Chapter 6
Disk & Song File Utilities

This chapter describes the DSR1's internal Memory Disk and floppy disk and song file management utilities. These include titling disks, copying disks, copying songs, deleting songs, and rearranging the order of songs on a disk.

Titling Disks

You can give your own disks titles that will scroll across the display when the disk is inserted into the disk drive.

1 **Insert a song disk into the disk drive, as necessary.**

> Note: When titling the Memory Disk, make sure there is no floppy disk inserted in the disk drive.

2 **Press the [RECORD] button.**

The RECORD indicator lights and the PLAY/PAUSE indicator flashes.

3 **Select song No. 1, then press the [SONG SELECT ⏮] button again to display the disk title.**
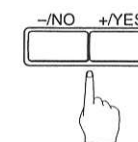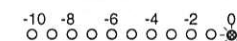

The song number disappears and the display cursor appears at the position of the first character in the title, as shown. If the disk already has a title, it will be shown on the display.

4 **Use the [◀][▶] cursor buttons to position the cursor within the title.**
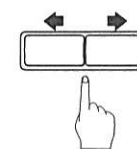
5 **Use the Dial, the keyboard or the [–/NO] and [+/YES] buttons to select a character.**

To enter characters using the keyboard, see "Keyboard Character Map" on the next page.

Pressing the [ENTER] button or the sustain (right) pedal moves the cursor to the next character.
Only 16 characters can be displayed at a time. To see the rest of the title, use the [◀][▶] cursor buttons.
Disk titles can be up to 64 characters long. The following table shows which characters are available.

(space)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	a	b	c	d	e
f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u
v	w	x	y	z	!	"	#	$	%	&	'	(	)	*	+
,	–	.	/	:	;	<	=	>	?	0	1	2	3	4	5
6	7	8	9												

6 **When you have entered a disk title, press the [STOP] button.**


Keyboard Character Map

The keyboard can be used to enter characters when titling songs and disks. See the character map below.

> Note: For Disklavier pianos (including MPX100II), MIDI OUT must first be set to KBD OUT. See "MIDI Settings" on page 17 of the *Getting Started & Playback Manual* and your piano's owner's manual for details.
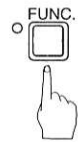
Note: Not all characters that the DSR1 provides are available from the keyboard. Certain punctuation must be input from the DSR1 front panel. See the character table on page 51.
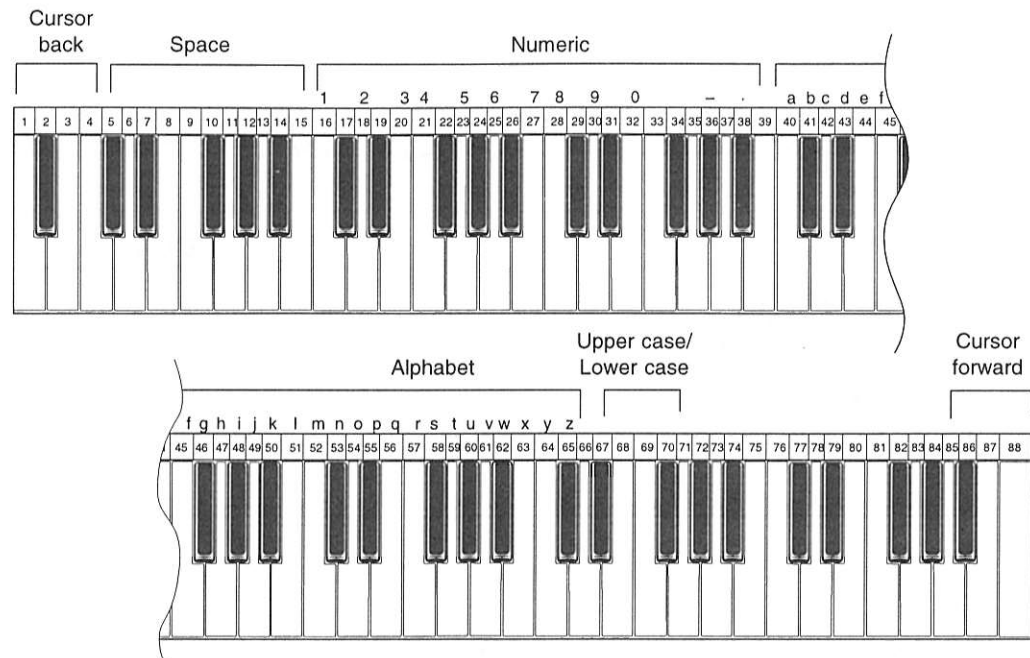
Copying Songs Stored on the Memory Disk

Songs stored on the Memory Disk can be copied to the Memory Disk or to a floppy disk.

1 Press the [FUNC.] button.

The FUNC. indicator lights and the following display appears.

```
▶Disk        *MIDI Setup  →
*M-Tune      *Piano Type
```

2 With the ▶ cursor next to the Disk option, press the [ENTER] button.

The Disk menu display appears.

```
▶Format      *SongDelete
*SongCopy     *SongSort    →
```
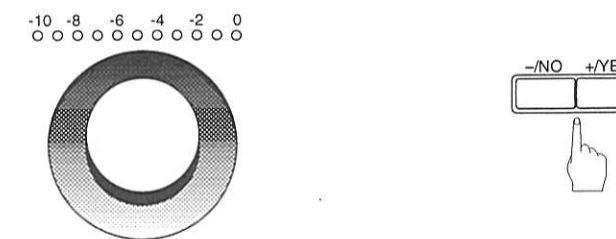
3 Press the [→] cursor button twice to position the ▶ cursor next to the Song Copy option, then press the [ENTER] button.
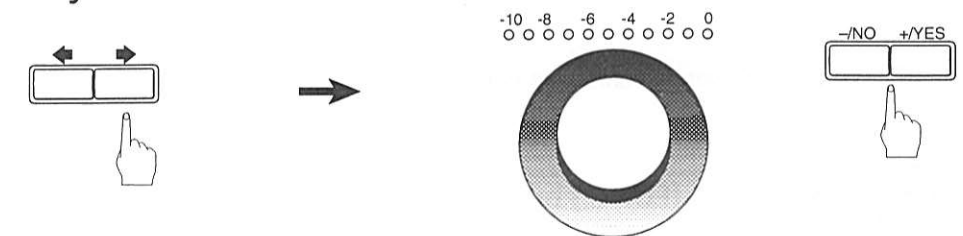

The following display appears.

```
[Song Copy]→Memory Disk
▶ 01 PIANO001.FIL   (ENT)
```

4 Use the Dial or the [–/NO] and [+/YES] buttons to select the song that you want to copy.

5 When you have selected the song, press the [→] cursor button, then use the Dial or the [–/NO] and [+/YES] buttons to select the destination disk: Memory Disk or Other Disk.


```
[Song Copy]▶Memory Disk
> 01 PIANO001.FIL   (ENT)
```

6 Press the [ENTER] button.

If the destination disk is the Memory Disk, the following display appears.

```
WRITING        ▓▓▓▓■□□□□□□□□
```

The song number indicator counts down from 99 and a bar graph on the display marks the progress. When the song number indicator reaches 00 and the squares on the bar graph are completely filled, the copy process is complete.

If the destination disk is a floppy disk, the following display appears.

```
INSERT DESTINATION DISK
   01 →OTHER DISK
```

Insert a formatted floppy disk in the disk drive, and song copy begins.

English

Note: Make sure that the destination floppy disk is formatted and its erasure protection tab is set to "unprotected".

Note: Copy-protected songs in the Memory Disk cannot be copied to a floppy disk. They can, however, be copied inside the Memory Disk.

7 **When the copy process is complete, the following display appears. Press any button to return to the normal display.**

```
COMPLETE
PRESS ANY BUTTON
```

Copying Songs Stored on a Floppy Disk

Songs stored on a floppy disk can be copied to the same floppy disk, to the Memory Disk, or to a second floppy disk.

Note: When copying to a second floppy disk, it is a good idea to set your source disk to "protected" to protect it from accidental erasure. When copying to the same floppy disk, however, make sure that the erasure protection tab is set to "unprotected"; otherwise, song copy will not be performed. See "Accidental Erasure Protection" on page 2.

Note: Copy-protected songs cannot be copied to another floppy disk.

1 **Press the [FUNC.] button.**

The FUNC. indicator lights and the following display appears.

```
▶Disk      *MIDI Setup →
*M-Tune    *Piano Type
```

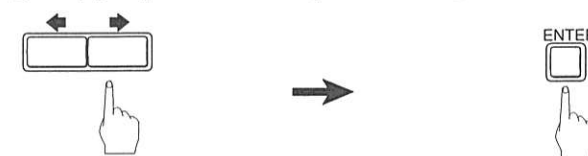**2** **With the ▶ cursor next to the Disk option, press the [ENTER] button.**

The Disk menu display appears.

```
▶Format.    *SongDelete
*SongCopy   *SongSort   →
```

3 **Press the [➡] cursor button twice to position the ▶ cursor next to the Song Copy option, then press the [ENTER] button.**
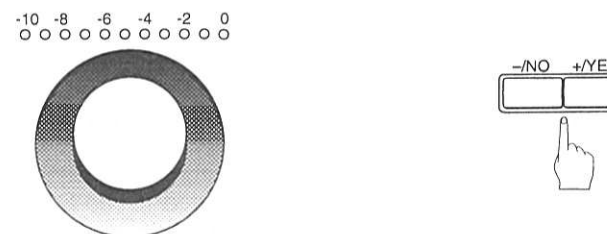
The following display appears.

```
[Song Copy]→Memory Disk
▶ 01 PIANO001.FIL   (ENT)
```
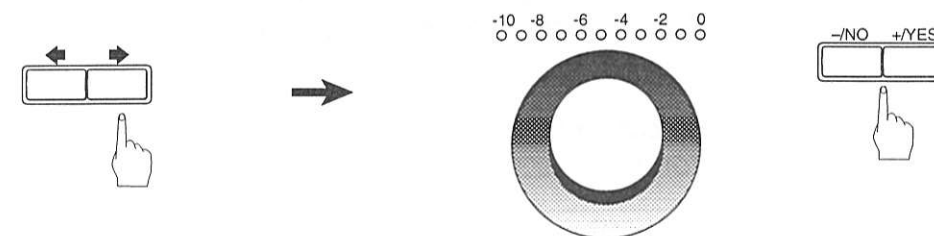
4 **Use the Dial or the [–/NO] and [+/YES] buttons to select the song that you want to copy.**

5 **When you have selected the song, press the [➡] cursor button, then use the Dial or the [–/NO] and [+/YES] buttons to select the destination disk: Same Disk, Memory Disk, or Other Disk.**

```
[Song Copy] ▶Other Disk
> 01 PIANO001.FIL   (ENT)
```

6 **Press the [ENTER] button.**

If the destination disk is Same Disk or the Memory Disk, the following display appears.

```
WRITING        ▮▮▮▮□□□□□□□
```

The song number indicator counts down from 99 and a bar graph on the display marks the progress. When the song number indicator reaches 00 and the squares on the bar graph are completely filled, the copy process is complete.

If the destination disk is Other Disk, the following display appears.

```
INSERT DESTINATION DISK
  01 →Other Disk
```

Insert a formatted floppy disk in the disk drive, and song copy begins.

Note: Make sure that the destination floppy disk is formatted and its erasure protection tab is set to "unprotected".

The copy process may take several seconds depending on the size of the song file. If the song file you want to copy is large, the following display may appear.

```
INSERT SOURCE DISK
  01 →Other Disk
```

Eject the destination disk and insert the source disk.
You may need to repeat this several times until the copy process is complete.

Note: If the destination disk has not been formatted in the DSR1, the message "UNFORMATTED DISK" appears. In this case, cancel the song copy process, then format the disk. See "Formatting Disks" on page 2.

Note: You cannot copy copy-protected songs such as PianoSoft songs onto a floppy disk. They can, however, be copied to the Memory Disk.

7 When the copy process is complete, the following display appears. Press any button to return to the normal display.

```
COMPLETE
PRESS ANY BUTTON
```

Copying All Songs on a Floppy Disk (Disk Copy)

All songs on a floppy disk can be copied onto another floppy disk. This is useful for making backup copies of your own song disks. This function cannot be used to copy all songs on the Memory Disk.

1 Set the source disk's erasure protection tab to "protected" then insert it into the disk drive.

Note: If the source disk's erasure protection tab is not set to protected, the message "SET THE SOURCE DISK'S ERASURE TAB TO PROTECTED" appears and you will not be able to proceed until the erasure tab is set.

Note: You cannot copy copy-protected songs such as PianoSoft songs onto another disk.

2 Press the [FUNC.] button.

The FUNC. indicator lights and the Function menu display appears.

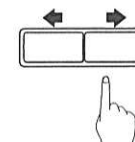**3** With the ▶ cursor next to the Disk option, press the [ENTER] button.

The Disk menu display appears.

```
▶Format     *SongDelete
*SongCopy   *SongSort   →
```

4 Use the [→] cursor button to position the ▶ cursor next to the Disk Copy option, then press the [ENTER] button.

The following display appears.

```
[Disk Copy]
2DD              (ENT)
```

If the source disk is a 2HD disk, the display indicates "2HD".

Note: You cannot copy a disk that contains copy-protected songs such as PianoSoft songs.

5 Press the [ENTER] button.

The disk copy process begins.

After a few seconds, the following display appears. Eject the source disk and insert the destination disk.

```
INSERT DESTINATION DISK
```

Note: Make sure that the destination disk's erasure protection tab is set to "unprotected".

English

Depending on the size of the files, the following display may appear.

```
INSERT SOURCE DISK
```

Eject the destination disk and insert the source disk. You may need to repeat this several times until the copy process is complete.

Note: All songs currently on the destination disk will be erased.

6 When the copy process is complete, the following display appears. Press any button to return to the normal display.

```
COMPLETE
  PRESS ANY BUTTON
```

Deleting a Song

You can delete songs stored on the Memory Disk or floppy disks.

If you want to delete all the songs on a disk, it may be quicker to re-format the disk. See "Formatting Disks" on page 2.

1 Insert a song disk into the disk drive, as necessary.

Note: To delete a song from the Memory Disk, make sure there is no floppy disk inserted in the disk drive.

2 Press the [FUNC.] button.

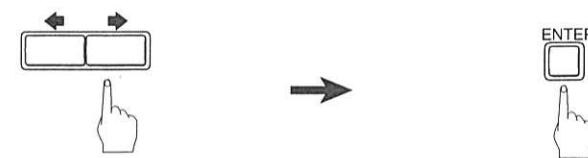The FUNC. indicator lights and the Function menu display appears.

3 With the ▶ cursor next to the Disk option, press the [ENTER] button.

The Disk menu display appears.

```
▶Format    *SongDelete
*SongCopy  *SongSort   →
```
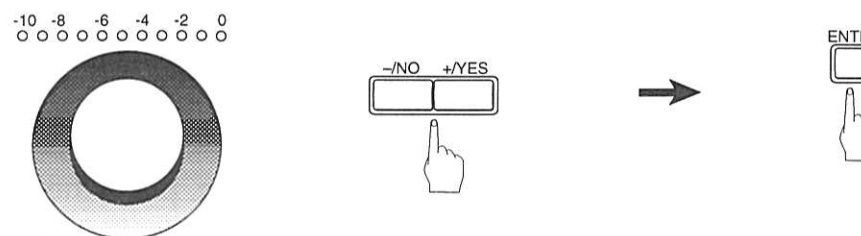
4 Use the [➡] cursor button to position the ▶ cursor next to the Song Delete option, then press the [ENTER] button.

The following display appears.

```
[Song Delete]      (-,+)
▶ 01 PIANO001.FIL  (ENT)
```
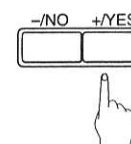
5 Use the Dial or the [–/NO] and [+/YES] buttons to select the song that you want to delete, then press the [ENTER] button.

The following display appears.

```
[Song Delete]       SURE?
  01 PIANO001.FIL  (Y/N)
```

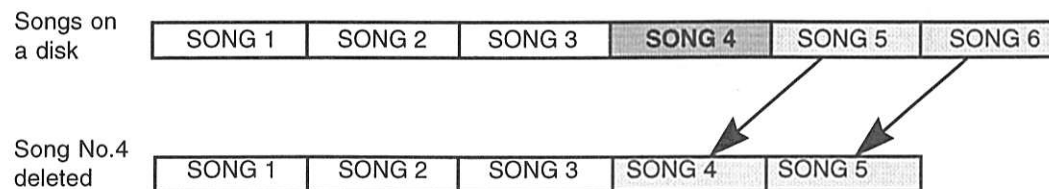**6** Press the [+/YES] button to delete the selected song.

If you do not want to delete the song, press the [–/NO] button and the previous display appears.

Note: Once deleted, a song cannot be retrieved, so take care when selecting which song to delete.

Note: You cannot delete copy-protected songs in a floppy disk. However, you can delete copy-protected songs in the Memory Disk.

When a song is deleted, subsequent songs are renumbered. For example, if you have six songs on a disk, and song No. 4 is deleted, song No.5 becomes song No.4 and song No.6 becomes song No.5, and so on.

Songs on a disk	SONG 1	SONG 2	SONG 3	SONG 4	SONG 5	SONG 6

Song No.4 deleted	SONG 1	SONG 2	SONG 3	SONG 4	SONG 5

English

Rearranging Song Order (Song Sort)

You can rearrange the order of songs on a disk.

1 **Insert a song disk in the disk drive, as necessary.**

> Note: To rearrange songs on the internal Memory Disk, make sure there is no floppy disk inserted in the disk drive.

2 **Press the [FUNC.] button.**

The FUNC. indicator lights and the Function menu display appears.

3 **With the ▮▸ cursor next to the Disk option, press the [ENTER] button.**

The Disk menu display appears.

```
▮Format      *SongDelete
*SongCopy    *SongSort    →
```

4 **Use the [▸] cursor button to position the ▮▸ cursor next to the Song Sort option, then press the [ENTER] button.**
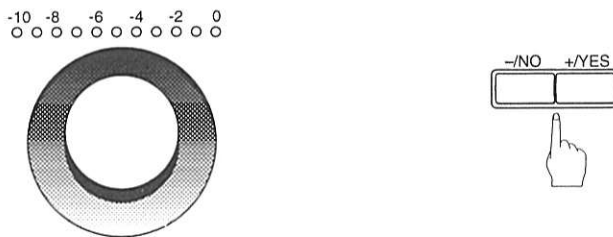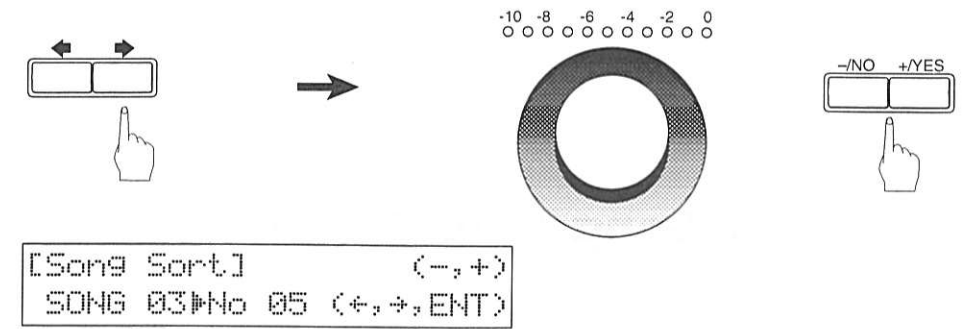
The following display appears.

```
[Song Sort]           (-,+)
▮SONG 02→No 01 (←,→,ENT)
```

5 **Use the Dial or the [–/NO] and [+/YES] buttons to select the song that you want to move.**

6 **When you have selected a song, press the [▸] cursor button, then use the Dial or the [–/NO] and [+/YES] buttons to select the destination.**

```
[Song Sort]           (-,+)
SONG 03▮No 05 (←,→,ENT)
```

In this example, song No. 3 is being moved to song No. 5.

7 **Press the [ENTER] button.**
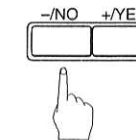
The following display appears.

```
CONTINUE Song Sort?
  03→    05   (YES,NO)
```
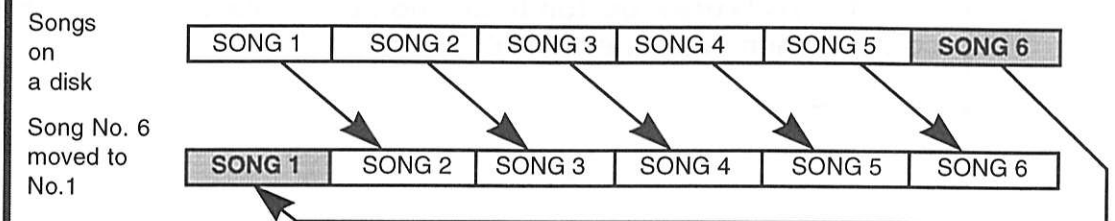
> Note: At this point of the procedure, the DSR1 has not saved the sorted song data to disk — it is asking if you want to sort some more songs before saving the sorted song data and exiting the song sort function.

Press the [+/YES] button if you want to sort more songs.

**8** **Press the [–/NO] button to save all the song sort data.**

During the sorting process, the selected song is changed to its new song number and all the other songs on the disk are rearranged. For example, the example below shows a disk that contains six songs. If you make song No.6 the first song on the disk (No.1), songs 1 to 5 are renumbered as songs 2 to 6.

Songs on a disk

| SONG 1 | SONG 2 | SONG 3 | SONG 4 | SONG 5 | SONG 6 |

Song No. 6 moved to No.1

| SONG 1 | SONG 2 | SONG 3 | SONG 4 | SONG 5 | SONG 6 |

> Note: You cannot sort the songs on a pre-recorded disk.

9 When sorting is complete, the following display appears.

Press any button to return to the normal display.

```
COMPLETE
  PRESS ANY BUTTON
```
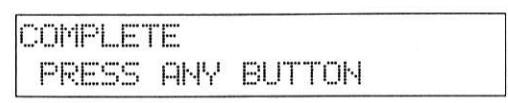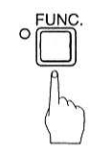
Changing the Song Time Display _____

The time display of a song can be changed from measures and beats (metronome) to minutes and seconds, or vice versa.

Note: If the format is changed from minutes and seconds to measures and beats, the metronome beat will not match the timing of the song.

1 Insert a song disk in the disk drive, as necessary.

Note: To change the song time display of a song on the Memory Disk, make sure there is no floppy disk inserted in the disk drive.
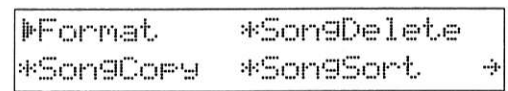
2 Press the [FUNC.] button.

The FUNC. indicator lights and the Function menu display appears.
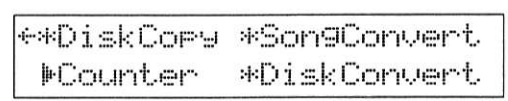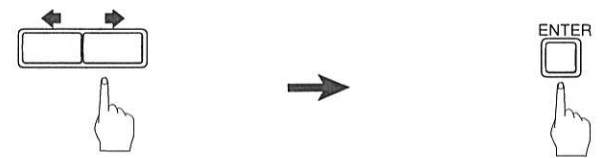
3 With the ▶ cursor next to the Disk option, press the [ENTER] button.

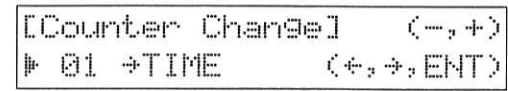The disk menu display appears.

```
▶Format      *SongDelete
*SongCopy    *SongSort    →
```

4 Use the [➡] cursor button to position the ▶ cursor next to the Counter option, then press the [ENTER] button.

```
←*DiskCopy  *SongConvert
  ▶Counter  *DiskConvert
```

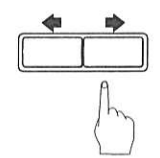The following display appears.

```
[Counter Change]    (-,+)
▶ 01 →TIME        (←,→,ENT)
```

5 Use the Dial or the [–/NO] and [+/YES] buttons to select the song whose time display you want to change.
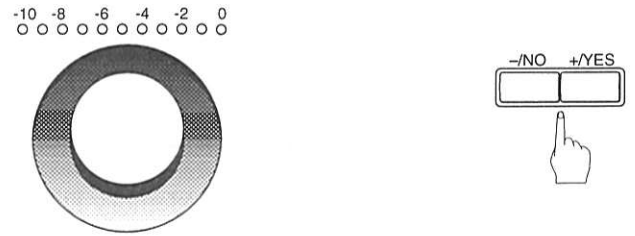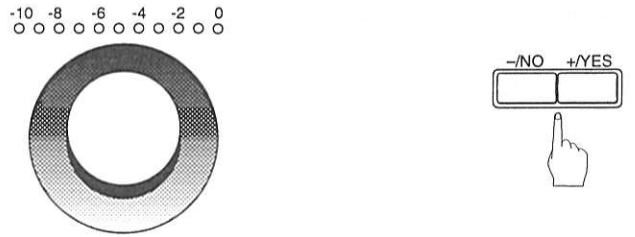
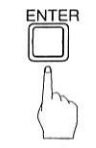**6** When you have selected a song, press the [➡] cursor button.

7 Use the Dial or the [–/NO] and [+/YES] buttons to select the time display.

TIME   : minutes and seconds display
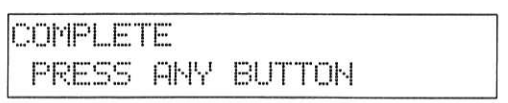METRONOME: measures and beats display

```
[Counter Change]    (-,+)
> 03 ▶METRONOME(←,→,ENT)
```

8 When you have selected the time display, press the [ENTER] button.

Note: You cannot change the time display of copy-protected songs.

9 After a few seconds, the following display appears.

Press any button to return to the normal display.

```
COMPLETE
  PRESS ANY BUTTON
```

English

Chapter 7
Song and Disk Formats and Compatibility

This chapter describes the song formats and disk types that the DSR1 uses to control song data on disks. This information is relevant to using DSR1 song data with other Yamaha instruments or MIDI equipment.

Song Format

Song format refers to the format in which songs are recorded onto the Memory Disk or floppy disks. The DSR1 supports both the most commonly used Standard MIDI File (SMF) format and Yamaha's E-SEQ format.

SMF Format Songs

If you plan to edit DSR1 songs on a MIDI instrument or computer music software, it would be wise to record them in the SMF format. It will provide you with access to a vast range of creative MIDI options. The DSR1 automatically records songs in SMF format if the disk on which the songs are to be recorded is formatted as an SMF type disk. (See "Disk Types" below.)

To be exact, the DSR1 records songs in SMF format 0 by default. (SMF format 1 is supported by the DSR1 for playback functions.)

When recording SMF songs, song tempo can be set between 30 and 400 bpm.
For songs with pedal data, incremental pedal data is stored on tracks 1 and 2.
You can also select any voice for tracks 3 to 9 and 11 to 16. Tracks 1 and 2 are for piano parts and track 10 for the rhythm track.

E-SEQ Format Songs

If you plan to play back DSR1 songs on earlier Disklavier pianos or earlier Clavinova series digital pianos, you should record them in E-SEQ format onto 2DD floppy disks. E-SEQ is a representative song file format developed by Yamaha, and its playback and recording functions are supported in full by the DSR1. To record DSR1 songs in E-SEQ format, the disk to which the songs are to be recorded should be formatted as an E-SEQ type disk. (See "Disk Types" below.)

When recording E-SEQ songs, song tempo can be set between 30 and 280 bpm.
For songs with pedal data, on/off pedal data is stored on tracks 1 and 2, and incremental pedal data is stored on track 3.
You can also select any voice for tracks 4 to 9 and 11 to 16. Tracks 1 to 3 are for piano parts and track 10 for the rhythm track.

Disk Types

You can format the Memory Disk and floppy disks in either SMF or E-SEQ format, in accordance with the song format you want to use for recording DSR1 songs. (See "Formatting Disks" on page 2 and "Converting Disk Type" on page 67.) The Memory Disk is formatted as an SMF type disk as a factory presetting.

Note: The terms "SMF type disk" and "E-SEQ type disk" are unique to the Yamaha DSR1 and Disklavier pianos, and should not be confused with SMF and E-SEQ song formats described above. With the DSR1, however, song format and disk type has much to do with the other. This is described in detail below.

SMF Type Disks

DSR1 songs recorded to a disk formatted as an SMF type disk will be recorded in SMF format 0 by default. However, it is possible to copy E-SEQ songs to an SMF type disk.

If a disk is formatted as an SMF type disk, the following display should appear as the disk title display.

```
Memory Disk
      SMF Type Disk
```

Up to 99 songs can be recorded onto an SMF type disk, depending on the size of the song file.

E-SEQ Type Disks

DSR1 songs recorded to a disk formatted as an E-SEQ type disk will be recorded in E-SEQ format only. It is not possible to copy SMF songs to an E-SEQ type disk. E-SEQ disks can be played back by most Disklavier pianos.

If a disk is formatted as an E-SEQ type disk, the following display should appear as the disk title display.

```
Memory Disk
      E-SEQ Type Disk
```

Up to 60 songs can be recorded onto an E-SEQ type disk.

Cl and Other Type Disks

Disks formatted by instruments other than the DSR1 or Disklavier pianos may be displayed as Cl Type Disk or Other Type Disk. These disks can be played back by the DSR1, but once DSR1 songs are recorded to these disks, they will automatically become SMF type disks, and you may no longer be able to play them back on the instruments in which they were originally formatted.

Converting Song Format

SMF songs can be converted to E-SEQ songs and vice versa.

Note: When converting songs from SMF to E-SEQ song format, if there is an instrumental part on track 3, incremental pedal data will be lost to accommodate the instrumental part on track 3.
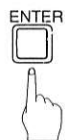
1   **Press the [FUNC.] button.**

The FUNC. indicator lights and the Function menu display appears.

2 With the ▶ cursor next to the Disk option, press the [ENTER] button.

The Disk menu display appears.

```
▶Format    *SongDelete
*SongCopy  *SongSort    →
```

3 Use the [➡] cursor button to position the ▶ cursor next to the Song Convert option, then press the [ENTER] button.
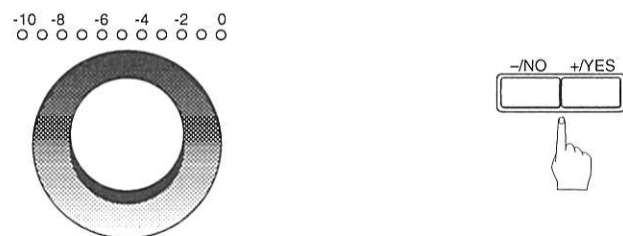
```
←*DiskCopy ▶SongConvert
 *Counter  *DiskConvert
```
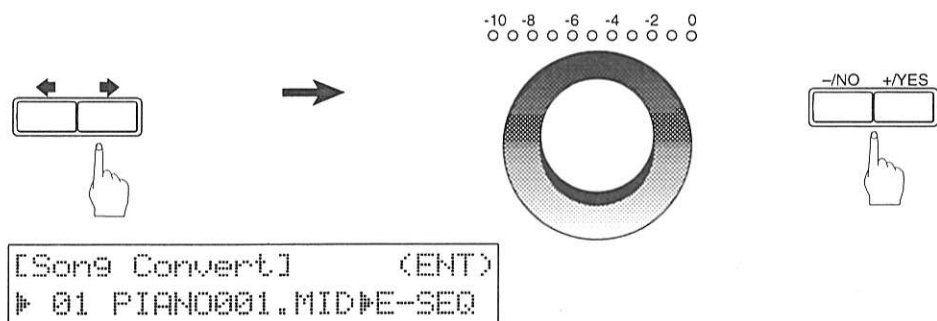
The following display appears.

```
[Song Convert]      (ENT)
▶ 01 PIANO001.MID→E-SEQ
```

4 Use the Dial or the [–/NO] and [+/YES] buttons to select the song that you want to convert.

5 When you have selected the song, press the [➡] cursor button to position the ▶ cursor next to the arrow. Then use the Dial or the [–/NO] and [+/YES] buttons to select a song format: E-SEQ, SMF0 or SMF1.

Symbol	Song format
E-SEQ	E-SEQ format
SMF0	Standard MIDI File format 0
SMF1	Standard MIDI File format 1

```
[Song Convert]      (ENT)
▶ 01 PIANO001.MID▶E-SEQ
```
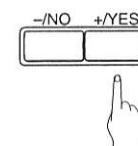
6 Press the [ENTER] button.

A display similar to the following appears.

```
[Song Convert]SURE?(Y/N)
 01 PIANO001.MID→E-SEQ
```

7 Press the [+/YES] button to begin song conversion.

If you do not want convert the song, press the [–/NO] button.

8 When song conversion is completed, the following display appears.

Press any button to return to the normal display.

```
COMPLETE
 PRESS ANY BUTTON
```

When a song format is converted, the extension of the file name changes.

Converting Disk Type

SMF type disks can be converted to E-SEQ type disks and vice versa. This can be helpful when you want to play back a song recorded in the SMF format on an early Disklavier model, or when you want to use song data recorded in the E-SEQ format with other MIDI instruments.

1 Press the [FUNC.] button.

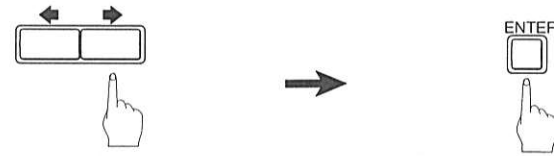The FUNC. indicator lights and the Function menu display appears.

2 With the ▶ cursor next to the Disk option, press the [ENTER] button.

The Disk menu display appears.

```
‖Format    *SongDelete
*SongCopy  *SongSort   →
```

3
Use the [➡] cursor button to position the ‖ cursor next to the Disk Convert option. Then press the [ENTER] button.
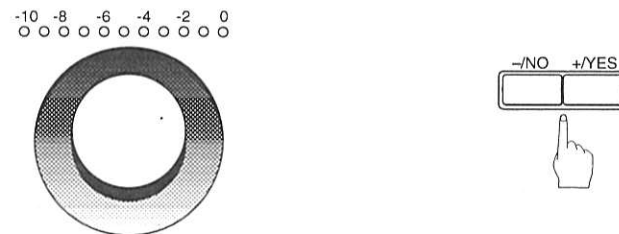


```
←*DiskCopy  *SongConvert
  *Counter  ‖DiskConvert
```

The following display appears.

```
[DiskConvert]
   SMF→‖E-SEQ Type (ENT)
```

4
Use the Dial or the [–/NO] and [+/YES] buttons to select a song format.

E-SEQ type disks can be converted to SMF type disks or Piano1 disks.
SMF type disks can be converted to E-SEQ type disks or Piano1 disks.

Note: Piano1 is a format that can be played back by the DSR1 and all Disklaviers.
        In the display, disk type for a Piano1 type disk will be shown as E-SEQ.

5
Press the [ENTER] button.

The following display appears.

```
INSERT DESTINATION DISK
```

Insert the destination disk.

Depending on the size of the disk, the following display may appear.

```
INSERT SOURCE DISK
```

Eject the destination disk and insert the source disk. You may need to repeat this several times until the conversion is complete.

If all data cannot fit onto one disk, the following display appears. Insert another floppy disk and conversion will continue.

```
INSERT ANOTHER
DESTINATION DISK
```

6
When the conversion process is complete, the following display appears.

Press any button to return to the normal display.

```
COMPLETE
   PRESS ANY BUTTON
```

Chapter 8
The DSR1 & MIDI

This chapter describes how the DSR1 can be used with other MIDI instruments. The DSR1's MIDI functions are flexible, so there are many different connection possibilities. This chapter provides a few examples. Even if your particular application is not one of these, by reading through these setup examples, you should be able to derive the information required to create your own setup.

Note: For the MIDI setups described in this chapter, it is recommended that you connect your MIDI instrument to the MIDI OUT connector and set the HOST SELECT switch to MIDI so that the DSR1 functions properly. See "Setting the HOST SELECT Switch" on page 82.

Start/Stop Control of another MIDI Instrument with the DSR1

In this setup, song disks are played back by the DSR1 and a connected MIDI drum machine or sequencer plays in synchronization. When the [PLAY] button is pressed, the MIDI instrument starts to play. It can also be paused and stopped via the DSR1. In addition, the tempo of the MIDI instrument will change as the tempo of the DSR1 is adjusted.

1 Connect the DSR1's MIDI OUT to the MIDI drum machine or sequencer's MIDI IN connector using a MIDI cable.
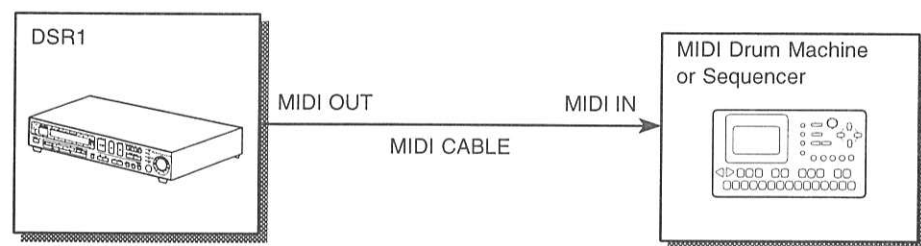
2 Set the MIDI drum machine or sequencer to synchronize with the incoming MIDI clock, sometimes called "MIDI SYNC". Refer to its operating manual for details.
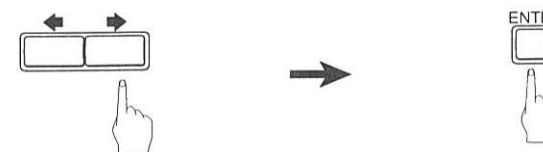
3 Press the [FUNC.] button.

The FUNC. indicator lights and the following display appears.


```
▶Disk      *MIDI Setup →
*M-Tune    *Piano Type
```

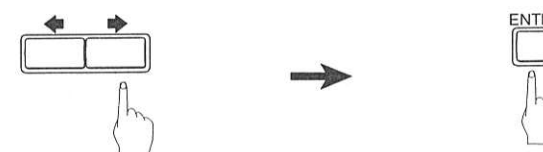**4** Use the [▶] cursor button to position the ▶ cursor next to the MIDI Setup option, then press the [ENTER] button.

The following display appears.

```
▶Piano Part *MIDI Out
*Remote
```

5 Press the [▶] cursor button twice to position the ▶ cursor next to the Remote option, then press the [ENTER] button.
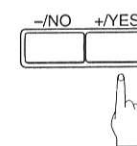
The following display appears.

```
▶Remote Out=OFF
>Remote In=OFF
```

6 Press the [+/YES] button to set the Remote Out parameter to ON.

7 Press the [FUNC.] button or the [STOP] button to exit the MIDI setup.

The DSR1 can now be used in the sequencer system.

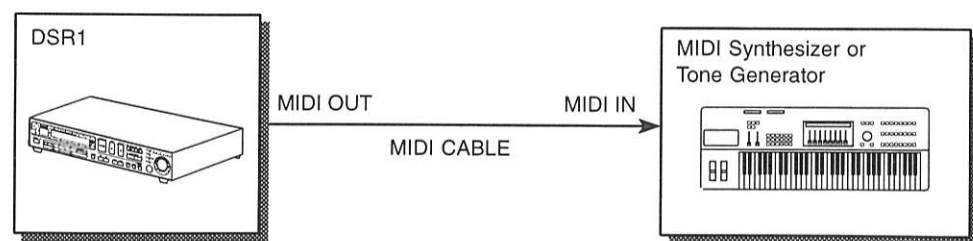## Sending Keyboard Data to a MIDI Instrument

In this setup, as you play your piano, an external MIDI tone generator or synthesizer connected to the DSR1 plays as well. This is sometimes referred to as voice layering or unison. A typical combination may be the piano and a strings voice, or the piano and a vibes voice. From the DSR1, you can select the MIDI instrument's voice, set its volume, and its transposition.

It is also possible to set a split point on the keyboard, so that, for example, your left-hand part is backed by a bass guitar voice and your right-hand part is backed by a marimba. MIDI data from each side of the split point is sent on a different MIDI channel, and the voice, volume, and transposition for each side can be set individually.

Note: This setup is not intended for Ensemble song playback. It is intended for manual piano playing with an external tone generator or synthesizer. To send Ensemble song data to an external MIDI instrument, see "Sending Song Data to a MIDI Instrument" on page 77.

The following procedure describes how to play MIDI instruments from the DSR1 using a keyboard split point.

1 Connect the DSR1's MIDI OUT to the external MIDI instrument's MIDI IN connector using a MIDI cable.
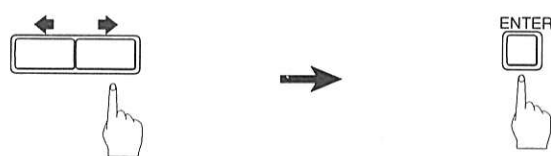

2 Press the [FUNC.] button.

The FUNC. indicator lights and the Function menu display appears.

3 Use the [➡] cursor button to position the ▐▶ cursor next to the MIDI Setup option, then press the [ENTER] button.

The following display appears.

```
▐▶Piano Part ✳MIDI Out
✳Remote
```

4 Use the [➡] cursor button to position the ▐▶ cursor next to the MIDI Out option, then press the [ENTER] button.
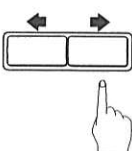

The following display appears.

```
▐▶MIDI Out=PIANO IN          →
```

→ See "Summary of the MIDI Out Parameter in a MIDI Setup" on pages 79 and 80 for details on the MIDI Out parameter.
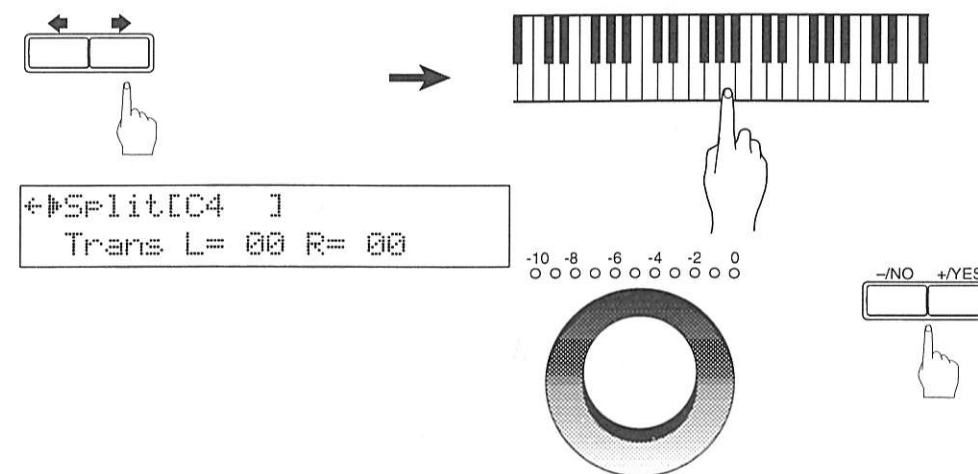
5 Press the [➡] cursor button.

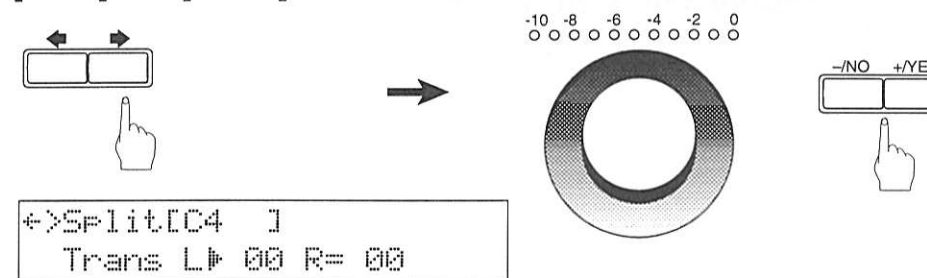A display similar to the following appears.

```
←Out Ch▐▶01                  →
  Prg=###      Vol=###
```

6 To set a split point, press the [➡] cursor button until the following display appears. Then, with the ▐▶ cursor next to the Split parameter, use the Dial, keyboard or the [–/NO] and [+/YES] buttons to select a key.



```
←▐▶Split[C4  ]
   Trans L= 00 R= 00
```

A keyboard split point can be set from A-1 to C-7.

7 If you want to transpose the MIDI output, press the [➡] cursor button to position the ▐▶ cursor next to the Trans parameter, then use the Dial or the [–/NO] and [+/YES] buttons to set a value.


```
←>Split[C4  ]
  Trans L▐▶ 00 R= 00
```

The MIDI output can be transposed from –60 to +60 in one semitone steps. Separate transposition values can be set for the left- and right-hand parts.

8 Press the [⬅] cursor button twice.

x 2
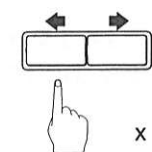
The following display appears.
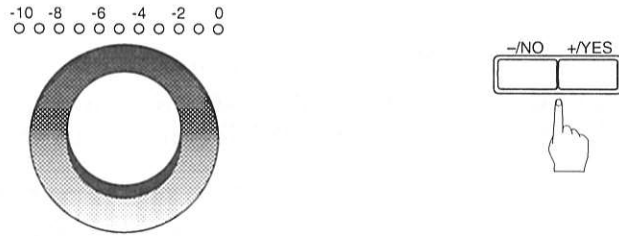
```
←Out Ch=01,02  (L,R)    →
 Prg=###,### Vol=###▐▶###
```

If you did not set a split point, the subsequent displays will be similar to the following.

```
←Out Ch=01                  →
 Prg=###      Vol▐▶###
```

English

Sending the Keyboard Data to a MIDI Instrument 73

9 Press the [◄] cursor button to position the ▶ next to the Out Ch parameter, then use the Dial or the [–/NO] and [+/YES] buttons to set a value.

The "Out Ch" option is used to select the MIDI channel/s on which the DSR1 will transmit MIDI data.
It can be set to OFF, MIDI channels 1 to 16 or HP.

| Channel	Description
OFF	No data is sent to the MIDI instrument.
1 to 16	Keyboard data and pedal data from PIANO IN are sent on the selected channel.
HP	For pianos with half-pedal function, keyboard data and on/off pedal data are sent on channel 1, and continuous pedal data (half pedal) is sent on channel 3. For pianos without half pedal function (such as MX80, MX100A, MX100B), keyboard data and on/off pedal data are sent on channel 1, and on/off pedal data also on channel 3.

10 To select a voice for the MIDI output, press the [▶] cursor button to position the ▶ cursor next to the Prg parameter, then use the Dial or the [–/NO] and [+/YES] buttons to select a voice.

```
◄Out Ch=01,02  (L,R)  →
Prg▶###,### Vol=###,###
```
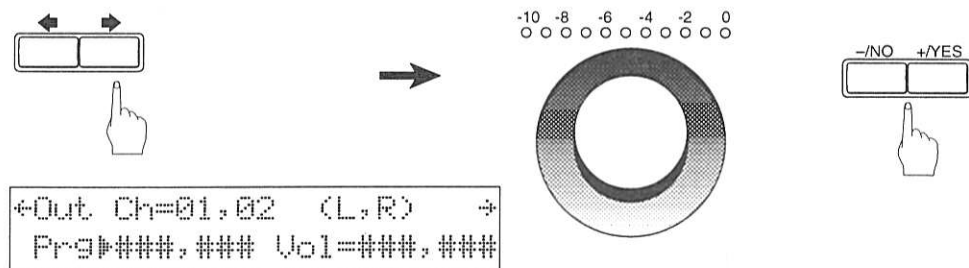
If you had set a split point, you can set different voices for the left- and right-hand parts.
A setting of "###" means no voice selection.

11 To set the volume of the MIDI output, press the [▶] cursor button to position the ▶ cursor next to the Vol parameter, then use the Dial or the [–/NO] and [+/YES] buttons to set the volume.

```
◄Out Ch=01,02  (L,R)  →
Prg=###,### Vol▶###,###
```
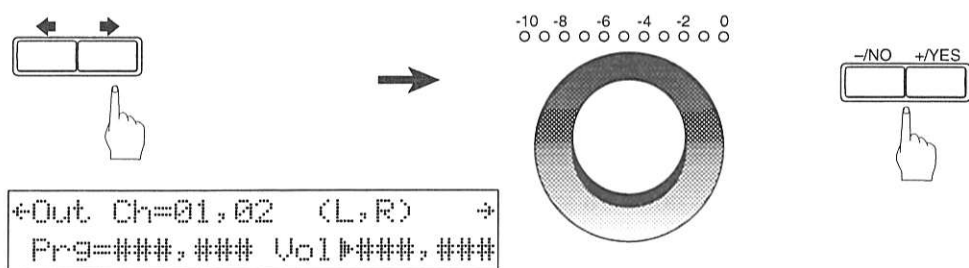
If you had set a split point, you can set different volume levels for the left- and right-hand piano parts.
A setting of "###" will not change the volume.

12 Press the [FUNC.] button or the [STOP] button to exit the MIDI setup.

Receiving Data from a MIDI Sequencer

In this setup, the DSR1 is connected to a MIDI sequencer for song recording and playback. In this way you can use an external MIDI sequencer's powerful recording and editing functions for creating songs. The sequencer can be a dedicated music sequencer, a MIDI data recorder, or a MIDI sequencer program running on a computer.

Note: **<For Disklavier pianos>**
A 500 millisecond delay is automatically applied to incoming MIDI data so that the Disklavier plays more fluently. Because of the delay you may notice that the beat indicator on the sequencer is slightly ahead of the actual sounds being produced. Be aware of this.

The DSR1's Piano Rcv Ch parameter must be set to match that of the sequencer track that contains the piano parts. For example, if the piano part is recorded on sequencer track 7 and track 7 is transmitting on MIDI channel 12, the DSR1 should be set to receive on MIDI channel 12. The Piano Rcv Ch parameter has the following options.

Option	Description
##	MIDI IN data is played by just the internal XG tone generator.
01 to 16	MIDI IN data is played by your piano on the specified MIDI channel.
HP	MIDI IN data is played by your piano — piano parts on MIDI channel 1 and 2, and half pedal data or on/off pedal data on MIDI channel 3 depending on whether or not your piano supports half pedal data.
1+2	MIDI IN data is played by your piano — piano parts on MIDI channel 1 and 2.
Prg	MIDI IN data is played by your piano on the channel with the smallest number which contains a piano group voice.
Prg(all)	All channels that contain a piano group voice in the MIDI IN data is played by your piano.

1 Connect the MIDI sequencer's MIDI OUT to the DSR1's MIDI IN with a MIDI cable.
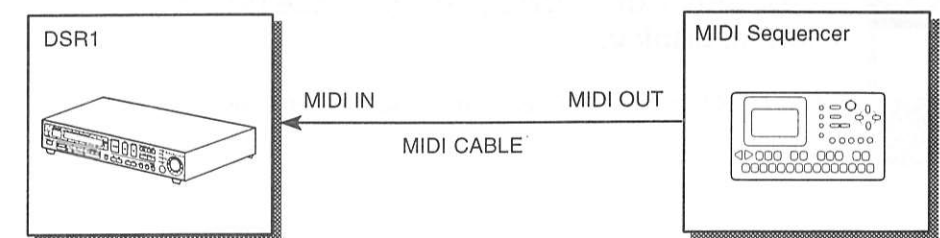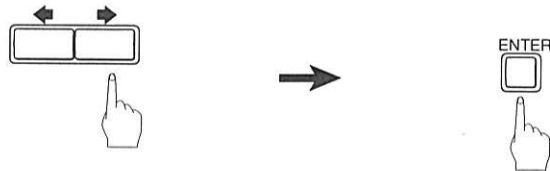
2 Press the [FUNC.] button.
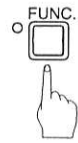
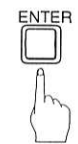The FUNC. indicator lights and the Function menu display appears.

3 Use the [➡] cursor button to position the ▶ cursor next to the MIDI Setup option, then press the [ENTER] button.

The following display appears.

```
▶Piano Part ✴MIDI Out
✴Remote
```
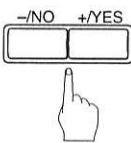
4 With the ▶ cursor next to the Piano Part option, press the [ENTER] button.

The following display appears.

```
▶Piano Rcv Ch=01          →
```

5 Use the [–/NO] and [+/YES] buttons to select a MIDI channel.

See page 75 for a list of available options.

6 Press either the [FUNC.] button or the [STOP] button to return to the normal display.

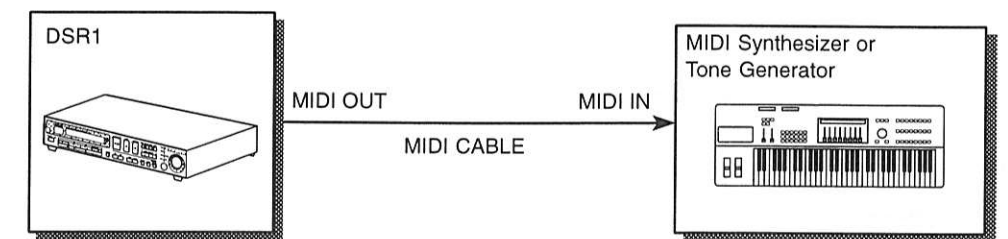The DSR1 can now be used in the sequencer system.

Sending Song Data to a MIDI Instrument

The parts of an Ensemble song are usually played by the internal XG tone generator. However, as the song data that is sent to the internal XG tone generator is simultaneously sent to the MIDI OUT connector, you can also output the song file to an external tone generator or MIDI instrument such as a synthesizer.

When playing back songs from a computer, for example, it would be a good idea to connect an external tone generator if the song has more than 16 channels. In this case, the DSR1 will play channels 1 to 16 and the rest of the channels will be played by the external tone generator. See "Playing Back More than 16 Channels" on page 85.

For the best compatibility, your external MIDI instrument should support Yamaha XG, General MIDI (GM), or both.

1 Connect the DSR1's MIDI OUT to the external MIDI instrument's MIDI IN connector using a MIDI cable.
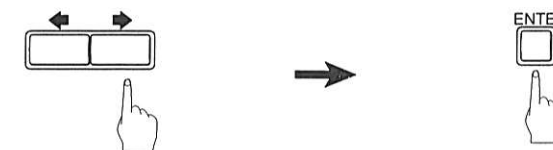
DSR1 — MIDI OUT — MIDI CABLE — MIDI IN — MIDI Synthesizer or Tone Generator

2 Press the [FUNC.] button.

The FUNC. indicator lights and the Function menu display appears.

3 Use the [➡] cursor button to position the ▶ cursor next to the MIDI Setup option, then press the [ENTER] button.

The following display appears.

```
▶Piano Part ✴MIDI Out
✴Remote
```

4 Use the [➡] cursor button to position the ▶ cursor next to the MIDI Out option, then press the [ENTER] button.