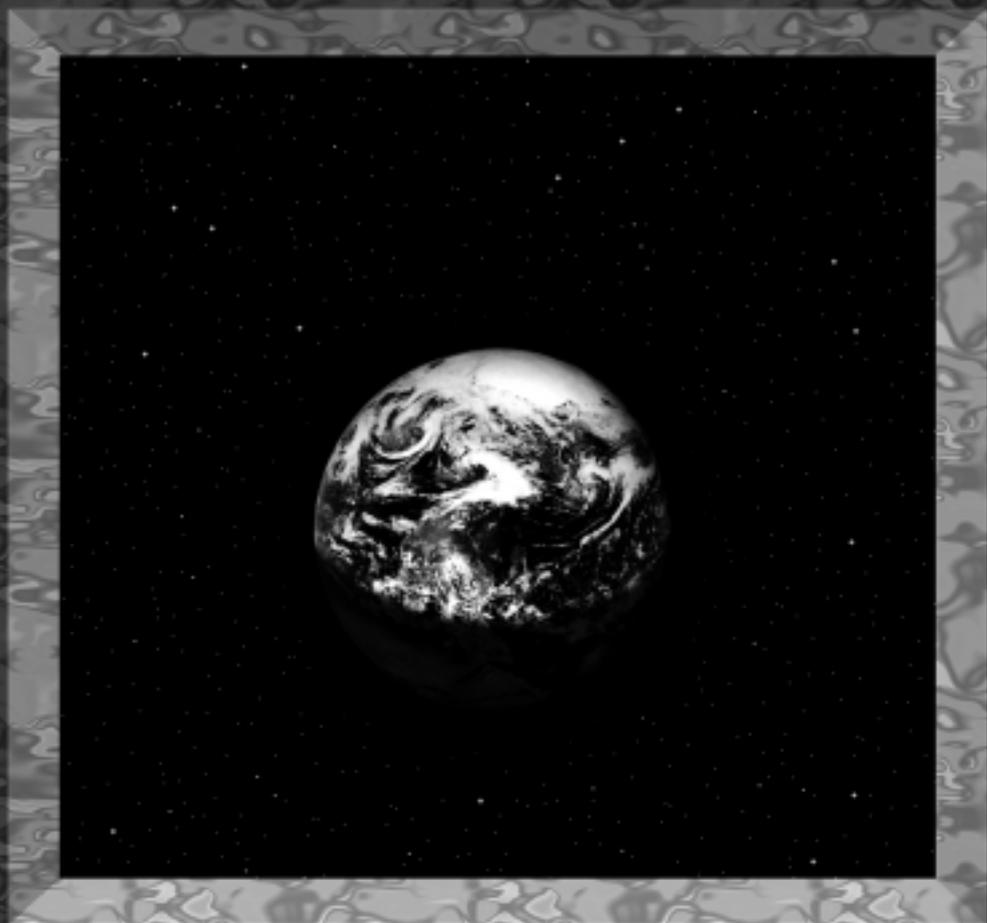


**YAMAHA**  
**PORTATONE**  
**PSR-6000**



# YAMAHA PORTATONE PSR-6000

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Owner's Manual

*English*

Bedienungsanleitung

*Deutsch*

Mode d'emploi

*Français*

# Congratulations!

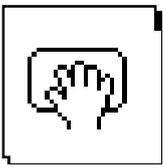
You are the proud owner of an extraordinary electronic keyboard. The Yamaha PSR-6000 PortaTone combines the most advanced AWM tone generation technology with state-of-the-art digital electronics and features to give you stunning sound quality with maximum musical enjoyment. The Interactive Accompaniment and One Touch Setting features, in particular, are brilliant examples of how advanced technology can significantly expand your musical horizons. A new large-size graphic display and easy-to-use interface also greatly enhance the operability of this advanced instrument.

In order to make the most of your PortaTone's features and vast performance potential, we urge you to read the manuals thoroughly while trying out the various features described. Keep the manual in a safe place for later reference.

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# Taking Care of Your PortaTone

Your PortaTone will give you years of playing pleasure if you follow the simple rules given below:

## ■ Location

Do not expose the instrument to the following conditions to avoid deformation, discoloration, or more serious damage.

- Direct sunlight (e.g. near a window).
- High temperatures (e.g. near a heat source, outside, or in a car during the daytime).
- Excessive humidity.
- Excessive dust.
- Strong vibration.

## ■ Power Supply

- Turn the power switch OFF when the instrument is not in use.
- The power supply cord should be unplugged from the AC outlet if the instrument is not to be used for an extended period of time.
- Unplug the instrument during electric storms.
- Avoid plugging the instrument into the same AC outlet as appliances with high power consumption, such as electric heaters or ovens. Also avoid using multi-plug adapters since these can result in reduced sound quality, operation errors, and possibly damage.

## ■ Turn Power OFF When Making Connections

- To avoid damage to the instrument and other devices to which it is connected (a sound system, for example), turn the power switches of all related devices OFF prior to connecting or disconnecting audio and MIDI cables.

## ■ Handling and Transport

- Never apply excessive force to the controls, connectors or other parts of the instrument.
- Always unplug cables by gripping the plug firmly, not by pulling on the cable.
- Disconnect all cables before moving the instrument.
- Physical shocks caused by dropping, bumping, or placing heavy objects on the instrument can result in scratches and more serious damage.

## ■ Cleaning

- Clean the cabinet and panel with a dry soft cloth.
- A slightly damp cloth may be used to remove stubborn grime and dirt.
- Never use cleaners such as alcohol or thinner.
- Avoid placing vinyl objects on top of the instrument (vinyl can stick to and discolor the surface).

## ■ Electrical Interference

- This instrument contains digital circuitry and may cause interference if placed too close to radio or television receivers. If this occurs, move the instrument further away from the affected equipment.

## ■ Data Backup

- Internal data (e.g. sequencer data) is retained in memory even if the power switch is turned OFF. If the power is not turned ON for periods longer than about a week, however, memory data will be lost. Save all important data to disk before turning off for longer periods.
- Internal memory data can be corrupted due to incorrect operation. Be sure to “save” important data to a floppy disk frequently so you have a backup to revert to if something happens to damage the data in memory. Also note that magnetic fields can damage data on the disk, so it is advisable to make a second back-up copy of disks that contain very important data, and keep backup disks in a safe place away from stray magnetic fields (i.e. away from speakers, appliances containing motors, etc.).

## ■ Service and Modification

- The PSR-6000 contains no user serviceable parts. Opening it or tampering with it in anyway can lead to irreparable damage and possibly electric shock. Refer all servicing to qualified YAMAHA personnel.

## Floppy Disks & the Disk Drive

### ■ Type of Disk

Use only 3.5-inch 2DD floppy disks.

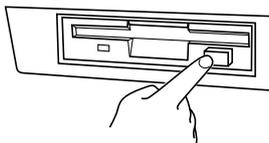
### ■ Disk Insertion & Removal

- To insert a floppy disk in the disk drive, hold the disk with the label side facing up and the sliding shutter facing the disk drive door, then insert carefully until the disk clicks into place.



- To remove a floppy disk from the disk drive, make sure the disk drive "in use" light is not lit and press the disk eject button firmly as far as it will go and then, when the disk is full ejected, remove it by hand.

If the eject button is only partially pressed or pressed too quickly the eject mechanism may not function properly, leaving the disk stuck halfway. Do not attempt to remove the disk forcefully if this happens, since excess force can damage the disk and/or the drive mechanism. Try either pressing the eject button carefully again, or push the disk all the way back into the drive and repeat the eject procedure.



- Never attempt to remove a floppy disk during a record or playback operation!! This can corrupt the data on the disk, and actually damage the disk drive!
- Be sure to remove the floppy disk from the disk drive before turning off the power. A floppy disk left in the drive for extended periods can easily pick up dust and dirt that can cause data read/write errors.

### ■ Clean the Read/Write Head Regularly

This instrument employs a precision magnetic read/write head which, after an extended period of use, will pick up a layer of magnetic particles from the disks used that will eventually cause read and write errors. To maintain the disk drive in optimum working order we recommend that you use a commercially-available Dry-type Head Cleaning Disk to clean the head about once a month. Ask your Yamaha dealer about the available of head-cleaning disks.

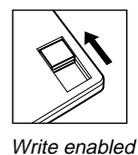
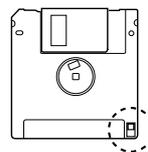
### ■ Floppy Disk Handling & Storage

The actual recording medium inside a floppy disk has a fine coating of magnetic particles in which the data is "stored". To protect this coating as well as the disk drive's delicate read-write head, please observe the following:

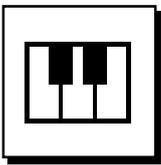
- Always keep floppy disks in their plastic case when they are not in use. Never place heavy objects on a disk or bend the disk in any way. Also keep disks away from liquids and dust.
- Never open the disk's shutter and touch the exposed surface of the disk.
- Keep floppy disks away from strong magnetic fields such as those produced by television sets, speakers, motors, etc.
- Never leave floppy disks in areas exposed to strong direct sunlight, excessively high or low temperature, or high humidity.
- Never use a floppy disk with a deformed shutter or housing.
- Do not attach anything other than the provided labels to a floppy disk. Also make sure that labels are attached in the proper location.

### ■ Protecting Your data

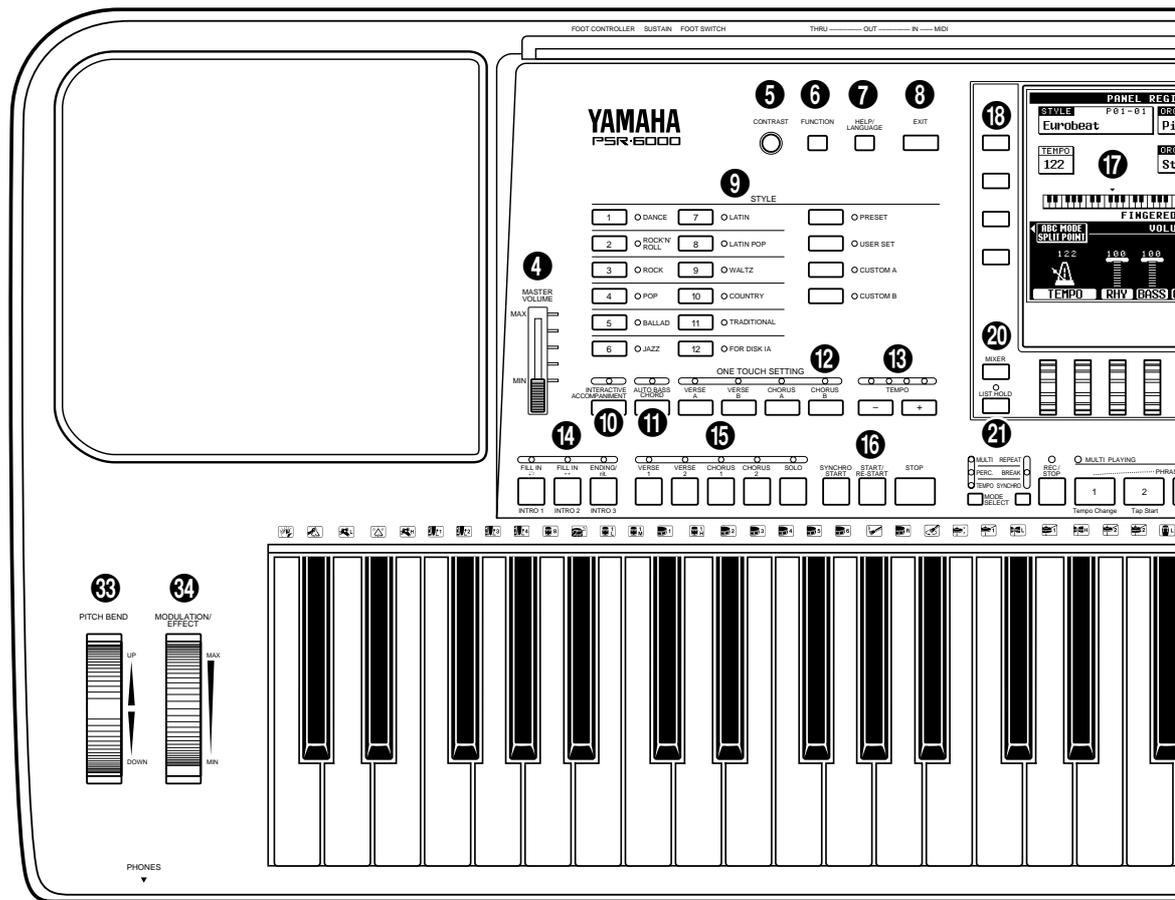
- To prevent accidental erasure of important data you have saved to floppy disk, be sure to slide the disk's write-protect tab to the "write protect" position (the tab window should be open). When this is done the disk cannot be written to.



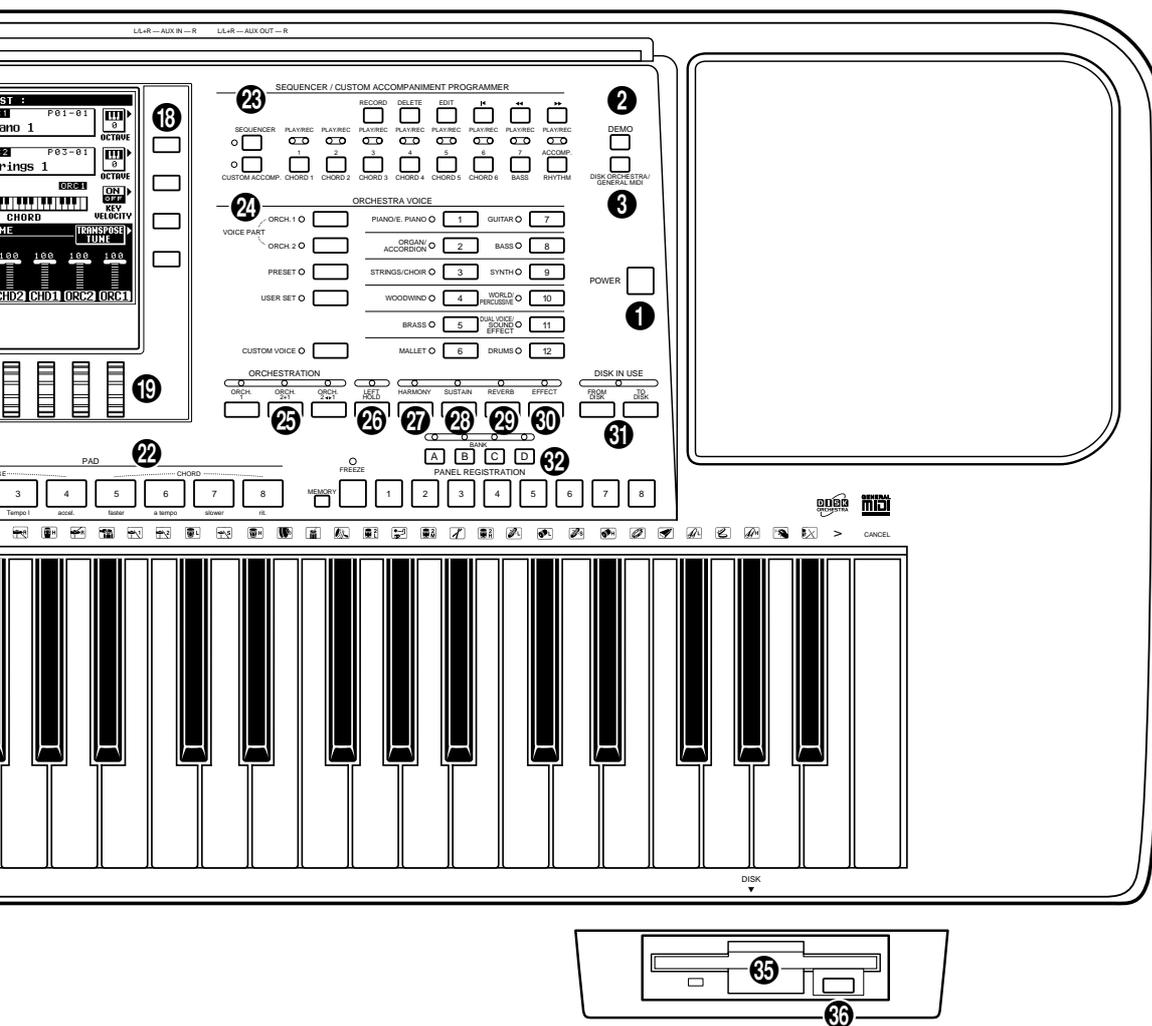
- Make regular backup copies of important data to a separate floppy disk, and keep your backup disks in a separate, safe place.
- To ensure the safety of your data (and of the disk drive itself) always use floppy disks from a well-known, reliable manufacturer. "No-brand" disks can cause trouble.



# Nomenclature



- |  |  |
|--|--|
| <p><b>1</b> POWER Button ..... [page 8]</p> <p><b>2</b> DEMO Button ..... [page 8]</p> <p><b>3</b> DISK ORCHESTRA/GENERAL MIDI Button ..... [page 43]</p> <p><b>4</b> MASTER VOLUME Control ..... [page 8]</p> <p><b>5</b> CONTRAST Control ..... [page 11]</p> <p><b>6</b> FUNCTION Button ..... [page 75]</p> <p><b>7</b> HELP/LANGUAGE Button ..... [page 11]</p> <p><b>8</b> EXIT Button ..... [page 9, 11]</p> <p><b>9</b> STYLE Buttons ..... [page 21, 26, 28, 62, 64]<br/>PRESET, USER SET, CUSTOM A, CUSTOM B, Style Group [1] – [12] Buttons</p> <p><b>10</b> INTERACTIVE ACCOMPANIMENT Button ..... [page 27]</p> <p><b>11</b> AUTO BASS CHORD Button ..... [page 19]</p> <p><b>12</b> ONE TOUCH SETTING Buttons ..... [page 29]<br/>VERSE A, VERSE B, CHORUS A, CHORUS B</p> | <p><b>13</b> TEMPO [–], [+]<br/>Buttons and Beat Display ..... [page 22]</p> <p><b>14</b> Fill-in, Intro, and Ending Buttons [page 22, 23, 25]<br/>FILL IN↷ (INTRO 1), FILL IN↔ (INTRO 2), ENDING/rit. (INTRO 3)</p> <p><b>15</b> Verse, Chorus, and Solo Buttons ..... [page 24]<br/>VERSE 1, VERSE 2, CHORUS 1, CHORUS 2, SOLO</p> <p><b>16</b> Accompaniment Control Buttons [page 22, 23, 25]<br/>SYNCHRO START, START/RE-START, STOP</p> <p><b>17</b> Liquid Crystal Display (LCD) ..... [page 8, 10]</p> <p><b>18</b> LCD Buttons ..... [page 8, 10]</p> <p><b>19</b> LCD Dials ..... [page 9, 10]</p> <p><b>20</b> MIXER Button ..... [page 10]</p> <p><b>21</b> LIST HOLD Button ..... [page 11]</p> <p><b>22</b> PAD Buttons ..... [page 33]<br/>PAD MODE SELECT Buttons, REC/STOP, 1-8</p> |
|--|--|



**23** SEQUENCER/CUSTOM ACCOMPANIMENT PROGRAMMER Buttons ..... [page 49, 62]

SEQUENCER, CUSTOM ACCOMP.

Sequencer Track/Custom Accompaniment Programmer Track Buttons

1 through 6/CHORD 1 through 6, 7/BASS, ACCOMP./RHYTHM

Sequencer/Custom Accompaniment Programmer Control Buttons

RECORD, DELETE, EDIT, ◀ (Top),  
◀◀ (Rewind), ▶▶ (Forward)

**24** ORCHESTRA VOICE Buttons ... [page 13, 15, 77]

VOICE PART ORCH.1, VOICE PART ORCH.2, PRESET, USER SET, CUSTOM VOICE, Voice Group [1] – [12] Buttons

**25** ORCHESTRATION Buttons ..... [page 12]

ORCH. 1, ORCH. 2+1, ORCH. 2◀▶1

**26** LEFT HOLD Button ..... [page 32]

**27** HARMONY Button ..... [page 31]

**28** SUSTAIN Button ..... [page 31]

**29** REVERB Button ..... [page 31]

**30** EFFECT Button ..... [page 31]

**31** DISK IN USE Buttons ..... [page 91, 93]

FROM DISK, TO DISK

**32** PANEL REGISTRATION Buttons ..... [page 41]

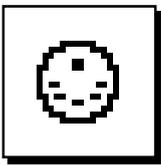
MEMORY, FREEZE, 1-8, BANK

**33** PITCH BEND Wheel ..... [page 32]

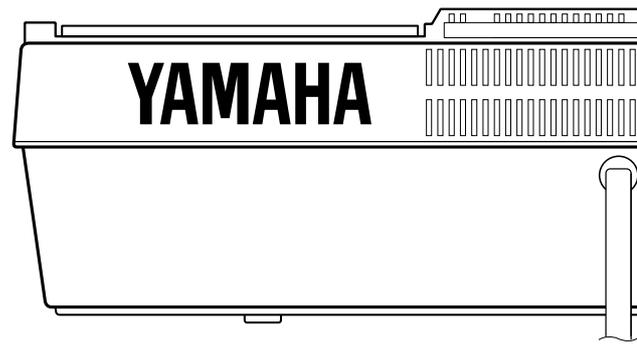
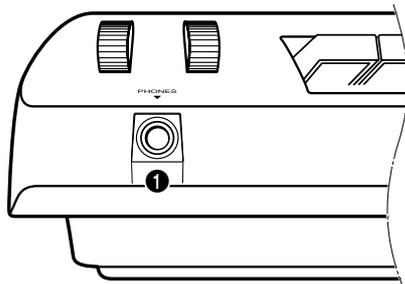
**34** MODULATION/EFFECT Wheel ..... [page 32]

**35** Disk Drive ..... [page 3, 28, 43]

**36** Disk Eject Button ..... [page 3, 45]

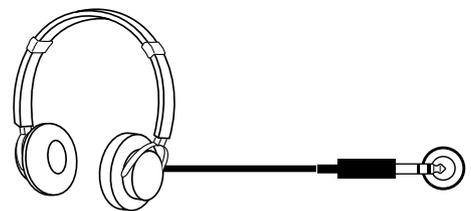


# Connections & Music Stand



## 1 The PHONES Jack

A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal stereo speaker system is automatically shut off when a pair of headphones is plugged into the **PHONES** jack.

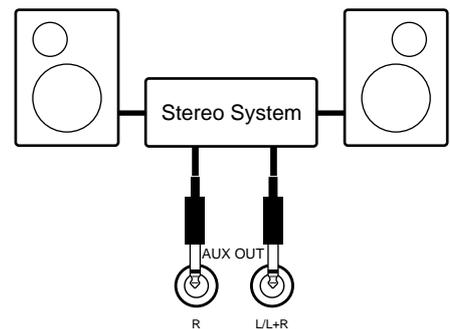


## 2 The AUX OUT L/L+R and R Jacks

The rear-panel **AUX OUT L/L+R** and **R** jacks deliver the output of the PSR-6000 for connection to a keyboard amplifier, stereo sound system, a mixing console, or tape recorder. If you will be connecting the PSR-6000 to a monaural sound system, use only the **L/L+R** jack. When a plug is inserted into the **L/L+R** jack only, the left- and right-channel signals are combined and delivered via the **L/L+R** jack so you don't lose any of the PSR-6000 sound.

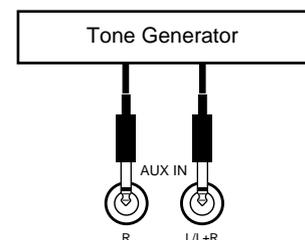


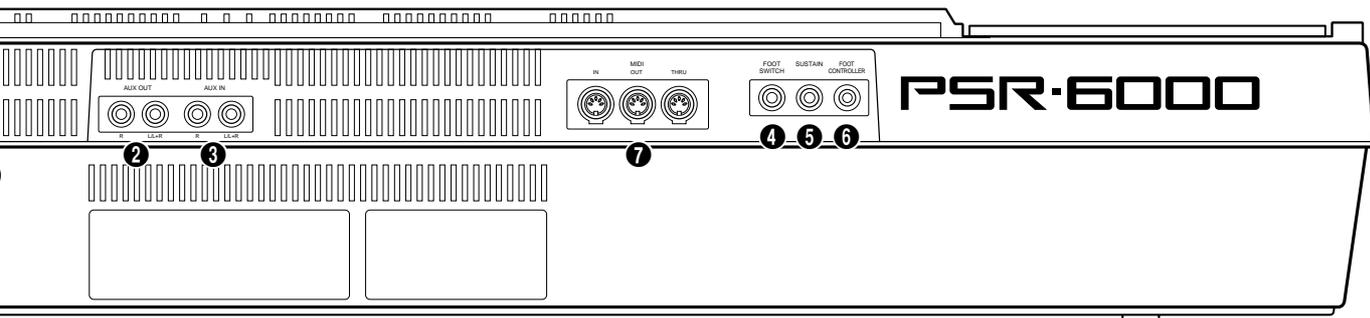
- *To prevent damage to the internal circuitry, the **AUX OUT** jack signal must never be returned to the **AUX IN** jacks, either directly or through external equipment.*



## 3 AUX IN L/L+R and R Jacks

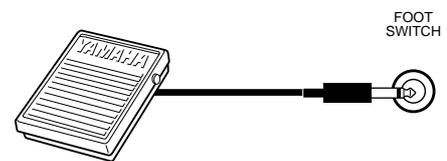
These jacks are intended primarily for use with external audio sources such as tone generators, drum machines, CD players, and similar equipment. The signal received via the **AUX IN L** and **R** jacks is reproduced via the PSR-6000's internal stereo amplifier and speaker system. If you will be connecting a monaural source to the PSR-6000, use only the **L/L+R** jack. When a plug is inserted into the **L/L+R** jack only, the monaural input signal is fed to both the left and right channels of the PSR-6000 stereo sound system. Please note that the PSR-6000 **MASTER VOLUME** control does not affect the level of the signal delivered to external equipment.





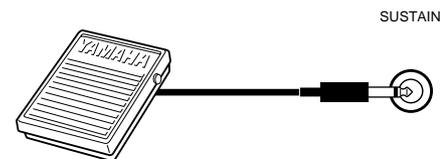
## 4 FOOT SWITCH Jack

An optional Yamaha **FC5** footswitch connected to this jack can be used to control a range of important functions. Refer to the “FOOT SWITCH SELECT” function described on page 86.



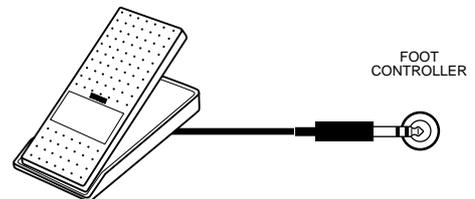
## 5 SUSTAIN Jack

An optional **FC5** footswitch can be connected here for foot sustain control. The footswitch functions like the damper pedal on a piano — press for sustain, release for normal sound.



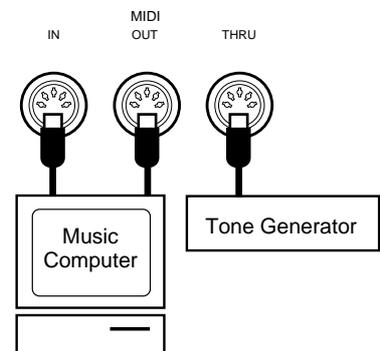
## 6 FOOT CONTROLLER Jack

An optional Yamaha **FC7** Foot Controller can be connected to this jack to allow foot expression (swell) or effect control. Please note that when the foot controller is used for expression control, no sound will be produced if it is set to the minimum position.



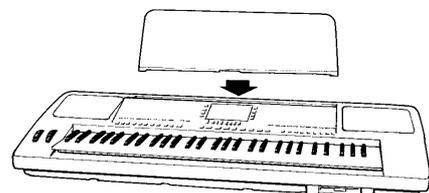
## 7 MIDI IN, THRU and OUT Connectors

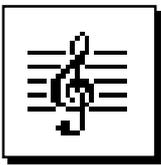
The **MIDI IN** connector receives MIDI data from an external MIDI device (such as a MIDI sequencer) which can be used to control the PSR-6000. The **MIDI THRU** connector re-transmits any data received at the **MIDI IN** connector, allowing “chaining” of several MIDI instruments or other devices. The **MIDI OUT** connector transmits MIDI data generated by the PSR-6000 (e.g. note and velocity data produced by playing the keyboard). More details on MIDI are provided on page 102.



### The Music Stand

The PSR-6000 is supplied with a music stand that can be attached to the instrument by inserting it into the slot at the rear of the control panel.





# The Demonstration

To give you an idea of the PSR-6000's sophisticated capabilities, it is programmed with 21 demonstration sequences which can be played in a number of ways.



- The demonstration sequences have been specially programmed for demonstration purposes — it is not possible to reproduce the demonstration sequences 100% using the PSR-6000 sequencer functions.

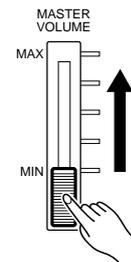
## 1 Switch ON

Plug the AC power cord into a convenient AC outlet, then press the [POWER] button to turn the PSR-6000 ON.



## 2 Set an Initial Volume Level

Set the [MASTER VOLUME] control to a position about half way toward the highest setting. You can re-adjust the [MASTER VOLUME] control for the most comfortable overall volume level after playback begins.



## 3 Press the [DEMO] Button

Press the [DEMO] button and the PSR-6000 demo display will appear.



## 4 Start & Stop Playback as Required

Press the **START** LCD button to start playback of all demo songs. Press the **STOP** LCD button when you want to stop playback.



- The default demo play mode is **RANDOM**.
- Demo playback can also be started and stopped by using the [START/RE-START] and [STOP] buttons on the PSR-6000 panel.



## 5 Exit When Done

Press either the [DEMO] button or the [EXIT] button to exit from the demo mode and return to the normal play-mode display when you've finished playing the demo songs.



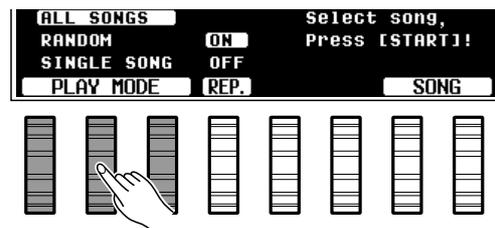
## The Demo Play Modes

If you play the demo as described above, you'll hear all 21 demo songs, one after another. Note that the demo songs are arranged into 7 groups of three songs each. By selecting an appropriate play mode, you can also play back all the songs in sequence, in random order, or a single specified song.

### 1 Select a Play Mode

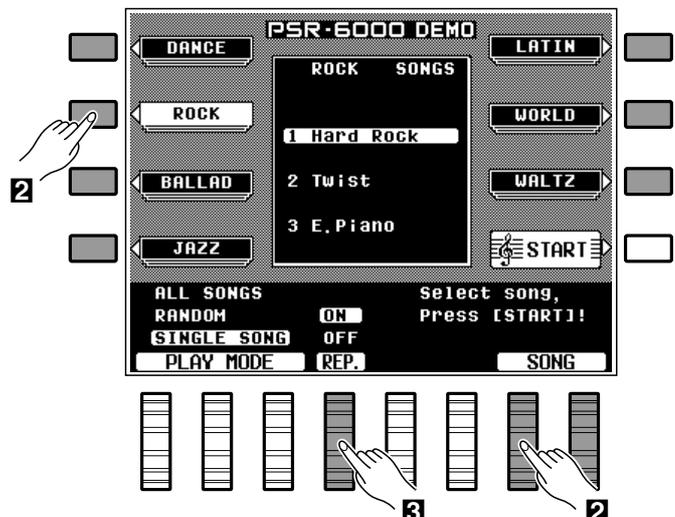
With demo playback stopped, use any of the three LCD dials under **PLAY MODE** on the display to select one of the available play modes.

- ALL SONGS** All 21 demo songs are played back in sequence.
- RANDOM** All 21 demo songs are played back in random order. This is the default mode.
- SINGLE SONG** Only the selected song is played.



### 2 Select a Song

If you've selected the **SINGLE SONG** play mode, press the LCD button corresponding to the demo group you want to play (**DANCE**, **ROCK**, etc.) and use the same LCD button to select the desired song (a new song within the group is selected each time it is pressed). If you've selected the **ALL SONGS** or **RANDOM** play mode, you can use the LCD buttons to select the first song to be played back. You can also use either of the LCD dials under **SONG** on the display to select any of the 21 demo songs.

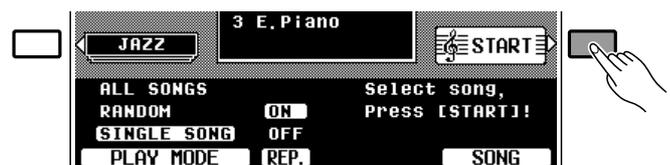


### 3 Turn the Repeat Mode ON or OFF

Use the **REP.** LCD dial to turn repeat playback **ON** or **OFF** as required (when **ON**, the selected song or sequence of songs will be repeated until the **STOP** LCD button is pressed)

### 4 Start & Stop Playback as Required

Press the **START** LCD button to start playback of the selected demo song(s). Press the **STOP** LCD button when you want to stop playback.



### 5 Exit When Done

Press either the **[DEMO]** button or the **[EXIT]** button to exit from the demo mode and return to the normal play-mode display when you've finished playing the demo songs.

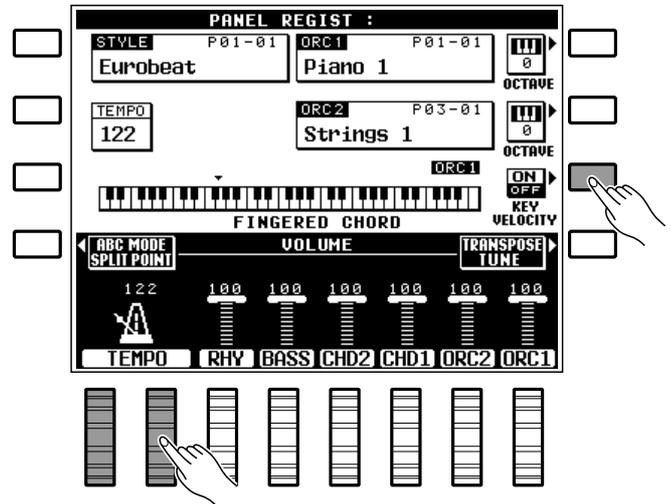




# The PSR-6000 Display & Help Function

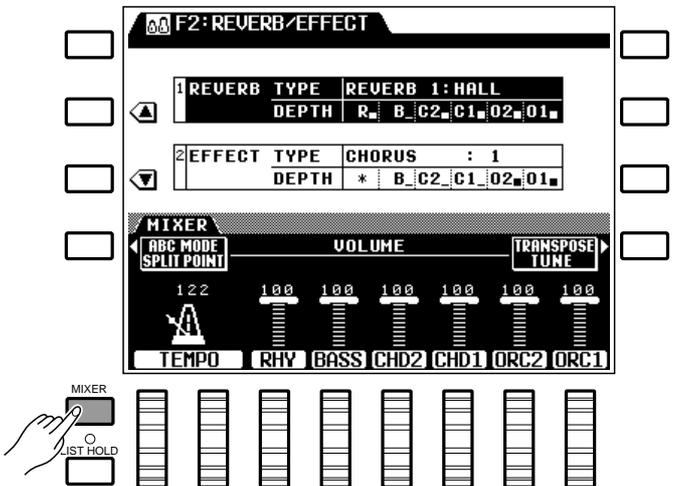
## The Display & Multi-function Controls

The PSR-6000 makes general operation and programming easier than ever with a large backlit LCD display panel and multi-function controls. The 8 LCD buttons — four on either side of the display panel — and 8 LCD dials below the display perform the function indicated by the adjacent section of the display. In the example display shown here, for example, the two LCD dials immediately below **TEMPO** on the display can be used to adjust the tempo (in this case both dials perform the same function). In the same way, the LCD button immediately to the right of **KEY VELOCITY** on the display is used to turn key velocity ON or OFF.



### The [MIXER] Button

The lower section of the normal play mode display, shown above, provides individual volume controls for the PSR-6000's rhythm, bass, chord 1, chord 2, orchestra 1, and orchestra 2 parts. This is essentially a "mixer" that you will use to achieve the best overall balance for your musical needs. The mixer controls will disappear when functions which have different displays are selected, but can be instantly recalled without exiting from the current display mode by pressing the [MIXER] button. Pressing the [MIXER] button a second time (or the [EXIT] button) causes the mixer controls to disappear.

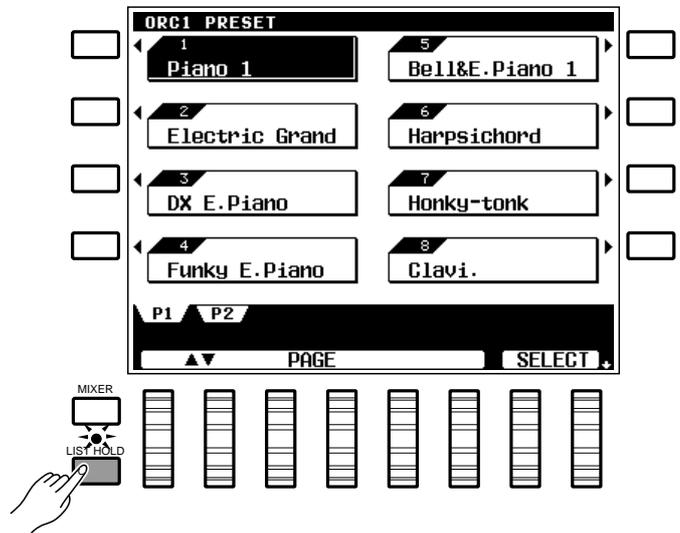


## The [LIST HOLD] Button

When selecting voices (page 13) or accompaniment styles (page 21), the voice or style list will appear on the display, but will automatically disappear after a few seconds if no selections are made. The voice/style list can be kept on the display for as long as required by pressing the [LIST HOLD] button so that its LED lights. Press [LIST HOLD] a second time (the LED will go out) to disengage the list hold function.

### NOTES

- If the [LIST HOLD] button is engaged when the voice or style list is not showing, the list will not appear even when a voice or style group button is pressed.



## The [CONTRAST] Control

The PSR-6000 display panel is a liquid-crystal type which can be easier or more difficult to read from different angles. Use the [CONTRAST] control to set the display for optimum legibility at your viewing angle.



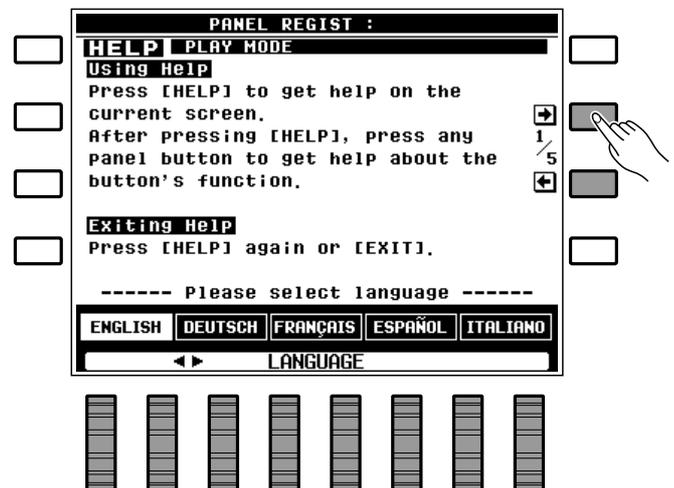
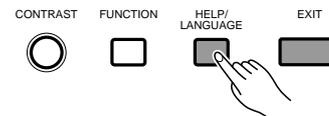
# The Help Function

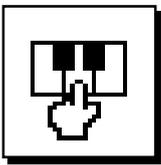
If you're ever in doubt about a display or button, the PSR-6000 HELP function is available. Simply press the [HELP/LANGUAGE] button to get information about the current display, or press [HELP/LANGUAGE] and then any panel button for information about that button and its function. If more than one help display page is available for the selected topic, use the [→] and [←] LCD buttons to change pages. Help is provided in five languages — English, German, French, Spanish, and Italian — that you can select by using any of the LCD dials.

Exit from the HELP function by pressing either the [HELP/LANGUAGE] or [EXIT] button.

### NOTES

- The HELP function will be automatically exited if a disk is inserted or ejected.





# Playing the PSR-6000

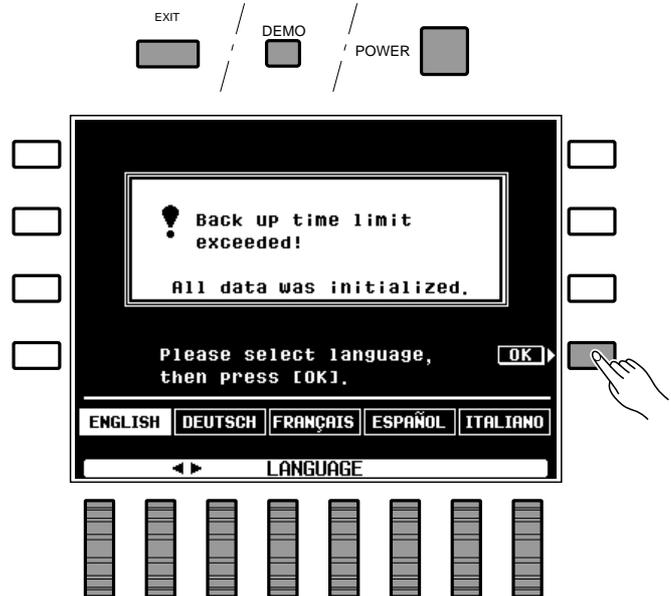
## ■ Before You Begin

Before playing your PSR-6000 for the first time, it might be a good idea to re-initialize it to the original factory settings just in case these have been changed at some point before you receive the instrument. To do this, turn the [POWER] switch ON while holding the [EXIT] and [DEMO] buttons.

When the display shown to the right appears, use the LCD dials to select the language you want the HELP text and messages to be displayed in, then press the OK LCD button.



- When the above initialization procedure is carried out, all sequencer and custom accompaniment data will also be initialized and therefore lost!



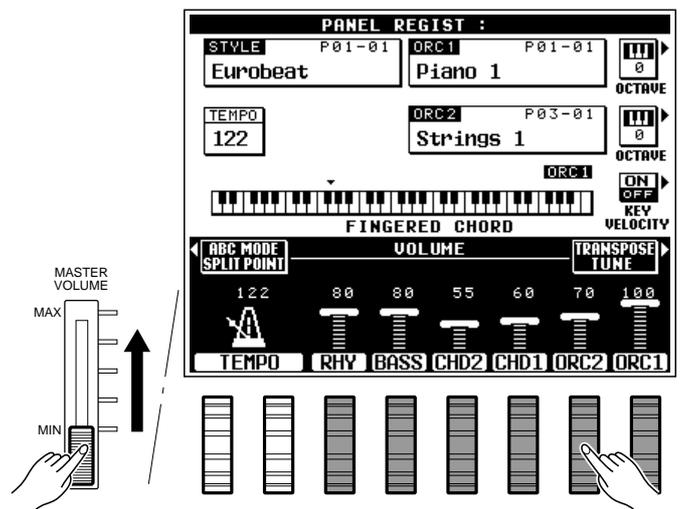
## Selecting & Playing Voices

### 1 Turn Power On and Set Initial Volume Levels

Press the [POWER] button to turn the power ON, and set the [MASTER VOLUME] control about half way toward its highest setting. Also make sure that the RHY, BASS, CHD2, CHD1, ORC2, and ORC1 volume levels on the LCD are set to their maximum "100" levels (use the corresponding LCD dials to set these volume levels if necessary). You can set the [MASTER VOLUME] control for the most comfortable overall volume level after beginning to play.

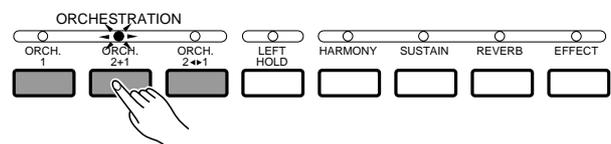


- No sound will be produced if all volume levels other than the [MASTER VOLUME] control are set to their minimum values.



### 2 Select the Orchestration

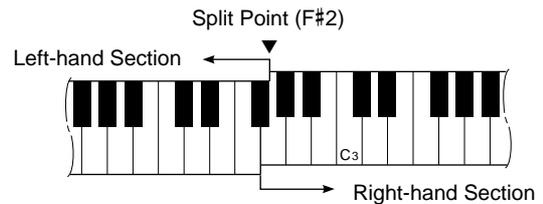
The PSR-6000 has three orchestration modes, selected by the corresponding ORCHESTRATION buttons. The corresponding ORCHESTRATION LED will light.



<b>ORCH. 1</b>	In this mode a single voice — the ORCH. 1 voice — can be played across the entire keyboard.
<b>ORCH. 2+1</b>	This is a “dual” mode in which two voices — ORCH. 1 and ORCH. 2 — can be played simultaneously across the entire keyboard.
<b>ORCH. 2◀▶1</b>	This is a “split” mode in which the ORCH. 2 voice is played on the left-hand section of the keyboard (to the left of the “split point” — see “NOTES” below), while the ORCH. 1 voice is played on the right-hand section of the keyboard.

**NOTES**

- The split point for the PSR-6000 is initially set at F#2. This means that when the “ORCH. 2◀▶1” mode is selected, the ORCH. 2 voice will be played by all keys to the left of and including F#2, while the ORCH. 1 voice will be played on all keys to the right of F#2. You can change the split point to any key desired as described on page 16.
- Since two voices are played simultaneously in the dual and split modes, the total number of notes that can be played on the keyboard at the same time is reduced.
- When the “ORCH.2+1” mode is selected and the same voice is selected for both ORCH. 1 and ORCH. 2, the sound may be slightly different from the normal voice.
- When the “ORCH.2◀▶1” mode is selected, the ORCH. 2 voice will automatically be transposed up one octave.



- The lowest key on the keyboard is C1.

### 3 Select a Voice or Voices

Before selecting a preset voice, make sure that the ORCHESTRA VOICE control section [PRE-SET] button LED is lit (if it isn't press the [PRE-SET] button so that it does light).

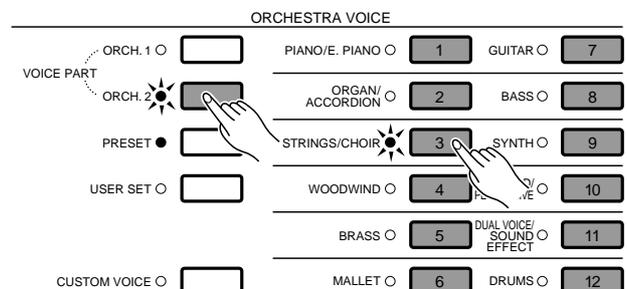
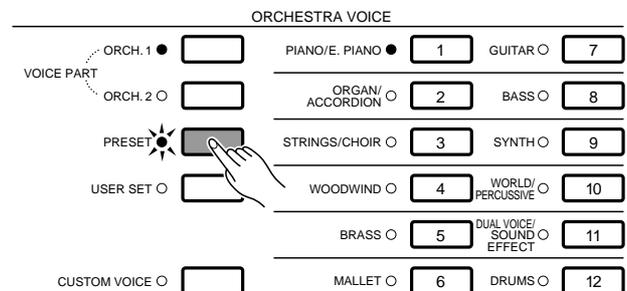
The PSR-6000 has 128 preset voices organized in 12 voice groups (see page 116 for a complete voice list).

Press the [ORCH. 1] or [ORCH. 2] VOICE PART button, depending on which voice you want to select. The corresponding VOICE PART LED will light.

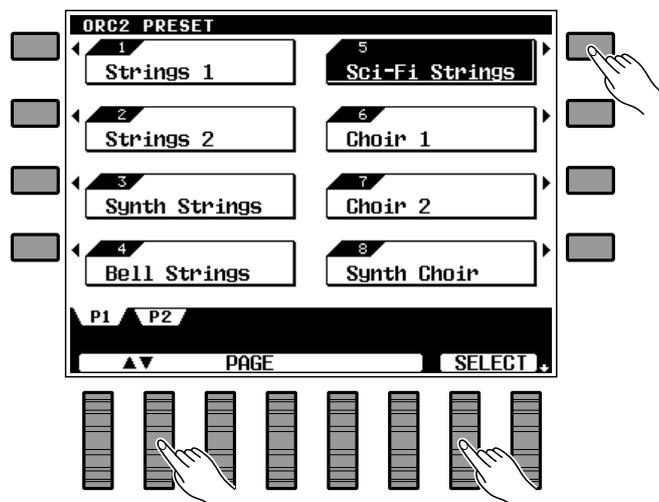
Use the voice group buttons to select the group from which you want to select a voice. The corresponding voice display will appear.

**NOTES**

- The display will automatically revert to the main display after a few seconds if the [LIST HOLD] button is not engaged (page 11).



Use the **PAGE** LCD dials to select the page containing the voice you want if more than one page is available, then press the LCD button corresponding to the desired voice. You can also use either of the **SELECT** LCD dials to select any of the voices within the selected group.

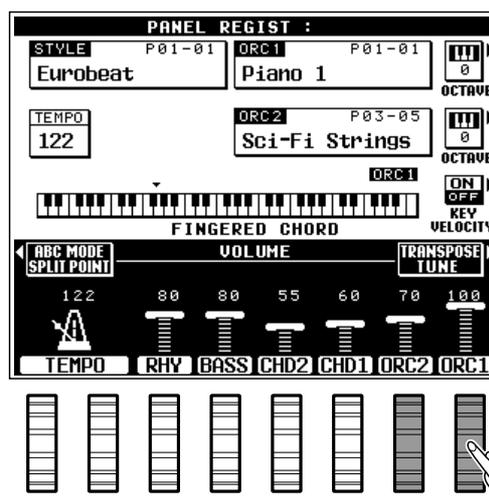


## 4 Play & Adjust Volume

You can now play the selected voice or voices with the selected orchestration. Use the **[MASTER VOLUME]** control to adjust the overall volume level, and the **ORC1** and **ORC2** LCD dials can be used to set the desired balance between the ORCH. 1 and ORCH. 2 voices when either the dual or split orchestration mode is used.

### NOTES

- Voices in the **DUAL VOICE/SOUND EFFECT** group are actually combinations of two voices, so the total number of simultaneous notes that can be played when these voices are selected is less than when any of the other voices are selected.



## Keyboard Percussion

When either of the **DRUMS** voices is selected — Drum Kit or Pop Drum Kit, you can play 59 different drums and percussion instruments on the keyboard. The drums and percussion instruments played by the various keys are marked by symbols above the keys. Some of the instruments in the Drum Kit and Pop Drum Kit voices sound different even though they have the same name, while others are essentially the same.

### NOTES

- The **Transpose**, **Tune**, **Sustain**, **Harmony**, **Left Hold**, **Modulation**, and **Octave Change** functions do not affect the keyboard percussion sound.
- The **pitch bend wheel** can be used to bend the pitch of the keyboard percussion voices to create unique musical effects, but it has little effect on some percussion sounds.
- See page 118 for a complete listing of the keyboard percussion drum instrument assignments.

## USER SET Voice Assignment

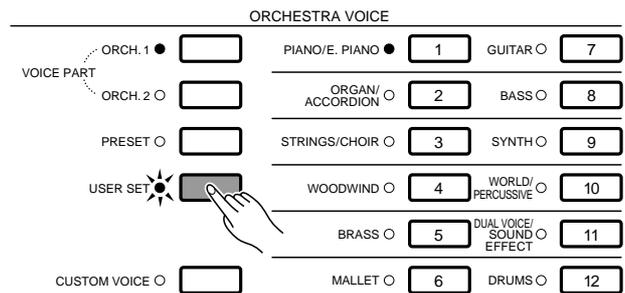
The PSR-6000 USER SET voice selection mode lets you assign any 12 voices — preset or custom (page 13, 77) — to the 12 voice select buttons so you can select them directly without having to select a category, page, and then a voice. This is particularly useful for the performer who want direct access to the voices he needs for a song or set.

### 1 Select the USER SET Mode

Press the [USER SET] button so that its indicator lights. The USER SET voice display will appear.

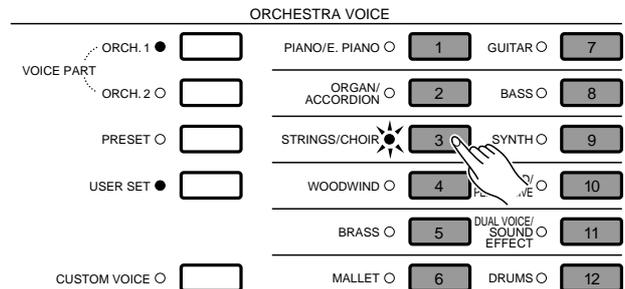
**NOTES**

- The display will automatically revert to the main display after a few seconds if the [LIST HOLD] button is not engaged (page 11).



### 2 Select a Voice Button

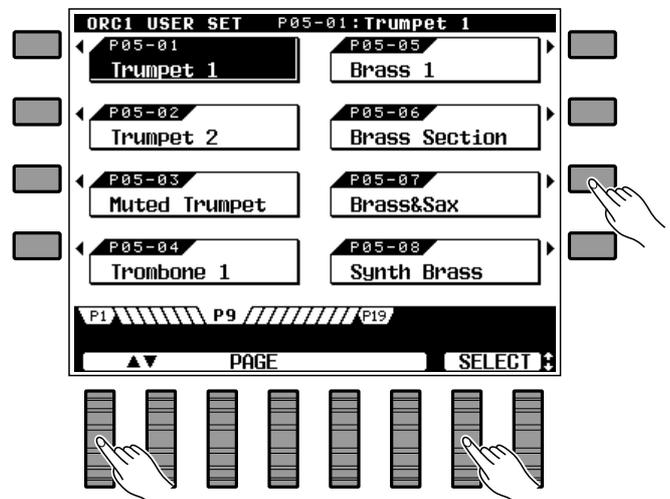
Press the voice group button to which you want to assign a voice.



### 3 Select a Voice

Use the PAGE LCD dials, the SELECT LCD dials, and the LCD buttons as required to select the voice you want to assign to the currently selected voice button. To assign a custom voice, press the [CUSTOM VOICE] button so that its indicator lights (when the CUSTOM VOICE LED is off the preset voices are assigned).

That's all there is to it, now the assigned voice will instantly be recalled anytime you press the same voice button while the USER SET mode is engaged. Voice assignments can be changed at any time in the same way.



## Changing the Split Point

The PSR-6000 split point applies to both the ORCH. 2◀▶1 split play mode, described in this section, and Auto Bass Chord accompaniment described on page 19. The current split point is indicated on the display by the triangular split marker (▼) and the “split” in the graphic keyboard when the ORCH. 2◀▶1 orchestration mode is selected. Here’s how you can change the split point to suit your own playing requirements.

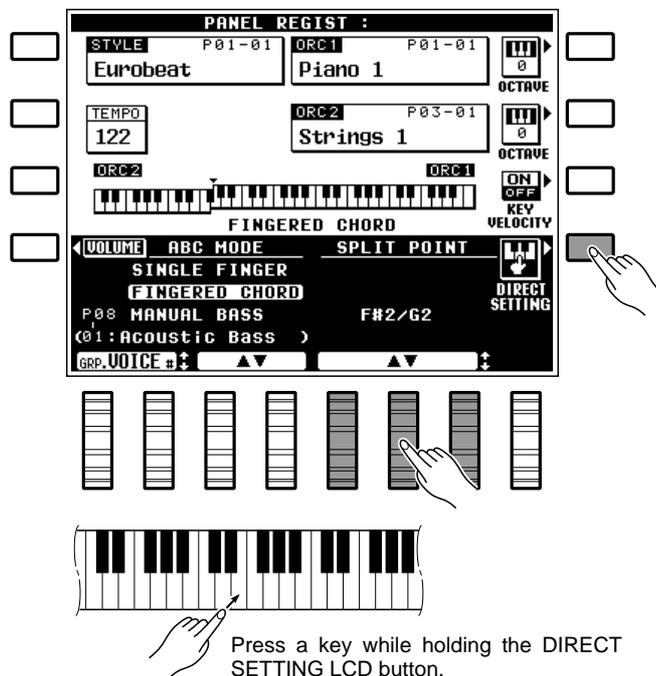
### 1 Press the ABC MODE/SPLIT POINT LCD Button

Press the **ABC MODE/SPLIT POINT** LCD button. The **ABC MODE** and **SPLIT POINT** function displays will appear.



### 2 Set the Split Point

The split point can be set in two ways: either use the **SPLIT POINT** LCD dials, or press the desired key on the keyboard while holding the **DIRECT SETTING** LCD button (or vice-versa). The new split point will be indicated on the graphic keyboard in the LCD.

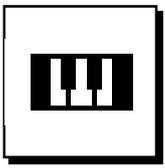


Press a key while holding the **DIRECT SETTING** LCD button.

### 3 Return to the Main Display When Done

Press the **VOLUME** LCD button to return to the main display when done.





# Transposition, Tuning, Octave Change, & Key Velocity

The most important and fundamental adjustment for any musical instrument is tuning. The TRANSPOSE, TUNING, and OCTAVE CHANGE functions described below let you control the pitch of the PSR-6000 in a number of ways.

The Key Velocity function has also been included in this section because it affects the way the PSR-6000 responds to notes played on the keyboard.

## TRANSPOSE & TUNE

These functions allow the overall pitch of the PSR-6000 to be transposed up or down in semitone increments, and fine-tuned in 0.5 Hertz increments.

### 1 Press the TRANSPOSE/TUNE LCD Button .....

Select the transpose and tune functions from the normal play mode display by pressing the TRANSPOSE/TUNE LCD button.

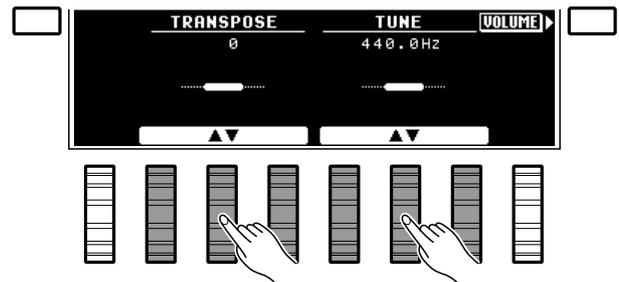


### 2 Set the Transposition and/or Tuning As Required .....

Use the TRANSPOSE LCD dials to set the desired degree of transposition, and the TUNE LCD dials to set the desired degree of tuning.

The transpose range is from -6 to +6, allowing a maximum upward or downward transposition of 1/2-octave. A setting of "0" produces the normal pitch.

The tuning range is from 427.5 Hertz to 452.5 Hertz, adjustable in 0.5-Hertz increments. A3 = 440.0 Hertz is "normal" pitch.



### 3 Return to the Main Display When Done .....

Press the VOLUME LCD button to exit from the transpose and tune functions and return to the main display.



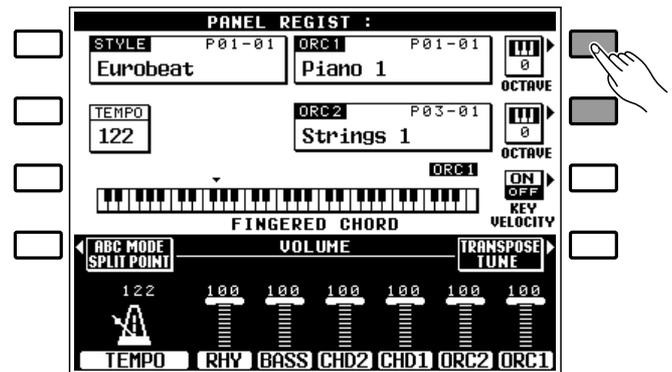
## OCTAVE CHANGE

This function allows the ORCH. 1 and ORCH. 2 voices to be independently transposed up or down by one octave.

The **OCTAVE** LCD button to the right of the ORCH.1. voice name changes the octave of the ORCH.1. voice, while the **OCTAVE** LCD button to the right of the ORCH.2 voice affects the ORCH.2. voice. Pressing either of these buttons changes the corresponding octave setting to “+1”, “-1”, and then “0”, in sequence. “+1” shifts the voice up one octave “-1” shifts the voice down one octave, and “0” sets the voice to its normal octave.

### NOTES

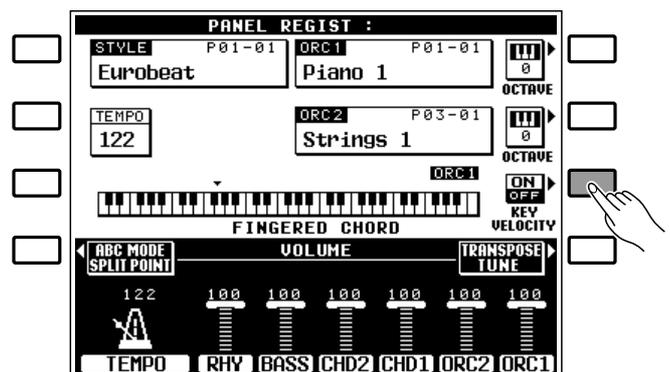
- Some voices may suddenly shift octaves when played at the extreme ends of the keyboard if they are set to a lower or higher octave than normal. This can also occur when the **PITCH BEND** wheel is used on extremely low or high notes.
- If you change the transpose, octave change, or tuning settings while playing one or more notes on the keyboard, the new transpose and octave change settings will take effect from the next notes played while tune settings take effect immediately.

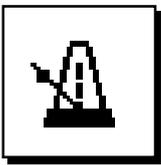


## KEY VELOCITY

The key velocity function turns the PSR-6000's keyboard velocity response on or off. Normally, key velocity should be turned ON to allow normal dynamic control via the keyboard (i.e. the harder the keys are played, the louder the sound). In some cases, however, you might want to turn key velocity OFF. For example, most organs have no keyboard velocity response, so key velocity can be turned OFF for greater realism when playing organ type voices. Key Velocity can also be turned off to create a constant-volume sound with any voice.

Use the **KEY VELOCITY** LCD button to turn key velocity ON or OFF as required.



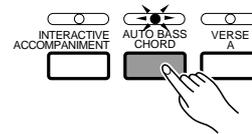


# Using the Accompaniment Section

The PSR-6000 has 50+1 different accompaniment “styles” (including preset IA style “New Age (No.12 button)”) that can be used to provide fully-orchestrated or rhythm-only accompaniment. The PSR-6000’s sophisticated Auto Bass Chord accompaniment system can provide automated bass and chord backing that is perfectly matched to the selected accompaniment style.

## 1 Turn ABC ON

Press the [AUTO BASS CHORD] button so that its indicator lights, thereby turning the ABC mode on.



### NOTES

- The maximum number of notes that can be played simultaneously on the PSR-6000 keyboard is reduced when the Auto Bass Chord feature is used.

## 2 Select the Desired ABC Mode

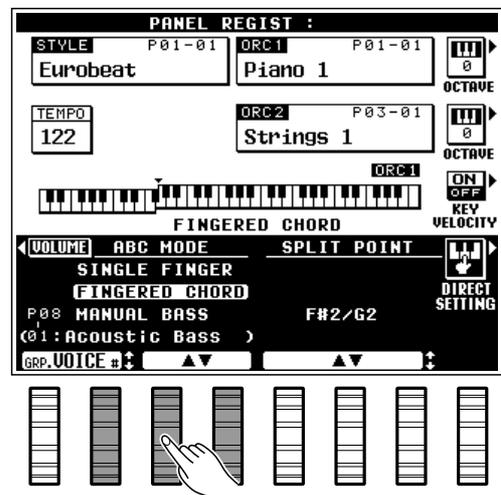
Press the **ABC MODE/SPLIT POINT** LCD button to select the ABC MODE and SPLIT POINT display, then use the **ABC MODE** LCD dials to select the **FINGERED CHORD**, **SINGLE FINGER**, or **MANUAL BASS** mode. If you select the **MANUAL BASS** mode, the **GRP. VOICE #** LCD dials can be used to specify the bass voice to be used. Press the **VOLUME** LCD button to return to the main display when done.

The **FINGERED CHORD**, **SINGLE FINGER**, and **MANUAL BASS** modes function as follows:

### ● FINGERED CHORD

This is the default ABC mode. The Fingered Chord mode lets you finger your own chords on the left-hand section of the keyboard (i.e. all keys to the left of and including the split-point key — normally F#2), while the PSR-6000 supplies appropriately orchestrated rhythm, bass, and chord accompaniment in the selected style.

The Fingered Chord mode will accept the chord types listed below (notes in parentheses may be omitted).



Chord Name/[Abbreviation]	Normal Voicing
Major [M] .....	1-3-5*
Minor [m] .....	1- $\flat$ 3-5*
Major seventh [M7] .....	1-3-(5)-7*
Major sixth [6] .....	1-3-5-6
Suspended fourth [sus4] .....	1-4-5*
Minor sixth [m6] .....	1- $\flat$ 3-5-6
Minor seventh [m7] .....	1- $\flat$ 3-(5)- $\flat$ 7
Minor seventh flatted fifth [m7 $\flat$ 5] .....	1- $\flat$ 3- $\flat$ 5- $\flat$ 7
Minor major seventh [mM7] .....	1- $\flat$ 3-(5)-7*
Seventh [7] .....	1-3-(5)- $\flat$ 7*
Seventh flatted fifth [7 $\flat$ 5] .....	1-3- $\flat$ 5- $\flat$ 7
Seventh augmented [7aug] .....	1-3- $\sharp$ 5- $\flat$ 7*
Seventh suspended fourth [7sus4] .....	1-4-5- $\flat$ 7*
Seventh ninth [7(9)] .....	1-2-3-(5)- $\flat$ 7*
Minor ninth [m(9)] .....	1-2- $\flat$ 3-5
Minor seventh ninth [m7(9)] .....	1-2- $\flat$ 3-(5)- $\flat$ 7*
Major ninth [M(9)] .....	1-2-3-5
Major seventh ninth [M7(9)] .....	1-2-3-(5)-7*
Minor major seventh ninth [mM7(9)] .....	1-2- $\flat$ 3-(5)-7*
Seventh flatted ninth [7( $\flat$ 9)] .....	1- $\flat$ 2-3-(5)- $\flat$ 7*
Major seventh flatted fifth [M7 $\flat$ 5] .....	1-3- $\flat$ 5-7*
Augmented [aug] .....	1-3- $\sharp$ 5
Diminished [dim] .....	1- $\flat$ 3- $\flat$ 5-(6)

\* Chords marked with an asterisk (\*) can be played in any inversion (i.e. the root of the chord does not have to be the lowest note played).

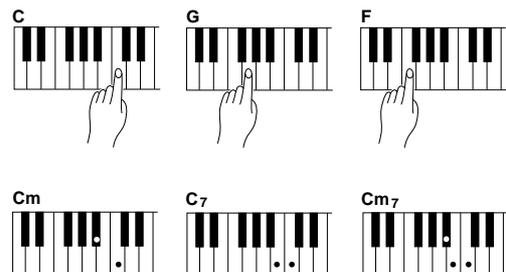
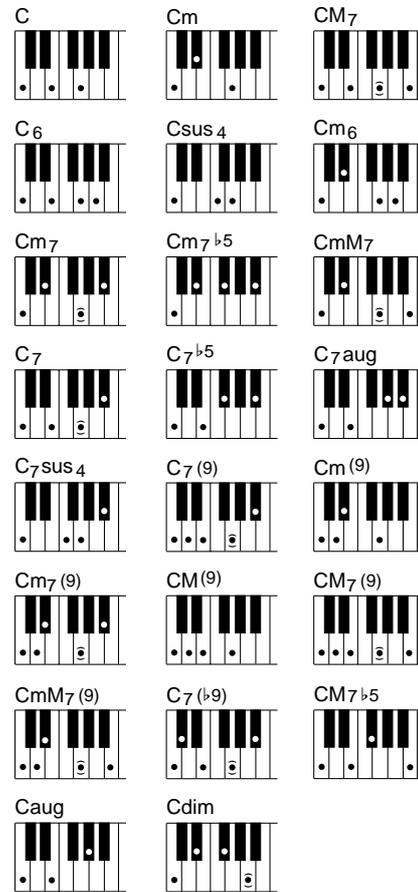
\* If you play any three adjacent keys (including black keys), the chord sound will be cancelled and only the rhythm instruments will continue playing (CHORD CANCEL function).

## ● SINGLE FINGER

Single-finger accompaniment makes it simple to produce beautifully orchestrated accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys on the left-hand section of the keyboard. The abbreviated chord fingerings described below are used:

- For a major chord, press the root key only.
- For a minor chord, simultaneously press the root key and a black key to its left.
- For a seventh chord, simultaneously press the root key and a white key to its left.
- For a minor-seventh chord, simultaneously press the root key and both a white and black key to its left.

## Example for “C” chords

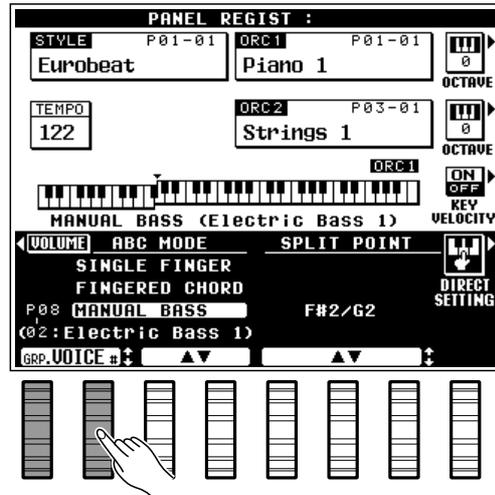


## ● MANUAL BASS

The Manual Bass mode provides an alternative to the normal split keyboard. The bass voice assigned to the left-hand keyboard section is monophonic, while a polyphonic ORCH. 1 voice is played on the upper section of the keyboard. You can select any of the PSR-6000's normal voices to play on the lower section of the keyboard — of course, it's normal to choose a bass voices for the left hand. No automatic bass and chord accompaniment is produced, although the Interactive Accompaniment feature (page 27) does affect the rhythm sound.

### NOTES

- Voices created using the PSR-6000 Custom Voice feature (page 77) can also be selected for use with the Manual Bass mode.
- The ABC mode cannot be changed when the sequencer ACCOMP. track contains data.



## 3 Select a Style

Before selecting a preset style, make sure that the STYLE control section [PRESET] button indicator is lit (if it isn't press the [PRESET] button so that it does light).

The PSR-6000 has 50+1 preset styles (including preset IA style "New Age (No.12 button)") organized in 12 groups (see the "Style List" on page 119).

Use the style group buttons to select the group from which you want to select a style. The corresponding style display will appear.

### NOTES

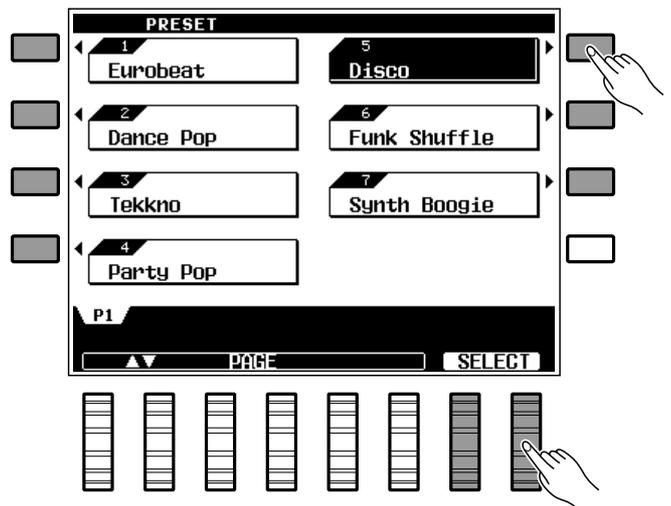
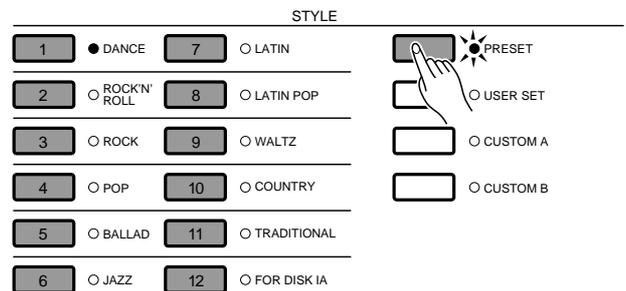
- The display will automatically revert to the main display after a few seconds if the [LIST HOLD] button is not engaged (page 11).

Press the LCD button corresponding to the desired style. You can also use either of the SELECT LCD dials to select any of the styles within the selected group.

Although you can select the ORCH. 1 voice you intend to play on the right-hand section of the keyboard and the ORCH. 2 voice if you use the split mode, the PSR-6000 automatically determines the voices to be used for the accompaniment bass and chords according the accompaniment style you select.

### NOTES

- Also see "USER SET Style Assignment" on page 26, and "Custom Style" on page 62.



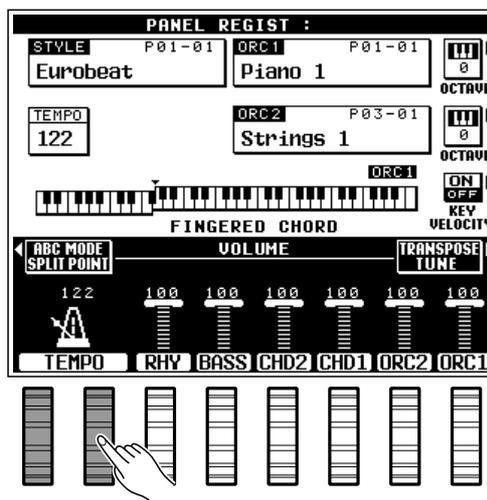
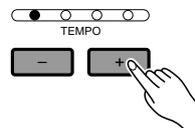
## 4 Set the Tempo

When you select a different style while the accompaniment is not playing, the “default” tempo for that style is also selected, and the tempo is displayed on the display in quarter-note beats per minute. If the accompaniment is playing, the same tempo is maintained even if you select a different style.

You can change the tempo to any value between 40 and 280 beats per minute, however, by using the **TEMPO [-]** and **TEMPO [+]** buttons, or the **TEMPO** LCD dials. This can be done either before the accompaniment is started or while it is playing. To use the **[-]** and **[+]** buttons, press either button briefly to decrement or increment the tempo value by one, or hold the button for continuous decrementing or incrementing.

**NOTE**

- The default tempo for the selected style can be recalled at any time by pressing both the **TEMPO [-]** and **TEMPO [+]** buttons simultaneously.



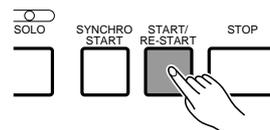
## 5 Start the Accompaniment

There are several ways to start the accompaniment:

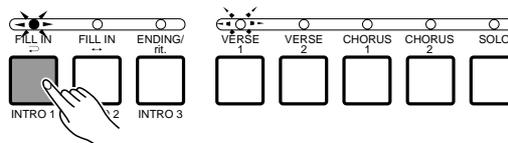
- **Straight start:** Press the **[START/RE-START]** button. If you press the **[START/RE-START]** button, the rhythm will begin playing immediately without bass and chord accompaniment.

**NOTE**

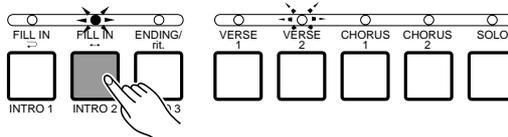
- If you press the **[START/RE-START]** button while the accompaniment is playing, playback will immediately return to the first beat of the current accompaniment pattern, making it possible to create measures with odd time signatures.
- It is also possible to select one of the several sections available prior to a straight start — refer to “7. Select Sections as Required,” below.



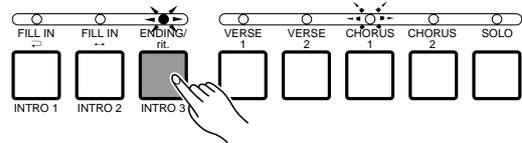
- **Start with an introduction followed by the VERSE 1 section:** press the **[INTRO 1]** button.



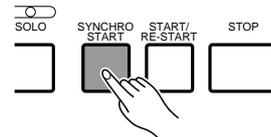
- **Start with an introduction followed by the VERSE 2 section:** press the **[INTRO 2]** button.



- **Start with an introduction followed by the CHORUS 1 section:** press the [INTRO 3] button.



- **Synchronized start:** Any of the above start types can be synchronized to the first note or chord played on the left-hand section of the keyboard (i.e. keys to the left of and including the split-point key — normally F#2) by first pressing the [SYNCHRO START] button. Pressing the [SYNCHRO START] button alone causes a straight start to occur when the first note or chord is played. Press [SYNCHRO START] and then the appropriate INTRO button for a synchronized introduction start. The first dot of the TEMPO display will flash at the current tempo when a synchronized start mode has been selected.

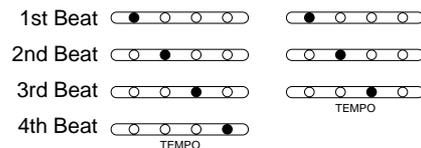


**NOTES**

- If you press the [SYNCHRO START] button while the accompaniment is playing, the accompaniment will stop and the synchro start mode will be engaged.
- The four LED dots of the TEMPO display provide a visual indication of the selected tempo as shown to the right. Several LEDs will flash simultaneously on the first beat of odd-numbered measures in all time signatures.
- A Yamaha FC5 footswitch plugged into the rear panel FOOT SWITCH jack can also be used to start the accompaniment if the appropriate function is assigned to the footswitch using the FOOT SWITCH SELECT function described on page 88.

**4/4 Time**

**3/4 Time**



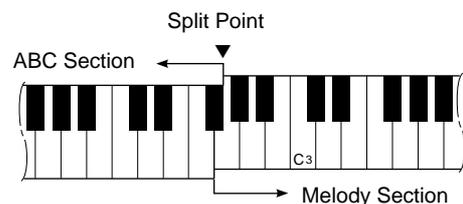
## 6 Play On the Left-hand Section Of the Keyboard

As soon as you play any chord that the PSR-6000 can “recognize” on the left-hand section of the keyboard in the FINGERED CHORD mode (see fingering chart on page 122) or an abbreviated chord in the SINGLE FINGER mode, the PSR-6000 will automatically begin to play the chord along with the selected rhythm and an appropriate bass line. The accompaniment will continue playing even if you release the left-hand keys.

If the MANUAL BASS mode is selected only the rhythm accompaniment will play automatically, and selected bass voice can be played on the left-hand section of the keyboard.

**NOTES**

- The appropriate chord and bass note will sound if you play in the left-hand section of the keyboard while the ABC function is on but the accompaniment is stopped. Please note that the Left Hold function (page 11) cannot be applied to these chord and bass notes.



## 7 Select Sections as Required

Each accompaniment style has a number of sections: VERSE 1, VERSE 2, CHORUS 1, and CHORUS 2. The VERSE and CHORUS sections further have more complex SOLO sections. There is also an ENDING section which is described in step 9. The INTRO section can be used to start the accompaniment as described in the preceding step. The remaining sections — VERSE 1, VERSE 2, CHORUS 1, CHORUS 2, and the SOLO sections of these — can be selected manually by pressing the corresponding section button. It is also possible to select the section that will follow the INTRO by pressing the appropriate section button while the INTRO is playing or while the intro synchro start mode is engaged.

### NOTES

- Some INTRO, ENDING, and SOLO sections have their own chord progressions which play in the current accompaniment key — the key is shown below the style name in the LCD display.

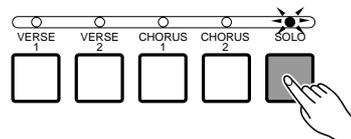
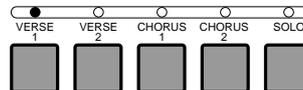
### ● The SOLO Sections

Although the SOLO sections can be selected manually, they can also be activated automatically when INTERACTIVE ACCOMPANIMENT is engaged (see page 27). If an accompaniment is playing and nothing is played on the keyboard for several measures, the SOLO mode is automatically engaged to “fill out” the accompaniment. When SOLO is on, not only are the sections more complex, but they will automatically cycle (VERSE 1 → VERSE 2 → CHORUS 1 → CHORUS 2 → VERSE 1, etc.). If the SOLO mode is on, it will be automatically disengaged after you begin playing on the keyboard.

This automatic switching of the solo mode can be turned off via the Auto Solo function described on page 27.

### NOTES

- The SOLO section will be automatically disengaged if it is turned on prior to starting the accompaniment with an introduction.



## 8 Use Fill-ins

The PSR-6000 provides two types of automatic breaks or “fill-ins.”

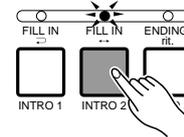
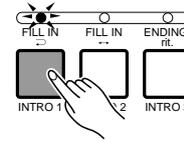
- **FILL IN ⇄**: Press the [**FILL IN ⇄**] button to produce a short fill and return to the same section.
- **FILL IN ↔**: Press the [**FILL IN ↔**] button to produce a fill and then go to the corresponding chorus or verse:

VERSE 1 ↔ CHORUS 1  
VERSE 2 ↔ CHORUS 2

It is possible to change the section that will play after the fill-in by pressing the appropriate section button while the fill-in is playing. If you hold one of the FILL IN buttons, the fill-in will repeat until the button is released.

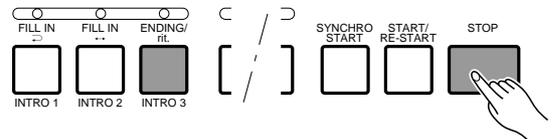
### NOTES

- A Yamaha FC5 footswitch plugged into the rear panel FOOT SWITCH jack can also be used to activate fill-ins if the appropriate function is assigned to the footswitch using the FOOT SWITCH SELECT function described on page 88.
- The transitions between the verse and chorus are different when SOLO is ON.



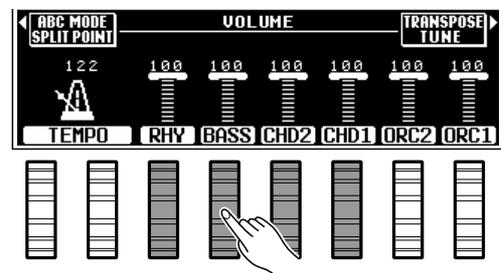
## 9 Stop the Accompaniment

The accompaniment can be stopped at any time by pressing the [**STOP**] button. Press the [**ENDING/rit.**] button if you want to go to the ending section and then stop. Press the [**ENDING/rit.**] button while the ending section is playing to produce a “ritardando” ending — i.e. the tempo gradually slows down during the ending.



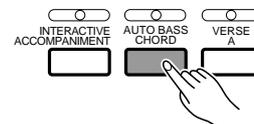
## Accompaniment Volume

Use the **RHY**, **BASS**, **CHD1**, and **CHD2** LCD dials controls to set the best balance between the corresponding accompaniment parts, and the optimum volume of the accompaniment parts in relation to the ORCH. 1 and ORCH. 2 voices.



## Rhythm-only Accompaniment

The AUTO BASS CHORD mode can be turned off at any time — leaving the rhythm accompaniment only — by pressing the [**AUTO BASS CHORD**] button so that its indicator goes out.



## USER SET Style Assignment

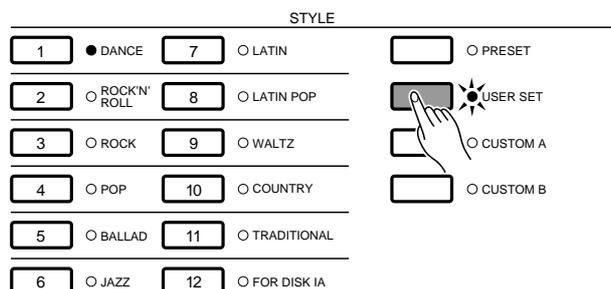
The PSR-6000 USER SET style selection mode lets you assign any 12 styles to the 12 style group buttons so you can select them directly without having to select a category, page, and then a style. This is particularly useful for the performer who want direct access to the styles he needs for a song or set.

### 1 Select the USER SET Mode

Press the STYLE control section [USER SET] button so that its indicator lights. The USER SET style display will appear.

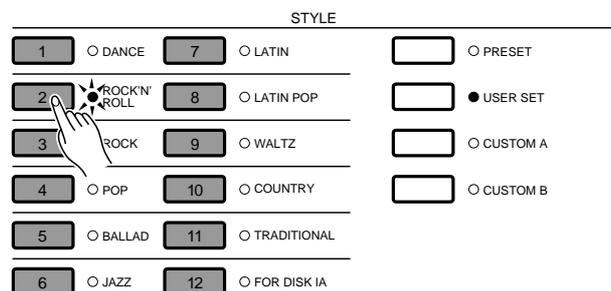
#### NOTES

- The display will automatically revert to the main display after a few seconds if the [LIST HOLD] button is not engaged (page 11).



### 2 Select a Style Button

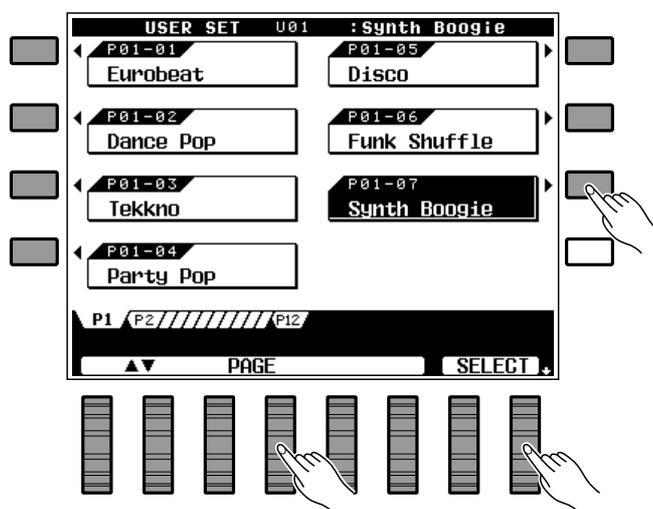
Press the style group button to which you want to assign a style.



### 3 Select a Style

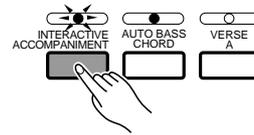
Use the PAGE LCD dials, the SELECT LCD dials, and the LCD buttons as required to select the style you want to assign to the currently selected style button.

Now the assigned style will instantly be recalled anytime you press the same style button while the USER SET mode is engaged. Style assignments can be changed at any time in the same way.



## Interactive Accompaniment

Press the [INTERACTIVE ACCOMPANIMENT] button so that its indicator lights to activate the Interactive Accompaniment mode. In this mode the PSR-6000 uses advanced technology to monitor the way you are playing on the keyboard and automatically varies the rhythm or ABC accompaniment accordingly.



If you are playing with the VERSE 1 section, for example, and you begin to build up the musical excitement on the keyboard (i.e. play more notes, faster, and/or harder) the PSR-6000 will automatically switch to the VERSE 2 section to better support what you are playing. On the other hand, if you play more mellow right-hand lines the PSR-6000 will automatically “shift down” to the VERSE 1 section. The same applies to the CHORUS 1 and CHORUS 2 sections.

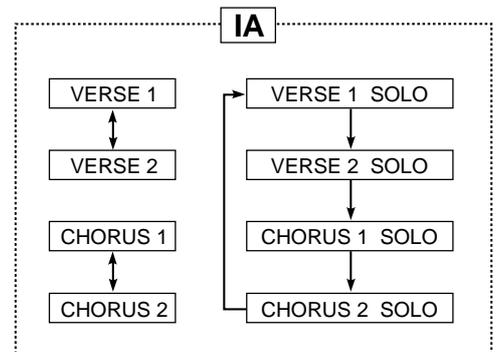
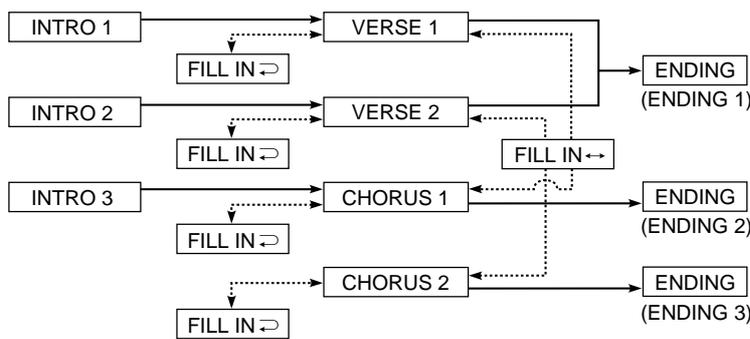
**NOTES**

- The “sensitivity” of the Interactive Accompaniment mode can be adjusted via the INTERACTIVE ACCOMPANIMENT Sensitivity function described on page 89. Also note that automatic switching between VERSE 1 and VERSE 2 or CHORUS 1 and CHORUS 2 will not occur if the Interactive Accompaniment MUTE mode is selected — see page 89.

### Auto Solo

When the AUTO SOLO function is turned ON (ON is the default setting — see page 89), the SOLO accompaniment sections will automatically be activated if nothing is played on the keyboard for a few measures. Further, the solo sections will automatically be de-activated from the end of the current phrase after keyboard performance is resumed.

#### ABC/IA Accompaniment Flow Diagram



## Using Disk Styles on Optional Data Disks

Use the following procedure to assign the desired disk style from an optional Yamaha style disk to the [FOR DISK IA] style button on the PSR-6000 panel.

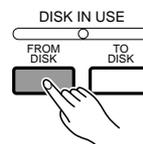
### 1 Insert the Data Disk

Insert the data disk into the PSR-6000 disk drive (located below the right end of the keyboard) with the disk shutter facing the drive slot and the label side facing upward.



### 2 Press [FROM DISK]

Press the [FROM DISK] button. The display shown to the right should appear.

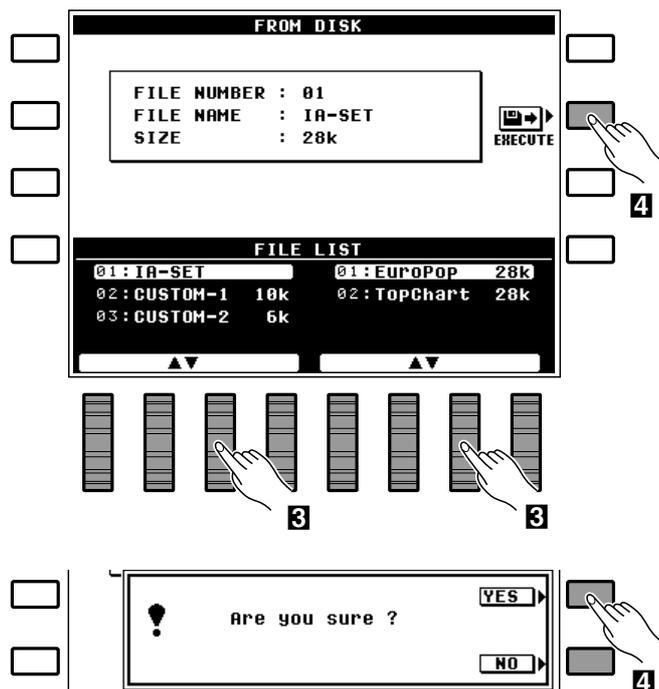


### 3 Select a Style File

Use the left ▲▼ LCD dials to select I/A-SET, then use the right ▲▼ dials to select the style you want to load.

### 4 Press the EXECUTE LCD Button

Press the EXECUTE LCD button. The “Are you sure ?” confirmation prompt will appear. Press the YES LCD button to begin loading the selected file (or NO to cancel). “Do not remove disk!” will appear on the display while the data is loading. “Completed.” will appear briefly when the data has been successfully loaded, and the normal play mode will then be automatically engaged.



#### NOTES

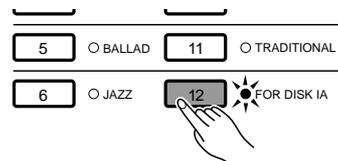
- If an error message appears during the disk load procedure, refer to page 111 for details.
- Disk style data that has been loaded into the PSR-6000 can be saved to a different floppy disk. See page 95 for details.

### Selecting a DISK Style

Once loaded, the disk style can be selected and used in the same way as the internal styles by pressing the [FOR DISK IA] button.

#### NOTES

- The preset IA style “New Age” can be recalled by using the “F7: RECALL PRESET DATA” function described on page 101.





# One Touch Setting

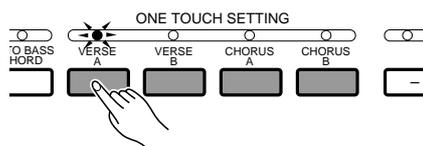
The PSR-6000's 50+1 internal styles (including preset IA style "New Age") each have 4 different preset "panel setups" that can be instantly selected via the ONE TOUCH SETTING buttons — [VERSE A], [VERSE B], [CHORUS A], and [CHORUS B] — to create different musical textures. The ONE TOUCH SETTING setups include settings for all of the following parameters:

- Orchestration
- Orchestra 1 Voice
- Orchestra 2 Voice
- Orchestra 1 Volume
- Orchestra 2 Volume
- Bass Volume
- Chord 1 Volume
- Chord 2 Volume
- Rhythm Volume
- Orchestra 1 Octave
- Orchestra 2 Octave
- Harmony On/Off
- Harmony Type
- Left Hold On/Off
- Sustain On/Off
- Sustain Part Select
- Pitch Bend Select
- Reverb On/Off
- Reverb Type & Depth
- Effect On/Off
- Effect Type & Depth

## 1 Engage the One Touch Setting Feature

The ONE TOUCH SETTING feature can be used either while an accompaniment is playing or prior to starting an accompaniment by simply pressing the appropriate ONE TOUCH SETTING button so that its indicator lights: [VERSE A] for a soft, mellow feel; [VERSE B] for a slightly more active feel; [CHORUS A] for an even more lively sound; [CHORUS B] for maximum presence and animation.

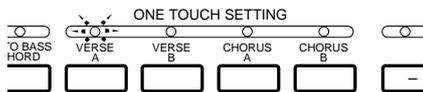
If the One Touch Setting **SYNCHRO CHANGE** parameter (see page 89) is turned **ON**, selecting a different accompaniment style while ONE TOUCH SETTING is engaged will cause the ONE TOUCH SETTING settings for that style to be selected automatically.



## 2 Adjust The Settings If Necessary

Any of the parameters set by the ONE TOUCH SETTING feature can be adjusted to create the desired sound after a ONE TOUCH SETTING setup has been selected.

If the One Touch Setting **SYNCHRO CHANGE** parameter is turned **ON** and you change a ONE TOUCH SETTING setting, the corresponding ONE TOUCH SETTING indicator will flash to indicate that a change has been made.

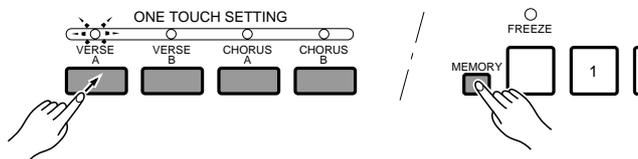


## 3 Memorize the One Touch Settings If You Like

Your One Touch Settings can be memorized by pressing the **VERSE [A]** or **[B]** or **CHORUS [A]** or **[B]** button while holding the Panel Registration **[MEMORY]** button.

### NOTES

- The initial One Touch Settings can be recalled by using the **RECALL PRESET DATA** function described on page 101.
- One Touch Settings can also be stored in the Panel Registration memory.

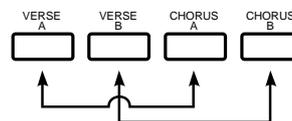
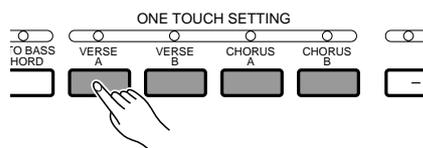


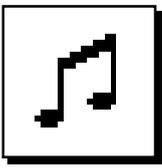
## 4 Turn One Touch Setting Off

**ONE TOUCH SETTING** is turned **OFF** by pressing the currently engaged **[ONE TOUCH SETTING]** button a second time so that its indicator goes out. If the **ONE TOUCH SETTING** indicator is flashing because changes have been made to the panel settings (and the **SYNCHRO CHANGE** parameter is **ON**), pressing any **[ONE TOUCH SETTING]** button twice turns **ONE TOUCH SETTING** off.

### NOTES

- If you turn the **SYNCHRO CHANGE** parameter described on page 89 **ON**, the **ONE TOUCH SETTING** setup will automatically switch according to changes in the accompaniment section.
- **ONE TOUCH SETTING** cannot be used with accompaniment styles created using the **Custom Accompaniment** feature described on page 62. The currently lit **ONE TOUCH SETTING LED** will automatically go out if a **Custom Style** is selected.
- **ONE TOUCH SETTING** setup data can be saved to floppy disk. See page 95 for details.

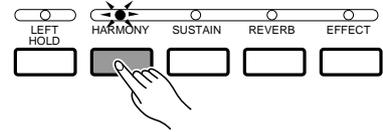




# Expression & Effects

## Harmony

The harmony effect can only be used when the AUTO BASS CHORD accompaniment mode is selected. Press the **[HARMONY]** button to turn the HARMONY effect on or off. When HARMONY is on (indicator lit), playing single notes or chords on the right-hand section of the keyboard produces automatic harmony matched to the accompaniment chords. The type of harmony produced can be selected via the HARMONY TYPE function described on page 90.

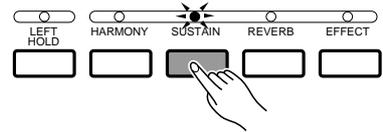


### NOTES

- The harmony is based on the top note of chords.
- Slight tempo delays may occur when harmony is used in conjunction with the ABC Fingered Chord mode.

## Sustain

Press the **[SUSTAIN]** button to turn the sustain effect on or off. When on (indicator lit), extra sustain is applied to the selected voice. If a footswitch connected to the rear-panel **SUSTAIN** jack is pressed in order to apply sustain, however, the panel SUSTAIN function will be automatically turned off.

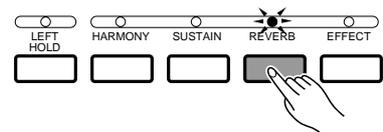


### NOTES

- Sustain can be applied to the ORCH. 1 voice only, the ORCH. 2 voice only, or both voices via the SUSTAIN PEDAL ASSIGN function described on page 87.

## Reverb

Press the **[REVERB]** button to apply the reverb effect specified by the REVERB TYPE and DEPTH functions described on page 84 to the ORCH. 1 and 2 voices as well as the chord and rhythm accompaniment sound. The **[REVERB]** button alternately turns the reverb effect on (indicator lit) or off (indicator out).

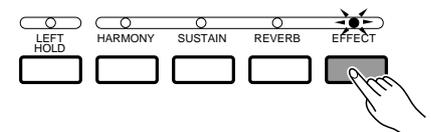


### NOTES

- Reverb type changes will apply to the note currently being played, while reverb ON/OFF and depth changes will apply to the next note played.

## Effects

Press the **[EFFECT]** button to apply the effect specified by the EFFECT TYPE and DEPTH functions described on page 85 to the ORCH. 1 and 2 voices as well as the chord accompaniment sound. The **[EFFECT]** button alternately turns the effect on (indicator lit) or off (indicator out).

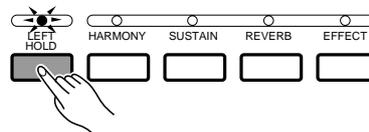


### NOTES

- Effect type changes will apply to the note currently being played, while effect ON/OFF and depth changes will apply to the next note played.

## Left Hold

This function causes the left-hand (ORCH. 2) voice to be held even when the keys are released when using the AUTO BASS CHORD and ORCH. 2 ◀▶1 orchestration modes. Non-decaying voices such as strings are held continuously, while decay-type voices such as piano decay more slowly (as if the sustain pedal has been pressed).

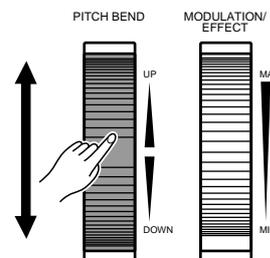


### NOTES

- The **LEFT HOLD** function works only while **AUTO BASS CHORD** accompaniment is running. Further, **LEFT HOLD** is temporarily disengaged during **ENDING** sections and **INTRO** or **SOLO** sections that have their own chord progressions.
- **LEFT HOLD** will not function during **Multi Pad (Chord Pad)** playback or **Sequencer ACCOMP.** track playback even if the **LEFT HOLD** indicator is lit.

## Pitch Bend Wheel

The **PITCH BEND** wheel to the left of the keyboard lets you bend the pitch of notes played on the keyboard up or down. Normal pitch is restored when the **PITCH BEND** wheel is released. The maximum pitch bend range is preset for each voice, but can be set as required for custom voices by using the **CUSTOM VOICE EDIT** feature described on page 77.

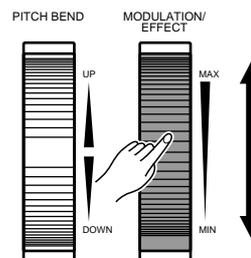


### NOTES

- Pitch bend can be applied to the **ORCH. 1** voice only, the **ORCH. 2** voice only, or both voices via the **PITCH BEND WHEEL ASSIGN** function described on page 87. Also, pitch bend is applied to harmony notes on the basis of the **ORCH. 1** settings.
- The pitch bend wheel may have no effect when applied to notes at the upper and lower extremes of the keyboard if a **CUSTOM VOICE** is used. Also, sudden pitch changes may occur.
- Pitch bend cannot be applied to the **ORCH. 2** voice when **AUTO BASS CHORD** is **ON** and the **ORCH. 2 ◀▶1** orchestration mode is selected.
- Pitch bend can be applied to notes from **C-1** to **C7** (i.e. **MIDI** note numbers 12 through 108). Pitch can not be bent down below the lowest note or up above the highest note in this range.

## Modulation/Effect Wheel

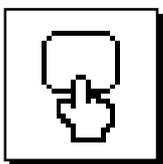
The **MODULATION/EFFECT** wheel to the left of the keyboard lets you apply amplitude/pitch modulation or effects to notes played on the keyboard. Rolling the **MODULATION/EFFECT** wheel upward (away from you) increases the modulation depth or effect. Use the **WHEEL SELECT** function described on page 86 to select modulation or effect operation. The type of effect applied when effect operation is selected is determined by the **EFFECT TYPE** function described on page 85.



The modulation effect mode is preset for each voice, but can be set for custom voices by using the **CUSTOM VOICE EDIT** feature described on page 77.

### NOTES

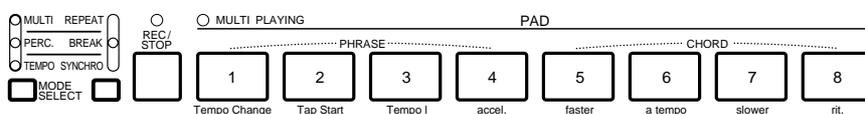
- Modulation is automatically applied to some voices, while to some it cannot be applied even if the modulation wheel is operated.



# Using the Pads

The PSR-6000 features 8 “PADs” above the keyboard that can be used in a variety of ways:

- **MULTI:** When the MULTI mode is selected, the 4 pads marked “PHRASE” and the 4 pads marked “CHORD” can be used to record and play back short sequences of notes and chords, respectively.
- **PERC:** In the PERC mode the pads can be used to play 8 different drum and percussion instruments selected from the PSR-6000’s drum voices — DRUM KIT and POP DRUM KIT.
- **TEMPO:** In the TEMPO mode the pads are used to vary tempo in a number of ways, giving the PSR-6000 unprecedented capability for creative tempo variations while playing.



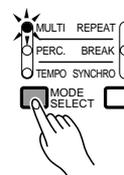
- Pad data can be saved to floppy disk. See page 95 for details.

## The MULTI Mode

To engage the MULTI mode, press the [MODE SELECT] button a few times until the MULTI indicator lights.



- Preset data is initially recorded in pads 1 through 8.



## The PHRASE Pads (pads 1 ... 4)

Each PHRASE pad can record up to approximately 160 notes played using the ORCH. 1 voice (only the ORCH. 1 voice is recorded even if the ORCH. 2+1 orchestration mode is selected). The recorded phrases can then be played back at any time — even while playing on the keyboard, with or without accompaniment. The PHRASE pads record the following data:

- Voice (Orch.1)
- Note On/Off (Orch.1)
- Modulation (when Modulation is On for Orchestra 1: see page 32)
- Orchestra 1 Volume
- Sustain On/Off (when Sustain is On for Orchestra 1: see page 31)
- Pitch Bend (when Pitch Bend is On for Orchestra 1: see page 32)
- Glide On/Off (when Glide is On for Orchestra 1: see page 88)
- Octave Change (Orch. 1)

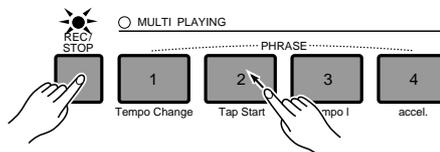


- The data listed above is also recorded if it is received via the PSR-6000 MIDI interface (page 102).

## Recording Phrases

### 1 Select a PHRASE Pad For Recording

Press the **PHRASE** pad you intend to record to while holding the **[REC/STOP]** button. The REC/STOP indicator will flash, indicating that the selected pad is ready to record.



### 2 Play a Phrase

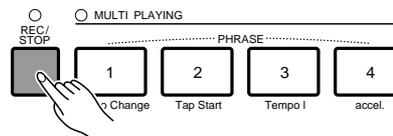
Recording begins automatically as soon as you play on the keyboard using the ORCHESTRA 1 voice (i.e. the right-hand section of the keyboard if the split play mode or AUTO BASS CHORD accompaniment is engaged), and the REC/STOP indicator will light continuously as long as recording continues.

#### NOTES

- You can record phrases while AUTO BASS CHORD accompaniment is playing or stopped. In either case the phrase will be recorded in relation to the currently set accompaniment tempo, so it is a good idea to record phrases while monitoring the accompaniment to ensure that they are reproduced at an appropriate tempo when played back with accompaniment.

### 3 Stop Recording

Press the **[REC/STOP]** button to stop recording when you've finished playing the phrase. The **[REC/STOP]** button indicator will go out when recording ends.



#### NOTES

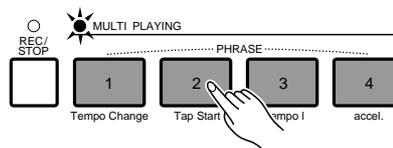
- Recording will stop automatically if the PHRASE pad memory becomes full (approximately 160 notes per pad), or if another pad is pressed.

## Phrase Playback

As long as the MULTI mode is selected, any recorded phrase can be played back simply by pressing the corresponding **PHRASE** pad. The phrase will play back whether the accompaniment is playing or not, but will always play at the currently set tempo. The MULTI PLAYING indicator will light while the phrase plays back, and playback will end automatically as soon as the end of the phrase is reached. A phrase can be stopped while it is playing by pressing either the **[REC/STOP]** button or the corresponding pad button. It is also possible to play back several phrases at the same time.

#### NOTES

- Although the note data played by the phrase pads can not be recorded by the PSR-6000 sequencer (page 49), the phrase pad events (i.e. the fact that a pad has been pressed) can be recorded. Phrase pad data can be saved to and loaded from disk (page 96), but can not be memorized by the Panel Registration feature (page 41).
- Use the MASTER VOLUME control to adjust the playback volume of the phrase pads.



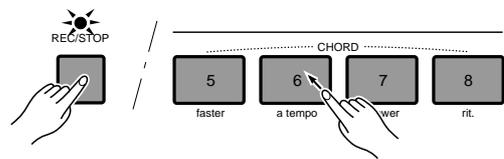
## The CHORD Pads (pads 5 ... 8)

Each CHORD pad can record up to approximately 80 chords played on the left-hand section of the keyboard when the AUTO BASS CHORD feature is engaged. The recorded chords can then be played back at any time.

### Recording Chords

#### 1 Select a CHORD Pad For Recording

Press the **CHORD** pad you intend to record to while holding the **[REC/STOP]** button. The REC/STOP indicator will flash, indicating that the selected pad is ready to record. If the accompaniment is stopped when the CHORD pad is selected for recording, the SYNCHRO START mode will automatically be engaged.



#### NOTES

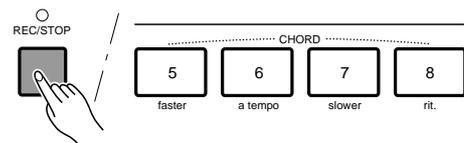
- If **AUTO BASS CHORD** is **OFF** when a **CHORD** pad is selected for recording, it will automatically be turned **ON**. Further, if the **MANUAL BASS** mode is selected, the **FINGERED CHORD** mode will automatically be selected in its place.

#### 2 Play the Required Chords

Recording begins automatically as soon as you play a chord on the left-hand section of the keyboard, and the REC/STOP indicator will light continuously as long as recording continues.

#### 3 Stop Recording

Press the **[REC/STOP]** button or the pad being recorded to stop recording when you've finished playing the chords. The **[REC/STOP]** button indicator will go out when recording ends.



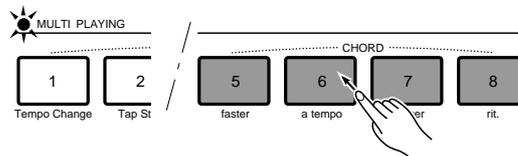
#### NOTES

- Recording will stop automatically if the **CHORD** pad memory becomes full (approximately 80 chords per pad); if another pad is pressed; or if the accompaniment **[STOP]**, **[START/RE-START]**, or **[SYNCHRO START]** buttons is pressed.

## Chord Playback

As long as the MULTI mode is selected and an AUTO BASS CHORD accompaniment is playing, any recorded chord sequence can be played back simply by pressing the corresponding **CHORD** pad. The phrase will play back at the currently set tempo. The MULTI PLAYING indicator will light while the chord sequence plays back, and playback will end automatically as soon as the end of the sequence is reached. Only one chord sequence can be played at a time.

During chord pad playback the ABC indicator will go out and the left-hand section of the keyboard plays in the same way as the right-hand section. To indicate that the end of the chord sequence is approaching, the MULTI PLAYING indicator flashes during the last two measures. A chord sequence that is playing can be stopped by pressing the same chord pad again, or by pressing the **[REC/STOP]** button.

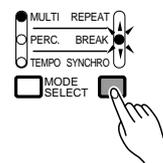


### NOTES

- If you press a CHORD pad while the accompaniment is stopped or while the AUTO BASS CHORD function is off, "Engage ABC to play the chord pads!" will appear on the display. Also, if AUTO BASS CHORD is on but the Manual Bass mode is selected, "Select FC or SF mode to play the chord pads!" will appear on the display, since chord playback will not function in the Manual Bass mode.
- Chord pad playback can be recorded by the PSR-6000 sequencer.
- Chord pad data can be saved to and loaded from disk (page 96, 97), but can not be memorized by the Panel Registration feature (page 41).
- Playback occurs in measure units. Playback will continue until the end of the measure even if recording was stopped prior to the end of that measure.

## MULTI Pad Repeat Playback

If you press the button immediately to the right of the pad **[MODE SELECT]** button so that the indicator above it lights while the MULTI mode is engaged, the MULTI REPEAT function is engaged and phrase or chord playback will repeat continuously until the **[REC/STOP]** button is pressed, the same pad is pressed a second time, or the REPEAT mode is turned off by pressing the button to the right of the **[MODE SELECT]** button again. In the last case the phrase or chord sequence will play through to the end and then stop.

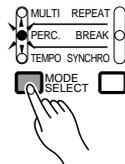


## The PERC Mode

To engage the PERC mode, press the [MODE SELECT] button a few times until the PERC indicator lights.

The 8 pads are initially programmed with the following drum and percussion instruments which can be played via the pads when the PERC mode is selected:

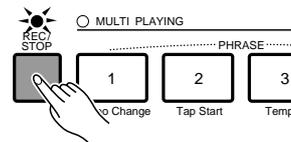
1. Kick 1
2. Snare 3
3. Tom 1 Low
4. Tom 1 Mid
5. Tom 1 Hi
6. Closed Hi-Hat 1
7. Open Hi-Hat 1
8. Crash Cymbal 2



### Assigning Different Instruments To the PERC Pads

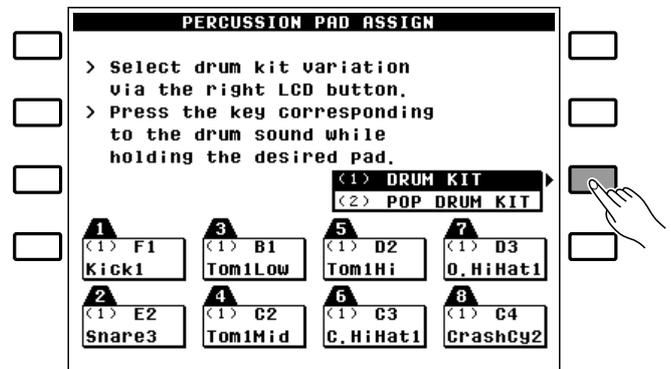
#### 1 Press [REC/STOP]

Press the [REC/STOP] button so that its indicator lights (make sure the PERC mode is selected first). The PERCUSSION PAD ASSIGN display will appear, listing the percussion instruments currently assigned to the pads.



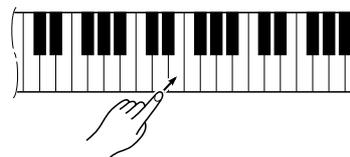
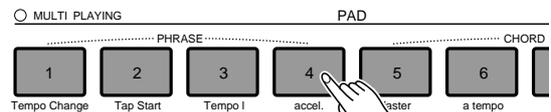
#### 2 Select a Drum Voice

The DRUM KIT voice is automatically selected if you press the [REC/STOP] key while in the PERC mode and a non-drum voice is selected. Use the **DRUM KIT/POP DRUM KIT** LCD button to select the drum voice which includes the percussion instruments you want to assign.



#### 3 Assign the Instruments

A new drum/percussion instrument is assigned to a pad simply by playing the key corresponding to the desired instrument while holding the drum pad to which it is to be assigned. The reverse also works: press the pad while holding the key. The velocity at which you play the key (how hard you press the key = how loud the note sounds) is also recorded to the specified pad.



#### NOTES

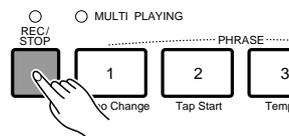
- Percussion voices created using the CUSTOM VOICE EDIT functions described on page 83 cannot be assigned to the percussion pads.

## 4 Press [REC/STOP] To End Assignment

When you're finished making instrument assignments to the PERC pads, press the [REC/STOP] button so that its indicator goes out.



- Percussion pad data can be saved to and loaded from disk (page 95, 96), but can not be memorized by the Panel Registration feature (page 41).

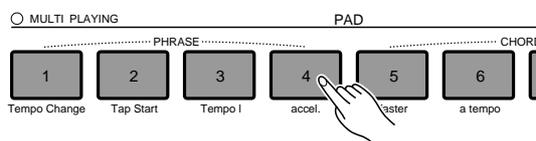


## Playing the Percussion Pads

The PERC pads can be played at any time — whether an accompaniment is playing or not — as long as the PERC mode is selected. Depending on the assigned instrument, some pads will play continuously as long as they are held.



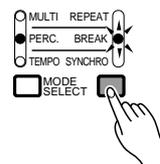
- The PERC pad sounds are not affected by the PSR-6000 PITCH BEND wheel or EFFECT settings.



## The PERC BREAK Function

If you press the button immediately to the right of the pad [MODE SELECT] button so that the indicator above it lights while the PERC mode is engaged, the PERC BREAK function is engaged — playing on the PERC pads causes the accompaniment rhythm to stop playing so you can create your own fill-in. The accompaniment rhythm begins playing from the beginning of the next measure when you stop playing the percussion pads.

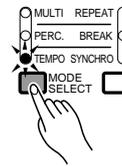
The BREAK mode is turned off by pressing the button to the right of the [MODE SELECT] button again.



## The TEMPO Mode

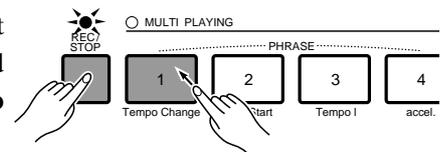
To engage the TEMPO mode, press the [MODE SELECT] button a few times until the TEMPO indicator lights.

The functions of the pads in the TEMPO mode are indicated by labels below each pad:



### ● Tempo Change

If you press this pad while holding the [REC/STOP] button, the tempo at that instant is registered in memory. The registered tempo can then be recalled at any time, regardless of the current tempo, simply by pressing the [Tempo Change] pad.

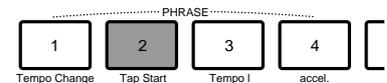


**NOTES**

- If this pad is used during an *accelerando* or *ritardando* (described below), the *accelerando* or *ritardando* stops immediately and the [Tempo Change] value takes effect.

### ● Tap Start

While the accompaniment is stopped, or during the SYNCHRO START mode before the accompaniment is started, the [Tap Start] pad can be used to set any desired tempo (within the PSR-6000's 40 to 280 beats per minute range) by simply tapping on the pad at the required tempo. Tap 4 times for an accompaniment with a 4/4 time signature, 3 times for 3/4, and 5 times for 5/4.

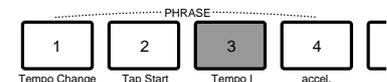


**NOTES**

- If the accompaniment is started before the required number of taps has been entered, the Tap Start setting will be ignored. The Tap Start setting will also be ignored if several seconds elapse before the required number of taps have been entered, if a different style is selected, or if the accompaniment [STOP] button is pressed.

### ● Tempo I (Tempo Primo)

If the [Tempo I] pad is tapped while an accompaniment is playing, the tempo setting that was active when the accompaniment was started is immediately restored, regardless of any tempo changes that occurred after the accompaniment was started.

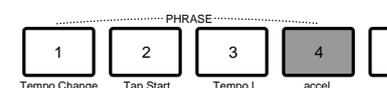


**NOTES**

- If this pad is used during an *accelerando* or *ritardando* (described below), the *accelerando* or *ritardando* stops immediately and the [Tempo I] value takes effect.

### ● accel. (Accelerando)

Pressing the [accel.] pad immediately starts a 2-measure *accelerando* (tempo increase) that is executed by increasing the tempo by a small amount on every 8th beat. The *accelerando* is stopped if the [accel.] pad is pressed again before the 2 measures are completed.

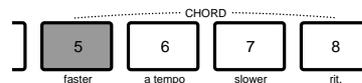


## ● faster

Tap the **[faster]** pad to increase the tempo by a fixed amount, whether the accompaniment is playing or not.



- If this pad is used during an *accelerando* or *ritardando*, the *accelerando* or *ritardando* stops immediately and the *[faster]* value takes effect.

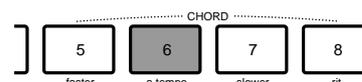


## ● a tempo

This pad recalls the tempo prior to the last tempo change — e.g. any change incurred by pressing the **[Tempo Change]**, **[accel.]**, **[faster]**, **[slower]**, or **[rit.]** pad.



- If this pad is used during an *accelerando* or *ritardando*, the *accelerando* or *ritardando* stops immediately and the *[a tempo]* value takes effect.

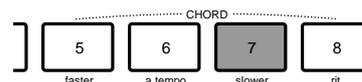


## ● slower

Tap the **[slower]** pad to decrease the tempo by a fixed amount, whether the accompaniment is playing or not.



- If this pad is used during an *accelerando* or *ritardando*, the *accelerando* or *ritardando* stops immediately and the *[slower]* value takes effect.

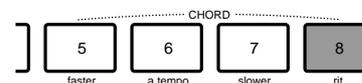


## ● rit. (Ritardando)

Pressing the **[rit.]** pad immediately starts a 2-measure ritardando (tempo decrease) that is executed by decreasing the tempo by a small amount on every 8th beat. The ritardando is stopped if the **[rit.]** pad is pressed again before the 2 measures are completed.



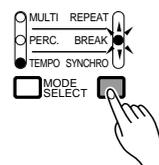
- The *[PAD 8/rit.]* pad has essentially the same effect on the tempo as the *[ENDING/rit.]* button (page 25), except that while the *[ENDING/rit.]* button causes the tempo to return to its initial value after the rhythm stops, the tempo does not return to its initial value if the *[PAD 8/rit.]* pad is used, even after the rhythm is stopped.
- If a *fill-in* pattern is selected during a ritardando, the ritardando continues during the fill-in but then original tempo is then restored as soon as the fill-in ends.

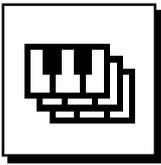


## The TEMPO SYNCHRO Function

If you press the button immediately to the right of the pad **[MODE SELECT]** button so that the indicator above it lights while the TEMPO mode is engaged, the TEMPO SYNCHRO function is engaged — any tempo change initiated by a TEMPO pad takes place at the beginning of the next measure instead of immediately when the pad is tapped (TEMPO SYNCHRO has no effect on Tap Start operation).

The SYNCHRO mode is turned off by pressing the button to the right of the **[MODE SELECT]** button again.



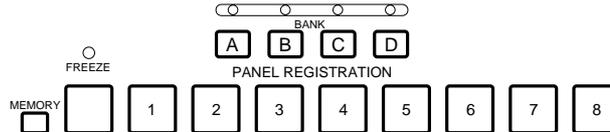


# Panel Registration

The PSR-6000 Panel Registration feature can be used to memorize 32 complete control-panel setups (4 banks, 8 setups each) that you can recall whenever needed.

## NOTES

- When the PSR-6000 is in its initial factory-preset condition, the panel registration memories contain preset setups. When these are recalled, a descriptive setup name will appear at the top of the display (example: A1 Going West!).



## Registering the Panel Settings

### 1 Set Up the Controls as Required

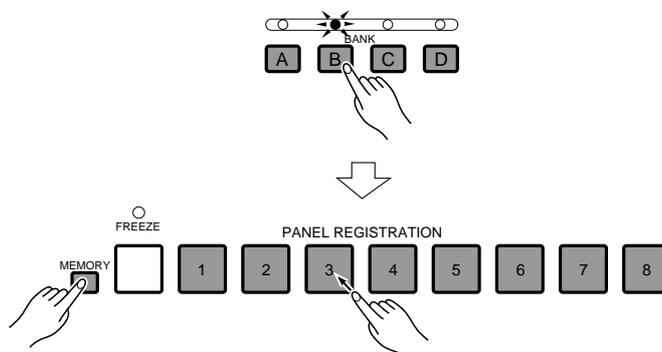
Make the desired control settings. The following settings are memorized by the Panel Registration function:

#### Data Stored By the Panel Registration Memory

	Panel Registration	Freeze OFF	Accomp. Freeze ON	Voice Freeze ON
Panel Buttons	Orchestra 1 Voice	○	○	×
	Orchestra 2 Voice	○	○	×
	Orchestration	○	○	×
	Harmony On/Off	○	○	×
	Sustain On/Off	○	○	×
	Reverb On/Off	○	○	×
	Effect On/Off	○	○	×
	Style	○	×	○
	ABC On/Off	○	×	○
	IA On/Off	○	×	○
	Accompaniment Section	○	×	○
	Multi Pad Select	○	○	○
	Pad Synchro/Break/Repeat On/Off	○	○	○
	Left Hold On/Off	○	○	○
Tempo	○	×	○	
Volume	Orchestra 1	○	○	×
	Orchestra 2	○	○	×
	Bass	○	×	○
	Chord 1	○	×	○
	Chord 2	○	×	○
	Rhythm	○	×	○
	Orchestra 1 Octave	○	○	×
Orchestra 2 Octave	○	○	×	
Panel Registration	Freeze OFF	Accomp. Freeze ON	Voice Freeze ON	
Key Velocity On/Off	○	○	×	
LCD	Split Point	○	○	○
	ABC Mode	○	×	○
	Manual Bass Voice	○	×	○
	Transpose	○	○	○
F2	Reverb Type	○	○	×
	Reverb Depth	○	○	×
	Effect Type	○	○	×
	Effect Depth	○	○	×
	Foot Switch Select	○	○	○
	Foot Switch Percussion	○	○	○
	Foot Controller Select	○	○	○
F3	Sustain Part Select	○	○	×
	Pitch Bend Wheel Select	○	○	×
	Modulation/Effect Wheel Type	○	○	×
	Modulation/Effect Wheel On/Off	○	○	×
	IA Mode	○	×	○
F4	Auto Solo On/Off	○	×	○
	IA Sensitivity	○	×	○
F5	IA Key Part	○	×	○
	One Touch Setting (Synchro Change On/Off)	○	×	○
F5	Harmony Type	○	○	×

## 2 Register in Memory

Use the [A], [B], [C], or [D] button to select the corresponding memory bank — the corresponding indicator will light. Press and hold the [MEMORY] button, then press one of the **PANEL REGISTRATION** buttons. Any data that was previously in the selected location is erased and replaced by the new settings.

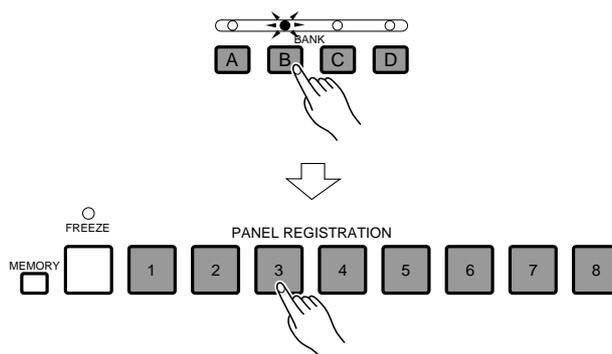


## Recall the Registered Panel Settings

Simply select the appropriate bank using the [A], [B], [C] or [D] button and press the desired **PANEL REGISTRATION** button at any time to recall the memorized settings.

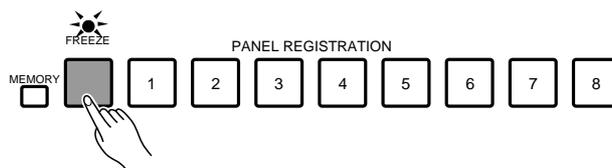
### NOTES

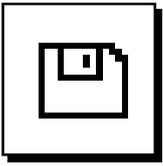
- No registration name is displayed when a user registration setup is recalled.
- The preset registration setups can be recalled by using the initialization procedure described on page 101.
- When the Foot Switch function is set to **REGISTRATION+** and a different panel registration memory is recalled either via the panel controls or the footswitch, the Foot Switch setting will not change even if a different setting is included in the recalled panel registration memory (i.e. Foot Switch remains set to **REGISTRATION+**).



## The Freeze Function

If you press the [FREEZE] button so that its LED lights, selecting a different panel registration will not change the currently selected accompaniment or voice settings even if the new panel registration includes a different settings. The **REGISTRATIONFREEZE** utility function (page 101) determines whether the freeze function affects accompaniment or voice settings.





# Playing DOC (Disk Orchestra Collection) & General MIDI Music Software Disks

The PSR-6000 can play optional Yamaha Disc Orchestra Collection software, and General MIDI mode software recorded by other equipment. When a disk of either type (3.5" 2DD disks only) is inserted into the PSR-6000 disk drive, the PSR-6000 automatically switches the internal tone generator system to allow playback of the software and performance on the keyboard.

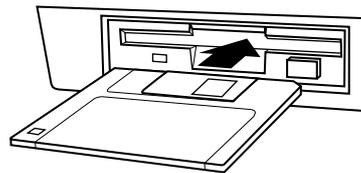
## Disk Orchestra Collection Disk Playback

Using DISK ORCHESTRA disks (available from Yamaha), the PSR-6000 will let you enjoy listening to automated performances, or function as your "private music tutor," allowing you to practice various parts of a piece while the others are played automatically.

### 1 Insert the DOC Disk

Insert the DISK ORCHESTRA disk into the PSR-6000 disk drive (located below the right end of the keyboard) with the sliding disk shutter facing the drive slot and the label side facing upward. The disk should click into place and the DISK IN USE lamp will light briefly while the PSR-6000 reads and identifies the disk.

When the disk is inserted and identified the display shown to the right will appear (if this display doesn't appear, press the [DISK ORCHESTRA/GENERAL MIDI] button):



#### NOTES

- There are actually three ways to select the DOC mode:
  - 1) Insert a DOC disk (the DOC mode is automatically selected).
  - 2) Press the [DISK ORCHESTRA/GENERAL MIDI] button (the normal, DOC, and General MIDI modes are selected in sequence).
  - 3) Receive a MIDI exclusive "Switch To DOC Mode" message from an external MIDI device.  
The [DISK ORCHESTRA/GENERAL MIDI] button is a handy way to engage the DOC mode from another mode when the disk is already loaded in the drive. Any rhythm or ABC operation in progress will stop automatically.
- You can use the [EXIT] button or [DISK ORCHESTRA/GENERAL MIDI] button to exit from the DOC mode.



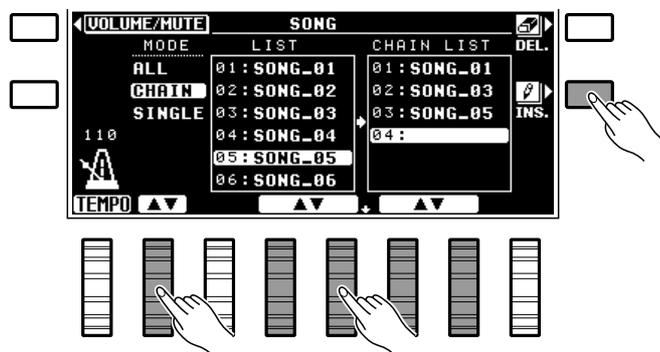
# Playing DOC (Disk Orchestra Collection) & General MIDI Music Software Disks

## 2 Select a Playback Mode & Song Number If Necessary

If the song select display is not showing, press the **SONG SELECT** LCD button to recall it. Three song playback modes are available: **ALL**, **CHAIN**, and **SINGLE**. Use the ▲▼ LCD dial next to the **TEMPO** dial to select the desired playback mode.

### NOTES

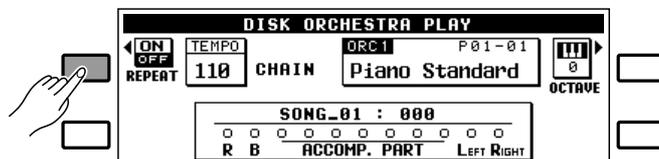
- The DOC and GM chain list data can be saved to or loaded from disk (page 91). Further, this data is retained in memory even when the power is off if the "F7: UTILITY MEMORY BACKUP" function is turned ON.



<b>ALL</b>	All songs shown in the song list will be played in sequence.
<b>CHAIN</b>	A specified sequence of songs from the song list will be played in sequence. When CHAIN is selected use the LIST ▲▼ LCD dials to select a song to add to the chain, then press the INS. LCD button to add that song to the chain. To delete songs from the chain use the CHAIN LIST ▲▼ LCD dials to select the song you want to delete, then press the DEL. LCD button.
<b>SINGLE</b>	Only a single specified song is played. When SINGLE is selected use the LIST ▲▼ LCD dials to select the song you want to play.

## 3 Set the Repeat Function As Required

Use the **REPEAT** LCD button to turn repeat playback **ON** or **OFF**. When repeat is **ON**, the selected song or sequence of songs will play repeatedly until stopped. When repeat is **OFF**, the song(s) will play through once, then playback will stop automatically.



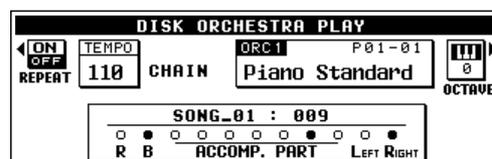
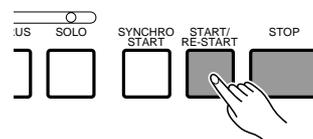
## 4 Press [START/RE-START] To Begin Playback

Start playback by pressing the **[START/RE-START]** button. The current measure number will be shown to the right of the current song number on the display during playback, and the activity of the various parts is shown by the circular indicators below the current song number.

Playback can be stopped at any time by pressing the **[STOP]** button.

### NOTES

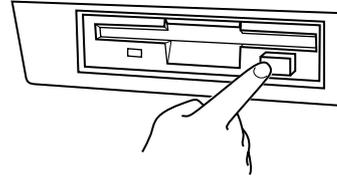
- The **TEMPO** LCD dial or **TEMPO [-]** and **[+]** buttons can be used to adjust the playback tempo before or during playback.
- Some Disk Orchestra software does not produce a tempo display (e.g. free-tempo phrases, etc.). In this case, three bars appear instead of the usual tempo value on the display.



- If the inserted disk contains both DOC and GM song files, the DOC mode will automatically be selected. GM song data may not be reproduced correctly in this case.

## 5 Eject the Disk When Done

When you've finished with the currently loaded disk, simply press the disk drive **EJECT** button to remove it. This will automatically exit the DISK ORCHESTRA mode.



### NOTES

- There are actually three ways to exit from the DOC mode:
  - 1) Remove the DOC disk.
  - 2) Press the [DISK ORCHESTRA/GENERAL MIDI] or [EXIT] button (the normal, DOC, and General MIDI modes are selected in sequence).
  - 3) Receive any MIDI exclusive message that selects a different mode from an external MIDI device.
- NEVER eject a disk or turn the power off while:
  - 1) the DISK ORCHESTRA function is playing.
  - 2) the DISK is formatting or recording.

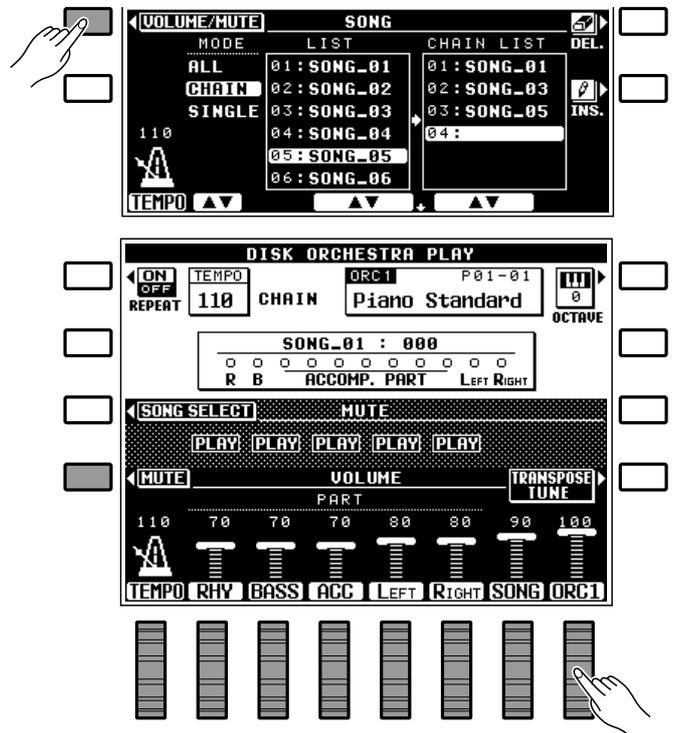
## Volume Control

If the volume control/mute display is not showing, press the **VOLUME/MUTE** LCD button to recall it. The volume-control LCD dials function in the same way as the volume controls in the normal play mode, each controlling the volume of the corresponding part, as listed below. As always, the **MASTER VOLUME** control adjusts the overall volume level.

<b>ORC1</b>	Adjusts the volume of ORCH.1 played on the keyboard.
<b>SONG</b>	Adjusts the overall volume of the song.
<b>RIGHT</b>	Adjusts the volume of the right-hand part.
<b>LEFT</b>	Adjusts the volume of the left-hand part.
<b>ACC</b>	Adjusts the volume of the disk backing.
<b>BASS</b>	Adjusts the volume of the disk bass part.
<b>RHY</b>	Adjusts the volume of the disk rhythm part.

### NOTES

- Operation of the volume controls may be different with some songs. Further, the reverb or other effect can be turned on or off for all parts by using the **REVERB** or **EFFECT** button.
- During DOC playback reverb (type) ON/OFF data may be read from the disk. When OFF data is received, the



depth values for all parts other than the part you are playing are set to "0." This means that unless you change the depth setting, reverb cannot be applied to those parts even if the **REVERB** indicator is lit. Also, since the effect depth values for all parts other than the part you will be playing are set to "0" before DOC playback is started, you will have to change the depth settings before effects can be applied to those parts, even if the **EFFECT** indicator is lit.

- Since only the **ORCH.1** voice is used for the part played on the keyboard in the DOC mode, no **ORCH.2** volume control is provided.

## Muting Specific Parts

By turning off (muting) the left- or right-hand melody part, or both, you can practice playing those parts on the PSR-6000 keyboard. The PSR-6000 also makes it possible to mute the rhythm, bass, and accompaniment parts. Sheet music is provided with the Disk Orchestra Collection disks.

Press the **MUTE** LCD button (from the **VOLUME** display) and use the **RHY**, **BASS**, **ACC.**, **LEFT**, and/or **RIGHT** LCD dials to set the corresponding part to **PLAY**, **MUTE**, or **SOLO**.

<b>PLAY</b>	The corresponding part plays normally.
<b>MUTE</b>	The corresponding part is muted and will not play.
<b>SOLO</b>	Only the corresponding part will play — all others are muted.

Press the **VOLUME** LCD button when you want to go back to the volume-control display.

### NOTES

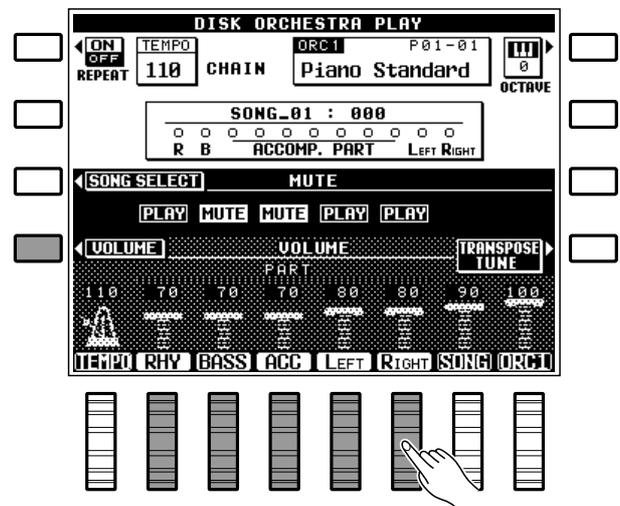
- The left and right-hand parts cannot be played separately on some songs.
- The appropriate voice for the part you are going to play is automatically selected when you select a song (When "ALL" is selected, the voice for the first song is automatically selected).

## Octave, Transpose, and Tune

The **OCTAVE** and **TRANSPOSE/TUNE** LCD buttons function in exactly the same way as in the normal play mode (page 17, 18).

## Other Controls That Function In the DOC Mode

- Keyboard.
- Voice select buttons (the DOC voice list is different from the normal play mode voice list — the voice group [12] button does not function).
- START and STOP buttons (ABC does not function).
- REVERB and EFFECT buttons (REVERB is automatically turned ON when the DOC mode is engaged).
- TEMPO buttons (the recommended tempo can be selected by pressing both the [+] and [-] buttons simultaneously).
- SUSTAIN button and pedal (Affects notes played on the keyboard. Sustain Part Select fixed at Orchestra 1).



- PITCH BEND wheel (affects notes played on the keyboard. Pitch Bend Select fixed at Orchestra 1. Range fixed at  $\pm 300$  cents).
- MODULATION/EFFECT wheel (modulation applies to Orchestra 1).
- PAD (fixed at PERCUSSION. Voices fixed as per normal play mode, and cannot be changed in the DOC mode).
- FOOT SWITCH (applies to notes played on the keyboard. Footswitch Select fixed at GLIDE).
- FOOT CONTROLLER (Applies to notes played on the keyboard. Foot Controller Select fixed at Orc1Vol).
- FUNCTION buttons (F2 and F8 only — pages 84 and 102).
- LIST HOLD button.
- HELP button.
- MIDI transmission/reception.

### NOTES

- Since octave offset is applied to some voices played via the keyboard in the DOC mode, the pitch of notes played via the keyboard may not match that of those played via MIDI note numbers.

## General MIDI Disk Playback

General MIDI disk playback is essentially the same as Disk Orchestra Collection disk playback, except for the differences listed below. Refer to the Disk Orchestra Collection procedure, above, for operational details.

### NOTES

- Only GM data recorded on 3.5" 2DD IBM-format disks in standard MIDI file format 0 or 1 can be played on the PSR-6000 (up to track 17 with format 1). Also note that data that does not comply with GM System Level 1 specifications may not be reproduced.
- No measure number appears on the GM mode display.
- \* "IBM" is a registered trademark of International Business Machines.

## Volume Control

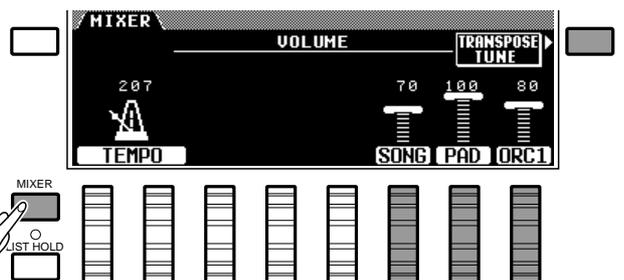
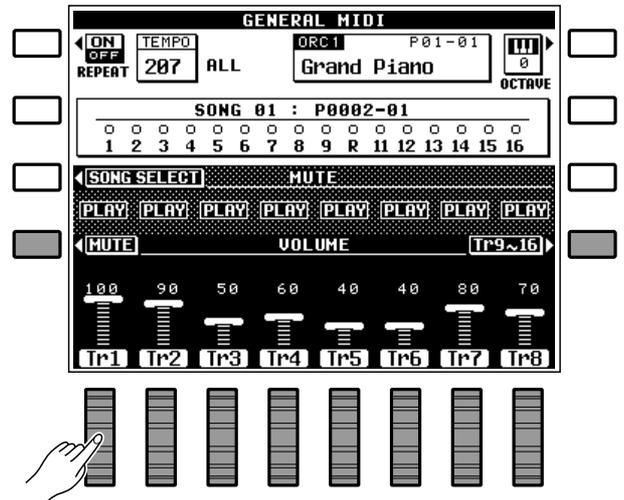
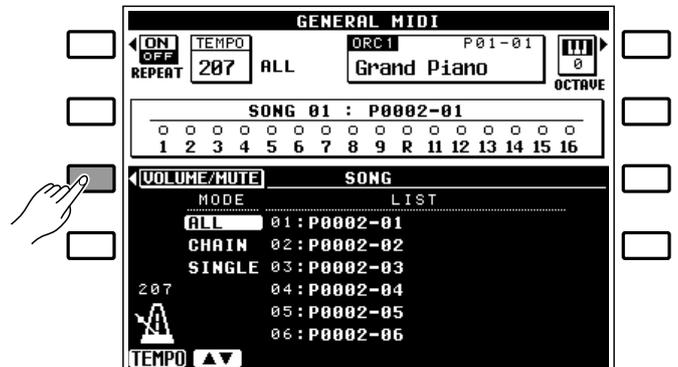
If the volume control display is not showing, press the **VOLUME** LCD button to recall it. The volume-control LCD dials function in the same way as the volume controls in the normal play mode, each controlling the volume of the corresponding track. Use the **Tr1-8** or **Tr9-16** LCD button to switch between the track 1-through-8 and track 9-through-16 displays, as required. As always, the **MASTER VOLUME** control adjusts the overall volume level.

Press the **[MIXER]** button to access the **SONG**, **PAD**, and **ORC1** volume controls listed below. The standard **TRANSPOSE** and **TUNE** functions can also be accessed from this screen by pressing the **TRANSPOSE/TUNE** LCD button. Press the **[MIXER]** button again, or the **[EXIT]** button, to return to the main GM mode display.

<b>SONG</b>	Adjusts the overall volume of song playback.
<b>PAD</b>	Adjusts the volume of the PSR-6000 pads.
<b>ORC1</b>	Adjusts the volume of ORCH.1 played on the keyboard.

### NOTES

- The reverb or other effect can be turned on or off for all parts by using the **REVERB** or **EFFECT** button.

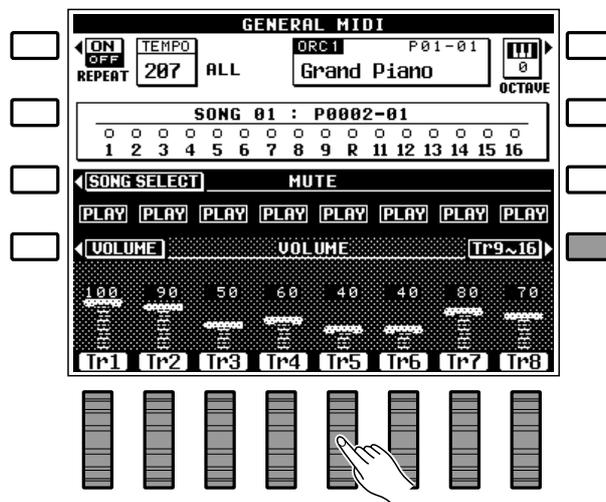


## Muting Specific Tracks

Individual tracks can be turned on or off (muted) as required. Press the **MUTE** LCD button (from the **VOLUME** display) and use the LCD dials to set the corresponding track to **PLAY**, **MUTE**, or **SOLO**. Use the **Tr1-8** or **Tr9-16** LCD button to switch between the track 1-through-8 and track 9-through-16 displays, as required.

<b>PLAY</b>	The corresponding track plays normally.
<b>MUTE</b>	The corresponding track is muted and will not play.
<b>SOLO</b>	Only the corresponding track will play — all others are muted.

Press the **VOLUME** LCD button when you want to go back to the volume-control display.



## Octave

The **OCTAVE** LCD button functions in exactly the same way as in the normal play mode (page 18).

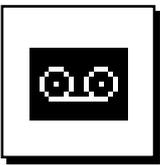
## Other Controls That Function In the General MIDI Mode

- Keyboard.
- Voice select buttons (the General MIDI voice list is different from the normal play mode voice list — the voice group [12] button does not function).
- START and STOP buttons (ABC does not function).
- REVERB and EFFECT buttons (REVERB is automatically turned ON when the GM mode is engaged).
- TEMPO buttons (the recommended tempo can be selected by pressing both the [+] and [-] buttons simultaneously).
- SUSTAIN button and pedal (Affects notes played on the keyboard. Sustain Part Select fixed at Orchestra 1).
- PITCH BEND wheel (affects notes played on the keyboard. Pitch Bend Select fixed at Orchestra 1. Range fixed at ±300 cents).
- MODULATION/EFFECT wheel (modulation applies to Orchestra 1).

- PAD (fixed at PERCUSSION. Voices fixed as per normal play mode, and cannot be changed in the GM mode).
- FOOT SWITCH (applies to notes played on the keyboard. Footswitch Select fixed at GLIDE).
- FOOT CONTROLLER (Applies to notes played on the keyboard. Foot Controller Select fixed at Orc1Vol).
- FUNCTION buttons (F2 and F8 only — pages 84 and 102).
- LIST HOLD button.
- HELP button.
- MIDI transmission/reception.

### NOTES

- See the "GM/DOC Mode Percussion Map" on page 121 for details on which rhythm voices are played by which note numbers.



# The Sequencer

The PSR-6000 features an 8-track sequencer that allows you to record and play back original musical creations — along with auto accompaniment if required. You can record the accompaniment and orchestra parts separately or at the same time. If, for example, you record the accompaniment first and then record your own performance while listening to playback of the accompaniment, you're free to use the entire keyboard for your performance rather than being limited to only the upper keyboard area. You can also play back each part independently or in any combination. For even further versatility, the PSR-6000 sequencer allows different songs to be saved to or re-loaded from floppy disk.

## Recording

As you become more familiar with the PSR-6000 sequencer you'll probably develop a recording procedure that best suits your particular musical requirements. Here, to get you started, is the most simple, straightforward way to approach sequencer recording.

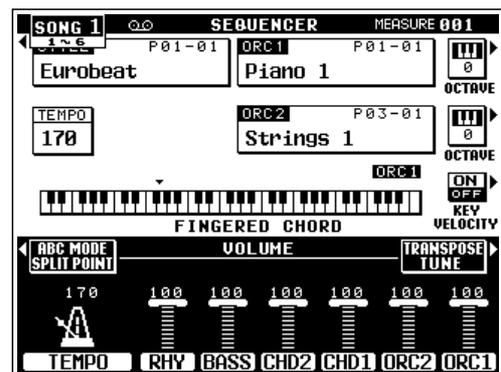
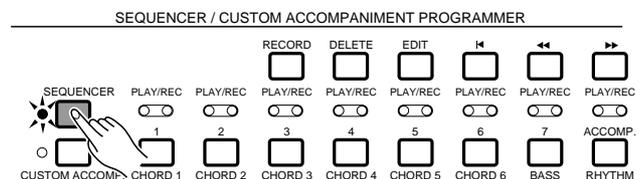
### 1 Engage the Sequencer

Press the [SEQUENCER] button to engage the sequencer. "SEQUENCER" will appear at the top of the display, the **MEASURE** number will appear to the right of this, and the top left LCD button will function as the sequencer's **SONG** select button.

If the sequencer contains previously recorded data, the green PLAY indicators of tracks containing data will light when the sequencer is engaged. Any of these tracks can be muted prior to engaging the record-ready mode (below) by pressing the corresponding track button so that the green PLAY indicator flashes.

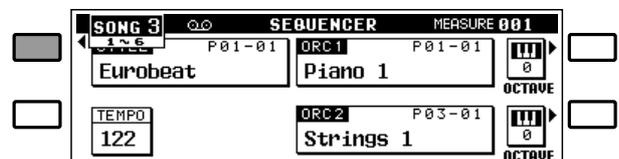


- The sequencer can also be engaged by pressing one of the track buttons.



### 2 Select a Song Number

The PSR-6000 sequencer can record up to 6 separate songs. Use the **SONG** LCD button to select the song number you want to record. The selected song number is shown to the right of "SONG" on the display.



## 3 Set Up All Record Parameters

Select the accompaniment style you want to record with, voices, orchestration, harmony, and other parameters before actually beginning recording. A list of the parameters that can be recorded by the PSR-6000 sequencer is given below.

You may also need to select a specific record mode and other conditions accessible via the sequencer's METRONOME, HARMONY, and RECORDING TYPE functions, described on page 54.

### Recordable Parameters

#### Tracks 1 — 7

- Note on/off
- Pitch bend
- Modulation
- Sustain on/off
- Orchestra 1 & 2 volume
- Voice change (including custom voice on/off)
- Tempo (if ACCOMP. track contains no data)
- Glide on/off
- Percussion pad on/off\*
- Tempo pad tempo value\*
- Multi pad on/off (phrase only)\*

\* The pad mode selected when the sequence is played back will be used.

\* Press the Pad [REC/STOP] button if you want to stop the phrase pad playback in the middle of the song recording.

#### NOTES

- If the record and playback pad modes are different, pad on/off events will not be reproduced.
- If parameter changes are memorized using the Panel Registration or One Touch Setting features during recording, only those parameters that can be recorded on the current track will be memorized.
- The time signature cannot be changed once a song has been recorded.

#### Accompaniment Track

- Chord & root (note on/off in Manual Bass mode)
- Style change (styles with the same time signature only)
- Rhythm volume
- Bass volume
- Chord 1 volume
- Chord 2 volume
- Tempo
- Reverb on/off & depth
- Reverb type
- Effect on/off & depth
- Effect type
- Effect control

- Harmony on/off and type
- Interactive Accompaniment on/off
- Interactive Accompaniment section
- Interactive Accompaniment mode & sensitivity
- Auto Bass Chord mode
- Percussion Pad on/off
- Pad function (Multi/Tempo/Perc)
- Repeat/Synchro/Break on/off
- Manual bass on/off, voice
- Intro, fill in & ending
- Chord pad chord sequence
- Tempo pad tempo value

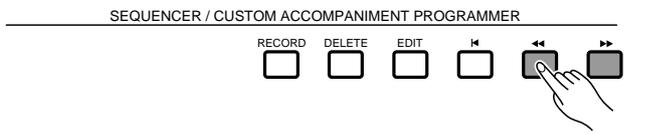
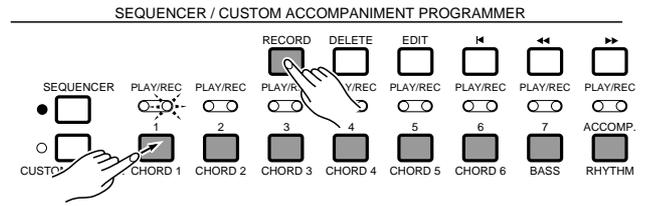
## 4 Select the Record Track(s)

AUTO BASS CHORD accompaniment can only be recorded on the ACCOMP. track. The ORCH.1 and ORCH.2 voices can be recorded on any of the remaining 7 tracks, but only one of these tracks can be recorded at a time if the normal ORCH.1 orchestration is selected. If the ORCH.2+1 or ORCH.2◀▶1 orchestration is selected, two record tracks must be selected — the ORCH.1 voice will be recorded on the lower-numbered track while the ORCH.2 voice will be recorded on the higher-numbered track. This means that a maximum of three record tracks can be specified when the ORCH.2+1 or ORCH.2◀▶1 orchestration is selected: ACCOMP. and any two numbered tracks.

To select the record track(s) and engage the record-ready mode, hold the **[RECORD]** button and press the appropriate track button(s). The red REC indicator for the tracks will flash. Also note that the AUTO BASS CHORD indicator will light automatically when the ACCOMP. track is selected.

**NOTES**

- The upper markings on the track buttons apply when the SEQUENCER mode is engaged (1 through 7, and ACCOMP.). The lower markings when the CUSTOM ACCOMPANIMENT PROGRAMMER described on page 62 is operating.
- If you are adding new material to tracks that have already been recorded, the **[◀▶]** and **[▶▶]** buttons can be used at this point to move to any measure number from which you want to begin recording. The **[◀▶]** and **[▶▶]** buttons will not function once recording has been started.

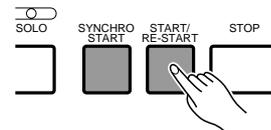


## 5 Start Recording

Recording will start as soon as the **[START/RE-START]** button is pressed or, if you also press the **[SYNCHRO START]** button, as soon as any key on the keyboard is pressed.

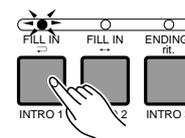
If the ACCOMP. track is selected and you start recording by pressing the **[START/RE-START]** button, only the rhythm will play until the first chord (FINGERED or SINGLE FINGER) is played on the left-hand section of the keyboard.

If you start recording in the SYNCHRO START mode by playing on the right-hand section of the keyboard, a metronome will sound in place of the rhythm and AUTO BASS CHORD accompaniment until a key is played on the left-hand section of the keyboard.



**NOTES**

- You can also start recording with an introduction by pressing any of the **[INTRO]** buttons.
- The restart function can not be used while the sequencer mode is engaged.
- Previously recorded fill-ins may not always be erased if that section is re-recorded or deleted.

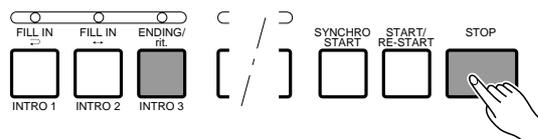


## 6 Play

Play the accompaniment and/or orchestra parts. The current measure number is shown in the upper right corner of the display as you record.

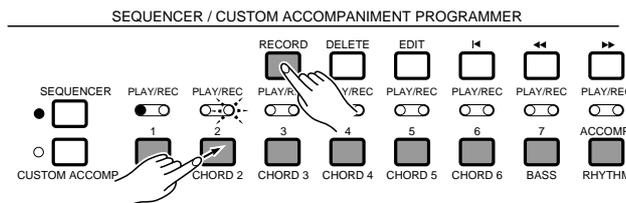
## 7 Stop Recording

Press the [STOP] button to stop recording immediately, or the [ENDING/rit.] button to finish off the recording with an appropriate ending. The first measure of the sequence is automatically selected when recording is stopped.



## 8 Record a New Track

To record a new track, simply select a new voice and other parameters as required, select a new track as described in step 4, then record. All previously recorded tracks will automatically be set to the PLAY mode so you can record the new material while listening to the material you've already recorded. Repeat this procedure until your sequence is complete.



### NOTES

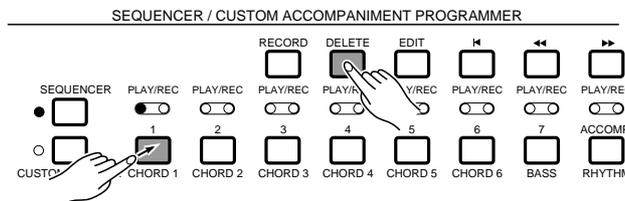
- Up to approximately 14,000 notes can be recorded for all six sequencer songs. The exact number of notes that can be recorded, however, will depend on the type of data you record.

## Deleting Tracks

If you make a mistake while recording or simply want to delete a track from your sequence, press the track button corresponding to the track you want to delete while holding the [DELETE] button.

### NOTES

- Tracks cannot be deleted while the record-ready mode is engaged, during recording, or during playback.

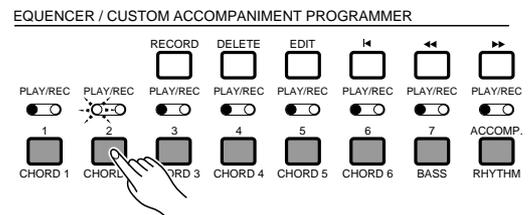
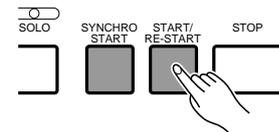


# Playback

## 1 Start Playback

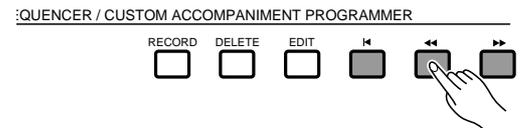
Since tracks are automatically set to the PLAY mode once they have been recorded, and tracks containing data are automatically set to the PLAY mode when the sequencer is initially engaged by pressing the [SEQUENCER] button, all you have to do to play back a sequence is to press the [START/RE-START] button (the green PLAY LEDs of all tracks set to the PLAY mode will be lit). If you first press the [SYNCHRO START] button, sequencer playback can be started by playing any key on the keyboard.

Any of the PLAY tracks can be muted before or during playback by pressing the corresponding track button. The PLAY indicator will flash when a track is muted. Normal playback can be restored by pressing the track buttons of muted tracks a second time (the PLAY indicator will light continuously).



**NOTES**

- Before starting playback you can use the [◀◀] and [▶▶] buttons to move to any measure number from which you want to begin playback. The [◀] button goes directly to measure number 1.
- If the One Touch Setting SYNCHRO CHANGE parameter (page 89) is turned ON during ACCOMP. track playback, the One Touch Setting section will change in accordance with accompaniment section transitions and the result may be different from the recorded data.



## 2 Play along If You Like

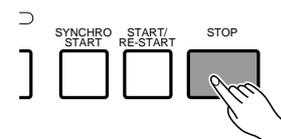
You can play along with the sequence using the entire PSR-6000 keyboard, selecting different voices and changing the tempo as required.

**NOTES**

- If any parameter changes are recorded in the sequence, the recorded changes will still take effect even if you manually change the parameters while playing.

## 3 Stop Playback

Playback will stop automatically when the end of the sequence is reached. At this point the parameters recorded on the ACCOMP. track will revert to their initial values. You can also stop playback at any time by pressing the [STOP] button.



## 4 Press [EXIT] When Done

Press the [EXIT] button to exit the sequencer mode and return to the normal play mode. The sequencer mode can also be exited by pressing the [SEQUENCER] button.



## Sequence Editing

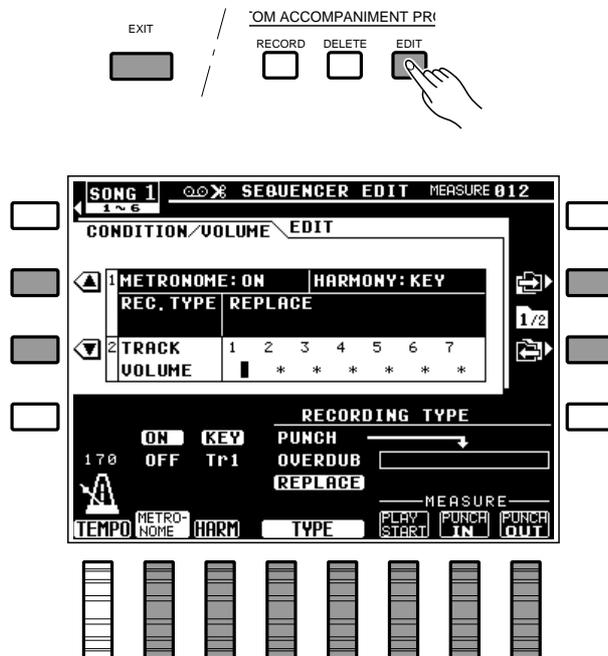
The PSR-6000 sequencer edit mode offers a range of functions that let you modify the recorded data and the way in which it is recorded in a number of ways.

Press the **[EDIT]** button while the sequencer is engaged to enter the sequencer edit mode. When you're finished editing press the **[EDIT]** button again or press the **[EXIT]** button to return to the sequencer.

The sequencer edit display has two main "pages" — **CONDITION/VOLUME** and **EDIT** — which are selected by using the **[→]** and **[←]** LCD buttons. The various functions within the selected display page are selected by using the **▲** and **▼** LCD buttons. The corresponding parameters are edited via the appropriate LCD dials.



- The edit functions may not work if a large amount of sequence data has been recorded.



### CONDITION/VOLUME — CONDITION

The **CONDITION** function actually includes three functions: **METRONOME**, **HARMONY**, and **RECORDING TYPE**.

#### ● METRONOME

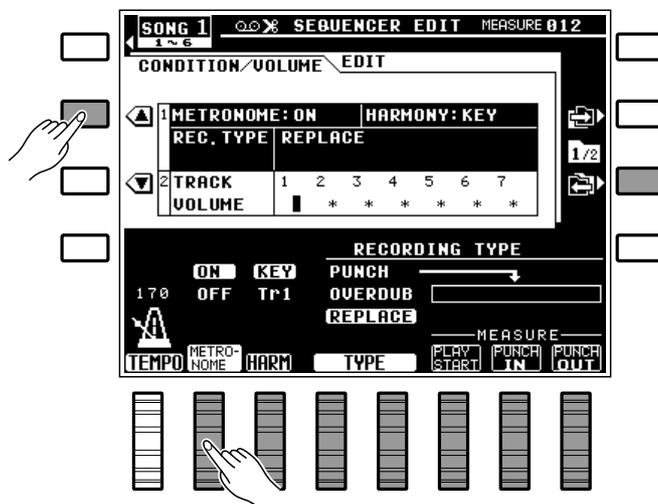
Allows the recording metronome sound to be turned on or off. Use the **METRONOME** LCD dial to turn **ON** or **OFF** as required.



- The metronome only sounds during recording when no rhythm is playing.

#### ● HARMONY

Determines whether harmony will be applied to the keyboard or a track part. Use the **HARM** LCD dial to select the harmony part — "**KEY**" or "**TR1**" through "**TR7**".



When the “**KEY**” harmony setting is selected (this is the default setting when the sequencer mode is engaged), harmony will be applied to notes played on the keyboard. If the “**TR1**” harmony setting is selected, harmony will be applied to the track-1 part. If “**TR2**” is selected harmony is applied to track 2, and so on.

**NOTES**

- If Harmony is not turned on during recording, it will automatically be turned off each time playback is stopped if it is turned on before or during playback.
- Harmony can only be applied to tracks that contain data.

## ● RECORDING TYPE

Selects the Replace, Overdub, or Punch record mode. Use either of the **TYPE** LCD dials to select the **REPLACE**, **OVERDUB**, or **PUNCH** record mode:

**REPLACE** If replace recording is selected, any previous data on the track being recorded will be erased and replaced by the new material. This is the “default” mode which is selected when the sequencer is initially engaged.

**OVERDUB** If overdub recording is selected, previous material on that track will be retained and the new material will be added to it.

**PUNCH** Punch-in recording allows a specified measure or range of measures to be re-recorded (replaced) without affecting previously recorded material before and after the punch-in range. When the Punch mode is selected you must also specify the measure from which playback is to begin prior to the “punch-in” point at which recording will actually begin (use the **PLAY START** LCD dial), the punch-in measure from which recording is to begin (use the **PUNCH IN** LCD dial), and the punch-out measure at which recording is to end (use the **PUNCH OUT** LCD dial).

**NOTES**

- It's generally convenient to set the “PLAY START” measure in the PUNCH mode to just a few measures before the punch-in point. This allows you to get the feel of the music and prepare to start playing at the punch-in point. You can even play along with the material prior to the actual punch-in point so you'll flow naturally into the punch-in recording range.
- A footswitch (an optional FC5 footswitch can be used) plugged into the rear-panel FOOT SWITCH jack can also be used to punch-in and punch-out when the footswitch “PUNCH IN/OUT” function is selected via the “FOOT SWITCH” function described on page 88. With the sequencer running in the Punch Record mode, press the footswitch at the point you want to begin recording (i.e. to “punch in”), and again to stop recording (punch out).
- Please note that the punch-in record function can only be used on tracks that already contain recorded material.

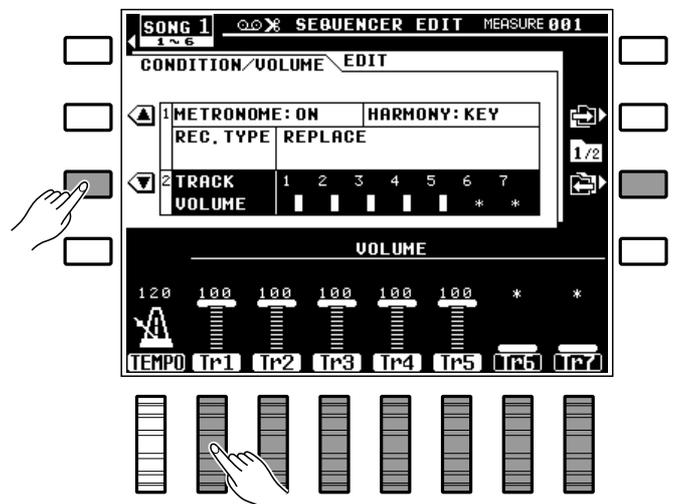
## CONDITION/VOLUME — TRACK VOLUME

This function lets you independently set the playback volume of each of the sequencer’s seven orchestra tracks.

Use the LCD dials — **Tr1** through **Tr7** — to set the volume of the corresponding tracks to a value between “**0**” (minimum volume — no sound) and “**100**” (maximum volume).

**NOTES**

- Only tracks that contain data are available for volume control — others are indicated by an asterisk (\*).
- Any recorded volume changes will override these settings.



## EDIT — TRACK COPY/MIX

Copies the data from one recorded track to another, or mixes the data from two recorded tracks (except the ACCOMP. track).

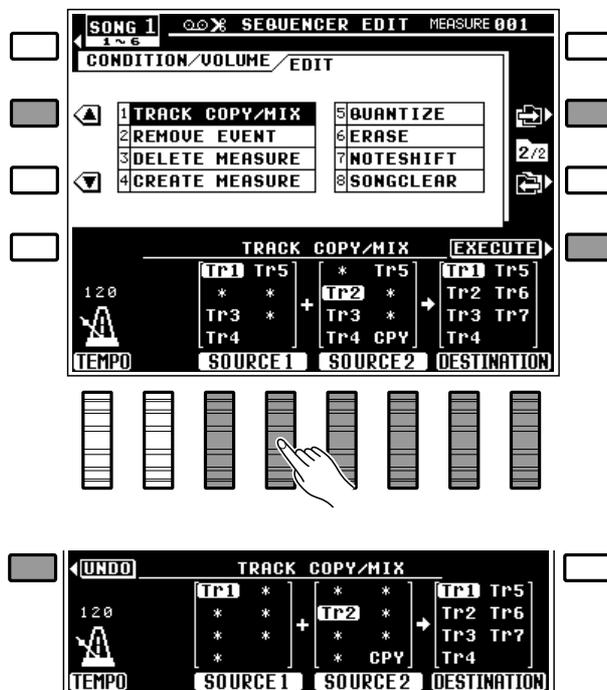
Use the **SOURCE1** LCD dial to set the first source track, the **SOURCE2** LCD dial to set the second source track, and the **DESTINATION** LCD dial to set the destination track. If “CPY” is selected for the **SOURCE2** parameter, only the **SOURCE1** track is copied to the destination track.

Once the source and destination tracks have been selected, press the **EXECUTE** LCD button to actually execute the copy or mixdown operation. “**Executing.**” will appear on the display while the operation is in progress, and “**Completed.**” will appear briefly when the operation has finished.

Immediately after execution an “**UNDO**” LCD button will appear on the left side of the display, and that button can be used to undo the copy or mixdown if it was executed by mistake. The undo function is only available until the next operation is performed.

### NOTES

- The mix function is most useful when you want to record more than 7 individual parts on the seven orchestra-part tracks. Successfully recorded parts can be combined using this function, thus opening up more tracks for further recording. The data in the source tracks is not erased during a mix operation.
- If the tracks that are mixed use different voices, the voice of the lower-numbered track will be used. Subsequent recorded voice changes will operate normally.
- Please note that only tracks containing data can be specified as the source tracks — tracks containing no data are indicated by an asterisk (\*).
- Any data in the destination track will be overwritten by data copied from the source 1 and 2 tracks.



### ● Copy

Source track 1



Copy to Destination track

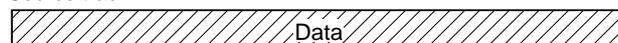


### ● Mix

Source track 1



Source track 2



Destination track



## REMOVE EVENT

Removes all occurrences of the specified event type (pitch bend, modulation wheel, volume, sustain, or program change operations) from the specified measure or range of measures in the specified track (accompaniment track not available).

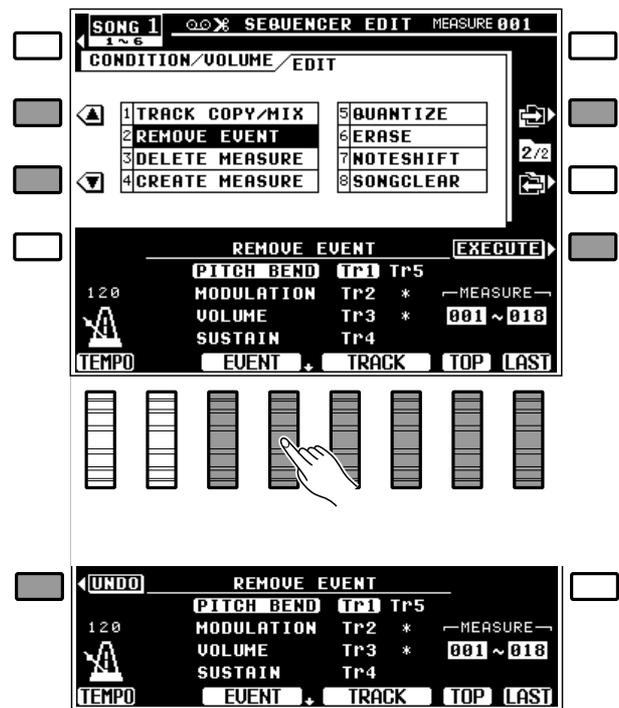
Use the **TRACK** LCD dials to set the track number, the **EVENT** LCD dials to set type of event to be removed, the **TOP** LCD dial to set the number of the first measure in the range from which the events are to be removed, and the **LAST** LCD dial to set the number of the last measure in the range from which the events are to be removed.

Once the track, event, and measure numbers have been specified, press the **EXECUTE** LCD button on the right side of the display to actually execute the remove event operation. “**Executing.**” will appear on the display while the operation is in progress, and “**Completed.**” will appear briefly when the operation has finished.

Immediately after execution an “**UNDO**” LCD button will appear on the left side of the display, and that button can be used to undo the remove event operation if it was executed by mistake. The undo function is only available until the next operation is performed.

### NOTES

- This function is handy if, for example, you've played some wild pitch bends that don't sound right. You can remove only the offending pitch bends without erasing the entire track.
- Be careful when removing effect on/off events. If, for example, you remove a pitch bend off event in a specified measure, the pitch bend applied in a previous measure will remain in effect until the next pitch bend event is encountered. Similarly, if you remove all program change events from the beginning of a track, the voice that was initially selected when the track was recorded will be used.



## DELETE MEASURE

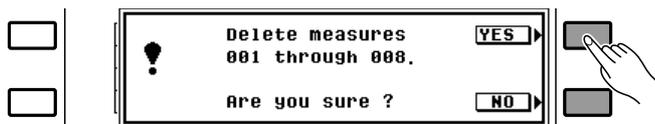
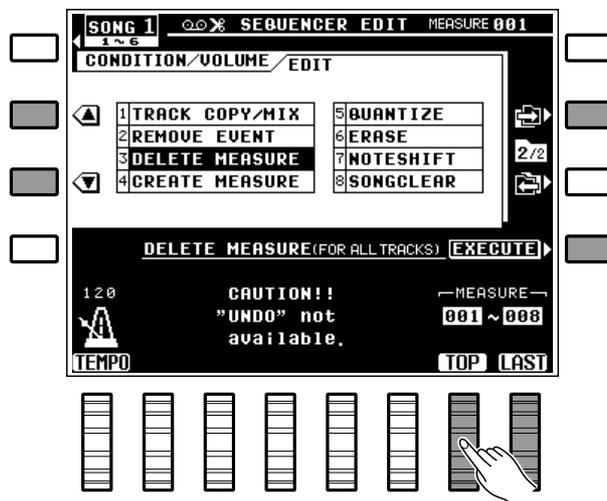
Deletes the specified measure or range of measures from all tracks (including the accompaniment track).

Use the **TOP** LCD dial to specify the number of the first measure in the range to be deleted, and the **LAST** LCD dial to specify the number of the last measure in the range to be deleted.

Once the top and last measure numbers have been selected, press the **EXECUTE** LCD button to execute the delete operation. The “**Are you sure?**” confirmation prompt will appear on the display: press the **YES** LCD button to go ahead with the delete operation, or the **NO** LCD button to cancel. “**Executing.**” will appear on the display while the operation is in progress, and “**Completed.**” will appear briefly when the operation has finished.

### NOTES

- It's important to remember that a Delete Measure operation affects all tracks simultaneously, and that measures following the deleted range are moved back to take the place of the deleted measures. This differentiates the Delete Measure function from the Erase function (described later), which replaces data in the specified range with rests.
- Be careful when deleting measures that contain effect on/off events — e.g. pitch bend, modulation, sustain, harmony, etc. If, for example, you delete a measure that contains a pitch bend off event, the pitch bend applied in a previous measure will remain in effect until the next pitch bend event is encountered.
- The Delete Measure operation has no “undo” function, so be absolutely sure you want to delete the selected material before actually executing the delete operation.



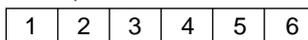
Delete Measures 4 through 6.



Measure 4 through 6 deleted.



Subsequent measures moved back.

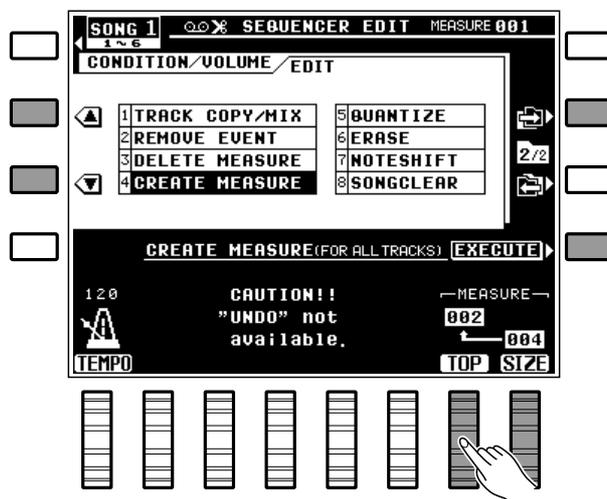


## CREATE MEASURE

Inserts a specified number of blank measures in all tracks (including the accompaniment track) at the specified measure number.

Use the **TOP** LCD dial to specify the number of the measure at which the blank measures are to be inserted, and the **SIZE** LCD dial to specify the number of blank measures to be inserted.

Once the top measure number and size have been selected, press the **EXECUTE** LCD button to actually execute the insert operation. The “**Are you sure?**” confirmation prompt will appear on the



display: press the **YES** LCD button to go ahead with the create measure operation, or the **NO** LCD button to cancel. “**Executing.**” will appear on the display while the operation is in progress, and “**Completed.**” will appear briefly when the operation has finished.



- Create Measure affects all tracks simultaneously. The specified number of blank measures is inserted before the existing data beginning at the specified measure

Create measure, size 3, at measure 6.

1	2	3	4	5	6
---	---	---	---	---	---

Measure 6 moved up; 3 blank measures inserted.

1	2	3	4	5				6
---	---	---	---	---	--	--	--	---

Result with new measure numbers.

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

number.

- The create measure operation has no “undo” function.

## ■ QUANTIZE

Aligns notes in the specified track to the nearest specified beat.

Use the **TRACK** LCD dial to select the track you want to quantize, and the **SIZE** LCD dial to specify the quantize size.

Once the track number and quantize size have been selected, press the **EXECUTE** LCD button to actually execute the quantize operation. “**Executing.**” will appear on the display while the operation is in progress, and “**Completed.**” will appear briefly when the operation has finished.

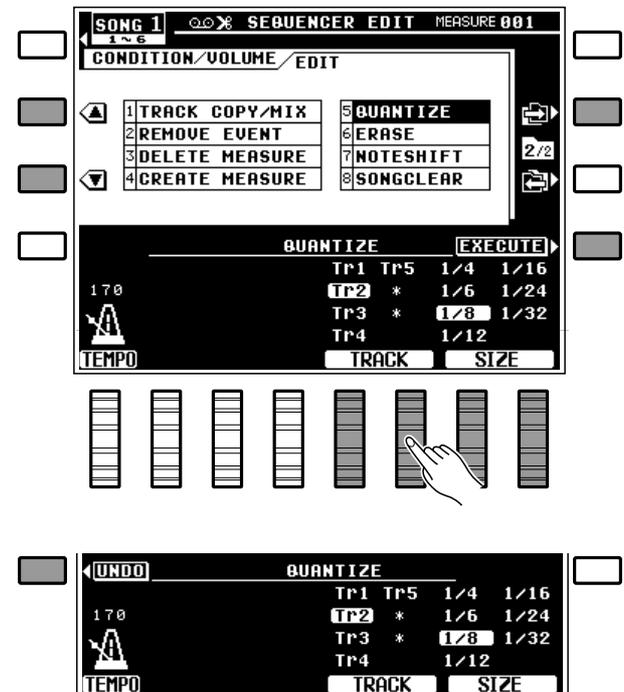
Immediately after execution an “**UNDO**” LCD button will appear on the left side of the display, and that button can be used to undo the quantize operation if it was executed by mistake. The undo function is only available until the next operation is performed.

The Quantize Sizes are:

- 1/4 =  1/4 note
- 1/6 =  1/4 note triplet
- 1/8 =  1/8 note
- 1/12 =  1/8 note triplet
- 1/16 =  1/16 note
- 1/24 =  1/16 note triplet
- 1/32 =  1/32 note



- Quantization is generally used to tighten up sloppy timing. Use it judiciously, however, because timing that is too perfect can sound cold and mechanical — unless, of course, you’re specifically aiming for a cold, mechanical feel. Always use a quantize value that is at



One measure of 8th notes before quantization



After quantization



least as “short” as the shortest notes in the track to be quantized. If you quantize a track containing 16th notes to 1/8 (8th notes), for example, some of the 16th notes will be aligned with 8th note beats, thus ruining the track.

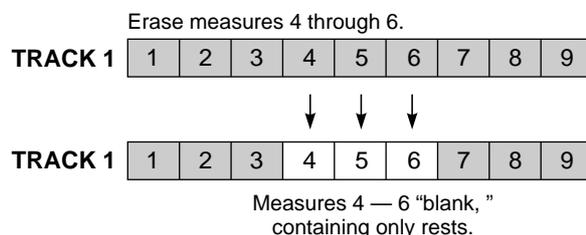
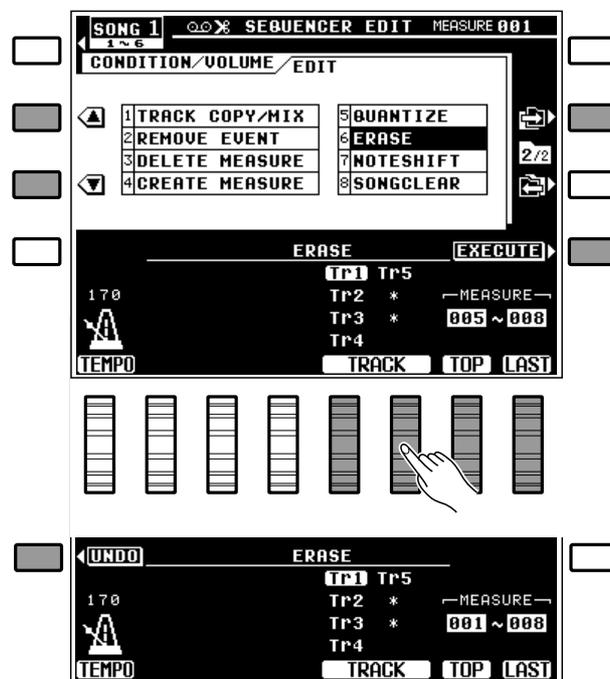
## ERASE

Erases all note and event (pitch bend, volume changes, etc.) data from the specified measure or range of measures in the specified track (accompaniment track not available), leaving blank measures.

Use the **TRACK** LCD dial to set the track number, the **TOP** LCD dial to set the number of the first measure in the range to be erased, and the **LAST** LCD dial to set the number of the last measure in the range to be erased.

Once the track and measure numbers have been selected, press the **EXECUTE** LCD button to actually execute the erase operation. “Executing.” will appear on the display while the operation is in progress, and “Completed.” will appear briefly when the operation has finished.

Immediately after execution an “**UNDO**” LCD button will appear on the left side of the display, and that button can be used to undo the erase operation if it was executed by mistake. The undo function is



only available until the next operation is performed.

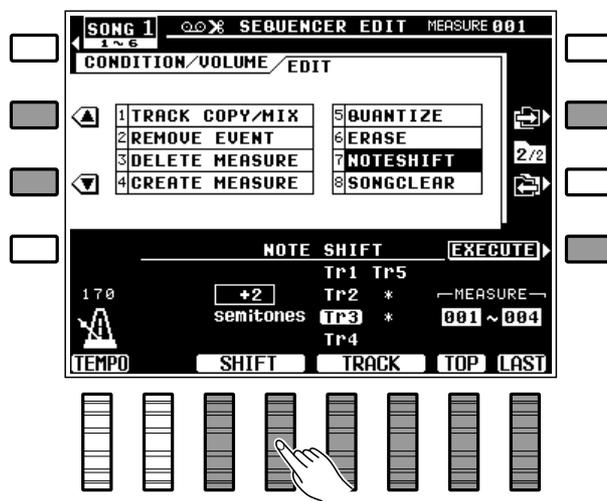
### NOTES

- An erase operation leaves the specified measures intact but blank.

## NOTE SHIFT

Shifts the pitch of notes in the specified measures of the specified track (accompaniment track not available) up or down by a maximum of two octaves, in semitone increments.

Use the **TRACK** LCD dial to set the track number, the **SHIFT** LCD dials to set the amount of note shift (see “NOTES” below), the **TOP** LCD dial to set the number of the first measure in the range in which the notes are to be shifted, and the **LAST** LCD dial to set the number of the last measure in the range



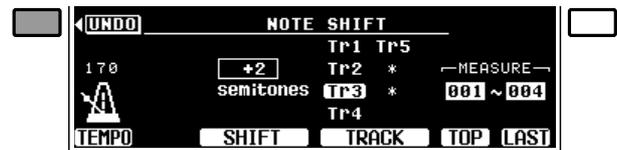
in which the notes are to be shifted.

Once the track, shift, and measure numbers have been specified, press **EXECUTE** LCD button to actually execute the note shift operation. “**Executing.**” will appear on the display while the operation is in progress, and “**Completed.**” will appear briefly when the operation has finished.

Immediately after execution an “**UNDO**” LCD button will appear on the left side of the display, and that button can be used to undo the note shift operation if it was executed by mistake. The undo function is only available until the next operation is performed.

**NOTES**

- The range of “SHIFT” values is from -24 to +24. A setting of “0” produces no note shift. Each increment represents a semitone, so a setting of +4, for example,



would shift the pitch of notes in the specified range up by an interval of a third. A setting of -12 would shift the notes down by one octave.

- The ability to selectively shift the pitch of specified measures and tracks makes it simple to create “modulations” (key changes) without having to reprogram entire passages, and to create simple harmonies.

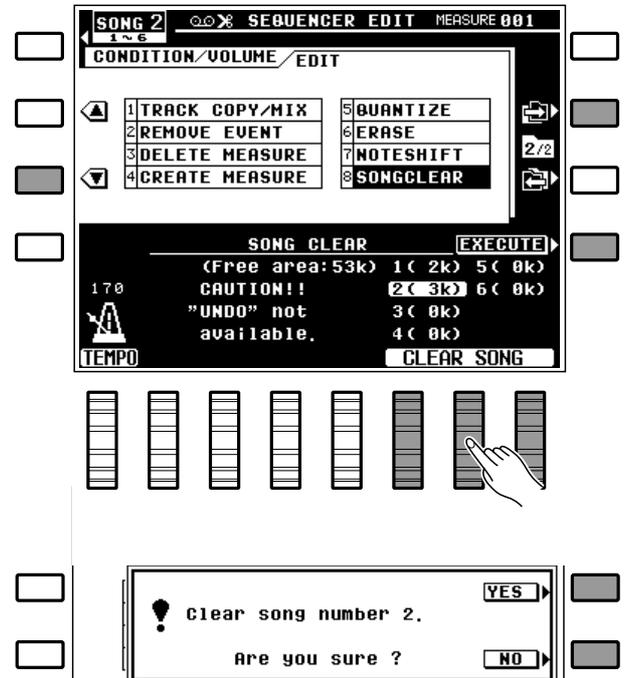
## SONG CLEAR

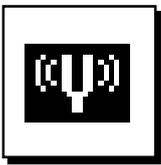
Deletes the entire song — i.e. deletes all data from all sequencer tracks.

Use the **CLEAR SONG** LCD dials to select the song to be cleared (1 ... 6), then press the **EXECUTE** LCD button to execute the song clear operation. The “**Are you sure?**” confirmation prompt will appear on the display: press the **YES** LCD button to go ahead with the clear operation, or the **NO** LCD button to cancel. “**Completed.**” will appear briefly when the operation has finished.

**NOTES**

- Remember that this function deletes all data from the specified song in one operation. If you think you might want to keep the data for later use or editing, be sure to save it to floppy disk (page 91) before executing the song clear operation.
- Be careful with **SONG CLEAR** — it has no “undo” function!
- The amount of sequencer memory used by each song is shown to the right of the song numbers in kilobytes (approximate). The total amount of free sequencer memory remaining is shown in parentheses under “**SONG CLEAR**” on the display.





# The Custom Accompaniment Programmer

The PSR-6000 CUSTOM ACCOMPANIMENT feature allows you to create and store up to 24 original accompaniment styles — including rhythm, bass, and chords — in addition to the 50+1 internal preset accompaniment styles (including preset IA style “New Age”). You can even create intro, fill-in, and ending patterns that can be saved with your accompaniment styles. More custom accompaniment styles can be created and saved to floppy disk (page 91). Your original accompaniment styles can be selected and played at any time, just like the presets.

## Basic Programming Procedure (Normal section)

Although many of the steps outlined below do not have to be carried out in the order given, the basic programming procedure presented below will serve as useful guide to get you started.

### 1 Select a Suitable Accompaniment Style.....

Begin by selecting one of the preset accompaniment styles that is close to the type of accompaniment you want to create. For example, select a WALTZ accompaniment style if you want to program a rhythm pattern in 3/4 time.

STYLE					
1	<input checked="" type="radio"/> DANCE	7	<input type="radio"/> LATIN	<input type="radio"/> PRESET	
2	<input type="radio"/> ROCK'N' ROLL	8	<input type="radio"/> LATIN POP	<input type="radio"/> USER SET	
3	<input type="radio"/> ROCK	9	<input type="radio"/> WALTZ	<input type="radio"/> CUSTOM A	
4	<input type="radio"/> POP	10	<input type="radio"/> COUNTRY	<input type="radio"/> CUSTOM B	
5	<input type="radio"/> BALLAD	11	<input type="radio"/> TRADITIONAL		
6	<input type="radio"/> JAZZ	12	<input type="radio"/> FOR DISK IA		

### 2 Engage the Custom Accompaniment Programmer.....

Press the [CUSTOM ACCOMP.] button. The CUSTOM ACCOMPANIMENT PROGRAMMER display will appear and the selected accompaniment style will begin playing, with accompaniment based on a C major chord. Also, the rhythm track will be set to the record mode (red REC indicator lit) and the Drum Kit voice will be selected. All other tracks containing data will be set to the PLAY mode (green PLAY indicator lit). PLAY tracks can be muted by pressing the corresponding track button (the green PLAY indicator will flash when the track is muted).



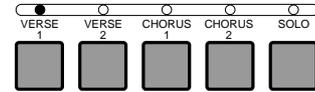
## 3 Select an Accompaniment Variation

Use the [VERSE 1], [VERSE 2], [CHORUS 1], [CHORUS 2], and [SOLO] buttons to select the accompaniment variation you want to program (variations cannot be selected when a custom style is selected).

Intro, fill-in, and ending patterns will be based on the selected variation. If you delete all existing data to program an accompaniment from scratch, and change the time signature (beat), the intro, fill-in, and ending patterns cannot be used.

### NOTES

- You could select a "section" — INTRO, FILL-IN, or ENDING — at this point instead of a variation. See "CREATING INTRO, FILL-IN, AND ENDING PATTERNS" on page 66.

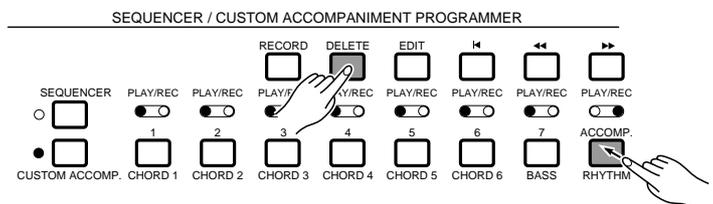


## 4 Program the Rhythm Track

Since the RHYTHM track is initially set to the REC mode and the Drum Kit voice is selected automatically, you can start programming the RHYTHM track immediately. You could also select the POP DRUM KIT voice using the normal voice selection procedure, and/or set a comfortable recording tempo before you actually start recording.

You can add new notes to the rhythm by playing the keys corresponding to the PSR-6000 drums and percussion instruments. The drums and percussion instruments produced are indicated by the symbols immediately above the keys (see the "Keyboard Percussion List" on page 118). Please note that pitch bend can not be applied to the rhythm instruments.

If you want to create a totally new rhythm track, press the [RHYTHM] track button while holding the [DELETE] button. This cancels all the instruments in the original rhythm track, leaving only a metronome sound (the metronome sound will not be heard while the rhythm is playing). The rhythm pattern can be up to 8 measures long (see "RECORD — MEASURE/BEAT" on page 69), and the pattern will continue to repeat so you can add new instruments during each repeat, if necessary.



# The Custom Accompaniment Programmer

## ● To Cancel A Single Percussion Instrument

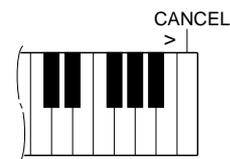
Although you can cancel all instruments in the RHYTHM track by pressing the [RHYTHM] track button while holding the [DELETE] button, it is also possible to cancel a single instrument to eradicate a mistake or simply eliminate an unwanted instrument. While holding the CANCEL key (the highest key on the PSR-6000 keyboard), press the percussion key corresponding to the instrument you want to cancel. The selected instrument should now be cleared from the pattern.



- The appropriate voice must be selected in order to cancel individual instruments — if you can't cancel an instrument even after following the above procedure, select another drum voice (DRUM KIT or POP DRUM KIT) and try again.

## ● To Add Accents

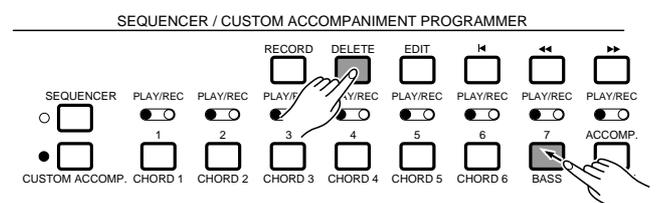
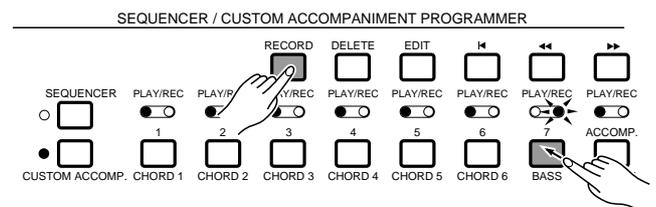
To accent specific beats after recording the rhythm, press the accent key (the second to highest key on the keyboard, with the “>” symbol) at the timing of beats you want to accent.



## 5 Program the Bass and Chord Tracks

After the RHYTHM track has been programmed (or it can be left as it is if no changes are required), you can select a bass or chord track for programming by pressing the [BASS] or a [CHORD] track button while holding the [RECORD] button (tracks containing preset data cannot be selected for recording). You can also select the voice you want to record with using the normal voice selection procedure. The RHYTHM track will automatically switch to the PLAY mode when a new REC track is specified. Please remember that only one track can be programmed at a time. You can press the [SYNCHRO START] button to engage the synchro start ready mode if you want to start recording from the first beat of the first measure.

Play notes or chords to be added to the existing data, or delete all data on the track (press the track button while holding the [DELETE] button) and start from scratch. The bass and chord tracks must be programmed in the key of C major!



Continue selecting new record tracks, and program until your custom accompaniment is complete.

## NOTES

- *Unwanted tracks can be deleted from the accompaniment by holding the [DELETE] button and pressing the appropriate track button.*
- *Although the bass and chord tracks must be programmed in C major, they are automatically re-harmonized when the custom accompaniment style is used in the play mode, and can be used in any key, major or minor.*
- *When programming an accompaniment from scratch, you can select a new voice that will take effect from the beginning of the accompaniment after deleting all tracks. Other voice changes added while programming will take effect from the point at which they are made.*
- *The synchro start, start, and stop functions can be used when recording a custom accompaniment. The re-start function, however, cannot be used.*
- *Pitch bend, modulation, and sustain changes are not recorded if the accompaniment is stopped — the accompaniment must be running for parameter changes to be recorded.*
- *The Custom Accompaniment Programmer memory capacity is limited. When the available memory for the track you are recording is exhausted, the “Work area full !!” display will appear and further recording on that track will be impossible unless existing data is deleted. Further, if the data size is too big when you perform a save operation, “Memory full!! Cannot store data” will appear on the display.*
- *Only the non-percussion and non-dual preset voices in groups 1 through 10 can be used to record bass and chord parts (custom voices cannot be used).*

## 6 Set a New Default Tempo .....

If necessary, set a new default tempo for the custom accompaniment style by using the **TEMPO** LCD dial or the **TEMPO [-]** and **[+]** buttons.

## 7 Give the Finished Accompaniment Style a Name and Assign it to a CUSTOM STYLE Number .....

Use the “NAME” function described on page 68 to give your custom accompaniment style an original name, then use the “STORE” function described on page 72 to assign the accompaniment style to a CUSTOM STYLE number.

## Creating Intro, Fill-In, & Ending Sections

The custom accompaniment programmer allows you to create four sets of intro, fill-in, and ending sections that can be saved and later used with custom accompaniment styles.

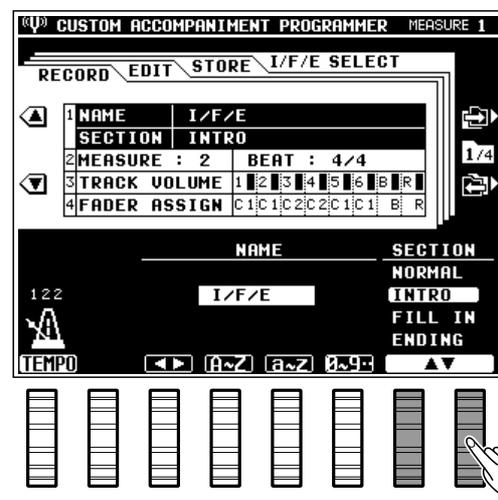
### Programming a Preset Intro, Fill-in, or Ending Section

#### 1 Select an Intro, Fill-in or Ending Section

After selecting a suitable accompaniment style and engaging the Custom Accompaniment Programmer as described in steps 1 and 2 of the “Basic Programming Procedure” (page 62), use the **SECTION** LCD dials to select the **INTRO**, **FILL IN**, or **ENDING** section for programming.

##### NOTES

- If any edits to the **NORMAL** section data have been made before you do this, the “Edited data not stored!” message will appear — press the **YES** LCD button to store the edited data and move on to the new section, **NO** to ignore the edited data and go on to the new section, or **CANCEL** to return to the last operation.



#### 2 Program the Selected Section(s)

Program the selected section as described in steps 4 and 5 of the “Basic Programming Procedure” (page 63, 64). Select a different section and repeat as necessary.

##### NOTES

- The default tempo will be determined by the tempo set for the **NORMAL** section.
- Names cannot be individually programmed for the intro, fill-in, or ending sections.

#### 3 Assign the Programmed Sections to a Custom Accompaniment Style Group

Use the **STORE** function described on page 72 to assign the programmed section(s) to a custom style group.

#### 4 Determine Whether Your Custom Style Will Use the Preset or Original Intro/Fill/Ending

Select the **I/F/E SELECT** page as described in Custom Accompaniment Editing” (next section) and select “**USER**” for the custom style numbers with which you want to use your original intro/fill/ending sections.

 **NOTES**

- *If the custom intro, fill-in, and ending sections have a different time signature than the normal custom accompaniment section, then “USER” cannot be selected in the “I/F/E SELECT” screen.*
- *To prevent differences between the time signatures of the custom intro, fill-in, and ending sections, all the sections for the selected styles are saved simultaneously when any one custom section is saved. For example, if you edit an intro section while a preset style is selected and then save the intro section, the fill-in and ending sections for the selected style will also be saved. If you then edit and save the fill-in section, the intro and ending sections will also be saved, meaning the intro section you just saved will be overwritten. To prevent this, first copy the preset style to a custom style number, and then use this as a basis for your new sections. Of course, you must be careful that you don’t overwrite a previously saved custom accompaniment style when doing this.*

### Editing a Previously Saved User Intro, Fill-in, or Ending Section

To edit intro, fill-in, and ending sections that you have previously created and saved, simply select the custom accompaniment style to which the user sections are assigned and program as described above.

### Creating a New Intro, Fill-in, or Ending Section From Scratch

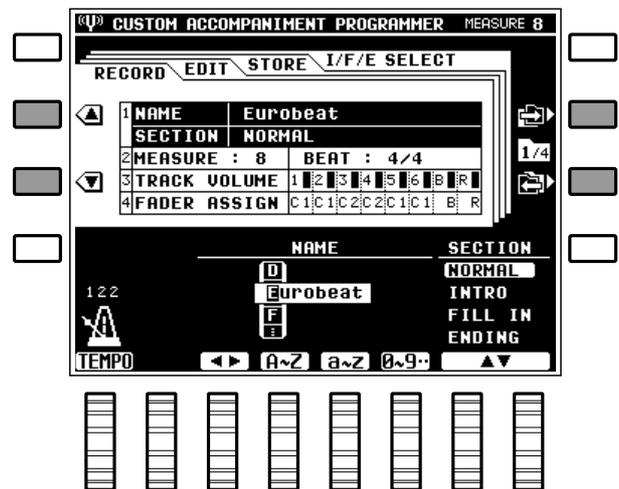
After selecting an intro, fill-in, or ending section as described above, use the **[DELETE]** button to delete all data from all tracks. You can then program a totally new pattern “from scratch”.

To create an intro, fill-in, or ending pattern with a different time signature, go to the Custom Accompaniment Programmer **RECORD** screen **MEASURE/BEAT** function (page 69) and set the **BEAT** parameter as required.

## Custom Accompaniment Editing

The PSR-6000 Custom Accompaniment Programmer offers a range of functions that let you modify the recorded data in a number of ways.

The Custom Accompaniment Programmer display has four main “pages” — **RECORD**, **EDIT**, **STORE**, and **I/F/E SELECT** — which are selected by using the [→] and [←] LCD buttons. The various functions within the selected display page are selected by using the ▲ and ▼ LCD buttons. The corresponding parameters are edited via the appropriate LCD dials.



### RECORD — NAME/SECTION

This display includes two functions: **NAME**, which allows a name of up to 8 characters to be assigned to the current custom accompaniment style before it is stored; and **SECTION**, which allows you to select the normal, intro, fill-in, or ending section for programming (page 68 for intro, fill-in, and ending programming details).

#### ● NAME

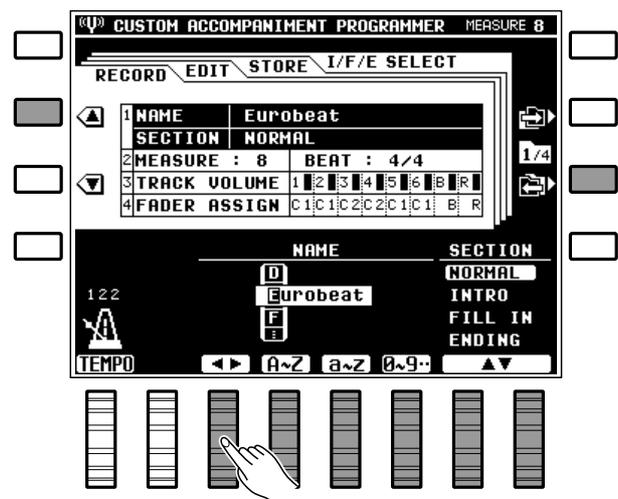
Use the ◀▶ LCD dial to move the name cursor to the various character positions, then use the **A~Z**, **a~z**, or **0~9..** LCD dial to select the required character for each position. The **A~Z** LCD dial selects capital letters, the **a~z** LCD dial selects lower-case letters, and the **0~9..** LCD dial selects numbers and special characters.

#### NOTES

- Independent names can not be assigned to **INTRO**, **FILL**, and **ENDING** sections.
- Preset style names which are originally longer than 8 characters will be truncated to the first 8 characters when used as the basis for custom accompaniment style programming.

#### ● SECTION

Selects the normal, intro, fill-in, or ending section for programming (see page 66 for details).



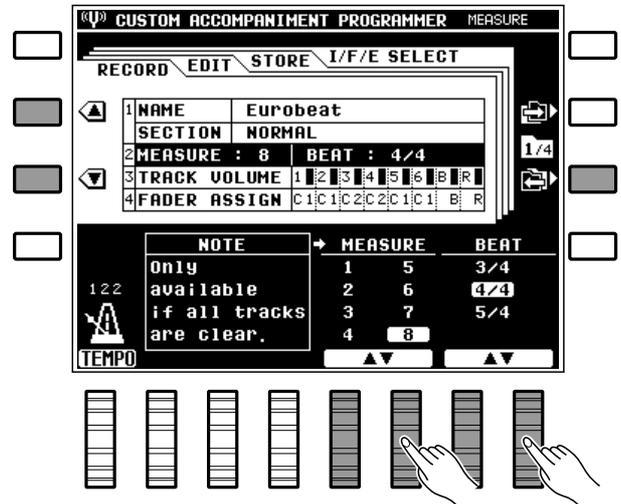
## RECORD — MEASURE/BEAT

These functions allow the length (in measures) and time signature of the accompaniment to be defined.

Use the **MEASURE** LCD dials to specify the number of measures the accompaniment is to have (from 1 to 8), and the **BEAT** LCD dials to specify the number of beats per measure — 3/4, 4/4, or 5/4.

### NOTES

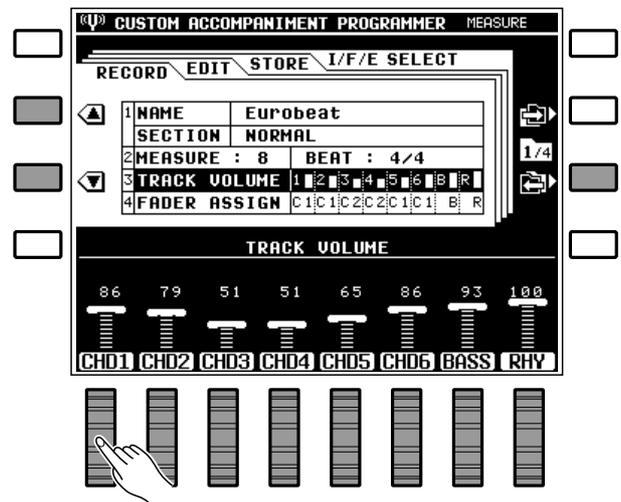
- These parameters can only be changed when you're creating an entirely new pattern from scratch—i.e. you have deleted all tracks from the original accompaniment by holding the [DELETE] button and pressing the buttons of all tracks containing data so that no PLAY indicators remain lit.
- All intro, fill-in and ending patterns must be clear in order to change the BEAT parameter of an intro, fill-in, or ending pattern.
- FILL patterns can have a maximum length of 1 measure.



## RECORD — TRACK VOLUME

Lets you independently set the volume of each of the Custom Accompaniment Programmer's tracks.

Use the LCD dials to set the volume of the corresponding tracks to a value between "0" (minimum volume — no sound) and "100" (maximum volume). In addition to the graphic controls above the respective LCD dials, vertical bar-graphs to the right of each track number in the "TRACK VOLUME" section of the display provide a graphic representation of the track volume levels.



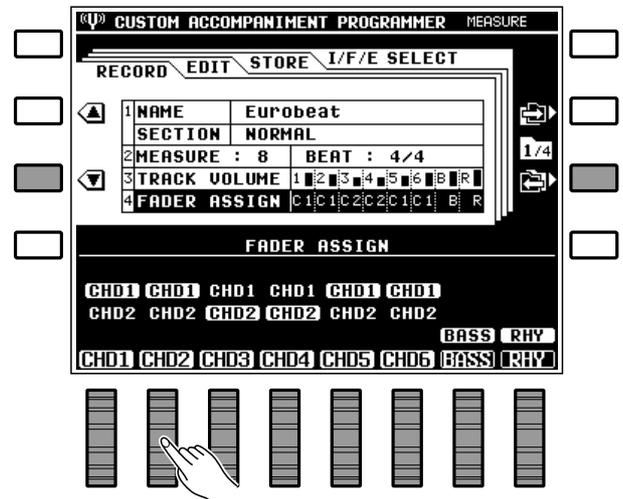
## RECORD — FADER ASSIGN

Assigns the **CHD1** and **CHD2** volume controls in the main play display to Custom Accompaniment Programmer CHORD tracks 1 through 6, determining which control affects which chord tracks when the accompaniment is played back.

Use the **CHD1** through **CHD6** LCD dials to assign the corresponding Custom Accompaniment Programmer track to the main play display **CHD1** or **CHD2** control.

### NOTES

- It is a good idea to group the chord tracks according to their musical function. For example, tracks containing basic block chords could be assigned to the CHD1 control while tracks containing more “decorative” chord work could be assigned to the CHD2 control.



## EDIT — QUANTIZE

Aligns notes in the specified track to the nearest specified beat.

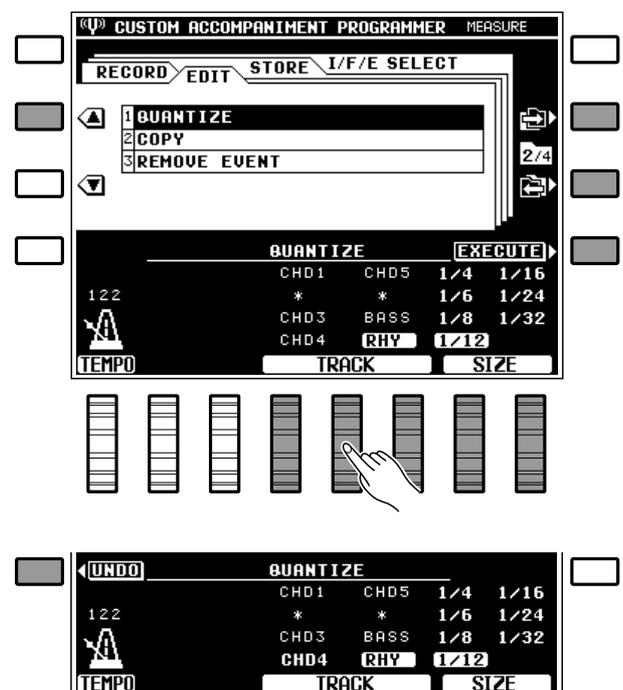
Use the **TRACK** LCD dials to select the track you want to quantize, and the **SIZE** LCD dials to specify the quantize size.

Once the track number and quantize size have been selected, press the **EXECUTE** LCD button to actually execute the quantize operation. “**Completed.**” will appear briefly when the operation has finished.

Immediately after execution an “**UNDO**” LCD button will appear on the left side of the display, and that button can be used to undo the quantize operation if it was executed by mistake. The undo function is only available until the next operation is performed.

### The Quantize Sizes are:

- 1/4 = 1/4 note
- 1/6 = 1/4 note triplet
- 1/8 = 1/8 note
- 1/12 = 1/8 note triplet
- 1/16 = 1/16 note
- 1/24 = 1/16 note triplet
- 1/32 = 1/32 note



**NOTES**

- Quantization is generally used to tighten up sloppy timing. Use it judiciously, however, because timing that is too perfect can sound cold and mechanical — unless, of course, you're specifically aiming for a cold, mechanical feel. Always use a quantize value that is at least as "short" as the shortest notes in the track to be quantized. If you quantize a track containing 16th notes to 1/8 (8th notes), for example, some of the 16th notes will be aligned with 8th note beats, thus ruining the track.
- Tracks displayed in small characters (preset) or marked with an asterisk (\* — no data) cannot be selected for quantization.

One measure of 8th notes before quantization



After quantization



## EDIT — COPY

Copies a specified measure or range of measures to a different location within the same track.

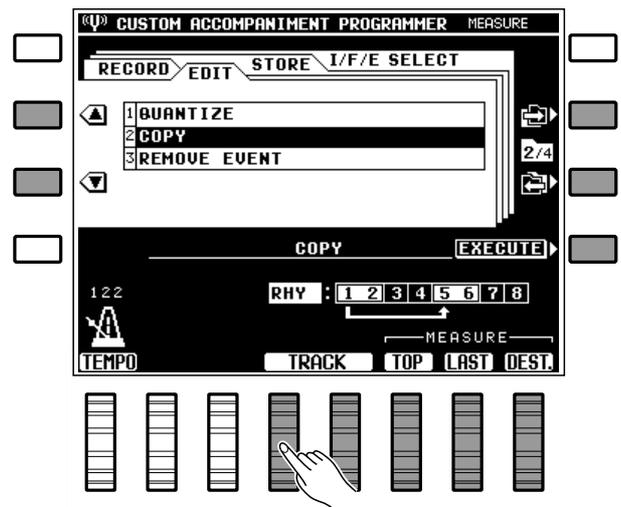
Use the **TRACK** LCD dials to specify the track number, the **TOP** LCD dial to specify the number of the first measure of the range to be copied, the **LAST** LCD dial to specify the number of last measure of the range to be copied, and the **DEST.** LCD dial to specify the number of the measure to which the data is to be copied.

Once the track numbers and measure numbers have been selected, press the **EXECUTE** LCD button to actually execute the copy operation. "Completed." will appear briefly when the operation has finished.

Immediately after execution an "UNDO" LCD button will appear on the left side of the display, and that button can be used to undo the copy operation if it was executed by mistake. The undo function is only available until the next operation is performed.

**NOTES**

- A copy operation overwrites the data from the beginning of the specified destination measure with the data from the source measure(s). Previous data in the overwritten measures is therefore lost.
- The **COPY** function cannot be used with tracks containing preset data.



Copy measures 1 through 2 to measure 5 in the same track

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1	2	3	4	1	2	7	8
---	---	---	---	---	---	---	---

## EDIT — REMOVE EVENT

Removes all occurrences of the specified event type (pitch bend, modulation wheel, volume, or sustain operations) from the specified track.

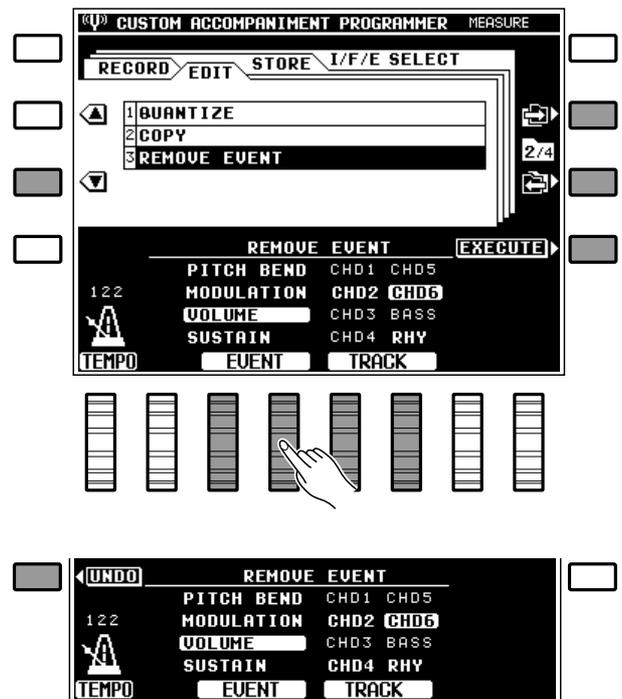
Use the **TRACK** LCD dials to set the track number and the **EVENT** LCD dials to set type of event to be removed.

Once the track and event type have been specified, press the **EXECUTE** LCD button on the right side of the display to actually execute the remove event operation. “**Completed.**” will appear briefly when the operation has finished.

Immediately after execution an “**UNDO**” LCD button will appear on the left side of the display, and that button can be used to undo the remove event operation if it was executed by mistake. The undo function is only available until the next operation is performed.

### NOTES

- This function is handy if, for example, you've played some wild pitch bends that don't sound right. You can remove only the offending pitch bends without erasing the entire track.
- Only the **VOLUME** event type can be selected when the **RHYTHM** tracks is selected.
- Be careful when removing effect on/off events. If, for example, you remove a pitch bend off event in a specified measure, the pitch bend applied in a previous measure will remain in effect until the next pitch bend event is encountered.



- Tracks displayed in small characters (preset) or marked with an asterisk (\*) — no data) cannot be selected for event removal.

## STORE

This function stores the current custom accompaniment to a specified custom accompaniment style number.

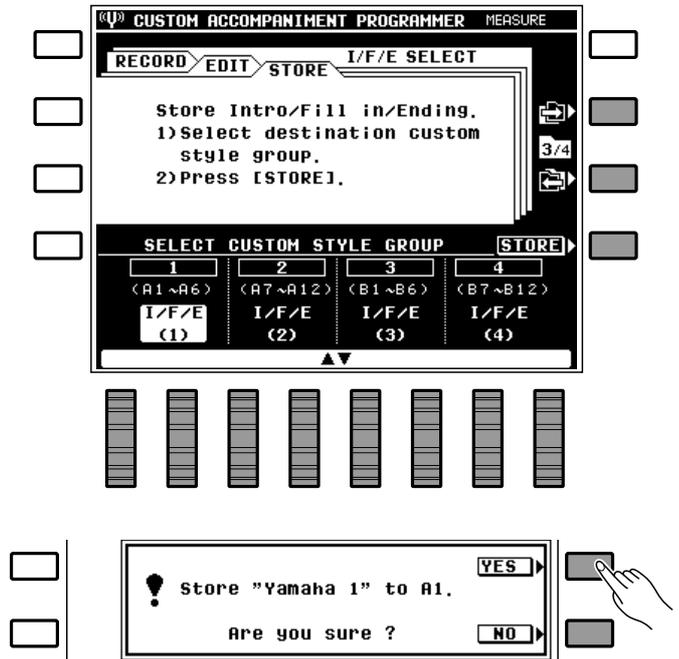
Any of the LCD dials can be used to determine to which custom style number the accompaniment will be stored. When saving a normal section, you can select any of the 24 available custom style memory locations: A1 through A12 and B1 through B12. When storing an intro, fill-in, or ending, you can select one of four custom style groups: 1 (A1 ... A6), 2 (A7 ... A12), 3 (B1 ... B6), or 4 (B7 ... B12). When the custom style number or group has been selected, press **STORE** LCD button to store the current custom accompaniment to the specified custom accompaniment style number. The “**Are**



**you sure?**” confirmation prompt will appear on the display: press the **YES** LCD button to go ahead with the store operation, or the **NO** LCD button to cancel. **“Completed.”** will appear when the operation is complete.

**NOTES**

- If during editing you change styles, variations, or sections, the “Edited data not stored ! Store it in memory?” message will appear. Press the YES LCD button to store the data, the NO LCD button to exit, or the CANCEL LCD button to return to the last operation.



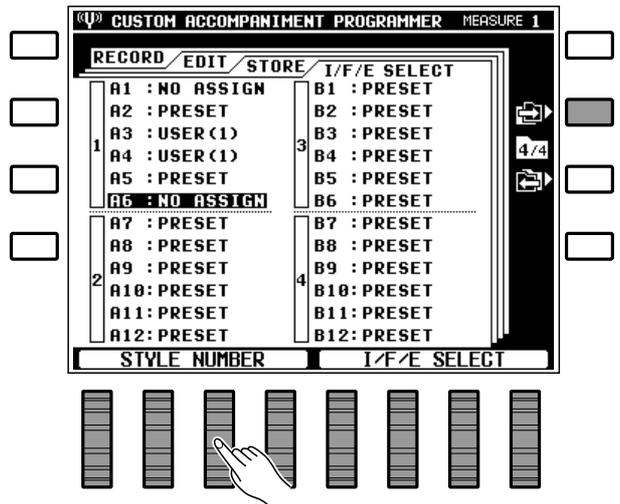
## I/F/E Select

Determines whether the preset, user-programmed, or no intro, fill-in, and ending sections will be used with each custom accompaniment style.

Use the **STYLE NUMBER** LCD dials to select a custom style number, then the **I/F/E SELECT** LCD dials to assign either the **PRESET** or **USER** intro, fill-in, and ending sections to that style number. Select **NO ASSIGN** if you want no intro, fill-in, or ending section to be used (see “NOTES” below).

**NOTES**

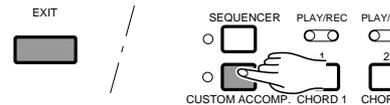
- If you select “PRESET”, then the un-edited intro, fill-in and ending sections of the original preset style will be used with the selected custom style. If you select “NO ASSIGN”, then no intro, fill-in, or ending sections will be used. In this case the [INTRO] button functions in the same way as the [START] button, the [ENDING] button functions in the same way as the [STOP] button, and the [FILL IN] button has no effect.



## Exiting From the Custom Accompaniment Programmer

To exit from the Custom Accompaniment Programmer mode, press either the [CUSTOMACCOMP.] or [EXIT] button. This will return you to the normal play mode. If you do this after editing any custom accompaniment data and you haven't already used the **STORE** function to save the edited data to a custom accompaniment number, the following display will appear:

Press the **YES** LCD button if you want to store the accompaniment — you will automatically be taken to the **STORE** function display described on page 72. Press the **NO** LCD button if you want to exit from the Custom Accompaniment Programmer without storing the data, or the **CANCEL** LCD button to cancel the store operation and return to the Custom Accompaniment Programmer if you want to make a few more changes or additions to the accompaniment before storing.



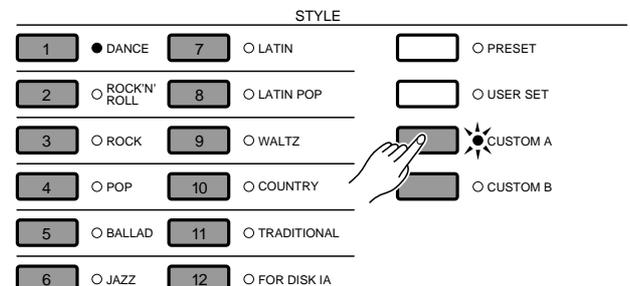
## Selecting & Using a Custom Accompaniment Style

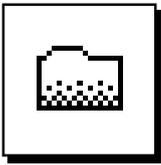
Once created and stored, your original accompaniment style can be selected and used in the same way as the preset accompaniment styles.

Press the [CUSTOM A] or [CUSTOM B] button and then the appropriate **STYLE** select button (1 ... 12) to select a custom accompaniment style. The selected custom accompaniment style can then be operated just like any of the preset accompaniment styles — it can be started and stopped as usual, and can be used in the FINGERED or SINGLE FINGER AUTO BASS CHORD modes.

### NOTES

- Interactive Accompaniment cannot be used with custom accompaniment styles.
- The [VERSE 1], [VERSE 2], [CHORUS 1], [CHORUS 2] and [SOLO] buttons cannot be used with custom styles.





# The PSR-6000 "Functions"

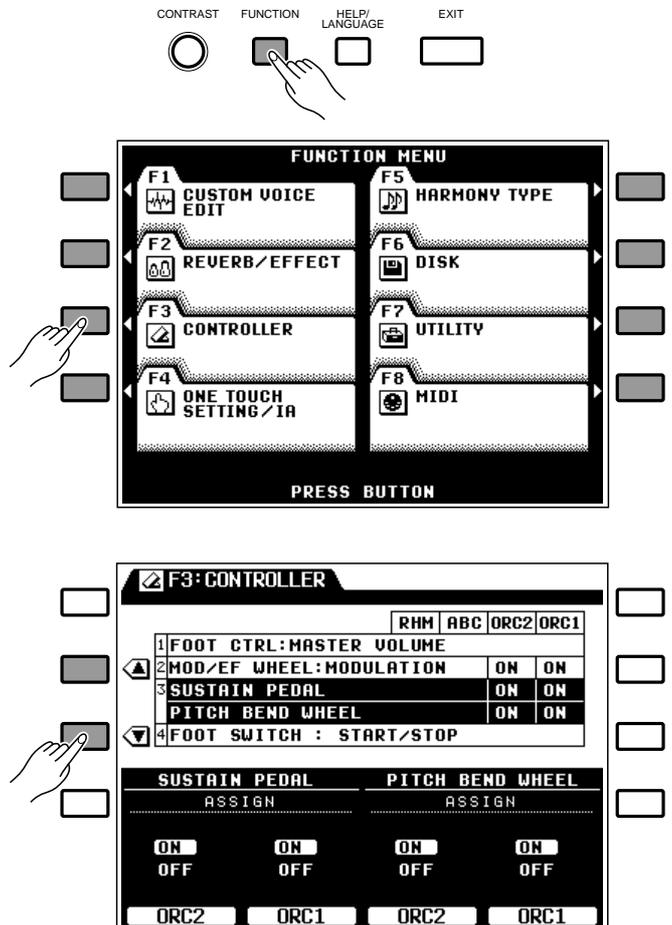
The PSR-6000 [FUNCTION] button selects 8 groups of functions that access a number of related parameters. Here's a list of the functions and the manual page numbers on which they are described in detail.

[F1] CUSTOM VOICE EDIT .....	77
[F2] REVERB/EFFECT .....	84
[F3] CONTROLLER .....	86
[F4] ONE TOUCH SETTING/IA .....	89
[F5] HARMONY TYPE .....	90
[F6] DISK .....	94
[F7] UTILITY .....	100
[F8] MIDI .....	102

## General Function Selection & Editing Procedure

Press the [FUNCTION] button to engage the function mode.

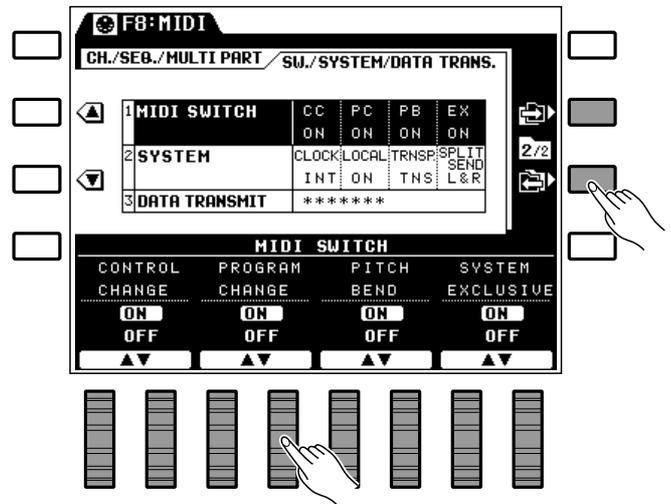
Each of the function groups is selected by pressing the corresponding LCD button. In some cases all of the parameters included in a function group will be available in a single display "page", and the various parameters can be accessed via the ▲ and ▼ LCD buttons — as in the **F3: CONTROLLER** display, below.



# The PSR-6000 "Functions"

In cases where the number of parameters included in the function group is too large to fit on a single display page, several pages may be available, selectable via the  $\rightarrow$  and  $\leftarrow$  LCD buttons — as in the **F8: MIDI** display shown to the right.

In all cases the selected parameter can be edited via the appropriated labelled or positioned LCD dial(s).

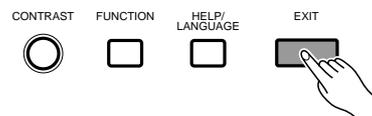


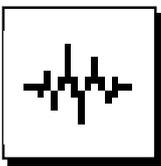
## The [EXIT] Button

The **[EXIT]** button can be used at any time to exit from a function and return to the normal play mode.

### NOTES

- Some functions cannot be selected in the Sequencer, Custom Accompaniment Programmer, or DOC/GM mode.
- You can return to the main function display from any other function display by pressing the **[FUNCTION]** button.





# F1: Custom Voice Edit

The Custom Voice Edit mode allows you to edit any of the PSR-6000 voices to create new sounds that ideally match your own music style. 128 custom voices can be programmed, each based on the corresponding preset voice.

After selecting the voice you want to edit (see “NOTES” below), engage the Custom Voice Edit mode by pressing the [FUNCTION] button and then the F1 CUSTOM VOICE EDIT LCD button. Use the various editing functions described below to modify the sound to suit your needs. Then press the [EXIT] button when you’re finished editing to return to the normal play mode.

Your custom voices can be selected and played by pressing the [CUSTOM VOICE] button and using the VOICE SELECT buttons in the normal way.

## NOTES

- You can also select a different voice while the Custom Voice Edit mode is engaged via the VOICE SELECT buttons. In this case the normal custom voice selection display will appear while the VOICE SELECT buttons are being used, and for a few seconds afterwards. The display will then revert to the previous Custom Voice Edit display page.
- Please note that some voices may suddenly shift to a different octave or change in level when played on the highest or lowest keys. There may also be slight tonal changes at one or more points on the keyboard.
- Some settings may produce noise or no sound.

## Standard Voice Edit Functions (voice groups 1 through 10)

The following functions are available when editing voice groups 1 through 10. Different edit functions are provided for the PSR-6000 dual voices (group 11 — DUAL VOICE/SOUND EFFECT) and drum voices (group 12 — DRUMS).

### NAME/CONTROL

The **NAME/CONTROL** page includes the **NAME** function via which you can give your custom voice an original name, and the **TOUCH SENSITIVITY** and **PITCH BEND** parameters which define the operation of the two most fundamental keyboard control features.

#### NAME

The **NAME** function allows an 8-character name to be assigned to the voice.

Use the ◀▶ LCD dial to move the name cursor to the various character positions, then use the **A~Z**, **a~z**, or **0~9** LCD dial to select the required character for each position. The **A~Z** LCD dial selects capital letters, the **a~z** LCD dial selects lower-case letters, and the **0~9** LCD dial selects



numbers and special characters.

**NOTES**

- It's a good idea to give your voices names that make them easily identifiable. If you've created a new voice that is a variation on the standard piano voice, for example, you could call it something like "PianVar".
- Preset voice names longer than 8 characters will be truncated to 8 characters when used in custom voices.

## ● CONTROLLER

The **CONTROLLER** section of the display includes two parameters that affect the entire voice.

### 1 TOUCH SENS.

Allows the touch sensitivity of the keyboard to be set to three different levels, or turned off: "1" (OFF), "2" (SOFT), "3" (MEDIUM), or "4"

(HARD). Use the **1** LCD dial to select as required.

### 2 PITCH BEND

Sets the range of the pitch bend wheel to "0" (OFF), "1" ( $\pm 1$  semitone), "2" ( $\pm 2$  semitones), "3" ( $\pm 3$  semitones), or "GLISSAND" (maximum 1-octave glissando in semitone steps). Use the **2** LCD dial to

select as required.

## ■ COMMON

The OCTAVE, PAN, MODULATION, and TONE parameters in this display page affect the entire voice.

### 1 OCTAVE

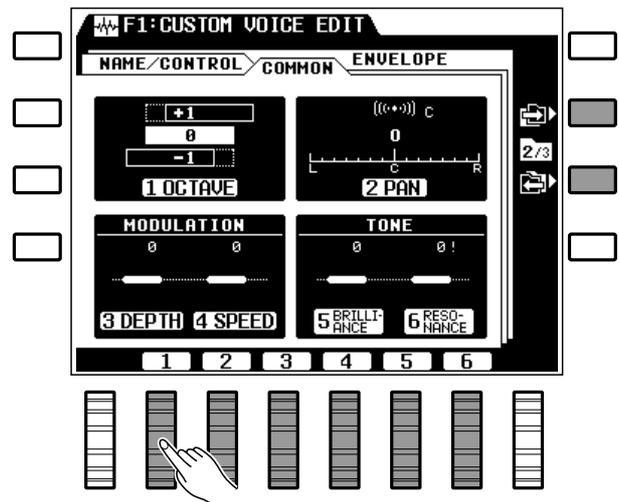
Shifts the pitch of the voice up one octave (+1) or down one octave (-1). A setting of "0" produces the normal pitch for that voice. Use the **1** LCD dial to set as required.

**NOTES**

- Some voices may exhibit sudden pitch changes in the highest and lowest ranges of the keyboard when shifted up or down by an octave. The pitch bend wheel may also cause sudden pitch changes.

### 2 PAN

Sets the apparent position of the voice in the stereo sound field. The graphic display indicates the approximate location of the sound between the left and right speakers. The pan range is from "L7" (full left) through "0" (center) to "R7" (full right). Use the **2** LCD dial to set as required.



 NOTES

- When *Pan* is set to the center position, the preset pan setting of the selected voice is used, creating a stereo effect with some voices.

## ● MODULATION

The two parameters provided in this screen are used to adjust the depth and speed of modulation produced by the PSR-6000 **MODULATION/EFFECT** wheel.

### 3 DEPTH

Decreases (-) or increases (+) the depth of modulation produced by the PSR-6000 **MODULATION/EFFECT** wheel relative to the original modulation depth of the selected voice. Use the **3** LCD dial to set as required.

### 4 SPEED

Decreases (-) or increases (+) the speed of modulation produced by the **MODULATION/EFFECT** wheel relative to the original modulation speed of the selected voice. Use the **4** LCD dial to set as required.

 NOTES

- The maximum range of the depth and speed is from -7 through 0 to +7, although this range is more limited with some voices. An exclamation mark (!) will appear next to the parameter when the maximum or minimum allowable setting for the selected voice has been reached.
- The default modulation depth and speed values for the selected voice are produced by settings of "0". Minus settings produce gentler or slower modulation, while

*plus settings produce deeper or faster modulation, respectively.*

- Modulation is applied automatically to some voices, and in some cases operating the wheel causes modulation to be applied automatically.

## ● TONE

The **BRILLIANCE** and **RESONANCE** parameters provided here make it possible to vary the tone of the voice over a wide range.

### 5 BRILLIANCE

This parameter alters the cutoff frequency of the filter applied to the voice, thereby making the sound more or less brilliant. Minus settings reduce brilliance for a rounder, more mellow tone, while plus setting increase brilliance for a sharper tone. Use the **5** LCD dial to set as required.

### 6 RESONANCE

Plus settings increase the height of a resonant peak at the filter cutoff frequency, giving the voice greater presence and sometimes a more "nasal" tone. Minus settings reduce resonance for a "flatter" sound. Use the **6** LCD dial to set as required.

 NOTES

- The maximum range of both parameters is from -50 through 0 to +50, although this range is more limited with some

voices. An exclamation mark (!) will appear next to the parameter when the maximum or minimum allowable setting for the selected voice has been reached.

- The default values for the selected voice are produced by settings of “0”.

## ENVELOPE

The **ATTACK**, **DECAY**, **RELEASE**, and **SUSTAIN** parameters provided here let you shape the volume envelope of the voice.

### 1 ATTACK

Sets the speed of attack — i.e. how fast the sound reaches maximum level after a key is pressed.

“0” sets the normal attack for the selected voice, minus settings produce a slower attack, and plus settings produce a faster attack. Use the **1** LCD dials to set as required.

### 2 DECAY

Sets the speed of decay portion of the envelope — i.e. how fast the sound decays from the maximum attack level to its normal level.

“0” sets the normal decay for the selected voice, minus settings produce a slower decay, and plus settings produce a faster decay. Use the **2** LCD dials to set as required.

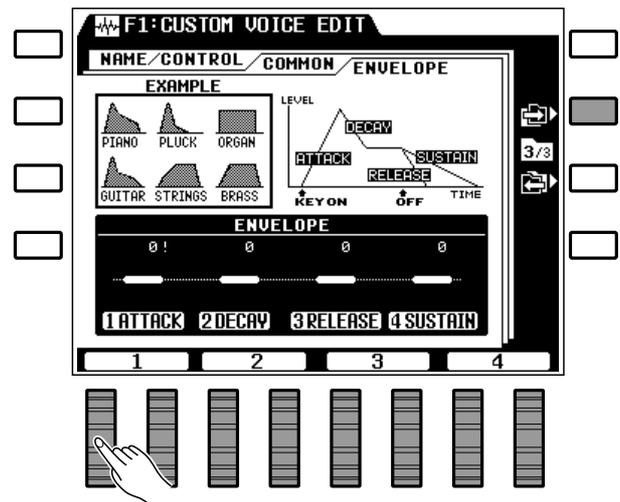
### 3 RELEASE

Sets the speed of release — i.e. how fast the sound decays after a key is released when the panel [SUSTAIN] button is off and the sustain pedal is not pressed.

“0” sets the normal release for the selected voice, minus settings produce a slower release decay, and plus settings produce a faster release decay. Use the **3** LCD dials to set as required.

### 4 SUSTAIN

Sets the speed of sustain decay — i.e. how fast the sound decays after a key is released when the panel [SUSTAIN] button is on or the sustain



pedal is pressed.

“0” sets the normal sustain for the selected voice, minus settings produce a longer sustain decay, and plus settings produce a faster sustain decay. Use the **4** LCD dials to set as required.

#### NOTES

- The maximum range for all parameters is from -50 through 0 to +50, although this range is more limited with some voices. An exclamation mark (!) will appear next to the parameter when the maximum or minimum allowable setting for the selected voice has been reached.
- The default values for the selected voice are produced by settings of “0”.
- With voices like STRINGS, in which key velocity (keyboard dynamics) controls the speed of attack, attack speed changes in the same way even if the attack parameter is set to a minus value.
- Since PIANO 1 and some other voices already have the

## Dual Voice Edit Functions (voice group 11)

fastest possible attack, no sound will be produced if the Decay parameter for such voices is set to "+50."

- The Decay parameter will have no effect on some sustain-type voices which have no inherent decay.
- Changing the envelope parameter setting may have no effect on the sound with some voices.

The following functions are available when editing the group 11 voices (DUAL VOICE/SOUND EFFECT). Different edit functions are provided for the PSR-6000 normal voices (groups 1 through 10 — page 77) and drum voices (group 12 — page 83).

### NAME/VOICE

This display page includes the **NAME** and **VOICE** functions, letting you assign an original name to your custom dual voice and specify the voices to be used.

#### ● NAME

The NAME function allows an 8-character name to be assigned to the custom dual voice.

Use the ◀▶ LCD dial to move the name cursor to the various character positions, then use the **A~Z**, **a~z**, or **0~9** LCD dial to select the required character for each position. The **A~Z** LCD dial selects capital letters, the **a~z** LCD dial selects lower-case letters, and the **0~9** LCD dial selects numbers and special characters.

#### NOTES

- Give your dual voice names that identify both the voices used, if possible. If you've created a new dual voice that combines piano and organ, for example, you could call it something like "PianOrg".
- Preset voice names longer than 8 characters will be truncated to 8 characters when used in custom voices.

#### ● VOICE

This function allows any two of the PSR-6000's preset and custom voices (groups 1 through 10) to be assigned to the dual voice.



Use the **GRP. 1** and **GRP. 2** LCD dials to select the desired voice groups, and the **1 #** and **2 #** LCD dials to select the desired voices.

**NOTES**

- The pitch bend range for DUAL VOICE is limited to  $\pm 1$  whole tone.

## OCT/PAN/VOL./DETUNE

In this display screen all parameters have dual settings, one for each of the voices used in the custom dual voice.

### ● OCTAVE

Allows the two voices used in the dual voice to be independently shifted up or down one octave.

Use the **1** LCD dial to set the octave of the “**A**” voice, and the **2** LCD dial to set the octave of the “**B**” voice.

**NOTES**

- Some voices may exhibit sudden pitch changes in the highest and lowest ranges of the keyboard when shifted up or down by an octave. The pitch bend wheel may also cause sudden pitch changes.
- “0” is the normal setting.

### ● PAN

Independently sets the pan positions of the two voices used in the dual voice.

Use the **3** LCD dial to set the pan position of the “**A**” voice, and the **4** LCD dial to set the pan position of the “**B**” voice.

The graphic displays indicates the approximate location of the sound between the left and right speakers.

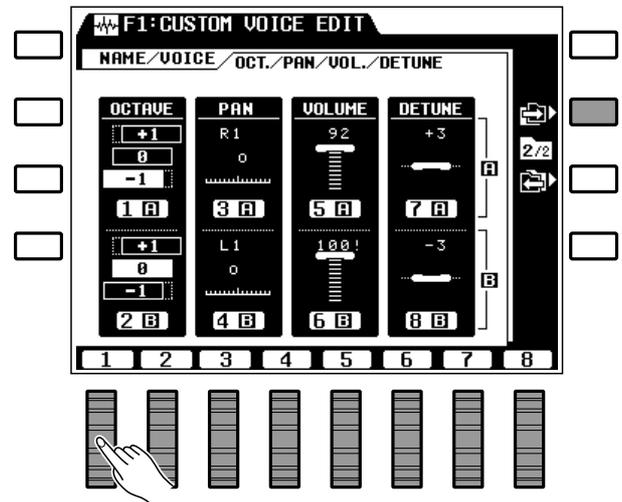
**NOTES**

- When Pan is set to the center position, the preset pan setting of the selected voice is used, creating a stereo effect with some voices.

### ● VOLUME

Independently adjusts the volumes of the two voices used in the dual voice.

Use the **5** LCD dial to set the volume of the “**A**”



voice, and the **6** LCD dial to set the volume of the “**B**” voice.

**NOTES**

- The volume range is from “0” (no sound) to “100” (maximum volume). Use this function to set the optimum balance between the two voices.
- When the parameter is set to “0” or “100” an exclamation mark (!) will appear next to the parameter indicating that the limit has been reached.

### ● DETUNE

Allows the two voices used in the dual voice to be detuned slightly to create a thicker sound.

Use the **7** LCD dial to detune the “**A**” voice, and the **8** LCD dial to detune the “**B**” voice. A setting of “0” produces the normal pitch of the voice, while positive (+) settings raise the pitch and negative (-) settings lower the pitch of the voice.

**NOTES**

- The normal tune value is “0”. This can be tuned down to a maximum setting of -50 or up to a maximum setting of +50. Each increment equals approximately 0.78 cents (a cent is one hundredth of a semitone). The maximum amount of detune that can be set in either direction is therefore 39 cents

## Drum Voice Edit Functions (Voice group 12)

— not quite a quarter tone.

- This function can be used by leaving one of the voices set at “0” and detuning the other until the desired effect is achieved.

Another approach is to tune one voice down and the other up.

- The pitch bend range is always  $\pm 200$  cents, regardless of the setting of this function.
- When the parameter is set to “-50” or “+50” an exclamation mark (!) will appear next to the parameter indicating that the limit has been reached.

The following functions are available when editing the drum voices in group 12. Different edit functions are provided for the PSR-6000 normal voices (groups 1 through 10 — page 77) and dual voices (group 11 — page 81).

### NAME/PAN/PITCH/SOFTNESS

All parameters available for drum voice editing are provided in a single display screen.

#### ● NAME

Allows an 8-character name to be assigned to the custom drum voice.

Use the ◀▶ LCD dial to move the name cursor to the various character positions, then use the **A~Z**, **a~z**, or **0~9..** LCD dial to select the required character for each position. The **A~Z** LCD dial selects capital letters, the **a~z** LCD dial selects lower-case letters, and the **0~9..** LCD dial selects numbers and special characters.

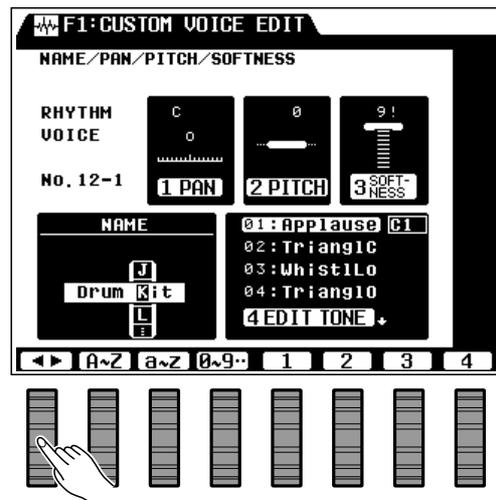
#### NOTES

- Give your drum voice names that identify their character. If you've created a new drum voice intended for rock music, for example, you could call it something like “RockDrum”.

#### ● PAN

Allows the pan position of each instrument in the drum voice to be individually adjusted.

Use the **4** LCD dial to select the drum instrument you want to edit (an alternative method is to press the key on the PSR-6000 keyboard corresponding to the desired instrument). Then use the **1** LCD dial to set the pan position. The pan range is from “**L7**” (full left) through “**C**” (center) to “**R7**” (full right). The graphic **PAN** display indicates the approximate location of the sound between the left and right speakers.



#### NOTES

- Use this function to create the required “stereo image” for your drum voice. View in the drum kit from the audience side, for example, the bass drum is normally in the center, the snare to its right, the tom-toms to the left, and so on.

#### ● PITCH

Allows the pitch of each instrument in the drum voice to be individually tuned.

Use the **4** LCD dial to select the drum instrument you want to edit (an alternative method is to press the key on the PSR-6000 keyboard corresponding to the desired instrument). Then use the **2** LCD dial to set the pitch as required.

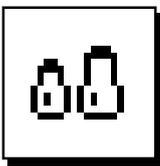
#### NOTES

- The maximum tuning range is from -50 through 0 to +50, with “0” being the normal pitch for the instrument. Each increment equals approximately 6.25 cents (a cent is one hundredth of a semitone), for a total tuning range of about  $\pm 312$  cents.
- When the parameter is set to “-50” or “+50” an exclamation mark (!) will appear next to the parameter indicating that the limit has been reached.

#### ● SOFTNESS

Allows the tone (softness) of each instrument in the drum voice to be individually adjusted.

Use the **4** LCD dial to select the drum instrument you want to edit (an alternative method is to press the key on the PSR-6000 keyboard corresponding to the desired



# F2: Reverb/Effect

The PSR-6000 has 23 reverb-based effects and 9 other effects that can be selected via the REVERB/EFFECT function display. The selected reverb and effect types are applied to the sound when the [EFFECT] and [REVERB] buttons are used (see page 31).

## REVERB TYPE & DEPTH

### ● REVERB TYPE

Selects the reverb effect to be applied when the [REVERB] button is turned on (page 31).

If the **REVERB TYPE** parameters are not showing on the lower section of the display, press the **TYPE LCD** button. Use the **GROUP LCD** dials to select a reverb group, and the **TYPE LCD** dials to select the desired reverb effect.

#### The Reverb Effects

No.	Group	Type	No.	Group	Type
1.	Reverb 1	Hall	13.	TempoSync.	Short
2.	Reverb 1	Room	14.	TempoSync.	Long
3.	Reverb 1	Plate	15.	Echo	Stereo
4.	Reverb 2	Church	16.	Echo	PingPong
5.	Reverb 2	Club	17.	Refl.&Gate	Panned
6.	Reverb 2	Stage	18.	Refl.&Gate	Early
7.	Reverb 3	Bathroom	19.	Refl.&Gate	Gate
8.	Reverb 3	Metal	20.	Delay&Rev	Single
9.	Delay 1	Short	21.	Delay&Rev	Dly. L/R
10.	Delay 1	Medium	22.	Variation	Distort.
11.	Delay 1	Long	23.	Variation	Tunnel
12.	Delay 2	OneShot			

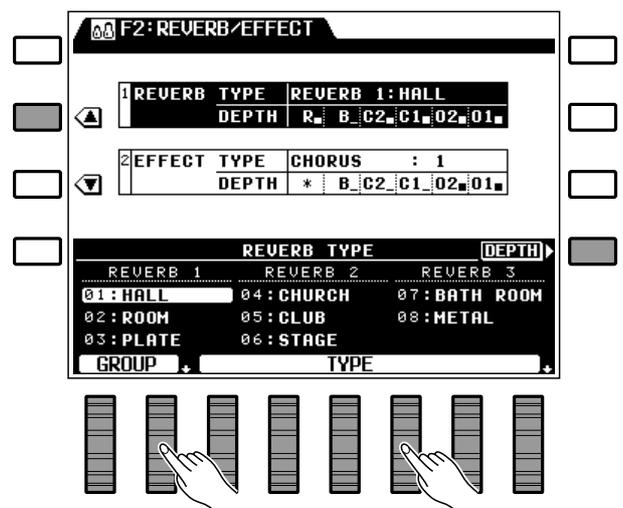
### ● REVERB DEPTH

Independently sets the depth of the selected reverb effect for the rhythm, bass, chord 1, chord 2, orchestra 1, and orchestra 2 sound.

If the **REVERB DEPTH** parameters are not showing on the lower section of the display, press the **DEPTH LCD** button. Use the **RHY**, **BASS**, **CHD2**, **CHD1**, **ORC2**, and **ORC1** LCD dials to set the depth of the reverb effect as required for the corresponding orchestra parts.

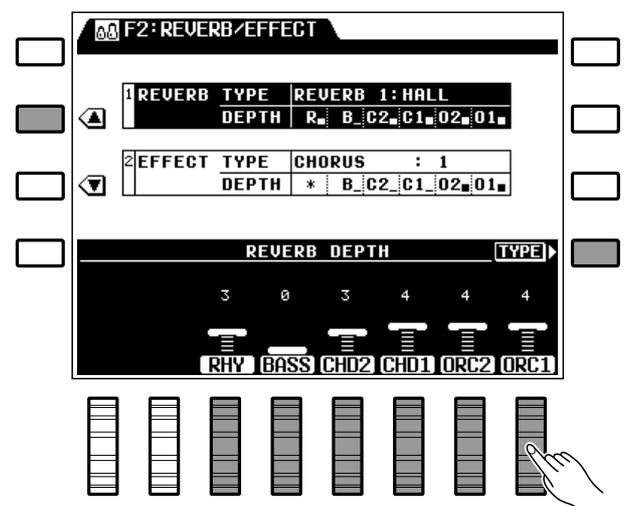
#### NOTES

- Reverb depth can be adjusted in 8 steps (0 ... 7), represented by a vertical bar to the right of each DEPTH parameter in the upper section of the display. The longer the bar, the greater the reverb depth.
- If the depth setting is changed while a note is being played, the new depth setting will take effect from the next note played.



#### NOTES

- The "TempoSync" effects produce a delay that is synchronized to the currently selected tempo. "Variation : Distort." produces a distortion effect.
- Try out all of the effects to get a feel for what they can do to your sound.



**EFFECT TYPE & DEPTH**

● **EFFECT TYPE**

Selects the effect to be applied when the [EFFECT] button is turned on (page 31).

If the **EFFECT TYPE** parameters are not showing on the lower section of the display, press the **TYPE LCD** button. Use the **GROUP LCD** dials to select an effect group, and the **TYPE LCD** dials to select the desired effect.

**The Effects**

No.	Group	Type
1.	Tremolo	1
2.	Tremolo	2
3.	Tremolo	3
4.	Chorus	1
5.	Chorus	2
6.	Flange	1
7.	Flange	2
8.	Symphonic	1
9.	Symphonic	2

**NOTES**

- Try out all of the effects to get a feel for what they can do to your sound.

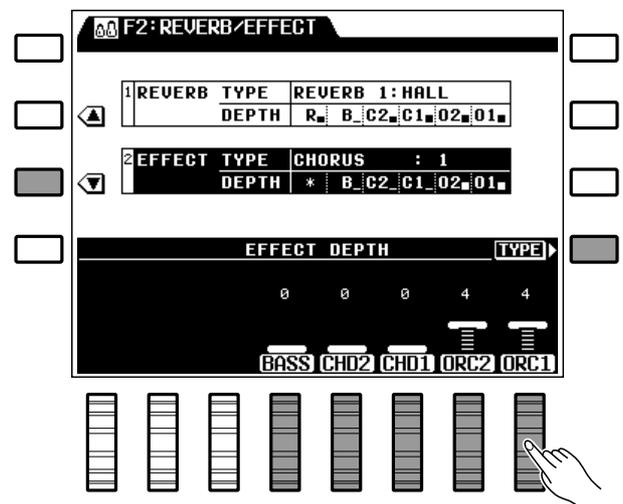
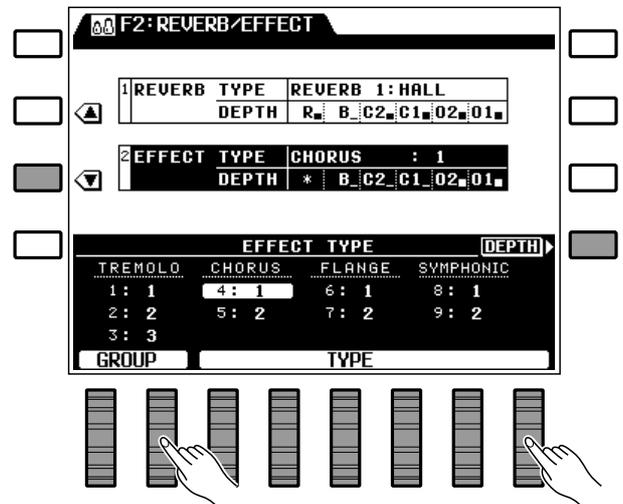
● **EFFECT DEPTH**

Independently sets the depth of the selected effect for the bass, chord 1, chord 2, orchestra 1, and orchestra 2 sound.

If the **EFFECT DEPTH** parameters are not showing on the lower section of the display, press the **DEPTH LCD** button. Use the **BASS**, **CHD2**, **CHD1**, **ORC2**, and **ORC1** LCD dials to set the depth of the effect as required for the corresponding orchestra parts.

**NOTES**

- Effect depth can be adjusted in 8 steps (0 ... 7), represented by a vertical bar to the right of each parameter. The longer the bar, the greater the effect depth.
- If the depth setting is changed while a note is being played, the new depth setting will take effect from the next note played.





# F3: Controller

The [F3] function group includes four functions that affect how the PSR-6000 responds to control via the keyboard, a foot controller plugged into the rear-panel FOOT CONTROLLER jack, the MODULATION/EFFECT wheel, the [SUSTAIN] button and SUSTAIN footswitch, the PITCH BEND wheel, and a footswitch plugged into the rear-panel FOOT SWITCH jack.

## FOOT CONTROLLER

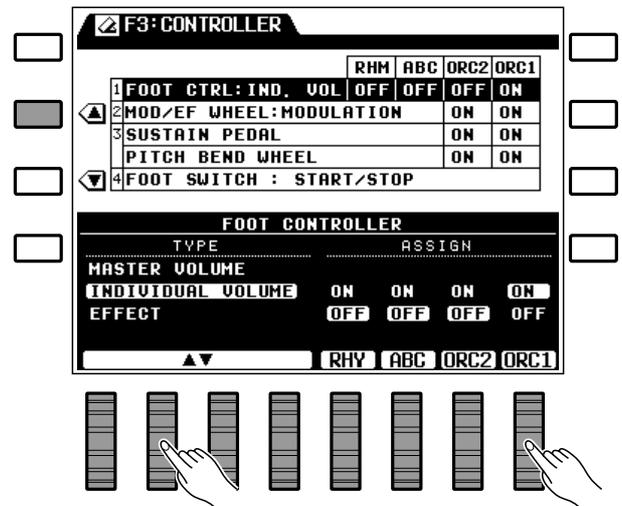
Determines whether a foot controller plugged into the rear-panel **FOOT CONTROLLER** jack will control master volume, the volume of an individual orchestra part (rhythm, ABC, etc.), or the depth of the selected effect.

Use the **TYPE** LCD dials to select **MASTER VOLUME** for master volume control, **INDIVIDUAL VOLUME** for individual part volume control, or **EFFECT** for effect depth control.

Individual part assignment parameters for the **RHY**, **ABC**, **ORC2** and **ORC1** parts will appear when the **INDIVIDUAL** type is selected. Use the corresponding LCD dials to turn volume control for the corresponding parts **ON** or **OFF** as required.

### NOTES

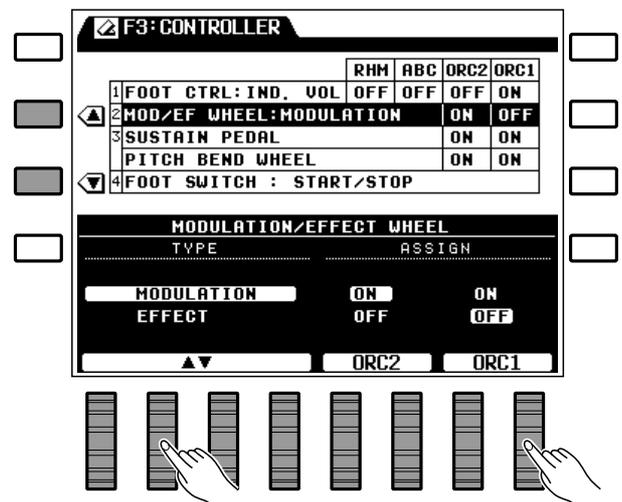
- Normally you'll want to be able to apply expression control to the orchestra voices without affecting the accompaniment and rhythm sound, so the **INDIVIDUAL** type should be selected and the **ORC1** and/or **ORC2** part turned on while the remaining parts are turned off.
- The **EFFECT** setting only applies when the panel [**EFFECT**] button is turned ON.



## MODULATION/EFFECT WHEEL

Determines whether the **MODULATION/EFFECT** wheel will control modulation or the selected effect (page 32), and whether it will affect the orchestra 1 voice, the orchestra 2 voice, or both orchestra voices.

Use the **TYPE** LCD dials to select either **MODULATION** or **EFFECT** operation. If **MODULATION** is selected the **ORC2** and **ORC1** assignment parameters will appear: use the corresponding LCD dials to turn modulation wheel operation **ON** or **OFF** for the **ORC2** and **ORC1** parts, as required.



**NOTES**

- This function can be used to apply modulation or the selected effect to just one of the voices being played in the split mode (ORCH. 2◀▶1) to emphasize that voice and provide greater contrast with the other voice.
- When EFFECT operation is selected, the wheel will function only when the panel [EFFECT] button is turned on.
- If AUTO BASS CHORD is on and the ORCH. 2◀▶1 orchestration mode is selected, no modulation is applied to the ORCH. 2 voice.

## SUSTAIN PEDAL & PITCH BEND WHEEL

### ● SUSTAIN PEDAL

Determines whether the PSR-6000 sustain effect is to be applied to the orchestra 1 voice, the orchestra 2 voice, or both orchestra voices.

Use the **SUSTAIN PEDAL ORC2** LCD dial to turn sustain on or off for the orchestra 2 voice, and the **SUSTAIN PEDAL ORC1** LCD dial to turn sustain on or off for the orchestra 1 voice.

**NOTES**

- The sustain effect is applied to the specified orchestra part(s) only when the panel [SUSTAIN] button is turned on or when the sustain pedal is pressed.

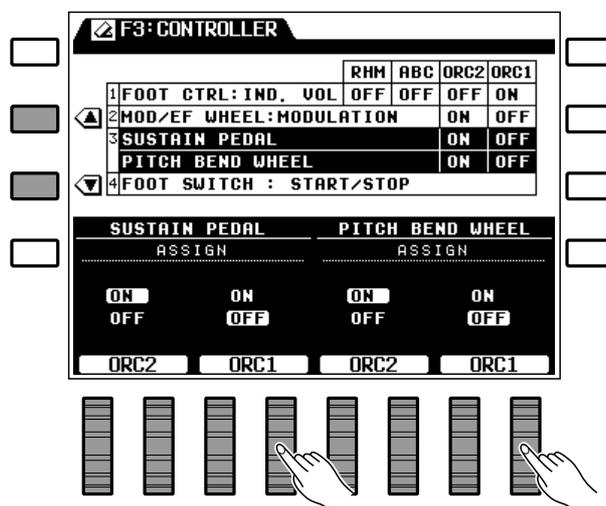
### ● PITCH BEND WHEEL

Determines whether the **PITCH BEND** wheel will affect the orchestra 1 voice, the orchestra 2 voice, or both orchestra voices.

Use the **PITCH BEND WHEEL ORC2** LCD dial to turn pitch bend on or off for the orchestra 2 voice, and the **PITCH BEND WHEEL ORC1** LCD dial to turn pitch bend on or off for the orchestra 1 voice.

**NOTES**

- If, for example, you're using the split mode (ORCH. 2◀▶1) with a bass voice on the left and a sax voice on the right, you'll want pitch bend to apply only to the right-hand sax voice. In this case simply turn orchestra 1 pitch bend on and orchestra 2 pitch bend off.
- If AUTO BASS CHORD is on and the ORCH. 2◀▶1 orchestration mode is selected, no pitch bend is applied to the ORCH. 2 voice.



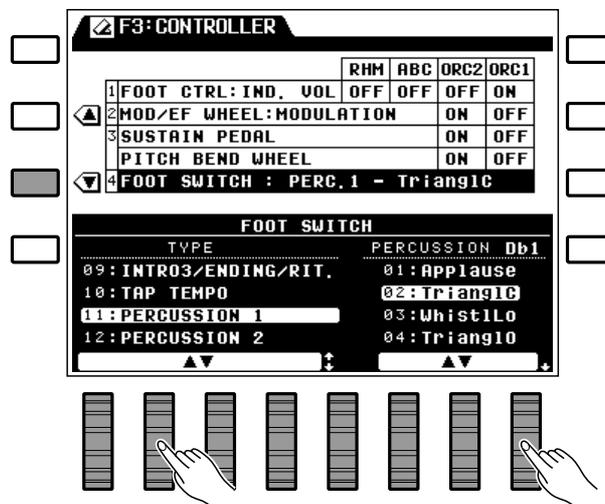
## FOOT SWITCH

Determines the function of a footswitch plugged into the rear-panel **FOOT SWITCH** jack.

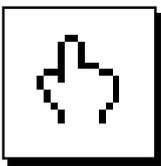
Use the **TYPE** LCD dials to select one of the following footswitch functions:

**NOTES**

- When the Foot Switch function is set to **REGISTRATION+** and a different panel registration memory is recalled either via the panel controls or the footswitch, the Foot Switch setting will not change even if a different setting is included in the recalled panel registration memory (i.e. Foot Switch remains set to **REGISTRATION+**).



<b>START/STOP</b>	Same as panel [START] and [STOP] buttons.
<b>GLIDE</b>	Lower orchestra 1 sound by a semitone while footswitch pressed.
<b>ROTARY SPEAKER</b>	The footswitch varies the speed of the tremolo effect each time it is pressed: slow → medium → fast → slow, and so on. When <b>ROTARY SPEAKER</b> is selected the panel [EFFECT] button automatically lights, the effect type is set to Tremolo1, and the ORCH.1 and ORCH.2 effect depth are set to maximum, while all other depth parameters are set to "0". If a different effect is selected via the F2: REVERB/EFFECT display after the <b>ROTARY SPEAKER</b> setting has been selected, the foot switch can be used to change the depth of the selected effect in three stages.
<b>HARMONY</b>	Harmony occurs only while footswitch pressed.
<b>REGISTRATION +</b>	Recall next (increment) panel registration.
<b>START/RE-START</b>	Same as panel [START/RE-START] button.
<b>INTRO1/FILL</b>	Same as panel [INTRO 1/FILL IN] button.
<b>INTRO2/FILL</b>	Same as panel [INTRO 2/FILL IN] button.
<b>INTRO3/ENDING/rit</b>	Same as panel [INTRO 3/ENDING/rit.] button.
<b>TAP TEMPO</b>	Same as PAD Tap Start function.
<b>PERCUSSION 1</b>	Footswitch plays a percussion instrument from the DRUM KIT voice. Use the PERCUSSION LCD dials to specify the percussion instrument to be played when the footswitch is pressed.
<b>PERCUSSION 2</b>	Footswitch plays a percussion instrument from the POP DRUM KIT voice. Use the PERCUSSION LCD dials to specify the percussion instrument to be played when the footswitch is pressed.
<b>PUNCH IN/OUT</b>	Sets punch-in and punch-out points when sequencer record mode set to "Punch."
<b>EFFECT</b>	Same as panel [EFFECT] button.
<b>TENSION</b>	Modifies dominant 7th chords in the accompaniment to produce a more consistent sound when playing in a minor key. Also automatically re-harmonizes non-scale tones on chords other than the tonic and 7th.



# F4: One Touch Setting/IA

## ONE TOUCH SETTING SYNCHRO CHANGE

Determines whether One Touch Setting variation switching will occur at the same time as accompaniment style and verse-to-chorus switching.

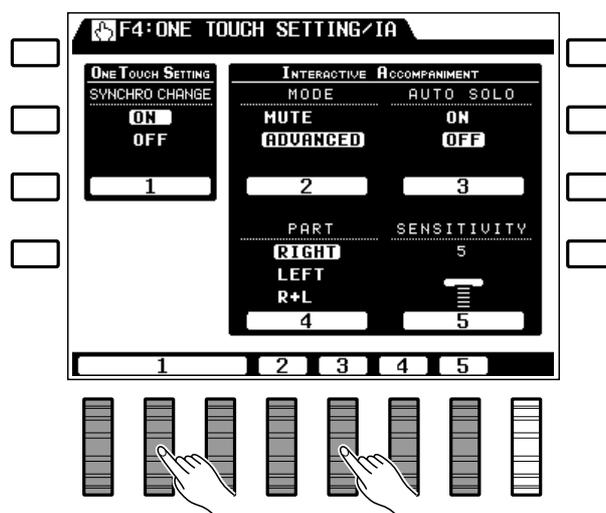
When **ON**, selecting a different accompaniment style or switching between the VERSE and CHORUS variations while ONE TOUCH SETTING is engaged will cause the ONE TOUCH SETTING settings for that style or variation to be selected automatically.

Also, if you change a ONE TOUCH SETTING setting the corresponding ONE TOUCH SETTING indicator will flash to indicate that a change has been made. When **OFF** no change occurs in the ONE TOUCH SETTING settings when a different style or VERSE/CHORUS variation is selected.

Use the **1** LCD dials to turn the **SYNCHRO CHANGE** parameter **ON** or **OFF**.

### NOTES

- Turning this function on can provide greater contrast between the chorus and verse variations when using the Accompaniment feature.
- When the SYNCHRO CHANGE parameter is OFF, the current ONE TOUCH SETTING indicator will go out if any of the settings it includes is changed.
- The default setting is "OFF".



## INTERACTIVE ACCOMPANIMENT. ..

The parameters in this section of the display select one of two available Interactive Accompaniment modes, turn the AUTO SOLO function on or off, determine the keyboard part on which Interactive Accompaniment will be based, and set the sensitivity of the Interactive Accompaniment function.

<b>MODE</b>	Use the 2 LCD dial to select the MUTE or ADVANCED MODE. <ul style="list-style-type: none"> <li>• When the MUTE Interactive Accompaniment mode is selected, accompaniment parts that may interfere with what is played on the keyboard are automatically lowered in volume when the keyboard is being played. When the ADVANCED mode is selected, the above function is combined with automatic muting of interfering parts and automatic switching between VERSE 1 and VERSE 2 or between CHORUS 1 and CHORUS 2 in response to keyboard activity. The default Mode setting is ADVANCED.</li> </ul>
<b>AUTO SOLO</b>	Use the 3 LCD dial to turn AUTO SOLO ON or OFF. <ul style="list-style-type: none"> <li>• When the AUTO SOLO function is turned ON, the solo accompaniment variations will automatically be activated if nothing is played on the keyboard for a few measures (the actual number of measures depends on the selected style). Further, the solo variations will automatically be de-activated at the end of the current phrase after keyboard performance is resumed. No automatic solo switching occurs when the AUTO SOLO function is turned OFF. The default AutoSolo setting is ON.</li> </ul>
<b>PART</b>	Use the 4 LCD dial to select the keyboard part(s) on which Interactive Accompaniment is to be based. <ul style="list-style-type: none"> <li>• When the PART parameter is set to R+L, the Interactive Accompaniment system responds to activity (i.e. anything you play) on the entire keyboard. When set to RIGHT only activity on the right-hand section of the keyboard is detected, and when set to LEFT only activity on the left-hand section of the keyboard is detected. The default PART setting is RIGHT.</li> </ul>
<b>SENSITIVITY</b>	Use the 5 LCD dial to set the desired Interactive Accompaniment sensitivity. <ul style="list-style-type: none"> <li>• The sensitivity range is from 1 to 8. 8 is the highest sensitivity. In this case "sensitivity" refers to how much activity the Interactive Accompaniment system must detect in the specified section(s) of the keyboard before a change in the accompaniment occurs. The default Sensitivity setting is 4.</li> </ul>



# F5: Harmony Type

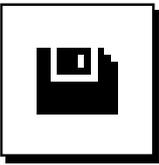
Selects the type of harmony to be applied when the [HARMONY] button is turned on (page 31).

There are four groups of harmony types — BASIC, POP, JAZZ, and CLASSIC — which can be selected either by using the **GROUP** LCD dials or by pressing the corresponding LCD buttons (the LCD buttons beside the arrows corresponding to the title of each group on the display). Once the group containing the desired harmony type has been selected, use the **TYPE** LCD dials to select the harmony type (you can actually use the **TYPE** LCD dials to scroll through all type in all groups, without first selecting a group).

### The Harmony Types

No.	Group	Type
1.	Basic	Duet
2.	Basic	Trio
3.	Basic	4 Part
4.	Pop	Octave
5.	Pop	Pop Riff
6.	Pop	Strings 1
7.	Pop	Strings 2
8.	Pop	Synth Ensemble
9.	Pop	Add Vocal
10.	Jazz	4 way Close
11.	Jazz	4 way Open
12.	Jazz	Vib. Ensemble
13.	Jazz	Sax Ensemble
14.	Jazz	Wind Ensemble
15.	Jazz	Guitar
16.	Classic	Strings





# F6: Disk

Although the F6: DISK function accesses a range of important disk operations, the most commonly used disk functions — save to disk and load from disk — can also be directly accessed via the [TO DISK] and [FROM DISK] buttons, as described below.

Please note that no other PSR-6000 functions will operate while a disk function is in progress.

## NOTES

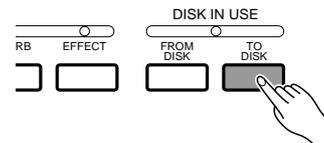
- For any disk operation an appropriate floppy disk must first be properly inserted into the PSR-6000 disk drive. The PSR-6000 uses only 3.5" 2DD type floppy disks. Make sure the disk write protect tab is set to the "write enable" position if you intend to save any data to the disk, and insert the disk with the sliding disk cover facing the disk drive and the disk label facing upward. Before a new disk can be used to save data, it must be formatted using the "FORMAT DISK" function described on page 98.

## The [TO DISK] Button

Press this button when you want to save the current contents of the PSR-6000 memory (see list below) to floppy disk for later re-loading and use. The display shown to the right will appear:

Use any of the LCD dials to select the file to which you want to save the data. The file list at the bottom of the display includes all files which currently exist on the disk and one "NEW" file (named "N-FILE"). Select an existing file if you want to overwrite the file with the new data, or select the "NEW" file if you want to create a new file. With the exception of the "NEW" file, the size of each file will appear to the right of the file name in kilobytes (approximate).

If you want to give a new file an original filename or change the name of an existing file prior to saving it to disk, press the **NAME** LCD button to go to the name display.



File names can be up to 8 characters long. Use the ◀▶ LCD dial buttons to move the name cursor to the various character positions, then use the A~Z or 0~9.. LCD dial to select the required character for each position. The A~Z LCD dial selects capital letters and the 0~9.. LCD dial selects numbers and special characters.

When the file and, if necessary, the file name has been specified, press the EXECUTE LCD button to actually begin the save operation — the “Are you sure?” confirmation display will appear.

If you want to execute the save operation press the YES LCD button (or press NO LCD button to cancel the operation). “Do not remove disk!” will appear while the data is being saved, and the progress of the save operation will be indicated by a bar graph at the bottom of the display. You can go back to the file list by pressing the LIST LCD button.

The data saved to disk is as follows:

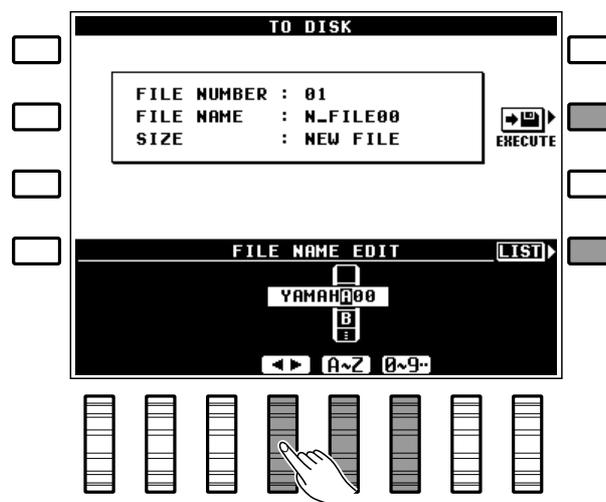
- Instrument setup (condition) data (including DOC/GM Chain list data).
- Disk style data.
- Custom voice data.
- Custom style data.
- Panel registration data.
- One touch setting data.
- Pad assignment data (Multi, Tempo, and Percussion assignments).
- Sequencer song data.

If you insert a disk that has not been formatted into the drive, the display shown to the right will appear when the [TO DISK] button is pressed:

Press the YES LCD button to format the disk (see “FORMAT DISK” on page 98).

### NOTES

- If you press the LIST LCD button to switch displays after entering a file name and pressing the EXECUTE LCD button, but before actually saving the name, the new file name will be canceled.
- See page 111 for a list of error messages that may appear during disk save.
- The PSR-6000 identifies and handles disk files by number rather than the file name. If you save to a file number that already contains data, the original data will be erased and replaced by the new data.



## The [FROM DISK] Button

Press this button when you want to re-load a previously saved file from floppy disk. The data loaded is the same as that saved by the TO DISK operation described above. When the [FROM DISK] button is pressed one of the displays shown to the right will appear, depending on the type of disk currently in the drive:

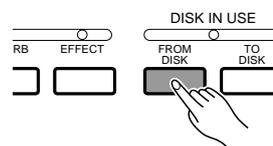
If normal data is to be loaded, simply use any of the LCD dials to select the file you want to load. The size of each file in the file list will appear to the right of the file name in kilobytes (approximate). If a style disk is loaded the style data disk display will appear. In this case use the left LCD dials to select either **I/A SET** or **CUSTOM STYLE** data, then use the right LCD dials to select the style or style group (**A1–A6**, **A7–A12**, **B1–B6**, or **B7–B12**).

When the file has been specified, press the **EXECUTE** LCD button to actually begin the load operation — the “**Are you sure?**” confirmation display will appear.

If you want to execute the load operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). “**Do not remove disk!**” will appear while the data is being loaded, and the progress of the load operation will be indicated by a bar graph at the bottom of the display.

**NOTES**

- The [FROM DISK] button allows all data in a file to be loaded at once. To load individual data groups use the FROM DISK function described on page 94.
- See page 111 for a list of error messages that may appear during a disk load operation.



The first LCD screen displays the following information:

```

FROM DISK
FILE NUMBER : 02
FILE NAME   : YAMAHA01
SIZE       : 80k
EXECUTE
FILE LIST
01: N_FILE00 80k
02: YAMAHA01 80k
    
```

The second LCD screen displays the following information:

```

FROM DISK
FILE NUMBER : 01
FILE NAME   : IA-SET
SIZE       : 28k
EXECUTE
FILE LIST
01: IA-SET          01: EUROPOP 28k
02: CUSTOM-1      10k 02: TOPChart 28k
03: CUSTOM-2       6k
    
```

The third LCD screen displays the following information:

```

FROM DISK
FILE NUMBER : 02
FILE NAME   : YAMAHA01
SIZE       : 80k
Are you sure ?
YES
NO
    
```

## The F6: DISK Functions

The F6: DISK function accesses a range of functions that are used for storage and retrieval of floppy disk data.

If you select the F6: DISK when no disk is present in the drive, the “Disk not found. Please insert disk.” message will appear on the display.

### ● 1 FROM DISK

Loads the specified file from a floppy disk inserted into the PSR-6000 disk drive.

If the **FILE LIST** display shown above is not showing, press the **LIST** LCD button to select it. Use any of the LCD dials to select the file to load. The name of the selected file is displayed to the right of the file number, and the size of the file appears to the right of the file name in kilobytes (approximate).

If you want to select a specific type of data to load, press the **CONTENTS** LCD button.

The LCD dials can now be used to select only one type of data to be loaded from the selected file (or “**ALL DATA**” to load all of the data types). Some selections provide extra choices, listed in the chart below. Press the **LIST** LCD button when you want to go back to the **FILE LIST** display.

When the file and other parameters have been specified, press the **EXECUTE** LCD button to actually begin the load operation — the “**Are you sure?**” confirmation display will appear.

If you want to execute the load operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). “**Do not remove disk!**” will appear while the data is being loaded, and the progress of the load operation will be indicated by a bar graph at the bottom of the display.



The following data types can be selected for loading:

<b>ALL DATA</b>	All of the below.
<b>SET UP</b>	Instrument setup (condition) data (including DOC/GM Chain list data).
<b>DISK STYLE</b>	Disk Style data saved via a TO SAVE operation.
<b>CUSTOM VOICE</b>	Custom voice data.
<b>CUSTOM STYLE</b>	Custom style data. Press the GROUP LCD button to go to the group display. Use the left LCD dials to select the group to be loaded from disk, then the right LCD dials to select the custom accompaniment group to which the data is to be loaded. Press the CONTENTS LCD button to go back to the contents screen or the LIST LCD button to go back to the file list.
<b>PANEL REGIST</b>	Panel registration data.
<b>ONE TOUCH S.</b>	One touch setting data.
<b>PAD DATA</b>	Multi, Tempo, and Percussion pad assignment data.
<b>SEQUENCER</b>	Sequencer song data. Press the INDIVIDUAL LCD button to go to the individual song select display. Use the left LCD dials to select the song to be loaded from disk, then the right LCD dials to select the song number to which the data is to be loaded. Press the CONTENTS LCD button to go back to the contents screen or the LIST LCD button to go back to the file list.

**NOTES**

- See page 28 for instructions on loading data from an optional Style Disk by using the FROM DISK function.

● **2 TO DISK**

Saves the data listed below to a floppy disk inserted into the PSR-6000 disk drive.

If the **FILE LIST** display shown above is not showing, press the **LIST** LCD button to select it. Use any of the LCD dials to select the file to which you want to save the data. The file list at the bottom of the display includes all files which currently exist on the disk and one “NEW” file (named “N-FILE”). Select an existing file if you want to overwrite the file with the new data, or select the “NEW” file if you want to create a new file. With the exception of the “NEW” file, the size of each file will appear to the right of the file name in kilobytes (approximate).

If you want to give a new file an original filename or change the name of an existing file prior to saving it to disk, press the **NAME** LCD button to go to the name display.



File names can be up to 8 characters long. Use the ◀▶ LCD dial to move the name cursor to the various character positions, then use the A~Z or 0~9.. LCD dial to select the required character for each position. The A~Z LCD dial selects capital letters and the 0~9.. LCD dial selects numbers and special characters.

When the file and, if necessary, the file name has been specified, press the EXECUTE LCD button to actually begin the save operation — the “Are you sure?” confirmation display will appear.

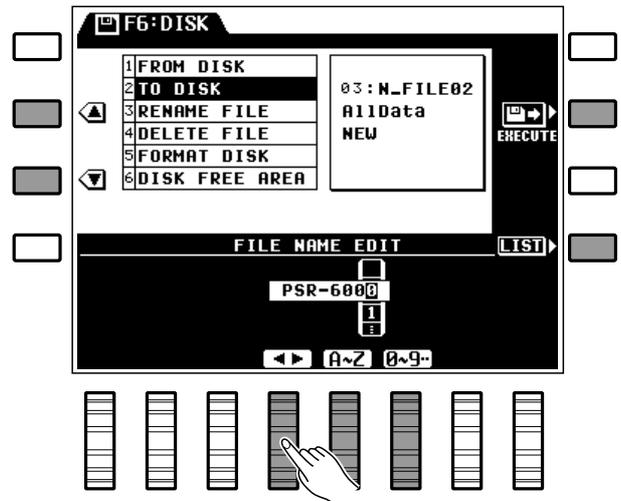
If you want to execute the save operation press the YES LCD button (or press the NO LCD button to cancel the operation). “Do not remove disk!” will appear while the data is being saved, and the progress of the save operation will be indicated by a bar graph at the bottom of the display. You can go back to the file list by pressing the LIST LCD button.

**The data saved to disk is as follows:**

- Instrument setup (condition) data (including DOC/GM Chain list data).
- Disk style data.
- Custom voice data.
- Custom style data.
- Panel registration data.
- One touch setting data.
- Pad assignment data (Multi, Tempo, and Percussion assignments).
- Sequencer song data.

**NOTES**

- If you press the LIST LCD button to switch displays after entering a file name and pressing the EXECUTE LCD button, but before actually saving the name, the new file name will be canceled.
- All data is saved in one operation. Specific data types can not be saved individually.
- See page 111 for a list of error messages that may appear during disk save.
- The PSR-6000 identifies and handles disk files by number rather than the file name. If you save to a file number that already contains data, the original data will be erased and replaced by the new data.



● 3 RENAME FILE

Allows the name of the specified file to be changed as required.

If the **FILE LIST** display shown above is not showing, press the **LIST** LCD button to select it. Use the any of the LCD dials to select the file you want to rename. The name of the selected file is displayed to the right of the file number, and the size of the file appears to the right of the file name in kilobytes (approximate). Press the **NAME** LCD button to go to the name display.

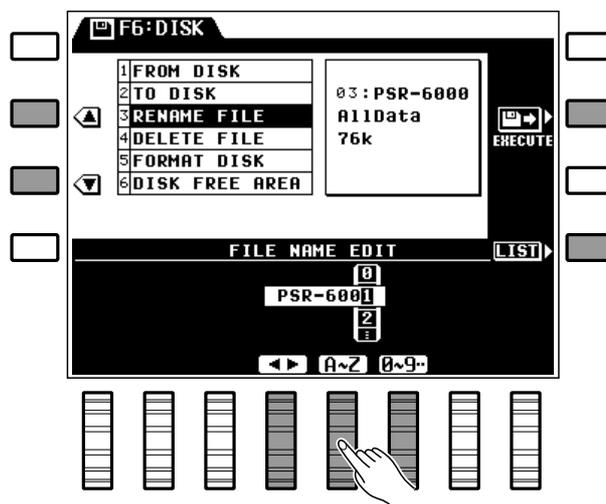
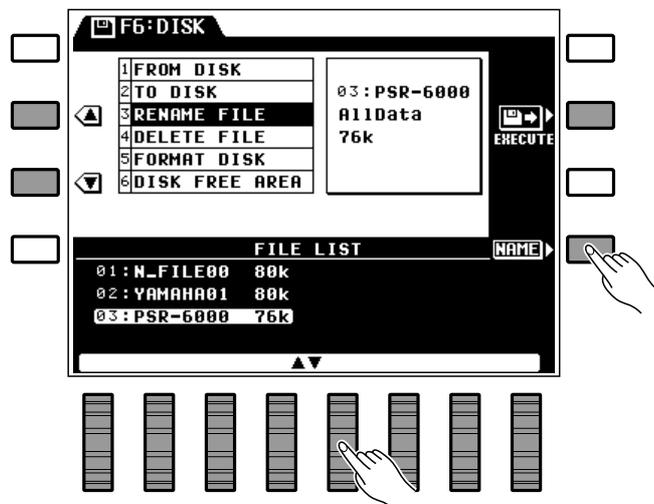
File names can be up to 8 characters long. Use the ◀ ▶ LCD dial to move the name cursor to the various character positions, then use the A~Z or 0~9.. LCD dial to select the required character for each position. The A~Z LCD dial selects capital letters and the 0~9.. LCD dial selects numbers and special characters.

When the file and file name have been specified, press the **EXECUTE** LCD button to actually begin the rename operation — the “Are you sure?” confirmation display will appear.

If you want to execute the rename operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). “Do not remove disk!” will appear while the file is being renamed. You can go back to the file list by pressing the **LIST** LCD button.

NOTES

- If you press the **LIST** LCD button to switch displays after entering a file name and pressing the **EXECUTE** LCD button, but before actually saving the name, the new file name will be canceled.
- This function lets you change the name of a file without having to re-load and then re-save the entire file with a new name.
- Since the PSR-6000 uses the file number rather than the file name to recognize and manage data files, a file saved with the same number as another file will overwrite that file even if it has a different name.



## ● 4 DELETE FILE

Deletes the specified file from the disk.

Use any of the LCD dials to select the file you want to delete. The name of the selected file is displayed to the right of the file number, and the size of the file appears to the right of the file name in kilobytes (approximate).

When the file has been specified, press the **EXECUTE** LCD button to actually begin the delete operation — the “**Are you sure?**” confirmation display will appear.

If you want to execute the delete operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). “**Do not remove disk!**” will appear while the file is being deleted.

### NOTES

- Files deleted from disk can not be restored (there is no “Undo” function), so be sure you’ve selected the right file before actually executing the delete operation.

## ● 5 FORMAT DISK

Formats a floppy disk for use with the PSR-6000.

After inserting a new floppy disk into the disk drive, press the **EXECUTE** LCD button to actually begin the format operation — the “**Are you sure?**” confirmation display will appear.



If you want to execute the format operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). **“Do not remove disk!”** will appear while the disk is being formatted, and the progress of the format operation will be indicated by a bar graph at the bottom of the display.

**NOTES**

- The PSR-6000 uses only 3.5" 2DD type floppy disks.
- Formatting a disk completely erases all data on the disk, so be sure that the disk you're formatting does not contain important data!

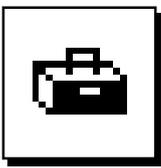
● **6 DISK FREE AREA**

Displays the remaining data capacity of the loaded disk in approximate percent and kilobytes.

**NOTES**

- This is a display-only function with no editable parameters.





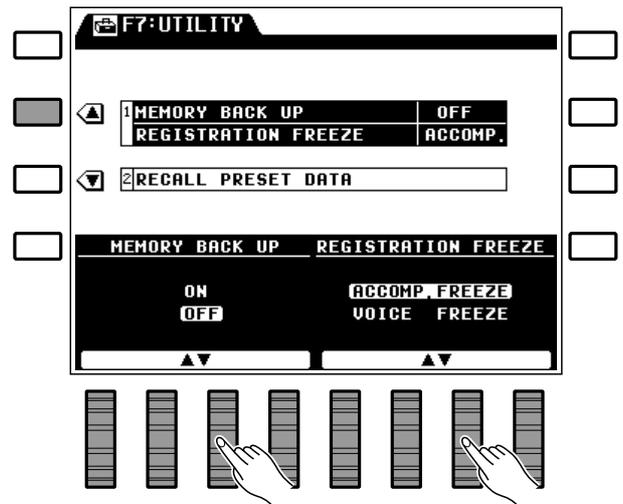
# F7: Utility

The F7: UTILITY function accesses utility functions that let you turn memory backup on or off, select the Panel Registration freeze function mode, and recall the factory preset data.

## MEMORY BACKUP & REGISTRATION FREEZE

### ● MEMORY BACKUP

This function turns memory backup on or off. Use the **MEMORY BACK UP** LCD dials to turn memory backup **ON** or **OFF**.



### Data Backed Up When MEMORY BACKUP is ON

- Sequencer Song Data
- Custom Style Data
- Custom Voice Data
- Disk Style Data
- Panel Registration Memory Data
- Multi Pad Data
- Tempo Change Data
- Percussion Pad Data
- One Touch Setting Data
- Voice Part Select
- Orchestration
- Orchestra 1 Voice
- Orchestra 2 Voice
- Orchestra 1 Octave
- Orchestra 2 Octave
- Mixer Display Volume (ORCH1, ORCH2, CHD1, CHD2, BASS, RHY)
- Harmony On/Off
- Harmony Type
- Style

- DOC/GM Chain list data

- ABC On/Off
- ABC Mode
- Manual Bass Voice
- Transpose Data
- Tune
- IA On/Off
- Accompaniment Variation
- Multi Pad Select
- Pad Synchro, Break, Repeat, On/Off
- Left Hold On/Off
- Key Velocity On/Off
- Foot Switch Assign Data
- Foot Switch Percussion
- Foot Controller Assign Data
- Sustain On/Off
- Sustain Part Select
- Pitch Bend Select
- Wheel On/Off
- Wheel Type
- Split Point
- IA Mode
- Auto Solo On/Off

- IA Sensitivity
- IA Part
- One Touch Setting Mode
- Reverb On/Off
- Reverb Type & Depth
- Effect On/Off
- Effect Type & Depth
- Memory Backup On/Off
- MIDI Transmit Ch
- MIDI Receive Ch
- MIDI Split Send Ch
- MIDI Rhythm Receive Ch
- MIDI Sequencer Ch
- MIDI Multi Part Ch
- MIDI Multi Part Volume
- MIDI Multi Part Voice
- MIDI Switch (Control Change, Pitch Bend, Program Change, System Exclusive)
- MIDI Clock
- MIDI Local On/Off
- MIDI Transpose Add Note
- MIDI Split Send On/Off, Enable

\* The above data will be retained in memory for about one week even if the power is not turned on. To retain the backed up data for longer periods, turn the power switch ON for a few minutes at least once a week.

\* The default setting for this parameter is "OFF".

**Data Backed Up At All Times (MEMORY BACKUP ON or OFF)**

- Sequencer Song Data
- Custom Style Data
- Custom Voice Data
- Disk Style Data
- Panel Registration Memory Data
- Multi Pad Data
- Tempo Change Data
- Percussion Pad Data
- One Touch Setting Data

**NOTES**

- The data backed up (retained in memory even when the power is turned off) by the PSR-6000 are listed above. When memory backup is turned OFF, the initial factory settings are automatically recalled whenever the power is turned on.

**REGISTRATION FREEZE**

Determines whether Panel Registration [FREEZE] button (page 42) freezes the accompaniment or voice settings.

Use the **REGISTRATION FREEZE** LCD dials to select **ACCOMP. FREEZE** or **VOICE FREEZE** as required.

**RECALL PRESET DATA**

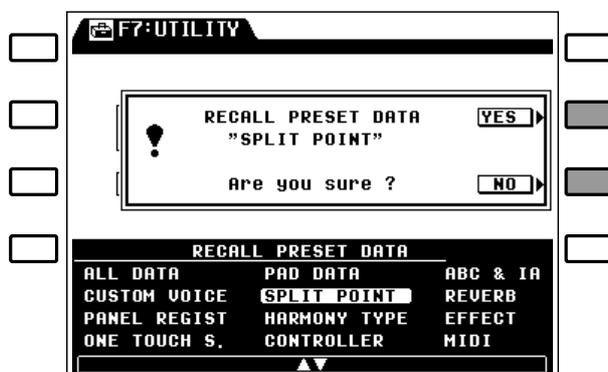
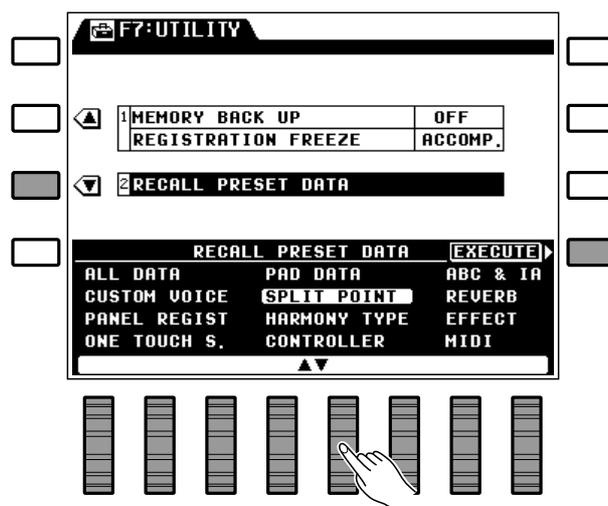
Recalls the specified initial factory settings.

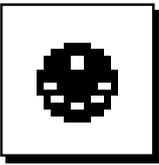
Use any of the LCD dials to select the type of factory preset data you want to recall (see list below), then press the **EXECUTE** LCD button — the “Are you sure?” confirmation display will appear.

If you want to execute the recall preset data operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). “Executing.” will appear while the data is being initialized, “Completed.” will appear briefly when the job is finished.

**Data initialized by the RECALL PRESET DATA function:**

<b>ALL DATA</b>	All of the below.
<b>CUSTOM VOICE</b>	Custom voice data.
<b>PANEL REGIST</b>	Panel registration data.
<b>ONE TOUCH S.</b>	One touch setting data.
<b>PAD DATA</b>	Multi, Tempo, and Percussion pad assignment data.
<b>SPLIT POINT</b>	The split point key.
<b>HARMONY TYPE</b>	The harmony type.
<b>CONTROLLER</b>	All controller settings (F3 function group).
<b>ABC &amp; IA</b>	Auto Bass Chord & Interactive Accompaniment data, preset IA style “New Age” (No.12 button).
<b>REVERB</b>	Reverb type, depth.
<b>EFFECT</b>	Effect type, depth.
<b>MIDI</b>	All MIDI data.





# F8: MIDI

MIDI, the Musical Instrument Digital Interface, is a world-standard communication interface that allows MIDI-compatible musical instruments and equipment to share musical information and control one another. This makes it possible to create “systems” of MIDI instruments and equipment that offer far greater versatility and control than is available with isolated instruments. The PSR-6000 offers a range of MIDI functions that allow it to be used in even sophisticated MIDI systems.

The MIDI parameters available on the PSR-6000 are different according to whether the normal play mode or Disk Orchestra/General MIDI mode is selected. Playback of Disk Orchestra Collection and General MIDI music software disks is described on page 43.



- *Always use a high-quality MIDI cable to connect MIDI OUT to MIDI IN terminals. Never use MIDI cables longer than about 15 meters, since cables longer than this can pick up noise which can cause data errors.*

## THE NORMAL PLAY MODE

In the PSR-6000’s normal mode of operation (i.e. when the DOC/GM mode is not selected) key on/off, voice, sustain, volume, pitch bend, and other performance data is transmitted and received without modification directly via the MIDI OUT and MIDI IN connectors. The receive channel is determined by the MIDI channel setting parameter described on page 104. It is also possible to play the rhythm instrument voices via the rhythm channel (page 104). More complex control is available through the Multi Part Setting parameters (page 105), allowing up to 8 different voices to be controlled via different MIDI channels. It is possible, for example, to play a number of melody parts from an external MIDI control device to the accompaniment of the PSR-6000 ABC system.

## THE DOC MODE

In this mode the PSR-6000 can play Yamaha Disk Orchestra Collection (DOC) software. MIDI data is transmitted and received in accordance with Yamaha DOC specifications.

For details refer to the “MIDI Function Tree” on page 128, the “Voice List” on page 116, and the “GM/DOC Mode Percussion Map” on page 121.

### 3 Ways To Select the DOC Mode

- Insert a DOC disk (the DOC mode is automatically selected).
- Press the [DISK ORCHESTRA/GENERAL MIDI] button (the normal, DOC, and General MIDI modes are selected in sequence).
- Receive a MIDI exclusive “Switch To DOC Mode” message from an external MIDI device.

## THE GENERAL MIDI (GM) MODE

In this mode MIDI data is received and transmitted in accordance with the General MIDI System Level 1 standard. General MIDI data can be received via the MIDI IN connector and played by the PSR-6000. General MIDI data transmitted via the PSR-6000 MIDI OUT connector can be used to control appropriate tone generators and other MIDI equipment.

For details refer to the “MIDI Function Tree” on page 128, the “Voice List” on page 116, and the “GM/DOC Mode Percussion Map” on page 121.

### 3 Ways To Select the GENERAL MIDI Mode

- Insert a General MIDI disk (the GM mode is automatically selected).
- Press the [DISK ORCHESTRA/GENERAL MIDI] button.
- Receive a MIDI exclusive “Switch To GM Mode” message from an external MIDI device.

#### ○ ABOUT GENERAL MIDI

The existing MIDI protocol allows performance and other data to be transferred between different instruments, even if they are from different manufacturers. This means, for example, that sequence data that was originally created to control a tone generator from manufacturer A can also be used to control a different tone generator from manufacturer B. Since the voice allocation in different devices from different manufacturers is usually different, however, appropriate program change data must be transmitted to select the right voices.

The General MIDI protocol was developed to minimize confusion and the need for re-programming when playing software created by one MIDI device on another. This has been achieved by defining a standard voice allocation in which the same or similar voices are accessed by the same program change numbers or MIDI channels. The current standard recognized by the International MIDI Association is known as “GM System Level 1.” The PSR-6000 voice allocation complies with the GM System Level 1 standard when it is switched to the GM mode. See the “Voice List” on page 116 for details.

### ● Initial General MIDI Mode Settings

When the General MIDI mode is selected, the parameters listed below are initialized as shown.

#### General MIDI System Level 1 Mode Initial Settings

Program Change#	0 (Grand Piano)
Pitch Bend	±0 (Center)
Volume	100
Pan	Voice Preset
Modulation	0 (Off)
Expression	127 (Max.)
Hold (Sustain)	0 (Off)
Pitch Bend Sense	02H/00H (2 semitones)
Fine Tune	40H/00H ±0
Coarse Tune	40H/00H ±0
RPN	NULL

## MIDI Channel & Multi Part Settings

The contents of this display are different depending on whether the normal play mode or the DOC/GM mode is selected.

### Normal Play Mode

#### ● CH. SETTING

Sets the basic transmit, basic receive, split transmit, and rhythm receive channels.

Use the **TRANSMIT** LCD dials to select the basic transmit channel (1 ... 16), and the **RECEIVE** LCD dials to select the basic receive channel (1 ... 16, All). The **SPLIT TRANSMIT** LCD dials select the split (left-hand) transmit channel (1 ... 16), and the **RHYTHM RECEIVE** LCD dials select the rhythm receive channel (1 ... 16).

#### TRANSMIT

This setting determines the basic channel on which all PSR-6000 data will be transmitted in the normal play mode.

#### RECEIVE

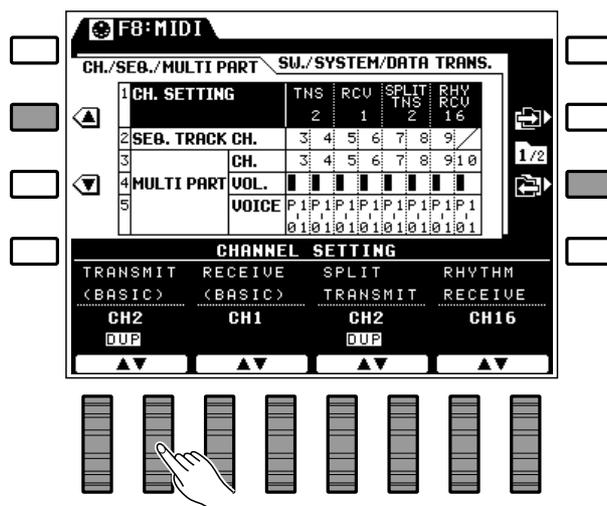
The receive channel is the basic channel on which the PSR-6000 will receive all MIDI data. If set to "All," data can be received via all 16 MIDI channels.

#### SPLIT TRANSMIT

The split transmit channel functions only in the normal play mode. This is the channel on which left-hand performance data (i.e. data produced by playing keys to the left of the split point) will be transmitted. Right-hand performance data is transmitted on the basic transmit channel.

#### RHYTHM RECEIVE

This setting specifies an independent MIDI channel via which the PSR-6000's rhythm (drums and percussion) can be controlled. This means you can, for example, play the selected voice via the basic receive channel while simultaneously playing the rhythm instruments via a different channel



#### NOTES

- The rhythm channel cannot be specified in the DOC/GM mode. Channel 15 is reserved for rhythm in the DOC mode, while channel 10 is reserved for rhythm in the GM mode.

(i.e. the RHYTHM RECEIVE channel).

● **SEQ. TRACK CH.**

Individually sets the transmit channels for the sequencer tracks.

Use the LCD dials — **TR1** through **TR7** to set the transmit channels for the corresponding tracks.

These settings only apply when the normal play mode is selected. Separate transmit channels can be set for sequencer tracks 1 through 7 (the ACCOMP. track does not transmit) so the PSR-6000 sequencer can be used to drive an external multi-timbre tone generator or multiple tone generators via the specified channels.

NOTES

- If basic, split, and or sequencer track transmit channels are set to the same MIDI channel number, DUP will appear below the channel number. If the basic and split transmit channels are set to the same number, the data from both the left- and right-hand sections of the keyboard will be transmitted on the basic transmit channel (the content of the data to be transmitted can be set via the “SPLIT SEND” function described on page 108). Further, if several sequencer tracks are set to transmit on the same channel, the data from all those tracks will be transmitted on the same channel.
- As with the transmit channels described above, if the basic, rhythm, and or multi part (described below) receive channels are set to the same MIDI channel number, DUP will appear below the channel number. In this case the received data will apply to all voices accessed by that channel number. If, for example, the basic, rhythm, and multi part receive channel are all set to the same number, any note data received on that channel will play the orchestra 1, rhythm, and multi part voices simultaneously.

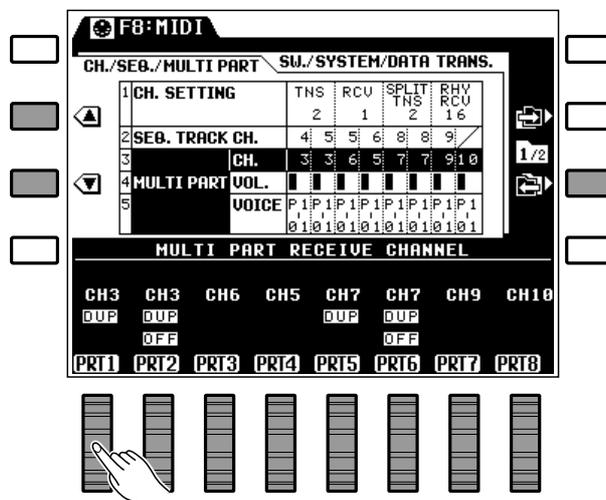
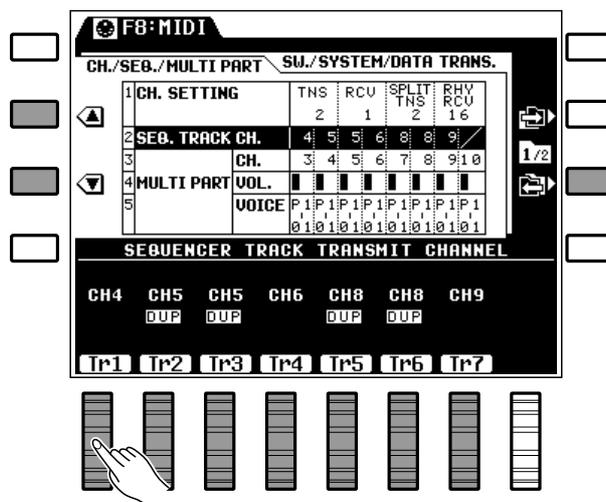
● **MULTI PART**

Allows the receive channel, volume, and voice to be independently specified for 8 separate “parts” to be controlled from an external MIDI device.

NOTES

- In the DOC mode MIDI reception occurs via channels 1 through 10, and channel 15 (rhythm part). In the GM mode, reception occurs on all channels regardless of these settings.

With the **MULTI PART CH.** parameters selected, use the LCD dials — **PART1** through **PART8** — to set the MIDI receive channels of the corre-



sponding parts.

With the **MULTI PART VOL.** parameters selected, use the LCD dials — **PART1** through **PART8** — to set the volume levels of the corresponding

parts.

With the **MULTI PART VOICE** parameters selected, use the LCD dials — **PART1** through **PART8** — to select the voices to be used by the corresponding parts.

**NOTES**

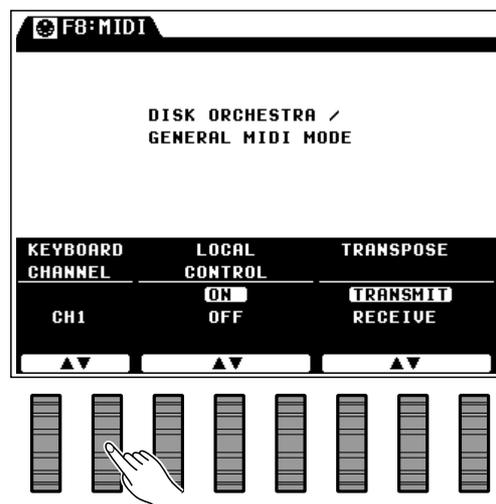
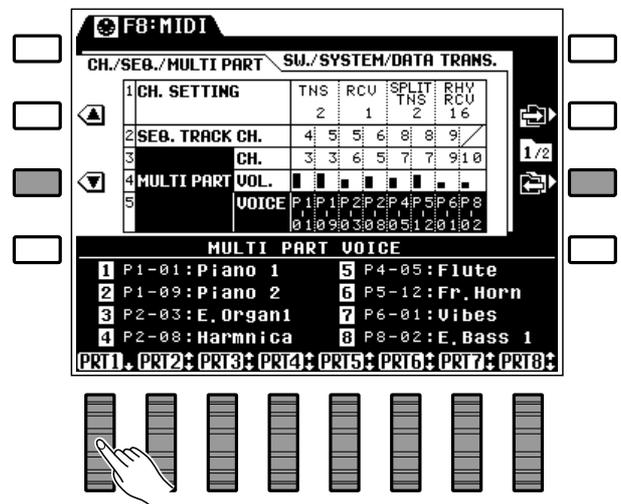
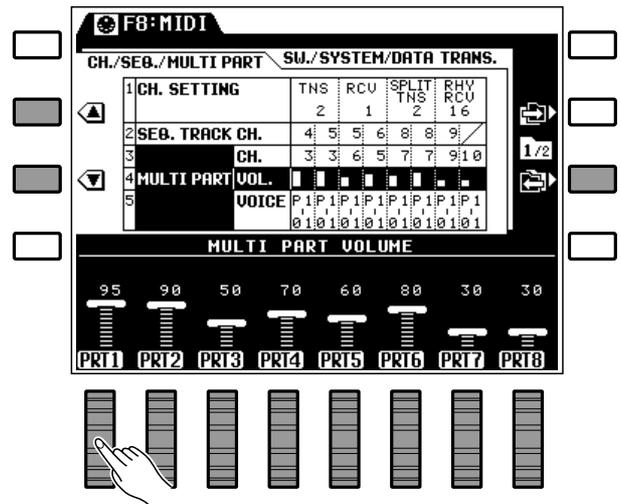
- Note that parts that are not required can be turned "OFF" via the "Channel" parameter in the **MULTI PART RECEIVE CHANNEL** display.
- If the channel number of any part is set to the same channel number as another part **DUP** will appear below both channel numbers, and **OFF** will appear below the higher-numbered part indicating that the part is turned off.
- Any of the preset or custom voices can be specified via the voice parameter in the **MULTI PART VOICE** display.
- If the basic receive channel is set to "All," a multi part receive channel cannot be assigned (**OFF** and **DUP**

will appear on the display).

**DOC/GM Mode**

Sets the keyboard transmit channel, turns local control on or off, and specifies the transpose type for the **DOC/GM** mode.

Use the **KEYBOARD CHANNEL** LCD dial to set the transmit channel (1 ... 16), the **LOCAL CONTROL** LCD dials to turn local control on or off



(see description below), and the **TRANSPOSE** LCD dials to set the transpose type as required (see description below).

● **KEYBOARD CHANNEL**

In addition to accepting MIDI note data on 16 channels (also during disk playback), the PSR-6000 has a separate keyboard note channel. Data on this channel can only be controlled via the PSR-6000 panel controls (when **LOCAL CONTROL** is **ON**), and is not affected by MIDI data. This data is transmitted via MIDI OUT, on the **KEYBOARD CHANNEL**.

● **LOCAL CONTROL**

The “Local” parameter determines whether the PSR-6000 is controlled by its own keyboard or MIDI data received from an external MIDI device. When local control is on, the PSR-6000 keyboard controls its internal tone generator, allowing the internal voices to be played directly from the key-

board. Local control can be turned off, however, so that the PSR-6000 keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT connector when notes are played on the keyboard. At the same time, the internal tone generator responds to MIDI information received via the MIDI IN connector. This means that while an external sequencer or MIDI computer, for example, plays the PSR-6000’s internal voices, an external tone generator can be played from the PSR-6000 keyboard.

When Local is “**ON**” voice and controller parameters that can be played via the keyboard are set to the same channel as the transmit channel.

● **TRANSPOSE**

When this parameter is set to **RECEIVE**, the PSR-6000 transpose settings are not applied to transmitted MIDI data. When set to **TRANSMIT**, the PSR-6000 transpose settings apply to transmitted MIDI data in the same they do to notes played on the PSR-6000 itself. As for received MIDI data, when this parameter is set to

## MIDI Switch, System Settings, & Data Transmission

**TRANSMIT** the note data is not transposed, and when set to **RECEIVE** the note data is transposed.

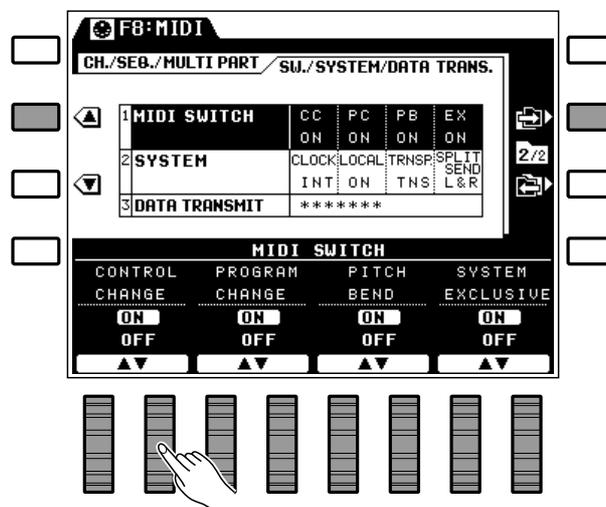
■ **MIDI SWITCH (Normal Play Mode Only)**

Allows reception and transmission of control change, program change, pitch bend, and system exclusive data to be independently turned on or off.

Use the appropriate LCD dials to turn **CONTROL CHANGE**, **PROGRAM CHANGE**, **PITCH BEND**, and/or **SYSTEM EXCLUSIVE** data reception and transmission **ON** or **OFF**.

NOTES

- These “switches” can be used to determine how the PSR-6000 responds to MIDI data received from external equipment. If, for example, you don’t want the PSR-6000 voices to be changed by program change messages received from an external device, turn the program change switch “OFF.”
- The same applies to transmission from the PSR-6000 — turn off data that you don’t want to be transmitted to



external equipment.

- In the DOC/GM mode, all control change data are transmitted and received regardless of the settings on this page.

## MIDI SYSTEM (Normal Play Mode Only)

These functions provide access to a number of important MIDI system “switches” — internal or external clock synchronization, local control on/off, transpose data transmission on/off, and split mode data transmission on/off.

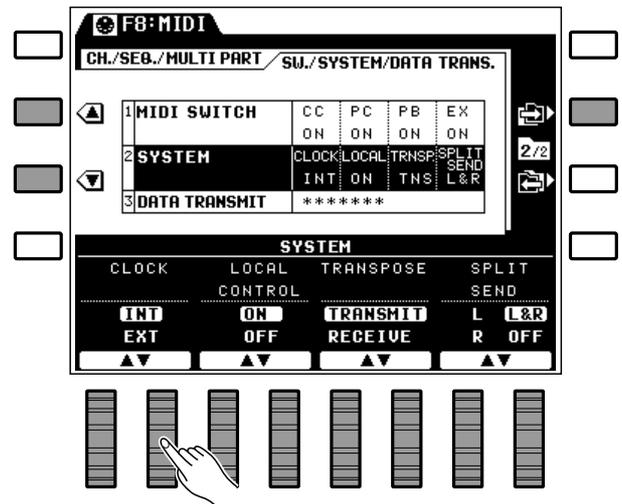
Use the appropriate LCD dials to set the **CLOCK**, **LOCAL CONTROL**, **TRANPOSE**, and **SPLIT SEND** parameters as required (see descriptions below).

### CLOCK

**INT** (internal) clock setting is the normal setting when the PSR-6000 is being used alone. If you are using the PSR-6000 with an external sequencer, MIDI computer, or other MIDI device, and you want the PSR-6000 to be synchronized to the external device, set this function to **EXT** (external). In the latter case, the external device must be connected to the PSR-6000 MIDI IN connector, and must be transmitting an appropriate MIDI clock signal.

### LOCAL CONTROL

“Local Control” refers to the fact that, normally, the PSR-6000 keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is “Local Control ON” since the internal tone generator is controlled locally by its own keyboard. Local control can be turned off, however, so that the PSR-6000 keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT connector when notes are played on the keyboard. At the same time, the internal tone



generator responds to MIDI information received via the MIDI IN connector. This means that while an external sequencer or MIDI computer, for example, plays the PSR-6000’s internal voices, an external tone generator can be played from the PSR-6000 keyboard.

### TRANPOSE

When this parameter is set to **RECEIVE**, the transmitted MIDI note data will not be affected by the PSR-6000 transpose setting. When set to **TRANSMIT** the transmitted notes will be transposed in accordance with the PSR-6000 transpose setting. The reverse is true for reception: when set to **TRANSMIT** received note data is not transposed; when set to **RECEIVE** received note data is transposed.

### SPLIT SEND

The **SPLIT SEND** parameter can be set so that MIDI note data from the left-hand (**L**), right-hand (**R**), or both sections of the keyboard (**L&R**) are transmitted via the MIDI OUT connector. You could choose to transmit only

the right-hand data so that only notes played on the right-hand section of the keyboard are reproduced via an external tone generator, for example. When turned **OFF** data from the entire keyboard is transmitted on the basic transmit channel.

### DATA TRANSMIT (Normal Play Mode Only)

Transmits the specified PSR-6000 panel or memory

data via the MIDI OUT connector.

Use any of the LCD dials to select **PANEL** or **MEMORY** data (see below), then press the **EXECUTE** LCD button — the “Are you sure?” confirmation display will appear.

If you want to transmit the selected data press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). The progress of the data transmit operation will be indicated by a bar graph at the bottom of the display.

The selected data is transmitted as a MIDI bulk dump that can be automatically received by a second PSR-6000 or other compatible MIDI device.

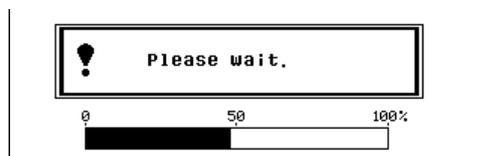
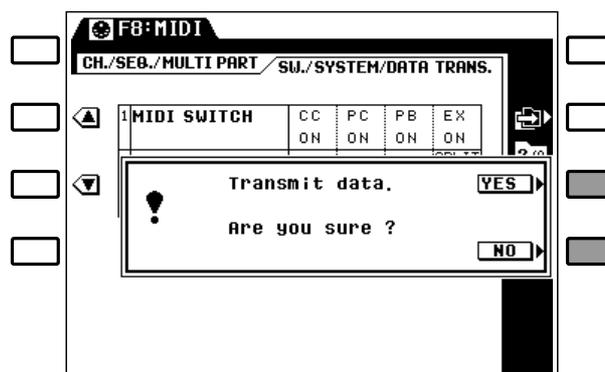
#### PANEL

When **PANEL** is selected all PSR-6000 panel settings are transmitted.

#### MEMORY

When **MEMORY** is selected the following data types are transmitted:

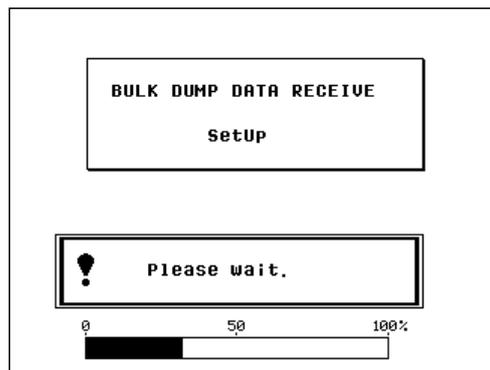
- Panel data.



- Panel registration data.
- One touch setting data.
- Multi, tempo, and percussion pad data.
- Custom voice data.
- Custom style data.
- Sequencer data.

## ● MIDI Bulk Dump Reception (Memory Data Receive)

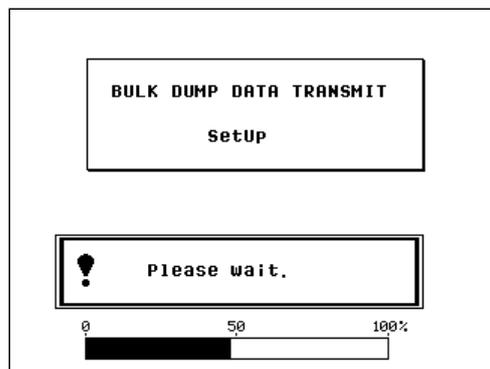
The PSR-6000 can receive bulk data transmitted by a second PSR-6000 as long as it is not accessing disk data, the Custom Accompaniment Programmer is not engaged, and the DOC/GM mode is not selected. When a bulk dump is received the following display will appear:



The bar graph roughly indicates the progress of the bulk dump receive operation. **“Completed.”** will appear on the display when the data has been successfully received.

## ● Receiving MIDI Bulk Dump Request Messages

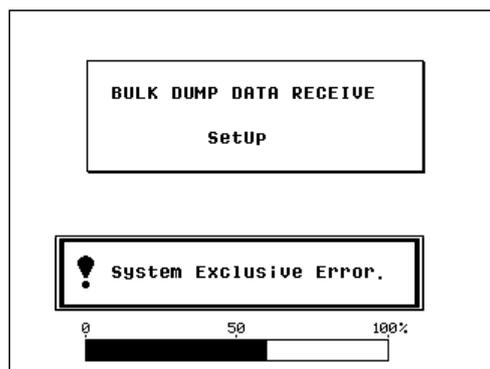
When the normal play mode is selected and the



PSR-6000 receives a MIDI bulk dump request message from an external device, The display appears and a bulk data transmission is performed. Progress of the transmission is shown in bar-graph form on the display.

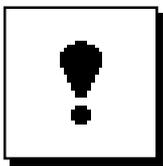
## ● Bulk Dump Error Messages

If an error is encountered during bulk reception, a **“System Exclusive Error ”** error message will appear for a few seconds and the receive operation will be terminated. In most cases the data will be replaced up until the point at which the error occurred. Data being received at the time the error occurred will be initialized. All other data is not affected.



### NOTES

- Broken cables and other external problems can also cause a “System Exclusive Error” message.



# Error Messages

If you attempt to perform an illegal operation or some other problem occurs, the PSR-6000 will usually warn you with an error message that provides an idea of what caused the problem and how it can be rectified. The following are the error messages you're most likely to see during normal operation.

Some of the error displays automatically revert to the previous display after a few seconds, while others require that the **CANCEL** LCD button be pressed to exit from the error display.

If a damaged disk is used the data countdown during FROM DISK or TO DISK operations may stop and the load or save operation may get "hung up." In this case, eject the disk from the drive even though the DISK IN USE lamp may be on. Discard the damaged disk.

## Sequencer Errors

<b>Time signature conflict! Playback not possible.</b>	You have attempted to play back a sequence using a different time signature from the one with which it was recorded.
<b>Data error! Playback stopped.</b>	A data error has been encountered during playback which makes continued playback impossible.
<b>Memory full! Recording stopped.</b>	The sequencer memory is full and no more data can be recorded. You may have to clear songs or data to make room. Save data you want to keep to floppy disk, then clear it from the PSR-6000 memory.
<b>Too much data! Operation cancelled.</b>	There is too much data for the specified edit operation. Simplify the sequence and try again.

## Custom Accompaniment Programmer Errors

<b>Memory full! Cannot store data.</b>	Not enough memory is available to store all the data. Simplify the accompaniment to reduce the amount of data, then try storing the data again.
<b>Work area full! Recording stopped.</b>	The work area memory used during custom accompaniment recording is full and recording cannot continue. Simplify the accompaniment so that it fits in the available work area.
<b>Preset track! Cannot record.</b>	This message will appear if you attempt to set a track which contains preset data to the record mode.
<b>Edited data not stored!</b>	You have attempted to exit from the Custom Accompaniment Programmer or change styles without first saving the edited data. Press the appropriate LCD button to continue.

## Disk Errors

<b>Disk error! Cannot continue.</b>	A data error has occurred during a save, load, delete, or format operation. Press the CANCEL LCD button to clear this error message.
<b>Disk full! Cannot continue.</b>	The floppy disk does not have enough remaining capacity to carry out the specified operation. Press the CANCEL LCD button to clear this error message.
<b>Bad file name.</b>	The file name is all spaces and cannot be recognized by the PSR-6000.

## Error Messages

<b>Not enough memory.</b>	Not enough memory to load the specified sequencer file from disk.
<b>Not a user disk! Cannot continue.</b>	You have attempted to perform a save, rename, delete, format, or disk free area operation while a pre-programmed (non-user) disk is in the drive.
<b>Wrong disk type/format! Cannot continue.</b>	The disk in the drive has not been formatted or the disk is the wrong type or has the wrong format. The current disk is write protected so no format option is provided with this error message (see below).
<b>Wrong disk type/format! Format disk? (All data will be erased!)</b>	The disk in the drive has not been formatted or the disk is the wrong type or has the wrong format. In this case the current disk can be written to, so a format option is provided with the error message.
<b>Disk write protected! Cannot continue.</b>	The disk write protect tab is in the write disable position, so the specified operation cannot be performed.
<b>Disk not found. Please insert disk.</b>	No disk in drive. Insert an appropriate disk and try again.
<b>File not found!</b>	The disk does not contain any files saved by the user.

### MIDI Errors

<b>System exclusive error.</b>	An error has been encountered while receiving MIDI system exclusive data — e.g. during a MIDI bulk dump operation.
<b>MIDI receive buffer overflow.</b>	The MIDI receive buffer cannot handle the amount of data being received. Reduce the complexity of the data being received and try again.

### DOC/GM Mode Errors

<b>Wrong disk type! (Operation cancelled.)</b>	The loaded disk does not contain DOC or GM song files recognizable by the PSR-6000.
<b>File not found! (Operation cancelled.)</b>	The specified song file cannot be found on the currently loaded disk.
<b>Disk load error! Operation cancelled.</b>	An error was encountered while loading data from the disk.

### Other Messages

<b>Back up time limit exceeded! All data was initialized.</b>	The PSR-6000 retains all data in memory for up to approximately one week if the power is not turned on during this time. This message will appear if a longer period of time has elapsed since the last time the power was turned on. In this case all data will be initialized to the factory-preset values. This message will also appear when all internal data is initialized by turning on the power while holding the [EXIT] and [DEMO] buttons.
---	--



# Troubleshooting

Symptom	Possible Cause/Solution
Noise is heard when the power is turned on or off.	This is a normal result of the power surge that occurs when the unit is turned on or off. No solution necessary.
No sound.	The volume controls or foot controller are turned all the way down. Set the volume controls and foot controller to a reasonable listening level.
	A pair of headphones is plugged into the PHONES jack. Unplug the headphones.
	MIDI local control is turned OFF. Turn MIDI local control ON.
The ABC chord does not change even when a different chord is played.	Are you sure you're playing on the left-hand section of the keyboard?
	You are using single-finger type fingering in the fingered mode, or vice-versa. Use the correct type of chord fingering for the selected ABC mode.
The disk lamp lights dimly.	The PSR-6000 is constantly checking for the presence of a disk. This is not a problem.
The style list or voice list does not appear even when a STYLE or VOICE group button is pressed.	The <b>[LIST HOLD]</b> button is engaged (its LED is lit). Press the <b>[LIST HOLD]</b> button so that its indicator goes out, then try selecting a style or voice (page 11).
Some function menus cannot be selected.	The GM/DOC, Sequencer, or Custom Accomp. mode is engaged. All function menus are available in the normal play mode.
An intro, fill-in, or ending created using the Custom Accompaniment Programmer cannot be used.	PRESET/NO ASSIGN is selected for that intro/fill/ending in the I/F/E display screen. Set to USER and try again (page 73).

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  - Accompaniment ..... 19
  - Accompaniment volume ..... 25
  - Accompaniment, ways to start ..... 22
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  - Auto solo ..... 27
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# Voice List • Stimmenverzeichnis • Liste des voix

Group	GM Prog #		GM Mode		DOC Mode	
	Name	Prog #	Name	Prog #	Name	Prog #
<b>PIANO/ E.PIANO</b>	Piano 1	0	Grand Piano	0	Piano Standard	12 (47/48)
	Electric Grand	120	Bright Piano	1	Bright Piano	51 (52)
	DX E.Piano	2	Electric Grand	2	Honky-tonk	49
	Funky E.Piano	4	Honky-tonk	3	E.Piano 1	13
	Bell&E.Piano 1	105	E.Piano 1	4	E.Piano 2	50
	Harpsichord	6	E.Piano 2	5	Harpsichord	14
	Honky-tonk	117	Harpsichord	6	Clavi.	18
	Clavi.	7	Clavi.	7	Clavinova Tone	68
	Piano 2	1				
	Mellow E.Piano	3				
	Ballad E.Piano	5				
	Bell&E.Piano 2	104				
<b>ORGAN/ ACCORDION</b>	Jazz Organ 1	10	Drawbar Organ	16	Jazz Organ 1	11 (43)
	Jazz Organ 2	11	Perc.Organ	17	Jazz Organ 2	82
	E.Organ 1	12	Rock Organ	18	Jazz Organ Dcy	65
	E.Organ 2	13	Church Organ	19	Pipe Organ 1	10
	Rock Organ	14	Reed Organ	20	Pipe Organ Dcy	64
	Theatre Organ	15	Accordion	21	Pipe Organ 2	76
	Accordion	38	Harmonica	22	Accordion	7
	Harmonica	40	Tango Accordion	23	Harmonica	41
	Jazz Organ 3	106				
	Jazz Organ 4	121				
	E.Organ 3	107				
	Drawbar Organ	122				
	Pipe Organ 1	8				
	Pipe Organ 2	9				
	Bandoneon	39				
<b>STRINGS/ CHOIR</b>	Strings 1	21	Strings 1	48	Strings 1	8
	Strings 2	22	Strings 2	49	Strings 2	74
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	Orchestra Hit	29	Whistle	78		
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	<b>WOODWIND</b>	Saxophone	37	Piccolo	72	Saxophone 1
Ballad Sax 1		110	Flute	73	Saxophone Dcy	67
Clarinet 1		33	Recorder	74	Saxophone 2	77
Clarinet 2		102	Pan Flute	75	Clarinet	4
Flute		30	Blown Bottle	76	Oboe	5
Pan Flute		31	Shakuhachi	77	Bassoon	80
Breath Flute		32	Ocarina	79	Flute 1	6
Synth Wood		125	Soprano Sax	64	Flute Dcy	61
Mellow Sax		109	Alto Sax	65	Flute 2	79
Ballad Sax 2		111	Tenor Sax	66	Synth Wood	44
Oboe		34	Baritone Sax	67		
English Horn		35	Oboe	68		
Bassoon		36	English Horn	69		
Blown Bottle		124	Bassoon	70		
Whistle		20	Clarinet	71		

<b>BRASS</b>	Trumpet 1	41	Trumpet	56	Trumpet	1
	Trumpet 2	42	Trombone	57	Muted Trumpet	40
	Muted Trumpet	43	Tuba	58	French Horn	2
	Trombone 1	44	Muted Trumpet	59	Brass	0
	Brass 1	48	French Horn	60	Brass Dcy	60
	Brass Section	126	Brass Section	61	Pop Brass	73
	Brass&Sax	115	Synth Brass 1	62	Synth Brass	20
	Synth Brass	51	Synth Brass 2	63	Synth Brass Dcy	66
	Trumpet 3	108				
	Trumpet 4	112				
	Trombone 2	45				
	French Horn	46				
	Brass 2	49				
	Tuba	47				
	Brass Fall	50				
<b>MALLET</b>	Vibraphone	52	Celesta	8	Celesta	15
	Marimba	54	Glockenspiel	9	Vibraphone	16
	Xylophone	55	Vibraphone	11	Marimba	17
	Glockenspiel	53	Marimba	12	Glockenspiel	19
	Steel Drums	59	Xylophone	13	Steel Drums	58
	Bells	56	Tubular Bells	14	Timpani	23
	Chime	57	Tinkle Bell	112		
	Timpani	58	Steel Drums	114		
			Timpani	47		
<b>GUITAR</b>	Classic Guitar	60	Nylon Guitar	24	Gut Guitar	24
	Folk Guitar	61	Steel Guitar	25	Folk Guitar	53
	12St.Guitar	62	Jazz Guitar	26	Jazz Guitar 1	25
	Jazz Guitar 1	64	Clean Guitar	27	Jazz Guitar 2	72
	Rock Guitar 1	65	Muted Guitar	28	Rock Guitar 1	26 (54)
	Rock Guitar 2	67	OverdriveGtr	29	Rock Guitar 2	69
	Dist.Guitar	68	DistortionGtr	30	Muted Guitar	70
	Hawaiian Guitar	70	GtrHarmonics	31		
	Jazz Guitar 2	63				
	Rock Guitar 3	66				
	Muted Guitar	69				
<b>BASS</b>	Acoustic Bass	74	Acoustic Bass	32	Acoustic Bass 1	28
	Electric Bass 1	75	Fingered Bass	33	Acoustic Bass 2	71
	Electric Bass 2	76	Picked Bass	34	Electric Bass 1	29
	Fretless Bass	77	Fretless Bass	35	Electric Bass 2	30
	Slap Bass	78	Slap Bass 1	36	Electric Bass 3	78
	Synth Bass 1	79	Slap Bass 2	37	Synth Bass	31
	Synth Bass 2	80	Synth Bass 1	38		
			Synth Bass 2	39		
<b>SYNTH</b>	Mini Lead	81	Square Lead	80	Synth Choir	46
	Square Lead	82	Saw. Lead	81	Synth Wood	44
	Big Lead	83	Calliope Lead	82	Synth Brass	20
	Synth Pad 1	84	Chiff Lead	83	Clavinova Tone	68
	Poly Synth	87	Charang Lead	84		
	Atmosphere	89	Voice Lead	85		
	Voyager	19	Fifth Lead	86		
	Sweep Pad 1	119	Bass & Lead	87		
	Crystal	85	New Age Pad	88		
	Soundtrack	113	Warm Pad	89		
	Calliope Lead	114	Polysynth Pad	90		
	Rain	116	Choir Pad	91		
	Synth Pad 2	127	Bowed Pad	92		
	Sweep Pad 2	88	Metallic Pad	93		
	Warm Pad	86	Halo Pad	94		
		Sweep Pad	95			

WORLD/ PERCCUSIVE						
WORLD/ PERCCUSIVE	Banjo	71	Sitar	104	Sitar	27
	Koto	72	Banjo	105	Banjo	55
	Bagpipe	101	Shamisen	106		
	Music Box	118	Koto	107		
			Kalimba	108		
			Bagpipe	109		
			Fiddle	110		
			Shanai	111		
			Dulcimer	15		
			Music Box	10		
			Agogo	113		
			Woodblock	115		
			Taiko Drum	116		
			Melodic Tom	117		
			Synth Drum	118		
			Reverse Cymbal	119		
	DUAL VOICE/ SOUND EFFECT					
DUAL VOICE/ SOUND EFFECT	Sax&Clarinet	90	Rain	96	Crystal	22
	Strings&Harpsi.	91	Soundtrack	97		
	Perc.Synth	92	Crystal	98		
	Caribbean	93	Atmosphere	99		
	Power Brass	94	Brightness	100		
	Big Brass	95	Goblins	101		
	Marching Brass	96	Echoes	102		
	Flute&Marimba	97	Sci-Fi	103		
			Gtr Fret Noise	120		
			Breath Noise	121		
			Seashore	122		
			Bird Tweet	123		
			Telephone	124		
			Helicopter	125		
			Applause	126		
			Gunshot	127		
	DRUMS					
DRUMS	Drum Kit	98				
	Pop Drum Kit	99				

**Keyboard Percussion List • Tastenzuordnung der Schlagzeug- und Percussion-Sounds • Liste de percussion au clavier .....**

C1	Applause	Hand Clap	A♭2	Brush Hit 1	Brush Hit 2	E4	March Cymbal	Reverse Cymbal
D♭1	Triangle Close	Triangle Close	A2	Snare Roll	Snare Roll	F4	Surdo	E.Tom Bass
D1	Whistle Low	Whistle Low	B♭2	Snare Brush Squeeze	Snare Brush Squeeze	F#4	Cabasa	Maracas
E♭1	Triangle Open	Triangle Open	B2	Pedal Hi-Hat 1	Pedal Hi-Hat 2	G4	Tom Brush Low	E.Tom Low
E1	Whistle Hi	Whistle Hi	C3	Closed Hi-Hat 1	Closed Hi-Hat 2	A♭4	Vibraslap	Vibraslap
F1	Kick 1	Kick 5	D♭3	Timbales Low	Timbales Low	A4	Tom Brush Mid	E.Tom Mid
F#1	Kick 2	Kick 6	D3	Open Hi-Hat 1	Open Hi-Hat 2	B♭4	Claves	Wood Block
G1	Kick 3	Kick 7	E♭3	Timbales Hi	Timbales Hi	B4	Tom Brush Hi	E.Tom Hi
A♭1	Kick 4	Kick 8	E3	Closed Hi-Hat 2	Closed Hi-Hat 3	C5	Guiro Long	Guiro Long
A1	Tom 1 Bass	Tom Bass	F3	Open Hi-Hat 2	Open Hi-Hat 3	D♭5	Cuica Low	Scratch Noise Low
B♭1	Rim Shot 1	Rim Shot 2	F#3	Conga 1 Low	Conga 2 Low	D5	Guiro Short	Guiro Short
B1	Tom 1 Low	Tom Low	G3	Ride Cymbal 1	Ride Cymbal 2	E♭5	Cuica Hi	Scratch Noise Hi
C2	Tom 1 Mid	Tom Mid	A♭3	Conga 1 Hi	Conga 2 Hi	E5	Tambourine	Running Water
D♭2	Snare 1	Snare 7	A3	Ride Cup 1	Ride Cup 2	F5	Cowbell Low	Cowbell Hi
D2	Tom 1 Hi	Tom Hi	B♭3	Conga 1 Mute	Conga 2 Mute	F#5	Agogo Low	Agogo Low
E♭2	Snare 2	Snare 8	B3	Crash Cymbal 1	Crash Cymbal 1	G5	Castanet	Dropping Coin
E2	Snare 3	Snare 9	C4	Crash Cymbal 2	Crash Cymbal 2	A♭5	Agogo Hi	Agogo Hi
F2	Snare 4	Snare 3	D♭4	Bongo Low	Bongo Low	A5	Finger Snaps	Finger Snaps
F#2	Snare 5	Snare 10	D4	Splash Cymbal	Chinese Cymbal	B♭5	Cross Sticks	Cross Sticks
G2	Snare 6	Snare 11	E♭4	Bongo Hi	Bongo Hi			

# Style List • Rhythmusverzeichnis • Liste des styles

Group	Name	MIDI Style #
<b>DANCE</b>	Eurobeat	0
	Dance Pop	1
	Tekkno	2
	Party Pop	3
	Disco	4
	Funk Shuffle	5
<b>ROCK'N'ROLL</b>	Synth Boogie	6
	Rock'n'Roll	7
	Twist	8
	Shuffle	9
<b>ROCK</b>	Boogie	10
	Rock Shuffle	11
	8Beat Rock	12
	16Beat Rock	13
<b>POP</b>	Soul Rock	14
	8Beat Pop	15
	8Beat Light	16
	16Beat Fusion	17
<b>BALLAD</b>	16Beat Pop	18
	8Beat Ballad	19
	Piano Ballad	20
	Slow Rock	21
<b>JAZZ</b>	Soul Ballad	22
	Swing	23
	Big Band	24
	Jazz Ballad	25
	Big Band Ballad	26
<b>LATIN</b>	Dixie	27
	Samba	28
	Bossa Nova	29
	Rhumba	30
	Cha-Cha	31
<b>LATIN POP</b>	Tango	32
	Fusion Shuffle	33
	Latin Pop	34
	Pop Samba	35
<b>WALTZ</b>	Reggae	36
	Vienna Waltz	37
	Trad.Waltz	38
	Slow Waltz	39
<b>COUNTRY</b>	Jazz Waltz	40
	Folk Rock	41
	Country	42
<b>TRADITIONAL</b>	Country Ballad	43
	Foxtrot	44
	Slow Fox	45
	Showtune	46
	Polka	47
	March	48
<b>FOR DISK IA</b>	6/8March	49
	New Age	50

# Normal Play Mode MIDI Percussion Map • MIDI-Schlagzeuginstrument-Zuordnung für normalen Spielmodus • Carte de batterie MIDI en mode d'exécution normal

- \* Refer to this map when receiving MIDI data on the rhythm channel.
- \* Richten Sie sich zum Empfang von MIDI-Daten auf dem Rhythmuskanal nach diesem Verzeichnis.
- \* Reportez-vous à cette carte en cas de réception de données MIDI sur le canal de rythme.

12	C-1	Hand Clap	51	E♭2	Snare 2	90	F#5	Agogo Low
13	D♭-1	Triangle Close	52	E2	Snare 3	91	G5	Castanet
14	D-1	Whistle Low	53	F2	Snare 4	92	A♭5	Agogo Hi
15	E♭-1	Triangle Open	54	F#2	Snare 5	93	A5	Finger Snaps
16	E-1	Whistle Hi	55	G2	Snare 6	94	B♭5	Cross Sticks
17	F-1	Kick 5	56	A♭2	Brush Hit 1	95	B5	—
18	F#-1	Kick 6	57	A2	Snare Roll	96	C6	Closed Hi-Hat 2
19	G-1	Kick 7	58	B♭2	Snare Brush Squeeze	97	D♭6	Timbale Low
20	A♭-1	Kick 8	59	B2	Pedal Hi-Hat 1	98	D6	Open Hi-Hat 2
21	A-1	Tom Bass	60	C3	Closed Hi-Hat 1	99	E♭6	Timbale Hi
22	B♭-1	Rim Shot 2	61	D♭3	Timbale Low	100	E6	Closed Hi-Hat 3
23	B-1	Tom Low	62	D3	Open Hi-Hat 1	101	F6	Open Hi-Hat 3
24	C0	Tom Mid	63	E♭3	Timbale Hi	102	F#6	Conga 2 Low
25	D♭0	Snare 7	64	E3	Closed Hi-Hat 2	103	G6	Ride Cymbal 2
26	D0	Tom Hi	65	F3	Open Hi-Hat 2	104	A♭6	Conga 2 Hi
27	E♭0	Snare 8	66	F#3	Conga 1 Low	105	A6	Ride Cup 2
28	E0	Snare 9	67	G3	Ride Cymbal 1	106	B♭6	Conga 2 Mute
29	F0	Snare 3	68	A♭3	Conga 1 Hi	107	B6	Crash Cymbal 1
30	F#0	Snare 10	69	A3	Ride Cup 1	108	C7	Crash Cymbal 2
31	G0	Snare 11	70	B♭3	Conga 1 Mute	109	D♭7	Bongo Low
32	A♭0	Brush Hit 2	71	B3	Crash Cymbal 1	110	D7	Chinese Cymbal
33	A0	Snare Roll	72	C4	Crash Cymbal 2	111	E♭7	Bongo Hi
34	B♭0	Snare Brush Squeeze	73	D♭4	Bongo Low	112	E7	Reverse Cymbal
35	B0	Pedal Hi-Hat 2	74	D4	Splash Cymbal	113	F7	E.Tom Bass
36	C1	Applause	75	E♭4	Bongo Hi	114	F#7	Maracas
37	D♭1	Triangle Close	76	E4	March Cymbal	115	G7	E.Tom Low
38	D1	Whistle Low	77	F4	Surdo	116	A♭7	Vibraslap
39	E♭1	Triangle Open	78	F#4	Cabasa	117	A7	E.Tom Mid
40	E1	Whistle Hi	79	G4	Tom Brush Low	118	B♭7	Wood Block
41	F1	Kick 1	80	A♭4	Vibraslap	119	B7	E.Tom Hi
42	F#1	Kick 2	81	A4	Tom Brush Mid	120	C8	Guiro Long
43	G1	Kick 3	82	B♭4	Claves	121	D♭8	Scratch Noise Low
44	A♭1	Kick 4	83	B4	Tom Brush Hi	122	D8	Guiro Short
45	A1	Tom 1 Bass	84	C5	Guiro Long	123	E♭8	Scratch Noise Hi
46	B♭1	Rim Shot 1	85	D♭5	Cuica Low	124	E8	Running Water
47	B1	Tom 1 Low	86	D5	Guiro Short	125	F8	Cowbell Hi
48	C2	Tom 1 Mid	87	E♭5	Cuica Hi	126	F#8	Agogo Low
49	D♭2	Snare 1	88	E5	Tambourine	127	G8	Dropping Coin
50	D2	Tom 1 Hi	89	F5	Cowbell Low			

- C1 ... B5 are included in voice number 98 Drum Kit.
- C-1 ... B0 are the lower 2 octaves on voice number 99 Pop Drum Kit (C1 ... B2).  
C6 ... G8 are the upper 2.5 octaves (C3 ... G5).
- A♭5 ... C6 are included in both voice numbers 98 Drum Kit and 99 Pop Drum Kit.
- C1 ... B5 sind Teil der "Schlagzeug-Stimme" DRUM KIT (Nr. 98).
- C-1 ... B0 entsprechen den unteren beiden Oktaven bei der "Schlagzeugstimme" POP DRUM KIT (Nr. 99) (C1 ... B2).  
C6 ... B8 entsprechen den oberen zweieinhalb Oktaven (C3 ... G5).
- A♭5 ... C6 sind Teil beider "Schlagzeug-Stimmen", DRUM KIT (Nr. 98) und POP DRUM KIT (Nr. 99).
- C1 ... B5 inclus dans la voix 98 Drum Kit.
- C-1 ... B0 sont les 2 octaves les plus basses de la voix numéro 99 Pop Drum Kit (C1 ... B2).  
C6 ... G8 sont les 2,5 octaves les plus hautes (C3 ... G5).
- A♭5 ... C6 inclus dans les deux voix 98 Drum Kit et 99 Pop Drum Kit.

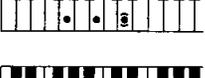
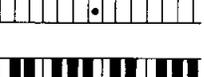
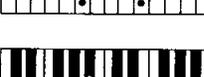
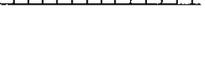
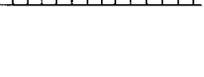
# GM/DOC Mode Percussion Map • Schlagzeugklang-Verzeichnis für GM/DOC-Modus • Carte de batterie en mode GM/DOC

24	C0	Click(Square wave)	—
25	D♭0	Brush Tap	—
26	D0	Brush Swirl L	—
27	E♭0	Brush Slap	—
28	E0	Brush Swirl H	—
29	F0	Snare Roll	—
30	F#0	Castanet	Snare Brush
31	G0	Snare L	—
32	A♭0	Sticks	Closed Hi-Hat Heavy
33	A0	Bass Drum L	—
34	B♭0	Open Rim Shot	Crash Cymbal Light
35	B0	Acoustic Bass Drum	Bass Drum Light
36	C1	Bass Drum 1	Snare Drum+Rim Heavy
37	D♭1	Side Stick	Ride Cup
38	D1	Acoustic Snare	Snare Drum+Rim Light
39	E♭1	Hand Clap	—
40	E1	Electric Snare	—
41	F1	Low Floor Tom	Bass Drum
42	F#1	Closed Hi-Hat	Rim Shot
43	G1	High Floor Tom	Snare Drum Heavy
44	A♭1	Pedal Hi-Hat	Snare Brush Shot
45	A1	Low Tom	Snare Drum Light
46	B♭1	Open Hi-Hat	Pedal Hi-Hat
47	B1	Low-Mid Tom	Snare Drum Echo
48	C2	Hi-Mid Tom	Tom 4
49	D♭2	Crash Cymbal 1	Closed Hi-Hat
50	D2	High Tom	Tom 3
51	E♭2	Ride Cymbal 1	Open Hi-Hat
52	E2	Chinese Cymbal	Tom 2
53	F2	Ride Bell	Tom 1
54	F#2	Tambourine	Ride Cymbal
55	G2	Splash Cymbal	Electronic Tom 3
56	A♭2	Cowbell	Crash Cymbal
57	A2	Crash Cymbal 2	Electronic Tom 2
58	B♭2	Vibraslap	Crash Cymbal
59	B2	Ride Cymbal 2	Electronic Tom 1
60	C3	Hi Bongo	Conga Low
61	D♭3	Low Bongo	Cabasa
62	D3	Mute Hi Conga	Conga High
63	E♭3	Open Hi Conga	Metronome
64	E3	Low Conga	Bongo
65	F3	High Timbale	Timbale Low
66	F#3	Low Timbale	Claves
67	G3	High Agogo	Timbale High
68	A♭3	Low Agogo	Castanets
69	A3	Cabasa	Cuica Low
70	B♭3	Maracas	Cowbell
71	B3	Short Whistle	Cuica High
72	C4	Long Whistle	Hand Clap
73	D♭4	Shot Guiro	Agogo Low
74	D4	Long Guiro	—
75	E♭4	Claves	Agogo High
76	E4	Hi Wood Block	Bongo Low
77	F4	Low Wood Block	Cuica Low
78	F#4	Mute Cuica	Tambourine
79	G4	Open Cuica	Crash Cymbal
80	A♭4	Mute Triangle	Triangle Closed
81	A4	Open Triangle	Snare Brush
82	B♭4	Shaker	Triangle Open
83	B4	Jingle Bell	—
84	C5	Belitree	—

# Fingering Chart • Akkordliste • Tablature

- Notes in parentheses ( ) can be omitted.
- Chord types marked with an asterisk (\*) can be played in any inversion (i.e. the root does not have to be the lowest note in the chord).
- Please determine which chords you are going to use before playing a song. In the case of chords marked with a "●" it may be necessary to shift the split to allow easy fingering.

- Noten in Klammern ( ) können ausgelassen werden.
- Mit einem Sternchenzeichen (\*) versehene Akkorde können in jeder Umkehrung gespielt werden (d.h. der Grundton muß nicht die tiefste angeschlagene Note sein).
- Überlegen Sie sich bitte vor dem Spielen eines Stücks, welche Akkorde gebraucht werden. Bei Akkorden, die mit einem "●" gekennzeichnet sind, ist unter Umständen eine Verlagerung des Splitpunkts vorteilhaft, um das Greifen dieser Akkorde zu erleichtern.

Major* Dur* Majeur*	Minor* Moll* Mineur*	Major seventh* Dur-Akkord mit großer Septime* Majeure septième*	Major sixth Dur-Akkord mit hinzugefügter Sexte Majeure sixte
C 	Cm 	CM7 	C6 
C# (D♭) 	C#m (D♭m) 	C#M7 (D♭M7) 	C#6 (D♭6) 
D 	Dm 	DM7 	D6 
D# (E♭) 	D#m (E♭m) 	D#M7 (E♭M7) 	D#6 (E♭6) 
E 	Em 	EM7 	E6 
F 	Fm 	FM7 	F6 
F# (G♭) 	F#m (G♭m) 	F#M7 (G♭M7) 	F#6 (G♭6) 
G 	Gm 	GM7 	G6 
G# (A♭) 	G#m (A♭m) 	G#M7 (A♭M7) 	G#6 (A♭6) 
A 	Am 	AM7 	A6 
A# (B♭) 	A#m (B♭m) 	A#M7 (B♭M7) 	● A#6 (B♭6) 
B 	Bm 	BM7 	● B6 

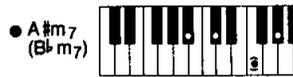
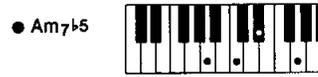
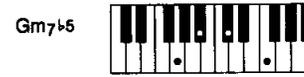
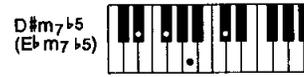
- Les notes entre parenthèses ( ) peuvent être omises.
- Les accords marqués d'un astérisque (\*) peuvent être joués dans n'importe quelle inversion (il n'est pas nécessaire que la note fondamentale de l'accord soit la note la plus basse).
- Veuillez déterminer quels accords que vous allez utiliser avant de commencer l'exécution d'un morceau. Dans le cas des accords marqués par "●", il peut s'avérer nécessaire de déplacer le point de partage pour faciliter l'exécution.

**Suspended fourth\***  
**Dur-Akkord mit vorgehaltener Quarte\***  
**Quarte sur sensible\***

**Minor sixth**  
**Moll-Akkord mit hinzugefügter Sexte**  
**Mineure sechs**

**Minor seventh**  
**Moll-Septakkord**  
**Mineure septième**

**Minor seventh flatted fifth**  
**Moll-Septakkord mit verminderter Quinte**  
**Quinte diminuée sur mineure septième**



**Minor major seventh\***  
**Moll mit großer Septime\***  
**Septième majeure sur mineur\***

**Seventh\***  
**Dur-Septakkord\***  
**Septième\***

**Seventh flatted fifth**  
**Dur-Septakkord mit**  
**verminderter Quinte**  
**Quinte diminuée en**  
**septième**

**Seventh augmented\***  
**Übermäßiger**  
**Septakkord\***  
**Septième augmentée\***



**Seventh suspended fourth\***  
**Dur-Septakkord mit vorgehaltener Quarte\***  
**Quarte sur septième sensible\***

**Seventh ninth\***  
**Dur-Septakkord mit hinzugefügter None\***  
**Neuvième sur septième\***

**Minor ninth**  
**Moll-Akkord mit hinzugefügter None**  
**Mineure neuvième**

**Minor seventh ninth\***  
**Moll-Septakkord mit hinzugefügter None\***  
**Neuvième sur mineure septième\***



**Major ninth**  
Dur-Akkord mit  
hinzugefügter None  
Majeure neuvième

**Major seventh ninth\***  
Dur-Akkord mit großer  
Septime und hinzugefügter  
None\*  
Neuvième sur majeure  
septième\*

**Minor major seventh  
ninth\***  
Moll-Akkord mit großer  
Septime und  
hinzugefügter None\*  
Neuvième majeure  
septième sur mineur\*

**Seventh flatted ninth\***  
Dur-Septakkord mit  
verminderter None\*  
Neuvième diminuée  
sur septième\*



**Major seventh flatted fifth\***  
**Dur-Akkord mit großer Septime**  
**und verminderter Quinte\***  
**Quinte diminuée sur majeure**  
**septième\***

**Augmented**  
**Übermäßig**  
**Augmenté**

**Diminished**  
**Vermindert**  
**Diminué**

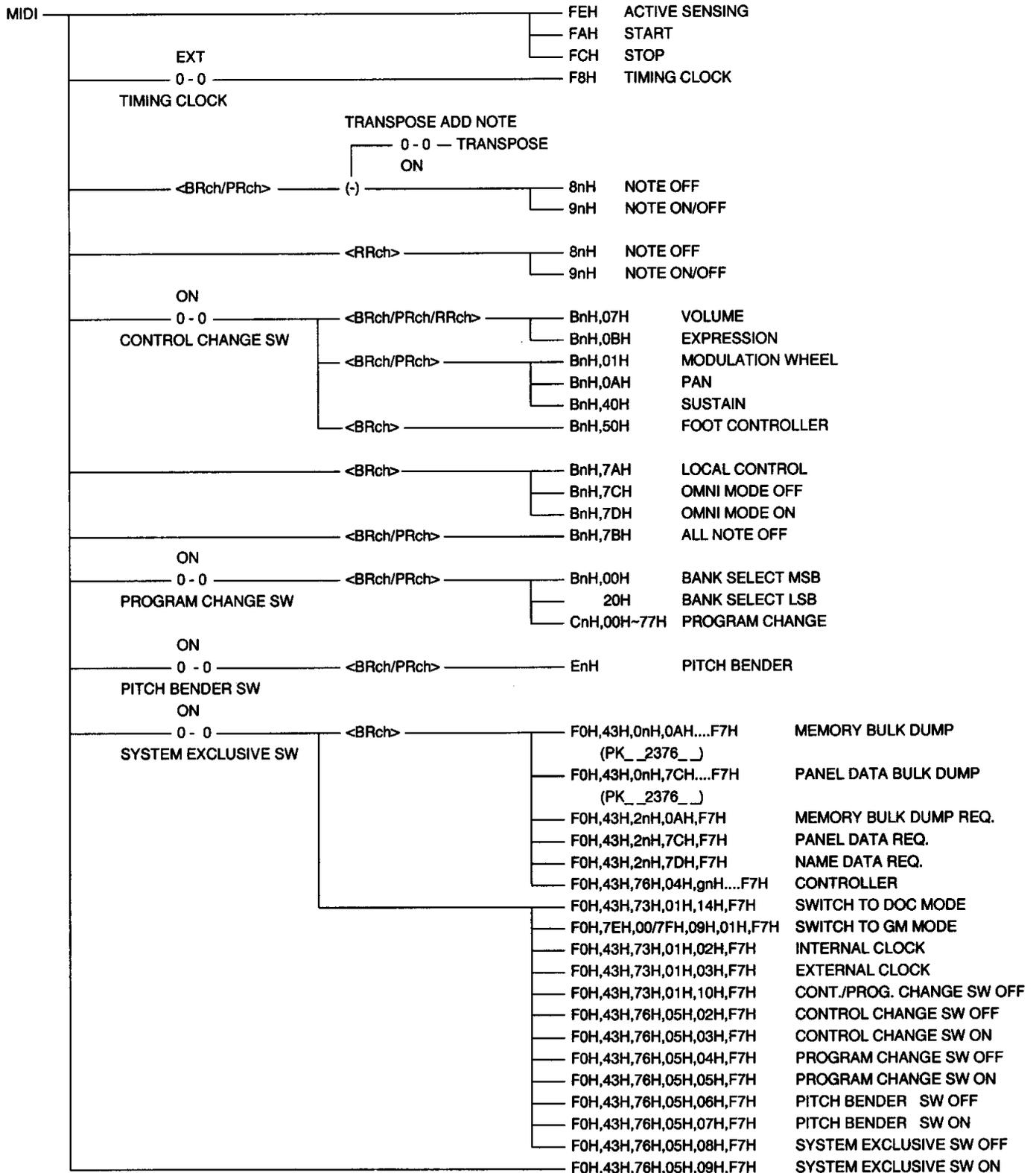
CM <sub>7</sub> ♭5		Caug		Cdim	
C♯M <sub>7</sub> ♭5 (D♭M <sub>7</sub> ♭5)		C♯aug (D♭aug)		C♯dim (D♭dim)	
DM <sub>7</sub> ♭5		Daug		Ddim	
D♯M <sub>7</sub> ♭5 (E♭M <sub>7</sub> ♭5)		D♯aug (E♭aug)		D♯dim (E♭dim)	
EM <sub>7</sub> ♭5		Eaug		Edim	
FM <sub>7</sub> ♭5		Faug		Fdim	
F♯M <sub>7</sub> ♭5 (G♭M <sub>7</sub> ♭5)		F♯aug (G♭aug)		F♯dim (G♭dim)	
GM <sub>7</sub> ♭5		Gaug		Gdim	
G♯M <sub>7</sub> ♭5 (A♭M <sub>7</sub> ♭5)		G♯aug (A♭aug)		G♯dim (A♭dim)	
AM <sub>7</sub> ♭5		Aaug		Adim	
A♯M <sub>7</sub> ♭5 (B♭M <sub>7</sub> ♭5)		A♯aug (B♭aug)		A♯dim (B♭dim)	
BM <sub>7</sub> ♭5		♭ Baug		Bdim	

# MIDI Function Tree • MIDI-Funktionsübersicht • Arbre des fonctions

- \* Values with an "H" suffix are hexadecimal.
- \* Bei Werten mit dem Suffix "H" handelt es sich um Hexadezimalwerte.
- \* Les valeurs précédées du suffixe "H" sont des valeurs hexadécimales.

## I. Normal Play Mode

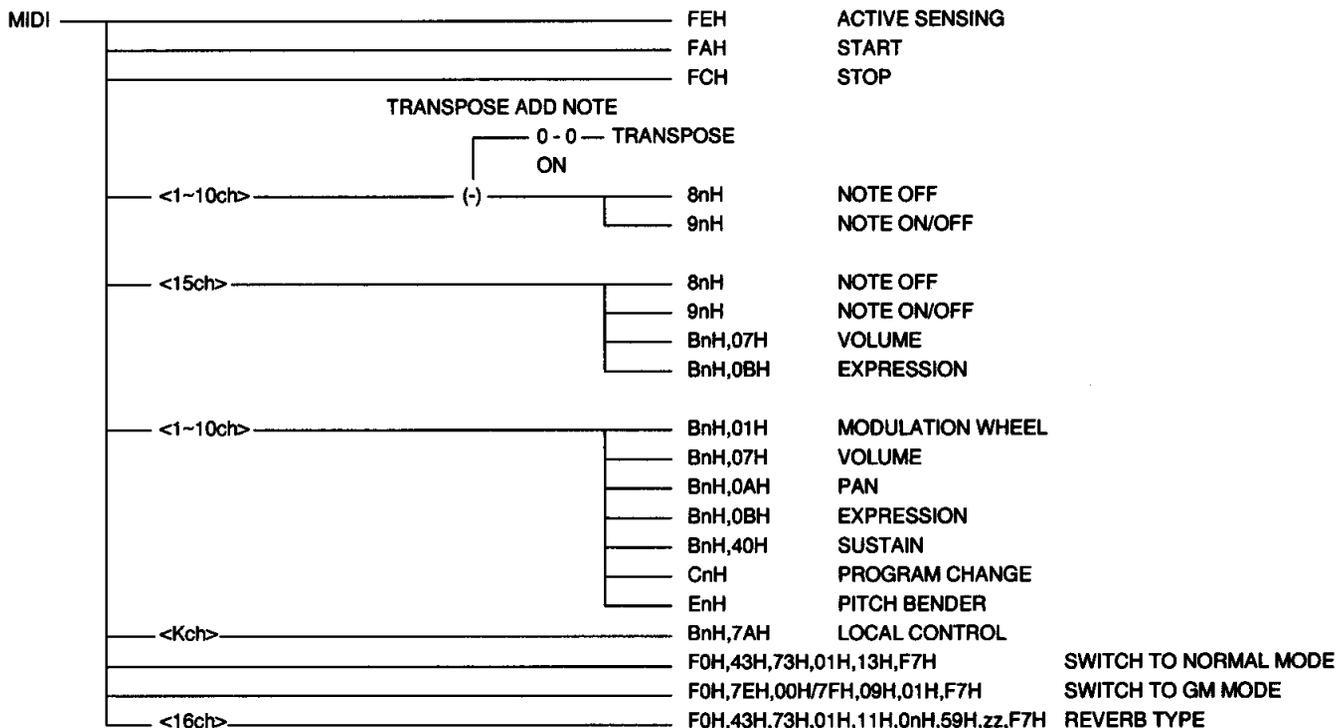
<Reception Conditions> BRch:Basic Receive Channel  
 PRch:Multi Part Receive Channel  
 RRch:Rhythm Receive Channel



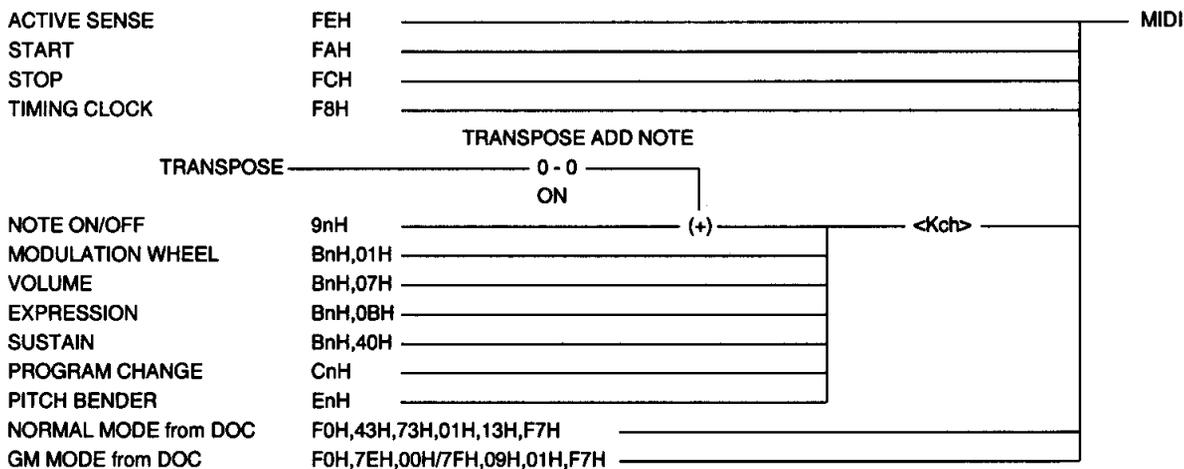


## II. DOC Mode

<Reception Conditions> Kch:Key Channel



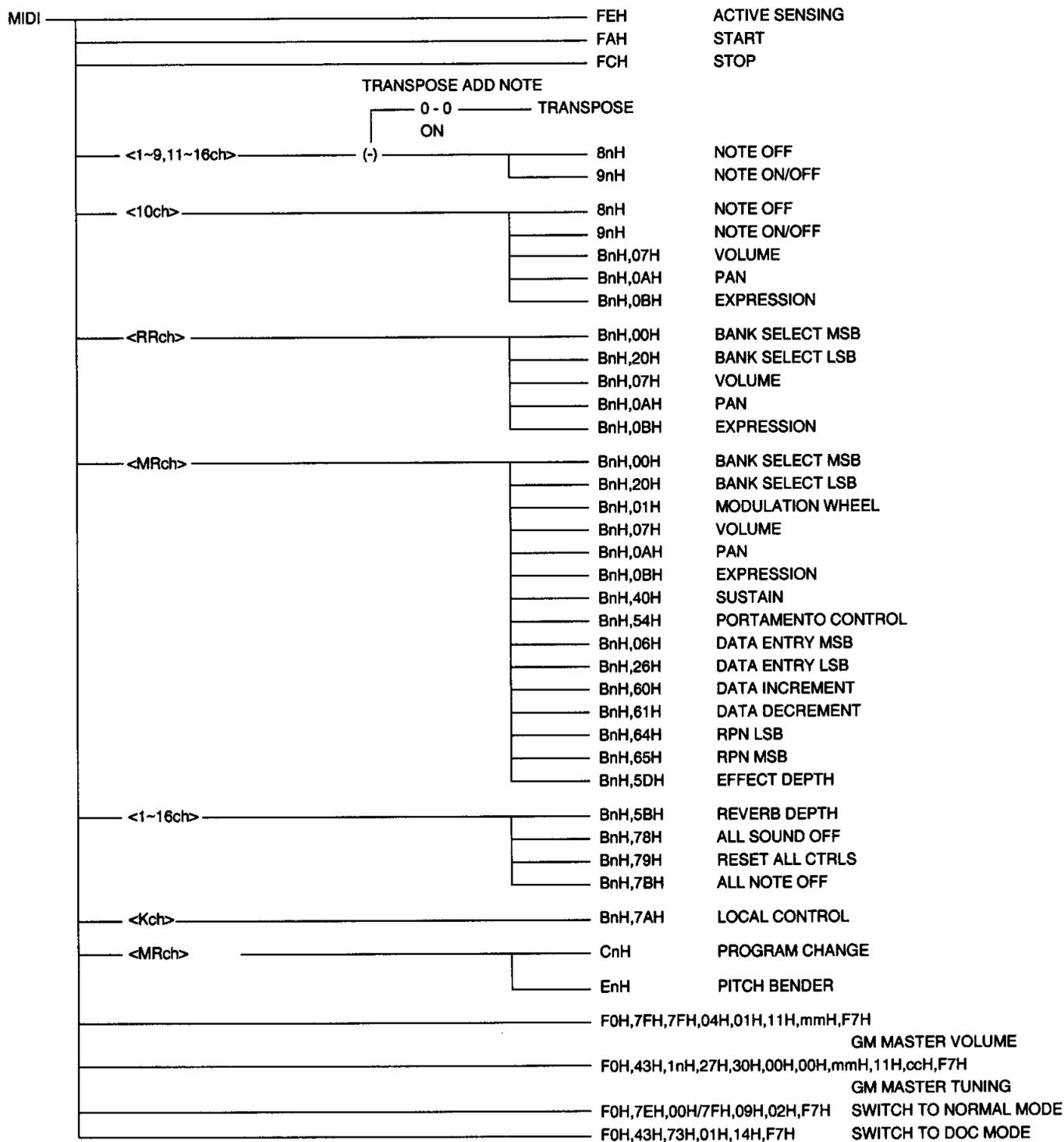
<Transmission Conditions> Kch:Key Channel



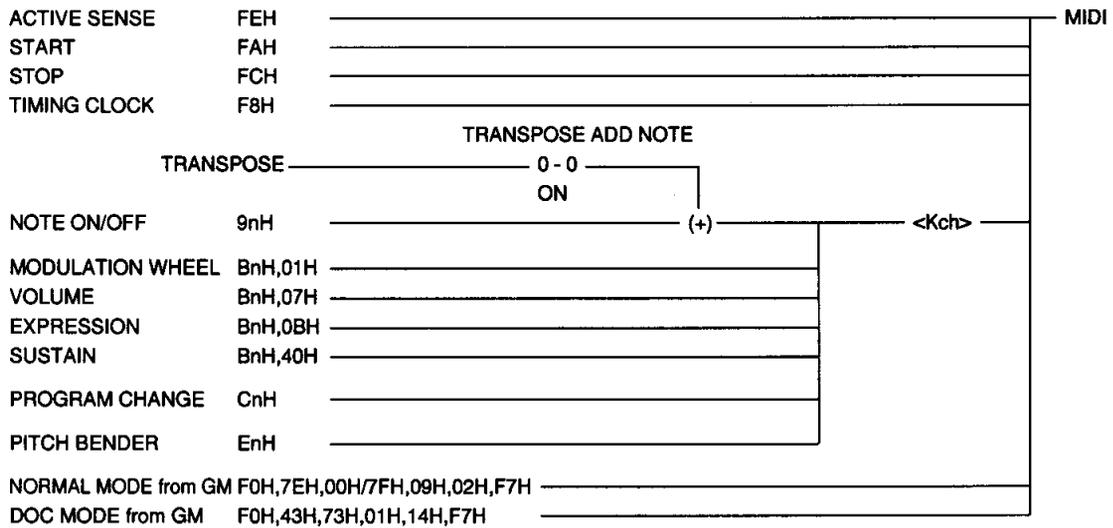
### III. GM Mode

<Reception Conditions>

Kch:Key Channel  
 MRch:Melody Receive Channel  
 RRch:Rhythm Receive Channel (except 10 channel)



<Transmission Conditions> Kch:Key Channel



## I. Channel Message

### 1. VOICE MESSAGE

1-1) 8n : NOTE OFF (Reception only)

(Compatible with Normal: O DOC: O GM1: O)

8	n
0	k
0	v

n: MIDI Channel

k: Key Note Number

v: Velocity

Velocity value ignored.

1-2) 9n : NOTE ON/OFF (Compatible with Normal: O DOC: O GM1: O)

9	n
0	k
0	v

n: MIDI Channel

k: Key Note Number

v: Velocity 00H~7FH

Key off when velocity = 0.

1-3) Cn : PROGRAM CHANGE

(Compatible with Normal: O DOC: O GM1: O)

C	n
0	p

n: MIDI Channel

p: Program Number

[IN/OUT]

Program Number      Normal : 0~127  
 DOC                    : 0~87 (Some numbers omitted)  
 GM1                    : 0~127

1-4) En : PITCH BEND CHANGE

(Compatible with Normal: O DOC: O GM1: O)

E	n
0	LSB
0	MSB

n: MIDI Channel

MSB      LSB

01111111 01111111 : max

: :

01000000 00000000 : center

: :

00000000 00000000 : min

[IN]

Pitch range.      Normal : Depends on voice.  
 DOC                : ±300¢  
 GM1                : ±200 cents default. Maximum range  
                          ±1 octave with RPN.

[OUT]

Pitch bend wheel value output.

1-5) Bn : CONTROL CHANGE

B	n
0	c
0	v

n: MIDI Channel

c: Control Number

v: Control Value

c=0 (Bank Select MSB) (Compatible with Normal: O DOC: X GM1: O)

[IN]

v = Normal: 00H, fixed.  
 GM1: 00H, GM melody voice.  
       7FH, GM rhythm voice.  
       10ch is fixed to 7FH

[OUT]

v = 00H, fixed.

c=1 (Modulation Depth) (Compatible with Normal: O DOC: O GM1: O)

[IN]

v= Normal : Depends on voice.

DOC : vibrato depth

GM1 : Depends on voice.

[OUT]

v = modulation wheel value: 00H(min) ~ 7FH(max).

c=7 (Volume) (Compatible with Normal: O DOC: O GM1: O)

[IN]

v= Normal : Corresponds to fader position.

DOC : 7FH=0dB, 00H=-∞, 0.1875dB/step

GM1 : 7FH=0dB, 60H=-4.8dB, 40H=-11.9dB,

20H=-23.9dB, 10H=-36dB, 00H=-∞

[OUT]

v= Normal : Corresponds to fader position.

DOC : Actual dB value applied to tone generator in  
 0.1875 dB steps, according to fader position.

GM1 : Inverse change applied to tone generator in dB,  
 according to fader position.

0dB=7FH, -4.8dB=60H, -11.9dB=40H,  
 -23.9dB=20H,.....

c=10 (Pan) (Reception only)

(Compatible with Normal: O DOC: O GM1: O)

[IN]

	Normal	GM1	DOC
V= 00H~07H	LEFT	7	LEFT 6
08H~0FH		6	6
10H~17H		5	6
18H~1FH		4	5
20H~27H		3	4
28H~2FH		2	3
30H~37H		1	2
38H~3FH	CENTER		1
40H	VOICE PAN		CENTER
41H~47H	CENTER		CENTER
48H~4FH	RIGHT	1	VOICE PAN
50H~57H		2	RIGHT 1
58H~5FH		3	2
60H~67H		4	3
68H~6FH		5	4
70H~77H		6	5
78H~7FH		7	6

c=11 (Expression) (Compatible with Normal: O DOC: O GM1: O)

[IN]

v= Normal : Corresponds to expression position.

DOC : 7FH=0dB, 00H=-∞, 0.1875dB/step

GM1 : 7FH=0dB, 60H=-4.8dB, 40H=-11.9dB,

20H=-23.9dB, 10H=-36dB, 00H=-∞

[OUT]

v= Normal : Corresponds to expression position.

DOC : Actual dB value applied to tone generator in  
 0.1875 dB steps, according to expression  
 position.

GM1 : Inverse change applied to tone generator in dB,  
 according to expression position.

0dB=7FH, -4.8dB=60H, -11.9dB=40H,  
 -23.9dB=20H,.....

## c=32 (Bank Select LSB)

(Compatible with Normal: O DOC: X GM1: X)

[IN/OUT]

v= Normal 00H: CustomVoice SW OFF

01H: CustomVoice SW ON

GM1 00H: fixed

## c=64 (Sustain)

(Compatible with Normal: O DOC: O GM1: O)

[IN]

v= : 00H~3FH=OFF, 40H~7FH=ON

(In DOC mode 00H~2FH=OFF, 30H~7FH=ON)

[OUT]

v= : 00H=OFF, 7FH=ON

## c=80 (Foot Controller)

(Compatible with Normal: O DOC: X GM1: X)

[IN]

v= : 00H~3FH=OFF, 40H~7FH=ON

[OUT]

v= : 00H=OFF, 7FH=ON

## c=84 (Portamento Control) (Reception only)

(Compatible with Normal: X DOC: X GM1: O)

[IN]

v= : 00H~7FH, Sorce Note

Portamento time is always 0.

## c=100(RPN LSB) (Reception only)

(Compatible with Normal: X DOC: X GM1: O)

### =101(RPN MSB)

[IN]

MSB	LSB	Function
v= 00H	00H	Pitch Bend Sense
00H	01H	Fine Tuning
00H	02H	Coarse Tuning

## c=6 (Data Entry MSB) (Reception only)

(Compatible with Normal: X DOC: X GM1: O)

### =38 (Data Entry LSB)

[IN]

v= Data input according to RPN, above.  
 Pitch Bend Sense: 1 step = 100/128 cents,  
 range = 0 ~ 1200 cents.  
 Fine Tuning: 1 step = 100/8196 cents, range = ±100 cents.  
 Coarse Tuning: 1 step = 100 cents, range = ±1200 cents.

## c=96 (Data Increment) (Reception only)

(Compatible with Normal: X DOC: X GM1: O)

### =97 (Data Decrement)

[IN]

v= Incremented or decrement by 1 in relation to the RPN value given above.

## c=91 (Reverb Depth) (Reception only)

(Compatible with Normal: X DOC: X GM1: O)

v = 7FH=0dB, 60H=-4.8dB, 40H=-11.9dB, 20H=-23.9dB,  
 10H=-36dB, 00H=-∞

## c=93 (Effect Depth) (Reception only)

(Compatible with Normal: X DOC: X GM1: O)

v = 7FH=0dB, 60H=-4.8dB, 40H=-11.9dB, 20H=-23.9dB,  
 10H=-36dB, 00H=-∞

## 2. MODE MESSAGE (Reception only)

B	n
0	c
0	v

n: MIDI Channel

c: Mode Message

v: Value

Refer to the chart below.

Mode Message	Function	Value	Normal	DOC	GM1
120	All Sound off	00H~7FH	X	X	O
121	Reset All Ctrls	00H~7FH	X	X	O*
122	Local Control	00H (off), All others (on)	O	O	O
123	All Notes Off	00H	O	X	O
124	OMNI Mode Off	00H	O	X	X
125	OMNI Mode On	00H	O	X	X

\* Controller parameters reset by GM1.

Pitch Bend Change=40H/00H (Center), Modulation=0 (Off),  
 Expression=127 (max.), Hold=0 (Off), RPN=null, Program  
 Change/Volume/Pan are not reset.

## II. System Message

### 1. REAL TIME MESSAGE

F8 : TIMING CLOCK (Compatible with Normal: O DOC: O GM1: O)  
 Transmission only in DOC & GM1 modes.

FA : START (Compatible with Normal: O DOC: O GM1: O)

FC : STOP (Compatible with Normal: O DOC: O GM1: O)

FE : ACTIVE SENSING (Compatible with Normal: O DOC: O GM1: O)

### 2. SYSTEM EXCLUSIVE MESSAGE

#### (1) MEMORY BULK DUMP REQUEST (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
0010nnnn	2nH	Substatus/n: Device Number
00001010	0AH	Format Number
11110111	F7H	EOX

#### (2) MEMORY BULK DUMP DATA

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
0000nnnn	0nH	Substatus/n: Device Number
00001010	0AH	Format Number
0nnnnnnn	nn	Byte Count MSB
0nnnnnnn	nn	Byte Count LSB
01010000	50H	Header 'P
01001011	4BH	'K
00100000	20H	space
00100000	20H	space

```

00110010 32H      '2
00110011 33H      '3
00110011 37H      '7
00111001 36H      '6
00100000 20H      space
0nnnnnnn nn      Data Number*
0ddddd dd        Data
:           :
0ddddd dd
0sssssss ss      Check-sum
11110111 F7H     EOX
    
```

\* DATA NUMBER

```

00H      SYSTEM SET UP DATA
01H      PANEL REGISTRATION DATA
02H~04H ONE TOUCH SETTING DATA
05H~07H PAD DATA
08H~09H CUSTOM VOICE DATA
0AH~4AH CUSTOM ACCOMPANIMENT DATA
4BH~6AH SEQUENCER DATA
    
```

(3) PANEL DATA REQUEST (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

```

11110000 F0H     Status
01000011 43H     YAMAHA ID
0010nnnn 2nH     Substatus/n: Device Number
01111100 7CH     Format Number
11110111 F7H     EOX
    
```

(4) PANEL DATA BULK DUMP

(Compatible with Normal: O DOC: X GM1: X)

```

11110000 F0H     Status
01000011 43H     YAMAHA ID
0000nnnn 0nH     Substatus/n: Device Number
01111100 7CH     Format Number
0nnnnnnn nn      Byte Count MSB
0nnnnnnn nn      Byte Count LSB
01010000 50H     Header 'P
01001011 4BH     'K
00100000 20H     space
00100000 20H     space
00110010 32H     '2
00110011 33H     '3
00110011 37H     '7
00111001 36H     '6
00100000 20H     space
00100000 20H     space
0vvvvvvv vv      Software Version Number
0rrrrrrr rr      Software Revision Number
0ddddd dd        Data
:           :
0ddddd dd
0sssssss ss      Check-sum
11110111 F7H     EOX
    
```

(5) NAME DATA REQUEST (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

```

11110000 F0H     Status
01000011 43H     YAMAHA ID
0010nnnn 2nH     Substatus/n: Device Number
01111101 7DH     Format Number
11110111 F7H     EOX
    
```

(6) NAME DATA TRANSMISSION (Transmission Only)

(Compatible with Normal: O DOC: X GM1: X)

```

11110000 F0H     Status
01000011 43H     YAMAHA ID
0000nnnn 0nH     Substatus/n: Device Number
01111101 7DH     Format Number
0nnnnnnn nn      Byte Count MSB
0nnnnnnn nn      Byte Count LSB
01010000 50H     Header 'P
01001011 4BH     'K
00100000 20H     space
00100000 20H     space
00110010 32H     '2
00110011 33H     '3
00110011 37H     '7
00111001 36H     '6
00100000 20H     space
00100000 20H     space
0vvvvvvv vv      Software Version Number
0rrrrrrr rr      Software Revision Number
0ccccc cc        ]
0ccccc cc        ] Condition Data
0ccccc cc        ]
0sssssss ss      Check-sum
11110111 F7H     EOX
    
```

(7) DOC/Normal Play Mode Switching

(7.1) NORMAL PLAY MODE

(Compatible with Normal: X DOC: O GM1: X)

```

11110000 F0H     Status
01000011 43H
01110011 73H
00000001 01H
00010011 13H
11110111 F7H     EOX
    
```

(7.2) DOC MODE (Compatible with Normal: O DOC: X GM1: O)

```

11110000 F0H     Status
01000011 43H
01110011 73H
00000001 01H
00010100 14H
11110111 F7H     EOX
    
```

## (8) GM Level 1/Normal Play Mode Switching

### (8.1) NORMAL PLAY MODE

(Compatible with Normal: X DOC: X GM1: O)

11110000	F0H	Status
01111110	7EH	
01111111	<Device ID> 00H or 7FH	
00001001	09H	
00000010	02H	GM Mode Off
11110111	F7H	EOX

### (8.2) GM Level 1 MODE

(Compatible with Normal: O DOC: O GM1: O)

11110000	F0H	Status
01111110	7EH	
01111111	<Device ID> 00H or 7FH	
00001001	09H	
00000001	01H	GM Mode On
11110111	F7H	EOX

## (9) CLOCK MODE CHANGE

### (9.1) INTERNAL MODE (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110011	73H	Substatus Section No.= 3 (Single Keyboard)
00000001	01H	Product ID
00000010	02H	Internal Clock Mode
11110111	F7H	EOX

### (9.2) EXTERNAL MODE (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110011	73H	Substatus Section No.= 3 (Single Keyboard)
00000001	01H	Product ID
00000011	03H	External Clock Mode
11110111	F7H	EOX

## (10) CONTROL/PROGRAM CHANGE OFF (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110011	73H	Substatus Section No.= 3 (Single Keyboard)
00000001	01H	Product ID
00010000	10H	MIDI non-sync mode on.
11110111	F7H	EOX

## (11) CONTROL CHANGE OFF (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)
00000101	05H	
00000010	02H	Control Change Off
11110111	F7H	EOX

## (12) CONTROL CHANGE ON (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)
00000101	05H	
00000011	03H	Control Change On
11110111	F7H	EOX

## (13) PROGRAM CHANGE OFF (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)
00000101	05H	
00000100	04H	Program Change Off
11110111	F7H	EOX

## (14) PROGRAM CHANGE ON (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)
00000101	05H	
00000101	05H	Program Change On
11110111	F7H	EOX

## (15) PITCH BEND OFF (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)
00000101	05H	
00000110	06H	Pitch Bender Off
11110111	F7H	EOX

## (16) PITCH BEND ON (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)
00000101	05H	
00000111	07H	Pitch Bender On
11110111	F7H	EOX

## (17) SYSTEM EXCLUSIVE OFF (Reception only)

(Compatible with Normal: O DOC: X GM1: X)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)
00000101	05H	
00001000	08H	System Exclusive Off
11110111	F7H	EOX

## (18) SYSTEM EXCLUSIVE ON (Reception only)

(Compatible with Normal: ○ DOC: × GM1: ×)

11110000	F0H	Status	
01000011	43H	YAMAHA ID	
01110110	76H	Substatus Section No.= 6 (Portable Keyboard)	
00000101	05H		
00001001	09H	System Exclusive On	
11110111	F7H	EOX	

This command can be received even when system exclusive is OFF.

## (19) REVERB TYPE (Compatible with Normal: × DOC: ○ GM1: ×)

11110000	F0H	Status	
01000011	43H	YAMAHA ID	
01110011	73H	Substatus Section No.= 3 (Single Keyboard)	
00000001	01H	Product ID	
00010001	11H		
0000nnnn	0nH	Channel number	
01011001	59H		
0zzzzzzz	zz	Reverb Type	zz=00: OFF
11110111	F7H	EOX	01: ROOM 02: HALL 03: HALL 04: OFF

## (20) GM MASTER VOLUME

(Compatible with Normal: × DOC: × GM1: ○)

11110000	F0H	Status	
01111111	7FH		
01111111	7FH		
00000100	04H		
00000001	01H		
01111111	11H	11: Ignored	
0mmmmmm	mmH	mm=	7FH=0dB, 60H=-4.8dB, 40H=-11.9dB, 20H=-23.9dB, 10H=-36dB, 00H=∞
11110111	F7H	EOX	

## (21) GM MASTER TUNING

(Compatible with Normal: × DOC: × GM1: ○)

11110000	F0H	Status	
01000011	43H	YAMAHA ID	
0001nnnn	1nH	n: Ignored	
00100111	27H		
00000011	30H		
00000000	00H		
00000000	00H		
0000mmmm	mmH	T=M-128	T: Tuning value (cents) M is decimal value represented by 1-byte using bits 0...3 of mm as the MSB and bits 0...3 of ll as the LSB.
00001111	11H		
0ccccccc	ccH	cc: Ignored	
11110111	F7H	EOX	

## 3. MIDI EXTENDED CONTROL CHANGE

### Reception & Transmission Rules

- ① Only controls that are active in each mode are available for reception and transmission.
- ② As for functions, when an LCD button on either side of the display is pressed a corresponding data entry event is transmitted rather than the edited value.
  - Reverb and effect type/depth ON events are transmitted simultaneously.
  - Harmony type also transmitted simultaneously with an ON event.
  - ABC mode transmitted when ABC turned ON, and ABC is turned ON when an ABC mode message is received.
- ③ For controls such as the PAD button which is held while some other operation is performed, an ON event is transmitted when the button is pressed and an OFF event is transmitted when the button is released.
- ④ OFF→ON events are transmitted in succession when an auto-repeat controller is used.

### Regeln für Empfang und Übertragung

- ① Bei Empfang und Übertragung werden lediglich aktive Bedien- und Steuerelemente berücksichtigt.
- ② Bei Funktionen wird beim Betätigen einer der LCD-Tasten zu beiden Seiten des Displays anstelle eines editierten Werts ein entsprechendes Dateneingabe-Ereignis übertragen.
  - EIN-Ereignisse (ON) für Hall- und Effektyp/-tiefe werden gleichzeitig übertragen.
  - Der Harmonietyp wird ebenfalls zusammen mit einem EIN-Ereignis (ON) übertragen.
  - Der Modus der automatischen Baß-/Akkordbegleitung wird beim Aktivieren der automatischen Baß-/Akkordbegleitung übertragen, während die automatische Baß-/Akkordbegleitung selbst beim Empfang einer entsprechenden Meldung eingeschaltet wird.
- ③ Für Bedienelemente wie die PAD-Taste, die beim Ausführen eines anderen Vorgangs gedrückt gehalten wird, wird beim Betätigen der Taste ein EIN-Ereignis (ON) übertragen und beim Loslassen der Taste ein AUS-Ereignis (OFF).
- ④ AUS→EIN-Ereignisse werden bei Verwendung eines Reglers mit automatischer Wiederholfunktion aufeinanderfolgend übertragen.

### Règles de réception et de transmission

- ① Seules les commandes active dans chaque mode sont disponibles pour la réception et la transmission.
- ② En ce qui concerne les fonctions, lorsqu'une des touches placées de chaque côté de l'affichage est sollicitée, un événement d'introduction de donnée correspondant est transmis à la place de la valeur éditée.
  - Reverb, le type/profondeur d'effet et les événements ON sont transmis simultanément.
  - Le type d'harmonie est également transmis simultanément avec l'événement ON.
  - Le mode ABC est transmis lorsque ABC est activé et ABC est activé à la réception d'un message ABC
- ③ Dans le cas de commandes telles que la touche [DEMO], qui doit maintenue enfoncée pendant que d'autres opérations sont réalisées, un événement ON est transmis lorsque la touche est enfoncée et un événement OFF lorsqu'elle est relâchée.
- ④ Les événement ON→OFF sont transmis en succession lorsqu'un contrôleur à répétition automatique est utilisé.

## (1) 1BYTE DATA FORMAT

(O: Transmit & receive. X: No transmit or receive. R: Receive only)

11110000 F0H Status  
 01000011 43H YAMAHA ID  
 01110110 76H Substatus Section No.= 6 (Portable Keyboard)  
 00000100 04H  
 0gggnnnn gn g=0, n:Local Device Number  
 0ccccccc cc cc: Controller number  
 0ddddddd dd Data  
 11110111 F7H EOX

### 1BYTE DATA

Bank	Oct	Hex	Parameter	Function	T	R
0	00H	00H	PRESET 0	RHYTHM STYLE	O	X
	:	:				
	31H	PRESET 49				
	32H	CUSTOM 0				
	:	:				
49H	CUSTOM 23					
4AH	DISK					
01H	00H	OFF	ABC Includes ABC ON	O	X	
	01H	SF				
	02H	FC				
	03H	MB				
03H	00H	OFF (Release button)	INTRO./FILL IN	O	X	
	01H	INTRO./FILL1 ON (Press)				
	02H	INTRO./FILL2 ON (Press)				
04H	00H	INTRO./ENDING ON (Press)	INTRO./ENDING	O	X	
05H	00H	SYNCHRO START ON (Press)	SYNCHRO START	O	X	
08H	7AH	-6	TRANPOSE	R	X	
	:	: 2's complement				
	7FH	-1 of 7 bits.				
	00H	0				
	:	:				
06H	+6					
0BH	01H	ORCH. 1	ORCHESTRATION	O	X	
	07H	ORCH. 2+1				
	08H	ORCH. 2+1				
0CH	00H	OTS OFF	ONE TOUCH SETTING	O	X	
	01H	OTS 1				
	:	:				
	04H	OTS 4				
0DH	04H	KEY VELOCITY OFF	KEY VELOCITY	R	X	
	05H	KEY VELOCITY ON				
0EH	00H	REVERB OFF	REVERB/EFFECT (Refer to "3 BYTE DATA" for each part)	O	X	
	01H	REVERB ON				
	02H	REVERB TYPE 1				
	:	:				
	18H	REVERB TYPE 23				
	40H	EFFECT OFF				
	41H	EFFECT ON				
	42H	EFFECT TYPE 1				
	:	:				
4AH	EFFECT TYPE 9					

11H	00H	PANEL REGISTRATION A1	PANEL REGISTRATION	O	X
	:	:			
	1FH	PANEL REGISTRATION D8			
	40H	FREEZE OFF			
12H	41H	FREEZE ON	MULTI PAD	O	X
	01H	PAD MULTI			
	02H	PAD TEMPO			
	03H	PAD PERCUSSION			
	06H	REPEAT/SYNC/BREAK OFF			
07H	07H	REPEAT/SYNC/BREAK ON	SEQUENCER SONG SELECT (Sequencer mode selected when received)	R	X
	08H	PAD REC/STOP OFF (When released)			
	09H	PAD REC/STOP ON (When pressed)			
15H	09H	SONG SELECT 1	SEQUENCER SONG SELECT (Sequencer mode selected when received)	R	X
	:	:			
	0EH	SONG SELECT 6			
17H	00H-7FH	CHORD 1 VOL.	CHORD 1 VOL.	O	X
18H	00H-7FH	BASS VOL.	BASS VOL.	O	X
19H	00H-7FH	RHYTHM VOL.	RHYTHM VOL.	O	X
1CH	00H-7FH	ORCH. 2 VOL.	ORCH. 2 VOL.	O	X
1DH	00H-7FH	CHORD 2 VOL.	CHORD 2 VOL.	O	X
1FH	00H	VOICE PART SELECT ORCH. 1	VOICE PART SELECT	O	X
	01H	VOICE PART SELECT ORCH. 2			
20H	00H	HARMONY OFF	HARMONY	O	X
	01H	HARMONY ON			
	02H	HARMONY TYPE 1			
	:	:			
11H	HARMONY TYPE 16	Transmitted when ON.			
22H	00H	DEMO OFF	DEMONSTRATION	O	X
	01H	DEMO ON			
24H	00H	IA OFF	INTERACTIVE ACCOMPANIMENT	O	X
	01H	IA ON			
	02H	VERSE1			
	03H	VERSE2			
	04H	CHORUS1			
	05H	CHORUS2			
	06H	SOLO OFF			
07H	SOLO ON				
25H	00H	EXIT	FUNCTION/SEQUENCER MODE/CUSTOM ACCOMP. MODE HELP MODE	O	X
	07H	SEQUENCER OFF			
	08H	SEQUENCER ON			
	09H	CUS.ACCOMP. OFF			
	0AH	CUS.ACCOMP. ON			
	0BH	HELP OFF			
	0CH	HELP ON			
	0DH	LIST HOLD			
	0EH	MIXER			
	10H	FUNCTION			
11H	FUNCTION 1				
:	:				
18H	FUNCTION 8				

g	cc	00H	7FH	Parameter	Function	T	R
26H	02H	EDIT OFF		SEQUENCER/ CUSTOM ACCOMP.		O	X
	03H	EDIT ON					
	04H	DELETE OFF (When released)					
	05H	DELETE ON (When pressed)					
	06H	▶▶ OFF (When released)					
	07H	▶▶ ON (When pressed)					
	08H	◀◀ OFF (When released)					
	09H	◀◀ ON (When pressed)					
	0AH	◀ ON (When pressed)					
	0BH	RECORD OFF (When released)					
0CH	RECORD ON (When pressed)						
27H	00H	TRACK1/CHORD1		SEQUENCER/ CUSTOM ACCOMP.		O	X
	:						
	05H	TRACK6/CHORD6					
	06H	TRACK7/BASS					
07H	ACCOMP/RHYTHM						
28H	00H	LEFT HOLD OFF	LEFT HOLD			O	X
	01H	LEFT HOLD ON					
2BH	67H	427.5Hz	PITCH TUNE			R	X
	:	: 2's complement of 7 bits.					
	7FH	439.5Hz					
	00H	440.0Hz (0.5Hz/Step)					
	:	:					
19H	452.5Hz						
2CH	00H	RE-START	RE-START			O	X
30H	00H	L1 SW OFF	LCD SW			O	X
	01H	L1 SW ON					
	02H	L2 SW OFF					
	03H	L2 SW ON					
	04H	L3 SW OFF					
	05H	L3 SW ON					
	06H	L4 SW OFF					
	07H	L4 SW ON					
	08H	R1 SW OFF					
	09H	R1 SW ON					
	0AH	R2 SW OFF					
0BH	R2 SW ON						
0CH	R3 SW OFF						
0DH	R3 SW ON						
0EH	R4 SW OFF						
0FH	R4 SW ON						

(2) 2BYTE DATA FORMAT

(O: Transmit & receive. X: No transmit or receive. R: Receive only)

```

11110000 F0H Status
01000011 43H YAMAHA ID
01110110 76H Substatus Section No.= 6 (Portable
Keyboard)
00000100 04H
Ogggnnnn gn g=1, n: Local Device Number
Occccccc cc cc: Controller number
Oddddddd dd1 Data1
Oddddddd dd2 Data2
11110111 F7H EOX
    
```

2BYTE DATA

g	cc	00H	7FH	Parameter	Function	T	R
1	00H	40~280 (Expressed in 14 bits)		TEMPO VALUE	TEMPO	O	X
	01H	00H	00H~7FH	PAD 1	PAD ON/OFF  dd2≠0:ON (Press) dd2=0:OFF (Release)	O	X
		01H	00H~7FH	PAD 2			
		02H	00H~7FH	PAD 3			
		03H	00H~7FH	PAD 4			
		04H	00H~7FH	PAD 5			
		05H	00H~7FH	PAD 6			
		06H	00H~7FH	PAD 7			
		07H	00H~7FH	PAD 8			
	02H	00H	00H~7FH	PRESET VOICE	ORCH.2 VOICE	O	X
01H		00H~7FH	CUSTOM VOICE				
03H	00H	00H~75H	PRESET VOICE	MB VOICE	O	X	
	01H	00H~75H	CUSTOM VOICE				
04H	00H	00H(Normal)	ORCH. 1	OCTAVE CHANGE	R	X	
		01H (1up) 7FH (1down)					
	01H	00H (Normal) 01H (1up) 7FH (1down)	ORCH. 2				
05H	00H	3FH~40H	RE1	ROTARY ENCORD.	O	X	
	:	:	:				
	7FH	:	RE8				

(3) 3BYTE DATA FORMAT

(O: Transmit & receive. X: No transmit or receive. R: Receive only)

```

11110000 F0H Status
01000011 43H YAMAHA ID
01110110 76H Substatus Section No.= 6 (Portable Keyboard)
00000100 04H
Ogggnnnn gn g=2, n: Local Device Number
Occccccc cc cc: Controller number
Oddddddd dd1 Data1
Oddddddd dd2 Data2
Oddddddd dd3 Data3
11110111 F7H EOX
    
```

3BYTE DATA

g	cc	00H	7FH	Parameter	Function	T	R
2	00H	00H	00H~07H	01H RHYTHM	Reverb depth.	O	X
		01H	00H~07H	01H BASS			
		02H	00H~07H	01H CHORD2			
		03H	00H~07H	01H CHORD1			
		04H	00H~07H	01H ORCH. 2			
	05H	00H~07H	01H ORCH. 1				
	01H	01H	00H~07H	01H BASS	Effect depth.	O	X
		02H	00H~07H	01H CHORD2			
		03H	00H~07H	01H CHORD1			
		04H	00H~07H	01H ORCH. 2			
05H		00H~07H	01H ORCH. 1				

# MIDI Implementation Chart

Function	Transmitted	Recognized	Remarks
Basic Channel Default Changed	1~16 1~16	1~16 1~16	memorized
Mode Default Messages Altered	3 X *****	1, 3 (*2) OMNI on, OMNI off X	memorized
Note Number : True voice	36~96 *****	0~127 0~127	
Velocity Note on Note off	O 9nH, v=1~127 X 9nH, v=0	O v=1~127 X	
After Touch key's Ch's	X X	X X	
Pitch Bender	O	O 0~12 semi (*1)	7bit resolution
Control Change	0, 32 O (*6) 1 O 6, 38 X 7 O 10 X 11 O 64 O 80 O (*2) 84 X 91 X 93 X 96 X 97 X 100, 101 X 120 X 121 X	O (*6) O O (*3) O O O O (*2) O (*3) O (*3) O (*3) O (*3) O (*3) O (*3) O (*3) O (*3) O (*3) O (*3)	Bank Select Modulation Data Entry Volume Pan Expression Sustain Foot Controller Portamento Reverb Depth Effect Depth RPN Data Increment RPN Data Decrement RPN LSB, MSB All Sound Off Reset All Controllers
Program Change : True #	O 0~127 (*4) *****	O 0~127 (*4) 0~127 (*4)	
System Exclusive	O	O	
System : Song Position : Song Select Common : Tune	X X X	X X X	
System : Clock Real Time : Commands	O O	O (*2) O	
Aux : Local ON/OFF : All Notes Off Messages : Active Sense : Reset	X X O X	O O (122~125) (*5) O X	
Notes:	*1= 0~3 if DOC mode is on *2= only normal play mode *3= only GM mode	*4= 0~87 if DOC mode is on *5= 122~123 if GM mode is on, 122 if DOC mode is on *6= if DOC mode is on	

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

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

O: Yes  
X: No

**KEYBOARD:**

61 Keys (C1~C6) with Touch Response

**POLYPHONY:**

38 notes max.

**VOICES:**

Preset 128 voices (Keyboard percussion 2 sets)

Custom 128 voices (Programmable)

**ACCOMPANIMENT:****INTERACTIVE ACCOMPANIMENT:**

Preset 50+1 (including "New Age" No. 12 button) styles

**CUSTOM ACCOMPANIMENT:**

24 styles (4 sets of Intro/Fill in/Ending are available)

**AUTO BASS CHORD:**

Single Finger/Fingered/Manual Bass

**ONE TOUCH SETTING:**

4 settings are available for each preset style

**EXPRESSION & EFFECT:**

Reverb 23 types,

Effect 9 types

Harmony 16 types

Sustain

Left Hold

Pitch Bend Wheel

Modulation/Effect Wheel

**PAD:**

8 (Multi/Perc./Tempo)

**SEQUENCER:**

8 Tracks, 6 Songs (approximately 14,000 notes)

**PANEL REGISTRATION:**

4 banks x 8 setups, Freeze

**HELP FUNCTION:**

Five languages

(English, German, French, Spanish and Italian)

**DISPLAY:**

116.2 mm x 90 mm

**DISK DRIVE:**

3.5" FDD, Compatibility with DOC (Yamaha Disk Orchestra Collection) and General MIDI software

**DEMONSTRATIONS:**

21 Songs

**CONNECTORS:**

MIDI (IN/OUT/THRU), FOOT SWITCH, SUSTAIN, FOOT CONTROLLER, PHONES, AUX IN (R, L/L+R), AUX OUT (R, L/L+R)

**AMPLIFIER:**

12W x 2

**SPEAKERS:**

16cm (6-1/4") x 2, 5cm (2") x 2

**DIMENSIONS (W x D x H):**

1067mm (42") x 409.3mm (16-1/8") x 181.5mm (7-1/8")

**WEIGHT:**

15 kg (33 lbs.)

**SUPPLIED ACCESSORIES:**

- Music Stand
- Owner's Manual

**OPTIONAL ACCESSORIES:**

- Foot switch FC5
- Foot controller FC7
- Headphones HPE-150
- Keyboard stand L-5, LW-12

\* Specifications subject to change without notice.