

Media Management

This chapter describes how to manage contents inside the media, such as managing albums, songs and playlists.

Managing Albums

Album selection screen [FUNC.]

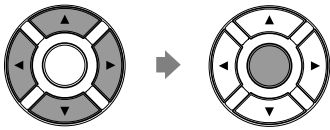
You can use the album function menu for creating, deleting and copying albums inside a medium.

1 Press [FUNC.] in the album selection screen.

The album function menu screen appears.



2 Select a desired function with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The following functions are available:

- CopyAlbum
- DeleteAlbum
- NewAlbum
- RenameAlbum
- SortAlbum
- AddToPList
- DeleteList
- NewList
- RenameList



To select a album, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.

Note:

Available functions vary depending on the medium you selected.



About playlists, see Chapter 11 “Media Management – Managing Playlists” on page 93.

Making Copies of Albums

Album selection screen [FUNC.] “CopyAlbum”

You can make copies of the album to the different medium.

This function is available for albums on [Memory], [CD](CD-ROM), [USB1], [USB2] and [FromToPC].


Note:

Up to 99 albums can be saved in a medium.

- 1** Select “CopyAlbum” in the album function menu, then press [ENTER].

```
=ALBUM MENU= (1/2)→
*CopyAlbum *DeleteAlbum
*NewAlbum *RenameAlbum
```

The CopyAlbum screen appears.



```
=CopyAlbum= --+ENT
01:Pops Selection
->Memory > (NewAlbum)
```


- 2** Select a destination medium with [+ / YES] and [- / NO].



```
=CopyAlbum= --+ENT
01:Pops Selection
->USB1 > (NewAlbum)
```

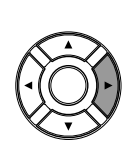
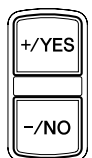
- 3a** To copy to the new album, press [ENTER].

“OK?” flashes in the first line of the screen.



```
=CopyAlbum= OK? YES/NO
01:Pops Selection
->USB1 > (NewAlbum)
```

- 3b** To add to the existing album, press [▶] to move the cursor to the album, and press [+ / YES] and [- / NO] to select the album, then press [ENTER].

```
=CopyAlbum= --+ENT
01:Pops Selection
->USB1 > 07:/Album07/
```

“OK?” flashes in the first line of the screen.



```
=CopyAlbum= OK? YES/NO
01:Pops Selection
->USB1 > 07:/Album07/
```

4 Press [+ / YES] to make a copy, [- / NO] to cancel.

After a while, the completion message appears.
Press any button to return to the album selection screen.

Deleting Albums

Album selection screen → [FUNC.] → "DeleteAlbum"

You can delete the albums.

This function is available for albums on [Memory], [USB1], [USB2] and [FromToPC].

1 Select "DeleteAlbum" in the album function menu, then press [ENTER].

The DeleteAlbum screen appears.

**2** Press [ENTER].

"OK?" flashes in the first line of the screen.

**3** Press [+ / YES] to delete the album, [- / NO] to cancel.

After a while, the completion message appears.
Press any button to return to the album selection screen.

Creating a New Album

Album selection screen [FUNC.] "NewAlbum"

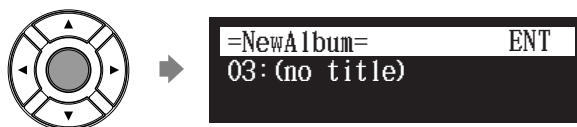
You can create a new album into the selected medium.

This function is available for albums on [Memory], [USB1] and [USB2].

- 1 Select the "NewAlbum" in the album function menu, then press [ENTER].



The NewAlbum screen appears.



- 2 Press [ENTER].

The album title editing screen appears.



- 3 Use [◀] and [▶] to move the cursor.



- 4 Select characters with [+YES] and [-/NO].



You can enter up to 64 characters.

Note:

Up to 99 albums can be created in a medium.

Note:

If you enter the same title as the album already exists, the new album is titled in the form of "album title xx" ("xx" indicates the number).



For details on characters, see "Available Characters" on page 34.

5 Press [ENTER].

“OK?” flashes in the first line of the screen.

**6** Press [+ / YES] to create a new album, [- / NO] to cancel.

After a while, the completion message appears.
Press any button to return to the album selection screen.

Renaming an Album

Album selection screen [FUNC.] "RenameAlbum"

You can rename the albums which already named.
This function is available only for albums on [Memory].

1 Select "RenameAlbum" in the album function menu, then press [ENTER].

The RenameAlbum screen appears.

**2** Press [ENTER].

The album title editing screen appears.



- 3** Use [◀] and [▶] to move the cursor.



- 4** Select characters with [+ / YES] and [- / NO].



You can enter up to 64 characters.

- 5** Press [ENTER].

“OK?” flashes in the first line of the screen.



- 6** Press [+ / YES] to rename, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return the album selection screen.



For details on characters, see
“Available Characters” on page 34.

Rearranging the Order of Albums

Album selection screen [FUNC.] "SortAlbum"

You can rearrange the order of albums that you selected.

This function is available only for albums on [Memory].

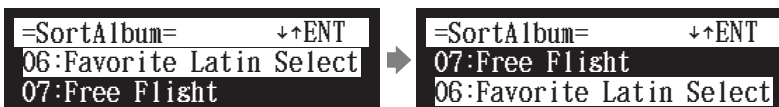
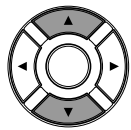
- 1 Select "SortAlbum" in the album function menu, then press [ENTER].



The SortAlbum screen appears.

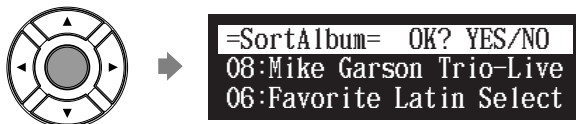


- 2 Press [▲] and [▼] to move the albums to the desired position.



- 3 Press [ENTER].

"OK?" flashes in the first line of the screen.



- 4 Press [+ / YES] to rearrange, [- / NO] to cancel.



After a while, the completion message appears.

Press any button to return to the album selection screen.

Managing Songs

Song selection screen → [FUNC.]

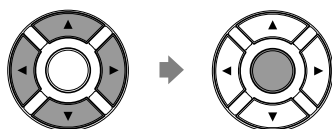
You can use the song function menu for managing the copy or the deletion songs inside the album.

1 Press [FUNC.] in the song selection screen.

The song function menu screen appears.



2 Select a desired function with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The following functions are available:

- CopySong
- DeleteSong
- RenameSong
- SortSong
- AddToPList
- ConvertSong
- Counter
- Strip XP



To select the song, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.

Note:

Available functions vary depending on the medium you selected.

Note:

If there is no available function or no song, the song function menu screen does not appear although pressing [FUNC.].



About playlists, see Chapter 11 “Media Management – Managing Playlists” on page 93.

Making Copies of Songs

Song selection screen → [FUNC.] → “CopySong”

You can copy songs stored on an album to another.

This function is available for song in the album on [Memory], [CD](CD-ROM), [USB1], [USB2] and [FromToPC].

Note:

Copy-protected songs, such as PianoSoft songs, cannot be copied to a removable medium.

Note:

Up to 999 songs can be saved in an album.

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- 1** Select “CopySong” in the song function menu, then press [ENTER].

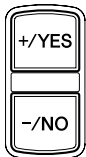
```
=SONG MENU= (1/2)→
*CopySong *DeleteSongs
*RenameSongs *SortSongs
```

The CopySong screen appears.



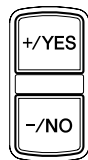
```
=CopySong= ←→+ENT
001:Mo' Art
->Memory >02:Free Flight
```

- 2** Select a destination medium with [+ / YES] and [- / NO].



```
=CopySong= ←→+ENT
001:Mo' Art
->USB1 >01: /
```

- 3** Press [▶] to move the cursor to the album, and press [+ / YES] and [- / NO] to select a destination album.



```
=CopySong= ←→+ENT
001:Mo' Art
->USB1 >02: /MyFolder
```

- 4** Press [ENTER].

“OK?” flashes in the first line of the screen.



```
=CopySong= OK? YES/NO
001:Mo' Art
->USB1 >02: /MyFolder
```

- 5** Press [+ / YES] to make a copy, [- / NO] to cancel.

```
=CopySong=
Executing . . .
```



```
=CopySong= ANY
Completed.
Press any button.
```

After a while, the completion message appears.
Press any button to return to the song selection screen.

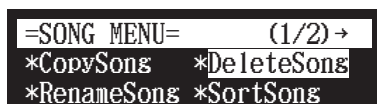
Deleting Songs

Song selection screen → [FUNC.] → "DeleteSong"

You can delete songs stored on an album.

This function is available for songs in the album on [Memory], [USB1], [USB2], [Playlist] and [FromToPC].

- 1 Select "DeleteSong" in the song function menu, then press [ENTER].



The DeleteSong screen appears.



- 2 Press [ENTER].

"OK?" flashes in the first line of the screen.



- 3 Press [+ / YES] to delete the song, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the song selection screen.

Renaming a Song

Song selection screen → [FUNC.] → "RenameSong"

You can rename the songs which already named.

This function is available for songs in the album on [Memory], [USB1], [USB2] and [FromToPC].

- 1 Select "RenameSong" in the song function menu, then press [ENTER].



The RenameSong screen appears.

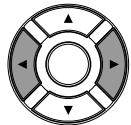


- 2 Press [ENTER].

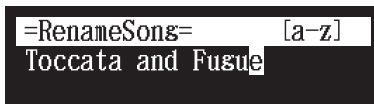
The song title editing screen appears.



- 3 Use [◀] and [▶] to move the cursor.



- 4 Select characters with [+ / YES] and [- / NO].



You can enter up to 64 characters.



For details on characters, see "Available Characters" on page 34.

5 Press [ENTER].

"OK?" flashes in the first line of the screen.

**6** Press [+ / YES] to rename, [- / NO] to cancel.

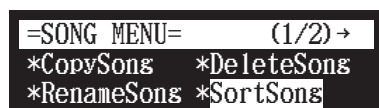
After a while, the completion message appears.
Press any button to return to the song selection screen.

Rearranging the Order of Songs

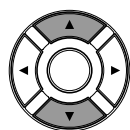
Song selection screen → [FUNC.] → "SortSong" →

You can rearrange the order of songs in an album.

This function is available only for songs in the album on [Memory] and [Playlist].

1 Select "SortSong" in the song function menu, then press [ENTER].

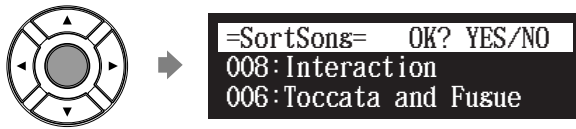
The SortSong screen appears.

**2** Press [▲] and [▼] to move the songs to the desired position.

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3 Press [ENTER].

“OK?” flashes in the first line of the screen.

**4** Press [+ / YES] to rearrange, [- / NO] to cancel.

After a while, the completion message appears.
Press any button to return to the song selection screen.

Converting Song Format

Song selection screen → [FUNC.] → “ConvertSong”

The song format can be converted to other format.

This function is available for songs in the album on [Memory], [USB1], [USB2] and [FromToPC].

1 Select “ConvertSong” in the song function menu, then press [ENTER].

The ConvertSong screen appears.

**Note:**

The converted song will be newly added to the end of the album.

2 Press [+ / YES] and [- / NO] to select a song format.



The following options are available:

Option	Song Format
E-SEQ	E-SEQ format
SMF0	SMF (Standard MIDI File) format 0
SMF1	SMF (Standard MIDI File) format 1
Piano1	E-SEQ format to play on all Disklavier in correct tempo

3 Press [ENTER].

“OK?” flashes in the first line of the screen.



4 Press [+ / YES] to convert, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the song selection screen.

Changing the Counter Display

Song selection screen → [FUNC.] → “Counter”

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

This function is available for songs in the album on [Memory], [USB1], [USB2] and [FromToPC].

- 1 Select “Counter” in the song function menu, then press [ENTER].

```
=SONG MENU=      ← (2/2)
*AddToPList *ConvertSongs
*Counter *Strip XP
```

The CounterChange screen appears.



TIME: minutes and seconds display

METRONOME: measures and beats display

- 2 Press [ENTER].

“OK?” flashes in the first line of the screen.



- 3 Press [+ / YES] to change, [- / NO] to cancel.

```
=CounterChange=  ANY
Executing...      Completed.
                  Press any button.
```

After a while, the completion message appears.

Press any button to return to the song selection screen.

Converting MIDI Data to a Standard Form (Strip XP)

Song selection screen → [FUNC.] → “Strip XP”

Some Disklavier pianos record highly precise control information (XP events) that becomes part of the MIDI song files. This data is used to achieve accurate playback on the Disklavier PRO model, but is not used when the file is played back on general MIDI devices. When you edit the song with external MIDI devices (for example a software sequencer), the relationship between the note data and the XP event as well as the actual performance may not be maintained. There may be cases in which songs edited in this manner cannot be played back normally, depending on the instrument’s settings. In such cases, use the Strip XP function to remove the XP event to convert the song to standard MIDI format before using it for playback. Strip XP also makes it possible to reduce the size of MIDI files when desired.


Note:

Once the XP event is stripped, the original data cannot be restored. Before converting valuable music data, be sure to backup the original data.

- 1 Select “Strip XP” in the song function menu, then press [ENTER].

```
=SONG MENU=      ← (2/2)
*AddToPList *ConvertSongs
*Counter *Strip XP
```


The Strip XP screen appears.



```
=Strip XP=      ENT
008:XP Song
```

- 2 Press [ENTER].

“OK?” flashes in the first line of the screen.



```
=Strip XP=      OK? YES/NO
008:XP Song
```

- 3 Press [+ / YES] to execute, [- / NO] to cancel.

```
=Strip XP=      ANY
Executing...    Completed.
Press any button.
```

After a while, the completion message appears.
Press any button to return to the song selection screen.

Managing Playlists

By creating lists of your favorite songs, you can program your Disklavier to automatically play back a series of songs. First create your own playlist by following the procedures below, then play back that list.

Adding Songs/Albums to the Playlist

Album or song selection screen [FUNC.] "AddToPList"

This function is available only for songs/albums on [Memory].

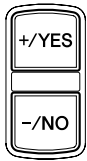
- 1 Select "AddToPList" in the album or song function menu, then press [ENTER].



The AddToPList screen appears.



- 2 Select a destination playlist with [+ / YES] and [- / NO].



- 3 Press [ENTER].

"OK?" flashes in the first line of the screen.



- 4 Press [+ / YES] to add, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the album or song selection screen.

Note:

Up to 999 songs can be added to a playlist.

Note:

You cannot add songs on media other than [Memory] directly to the playlist. First, copy songs to the internal flash memory.

Note:

If "NewPlaylist" is selected in step 2, the title of added album is copied to that playlist.

Note:

If you select "New Playlist" and add songs to it, the playlist is titled as "My Playlist."

Deleting a Playlist

Album selection screen → [FUNC.] → "DeleteList"

You can delete the playlists which already registered.

- 1 Select "DeleteList" in the album function menu for the playlist, then press [ENTER].

```
=ALBUM MENU= (1/1)
*DeleteList *NewList
*RenameList
```

The DeleteList screen appears.



```
=DeleteList= ENT
02:My Best Collection
```

- 2 Press [ENTER].

"OK?" flashes in the first line of the screen.



```
=DeleteList= OK? YES/NO
02:My Best Collection
```

- 3 Press [+ / YES] to delete the playlist, [- / NO] to cancel.

```
=DeleteList= Executing... → =DeleteList= ANY
Completed.
Press any button.
```

After a while, the completion message appears.

Press any button to return to the album selection screen for the playlist.

Creating a New Playlist

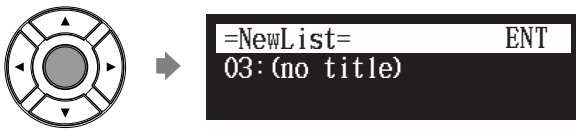
Album selection screen → [FUNC.] → "NewList"

You can create a new playlist for playing back your favorite songs in your selected order.

- 1 Select "NewList" in the album function menu for the playlist, then press [ENTER].



The NewList screen appears.



- 2 Press [ENTER].

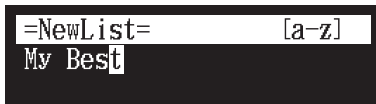
The playlist title editing screen appears.



- 3 Use [◀] and [▶] to move the cursor.



- 4 Select characters with [+ / YES] and [- / NO].



You can enter up to 64 characters.

- 5 Press [ENTER].

"OK?" flashes in the first line of the screen.



Note:

Up to 99 playlists can be created.

Note:

If you enter the same title as the playlist already exists, the new playlist is titled in the form of "playlist title [xx]" ("xx" indicates the number).



For details on characters, see "Available Characters" on page 34.

- 6** Press [+ / YES] to create a new playlist, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the album selection screen for the playlist.

Renaming a Playlist

Album selection screen [FUNC.] "RenameList"

You can rename a playlist which already registered.

- 1** Select "RenameList" in the album function menu for the playlist, then press [ENTER].



The RenameList screen appears.



- 2** Press [ENTER].

The playlist title editing screen appears.



- 3** Use [◀] and [▶] to move the cursor.



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4 Select characters with [+ / YES] and [- / NO].

```
=RenameList= [a-z]
My Best Hit Collection
```

You can enter up to 64 characters.

5 Press [ENTER].

“OK?” flashes in the first line of the screen.



```
=RenameList= OK? YES/NO
My Best Hit Collection
```

6 Press [+ / YES] to rename, [- / NO] to cancel.

```
=RenameList= ANY
Executing...           Completed.
                       Press any button.
```

After a while, the completion message appears.
Press any button to return to the album selection screen for the playlist.



For details on characters, see
“Available Characters” on page 34.

Managing Media

Media selection screen **[FUNC.]**

You can use the media function menu for copying or deleting entire contents inside the media.

1 Press [FUNC.] in the media selection screen.

The media function menu screen appears.

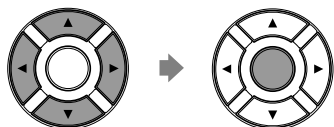
FUNC. 

```
=MEDIA MENU=
*CopyAll *DeleteAll
```



To select a media, see Chapter 3
“Basic Song Playback – Selecting
Medium and Their Contents” on
page 22.

- 2** Select a desired function with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The following functions are available:

- CopyAll
- DeleteAll
- Format
- Refresh

Note:

Available functions vary depending on the medium you selected.

Note:

If there is no available functions, the media function menu screen does not appear although pressing [FUNC.].

Making Copies of the Entire Contents in a Medium

Media selection screen [FUNC.] "CopyAll"

You can copy the entire contents in a medium to the another medium.

The function is available for [Memory], [CD](CD-ROM), [USB1], [USB2] and [FromToPC].

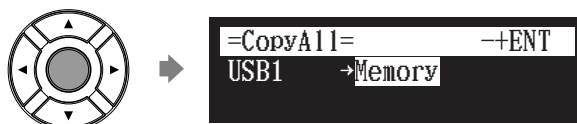


To select a medium, see Chapter 3 "Basic Song Playback – Selecting Medium and Their Contents" on page 22.

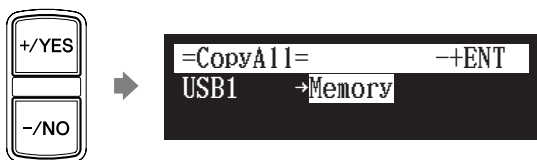
- 1** Select "CopyAll" in the media function menu, then press [ENTER].



The CopyAll screen appears.



- 2** Select a destination medium with [+ / YES] and [- / NO].



Note:

Confirm that the destination medium has enough space to store the contents.

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3 Press [ENTER].

“OK?” flashes in the first line of the screen.

**4** Press [+ / YES] to make a copy, [- / NO] to cancel.

After a while, the completion message appears.
Press any button to return to the media selection screen.

Note:

If the maximum number of the albums in the destination medium exceeds 99, copying stops.

Deleting the Entire Contents in a Medium

Media selection screen → [FUNC.] → "DeleteAll"

You can delete the entire contents in a medium.

This function is available for [Memory], [USB1], [USB2] and [FromToPC].

1 Select “DeleteAll” in the media function menu, then press [ENTER].

The DeleteAll screen appears.

**2** Press [ENTER].

“OK?” flashes in the first line of the screen.



To select a medium, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.

3 Press [+ / YES] to delete, [- / NO] to cancel.

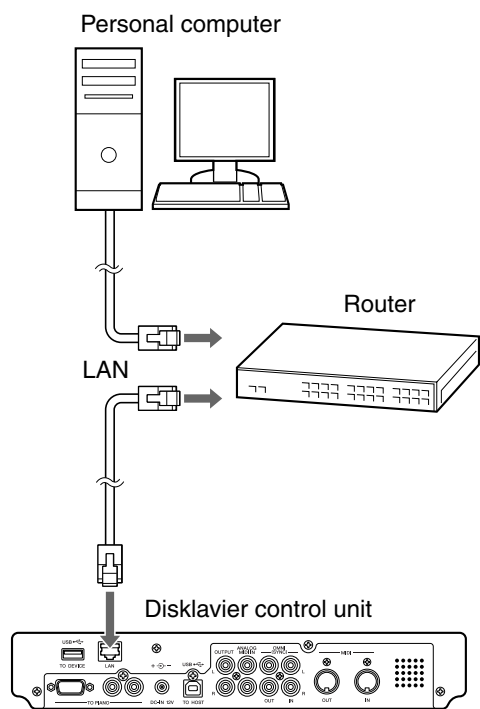


After a while, the completion message appears.
Press any button to return to the media selection screen.

Copying Song File from a Personal Computer to the Disklavier Control Unit

You can copy song files from a Windows or Macintosh computer to a special folder on the Disklavier control unit called [FromToPC] and then play them on the Disklavier.

1 Connect the Disklavier control unit to a LAN (local area network) to which a personal computer with a song file is also connected.



Note:

Copy-protected files, such as PianoSoft and PianoSoft-Plus songs, cannot be copied to the [FromToPC] folder.

Note:

Do not copy the files other than Disklavier song files.

Note:

Do not access the [FromToPC] folder while Disklavier control unit is engaged in another operation (such as file copying or deleting).

Note:

It is necessary to configure the Disklavier control unit properly for network communications by enabling it to get a DHCP IP address automatically (recommended) or by assigning an appropriate address manually. The procedure is the same as the one used for setting up the Disklavier control unit for Internet communications. Please follow the instructions in Chapter 5 “Internet Direct Connection (IDC) – Setting the Disklavier Control Unit for the Internet Connection” on page 41.

Note:

Use an STP (shielded twisted pair) cable for connection. For details, see Chapter 5 “Internet Direct Connection (IDC) – Connecting the Disklavier to the Internet” on page 35.

Note:

For information about configuring a personal computer for network communications, please refer to the documentation that came with the computer.

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■ For Windows

2 On the computer screen, click [Start] and then select [My Network Places].

The [My Network Places] window appears. Confirm that the [Dkv*****] icon is shown in the [My Network Places] window.

3 Double-click the [Dkv***] icon.**

The [Dkv*****] folder opens. Confirm that the [FromToPC] icon is shown in the [Dkv*****] folder.

4 Double-click the [FromToPC] icon.

The [FromToPC] folder opens.

5 Copy the desired song files to the [FromToPC] folder.**6 Refresh the contents in the folder.**
■ For Windows: In case that you cannot find the [Dkv***] icon**

1. Press [SETUP] on the remote control.
2. Select "Network" in the setup menu screen.
3. Select "Information" to display the information of network settings.
4. Press [▼] several times to display "NAME=DKV*****" and memorize that name.
5. Open the [My Network Places] on the computer, and then click the [Search] icon on the top of the window.
6. Enter the name confirmed in step 4 in the [Computer name] box, and then click [Search] to start searching.
7. Open [Dkv*****] and confirm that the [FromToPC] folder is shown under that.
8. Copy the desired song files to the [FromToPC] folder.

Note:

[Dkv*****] differs depending on each Disklavier control unit.

Note:

The folder or icon name differs depending on the version of your operating system.



See Chapter 11 "Media Management – Refreshing the Contents in [FromToPC]" on page 105.

■ For Mac OS X 10.3 or 10.4

- 2 Click the [Finder] icon in the dock, and then click the [Network] icon in the left side of the window.

The [Network] window appears. Confirm that the [Dkv] icon is shown in the [Network] window.

- 3 Click the [Dkv] icon.

The [Dkv] folder opens. Confirm that the [Dkv*****] icon is shown in the [Dkv] folder.

- 4 Click the [Dkv*****] icon.

- 5 In the first dialog that appears, select [FromToPC] from the mini-menu and click [OK].

- 6 Click [OK] again in the next dialog that appears.

Connection process completes and the [FromToPC] icon appears in the left side of the window.

- 7 Click the [FromToPC] icon.

The [FromToPC] folder opens.

- 8 Copy the desired song files to the [FromToPC] folder.

- 9 Refresh the contents in the folder.

Note:

[Dkv*****] differs depending on each Disklavier control unit.

Note:

If the user ID and password are required during the process, enter any name for the ID and leave the space for the password blank.



See Chapter 11 “Media Management – Refreshing the Contents in [FromToPC]” on page 105.

Media Management

■ For Mac OS X 10.5

- 2** Click the [Finder] icon in the dock, and then select [Go] and then [Network] from the menu bar.

The [Network] window appears. Confirm that the [Dkv*****] icon is shown in the [Network] window.

- 3** Click the [Dkv*****] icon.

The [Dkv*****] folder opens. Confirm that the [FromToPC] icon is shown in the [Dkv*****] folder.

- 4** Click the [FromToPC] icon.

The [FromToPC] folder opens.

- 5** Copy the desired song files to the [FromToPC] folder.

- 6** Refresh the contents in the folder.

■ For Macintosh: In case that you cannot find the [Dkv***] icon**

1. Press [SETUP] on the remote control.
2. Select “Network” in the setup menu screen.
3. Select “Information” to display the information of network settings.
4. Press [▼] several times to display “NAME=DKV*****” and memorize that name.
5. Select [Go] and then [Connect to Server] from the menu bar on the computer.
6. Enter the name confirmed in step 4 in the address field, and then click [Connect]. Use syntax “smb://” when entering the name (“smb://Dkv*****”).
7. Select [FromToPC] from the mini-menu in the first window appears and click [OK]. Click [OK] again in the next window that appears.
8. Copy the desired song files to the [FromToPC] folder on the left side of the finder window.

Note:

[Dkv*****] differs depending on each Disklavier control unit.

Note:

If the user ID and password are required during the process, enter any name for the ID and leave the space for the password blank.



See Chapter 11 “Media Management – Refreshing the Contents in [FromToPC]” on page 105.

Refreshing the Contents in [FromToPC]

Select the [FromToPC] [FUNC.] "Refresh"

You must refresh the contents in the [FromToPC] folder after copying song files from a personal computer, in order to play them on the Disklavier.



To select a medium, see Chapter 3 "Basic Song Playback – Selecting Medium and Their Contents" on page 22.

- 1 Select "Refresh" in the media function menu, then press [ENTER].



The Refresh screen appears.



- 2 Press [ENTER].

"OK?" flashes in the first line of the screen.



- 3 Press [+ / YES] to refresh, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the media selection screen.

Formatting the Floppy Disk (Optional)

Select the floppy disk [FUNC.] "Format"

In the case of using the unformatted floppy disk on the floppy drive (optional) or deleting the entire contents on the floppy disk, format the floppy disk.

1 Connect the floppy drive (optional) to the USB port on the control unit.

2 Insert a floppy disk to the floppy drive.

3 Select "Format" in the media function menu, then press [ENTER].

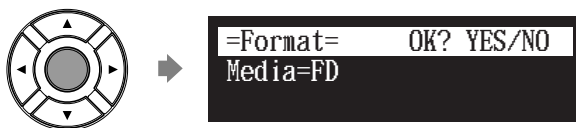


The Format screen appears.



4 Press [ENTER].

"OK?" flashes in the first line of the screen.



5 Press [+ / YES] to format, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the media selection screen.

Important:

Formatting a floppy disk erases all data that stored in the disk, so make sure that the disk you are going to format does not contain the data you want to keep.



To select a medium, see Chapter 3 "Basic Song Playback – Selecting Medium and Their Contents" on page 22.

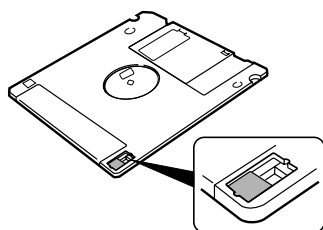
Note:

If you are formatting a floppy disk, make sure that the floppy disk's erasure protection tab is set to "unprotected."

■ Floppy Disk Accidental Erasure Protection

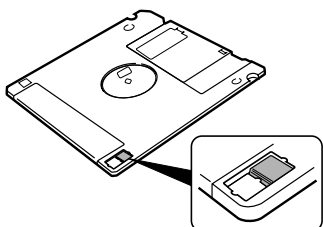
Floppy disks have an erasure protection tab located on the reverse side of the disk in the bottom right-hand corner. When formatting a disk, make sure that its erasure protection tab is set to “unprotected.”

Protected



When the tab window is open, formatting and recording are not possible.

Unprotected



When the tab window is closed, formatting and recording are possible.

Making Backups of Songs

[SYSTEM] → “Backup”

You can make a backup copy of the songs and playlists. In order to protect your valuable music data, Yamaha strongly recommends that you backup your memory on regular basis.

1 Connect an external USB medium to the USB port on the control unit.

2 Press [SYSTEM] on the remote control.

The system menu screen appears.



Note:

Be sure to use the USB medium described in Chapter 2 “Getting Started – Compatible Media Format for the Removable Media” on page 19.

Note:

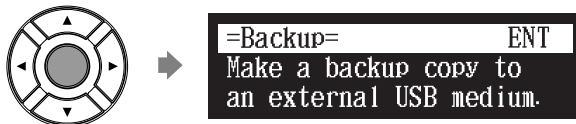
Make sure that the USB medium has enough space to save the backup data.

Media Management

- 3** Select “Backup” with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].

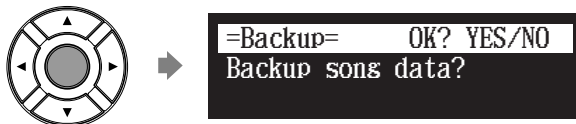


The Backup screen appears.



- 4** Press [ENTER].

“OK?” flashes in the first line of the screen.



- 5** Press [+ / YES] to make a backup, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the system menu screen.

Restoring the Backups

[SYSTEM] → “Restore”

You can restore the current condition of the internal memory to the previous condition that you made a backup copy.

- 1** Connect an external USB medium in which you made backup last time to the USB port on the control unit.
- 2** Press [SYSTEM] on the remote control.

The system menu screen appears.



To make a backup, see Chapter 11 “Media Management – Making Backups of Songs” on page 107.

- 3** Select “Restore” with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The Restore screen appears.



- 4** Press [ENTER].

“OK?” flashes in the first line of the screen.



- 5** Press [+ / YES] to restore, [- / NO] to cancel.

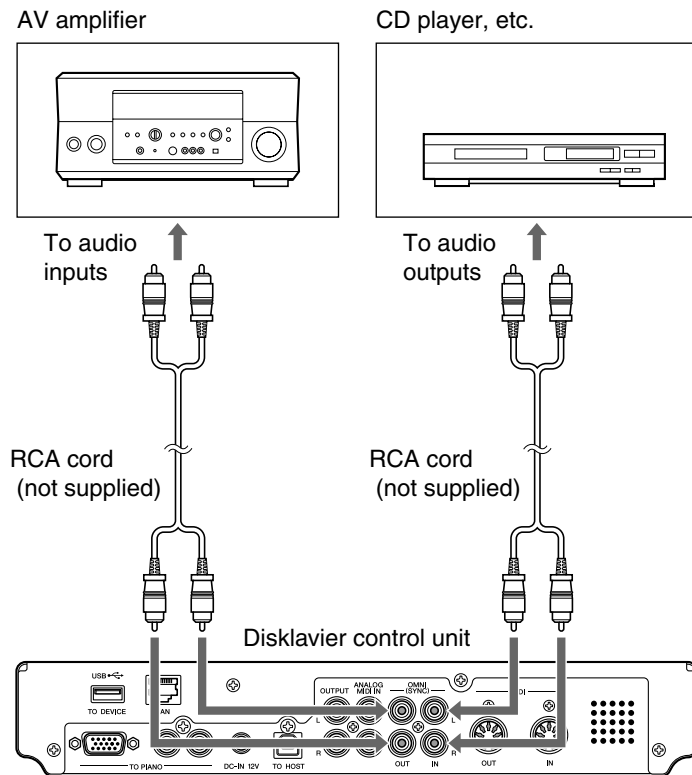


After a while, the completion message appears.
Press any button to return to the system menu screen.

Enhancing the Disklavier by Hooking Up Other Devices

Hooking Up Audio Equipment

If you connect the Disklavier control unit to an audio system, you can hear the sound played/played back on the Disklavier from the connected audio system, and the sound played back on the connected audio system from the Disklavier.

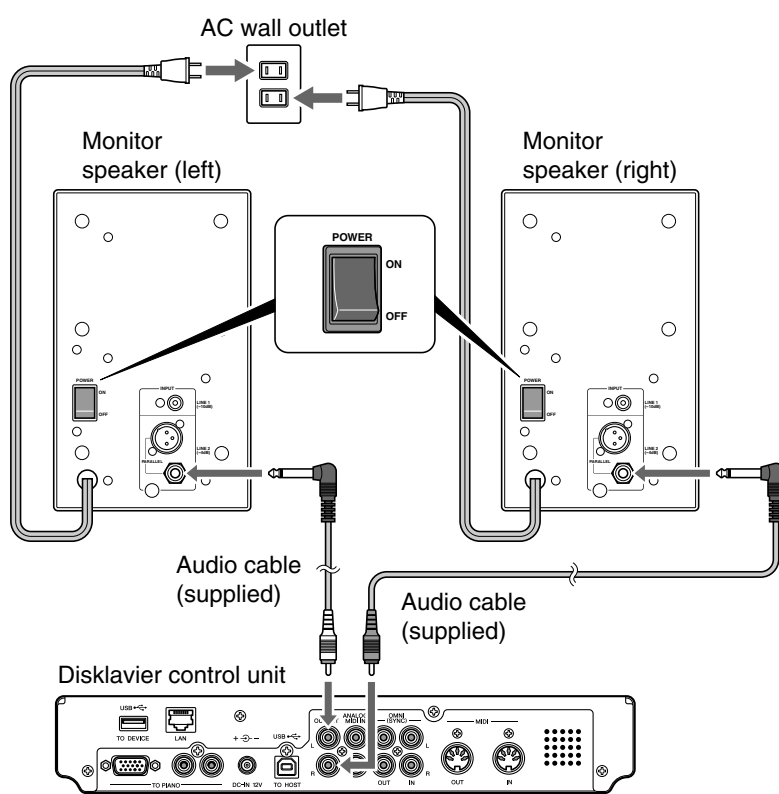


Connecting Monitor Speakers

By connecting monitor speakers, you can listen to the internal XG tone generator voices or audio from the external audio equipment connected to the OMNI (SYNC) IN jacks from monitor speakers. Connection methods vary depending on whether your piano is equipped with the Silent Piano™ function or not.

■ Connecting Optional Monitor Speakers Directly to the Disklavier Control Unit

If your piano is not equipped with the Silent Piano™ function, connect monitor speakers following the procedures below.



- 1** Connect the INPUT LINE2 jacks on the rear of the monitor speakers and the OUTPUT jacks on the rear panel of the Disklavier control unit with the supplied audio cables (pin plug – phone plug).
- 2** Connect the power cables of the monitor speakers to the AC wall outlet.
- 3** Turn on the POWER switches of the monitor speakers.

The monitor speakers are turned on.

Enhancing the Disklavier by Hooking Up Other Devices

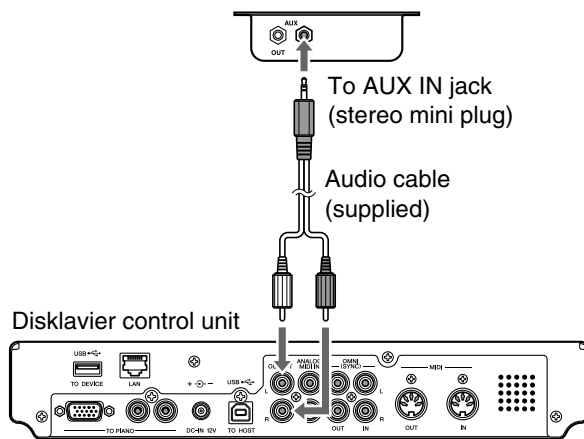
■ In Case that You are Using Monitor Speakers for Your Piano

If your piano is equipped with the Silent Piano™ function, connect monitor speakers following the procedures below.

If you have already connected monitor speakers to your piano, connect the AUX IN jacks of your piano to the OUTPUT jacks of the rear panel of the Disklavier control unit.

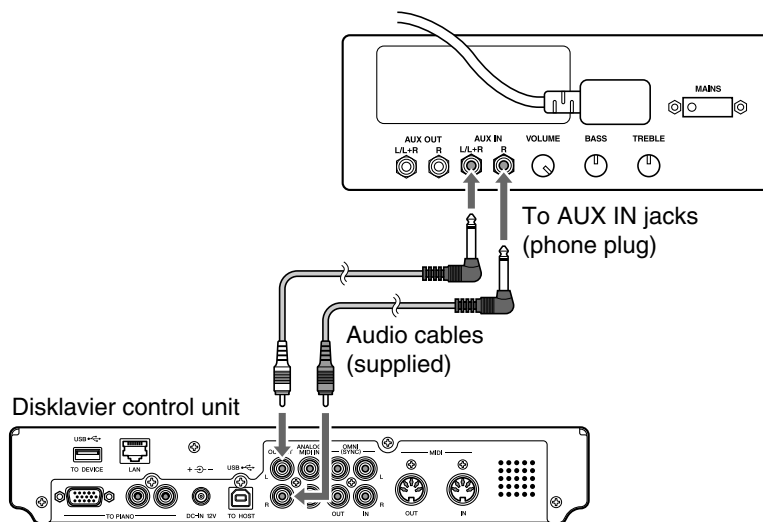
For models equipped with the control box

Connect your piano and the Disklavier control unit using the supplied audio cable (pin plugs – stereo mini plug).



For models equipped with the amplifier

Connect your piano and the Disklavier control unit using the supplied audio cables (pin plug – phone plug).



If you cannot find the AUX IN jacks on your piano, connect optional monitor speakers following the procedures in “Connecting Optional Monitor Speakers Directly to the Disklavier Control Unit” on previous page.

Note:

The shape of units or the location of the AUX IN jacks varies depending on the piano model.

Setting the Disklavier Control Unit for Audio Data Reception/Transmission

[SETUP] "Audio/O"

You can select the kind of the incoming/going out audio signals. The following options should be set up in advance.

OMNI IN

Selects the appropriate option to match the incoming data input to the OMNI (SYNC) IN jacks.

Auto Detect:

Select this when you make the Disklavier control unit detect the input signal automatically.

Audio: Select this when you play back an audio software on the connected CD player, etc. and reproduce the sound from optional monitor speakers.

OFF: Select this when you cancel the data reception from the OMNI (SYNC) IN jacks.

OMNI IN Vol

Adjust the volume of the incoming audio signals to the OMNI (SYNC) IN jacks. The volume can be set in a range of 000 to 127.

OMNI OUT

Selects the desired data to be output from the OMNI (SYNC) OUT jacks.

Output: Select this when you output the same audio signals as the ones for the OUTPUT jacks.

SYNC: Select this when you output the SMPTE signal used for video synchronization playback.

OFF: Select this when you cancel the data transmission from the OMNI (SYNC) OUT jacks.

OMNI OUT Vol

Adjust the volume of the outgoing audio signals to the OMNI (SYNC) OUT jacks. The volume can be set in a range of 000 to 127, or to "M-Volume."

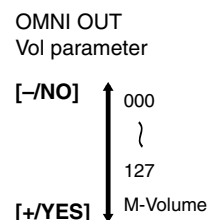
When you set to "M-Volume", the OMNI OUT volume works with the main volume.

ANALOG MIDI IN Vol

Adjust the volume of the incoming audio signals to the ANALOG MIDI IN jacks. The volume can be set in a range of 000 to 127.

Note:

"M-Volume" is the next increment on the OMNI OUT Vol setting above 127.



Enhancing the Disklavier by Hooking Up Other Devices

SYNC IN Offset

Adjusts the length of the offset time that leads the actual playback of entire recording. The offset time can be set in a range of -500ms to $+500\text{ms}$. Decrease this value to delay the piano playing, and increase to advance the piano playing.

SYNC OUT Level

Adjusts the output level of the SMPTE signal. For normal use, the adjustment of this option is not required. If noises (synchronized signal) are output from the OUTPUT jacks during video synchronized playback, turn down the level and re-record.

1 Press [SETUP] on the remote control.

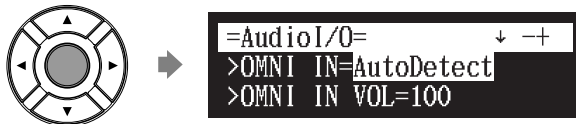
The setup menu screen appears.



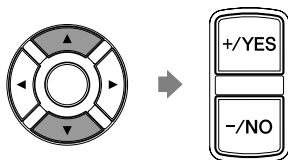
2 Select "AudioI/O" with the cursor buttons ([<] [>] [▲] [▼]), then press [ENTER].



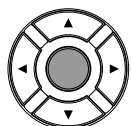
The audio I/O setting screen appears.



3 Select a desired option with the cursor buttons ([▲] [▼]), then press [+ / YES] and [- / NO] to change setting.



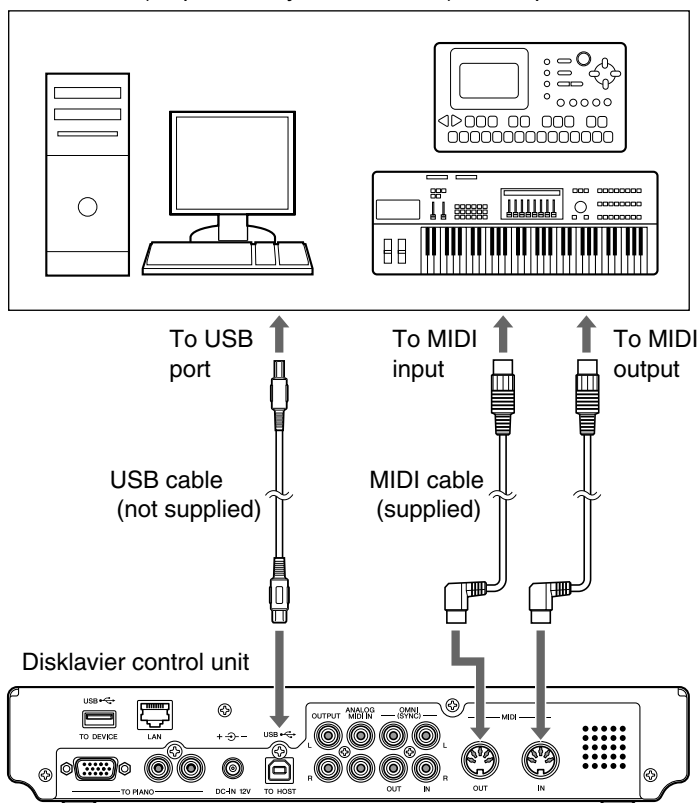
4 Press [ENTER] to complete the operation.



Hooking Up MIDI Devices

MIDI (an acronym for Musical Instrument Digital Interface) allows electronic device (synthesizers, etc.) to interact and work in synchronization with other MIDI compatible device. The Disklavier enables you to enjoy a variety of MIDI features by connecting a MIDI device or computer to the Disklavier control unit.

MIDI device (sequencer, synthesizer, etc.) or computer



Note:

When you use the USB connection, it is required to install the USB driver to the connected device. In such a case, visit the following website and download the driver.
http://www.global.yamaha.com/download/usb_midi/

Note:

Be sure to use the commercially available MIDI cable with the L-shaped connector on the control unit end.

Note:

If your piano is connected to the Disklavier control unit with the MIDI cables, you cannot use the MIDI IN and MIDI OUT terminals for connection with other MIDI devices. Use the USB port for connection.

Setting the Disklavier Control Unit for MIDI Data Reception

[SETUP] "MIDI"

The Disklavier can play back the MIDI data being received from the connected MIDI device as well as the software loaded or stored in the Disklavier control unit itself. The following options should be set up in advance.

MIDI IN Port

Selects the terminal/port used for the data reception.

MIDI: Select this when the MIDI device is connected to the MIDI IN terminal.

USB: Select this when the MIDI device is connected to the USB port.

Note:

If you set the connection type setting to "Add", the MIDI IN Port setting is fixed to "USB." Note that you cannot use the MIDI IN terminal as MIDI IN Port.

Enhancing the Disklavier by Hooking Up Other Devices

Piano Rcv Ch

The MIDI data consists of multi channels that are respectively assigned to a certain instrument's part. This option assigns the desired channel(s) to the piano part(s) that is (are) played back on the Disklavier's keyboard.

01 thru 16: Select the desired channel to which you assign the piano part.

1+2: Select this when the "01" and "02" channels are assigned to the piano parts.

Prg: Select the smallest number channel assigned to the piano group voice (see page 134) to be played on the Disklavier.

Prg(All): Select all channels assigned to the piano group voice (see page 134) to be played on the Disklavier.

MIDI IN Delay

When the Disklavier control unit receives two kinds of data (strong and weak note) at the same time, the weak note sounds a little bit later than the strong one due to the characteristics of the mechanism of the Disklavier control unit. To eliminate this delay in the sound reproduction and the notes are sounded in accurate timing at 500 millisecond after the data reception, usually a delay is applied to the incoming MIDI data.

ON: Select this when you apply this delay to the incoming MIDI data.

OFF: Select this when you do not apply this delay.

1 Press [SETUP] on the remote control.

The setup menu screen appears.



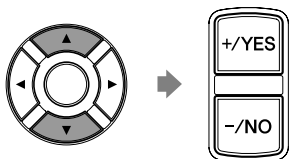
2 Select "MIDI" with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].



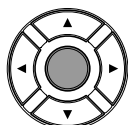
The MIDI setting screen appears.



- 3** Select a desired option with the cursor buttons ([▲] [▼]), then press [+ / YES] and [- / NO] to change setting.



- 4** Press [ENTER] to complete the operation.



Setting the Disklavier Control Unit for MIDI Data Transmission

[SETUP] "MIDI" →

The Disklavier control unit can transmit the information of piano playing/ensemble part playback on the Disklavier as the MIDI data to the connected MIDI device to reproduce the sound with its sound generator, etc. or to record the MIDI data. The following options should be set up in advance.

MIDI OUT Port

Selects the terminal/port used for the data transmission.

MIDI: Select this when the MIDI device is connected to the MIDI OUT terminal.

USB: Select this when the MIDI device is connected to the USB port.

MIDI OUT

Selects one of the following parts to be transmitted to the connected MIDI device.

ESBL Out: Select this when you transmit the ensemble part played back on the Disklavier.

KBD Out: Select this when you transmit the piano part played on the Disklavier.

- 1** Press [SETUP] on the remote control.

The setup menu screen appears.



Note:

If you set the connection type setting to "Add", the MIDI OUT Port setting is fixed to "USB." Note that you cannot use the MIDI OUT terminal as MIDI OUT Port.

Note:

If you connected the playback model and set the connection type setting to "Replace", the MIDI OUT setting is fixed to "ESBL Out."

Enhancing the Disklavier by Hooking Up Other Devices

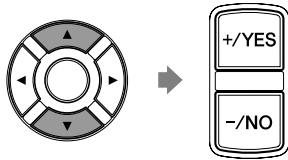
- 2** Select “MIDI” with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].



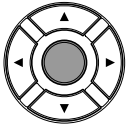
The MIDI setting screen appears.



- 3** Select a desired option with the cursor buttons ([▲][▼]), then press [+ / YES] and [- / NO] to change setting.



- 4** Press [ENTER] to complete the operation.



Setting the Disklavier Control Unit for Keyboard Playing Data Transmission

[SETUP] → "MIDI" →

Besides the MIDI OUT options, more detailed setups for the keyboard playing data transmission are available. The following options should be set up in advance.

KBD OUT CH

Assigns the piano part to the desired channels.

01 thru 16: Select the desired channel to which you assign the piano part.

1 Press [SETUP] on the remote control.

The setup menu screen appears.



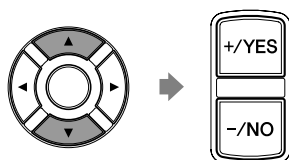
2 Select "MIDI" with the cursor buttons ([<] [>] [▲] [▼]), then press [ENTER].



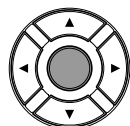
The MIDI setting screen appears.



3 Select a desired option with the cursor buttons ([▲] [▼]), then press [+ / YES] and [- / NO] to change setting.



4 Press [ENTER] to complete the operation.



Tuning the Tone Generator (TG Master Tune)

[SETUP] → "M-Tune"

The internal XG tone generator has already been tuned to match the acoustic piano (A3=440 Hz). However, you can re-tune the internal XG tone generator in accordance with the pitch of the acoustic piano by following the procedure below.

1 Press [SETUP] on the remote control.

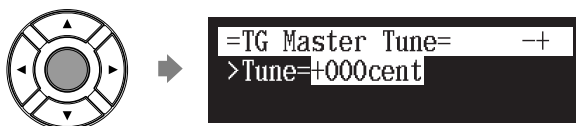
The setup menu screen appears.



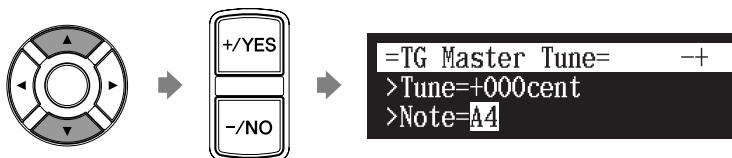
2 Select "M-Tune" with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].



The TG Master Tune setting screen appears.



If you connected the playback model, the piano tone will sound automatically on the XG tone generator. You can change the key of this tone. Select "Note" with the cursor buttons ([▲][▼]), then press [+ / YES] and [- / NO] to change the key.



The following key settings are available: A-1, A0, A1, A2, A3, A4, A5, A6.

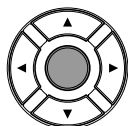
- 3** Playing the keyboard, press [+ / YES] and [- / NO] to tune the pitch of the internal XG tone generator.



The same note will sound simultaneously on the XG tone generator's digital piano and on the acoustic piano as soon as you play the keyboard.

The pitch of the internal XG tone generator can be adjusted in a range of -50 cent to +50 cent.

- 4** Press [ENTER] to complete the operation.



Note:

To reset to the default factory pitch settings, see Chapter 13 "Other Settings – Resetting the Disklavier Control Unit" on page 122.

Switching the Languages for the Screen

[SYSTEM] → "Language"

- 1** Press [SYSTEM] on the remote control.

The system menu screen appears.



- 2** Select "Language" with the cursor buttons ([<] [>] [▲] [▼]), then press [ENTER].



The language setting screen appears.



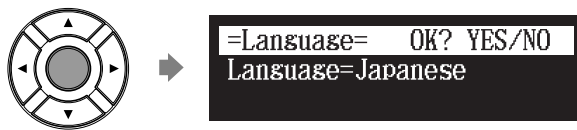
Other Settings

- 3** Press [+ / YES] and [- / NO] to select the language.



- 4** Press [ENTER].

“OK?” flashes in the first line of the screen.



- 5** Press [+ / YES] to set the language, and return to the system menu screen.

Resetting the Disklavier Control Unit

[SETUP] **“Reset”**

If you want to return your Disklavier control unit to its initial factory, follow the procedure below.

- 1** Press [SETUP] on the remote control.

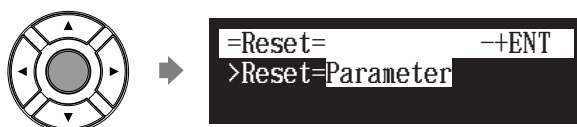
The setup menu screen appears.



- 2** Select “Reset” with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The reset screen appears.



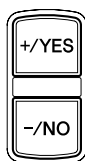
Important:

If you reset your Disklavier control unit, depends upon the option what you select, you may lose all parameters or all data in the internal memory, or both of these. For normal use, you do not have to reset. Necessarily case you have to reset your Disklavier control unit, Yamaha strongly recommends that you backup your songs in the internal memory. However, you cannot backup your various parameter settings.



To make a backup copy of the songs which are in the internal memory, see Chapter 11 “Media Management – Making Backups of Songs” on page 107.

- 3** Press [+ / YES] and [- / NO] to select the option that you want to reset.

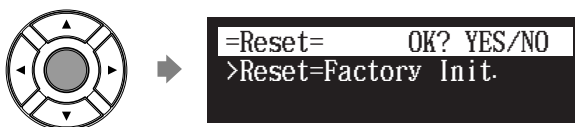


The following options are available:

Option	Description
Parameter	Reset all parameters, excluding the clock setting and the Internet setting.
Memory	Reset the internal memory.
Factory Init.	Reset the Disklavier control unit to its initial factory setting.
DeleteCookies	Delete the contents of all saved cookies.

- 4** Press [ENTER].

“OK?” flashes in the first line of the screen.



- 5** Press [+ / YES] to reset, [- / NO] to cancel.



After a while, the completion message appears.
Press any button to return to the setup menu screen.

Note:

Selecting “Factory Init.” will also reset the piano type settings.

Updating the Disklavier Control Unit

Shut down the Disklavier control unit **[PLAY/PAUSE]** and **[ON/OFF]**

You can update the Disklavier control unit firmware using update program (saved on the CD-ROM or USB flash memory, or downloaded via Internet).

- 1** Make sure that Disklavier control unit is shut down.

Note:

For this operation you have to insert the CD-ROM or USB flash memory in which the update program is saved or download update program via Internet, and shut down the Disklavier control unit.

Other Settings

2 Holding [PLAY/PAUSE] on the front panel, press [ON/OFF].

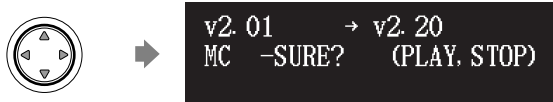
The current version information of each module appears one after the other.

3 Make sure that the update program is prepared, then press [ENTER] on the front panel.

The starting screen appears.

**4** Press [ENTER] on the front panel again.

After a while, the update confirmation message of each module appears.

**5** Press [PLAY/PAUSE] to start the update.

The update process of the first module takes approximately 3 minutes.

MC v2.01 → v2.20
DO NOT REMOVE DISK!

When the update of the first module completes, the following confirmation message appears.

Confirmation message of the second module

v2.01 → v2.10
CTRL-SURE? (PLAY, STOP)

Press [PLAY/PAUSE] to start the update of the second module. The update process of the second module takes approximately 3 minutes.

A total of four modules needs to be updated. Repeat this step to complete the update.

Important:

DO NOT turn off this unit during update.

Important:

Be sure to update all the modules.

Confirmation message of the third module

```
v2. 01      → v2. 01  
APE -SURE? (PLAY, STOP)
```

The update process of the third module takes approximately 2 minutes.

Confirmation message of the fourth module

```
v2. 02      → v2. 10  
CSP -SURE? (PLAY, STOP)
```

The update process of the fourth module takes approximately 2 minutes.

The closing screen appears when the update for all modules completes.

```
COMPLETE  
Turn OFF. TURN ON again!
```

6 Restart the Disklavier control unit.

Troubleshooting

If you are having difficulty operating the Disklavier control unit, see if any of the symptoms listed below apply to your problem and follow the recommended remedy.

Power

Symptom	Remedy
The Disklavier does not turn on.	Make sure that the AC adaptor is securely connected to a suitable AC wall outlet. If the Disklavier control unit still cannot be turned on, disconnect it from the AC wall outlet, and consult your Disklavier dealer.

Control Unit

Symptom	Remedy
The control unit does not appear to work correctly.	Turn off the control unit, wait 5 seconds, then turn it back on. If the problem continues, consult your Disklavier dealer.
The control unit becomes hot.	Although the chassis of the control unit may become hot while it is turned on (also in the standby mode), this is not a malfunction.

Remote Control

Symptom	Remedy
You cannot control the Disklavier control unit using the remote control.	Make sure that you are pointing the remote control at the remote control sensor on the front panel. Make sure that you are within the remote control's specified operating range (approx. 5 m). Make sure that the remote control's batteries have been installed correctly. Check the condition of the remote control's batteries.

Playback

Symptom	Remedy
None of the playback functions can be used.	Insert a medium that contains songs into the Disklavier control unit.
The Disklavier control unit does not read a song file.	The maximum number of the readable files in an album is 999. Make sure that the name of the SMF song has an extension as ".MID" or ".mid" and the E-SEQ song has ".FIL" or ".fil."
Songs are played back at the wrong tempo or in the wrong key.	Reset the tempo or transposition changes. Once the tempo or transposition have been changed, they will affect playback of all songs on an album, until another medium or album is selected, the recording standby mode is engaged, the Disklavier control unit is turned off, or they are reset.
Songs are not played back in the normal song order.	Make sure that the random repeat mode is off.
The playback order differs from the order on another device.	The playback order depends on the recording software or other factors. Naming the file starting from numbers such as 01, 02, etc. may solve the problem.
When selecting a song using the remote control's number keypad, but the last song on the album is selected.	If a song number higher than the last song number on the album is specified, the last song will be selected.
When specifying a search time using the remote control's number keypad, but the end of the song is selected.	If a time value higher than the total length of the song is specified, the end of the song will be selected.
Some notes drop out during playback.	When a piano song is played back at a low volume, complex note trills and faint pianissimo passages sometimes drop out. In such case, increase the volume level of the Disklavier control unit.
PianoSmart™ playback cannot be performed.	Make sure that an appropriate SmartPianoSoft song, which is paired with the song on commercial CDs, is selected.
The pedals do not operate during playback.	Make sure that the pedal part is not canceled. Make sure that your piano is not in the Silent Piano™ function mode.

Tone Generator

Symptom	Remedy
The ensemble parts cannot be heard during ensemble song playback.	Make sure that the TG balance is set to an appropriate level and readjust it.
The pitch of your piano and the internal tone generator do not match.	Use the TG Master Tune function to tune the internal tone generator.

Recording

Symptom	Remedy
You cannot re-record.	Re-recording is not possible on protected songs such as PianoSoft and PianoSoft-Plus songs.

Media

Symptom	Remedy
The Disklavier control unit does not recognize a USB flash memory.	Certain USB storage devices may not function properly with the Disklavier control unit. For a list of compatible products, please visit: www.yamaha.com/disklavier/
The Disklavier control unit does not read a CD-R/RW disc.	The audio CD should be formatted in CD-DA, and the data CD in ISO 9660 Level1. The Disklavier control unit may not read a CD-R/RW disc other than this format.

Connection with External Devices

Symptom	Remedy
The Disklavier control unit cannot send or receive MIDI data with other MIDI instruments.	Make sure that the MIDI cables or USB cable are connected properly.
A MIDI loop was accidentally created when you connected a computer to the MIDI OUT terminal on the Disklavier control unit, so that song data is sent back and forth between the computer and the Disklavier.	Configure the setting for the MIDI OUT terminal to "KBD OUT."

Video Synchronized Recording/Playback

Symptom	Remedy
Synchronized songs are not played back.	<p>Make sure that the audio channels of the DVD recorder are correctly connected to the Disklavier control unit.</p> <p>Make sure that the input and output of the DVD recorder are correctly connected to the Disklavier control unit.</p> <p>Make sure that the "OMNI IN" option on the Disklavier control unit is set to "AutoDetect."</p> <p>Make sure that the "OMNI OUT" option on the Disklavier control unit is set to "SYNC."</p>
Noises are heard during recording.	<p>Turn down the volume of the TV connected to the DVD recorder.</p> <p>Disconnect the left side connector of the RCA cord from the OMNI OUT (L) jack on the Disklavier control unit. This will not affect the functionality of video synchronized recording.</p>
Noises are heard during playback.	The level of the synchronized signal (SMPTE) from the Disklavier control unit may be too high. Turn down the level with the "SYNC OUT Level" option and re-record.
The piano playback is not synchronized with the video picture.	The video picture may be delayed on the projection device. Adjust the offset time with the "SYNC IN Offset" to match the piano playing and the video picture.
The beginning of the piano performance is dropped out when you play back the synchronized song.	It may take some time until the Disklavier control unit recognizes the synchronized signal and the piano begins to play back. Select the synchronized song in advance, and then start playback on the DVD recorder. Note that you should wait for a while before playing the piano after recording begins on the DVD recorder.

Error Messages

While operating your Disklavier control unit, an error message may appear in the display. If an error message appears, refer to the table below for an explanation of the message.

Media Selection / Playback

Error Messages	Situation	Remedy
NO MEDIA!	You selected the medium that has not been inserted.	Insert the medium or select another medium.
DIFFERENT CD!	Your CD is not paired with the selected SmartPianoSoft song.	Insert appropriate CD that is paired with the SmartPianoSoft song.

Voice Function

Error Messages	Situation	Remedy
CANNOT USE THIS FUNCTION PIANO TYPE	You tried to use the voice function on the playback model.	You cannot use the voice function if your piano is the playback model.

File Operation

Error Messages	Situation	Remedy
CANNOT EXECUTE. NOT ENOUGH DISK SPACE	You tried to copy a song to the medium that has no disk space.	Try another medium or delete songs on the media to make disk space.
CANNOT EXECUTE. NO DESTINATION MEDIUM	You selected the destination medium that has not been inserted when copying the album.	Insert the destination medium and select it.
DISK WRITE PROTECTED!	You tried to copy songs or albums to the medium with the protection tab set to "protected".	Set the protection tab of the medium to "unprotected".
CANNOT EXECUTE. PROTECTED FILE	You tried to copy the protected song file to the removable medium such as a USB flash memory.	You cannot copy the protected file to the removable medium.
Deleted all songs in this album	You tried to delete the album with sub folders on the external medium.	
CANNOT EXECUTE TO CREATE MORE THAN 99 ALBUMS	You tried to create a new album on the medium that already contains 99 albums.	No more than 99 albums can be created on the medium.
CANNOT EXECUTE TO CREATE MORE THAN 999 SONGS	You tried to create a new song in the album that already contains 999 songs.	No more than 999 songs can be created in the album.
CANNOT EXECUTE. SAME TITLE EXISTS	You tried to rename an album as same as the album that already exists.	Enter the different title to an album.
	You tried to rename a playlist as same as the playlist that already exists.	Enter the different title to a playlist.

Recording

Error Messages	Situation	Remedy
SELECT REC TRACK	You tried to start re-recording with no part selected.	Select the part to record before starting re-recording.
CANNOT RECORD. PLAYBACK MODEL	You tried to record a song on the playback model.	You cannot record a song if your piano is the playback model.

Error Messages

Timer Play

Error Messages	Situation	Remedy
SAME TIME EVENT EXISTS! CHANGE THE TIME	You tried to set two different programs with the same time for timer playback.	You cannot set two different program with the same time.

Internet Direct Connection

Error Messages	Situation	Remedy
CANNOT USE THIS FUNCTION PIANO TYPE	You tried to use the Internet Direct Connection on the piano connected to the Disklavier control unit with the MIDI cables.	Internet Direct Connection is available only on models of which the control unit has been replaced with the Disklavier control unit.

MIDI

Error Messages	Situation	Remedy
CANNOT USE THE MIDI PORT PIANO TYPE	You tried to change the MIDI IN Port or MIDI OUT Port settings on the piano connected to the Disklavier control unit with the MIDI cables.	If your piano is connected to the Disklavier control unit with the MIDI cables, these settings are fixed to "USB" and you cannot change the settings.
CANNOT USE THE KBDOUT PLAYBACK MODEL	You tried to change the MIDI OUT setting on the playback model of which the control unit is replaced with the Disklavier control unit.	If you replace the control unit of the playback model with the Disklavier control unit, this setting is fixed to "ESBL Out" and you cannot change the setting.

This glossary provides basic definitions of terms used frequently in this manual.

Continuous Pedal

See *“Incremental Pedal.”*

Cookie

A computer data file that stores certain information for use when revisiting a website. In the case of the Disklavier, cookies are used to store ID and password for the IDC service.

DHCP

This is a standard or protocol by which IP addresses and other low-level network configuration information can be dynamically and automatically assigned each time a connection is made to the Internet.

DNS

A system that translates names of computers connected to a network to their corresponding IP addresses.

Ensemble Song

A song which contains piano parts and accompanying instrumental voices. An ensemble song contains the same left- and right-hand parts as an L/R song, and in addition, up to 13 accompanying instrument tracks. These extra tracks are played by the internal XG tone generator. The accompanying tracks may be used for acoustic bass, drums, strings, vibes, etc.

E-SEQ Song Format

A song file format developed by Yamaha for saving songs.

Floppy Disk

The magnetic storage medium that the Disklavier uses to save songs. With the optional USB floppy drive, you can use the 3.5 inch 2DD and 2HD floppy disks commonly used for computers.

Gateway

A system which links different networks or systems, and makes possible data transfer and conversion despite differing communications standards.

General MIDI (GM)

An addition to the MIDI standard that simplifies the transfer of MIDI song files between instruments of different manufacturers. A MIDI song recorded using a GM compatible tone generator should play back correctly when used with any GM compatible tone generator. The standard specifies that a GM compatible tone generator must support 24-note polyphony, 16 parts, and 128 standard voices.

Half Pedal

See *“Incremental Pedal.”*

Incremental Pedal

Piano pedals are not always completely up or down and may be held somewhere in-between. Using incremental pedal data (also called continuous or half pedal data) the Disklavier precisely records the up and down movement of the piano pedals.

Internet

A huge network made up of networks, the Internet allows high-speed data transfer among computers, mobile phones and other devices.

IP Address

A string of numbers assigned to each computer connected to a network, and indicating the device's location on the network.

LAN

Short for Local Area Network, this is a data-transfer network that connects a group of computers at a single location (such as an office or home) by means of a special cable.

L/R Song

In a L/R song, the left-hand piano part is stored on track 1 (L) and the right-hand piano part is stored on track 2 (R). During playback you can cancel either part, and then play that part yourself. When recording an L/R song, you can record the two parts simultaneously or separately.

MIDI

An acronym for Musical Instrument Digital Interface. MIDI allows electronic musical instruments to communicate with each other.

Modem

A device which connects and allows data transfer between a conventional telephone line and a computer. It converts the digital signals from the computer to analog audio for sending over the phone line, and vice versa.

Piano Parts

Refer to the left- and right-hand piano parts of a song. The left-hand piano part is recorded onto track 1 and the right-hand piano part is recorded onto track 2.

PianoSoft™

The PianoSoft Disk Collection is a library of prerecorded song disks made by Yamaha specifically for use with the Disklavier.

PianoSoft-Plus™

PianoSoft-Plus disks contain Ensemble songs that can be played on the Disklavier.

Polyphony

The maximum number of voices (or sounds) that can be produced at a time from MIDI instruments.

Provider

A communications business that offers Internet connection services. In order to connect to the Internet, it is necessary to contract to a provider.

Proxy

A proxy server is a server that all computers on a local network have to go through before accessing information on the Internet. It intercepts all or designated requests to the real server to see if it can fulfill the requests itself. If not, it forwards the request to the real server. Proxy servers are used to improve performance and speed, and to filter requests, usually for security and to prevent unauthorized access to an internal network.

Router

A device for connecting multiple computer networks. For example, a router is necessary when connecting several computers in a house or office, to allow all of them access the Internet and share data. A router is usually connected between a modem and a computer, although some modems have a built-in router.

Sequencer

A sequencer can be used with the Disklavier to play back and record MIDI data.

Server

A hardware system or computer used as a central point for a network, providing access to files and services.

SmartPianoSoft™

Software made by Yamaha containing MIDI signals for playing back along with standard audio CDs.

SMF

Abbreviation for Standard MIDI File.

SMF Song Format

A song file format supported by MIDI sequencers and music software.

Song

Normally, a short piece of music with lyrics. However, for clarity in Disklavier manuals, the term is used to refer to any piece of music of any genre.

Standard MIDI File

A file of MIDI data that can be read and used by a number of different MIDI devices and computers.

Subnet Mask

A setting used to divide a large-scale network into several smaller networks.

TG Master Tune

The function that allows you to tune the internal XG tone generator, and if connected, an external tone generator simultaneously so that their tunings match that of the Disklavier.

Tone Generator

An electronic device that can generate tones or instrument voices.

Transpose

Changing the key of a song. For example, a song in the key of C is transposed to the key of D when it is moved up two semitones.

USB

An interface for connecting an external device with plug and play. The Disklavier supplies with 2 TO DEVICE terminal with USB 1.1 standard and 1 TO HOST terminal. You can use as the external memory media if connected a USB flash memory or a USB hard disk to TO DEVICE terminal. Also the Disklavier enables you to enjoy a variety of MIDI features by connecting a computer to TO HOST terminal.

Voice

The sounds produced by a tone generator expressing various instruments.

Web Page

Refers to each individual page that makes up a website.

Website

This refers to the group of web pages that are opened together. For example, the collection of web pages whose addresses begin with "*http://www.yamaha.com/*" is referred to as the Yamaha site.

XG

Yamaha XG is an extension of the GM (General MIDI) format. Its greater polyphony, more voices, and use of effects enhances the compatibility between MIDI devices. When a song in the Yamaha XG format is played on another XG-compatible tone generator or synthesizer, it plays and sounds as the original composer/creator intended.

Internal Tone Generator Voices

The following table lists the basic voices for the internal GM/XG and TG3 tone generator.

Internal GM/XG Tone Generator Basic Voice List

Voice #	Display Name	Voice #	Display Name	Voice #	Display Name		
01 Piano							
001	GrandPno	043	Orgel	086	OrgFlute		
002	GrndPnoK	044	Vibes	087	TrmOrgFl		
003	MelloGrP	045	VibesK	088	ReedOrgn		
004	PianoStr	046	HardVibe	089	Puff Org		
005	Dream	047	Marimba	090	Acordion		
006	BritePno	048	MarimbaK	091	Accordlt		
007	BritPnoK	049	SineMrmb	092	Harmnica		
008	E.Grand	050	Balafon2	093	Harmo 2		
009	EIGrPnoK	051	Log Drum	094	TangoAcid		
010	Det.CP80	052	Xylophon	095	TngoAcid2		
011	EIGrPno1	053	TubulBel	04 Guitar			
012	EIGrPno2	054	ChrchBel	096	NylonGtr		
013	HnkyTonk	055	Carillon	097	NylonGt2		
014	HnkyTnkK	056	Dulcimer	098	NylonGt3		
015	E.Piano1	057	Dulcimr2	099	VelGtHrm		
016	EI.Pno1K	058	Cimbalom	100	Ukulele		
017	MelloEP1	059	Santur	101	SteelGtr		
018	Chor.EP1	03 Organ		102	SteelGt2		
019	HardEI.P	060	DrawOrgn	103	12StrGtr		
020	VX EI.P1	061	DetDrwOr	104	Nyln&Stl		
021	60sEI.P	062	60sDrOr1	105	Stl&Body		
022	E.Piano2	063	60sDrOr2	106	Mandolin		
023	EI.Pno2K	064	70sDrOr1	107	Jazz Gtr		
024	Chor.EP2	065	DrawOrg2	108	MelloGtr		
025	DX Hard	066	60sDrOr3	109	JazzAmp		
026	DXLegend	067	EvenBar	110	CleanGtr		
027	DX Phase	068	16+2"2/3	111	ChorusGt		
028	DX+Analg	069	Organ Ba	112	Mute.Gtr		
029	DXKotoEP	070	70sDrOr2	113	FunkGtr1		
030	VX EI.P2	071	CheezOrg	114	MuteStlG		
031	Harpsi.	072	DrawOrg3	115	FunkGtr2		
032	Harpsi.K	073	PercOrgn	116	Jazz Man		
033	Harpsi.2	074	70sPcOr1	117	Ovrdrive		
034	Harpsi.3	075	DetPrcOr	118	Gt.Pinch		
035	Clavi.	076	LiteOrg	119	Dist.Gtr		
036	Clavi.K	077	PercOrg2	120	FeedbkGt		
037	ClaviWah	078	RockOrgn	121	FeedbGt2		
038	PulseClv	079	RotaryOr	122	GtrHarmo		
039	PierceCl	080	SloRotar	123	GtFeedbk		
02 ChromaticPerc						124	GtrHrmo2
040	Celesta	081	FstRotar	05 Bass			
041	Glocken	082	ChrchOrg	125	Aco.Bass		
042	MusicBox	083	ChurOrg3	126	JazzRthm		
		084	ChurOrg2	127	VXUprght		
		085	NotreDam				

Voice #	Display Name
128	FngrBass
129	FingrDrk
130	FlangeBa
131	Ba&DstEG
132	FngrSlap
133	FngBass2
134	ModAlem
135	PickBass
136	MutePkBa
137	Fretless
138	Fretles2
139	Fretles3
140	Fretles4
141	SynFretl
142	Smooth
143	SlapBas1
144	ResoSlap
145	PunchThm
146	SlapBas2
147	VeloSlap
148	SynBass1
149	SynBa1Dk
150	FastResB
151	AcidBass
152	Clv Bass
153	TeknoBa
154	Oscar
155	SqrBass
156	RubberBa
157	Hammer
158	SynBass2
159	MelloSB1
160	Seq Bass
161	ClkSynBa
162	SynBa2Dk
163	SmthBa 2
164	ModulrBa
165	DX Bass
166	X WireBa
06 Strings	
167	Violin
168	SlowVln
169	Viola
170	Cello
171	Contrabs
172	Trem.Str
173	SlwTrStr
174	Susp Str
175	Pizz.Str
176	Harp
177	YangChin

Voice #	Display Name
178	Timpani
07 Ensemble	
179	Strings1
180	S.Strngs
181	SlowStr
182	ArcoStr
183	60sStrng
184	Orchestr
185	Orchstr2
186	TremOrch
187	VeloStr
188	Strings2
189	S.SlwStr
190	LegatoSt
191	Warm Str
192	Kingdom
193	70s Str
194	Str Ens3
195	Syn.Str1
196	ResoStr
197	Syn Str4
198	SS Str
199	Syn.Str2
200	ChoirAah
201	S.Choir
202	Ch.Aahs2
203	MelChoir
204	ChoirStr
205	VoiceOoh
206	SynVoice
207	SynVox2
208	Choral
209	AnaVoice
210	Orch.Hit
211	OrchHit2
212	Impact
08 Brass	
213	Trumpet
214	Trumpet2
215	BriteTrp
216	WarmTrp
217	Trombone
218	Trmbone2
219	Tuba
220	Tuba 2
221	Mute.Trp
222	Fr.Horn
223	FrHrSolo
224	FrHorn2
225	HornOrch
226	BrasSect

Voice #	Display Name
227	Tp&TbSec
228	BrssSec2
229	HiBrass
230	MelloBrs
231	SynBras1
232	QuackBr
233	RezSynBr
234	PolyBrss
235	SynBras3
236	JumpBrss
237	AnaVelBr
238	AnaBrss1
239	SynBras2
240	Soft Brs
241	SynBras4
242	ChorBrss
243	VelBras2
244	AnaBrss2
09 Reed	
245	SprnoSax
246	Alto Sax
247	Sax Sect
248	HyprAlto
249	TenorSax
250	BrthTnSx
251	SoftTenr
252	TnrSax 2
253	Bari.Sax
254	Oboe
255	Eng.Horn
256	Bassoon
257	Clarinet
10 Pipe	
258	Piccolo
259	Flute
260	Recorder
261	PanFlute
262	Bottle
263	Shakhchi
264	Whistle
265	Ocarina
11 Synth Lead	
266	SquareLd
267	Square 2
268	LMSquare
269	Hollow
270	Shmoog
271	Mellow
272	SoloSine
273	SineLead
274	Saw.Lead

Internal Tone Generator Voices

Voice #	Display Name
275	Saw 2
276	ThickSaw
277	DynaSaw
278	DigiSaw
279	Big Lead
280	HeavySyn
281	WaspySyn
282	PulseSaw
283	Dr. Lead
284	VeloLead
285	Seq Ana
286	CaliopLd
287	Pure Pad
288	Chiff Ld
289	Rubby
290	CharanLd
291	DistLead
292	WireLead
293	Voice Ld
294	SynthAah
295	VoxLead
296	Fifth Ld
297	Big Five
298	Bass &Ld
299	Big&Low
300	Fat&Prky
301	SoftWurl
12 Synth Pad	
302	NewAgePd
303	Fantasy2
304	Warm Pad
305	ThickPad
306	Soft Pad
307	SinePad
308	Horn Pad
309	RotarStr
310	PolySyPd
311	PolyPd80
312	ClickPad
313	Ana Pad
314	SquarPad
315	ChoirPad
316	Heaven2
317	Itopia
318	CC Pad
319	BowedPad
320	Glacier
321	GlassPad
322	MetalPad
323	Tine Pad
324	Pan Pad

Voice #	Display Name
325	Halo Pad
326	SweepPad
327	Shwimmer
328	Converge
329	PolarPad
330	Celstial
13 Synth Effects	
331	Rain
332	ClaviPad
333	HrmoRain
334	AfrcnWnd
335	Caribbean
336	SoundTrk
337	Prologue
338	Ancestrl
339	Crystal
340	SynDrCmp
341	Popcorn
342	TinyBell
343	RndGlock
344	GlockChi
345	ClearBel
346	ChorBell
347	SynMalet
348	SftCryst
349	LoudGlok
350	XmasBell
351	VibeBell
352	DigiBell
353	AirBells
354	BellHarp
355	Gamelmba
356	Atmosphr
357	WarmAtms
358	HollwRls
359	NylonEP
360	NylnHarp
361	Harp Vox
362	AtmosPad
363	Planet
364	Bright
365	FantaBel
366	Smokey
367	Goblins
368	GobSyn
369	50sSciFi
370	Ring Pad
371	Ritual
372	ToHeaven
373	Night
374	Glisten

Voice #	Display Name
375	BelChoir
376	Echoes
377	EchoPad2
378	Echo Pan
379	EchoBell
380	Big Pan
381	SynPiano
382	Creation
383	Stardust
384	Reso Pan
385	Sci-Fi
386	Starz
14 Ethnic	
387	Sitar
388	DetSitar
389	Sitar 2
390	Tambra
391	Tamboura
392	Banjo
393	MuteBnjo
394	Rabab
395	Gopichnt
396	Oud
397	Shamisen
398	Koto
399	T.Koto
400	Kanoon
401	Kalimba
402	Bagpipe
403	Fiddle
404	Shanai
405	Shanai2
406	Pungi
407	Hichriki
15 Percussive	
408	TnklBell
409	Bonang
410	Gender
411	Gamelan
412	S.Gamlan
413	Rama Cym
414	AsianBel
415	Agogo
416	SteelDrm
417	GlasPerc
418	ThaiBell
419	WoodBlok
420	Castanet
421	TaikoDrm
422	Gr.Cassa
423	MelodTom

Internal Tone Generator Voices

Voice #	Display Name
424	Mel Tom2
425	Real Tom
426	Rock Tom
427	Syn.Drum
428	Ana Tom
429	ElecPerc
430	RevCymb1
16 Sound Effects	
431	FretNoiz
432	BrthNoiz
433	Seashore
434	Tweet
435	Telephone
436	Helicptr
437	Applause
438	Gunshot
18 SFX Voice	
450	CuttngNz
451	CttngNz2
452	Str Slap
453	Fl.KClk
454	Rain
455	Thunder
456	Wind
457	Stream
458	Bubble

Voice #	Display Name
459	Feed
460	Dog
461	Horse
462	Bird 2
463	Ghost
464	Maou
465	Tel.Dial
466	DoorSqek
467	DoorSlam
468	Scratch
469	Scratch2
470	WindChm
471	Telphon2
472	CarEngin
473	Car Stop
474	Car Pass
475	CarCrash
476	Siren
477	Train
478	Jetplane
479	Starship
480	Burst
481	Coaster
482	SbMarine
483	Laughing
484	Scream

Voice #	Display Name
485	Punch
486	Heart
487	FootStep
488	MchinGun
489	LaserGun
490	Xplosion
491	FireWork

Internal GM/XG Tone Generator Drum Voice List

Voice #	Display Name
17 Drum Kit	
439	StandKit
440	Stnd2Kit
441	Room Kit
442	Rock Kit
443	ElectKit
444	AnalgKit
445	Jazz Kit
446	BrushKit
447	ClascKit
448	SFX Kit1
449	SFX Kit2

Internal TG3 Tone Generator Basic Voice List

Voice #	Display Name
01 Piano	
001	GrandPno
002	BritePno
003	E.Grand
004	HnkyTonk
005	E.Piano1
006	E.Piano2
007	Harpsi.
008	Clavi.
02 ChromaticPerc	
009	Celesta
010	Glocken
011	MusicBox
012	Vibes
013	Marimba
014	Xylophon
015	TubulBel

Voice #	Display Name
016	Dulcimer
03 Organ	
017	DrawOrgn
018	PercOrgn
019	RockOrgn
020	ChrchOrg
021	ReedOrgn
022	Acordion
023	Harmnica
024	TangoAcid
04 Guitar	
025	NylonGtr
026	SteelGtr
027	Jazz Gtr
028	CleanGtr
029	Mute.Gtr
030	Ovrdrive

Voice #	Display Name
031	Dist.Gtr
032	GtrHarmo
05 Bass	
033	Aco.Bass
034	FngrBass
035	PickBass
036	Fretless
037	SlapBas1
038	SlapBas2
039	SynBass1
040	SynBass2
06 Strings	
041	Violin
042	Viola
043	Cello
044	Contrabs
045	Trem.Str

Internal Tone Generator Voices

Voice #	Display Name
046	Pizz.Str
047	Harp
048	Timpani
07 Ensemble	
049	Strings1
050	Strings2
051	Syn.Str1
052	Syn.Str2
053	ChoirAah
054	VoiceOoh
055	SynVoice
056	Orch.Hit
08 Brass	
057	Trumpet
058	Trombone
059	Tuba
060	Mute.Trp
061	Fr.Horn
062	BrasSect
063	SynBras1
064	SynBras2
09 Reed	
065	SprnoSax
066	Alto Sax
067	TenorSax
068	Bari.Sax
069	Oboe
070	Eng.Horn
071	Bassoon
072	Clarinet
10 Pipe	
073	Piccolo
074	Flute
075	Recorder
076	PanFlute
077	Bottle
078	Shakhchi
079	Whistle
080	Ocarina
11 Synth Lead	
081	SquareLd
082	Saw.Lead
083	CaliopLd
084	Chiff Ld
085	CharanLd
086	Voice Ld
087	Fifth Ld
088	Bass &Ld
12 Synth Pad	
089	NewAgePd
090	Warm Pad

Voice #	Display Name
091	PolySyPd
092	ChoirPad
093	BowedPad
094	MetalPad
095	Halo Pad
096	SweepPad
13 Synth Effects	
097	Rain
098	SoundTrk
099	Crystal
100	Atmosphr
101	Bright
102	Goblins
103	Echoes
104	Sci-Fi
14 Ethnic	
105	Sitar
106	Banjo
107	Shamisen
108	Koto
109	Kalimba
110	Bagpipe
111	Fiddle
112	Shanai
15 Percussive	
113	TnkIBell
114	Agogo
115	SteelDrm
116	WoodBlok
117	TaikoDrm
118	MelodTom
119	Syn.Drum
120	RevCymbI
16 Sound Effects	
121	FretNoiz
122	BrthNoiz
123	Seashore
124	Tweet
125	Telephone
126	Helicptr
127	Applause
128	Gunshot

Internal TG3 Tone Generator Drum Voice List

Voice #	Display Name
17 Drum Kit	
129	StandKit

General Specifications

Data Storage	Internal Memory	128 MB
Removable Media	CD-ROM	Audio CD (CD-DA), Data CD (ISO9660 Level1-compliant)
	USB Flash Memory	FAT16 or FAT32 format Yamaha does not assure the operation of the commercially available USB flash memories.
	Floppy Disk ¹	3.5" 2DD (720 KB) or 2HD (1.44 MB)
File Format		Standard MIDI File (SMF) format 0, Standard MIDI File (SMF) format 1, E-SEQ format
Song Format		PianoSoft (Solo), PianoSoft-Plus, PianoSoft-PlusAudio, SmartPianoSoft, SmartKey (CueTIME) ^{2 3}
Pitch Control		Set at A=440Hz, tunable -50 to +50 cents in 1 cent increment
Ensemble Tone	Type	Advanced Wave Memory 2 (AWM2)
	Polyphony	32 notes (max.)
	Ensemble Parts	16 parts
	Voice Module Modes	XG, GM
	Normal Voices	676 voices (480 voices can be used for playing)
	Drum Voices	21 kits (11 kits can be used for playing)
Connectors	MIDI	MIDI IN, MIDI OUT
	Audio	OUTPUT, ANALOG MIDI IN, OMNI IN, OMNI OUT
	Others	LAN, USB (1 × TO HOST, 2 × TO DEVICE)
Dimensions (W × H × D)		292 × 49 × 216 mm (11-1/2" × 1-15/16" × 8-1/2")
Weight		2.7 kg (5.95 lb)
Rated Power		DC12 V 3A, 50/60 Hz
Power Consumption		12 W
Supplied Accessories		Remote control (1), battery for remote control (2), remote control sensor shielding sticker (1), sample PianoSoft CD software (1), MIDI cable (2), audio cable (3), conversion cable for control (1), AC adaptor (PJP-PS02) (1), power cable (1), operation manual (1), PianoSoft CD song list (1)
Optional Accessories		Control unit suspension kit ⁴ , USB floppy disk drive (UD-FD01)

Functions & Controls

Playback Functions	Media Select	Internal memory, CD, USB media (including floppy disk)
	Song Select	Cursor buttons (control unit), cursor buttons/numeric section (remote control)
	Basic Functions	Play, stop, pause
	Song Search	Reverse/forward w/ sound (MIDI songs), reverse/forward w/o sound (audio songs), directly by time or measure
	Repeat	ALL (all songs in current album), RPT (current song), RND (all songs in current album in random order), A-B
	Part Cancel	L (left), R (right), pedal
	Timer Playback	See page 51.
	SmartKey™ Playback ^{*2*}	See page 56.
	Video Synchronization	See page 75.
	PianoSmart™ Playback	See page 77.
	Volume	11 levels (-10 to 0)
	Tempo	-50 to 50% in 1% increment
	Transposition	-24 to +24 semitones (2 octaves) in 1 semitone increment
	Balance (TG, Audio)	10 to 127
Recording Functions	Piano Part Recording	L/R overwrite, split
	Metronome Mode Recording	See page 58.
	Tempo Change	See page 65.
	Video Synchronization	See page 71.
	Audio CD Synchronization	See page 76.
Metronome	Tempo	30 to 400 beats per minutes
	Time Signatures	1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 8/4, 9/4
	Volume	Controllable
Utility Functions	Song	Copy, delete, rename, sort, add to playlist, type convert, time format convert, strip XP
	Album	Copy, delete, create, rename, sort, add to playlist
	Playlist	Create, delete, rename
	Backup/Restore	See pages 107 and 108.
	Floppy Disk ^{*1}	Format
Network Functions	DisklavierRadio ^{*3}	See pages 30 and 37.
	FromToPC Folder	See pages 101 to 105.
	Network Update ^{*3}	See page 39.
Update		Firmware update with media (CD-ROM or USB flash memory) or via the Internet ^{*3}

Specifications are subject to change without prior notice.

Note: ^{*1} Possible with optional USB floppy disk drive (UD-FD01).

^{*2} Available only on models capable of SmartKey™ playback.

^{*3} Available only on models of which the control unit is replaced with the Disklavier control unit.

^{*4} Available only on grand pianos.

disklavierTM

Disklavier Control Unit DKC-850

Appendix

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Version 2, June 1991

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glibc

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jpg "Clone me," says Dolly sheepishly

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zlib

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MIDI Data Format

If you are familiar with MIDI, or are using a computer to control your music software with computer-generated MIDI messages, the data provided in this section can help you to control your Disklavier. Messages include those that can be received by the piano part and/or those that can be received by an ESBL part. Messages that can be transmitted as well as received are shown as “transmitted.”

1. CHANNEL MESSAGES

1.1 Key On / Key Off

(Piano Part, ESBL Part) (transmitted)

Piano Part reception note range = A-1~C7 : C3=60

ESBL part reception note range = C-2~G8

Velocity range = 1~127 (Only the Key On velocity is received)

1.2 Control Change

1.2.1 Bank Select

(ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
0	Bank Select MSB	0: Normal, 63: User voice, 64: SFX, 126: SFX kit, 127: Drum
32	Bank Select LSB	0...127

You can select the Voice banks with MSB and LSB numbers. MSB and LSB functions differently depending on the play mode. In XG mode, MSB numbers select Voice type (Normal Voice or Drum Voice), and LSB number select Voice banks. In TG300B mode, LSB is fixed, and MSB numbers select Voice banks.

(See Normal Voice List Drum Voice List.)

A new bank selection will not become effective until the next Program Change message is received.

1.2.2 Modulation

(ESBL Part)

Cntrl#	Parameter	Data Range
1	Modulation	0...127

1.2.3 Portamento Time

(ESBL Part)

Cntrl#	Parameter	Data Range
5	Portamento Time	0...127

When the parameter 1.2.9 Portamento = ON, values will adjust the speed of pitch change.

A setting of 0 - minimum portamento time, and 127 - maximum portamento time.

1.2.4 Data Entry

(ESBL Part)

Messages which set the value for the parameter specified by RPN/NRPN.

Cntrl#	Parameter	Data Range
6	Data Entry MSB	0...127
38	Data Entry LSB	0...127

Parameter value is determined by combining MSB and LSB.

1.2.5 Main Volume

(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
7	Main Volume	0...127

1.2.6 Pan

(ESBL Part)

Cntrl#	Parameter	Data Range
10	Pan	0...127

1.2.7 Expression

(Piano Part, ESBL Part)

Cntrl#	Parameter	Data Range
11	Expression	0...127

1.2.8 Hold1

(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
64	Hold1	0...127 (0-63:off, 64-127:on)

1.2.9 Portamento (ESBL Part)

Cntrl#	Parameter	Data Range
65	Portamento	0...127 (0-63:off, 64-127:on)

1.2.10 Sostenuto

(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
66	Sostenuto	0...127 (0-63:off, 64-127:on)

1.2.11 Soft Pedal

(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
67	Soft Pedal	0...127 (0-63:off, 64-127:on)

1.2.12 Harmonic Content

(ESBL Part)

Messages which adjust the resonance set for each Voice.

Cntrl#	Parameter	Data Range
71	Harmonic Content	0...127 (0:-64, 64:+0, 127:+63)

Higher values will result in a more characteristic, resonant sound.

Depending on the Voice, the effective range may be narrower than the range available for adjustment.

1.2.13 Release Time

(ESBL Part)

Messages which adjust the envelope release time set for each Voice.

Cntrl#	Parameter	Data Range
72	Release Time	0...127 (0:-64, 64:+0, 127:+63)

1.2.14 Attack Time

(ESBL Part)

Messages which adjust the envelope attack time set for each Voice.

Cntrl#	Parameter	Data Range
73	Attack Time	0...127 (0:-64, 64:+0, 127:+63)

1.2.15 Brightness

(ESBL Part)

Messages which adjust the filter cutoff frequency set for each Voice.

Cntrl#	Parameter	Data Range
74	Brightness	0...127 (0:-64, 64:+0, 127:+63)

1.2.16 Portamento Control

(ESBL Part)

Messages which apply a portamento between the currently-sounding note and the subsequent note.

Cntrl#	Parameter	Data Range
84	Portamento Control	0...127

1.2.17 Effect1 Depth (Reverb Send Level)

(ESBL Part)

Cntrl#	Parameter	Data Range
91	Effect1 Depth	0...127

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1.2.18 Effect3 Depth (Chorus Send Level) (ESBL Part)

Cntrl#	Parameter	Data Range
93	Effect3 Depth	0...127

1.2.19 Effect4 Depth (Variation Effect Send Level) (ESBL Part)

Cntrl#	Parameter	Data Range
94	Effect4 Depth	0...127

1.2.20 Data Increment / Decrement (for RPN) (ESBL Part)

Cntrl#	Parameter	Data Range
96	RPN Increment	0...127
97	RPN Decrement	0...127

1.2.21 NRPN (Non-Registered Parameter Number) (ESBL Part)

Cntrl#	Parameter	Data Range
98	NRPN LSB	0...127
99	NRPN MSB	0...127

First send the NRPN MSB and NRPN LSB to specify the parameter which is to be controlled. Then use Data Entry to set the value of the specified parameter.

* Note that once the NRPN has been set for a channel subsequent data entry will be recognized as the same NRPN's value change. Therefore, after you use the NRPN, you should set a Null (7FH, 7FH) value to avoid an unexpected result.

The following NRPN number can be received.

NRPN	Data entry		
MSB	LSB	MSB	PARAMETER NAME and VALUE RANGE
\$01	\$08	\$mm	Vibrato Rate mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$01	\$09	\$mm	Vibrato Depth mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$01	\$0A	\$mm	Vibrato Delay mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$01	\$20	\$mm	Filter Cutoff Frequency mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$01	\$21	\$mm	Filter Resonance mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$01	\$63	\$mm	EG Attack Time mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$01	\$64	\$mm	EG Decay Time mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$01	\$66	\$mm	EG Release Time mm : \$00 - \$40 - \$7F (-64 - 0 - +63)
\$14	\$rr	\$mm	Drum Filter Cutoff Frequency mm : \$00 - \$40 - \$7F (-64 - 0 - +63) rr : drum instrument note number
\$15	\$rr	\$mm	Drum Filter Resonance mm : \$00 - \$40 - \$7F (-64 - 0 - +63) rr : drum instrument note number
\$16	\$rr	\$mm	Drum EG Attack mm : \$00 - \$40 - \$7F (-64 - 0 - +63) rr : drum instrument note number
\$17	\$rr	\$mm	Drum EG Decay Rate mm : \$00 - \$40 - \$7F (-64 - 0 - +63) rr : drum instrument note number Applies to both Decay1 and 2.
\$18	\$rr	\$mm	Drum Instrument Pitch Coarse mm : \$00 - \$40 - \$7F (-64 - 0 - +63) rr : drum instrument note number
\$19	\$rr	\$mm	Drum Instrument Pitch Fine mm : \$00 - \$40 - \$7F (-64 - 0 - +63) rr : drum instrument note number
\$1A	\$rr	\$mm	Drum Instrument Level mm : \$00 - \$7F (0 - max) rr : drum instrument note number
\$1C	\$rr	\$mm	Drum Instrument Pan mm : \$00 - \$40 - \$7F (random, left - center - right) rr : drum instrument note number

\$1D \$rr \$mm Drum Instrument Reverb Send Level
mm : \$00 - \$7F (0 - max)
rr : drum instrument note number

\$1E \$rr \$mm Drum Instrument Chorus Send Level
mm : \$00 - \$7F (0 - max)
rr : drum instrument note number

\$1F \$rr \$mm Drum Instrument Variation Send Level
mm : \$00 - \$7F (0 - max)
rr : drum instrument note number

MSB 14H- 1FH (for Drum) is valid only if the Multi Part parameter PART MODE = DRUMS 1 or DRUMS2 for that channel. (If PART MODE = DRUM, no values will be changed.)

1.2.22 RPN (Registered Parameter Number) (ESBL Part)

Cntrl#	Parameter	Data Range
100	RPN LSB	0...127
101	RPN MSB	0...127

The following RPN numbers can be received.

RPN	Data entry			
MSB	LSB	MSB	LSB	PARAMETER NAME and VALUE RANGE
00H	00H	mmH	—	Pitch Bend Sensitivity mm:00-18H (0-24 chromatic steps) Assignable in chromatic steps up to 2 octaves Default : 02H LSB value is ignored.
00H	01H	mmH	11H	Fine Tuning mm: 00H-40H-7FH (-64-0-+63)
00H	02H	mmH	—	Coarse Tuning mm: 28H - 40H - 58H (-24 - +24 chromatic steps) LSB value is ignored.
7FH	7FH	—	—	RPN null Cancels RPN and NRPN numbers

1.2.23 Channel Mode Messages

The following Channel Mode Messages can be received.

2nd byte	3rd byte	
120	0	All Sound Off
121	0	Reset All Controllers
123	0	All Note Off
124	0	Omni Off
125	0	Omni On
126	0 ~ 16	Mono
127	0	Poly

1.2.23.1 All Sound Off

(Piano Part, ESBL Part) (transmitted)

ESBL part;
Terminates all sounds currently sounding on the specified channel. However, the status of channel messages such as Note On and Hold On is maintained.

Piano Part;
The status of channel messages is not maintained.

1.2.23.2 Reset All Controllers

(ESBL Part)

The values of the following controllers will be reset to the defaults.

CONTROLLER	VALUE
Pitch Bend Change	±0 (center)
Channel Aftertouch	0 (off)
Polyphonic Aftertouch	0 (off)
Modulation	0 (off)
Expression	127 (max)
Hold 1	0 (off)
Portamento	0 (off)
Sostenuto	0 (off)
Soft Pedal	0 (off)

Portamento Control cancels the Portamento Source Key Number that was received
 RPN number not specified; internal data will not change
 NRPN number not specified; internal data will not change

1.2.23.3 All Note Off

(Piano Part, ESBL Part) (transmitted)

Terminates all notes currently on for the specified channel. However, if Hold 1 or Sostenuto is on, notes will continue sounding until these are turned off.

1.2.23.4 Omni Off

(Piano Part, ESBL Part)

Performs the same function as when an All Notes Off message is received.

1.2.23.5 Omni On

(Piano Part, ESBL Part)

Performs the same function as when an All Notes Off message is received.

1.2.23.6 Mono

(Piano Part, ESBL Part)

Performs the same function as when an All Sounds on message is received, and if the 3rd byte (mono number) is in the range of 0 - 16, sets the corresponding channel to Mono Mode (Mode 4 : m = 1).

1.2.23.7 Poly

(Piano Part, ESBL Part)

Performs the same function as when an All Sounds Off message is received. and sets the corresponding channel to Poly Mode (Mode 3).

1.2.24 Local Control

(Piano Part, ESBL Part)

0;Off Disklavier keyboard does not play the internal voices.
 127;On

1.3 Program Change

(ESBL Part) (transmitted)

Messages for Voice selection.
 With a combination of Bank Select, you can select not only basic Voice numbers, but also variation Voice bank numbers.

1.4 Pitch Bend

(ESBL Part)

When Multi Part Parameter Rcv PITCH BEND CHANGE=OFF, pitch bend for that part is not received.

1.5 Channel Aftertouch

(ESBL Part)

1.6 Polyphonic Aftertouch

(ESBL Part) (PianoPart) (transmitted)

Applying further pressure on the key does not output "key aftertouch" information. Instead, key position is transmitted as additional information.

2. SYSTEM EXCLUSIVE MESSAGES

2.1 Parameter Change

The Disklavier receives the following parameter change messages.

[UNIVERSAL REALTIME MESSAGE]

1) Master Volume

[UNIVERSAL NON REALTIME MESSAGE]

1) General MIDI Mode On

[XG NATIVE]

1) XG System on

2) XG System Data parameter change

3) Multi Effect1 Data parameter change

4) Multi Part Data parameter change

5) Drums Setup Data parameter change

[OTHER]

1) Master tuning

2) TG300 System Data Parameter change

3) TG300 Multi Effect Data parameter change

4) TG300 Multi Part Data parameter change

2.1.2 Universal Realtime Messages

2.1.2.1 Master Volume

(Piano Part, ESBL Part)

11110000 F0 = Exclusive status
 01111111 7F = Universal Real Time
 01111111 7F = ID of target device
 00000100 04 = Sub-ID #1=Device Control Message
 00000001 01 = Sub-ID #2=Master Volume
 0sssssss *SS = Volume LSB
 0tttttt TT = Volume MSB
 11110111 F7 = End of Exclusive

or

11110000 F0 = Exclusive status
 01111111 7F = Universal Real Time
 0xxxnnnn XN = Device Number, xxx = don't care
 00000100 04 = Sub-ID #1=Device Control Message
 00000001 01 = Sub-ID #2=Master Volume
 0sssssss SS = Volume LSB
 0tttttt TT = Volume MSB
 11110111 F7 = End of Exclusive

When received, the Volume MSB will be effective for the System Parameter MASTER VOLUME.

* "SS" is the hexadecimal expression of 0sssssss; same as for "tt", "aa", etc.

2.1.3 Universal Non-Realtime Messages

2.1.3.1 General MIDI Mode On

(ESBL Part)

11110000 F0 = Exclusive status
 01111110 7E = Universal Non-Real Time
 01111111 7F = ID of target device
 00001001 09 = Sub-ID #1=General MIDI Message
 00000001 01 = Sub-ID #2=General MIDI On
 11110111 F7 = End of Exclusive

or

11110000 F0 = Exclusive status
 01111110 7E = Universal Non-Real Time
 0xxxnnnn XN = Device Number, xxx = don't care
 00001001 09 = Sub-ID #1=General MIDI Message
 00000001 01 = Sub-ID #2=General MIDI On
 11110111 F7 = End of Exclusive

When General MIDI Mode On is received. the play mode will be changed to XG mode.

When this happens, the ESBL part will receive the MIDI messages which compatible with GM System Level 1, and consequently will not receive NRPN and Bank Select messages. Since approximately 50ms is required to execute this message, be sure to leave an appropriate interval before the subsequent message.

2.1.4 XG Native Parameter Change

(ESBL Part)

With the Parameter Change messages as listed below, you can change the characteristic of a Voice, such as by Effect Type or effect parameter, transpose, tuning, and others.

11110000 F0 Exclusive status
 01000011 43 YAMAHA ID
 0001nnnn 1n Device Number
 01001100 4C XG Model ID
 0aaaaaaa aaaaaaa Address High
 0aaaaaaa aaaaaaa Address Mid
 0aaaaaaa aaaaaaa Address Low
 0ddddddd ddddddd Data
 | |
 11110111 F7 End of Exclusive

* Any number is OK since the device number for the Disklavier is fixed to "All."

For parameters with data size of 2 or 4, transmit the appropriate number of data bytes.

When sending the parameter change messages consecutively, be sure to leave an appropriate interval (if the time base is 480. ca 5 unit) between the messages.

2.1.4.1 XG System On (ESBL Part)

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	XG Model ID
0aaaaaaa	00	Address High
0aaaaaaa	00	Address Mid
0aaaaaaa	7E	Address Low
00000000	00	Data
11110111	F7	End of Exclusive

When this data is received, the Disklavier will switch to XG mode and all the parameters will be initialized accordingly, and XG-compatible messages such as NRPN and Bank Select messages can be received.

Since approximately 50ms is required to execute this message, be sure to leave an appropriate interval before the subsequent message

2.1.4.2 XG System Data parameter change (ESBL Part)

See tables <1-1> and <1-2>.

2.1.4.3 Multi Effect1 Data parameter change (ESBL Part)

See tables <1-1> and <1-3>.

2.1.4.4 Multi Part Data parameter change (ESBL Part)

See tables <1-1> and <1-4>.

2.1.4.5 Drums Setup Data parameter change (ESBL Part)

See tables <1-1> and <1-5>.

If a Drum Setup Reset parameter change message is received, the Drum Setup parameter values will be initialized.

Selecting a Drum Set will cause the Drum Setup parameter values to be initialized.

2.1.5 Other parameter changes

2.1.5.1 Master Tuning (ESBL Part)

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1n	Device Number
00100111	27	Model ID
00110000	30	Sub ID2
00000000	00	
00000000	00	
0mmmmmmm	mm	Master Tune MSB
0lllllll	ll	Master Tune LSB
0ccccccc	cc	
11110111	F7	End of Exclusive

This message simultaneously changes the pitch of all channels.

2.2 Bulk Dump (ESBL Part)

The Disklavier receives the following bulk dump data.

[XG NATIVE]

- 1) XG System Data
- 2) Multi Effect1 Data
- 3) Multi Part Data
- 4) Drums Setup Data

[QS300 NATIVE]

- 1) QS300 User Normal Voice Data

2.2.1 XG Native Bulk Dump

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0n	Device Number
01001100	4C	XG Model ID
0bbbbbbb	bbbbbbb	ByteCount
0bbbbbbb	bbbbbbb	ByteCount
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
0ddddddd	dd	Data
0ccccccc	ccccccc	Checksum
11110111	F7	End of Exclusive

For the Address and Byte Count, refer to the supplementary tables.

The Checksum is the value that results in a value of 0 for the lower 7 bits when the Start Address, Byte Count, plus the Checksum itself are added.

2.2.1.1 XG System Data bulk dump (ESBL Part)

See tables <1-1> and <1-2>.

2.2.1.2 Multi Effect1 Data bulk dump (ESBL Part)

See tables <1-1> and <1-3>.

2.2.1.3 Multi Part Data bulk dump (ESBL Part)

See tables <1-1> and <1-4>.

2.2.1.4 Drums Setup Data bulk dump (ESBL Part)

See tables <1-1> and <1-5>.

2.2.2 QS300 Native Bulk Dump

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0n	Device Number
01001101	4B	QS300 Model ID
0bbbbbbb	bbbbbbb	ByteCount
0bbbbbbb	bbbbbbb	ByteCount
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
0ddddddd	dd	Data
0ccccccc	ccccccc	Checksum
11110111	F7	End of Exclusive

2.2.2.1 QS300 User Normal Voice Data bulk dump (ESBL Part)

See tables <2-1> and <2-2>.

3. SYSTEM REALTIME MESSAGES

3.1 Active Sensing

- a) Transmission
Transmitted.
- b) Reception
Once FE has been received, if no MIDI data is subsequently received for longer than an interval of approximately 300msec, the Disklavier will perform the same function as when ALL SOUNDS OFF, ALL NOTES OFF, and RESET ALL CONTROLLERS messages are received, and will then return to a status in which FE is not monitored.

<Table 1-1>

Parameter Bass Address
Model ID = 4C [XG]

	Parameter Change Address			Description
	(H)	(M)	(L)	
XG SYSTEM	00	00	00	System
	00	00	7D	Drum setup Reset
	00	00	7E	XG System On
	00	00	7F	All Parameter Reset
EFFECT1	02	01	00	Effect1 (Reverb, Chorus, Variation)
MULTI PART	08	00	00	Multi Part 1 :
	08	0F	00	Multi Part 16
DRUM	30	18	00	Drum Setup 1
	30	18	00	Drum Setup 2

----->

Address	Parameter
3n 0B 00	note number 13
3n 0C 00	note number 14
:	:
3n 5B 00	note number 91

n: Drum setup number (0, 1)

<Table 1-2>

MIDI Parameter Change table (SYSTEM) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description (H)	Default value
00 00 00	4	0000-07FF	MASTER TUNE	-102.4 - +102.3 [cent] 1st bit3-0→bit15-12 2nd bit3-0→bit11-8 3rd bit3-0→bit7-4 4th bit3-0→bit3-0	00 04 00 00 -400
	04	1 00 - 7F	MASTER VOLUME	0 - 127	7F
	05	1 00 - 7F	not used		
	06	1 28 - 58	TRANSPOSE	-24 - +24 [semitones]	40
	7D	n	DRUM SETUP RESET	n=Drum setup number	
	7E	00	XG SYSTEM ON	00=XG system ON (receive only)	
	7F	00	ALL PARAMETER RESET	00=ON (receive only)	
TOTAL SIZE		07			

<Table 1-3>

MIDI Parameter Change table (EFFECT 1) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 01 00	2	00-7F	REVERB TYPE MSB	see Effect Type List	01(=HALL1)
		00-7F	REVERB TYPE LSB	00 : basic type	00
	02	1 00-7F	REVERB PARAMETER 1	see Effect Parameter List	Depends on reverb type
	03	1 00-7F	REVERB PARAMETER 2	"	"
	04	1 00-7F	REVERB PARAMETER 3	"	"
	05	1 00-7F	REVERB PARAMETER 4	"	"
	06	1 00-7F	REVERB PARAMETER 5	"	"
	07	1 00-7F	REVERB PARAMETER 6	"	"
	08	1 00-7F	REVERB PARAMETER 7	"	"
	09	1 00-7F	REVERB PARAMETER 8	"	"
	0A	1 00-7F	REVERB PARAMETER 9	"	"
	0B	1 00-7F	REVERB PARAMETER 10	"	"
	0C	1 00-7F	REVERB RETURN	-∞dB...0dB...+6dB(0...64...127)	40
	0D	1 01-7F	REVERB PAN	L63...C...R63(1...64...127)	40

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TOTAL SIZE		0E				
02	01	10	1	00-7F	REVERB PARAMETER 11	see Effect Parameter List
		11	1	00-7F	REVERB PARAMETER 12	Depends on reverb type
		12	1	00-7F	REVERB PARAMETER 13	"
		13	1	00-7F	REVERB PARAMETER 14	"
		14	1	00-7F	REVERB PARAMETER 15	"
		15	1	00-7F	REVERB PARAMETER 16	"
TOTAL SIZE		6				
02	01	20	2	00-7F	CHORUS TYPE MSB	see Effect Type List
				00-7F	CHORUS TYPE LSB	00 : basic type
		22	1	00-7F	CHORUS PARAMETER 1	41 (=CHORUS1)
		23	1	00-7F	CHORUS PARAMETER 2	00
		24	1	00-7F	CHORUS PARAMETER 3	Depends on chorus Type
		25	1	00-7F	CHORUS PARAMETER 4	"
		26	1	00-7F	CHORUS PARAMETER 5	"
		27	1	00-7F	CHORUS PARAMETER 6	"
		28	1	00-7F	CHORUS PARAMETER 7	"
		29	1	00-7F	CHORUS PARAMETER 8	"
		2A	1	00-7F	CHORUS PARAMETER 9	"
		2B	1	00-7F	CHORUS PARAMETER 10	"
		2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB(0...64...127)
		2D	1	01-7F	CHORUS PAN	L63...C...R63(1...64...127)
		2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB... +6dB(0...64...127)
TOTAL SIZE		0F				
02	01	30	1	00-7F	CHORUS PARAMETER 11	see Effect Parameter List
		31	1	00-7F	CHORUS PARAMETER 12	Depends on chorus Type
		32	1	00-7F	CHORUS PARAMETER 13	"
		33	1	00-7F	CHORUS PARAMETER 14	"
		34	1	00-7F	CHORUS PARAMETER 15	"
		35	1	00-7F	CHORUS PARAMETER 16	"
TOTAL SIZE		6				
02	01	40	2	00-7F	VARIATION TYPE MSB	see Effect Type List
				00-7F	VARIATION TYPE LSB	00 : basic type
		42	2	00-7F	VARIATION PARAMETER 1 MSB	05 (=DELAY L, C, R)
				00-7F	VARIATION PARAMETER 1 LSB	00
		44	2	00-7F	VARIATION PARAMETER 2 MSB	Depends on variation type
				00-7F	VARIATION PARAMETER 2 LSB	"
		46	2	00-7F	VARIATION PARAMETER 3 MSB	"
				00-7F	VARIATION PARAMETER 3 LSB	"
		48	2	00-7F	VARIATION PARAMETER 4 MSB	"
				00-7F	VARIATION PARAMETER 4 LSB	"
		4A	2	00-7F	VARIATION PARAMETER 5 MSB	"
				00-7F	VARIATION PARAMETER 5 LSB	"
		4C	2	00-7F	VARIATION PARAMETER 6 MSB	"
				00-7F	VARIATION PARAMETER 6 LSB	"
		4E	2	00-7F	VARIATION PARAMETER 7 MSB	"
				00-7F	VARIATION PARAMETER 7 LSB	"
		50	2	00-7F	VARIATION PARAMETER 8 MSB	"
				00-7F	VARIATION PARAMETER 8 LSB	"
		52	2	00-7F	VARIATION PARAMETER 9 MSB	"
				00-7F	VARIATION PARAMETER 9 LSB	"
		54	2	00-7F	VARIATION PARAMETER 10 MSB	"
				00-7F	VARIATION PARAMETER 10 LSB	"
		56	1	00-7F	VARIATION RETURN	-∞ dB...0dB...+6dB(0...64...127)
		57	1	01-7F	VARIATION PAN	L63...C...R63(1...64...127)
		58	1	00-7F	SEND VARIATION TO REVERB	-∞ dB...0dB...+6dB(0...64...127)
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞ dB...0dB...+6dB(0...64...127)
		5A	1	00-01	VARIATION CONNECTION	0:INSERTION, 1:SYSTEM
		5B	1	00-0F,7F	VARIATION PART	Part1...16(0...15)
						OFF (127)
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64 - +63
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64 - +63
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64 - +63
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64 - +63
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64 - +63
TOTAL SIZE		21				
02	01	70	1	00-7F	VARIATION PARAMETER 11	see Effect Parameter List
		71	1	00-7F	VARIATION PARAMETER 12	Depends on variation type
		72	1	00-7F	VARIATION PARAMETER 13	"
		73	1	00-7F	VARIATION PARAMETER 14	"
		74	1	00-7F	VARIATION PARAMETER 15	"
		75	1	00-7F	VARIATION PARAMETER 16	"
TOTAL SIZE		6				

<Table 1-4>

MIDI Parameter Change table (MULTI PART) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
08 nn 00	1	00 - 20	ELEMENT RESERVE	0 - 32	part10=0, other=2
nn 01	1	00 - 7F	BANK SELECT MSB	0 - 127	part10=7F, other=0
nn 02	1	00 - 7F	BANK SELECT LSB	0 - 127	00
nn 03	1	00 - 7F	PROGRAM NUMBER	1 - 128	00
nn 04	1	00 - 0F, 7F	Rcv CHANNEL	1 - 16, OFF	part no.
nn 05	1	00 - 01	MONO/POLY MODE	0: MONO 1: POLY	01
nn 06	1	00 - 02	SAME NOTE NUMBER KEY ON ASSIGN	0: SINGLE 1: MULTI 2: INST (for DRUM)	1 (all part) part10=2, other=0
nn 07	1	00 - 03	PART MODE	0: NORMAL 1: DRUM 2-3: DRUMS1 - 2	00 (other than Part10) 02 (Part10)
nn 08	1	28 - 58	NOTE SHIFT	-24 - +24 [semitones]	40
nn 09	2	00 - FF	DETUNE	-12.8 - +12.7 [Hz]	08 00
nn 0A				1st bit3-0→bit7-4 2nd bit3-0→bit3-0	(80)
nn 0B	1	00 - 7F	VOLUME	0 - 127	64
nn 0C	1	00 - 7F	VELOCITY SENSE DEPTH	0 - 127	40
nn 0D	1	00 - 7F	VELOCITY SENSE OFFSET	0 - 127	40
nn 0E	1	00 - 7F	PAN	0/random, 1/L63-64/C-127/R63	40
nn 0F	1	00 - 7F	NOTE LIMIT LOW	C-2 - G8	00
nn 10	1	00 - 7F	NOTE LIMIT HIGH	C-2 - G8	7F
nn 11	1	00 - 7F	DRY LEVEL	0 - 127	7F
nn 12	1	00 - 7F	CHORUS SEND	0 - 127	00
nn 13	1	00 - 7F	REVERB SEND	0 - 127	40
nn 14	1	00 - 7F	VARIATION SEND	0 - 127	00
nn 15	1	00 - 7F	VIBRATO RATE	-64 - +63	40
nn 16	1	00 - 7F	VIBRATO DEPTH	-64 - +63	40 (drum part ignores)
nn 17	1	00 - 7F	VIBRATO DELAY	-64 - +63	40 (drum part ignores)
nn 18	1	00 - 7F	FILTER CUTOFF FREQUENCY	-64 - +63	40
nn 19	1	00 - 7F	FILTER RESONANCE	-64 - +63	40
nn 1A	1	00 - 7F	EG ATTACK TIME	-64 - +63	40
nn 1B	1	00 - 7F	EG DECAY TIME	-64 - +63	40
nn 1C	1	00 - 7F	EG RELEASE TIME	-61 - +63	40
nn 1D	1	28 - 58	MW PITCH CONTROL	-24 - +24 [semitones]	40
nn 1E	1	00 - 7F	MW FILTER CONTROL	-9600 - +9450 [cent]	40
nn 1F	1	00 - 7F	MW AMPLITUDE CONTROL	-64 - +63	40
nn 20	1	00 - 7F	MW LFO PMOD DEPTH	0 - 127	0A
nn 21	1	00 - 7F	MW LFO FMOD DEPTH	0 - 127	00
nn 22	1	00 - 7F	MW LFO AMOD DEPTH	0 - 127	00
nn 23	1	28 - 58	BEND PITCH CONTROL	-24 - +24 [semitones]	42
nn 24	1	00 - 7F	BEND FILTER CONTROL	-9600 - +9450 [cent]	40
nn 25	1	00 - 7F	BEND AMPLITUDE CONTROL	-64 - +63	40
nn 26	1	00 - 7F	BEND LFO PMOD DEPTH	+100 - +100 [%]	40
nn 27	1	00 - 7F	BEND LFO FMOD DEPTH	+100 - +100 [%]	40
nn 28	1	00 - 7F	BEND LFO AMOD DEPTH	+100 - +100 [%]	40
TOTAL SIZE	29				
nn 30	1	00 - 01	Rcv PITCH BEND	0/OFF, 1/ON	01
nn 31	1	00 - 01	Rcv CH AFTER TOUCH (CAT)	0/OFF, 1/ON	01
nn 32	1	00 - 01	Rcv PROGRAM CHANGE	0/OFF, 1/ON	01
nn 33	1	00 - 01	Rcv CONTROL CHANGE	0/OFF, 1/ON	01
nn 34	1	00 - 01	Rcv POLY AFTER TOUCH (PAT)	0/OFF, 1/ON	01
nn 35	1	00 - 01	Rcv NOTE MESSAGE	0/OFF, 1/ON	01
nn 36	1	00 - 01	Rcv RPN	0/OFF, 1/ON	01
nn 37	1	00 - 01	Rcv NRPN	0/OFF, 1/ON	XG=01, GM=00
nn 38	1	00 - 01	Rcv MODULATION	0/OFF, 1/ON	01
nn 39	1	00 - 01	Rcv VOLUME	0/OFF, 1/ON	01
nn 3A	1	00 - 01	Rcv PAN	0/OFF, 1/ON	01
nn 3B	1	00 - 01	Rcv EXPRESSION	0/OFF, 1/ON	01
nn 3C	1	00 - 01	Rcv HOLD1	0/OFF, 1/ON	01
nn 3D	1	00 - 01	Rcv PORTAMENTO	0/OFF, 1/ON	01
nn 3E	1	00 - 01	Rcv SOSTENUTO	0/OFF, 1/ON	01
nn 3F	1	00 - 01	Rcv SOFT PEDAL	0/OFF, 1/ON	01
nn 40	1	00 - 01	Rcv BANK SELECT	0/OFF, 1/ON	XG=01, GM=00
nn 41	1	00 - 7F	SCALE TUNING C	-64 - +63 [cent]	40

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nn	42	1	00 - 7F	SCALE TUNING C#	-64 - +63 [cent]	40
nn	43	1	00 - 7F	SCALE TUNING D	-64 - +63 [cent]	40
nn	44	1	00 - 7F	SCALE TUNING D#	-64 - +63 [cent]	40
nn	45	1	00 - 7F	SCALE TUNING E	-64 - +63 [cent]	40
nn	46	1	00 - 7F	SCALE TUNING F	-64 - +63 [cent]	40
nn	47	1	00 - 7F	SCALE TUNING F#	-64 - +63 [cent]	40
nn	48	1	00 - 7F	SCALE TUNING G	-64 - +63 [cent]	40
nn	49	1	00 - 7F	SCALE TUNING G#	-64 - +63 [cent]	40
nn	4A	1	00 - 7F	SCALE TUNING A	-64 - +63 [cent]	40
nn	4B	1	00 - 7F	SCALE TUNING A#	-64 - +63 [cent]	40
nn	4C	1	00 - 7F	SCALE TUNING B	-64 - +63 [cent]	40
nn	4D	1	28 - 58	CAT PITCH CONTROL	-24 - +24 [semitones]	40
nn	4E	1	00 - 7F	CAT FILTER CONTROL	-9600 - +9450 [cent]	40
nn	4F	1	00 - 7F	CAT AMPLITUDE CONTROL	-64 - +63	40
nn	50	1	00 - 7F	CAT LFO PMOD DEPTH	0 - 127	00
nn	51	1	00 - 7F	CAT LFO FMOD DEPTH	0 - 127	00
nn	52	1	00 - 7F	CAT LFO AMOD DEPTH	0 - 127	00
nn	53	1	28 - 58	PAT PITCH CONTROL	-24 - +24 [semitones]	40
nn	54	1	00 - 7F	PAT FILTER CONTROL	-9600 - +9450 [cent]	40
nn	55	1	00 - 7F	PAT AMPLITUDE CONTROL	-64 - +63	40
nn	56	1	00 - 7F	PAT LFO PMOD DEPTH	0 - 127	00
nn	57	1	00 - 7F	PAT LFO FMOD DEPTH	0 - 127	00
nn	58	1	00 - 7F	PAT LFO AMOD DEPTH	0 - 127	00
nn	59	1	00 - 5F	AC1 CONTROLLER NUMBER	0 - 95	10
nn	5A	1	28 - 58	AC1 PITCH CONTROL	-24 - +24 [semitones]	40
nn	5B	1	00 - 7F	AC1 FILTER CONTROL	-9600 - +9450 [cent]	40
nn	5C	1	00 - 7F	AC1 AMPLITUDE CONTROL	-64 - +63	40
nn	5D	1	00 - 7F	AC1 LFO PMOD DEPTH	0 - 127	00
nn	5E	1	00 - 7F	AC1 LFO FMOD DEPTH	0 - 127	00
nn	5F	1	00 - 7F	AC1 LFO AMOD DEPTH	0 - 127	00
nn	60	1	00 - 5F	AC2 CONTROLLER NUMBER	0 - 95	11
nn	61	1	28 - 58	AC2 PITCH CONTROL	-24 - +24 [semitones]	40
nn	62	1	00 - 7F	AC2 FILTER CONTROL	-9600 - +9450 [cent]	40
nn	63	1	00 - 7F	AC2 AMPLITUDE CONTROL	-64 - +63	40
nn	64	1	00 - 7F	AC2 LFO PMOD DEPTH	0 - 127	00
nn	65	1	00 - 7F	AC2 LFO FMOD DEPTH	0 - 127	00
nn	66	1	00 - 7F	AC2 LFO AMOD DEPTH	0 - 127	00
nn	67	1	00 - 01	PORTAMENTO SWITCH	0/OFF, 1/ON	00
nn	68	1	00 - 7F	PORTAMENTO TIME	0 - 127	00
nn	69	1	00 - 7F	PITCH EG INITIAL LEVEL	-64 - +63	40
nn	6A	1	00 - 7F	PITCH EG ATTACK TIME	-64 - +63	40
nn	6B	1	00 - 7F	PITCH EG RELEASE LEVEL	-64 - +63	40
nn	6C	1	00 - 7F	PITCH EG RELEASE TIME	-64 - +63	40
nn	6D	1	01 - 7F	VELOCITY LIMIT LOW	1 - 127	01
nn	6E	1	01 - 7F	VELOCITY LIMIT HIGH	1 - 127	7F
TOTAL SIZE 3F						

nn = Part Number (0:1Part, 1:2Part, 2:3Part, ..., 15:16Part)

For the DRUM PART, the following parameters have no effect.

- SOFT PEDAL
- BANK SELECT LSB
- MONO/POLY
- SCALE TUNING
- PORTAMENTO
- PITCH EG INITIAL LEVEL
- PITCH EG ATTACK TIME
- PITCH EG RELEASE LEVEL
- PITCH EF RELEASE TIME
- POLY AFTER TOUCH

<Table 1-5>

MIDI Parameter Change table (DRUM SETUP) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default (H)
3n rr	00	1	00 - 7F	PITCH COARSE	-64 - +63
3n rr	01	1	00 - 7F	PITCH FINE	-64 - +63 [cent]
3n rr	02	1	00 - 7F	LEVEL	0 - 127
3n rr	03	1	00 - 7F	ALTERNATE GROUP	0/OFF, 1 - 127
3n rr	04	1	00 - 7F	PAN	0/random, 1/L63 - 64/C - 127/R63
3n rr	05	1	00 - 7F	REVERB SEND	0 - 127
3n rr	06	1	00 - 7F	CHORUS SEND	0 - 127
3n rr	07	1	00 - 7F	VARIATION SEND	0 - 127

3n	rr	08	1	00 - 01	KEY ASSIGN	0/SINGLE, 1/MULTI	00
3n	rr	09	1	00 - 01	Rcv NOTE OFF	0/OFF, 1/ON	Depends on the note
3n	rr	0A	1	00 - 01	Rcv NOTE ON	0/OFF, 1/ON	01
3n	rr	0B	1	00 - 7F	FILTER CUTOFF FREQUENCY	-64 - +63	40
3n	rr	0C	1	00 - 7F	FILTER RESONANCE	-64 - +63	40
3n	rr	0D	1	00 - 7F	EG ATTACK RATE	-64 - +63	40
3n	rr	0E	1	00 - 7F	EG DECAY1 RATE	-64 - +63	40
3n	rr	0F	1	00 - 7F	EG DECAY2 RATE	-64 - +63	40
TOTAL SIZE			10				

[Note]

n: Drum number (0 - 1)

rr: note number (0D - 5B)

When XG system on or GM mode on messages are received, all Drum Setup parameters are initialized.

The Drum Setup Reset message can be used to initialize each Drum Setup parameter.

Selecting a Drum Set will cause the Drum Setup parameter values to be initialized.

<Table 2-1>

Parameter Bass Address
Model ID = 4B [QS300]

Bulk Dump				Description
Address			(L)	
	(H)	(M)		(L)
USER	11	00	00	User Normal Voice 1
NORMAL				:
VOICE	00	1F	00	User Normal Voice 32

<Table 2-2>

MIDI Bulk Dump table (USER NORMAL VOICE) [QS300]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default (H)	
11	nn	00	17D	20-7E	Voice Name	[Common]
		07				
		08			not used	
		0A			"	
		0B		01-03	Element Switch	1:Element 1 on, 2:Element 2 on, 3:Element 1 and 2 on
		0C		00-7F	Voice Level	
		0D			not used	
		3C			"	
		3D		00-7F	Wave Number High	[Element 1] bit13-bit7
		3E		00-7F	Wave Number Low	bit6-bit0
		3F		00-7F	Note Limit Low	
		40		00-7F	Note Limit High	
		41		00-7F	Velocity Limit Low	
		42		00-7F	Velocity Limit High	
		43		00-01	Filter EG Velocity Curve	
		44		00-02	LFO Wave Select	0:saw, 1:tri, 2:S&H
		45		00-01	LFO Phase Initialize	0:OFF, 1:ON
		46		00-3F	LFO Speed	
		47		00-7F	LFO Delay	
		48		00-7F	LFO Fade Time	
		49		00-3F	LFO PMD Depth	
		4A		00-0F	LFO CMD Depth	
		4B		00-1F	LFO AMD Depth	
		4C		20-60	Note Shift	
		4D		0E -72	Detune	
		4E		00-05	Pitch Scaling	0:100%, 1:50%, 2:20%, 3:10%, 4:5%, 5:0%
		4F		00-7F	Pitch Scaling Center Note	
		50		00-03	Pitch EG Depth	0:1/2oct, 1:1oct, 2:2oct, 3:4oct
		51		39-47	Velocity PEG Level Sensitivity	
		52		39-47	Velocity PEG Rate Sensitivity	
		53		39-47	PEG Rate Scaling	
		54		00-7F	PEG Rate Scaling Center Note	
		55		00-3F	PEG Rate 1	
		56		00-3F	PEG Rate 2	
		57		00-3F	PEG Rate 3	

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58	00-3F	PEG Rate 4	
59	00-7F	PEG Level 0	
5A	00-7F	PEG Level 1	
5B	00-7F	PEG Level 2	
5C	00-7F	PEG Level 3	
5D	00-7F	PEG Level 4	
5E	00-3F	Filter Resonance	
5F	00-07	Velocity Sensitivity	
60	00-7F	Cutoff Frequency	
61	00-7F	Cutoff Scaling Break Point 1	
62	00-7F	Cutoff Scaling Break Point 2	
63	00-7F	Cutoff Scaling Break Point 3	
64	00-7F	Cutoff Scaling Break Point 4	
65	00-7F	Cutoff Scaling Offset 1	
66	00-7F	Cutoff Scaling Offset 2	
67	00-7F	Cutoff Scaling Offset 3	
68	00-7F	Cutoff Scaling Offset 4	
69	39-47	Velocity FEG Level Sensitivity	
6A	39-47	Velocity FEG Rate Sensitivity	
6B	39-47	FEG Rate Scaling	
6C	00-7F	FEG Rate Scaling Center Note	
6D	00-3F	FEG Rate 1	
6E	00-3F	FEG Rate 2	
6F	00-3F	FEG Rate 3	
70	00-3F	FEG Rate 4	
71	00-7F	FEG Level 0	
72	00-7F	FEG Level 1	
73	00-7F	FEG Level 2	
74	00-7F	FEG Level 3	
75	00-7F	FEG Level 4	
76	00-7F	Element Level	
77	00-7F	Level Scaling Break Point 1	
78	00-7F	Level Scaling Break Point 2	
79	00-7F	Level Scaling Break Point 3	
7A	00-7F	Level Scaling Break Point 4	
7B	00-7F	Level Scaling Offset 1	
7C	00-7F	Level Scaling Offset 2	
7D	00-7F	Level Scaling Offset 3	
7E	00-7F	Level Scaling Offset 4	
7F	00-06	Velocity Curve	
80	00-0F	Pan	0 (Left)-14 (Right), 15:Scaling
81	39-47	AEG Rate Scaling	
82	00-7F	AEG Scaling Center Note	
83	00-0F	AEG Key on Delay	
84	00-7F	AEG Attack Rate	
85	00-7F	AEG Decay 1 Rate	
86	00-7F	AEG Decay 2 Rate	
87	00-7F	AEG Release Rate	
88	00-7F	AEG Decay 1 Level	
89	00-7F	AEG Decay 2 Level	
8A	00-7F	Address Offset High	bit13-bit7
8B	00-7F	Address Offset Low	bit6-bit0
8C	39-47	Resonance Sensitivity	
8D			[Element 2]
:			same as [Element 1]
DC			"
			"
DD			[Element 3]
:			not used
			"
12C			"
12D			[Element 4]
:			not used
			"
17C			"
TOTAL SIZE	17D		"
nn=Voice Number (00-1F)			

XG Drum Voice List

Bank Select MSB = Bank Number, LSB = 000

Drum kit names in bold typeface are those that can be selected in the Disklavier.

Bank	127	127	127	127	127	127	127	127	127	126	126			
Program #	1	2	9	17	25	26	33	41	49	1	2			
Note#	Note	Key off	Alternate assign	Standard Kit	Standard2 Kit	Room Kit	Rock Kit	Electro Kit	Analog Kit	Jazz Kit	Brush Kit	Classic Kit	SFX 1	SFX 2
13	C# -1		3	Surdo Mute										
14	D -1		3	Surdo Open										
15	D# -1			Hi Q										
16	E -1			Whip Slap										
17	F -1		4	Scratch Push										
18	F# -1		4	Scratch Pull										
19	G -1			Finger Snap										
20	G# -1			Click Noise										
21	A -1			Metronome Click										
22	A# -1			Metronome Bell										
23	B -1			Seq Click L										
24	C 0			Seq Click H										
25	C# 0			Brush Tap										
26	D 0	O		Brush Swirl L										
27	D# 0			Brush Slap										
28	E 0	O		Brush Swirl H				Reverse Cymbal	Reverse Cymbal					
29	F 0	O		Snare Roll	Snare Roll 2									
30	F# 0			Castanet				Hi Q	Hi Q					
31	G 0			Snare L	Snare L 2		SD Rock M	Snare M	SD Rock H		Brush Slap L			
32	G# 0			Sticks										
33	A 0			Bass Drum L			Bass Drum M	Bass Drum H 4	Bass Drum M			Bass Drum L2		
34	A# 0			Open Rim Shot	Open Rim Shot 2									
35	B 0			Bass Drum M	Bass Drum M 2		Bass Drum H 3	BD Rock	BD Analog L			Gran Cassa		
36	C 1			Bass Drum H	Bass Drum H 2		BD Rock	BD Gate	BD Analog H	BD Jazz	BD Soft	Gran Cassa Mute	Guitar Cutting Noise	Dial Tone
37	C# 1			Side Stick					Analog Side Stick				Guitar Cutting Noise 2	Door Creaking
38	D 1			Snare M	Snare M 2	SD Room L	SD Rock	SD Rock L	Analog Snare L		Brush Slap M	Marching Sn M		Door Slam
39	D# 1			Hand Clap									String Slap	Scratch
40	E 1			Snare H	Snare H 2	SD Room H	SD Rock Rim	SD Rock H	Analog Snare H		Brush Tap H	Marching Sn H		Scratch 2
41	F 1			Floor Tom L		Room Tom 1	Rock Tom 1	E Tom 1	Analog Tom 1	Jazz Tom 1	Brush Tom 1	Jazz Tom 1		Windchime
42	F# 1		1	Hi-Hat Closed					Analog HH Closed 1					Telephone Ring2
43	G 1			Floor Tom H		Room Tom 2	Rock Tom 2	E Tom 2	Analog Tom 2	Jazz Tom 2	Brush Tom 2	Jazz Tom 2		
44	G# 1		1	Hi-Hat Pedal					Analog HH Closed 2					
45	A 1			Low Tom		Room Tom 3	Rock Tom 3	E Tom 3	Analog Tom 3	Jazz Tom 3	Brush Tom 3	Jazz Tom 3		
46	A# 1		1	Hi-Hat Open					Analog HH Open					
47	B 1			Mid Tom L		Room Tom 4	Rock Tom 4	E Tom 4	Analog Tom 4	Jazz Tom 4	Brush Tom 4	Jazz Tom 4		
48	C 2			Mid Tom H		Room Tom 5	Rock Tom 5	E Tom 5	Analog Tom 5	Jazz Tom 5	Brush Tom 5	Jazz Tom 5		
49	C# 2			Crash Cymbal 1					Analog Cymbal				Hand Cym.Open L	
50	D 2			High Tom		Room Tom 6	Rock Tom 6	E Tom 6	Analog Tom 6	Jazz Tom 6	Brush Tom 6	Jazz Tom 6		
51	D# 2			Ride Cymbal 1									Hand Cym.Closed L	
52	E 2			Chinese Cymbal										
53	F 2			Ride Cymbal Cup									FL Key Click	Engine Start
54	F# 2			Tambourine										Tire Screech
55	G 2			Splash Cymbal										Car Passing
56	G# 2			Cowbell					Analog Cowbell					Crash
57	A 2			Crash Cymbal 2									Hand Cym.Open H	Siren
58	A# 2			Vibraslap										Train
59	B 2			Ride Cymbal 2									Hand Cym.Closed H	Jetplane
60	C 3			Bongo H										Starship
61	C# 3			Bongo L										Burst Noise
62	D 3			Conga H Mute					Analog Conga H					Coaster
63	D# 3			Conga H Open					Analog Conga M					SbMarine
64	E 3			Conga L					Analog Conga L					
65	F 3			Timbale H										
66	F# 3			Timbale L										
67	G 3			Agogo H										
68	G# 3			Agogo L										
69	A 3			Cabasa										
70	A# 3			Maracas					Analog Maracas					
71	B 3	O		Samba Whistle H										
72	C 4	O		Samba Whistle L										
73	C# 4			Güiro Short										
74	D 4	O		Güiro Long										
75	D# 4			Claves					Analog Claves					
76	E 4			Wood Block H										
77	F 4			Wood Block L										
78	F# 4			Cuica Mute				Scratch Push	Scratch Push					
79	G 4			Cuica Open				Scratch Pull	Scratch Pull					
80	G# 4		2	Triangle Mute										
81	A 4		2	Triangle Open										
82	A# 4			Shaker										
83	B 4			Jingle Bell										
84	C 5			Bell Tree										
85	C# 5												Dog	Machine Gun
86	D 5												Horse Gallop	Laser Gun
87	D# 5												Bird 2	Explosion
88	E 5													FireWork
89	F 5													
90	F# 5												Ghost	
91	G 5												Maou	

☐ : Same as Standard kit
 ☐ : No sound

TG300B Drum Voice List

Program #	Note#	Note	Alternate assign	1	9	17	25	26	33	41	49	57	128
				Standard Kit	Room Kit	Power Kit	Electro Kit	Analog Kit	Jazz Kit	Brush Kit	Orchestra Kit	SFX Set	C/M Kit
25	C#	0		Snare Roll									
26	D	0		Finger Snap									
27	D#	0		Hi-Q									
28	E	0		Whip Slap							Hi-Hat Closed		
29	F	0	7	Scratch Push							Hi-Hat Pedal		
30	F#	0	7	Scratch Pull							Hi-Hat Open		
31	G	0		Sticks							Ride Cymbal 1		
32	G#	0		Click Noise									
33	A	0		Metronome Click									
34	A#	0		Metronome Bell									
35	B	0		Bass Drum M							BD Jazz		
36	C	1		Bass Drum H		BD Power	BD Electronic	BD Analog H	BD Jazz	BD Soft	Gran Cassa		
37	C#	1		Side Stick				Analog Side Stick					
38	D	1		Snare M		SD Power	SD Electronic	Analog Snare L		Brush Tap	Concert SD		
39	D#	1		Hand Clap						Brush Slap	Castanet	High-Q	
40	E	1		Snare H			SD Power			Brush Swirl	Concert SD	Slap	SD Electro
41	F	1		Floor Tom L	Room Tom 1	Room Tom 1	E Tom 1	Analog Tom 1	Jazz Tom 1	Jazz Tom 1	Timpani F	Scratch Push	
42	F#	1	1	Hi-Hat Closed				Analog HH Closed 1			Timpani F#	Scratch Pull	
43	G	1		Floor Tom H	Room Tom 2	Room Tom 2	E Tom 2	Analog Tom 2	Jazz Tom 2	Jazz Tom 2	Timpani G	Sticks	
44	G#	1	1	Hi-Hat Pedal				Analog HH Closed 2			Timpani G#	Square Click	Hi-Hat Open 1
45	A	1		Low Tom	Room Tom 3	Room Tom 3	E Tom 3	Analog Tom 3	Jazz Tom 3	Jazz Tom 3	Timpani A	Metronome Click	
46	A#	1	1	Hi-Hat Open				Analog HH Open			Timpani A#	Metronome Bell	Hi-Hat Open 2
47	B	1		Mid Tom L	Room Tom 4	Room Tom 4	E Tom 4	Analog Tom 4	Jazz Tom 4	Jazz Tom 4	Timpani B	Guitar Fret Noise	
48	C	2		Mid Tom H	Room Tom 5	Room Tom 5	E Tom 5	Analog Tom 5	Jazz Tom 5	Jazz Tom 5	Timpani C	Guitar Cutting Down	
49	C#	2		Crash Cymbal 1				Analog Cymbal			Timpani C#	Guitar Cutting Up	
50	D	2		High Tom	Room Tom 6	Room Tom 6	E Tom 6	Analog Tom 6	Jazz Tom 6	Jazz Tom 6	Timpani D	Ac Bass Slap	
51	D#	2		Ride Cymbal 1							Timpani D#	PL Key Click	
52	E	2		Chinese Cymbal			Reverse Cymbal				Timpani E	Laughing	
53	F	2		Ride Cymbal Cup							Timpani F	Screaming	
54	F#	2		Tambourine								Punch	
55	G	2		Splash Cymbal								Heartbeat	
56	G#	2		Cowbell				Analog Cowbell				Footsteps 1	
57	A	2		Crash Cymbal 2							Hand Cym.1	Footsteps 2	
58	A#	2		Vibraslap								Applause	
59	B	2		Ride Cymbal 2							Hand Cym.2	Door Creaking	
60	C	3		Bongo H								Door Slam	
61	C#	3		Bongo L								Scratch	
62	D	3		Conga H Mute				Analog Conga H				Windchime	
63	D#	3		Conga H Open				Analog Conga M				Engine Start	
64	E	3		Conga L				Analog Conga L				Tire Screech	
65	F	3		Timbale H								Car Passing	
66	F#	3		Timbale L								Crash	
67	G	3		Agogo H								Siren	
68	G#	3		Agogo L								Train	
69	A	3		Cabasa								Jetplane	
70	A#	3		Maracas				Analog Maracas				Helicopter	
71	B	3	2	Samba Whistle H								Starship	
72	C	4	2	Samba Whistle L								Gunshot	
73	C#	4	3	Guiro Short								Machine Gun	Vibraslap
74	D	4	3	Guiro Long								Laser Gun	
75	D#	4		Claves				Analog Claves				Explosion	
76	E	4		Wood Block H								Dog	Laughing
77	F	4		Wood Block L								Horse Gallop	Screaming
78	F#	4	4	Cuica Mute								Bird Tweet	Punch
79	G	4	4	Cuica Open								Rain	Heartbeat
80	G#	4	5	Triangle Mute								Thunder	Footsteps 1
81	A	4	5	Triangle Open								Wind	Footsteps 2
82	A#	4		Shaker								Seashore	Applause
83	B	4		Jingle Bell								Stream	Door Creaking
84	C	5		Bell Tree								Bubble	Door Slam
85	C#	5		Castanet									Scratch
86	D	5	6	Surdo Mute									Windchime
87	D#	5	6	Surdo Open									Engine Start
88	E	5									Applause		Tire Screech
89	F	5											Car Passing
90	F#	5											Crash
91	G	5											Siren
92	G#	5											Train
93	A	5											Jetplain
94	A#	5											Helicopter
95	B	5											Starship
96	C	6											Gunshot
97	C#	6											Machine Gun
98	D	6											Laser Gun
99	D#	6											Explosion
100	E	6											Dog
101	F	6											Horse Gallop
102	F#	6											Bird Tweet
103	G	6											Rain
104	G#	6											Thunder
105	A	6											Wind
106	A#	6											Seashore
107	B	6											Stream
108	C	7											Bubble

☐ : Same as Standard kit

☐ : No sound

Effect Type List

Exclusive		Effect Type	Description
MSB	LSB		
REVERB			
00	00	NO EFFECT	Effect turned off.
01	00	HALL1	Reverb simulating the resonance of a hall.
01	01	HALL2	Reverb simulating the resonance of a hall.
02	00	ROOM1	Reverb simulating the resonance of a room.
02	01	ROOM2	Reverb simulating the resonance of a room.
02	02	ROOM3	Reverb simulating the resonance of a room.
03	00	STAGE1	Reverb appropriate for a solo instrument.
03	01	STAGE2	Reverb appropriate for a solo instrument.
04	00	PLATE	Reverb simulating a metal plate reverb unit.
10	00	WHITE ROOM	A unique short reverb with a bit of initial delay.
11	00	TUNNEL	Simulation of a tunnel space expanding to left and right.
13	00	BASEMENT	A bit of initial delay followed by reverb with a unique resonance.
CHORUS			
00	00	NO EFFECT	Effect turned off.
41	00	CHORUS1	Conventional chorus program that adds natural spaciousness.
41	01	CHORUS2	Conventional chorus program that adds natural spaciousness.
41	02	CHORUS3	Conventional chorus program that adds natural spaciousness.
41	08	CHORUS4	Chorus with stereo input. The pan setting specified for the Part will also apply to the effect sound.
42	00	CELESTE1	A 3-phase LFO adds modulation and spaciousness to the sound.
42	01	CELESTE2	A 3-phase LFO adds modulation and spaciousness to the sound.
42	02	CELESTE3	A 3-phase LFO adds modulation and spaciousness to the sound.
42	08	CELESTE4	Celeste with stereo input. The pan setting specified for the Part will also apply to the effect sound.
43	00	FLANGER1	Adds a jet-airplane effect to the sound.
43	01	FLANGER2	Adds a jet-airplane effect to the sound.
43	08	FLANGER3	Adds a jet-airplane effect to the sound.
VARIATION			
00	00	NO EFFECT	Effect turned off.
01	00	HALL1	Reverb simulating the resonance of a hall.
01	01	HALL2	Reverb simulating the resonance of a hall.
02	00	ROOM1	Reverb simulating the resonance of a room.
02	01	ROOM2	Reverb simulating the resonance of a room.
02	02	ROOM3	Reverb simulating the resonance of a room.
03	00	STAGE1	Reverb appropriate for a solo instrument.
03	01	STAGE2	Reverb appropriate for a solo instrument.
04	00	PLATE	Reverb simulating a metal plate reverb unit.
05	00	DELAY L, C, R	A program that creates three delay sounds; L, R, and C (center).
06	00	DELAY L, R	A program that creates two delay sounds; L and R. Two feedback delays are provided.
07	00	ECHO	Two delays (L and R) and independent feedback delays for L and R.
08	00	CROSS DELAY	A program that crosses the feedback of two delays.
09	00	EARLY REF1	An effect that produces only the early reflection component of reverb.
09	01	EARLY REF2	An effect that produces only the early reflection component of reverb.
0A	00	GATE REVERB	A simulation of gated reverb.
0B	00	REVERSE GATE	A program that simulates gated reverb played backwards.
14	00	KARAOKE 1	A delay with feedback of the same types as used for karaoke reverb.
14	01	KARAOKE 2	A delay with feedback of the same types as used for karaoke reverb.
14	02	KARAOKE 3	A delay with feedback of the same types as used for karaoke reverb.
41	00	CHORUS1	Conventional chorus program that add natural spaciousness.
41	01	CHORUS2	Conventional chorus program that adds natural spaciousness.
41	02	CHORUS3	Conventional chorus program that adds natural spaciousness.
41	08	CHORUS4	Chorus with stereo input.
42	00	CELESTE1	A 3-phase LFO adds modulation and spaciousness to the sound.
42	01	CELESTE2	A 3-phase LFO adds modulation and spaciousness to the sound.
42	02	CELESTE3	A 3-phase LFO adds modulation and spaciousness to the sound.
42	08	CELESTE4	Celeste with stereo input.
43	00	FLANGER1	Adds a jet-airplane effect to the sound.
43	01	FLANGER2	Adds a jet-airplane effect to the sound.
43	08	FLANGER3	Adds a jet-airplane effect to the sound.
44	00	SYMPHONIC	A multi-phase version of CELESTE.
45	00	ROTARY SPEAKER	A simulation of a rotary speaker. You can use AC1 (assignable controller) etc. to control the speed of rotation.
46	00	TREMOLO	An effect that cyclically modulates the volume.
47	00	AUTO PAN	A program that cyclically moves that sound image to left and right, front and back.
48	00	PHASER1	Cyclically changes the phase to add modulation to the sound.
48	08	PHASER2	Phaser with stereo input.
49	00	DISTORTION	Adds a sharp-edged distortion to the sound.
4A	00	OVER DRIVE	Adds mild distortion to the sound.
4B	00	AMP SIMULATOR	A simulation of a guitar amp.
4C	00	3BAND EQ (MONO)	A mono EQ with adjustable LOW, MID, and HIGH equalizing.
4D	00	2BAND EQ (STEREO)	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.
4E	00	AUTO WAH (LFO)	Cyclically modulates the center frequency of a wah filter. With an AC1 etc. this can function as a pedal wah.
40	00	THRU	Bypass without applying any effect.

* MSB, LSB is represented in hexadecimal.

* LCB=0 is the basic effect type.

Effect Parameter List

No	Parameter	Range	Value	See Table	Control
HALL1, HALL2, ROOM 1, 2, 3, STAGE 1, 2, PLATE					
1	Reverb Time	0.3~30.0s	0-69	table#4	
2	Diffusion	0~10	0-10		
3	Initial Delay	0~63	0-63	table#5	
4	HPF Cutoff	Thru~8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k~Thru	34-60	table#3	
6					
7					
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11	Rev Delay	0~63	0-63	table#5	
12	Density	0~3	0-3		
13	Er/Rev Balance	E63>R ~ E=R ~ E>R63	1-127		
14					
15	Feedback Level	-63~+63	1-127		
16					
WHITE ROOM, TUNNEL, BASEMENT					
1	Reverb Time	0.3~30.0s	0-69	table#4	
2	Diffusion	0~10	0-10		
3	Initial Delay	0~63	0-63	table#5	
4	HPF Cutoff	Thru~8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k~Thru	34-60	table#3	
6	Width	0.5~10.2m	0-37	table#11	
7	Height	0.5~20.2m	0-73	table#11	
8	Depth	0.5~30.2m	0-104	table#11	
9	Wall Vary	0~30	0-30		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11	Rev Delay	0~63	0-63	table#5	
12	Density	0~3	0-3		
13	Er/Rev Balance	E63>R~E=R~E>R63	1-127		
14					
15	Feedback Level	-63~+63	1-127		
16					
DELAY L, C, R					
1	Lch Delay	0.1~715.0ms	1-7150		
2	Rch Delay	0.1~715.0ms	1-7150		
3	Cch Delay	0.1~715.0ms	1-7150		
4	Feedback Delay	0.1~715.0ms	1-7150		
5	Feedback Level	-63~+63	1-127		
6	Cch Level	0~127	0-127		
7	High Damp	0.1~1.0	1-10		
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
14	EQ Low Gain	-12~+12dB	52-76		
15	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
16	EQ High Gain	-12~+12dB	52-76		
DELAY L, R					
1	Lch Delay	0.1~715.0ms	1-7150		
2	Rch Delay	0.1~715.0ms	1-7150		
3	Feedback Delay1	0.1~715.0ms	1-7150		
4	Feedback Delay2	0.1~715.0ms	1-7150		
5	Feedback Level	-63~+63	1-127		
6	High Damp	0.1~1.0	1-10		
7					
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
14	EQ Low Gain	-12~+12dB	52-76		
15	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
16	EQ High Gain	-12~+12dB	52-76		

No	Parameter	Range	Value	See Table	Control
ECHO					
1	Lch Delay1	0.1~355.0ms	1-3350		
2	Lch Feedback Level	-63~+63	1-127		
3	Rch Delay1	0.1~355.0ms	1-3350		
4	Rch Feedback Level	-63~+63	1-127		
5	High Damp	0.1~1.0	1-10		
6	Lch Delay2	0.1~355.0ms	1-3350		
7	Rch Delay2	0.1~355.0ms	1-3350		
8	Delay2 Level	0~127	0-127		
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
14	EQ Low Gain	-12~+12dB	52-76		
15	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
16	EQ High Gain	-12~+12dB	52-76		
CROSS DELAY					
1	L->R Delay	0.1~355.0ms	1-3350		
2	R->L Delay	0.1~355.0ms	1-3350		
3	Feedback Level	-63~+63	1-127		
4	Input Select	L, R, L&R	0-2		
5	High Damp	0.1~1.0	1-10		
6					
7					
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
14	EQ Low Gain	-12~+12dB	52-76		
15	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
16	EQ High Gain	-12~+12dB	52-76		
EARLY REF1, EARLY REF2					
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5		
2	Room Size	0.1~7.0	0-44	table#6	
3	Diffusion	0~10	0-10		
4	Initial Delay	0~63	0-63	table#5	
5	Feedback Level	-63~+63	1-127		
6	HPF Cutoff	Thru~8.0kHz	0-52		
7	LPF Cutoff	1.0k~Thru	34-60		
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11	Liveness	0~10	0-10		
12	Density	0~3	0-3		
13	High Damp	0.1~1.0	1-10		
14					
15					
16					
GATE REVERB, REVERSE GATE					
1	Type	TypeA, TypeB	0-1		
2	Room Size	0.1~7.0	0-44	table#6	
3	Diffusion	0~10	0-10		
4	Initial Delay	0~63	0-63	table#5	
5	Feedback Level	-63~+63	1-127		
6	HPF Cutoff	Thru~8.0kHz	0-52		
7	LPF Cutoff	1.0k~Thru	34-60		
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11	Liveness	0~10	0-10		
12	Density	0~3	0-3		
13	High Damp	0.1~1.0	1-10		
14					
15					
16					

• : Can be controlled by AC1 (Assignable Controller 1)
 No.* : These numbers correspond to the Parameter Suffix numbers in <Table 1-3>
 See Table** : Refer to "Effect Data Assign Table"

No	Parameter	Range	Value	See Table	Control
KARAOKE 1, 2, 3					
1	Delay Time	0~127	0-127	table#7	
2	Feedback Level	-63~+63	1-127		
3	HPF Cutoff	Thru~8.0kHz	0-52		
4	LPF Cutoff	1.0k~Thru	34-60		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13					
14					
15					
16					
CHORUS 1, 2, 3, 4, CELESTE 1, 2, 3, 4					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	
2	LFO PM Depth	0~127	0-127		
3	Feedback Level	-63~+63	1-127		
4	Delay Offset	0~127	0-127	table#2	
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13					
14					
15	Input Mode	mono/stereo	0-1		
16					
FLANGER 1, 2, 3					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	
2	LFO Depth	0~127	0-127		
3	Feedback Level	-63~+63	1-127		
4	Delay Offset	0~63	0-63	table#2	
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13					
14	LFO Phase Difference	-180~+180deg	4-124		
15					
16					
SYMPHONIC					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	
2	LFO Depth	0~127	0-127		
3	Delay Offset	0~127	0-127	table#2	
4					
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11					
12					
13					
14					
15					
16					

No	Parameter	Range	Value	See Table	Control
ROTARY SPEAKER					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	•
2	LFO Depth	0~127	0-127		
3					
4					
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		
11					
12					
13					
14					
15					
16					
TREMOLO					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	•
2	AM Depth	0~127	0-127		
3	PM Depth	0~127	0-127		
4					
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10					
11					
12					
13					
14		-180~+180deg	4-124		
15	Input Mode	mono/stereo	0-1		
16					
AUTO PAN					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	•
2	L/R Depth	0~127	0-127		
3	F/R Depth	0~127	0-127		
4	PAN Direction	L<->R, L->R, L<-R, Lturn, Rturn, L/R	0-5		
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10					
11					
12					
13					
14					
15					
16					
PHASER1, PHASER2					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	
2	LFO Depth	0~127	0-127		
3	Phase Shift	0~127	0-127		
4	Feedback Level	-63~+63	1-127		
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		•
11	Stage	3~10	3-10		
12	Diffusion	Mono/Stereo	0-1		
13	LFO Phase Di	-180~+180deg	4-124		
14					
15					
16					

• : Can be controlled by AC1 (Assignable Controller 1)
 No.* : These numbers correspond to the Parameter Suffix numbers in <Table 1-3>
 See Table** : Refer to "Effect Data Assign Table"

MIDI Data Format

No	Parameter	Range	Value	See Table	Control
DISTORTION, OVERDRIVE					
1	Drive	0~127	0-127		•
2	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
3	EQ Low Gain	-12~+12dB	52-76		
4	LPF Cutoff	1.0k~Thru	34-60	table#3	
5	Output Level	0~127	0-127		
6					
7	EQ Mid Frequency	500Hz~10.0kHz	28-54	table#3	
8	EQ Mid Gain	-12~+12dB	52-76		
9	EQ Mid Width	1.0~12.0	10-120		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		
11	Edge (Clip Curve)	0~127	0-127	mild ~sharp	
12					
13					
14					
15					
16					
GUITAR AMP SIMULATOR					
1	Drive	0~127	0-127		•
2	AMP Type	Off, Stack, Combo, Tube	0-3		
3	LPF Cutoff	1.0k~Thru	34-60	table#3	
4	Output Level	0~127	0-127		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W~D=W~D<W63	1-127		
11	Edge (Clip Curve)	0~127	0-127	mild ~sharp	
12					
13					
14					
15					
16					
3-BAND EQ					
1	EQ Low Gain	-12~+12dB	52-76		
2	EQ Mid Frequency	500Hz~10.0kHz	28-54	table#3	
3	EQ Mid Gain	-12~+12dB	52-76		
4	EQ Mid Width	1.0~12.0	10-120		
5	EQ High Gain	-12~+12dB	52-76		
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
8					
9					
10					
11					
12					
13					
14					
15					
16					

No	Parameter	Range	Value	See Table	Control
2-BAND EQ					
1	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
2	EQ Low Gain	-12~+12dB	52-76		
3	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
4	EQ High Gain	-12~+12dB	52-76		
5					
6					
7					
8					
9					
10					
11	EQ Mid Frequency	100Hz~10.0kHz	14-54	table#3	
12	EQ Mid Gain	-12~+12dB	52-76		
13	EQ Mid Width	1.0~12.0	10-120		
14					
15					
16					
AUTO WAH					
1	LFO Frequency	0.00~39.7Hz	0-127	table#1	
2	LFO Depth	0~127	0-127		
3	Cutoff Frequency	0~127	0-127		•
4	Resonance	1.0~12.0	10-120		
5					
6	EQ Low Frequency	50Hz~2.0kHz	8-40	table#3	
7	EQ Low Gain	-12~+12dB	52-76		
8	EQ High Frequency	500Hz~16.0kHz	28-58	table#3	
9	EQ High Gain	-12~+12dB	52-76		
10	Dry/Wet	D63>W~D=W~D<W63	1-127		
11					
12					
13					
14					
15					
16					

• : Can be controlled by AC1 (Assignable Controller 1)
 No.* : These numbers correspond to the Parameter Suffix numbers in <Table 1-3>
 See Table** : Refer to "Effect Data Assign Table"

Effect Data Assign Table

Table#1: LFO Frequency (Hz) table with 6 columns: Data, Value, Data, Value, Data, Value. Rows 0-42.

Table#2: Modulation Delay Offset (ms) table with 6 columns: Data, Value, Data, Value, Data, Value. Rows 0-42.

Table#3: EQ Frequency (Hz) table with 4 columns: Data, Value, Data, Value. Rows 0-42.

Table#4: Reverb Time (ms) table with 4 columns: Data, Value, Data, Value. Rows 0-42.

Table#5: Delay Time (ms) table with 6 columns: Data, Value, Data, Value, Data, Value. Rows 0-42.

Table#6: Room Size (m) table with 4 columns: Data, Value, Data, Value. Rows 0-42.

Table#7: Delay Time (ms) table with 6 columns: Data, Value, Data, Value, Data, Value. Rows 0-42.

Table#8: Reverb Width; Depth; Height table with 6 columns: Data, Value, Data, Value, Data, Value. Rows 0-42.

MIDI IMPLEMENTATION CHART

Yamaha Disklavier Control Unit
Model: DKC-850

Date: 01-Aug-2008
Version: 1.00

Function...	Transmitted	Recognized	Remarks
Basic Default	1-16	1-16	Memorized
Channel Changed	1-16	1-16	
Mode Default	3	3	
Mode Messages	x	3, 4 (m=1) *2, *3	
Mode Altered	*****	x	
Note Number : True voice	0-127 *****	0-127 0-127	
Velocity Note ON	o 9nH, v=1-127	o v=1-127	
Velocity Note OFF	o	o	
After Key's	o *5	o	
Touch Ch's	x	o *1, *2	
Pitch Bend	x	o 0-24 semi *1, *2	
Control 0, 32	o	o *1, *2	Bank Select Data Entry Hold1 (Sustain) Portament Sostenuto Soft (Shift) Pedal Effect Depth
Control 7, 11	o	o *1	
Control 1, 5, 10	x	o *1, *2	
Control 6, 38	x	o *2	
Control 64	o	o	
Control 65	x	o *2	
Control 66	o *4	o *2	
Control 67	o	o	
Control 71-74, 84	x	o *2	
Control 91, 93, 94	x	o *2	
Control 96-101	x	o *1, *2	
Prog Change : True #	o 0-127 *****	o 0-127 *2	
System Exclusive	o	o	
Common : Song Pos	x	x	
Common : Song Sel	x	x	
Common : Tune	x	x	
System Real Time : Clock	x	x	
System Real Time : Commands	x	x	
Aux Messages : All Sound OFF	o	o (120, 126, 127)	
Aux Messages : Reset All Cntrls	x	o (121)	
Aux Messages : Local ON/OFF	x	o	
Aux Messages : All Notes OFF	o	o (123-125)	
Aux Messages : Active Sense	o	o	
Aux Messages : Reset	x	x	
Notes	*1 = Received (transmitted) if switch is on. *2 = Only ESBL Part can recognized. *3 = m is always treated as 1 regardless of its value. *4 = Transmit if this model has a Sostenuto Pedal. *5 = Applying further pressure on the key does not output key aftertouch information. Instead, key position is transmitted as additional information.		

Mode 1 : OMNI ON. POLY
Mode 3 : OMNI OFF. POLY

Mode 2 : OMNI ON. MONO
Mode 4 : OMNI OFF. MONO

o : YES
x : NO

