

Chapter 6

Disk & Song File Utilities

This chapter describes the Disklavier'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.

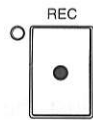
Titling Disks

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.

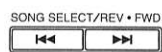
Note: When titling the Memory Disk, make sure there is no floppy disk inserted in the disk drive.

2 Press the [REC] button.



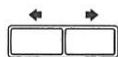
The REC indicator lights and the PLAY/PAUSE indicator flashes.

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

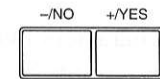
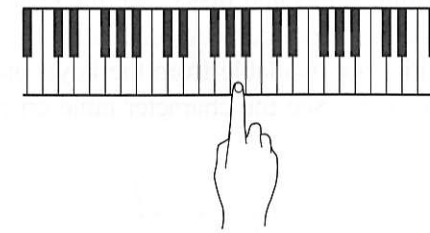


The song number disappears and the display cursor appears at the position of the first character in the title, as shown. If the disk already has a title, it will be shown on the display.

4 Use the [◀] [▶] cursor buttons to position the cursor within the title.



5 Use the keyboard or the [-/NO] [+ /YES] buttons to select a character.



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

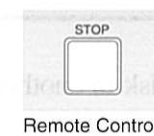
Pressing the [ENTER] button or the sustain (right) pedal moves the cursor to the next character.

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												

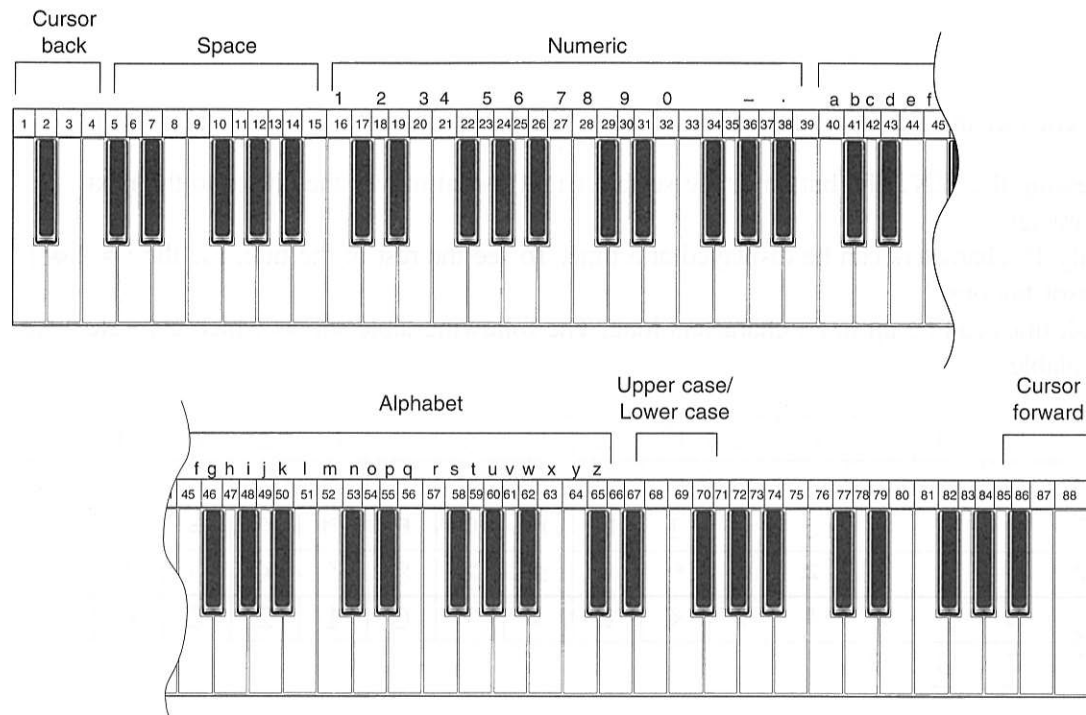
6 When you have entered a disk title, press the [STOP] button.



Keyboard Character Map

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

Note: Not all characters that the Disklavier provides are available from the keyboard. Certain punctuation must be input from the Control Unit. See the character table on page 45.



Copying Songs

You can copy songs stored on a disk to another one song at a time or all songs at once.

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

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

Note: Copy-protected songs, such as PianoSoft songs, cannot be copied to a floppy disk, but can be copied to the Memory Disk.

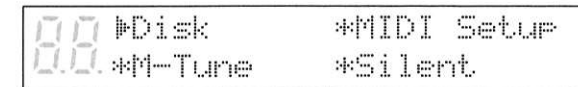
1 If you want to copy songs stored on a floppy disk, insert the disk in the disk drive.

Note: It is a good idea to set your floppy disk to “protected” to prevent accidental erasure. See “Accidental Erasure Protection” on page 2.

2 Press the [FUNC.] button.



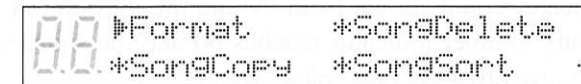
The FUNC. indicator lights and the following display appears.



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



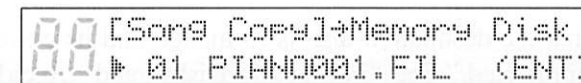
The Disk menu display appears.



4 Press the \blacktriangleright cursor button to position the \blacktriangleright cursor next to the Song Copy option, then press the [ENTER] button.



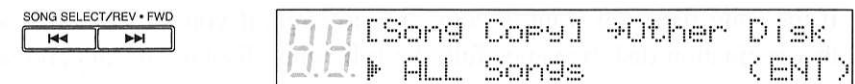
A display similar to the following appears.



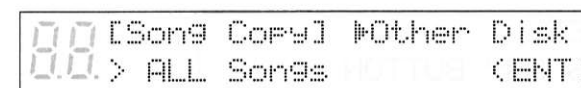
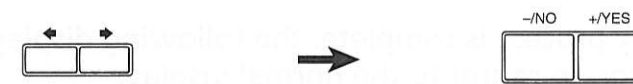
When the source disk is a floppy disk, the parameter next to the arrow shows “Memory Disk”; when the source disk is the Memory Disk, the parameter shows “Other Disk.”

5a TO COPY ALL SONGS

Press the \blacktriangleleft button until the following display appears.

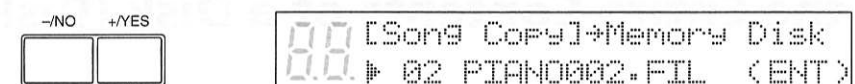


Press the \blacktriangleright cursor button, then use the [-/NO] [+ /YES] buttons to select the destination disk.



5b TO COPY ONE SONG

Use the [-/NO] [+ /YES] buttons to select the song that you want to copy.



Then press the \blacktriangleright cursor button, and use the [-/NO] [+ /YES] buttons to select the destination disk.



6 Press the [ENTER] button.

If the destination disk is Same Disk (for floppy disks only) or Memory Disk, the following display appears.

```
00 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.

```
00 INSERT DESTINATION DISK
00 01 →OTHER DISK
```

Insert a formatted floppy disk in the disk drive. Song copy begins.

Note: Make sure that the destination disk is formatted and its erasure protection tab is set to “unprotected.” See “Formatting Disks” and “Accidental Erasure Protection” on page 2. If the destination disk has not been formatted in the Disklavier, the message “UNFORMATTED DISK” appears. In this case, cancel the song copy process and format the disk.

The copy process may take several seconds depending on the size of the song files.

If the song files you want to copy are too large, if you are copying too many songs, or if the destination disk becomes full, the following display appears and song copy is canceled.

```
00 SONG FILE FULL
00 PRESS ANY BUTTON
```

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

```
00 COMPLETE
00 PRESS ANY BUTTON
```

Copying the Entire Contents of a Disk (Disk Copy)

You can copy the entire contents of a disk to another disk.

Note: The contents of the destination disk will be erased.

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

1 If you want to copy the contents of a floppy disk, insert the disk in the disk drive.

Note: The floppy disk’s erasure protection tab must be set to “protected”. If not, 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. See “Accidental Erasure Protection” on page 2.

2 Press the [FUNC.] button.

The FUNC. indicator lights and the following display appears.

```
00 Disk *MIDI Setup
00 *M-Tune *Silent
```

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

The Disk menu display appears.

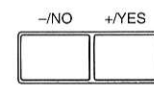
```
00 Format *SongDelete
00 *SongCopy *SongSort →
```

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

A display similar to the following appears.

```
00 [Disk Copy]
00 2DD →Men (ENT)
```

The display shows the type of source disk (2DD, 2HD or Memory) and the default destination disk.

5 Use the [-/NO] [+ /YES] buttons to select the destination disk.**6** Press the [ENTER] button.

Disk copy of the source disk begins.

If the destination disk is a floppy disk, the following display appears. Eject the source disk if the source disk is a floppy disk, then insert a formatted destination disk.

```
00 INSERT DESTINATION DISK
```

Note: Make sure that the destination disk is formatted and its erasure protection tab is set to “unprotected”. See “Formatting Disks” and “Accidental Erasure Protection” on page 2. If the destination disk has not been formatted in the Disklavier, the message “UNFORMATTED DISK” appears. In this case, cancel the song copy process and format the disk.

Note: If the destination disk differs from what was specified, the message “WRONG DESTINATION DISK. INSERT 2DD DISK” or similar appears. Insert the correct destination disk to continue, or press the [STOP] button to cancel disk copy.

Note: If the destination disk contains songs, the message “DELETE SONGS ON DEST. SURE?” appears. Press the [+ / YES] button if it is okay to erase the contents of the destination disk and continue, or the [- / NO] button to cancel disk copy.

The copy process may take several seconds depending on the size of the disk content.

If the disk content is too large or if the destination disk becomes full, the following display appears and disk copy is canceled.

```
00 SONG FILE FULL
00 PRESS ANY BUTTON
```

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

```
00 COMPLETE
00 PRESS ANY BUTTON
```

Deleting Songs

You can delete songs stored on a disk one song at a time or all songs at once.

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

1 If you want to delete songs from a floppy disk, insert the disk in the disk drive.

Note: Be sure that the accidental erasure protection tab is set to “unprotected.”

2 Press the [FUNC.] button.



The FUNC. indicator lights and the following display appears.

```
00 Disk *MIDI Setup
00 *M-Tune *Silent
```

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



The Disk menu display appears.

```
00 Format *SongDelete
00 *SongCopy *SongSort
```

4 Press the [\blacktriangleright] cursor button until the \blacktriangleright cursor is next to the Song Delete option, then press the [ENTER] button.



The following display appears.

```
00 [Song Delete] (-,+)
00 Disk *01 PIAN0001.FIL (ENT)
```

5a TO DELETE ALL SONGS
Press the [\blacktriangleleft] button until the following display appears, then press the [ENTER] button.



```
00 [Song Delete] (-,+)
00 Disk *ALL Songs (ENT)
```

The following display appears.

```
00 [Song Delete] SURE?
00 Disk *ALL Songs (Y/N)
```

5b TO DELETE ONE SONG
Use the [- / NO] [+ / YES] buttons to select the song that you want to delete.

```
-/NO +/YES 00 [Song Delete] (-,+)
00 Disk *01 PIAN0001.FIL (ENT)
```

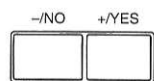
Then press the [ENTER] button.



A display similar to the following appears.

```
00 [Song Delete]      SURE?
00 ▶ 01 PIANO001.FIL (Y/N)
```

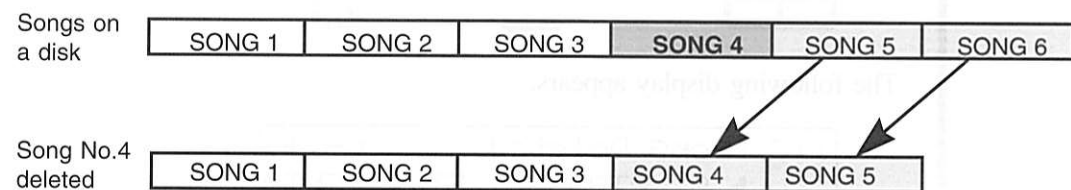
6 Press the [+ / YES] button to delete the songs, the [- / NO] button if you do not want to delete the songs.



Note: Once deleted, songs cannot be retrieved, so take care in selecting which songs 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.



Rearranging the 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.

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

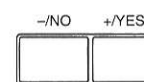
4 Use the [→] cursor button to position the cursor next to the Song Sort option, then press the [ENTER] button.



The following display appears.

```
00 [Song Sort]      (-, +)
00 ▶SONG 02▶No 01 (+, +, ENT)
```

5 Use the [- / NO] [+ / 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 [- / NO] [+ / YES] buttons to select the destination.



```
00 [Song Sort]      (-, +)
00 SONG 03▶No 05 (+, +, ENT)
```

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

7 Press the [ENTER] button.



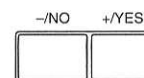
The following display appears.

```
00 CONTINUE Song Sort?
00 03▶ 05 (YES, NO)
```

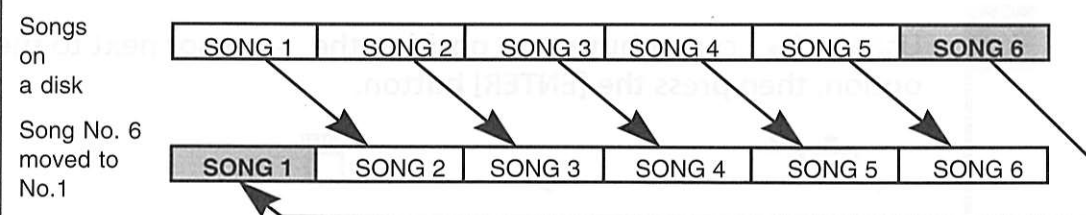
Note: At this point of the procedure, the Disklavier has not saved the sorted song data to disk — it is asking if you want to sort some more songs before saving the sorted song data and exiting the song sort function.

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

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



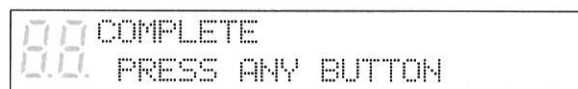
During the sorting process, the selected song is changed to its new song number and all the other songs on the disk are rearranged. For example, the example below shows a disk that contains six songs. If you make song No.6 the first song on the disk (No.1), songs 1 to 5 are renumbered as songs 2 to 6.



Note: You cannot sort copy-protected songs on a pre-recorded disk such as PianoSoft songs.

9 When sorting is complete, the following display appears.

Press any button to return to the normal display.



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.

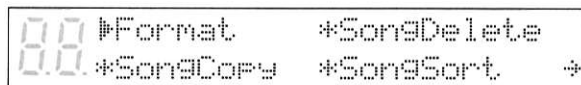


The FUNC. indicator lights and the Function menu display appears.

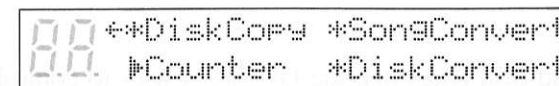
3 With the cursor next to the Disk option, press the [ENTER] button.



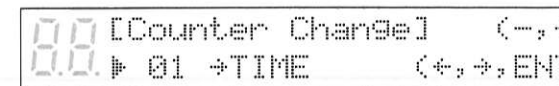
The disk menu display appears.



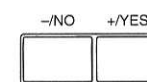
4 Use the [right arrow] cursor button to position the cursor next to the Counter option, then press the [ENTER] button.



The following display appears.



5 Use the [-/NO] [+ /YES] buttons to select the song whose time display you want to change.

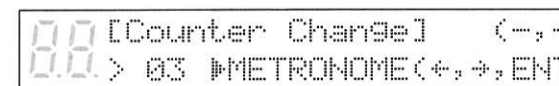
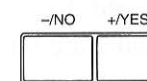


6 When you have selected a song, press the [right arrow] cursor button.



7 Use the [-/NO] [+ /YES] buttons to select the time display.

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



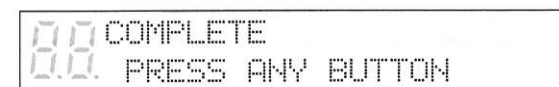
8 When you have selected the time display, press the [ENTER] button.



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.



Chapter 7

Song and Disk Formats and Compatibility

This chapter describes the song formats and disk types that the Disklavier uses to control song data on disks. This information is relevant to using the Disklavier 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 Disklavier 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 your Disklavier 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 Disklavier 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 Disklavier records songs in SMF format 0 by default. (SMF format 1 is supported by the Disklavier 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 Disklavier piano parts and track 10 for the rhythm track.

E-SEQ Format Songs

If you plan to play back your Disklavier songs on earlier Disklavier models or the Clavinova series, you should record them in E-SEQ format. E-SEQ is a representative song file format developed by Yamaha, and its playback and recording functions are supported in full by the Disklavier. To record your Disklavier 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 Disklavier piano parts and track 10 for the rhythm track.

Disk Types

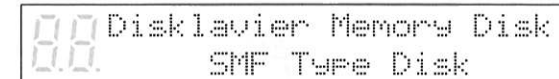
You can format the Memory Disk and floppy disks in either SMF or E-SEQ format, in accordance with the song format you want to use for recording your Disklavier songs. (See "Formatting Disks" on page 2 and "Converting Disk Type" on page 59.) The Memory Disk is formatted as an SMF type disk as a factory presetting.

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

SMF Type Disks

Disklavier 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.



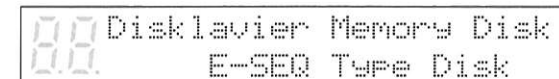
00 Disklavier Memory Disk
SMF Type Disk

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

E-SEQ Type Disks

Disklavier 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 earlier Disklavier models as well as by the Disklavier. (Some early models may not be able to play back, in part, E-SEQ songs recorded using the Disklavier.)

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



00 Disklavier Memory Disk
E-SEQ Type Disk

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

CI and Other Type Disks

Disks formatted by instruments other than the Disklavier may be displayed as CI Type Disk or Other Type Disk. These disks can be played back by the Disklavier, but once Disklavier 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.

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

- 3** Use the [**▶**] cursor button to position the **▶** cursor next to the Song Convert option, then press the [ENTER] button.

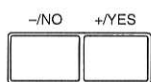


```
00 ◀◀DiskCopy ▶SongConvert
00 *Counter *DiskConvert
```

The following display appears.

```
00 [Song Convert] (ENT)
00 ▶ 01 PIANO001.MID→E-SEQ
```

- 4** Use the [-/NO] [+ /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 [-/NO] [+ /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



```
00 [Song Convert] (ENT)
00 ▶ 01 PIANO001.MID→E-SEQ
```

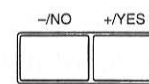
- 6** Press the [ENTER] button.



A display similar to the following appears.

```
00 [Song Convert]SURE?(Y/N)
00 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.

```
00 COMPLETE
00 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 earlier 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.

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

- 3** Use the [**▶**] cursor button to position the **▶** cursor next to the Disk Convert option. Then press the [ENTER] button.



```
00 ◀◀DiskCopy *SongConvert
00 *Counter ▶DiskConvert
```

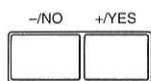
The following display appears.

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


4

Use the [-/NO] [+ /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.



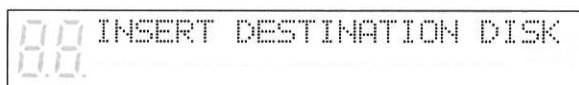
Note: Piano1 is a format that can be played back by all Disklaviers. In the display, disk type for a Piano1 type disk will be shown as E-SEQ.

5

Press the [ENTER] button.

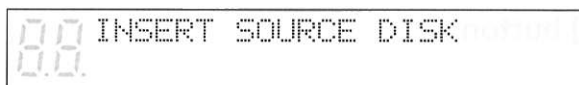


The following display appears.



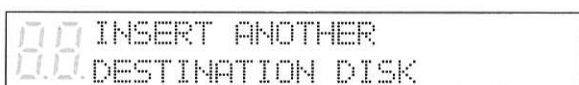
Insert the destination disk.

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



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

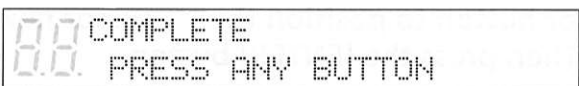
If all data cannot fit onto one disk, the following display appears. Insert another floppy disk and conversion will continue.



6

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

Press any button to return to the normal display.



Chapter 8 The Disklavier & MIDI

This chapter describes how the Disklavier can be used with other MIDI instruments. The Disklavier's MIDI functions are quite 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.

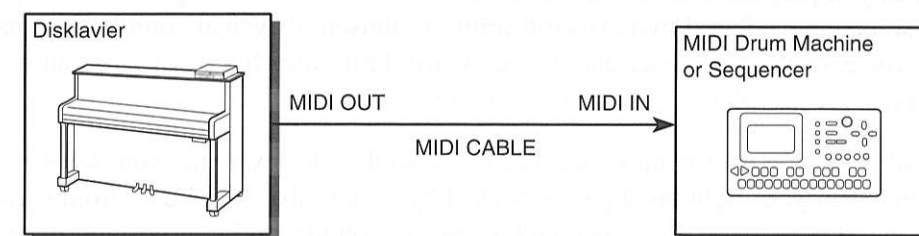
Note: For the MIDI setups described in this chapter, it is recommended that you connect your MIDI instrument to the MIDI OUT connector and set the HOST SELECT switch to MIDI so that the Disklavier functions properly. See "Setting the HOST SELECT Switch" on page 74.

Start/Stop Control of a MIDI Instrument with the Disklavier

In this setup, song disks are played on the Disklavier and a 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 Disklavier. In addition, the tempo of the MIDI instrument will change as the tempo of the Disklavier is adjusted.

1

Connect the Disklavier's MIDI OUT to the MIDI drum machine or sequencer's MIDI IN connector using a MIDI cable.



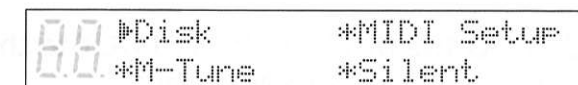
2

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

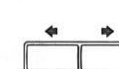
Press the [FUNC.] button.

The FUNC. indicator lights and the following display appears.



4

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



The following display appears.

```
00 ▶Piano Part *MIDI Out
00 *Remote *Local
```

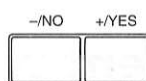
- 5** Press the [▶] cursor button until the ▶ cursor is next to the Remote option, then press the [ENTER] button.



The following display appears.

```
00 ▶Remote Out=OFF
00 >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 Disklavier can now be used in the sequencer system.

Sending the Keyboard Data to a MIDI Instrument

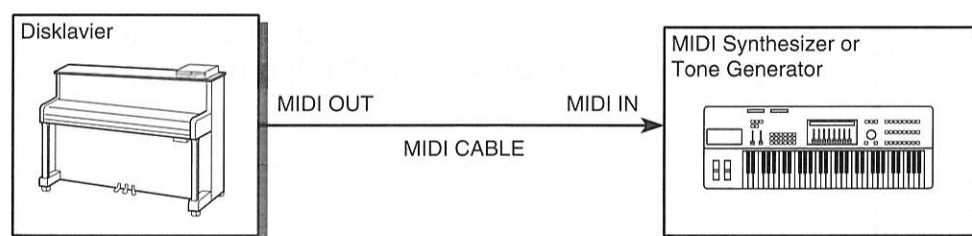
In this setup, as you play the Disklavier, a connected external MIDI tone generator or synthesizer plays as well. This is sometimes referred to as voice layering or unison. A typical combination may be the Disklavier and a strings voice, or the Disklavier and a vibes voice. From the Disklavier, you can select the tone generator'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 68.

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

- 1** Connect the Disklavier'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.

```
00 ▶Piano Part *MIDI Out
00 *Remote *Local
```

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



The following display appears.

```
00 ▶MIDI Out=KBD Out →
```

→ See "Summary of the MIDI Out Parameter in a MIDI Setup" on pages 71 and 72 for details on the MIDI Out parameter.

- 5** Press the [▶] cursor button.



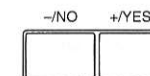
A display similar to the following appears.

```
00 *Out Ch#01 →
00 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 keyboard or the [- / NO] [+ / YES] buttons to select a key.



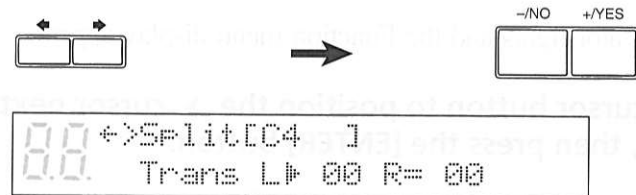
```
00 *Split[C4 ]
00 Trans L= 00 R= 00
```



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

7

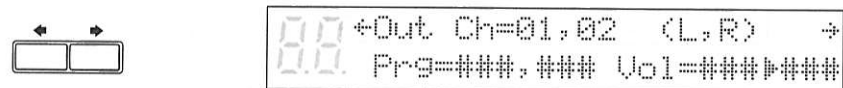
If you want to transpose the MIDI output, press the [➡] cursor button to position the ▸ cursor next to the Trans parameter, then use the [-/NO] [+ /YES] buttons to set a value.



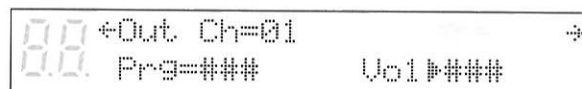
The MIDI output can be transposed from -60 to +60 in one semitone steps. Separate transposition values can be set for the left- and right-hand parts.

8

Press the [←] cursor button until the following display appears.



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



9

Press the [←] cursor button to position the ▸ next to the Out Ch parameter, then use the [-/NO] [+ /YES] buttons to set a value.



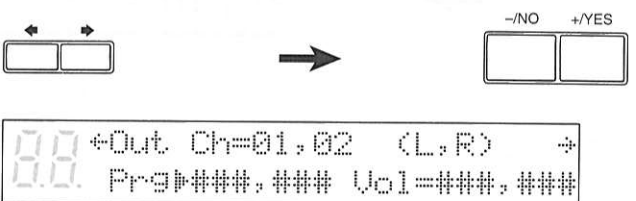
The “Out Ch” option is used to select the MIDI channel/s on which the Disklavier will transmit MIDI data.

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	The Disklavier keyboard data and pedal data is sent on the selected channel.
HP	Keyboard data and on/off pedal data will be sent on channel 1, and continuous pedal data (half pedal) will be sent on channel 3. In this case the pedal data will be continuously variable (half pedal).

10

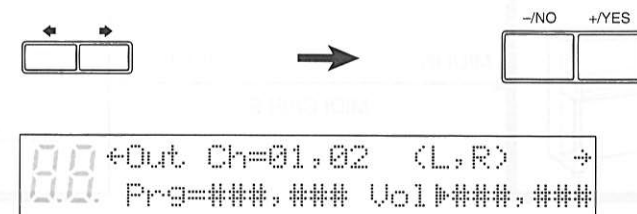
To select a voice for the MIDI output, press the [➡] cursor button to position the ▸ cursor next to the Prg parameter, then use the [-/NO] [+ /YES] buttons to select a voice.



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 [-/NO] [+ /YES] buttons to set the volume.



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

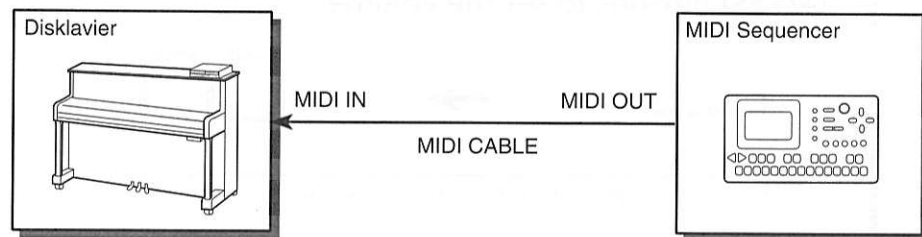
In this setup, the Disklavier is connected to a MIDI sequencer for song recording and playback. In this way you can use a MIDI sequencer’s powerful recording and editing functions for creating your Disklavier songs. The sequencer can be a dedicated music sequencer, a MIDI data recorder, or a MIDI sequencer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

A 500 millisecond delay is applied to the 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. To control the Disklavier in real time, see “Controlling the Disklavier in Real Time” on page 67.

The Disklavier’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 Disklavier 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 tone generator.
01 to 16	MIDI IN data is played by the piano on the specified MIDI channel.
HP	MIDI IN data is played by the piano. Left-hand part on MIDI channel 1, right-hand part on MIDI channel 2, and half pedal data on MIDI channel 3.
1+2	MIDI IN data is played by the piano. Left-hand part on MIDI channel 1, right-hand part on MIDI channel 2.
Prg	MIDI IN data is played by the piano on the channel with the smallest number which contain a piano group voice.
Prg(all)	All channels that contain a piano group voice in the MIDI IN data is played by the piano.

- 1** Connect the MIDI sequencer's MIDI OUT to the Disklavier's MIDI IN with a MIDI cable.



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

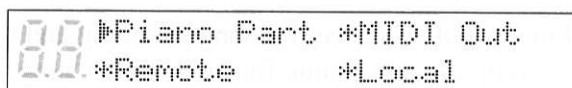


The FUNC. indicator lights and the Function menu display appears.

- 3** Use the [↔] cursor button to position the cursor next to the MIDI Setup option, then press the [ENTER] button.



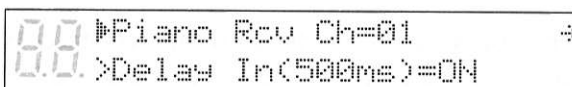
The following display appears.



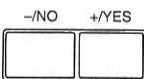
- 4** With the cursor next to the Piano Part option, press the [ENTER] button.



The following display appears.

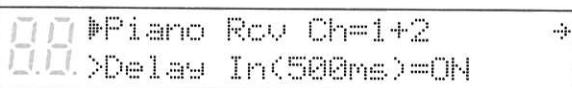


- 5** Use the [-/NO] [+/YES] buttons to select a MIDI channel.



See page 65 for a list of available options.

- 6** Press the [↔] cursor button to position the cursor next to the Delay In parameter, then use the [-/NO] [+/YES] buttons to set the Delay In (500 ms) to ON.



For more information on the 500 ms delay function, see "Controlling the Disklavier in Real Time" on page 67.

- 7** Press either the [FUNC.] button or the [STOP] button to return to the normal display.

The Disklavier can now be used in the sequencer system.

Controlling the Disklavier in Real Time

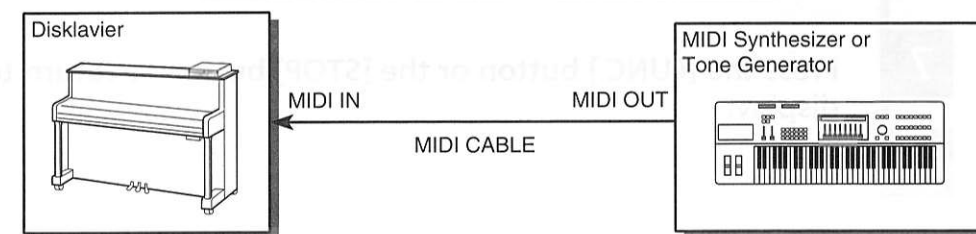
As the Disklavier uses a mechanical system for driving the piano keys, incoming MIDI data cannot be played instantly. For this reason a fixed delay of 500 ms is usually applied to all incoming MIDI data. For most applications this delay will not be a problem.

If you want to play the Disklavier in "real time" via a MIDI master keyboard, synthesizer, or MIDI guitar controller, this fixed delay can be turned off. However, it will still take the Disklavier time to respond to incoming MIDI data and the Disklavier piano response time will vary based on the velocity of the notes and is not user-controllable.

As well as set the Delay In parameter to OFF, you also have to set the Piano Rcv Ch parameter to match that of the other keyboard's MIDI transmit channel. If the channels do not match, the Disklavier will not respond to the MIDI data.

Refer to the other keyboard's user guide for information on setting its transmit MIDI channels.

- 1** Connect the MIDI controller's MIDI OUT to the Disklavier's MIDI IN using a MIDI cable.



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

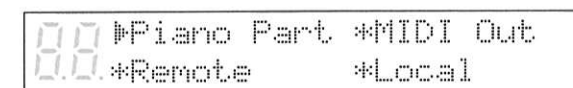


The FUNC. indicator lights and the Function menu display appears.

- 3** Use the [↔] cursor button to position the cursor next to the MIDI Setup option, then press the [ENTER] button.



The following display appears.



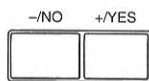
- 4** With the **[▶]** cursor next to the Piano Part option, press the **[ENTER]** button.



The following display appears.

```
00 ▶Piano Rcv Ch=01  →
00 >Delay In(500ms)=ON
```

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



See page 65 for a list of available options.

- 6** Press the **[▶]** cursor button to position the **[▶]** cursor next to the Delay In parameter, then use the **[-/NO]** **[+/YES]** buttons to set the Delay In (500 ms) to OFF.



```
00 ▶Piano Rcv Ch=1+2  →
00 >Delay In(500ms)=OFF
```

- 7** Press the **[FUNC.]** button or the **[STOP]** button to return to the normal display.

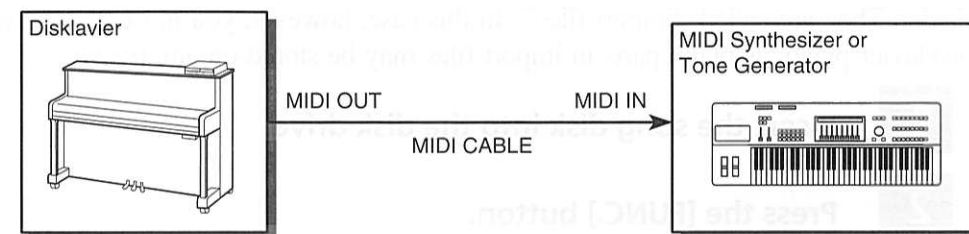
Sending Song Data to a MIDI Instrument

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 Disklavier 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 77.

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

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



Note: Disconnect the external speakers from the AUX OUT on the Control Box and connect them to the external MIDI instrument if you want to sound only the external MIDI instrument.

- 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.



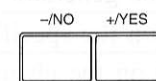
The following display appears.

```
00 ▶Piano Part *MIDI Out
00 *Remote *Local
```

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



- 5** Use the **[-/NO]** **[+/YES]** buttons to select ESBL Out.



```
00 ▶MIDI Out=ESBL Out
(500ms)
```

→ See "Summary of the MIDI Out Parameter in a MIDI Setup" on pages 71 and 72 for details on the MIDI Out parameter.

- 6** Press the **[FUNC.]** button or the **[STOP]** button to exit the MIDI Setup mode.