PATTERN MODE

Pattern mode allows you to record and play back patterns of 1 to 32 measures. These patterns can be edited in various ways, and a different pattern can be placed in each Part of track 16 (the pattern track) to play frequently repeating phrases or rhythm patterns.

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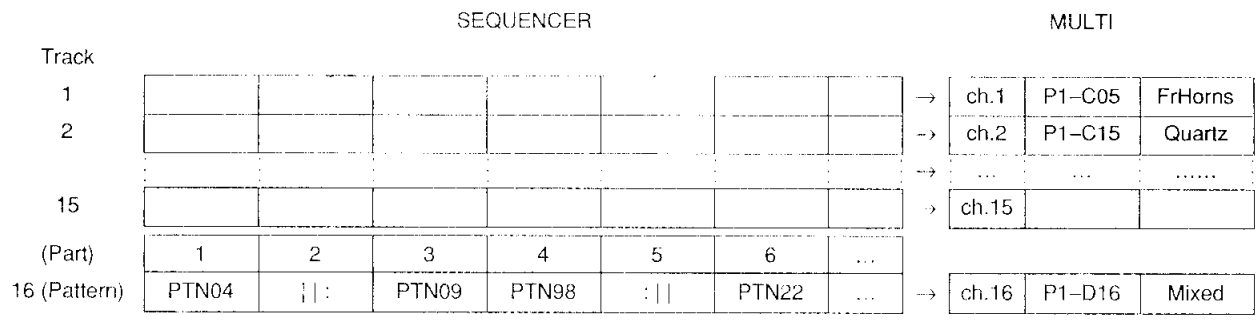
In pattern mode you can record and play back patterns of 1 to 32 measures. Editing functions in song mode allow you to place these patterns in track 16 (the pattern track). Since the same pattern can be placed in more than one part of track 16, you can save time and sequencer memory by creating a pattern for each frequently appearing motif and assigning it to the appropriate location every time you want it to playback.

Patterns are often used to play a drum-type voice from track 16 of the sequencer, as shown in the following diagram.

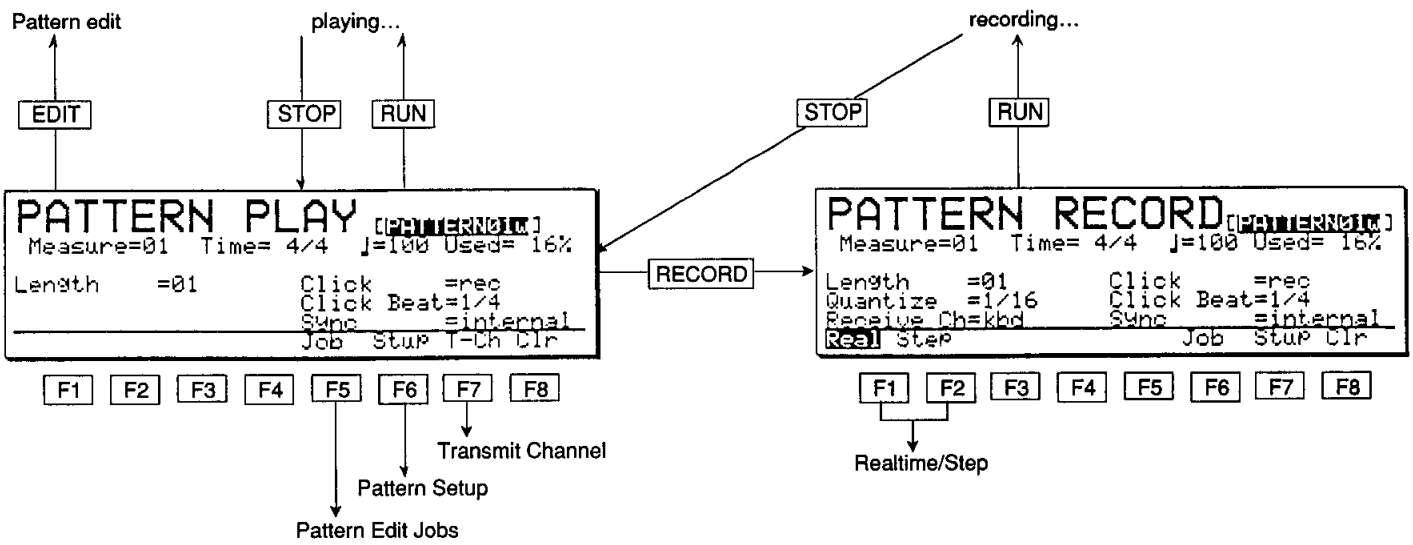
Since the transmission channel of each sequencer track can be modified, make sure that track 16 is transmitting its data on a channel that will be received by the voice in the multi which you want the patterns to be played by.

Pattern data may be recorded when the SY99 is in Voice mode. However, this data will not be played when the SY99 is in Voice mode unless the voice receive channel is set to the pattern track's transmit channel (usually channel 16) or "omn" (which means the voice will play data received on all channels). Refer to the explanation of the voice receive channel setting on page 258.

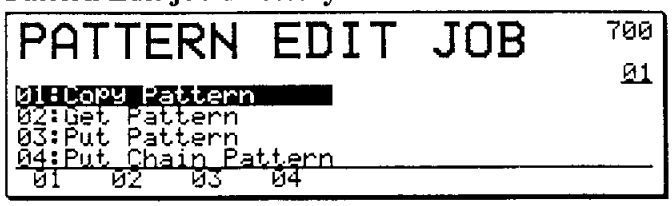


For details of how to place parts in track 16, refer to *Song edit, Chain pattern*, page 212.

How pattern mode is organized

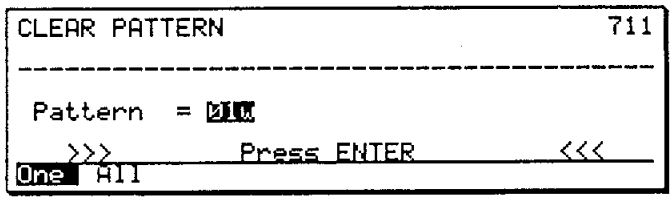


Pattern Edit job directory

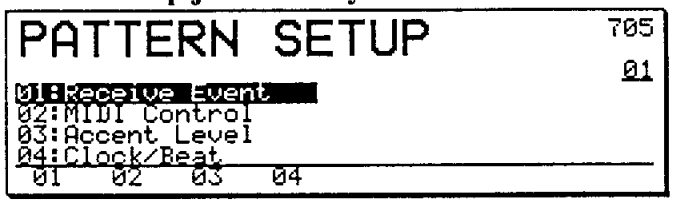


01:Copy Pattern
02:Get Pattern
03:Put Pattern
04:Put Chain Pattern

Clear Pattern



Pattern Setup job directory



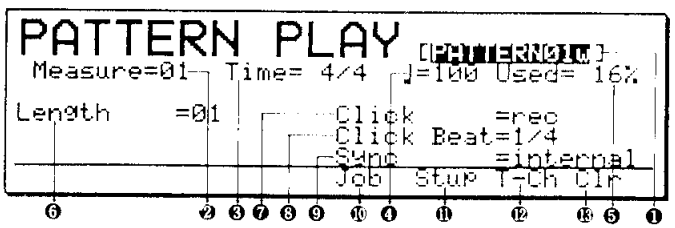
01:Receive Event
02:MIDI Control
03:Accent Level
04:Clock/Beat

Pattern play

Summary: In pattern play mode you can select and playback any pattern 01–99. You can also make settings for the click (metronome) and synchronization.

Procedure:

Press: PATTERN to enter pattern play mode. The PATTERN LED will light red.
Select: the pattern to playback.
To start: playback press RUN.
To stop: playback press STOP.



❶ Pattern (01...99): This selects the pattern to playback.

❷ Measure (001...032): This determines the measure from which the pattern will begin playback. Move the cursor here and specify the measure, or use the sequencer location buttons (|◁, ◁◁, LOCATE, or ▷▷).

❸ Time (1/4...32/16): This displays the time signature for this pattern as you specified in pattern record mode. This cannot be modified in pattern play mode.

❹ ♩ (30...250): This determines the tempo in quarter notes per minute.

❺ Used (0...100%): This displays the amount of used sequencer memory.

❻ Length (1...32): This displays the length of the pattern.

❼ 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.

❽ Click Beat (1/4, 1/6, 1/8, 1/12, 1/16, 1/24): This determines the beat on which the click will sound.

❾ 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.

❿ Press F5 (Job) to move to the Pattern Edit job directory. Refer to the following section, *Pattern edit jobs.*

⓫ Press F6 (Stup) to move to the Pattern Setup job directory. Refer to the following section, *Song setup edit jobs.*

⓬ Press F7 (T-Ch) to view or change the transmit channel settings for tracks 1 through 16. Refer to the following section, *Transmit channel.*

⓭ Press F8 (Clr) to clear a selected pattern or all patterns. Refer to the following section, *Clear pattern.*

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

During playback: During playback you can select another pattern, and modify the tempo, click, and click beat settings.

Patterns which contain no data cannot be selected. When you change the pattern number during playback, the currently playing pattern will finish before the newly selected pattern begins.

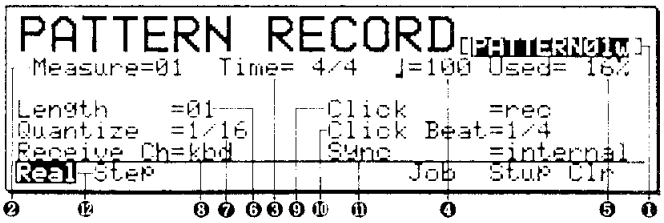
Pattern edit: Any time while in pattern play mode you can press EDIT to edit the pattern. For details refer to *Pattern edit*, page 241.

Pattern record

Summary: In pattern record mode you can make settings in preparation to recording a pattern. You can specify either realtime or step recording, set the time signature and length of the pattern, and make other settings for click and sync as in the Pattern Play display.

Procedure:

From: pattern play display
Press: RECORD and the RECORD LED will light.
Select: the recording mode.
To begin: recording press RUN.
To end: recording press STOP.



❶ PATTERN (01...99): Select the pattern you wish to record.

❷ Measure (01...32): This determines the measure from which the pattern 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 ▷▷).

❸ Time (01–08/4, 01–16/08, 01–32/16): This determines the time signature of the pattern to be recorded. It can be modified only for patterns which have not yet been recorded.

❹ ♩ (30...250): This determines the tempo in quarter notes per minute.

❺ Used (0...100%): This displays the amount of unused sequencer memory.

❻ Length (1...32): This indicates the length of the pattern. It can be modified only if the pattern has not yet been recorded.

❼ 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.

❽ Receive Channel (1–16, omni, kbd): This determines the source of data that will be recorded by the sequencer. Normally you will set this to "kbd" so that data from the SY99's keyboard will be recorded.

If you want to record data from an external MIDI device on a specific channel, set this to 1–16 so that data received at MIDI IN on the specified channel will be recorded.

If you want to record data from an external MIDI device on all channels then set this to "omni" so that all data received at MIDI IN will be recorded.

❾ 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.

❿ Click Beat (1/4, 1/6, 1/8, 1/12, 1/16, 1/24): This determines the beat on which the click will sound.

⓫ 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.

⓬ Recording mode (Real, Step): Press F1 or F2 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 at which you play.

Pattern recording procedure:

1. Select the pattern to record.
2. If the selected pattern has not yet been recorded, specify the time signature and length.
3. Make setting for tempo, quantize, receive channel, click, click beat, and sync.
4. Specify the recording mode; realtime (F1) or step (F2).
5. Press RUN and pattern recording will begin. The recording display will depend on the recording mode selected in step 2. For details see the following sections; *Pattern realtime record* or *pattern step record*.
6. When you are finished recording press STOP and you will return to the pattern play display.

Pattern edit: Any time while in pattern record mode you can press EDIT to edit the pattern. For details refer to *Pattern edit mode*.

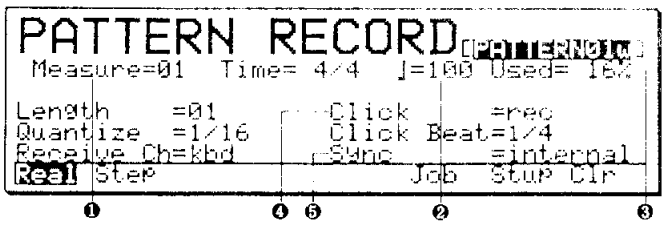
PATTERN RECORD

Pattern realtime record

Summary: In realtime recording the notes you play will be recorded in the exact timing at which you play them. Newly recorded notes will be added to the previous data in the pattern.

Procedure:

From: pattern record display
Press: F1 (Real) to select realtime recording.
To begin: recording press RUN. The RUN LED will blink at tempo.
To stop: recording and return to the song play display press STOP.



❶ Measure (01...32): As you record this will advance to show the currently recorded measure number of the pattern.

❷ ♩ (30...250): While recording you can move the cursor here to modify the tempo.

❸ Used (0...100%): As you record this will increase to show the amount of sequencer memory that has been used.

❹ 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.

❺ 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 pattern record display.

Unlike song realtime recording, pattern realtime recording gives you no choice of overdub or replace recording modes. Pattern recording is always in overdub mode, meaning that newly recorded notes will be added to the previous data in the pattern.

In realtime pattern recording the pattern will continue to repeat from beginning to end until you press STOP. This allows you to build up complex rhythmic parts one note at a time.

To delete: During realtime recording, you can delete any given note from the pattern by pressing SHIFT while holding down the key of the unwanted note.

Allow the pattern to run through the section you wish to erase.

Important: Pattern data may be recorded when the SY99 is in Voice mode. However, this data will not be played when the SY99 is in Voice mode unless the voice receive channel is set to the pattern track's transmit channel (usually channel 16) or "omn" (which means the voice will play data received on all channels). Refer to the explanation of the voice receive channel setting on page 258.

PATTERN RECORD

Pattern step record

Summary: In step recording the notes you play will be recorded at intervals of the specified step, regardless of the actual exact timing with which you play them. Newly recorded notes will be added to the previous data in the pattern.

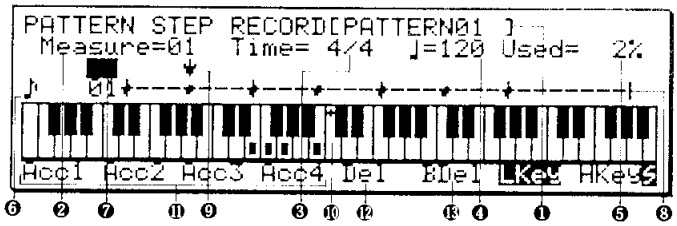
Procedure:

From: the pattern record display

Press: F2 (Step) to select step recording.

To begin: recording press RUN. The RUN LED will light green.

To stop: recording and return to the song play display press STOP.



❶ Pattern (01..99): Select the pattern to record.

❷ Measure (01...32): To move to another measure in the pattern, place the cursor here and modify the data.

❸ Time (01–08/4, 01–16/08, 01–32/16): The time signature is only displayed and cannot be modified.

❹ ♩: The tempo is only displayed and cannot be modified.

❺ Used (0...100%): This displays the amount of sequencer memory already used.

❻ 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).

❼ 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.

❽ This 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.

❾ 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.

❿ If the currently selected 32nd note area contains data, the notes in that area will be displayed on the keyboard diagram.

⓫ To select an accent value, press F1–F4. Subsequently entered notes will be given the selected accent value. To change the accent value assigned to F1–F4 refer to *Pattern setup job 4, accent level.*

⓬ To delete all data in the 32nd note area where the cursor is located, press F5 (Del). The cursor location will not change.

⓭ To delete all data in the 32nd note area before the cursor, press F6 (BDel). The cursor will move back one 32nd 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 slurred 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 8th 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:

- Entering 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.
- Move through the data: When the cursor is located at ❼ you can also use the cursor keys ◁▷ to move back and forth in the pattern, 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 pattern press STOP. You will return to the pattern play display, where you can press RUN and hear the pattern you just recorded.

Pattern edit

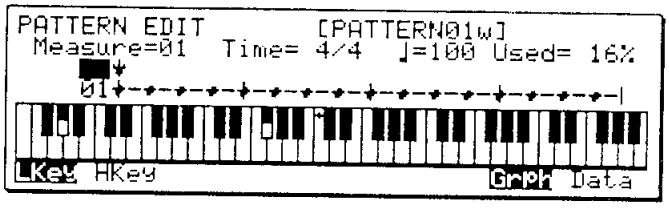
Summary: This is where you edit individual events that have been recorded in a pattern.

Procedure:

From: pattern play or pattern record mode
Press: EDIT.
To exit: edit mode and return to pattern play mode press EXIT.

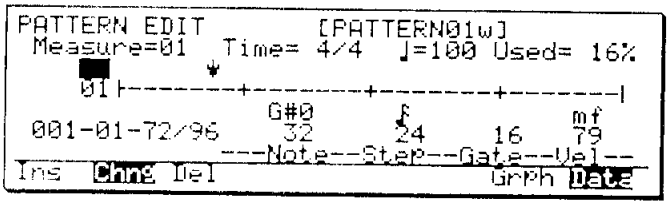
The pattern edit display will differ according to whether graph or data editing has been selected.

Pattern graph editing: To select graphic editing press F7 (Grph). The display will show a horizontal bar to indicate the position in the measure, and a keyboard diagram to indicate the notes that have been recorded at each step.



Pattern graph editing is exactly the same as song graph editing, except that the pattern number is displayed instead of the song name, and that the maximum measure number is 32 instead of 999. For details, please refer to *Song edit (graph)* on page 208.

Pattern data editing: To select data editing press F8 (Data). The display will show the type and numerical values for each event. Data editing is divided into two modes; graph mode and data mode. In data mode you can either Change or Insert data. When you enter data mode, change will automatically selected.



Pattern data editing is exactly the same as song data editing, except that the pattern number is displayed instead of the song name, and that the maximum measure number is 32 instead of 999. For details, please refer to *Song edit (data insert)* on page 210 or *Song edit (data change)* on page 209.

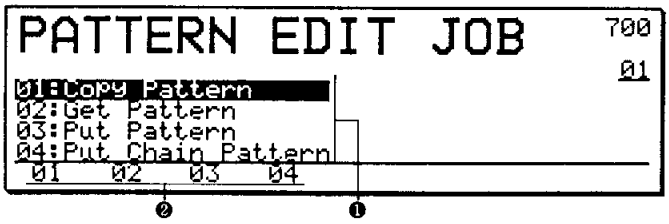
Pattern edit jobs

JUMP #700

Summary: Pattern edit jobs allow you to copy a pattern to another pattern, copy data from a track into a pattern, copy data from a pattern into a track, or copy the pattern data of all parts into a track.

Procedure:

From: the pattern play or pattern record display
Press: F5 (Job).



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

❷ Pressing F1–F4 will select the corresponding job 1–4.

01: Copy Pattern: Copy a pattern to another pattern.
02: Get Pattern: Copy data from specified measures of a track into a pattern.
03: Put Pattern: Copy data from a pattern into specified measures of a track.
04: Put Chain Pattern: Copy the pattern data of all parts into a specified track 1–15.

PATTERN EDIT JOBS

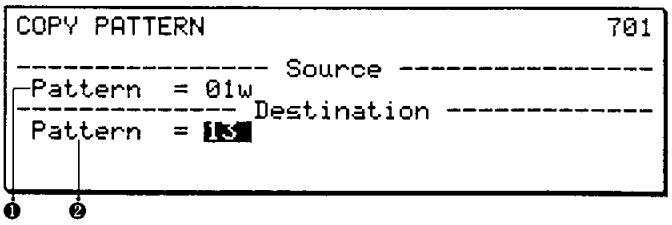
1. Copy pattern

JUMP #701

Summary: This operation copies a pattern to another pattern. This is useful when you want to create a new pattern that is similar to an already existing pattern.

Procedure:

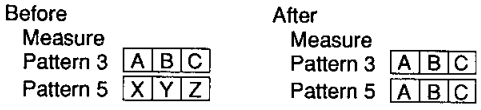
From:	the pattern edit job directory	(JUMP #700)
Select:	01:Copy Pattern	(JUMP #701)
Specify:	the Source pattern and the Destination pattern.	
To execute:	the operation press ENTER.	
To quit:	without executing press EXIT.	



❶ Source pattern (01...99): Specify the pattern you wish to copy.

❷ Destination pattern (01...99): Specify the pattern into which you wish to copy the source pattern. The previous data in the destination pattern will be lost.

Example: For settings of Source = pattern 3, Destination = pattern 5, the result would be as follows.



PATTERN EDIT JOBS

2. Get pattern

JUMP #702

Summary: Copy data from specified measures of a track 1–15 into a pattern.

Procedure:

From: the pattern edit job directory (JUMP #700)

Select: 02:Get Pattern. (JUMP #702)

Specify: the source track and the measures from which to copy the data, and specify the destination pattern into which to copy the data.

To execute: the operation press ENTER.

To quit: without executing press EXIT.

```
GET PATTERN                                  702
---------------- Source ----------------
Track      = 01
Top Measure = 001  Last Measure = 004
-------------- Destination --------------
Pattern   = 1r
```

❶ ❷

❶ Source (Track 01...15, Top Measure 001...32, Last Measure 001...32): Specify the track and measures from which to copy the data. Since the maximum length of a pattern is 32 measures, the last measure can be no more than 32 measures after than the top measure. Also, it is not possible to select measures which contain differing time signatures.

❷ Destination (Pattern 01...99): Specify the pattern into which the data will be copied.

The previous data in the destination pattern will be lost.

Example: For settings of "Source = track 2 measures 2–3, Destination = pattern 5", the result would be as follows.

Before

Measure	1	2	3	4	5	6	7	8	9	...
Track 2	A	B	C	D	E	F	G	H	I	...
Pattern 5										

After

Measure	1	2	3	4	5	6	7	8	9	...
Track 2	A	B	C	D	E	F	G	H	I	...
Pattern 5	B	C								

PATTERN EDIT JOBS

3. Put pattern

JUMP #703

Summary: Copy data from a pattern into specified measures of a track.

Procedure:

From: the pattern edit job directory (JUMP #700)

Select: 03:Put Pattern. (JUMP #703)

Specify: the source pattern, and specify the destination track and measure at which to copy the data from the pattern.

To execute: the operation press ENTER.

To quit: without executing press EXIT.

```
PUT PATTERN                                  703
---------------- Source ----------------
Pattern   = 01w
-------------- Destination --------------
Track      = 03
Top Measure = 008
-------------- Parameter ----------------
Put = 2 times
```

❷ ❸ ❶

❶ Source (Pattern 01...99): Specify the pattern from which the data will be copied.

❷ Destination (Track 01...15, Top Measure 001...32): Specify the track and measures to which the data will be copied.

❸ Put (1...99): Specify the number of times that the data will be copied from the pattern.

Example: For settings of "Source = pattern 5, Destination = track 2, measure 4, Put Time = 2" the result would be as follows.

Before

Measure	1	2	3	4	5	6	7	8	9	...
Track 2	Z	Z	Z	Z	Z	Z	Z	Z	Z	...
Pattern 5	A	B								

After

Measure	1	2	3	4	5	6	7	8	9	...
Track 2	Z	Z	Z	A	B	A	B	Z	Z	...
Pattern 5	A	B								

PATTERN EDIT JOBS

4. Put chain pattern

JUMP #704

Summary: Copy the data of all patterns used by track 16 (the pattern track) into a specified track 1–15.

Procedure:

From:	the pattern edit job directory	(JUMP #700)
Select:	04:Put Chain Pattern	(JUMP #704)
Specify:	the destination track	
To execute:	the operation press ENTER.	
To quit:	without executing press EXIT.	

```
PUT CHAIN PATTERN                    704
-------------- Destination -------------
 Track     = 04
```

❶

❶ Destination (Track 01...15): Specify the track to which the data will be copied. The previous data in the destination track will be lost.

Remarks: If the amount of data is large, some time may be required for the data to be copied. Since this operation copies the actual data of each pattern as many times as it is used in a pattern, the resulting destination track will occupy more memory than the original pattern data.

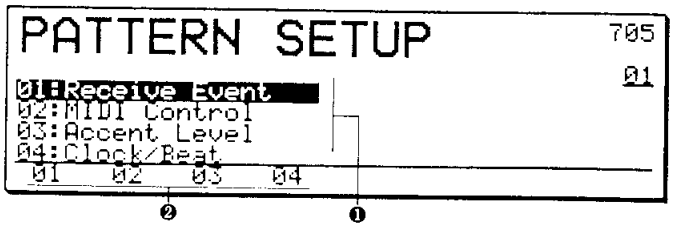
Pattern setup jobs

JUMP #705

Summary: Setup parameters affect the overall functioning of the sequencer.

Procedure:

From: the pattern play or pattern record display
Press: F6 (Stup) (JUMP #705)
Select: the desired pattern setup job



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

❷ 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.

Note: *These setup parameters can also be set from Song Play mode. The result is exactly the same whether you set them from Pattern or from Song mode. For details, refer to the Song setup jobs.*

Transmit channel

JUMP #710

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

Procedure:

From: pattern play mode

Press: F7 (T-ch) (JUMP #710)

Specify: the MIDI transmission channel for each track.

To exit: to pattern play mode, press EXIT.

```
TRANSMIT CHANNEL                                710
-----------------------------------------------
 Tr.01=[1]  Tr.05= 5  Tr.09= 9  Tr.13=13
 Tr.02= 2   Tr.06= 6  Tr.10=10  Tr.14=14
 Tr.03= 3   Tr.07= 7  Tr.11=11  Tr.15=15
 Tr.04= 4   Tr.08= 8  Tr.12=12  Tr.16=16
```

❶

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

Note: *The transmit channel assignments can also be changed from song play mode. The result is exactly whether you select this function from Pattern or from Song mode.*

The transmit channel used to transmit pattern data can be changed by changing the setting for Track 16.

Clear pattern

JUMP #711

Summary: All data can be cleared from any specified pattern or from all patterns 01–99.

Procedure:

From: pattern play mode
Press: F8 (Clr) (JUMP #711)
Specify: whether to clear a single pattern or all patterns.
To execute: the operation press ENTER.
To quit: without executing press EXIT.

```
CLEAR PATTERN                          711
-----------------------------------------
 Pattern  = 01
   >>>          Press ENTER          <<<
One  All
```

❷ ❸ ❶

❶ Pattern (01...99): If you have pressed F1 (One), specify the pattern to be cleared.
❷ To clear a single pattern press F1 (One) and specify the pattern.
❸ To clear all patterns press F2 (All).

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

UTILITY MODE

In utility mode you can make settings that affect the SY99's overall system, make settings for MIDI transmission and reception, transmit bulk data via MIDI, save or load SY99 data on card or disk, load and store sample data, store MIDI bulk data from another device, or use the SY99 as a MIDI master controller.

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Disk utility 265
Sample utility 275
MIDI data recorder utility 279
Master control utility 284

In Utility mode you can make settings that affect the SY99's overall system, make settings for MIDI transmission and reception, transfer data to and from a card, transfer data to and from a disk, load and store sample data, store MIDI bulk data received from another device, and use the SY99 as a MIDI master controller. The functions of the utility mode are divided into seven job directories. When you press UTILITY the last-selected of these directories will appear. Select a job directory by pressing F1–F7.

System Utility job directory

```
UTILITY                                  800
System Utility                            06
01:Master Tuning      05:Greeting Message
02:Velocity Set       06:Memory Allocate
03:Controllers        07:Switch Lock
04:Edit Confirm
Sys MIDI Card Disk SmPl MDR  Mstr          S
```

01:Master Tuning: The overall tuning of the SY99 can be adjusted both in half steps and 1-cent (approximately) steps.

02:Velocity Set: The SY99 keyboard and internal tone generator can be set to respond to your playing velocity in various ways.

03:Controllers: The MODULATION 2 wheel and an optional footswitch connected to the FOOT SWITCH jack will transmit data using the MIDI control number you specify. Also, the controller hold function can be set to prevent the resetting of modulation and other parameters affected by controllers.

04:Edit Confirm: The "Are you sure?" message that appears when you store, recall, or initialize data can be turned on/off.

05:Greeting Message: Edit the two-line message that is briefly displayed when the SY99 power is turned on.

06:Memory Allocate: Specify how much of the MDR/sample RAM will be used by the MDR.

07:Switch Lock: Lock the switches on the SY99 front panel.

MIDI Utility job directory

```
UTILITY                                  806
MIDI Utility                              01
01:Setting
02:Bulk Dump
Sys MIDI Card Disk SmPl MDR  Mstr          S
```

01:Setting: The SY99 will receive and transmit MIDI data as determined by the MIDI channels and settings specified here.

02:Bulk Dump: Various types of SY99 data can be transmitted via MIDI to another SY99 or other device.

Card Utility job directory

```
UTILITY (DATA CARD TYPE=----) 812
Card Utility                              01
01:Load From Data Card
02:Save To Data Card
03:Format Data Card
04:Load From Wave Card
Sys MIDI Card Disk SmPl MDR  Mstr          S
```

01:Load From Data Card: Synthesizer data can be loaded from a DATA card (RAM card or ROM card).

02:Save To Data Card: Synthesizer data can be saved to a RAM DATA card.

03:Format Data Card: Before you use a new MCD64 RAM card, you must use this operation to format it.

04:Load From Wave Card: Waveform data can be loaded from a WAVEFORM card.

Disk Utility job directory

```
UTILITY (DISK SAVE TYPE=SY99) 816
Disk Utility                  01
01:Disk Status      05:Backup Disk
02:Load From Disk   06:Rename File
03:Save To Disk     07:Delete File
04:Format Disk      08:Disk Save Type
Sys MIDI Card Disk Smpl MDR Mstr  S
```

01:Disk Status: This allows you to check the number of disk files of each type and the remaining free area on the disk.
02:Load From Disk: Synthesizer, sequencer, or card data can be loaded from disk.
03:Save To Disk: Synthesizer, sequencer, or card data can be saved to disk.
04:Format Disk: Before a newly purchased disk can be used it must be formatted.
05:Backup Disk: Use this operation to make backup disks for important data.
06:Rename File: An already existing disk file can be given a different name.
07:Delete File: An unwanted file can be deleted from disk.
08:Disk Save Type: This setting allows you to write disk files in SY77 "All Data", or "Synthesizer All" "Sequencer All" format.

Sample Utility job directory

```
UTILITY                       826
Sample Utility                01
01:Sample Dir       05:Initialize Sample
02:Sample Dump
03:Load From Disk
04:Save To Disk
Sys MIDI Card Disk Smpl MDR Mstr  S
```

01:Sample Dir: This allows the display, copying, and deleting of sample data.
02:Sample Dump: Output samples and waveforms from the SY99 by MIDI sample dump; also, output sample dump requests.
03:Load From Disk: Load sample data from disk.
04:Save To Disk: Save sample data to disk.
05:Initialize Sample: Initialize the SY99's sample memory.

MIDI Data Recorder utility

```
UTILITY                       830
MIDI Data Recorder Utility    01
01:Output           05:Initialize MDR
02:Input
03:Load From Disk
04:Save To Disk
Sys MIDI Card Disk Smpl MDR Mstr  S
```

01:Output: This operation transmits MIDI bulk data from SY99 MDR memory to an external device.
02:Input: This operation receives MIDI bulk data from an external device into SY99 MDR memory.
03:Load From Disk: This operation loads a file of MIDI bulk data from disk into the SY99 MDR memory.
04:Save To Disk: This operation saves MIDI bulk data from SY99 MDR memory to a disk file.
05:Initialize MDR: This operation initializes the SY99 MDR memory.

Master Control

```
UTILITY                       831
Master Control                01
01:Controller Select
02:Transmit Filter
Sys MIDI Card Disk Smpl MDR Mstr  S
```

01:Controller Select: Select one MIDI master control setups, and edit setup parameters.
02:Transmit Filter: Specify which types of data will be transmitted on which channels when the SY99 is in master control mode.

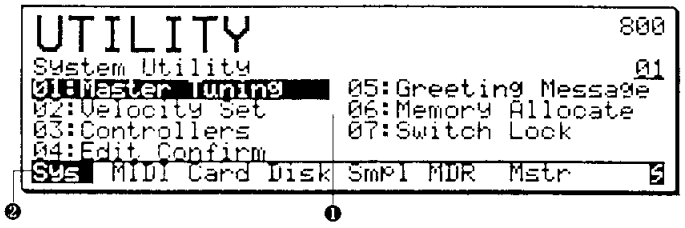
System utility

JUMP #800

Summary: System utility settings affect the entire SY99 system.

Procedure:

From: MIDI utility (JUMP #806)
Card utility (JUMP #812)
Disk utility (JUMP #816)
Sample utility (JUMP #826)
MDR utility (JUMP #830)
Master control (JUMP #831)
Press: F1 (Sys) (JUMP #800)
Select: the desired system utility job and press ENTER.



❶ Move the cursor in this area to select one of the following jobs and then press ENTER.

01: Master Tuning: The overall tuning of the SY99 can be adjusted both in half steps and 1-cent (approximately) steps.

02: Velocity Set: The SY99 keyboard and internal tone generator can be set to respond to your playing velocity in various ways

03: Controllers: The MODULATION 2 wheel and an optional footswitch connected to the FOOT SWITCH jack will transmit data using the MIDI control number you specify. Also, the controller hold function can be set to prevent the resetting of modulation and other parameters affected by controllers.

04: Edit Confirm: The "Are you sure?" message that appears when you store, recall, or initialize data can be turned on/off.

05: Greeting Message: The two-line message that is briefly displayed when the SY99 power is turned on can be edited.

06: Memory Allocate: Specify how much of the MDR/sample RAM will be used by the MDR.

07: Switch Lock: Lock the switches on the SY99 front panel.

❷ To move to a different utility mode press F2–F7. To select a job from the currently displayed job directory, hold SHIFT and press a function key.

SYSTEM UTILITY

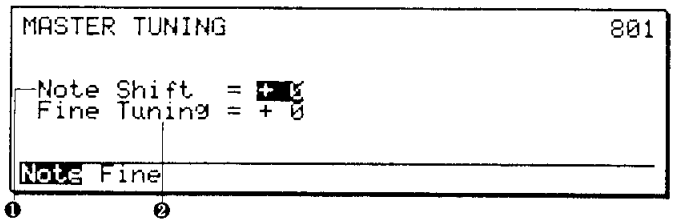
1. Master tuning

JUMP #801

Summary: The overall tuning of the SY99 can be adjusted both in half steps and fine tuning.

Procedure:

From: system utility job directory (JUMP #800)
Select: 01:Master Tuning (JUMP #801)
Specify: the overall tuning in half steps and fine steps



❶ Note Shift (–64...+63): This adjusts the pitch of the of the entire SY99 in half steps.

❷ Fine Tuning (–64...+63): This adjusts the pitch of the entire SY99 in steps of 1.171875 cents.

Remarks: To adjust the pitch of only specific voices, refer to *Voice Common job 2. Element Detune* and *3. Note Shift* (page 97).

This setting affects only the SY99's internal tone generator. It has no effect on the note numbers transmitted from MIDI OUT.

Certain voices using AWM waveforms may fail to sound properly if the note shift value is raised too high. Should this happen, try lowering the note shift value an octave. (The same phenomenon can occur when a voice is played at high pitch. This may be due to the element detune and note shift settings mentioned above.)

SYSTEM UTILITY

2. Velocity set

JUMP #802

Summary: The SY99 keyboard can be set to respond to your playing velocity in various ways.

Procedure:

From: system utility job directory (JUMP #800)
Select: 02:Velocity Set (JUMP #802)
Specify: the fixed velocity value and the velocity curve

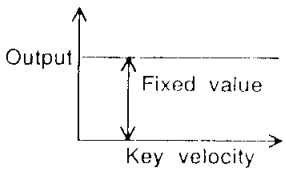
```
VELOCITY SET                                  802

 Fixed Velocity = Off
 Velocity Curve =  0  (normal )

 Fix  Curv
```

❶ ❷

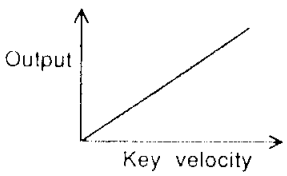
❶ Fixed Velocity (off, 1...127): When this is set "off", the SY99 tone generator will respond to your playing velocity according to the velocity curve specified in ❷. When this is set to a value 0...127, all notes will be given the same specified velocity value regardless of your playing velocity.

❷ Velocity Curve (0...7): This determines the way in which the SY99 tone generator will respond to your playing velocity as shown in the following diagrams.
Velocity curves 6 (cross-1) and 7 (cross-2) allow you to crossfade between two voices using key velocity. Set one voice to positive key velocity sensitivity and the other to negative key velocity sensitivity. Refer to *AFM element data 5. AFM sensitivity* (JUMP #243) and *AWM element data 4. AWM sensitivity* (JUMP #260).

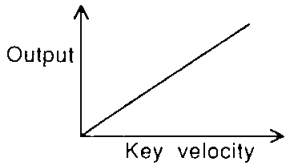
FIXED VELOCITY =1~127



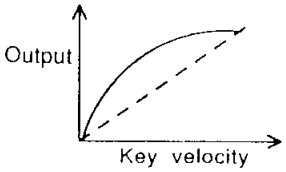
FIXED VELOCITY = Off



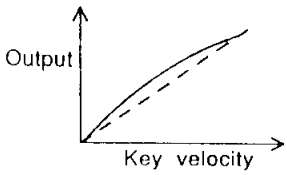
0. Normal



1. Soft – 1

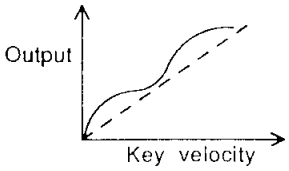


2. Soft – 2



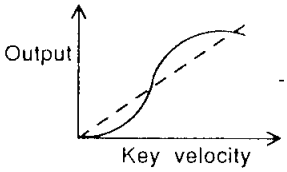
- - - is the Normal velocity curve

3. Easy



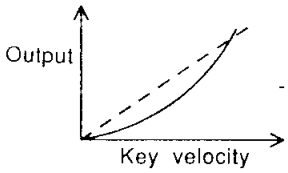
- - - is the Normal velocity curve

4. Wide



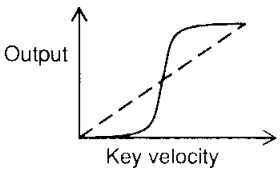
- - - is the Normal velocity curve

5. Hard

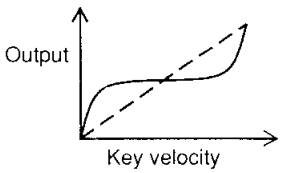


- - - is the Normal velocity curve

6. Cross – 1



7. Cross – 2



- - - is the Normal velocity curve

Remarks: When playing the sound of an instrument such as organ or harpsichord that normally does not respond to key velocity, it may be effective to use a fixed velocity value. A similar result could be achieved by setting all velocity sensitivity parameters of the voice to 0. In fact this is preferable since it will leave all other voices at their normal velocity settings.

The velocity curve setting affects only the SY99's internal tone generator, and will be effective for notes received from MIDI IN as well as notes played on the SY99 keyboard. This setting has no effect on the note messages transmitted from MIDI OUT.

SYSTEM UTILITY

3. Controllers

JUMP #803

Summary: The MODULATION 2 wheel and an optional footswitch connected to the FOOT SWITCH jack will transmit data using the MIDI control number you specify. Also, the controller hold function can be set to prevent the resetting of modulation and other parameters affected by controllers.

Procedure:

From: system utility job directory (JUMP #800)
Select: 03:Controllers (JUMP #803)
Specify: the MIDI control number for each assignable controller

```
CONTROLLERS                                  803
      Controller        | MIDI Control Number
Assignable Foot Sw      |065 Portament Switch
Assignable Wheel        |013 Non-assigned no.

Controller Hold     = off
Foot Whl  Hold
```

❸ ❷ ❶

❶ Assignable Foot Switch (1...120): An optional foot switch connected to the rear panel FOOT SWITCH jack will transmit control messages of the type you specify here.

❷ Assignable Wheel (1...120): The MODULATION 2 wheel located at the left of the SY99 keyboard will transmit control messages of the type you specify here.

❸ Press F1 (Foot) or F2 (Whl) to move the cursor to ❶ or ❷.

Remarks: The settings in *Voice Common job 12. Controllers* (JUMP #226, #227, #228) determine the type of control message by which each parameter will be controlled. If you want to use an assignable controller to control the SY99's voices, make sure that the MIDI control number you assign matches the MIDI control number selected for the parameter you want to control.

If you want to assign the MODULATION 2 wheel or the FOOT SWITCH to control external MIDI equipment and not affect the SY99's tone generator, use a MIDI control number that is not used in *Voice Common job 12. Controllers* (JUMP #226, #227, #228). Refer to the MIDI implementation chart in the manuals for your other devices to learn how each device reacts to incoming MIDI control data. The official MIDI standard defines the use of the following control change messages.

Control change numbers 000 and 032 are used by the Bank Select message, and cannot be selected.

Continuous type		On/off type	
001	Modulation wheel	064	Sustain
002	Breath controller	065	Portamento
004	Foot controller	066	Sostenuto
005	Portamento time	067	Soft pedal
006	Data entry	069	Hold 2
007	Main volume	091	Ex effect depth
008	Balance control	092	Tremolo depth
010	Panpot	093	Chorus depth
011	Expression	094	Celeste depth
		095	Phaser depth

Normally, modulation and other parameters affected by the movement of controllers (except for main volume) are reset when a program change is executed. You can prevent the resetting of these parameters by setting the controller hold function to "on". When this setting is made, all parameter values are maintained regardless of their controller assignments. For example, if pitch modulation is applied to one voice using MODULATION 1, the same amount of pitch modulation will be applied to the next voice that is selected so long as pitch modulation is enabled for that voice. (Note that pitch modulation need not be assigned to MODULATION 1 – or any other controller, for that matter – for the controller hold function to take effect.)

Main volume, modulation, and all other parameters affected by the movement of controllers will be reset when the SY99's mode is changed from Multi to Voice mode (or vice versa), or by the execution of a program change in Multi mode, even if the controller hold function is turned on.

SYSTEM UTILITY

4. Edit confirm

JUMP #804

Summary: The "Are you sure?" message that appears when you store, recall, or initialize data can be turned on/off.

Procedure:

From: system utility job directory (JUMP #800)
Select: 04:Edit Confirm (JUMP #804)
Specify: whether or not the confirm message will appear

```
EDIT CONFIRM                    804

 Edit Confirm = on
```

❶

❶ Edit Confirm (on, off): When this is on you will be asked "Are you sure?" whenever an operation that erases or replaces data is about to be performed. When this is off the operation will be executed without asking for confirmation.

Remarks: Until you are familiar with the SY99 we recommend that you leave this on.

SYSTEM UTILITY

5. Greeting message

JUMP #805

Summary: Edit the two-line message that is briefly displayed when the SY99 power is turned on.

Procedure:

From: system utility job directory (JUMP #800)
Select: 05:Greeting Message (JUMP #805)
Specify: the greeting message

```
GREETING MESSAGE                805

  Line 1    = [ Create YOUR sound !]
  Line 2    = [   ...I'm ready     ]
Clr  Uppr Lowr
```

❷ ❶

❶ Enter the two-line x 20 character greeting message.

❷ To clear the currently entered message press F1 (Clr). (If you clear the greeting message, the greeting message box will not appear when the SY99's power is turned on.) 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 data* of *Introducing the SY99*.

SYSTEM UTILITY

6. Memory allocate

JUMP #820

Summary: Specify how the SY99's 512 Kbytes of internal MDR/sample RAM will be allocated for use by MDR data, and how much will be used for sample data.

Procedure:

From:	system utility job directory	(JUMP #800)
Select:	06:Memory Allocate	(JUMP #820)
Specify:	how much memory to allocate to MDR data and sample data.	
To execute:	memory allocation press F8 (Go)	
To quit:	without executing press EXIT	

```
MEMORY ALLOCATE                          820
  All Memory =  512 KByte
      Sample =  512 K   Used =  445 K
      MDR    =    0 K   Used =    0 K
                Init                    Go
```

❶ With the cursor located at the MDR memory value, adjust the allocation for that type of memory in 4-Kbyte steps. (The minimum value which can be allocated to MDR memory Kbytes is 8 Kbytes.) The Sample memory value is automatically adjusted so that the total will always be 512 Kbytes.

❷ By pressing F4 (Init) you can clear the memory and assign all 512 Kbytes to sample memory.

❸ After you make settings in ❶, you must press F8 (Go) for the settings to take effect. If you increase the sample memory allocation and press F8 (Go), the existing sample data will be preserved. The same will be true if you decrease sample memory, but leave enough memory to hold the samples currently contained by the SY99. However, if you attempt to decrease the sample memory area to a value insufficient to hold the samples currently contained by the SY99, an error message will appear informing you that the change cannot be executed as desired. In such a case, you will have to initialize the sample RAM area before attempting to decrease its volume.

MDR Memory: The MDR function lets you use the SY99's disk to save and load bulk data from other devices. Refer to *MIDI Data Recorder Utility*, page 279.

Sample Memory: Sample data can be received at any time via MIDI from another device. Sample data can also be loaded from disk as explained in *Sample Utility, 3.Load from disk*, page 277. These samples can be assigned to a waveform, and used in the same way as preset and card AWM waveforms. Refer to *AWM element data, 2.0 Waveform edit*, page 160.

Expansion RAM: The size of the MDR/sample memory area can be expanded to a maximum of 3 Mbytes using optional expansion memory boards, model SYEMB05. However, even when the SY99's MDR/sample memory has been increased in this manner, the amount of this area which can be allocated to MDR use is limited to a maximum of 512 Kbytes.

For details regarding memory expansion, refer to *Expansion memory boards* in the appendix (page 325).

SYSTEM UTILITY

7. Switch lock

Summary: Lock the front panel switches of the SY99 to keep them from being operated unintentionally.

Procedure:

From:	system utility job directory (JUMP #800)
Select:	07:Switch Lock
To lock:	the front panel switches press YES
To quit:	without locking press NO or EXIT
To unlock:	the front panel switches press SHIFT+EXIT

```
SWITCH LOCK

ARE YOU SURE ?
(Yes or No)
```

This function locks the front panel switches on the SY99. This may be convenient when you wish to place books or sheet music on the SY99 front panel, and do not want memories to be changed accidentally. To unlock the front panel switches, simultaneously press the SHIFT and EXIT buttons or turn off the power once, and you will return to the System Utility job directory.

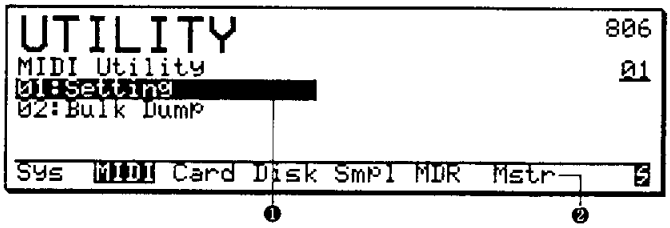
MIDI utility

JUMP #806

Summary: MIDI utility settings determine how MIDI data is transmitted and received.

Procedure:

From: System utility (JUMP #800)
Card utility (JUMP #812)
Disk utility (JUMP #816)
Sample utility (JUMP #826)
MDR utility (JUMP #830)
Master control (JUMP #831)
Press: F2 (MIDI) (JUMP #806)
Select: the desired MIDI utility job and press ENTER.



❶ Move the cursor in this area to select one of the following jobs and then press ENTER.
01: Setting: The SY99 will receive and transmit MIDI data as determined by the MIDI channels and settings specified here.
02: Bulk Dump: Various types of SY99 data can be transmitted via MIDI to another SY99 or other device.

❷ To move to a different utility mode press F1 or F3–F7. To select a job from the currently displayed job directory, hold SHIFT and press a function key.

MIDI UTILITY

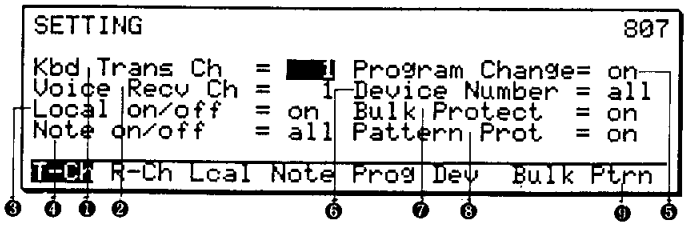
1. Setting

JUMP #807

Summary: The SY99 will receive and transmit MIDI data as determined by the MIDI channels and settings specified here.

Procedure:

From: MIDI utility job directory (JUMP #806)
Select: 01:Setting (JUMP #807)
Specify: MIDI transmit and receive channels and settings



❶ Keyboard Transmit Channel (1...16): This determines the channel on which data will be transmitted from MIDI OUT when you play the keyboard or move the various controllers. In multi mode, this also determines which of the sixteen voices will be played by the keyboard.

❷ Voice Receive Channel (1...16, omni): This determines the channel on which the SY99 can be played when in voice play mode. When "omni" is selected the SY99 will respond to any channel. In multi play mode, bank select messages and effect control messages will be received on this channel.

❸ Local on/off (off, on): This determines whether or not the SY99 keyboard will play the SY99 tone generator. Usually you will leave this on so that the SY99 keyboard will play the SY99 tone generator.

When set off, the SY99 tone generator will produce sound only in response to messages from MIDI IN, but messages will be transmitted from MIDI OUT when you play the keyboard or move the various controllers.

Data from the SY99's internal sequencer will always be sent to the tone generator regardless of the Local on/off setting.

❹ Note on/off (all, odd, even): When set to "all", the SY99 tone generator will produce sound in response to all notes received at MIDI IN. When set to "odd" or "even", the SY99 tone generator will respond only to odd or even notes. This affects only the notes received at MIDI IN, and will have no effect on the notes played by the SY99 keyboard.

❺ Program Change (off, on): This determines what the SY99 does when a program change message is received at MIDI IN, and how program change messages are transmitted from MIDI OUT. Usually you will leave this set at "on". For details, see the following explanations for *Program Change = off* and *Program Change = on.*

The SY99 will also receive and transmit MIDI bank select messages (see the chart below).

❻ Device Number (off, 1...16, all): This determines the channel on which the SY99 will receive or transmit MIDI system exclusive messages such as parameter changes and bulk data. When "off" is selected, system exclusive messages will not be transmitted or received. When "all" is selected, system exclusive messages will be transmitted on channel 1, and received on any channel.

❼ Bulk Protect (off, on): The SY99 is able to receive system exclusive bulk data at any time, and the newly received data will replace the data in memory. By setting bulk protect on you can prevent unexpected bulk data from overwriting important data.

❽ Pattern Protect (off, on): Song data in the K-Seq format in MIDI consists of both song data and pattern data. If the pattern protect item is set to "off" the SY99 will receive both the song data and the pattern data. By setting the pattern protect to "on," you can instruct the SY99 to selectively admit song data but exclude pattern data. This is useful when you wish to receive in songs without overwriting the pattern data currently contained in the SY99's sequencer memory.

❾ Pressing F1–F8 will move the cursor to the corresponding item in the display.

Local: If you are using the SY99 by itself, you should usually leave local on. However local off can be useful in the following situations.

Some commercially available MIDI processing devices are able to receive a stream of MIDI note and controller data and process it to create parallel harmony or other musical effects. If you have this type of MIDI processing unit, it may be interesting to turn the SY99 local parameter off and make MIDI connections so that the note and controller data transmitted from the SY99's MIDI OUT is processed by the MIDI processing parameter unit and then transmitted back to the SY99's MIDI IN.

If you use an external sequencer with the SY99, you will probably record from the SY99's MIDI OUT to the sequencer, and playback from the sequencer's MIDI OUT to the SY99's MIDI IN. If the external sequencer is able to echo back (retransmit) the data being recorded, you can turn local off for the SY99 so that it produces sound only in response to data from the external sequencer.

Note on/off: This setting can be used to increase the number of simultaneous notes. Each SY99 is able to produce up to 16 notes of AFM sound and 16 notes of AWM sound at once. By sending the same MIDI data to two SY99s and setting one to note "odd" and the other to note "even", you can double the number of simultaneous notes that can be produced.

Program Change = off: Incoming bank select and program change messages will be ignored. Program change messages will not be transmitted.

Program Change = on: Incoming bank select and program change messages will be executed as indicated in the chart below.

	Voice/ Multi Number	Bank Select	Program Change
Voice (Internal)	1–64	1	1–64
(Card)	1–64	2	1–64
(Preset1)	1–64	3	1–64
(Preset2)	1–64	6	1–64
Multi (Internal)	1–16	17	65–80
(Card)	1–16	18	65–80
(Preset)	1–16	19	65–80
Voice in Multi (Internal)	1–64	33	1–64
(Card)	1–64	34	1–64
(Preset1)	1–64	35	1–64
(Preset2)	1–64	38	1–64

MIDI UTILITY

2. Bulk dump

JUMP #809

Summary: Various types of SY99 data can be transmitted via MIDI to another SY99 or other device.

Procedure:

From: MIDI utility job directory (JUMP #806)
Select: 02:Bulk Dump (JUMP #809)
Specify: the type of data to be transmitted
To execute: data transmission press F8 (Go).
To quit: without executing press EXIT.

```
BULK DUMP                                  809
                                            01
01:Vc & Mlt  05:64 Voice   09:Sequencer
02:Syn Setup 06:16 Multi   10:1Song & Ptn
03:Pan       07:1 Voice    11:Seq Setup
04:McrTuning 08:1 Multi    12:NSEQ
                                           Go
```

❶

❶ Move the cursor in the area to select the type of data you wish to transmit. Then press F8 (Go).

01: Vc & Mlt: All internal voice, multi, data
02: Syn Setup: System setup data for the synthesizer section
03: Pan: All internal pan data
04: McrTuning: All internal micro tuning data
05: 64 Voice: All internal voices
06: 16 Multi: All internal multis
07: 1 Voice: A single specified voice
08: 1 Multi: A single specified multi
09: Sequencer: Data for one song, plus pattern data and sequencer setup data
10: 1Song & Pat: Data for one song, plus pattern data
11: Seq Setup: Sequencer setup data
12: NSEQ: Data for one song in N-Seq format

Go: When you press F8 (Go) transmission will begin and the bottom line of the LCD will display "Now transmitting !" When transmission ends the bottom line will display "Completed !"

System setup data: The system setup data transmitted by bulk dump 02:Syn Setup consists of all System utility, MIDI utility, and master control settings.

1 Voice: If you select 07:1 Voice and press F8 (Dir) a directory of the sixteen voices in the currently selected bank will appear. Select a bank A–D, and select a voice 1–16. Then press F8 (Go) and the data of the selected voice will be transmitted. Only internal voices can be dumped.

1 Multi: If you select 08:1 Multi and press F8 (Dir) a directory of the sixteen multis in the currently selected memory will appear. Select a multi 1–16. Then press F8 (Go) and the data of the selected multi will be transmitted. Only internal multis can be dumped.

Sequencer data: If you select 09:Sequencer, 10:1Song & Pat, or 12:NSEQ and then press F8 (Dir), a directory of the songs in the sequencer memory will appear. Select a song and press F8 (Go) to transmit the data for the song (plus pattern and setup data, depending on the dump type selected) as a MIDI sequencer data dump. All pattern data will be transmitted no matter which song is selected.

The selection of a song is the same as described for the song directory on page 232, except that direct selection using the function keys is not possible.

Remarks: For the data to be received by another SY99, the device number settings of the two units must match.

Data transmitted by 07:1 Voice or 08:1 Multi will be received into the editing buffer of the receiving device. If you select another memory before storing it into a memory, the newly received data will be lost.

Receiving system setup data by bulk dump: The SY99 is capable of receiving all system setup data which can be transmitted as a bulk dump. However, the MDR/sample RAM memory allocation setting will not be changed as the result of an incoming bulk dump.

Receiving song data by bulk dump: When data for a single song is received by bulk dump (whether in K-Seq or N-Seq format), that song is automatically assigned to the song number of the currently selected song. Any sequence data for the current song will be deleted by the incoming data. Moreover, Next Song, Next Mode, and PGM Select settings cannot be received as part of a song data bulk dump; these items will retain the values set for the previous current song, if any.

Card utility

JUMP #812

Summary: Card utility jobs allow you to transfer data to and from a card, and to format a card to accept SY99 data.

Procedure:

From:	System utility	(JUMP #800)
	MIDI utility	(JUMP #806)
	Disk utility	(JUMP #816)
	Sample utility	(JUMP #826)
	MDR utility	(JUMP #830)
	Master control	(JUMP #831)
Press:	F3 (Card)	(JUMP #812)

Select: the desired card utility job and press ENTER.

```
UTILITY (DATA CARD TYPE=----) 812
Card Utility                  01
01:Load From Data Card
02:Save To Data Card
03:Format Data Card
04:Load From Wave Card
Sys  MIDI Card Disk SmPl MDR  Mstr
```

❶ ❷

❶ Move the cursor in this area to select one of the following jobs and then press ENTER.

01: Load From Data Card: Synthesizer data can be loaded from a DATA card (RAM card or ROM card).

02: Save To Data Card: Synthesizer data can be saved to a RAM DATA card.

03: Format Data Card: Before you use a new MCD64 RAM card, you must use this operation to format it.

04: Load From Wave Card: Waveform data can be loaded from a WAVEFORM card.

❷ To move to a different utility mode press F1–F2 or F4–F7. To select a job from the currently displayed job directory, hold SHIFT and press a function key.

CARD UTILITY

1. Load from data card

JUMP #814

Summary: Synthesizer data can be loaded from a RAM or ROM card.

Procedure:

From:	card utility job directory	(JUMP #812)
Select:	01:Load From Data Card	(JUMP #814)
Specify:	the type of data to be loaded.	
To execute:	the load operation press F8 (Go).	
To quit:	without executing press EXIT.	

```
LOAD DATA CARD (DATA CARD TYPE=SY99) 814

 Data        = synthe all

                                  Go
```

Data Type (synth all, multi&voice (pan, mct), synth setup): You can load all or part of the data from card. When "synth all" is selected all the data will be loaded. When "multi&voice (pan, mct)" is selected multi, voice, pan, and micro-tuning data will be loaded. When "synth setup" is selected the system setup data will be loaded. Master Controller Select data is not loaded.

If the card was formatted for the SY77, "synth all" will be the only choice.

This function loads the specified type of synthesizer data from a RAM or ROM card inserted in the DATA card slot. After selecting the data type to load, press F8 (Go) to load the data from card. The display will ask "Are you sure?" so if you are sure you want to load the data press YES.

If the card inserted in the DATA slot is formatted for a different type of device the LCD will show "ERROR: Illegal Format!" Press EXIT to exit from the error message.

System setup data: The system setup data loaded when "synth all" or "synth setup" data is selected consists of all System utility, MIDI utility, and master control settings. The MDR/sample memory allocation ratio or master controller select will be changed as a result of either of these load operations.

CARD UTILITY

2. Save to data card

JUMP #813

Summary: Synthesizer data can be saved to a RAM card.

Procedure:

From: card utility job directory (JUMP #812)
Select: 02:Save To Data Card (JUMP #813)
To execute: the operation press F8 (Go).
To quit: without executing press EXIT.

```
SAVE DATA CARD (DATA CARD TYPE=SY99) 813

   All (synthe) data will be saved

                                    Go
```

This job saves all synthesizer data to a RAM card inserted in the DATA card slot. Before a newly purchased RAM card can be used by the SY99 it must be formatted using the *4. Format data card* function explained later in this section.

Press F8 (Go) to save the synthesizer data to card. The display will ask "Are you sure?" so if you are sure you want to save the data press YES.

If the card inserted in the DATA card slot has not been formatted for the SY99 or the SY77, the LCD will show "ERROR: Illegal Format !" Press EXIT to exit from the error message.

This function saves the following data to RAM card.

- System setup data (System utility, MIDI utility, and master control settings)
- Pan data
- Micro tuning data
- Internal voices 1–64
- Internal multis 1–16

CARD UTILITY

3. Format data card

JUMP #815

Summary: Before you use a new RAM card, you must format it so that the card can be used by the SY99 or the SY77.

Procedure:

From: card utility job directory (JUMP #812)
Select: 03:Format data card (JUMP #815)
To execute: the operation press F8 (Go).
To quit: without executing press EXIT.

```
FORMAT DATA CARD                    815
 Current Data Card Type = SY77
              Format to   SY99
 Card data will be erased !
SY99 SY77                           Go
```

This function prepares an MCD64 RAM card (sold separately) for use by the SY99 or the SY77.

Insert the card into the data card slot. Press F1 (SY99) or F2 (SY77) to indicate which synthesizer the card is to be used by. (If "SY77" is selected the card will be formatted for use by either the SY77 or the SY99. If "SY99" is selected, however, the card may not be used by the SY77.) Then press F8 (Go) to format the data card. The display will ask "Are you sure?" so if you are sure you want to format the card press YES.

If the card is faulty or is a type that cannot be used by the SY99 the LCD will show an error message. Press EXIT to exit from the error message.

CARD UTILITY

4. Load from wave card

JUMP #824

Summary: This operation loads the entire contents of the currently inserted WAVEFORM card into the sample memory, allowing you to simultaneously use AWM voices that use data from two different WAVEFORM cards.

Procedure:

From:	card utility job directory	(JUMP #812)
Select:	04:Load From Wave Card	(JUMP #824)
To execute:	the operation press F8 (Go)	
To quit:	without executing press EXIT	

```
LOAD WAVE CARD                    824

    All data will be loaded

                                  Go
```

❶

❶ To load all waveform data from the currently inserted WAVEFORM card, press F8 (Go). To quit without loading press EXIT.

Remarks: If all the voices you are playing use the same AWM WAVEFORM card (or preset waveforms), there is no need to use this operation.

This operation will be useful only when you wish to use waveforms from more than one waveform card at the same time. Once you have loaded the contents of a waveform card, you can then insert the other card into the WAVEFORM slot, and have the waveform data of both cards available simultaneously.

Waveform and sample data loaded using this operation will be placed in consecutive sequence in available MDR/sample RAM memory. Data from two cards may be loaded at once, as long as there is sufficient memory available to load all of the waveform and sample data from the second card in sequence after the data from the first card.

If sufficient memory is not available, an error message will be displayed to inform you of this fact. You may wish to try using the initialize waveform (page 161), sample delete (page 275), initialize sample (page 278), or memory allocate (page 256) operations to free enough memory to load the data.

Keep in mind, however, that any memory area freed by deleting samples or initializing waveforms must allow the loaded data to fit into the memory in consecutive order. Thus, for example, it will be of little merit to delete only the first of a series of samples.

The data contained in optional waveform cards is copy protected so that it cannot be illegally transferred to disk or to another device via MIDI sample dump. The same applies to some sample data disks. Copy-protected samples are indicated on the SY99 sample directory display by a key symbol, like the one shown here, before the sample name.

Disk utility

JUMP #816

Summary: Disk utility operations allow you to transfer data to and from a disk, and to format a disk to accept SY99 data.

Procedure:

From: System utility (JUMP #800)
MIDI utility (JUMP #806)
Card utility (JUMP #812)
Sample utility (JUMP #826)
MDR utility (JUMP #830)
Master control (JUMP #831)
Press: F4 (Disk) (JUMP #816)
Select: the desired disk utility job and press ENTER

```
UTILITY (DISK SAVE TYPE=SY99) 816
Disk Utility                    01
01:Disk Status    05:Backup Disk
02:Load From Disk 06:Rename File
03:Save To Disk   07:Delete File
04:Format Disk    08:Disk Save Type
Sys  MIDI Card Disk SmPl MDR  Mstr  9
```

❶ ❷

❶ Move the cursor in this area to select one of the following jobs and then press ENTER.

01: Disk Status: This allows you to check the number of disk files of each type and the remaining free area on the disk.

02: Load From Disk: Synthesizer, sequencer, or card data can be loaded from disk.

03: Save To Disk: Synthesizer, sequencer, or card data can be saved to disk.

04: Format Disk: Before a newly purchased disk can be used it must be formatted.

05: Backup Disk: Use this operation to make backup disks for important data.

06: Rename File: An already existing disk file can be given a different name.

07: Delete File: An unwanted file can be deleted from disk.

08: Disk Save Type: This setting allows you to write "All Data", "Sequencer All", or "Synthesizer All" files in SY77 format. Songs saved as "1 Song" or "Song ESEQ" files will be saved in a format common to both the SY99 and SY77, regardless of this setting.

❷ To move to a different utility mode press F1–F3 or F5–F7. To select a job from the currently displayed job directory, hold SHIFT and press a function key F1–F8.

Important: Before using a newly purchased disk or a disk that has been used by other devices, you must format the disk using the 04:Format Disk operation.

DISK UTILITY

1. Disk status

Summary: You can check the number of disk files and the remaining free area on the disk.

Procedure:

From: disk utility job directory (JUMP #816)
When: the disk you want to check is inserted
Select: 01:Disk Status
To exit: the disk status display press EXIT.

```
DISK STATUS
                    All      =  1 Files
Total =    12 Files Syn all  =  2 Files
                    Seq all  =  2 Files
Used  = 623K bytes  Sample   =  3 Files
Free  =  90K bytes  Card     =  1 Files
                    MDR      =  0 Files
                    Misc.    =  3 Files
```

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

❶ Total: The total number of files on the disk
❷ Used: The amount of disk space occupied by files
❸ Free: The amount of unused disk space
❹ All: The number of files saved as "All Data"
❺ Syn all: The number of files saved as "Synthesizer All"
❻ Seq all: The number of files saved as "Sequencer All"
❼ Sample: The number of files saved using the Sample utility save to disk function. See *Sample utility 4.Save to disk*, page 277.
❽ Card: The number of files saved as "Card"

❾ MDR: The number of files saved by the MDR function (see *MIDI data recorder utility,* page 279)

❿ Misc.: The number of all other types of files

Remarks: When this job is selected the currently inserted disk will be checked immediately, so be sure to insert the disk before you select the job. There are no settings to make in this job.

DISK UTILITY

2. Load from disk

JUMP #817

Summary: Synthesizer, sequencer, or card data can be loaded from disk.

Procedure:

From: disk utility job directory (JUMP #816)
Select: 02:Load From Disk (JUMP #817)
Specify: the type of data to be loaded.
Press: ENTER
Select: the file from which to load the data.
To execute: the loading operation press F8 (Go).
To quit: without loading press EXIT.

```
LOAD FROM DISK                                  817

01:All Data   06:Pan          11:1 Voice 01
02:Synth All  07:McrTuning    12:1 Multi
03:Seq All    08:Seq Setup    13:1 Song
04:Syn Setup  09:Song & Ptn   14:Card
05:Vc & Mlt   10:Other seq
```

❶

❶ Move the cursor in this area to select the type of data you wish to load from disk.

01: All Data: All data of the SY99
02: Synth All: 64 voices, 64 multis, 32 pan, 2 micro tuning, and system setup
03: Seq All: K-Seq data and setup data of the sequencer section
04: Syn Setup: Synthesizer system setup data from a disk file that was saved as "All Data"
05: Vc & Mlt: 64 voices, 64 multis, from a disk file that was saved as "All Data"
06: Pan: 32 pan data from a disk file that was saved as "All Data"
07: McrTuning: 2 micro tuning data from a disk file that was saved as "All Data"
08: Seq Setup: Setup data from a disk file that was saved as "All Data"
09: Song & Ptn: 1 song and pattern sequencer data from a disk file that was saved as "All Data"
10: Other Seq: Sequencer data in K-Seq, E-Seq, N-Seq, or standard MIDI file format
11: 1 Voice: A single selected voice from a disk file that was saved as "All Data"
12: 1 Multi: A single selected multi from a disk file that was saved as "All Data"
13: 1 Song: A song that was saved as "1 Song"
14: Card: Data that was saved as "Card"

Types of load operations: The data that can be loaded by each operation depends on the type of save operation that was used (refer to the following section *3.Save to disk*):

Data that was saved using this operation:	an be loaded using this operation:
01:All Data	01:All Data, 04:Syn Setup 05:Vc & Mlt, 06:Pan 07:McrTuning, 08:Seq Setup 09:Song & Ptn, 11:1 Voice 12:1 Multi
02:Synthesizer All	2:Synth All
03:Sequencer All	3:Seq All
04:1 Song	13:1 Song
05:Song ESEQ	10:Other Sequence
06:MIDI File	10:Other Sequence
07:Card	14:Card

The load operation procedure may vary slightly depending on the type of load operation selected. Details are given below.

Load from disk (types 1–8 and 14): As the chart above shows, load operation types 1 and 4–9 can only be used to load data saved as "All Data." Load operations type 2 and 3 are used to load data saved as "Synthesizer All" and "Sequencer All", respectively. Load operation type 14 is used to load data saved from a data card.

1. After selecting the desired load operation, press ENTER to select the disk file from which to load the data.

The names of all disk files of the selected type will be displayed. An elongated dash is displayed after file numbers that contain no data. Move the cursor to select a file, or use the numeric keys to directly specify a file number.

2. Although a disk can contain as many as 99 files, the LCD can show only ten filenames at once. To view the rest of the filenames, press F1 or F2 to scroll the filename display up or down.
3. After selecting a file press F8 (Go). The display will ask "Are you sure ?" If you are sure that you want to load the data, press YES. The data will be loaded from disk file into the SY99.

Load from disk (type 9): Load operation type 9 can be used to load a single song saved as part of an "All Data" file. The procedure for loading this data differs from that described above in that you must select the song to be loaded, and the destination to which it is to be loaded.

1. Select the file from which data is to be loaded. Then press F8 (Dir) to view a directory of the songs contained in the selected file.
2. Move the cursor to select the desired song.
3. To select the destination into which the selected song will be loaded, press F4 (Dst) and move the cursor to the desired song number. Note that if you select a song location already occupied by data, that data will be overwritten by the load operation.
4. If you change your mind about the source song you have selected for loading, press F3 (Src) to return to the source song directory.
5. When you have selected the destination song, press F8 (Go). The SY99 will ask you if you want to "LOAD With Pattern Data ?" Press YES to load pattern data as well as song data, or NO to load song data only. The selected data will be loaded from disk into internal memory.

Load from disk (types 10 and 13): Like load operation type 9, load operation types 10 and 13 are used to load data files containing a single song. Load operation 10 is used to load data saved using the E-Seq, N-Seq, and Standard MIDI File formats, whereas load operation type 13 is used to load K-Seq data saved using the "1 Song" procedure described in *3.Save to disk*, below. The procedure for loading these types of data is similar to that described above for load operation type 9.

1. When load operation type 10 or 13 is selected, the display will show the complete names of all of the files on the disk, whether or not they were created by the SY99. Each filename includes a three-character extension. The first letter of this extension shows the format of the data. Refer to *Disk filename extensions* in the Appendix, page 322.
2. The display can show the names of only ten files at one time. Use F1 and F2 to scroll the display up or down, and move the cursor to select the desired file.
3. To select the destination into which the selected song will be loaded, press F4 (Dst) and move the cursor to the desired song number. Note that if you select a song location already occupied by data, that data will be overwritten by the load operation.
4. If you change your mind about the source song you have selected for loading, press F3 (Src) to return to the source song directory.
5. When you have selected the destination song, press F8 (Go). If you have selected load operation type 10 (1 song), the SY99 will ask you if you want to "LOAD With Pattern Data?" In this case, press YES to load pattern data as well as song data, or NO to load song data only. The selected data will be loaded from disk into internal memory.

   If you select and attempt to load a file which does not contain sequencer data readable by the SY99, an error message will be displayed. When loading E-Seq or N-Seq data, any data specific to the device which created the file will be ignored. For example, when loading N-Seq data saved by the QX5FD, macro data will be ignored.

   Please refer to *About the Standard MIDI File Format* (page 323) for a detailed discussion of the standard MIDI file format.

Load from disk (types 11 and 12): Load operation types 11 and 12 may be used to load a single voice or multi from a file saved as "All Data." The procedure differs from that described above for load operation types 1–8 and 14 in that you must select the voice or multi to be loaded, as well as the load destination.

1. Select a load operation type and the file from which data is to be loaded. Then press F8 (Dir) to view a list of the voices or multis contained in the selected "All Data" file.
2. The display can show the names of only ten voices or multis at one time. Use F1 and F2 to scroll the display up or down, and move the cursor to select the desired voice or multi.
3. To select the destination into which the selected voice or multi will be loaded, press F4 (Dst), followed by the bank A–D (if loading a voice) and the memory select buttons 1–16 to specify the load destination. Note that voices saved from banks A–C can only be loaded into banks A–C.
4. If you change your mind about the source voice or multi you have selected for loading, press F3 (Src) to return to the source directory.
5. When you have selected the source and destination voice or multi, press F8 (Go) and the selected data will be loaded from disk into internal memory.

System setup data: The system setup data loaded using load operation types 1, 2, and 4 consists of all System utility, MIDI utility, and master control settings. The MDR/sample memory allocation ratio will be changed as a result of load operation type 1; however, this ratio and master control select data will not be changed as a result of load operation types 2 or 4.

Remarks: Some "All Data" files are very large and will not fit on a single disk. If data is loaded from such a file, the SY99 may pause during the operation and ask you to "Please insert No. 2 disk, OK?" At this time you should insert the next disk, or press NO to quit the load operation.

When sequencer data is loaded from an "All Data" or "Sequencer All" file which was saved using the SY77 format, the song data from that file will be loaded to the SY99 as Song 1. Any other songs currently held in the SY99's memory will be cleared as a result of the load operation. For details, refer to the following section, *8.Disk save type*.

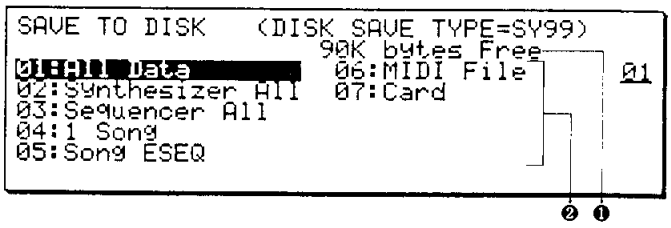
DISK UTILITY

3. Save to disk

Summary: Synthesizer, sequencer, and card data can be saved to disk.

Procedure:

From: disk utility job directory (JUMP #816)
Select: 03:Save To Disk and press ENTER
Specify: the type of data to be saved.
Press: ENTER
Specify: the file into which the data will be saved
To execute: the operation press F8 (Go).
To quit: without executing press EXIT.



❶ This shows the amount of free area remaining on the disk inserted in the disk drive.

❷ Move the cursor in this area to select the type of data you wish to save to disk and then press ENTER.

01: All Data: All data of the SY99
02: Synthesizer All: All data of the synthesizer section (including system setup data)
03: Sequencer All: All data of the sequencer section
04: 1 Song: Sequencer song data in K-Seq format (SY99 sequence data format without the setup data)
05: Song ESEQ: Sequencer song data in E-Seq format (Yamaha QX3, electones, player pianos, etc.)
06: MIDI File: Sequencer song data in standard MIDI file format 0.
07: Card: The entire contents of a card inserted in the DATA slot

Save to disk (types 1–3): If you have selected save operation type 1, 2, or 3 to save all sequencer and/or song data, a display like the following will appear when you press ENTER:

```
SAVE TO DISK    (DISK SAVE TYPE=SY99)
 Data Type = All Data
01:AllData1            06:- NEW -*        02
02:- NEW -*            07:- NEW -*
03:- NEW -*            08:- NEW -*
04:- NEW -*            09:- NEW -*
05:- NEW -*            10:- NEW -*
 ▲  ▼                        Name  Go
```

1. Move the cursor or use the numeric keys to select a file number under which the data will be saved. (Up to 99 files may be saved on a single disk.) Unused file numbers are indicated by an asterisk. If you save the data without assigning a name, the asterisk will disappear. If necessary, press F1 or F2 to scroll the filename display up or down and find an open file number.
2. If you wish to name the file, press F7 (Name) to enter the job described in the following section *3.1 Save to disk filename*. Since the SY99 recognizes disk files by filename extensions (one character denoting the type and two digits denoting the number) which it assigns automatically when saving files, it is possible to assign the same name to two or more files. However, it is a good idea to give each file a distinctive name as a reminder of the contents.
3. To save the data to the selected file, press F8 (Go).
4. If the selected file number is already occupied by data, the SY99 will ask you if you wish to overwrite the file. If you do not wish to keep the data in the file, press YES and the old file will be overwritten. If the old data is important, press NO and select a different file number.

Save to disk (types 4–6): Save operation types 4–6 are used to save data for a single song. Type 4 is used to save data in the K-seq format; type 5 is used to save data in the E-Seq format; and type 6 is used to save data in standard MIDI file format 0. The procedure for these save operations is different from that described above in that you must specify the song to be saved.

1. Move the cursor or use the numeric keys to select a song to save.
2. Press F4 (Dst) to display the names of the files contained on the disk. Move the cursor or use the numeric keys to select a file number under which the data will be saved. If necessary, press F1 or F2 to scroll the display up or down and find an open file number.

   Please refer to *About the Standard MIDI File Format* (page 323) for a detailed discussion of the standard MIDI file format.
3. If you change your mind about the source song you have selected for saving, press F3 (Src) to return to the source song directory.
4. The name assigned to the song in the SY99's memory will be saved as the file's name unless you change it. To change the name, press F7 (Name) to enter the job described in the following section *3.1 Save to disk filename*.
5. To save the data to the selected file, press F8 (Go).
6. If the selected file number is already occupied by data, the SY99 will ask you if you wish to overwrite the file. If you do not wish to keep the data in the file, press YES and the old file will be overwritten. If the old data is important, press NO and select a different file number.

   Please refer to *About the Standard MIDI File Format* in the Appendix (page 323) for a detailed discussion of the standard MIDI file format.

Save to disk (type 7): This operation allows you to save the entire contents of a data card inserted in the DATA slot onto an SY99 disk, regardless of whether or not the SY99 itself is able to use the data from that card. For example, you can use this operation to save the contents of MCD64/32 data cards which contain data for the Yamaha V50, SY55/TG55, or RX8.

The procedure for saving data from a card is different from that described for save operation types 1–3 above in that you must specify whether the card to be saved is 32 or 64 Kbytes. If you have selected save operation type 7, a display like the following will appear when you press ENTER:

```
SAVE TO DISK
 Data Type = Card     64KByte
01:DataCard           06:- NEW -*          02
02:- NEW -*           07:- NEW -*
03:- NEW -*           08:- NEW -*
04:- NEW -*           09:- NEW -*
05:- NEW -*           10:- NEW -*
 ▲   ▼                64K  32K  Name  Go
```

1. Press F5 (64k) or F6 (32k) to specify the type of card you are saving from. For an MCD64 card, press F5 (64k). For an MCD32 card, press F6 (32k).
2. Move the cursor or use the numeric keys to select a file number under which the card data will be saved.
3. If you wish to name the file, press F7 (Name) to enter the job described in the following section *3.1 Save to disk filename.*
4. To save the data to the selected file, press F8 (Go).
5. If the selected file number is already occupied by data, the SY99 will ask you if you wish to overwrite the file. If you do not wish to keep the data in the file, press YES and the old file will be overwritten. If the old data is important, press NO and select a different file number.

System setup data: The system setup data saved using save operation types 1 and 2 consists of all System utility, MIDI utility, and master control settings.

Remarks: Some "All Data" files are very large and will not fit on a single disk. When you save data to such a file, the SY99 will display the number of disks required to save the file. If two disks are required, for example, the message "You need 2 pc. disks, OK?" will appear. Press YES to continue. If the disk you have inserted is unformatted or contains any data files, the SY99 will ask "Format before saving? or Change disk." Press YES to format the disk while saving, or NO after replacing the disk, if using empty disks which are already formatted. (Remember that formatting a disk will destroy any data it contains!)

The SY99 will pause during the save operation and ask you to "Please insert No. 2 disk, OK?" At this time you should insert the next disk, or press NO to quit the save operation.

When sequencer data is saved to an "All Data" or "Sequencer All" file using the SY77 format, only the song data for the currently selected song only will be saved. Any other songs currently held in the SY99's memory will not be saved by the save operation. For details, refer to the following section, *8.Disk save type.*

DISK UTILITY

3.1 Save to disk filename

Summary: Each file on disk can be given an eight-character name as a reminder of the contents.

Procedure:

From: the *Save to disk* filename directory in *3. Save to disk*

Press: F7 (Name)

Specify: an 8-character filename.

To execute: the Save To Disk operation press F8 (Go).

To quit: without executing press EXIT.

```
SAVE TO DISK

  File Name = [- NEW - ]

Clr  Uppr  Lowr                    Go
```

❷ ❶ ❸

❶ Enter an eight-character name for the file.

❷ 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).

❸ After entering a name for the disk file press F8 (Go). The bottom line of the display will ask "Are you sure ?" If you are sure that you want to save the data then press YES and the data will be saved to the specified disk file.

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

Note that the actual disk save operation can be executed either from this *3.1 Save to disk* filename job or from the *3. Save to disk* filename directory.

DISK UTILITY

4. Format disk

JUMP #818

Summary: Before a disk can be used it must be formatted to accept SY99 data.

Procedure:

From: disk utility job directory (JUMP #816)

Select: 04:Format Disk (JUMP #818)

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

To quit: without executing press EXIT.

```
FORMAT DISK                        818

  Please insert a blank disk

                                   Go
```

Newly purchased disks must be formatted by the SY99 before they can be used to store data. *Formatting a disk will erase all the data on the disk.* Be careful not to accidentally format a disk which contains valuable data.

The display will ask you to "Please insert a blank disk". Make sure that the write protect slider of the disk is in the write enabled position with the slider covering the hole, insert the disk into the disk drive, and press F8 (Go). You will be asked "Are you sure?" If you are sure you want to format the disk press YES and formatting will begin.

While the disk is being formatted the display will show "xx% Formatted". When the number reaches 100% the display will show "Completed !" until a switch is pressed.

Note: *The SY99 uses exactly the same disk format as the SY77. Disks formatted by the SY77 can be used by the SY99, and vice versa.*

The formatting of disks is entirely unrelated to the disk save type setting described on page 274. The former refers to the physical formatting of disks so that they can be used by the synthesizer's disk drive, whereas the latter refers to the data format used when saving sequencer data to a disk.

DISK UTILITY

5. Backup disk

JUMP #819

Summary: Use this operation to make backup disks for important data.

Procedure:

From: disk utility job directory (JUMP #816)
Select: 05:Back Up Disk (JUMP #819)
To execute: the backup operation press F8 (Go).
To quit: without executing press EXIT.

Floppy disks are generally quite reliable, but it is always a good idea to make backup copies of important data.

Important: When this *5. Backup disk* operation is used, all data in the SY99 sequencer memory will be lost.

```
BACKUP DISK                                  819
 Disk Data Load
     SEQ data will be erased !
     Please insert SOURCE disk

                 0 %

                                             Go
```

1. Insert the source disk (the original data) into the disk drive and press F8 (Go). The display will show "Now Loading" and the data will be loaded into the SY99's memory. The "xx% Loaded" display indicates the percentage of the backup data that has been loaded.
2. When the SY99 has loaded as much data as possible, the display will ask you to "Please insert DUPLICATE into drive."
3. Make sure that the backup disk is correctly formatted for the SY99 and that its write protect slider is in the write enabled position (covering the hole). Insert the backup disk into the disk drive and press F8 (Go).
4. The display will show "Now Saving" and the data will be saved onto the backup disk. The "xx% Saved" display indicates the percentage of the data that has been saved.
5. Repeat steps 1–4 until 100% of the source data has been loaded and saved. When the backup process is complete the display will show "Completed !".

DISK UTILITY

6. Rename file

Summary: An already existing disk file can be given a different name.

Procedure:

From: disk utility job directory (JUMP #816)
Select: 06:Rename File
Specify: the type of file you wish to rename.
Press: ENTER
Specify: the file you wish to rename.
Press: ENTER
Specify: the new filename.
To execute: the rename operation press F8 (Go).
To quit: without executing press EXIT.

```
RENAME FILE
                    90K bytes Free
01:All Data          06:MIDI File      01
02:Synthesizer All   07:Card
03:Sequencer All     08:1 Sample
04:1 Song            09:MDR Data
05:Song ESEQ
```

❷ ❶

❶ This shows the amount of remaining free memory for the currently inserted disk.

❷ Move the cursor in this area to select the type of file you wish to rename.

01: All Data: All data of the SY99
02: Synthesizer All: All data of the synthesizer section
03: Sequencer All: All data of the sequencer section
04: 1 song: Sequencer song data in K-Seq format (SY99 sequence data format without the setup data)
05: Song ESEQ: Sequencer song data in E-Seq format (Yamaha QX3, electones, player pianos, etc.)
06: MIDI File: Sequencer song data in standard MIDI file format 0
07: Card: Data saved from a data card

08: 1 Sample: Sample data in SY99 or TX16W format
09: MDR: Data saved data using the *MDR Save to Disk* operation

1. After selecting the type of file you wish to rename, press ENTER and the names of all files of the selected type will be displayed.
2. Move the cursor or use the numeric keys to select the file 1–99 you wish to rename. If necessary press F1 (△) or F2 (▽) to scroll the list of filenames.
3. After selecting the file you wish to rename press F8 (Name).
4. Enter an eight-character name for the file. 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).
5. After entering a new name for the disk file press F8 (Go). The bottom line of the display will ask "Are you sure ?" If you are sure that you want to rename the file then press YES and the disk file will be renamed.

DISK UTILITY

7. Delete file

Summary: You can delete an unwanted file from disk.

Procedure:

From: disk utility job directory (JUMP #816)
Select: 07:Delete File
Specify: the type of file you wish to delete.
Press: ENTER
Specify: the file you wish to delete.
To execute: the delete file operation press F8 (Go).
To quit: without executing press EXIT.

```
DELETE FILE
                    90K bytes Free
01:All Data          06:MIDI File      01
02:Synthesizer All   07:Card
03:Sequencer All     08:1 Sample
04:1 Song            09:MDR Data
05:Song ESEQ
```

❶ ❷

❶ This shows the amount of remaining free memory for the currently inserted disk.
❷ Move the cursor in this area to select the type of file you wish to delete.
01: All Data: All data of the SY99
02: Synthesizer All: All data of the synthesizer section
03: Sequencer All: All data of the sequencer section
04: 1 song: Sequencer song data in K-Seq format (SY99 sequence data format without the setup data)
05: Song ESEQ: Sequencer song data in E-Seq format (Yamaha QX3, electones, player pianos, etc.)
06: MIDI File: Sequencer song data in standard MIDI file format 0
07: Card: Data saved from a data card
08: 1 Sample: Sample data in SY99 or TX16W format
08: MDR: Data saved data using the MDR *MDR Save To Disk* operation

1. After selecting the type of file you wish to delete, press ENTER and the names of all files of the selected type will be displayed.
2. Move the cursor or use the numeric keys to select the file 1–99 you wish to delete. If necessary press F1 (△) or F2 (▽) to scroll the list of filenames.
3. After selecting the file you wish to delete press F8 (Go). The bottom line of the display will ask "Are you sure ?" If you are sure that you want to delete the file then press YES and the disk file will be deleted.

DISK UTILITY

8. Disk type

Summary: This setting determines whether disk save operations for data types "All data", "Synthesizer all" and "Sequencer All" will be performed in SY99 format or in SY77 format.

Procedure:

From: disk utility mob directory (JUMP #816)
Select: 08:Disk Save Type
Press: F1 (SY99) or F2 (SY77) to select the disk format
To exit: the disk type selection press EXIT

```
DISK SAVE TYPE                                  825

 SYNTH & SEQ Data Save Type =  SY99

SY99 SY77
```

You will need to make this setting only when you wish to save "All Data", "Synthesizer All" and "Sequencer All" data to a disk which will be later loaded by an SY77.

Although most types of disk file are compatible between the SY99 and the SY77, "01:All Data", "02:Synthesizer All" and "03:Sequencer All" formats are not compatible. The SY99 "All Data" contains synthesizer, sequencer, waveform, sample and MDR data, but the SY77 "All Data" contains only synthesizer and sequencer data. The SY99 "Synthesizer All" is in a different format than the SY77 "Synthesizer All".

Once the data has been loaded into SY99 memory, it can be saved to disk in either format.

When the power is turned on, this will always be set to "SY99" format.

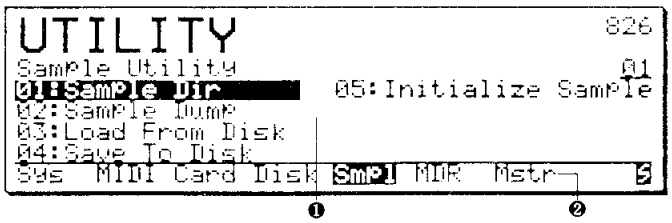
Sample utility

JUMP #826

Summary: Send and receive MIDI sample dumps, save sample data to disks, load samples from disks, and organize samples within the SY99's sample memory area.

Procedure:

From:	System utility	(JUMP #800)
	MIDI utility	(JUMP #806)
	Card utility	(JUMP #812)
	Disk utility	(JUMP #816)
	MDR utility	(JUMP #830)
	Master control	(JUMP #831)
Press:	F5 (Smpl)	(JUMP #826)
Select:	the desired sample utility job and press ENTER.	



❶ Move the cursor in this area to select one of the following jobs and then press ENTER.

01: Sample Dir: This allows the display, copying, and deleting of sample data.

02: Sample Dump: Output samples and waveforms from the SY99 by MIDI sample dump; also, output sample dump requests.

03: Load From Disk: Load sample data from disk.

04: Save To Disk: Save sample data to disk.

05: Initialize Sample: Initialize the SY99's sample memory.

❷ To move to a different utility mode press F1–F4 or F6–F7. To select a job from the currently displayed job directory, hold SHIFT and press a function key.

Edit sample: Sample data which has been loaded to the SY99 can be edited as described in *AWM element data 2.0 Waveform edit*, page 160. However, samples loaded from waveform cards and copy-protected disks cannot be saved to disk or output via MIDI sample dump.

Important: It is possible for data in internal memory to be lost as a result of inappropriate operation or other reasons. We recommend that you keep backups of important voice, multi, system, sequencer, sample, MDR data on a floppy disk or memory card (MCD64). It is also possible for the data in a floppy disk or memory card to be lost as a result of static electricity, magnetic fields, or other causes. For very important data it is always a good idea to make double backups.

SAMPLE UTILITY

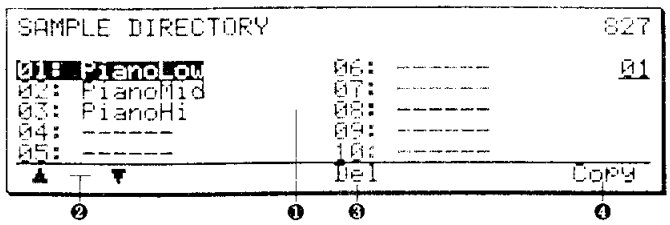
1. Sample directory

JUMP #827

Summary: Copy and delete samples while viewing a directory of the samples currently contained in the SY99's sample memory.

Procedure:

From:	sample utility job directory	(JUMP #826)
Select:	01:Sample Dir	(JUMP #827)
Specify:	a sample.	
To delete:	a sample, press F5 (Del).	
To copy:	a sample, press F8 (Copy).	
To exit:	to the sample utility job directory, press EXIT.	



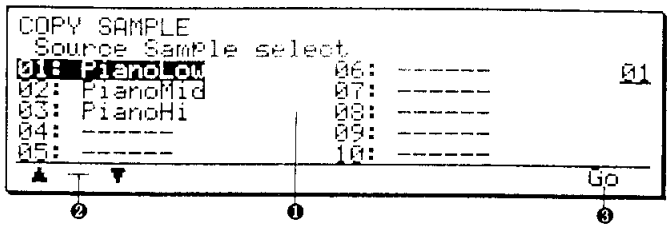
❶ The names of the samples contained in the SY99's sample memory will be displayed in this area. Move the cursor to select a sample.

❷ The display can only show ten samples at one time. Press F1 or F2 to scroll the display up or down and view other samples.

❸ Press F5 (Del) to delete a selected sample from memory. This does not delete the corresponding file management data. Use the Initialize Sample function (page 278) to delete all data.

❹ Press F8 (Copy) to copy a sample within the sample memory. Refer to the following explanation of the *Copy Sample* function.

Copy Sample: To copy a sample, move the cursor to an empty space in the sample directory display and press F8 (Copy). A display like the one following will appear:



❶ Move the cursor within this area to select a sample to copy.

❷ The display can only show ten samples at one time. Press F1 or F2 to scroll the display up or down and view other samples.

❸ Press F8 (Go) to copy the selected sample.

SAMPLE UTILITY

2. Sample dump

JUMP #828

Summary: This function allows you to dump waveform and sample data, and to request sample dumps.

Procedure:

From: sample utility job directory (JUMP #826)

When: the SY99 is connected to another MIDI device capable of sending and receiving sample dumps

Select: 02:Sample Dump (JUMP #828)

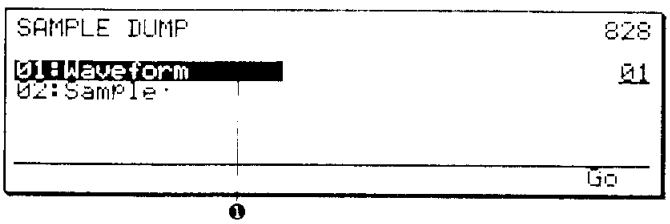
Specify: the type of dump to perform.

To dump waveform data:
press F8 (Go).

To dump sample data:
specify a sample and press F8 (Go).

To request a sample dump:
specify a destination and press F6 (Rqst).

To exit: without executing, press EXIT.



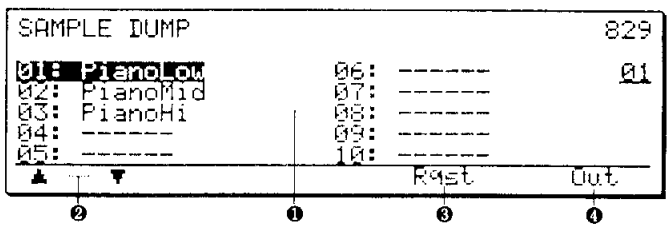
❶ Two types of dump operations are listed here. Move the cursor to select the desired operation and then press ENTER.

01: Waveform: This allows you to dump all internal waveform data.

02: Sample: This job allows you to dump a specified sample, or to send a sample dump request.

❷ If *01:Waveform* is selected, press F8 (Go) to dump the waveform data. If *02:Sample* is selected, the label for F8 will change to "Dir". Refer to the following explanation of the *Sample dump* function.

Sample dump/request: If *02:Sample* is selected, the label for F8 will change to "Dir". Press F8 (Dir) to display a directory of samples contained in the SY99's sample memory.



❶ Move the cursor within this area to select a sample to dump. (If performing a sample dump request, select an empty space to serve as the destination of the incoming sample.)

❷ The display can only show ten samples at one time. Press F1 or F2 to scroll the display up or down and view other samples.

❸ Press F6 (Rqst) to send a sample dump request.

❹ Press F8 (Go) to dump the selected sample.

Remarks: The SY99 will display the message "MIDI Transmitting !" and show the number of remaining sample packets to be transmitted at the bottom of the LCD while the sample dump is in progress.

Data originally loaded from waveform cards or copy-protected disks cannot be output from the SY99 via MIDI sample dump.

Some TX16W samples may produce noise when loaded to the SY99 via sample dump. Try transferring these samples via floppy disk.

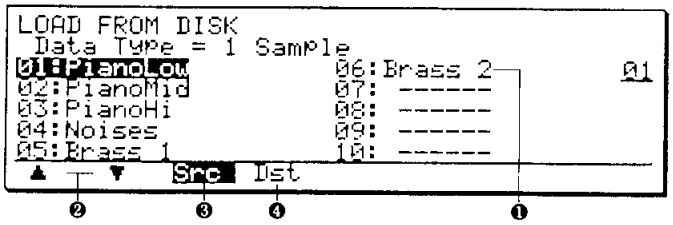
SAMPLE UTILITY

3. Load from disk

Summary: You can load sample data from a floppy disk.

Procedure:

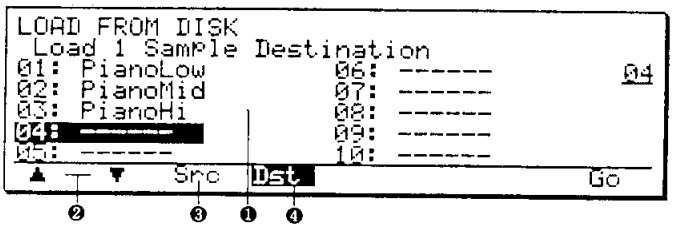
From: sample utility job directory (JUMP #826)
When: a disk containing sample data is inserted in the SY99 disk slot
Select: 03:Load from Disk
Specify: the sample to load, and the load destination.
To execute: press F8 (Go).
To exit: without executing, press EXIT.



❶ When this operation is selected, the display will show a directory of all sample files on the disk. Move the cursor within this area to select a sample to load.

❷ The display can only show ten sample files at one time. Press F1 or F2 to scroll the display up or down and view other samples.

❸ To select the destination into which the selected sample will be loaded, press F4 (Dst). The following display will appear:



❶ Move the cursor within this area to select a destination sample number. Note that if the selected sample number is already occupied by data, this data will be overwritten by the load operation.

❷ The display can only show ten sample numbers at one time. If necessary, press F1 or F2 to scroll the display up or down and find an open sample number.

❸ If you change your mind about the sample you have selected for loading, press F3 (Src) to return to the source sample directory.

❹ Press F8 (Go) to load the selected sample.

Remarks: The number of samples which can be loaded to the SY99's sample memory depends on the amount of sample memory available and on the size of the samples loaded. The size of the sample memory area can be expanded up to 3 Mbytes, as described in *Expansion memory boards* in the appendix (page 325).

SAMPLE UTILITY

4. Save to disk

Summary: With this operation, you can save sample data to a floppy disk.

Procedure:

From: sample utility job directory (JUMP #826)
When: a disk is inserted in the SY99 disk slot
Select: 04:Save to Disk
Specify: the sample to save, and the file into which the data will be saved.
To execute: press F8 (Go).
To exit: without executing, press EXIT.

```
SAVE TO DISK
 Save 1 Sample Source
01: PianoLow        06: ------        01
02: PianoMid        07: ------
03: PianoHi         08: ------
04: ------          09: ------
05: ------          10: ------
▲ ▼   Src   Dst
```

❶ ❷ ❸ ❹

❶ When this operation is selected, the display will show a directory of all samples contained in the SY99's sample memory. Move the cursor within this area to select a sample to save.

❷ The display can only show the names of ten samples at one time. Press F1 or F2 to scroll the display up or down and view other samples.

❸ To select the destination file into which the selected sample data will be saved, press F4 (Dst). The following display will appear:

```
SAVE TO DISK
 Data Type = 1 Sample
01:PianoLow         06:Brass 2        07
02:PianoMid         07:- NEW -*
03:PianoHi          08:- NEW -*
04:Noises           09:- NEW -*
05:Brass 1          10:- NEW -*
▲ ▼   Src   Dst                       Go
```

❷ ❸ ❶ ❹

❶ Move the cursor within this area to select a destination file number. Note that if the selected file number is already occupied by data, this data will be overwritten by the save operation.

❷ The display can only show ten file numbers at one time. If necessary, press F1 or F2 to scroll the display up or down and find an open file number.

❸ If you change your mind about the sample you have selected for saving, press F3 (Src) to return to the source sample directory.

❹ Press F8 (Go) to save the selected sample data.

Remarks: Data originally loaded from waveform cards or copy-protected disks cannot be saved to disk.

The size of a sample file depends on the amount on the amount of data a sample contains. Some large files of sample data may not fit on a single disk. When you save data to such a file, the SY99 will display the amount of disk space required to save the entire file and ask whether it should format the disk as it saves the data. Press YES to format the disk while saving, NO if using disks which are already formatted. (Remember that formatting a disk will destroy any data it contains!) The SY99 will pause during the save operation and ask you to "Please insert No. 2 disk, OK?". At this time you should insert the next disk, or press EXIT to quit the save operation.

SAMPLE UTILITY

5. Initialize sample

Summary: This operation clears all data from the SY99's internal sample memory.

Procedure:

From: sample utility job directory (JUMP #826)
Select: 05:Initialize Sample
To execute: the initialize operation press YES
To quit: without initializing press NO

```
INITIALIZE SAMPLE

ARE YOU SURE ?

(Yes or No)
```

Press YES if you are sure you want to initialize the internal sample memory. All sample data and waveform assignments will cleared from the SY99's sample memory. Note that data cleared in this way is permanently deleted and cannot be recalled!

To clear a single sample from memory, use the delete operation described in *1.Sample directory* above, page 275. To initialize a single waveform, use the *Initialize waveform* function described on page 161.

Sample memory initialization will not affect the data stored in memory allocated to the MIDI data recorder.

MIDI data recorder utility

JUMP #830

Summary: MIDI data recorder utility jobs allow you to use the SY99 disk drive to save and load data from other devices.

Procedure:

From: System utility (JUMP #800)
MIDI utility (JUMP #806)
Card utility (JUMP #812)
Disk utility (JUMP #816)
Sample utility (JUMP #826)
Master control (JUMP #831)
Press: F6 (MDR) (JUMP #830)
Select: the desired MIDI data recorder job and press ENTER

```
UTILITY                                  830
MIDI Data Recorder Utility               01
01:Output          05:Initialize MDR
02:Input
03:Load From Disk
04:Save To Disk
Sys  MIDI Card Disk SmPl MDR Mstr        S
```

❶ ❷

❶ Move the cursor in this area to select one of the following jobs and then press ENTER.

01: Output: This operation transmits MIDI bulk data from SY99 MDR memory to an external device.

02: Input: This operation receives MIDI bulk data from an external device into SY99 MDR memory.

03: Load From Disk: This operation loads a file of MIDI bulk data from disk into the SY99 MDR memory.

04: Save To Disk: This operation saves MIDI bulk data from SY99 MDR memory to a disk file.

05: Initialize MDR: This operation initializes the SY99 MDR memory.

❷ To move to a different utility mode, press F1–F5 or F7. To select a job from the currently displayed job directory, hold SHIFT and press a function key.

MDR procedure: The SY99's MDR function provides a convenient way of storing data for devices which do not have their own disk drive or card slot, but are able to tranmsit their data as a MIDI bulk message. Use the following procedure to save data for such devices.

1. Use *02:Input MDR* to receive the data from the external device into the SY99's MDR memory.
2. Use *04:Save To Disk* to save the data from SY99 MDR memory onto an SY99 disk.

When you wish to load the data back into the external device use the following procedure.

3. Use *03:Load From Disk* to load the data from SY99 disk into SY99 MDR memory.
4. Use *01:Output MDR* to transmit the data from SY99 MDR memory to the external device.

For details, refer to the explanations in each of the following sections.

Important: Before using a newly purchased disk or a disk that has been used by other devices, you must format the disk using the *Disk utility 4.Format Disk* operation (page 271).

It is possible for data in internal memory to be lost as a result of inappropriate operation or other reasons. We recommend that you keep backups of important voice, multi, system, sequencer, sample, MDR data on a floppy disk or memory card (MCD64). It is also possible for the data in a floppy disk or memory card to be lost as a result of static electricity, magnetic fields, or other causes. For very important data it is always a good idea to make double backups.

Note: *The appendix contains a tutorial on using the SY99's MIDI data recorder functions. Refer to page 312.*

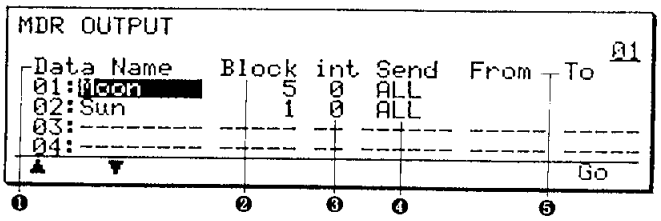
MIDI DATA RECORDER

1. Output

Summary: This operation transmits MIDI bulk data from SY99 MDR memory to an external device.

Procedure:

From: MIDI data recorder utility job directory (JUMP #830)
Select: 01:Output
Select: the MDR data you wish to transmit
To transmit: the data press F8 (Go)
To quit: without transmitting press EXIT



❶ Data Name (1–99): This displays the number and name of each set of bulk data. A name can be assigned to each set in *MDR utility 2.MDR input* (page 281).

❷ Block (1–32767): This displays the number of F0–F7 blocks in each set of MIDI bulk data.

❸ Int (0...10): This specifies the interval inserted between blocks of data. If you enter a value of 0, an interval of 100 ms (milliseconds) will be inserted between each F0–F7 block of data, or after each 4096 bytes of data, should a single block exceed this length. You may enter a number from 1 to 10 to specify the number of 100 ms intervals inserted between each F0–F7 block of data, or after each 1024 bytes of data, should a single block exceed this length. (Thus, if you enter a 3, a 300 ms interval will be inserted between each block of data, and after each kilobyte of data in blocks longer than one kilobyte.) Some devices are not able to receive large amounts of incoming data in a short time. If necessary, increase this interval time. The default is an interval time of zero.

❹ SndType (ALL, Select): You may specify all blocks or selected blocks of the set of data to be transmitted. If "ALL" is selected all F0–F7 blocks in the set of MIDI bulk data will be transmitted. If "Select" is selected, you can specify which F0–F7 blocks of the data will be transmitted (see ❺ below).

❺ From, To: If Snd Type ❸ has been set to "Select", you can specify which F0–F7 blocks of the data will be transmitted. Many devices dump the contents of their internal memory as a separate F0–F7 block (a separate bulk message) for each type of data, and are also able to receive individual blocks. Refer to the system exclusive documentation for your device to learn how it transmits and receives bulk data.

Output procedure: Before you transmit MDR data to an external device, make sure that the receiving device is ready to receive the data. If the device has a "bulk protect" setting, turn it off. Also make sure that the MIDI OUT of the SY99 is connected to the MIDI IN of the receiving device.

1. Move the cursor in ❶ to select the set of data (1–99) you wish to transmit. If necessary, press F1 (△) or F2 (▽) to scroll the display up or down.
2. If necessary, increase the interval time in ❸. In most cases the default value of 1 will be sufficient.
3. If desired, specify in ❹ and ❺ which F0–F7 blocks of the selected set of data will be transmitted.
4. To transmit the data press F8 (Go). While the data is being transmitted, the bottom line of the display will show "MDR Transmitting!", and show the number of blocks that have been transmitted.
5. When transmission is complete, press any key to exit the display.

MIDI DATA RECORDER

2. Input

Summary: This operation receives MIDI bulk data from an external device into SY99 MDR memory.

Procedure:

From: MIDI data recorder utility job directory (JUMP #830)
Select: 02:Input
Specify: the MDR data memory into which the MIDI bulk data will be received
To begin: reception press F8 (Go)
To quit: without receiving press EXIT
To end: reception press EXIT

```
MDR INPUT
                                                  01
 Data Name        Blk Cnt   Size(KBYTE)
 01:Moon           5         5
 02:Sun            1         5
 03:- NEW -*      ----      ----
 04:- NEW -*      ----      ----
 ▲   ▼            Del          Name   Go
❶   ❹            ❷ ❺       ❸      ❻    ❼
```

❶ Data Name (1–99): The MDR memory can accommodate up to 99 sets of bulk data, and each set can contain one or more F0–F7 blocks or messages. The number and name of each bulk data set are displayed here. To assign a name to a set of bulk data, press F6 (Name) as explained below.

❷ Blk Cnt (1–32767): For data which already exists in MDR memory, this displays the number of F0–F7 blocks in each set of data.

❸ Size: For data which already exists in MDR memory, this displays the total size of the set of data in kilobytes.

❹ Press F1 (△) or F2 (▽) to scroll the display up or down.

❺ By pressing F5 (Del) you can delete the selected set of data from MDR memory.

❻ By pressing F7 (Name) you can name an unused memory or rename a previously used memory.

❼ When you press F8 (Go), the SY99 will begin recording the incoming MIDI bulk data until you press EXIT.

1. Move the cursor in ❶ to select an empty data location (marked "– NEW –*") into which the incoming MIDI bulk data will be received. If necessary, press F1 (△) or F2 (▽) to scroll the display up or down.

   It is not possible to receive MDR data into a location which already contains data. If you wish to delete or overwrite old MDR data, press F4 (Del) to delete the data.
2. If desired, you can assign a name to the data by pressing F6 (Name). A display will appear, allowing you to input an MDR name. You may execute MDR input from the naming screen.
3. Whether or not you have assigned a name to the data, press F8 (Go) to begin recording MDR data. The bottom line of the display will show "MDR Recording!".
4. Refer to the operating manual for your MIDI device, and make it transmit the desired type of MIDI bulk data. As the SY99 receives data, the number of blocks that have been received will be displayed in the bottom line. You may transmit any number of MIDI bulk messages (F0–F7 blocks) from any number of devices, and they will all be received into the currently selected set of bulk data.
5. When the external device has finished transmitting the data, press EXIT. The bottom line of the SY99 display will show "Completed!".

   If the SY99 did not receive any MIDI bulk data, the bottom line of the display will show "Recording Canceled!". Make sure that the external device is actually transmitting bulk data, check MIDI connections, and try again.

Remarks: MIDI bulk data that has been received into the SY99 MDR memory is preserved even when the power is turned off. However as a precaution against accidents, we suggest that you use the following *3.Save to disk* operation to save the MDR memory to a disk file.

MIDI DATA RECORDER

3. Load from disk

Summary: This operation loads a disk file containing up to 99 sets of bulk data into the SY99 MDR memory.

Procedure:

From: MIDI data recorder utility job directory (JUMP #830)
Select: 03:Load From Disk
Select: the MDR file number to load
To load: the MDR file into MDR memory press F8 (Go)
To quit: without loading press EXIT

```
LOAD FROM DISK
 Data Type = MDR Data
01:Voices1          06: ------        01
02:Voices2          07: ------
03:Songs            08: ------
04: ------          09: ------
05: ------          10: ------
 ▲  ▼                          Go
```

❷ ❶ ❸

❶ File Name (1–99): This displays the number and name of each MDR file on the disk.

❷ Press F1 (△) or F2 (▽) to scroll the display up or down.

❸ When you press F8 (Go), the selected MDR file will be loaded into the SY99 MDR memory.

Loading procedure: This operation will load only files that were saved by the *4.Save to disk* operation. The file that is loaded contains up to 99 sets of MDR data, with each set containing one or more F0–F7 blocks of bulk data. All sets of data that were previously in MDR memory will be overwritten by the newly loaded file. It is not possible to load individual sets of data from an MDR file.

1. Move the cursor in ❶ to select a disk file 1–99. If necessary, press F1 (△) F2 (▽) to scroll the display up or down.
2. Press F8 (Go) to load the selected MDR file into MDR memory.

MIDI DATA RECORDER

4. Save to disk

Summary: This operation saves all 99 sets of data from SY99 MDR memory to a disk file.

Procedure:

From: MIDI data recorder utility job directory (JUMP #830)
Select: 04:Save To Disk
Select: the file number into which the MDR data will be saved
Specify: a name for the file if desired
To save: the MDR data to a file press F8 (Go)
To quit: without saving press EXIT

```
SAVE TO DISK
 Data Type = MDR Data
01:Voices1          06:- NEW -*       01
02:Voices2          07:- NEW -*
03:Songs            08:- NEW -*
04:- NEW -*         09:- NEW -*
05:- NEW -*         10:- NEW -*
 ▲  ▼                          Name  Go
```

❷ ❶ ❸ ❹

❶ File Name (0–99): This displays the number of each MDR file on the disk, and the name which was assigned to the file data by pressing F6 (Name) as explained below.

❷ Press F1 (△) or F2 (▽) to scroll the display up or down.

❸ By pressing F6 (Name) you can assign a name to the selected file.

❹ When you press F8 (Go), all data from the SY99 MDR memory will be saved in the specified file.

Saving procedure: Before this operation can be used, the MDR memory must contain data received by the *2.Input* operation explained on page 281. This operation will save all 99 sets of data from MDR memory to a file. It is not possible to save individual sets of MDR data to a file.

1. Move the cursor in ❶ to select a disk file 1–99. If necessary, press F1 (△) or F2 (▽) to scroll the display up or down.
2. If you wish to specify a name for the file, refer to the section *Save to disk filename* on page 271.
3. Press F8 (Go) to save the MDR data to the file.

MIDI DATA RECORDER

5. Initialize MDR

Summary: This operation clears all data from the SY99's internal MIDI data recorder.

Procedure:

From: MIDI data recorder utility job directory (JUMP #830)
Select: 05:Initialize MDR
To execute: the initialize operation press YES
To quit: without initializing press NO

```
INITIALIZE MDR

ARE YOU SURE ?
(Yes or No)
```

Press YES if you are sure you want to initialize the internal MDR memory. All data will cleared from the SY99's MDR memory. Note that data cleared in this way is permanently deleted and cannot be recalled!

MDR initialization will not affect the data stored in memory allocated as sample memory area.

Master control utility

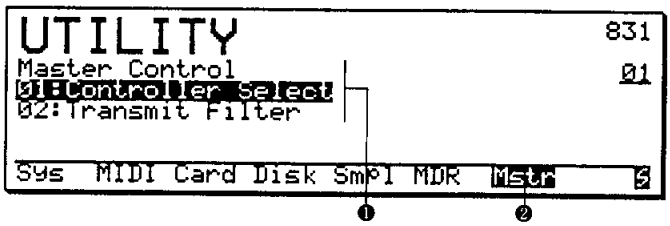
JUMP #831

Summary: Master control utility jobs allow you to select master control setups, edit setup parameters, and specify the channels on which each type of data is transmitted.

Procedure:

From:	System utility	(JUMP #800)
	MIDI utility	(JUMP #806)
	Card utility	(JUMP #812)
	Disk utility	(JUMP #816)
	Sample utility	(JUMP #826)
	MDR utility	(JUMP #830)
Press:	F7 (Mstr)	(JUMP #831)

Select: the desired master control utility job and press ENTER.



❶ Move the cursor in this area to select one of the following jobs and then press ENTER.
- 01: Controller Select: Select one or more MIDI master control setups, and edit setup parameters.
- 02: Transmit Filter: Specify which types of data will be transmitted on which channels when the SY99 is in master control mode.

❷ To move to a different utility mode press F1–F6. To select a job from the currently displayed job directory, hold SHIFT and press a function key.

MASTER CONTROL

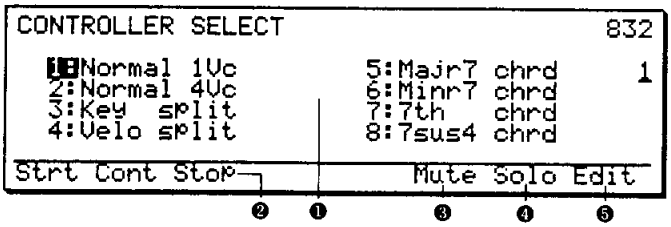
1. Controller select

JUMP #832

Summary: This job allows you to select master control setups and edit setup parameters.

Procedure:

From:	master control utility directory	(JUMP #831)
Select:	1:Controller Select	
Specify:	a master control setup to activate, deactivate, or edit.	
To activate:	an inactive setup, press ENTER.	
To deactivate:	an active setup, press ENTER.	
To edit:	a control setup, press F8 (Edit).	



❶ This area displays the names assigned to the eight master control setups. Move the cursor to a setup number and press ENTER to activate or deactivate the selected setup. Refer to the explanation of the *Activation* function, below.

❷ Press F1 (Strt), F2 (Cont), or F3 (Stop) to transmit a start, continue, or stop message to an external sequencer or rhythm machine via MIDI OUT.

❸ Press F6 (Mute) to switch Mute mode on or off. Refer to the explanation of *Mute mode*, below.

❹ Press F7 (Solo) to switch Solo mode on or off. Refer to the explanation of *Solo mode*, below.

❺ Press F8 (Edit) to edit the selected master control setup. Refer to the explanation of the *Controller edit* function, below.

Activation: The name of an active control setup will be displayed in reverse characters, and the program select LEDs will light to indicate the MIDI channels on which the setup is transmitting. You can deactivate the setup by selecting it again, or by selecting a different setup.

A control setup consists of four zones, each of which has its own transmit channel, velocity and aftertouch curves, transposition, and note and velocity limits. A variety of initial messages (bank select, program change, Main volume, and a set of MDR data) can also be specified for transmission by each of the four zones whenever that control setup is activated.

The master control functions of the SY99 will remain active only while the controller select or controller edit display is showing.

It is also possible to activate a control setup by inputting the number of that setup using the numerical keypad. Inputting a "0" from the numerical keypad will deactivate the control setup.

For details of the settings for each control setup, refer to the explanation of the *Controller edit* function, below.

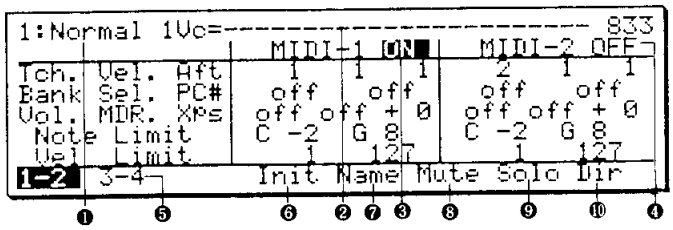
Mute mode: While Mute mode is on, you can press the program select buttons 1–16 to temporarily mute one or more channels being used by the active control setup. The LEDs corresponding to muted channels will blink. Press the program select button once again to un-mute a muted channel.

Solo mode: While Solo mode is on, the LEDs for all channels will blink. You can press a program select button 1–16 to solo a desired channel. The LED for that button will light steadily, and only the corresponding channel will transmit data.

Note: *It is of course possible to use both the master control feature and the SY99's sequencer at the same time in Song or Pattern play mode. However, it is not possible to use the master control functions while recording using the SY99's sequencer.*

If you press RECORD while a control setup is activated, the control setup will be deactivated while the sequencer is recording. When you press STOP to stop recording, the control setup will reactivate automatically.

Controller edit: When F8 (Edit) is pressed, a display similar to the following will appear:



❶ This area displays the number and name of the selected master control setup.

❷ Here you can specify the SY99 voice or multi that will be played by the SY99 keyboard when this control setup is selected.

❸ Each zone of the control setup can be turned on or off. If a zone is turned off, it will not transmit data.

❹ Specify how each of the four zones will transmit data. For details, refer to the explanation of *Control setup data*, below.

❺ To edit zones 1 and 2 press F1 (1–2). To edit zones 3 and 4 press F2 (3–4).

❻ To initialize all settings of the control setup, press F4 (Init). When a setup is initialized, the values for the factory preset "Normal 1Vc" are loaded to the setup. (Refer to the explanation of *Control setup factory presets*, below.)

❼ To edit the name press F5 (Name). Methods of entering character data are explained in *How to enter character data*, page 30.

❽ Press F6 (Mute) to switch Mute mode on or off. Refer to the explanation of *Mute mode*, above.

❾ Press F7 (Solo) to switch Solo mode on or off. Refer to the explanation of *Solo mode*, above.

❿ Press F8 (Dir) to display a directory of SY99 voices and multis.

Keyboard: When the cursor is moved to the Note Limit items within a zone, the label "Kbd" will appear for F3. Press F3 (Kbd) to input data using the keyboard.

Control setup data: Each of the four zones of a control setup contains the following data items:

ON/OFF: Zones that are turned off will not transmit data.

Transmit channel (1...16): The data for the zone will be transmitted on this MIDI channel.

Velocity curve (1...4): This determines how the note-on velocity of notes played will relate to the note-on velocity of the notes transmitted by this zone. (Refer to *System utility 2.Velocity set,* page 253.)

Aftertouch curve (1...4): This determines how pressure on the keyboard will be transmitted as channel aftertouch messages by this zone.

Bank Select (off, 1–16384): A bank select message of this number will be transmitted by this zone when the control setup is selected.

Program Change (off, 1–128): A program change message of this number will be transmitted by this zone when the control setup is selected.

Volume (off, 0...127): A volume message (control change 7) will be transmitted by this zone when the control setup is selected.

MDR data set (off, 1...99): The specified set of bulk data will be transmitted when the control setup is selected. (Refer to *MIDI data recorder utility*, page 279.) If there is a large amount of bulk data in the selected MDR data set, there may be a noticeable delay while this data is transmitted before the keyboard will respond to your playing.

Transpose (–64...+64): The notes transmitted by the zone will be transposed by this amount.

Note Limit (C-2...G8): The zone will transmit only notes whose note number is inside this range within.

Velocity Limit (1...127): The zone will transmit only notes that have a note-on velocity within this range.

Control setup factory presets: The following eight control setups were programmed to your SY99 when it left the factory:

Setup Name	Description
Normal 1Vc	Normal MIDI output. These settings are loaded by the initialize operation.
Normal 4Vc	Simultaneous four-channel MIDI output.
Key split	Two-channel output for each of the upper and lower halves of the keyboard; keyboard split at center.
Velo split	Two-channel output split at velocity median value.
Majr7 chrd	Transposes output to major seventh chord structure.
Minr7 chrd	Transposes output to minor seventh chord structure.
7th chrd	Transposes output to seventh chord structure.
7sus4 chrd	Transposes output to seventh sus4 chord structure.

We recommend saving these settings to a disk or data card, as they will be lost once they are edited.

Control setup chart: You can copy the chart on the next page to keep records of your own settings.

Summary: Edit the settings of the selected controller to specify how it will transmit data on each of its four zones.

Master control setup	Internal voice/multi:			
	MIDI-1	MIDI-2	MIDI-3	MIDI-4
	off/on	off/on	off/on	off/on
Transmit channel (1...16)	(1...16)			
Velocity curve (1...4)	(1...4)			
Aftertouch curve (1...4)	(1...4)			
Bank select number	(off, 1...16384)			
Program change number	(off, 1...128)			
Volume	(off, 0...127)			
MDR data set	(off, 1...99)			
Transpose	(–64...+64)			
Note limit	(C-2...G8)			
Velocity limit	(1...127)			

MASTER CONTROL

2. Transmit filter

JUMP #837

Summary: Specify whether each type of MIDI data on each channel will be transmitted or not when in master control mode.

Procedure:

From: master control utility directory (JUMP #831)

Select: 2:Transmit Filter (JUMP #837)

Specify: whether or not each type of message will be transmitted on each channel

```
TRANSMIT FILTER                                 837
          1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Prg Chg   x x x x x x x x · · · · · · · ·
Cont Chg  · · · · · · · · · · · · · · · ·
P Bender  · · · · x x · ▣ · · · · · · · ·
Sustain   · · · · · · · · · · · · x x x x
Aft Tuch  · · · · · · · · · · · · · · · ·
M Volume  x x x x x x x x x x x x x x x x
```

❶

❶ Move the cursor in this area and specify whether or not Program Change, Control Change, Pitch Bender, Sustain, Aftertouch, or Main Volume messages will be transmitted from each channel by the master controllers. An "x" symbol indicates that the data will not be transmitted.

The filter settings in this display are common to all eight master controllers, and are effective only when in master controller mode.