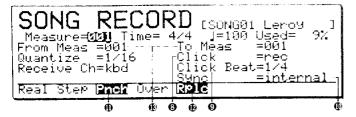
The song record display will differ according to whether or not punch-in recording has been

selected.

If Realtime or Step recording has been selected



If Punch in recording has been selected



- The number and name of the currently selected song are displayed here.
- Measure (001...999): This determines the measure from which the song will begin playback. You can modify this by moving the cursor here and specifying the measure, or by using the sequencer location buttons (⋈, ⋈, LOCATE, or ⋈).
- Time (01-08/4, 01-16/08, 01-32/16): This determines the time signature of measures that will be recorded. (A song may contain measures of differing time signatures.)

- **Q** \downarrow (30...250): This determines the tempo in quarter notes per minute.
- Used (0...100%): This displays the amount of sequencer memory already used. Since recording and editing operations require some memory for processing, it may not always be possible to continue recording until this displays 100%.
- Quantize (off, 1/32, 1/24, 1/16, 1/12, 1/8, 1/4, 1/2): This determines the timing accuracy to which the notes you play will be corrected. When quantization is turned off the notes you play will be recorded at the exact timing they occur. When a quantization of 1/32...1/2 is selected, all notes you play will be moved to the nearest timing at the specified interval.
- Receive Channel (1–16, omni, kbd): This determines the channel that will be recorded by the sequencer.

1–16: The sequencer will record only the data received on the specified channel from MIDI IN.

omni: The sequencer will record all data of any channel from MIDI IN.

kbd: The sequencer will record the notes played on the SY99 keyboard, regardless of the Kbd Transmit channel setting.

This determines when the click (mctronome) will sound.

off: The metronome will not sound.

rec: The metronome will sound only during recording.

rec/play: The metronome will sound during recording or playback.

always: The metronome will sound constantly.

- O Click Beat (1/4, 1/6, 1/8, 1/12, 1/16, 1/24): This determines the beat on which the click will sound.
- Sync (internal, MIDI): This determines the timing source which will control the sequencer. Normally you will leave this set to internal so that the SY99's own clock will determine the tempo.

If you are using an external MIDI sequencer and want the SY99's sequencer to play in synchronization with it, set this to MIDI so that MIDI clock messages received at MIDI IN will determine the tempo.

• Recording mode (Real, Step, Pnch): Press F1,F2 or F3 to select the recording mode.

Realtime recording (press F1): Notes will be recorded at the exact time you play them.

Step recording (press F2): Notes will be recorded one by one with the specified time value, regardless of the actual timing with which you play.

Punch-in recording (press F3): The same as realtime recording except that recording will take place only over the measures specified by **®** From Meas and To Meas.

Overdub/Replace (Over, Rplc): This determines how newly recorded data will be added to the track.

Overdub recording: If you select overdub recording by pressing F4, notes you record will be added to the data already in the track. The track will then contain both the old and new data. If step recording has been selected in ①, overdub recording will automatically be selected. In punch record mode, overdub recording can not be selected.

Replace recording: If you select replace recording by pressing F5, notes you record will replace the data previously in the track. The track will contain only the new data, and the old data will be lost. If step recording has been selected in ①, replace recording cannot be selected.

From Meas (001...999), To Meas (001...999): If F3 (Pnch) has been pressed to select punch-in recording, you will be able to specify the range of measures over which recording will take place.

Recording procedure:

- If necessary, specify the measure at which recording will begin, and modify the settings for time, tempo, quantize, receive channel, click, click beat, and sync.
- 2. Specify the recording mode; realtime (F1), step (F2), or punch-in (F3).
- 3. If you specified punch-in recording in step 2, set the beginning (From Meas) and end (To Meas) of the recorded area.
- 4. Specify overdub (F4) or replace (F5).
- 5. Press a memory select button 1–15 to select the track on which to record. The LED of the selected track will light red. The LEDs of tracks which already contain data are lit green.
- 6. Press RUN and recording will begin. The recording display will depend on the recording mode selected in step 2. For details see the following sections; *Realtime Recording*, *Punch-in Recording*, and *Step Recording*.
- 7. When you are finished recording press STOP and you will return to the song play display.

Song edit: Any time while in song record mode (except while recording) you can press EDIT to edit the song. For details refer to Song Edit Mode.

SONG RECORD

Realtime recording

Summary: In realtime recording the notes you play will be recorded in the exact timing with which you play them

Procedure:

From: song record display

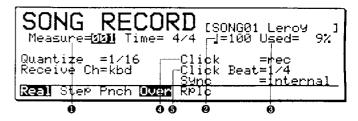
Press: F1 (Real) to select realtime recording

To begin: recording press RUN. The RUN LED

will blink to the tempo.

To stop: recording and return to the song play

display press STOP.



Measure (001...999): As you record this will advance to show the number of the measure currently being recorded.

- **②** ↓ (30...250): While recording you can move the cursor here to modify the tempo.
- Used (0...100%): As you record this will increase to show the amount of sequencer memory that has been used.
- Click (off, rec, rec/play, always): While recording you can move the cursor here and specify when the click (metronome) will sound.

off: The metronome will not sound.

rec: The metronome will sound only during recording.

rec/play: The metronome will sound during recording or playback.

always: The metronome will sound constantly.

Click Beat (1/4, 1/6, 1/8, 1/12, 1/16, 1/24): While recording you can move the cursor here and specify the beat on which the click will sound. While recording or playing back, the RUN LED will blink green on each beat and blink red on the first beat of each measure.

Remarks: While recording you can modify the settings for tempo, click, and click beat. To modify the other parameters you must return to the song record display.

SONG RECORD

Punch-in recording

Summary: In punch-in recording the notes you play will be recorded in the exact timing at which you play them, but only over the measures you specify.

Procedure:

From: song record display

Press: F3 (Pnch) to select punch-in recording

Specify: the measures over which recording

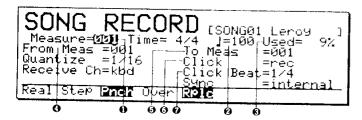
will take place.

To begin: recording select the track to be

recorded and press RUN. The RUN LED will blink to the tempo.

To stop: recording and return to the song play

display press STOP.



- Measure (001...999): As you record this will advance to show the number of the measure currently being recorded.
- ② ↓ (30...250): While recording you can move the cursor here to modify the tempo.
- Used (0...100%): As you record this will increase to show the amount of sequencer memory that has been used.
- From Measure (001...999): When the beginning

- of this measure is reached, recording will begin. The notes you play will replace the previous data in the track.
- To Measure (001...999): When the end of this measure is reached recording will end, but the song will continue playing back.
- 6 Click (off, rec, rec/play, always): While recording you can move the cursor here and specify when the click (metronome) will sound.

off: The metronome will not sound.

rec: The metronome will sound only during recording.

rec/play: The metronome will sound during recording or playback.

always: The metronome will sound constantly.

Click Beat (1/4, 1/6, 1/8, 1/12, 1/16, 1/24): While recording you can move the cursor here and specify the beat on which the click will sound.

Remarks: While recording you can modify the settings for tempo, click, and click beat. To modify the other parameters you must return to the song record display.

It is a good idea to set the location to a few measures before the punch-in point specified by From Measure. This will give you a chance to get the feel of the section you are going to rerecord.

When the punch-out point specified by To Measure is reached, playback will continue.

SONG RECORD

Step recording

Summary: In song step record mode, notes will be recorded one by one with the specified time value, regardless of the actual timing at which you play. This makes it possible to input very complex passages which would be difficult to play in realtime.

Procedure:

From: song record display

Press: F2 (Step) to select step recording.

To begin: recording specify the track to be

recorded and press RUN. The RUN

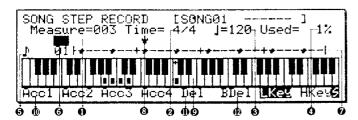
LED will light green.

Record: data as explained in the Recording

Procedure below.

To stop: recording and return to the song play

display press STOP.



- Measure (001...999): To move to another measure, place the cursor here and modify the data.
- 2 Time (01-08/4, 01-16/08, 01-32/16): The time signature is only displayed, and cannot be modified.
- 3: The tempo is only displayed, and has no effect in step recording.
- Used (0...100%): This displays the amount of sequencer memory already used.
- This area indicates the currently selected note value. At any time in step recording you can use the numeric keypad to enter note values. You can also move the cursor to this area and modify the note values. If possible, the note values in this area will be displayed as graphic symbols for a whole note, quarter note, etc. Otherwise the note value will displayed as a number of clocks (1/384th notes).
- When the cursor is located in this area you can move backwards and forwards through the data in time. If the current measure is longer than four quarter notes (e.g., a time signature of 10/8), a

- number will be displayed here to indicate the section of the measure now being displayed.
- The measure bar represents one measure, and vertical divisions represent one beat. A dot will be displayed on the bar to indicate a 32nd note area which contains data.
- **3** As you move backward or forward through the data in time, an arrow pointing downward will move in 32nd note steps to indicate the current position in the measure.
- If the currently selected 32nd note area contains data, the notes in that area will be displayed on the keyboard diagram.
- To select an accent value, press F1-F4. Subsequently entered notes will be given the selected accent value. With the initial settings, Acc1=24, Acc2=56, Acc3=88, and Acc4=120. To change the accent value assigned to F1-F4 refer to Song setup job 4. Accent level.
- **10** To delete all data in the 32nd note area where the cursor is located, press F5 (Del). The cursor location will not change.
- ₱ This function, F6 (BDel) depends on the current note length. If the currently selected note length is 1/4 then data at the location 1/4 note previous to the current position will be deleted. The cursor will move back 1/4 note.

Note duration: To specify how long the note will be held in relation to its note value hold SHIFT and press F1-F3. To record normal notes which sound for 80% of their note values press F1 (Norm). To record staccato notes which sound for 50% of their note values press F2 (Stac). To record sturred notes which sound for 99% of their note value press F3 (Slur).

Numeric keypad:

• Note value (numeric keys 1-8): Use the numeric keys 1-8 to specify the note value to be recorded. Pressing each key will select the note value printed above it, from a whole note (key 1) to a 16th note triplet (key 8). This also determines the step time by which the cursor will automatically advance after each note has been entered.

- Dot (numeric key 9): To dot the current note value press numeric key 9. The current note value will be extended by 50%.
- Tie (numeric key "-"): To extend the duration of the previously entered note, press TIE. The duration of the note will be extended by the current note value, and the cursor will advance accordingly.
- Rest (numeric key 0): To advance one step without entering data press REST.

Recording procedure:

• Enter notes: Each time you press and release a key it will be recorded, and the position will move ahead one step as specified by the step time. The note will not be entered until all keys have been released. This allows you to enter more than one note at the same location by pressing more than one note before releasing the first.

- Scroll through the data: When the cursor is located at **⑤** you can also use the cursor keys ⊲⊳ to move back and forth in the track and enter notes wherever you like. When you come to note data, it will be displayed on the keyboard diagram below and sounded on the synthesizer.
- To stop recording: When you are finished recording the song press STOP. You will return to the song play display, where you can press RUN and hear the song you just recorded.

Song edit

Summary: In song edit mode you can edit individual events that have been recorded in tracks 1–15.

Procedure:

From: song mode when the SONG LED is lit red

Press: EDIT

Select: the track to edit

Edit: the data as explained in the following

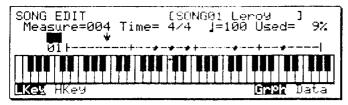
sections.

To exit: song edit mode and return to song play

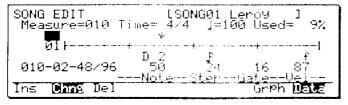
mode press EXII.

The song edit display will differ according to whether graphic or data editing has been selected, and whether tracks 1-15 or track 16 has been selected.

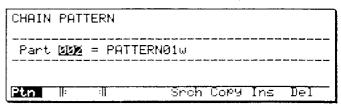
If graphic editing has been selected (tracks 1–15)



If data editing has been selected (tracks 1–15)



If track 16 has been selected for editing



Select the track to edit: Press a memory select button 1–16 to select the track to edit. Tracks 1–15 contain sequence data and track 16 contains pattern data.

Song graphic editing (tracks 1–15): To select graphic editing when a track 1–15 is selected, press F7 (Grph). A horizontal line will be displayed with dots indicating the position of note data in the measure. A keyboard diagram below will indicate the notes at the currently selected 32nd note area. For details refer to the following section *Song edit (graphic mode)*.

Song data editing (tracks 1–15): To select data editing when a track 1–15 is selected, press F8 (Data). The display will show the type and numerical values for each event. Data editing is divided into two modes; insert and change. For details refer to the following sections *Song edit* (data insert) and Song edit (data change).

Chain pattern editing (track 16): When track 16 is selected, the display will show the pattern number assigned to each part. For details refer to the following section *Chain pattern*.

SONG EDIT

Song edit (graph)

Summary: In song editing graph mode, the notes in the selected track 1--15 will be graphically displayed on a keyboard diagram. Data can only be viewed, not edited in graph mode.

Procedure:

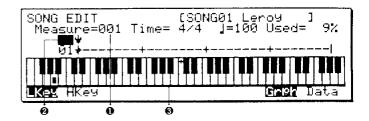
From: song mode when the SONG LED is lit red

Press: EDIT

Select: a track 1–15 Press: F7 (Grap).

View: the data as explained below.

To exit: song edit mode and return to song play mode press EXIT.



- Measure (001...999): This indicates the measure that is displayed. You can move the cursor here and select another measure, or use the sequencer location keys |<, <<, , LOCATE, or >>.
- You can use the dial, -1 +1, or the slider to move within the step area in 32nd note increments by placing the cursor here. As you come to note data, it will be displayed on the keyboard diagram below and sounded by the synthesizer.
- If the currently selected 32nd note step contains note data, the notes will be displayed on this keyboard diagram.
- The keyboard diagram in above may be displayed in either of two ranges. Press F1 (LKey) to view the keyboard from E0 to B5. Press F2 (HKey) to view the keyboard from C1 to G6.
- Select the track to view: While in song edit graph mode you can press a memory select button 1—15 to select the track to view. If you select track 16 the display will be as explained in the following section, *Chain pattern*.

Remarks: Graph edit mode only displays the data in the track. To edit data you must use either data change mode or data insert mode.

SONG EDIT

Song edit (data change)

Summary: In song editing data change mode, all data in the selected track 1-15 will be displayed numerically. You can change the values of existing data, or delete the currently displayed data.

Procedure:

From: song mode when the SONG LED is lit

red

Press: EDIT

Select: a track 1-15

Press: F8 (Data) and then press F2 (Chng).

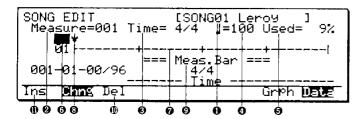
Select: the data you wish to edit

Specify: the data parameters and location.

To change: the data press ENTER

To exit: song edit mode and return to song play

mode press EXIT.



- Song Name: This displays the name of the song.
- Measure (001...999): To move to another measure in the track, place the cursor here and modify the data.
- Time (01–08/4, 01–16/08, 01–32/16): This displays the time signature of the current measure in the track.
- J: Tempo is only displayed, and has no effect in song edit mode.

- **6** Used (0...100%): This displays the amount of sequencer memory already used.
- When the cursor is located in this area you can use -1+1 or the dial to move backward and forward through the data in time. If the current measure is longer than four quarter notes (e.g., a time signature of 10/8), a number will be displayed here to indicate the section of the measure now being displayed.
- The horizontal line represents one measure, and vertical divisions represent one beat. A dot will be displayed on the bar to indicate a 32nd note area which contains data.
- As you move backward or forward through the data in time, an arrow pointing downward will move in 32nd note steps to indicate the current position in the measure.
- This area numerically shows the data at the cursor location. Move the cursor to the data you wish to modify, modify the data, and press ENTER.
- To delete the currently displayed data press F3 (Del).
- 1 To move to Insert mode press F1 (Ins).

Move through the data: As mentioned above, when the cursor is located at **6** you can use -1+1 or the dial to move backwards and forwards through the data. You can also move through the data regardless of the location of the cursor by holding SHIFT and using -1+1 or the dial.

SONG MODE

Change the location of the data: In addition to the data values for each type of data, you can also modify the location (measure, beat, clock) to move the data in time.

Change the data values: The following section Song edit (data insert) explains the values which can be modified for each type of data. After modifying the data values and/or location, be sure to press ENTER if you wish to finalize the change.

Top/end of Track: To indicate the beginning or end of the track, the display will show "Top of Track" or "End of Track". This data cannot be changed.

Measure marks: When a measure mark ("Meas.Bar") is displayed, you can move the cursor to the time signature and modify it. If you modify the time signature of a measure, the location of all subsequent measure marks will be affected.

This will not affect the musical data in the tracks. However it will determine how the metronome is sounded when playing back or recording. It may also be useful in the following situation.

Most song edit jobs (pages 214 to 227) require you to specify the area to be affected in measures. If you want to use a song edit job on an area which is not bounded by the existing measure marks, you can edit a measure mark to a suitable time signature (such as 1/16) so that the measure marks now delimit the area where you want to use the song edit job.

SONG EDIT

Song edit (data insert)

Summary: In song editing data insert mode, you can insert any type of data into any location in the selected track 1–15.

Procedure:

From: song mode (when the SONG LED is lit

red)

Press: EDIT

Select: a track 1-15

Press: F8 (Data) and then press F1 (Ins).

Specify: the type, parameters, and location of

the data you wish to insert.

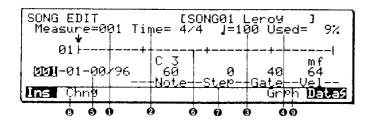
To insert: the data press ENTER. It is not

necessary to press ENTER if you enter

data via the numeric keys.

To exit: song edit mode and return to song play

mode press EXIT.



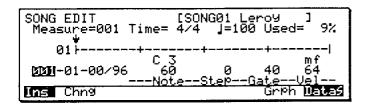
- Measure (001...999): To move to another measure in the track, place the cursor here and modify the data.
- Time (01–08/4, 01–16/08, 01–32/16): This displays the time signature of the measure in the track being edited.
- 3: Tempo is only displayed, and has no effect in step record mode.
- Used (0...100%): This displays the amount of sequencer memory already used.
- When the cursor is located in this area you can move backwards and forwards through the data in time (except in the Insert mode). If the current measure is longer than four quarter notes (e.g., a time signature of 10/8), a number will be displayed here to indicate the section of the measure now being displayed.
- The measure bar represents one measure, and vertical divisions represent one beat. A dot will be displayed on the bar to indicate a 32nd note area which contains data.

- This area numerically shows the data that will be inserted at the cursor location. To specify the type of data to be inserted, hold SHIFT and press F1-F6 to enter one of the types of data explained below. Move the cursor and modify the parameters as desired, and press ENTER to insert the data at the current location.
- To move to Change mode press F2 (Chng).
- **9** To move to Graph mode press F7 (Grph).

Note: The following display will appear, and you can move the cursor to specify the following data; location ("001-01-00/96", etc.), note number (Note 0...127), gate time (Gate 1...8188) in multiples of 4, and note-on velocity (Velocity 1...127).

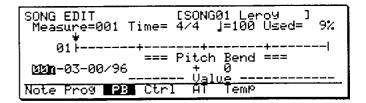
Gate time is displayed as the number of clocks (1/96th of a beat) that the note will be held, but can be specified only in multiples of 4.

Step time (Step 0...9999) is displayed to indicate the time until the next event, but cannot be edited.

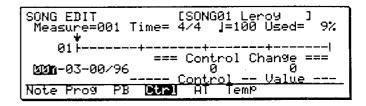


Program change: To enter program change data hold SHIFT and press F2 (Prog). The following display will appear, and you can move the cursor to specify the the program change number (Value 0...127). A program change of 0 will select the first program; A01 in the case of the SY99. The setting for MIDI Utility 1.Setting (JUMP #807) will determine how program changes are received. For details, see page 258.

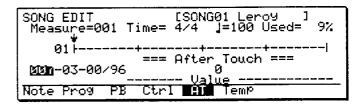
Pitch bend: To enter pitch bend data hold SHIFT and press F3 (PB). The following display will appear, and you can move the cursor to specify the pitch bend data (Value -8192...8191).



Control change: To enter control change data hold SHIFT and press F4 (Ctrl). The following display will appear, and you can move the cursor to specify the control change number (Control 0...127) and control change data (Value 0...127). Control change number 123 cannot be selected.



After touch: To enter after touch data hold SHIFT and press F5 (AT). The following display will appear, and you can move the cursor to specify the aftertouch data (Value 0...127).



Relative tempo: To enter relative tempo data hold SHIFT and press F6 (Temp). The following display will appear, and you can move the cursor to specify the relative tempo change data (Value 10%...200%).

When playback reaches relative tempo data, the playback tempo will change by the specified percentage. Relative tempo data will have an effect only if the SY99 sequencer is synchronized to its own internal clock. Refer to Song Setup job 2.MIDI Control.

SONG EDIT

Chain pattern

Summary: Track 16 of the sequencer contains pattern numbers and repeat data. Chain pattern allows you to arrange the pattern and repeat data in this track.

Procedure:

From: song mode (when the SONG LED is lit

red)

Press: EDIT Select: track 16

Specify: the pattern played by each part, and

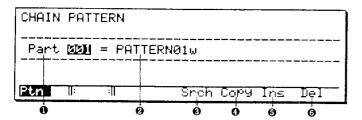
search, copy, insert, or delete parts.

To enter: the specified data for each part press

ENTER.

To exit: chain pattern mode and return to song

play press EXIT.



- Track 16 can consist of up to 999 Parts. When the cursor is located at Part, select an existing part 001–999. It is not possible to select a part which contains no data. When you press ENTER to enter the specified data for a part, this number will automatically advance to the next part.
- ② Each part in track 16 can be either a pattern number, a begin repeat mark (II:), or an end repeat mark (III). With the cursor located here, specify the data that will occupy the selected part. To specify a pattern press F1 (Ptn) and specify the pattern number 01-99. To enter a begin repeat mark press F2 (II:). To enter an end repeat mark press F3 (III) and specify the number of times to repeat. When you press ENTER to enter the specified data for each part, the part number will automatically advance.
- To search for the next occurrence of a begin repeat, end repeat, or specified pattern number, press F5 (Srch). Details are given below.
- To copy a specified range of parts to another range of parts, press F6 (Copy). Details are given below.

- To insert a new part into the track, press F7 (Ins). Details are given below.
- **6** To delete a specified part from the track, press F8 (Del). Details are given below.

Repeat marks: The parts surrounded by repeat begin and repeat end marks will repeat for the specified number of times. For example, if track 16 consists of the following data, it will repeat pattern 01 for 200 times.

Part 001 = ||:
Part 002 = PATTERN01w
Part 003 = PATTERN01w
Part 004 = :|| x99

Repeat marks can be nested if desired. For example, the data in the diagram below will play parts as follows: [05, 12, 05, 12, 05, 12, 07] x 3.

		r · · ·		p				
Part	001	002	003	004	005	006	007	
	:	:	05	12	: x2	07	: x2	

Search: To search for the next occurrence of a begin repeat, end repeat, or specified pattern number, press F5 (Srch). The lower lines of the display will change as follows.

CHAI	N PAT	TERN				<u></u>		
Part	t 001	= PF	TTE	RN	 01ω			
Sear	nch f	orwar	.q		MEETIN	94w		
Ptn	11:	:	+	}	Srch	Copy	Ins	Del

- 1. Specify the data you wish to search for. To search for a specific pattern press F1 (Ptn) and specify the number 1–99 for which you are searching. To search for the next begin repeat mark press F2 (II:). To search for the next end repeat mark press F3 (:II).
- 2. Specify the direction in which you want to search. Each time you press F4 (↔) the display will alternate between "forward" and "backward".
- 3. To begin searching press ENTER. To cancel without searching press EXIT.

Copy part: To copy a specified range of parts to another range of parts, press F6 (Copy). The lower lines of the display will change as follows.

CHAIN	PATTERN
Part	001 = PATTERN01w
Сору	Source From Part=001 To Part=001 Destination Part= 30E
	Srch <mark>Copy</mark> Ins Del

- 1. Specify the copy source as "From Part" and "To Part".
- 2. Specify the copy destination as "Destination Part".
- 3. To copy the specified parts press ENTER. To cancel without copying press EXIT. For example if you have specified "From Part=002", "To Part=003", and "Destination Part=005", the contents of track 16 will change as follows.

Before								
Part	001	002	003	004	005	006	007	008
Pattern	05	11	12	13	02	01	01	01
After						•		
Part	001	002	003	004	005	006	007	008
Pattern	05	11	12	13	11	12	01	01

Insert part: To insert a new part into the track, press F7 (Ins). The lower lines of the display will change as follows.

CHAIN PATTERN	
Part 001 = PATTERNO	
Insert Part = 🔟n	
	Srch Copy Ins Del

- 1. Specify the number of the part to be inserted.
- 2. To insert the specified part press ENTER. To cancel without inserting press EXIT. When a part is inserted the following parts will be moved to make room for it. For example if you have specified "Insert Part=003" the contents of track 16 will change as follows.

Before			,					
Part	001	002	003	004	005	006	007	008
Pattern	05	11	12	13	02	01	01	01
After			·					
Part	001	002	003	004	005	006	007	008
Pattern	05	11	??	12	13	02	01	01

Delete part: To delete a specified part from the track, press F8 (Del). The lower lines of the display will change as follows.

CHAIN PATTERN		 -		
Part 001 = PATTERN	101w			
Delete Part = 🐠				
	Srch	Copy	Ins	llel

- 1. Specify the number of the part to be deleted.
- 2. To delete the specified part press ENTER. To cancel without deleting press EXIT. When a part is deleted the following parts will be moved to fill the gap. For example if you have specified "Delete Part=003" the contents of track 16 will change as follows.

Before	,								
Part	001	002	003	004	005	006	007	008	
Pattern	05	11	12	13	02	01	01	01	
After									
Part	001	002	003	004	005	006	007		
Pattern	05	11	13	02	01	01	01	-	

Note: The pattern data is shared by all of the songs. This can lead to problems if you use the same pattern for more than one song. Say, for example, you are using Pattern 01 in both Song 1 and Song 2. If you change the pattern while editing Song 2, you may find that these changes will not Song 1 at all.

For this reason it is best to avoid using patterns in more than one song. If you have created a pattern for one song which you would like to use in another, it is best to use the copy pattern function to copy the pattern to another number. You may then use the copied pattern in the new song.

Song edit jobs 1

JUMP #600

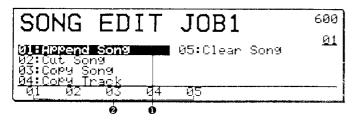
Summary: The first song edit job directory contains operations which allow you manipulate data for entire tracks and songs.

Procedure:

From: song play mode

Press: F3 (Job1) (JUMP #600)

Select: the desired song edit job



- Move the cursor in this area and press ENTER to select the specified job.
- 2 Pressing F1-F5 will select the corresponding job.
 - 01: Append Song: Append one song to the end of another.
 - 02: Cut Song: Cut a song in two.
 - 03: Copy Song: Make a copy of a song.
 - 04: Copy Track: Copy a track from one song to another.
 - 05: Clear Song: Erase all data for one song or all songs.

SONG EDIT JOBS 1

1. Append song

JUMP #601

Summary: This operation is used to append one song to the end of another.

Procedure:

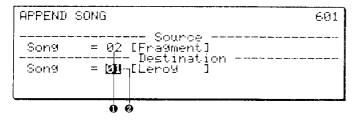
From: song edit job directory 1 (JUMP #600) Select: 01:Append Song. (JUMP #601) Specify: the song to be appended, and the song

4 - Aliah 14 la 4 - La ana a La L

to which it is to be appended.

To execute: press ENTER.

To quit: without executing, press EXIT.



- Source (1...10): Specify the song to be appended. This song will be cleared as a result of the append operation.
- **2** Destination (1...10): Specify the song to which the song in (1) is to be appended.

Remarks: When the source song is appended to the destination song, the tempo, transmit channels, next song, next mode, and song name for the destination song will remain valid for the

combined whole. Any repeat end marks in the destination song which do not have corresponding repeat begin marks will be removed from the destination song during the append process.

The two songs will play back-to-back, with one exception: if Track 16 of the destination song is shorter than the other tracks, Track 16 of the source song will be moved forward in time and attached directly to the end of the destination Track 16. As a result, the pattern data for the source song will begin playing before the rest of the destination song has ended. To avoid this problem, check to be sure that Track 16 of the destination song is the same length as the rest of the tracks. If it is not, you may wish to pad the track with blank patterns.

Errors: An attempt to append a song will result in an error under any of the following conditions:

- When there is not sufficient sequencer memory to perform the append operation.
- When the same song is specified as both the source and destination.
- When the combined pattern chain exceeds the maximum number of parts.

2. Cut song

JUMP #602

Summary: This operation allows you to cut a song in two, creating two shorter songs from one long song.

Procedure:

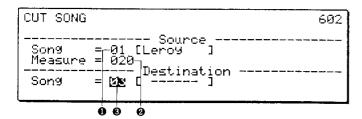
From: song edit job directory 1 (JUMP #600) Select: 02:Cut Song (JUMP #602) Specify: the song to be cut, the measure at

> which it is to be cut, and the song number to which the cut portion is to

be copied.

To execute: press ENTER.

To quit: without executing, press EXIT.



- Source (1...10): Specify the song to be cut.
- Measure (1...999): Specify the measure at which the song in is to be cut. This measure and all measures following it will be cut from the source song and copied to the destination song location.
- Destination (1...10): Specify the song number to which the cut portion is to be moved.

Remarks: The cut song operation cuts the specified measure and all following measures from the source song and moves them to the destination song. The tempo, transmit channels, next song, next mode, and song name for the destination song will be the same as those set for the source song.

If the destination song is already occupied by song data, this data will be erased by the cut operation. Before executing the cut song operation, always check to be certain that the destination song does not contain data you wish to keep.

Errors: An attempt to cut a song will result in an error under any of the following conditions:

- When there is not sufficient sequencer memory to perform the cut operation.
- When the same song is specified as both the source and destination.
- When the song cannot be cut at the specified measure. The measure specification is subject to the following limitations: It should not be located after the end of the song data.
 It should not be located within a pattern; that is, the specified measure should always be the first measure of a pattern. It should not be located within a loop (i.e., between repeat marks) in the pattern chain.

SONG EDIT JOBS 1

3. Copy song

JUMP #603

Summary: This operation allows you to make a copy of a song.

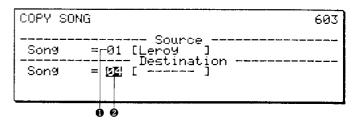
Procedure:

From: song edit job directory 1 (JUMP #600) Select: 03:Copy Song (JUMP #603) Specify: the song to be copied, and the song

number to which it is to be copied.

To execute: press ENTER.

To quit: without executing, press EXIT.



- Source (1...10): Specify the song to be copied.
- Destination (1...10): Specify the song number to which the song in **①** is to be copied.

SONG MODE

Remarks: All song data will be copied from the source to the destination. The tempo, transmit channels, next song, next mode, and song name for the destination song will be the same as those for the source song.

If the destination song is already occupied by song data, this data will be erased by the copy operation. Before executing the copy song operation, always check to be certain that the destination song does not contain data you wish to keep.

Errors: An attempt to copy a song will result in an error under any of the following conditions:

- When there is not sufficient sequencer memory to perform the copy operation.
- When the same song is specified as both the source and destination.

SONG EDIT JOBS 1

4. Copy track

JUMP #604

Summary: This operation allows you to copy a track from one song to another.

Procedure:

From: song edit job directory 1 (JUMP #600) Select: 04:Copy Track (JUMP #604) Specify: the song from which a track is to be

copied, and the song to which it is to

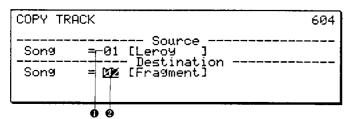
be copied.

Press: a track select button 1-16 to select a

track to copy.

To execute: press ENTER.

To quit: without executing, press EXIT.



- Source (1...10): Specify the song from which the selected track is to be copied.
- Destination (1...10): Specify the song to which the selected track is to be copied.

Remarks: All song data for the selected track will be copied from the source to the destination. A song may become longer as a result of the copy track operation, if the track copied is longer than the destination song. However, the measure table of the destination song will not be changed as a result of the operation.

If the selected track of the destination song is already occupied by song data, this data will be erased by the copy operation. Before executing the copy track operation, always check to be certain that the selected track of the destination song does not contain data you wish to keep.

Errors: An attempt to copy a track will result in an error under any of the following conditions:

- When there is not sufficient sequencer memory to perform the copy operation.
- When the same song is specified as both the source and destination.

5. Clear song

JUMP #605

Summary: This operation allows you to clear one song or all songs from the SY99's sequencer memory.

Procedure:

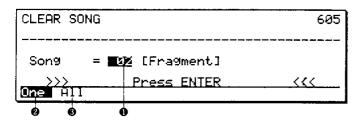
From: song edit job directory 1 (JUMP #600)
Select: 05:Clear Song (JUMP #605)
Specify: whether to clear one song or all songs.
If one song is chosen, specify the song

to be elegand

to be cleared.

To execute: press ENTER.

To quit: without executing, press EXIT.



- Song (1...10): If you have pressed F1 (One), specify the song to be cleared.
- 2 To clear a single song, press F1 (One) and specify the song.

1 To clear all songs, press F2 (All).

Remarks: This operation clears all song data for the a specified song or all songs from the SY99's sequencer memory. In addition, the song's settings are initialized as follows:

- The song's measure table is initialized to 4/4.
- The tempo is set to 120.
- The transmit channels are assigned to their equivalent tracks. (Track 1 to channel 1, Track 2 to channel 2, etc.)
- The Next Song item is set to "Off."
- The Next Mode item is set to "Stop."
- The name is " ----- ".

If you clear one song or all songs, the data will be lost forever. There is no way of recalling a song that has been cleared from memory.

Song edit jobs 2

JUMP #606

Summary: The second song edit job directory contains various operations which allow you to edit the data in specified measures of tracks 1–15 in various ways. To select the track to which the operation will apply, press a track select button 1–15. Some operations (jobs 10, 12, 13, and 15) allow you to select two or more tracks. These edit jobs can be used only on tracks 1–15. Track 16 contains Part data, not sequence data.

Procedure:

From: song play mode

Press: F4 (Job2) (JUMP #606)

Select: the desired song edit job

SONG	EDIT	JOB2		606
MHQUantiz W:MdfGate G:MdfYVel	0K:Thin∩ut.	0:MovClck 10:CpyMeas 11:ErsMeas	14: Mix	Inck
M:Cresc 01 02	W:NtShift 03 04	12: DelMeas 05 06	97	08 5 ⊓
		D		e

- Move the cursor in this area and press ENTER to select the specified job.
- Pressing F1-F8 will select the corresponding job 1-8. Holding SHIFT and pressing F1-F7 will select the corresponding job 9-15.
 - 01: Quantiz (Quantize): Adjust the timing of each event in the specified measures of the selected track to the nearest interval of the specified value.
 - 02: MdfGate (Modify gate time): Modify the gate times (durations) of all notes in specified measures of the selected track.
 - 03: MdfyVel (Modify velocity): Modify the noteon velocity values for all note events in specified measures of the selected track.
 - 04: Cresc (Crescendo): Create a gradual change in note-on velocity over the specified measures of the selected track to create an effect of crescendo or diminuendo.

- 05: Transpose (Transpose): Transpose all notes in specified measures of the selected track by a specified interval.
- 06: ThinOut (Thin out): Conserve sequencer memory by deleting approximately every other occurrence of a specified type of continuous controller from specified measures of the selected track.
- 07: ErsEvnt (Erase event): Erase all data of a specified type from specified measures of the selected track.
- 08: NtShift (Note shift): Shift all notes of a specified note number in the selected track to another note number.
- 09: MovClck (Move clock): Move events in the specified measures of the selected track forwards or backward in time.
- 10: CpyMeas (Copy measure): Copy a specified range of measures in the selected track(s) to another location in the same track.
- 11: ErsMeas (Erase measure): Erase all data from specified measures of the track, leaving the measures empty.
- 12: DelMeas (Delete measure): Delete the specified measures from the selected track(s), and move the following measures up to fill the gap.
- 13: CreMeas (Create measure): Insert empty measures of the specified time signature into the selected track(s) over the specified range of measures.
- 14: MixTrck (Mix track): Combine the data of specified measures from a specified track with the data of another track.
- 15: ErsTrck (Erase track): Erase all data from the selected track(s).

1. Quantize

JUMP #607

Summary: This operation adjusts the timing of each event in the specified measures of the track to the nearest interval of the specified value. This can be used to move inaccurately played notes precisely onto the beat

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 01:Quantz (JUMP #607)

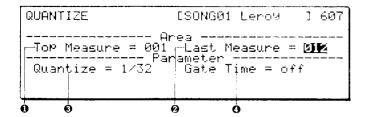
Specify: the area of track measures you wish to quantize and set the parameters.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

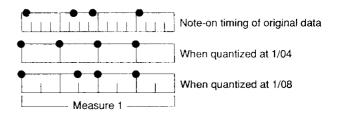
To quit: without executing press EXIT.



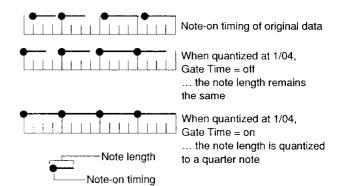
- Top Measure (001...999): Specify the first measure to be affected.
- 2 Last Measure (001...999): Specify the last measure to be affected.
- Quantize (1/2, 1/4, 1/8, 1/12, 1/16, 1/24, 1/32): Specify the timing interval to which the notes will be quantized. For example if the shortest note value should be a 16th note, specify 1/16. If the music contains triplets, you should use a quantization of 1/12, or 1/24.

• Gate Time (on, off): Specify whether or not the gate time (duration of the note) should be quantized. If you set this "on", the gate time of each note will also be adjusted to the nearest quantize value you specify.

Quantize: The following diagram shows how a track recorded in realtime and played with inaccurate timing would change as a result of quantizing at 1/04 and at 1/08.



Gate time: The following diagram shows how the Gate Time setting will affect the quantized results.



SONG EDIT JOBS 2

2. Modify gate time

JUMP #608

Summary: This operation modifies the gate times (durations) of all notes in specified measures of the selected track. Gate times can be modified by a ratio or by an absolute value.

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 02:MdfGate (JUMP #608) Specify: the area of track measures for which

you wish to modify gate time and set

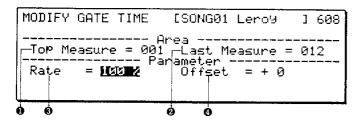
the parameters.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

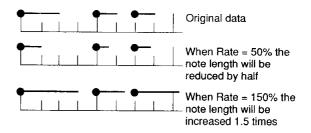
To quit: without executing press EXIT.



- Top Measure (001...999): Specify the first measure to be affected.
- 2 Last Measure (001...999): Specify the last measure to be affected.
- Rate (000%...200%): All gate times will be multiplied by the specified percentage. A rate of 100% will result in no change. A rate of 200% will make all gate times twice as long. A rate of 0% will set a gate time of 1.
- Offset (-99...+99): The specified offset will be added to all gate times.

Remarks: Each note event in a track has a gate time which determines the duration of the note. The gate time is indicated in units of a 1/384th note (1/96th of a quarter note), and has a range of 0–8188. The modify gate time operation will not increase or decrease the gate time beyond these values.

Rate and Offset: These two settings can be used separately or together. First the value is multiplied by the rate, and then the offset is added. The following diagram shows how Rate settings modify the gate time by the specified percentage.



The following diagram shows how Offset settings add the specified value to the original gate time.



- If you want only to add an absolute value to each gate time, leave rate at 100% so it will have no effect.
- If you want only to multiply each gate time by the same percentage, then leave offset at 0 so it will have no effect.
- If the resulting gate time is (), the note may be inaudible.
- The gate time is always a multiple of 4.

SONG EDIT JOBS 2

3. Modify velocity

JUMP #609

Summary: This operation modifies the note-on velocity values for all note events in specified measures of the selected track.

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 03:MdfVel (JUMP #609)

Specify: the area of track measures for which

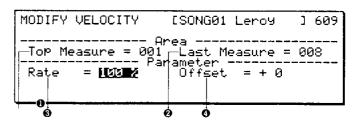
you wish to modify velocity and set the parameters.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



- Top Measure (001...999): Specify the first measure to be affected.
- 2 Last Measure (001...999): Specify the last measure to be affected.

- Rate (000%...200%): All note-on velocity values will be multiplied around the central value of 64 by the specified percentage. A rate of 100% will result in no change. A rate of 200% will move all velocity values further away from 64; i.e., expand the dynamic range. A rate of 0% will set all velocities to the central value of 64; i.e., compress the dynamic range.
- Offset (-99...+99): The specified offset will be added to all note-on velocity values.

Remarks: Each note event in a track has a note-on velocity which determines the force with which the note is played. The velocity has a range of 1–127. This modify velocity operation cannot increase or decrease the velocity beyond these values.

- **Rate and Offset:** These two settings can be used separately or together. First the value is multiplied by the specified rate, and then the offset is added.
- If you want only to add an absolute value to each velocity, leave rate at 100% so it will have no effect.
- If you want only to modify each velocity around the central value of 64, then leave offset at 0 so it will have no effect.

SONG EDIT JOBS 2

4. Crescendo

JUMP #610

Summary: This operation creates a gradual change in note-on velocity over the specified measures of the selected track to create an effect of crescendo or diminuendo.

Procedure:

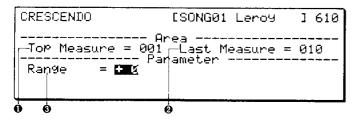
From: song edit job directory 2 (JUMP #606)
Select: 04:Cresc (JUMP #610)
Specify: the area of track measures over which you wish to create a crescendo, and specify the range.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



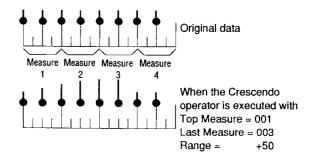
- Top Measure (001...999): Specify the first measure to be affected.
- **2** Last Measure (001...999): Specify the last measure to be affected.
- Range (-99...+99): Starting at the beginning of the first measure you specify, note-on velocity will gradually be modified until the increase or decrease specified by the range is reached at the

end of the last measure. Settings of +1...+99 will result in a crescendo. Settings of -1...-99 will result in a diminuendo.

Remarks: Each note event in a track has a note-on velocity which indicates the force with which the note is played. The velocity value of each note is limited to a range of 1–127, and the velocity values resulting from this operation will not exceed these limits.

If a voice has not been programmed with velocity sensitivity, the velocity value of the note-on message will have no effect on the sound.

Range: This specifies the final change in velocity which will be reached at the end of the crescendo or diminuendo. The following diagram shows the result of the Range setting.



5. Transpose

JUMP #611

Summary: This operation transposes all notes in specified measures of the track by a specified interval.

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 05:Transps (JUMP #611)

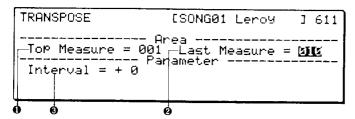
Specify: the area of track measures which you

wish to transpose and set the interval. Press: a track select button 1–15 to select a

trook

To execute: the operation press ENTER.

To quit: without executing press EXIT.



- **1** Top Measure (001...999): Specify the first measure to be affected.
- 2 Last Measure (001...999): Specify the last measure to be affected.
- Interval (-99...+99): The note number of all notes will be transposed by the specified interval. Settings of +1...+99 will transpose upwards, and settings of -1...-99 will transpose downwards. The note number is limited to a range of 0 (C-2) to 127 (G8), and the note numbers resulting from this operation will not exceed these limits.

SONG EDIT JOBS 2

6. Thin out

JUMP #612

Summary: This operation conserves sequencer memory by deleting approximately every other occurrence of a specified type of continuous controller from specified measures of the track.

Procedure:

From: song edit job directory 2 (JUMP #606)

Select: 06:ThinOut (JUMP #612)

Specify: the area of track measures which you

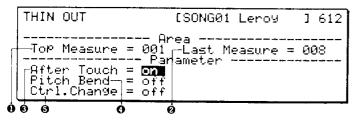
wish to thin out and specify the type of data to be thinned out.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



• Top Measure (001...999): Specify the first measure to be affected.

- **2** Last Measure (001...999): Specify the last measure to be affected.
- After Touch (on, off): When this is set "on", channel aftertouch data will be thinned out. (Polyphonic aftertouch is not received or recorded by the SY99.)
- Pitch Bend (on, off): When this is set "on", pitch bend data will be thinned out.
- Control Change (on, off): When this is set "on", all continuous control change data will be thinned out. Switch-type controllers such as sustain on/off will not be affected.

Remarks: You may thin out more than one type of data at once.

When you move a continuous controller slowly, many messages with closely spaced data will be transmitted. You can usually delete half of them without any audible difference. If you are running low on sequencer memory, thinning out some continuous data can help. Repeating the thin out operation several times will eventually produce rough changes in controller data, which can be an interesting effect in itself.

7. Erase event

JUMP #613

Summary: This operation erases all data of a specified type from specified measures of the track.

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 07:ErsEvnt (JUMP #613) Specify: the area of track measures from which

you wish to erase data, and specify

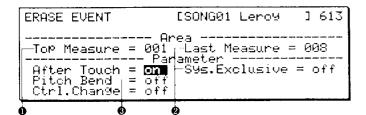
the type of data to be erased.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



- Top Measure (001...999): Specify the first measure to be affected.
- **2** Last Measure (001...999): Specify the last measure to be affected.
- **3** Parameter (Aftertouch, Pitch Bend, Control Change, System Exclusive): Set this to "on" for each type of data you wish to erase.

When you press ENTER all data of the specified types will be erased from the specified range of measures.

SONG EDIT JOBS 2

8. Note shift

JUMP #614

Summary: This operation shifts all notes of a specified note number to another note number.

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 08:NtShift (JUMP #614)

Specify: the area of track measures for which you shift notes, and specify the original

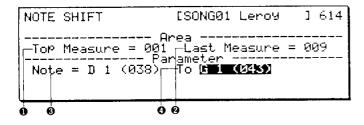
and new note numbers.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



- Top Measure (001...999): Specify the first measure to be affected.
- **2** Last Measure (001...999): Specify the last measure to be affected.
- Note (C-2...G8 = 000...127): Specify the original note number.
- To (C-2...G8 = 000...127): Specify the new note number.

When you press ENTER all notes of the number specified by "Note" will be shifted to the note number specified by "To".

Remarks: This operation is often useful when controlling a drum machine from the SY99's sequencer. Most drum machines play specific sounds for each note. For example, shifting all D#2 notes to F#2 might change all snare hits to hi-hat hits. Consult the instrument/note table for your drum machine.

9. Move clock

JUMP #615

Summary: This operation moves the specified measures of the track forward or backward in time.

Procedure:

From: song edit job directory 2 (JUMP #606)
Select: 09:MovClck (JUMP #615)
Specify: the track which you wish to move in

time and set the number of clocks by

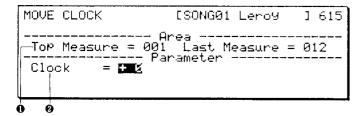
which to move it.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



• Area (001...999): The measures beginning with the specified Top Measure and ending with the specified Last Measure will be moved in time. Clock (-99...+99): Specify the number of clocks (units of 1/96th of a quarter note) by which the track is to be moved. Positive settings will move the track forward in time so that it plays later. Negative settings will move the track backward in time so that it plays earlier.

Remarks: It is often effective to use clock move to compensate for voices that have a slow attack. For example strings often have a slower attack than other voices, and will appear to be lagging behind the other voices even if the note on messages are actually simultaneous. In such cases you can use this Move Clock operation to move the strings track earlier in time so that the string voices begin playing a bit before than the other voices to improve the perceived timing.

SONG EDIT JOBS 2

10. Copy measure

JUMP #616

Summary: This operation copies a specified range of measures in one or more tracks to another location in the same track.

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 10:CpyMeas (JUMP #616) Specify: the area of source measures from

which you wish to copy, the destination measure to which the data will be copied, and the number of times that

the data will be copied.

Press: one or more track select buttons 1-15

to select the tracks.

To execute: the operation press ENTER.

To quit: without executing press EXIT.

COPY MEASURE [SONG01 Leroy] 616

Top Measure = 001 Last Measure = 008

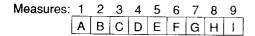
Top Measure = 001

Top Measure = 001

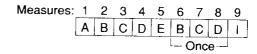
Copy = 1 times

- Source (001...999): The measures beginning with the specified Top Measure and ending with the specified Last Measure will be copied.
- Destination (001...999): The data will be copied into the same track starting at the specified Top Measure.
- 3 Copy (1...99): The specified source measures will be copied as many times as specified here.

Example: For track data as shown in the following diagram.



using the Copy Measure operation with settings of "Source = 002...004", "Destination=006", and "Copy=1" would change the track data as follows.



If "Copy=2", the track data would change as follows.

SONG EDIT JOBS 2

11. Erase measure

JUMP #617

Summary: This operation erases all data from specified measures of one or more selected tracks, leaving the measures empty.

Procedure:

From: song edit job directory 2 (JUMP #606) Select: 11:ErsMeas (JUMP #617)

Specify: the area of track measures which you

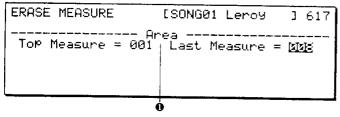
wish to erase.

Press: a track select button 1-15 to select a

track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



• Area (001...999): The measures beginning with the specified Top Measure and ending with the specified Last Measure will be erased.

Example: For track data as shown in the following diagram,

using the Erase Measure operation with settings of "Area = 002...004" would change the track data as shown in the following diagram.

SONG EDIT JOBS 2

12. Delete measure

JUMP #618

Summary: This operation deletes the specified measures from one or more selected tracks, and moves the following measures up to fill the gap.

Procedure:

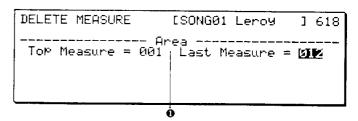
From: song edit job directory 2 (JUMP #606) Select: 12:DelMeas (JUMP #618) Specify: the area of measures which you wish

to delete

Press: one or more track select buttons 1–15

to select the tracks.

To execute: the operation press ENTER. To quit: without executing press EXIT.



SONG MODE

• Area (001...999): The measures beginning with the specified Top Measure and ending with the specified Last Measure will be deleted.

Example: For track data as shown in the following diagram,

Measures: 1 2 3 4 5 6 7 8 9

A B C D E F G H I

using the Delete Measure operation with settings of "Area = 002...004" would change the track data as follows.

Measures: 1 2 3 4 5 6
A E F G H I

SONG EDIT JOBS 2

13. Create measure

JUMP #619

Summary: This operation inserts empty measures of the specified time signature into one or more selected tracks over the specified range of measures. The following measures will be pushed back to make room.

Procedure:

From: song edit job directory 2 (JUMP #606)
Select: 13:CreMeas (JUMP #619)
Specify: the area of measures to be created and

set the time signature.

Press: one or more track select buttons 1-15

to select the tracks.

To execute: the operation press ENTER.

To quit: without executing press EXIT.

ERASE TRACK [SONG01 Leroy] 621

>>> Set tracks and Press ENTER <<<

- Area (001...999): New measures beginning with the specified Top Measure and ending with the specified Last Measure will be created and inserted.
- 2 Time (1-8/4, 1-16/8, 1-32/16): Specify the time signature of the measures you wish to create.

Example: For track data as shown in the following diagram,

Measures: 1 2 3 4 5 6 7 8 9
Track A B C D E F G H I

using the Create Measure operation with settings of "Area = 002...004" would change the track data as follows.

Measures: 1 2 3 4 5 6 7 8 9 10 11 12
Track A B C D E F G H I

SONG EDIT JOBS 2

14. Mix track

JUMP #620

Summary: This operation combines the data of specified measures from a specified track with the data of another track.

Procedure:

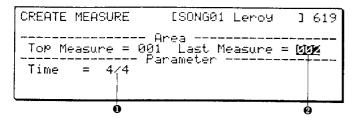
From: song edit job directory 2 (JUMP #606) Select: 14:MixTrck (JUMP #620) Specify: the source track and the measures which you wish to mix into the desti-

nation track, and specify the destina-

tion track.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



- Source (Track 01...15, Measures 001...999): Specify the source track and area of measures.
- Destination (Track 01...15): Specify the destination track into which the measures specified by 1 will be mixed.

Example: For track data as shown in the following diagram,

Measures:	1_	2	3	4	5	6	7	8	9	
Track 1	Α	В	С	D	E	F	G	Н	ı	
Track 2	а	b	С	d	е	f	g	h	i	İ

using the Mix Track operation with settings of "Source Track = 01", "Source Measures = 002...004", and "Destination Track = 02" would change the data as follows.

Measures:	1	2	3	4	5	6	7	8	9
Track 1	Α	В	С	D	E	F	G	Η	ĺ
Track 2	а	b	С	d	е	f	g	h	i
	1	В	С	D					

SONG EDIT JOBS 2

15. Erase track

JUMP #621

Summary: This operation crases all data from the specified track(s).

Procedure:

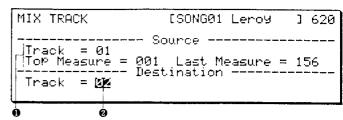
From: song edit job directory 2 (JUMP #606) Select: 15:ErsTrck (JUMP #621)

Press: one or more track select buttons 1-16

to select the tracks.

To execute: the operation press ENTER.

To quit: without executing press EXIT.



There are no parameters to set for this operation. Use the memory select 1–16 buttons to specify the track(s) to be erased. The LEDs of selected track will light red. When you press ENTER the data will be erased from the selected tracks.

Song setup jobs

JUMP #622

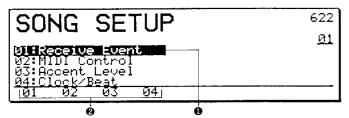
Summary: Song setup parameters affect the overall functioning of the sequencer.

Procedure:

From: song play mode or song record mode

Press: F5 (Stup) (JUMP #622)

Select: the desired song setup job.



• Move the cursor in this area and press ENTER to select the specified job.

- Pressing F1-F4 will select the corresponding job 1-4.
 - 01: Receive Event: To conserve sequencer memory, you can specify that unwanted types of data not be recorded.
 - 02: MIDI Control: Specify whether the SY99's sequencer will be controlled by its own timing source or by an external sequencer.
 - 03: Accent Level: Specify the accent level for each of the four function keys F1-F4 used to specify the accent of a note in song step record mode.
 - 04: Clock/Beat: Set the number of clocks per beat that will be displayed in editing.

SONG SETUP JOBS

1. Receive event

JUMP #623

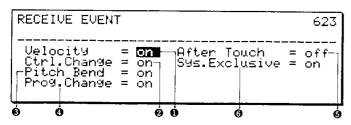
Summary: You can specify that unwanted types of data not be recorded, so as to conserve sequencer memory.

Procedure:

From: song setup job directory (JUMP #622)
Select: 01:Receive Event (JUMP #623)
Specify: reception on/off for each type of data.

To exit: to the song setup job directory press

EXIT.



- Velocity (on, off): Specify whether the velocity value of note-on messages will be recorded by the sequencer. When this is set "off", all notes will be recorded with a velocity of 64 regardless of their original velocity.
- Control Change (on, off): Specify whether or not control change messages will be recorded by the sequencer.

- Pitch Bend (on, off): Specify whether or not pitch bend messages will be recorded by the sequencer.
- Program Change (on, off): Specify whether or not program change messages will be recorded by the sequencer.
- **6** After Touch (on, off): Specify whether or not after touch messages will be recorded by the sequencer.
- **6** System Exclusive (on, off): Specify whether or not system exclusive messages will be recorded by the sequencer. The SY99 sequencer can not record system exclusive messages which are longer than 32 bytes.

Remarks: In order to conserve sequencer memory, turn off reception for types of data that do not affect the voices you are using. For example if the voices have not been programmed with aftertouch sensitivity, turn aftertouch reception off so that the sequencer memory does not fill up with unnecessary data.

SONG SETUP JOBS

2. MIDI control

JUMP #624

Summary: Specify whether the SY99's sequencer will be controlled by its own timing source or by an external sequencer.

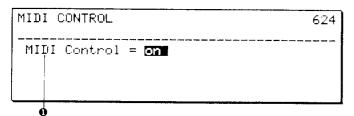
Procedure:

From: song setup job directory (JUMP #622) Select: 02:MIDI Control (JUMP #624)

Specify: MIDI Control on or off.

To exit: to the song setup job directory press

EXIT.



• MIDI Control (on, off): Normally you will leave this set "off" so that the SY99 sequencer will be controlled by its own timing clock and the front panel sequencer control buttons.

If you want to use an external sequencer connected to the SY99's MIDI IN to control the SY99 sequencer, set this "on" so that the SY99 sequencer will be controlled by MIDI start, continue, stop, song position pointer, and song select messages, and the tempo will be determined by MIDI clock messages.

Remarks: When MIDI control is on, the SY99 sequencer will not run unless MIDI clock messages are being received.

SONG SETUP JOBS

3. Accent level

JUMP #625

Summary: Specify the accent level for each of the four function keys F1-F4 used to specify the accent of a note in song step record mode.

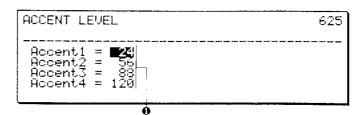
Procedure:

From: song setup job directory (JUMP #622) Select: 03:Accent Level (JUMP #625)

Specify: each of the four accent levels.

To exit: to the song setup job directory press

EXIT.



• Accent 1 – Accent 4 (1...127): These determine the accent levels that will be selected when a function key F1-F4 (Acc1-Acc4) is pressed while in song step record mode.

SONG SETUP JOBS

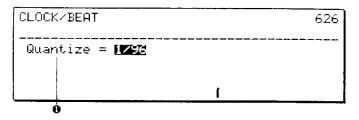
4. Clock/Beat

JUMP #626

Summary: Set the number of clocks per beat that will be displayed in editing.

Procedure:

From: song setup job directory (JUMP #622) Select: 04:Clock/Beat (JUMP #626)



• Quantize (1/6, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48, 1/64, 1/96): Specify the time value of one displayed beat.

This sets the number of clocks per beat that will be displayed in editing. This has no effect on the time signature, but is simply a convenience for editing.

Transmit channel

JUMP #627

Summary: Specify the MIDI channel on which each track of the sequencer will transmit its data.

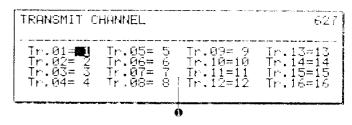
Procedure:

From: song play mode

Press: F6 (T-ch) (JUMP #627) Specify: the MIDI transmission channel for each

track.

To exit: to song play mode, press EXIT.



 Tracks 1-16 (1..16): Specify the channel 1-16 on which each track will transmit data from MIDI OUT.

Song name

JUMP #628

Summary: Each song in the SY99's sequencer memory can be given an eight-character name, which will be displayed in song play or song record mode.

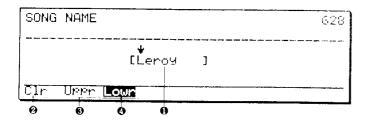
Procedure:

From: song play or song record mode

Press: F7 (Name) (JUMP #628)

Specify: the song name.

To exit: to song play mode, press EXIT.



- Enter an eight-character name for the sequencer song.
- 2 To clear the currently entered name press F1 (Clr).
- To switch to upper-case characters press F2 (Uppr).
- To switch to lower-case characters press F3 (Lowr).

Remarks: Methods of entering character data are explained in How to enter character data, page 30.

Song directory

JUMP #629

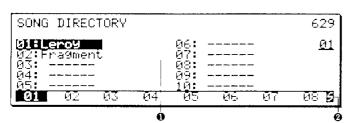
This function allows you select songs while viewing a directory of the songs currently held in the SY99's sequencer memory.

Procedure:

From: song play mode

Select: F8 (Dir) (JUMP #629)

Specify: one of the displayed songs To exit: to song play mode, press EXIT.



- The names of the songs will be displayed in this area. You can select a song by inputting a number from one to ten, by pressing the corresponding function keys (F1-F8, or SHIFT + F1, F2), or by moving the cursor to the desired song and pressing ENTER. (If the cursor is moved using INC, DEC, the data entry slider or the data entry wheel, it is not necessary to press ENTER.)
- Pressing F1-F8 will select the corresponding song 1-8. Holding SHIFT and pressing F1 or F2 will select song 9 or 10, respectively.