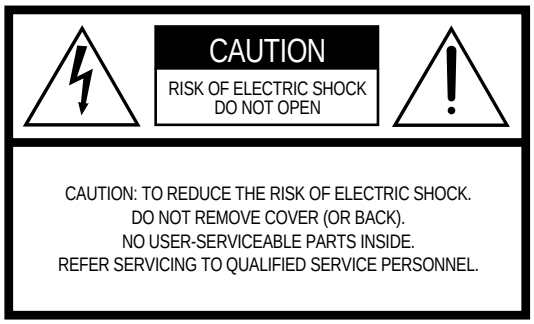
YAMAHA
PORTATONE
PSR-7000

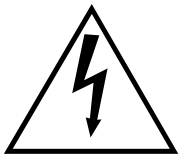
OWNER'S MANUAL
BEDIENUNGSANLEITUNG
MODE D'EMPLOI

SPECIAL MESSAGE SECTION

PRODUCT SAFETY MARKINGS: Yamaha electronic products may have either labels similar to the graphics shown below or molded/stamped facsimiles of these graphics on the enclosure. The explanation of these graphics appears on this page. Please observe all cautions indicated on this page and those indicated in the safety instruction section.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

IMPORTANT NOTICE: All Yamaha electronic products are tested and approved by an independent safety testing laboratory in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commission others to do so unless specifically authorized by Yamaha. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

SPECIFICATIONS SUBJECT TO CHANGE: The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

ENVIRONMENTAL ISSUES: Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

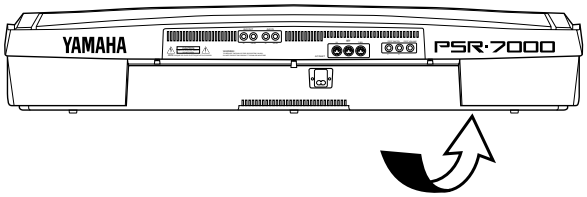
Battery Notice: This product MAY contain a small non-rechargable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

Warning: Do not attempt to recharge, disassemble, or incinerate this type of battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by applicable laws. Note: In some areas, the servicer is required by law to return the defective parts. However, you do have the option of having the servicer dispose of these parts for you.

Disposal Notice: Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc.

NOTICE: Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer’s warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

NAME PLATE LOCATION: The graphic below indicates the location of the name plate. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.



Model _____

Serial No. _____

Purchase Date _____

YAMAHA PORTATONE

PSR-7000

Owner's Manual — English

Bedienungsanleitung — Deutsch

Mode d'emploi — Français

Congratulations!

You are the proud owner of an extraordinary electronic keyboard. The Yamaha PSR-7000 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 advanced Auto Accompaniment and One Touch Setting features, in particular, are brilliant examples of how Yamaha 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 manuals in a safe place for later reference.

Contents

Taking Care of Your PortaTone

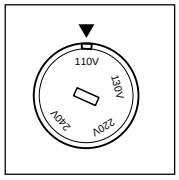
Your PortaTone will give you years of playing pleasure if you follow the simple rules given below:

■ 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



- In some areas the PSR-7000 will have a voltage selector on the bottom panel. Make sure that the voltage selector is set for the AC mains voltage in your area. The voltage selector can be set (rotated) by using a screwdriver. If in doubt, contact your Yamaha dealer.
- Turn the power switch OFF when the instrument is not in use. (The PSR-7000 uses a very small amount of power to maintain the internal memory contents even when no batteries are installed and the power is turned off.)
- 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.

■ Memory Backup Batteries

The PSR-7000 requires four 1.5 V C size (LR14) batteries for memory backup power. If no backup batteries are installed, the memory contents will be lost when then instrument is unplugged from the AC mains supply. Please use alkaline batteries. The average life of a set of alkaline batteries is about 12 months.

1. Open Battery Compartment Cover

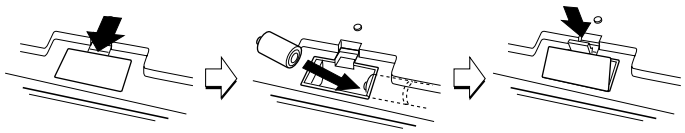
Open the battery compartment cover — located on the instrument's bottom panel — by pressing on the two latches on the cover and pulling outward, as shown in the illustration.

2. Insert Batteries

Insert the four batteries, being careful to follow the polarity markings on the bottom panel.

3. Replace Cover

Replace the compartment cover, making sure that it locks firmly in place.



NOTES

- *Never mix old and new, or different type of batteries!*
- *To prevent damage due to battery leakage, it is a good idea to remove the batteries from the PSR-7000 (after saving any important data to disk) if it is not to be used an extended period of time. (YAMAHA is not responsible irretrievable internal data.)*

■ 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

- Save all important data to disk before turning off for longer periods.
- Internal data (e.g. Registration data) is retained in memory even if the power switch is turned OFF when backup batteries are installed as described above. If you do not intend to use the PSR-7000 for an extended period of time, it is a good idea to unplug the instrument from the AC outlet and remove the batteries.

- 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-7000 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.

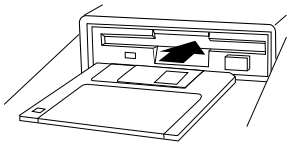
Floppy Disks & the Disk Drive

■ Type of Disk

Use only 3.5-inch 2DD or 2HD floppy disks.

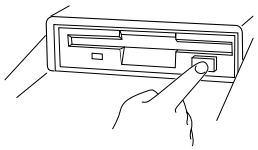
■ Disk Insertion & Removal

- 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 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.

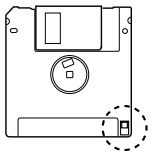
■ Floppy Disk Handling & Storage

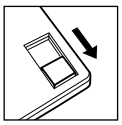
The actual recording medium inside a floppy disk has a fine coating of magnetic particles in which the data is "stored". To protect this coating as well as the disk drive's delicate read-write head, please observe the following:

- Always keep floppy disks in their 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.

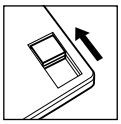
■ Protecting Your data

- 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.





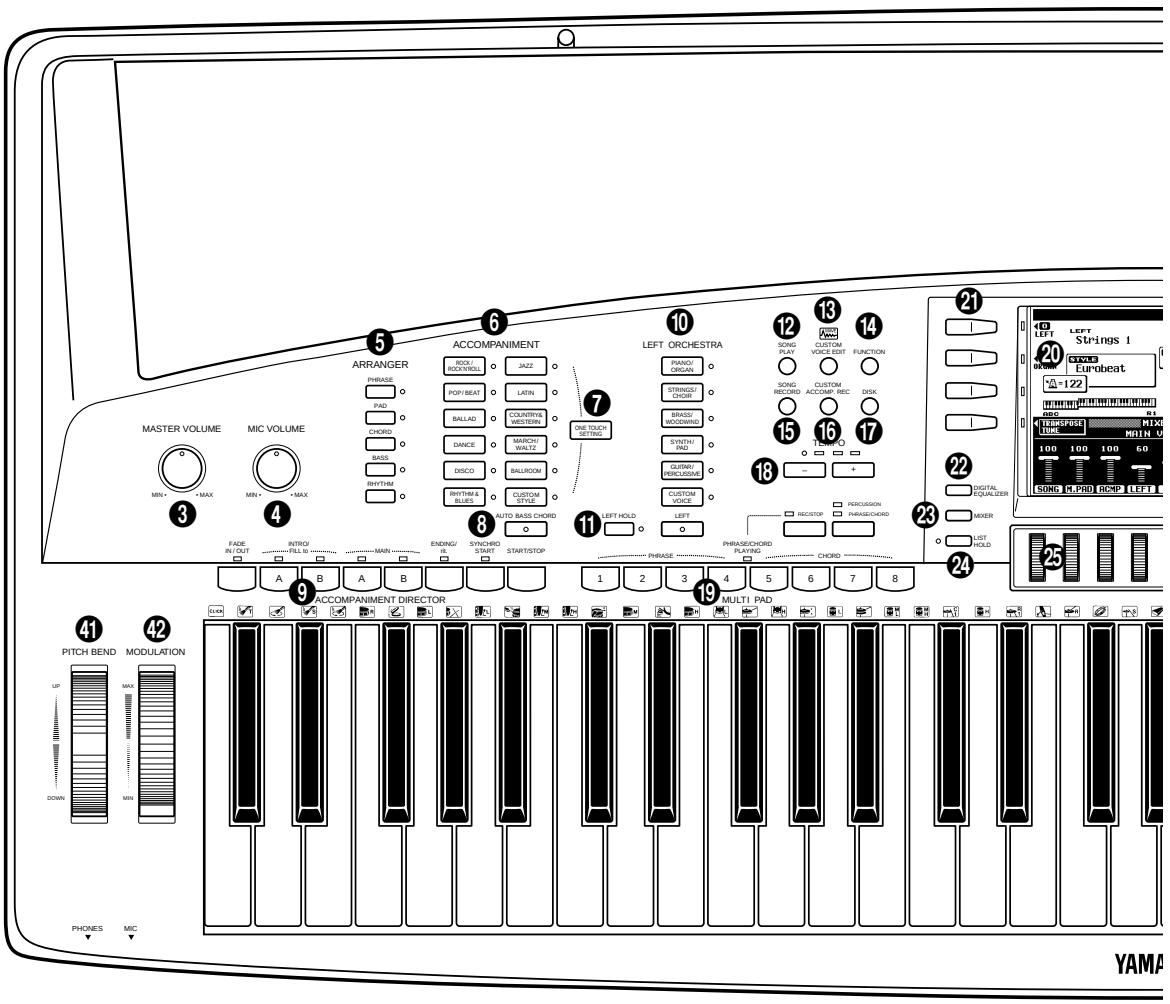
Write protected



Write enabled

YAMAHA is not responsible for damage caused by improper handling or operation.
YAMAHA provides no guarantee against disk damage.

Panel Controls

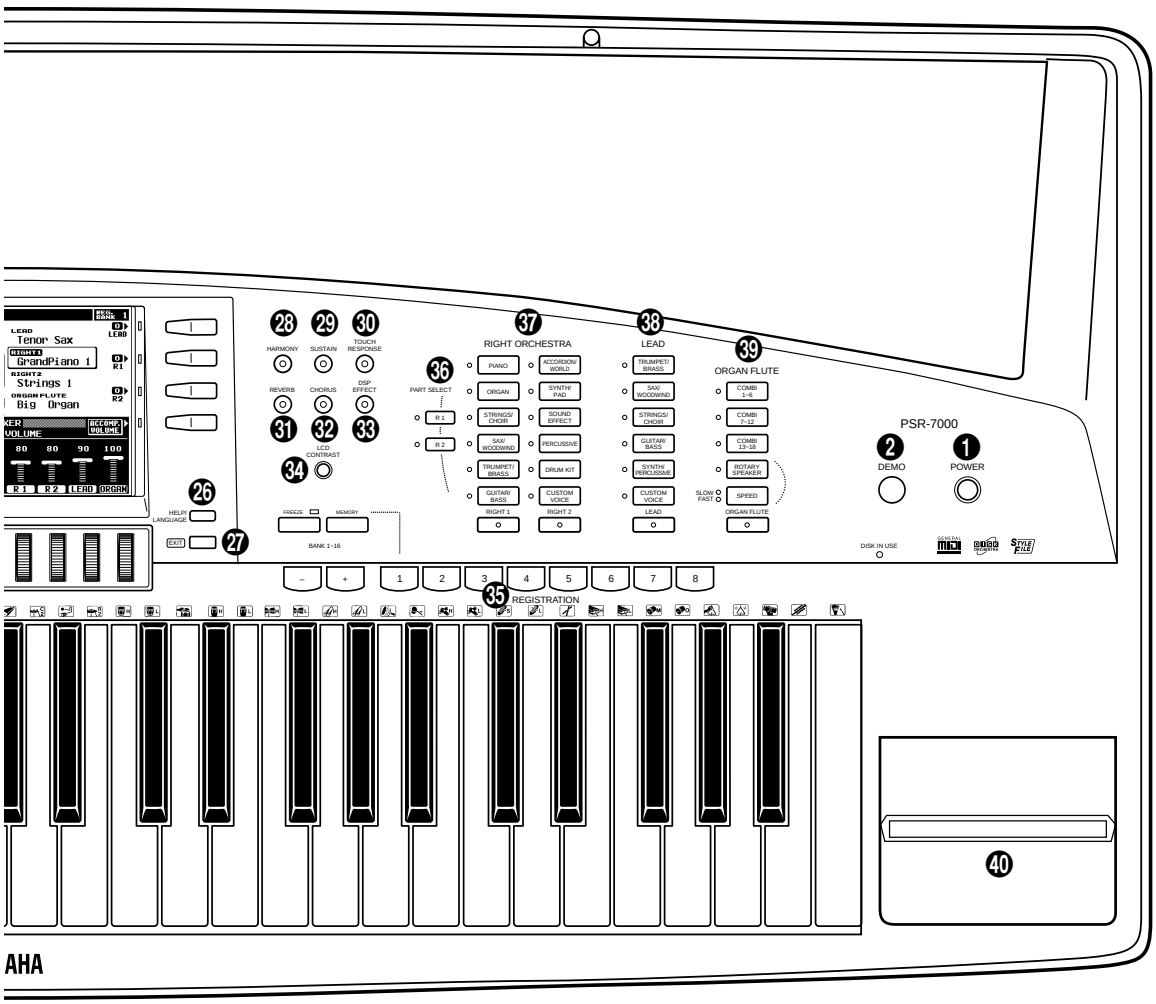


- ❶ POWER Button ..... page 8
- ❷ DEMO Button ..... page 8
- ❸ MASTER VOLUME Control ..... page 8
- ❹ MIC VOLUME Control ..... page 6
- ❺ ARRANGER Buttons ..... page 34

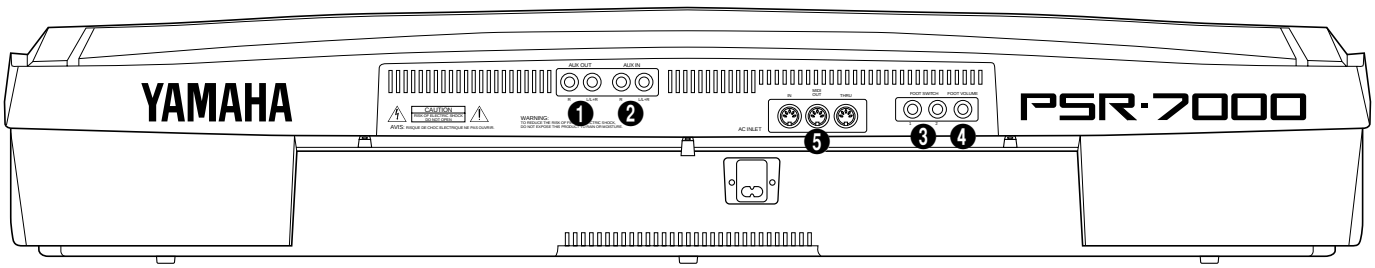
  PHRASE, PAD, CHORD, BASS, RHYTHM
- ❻ ACCOMPANIMENT Buttons ..... page 26
- ❼ ONE TOUCH SETTING Button ..... page 35
- ❽ AUTO BASS CHORD Button ..... page 23
- ❾ ACCOMPANIMENT DIRECTOR Buttons ..... pages 27 – 30

  FADE IN/OUT, INTRO/FILL to A/B, MAIN A/B, ENDING/rit., SYNCHRO START, START/STOP
- ❿ LEFT ORCHESTRA Buttons ..... pages 13, 14
- ⓫ LEFT HOLD Button ..... page 39
- ⓬ SONG PLAY Button ..... page 53
- ⓭ CUSTOM VOICE EDIT Button ..... page 84
- ⓮ FUNCTION Button ..... page 106
- ⓯ SONG RECORD Button ..... page 58
- ⓰ CUSTOM ACCOMP. REC Button ..... page 75
- ⓱ DISK Button ..... page 96
- ⓲ TEMPO [–] and [+] Buttons ..... page 26
- ⓳ MULTI PAD Buttons ..... page 42

  REC/STOP, PHRASE/CHORD-PERCUSSION, 1 — 8

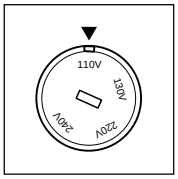


Connections & Music Stand



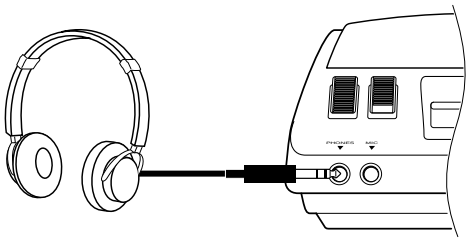
■ Check the Voltage (Before you connect the AC cord)

In some areas the PSR-7000 will have a voltage selector on the bottom panel. Make sure that the voltage selector is set for the AC mains voltage in your area. The voltage selector can be set (rotated) by using a screwdriver. If in doubt, contact your Yamaha dealer.



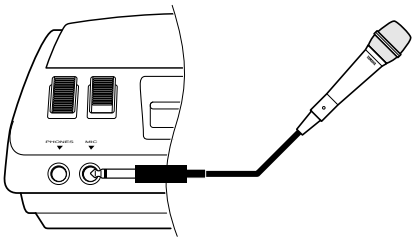
■ The PHONES Jack

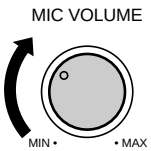
A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal stereo speaker system is automatically shut off when a pair of headphones is plugged into the **PHONES** jack.



■ The MIC Jack & MIC VOLUME Control

The PSR-7000 includes a microphone ("**MIC**") jack into which just about any standard microphone with a 1/4" phone plug connected can be plugged (a dynamic microphone with an impedance of 250 ohms is recommended). The microphone sound is amplified and reproduced via the PSR-7000's sound system along with the sound of the internal tone generator. The volume of the microphone sound is independently controlled by the **MIC VOLUME** control.



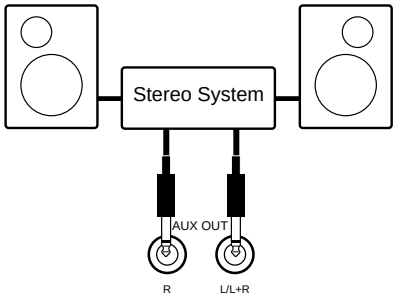


NOTES

- *The level of the microphone sound may vary according to the type of microphone used.*

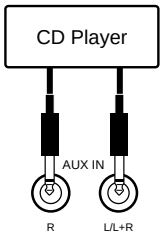
❶ The AUX OUT L/L+R and R Jacks

The rear-panel **AUX OUT L/L+R** and **R** jacks deliver the output of the PSR-7000 for connection to a keyboard amplifier, stereo sound system, a mixing console, or tape recorder. If you will be connecting the PSR-7000 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-7000 sound.



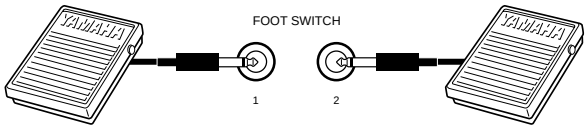
❷ The AUX IN L/L+R and R Jacks

The rear-panel **AUX IN L/L+R** and **R** jacks accept input from an external instrument or audio souce. The signal received at the INPUT jack is mixed with PSR-7000 sound and delivered via the speaker system. When a plug is inserted into the **L/L+R** jack only, the signal is delivered via the both channels.



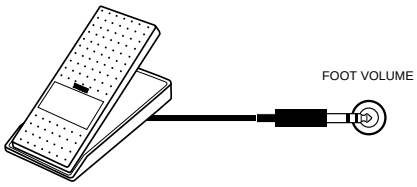
❸ FOOT SWITCH 1 and 2 Jacks

One or two optional Yamaha **FC5** footswitches connected to these jacks can be used to control sustain and a range of other important functions. Refer to the "FOOT SWITCH 1" and "FOOT SWITCH 2" functions described on page 112.



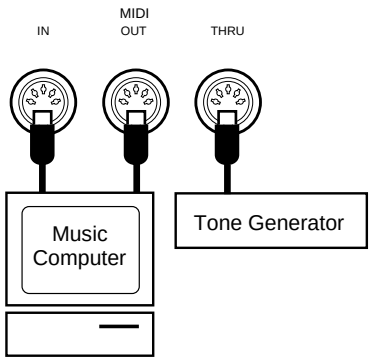
❹ FOOT VOLUME Jack

An optional Yamaha **FC7** Foot Controller can be connected to this jack to allow foot volume (expression) control. The foot controller can be assigned to control overall volume or the volume of individual accompaniment and/or voices via the "FOOT VOLUME" function — page 112.



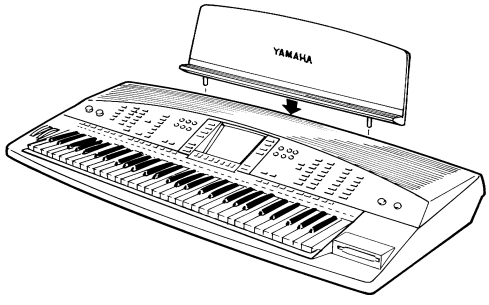
❺ MIDI IN, THRU and OUT Connectors

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-7000. 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-7000 (e.g. note and velocity data produced by playing the keyboard). More details on MIDI are provided on page 124.



The Music Stand

The PSR-7000 is supplied with a music stand that can be attached to the instrument by inserting it into the holes at the rear of the speaker panel.

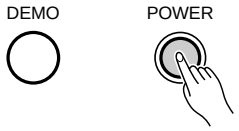


The Demonstration

To give you an idea of the PSR-7000's sophisticated capabilities, it is programmed with 14 demonstration sequences which can be played in a number of ways.

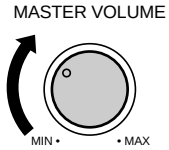
1 Switch ON

Plug the AC power cord into a convenient AC outlet, then press the **[POWER]** button to turn the PSR-7000 ON.



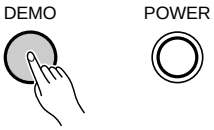
2 Set an Initial Volume Level

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



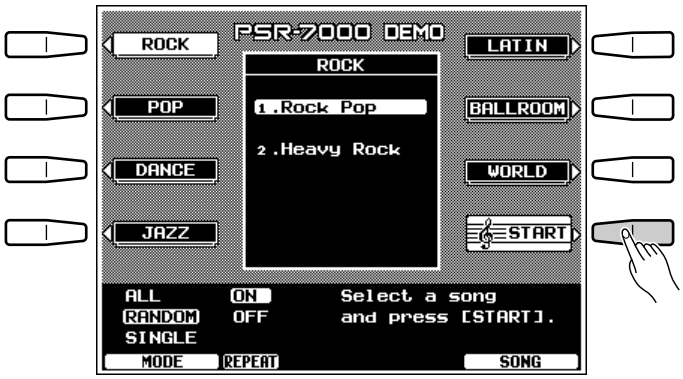
3 Press the [DEMO] Button

Press the **[DEMO]** button and the PSR-7000 demo display will appear.



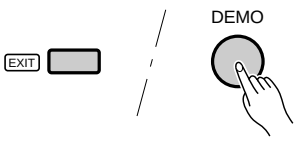
4 Start & Stop Playback as Required

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



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.



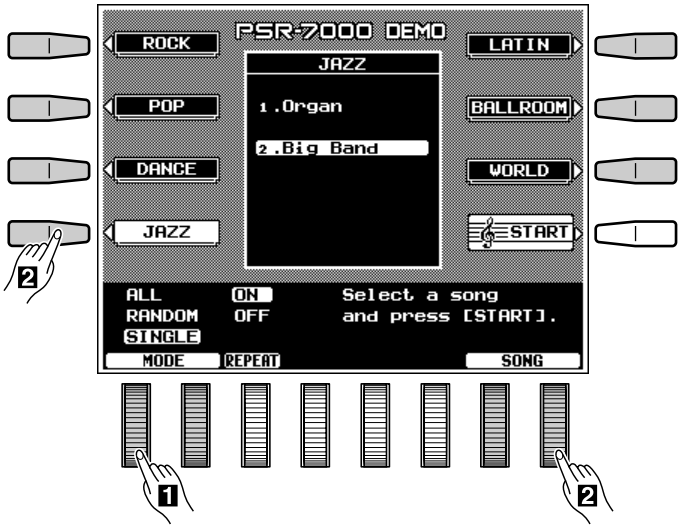
The Random & Single Demo Play Modes

If you play the demo as described above, you'll hear all 14 demo songs played in random order. By selecting an appropriate play mode you can also play back all the songs sequence, or play a single specified song.

1 Select a Play Mode

Use either of the LCD dials under **MODE** on the display to select one of the available play modes.

ALL	All 14 demo songs are played back in sequence.
RANDOM	All 14 demo songs are played back in random order. This is the default mode.
SINGLE SONG	Only the selected song is played.

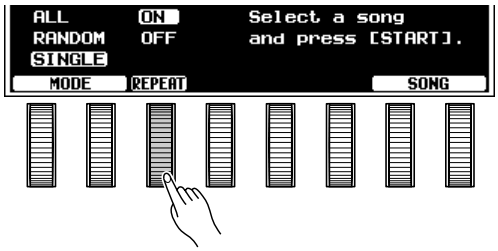


2 Select a Song

Press the LCD button corresponding to the type of demo song you want to play, then use the same LCD button to select either of the two demo songs in that group. You can also use either of the LCD dials under **SONG** on the display to select any of the 14 demo songs.

3 Turn the Repeat Mode ON or OFF

Use the **REPEAT** 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)

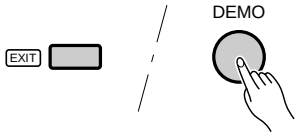


4 Start & Stop Playback as Required

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.

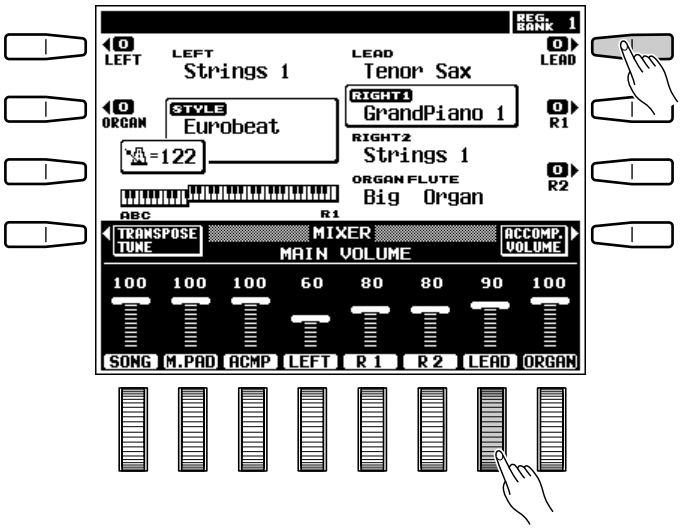
5 Exit When Done

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.



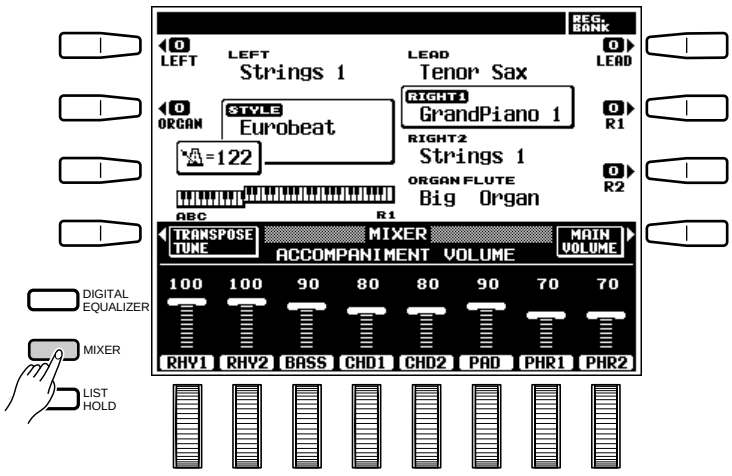
The Display & Multi-function Controls

The PSR-7000 makes general operation and programming easier than ever with a large backlit LCD display panel and multi-function controls. The 8 LCD selectors — 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 LCD dial immediately below **LEAD** on the display can be used to adjust the volume of the LEAD voice. Rotate the dial upward to increase the volume, or rotate the dial downward to decrease the volume. In the same way, the LCD button immediately to the right of **LEAD** on the display is used to set the normal octave for the lead voice ("0"), shift it one octave up ("+1"), or one octave down ("–1").



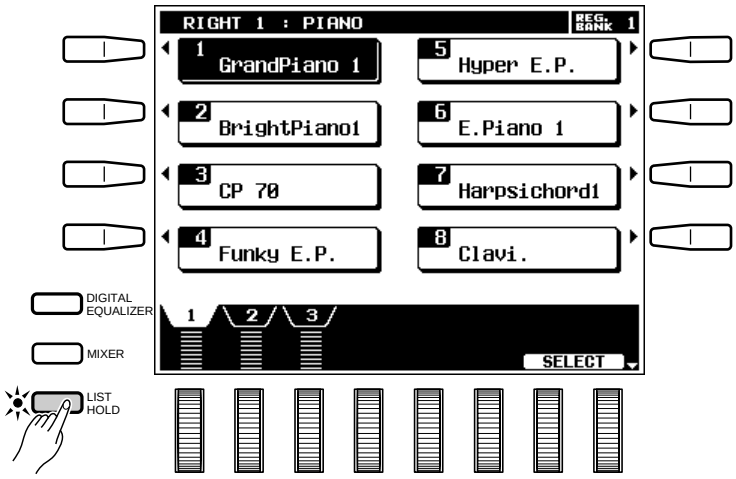
The [MIXER] Button

The lower section of the normal play mode display, shown above, provides individual volume controls for the PSR-7000's song, multi pad, accompaniment, left, right 1, right 2, lead, and organ sound. Pressing the **ACCOMP. VOLUME** LCD button switches to the individual auto-accompaniment part volume controls: rhythm 1, rhythm 2, bass, chord 1, chord 2, pad, phrase 1, and phrase 2. This is essentially a "mixer" that you will use the 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 14) or accompaniment styles (page 26), or using the ONE TOUCH SETTING feature (page 35), the voice, style, or ONE TOUCH SETTING list will appear on the display, but will automatically disappear after a few seconds if no selections are made. The 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 a list is not showing, the list will not appear even when a voice group, style group, or ONE TOUCH SETTING button is pressed.*

The [LCD CONTRAST] Control

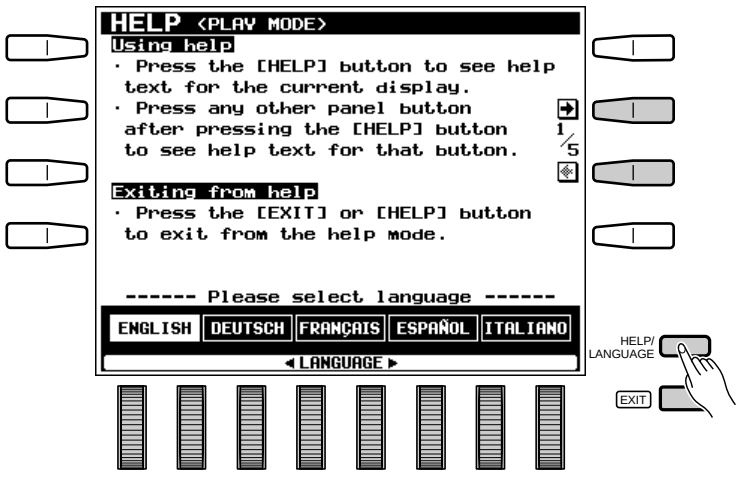
The PSR-7000 display panel is a liquid-crystal type which features a **[LCD CONTRAST]** control. Use the **[LCD CONTRAST]** control to set the display for optimum legibility.

The 5-language Help Function

To make operation as smooth and easy as possible, the PSR-7000 provides "on-line help" for most features and functions.

Press the **[HELP/LANGUAGE]** button to see help text for the current display, or press any other panel button after pressing the **[HELP/LANGUAGE]** button to see help text for that button. Press the **[EXIT]** or **[HELP/LANGUAGE]** button when you're ready to exit from the help mode. If more than one page of help text is available for the selected topic, use the LCD buttons to the right of the display to switch pages as necessary.

Help text and screen messages are available in five languages: English, German, French, Spanish, and Italian. Use the LCD dials in the help display to select the desired language.



Playing the PSR-7000

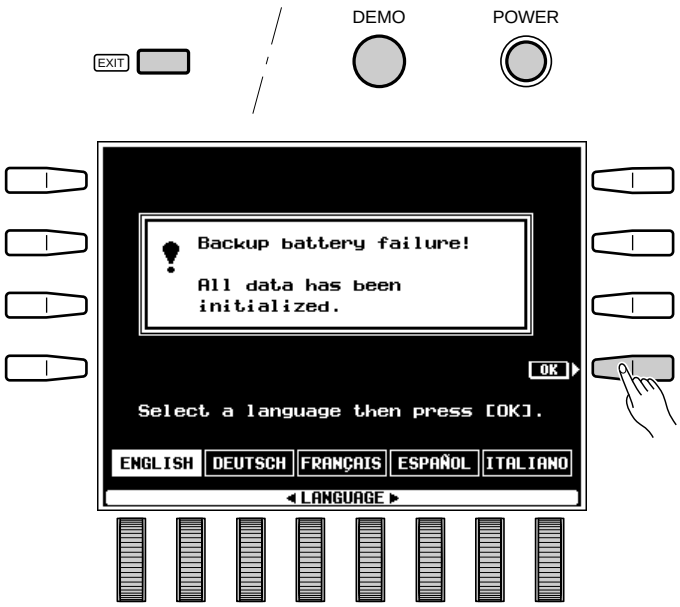
■ Before You Begin

Before playing your PSR-7000 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 **[DEMO]** and **[EXIT]** buttons.

When the display shown to the right appears press the **OK** LCD button.

CAUTION

- ***When the above initialization procedure is carried out, all internal data (e.g. REGISTRATION, CUSTOM STYLE, CUSTOM VOICE, MULTI PAD) will also be initialized and therefore lost!***



Selecting & Playing Voices

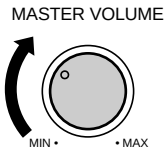
The PSR-7000 allows you to individually select and play up to four "orchestra parts" at the same time in a number of ways. A range of voices can be assigned to each orchestra part. There's also an "ORGAN FLUTE" part which simulates an extremely wide range of organ sounds — complete with realistic rotary speaker effect.

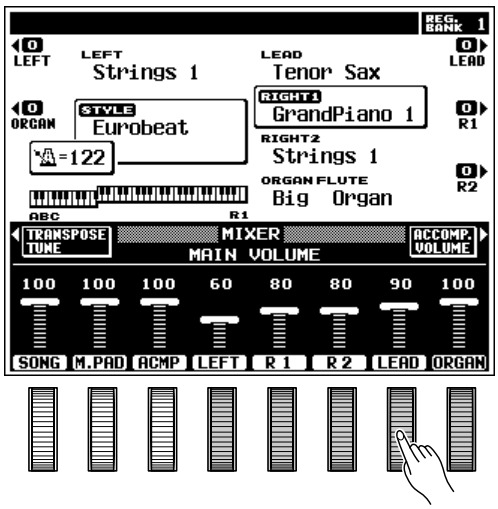
RIGHT ORCHESTRA 1 **RIGHT ORCHESTRA 2**	Both the RIGHT 1 and RIGHT 2 voices are polyphonic voices which can be played over the entire keyboard or to the right of a specified split point. The default split point is the F♯2 key. Either voice can be played alone, or both can be played simultaneously. The RIGHT 1 and RIGHT 2 voices can be selected from a range of 246+8 (Drum kit) voices organized in 12 groups.
LEAD	This is a monophonic voice which can be played over the entire keyboard or to the right of a specified split point. The default split point is the F♯2 key. The LEAD voice can be played alone, or simultaneously with either or both of the RIGHT ORCHESTRA voices. The LEAD voice can be selected from a range of 123 voices organized in 6 groups. When only the LEAD voice is being played it has "last note priority". That is, only the last note played will sound. When the LEAD voice is being played with a RIGHT ORCHESTRA voice it has "highest note priority" — the highest note is played by the LEAD voice.
LEFT ORCHESTRA	A polyphonic voice which can be played to the left of a specified split point while the RIGHT 1, RIGHT 2, and/or LEAD voices are played to the right of the split point. The default split point is the F♯2 key. The LEFT voice can be selected from a range of 205 voices organized in 6 groups.
ORGAN FLUTE	This is a polyphonic voice which can be played over the entire keyboard or to the right of a specified split point. The default split point is the F♯2 key. The ORGAN FLUTE voice cannot be played simultaneously with the RIGHT or LEAD voices. Details on using the ORGAN FLUTE voices are provided on page 16.

** Voice numbers include Custom Voice.*

1 Set Initial Volume Levels

Set the **[MASTER VOLUME]** control to an appropriate level, and make sure that the **LEFT**, **R1**, **R2**, **LEAD** and **ORGAN** volume levels in the **MIXER MAIN VOLUME** display 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.





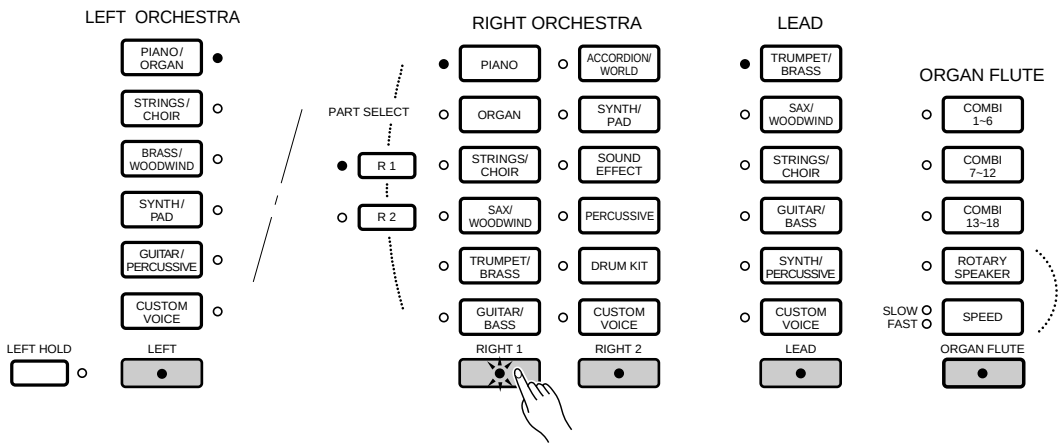
NOTES

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

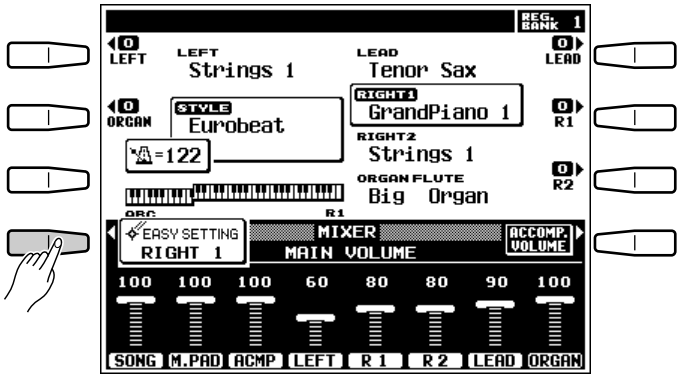
2 Select the Orchestra Parts You Want To Play

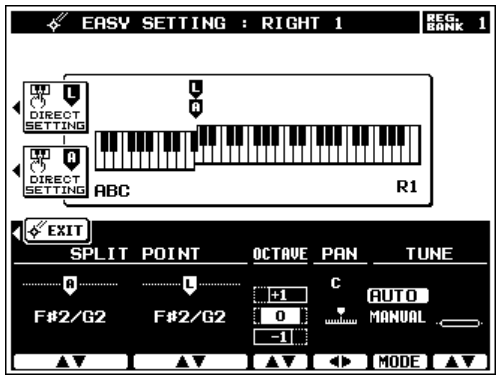
Press the **[RIGHT 1]**, **[RIGHT 2]**, **[LEAD]**, and/or **[LEFT]** button(s), turning on the indicators corresponding to the parts you want to play. Press the **[ORGAN FLUTE]** button to play the ORGAN FLUTE voice. The RIGHT 1, RIGHT 2, and LEAD voices will automatically be turned off when the ORGAN FLUTE voice is selected. The ORGAN FLUTE voice will automatically be turned off when the RIGHT 1 , RIGHT 2 or LEAD voice is turned on.

Each time you turn a part on or off, the **EASY SETTING** LCD button for that part will appear on the LCD for a few seconds.



If you press the **EASY SETTING** LCD button before it disappears, the easy-setting display for that part will appear providing access to the split point parameters as well as the individual octave, pan, and tune parameters for that part. These same parameters can be accessed via the FUNCTION displays (page 106), but the easy-setting displays offer an easier, more efficient way to set these parameters when selecting parts. The easy setting display for a part that is already on can be accessed by pressing the **EASY SETTING** LCD button while holding the corresponding part button (in this case the part button indicator will not go out when the button is released). See the following pages for details on each of the orchestra part easy setting parameters:





NOTES

- *The more parts you play simultaneously, the fewer the total number of notes that can be played on the keyboard at the same time.*
- *When the RIGHT 1 and RIGHT 2 parts are both on and the same voice is selected for both parts, the sound may be slightly different from the normal voice.*
- *When the LEFT part is on, the left voice will automatically be transposed up one octave.*

SPLIT POINT [L]	Page 20
SPLIT POINT [A]	Page 31
OCTAVE	Page 109
PAN	Page 109
TUNE	Page 109

3 Select a Voice or Voices

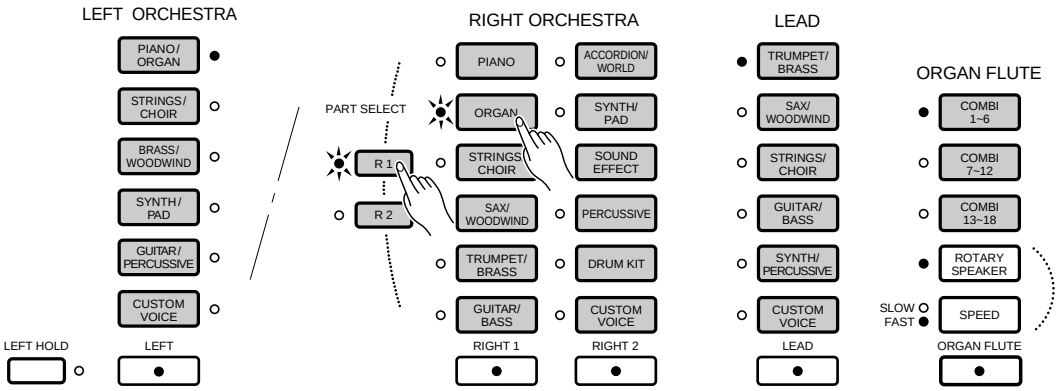
To select a RIGHT 1 or RIGHT 2 voice use the RIGHT ORCHESTRA voice selectors, to select a LEAD voice use the LEAD voice selectors, to select an ORGAN FLUTE voice use the ORGAN FLUTE voice selectors (**[COMBI 1-6]**, **[COMBI 7-12]**, or **[COMBI 13-18]**), and to select a LEFT voice use the LEFT ORCHESTRA voice selectors.

When selecting a RIGHT 1 or RIGHT 2 voice it is also necessary to press the **[R1]** or **[R2]** PART SELECT button prior to actually selecting the voice, according to whether you want to select a RIGHT 1 or RIGHT 2 voice (this is not necessary if the [R1] or [R2] indicator for the part you want to select is already lit).

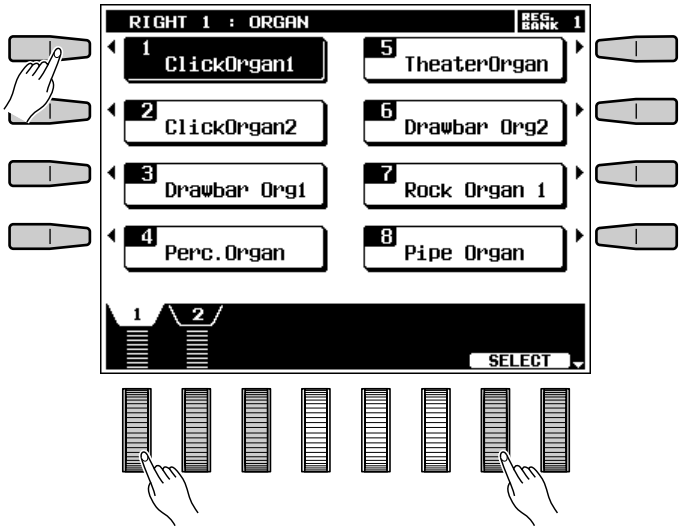
Use the voice group buttons to select the group from which you want to select a voice. The corresponding voice display will appear.

NOTES

- *The display will automatically revert to the main display after a few seconds if the [LIST HOLD] button is not engaged (page 11).*
- *Custom voices which can be selected via the RIGHT ORCHESTRA, LEFT ORCHESTRA, and LEAD [CUSTOM] buttons can be created via the CUSTOM VOICE EDIT mode described on page 84, or loaded from disk.*

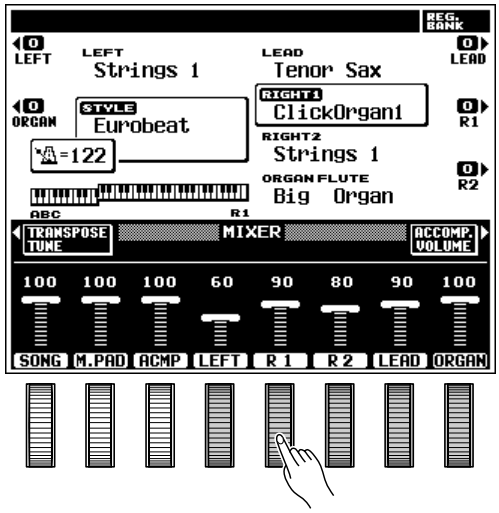


Use the page-number LCD dials the select the page containing the voice you want if more than one page is available, then press the LCD button corresponding to the desired voice. You can also use either of the **SELECT** LCD dials to select any of the voices within the selected group.



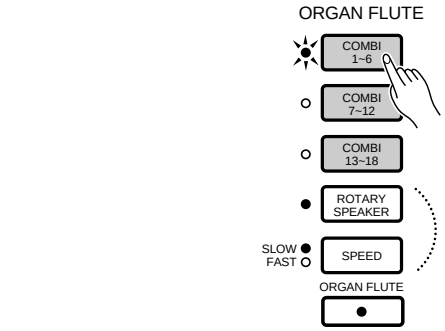
4 Play & Adjust Volume

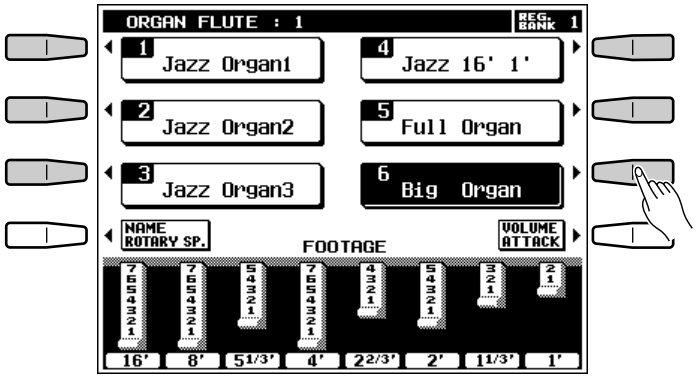
You can now play the selected voice or voices on the keyboard. Use the **[MASTER VOLUME]** control to adjust the overall volume level, and the **MIXER MAIN VOLUME** LCD dials to set the desired balance between the parts.



Using the Organ Flute Voices

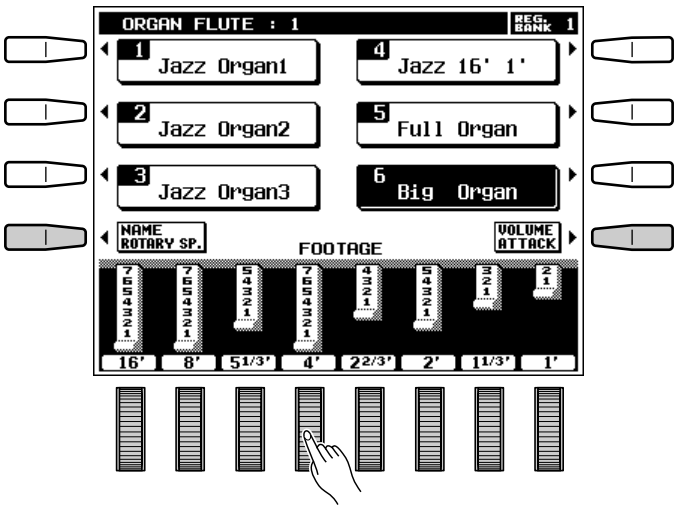
The PSR-7000 has 18 preset ORGAN FLUTE voices which can be selected in the same way as the RIGHT, LEAD and LEFT voices: press an ORGAN FLUTE voice group button — **[COMBI 1-6]**, **[COMBI 7-12]**, or **[COMBI 13-18]** — and then press the LCD button corresponding to the desired voice in the selected group. The main difference between the ORGAN FLUTE voices and others is that the ORGAN FLUTE voices can be directly edited via the voice list display. The editing controls appear below the voice list (turn **[LIST HOLD]** on to keep the voice list and editing controls on the display).





FOOTAGE

The basic sound of the currently selected ORGAN FLUTE voice is edited via FOOTAGE bars corresponding to the LCD dials. If the **FOOTAGE** display is not showing, press the **FOOTAGE** LCD button in the ORGAN FLUTE voice list display. The term "FOOTAGE" is a reference to the fact that the sound of pipe organs was adjusted via "stops" which turned on or off pipes of different lengths (in feet). The longer the pipe, the lower the pitch of the sound, thus the **16'** (16-foot) FOOTAGE bar adjusts the volume of the lowest pitched component of the voice while the **1'** bar adjusts the highest-pitched component of the voice. Use the LCD dials to increase or reduce the amount of the corresponding footages to create the desired overall sound. The longer a graphic footage bar, the greater the amount of the corresponding footage added to the sound.

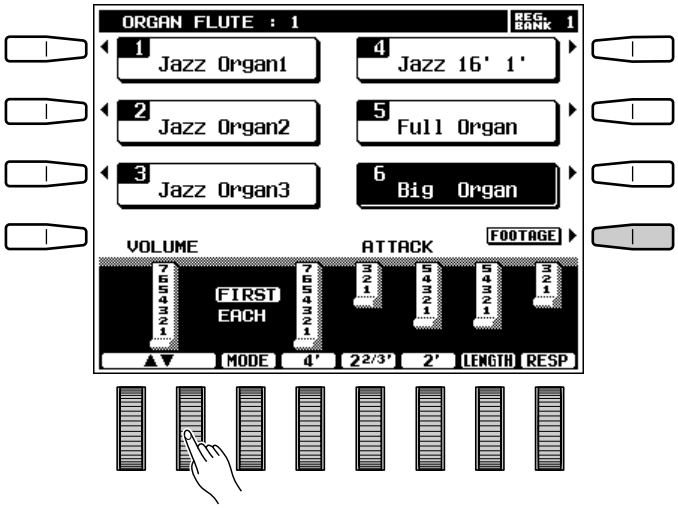


VOLUME & ATTACK

To access the VOLUME and ATTACK parameters for the ORGAN FLUTE voices, press the **VOLUME/ATTACK** LCD button from the **FOOTAGE** display.

The **VOLUME** control adjusts the overall volume of the current ORGAN FLUTE voice. The longer the graphic bar, the greater the volume.

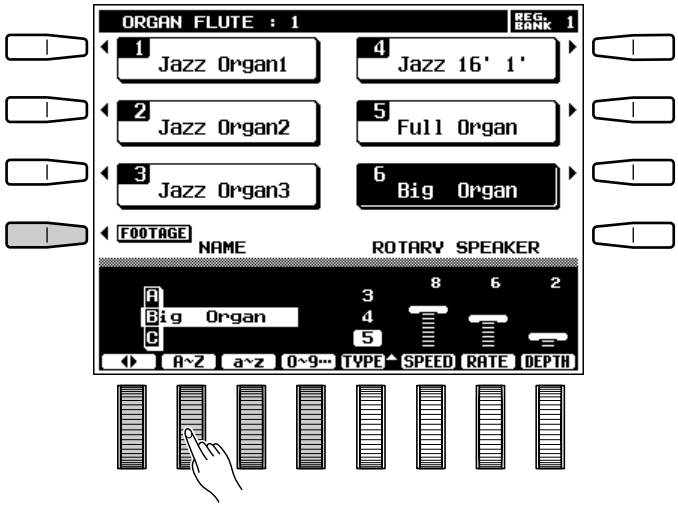
The **ATTACK** controls adjust the attack sound of the current ORGAN FLUTE voice. The **4'**, **2 2/3'** and **2'** controls increase or reduce the amount of attack sound at the corresponding footages. The longer the graphic bar the greater the attack sound. The **LENGTH** control produces a longer or shorter decay after the initial attack. The longer the graphic bar the longer the decay. The **MODE** control selects the **FIRST** or **EACH** attack mode: in the **FIRST** mode attack will only be applied to the first note in a chord or group of notes played and held simultaneously; in the **EACH** mode attack will be applied equally to all notes. The **RESP** control increases or decreases the length of attack and release on voices based on the **FOOTAGE** controls. The higher the value the longer the attack and release.



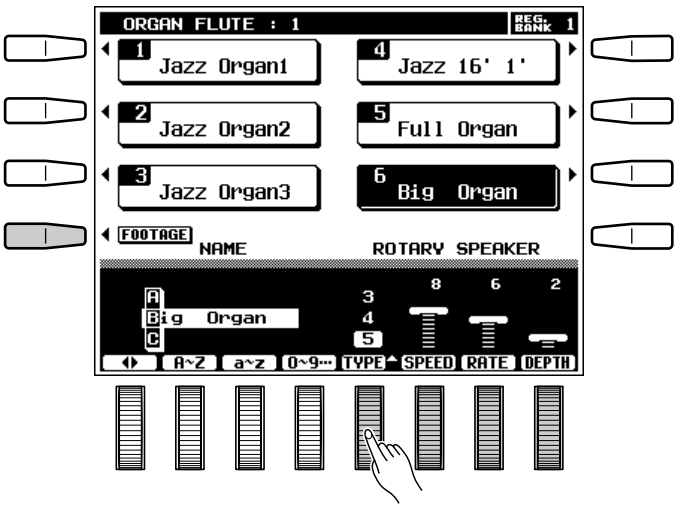
NAME & ROTARY SPEAKER

To access the NAME and ROTARY SPEAKER parameters for the ORGAN FLUTE voices, press the **NAME/ROTARY SP.** LCD button from the **FOOTAGE** display.

The **NAME** controls can be used to enter an original name for the current ORGAN FLUTE voice. Voice names can be up to 12 characters long. Use the ◀ ▶ LCD dials 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.



The **ROTARY SPEAKER** controls set up the rotary speaker effect for the current ORGAN FLUTE voice. The **TYPE** control selected one of 5 different rotary speaker types. The **SPEED** control sets the speed of the rotary speaker effect when the FAST mode is selected: the greater the value the faster the speed. The **RATE** control sets the rate of variation between the FAST and SLOW modes: the greater the value the faster the rate of change when the FAST or SLOW rotary speaker mode is selected. The **DEPTH** control sets the depth of the rotary speaker effect: the higher the value the more pronounced the effect.

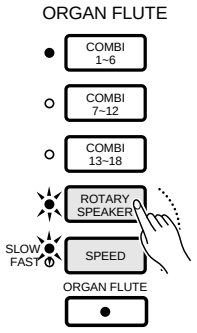


NOTES

- *All of the above parameters can be individually programmed for each ORGAN FLUTE voice. The settings are retained in memory even when the power is turned off as long as a good set of backup batteries is present in the PSR-7000 (page 2).*
- *The ORGAN FLUTE settings can be saved to disk and recalled when needed via the SAVE TO DISK and LOAD FROM DISK functions described on pages 96 and 98.*
- *The original factory settings can be recalled via the RECALL PRESET DATA function described on page 123.*

Using the Rotary Speaker Effect

When the ORGAN FLUTE voice is selected, press the **[ROTARY SPEAKER]** button so that its indicator lights to engage the ROTARY SPEAKER effect. Press the **[ROTARY SPEAKER]** button again to turn the effect off. The **[SPEED]** button alternately switches between the slow and fast speeds. The current speed is indicated by the SLOW and FAST indicators next to the **[SPEED]** button.



Keyboard Percussion

When one of the RIGHT ORCHESTRA [DRUM KIT] voices is selected, you can play 61 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 different drum kit voices sound different even though they have the same name, while others are essentially the same.

NOTES

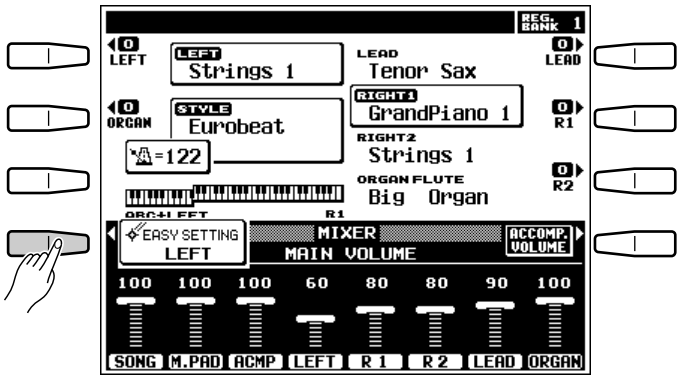
- *When the DRUM KIT voice OCTAVE parameter is set to "–1", 11 different instruments are available in the lowest octave.*
- *The Transpose, Tune, Sustain, Harmony, Left Hold, and Modulation functions do not affect the DRUM KIT voices.*
- *The pitch bend wheel can be used to bend the pitch of the keyboard percussion voices to create unique musical effects, but it has little effect on some percussion sounds.*
- *See page 138 for a complete listing of the keyboard percussion drum instrument assignments.*

Changing the "L" Split Point

The PSR-7000 has two programmable split points — one which divides the LEFT and RIGHT/LEAD/ORGAN FLUTE orchestra parts, and one which divides the auto-accompaniment and manual sections of the keyboard when AUTO BASS CHORD accompaniment (page 31) is engaged. In the split point displays accessed by the **EASY SETTING** LCD button described below, and the FUNCTION displays (page 110), the former is indicated by the "L" marker and the latter by the "A" marker above the graphic keyboard. The current split points are indicated on the display both by the split markers and the "splits" in the graphic keyboard. We'll look at the ABC ("A") split point in more detail in "Using the Accompaniment Section", page 31. For now, here's how you can change the "L" split point via the orchestra part easy-setting displays to suit your own playing requirements.

1 Select an Orchestra Part Easy Setting Display

Select an orchestra part easy-setting display either by turning a part on or off and pressing the **EASY SETTING** LCD button before it disappears, or by pressing the **EASY SETTING** LCD button while holding an orchestra part button that is already on.

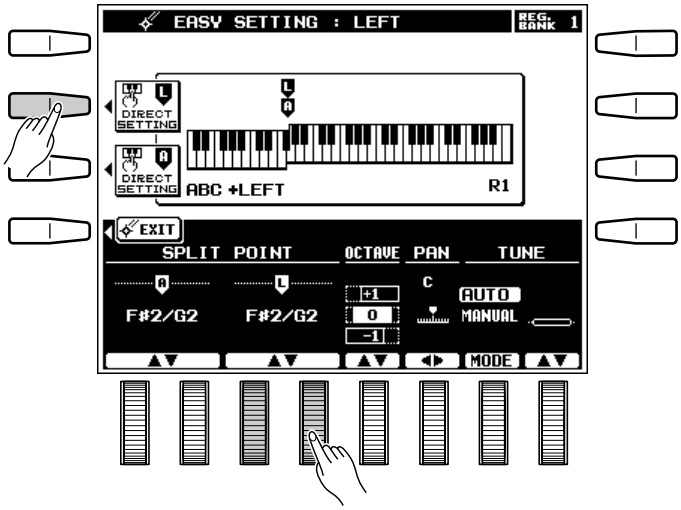


2 Set the Split Point

The split point can be set in two ways: either use the **SPLITPOINTL** LCD dials, or press the desired key on the keyboard while holding the **L DIRECT SETTING** LCD button. The new split point will be indicated on the graphic keyboard in the LCD.

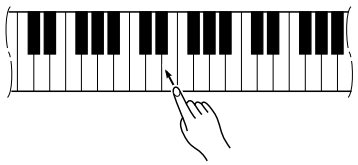
NOTES

- *The "L" split point cannot be set lower than the "A" split point.*
- *When the "L" and "A" split points are set at different keys, the LEFT voice can be played between the "A" and "L" split points when the AUTO BASS CHORD function on. When the "L" and "A" split points are set to the same key, the LEFT voice can be played anywhere to the left of the "L" and "A" split points.*



3 Return to the Previous Display When Done

Press the **EXIT** LCD button or **[EXIT]** panel button to return to the previous display when done.



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

Transposition, Tuning, & Octave Change

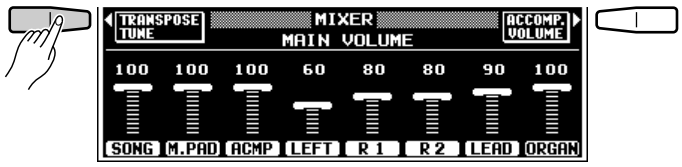
The most important and fundamental adjustment for any musical instrument is tuning. The TRANSPOSE, TUNING, and OCTAVE CHANGE functions described below let you control the pitch of the PSR-7000 in a number of ways.

TRANSPOSE & TUNE

These functions allow the overall pitch of the PSR-7000 to be transposed up or down in semitone steps, and fine-tuned in 0.2 Hertz steps.

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.

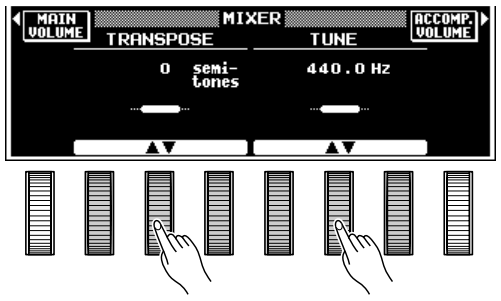


2 Set the Transposition and/or Tuning As Required

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

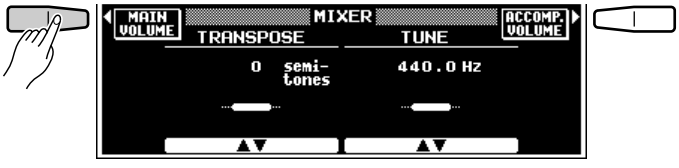
The transpose range is from **-24** to **+24**, allowing a maximum upward or downward transposition of 2 octaves. A setting of "**0**" produces the normal pitch.

The tuning range is from **414.6** Hertz to **466.8** Hertz, adjustable in 0.2-Hertz steps. A3 = **440.0** Hertz is "normal" pitch.



3 Return to the Main Display When Done

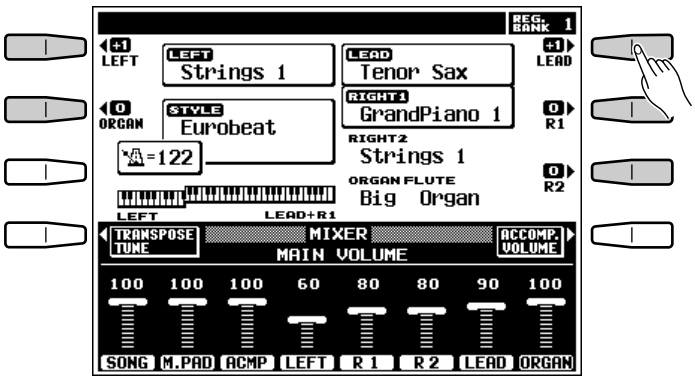
Press the **MAIN VOLUME** LCD button to exit from the transpose and tune functions and return to the main display.



OCTAVE CHANGE

This function allows the LEFT, RIGHT 1, RIGHT2, LEAD, and ORGAN FLUTE voices to be independently transposed up or down by one octave.

The **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD buttons directly set the octave of the corresponding voice. Pressing one 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

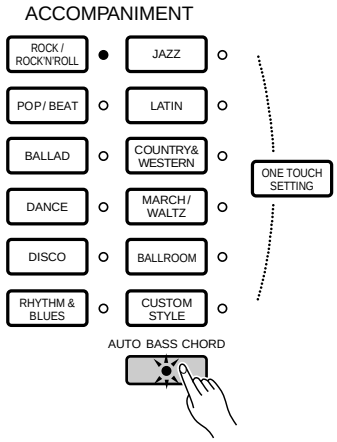
- *These parameters are also available in the F1 VOICE PART function display — page 109.*
- *Some voices may suddenly shift octaves when played at the extreme ends of the keyboard if they are set to a lower or higher octave than normal. This can also occur when the PITCH BEND wheel is used on extremely 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 octave change settings will take effect from the next notes played while tune and transpose settings take effect immediately.*

Using the Accompaniment Section

The PSR-7000 has 120 different preset accompaniment "styles" and up to 32 custom accompaniment styles that can be used to provide fully-orchestrated or rhythm-only accompaniment. The PSR-7000'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.



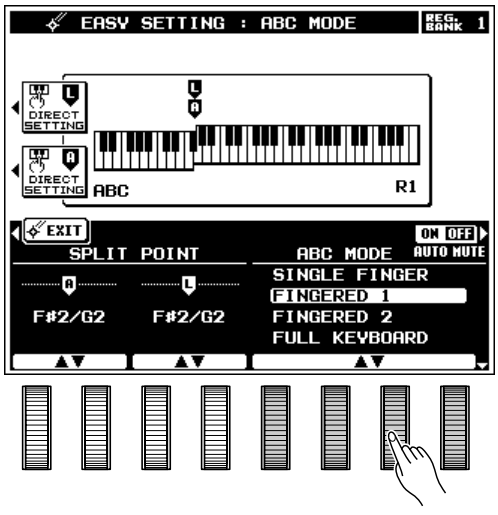
NOTES

- *Rhythm-only accompaniment will be produced if you don't turn the [AUTO BASS CHORD] button on.*
- *The maximum number of notes that can be played simultaneously on the PSR-7000 keyboard is reduced when the Auto Bass Chord feature is used.*
- *The PSR-7000 employs "last-note priority", which means that when the number of notes played on the keyboard exceeds the total number that can be produced by the PSR-7000 at that time, the last notes played take priority.*

2 Select the Desired ABC Mode

Press the **ABC EASY SETTING** LCD button immediately after pressing the **[AUTO BASS CHORD]** button to select the ABC MODE and SPLIT POINT display. Use the **ABC MODE** LCD dials to select the SINGLE FINGER, FINGERED 1, FINGERED 2, FULL KEYBOARD, AUTO MIDI BASS, or MANUAL MIDI BASS mode. If you select the MANUAL MIDI BASS mode, and press the **BASS VOICE** LCD button which appears, you can use the **GROUP** LCD dials to specify the bass voice to be used. Press the **ABC MODE** LCD button to return to the ABC MODE display as required.

Press the **EXIT** LCD button or **[EXIT]** panel button to return to the main display when done.

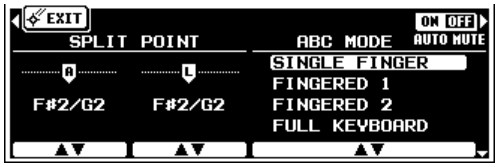


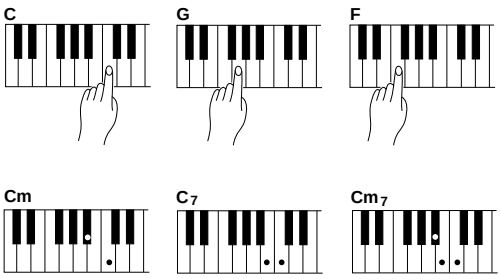
The SINGLE FINGER, FINGERED 1, FINGERED 2, FULL KEYBOARD, AUTO MIDI BASS and MANUAL MIDI BASS modes function as follows:

● SINGLE FINGER (SF)

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.

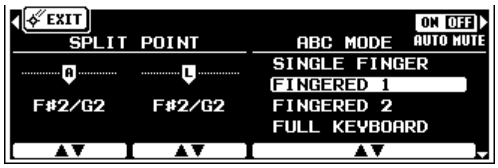




● FINGERED 1 (FC1)

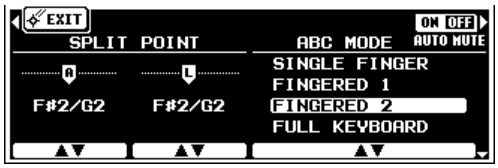
This is the default ABC mode. The FINGERED 1 mode lets you finger your own chords on the ABC section of the keyboard (i.e. all keys to the left of and including the split-point key — normally F♯2), while the PSR-7000 supplies appropriately orchestrated rhythm, bass, and chord accompaniment in the selected style.

The FINGERED 1 mode will accept the 34 chord types.



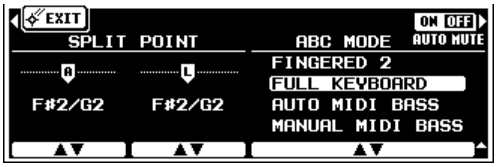
● FINGERED 2 (FC2)

This mode accepts the same fingerings as the FINGERED 1 mode, but the lowest note played in the ABC section of the keyboard is used as the bass root, allowing you to play “on bass” or “fraction” chords (in the FINGERED 1 mode the root of the chord is always used as the bass root).



● FULL KEYBOARD

When this advanced auto-accompaniment mode is engaged the PSR-7000 will automatically create appropriate accompaniment while you play just about anything, anywhere on the keyboard: chords, a bass line, arpeggiated chords, a melody line. The name of the detected chord will appear on the display. You don't have to worry about specifying the accompaniment chords. Although the FULL KEYBOARD mode is designed to work with many songs, some arrangements may not be suitable for use with this feature. Try playing a few simple songs in the FULL KEYBOARD mode to get a feel for its capabilities.



NOTES

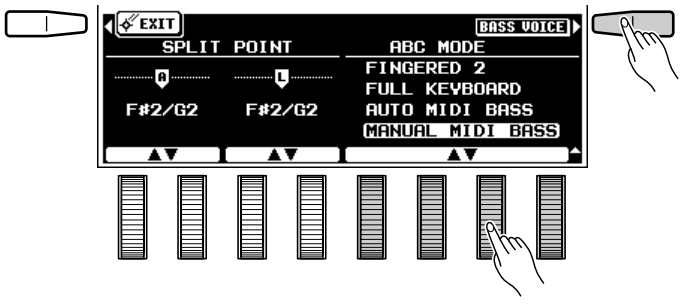
- *Chord detection occurs at approximately 8th-note intervals. Extremely short chords — less than an 8th note in length — may therefore not be detected.*

● AUTO MIDI BASS

In this mode all accompaniment parts except the bass part respond to the chord played on the keyboard. Fingering is the same as in the FINGERED 1 mode. If more than three notes are played on the ABC section of the keyboard in this mode, and if the chord played is not recognized by the PSR-7000, only the top three are used for chord recognition. All others are ignored. The bass part is determined by the note played on an external MIDI bass keyboard connected to the MIDI IN terminal and assigned to the MIDI Bass channel (page 128).

● MANUAL MIDI BASS

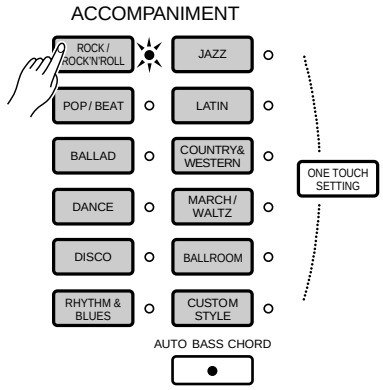
In this no chord recognition occurs. All accompaniment parts other than the rhythm part are muted, and a MIDI bass keyboard connected to the MIDI IN connector and assigned to the MIDI Bass channel (page 128) directly plays the bass voice selected via the BASS VOICE parameter that appears when the MANUAL MIDI BASS mode is selected in the ABC easy-setting display.



3 Select a Style

The PSR-7000 has 120 preset styles organized in 11 groups (see the "Style List" on page 130).

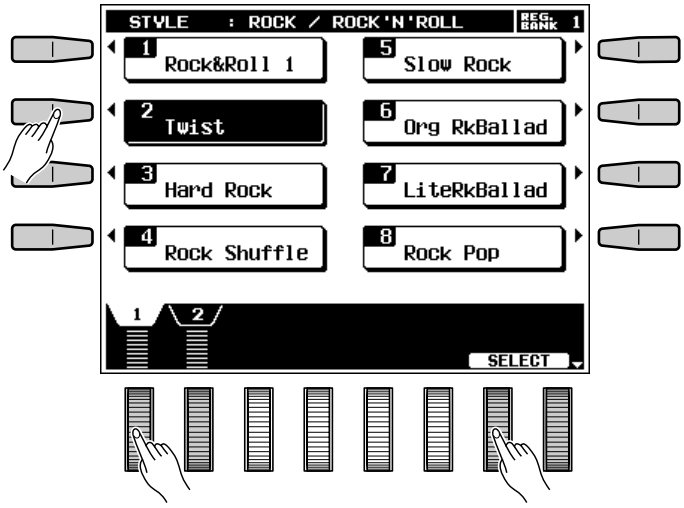
Use the ACCOMPANIMENT group buttons to select the group from which you want to select a style. The corresponding style display will appear.



NOTES

- *The display will automatically revert to the main display after a few seconds if the [LIST HOLD] button is not engaged (page 11).*
- *For easy selection some styles are repeated in different groups.*
- *Custom styles which can be selected via the ACCOMPANIMENT [CUSTOM] button can be created via the CUSTOM ACCOMPANIMENT RECORD mode described on page 75, or loaded from disk.*

Use the page-number LCD dials to select the page containing the style you want if more than one page is available, then 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.



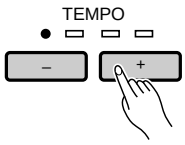
The PSR-7000 automatically determines the voices to be used for the accompaniment bass and chords according the accompaniment style you select.

NOTES

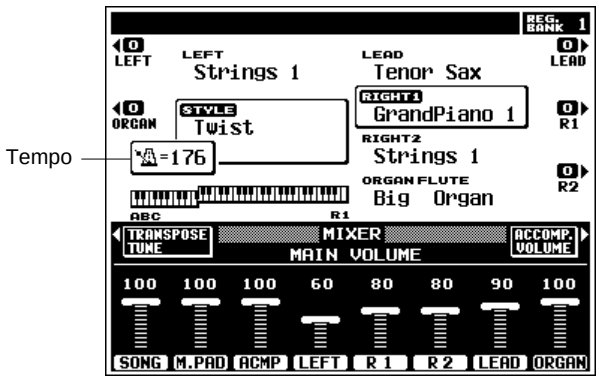
- *Also see "Custom Accompaniment" on page 75.*
- *The custom style button can be used to access the styles on optional SFF (Style File Format) disks.*

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 32 and 280 beats per minute, however, by using the **TEMPO [–]** and **[+]** buttons. 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.



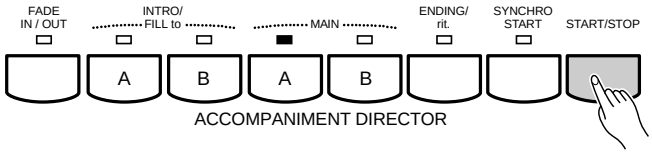
NOTES

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

5 Start the Accompaniment

There are several ways to start the accompaniment:

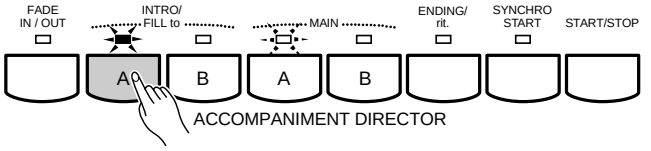
- **Straight start:** Press the **[START/STOP]** button. If you press the **[START/STOP]** button, the rhythm will begin playing immediately without bass and chord accompaniment.



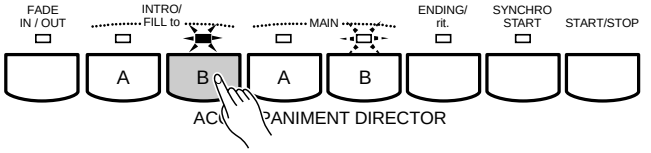
NOTES

- *It is also possible to select one of the several variations available prior to a straight start — refer to "7. Select Variations as Required," below.*

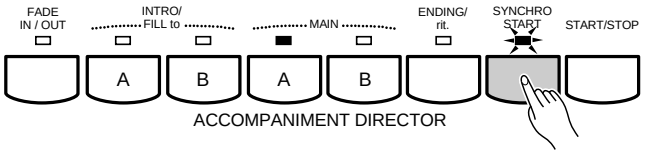
- **Start with an introduction followed by the MAIN A variation:** press the **[INTRO A/FILL to A]** button.



- **Start with an introduction followed by the MAIN B variation:** press the **[INTRO B/FILL to B]** button.

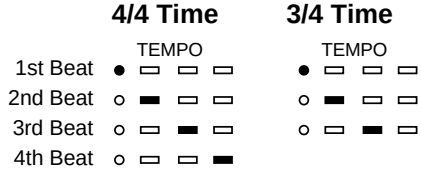


- **Synchronized start:** Any of the above start types can be synchronized to the first note or chord played on the ABC section of the keyboard (i.e. keys to the left of and including the split-point key — normally F♯2) by first pressing the **[SYNCHRO START]** button. Pressing the **[SYNCHRO START]** button alone causes a straight start to occur when the first note or chord is played. Press **[SYNCHRO START]** and the appropriate INTRO button (or vice-versa) 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

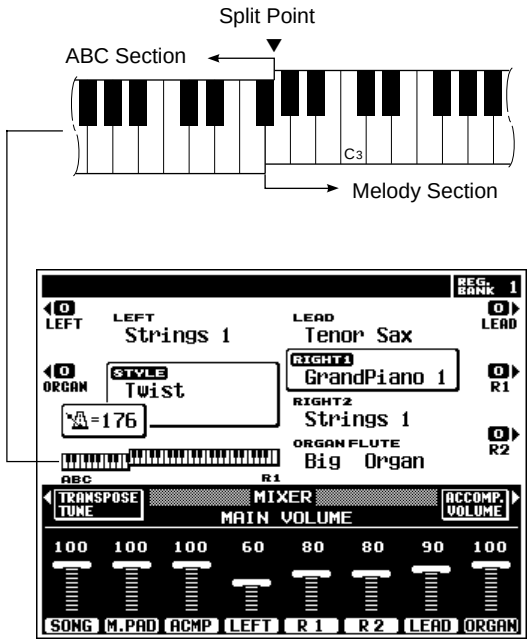
- *If you press the [SYNCHRO START] button while the accompaniment is playing, the accompaniment will stop and the synchro start mode will be engaged.*
- *The four LED dots of the TEMPO display provide a visual indication of the selected tempo as shown to the left.*
- *A Yamaha FC5 footswitch plugged into a 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 functions described on page 112.*



6 Play On the ABC Section Of the Keyboard

As soon as you play any chord that the PSR-7000 can "recognize" on the ABC section of the keyboard in one of the FINGERED modes or the AUTO MIDI BASS (see fingering chart on page 144), an abbreviated chord in the SINGLE FINGER mode, or just about anything anywhere on the keyboard in the FULL KEYBOARD mode, the PSR-7000 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 MIDI BASS mode is selected only the rhythm accompaniment will play automatically, and selected bass voice can be played via a MIDI bass keyboard.

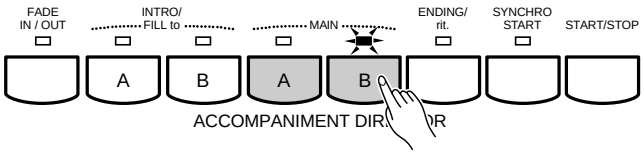


NOTES

- *The appropriate chord and bass note will sound if you play in the ABC section of the keyboard while the ABC function is on but the accompaniment is stopped (but not in the FULL KEYBOARD and MANUAL MIDI BASS modes). Please note that the Left Hold function (page 39) cannot be applied to these chord and bass notes.*

7 Select Sections as Required

Each accompaniment style has two sections: MAIN A and MAIN B. There is also an ENDING section which is described in step **9** . The INTRO A and B sections can be used to start the accompaniment as described in the preceding step. The MAIN A and B sections can be selected manually by pressing the corresponding section button.



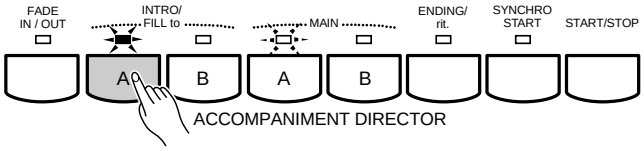
NOTES

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

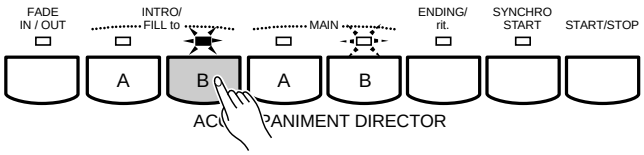
8 Use Fill-ins

The PSR-7000 provides two types of automatic breaks or “fill-ins.”

- **FILL to A:** Press the **[INTRO A/FILL to A]** button to produce a fill and go (or return) to the MAIN A section.



- **FILL to B:** Press the **[INTRO B/FILL to B]** button to produce a fill and then go (or return) to the MAIN B section.



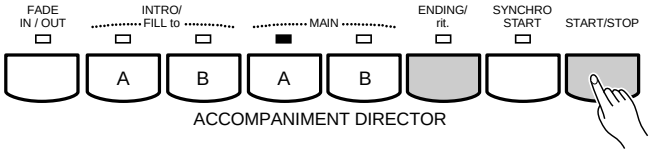
It is possible to change the section that will play after the fill-in by pressing the appropriate section button while the fill-in is playing.

NOTES

• A Yamaha FC5 footswitch plugged into a rear panel FOOT SWITCH jack can also be used to activate the intro and fill-in functions if the appropriate function is assigned to the footswitch using the FOOT SWITCH functions described on page 112.

9 Stop the Accompaniment

The accompaniment can be stopped at any time by pressing the **[START/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.

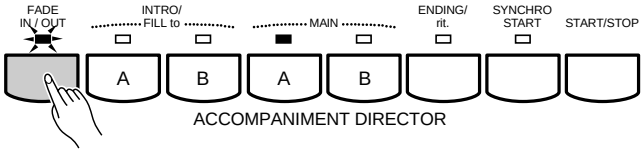


Fade-ins and Fade-outs

The **[FADE IN/OUT]** button can be used to produce smooth fade-ins and fade-outs when starting and stopping the accompaniment.

To produce a fade-in, press the **[FADE IN/OUT]** button so that its indicator lights before starting the accompaniment. Then when the accompaniment is started the sound will gradually fade in. The **[FADE IN/OUT]** indicator will flash during the fade-in, and then go out when full volume has been reached.

To produce a fade-out press the **[FADE IN/OUT]** button while the accompaniment is playing. The indicator will flash during the fade out, then the accompaniment will stop when the fade-out is complete. The **[FADE IN/OUT]** button indicator will remain lit after the fade-out, indicating that the fade-in mode is engaged. Press the **[FADE IN/OUT]** button so that its indicator goes out if you want to disengage the fade-in mode.

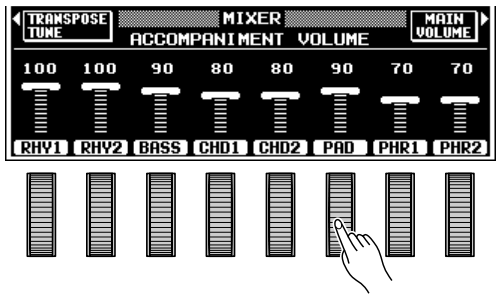


NOTES

- *A Yamaha FC5 footswitch plugged into a rear panel FOOT SWITCH jack can also be used to activate the fade-ins and fade-outs functions if the appropriate function is assigned to the footswitch using the FOOT SWITCH functions described on page 112.*

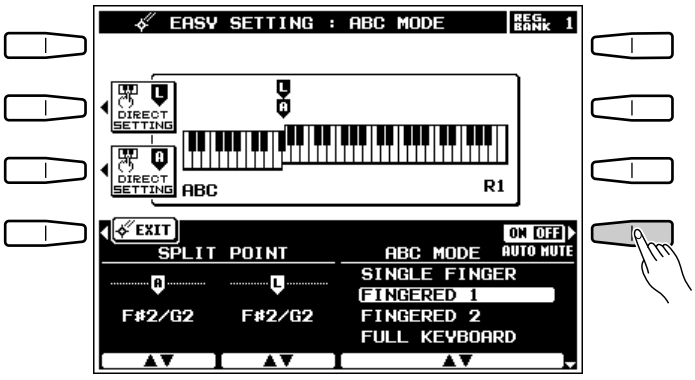
Accompaniment Volume

Use the various LCD dials in the **MIXER ACCOMPANIMENT VOLUME** display to set the best balance between the corresponding accompaniment parts, and the optimum volume of the accompaniment parts in relation to the orchestra part voices.



The Auto Mute Function

When the **EASY SETTING ABC** display is selected, or when the **F2 SPLIT POINT/ABC MODE** display is selected, the **AUTO MUTE** LCD button will appear as long as the MANUAL MIDI BASS ABC mode is not selected. When this function is turned **ON** certain AUTO BASS CHORD parts will either stop playing or play with reduced volume whenever the right-hand keys are played — so that the accompaniment does not "get in the way" of what you play on the keyboard. Normal accompaniment playback resumes when no right-hand keys are being played.



NOTES

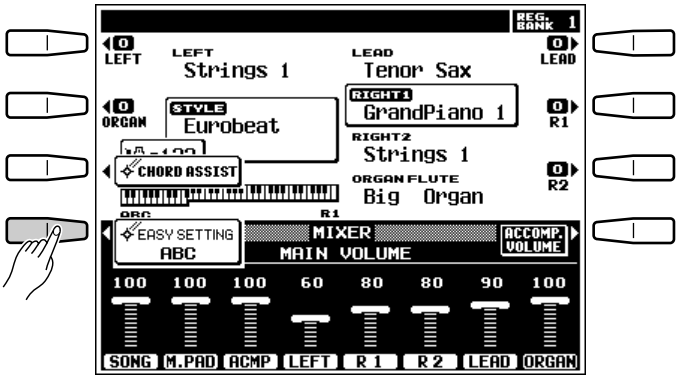
- *The AUTO MUTE function will not work with some styles.*

Changing the "A" Split Point

The "**L**" split point has already been described on page 16. The "**A**" split point divides the auto-accompaniment and manual sections of the keyboard when AUTO BASS CHORD accompaniment (page 23) is engaged. Like the "**L**" split point, the "**A**" split point can be changed as required via the **ABC EASY SETTING** display, or the **SPLIT POINT/ABC MODE/M. PAD** function display (pages 110). The current split points are indicated on the display both by the split markers and the "splits" in the graphic keyboard.

1 Select the ABC EASY SETTING Display

Select the AUTO BASS CHORD easy-setting display either by turning the **[AUTO BASS CHORD]** button on and pressing the **EASY SETTING** LCD button before it disappears, or by pressing the **EASY SETTING** LCD button while holding the **[AUTO BASS CHORD]** button.

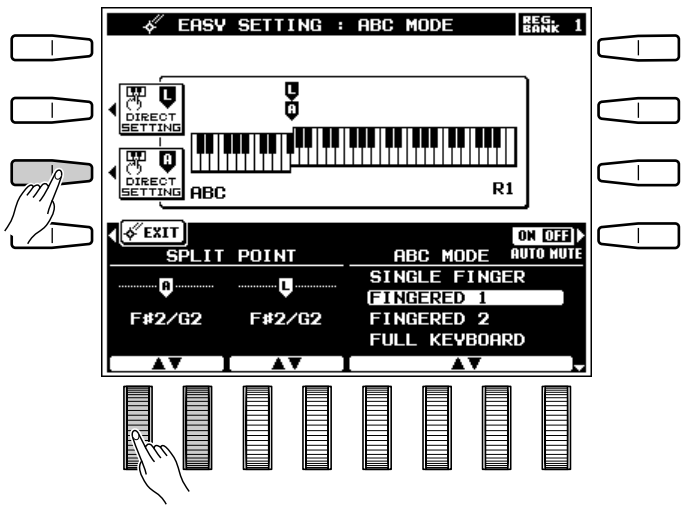


2 Set the Split Point

The split point can be set in two ways: either use the **SPLITPOINTA** LCD dials, or press the desired key on the keyboard while holding the **A DIRECT SETTING** LCD button. The new split point will be indicated on the graphic keyboard in the LCD.

NOTES

- *The "A" split point cannot be set higher than the "L" split point.*
- *When the "L" and "A" split points are set at different keys, the LEFT voice can be played between the "A" and "L" split points when the AUTO BASS CHORD function on. When the "L" and "A" split points are set to the same key, the LEFT voice can be played anywhere to the left of the "L" and "A" split points.*



3 Return to the Previous Display When Done

Press the **EXIT** LCD button or **[EXIT]** panel button to return to the previous display when done.

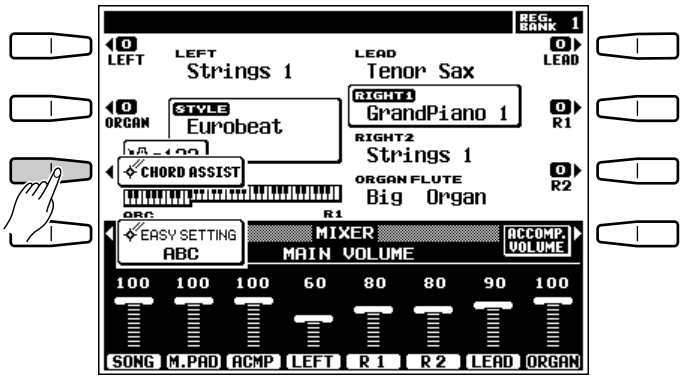
The Chord Assist Function

The Chord Assist function is essentially an electronic "chord book" that will show you appropriate fingerings for chords you enter via the display. The fingerings are indicated by dots on the graphic keyboard in the display, and correspond to those recognized in the ABC FINGERED 1 mode. You can also play chords on the keyboard in the same way as in the ABC FINGERED 1 mode.

1 Select the Chord Assist Function

Select the CHORD ASSIST display either by turning the **[AUTO BASS CHORD]** button on and pressing the **CHORD ASSIST** LCD button before it disappears, or by pressing the **CHORD ASSIST** LCD button while holding the **[AUTO BASS CHORD]** button.

When the CHORD ASSIST function is selected the ABC FINGERED 1 mode will automatically be selected and the split point will be set at C♯3.



2 Start the Accompaniment

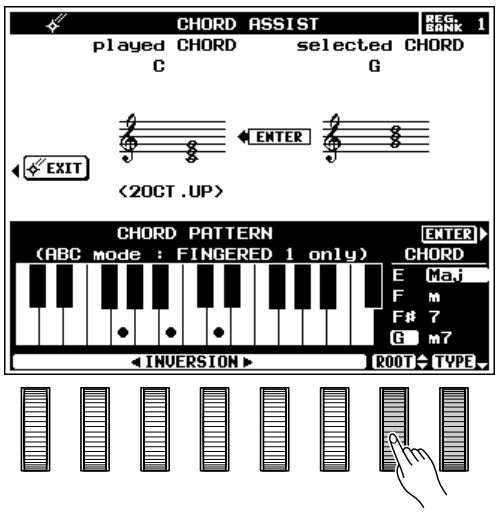
Start the accompaniment by using any of the methods described on page 27.

3 Select the Chord Root and Type

Use the **ROOT** LCD dial to select the desired chord root.

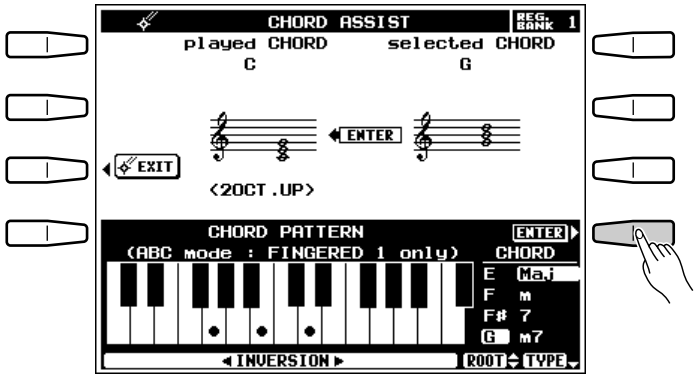
Use the **TYPE** LCD dial to select the chord type.

The selected chord root and type will appear on the graphic keyboard display, and the same chord will appear in notation form on the musical staff under "selected CHORD" in the upper half of the display.



4 Hear the Chord

At this point you can "play" and hear the specified chord by pressing the **ENTER** LCD button — i.e. the specified chord accompaniment will sound and the chord will appear in notation form on the musical staff under "played CHORD" in the upper half of the display.

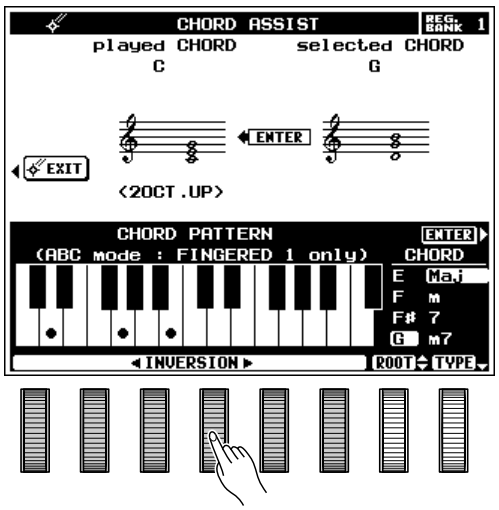


NOTES

- *Chords which are recognizable by the PSR-7000 CHORD ASSIST function can also be entered by playing them on the ABC section of the keyboard. The chord will appear in notation form on the musical staff under "played CHORD" in the upper half of the display.*

5 Invert the Fingering as Necessary

Use the **INVERSION** LCD dials to shift the fingering up or down the keyboard. Each time an **INVERSION** LCD dial is pressed the next viable fingering (inversion) appears on the graphic keyboard display and the musical staff below "**selected CHORD**".



6 Stop the Accompaniment

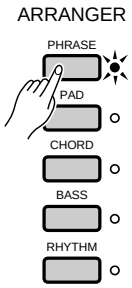
Press the **[START/STOP]** button to stop the accompaniment.

7 Exit When Done

Press the **EXIT** LCD button or the panel **[EXIT]** button to exit from the Chord Assist function.

The Arranger Buttons

The **ARRANGER** buttons make it possible to individually mute accompaniment parts to create the blend and accompaniment "size" you want. When an **ARRANGER** button is pressed so that its indicator goes out, the corresponding accompaniment part(s) are muted. Muted parts can be turned back on by pressing the appropriate **ARRANGER** button so that its indicator lights. The **ARRANGER** buttons correspond to the following accompaniment parts:



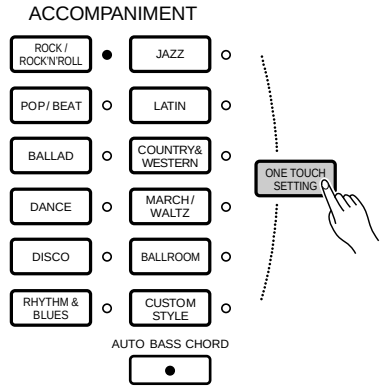
PHRASE	PHRASE 1, PHRASE 2
PAD	PAD
CHORD	CHORD 1, CHORD 2
BASS	BASS
RHYTHM	RHYTHM 1, RHYTHM 2

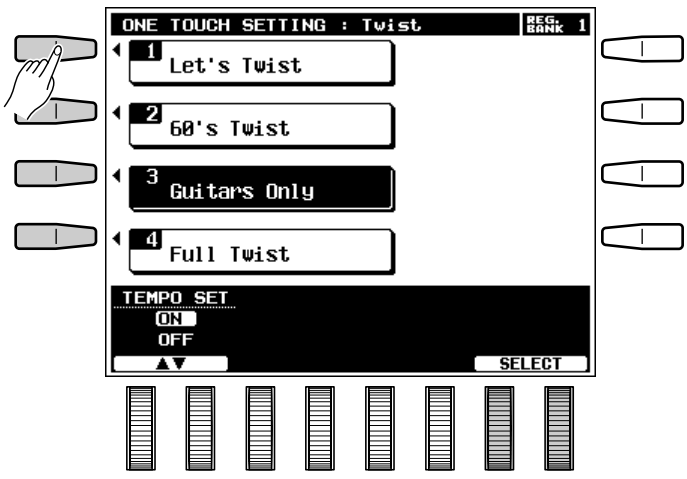
One Touch Setting

The PSR-7000's 120 internal styles each have 4 different preset "panel setups" that can be selected via the [ONE TOUCH SETTING] buttons to create different musical textures — e.g. different voices for the accompaniment parts.

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 **[ONE TOUCH SETTING]** button and selecting the desired ONE TOUCH SETTING setup by pressing the appropriate LCD button.



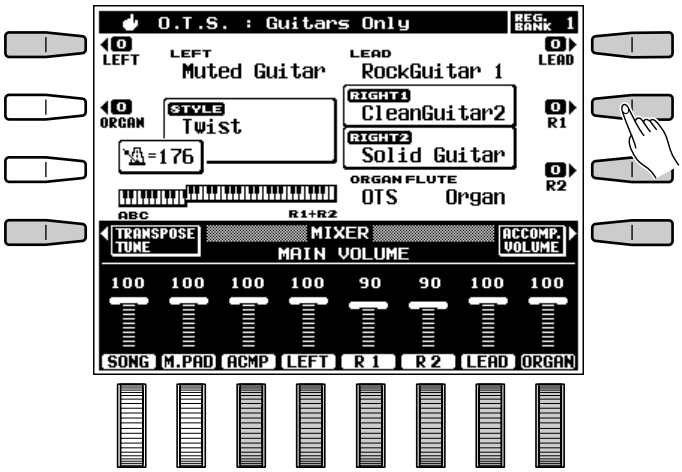


2 Adjust The Settings If Necessary

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.

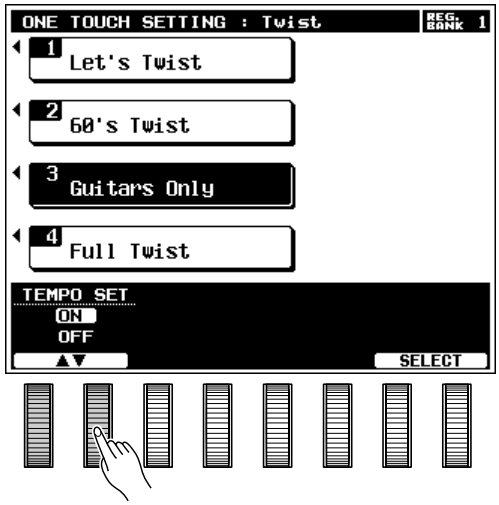
NOTES

- *See page 140 for a complete listing of the ONE TOUCH SETTING setup parameters*
- *One Touch Settings can also be stored in the REGISTRATION memory.*
- *ONE TOUCH SETTING cannot be used with accompaniment styles created using the Custom Accompaniment feature described on page 75. An error message will appear on the display if a Custom Style is selected.*



THE TEMPO SET FUNCTION

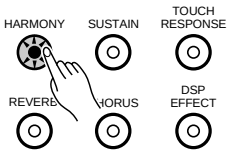
The **TEMPO SET** LCD dials in the **ONE TOUCH SETTING** display can be used to turn the ONE TOUCH SETTING TEMPO SET function **ON** or **OFF**. When **ON** the tempo will change according to the tempo setting included in each ONE TOUCH SETTING setup whenever a different setup is selected. When **OFF** the tempo will not change when a different setup is selected, regardless of the tempo setting it includes.



Expression & Effects

Harmony

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 harmony function can be turned on when AUTO BASS CHORD accompaniment is off, but in this case the harmony produced will consist only of unison and/or octave notes.

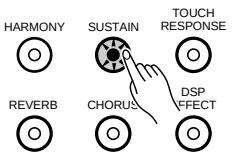


NOTES

- *The type of harmony produced can be selected via the HARMONY EASY SETTING display, or via the HARMONY function display. See page 122 for details.*
- *The harmony is based on the ABC chords, and is added to the highest note played except when only the LEAD voice is on, in which case the harmony notes are added to the last note played.*
- *The HARMONY feature cannot be engaged when the FULL KEYBOARD ABC mode is selected.*

Sustain

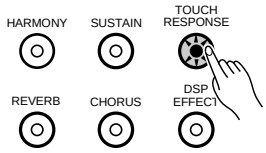
Press the **[SUSTAIN]** button to turn the sustain effect on or off. When on (indicator lit), extra sustain is applied to the selected voice. When sustain is applied via a footswitch, however, the panel **[SUSTAIN]** button will not function.



NOTES

- *Sustain can be applied to any combination of the LEFT, RIGHT 1, RIGHT 2, LEAD, and ORGAN voices via the SUSTAIN BUTTON parameter available via the SUSTAIN EASY SETTING display or the CONTROLLER function display. See page 112 for details.*
- *The sustain effect may not produce the same effect for all voices.*

Touch Response



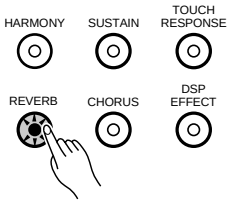
The touch response function turns the PSR-7000's initial keyboard velocity and aftertouch response on or off. Normally, touch response should be turned on — the **[TOUCH RESPONSE]** button indicator should be lit — to allow normal dynamic control via the keyboard. With initial touch response the harder the keys are played, the louder the sound. Aftertouch response allows the volume, timbre, modulation, and pitch of some voices to be varied according to how hard the keys are pressed after they have been initially played. In some cases you might want to turn touch response off (indicator off). For example, most organs have no keyboard velocity response, so touch response can be turned off for greater realism when playing organ type voices. Touch response can also be turned off to create a constant-volume sound with any voice.

Use the **[TOUCH RESPONSE]** button to turn touch response on or off as required.

NOTES

- *Aftertouch response may produce minimal or no effect with some voices.*
- *When two or more of the "right-hand" parts are played at the same time (RIGHT 1, RIGHT 2, LEAD), aftertouch response may result in distorted sound with some voices.*
- *Touch response sensitivity, off level, and voice assignments can be set via the TOUCH EASY SETTING display, or via the CONTROLLER function display. See page 115 for details.*

Reverb



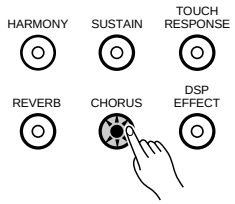
Press the **[REVERB]** button to apply the reverb effect specified by the REVERB TYPE and DEPTH functions described on page 118. The **[REVERB]** button alternately turns the reverb effect on (indicator lit) or off (indicator out).

NOTES

- *Reverb type and depth settings are available via the REVERB EASY SETTING display, or via the REVERB/CHORUS/DSP EFFECT function display. See page 118 for details.*
- *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.*
- *Although the [REVERB] indicator will go out, the reverb effect cannot be turned off during accompaniment or song playback.*

Chorus

Press the **[CHORUS]** button to apply the chorus effect at a depth specified by the CHORUS DEPTH function described on page 120. The **[CHORUS]** button alternately turns the chorus effect on (indicator lit) or off (indicator out).

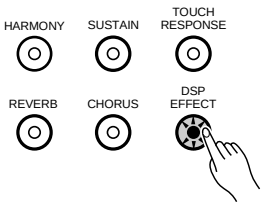


NOTES

- *Chorus depth settings are available via the CHORUS EASY SETTING display, or via the REVERB/CHORUS/DSP EFFECT function display. See page 118 for details.*
- *Although the [CHORUS] indicator will go out, the chorus effect cannot be turned off during accompaniment or song playback.*

DSP Effects

Press the **[DSP EFFECT]** button to apply the effect specified by the DSP EFFECT TYPE and DEPTH functions described on page 120. The **[DSP EFFECT]** button alternately turns the effect on (indicator lit) or off (indicator out).

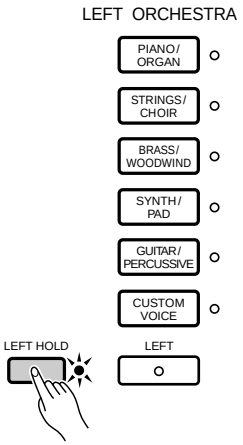


NOTES

- *When the default setting is selected, an appropriate DSP effect will automatically be selected whenever a new voice is selected.*
- *DSP effect depth, type, and individual parameter settings are available via the DSP EFFECT EASY SETTING display, or via the REVERB/CHORUS/DSP EFFECT function display. See page 118 for details.*
- *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.*

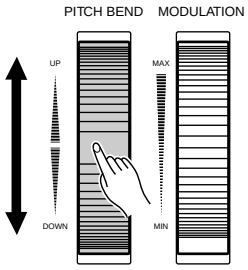
Left Hold

This function causes the LEFT orchestra part voice to be held even when the keys are released. 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).



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 89.

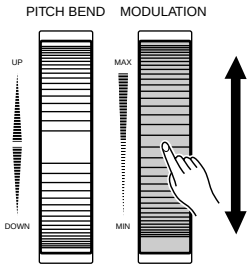


NOTES

- *Pitch bend can be applied to the LEFT, RIGHT 1, RIGHT 2, LEAD, and ORGAN voices — the PITCH BEND WHEEL parameter described on page 114 allows the pitch bend wheel to be assigned any of these voices, singly or in any combination.*
- *The pitch bend wheel may cause sudden pitch changes when applied to notes at the upper and lower extremes of the keyboard.*

Modulation Wheel

The **MODULATION** wheel to the left of the keyboard lets you apply modulation to notes played on the keyboard using the LEFT, RIGHT 1, RIGHT 2, LEAD, and ORGAN orchestra part voices. Rolling the **MODULATION** wheel upward (away from you) increases the modulation depth.



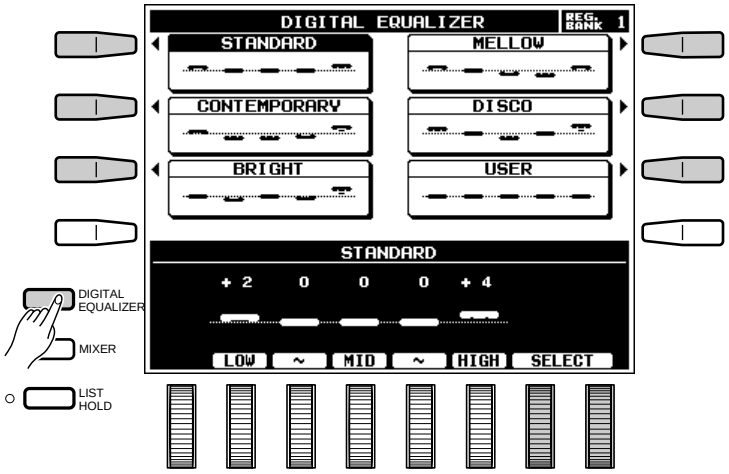
NOTES

- *Modulation can be applied to the LEFT, RIGHT 1, RIGHT 2, LEAD, and ORGAN voices — the MODULATION WHEEL parameter described on page 114 allows the modulation wheel to be assigned any of these voices, singly or in any combination.*
- *With some voices the MODULATION wheel changes the depth of effects or the timbre of the sound.*

Digital Equalizer

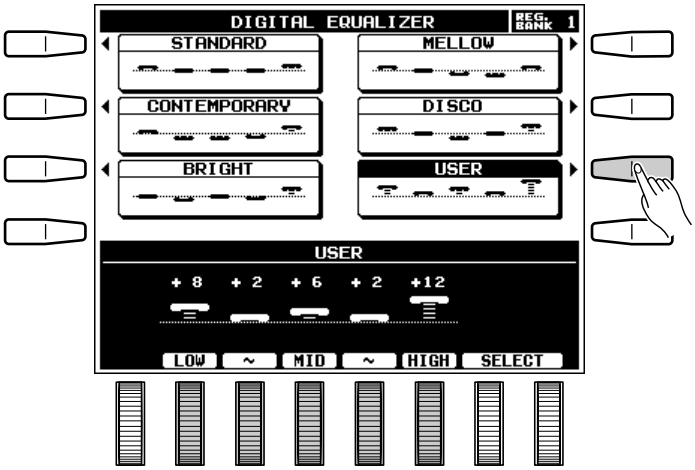
The PSR-7000 features a digital 5-band equalizer that can be used to "shape" the overall frequency characteristics of the instrument to create a wide range of tonal variations.

Press the **[DIGITAL EQUALIZER]** button to access the equalizer controls. 5 preset equalizer curves and one programmable "USER" curve are provided. The various curves can be selected by pressing the appropriate LCD button or by rotating the **SELECT** dial.



The USER curve can be programmed as required via the corresponding LCD dials — **LOW** through **HIGH**. Each of the 5 bands can be boosted ("+" values) or cut ("–" values) by up to 12 dB. Any changes are shown graphically via both the controls and the markers in the USER curve. The USER curve is automatically selected whenever any of the equalizer parameters are edited.

Press the **[DIGITAL EQUALIZER]** or **[EXIT]** button to return to the normal play mode display.



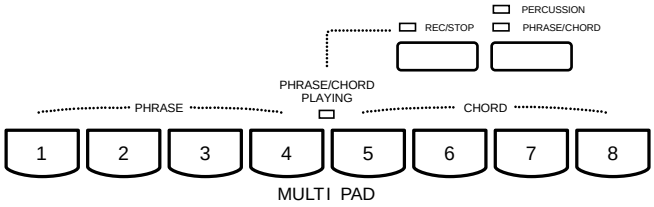
NOTES

- *Extreme digital equalizer settings may result in distorted sound with some voices.*

The Multi Pads

The PSR-7000 features 8 “MULTI PADs” above the keyboard that can be used in two ways:

- **PHRASE/CHORD:** When the PHRASE/CHORD 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.
- **PERCUSSION:** In the PERCUSSION mode the pads can be used to play 8 different drum and percussion instruments selected from the PSR-7000’s DRUM KIT voices and Custom Voice DRUM KIT voice.

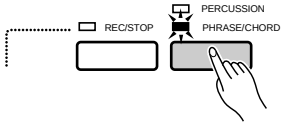


NOTES

• MULTI PAD data can be saved to floppy disk. See page 98 for details.

The PHRASE/CHORD Mode

To engage the PHRASE/CHORD mode, press the **[PHRASE/CHORD - PERCUSSION]** button so that the PHRASE/CHORD indicator lights (the PHRASE/CHORD and PERCUSSION indicators light alternately each time the button is pressed).



NOTES

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

The PHRASE Pads (pads 1 … 4)

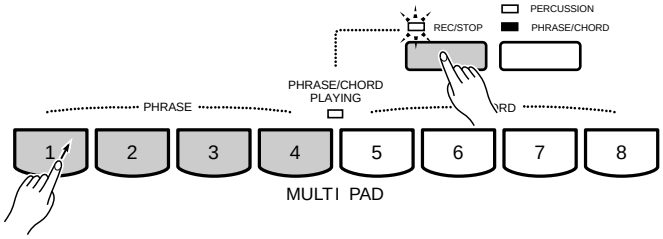
Each PHRASE pad can record up to approximately 350 notes played using the RIGHT 1, RIGHT 2, or LEAD voices (only one of these voices is recorded). The recorded phrases can then be played back at any time — even while playing on the keyboard, with or without accompaniment. The PHRASE pads record the following data:

- Notes
- Key velocity (touch response)
- Voice number
- Volume
- Sustain
- Modulation
- Pitch bend
- PAN
- SOSTENUTO
- SOFT PEDAL
- Reverb depth
- Part tune

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 RIGHT 1, RIGHT 2, or LEAD voice (see "NOTES", below), and the REC/STOP indicator will light continuously as long as recording continues.

NOTES

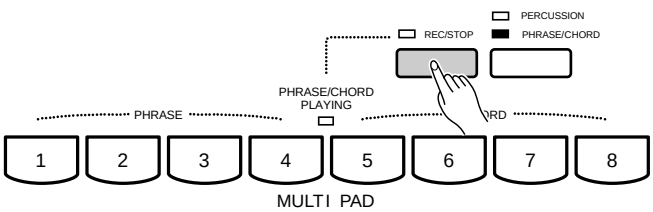
- *Only one voice can be recorded to the pads.*
- *If more than one voice is selected when the pad record mode is engaged, the voice with the highest priority will be used for recording. The RIGHT 1 voice has the highest priority, followed by the RIGHT 2 voice, and then the LEAD voice.*
- *The RIGHT 1 voice will automatically be selected if the RIGHT 1, RIGHT 2, and LEAD voices are off or ORGAN FLUTE is on when the pad record mode is engaged.*
- *When a pad is recorded all previous data in that pad will be erased and replaced by the new data.*
- *The preset pad data can be reloaded via the RECALL PRESET DATA function described on page 123.*
- *Recorded phrases which are to be played using the CHORD MATCH function (page 111) should be recorded in the key of C major 7.*
- *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

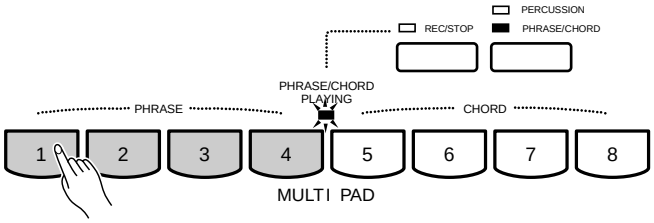
- *Recording will stop automatically if the PHRASE pad memory becomes full (approximately 350 notes per pad), or if another pad is pressed.*



Phrase Playback

As long as the PHRASE/CHORD 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 PHRASE/CHORD 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.

If a PHRASE pad is played while AUTO BASS CHORD accompaniment is playing and the CHORD MATCH function for that pad is ON (see "The Repeat & Chord Match Settings", below), the phrase will be automatically re-harmonized to match the accompaniment chords.



NOTES

- *Phrase pad data can be saved to and loaded from disk (page 96), but can not be memorized by the Registration feature (page 49).*
- *Use the M.PAD VOLUME control in the MIXER MAIN VOLUME display to adjust the playback volume of the phrase pads.*
- *Only one pad can be played at a time in the SONG RECORD mode (page 58).*

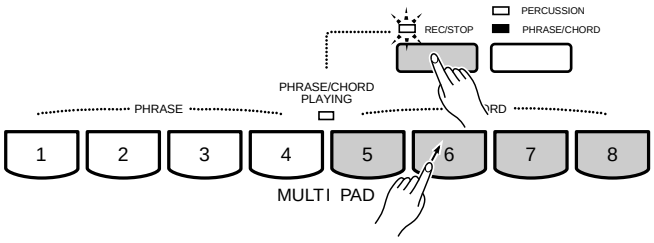
The CHORD Pads (pads 5 … 8)

Each CHORD pad can record up to approximately 50 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 when ABC is engaged and an accompaniment is playing.

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

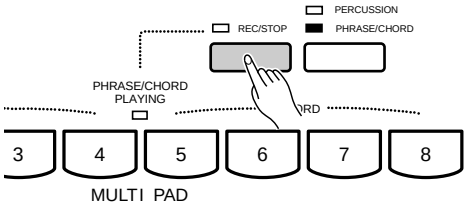
- *If AUTO BASS CHORD is OFF when a CHORD pad is selected for recording, it will automatically be turned ON. Further, if the MANUAL MIDI BASS mode is selected, the FINGERED 1 mode will automatically be selected.*

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.

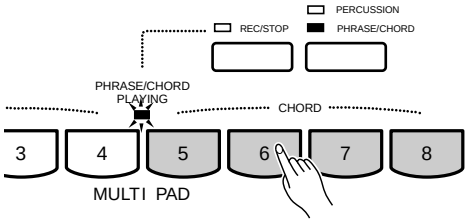


NOTES

- *Recording will stop automatically if the CHORD pad memory becomes full (approximately 50 chords per pad); if another pad is pressed; or if the accompaniment [START/STOP], or [SYNCHRO START] button is pressed.*
- *Quarter note steps are the smallest that can be recorded.*

Chord Playback

As long as the PHRASE/CHORD 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 chord sequence will play back at the currently set tempo. The PHRASE/CHORD 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 AUTO BASS CHORD 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 PHRASE/CHORD PLAYING indicator flashes during the last two measures (if the REPEAT mode is not engaged — see below). A chord sequence that is playing can be stopped by pressing the same chord pad again, or by pressing the **[REC/STOP]** button. The AUTO BASS CHORD function will continue playing the last chord played in the chord sequence.

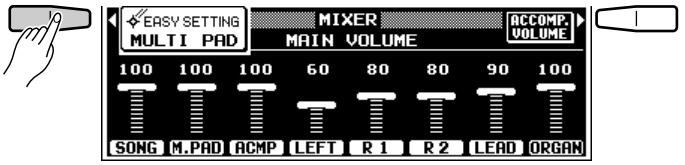
NOTES

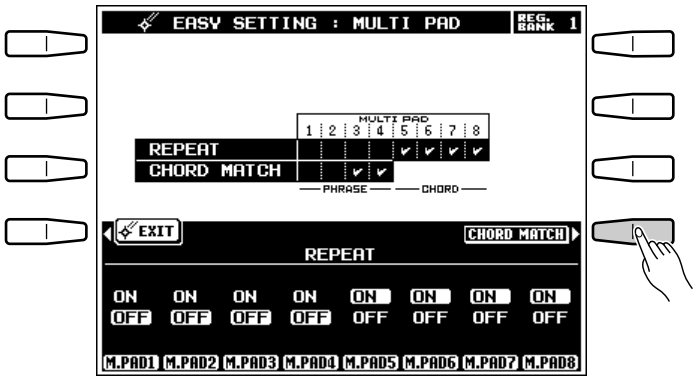
- *If you press a CHORD pad while the accompaniment is stopped or while the AUTO BASS CHORD function is off, "Engage ABC to play the chord pads" will appear on the display. Also, if AUTO BASS CHORD is on but the MANUAL MIDI BASS mode is selected, "Engage SF, FC1, FC2, FULL KEYBOARD, or AUTO MIDI BASS mode to play the chord pads" will appear on the display, since chord playback will not function in the MANUAL MIDI BASS mode.*
- *Chord pad data can be saved to and loaded from disk (page 96), but can not be memorized by the Registration feature (page 49).*
- *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.*

The Repeat & Chord Match Settings

The repeat and chord match settings for PHRASE/CHORD pad playback can be accessed by pressing the **EASY SETTING** LCD button that appears when the **[PERCUSSION - PHRASE/CHORD]** button is pressed. Once the easy setting display has been selected the repeat and chord match parameters can be accessed by pressing the **REPEAT** or **CHORD MATCH** LCD button.

Press either the **EXIT** LCD button or the panel **[EXIT]** button when done.





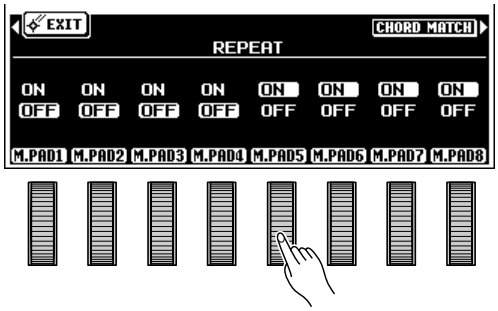
NOTES

- *The MULTI PAD repeat and chord match settings are also available via the MULTI PAD FUNCTION display — page 111.*

● REPEAT

When a check mark appears in a REPEAT box in the REPEAT display, the corresponding pad — PHRASE or CHORD — will playback repeatedly until stopped by either pressing the same MULTI PAD again, or by pressing the **[REC/STOP]** button.

Use the LCD dials to turn repeat for the corresponding pads ON or OFF as required.

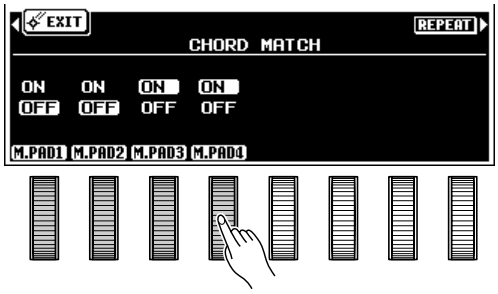


NOTES

- *The default repeat settings are: pads 1…4 OFF; pads 5…8 ON.*

● CHORD MATCH

When a check mark appears in a CHORD MATCH box in the CHORD MATCH display, the phrase played by the corresponding PHRASE pad will be automatically re-harmonized to match the accompaniment chords if the PHRASE pad is played while AUTO BASS CHORD accompaniment is playing.



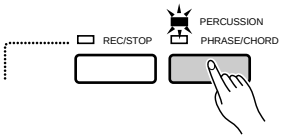
Use the LCD dials to turn the chord match function for the corresponding pads ON or OFF as required.

NOTES

- *Phrases to be played back using the CHORD MATCH function must be recorded in the key of C major 7.*
- *The chord match function is only available for pads 1 through 4 (the PHRASE pads).*
- *The default chord match settings are:1 and 2 OFF; 3 and 4 ON.*

The PERCUSSION Mode

To engage the PERCUSSION mode, press the **[PHRASE/CHORD - PERCUSSION]** button so that the PERCUSSION indicator lights (the PHRASE/CHORD and PERCUSSION indicators light alternately each time the button is pressed).



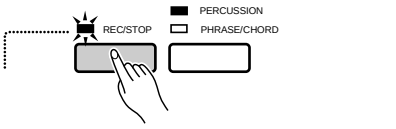
The 8 pads are initially programmed with the following drum and percussion instruments which can be played via the pads when the PERCUSSION mode is selected:

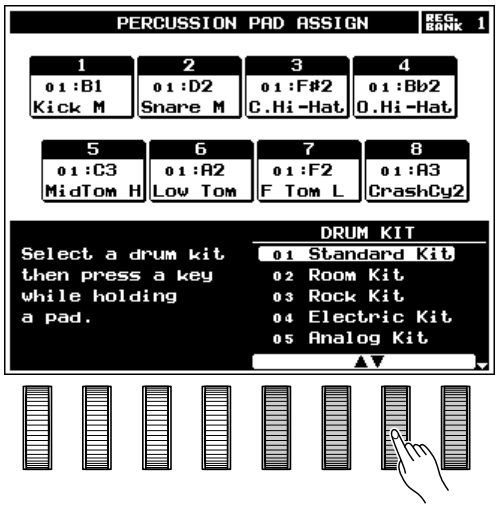
1. Kick M
2. Snare M
3. C.Hi-Hat
4. O.Hi-Hat
5. MidTom H
6. Low Tom
7. F Tom L
8. CrashCy2

Assigning Different Instruments To the PERCUSSION Pads

1 Press [REC/STOP]

Press the **[REC/STOP]** button so that its indicator lights (make sure the PERCUSSION 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

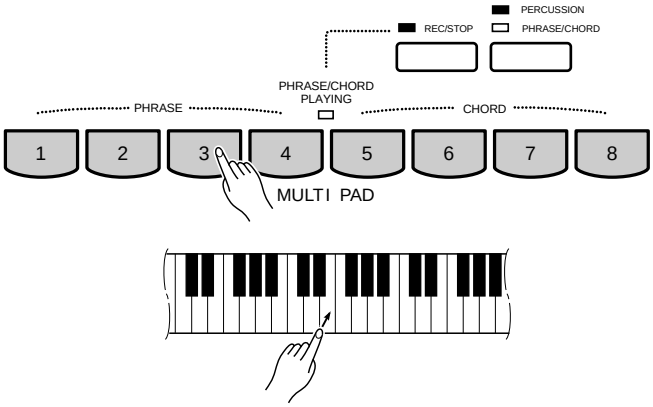
Use the **DRUM KIT** LCD dials to select the drum voice which includes the percussion instruments you want to assign.

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 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 84 can also be assigned to the percussion pads.*

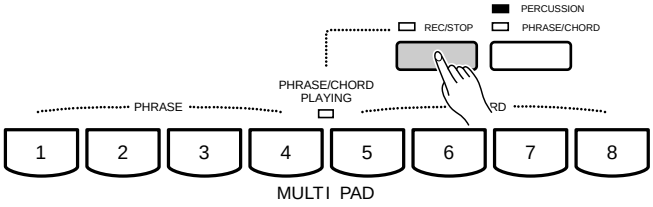


4 Press [REC/STOP] To End Assignment

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

NOTES

- *Percussion pad data can be saved to and loaded from disk (page 96), but can not be memorized by the Registration feature (page 49).*

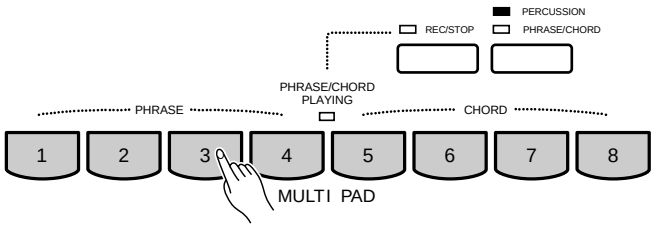


Playing the Percussion Pads

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

NOTES

- *The PERCUSSION pad sounds are not affected by the PSR-7000 PITCH BEND wheel or MODULATION wheel.*



Registration Memory

The PSR-7000 Registration Memory feature can be used to memorize 128 complete control-panel setups (16 banks, 8 setups each) that you can recall whenever needed.

NOTES

- *Registration data can be saved to and loaded from floppy disk as required (page 96).*
- *The disk provided with the PSR-7000 contains a number of sample registration settings.*

Registering the Panel Settings

1 Set Up the Controls as Required

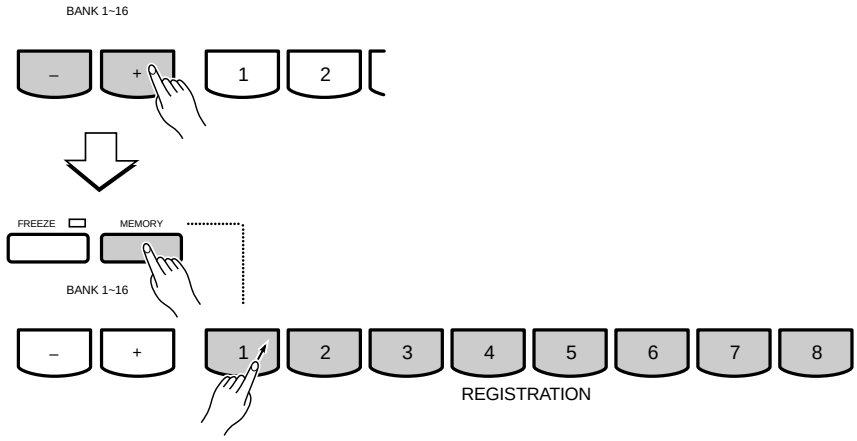
Make the desired control settings.

NOTES

- *See page 140 for a complete listing of the data stored by the Registration function.*

2 Register in Memory

Use the **BANK [–]** or **[+]** button to select the desired memory bank — the bank number is shown next to **REG. BANK** in the upper right corner of the display. Press and hold the **[MEMORY]** button, then press one of the **REGISTRATION** buttons. Any data that was previously in the selected location is erased and replaced by the new settings.

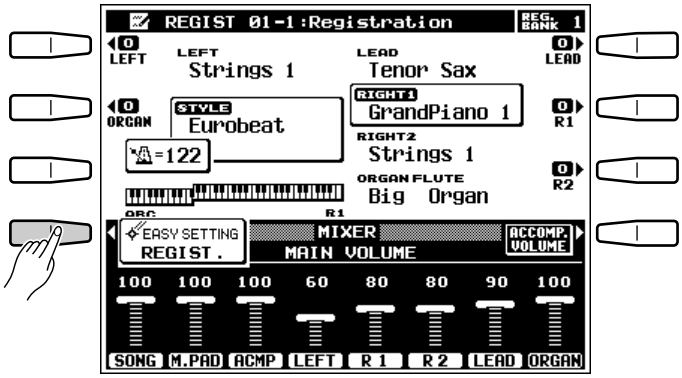


Entering a Registration Name

You can enter descriptive names up to 16 characters in length for each registration setup via the NAME function accessible via the registration **EASY SETTING** display. The same function is also available via the FUNCTION display — page 122.

1 Select the NAME Function

Press the **EASY SETTING** LCD button that appears when a BANK button or the **[MEMORY]** button is pressed before it disappears. When the easy setting display appears, select the **NAME** function by pressing the corresponding LCD button.



2 Enter a 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

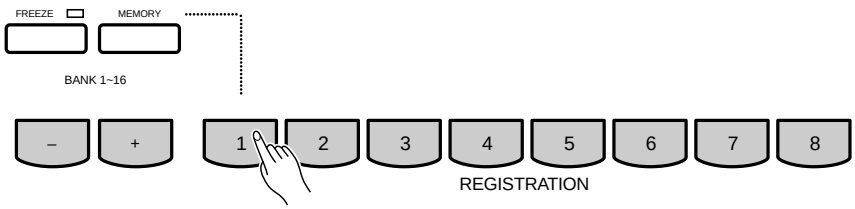
- *It's a good idea to give your registration setups names that make them easily identifiable. If you've created a registration setup for a song named "MySong", a good registration name might be something like "MySong-Reg".*

3 Exit When Done

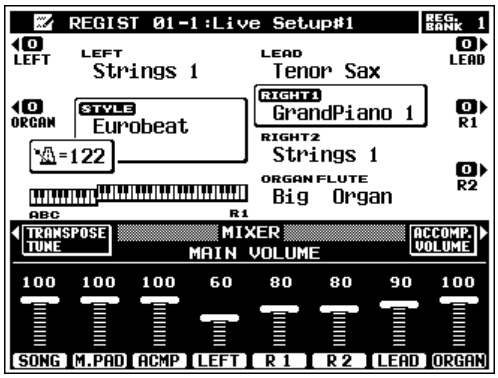
Press either the **EXIT** LCD button or the panel **[EXIT]** button when done.

Recalling the Registered Panel Settings

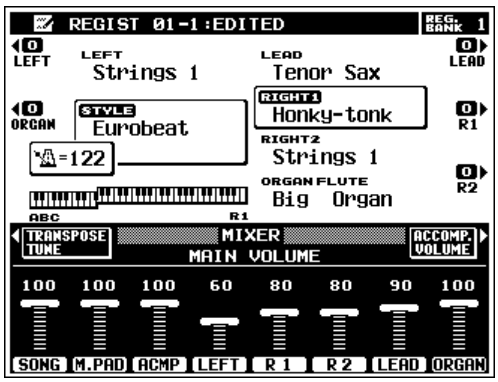
Simply select the appropriate bank using the **BANK [–]** or [+] button and press the desired **REGISTRATION** button at any time to recall the memorized settings. The memorized settings are actually recalled only when a **REGISTRATION** button is pressed — selecting a different bank does not change the settings.



The selected bank and registration number appears at the top of the display. The registration name appears to the right of the bank and number.

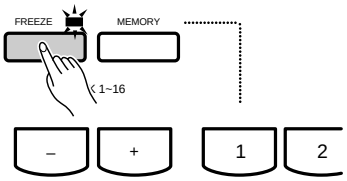


If any change is made to a setting memorized by the REGISTRATION feature, "**REGIST EDITED**" appears in place of the bank, number, and name to indicate that the current panel settings do not exactly correspond to the selected registration memory.



The Freeze Function

If you press the **[FREEZE]** button so that its LED lights, selecting a different registration setup will not change the settings specified in the **FREEZE GROUP SETTING** display accessed either via the registration **EASY SETTING** display or the **[FUNCTION]** button (page 122).

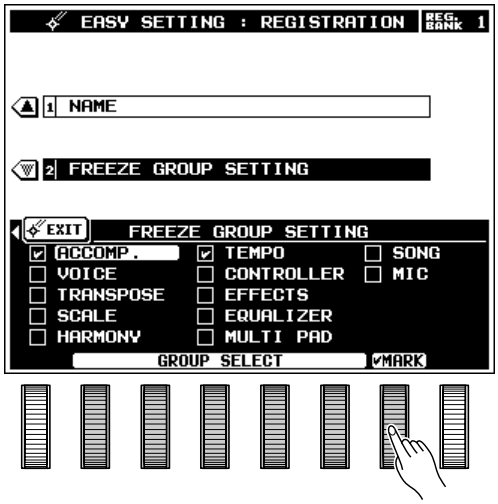


The Freeze Group Settings

You can specify which settings are affected by the FREEZE function via the FREEZE GROUP SETTING function accessible via the registration **EASY SETTING** display. The same function is also available via the FUNCTION display — page 122.

1 Select the FREEZE GROUP SETTING Function

Press the **EASY SETTING** LCD button that appears when a BANK button or the **[MEMORY]** button is pressed before it disappears. When the easy setting display appears, select the **FREEZE GROUP SETTING** function by pressing the corresponding LCD button.



2 Mark the Settings to be "Frozen"

Use the **GROUP SELECT** LCD dials to select a setting you want to freeze or "un-freeze", then use the **MARK** LCD dial to set or remove the check mark for that setting. Repeat until all settings are marked or un-marked as required.

3 Exit When Done

Press either the **EXIT** LCD button or the panel **[EXIT]** button when done.

Song Playback & Recording

Song Playback

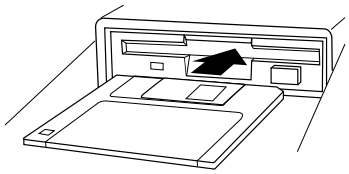
The PSR-7000 SONG PLAY mode allows song data to be played back from a floppy disk or the optional hard disk. The song file types which can be played by the PSR-7000 are: songs recorded on the PSR-7000, DOC (Disk Orchestra Collection), PianoSoft and GM song (SMF format). Refer to the DOC or SMF disk manuals as necessary.

About the Supplied Disk

The floppy disk supplied with the PSR-7000 includes a number of sample songs with wave data that are automatically loaded when the disk is inserted. When the data is loaded the SONG PLAY mode is automatically engaged, and you can then select and play the various sample songs as described below. Please note that the internal wave data (custom voice data), registration data, and SETUP data will be overwritten by the data loaded from the supplied disk.

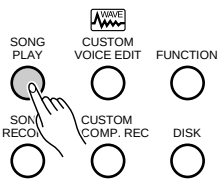
1 Insert a Song Disk

Insert a song disk into the PSR-7000 disk drive — a disk containing songs you have recorded on the PSR-7000 yourself, a Yamaha DOC (Disk Orchestra Collection), a Yamaha PianoSoft disk, or a GM song disk. The SONG PLAY mode will be automatically engaged if a DOC, PianoSoft or GM song disk is inserted (and an accompaniment is not playing). Otherwise engage the SONG PLAY mode as described in the following step.



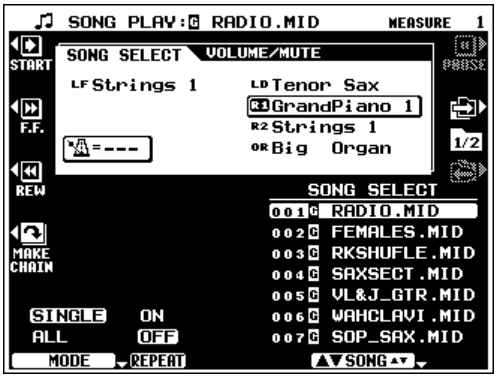
2 Engage the Song Play Mode

Press the **[SONG PLAY]** button to engage the SONG PLAY mode. The **SONG PLAY** display will appear.



NOTES

- *If the optional hard disk is present, DIR ▲▼ dials will be available in the SONG PLAY display. These can be used to select the floppy disk or the hard disk directory containing the desired song.*

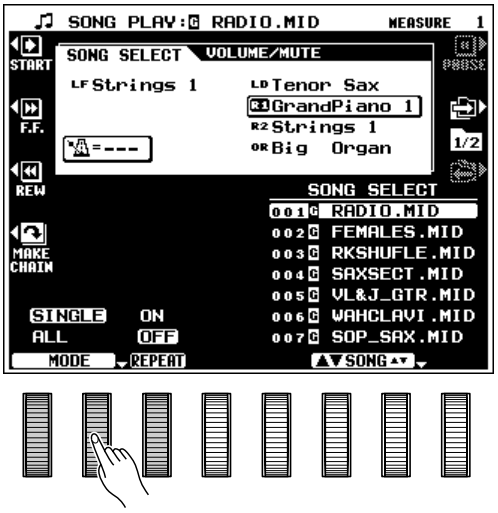


3 Select a Play Mode

Use the **MODE** LCD dials to select a play mode:

SINGLE	Plays the single song selected via the SONG SELECT controls.
ALL	Plays all songs in the song list in order.
CHAIN	Plays the songs specified in the CHAIN LIST in the specified order. Set this via the MAKE CHAIN button.
RANDOM	Plays all songs in the song list in random order.

Also, use the **REPEAT** LCD dial to turn the repeat mode **ON** or **OFF** as required. When **ON**, playback will repeat continuously until stopped.

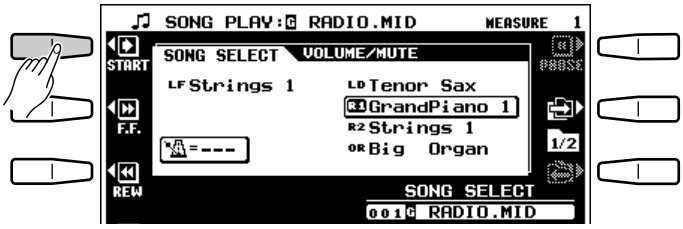


4 Start/Stop Playback

Press the **START** LCD button to start playback. Playback will stop automatically when the specified song(s) have been played all the way through (unless the repeat mode is ON). You can also stop playback at any time by pressing the **STOP [■]** LCD button.

NOTES

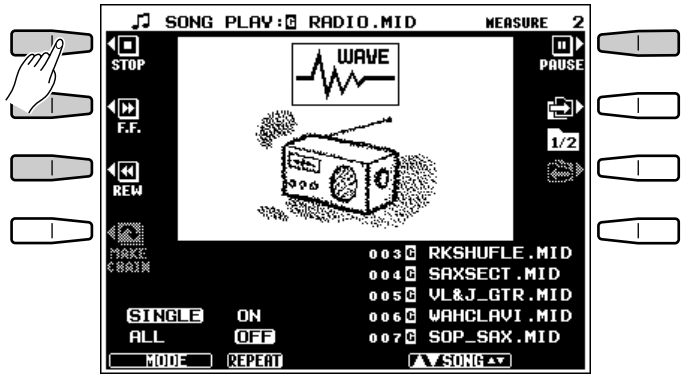
- *The ORGAN FLUTE voice cannot be played on the keyboard when playing back a track on which the ORGAN FLUTE voice is recorded.*



■ Pause, Fast Forward & Reverse

When you press the **STOP [■]** LCD button, playback stops and the song position returns to the beginning of the song. The **PAUSE** LCD button, however, lets you pause playback and then start again from the same point in the song. Playback can be restarted either by pressing the **PAUSE** LCD button again or by pressing the **START** LCD button.

While the PAUSE mode is engaged the **F.F. [▶▶]** (Fast Forward) and **REW [◀◀]** (Reverse) LCD buttons rapidly move the playback location forward and backward in 1-measure steps, respectively. The **[◀◀]** and **[▶▶]** buttons can be used both during playback and while playback is paused. The **REW [◀◀]** LCD button will not appear and reverse operation will not be possible when a GM song disk (SMF Format 1) is being played.



The display shown appears when the supplied disk is used.

Chain Playback

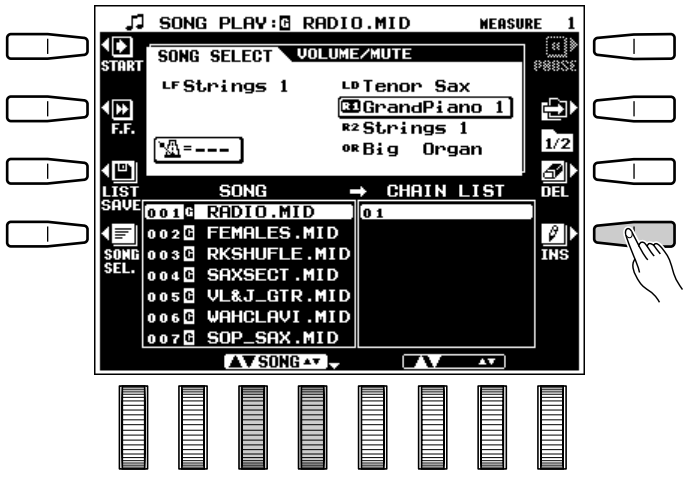
Chain playback allows any number of songs to be grouped together in any order for playback. To program a chain:

1 Press the MAKE CHAIN LCD Button

The **MAKE CHAIN** LCD button will take you to the chain programming display.

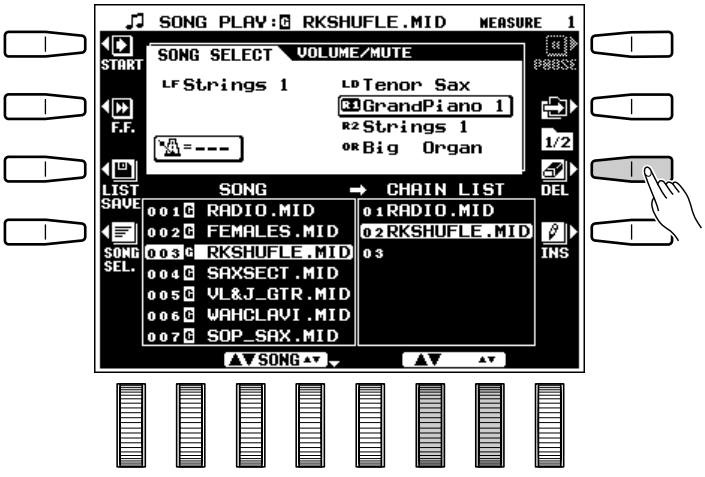
2 Select and Insert the Required Songs

Use the **SONG** LCD dials to select a song, use the **CHAIN LIST** LCD dials to select a position in the chain if the chain contains more than one song, and finally press the **INS** LCD button to insert the song at the current position. Repeat this process to insert the required songs at the required locations.



3 Delete Songs As Required

To delete a song from the chain list simply use the **CHAIN LIST** LCD dials to select the song to be deleted, then press the **DEL** LCD button.



4 Save the Chain List, If Necessary

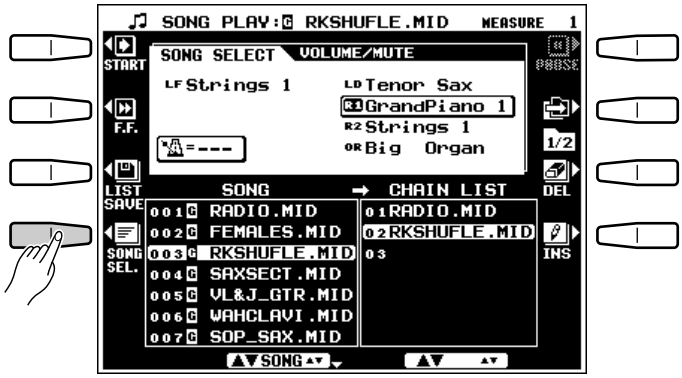
The completed chain list can be saved to disk by pressing the **LIST SAVE** LCD button. A confirmation display will appear ("OK to save chain data?"): press **YES** to save the list or **NO** to cancel.

NOTES

- *Chain list data cannot be saved to a DOC or PianoSoft disk.*

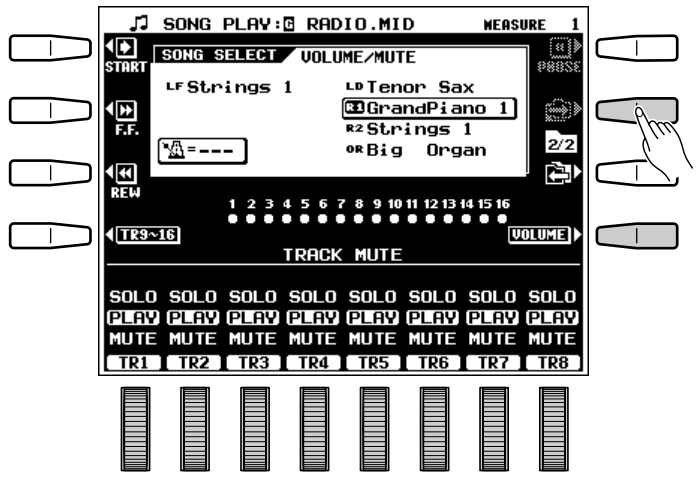
5 Return to the Song Select Display

Press the **SONG SEL.** LCD button to return to the SONG SELECT display.



Volume & Mute/Solo Settings

The volume, mute, and solo parameters for song playback are available via the **VOLUME/MUTE** display which can be accessed by pressing the **[➡]** LCD button to the right of the display. Press the **VOLUME** or **MUTE** LCD button to switch to the corresponding display.



The number of volume parameters in the **TRACK VOLUME** display will depend on the type of song being played. If an original song recorded on the PSR-7000 using the QUICK RECORD mode is being played, two volume parameters will be available: **MANUAL** and **ACCOMP.** If an original song recorded on the PSR-7000 using the MULTITRACK RECORD mode or a GM song is being played, individual parameters for all 16 tracks will be available: **TR1** through **TR16**. Use the LCD dials to set the volume of the corresponding tracks. If a Yamaha DOC song is being played use the **RHY**, **BASS**, **ORCH**, **LEFT**, and **RIGHT** LCD dials to set the volume of the corresponding tracks (see the DOC or PianoSoft software manual for more details). If a PianoSoft song is being played use the **ORCH**, **LEFT**, and **RIGHT** LCD dials to set the volume of the corresponding tracks.

The LCD dials in the **TRACK MUTE** display allow **PLAY**, **MUTE**, or **SOLO** to be selected for each track group. Muted tracks do not play. If a track is set to SOLO only that track will play.

The track indicators above the volume or mute/solo parameters indicate which tracks contain data and which are muted. Tracks which do not contain data are indicated by a dotted circle outline while tracks which contain data have a solid outline. Play-enabled tracks are indicated by a filled circle while tracks that are muted are indicated by an outline only.

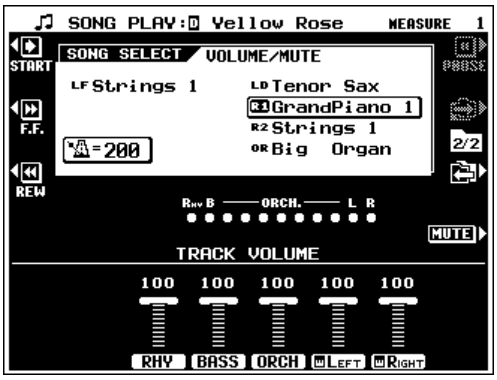
NOTES

- *When GM song is played all tracks appear on the display as if they contain data, even if they don't.*

QUICK RECORD song

MULTITRACK RECORD song

DOC song



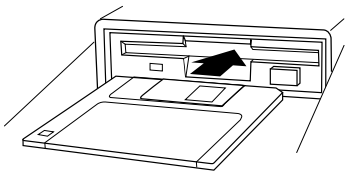
GM song

Song Recording

The PSR-7000 SONG RECORD mode allows anything you play to be recorded to floppy disk. A QUICK RECORD mode provides an easy way to record a melody with accompaniment, while a MULTITRACK record mode allows independent recording on up to 16 tracks. There's also a CHORD SEQUENCE record mode available via the QUICK record mode.

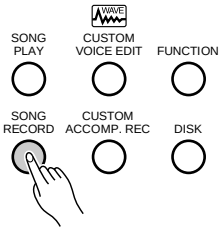
1 Insert a Recordable Disk

Insert a properly formatted disk in the PSR-7000 disk drive.



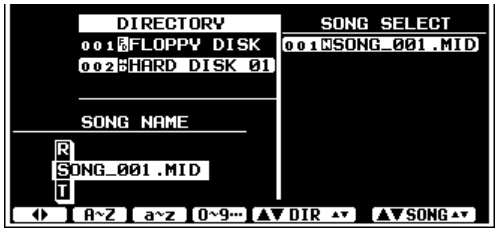
2 Engage the Song Record Mode

Press the [SONG RECORD] button to engage the SONG RECORD mode. The **SONG RECORD** display will appear.



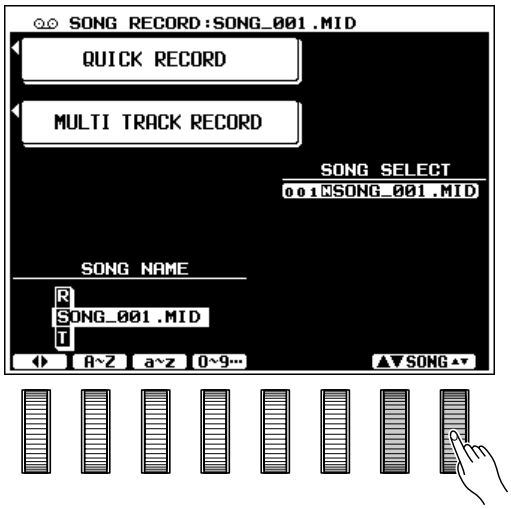
NOTES

- *If an unformatted disk or a disk which has not been formatted for use with the PSR-7000 is inserted, the "Wrong disk format! Format disk?" confirmation message will appear when the SONG RECORD mode is selected. Press YES to format the disk or NO to cancel.*
- *If a GM disk is in the drive when the SONG RECORD mode is engaged, the "Not a user disk! Recording to this disk will convert it to a user disk. OK to record?" message will appear on the display. Press YES to enter the record mode or NO to cancel.*
- *If a DOC or PianoSoft disk is in the drive when the SONG RECORD mode is engaged the "Write protected!" message will appear and it will not be possible to enter the record mode.*
- *If the optional hard disk is present, DIR ▲▼ dials will be available in the SONG PLAY display. These can be used to select the floppy disk or the hard disk directory to which the song is to be recorded.*



3 Select a Song

Use the **SONG** LCD dials to select either an existing song for additional recording or a new song ("**H**" on the SONG LIST) to record a new song.



4 Enter a Song Name, If Necessary

You can enter an original name for the song at this point. Song names can be up to 12 characters long. 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** control selects lower-case letters, and the **0~9...** LCD dial selects numbers and special characters.

5 Select a Record Mode

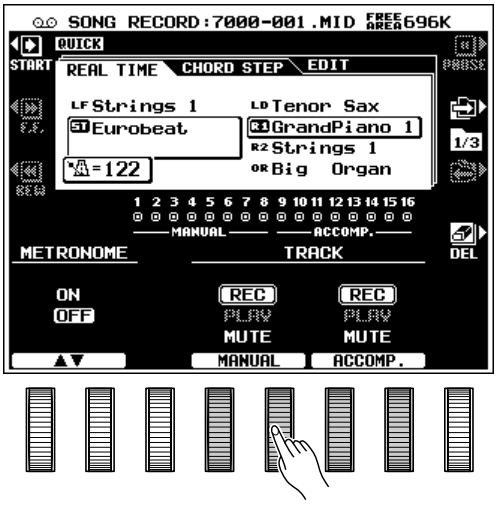
Press the **QUICK RECORD** or **MULTI TRACK** LCD button to select the corresponding record mode.

Quick Record

The QUICK RECORD mode, as its name suggests, makes track selection and recording easy by grouping the accompaniment and manual tracks.

1 Set the Track Modes

Use the **MANUAL** and **ACCOMP.** LCD dials to the select the **REC** mode for the track(s) to be recorded, the **PLAY** mode for the tracks to be played while recording, or the **MUTE** mode for tracks neither to be played or recorded. The **PLAY** mode can only be selected for tracks which contain data.



NOTES

- *Note that the SYNCHRO START mode is automatically engaged when the QUICK RECORD mode is selected, so be careful not to play the keyboard before you're ready to actually start recording, or recording will begin automatically. SYNCHRO START can be disengaged by pressing the [SYNCHRO START] button.*

2 Set Up For the Recording

Select the required voice(s), select a style, turn AUTO BASS CHORD on if required (see "NOTES" below). Set up all parameters as desired for recording. The voices, multi-pad notes, harmony notes, and accompaniment parts are recorded on the various tracks as listed to the right.

MANUAL

VOICE	TRACK
LEAD voice	1
RIGHT 1 voice	2
ORGAN FLUTE voice	3
LEFT voice	4
MULTI PAD	5
HARMONY	6…7
RIGHT 2 voice	8

ACCOMPANIMENT

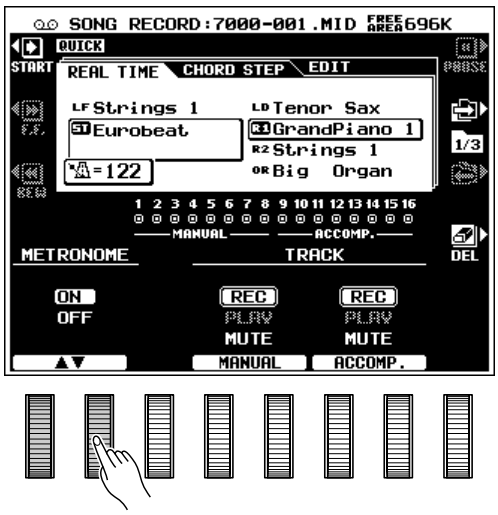
PART	TRACK
RHYTHM 1	9
RHYTHM 2	10
BASS	11
CHORD 1	12
CHORD 2	13
PAD	14
PHRASE 1	15
PHRASE 2	16

NOTES

- *If you turn the panel [AUTO BASS CHORD] button on, the ACCOMP. tracks will automatically be set to the REC mode.*
- *If the REC mode is engaged for the ACCOMP. tracks the panel [AUTO BASS CHORD] button will be turned on automatically.*
- *When the QUICK RECORD mode is selected and a three-note HARMONY TYPE is selected, only two harmony notes will be recorded.*

3 Turn the Metronome On If Required

Use the **METRONOME** LCD dials to turn the metronome ON if you want to record while monitoring the metronome sound (the metronome sound is not recorded).



4 Start Recording

If the SYNCHRO START mode is engaged (it is engaged automatically when the QUICK RECORD mode is selected) you can start recording by simply playing on the keyboard. Otherwise use the **START** LCD button or the panel **[START]** button.

NOTES

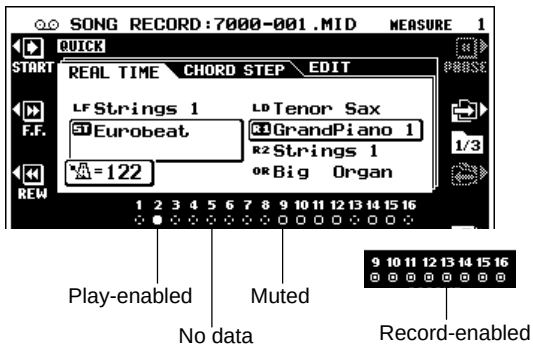
- *Any previous data in a track will be erased when that track is recorded.*
- *When the record mode is engaged and accompaniment is stopped, prior to actually starting recording, the amount of available disk space will appear in the upper right corner of the display in approximate kilobytes. The measure number is displayed in this location when recording is started.*

5 Stop Recording

Stop recording by pressing the **STOP** LCD button, the panel **[STOP]** button or the **[ENDING]** button. When recording is stopped the "Saving to disk" message may appear on the display while the recorded data is being saved to the disk.

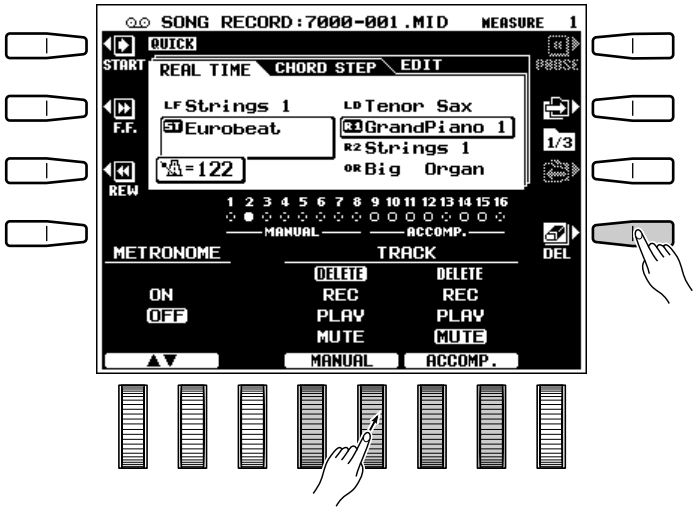
THE TRACK INDICATORS

The track indicators above the track mode selectors indicate which tracks contain data and which are muted. Tracks which do not contain data are indicated by a dotted circle outline while tracks which contain data have a solid outline. Play-enabled tracks are indicated by a filled circle while tracks that are muted are indicated by an outline only.



TRACK DELETE

When the **DEL** LCD button is pressed **DELETE** will appear for tracks which contain data. Select **DELETE** via the **MANUAL** or **ACCOMP.** track LCD dials while holding the **DEL** button to delete all data in the corresponding tracks. The data is actually deleted when the **DEL** LCD button is released. When the **DEL** LCD button is pressed, tracks set to **REC** will automatically be switched to **PLAY** or **MUTE**.



PLAYBACK

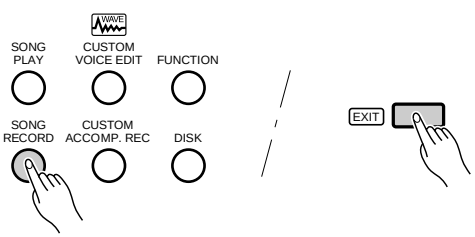
Recorded tracks are automatically set to the **PLAY** mode when recording is stopped, so you can simply press the **START** LCD button or the **[START]** panel button to hear what you've recorded immediately after recording. All other playback functions are the same as described on the "Song Playback" section (page 53).

NOTES

- *If the panel [ORGAN FLUTE] button is turned on before playing a song recorded with an ORGAN FLUTE voice, the panel ORGAN FLUTE settings will be used.*
- *An ORGAN FLUTE voice cannot be played on the keyboard when playing a song that was recorded with an ORGAN FLUTE voice.*

EXITING

Press the **[SONG RECORD]** or **[EXIT]** button to exit from the QUICK RECORD mode and return to the normal play mode.



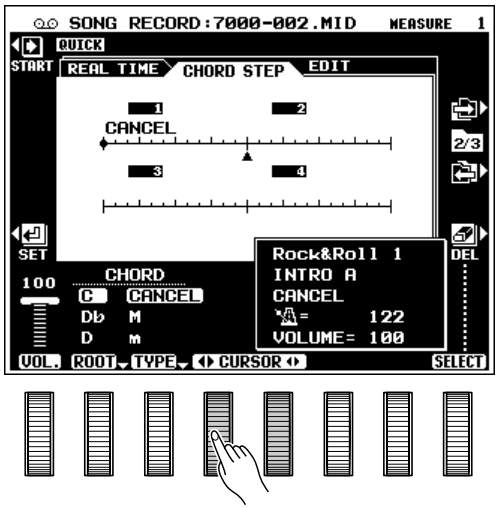
Chord Step Recording

The CHORD STEP recording feature makes it possible to record accompaniment chord changes one at a time with precise timing. Since the changes don't have to entered in real time, it is easy to create even complex accompaniments before recording the melody.

Select the **CHORD STEP** display via the **[➡]** or **[⬅]** LCD button to the right of the display.

1 Select an Entry Point

Use the ◀ ▶**CURSOR**◀ ▶ LCD dials to position the cursor at the measure and beat at which you want to enter a chord or other accompaniment event. The large ◀ ▶ controls move the cursor in 1-measure steps while the small ◀ ▶ controls position the cursor in the smallest increment allowed for the current style. Measure numbers appear above each measure division on the "data line", and the smaller division represent the smallest increment available for the current style. The measure numbers will scroll accordingly when the cursor is moved past the last or first measure on the display (but not backwards past measure 1).

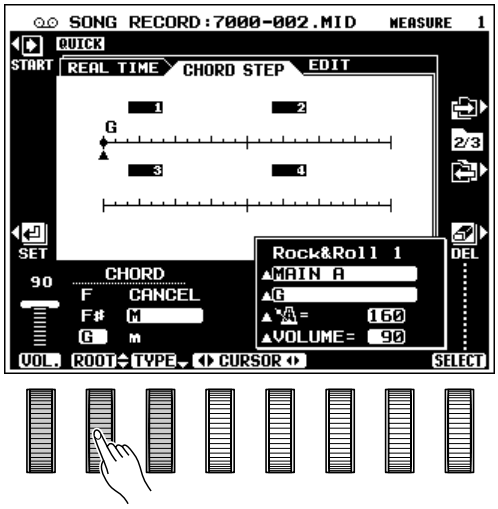


2 Specify a Chord, Volume Change, or Other Event

To specify a chord change use the **ROOT** and **TYPE** LCD dials to specify the chord. It is also possible to enter chords directly via the AUTO BASS CHORD section of the keyboard.

To specify a volume change use the **VOL.** LCD dial to specify the new volume level.

Other events which can be entered via the panel controls are: **STYLE** changes, **[MAIN A]**, **[MAIN B]**, **[INTRO A/FILL to A]**, **[INTRO B/FILL to B]**, **[ENDING]**, and **TEMPO** changes. **STYLE** change, **[MAIN A]**, **[MAIN B]**, and **[ENDING]** events can only be entered at the top of each measure. The edited event appears in inverse text.



3 Enter the Specified Event(s)

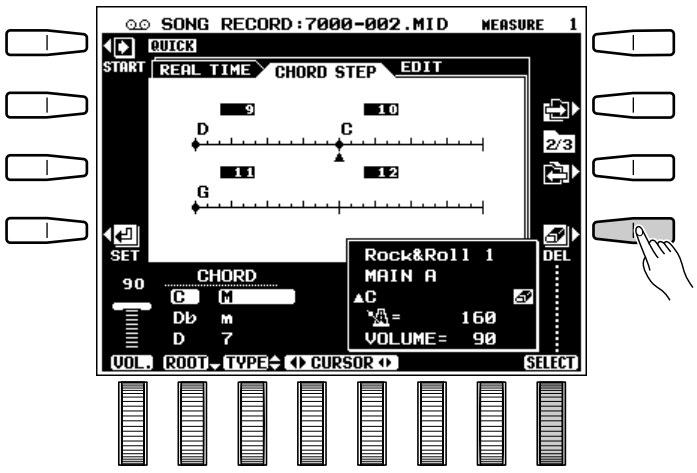
Once the event or events to be entered have been specified as described in the preceding step, press the **SET** LCD button to actually enter the event at the current cursor position. A dot will appear on the CHORD STEP data line and the cursor will advance to the top of the next measure.

4 Repeat Until Done

Repeat steps 1 through 3, above, until the required number of chord changes and other accompaniment events have been entered. The end of the sequence is automatically set at the end of the last measure containing data, the insert point of an **END** event (available at the bottom of the **TYPE** list).

DELETING EVENTS

When the cursor is located at any previously-entered dot on the CHORD STEP data line, the type of event(s) recorded in that location are indicated by triangular markers (s) to the left of the corresponding event names in the event window. When only one type of event has been entered at the cursor location an eraser icon appears to the right of the corresponding event in the event window, and that event can be erased simply by pressing the **DEL** LCD button. When more that one type of event has been entered at the cursor location the **SELECT** LCD dial can be used to place the eraser icon next to any of these events, and the specified event can be erased by pressing the **DEL** LCD button. Events at the top of a measure can be changed but not deleted.



Quick Record Mode Edit Functions

The QUICK RECORD mode EDIT display includes only one function: SONG DELETE.
Select the **EDIT** display via the **[➡]** LCD button to the right of the display.

SONG DELETE

This function deletes the specified song file from the disk.

NOTES

- *The song currently being recorded cannot be deleted.*
- *The amount of remaining disk space is displayed in the upper right corner of the display in approximate kilobytes while recording or playback is stopped.*

1 Select a Song

Use the **SONG** LCD dials to select the song to be deleted.

NOTES

- *If the optional hard disk is present, DIR ▲▼ dials will be available which can be used to select the floppy disk or the hard disk directory containing the song to be deleted.*

2 Delete the Song

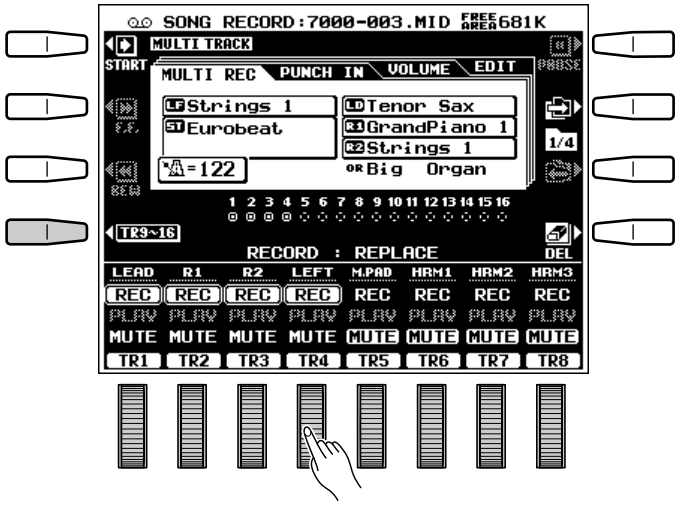
Press the **EXECUTE** LCD button. The "Ready to Delete ********. OK to delete?" confirmation message will appear ("********" is the song name). Press **YES** to delete the song or **NO** to cancel.

Multitrack Record

The MULTITRACK record mode allows independent recording and playback on any of 16 tracks, so even complex songs can be built up track by track.

1 Set the Track Modes

Use the **TR1** through **TR16** LCD dials to the select the **REC** mode for the track(s) to be recorded, the PLAY mode for the tracks to be played while recording, or the **MUTE** mode for tracks neither to be played or recorded. The **PLAY** mode can only be selected for tracks which contain data. The **TR1–8** or **TR9–16** LCD button selects track groups 1 through 8 and 9 through 16, respectively.

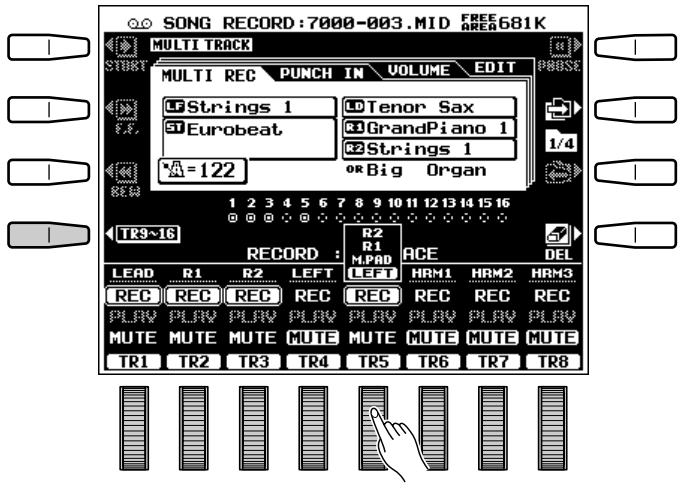


2 Change the Track Parts, If Required

The default part for each track is displayed above the **REC** setting. The parts can be changed as required by selecting them via the corresponding LCD dials. When the part has been changed, move back down to the REC setting.

NOTES

- *ORGAN FLUTE voices can be recorded on track 3.*



3 Set Up For the Recording

Select the required voice(s), select a style, turn AUTO BASS CHORD on if required. Set up all parameters as desired for recording.

NOTES

- *If you turn the panel [AUTO BASS CHORD] button on, the accompaniment tracks will automatically be set to the REC mode.*
- *If the panel [AUTO BASS CHORD] button is turned off the accompaniment track REC modes will be disengaged.*
- *If no AUTO BASS CHORD track is set to the REC mode, the [AUTO BASS CHORD] button will automatically be turned off.*
- *If the REC mode is engaged for any of the accompaniment tracks the panel [AUTO BASS CHORD] button will be turned on automatically.*

4 Start Recording

Engage the SYNCHRO START mode if you want to start recording automatically as soon as you start playing on the keyboard. Otherwise use the **START** LCD button or the panel **[START]** button.

NOTES

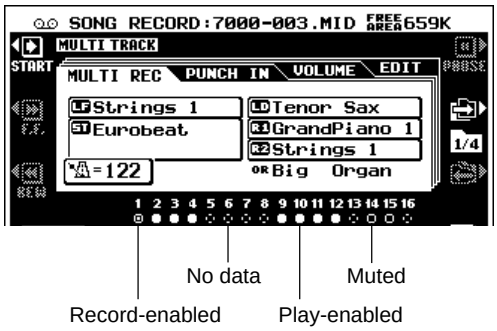
- *Any previous data in a track will be erased when that track is recorded.*
- *When the record mode is engaged and accompaniment is stopped, prior to actually starting recording, the amount of available disk space will appear in the upper right corner of the display in approximate kilobytes. The measure number is displayed in this location when recording is started.*

5 Stop Recording

Stop recording by pressing the **STOP** LCD button, the panel **[STOP]** button or the **[ENDING]** button. When recording is stopped the "Saving to disk" message may appear on the display while the recorded data is being saved to the disk.

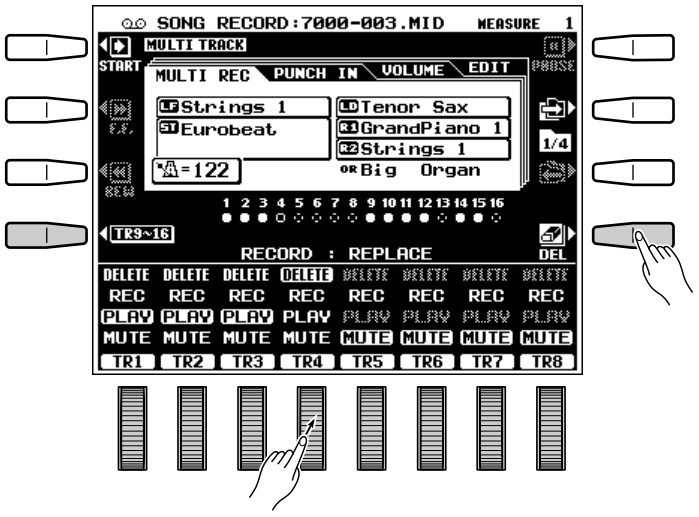
THE TRACK INDICATORS

The track indicators above the track mode selectors indicate which tracks contain data and which are muted. Tracks which do not contain data are indicated by a dotted circle outline while tracks which contain data have a solid outline. Play-enabled tracks are indicated by a filled circle while tracks that are muted are indicated by an outline only.



TRACK DELETE

When the **DEL** LCD button is pressed **DELETE** will appear for tracks which contain data. Select **DELETE** via the **TR1** through **TR16** LCD dials while holding the **DEL** button to delete all data in the corresponding tracks. The data is actually deleted when the **DEL** LCD button is released. When the **DEL** LCD button is pressed, tracks set to **REC** will automatically be switched to **PLAY** or **MUTE**.



RECORDING & EFFECTS

The reverb, chorus, and DSP effects are recorded as follows:

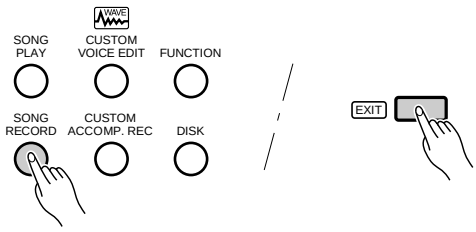
REVERB	The last reverb type selected during recording takes priority. No effect type is recorded if the [REVERB] button is off during recording.
CHORUS	The chorus type is only recorded when the accompaniment or rhythm tracks are recorded. The chorus type is recorded even if the [CHORUS] button is off during recording. The chorus type is selected automatically according to the selected style.
DSP EFFECT	If the [DSP EFFECT] button is on during recording, the current DSP effect will be recorded only for the tracks actually being recorded. If the [DSP EFFECT] button is off during recording or only the accompaniment tracks are set to the REC mode, no change occurs. If the [DSP EFFECT] button is turned on during manual track recording, however, only tracks set to the REC mode are effected.

PLAYBACK

Recorded tracks are automatically set to the **PLAY** mode when recording is stopped, so you can simply press the **START** LCD button or the **[START]** panel button to hear what you've recorded immediately after recording. All other playback functions are the same as described on the "Song Playback" section (page 53).

EXITING

Press the **[SONG RECORD]** or **[EXIT]** button to exit from the MULTITRACK RECORD mode and return to the normal play mode.



Punch-In Recording

PUNCH IN recording allows only a section of a recorded track to be re-recorded without having to redo the entire track.

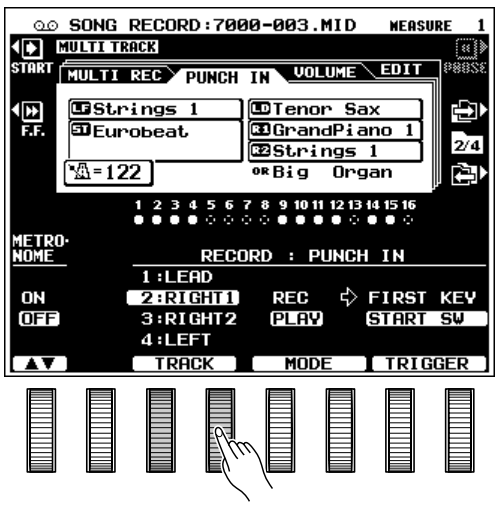
Select the **PUNCH IN** display via the **[➡]** or **[⬅]** LCD button to the right of the display.

NOTES

- *If you require the metronome sound for punch-in recording turn the METRONOME parameter ON in the PUNCH IN display. The metronome settings are available in the MULTI REC mode.*

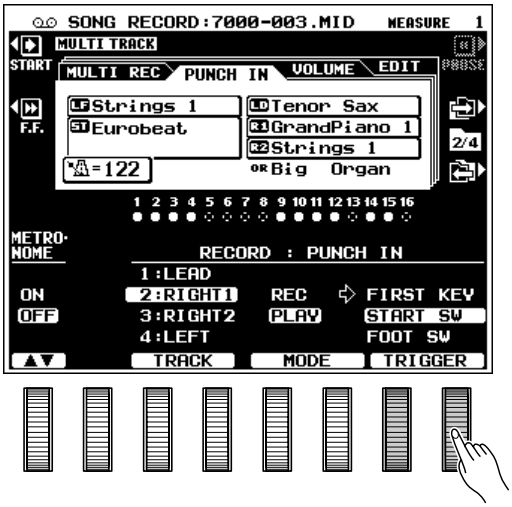
1 Select a Track

Use the **TRACK** LCD dials to select a track for PUNCH IN recording: **LEAD**, **RIGHT1**, **RIGHT2**, or **LEFT**. Only tracks which contain data can be selected.



2 Select a Start Trigger Type

Use the **TRIGGER** LCD dials to select the **FIRST KEY** or **START SW** start trigger. When **FIRST KEY** is selected recording will begin when the first key is played on the keyboard. When **START SW** is selected recording will begin when the **START** LCD button or panel **[START/STOP]** button is pressed. If a footswitch has been assigned to the PUNCH IN/OUT function via the F3 CONTROLLER: FOOT CONTROLLER display (page 112), **FOOT SW** can also be selected via the **TRIGGER** LCD dials.

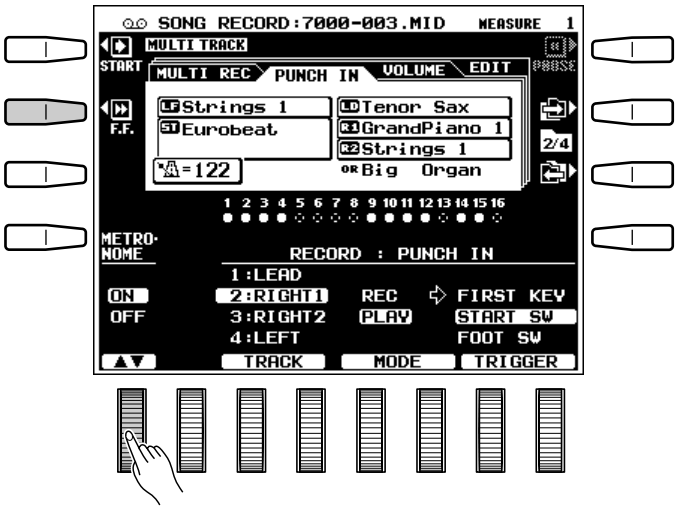


3 Turn the Metronome On If Required

Use the **METRONOME** LCD dial to turn the metronome **ON** if you want to record while monitoring the metronome sound (the metronome sound is not recorded).

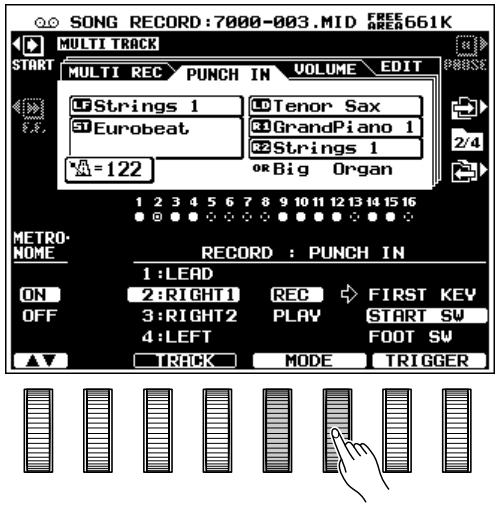
4 Locate the Punch In Point

While the **PLAY** mode is selected play the song and pause playback a few measures before the punch-in point so you have a good "lead in" prior to actually starting recording.



5 Engage the Record Mode

Use the **MODE** LCD dials to select the **REC** mode.



6 Start Playback

Press the **START** LCD button or panel **[START/STOP]** button to start playback from the current PAUSE location.

7 Start Recording at the Punch-in Point

Start recording at the punch-in point by either pressing a START button, playing on the keyboard, or pressing the footswitch, according to the start trigger type selected in step 2, above.

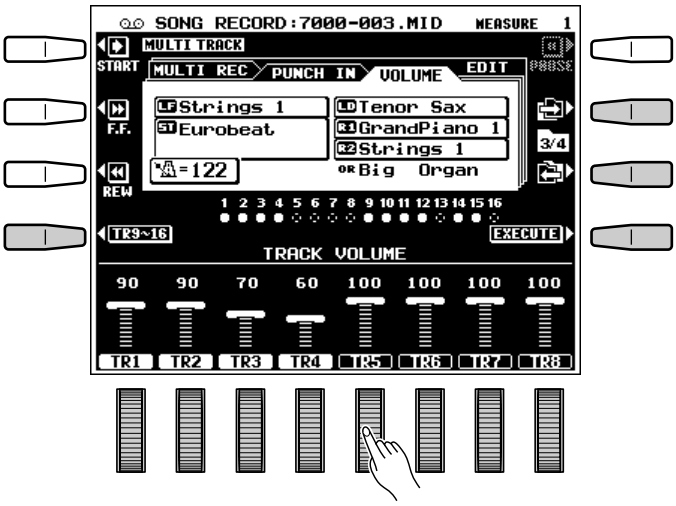
8 Stop Recording

Stop recording at the punch-out point by pressing the **PUNCH OUT** LCD button, the panel **[START/STOP]** button, or the footswitch. If recording is stopped via the panel **[START/STOP]** button, all data following the punch-out point will be deleted. If recording is stopped by using the **PUNCH OUT** LCD button or footswitch, data following the punch-out point will be left intact.

Track Volume Control

The MULTITRACK RECORD VOLUME display provides independent volume parameters for each of the 16 tracks.

Select the **VOLUME** display via the **[➡]** or **[⬅]** LCD button to the right of the display, and use the **TR1** through **TR16** LCD dials to set the volume of the corresponding tracks. The **TR1–8** or **TR9–16** LCD button selects track groups 1 through 8 and 9 through 16, respectively. Press the **EXECUTE** LCD button to save the edited volume data to disk.



Multitrack record Mode Edit Functions

The MULTITRACK RECORD mode EDIT display includes four functions: QUANTIZE, TRACK MIX, INITIAL EDIT, and SONG DELETE.

Select the **EDIT** display via the **[➡]** LCD button to the right of the display, then use the ▲ and ▼ LCD buttons to the left of the display to select the desired function.

QUANTIZE

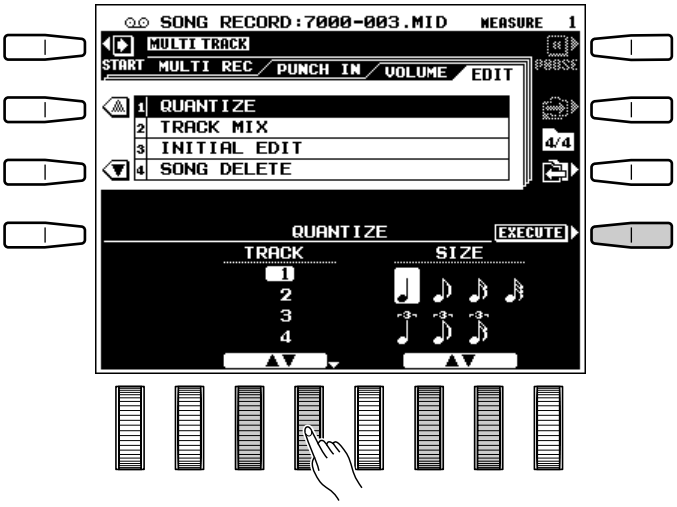
The QUANTIZE function aligns recorded notes in a specified track to the specified beats to "tighten up" the timing of a performance.

One measure of 8th notes before quantization

After quantization

The Quantize sizes are:

- 1/4 note
- 1/4 note triplet
- 1/8 note
- 1/8 note triplet
- 1/16 note
- 1/16 note triplet
- 1/32 note



1 Select a Track

Use the **TRACK** LCD dials to select the track to be quantized, and the **SIZE** LCD dials to select the beats to which the notes will be aligned. Only tracks which contain data will be available for quantization.

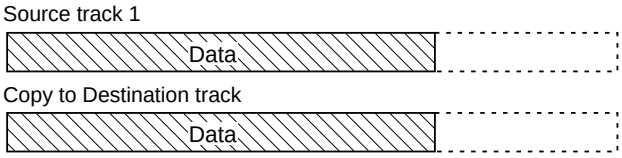
2 Quantize the Track

Press the **EXECUTE** button. "Executing" will appear on the display while the data is being quantized. After quantization the **EXECUTE** button changes to an **UNDO** button which can be used to undo the quantize operation if the results are not satisfactory.

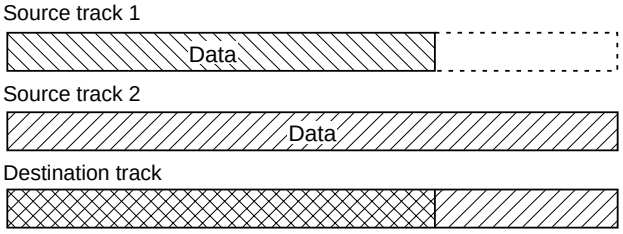
TRACK COPY/MIX

This function allows data to be copied from one track to another, or data from two tracks can be mixed and the results placed in a different track.

● **Copy**

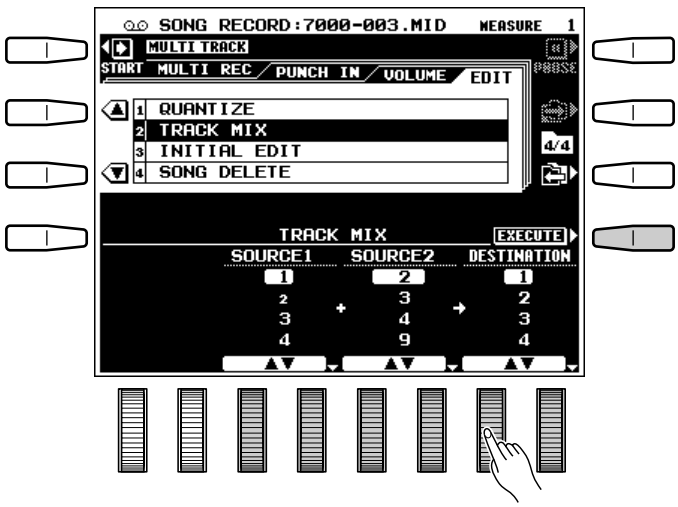


● **Mix**



1 Select the Source and Destination Tracks

Use the **SOURCE1** and **SOURCE2** LCD dials to specify the tracks to be mixed, and the **DESTINATION** LCD dials to select the track into which the results will be placed. To simply copy from the **SOURCE1** track to the **DESTINATION** track select **COPY** via the **SOURCE2** LCD dials.



2 Copy/Mix the Data

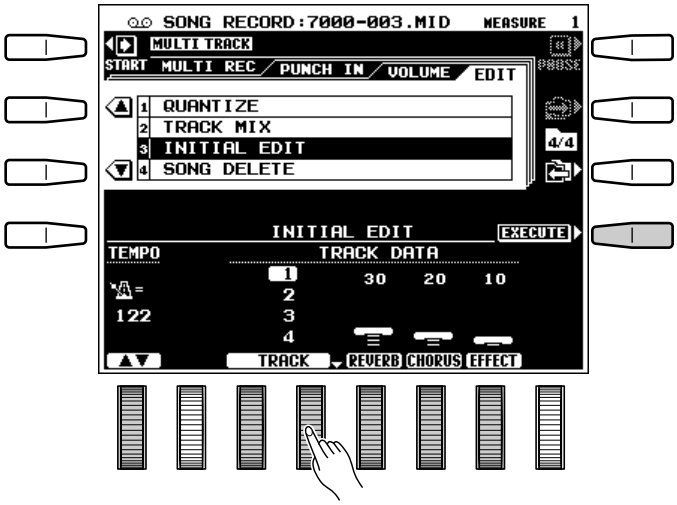
Press the **EXECUTE** button. "Executing" will appear on the display while the data is being copied. After execution the **EXECUTE** button changes to an **UNDO** button which can be used to undo the copy/mix operation if the results are not satisfactory.

INITIAL EDIT

Allows the initial REVERB DEPTH, CHORUS DEPTH, and DSP EFFECT depth settings for each track to be edited as required.

1 Select a Track & Set the Depth Parameters

Use the **TRACK** LCD dials to select a track, and the **REVERB**, **CHORUS**, and **EFFECT** LCD dials to set the corresponding depth parameters as required. Only tracks which contain data can be selected for editing.



2 Enter the Edited Data

Press the **EXECUTE** button. "Executing" will appear on the display while the data is being updated. After execution the **EXECUTE** button changes to an **UNDO** button which can be used to undo the initial edit operation if the results are not satisfactory.

NOTES

- *INITIAL EDIT parameters cannot be edited for a track on which the ORGAN FLUTE voice was recorded.*

SONG DELETE

This function deletes the specified song file from the disk.

NOTES

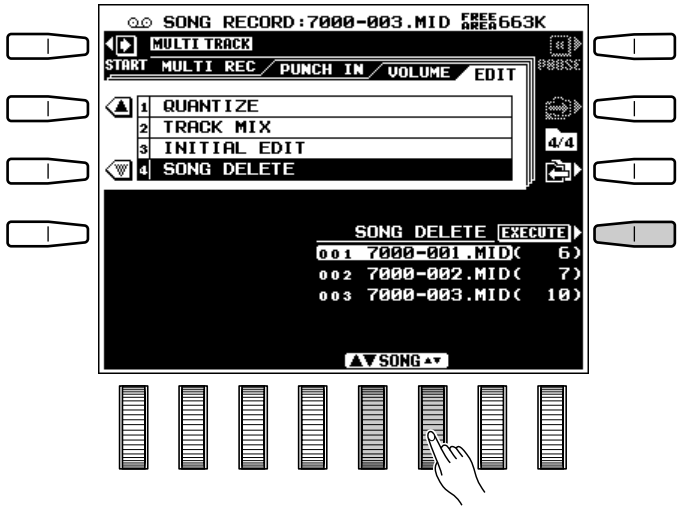
- *The song currently being recorded cannot be deleted.*
- *The amount of remaining disk space is displayed in the upper right corner of the display in approximate kilobytes while recording or playback is stopped.*

1 Select a Song

Use the **SONG** LCD dials to select the song to be deleted.

NOTES

- *If the optional hard disk is present, DIR ▲▼ dials will be available which can be used to select the floppy disk or the hard disk directory containing the song to be deleted.*



2 Delete the Song

Press the **EXECUTE** LCD button. The "Ready to Delete ********. OK to delete?" confirmation message will appear ("********" is the song name). Press **YES** to delete the song or **NO** to cancel.

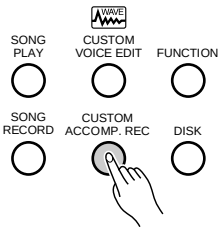
Custom Accompaniment

The CUSTOM ACCOMPANIMENT RECORD mode allows you to create original accompaniment styles that can be later recalled and played at any time, just like the presets. Up to 32 custom accompaniment styles can be maintained in internal memory at the same time, and any number can be saved to disk for later reloading and use. 5 sections can be created for each custom style: MAIN A, MAIN B, INTRO, FILL IN, and ENDING.

The basic custom style recording procedure is outlined below.

1 Engage the CUSTOM ACCOMP. RECORD Mode

Press the **[CUSTOM ACCOMP. RECORD]** button. The current **[CUSTOM]** style will begin playing in the key of C major 7 and the REC mode for the RHY1 track will be automatically engaged.

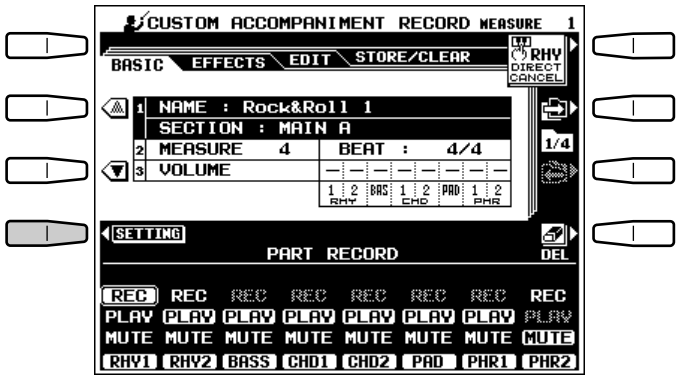


2 Select a Style

Select one of the **[CUSTOM]** styles or a preset style that is close to the style you want to create. Style selection is carried out in the normal way (page 26).

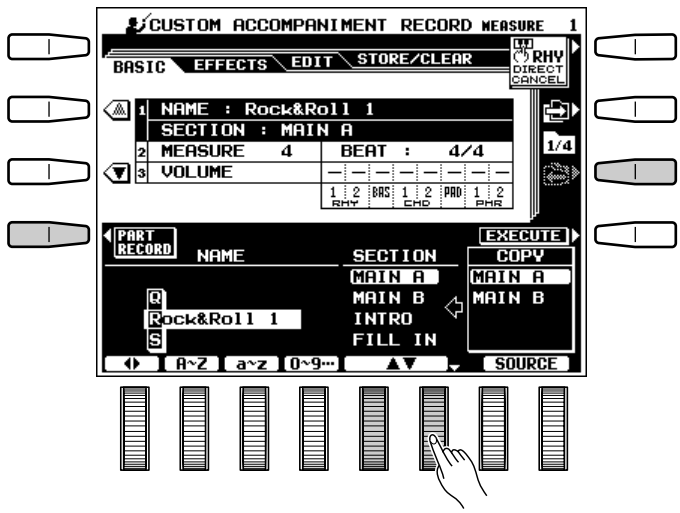
NOTES

- *If you select a different style after any data has been edited a confirmation display will appear. This is necessary because loading a new style will erase any edits you have already made.*



3 Select the Section You Want to Record

After making sure that the **BASIC** page is selected (use the **[←]** LCD button to the right of the display if necessary), press the **SETTING** LCD button if it is showing to access the **NAME**, **SECTION**, and **COPY** parameters. Use the **SECTION** LCD dials to select the section you want to program first: MAIN A, MAIN B, INTRO, FILL IN, or ENDING. The MAIN A section is initially selected.

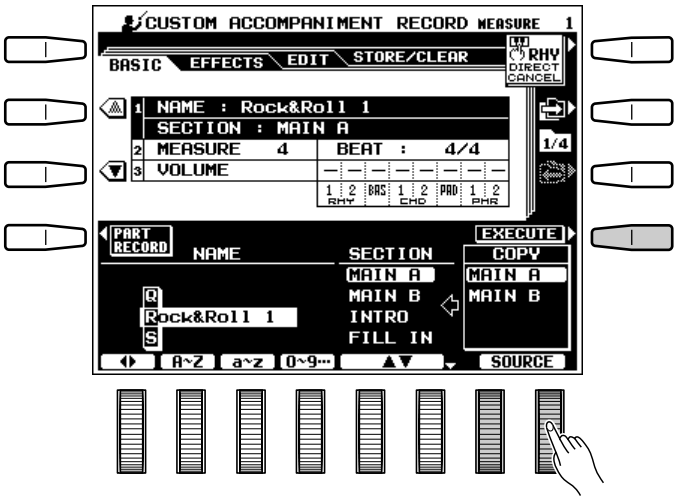


4 Copy the Data For the A or B Variation

The **COPY** parameter makes it possible to copy the A or B variation to the selected section, depending on the variation you want to program. The possibilities are listed below:

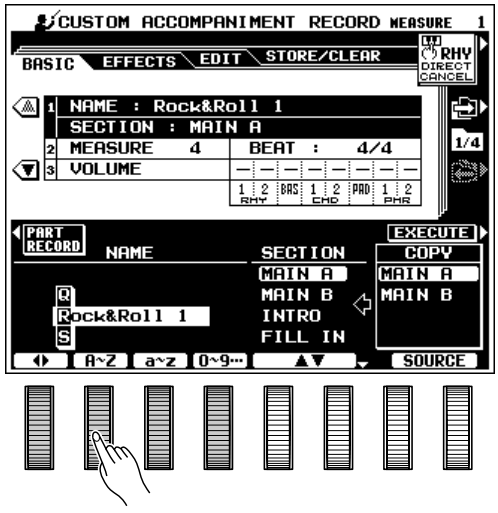
SECTION	COPY SOURCE
MAIN A or B	⇦ MAIN A, MAIN B
INTRO	⇦ INTRO A, INTRO B
FILL IN	⇦ FILL AA, FILL AB, FILL BB, FILL BA
ENDING	⇦ ENDING A, ENDING B

Use the **SOURCE** LCD dials to select the section to be copied to the current section. Press the **EXECUTE** button, then press **YES** to copy the data when the confirmation display appears (or **NO** to cancel).



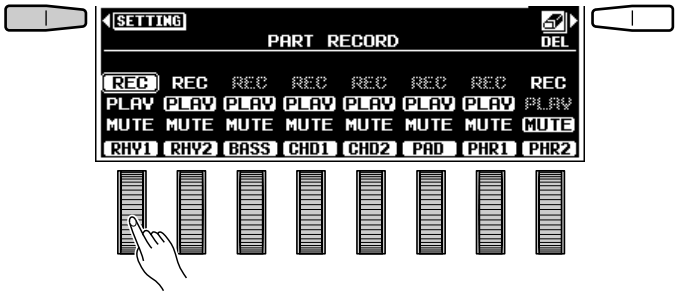
5 Enter a Style Name, If Necessary

You can enter an original name for the custom accompaniment style at this point. Style names can be up to 12 characters long. 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.



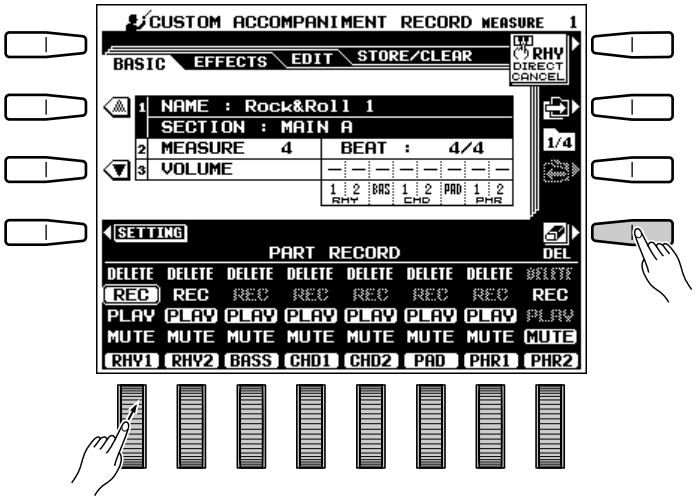
6 Go to the PART RECORD Display and Set Up the Tracks

Press the **PART RECORD** LCD button to go to the PART RECORD display and use the LCD dials to set the **REC** mode for the part you want to record. Other parts can be play-enabled or muted as required. Parts which contain no data are automatically set to **MUTE**.



Parts can be cleared completely before recording if you want to record "from scratch", or change the number of measures in the section, as described below. When the **DEL** LCD button is pressed **DELETE** will appear for tracks which contain data. Select **DELETE** via the track LCD dials while holding the **DEL** button to delete all data in the corresponding tracks. The data is actually deleted when the **DEL** button is released.

The entire custom accompaniment style can be cleared (in order to change the time signature, for example) by using the CLEAR CUSTOM STYLE function described on page 83.



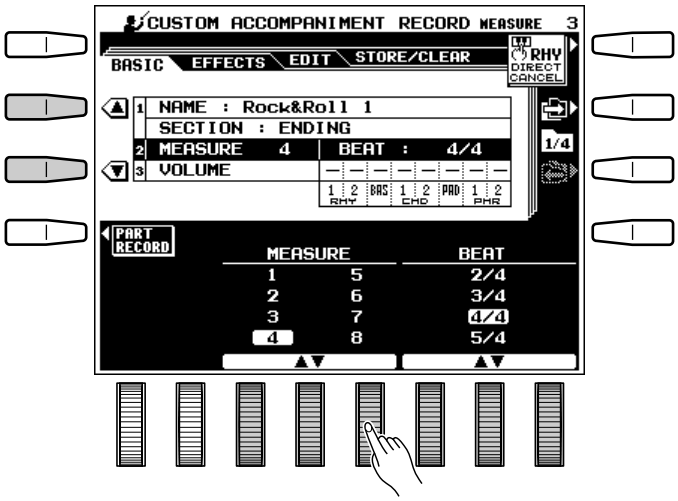
7 Change the Time Signature & Number Of Measures, If Required

If you want to create a style in a different time signature than the current style, or change the number of measures in the selected section, use the ▼ LCD button to the left of the display to select the **MEASURE** and **BEAT** parameters.

Use the **BEAT** LCD dials to select a different time signature: 2/4, 3/4, 4/4, or 5/4. Please note that the time signature can only be changed if all sections of the current custom style have been cleared. If any data remains in any section "All sections must be clear to set beat" will appear in the **BEAT** parameter position (use the CLEAR CUSTOM STYLE function described on page 83 to clear all sections of the current custom style).

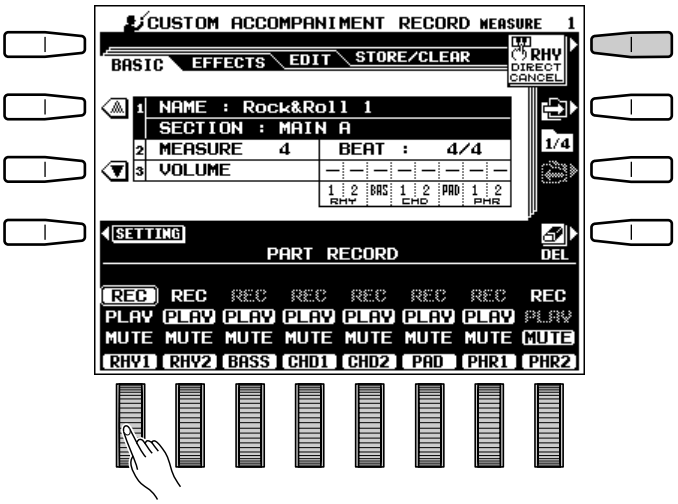
Use the **MEASURE** LCD dials to select a different number of measures for the selected section. Please note that the number of measures can only be changed if all parts of the current section have been cleared. If any data remains in any part "All parts must be clear to set measures" will appear in the **MEASURE** parameter position (the parts can be cleared as described in the previous step) Once the parts have been cleared you can select a new number of measures as required: 1 through 8.

Once the **BEAT** and/or **MEASURE** parameters have been set as required, press the **PART RECORD** button to the left of the display to go back to the **PART RECORD** display.



8 Record the Selected part

You can now add new notes to the selected part by playing the keyboard at the appropriate timing. All parts must be entered in the key of C major 7. If both the **RHY1** and **RHY2** parts are cleared the metronome will sound to provide a timing guide (the metronome sound is not recorded). A single drum instrument can be cleared from the **RHY1** and/or **RHY2** track by pressing the key corresponding to the instrument to be cleared while holding the **RHY DIRECT CANCEL** LCD button.



NOTES

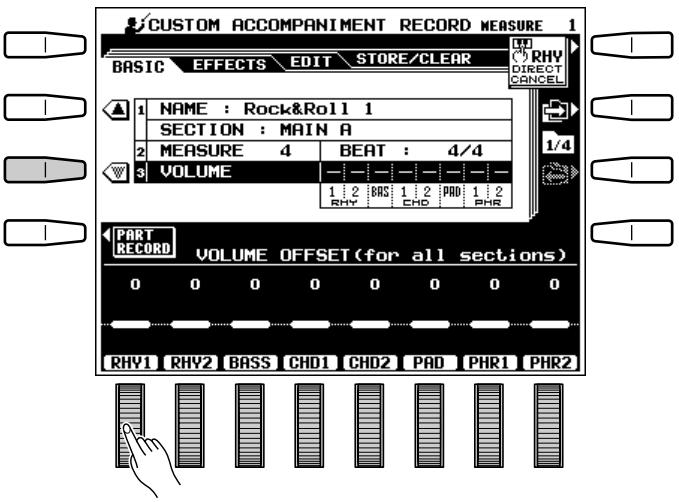
- *Key On/Off ,Voice , Volume , Pitch Bend and Modulation data can be recorded.*
- *When the RHY1 or RHY2 part is selected the keyboard percussion mode is automatically engaged. In this case the drum kit voice can be changed via the RIGHT 1 voice selectors. All voices in the [CUSTOM] group can be selected — but only drum kit voices will sound.*
- *If a preset style or an SFF style loaded from disk is being used unedited, or a part contains no data, REC will appear in gray for all except the RHYTHM parts and the REC mode cannot be selected. New data can be recorded for such parts by first deleting all data from the part.*
- *Playback can be started and stopped via the [START/STOP] button as required while in the CUSTOM ACCOMP. RECORD mode — data cannot be recorded while playback is stopped. It is a good idea, however, to use [SYNCHRO START] if you want to record from the top of the first measure.*
- *The volume of the voice being edited can be adjusted by pressing the [MIXER] button and using the R1 LCD dials.*
- *A "KEY OFF" event will automatically be recorded after the last note in the accompaniment.*
- *If a custom accompaniment which includes an empty section is saved to disk, the empty section will be replaced by a suitable section when the accompaniment is later loaded and played.*

9 Repeat Until All Parts Have Been Recorded

Continue selecting the **REC** mode for the various tracks and recording them as required until all parts have been recorded.

10 Set the Part Volume Levels

Use the ▼ LCD button to the left of the display to select the **VOLUME** parameters. Then use the **VOLUME OFFSET** LCD dials to adjust the volume of each part to create the best overall balance. Since these are "offset" parameters, both "+" and "–" settings are possible to increase or decrease the volume from the preset level, respectively. These settings apply to the corresponding parts in all sections of the accompaniment.

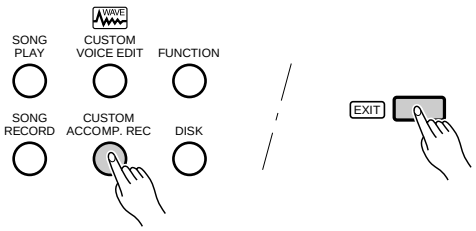


11 Go On to EFFECTS, EDIT, and STORE

You can now stop the accompaniment by pressing the **[START/STOP]** button (or leave it running, as required), and go on to the **EFFECTS** and **EDIT** functions described below. When your custom accompaniment is complete, be sure to use the **STORE** function, also described below, to store the style to one of the CUSTOM memory locations.

12 Exit When Done

When your custom accompaniment is complete, press the **[CUSTOM ACCOMP. REC]** or **[EXIT]** button to exit from the CUSTOM ACCOMPANIMENT RECORD mode.

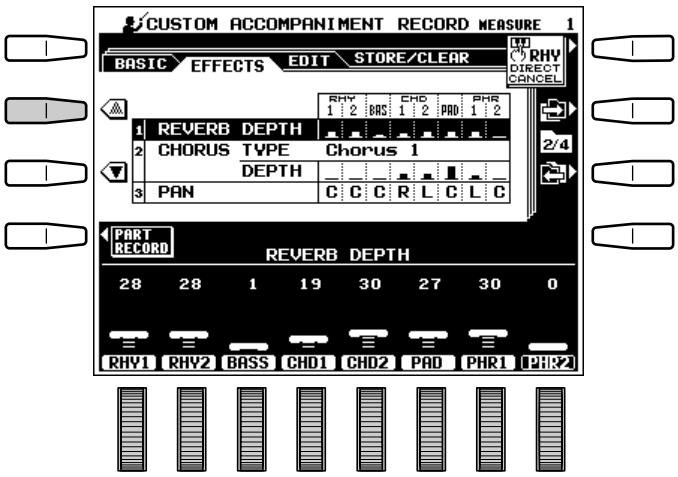


Effects

Select the **EFFECTS** display via the **[➡]** or **[⬅]** LCD button to the right of the display. If not already selected, press the **SETTING** LCD button to access the **REVERB DEPTH**, **CHORUS TYPE/DEPTH**, and **PAN** parameters for the current section.

REVERB DEPTH

Use the ▲ and ▼ buttons to the left of the display to select the **REVERB DEPTH** parameters, then use the **RHY1**, **RHY2**, **BASS**, **CHD1**, **CHD2**, **PAD**, **PHR1**, and **PHR2** LCD dials to set the reverb depth for the corresponding parts.

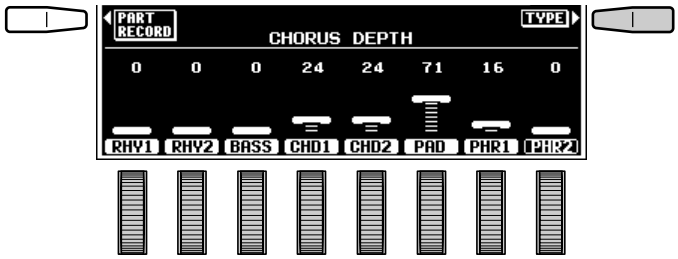


CHORUS TYPE & DEPTH

Use the ▲ and ▼ buttons to the left of the display to select the **CHORUS TYPE/DEPTH** parameters.

To select a chorus type use the **TYPE** LCD button to select the **CHORUS TYPE** display. Use the LCD dials to select the desired chorus type.

To set the chorus depth parameters use the **DEPTH** LCD button to select the **CHORUS DEPTH** display (if it isn't already selected). Use the **RHY1**, **RHY2**, **BASS**, **CHD1**, **CHD2**, **PAD**, **PHR1**, and **PHR2** LCD dials to set the chorus depth for the corresponding parts.

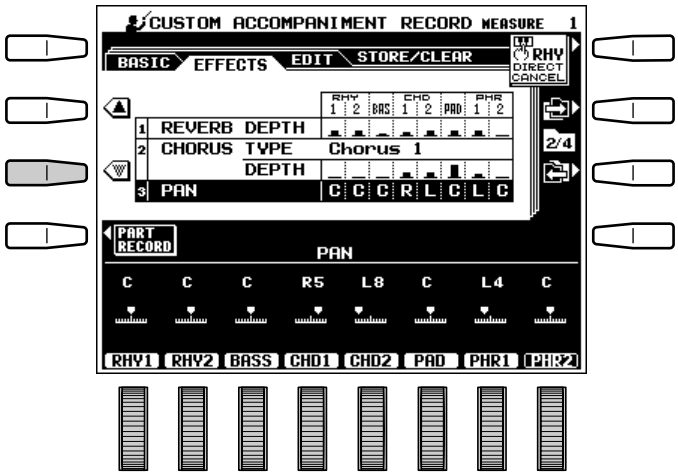


PAN

Use the ▲ and ▼ buttons to the left of the display to select the **PAN** parameters. Use the **RHY1**, **RHY2**, **BASS**, **CHD1**, **CHD2**, **PAD**, **PHR1**, and **PHR2** LCD dials to set the pan position for the corresponding parts.

NOTES

- *The REVERB, CHORUS, and PAN parameters can not be edited for parts which contain no data.*



Edit

Select the **EDIT** display via the **[➡]** or **[⬅]** LCD button to the right of the display. If not already selected, press the **SETTING** LCD button to access the **QUANTIZE**, **COPY**, and **REMOVE EVENT** parameters. Use the ▲ and ▼ LCD buttons to the left of the display to select the desired function.

QUANTIZE

The QUANTIZE function aligns recorded notes in a specified part to the specified beats to "tighten up" the timing of a performance.

1 Select a Part

Use the **PART** LCD dials to select the part to be quantized, and the **SIZE** LCD dials to select the beats to which the notes will be aligned.

The part name for parts which are being used unedited from a preset style will appear in small letters. "*****" will appear for parts which contain no data. Neither can be selected for quantization.

2 Quantize the Part

Press the **EXECUTE** button. The "Completed" display will appear briefly when the quantize operation has finished. After quantization the **EXECUTE** button changes to an **UNDO** button which can be used to undo the quantize operation if the results are not satisfactory.

The Quantize sizes are:

- 1/4 note
- 1/4 note triplet
- 1/8 note
- 1/8 note triplet
- 1/16 note
- 1/16 note triplet
- 1/32 note

COPY

This function allows data to be copied from one measure or group of measures to another location within the same part.

1 Select a Part

Use the **PART** LCD dials to select the part to be edited.

The part name for parts which are being used unedited from a preset style will appear in small letters. "*****" will appear for parts which contain no data. Neither can be selected for editing.

2 Select the Top, Last, and Destination Measures

Use the **TOP** and **LAST** LCD dials to specify the first and last measures in the region to be copied. Use the **DEST** LCD dial to specify the top of the measure to which the data is to be copied.

3 Copy the Data

Press the **EXECUTE** button. The "Completed" display will appear briefly when the copy operation has finished. After execution the **EXECUTE** button changes to an **UNDO** button which can be used to undo the copy operation if the results are not satisfactory.

REMOVE EVENT

This function can be used to remove all occurrences of a specified type of event — **VOLUME**, **PITCH BEND**, or **MODULATION** — from a specified part.

1 Select a Part

Use the **PART** LCD dials to select the part from which a type of event is to be removed.

The part name for parts which are being used unedited from a preset style will appear in small letters. "*" will appear for parts which contain no data. Neither can be selected for editing.

2 Select an Event Type

Use the **EVENT** LCD dials to select the type of event to be removed.

NOTES

- *MODULATION events cannot be removed from the RHY1 and RHY2 parts.*

3 Remove the Specified Events

Press the **EXECUTE** button. "Completed" will appear on the display briefly when the data has been removed. After execution the **EXECUTE** button changes to an **UNDO** button which can be used to undo the copy operation if the results are not satisfactory.

Store/Clear

Select the **STORE** display via the **[➡]** LCD button to the right of the display. If not already selected, press the **SETTING** LCD button to access the **STORE** and **CLEAR CUSTOM STYLE** parameters. Use the ▲ and ▼ LCD buttons to the left of the display to select the desired function.

STORE

Stores the recorded custom accompaniment data for use with the PSR-7000 accompaniment feature. When this function is selected the size of the current style and the remaining memory capacity available for style storage are displayed to the right of the display. The names and sizes of all other styles currently in memory are shown in the lower section of the display.

1 Select a Custom Style Number

Use the **STORE** LCD dials to select the custom style number to which you want to store the newly created custom style.

2 Store the Custom Style

Press the **EXECUTE** button, then press **YES** to store the style when the confirmation display appears (or **NO** to cancel).

CLEAR CUSTOM STYLE

Clears unwanted custom styles from memory, making more memory available for custom style storage.

1 Select a Custom Style Number

Use the **CLEAR** LCD dials to select the custom style you want to clear.

2 Clear the Custom Style

Press the **EXECUTE** button, then press **YES** to clear the style when the confirmation display appears (or **NO** to cancel).

NOTES

- *If you change styles or exit from the CUSTOM ACCOMP. REC mode before storing an edited style, a store confirmation display will appear. Press YES to store the data, NO to exit without storing, or CANCEL to continue editing. The YES button returns you to the STORE/CLEAR display.*

Custom Voice Edit

This mode makes it possible to create new voices by editing some parameters of the preset voices. Wave data loaded from disk can also be edited to create original voices.* A simple EASY EDIT mode and full-parameter FULL EDIT mode are available. Both modes can be used to customize voice data loaded from disk. Up to 32 custom voices can be retained in memory and selected via the RIGHT 1, RIGHT 2, LEFT, and LEAD voice [CUSTOM] buttons.

** The wave data loaded automatically when the data disk supplied with the PSR-7000 is inserted (see page 96) is loaded into the CUSTOM VOICE memory. These custom voices can then be saved to a different disk using the SAVE TO DISK function (page 98), reloaded, and edited as required to create original voices.*

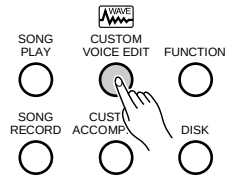
NOTES

- *Optional Yamaha "Sample Data Disks" can also be loaded via the DISK LOAD function (page 96).*
- *Not all disk titles are available in all areas.*
- *To load only custom voice data from the supplied disk, press the [DISK] button, press the DISK LOAD LCD button, and then insert the disk.*

Engaging the Easy/Full Edit Mode

1 Engage the CUSTOM VOICE EDIT Mode

Press the **[CUSTOM VOICE EDIT]** button to engage the CUSTOM VOICE EDIT mode. The **CUSTOM VOICE EDIT** display will appear.



2 Select a Preset Voice

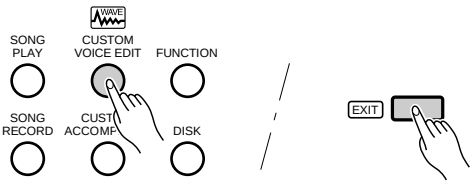
Select the preset voice on which the custom voice will be based via the **PART**, **GROUP**, and **VOICE** LCD dials. The control below the large ▲ and ▼ symbols scrolls quickly through the voice list while the control below the smaller ▲ and ▼ symbols scroll more slowly.

3 Select Easy or Full Edit

Press the **EASY EDIT** or **FULL EDIT** LCD button to go to the corresponding mode. The EASY EDIT mode cannot be selected when a drum kit voice is selected for editing.

EXITING

Exit from the CUSTOM VOICE EDIT mode when done by pressing either the **[CUSTOM VOICE EDIT]** or **[EXIT]** button.



NOTES

- *If the edited data was not stored to disk before pressing the [EXIT] button, the "Edited data not stored! Store data?" confirmation will appear on the display. Pressing "YES" will go to the STORE function, "NO" will exit from the CUSTOM VOICE EDIT mode, or CANCEL will return to the previous display.*

The Easy Edit Parameters

Use the **[➡]** and **[⬅]** LCD buttons to the right of the display to select the **EDIT** and **STORE/CLEAR** display pages. Use the ▲ and ▼ buttons to the left of the display to select the various parameters within each page.

The **COMPARE** LCD button can be used during editing to compare the sound of the original voice with the edited voice.

EDIT

NAME

A name of up to 12 characters can be entered for each custom 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 lowercase letters, and the **0~9...** LCD dial selects numbers and special characters.

PAN

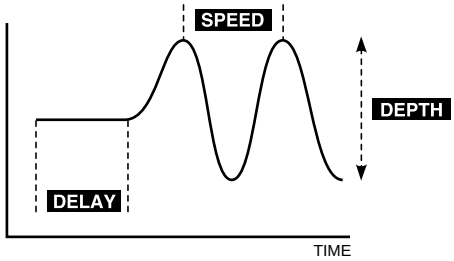
The **PAN** LCD dial can be used to position the voice in the center of the stereo sound field, or to the left or right in 10 steps.

NOTES

- *Depending upon the selected DSP EFFECT type, some PAN parameters may not function.*

VIBRATO

Use the **DEPTH**, **SPEED** and **DELAY** LCD dials to set up the vibrato effect. **DELAY** produces a delay between the time a key is pressed and the beginning of the vibrato effect. "0" is the preset value for all parameters. "+" settings increase while "–" settings decrease the range of the effect.



TONE

The timbre of the voice can be varied via the **BRILLIANCE** and **RESONANCE** LCD dials. "0" is the preset value for both parameters. "+" **BRILLIANCE** settings produce a brighter sound, while "+" **RESONANCE** settings produce a more "peaky" sound.

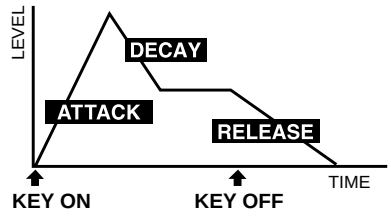
ENVELOPE

The **ENVELOPE** parameters affect the volume envelope of the voice.

The **ATTACK** LCD dial sets the time it takes for maximum level to be reached after a key is pressed. "0" is the preset value. "+" settings produce a faster attack.

The **DECAY** LCD dial sets the time it takes to reach the sustain level after the maximum attack level has been reached. "0" is the preset value. "+" settings produce a faster decay.

The **RELEASE** LCD dial sets the time it takes for the sound to diminish to zero after a key is released. "0" is the preset value. "+" settings produce a faster release.



NOTES

- *An exclamation mark (!) will appear to the right of a parameter when the maximum setting for that parameter has been reached.*
- *These parameters may have different effects on different voices.*

STORE/CLEAR

STORE

Stores the edited custom voice data in the specified custom voice memory location. When this function is selected the size of the current voice and the remaining memory capacity available for voice storage are displayed to the right of the display. The names and sizes of all other voices currently in memory are shown in the lower section of the display.

1 Select a Custom Voice Number

Use the **STORE** LCD dials to select the custom voice number to which you want to store the newly created custom voice.

2 Store the Custom Voice

Press the **EXECUTE** button, then press **YES** to store the voice when the confirmation display appears (or **NO** to cancel).

CLEAR CUSTOM VOICE

Clears unwanted custom voices from memory, making more memory available for custom voice storage.

1 Select a Custom Voice Number

Use the **CLEAR** LCD dials to select the custom voice you want to clear.

2 Clear the Custom Voice

Press the **EXECUTE** button, then press **YES** to clear the voice when the confirmation display appears (or **NO** to cancel).

The Full Edit Parameters

The **FULL EDIT** mode can be entered as described on page 78. The **FULL EDIT** mode can be used to edit both internal voices and voices in the custom voice group.

Use the **[➡]** and **[⬅]** LCD buttons to the right of the display to select the **E1:BASIC**, **E2:CONTROLLER**, **E3:ENVELOPE**, **E4:EFFECTS** and **STORE/CLEAR** display pages. Use the ▲ and ▼ buttons to the left of the display to select the various parameters within each page.

Many PSR-7000 orchestra voices are actually made up of two sounds "layered" together. Each of these layers is called an "element". **SINGLE** will appear in the upper left corner of the display when a 1-element voice is being selected for editing, and **DUAL** will appear when a 2-element voice is selected. **DRUM** will appear when a drum kit voice has been selected (drum kit voices are all single-element). When a 2-element voice which allows individual editing of each element is selected the **ELEMENT** LCD button can be used to select the element to be edited: **A** or **B**. The **COMPARE** LCD button can be used during editing to compare the sound of the original voice with the edited voice.

E1:BASIC

NAME

A name of up to 12 characters can be entered for each custom 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 lowercase letters, and the **0~9...** LCD dial selects numbers and special characters.

WAVE (except for the DRUM KITS)

Use the **WAVE** ▲▼ LCD dials to select a wave. The "wave" is the raw sound on which the voice is based. 2-element voices use two waves. The PSR-7000 has 656 waves in internal read-only memory. External waves from custom voices loaded from disk can also be used.

TUNE (except for the DRUM KITS)

These parameters adjust the pitch of the voice. **COARSE** tunes in semitone steps and **FINE** tunes in 1-cent steps (a cent is 1/100th of a semitone). The maximum **COARSE** range is from –24 to +24 semitones (plus or minus two octaves), and the maximum **FINE** range is from –50 to +50 cents. Normal pitch is produced when both parameters are set to "0".

VOLUME (except for the DRUM KITS)

Sets the element volume. The higher the value the higher the volume.

KEY ON DELAY (except for the DRUM KITS)

Sets the time before the envelope begins after a key is pressed. The higher the value the longer the delay.

PAN

The **PAN** LCD dial can be used to position the voice in the center of the stereo sound field, or to the left or right in 10 steps.

NOTES

- *Depending upon the selected DSP EFFECT type, some PAN parameters may not function.*

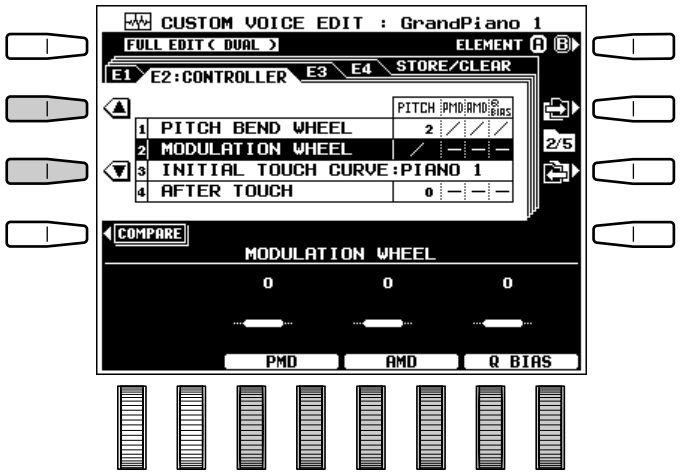
E2:CONTROLLER

PITCH BEND WHEEL

Use the **PITCH** LCD dials to set the maximum PITCH BEND wheel range in semitone steps. The maximum pitch bend wheel range is from 0 to 12 semitones.

MODULATION WHEEL

The **PMD** (phase modulation), **AMD** (amplitude modulation), and **Q BIAS** (resonance) LCD dials set the corresponding modulation parameter. "0" is the preset value. "+" settings increase the maximum modulation depth while "–" settings decrease the maximum modulation depth achievable with the modulation wheel. In the case of AMD, moving the modulation wheel while a key is already pressed will produce no effect. The effect will be produced if the next key is pressed.

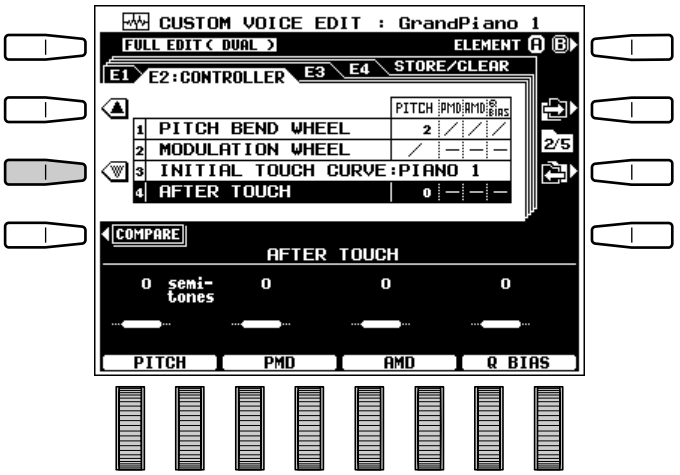


INITIAL TOUCH CURVE

Use the ▲▼ LCD dials to select any of 6 keyboard touch response speed sensitivities: **PIANO 1**, **STRINGS**, **ORGAN**, **PIANO 2**, **WOOD WIND**, or **E.PIANO**. The **OFFSET** LCD dial sets the velocity offset. "0" is the preset value.

AFTER TOUCH

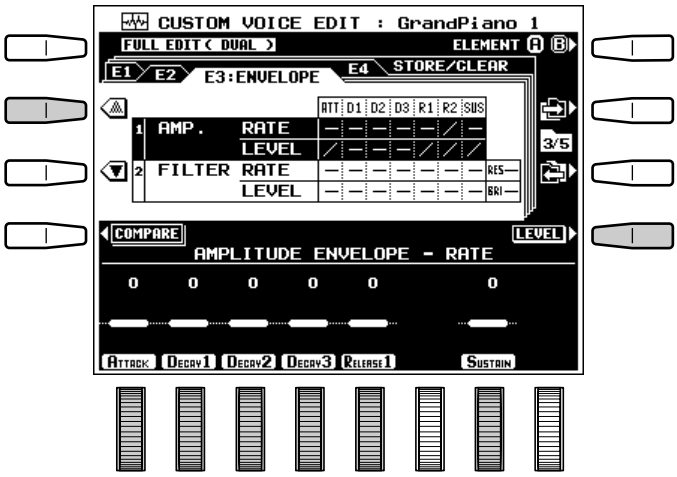
The **PITCH**, **PMD** (phase modulation), **AMD** (amplitude modulation), and **Q BIAS** (resonance) LCD dials set the corresponding aftertouch parameter. "0" is the preset value. "+" settings increase the maximum depth while "–" settings decrease the maximum depth achievable with aftertouch response.



E3:ENVELOPE

AMPLITUDE ENVELOPE

The **AMPLITUDE ENVELOPE** LCD dials are used to set the amplitude envelope **RATE** and **LEVEL** parameters. Use the **RATE** or **LEVEL** LCD button to select the corresponding group of parameters.



RATE

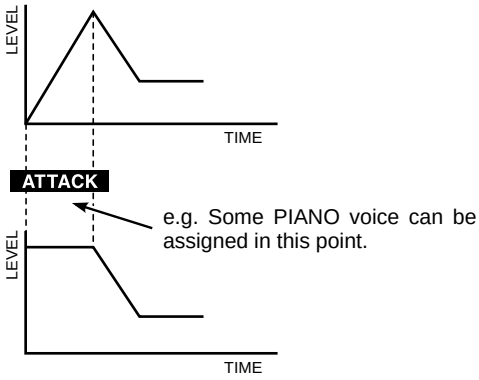
These parameters set the rate of output level variation. Higher values produce faster variation.

ATTACK: Sets the speed of variation from key-on to the maximum attack level.

DECAY1, **DECAY2**, **DECAY3**: Set the speed of variation between the maximum attack level and the levels set by the **LEVEL DECAY1**, **DECAY2**, and **DECAY3** parameters, respectively.

RELEASE1: Sets the rate of variation from the level at key-release to level 0 when SUSTAIN is off.

SUSTAIN: Sets the rate of variation from the level at key-release to level 0 when SUSTAIN is on.



LEVEL

These parameters sets the envelope output level. Higher values produce higher output.

The **ATTACK** level is fixed at maximum and cannot be changed.

DECAY1, **DECAY2**, **DECAY3**: Set the levels after **DECAY1**, **DECAY2**, and **DECAY3** variation.

FILTER

The **FILTER ENVELOPE** LCD dials are used to set the filter envelope **RATE** and **LEVEL** parameters. Use the **RATE** or **LEVEL** LCD button to select the corresponding group of parameters.

RATE

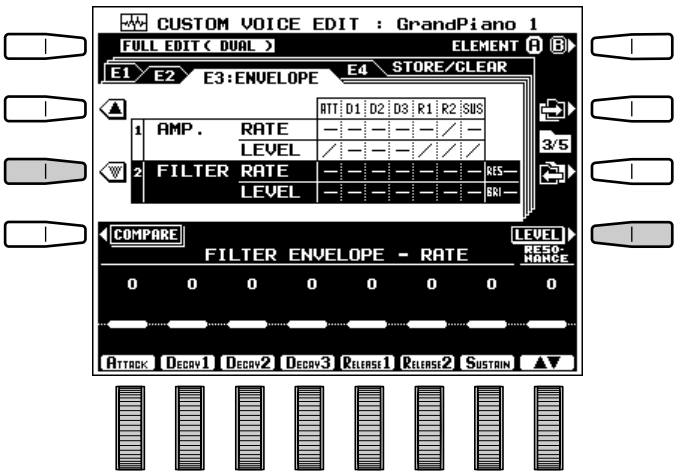
Set the rate of cutoff frequency variation. Higher values produce faster variation.

ATTACK: Sets the speed of variation from key-on (BRILLIANCE LEVEL) to the level set by the ATTACK LEVEL parameter.

DECAY1, **DECAY2**, **DECAY3**: Set the speed of variation between the attack level and the levels set by the **LEVEL DECAY1**, **DECAY2**, and **DECAY3** parameters, respectively.

RELEASE1: Sets the rate of variation from the level at key-release to the level set by the **LEVEL RELEASE1** parameter when SUSTAIN is off.

RELEASE2: Sets the rate of variation from the level set by the **LEVEL RELEASE1** parameter to that set by the **LEVEL RELEASE2** parameter when SUSTAIN is off.



SUSTAIN: Sets the rate of variation from the level at key-release to the level set by the **LEVEL SUSTAIN** parameter when SUSTAIN is on.

RESONANCE: Sets the amount of emphasis at the cutoff frequency (resonance).

LEVEL

These parameters set the amount of variation from the preset cutoff frequency. Level "0" is the preset value.

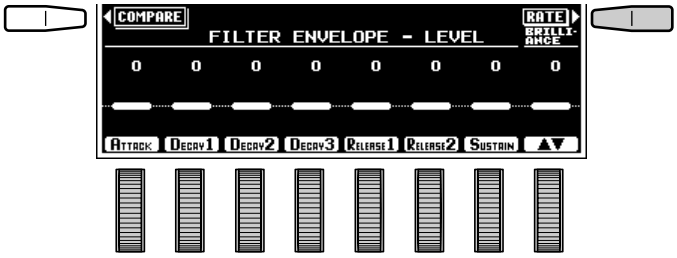
ATTACK: Sets the attack level after key-on.

DECAY1, **DECAY2**, **DECAY3**: Set the levels after **DECAY1**, **DECAY2**, and **DECAY3** variation.

RELEASE1, **RELEASE2**: Set the levels after **RATE RELEASE1** and **RELEASE2** variation after key-release when SUSTAIN is off.

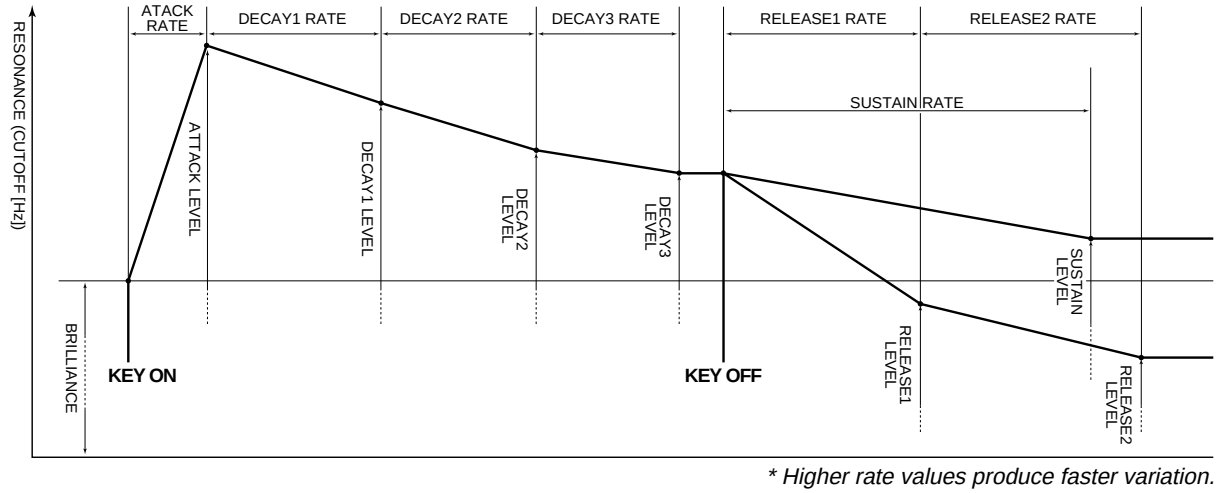
SUSTAIN: Sets the level after **RATE SUSTAIN** variation after key-release when SUSTAIN is on.

BRILLIANCE: Sets the brilliance level.



NOTES

- *If DRUM kit is selected , SUSTAIN parameters in the AMPLITUDE ENVELOPE or FILTER ENVELOPE cannot be changed.*
- *Some parameter settings may have minimal or no effect with some voices.*



** Higher rate values produce faster variation.*

E4:EFFECTS

LFO

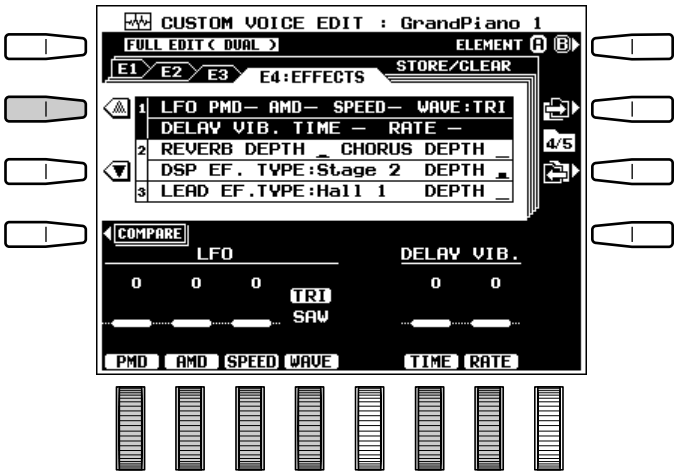
The **LFO** parameters set the LFO (Low Frequency Oscillator) to produce cyclic pitch and amplitude modulation.

PMD: Sets the phase modulation depth. Higher values produce deeper modulation.

AMD: Sets the amplitude modulation depth. Higher values produce deeper modulation.

SPEED: Sets the speed of LFO variation.

WAVE: Sets the waveform of the LFO: **TRI** (triangular) or **SAW** (sawtooth).



DELAY VIB

Delay Vibrato is a vibrato effect based on LFO modulation which has a variable delay between the time a key is played and the beginning of the vibrato effect.

TIME: Sets the delay between key-on and the beginning of LFO modulation. No delay is produced when TIME is set to its minimum value. In this case, only normal vibrato is produced (this has no relation to the RATE value).

RATE: Sets the rate at which LFO phase modulation is applied after the delay time — i.e. how long it takes to reach maximum modulation level after modulation begins. The AMD has no RATE parameters.

REVERB DEPTH

Sets the depth of the reverb effect. The higher the value the greater the reverb depth.

CHORUS DEPTH

Sets the depth of the chorus effect. The higher the value the greater the chorus depth.

DSP EFFECT

Use the **TYPE** LCD dials to select a DSP EFFECT type, and the **DEPTH** LCD dial to set the depth of the selected DSP effect. For some DSP effect types the DEPTH parameter is fixed at "100" and cannot be changed.

NOTES

- *Depending upon the selected DSP EFFECT type, some PAN parameters may not function.*

LEAD EFFECT

Use the **TYPE** LCD dials to select a DSP EFFECT type for the LEAD voice, and the **DEPTH** LCD dial to set the depth of the selected effect. The effect of these parameters can monitored while editing if the lead voice was initially selected in the **ORIGINAL VOICE** display.

STORE/CLEAR

STORE

Stores the edited custom voice data in the specified custom voice memory location. When this function is selected the size of the current voice and the remaining memory capacity available for voice storage are displayed to the right of the display. The names and sizes of all other voices currently in memory are shown in the lower section of the display.

1 Select a Custom Voice Number

Use the **STORE** LCD dials to select the custom voice number to which you want to store the newly created custom voice.

2 Store the Custom Voice

Press the **EXECUTE** button, then press **YES** to store the voice when the confirmation display appears (or **NO** to cancel).

CLEAR CUSTOM VOICE

Clears unwanted custom voices from memory, making more memory available for custom voice storage.

1 Select a Custom Voice Number

Use the **CLEAR** LCD dials to select the custom voice you want to clear.

2 Clear the Custom Voice

Press the **EXECUTE** button, then press **YES** to clear the voice when the confirmation display appears (or **NO** to cancel).

The Drum Kit Edit Mode

When a drum kit voice is selected for editing the parameters and functions available are essentially the same as those for the orchestra voices in the **FULL EDIT** mode. Many parameters of individual percussion voices within the DRUM KIT can be edited independently.

The only differences are in the **E1:BASIC** display:

- Use the **PERCUSSION** parameter function to select the desired percussion sound for editing. Pressing any key on the keyboard will directly select that keys percussion sound.
- The drum kit voices have no **VOLUME** or **KEY ON DELAY** parameters.
- The **PITCH** parameter functions in the same way as the **TUNE FINE** parameter provided for the orchestra voices.

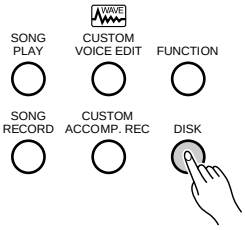
The **E2:CONTROLLER**, **E3:ENVELOPE**, **E4:EFFECTS**, and **STORE/CLEAR** display parameters and functions are the same as in the orchestra voice **FULL EDIT** mode.

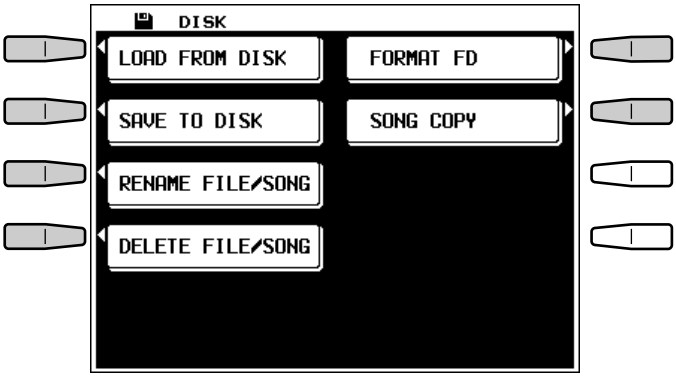
NOTES

- *Some parameters may not effect the drum kit voices in exactly the same way as the orchestra voices.*
- *Some settings may result in no sound, depending on the drum kit voice and parameter.*
- *The SUSTAIN parameter cannot be changed in the E3 setting.*

Disk Operations

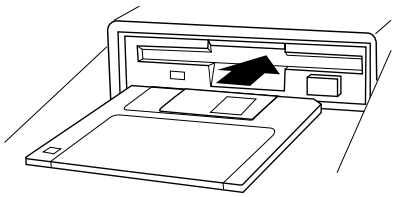
The PSR-7000 [DISK] button accesses a range of functions that are used for storage and retrieval of floppy disk data. The PSR-7000 can also be fitted with an optional internal hard disk for massive on-line storage capacity. Consult your Yamaha dealer for details on hard disk installation. To select a disk operation first press the [DISK] button, then press the LCD button corresponding to the operation you want to perform.

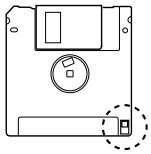


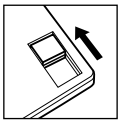


NOTES

- *Please note that no other PSR-7000 functions will operate while a disk function is in progress.*
- *For any disk operation an appropriate floppy disk must first be properly inserted into the PSR-7000 disk drive. The PSR-7000 uses only 3.5" 2DD and 2HD 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 FD" function described on page 102.*
- *If you select a disk function when no disk is present in the drive, the "No disk! Please insert a disk." error message will appear on the display.*







Write protect tab closed (unlocked — write enabled)

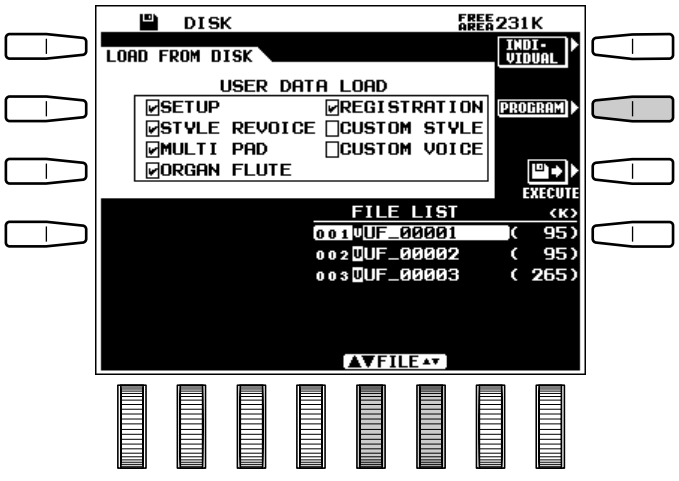
Load From Disk

Loads the specified file from a floppy disk inserted into the PSR-7000 disk drive, or the optional hard disk.

If the **FILE LIST** display shown to the right is not showing, press the **LIST** LCD button to select it. Use the **FILE** 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 a hard disk is present the **DIR ▲▼** dials will be available, and are used to select the directory containing the desired file.

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



The LCD dials can now be used to select the type(s) of data to be loaded from the selected file. Data types which are turned **ON** are loaded.

SETUP	All setup data — see list on page 140.
STYLE REVOICE	All STYLE REVOICE settings - page 116.
MULTI PAD	All MULTI PAD phrase, percussion, and chord data - page 42.
ORGAN FLUTE	All ORGAN FLUTE voice data — page 16.
REGIST-RATION	All REGISTRATION memory data - page 140.
CUSTOM STYLE	All CUSTOM STYLE data - page 75.
CUSTOM VOICE	All CUSTOM VOICE data - page 84.

Press the **LIST** LCD button when you want to go back to the FILE LIST display.

If you want to load an individual registration, style, or voice, press the **INDIVIDUAL** LCD button.

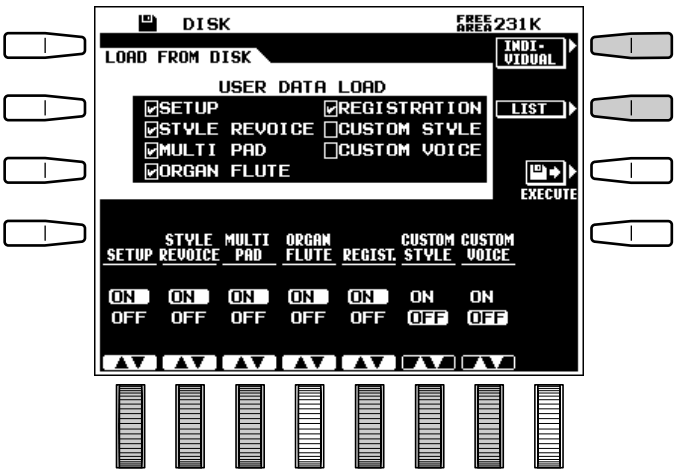
In the **INDIVIDUAL LOAD** display use the **DATA** LCD dial to select **REGIST**, **STYLE** or **VOICE**, the **CONTENT** LCD dials to select the individual file to be loaded, and the **DEST. REGIST**, **CUSTOM STYLE**, or **CUSTOM VOICE** LCD dials to select the destination for the selected individual file.

When the **INDIVIDUAL** mode is selected and STYLE is selected for loading, a **PRE-LOAD LISTEN** LCD button appears which lets you listen to the style before actually loading it. The **PRE-LOAD LISTEN** function will not work if there is too much style data, however.

Press the **LIST** LCD button when you want to go back to the FILE LIST display.

When the file and data types have been specified, press the **EXECUTE** LCD button to actually begin the load operation — the "OK to load?" 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). "Don't remove disk" will appear while the data is being loaded, and the progress of the load operation will be indicated by a bar graph on the display.



NOTES

- *Data spanning two or more disks (i.e. "split" data) cannot be loaded using the INDIVIDUAL LOAD function.*
- *When loading CUSTOM STYLE or CUSTOM VOICE data — not in the INDIVIDUAL mode — all data will be loaded even if the loaded file contains empty styles or voices.*
- *SFF (optional style file format) disks can also be loaded when using the custom style load function.*

Save To Disk

Saves the data listed below to a floppy disk inserted into the PSR-7000 disk drive, or to the optional hard disk.

NOTES

- *If an unformatted disk or a disk which has not been formatted for use with the PSR-7000 is inserted, the "Wrong disk type or format! Format disk?" confirmation message will appear when the SAVE TO DISK function is selected. Press YES to format the disk or NO to cancel.*

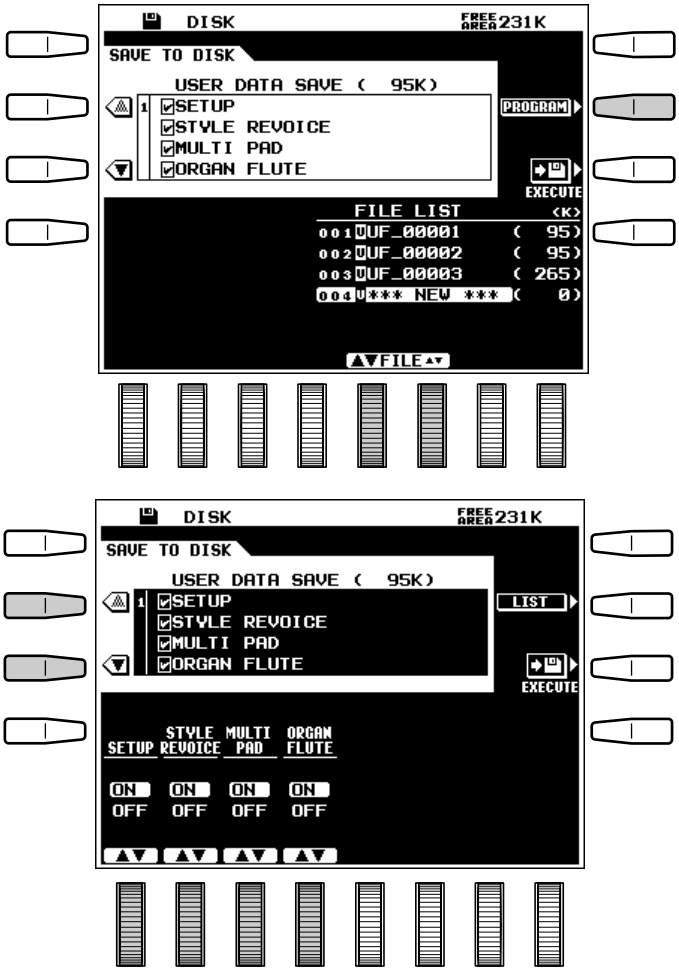
If the **FILE LIST** display shown to the right is not showing, press the **LIST** LCD button to select it. Use **FILE** LCD dials to select the file to which you want to save the data.

If a hard disk is present the **DIR ▲▼** dials will be available, and are used to select the directory to which the file is to be saved.

The file list at the bottom of the display includes all files which currently exist on the disk and one "***** NEW *****" 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 specify the type(s) of data to be saved, press the **PROGRAM** LCD button.

The ▲ and ▼ LCD buttons to the left of the display can now be used to select various groups of data, and the LCD dials can be used to select the individual type(s) of data to be saved to the selected file. Data types which are turned **ON** are saved.



SETUP	All setup data — see list on page 140.
STYLE REVOICE	All STYLE REVOICE settings - page 116.
MULTI PAD	All MULTI PAD phrase, percussion, and chord data - page 42.
ORGAN FLUTE	All ORGAN FLUTE voice data — page 16.
REGISTRATION BANK	The ▲ and ▼ LCD buttons select REGISTRATION memory bank groups 1… 8 and 9 … 16. The LCD dials turn the individual banks within the selected group ON or OFF.
CUSTOM STYLE	The ▲ and ▼ LCD buttons select CUSTOM STYLE memory groups 1… 8, 9…16,17...24 or 25...32. The LCD dials turn the individual custom style within the selected group ON or OFF.
CUSTOM VOICE	The ▲ and ▼ LCD buttons select CUSTOM VOICE memory groups 1… 8, 9 … 16, 17 … 24, or 25 … 32. The LCD dials turn the individual custom voice within the selected group ON or OFF.
SONG SETUP	Determines whether the above data will be loaded before song playback is started in the SONG PLAY mode.

Press the **LIST** LCD button when you want to go back to the FILE LIST display.

When the file and data types have been specified, press the **EXECUTE** LCD button to actually begin the save operation — the confirmation display shown to the right will appear.

If you want to give the file to be saved an original file name, be sure to do so before pressing the **YES** LCD button. 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 you're ready to execute the save operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). "Don't remove disk" will appear while the data is being saved, and the progress of the save operation will be indicated by a bar graph on the display.

NOTES

- *When the amount of data to be saved exceeds the remaining disk space, the following message will appear in the display.*
  Not enough disk space!
  Press [RD] to reduce the amount of data;
  [CD] to use a different disk;
  or [SP] to split the data into more than one file.
  (Split data can not be loaded individually.)
- *"AUTO LXXX" (X=any character) or a name consisting of all spaces are not permitted as a file names. If spaces are used as a file name they will automatically be changed to the underline character "_".*
- *If a hard disk is present, data load and save operations can be speeded up by organizing your data in separate directories.*

Rename File/Song

Allows the name of the specified user-recorded song or user file to be changed as required.

Press the **SONG** LCD button to if the **SONG LIST** is not showing in order to rename a song file, or the **USER FILE** LCD button if the **USER FILE LIST** is not showing in order to rename a user file. Use the **FILE** or **SONG** LCD dials to select the file you want to rename.

If a hard disk is present the **DIR** ▲▼ dials will be available, and are used to select the directory containing the file to be renamed.

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).

The **LISTEN** LCD button which appears when the **SONG LIST** is selected can be used to listen to the currently selected song — press **LISTEN** again to stop playback when done.

When the user or song file to be renamed has been selected, press the **EXECUTE** LCD button. The following display will appear.

Song file names can be up to 12 characters long and user 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 a song file is selected the "**a~z**" LCD dial is also available for lower-case character entry.

When the file and file name have been specified, press the **YES** LCD button to actually begin the rename operation (or press the **NO** LCD button to cancel the operation). "Don't remove disk" will appear while the file is being renamed.

NOTES

- *User file names which already exist cannot be entered.*

Delete File/Song

Deletes the specified song or user file from the disk.

Press the **SONG** LCD button to if the **SONG LIST** is not showing in order to delete a song file, or the **USER FILE** LCD button if the **USER FILE LIST** is not showing in order to delete a user file. Use the **FILE** or **SONG** LCD dials to select the file you want to delete.

If a hard disk is present the **DIR ▲▼** dials will be available, and are used to select the directory containing the file to be deleted.

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).

The **LISTEN** LCD button which appears when the **SONG LIST** is selected can be used to listen to the currently selected song — press **LISTEN** again to stop playback when done.

When the file to be deleted has been selected, press the **EXECUTE** LCD button. The “OK to delete?” 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). “Don’t 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.*

Format FD

Formats a floppy disk for use with the PSR-7000.

After inserting a new floppy disk into the disk drive, press the **EXECUTE** LCD button to actually begin the format operation — the "OK to format?" 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). "Don't remove disk" will appear while the disk is being formatted, and the progress of the format operation will be indicated by a bar graph on the display.

NOTES

- *The PSR-7000 uses only 3.5" 2DD or 2HD 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!*

Song Copy

This function can be used to copy songs recorded on the PSR-7000 to a different number/name on the same floppy disk, or from one floppy disk to another. If the optional hard disk is present songs can be copied to a different hard disk directory. A perfect way to make backup copies of important songs.

If the **SONG LIST** display shown to the right is not showing, press the **SOURCE** LCD button to select it. Use the **SONG** LCD dials to select the file to copy.

If a hard disk is present the **DIR ▲▼** dials will be available, and are used to select the directory containing the file to be copied.

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). The **LISTEN** LCD button can be used to listen to the currently selected source song — press **LISTEN** again to stop playback when done.

When the source song has been selected press the **DESTINATION** LCD button and use the **DIR ▲▼** LCD dials to select the destination disk. Select "**another FD**" to copy to a different floppy disk, or "**FLOPPY DISK**" to copy to the same floppy disk.

Press the **EXECUTE** LCD button to begin the copy operation. At this point the display shown below will appear and you will have a chance to change the song name before it is copied.

If a hard disk is present the **DIR ▲▼** dials will be available, and are used to select the directory.

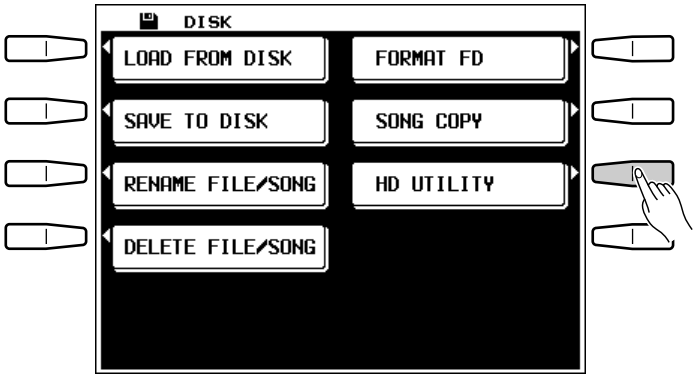
If you want to give the file to be copied an original file name, be sure to do so before pressing the **YES** LCD button. File names can be up to 12 characters long. Use the ◀ ▶ LCD dial to move the name cursor to the various character positions, then use the **A~Z** or **0~9...** LCD dial to select 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 you're ready to execute the copy operation press the **YES** LCD button (or press the **NO** LCD button to cancel the operation). "Don't remove disk" will appear while the data is being copied. If you're copying to a different floppy disk the PSR-7000 will prompt when to insert the copy destination disk. Follow the on-screen instructions.

HD Utility

This item will only appear when the optional hard disk is present. The HD Utility functions include hard disk directory management, formatting, and diagnostics.

Use the ▲ and ▼ buttons to the left of the display to select the desired function.



NOTES

- *Make regular backup copies of important data on floppy disks, and store the backup disks in a safe location. Use the SONG COPY function to copy song data from the optional internal hard disk to floppy disk. Other data must first be loaded from the hard disk and then saved to floppy disk.*
- ***YAMAHA provides no guarantee against disk damage.***

DIRECTORY EDIT

Allows hard disk directories to be renamed, created, and deleted.

● RENAME

To change a directory name use the **DIR ▲▼** dials to select the directory, use the ◀ and ▶ dials to move the cursor to the characters you want to change, then use the **A~Z**, **a~z**, and **0~9**… dials to enter the desired characters. When the new name has been entered as required press the **RENAME** button, then press the **YES** confirmation button to execute the rename operation.

● MAKE

Organizing your data in separate directories can generally speed up the data load and save operations. To make a new directory, first create a name for a directory with the default name "***** NEW *****", as described under "RENAME", above. When the name for the new directory has been entered press the **MAKE** button, then press the **YES** confirmation button to execute the make directory operation.

● DELETE

To delete a directory use the **DIR ▲▼** dials to select the directory to be deleted. Press the **DELETE** button, then press the **YES** confirmation button to execute the delete operation. Please note that directories which contains files cannot be deleted — all files in the directory must be deleted first.

NOTES

- *The last remaining hard disk directory cannot be deleted.*

HD FORMAT

To format the hard disk press the **EXECUTE** button, then press the **YES** confirmation button to execute the format operation. The progress of the format operation will be shown by a bar-graph indicator on the display.

CAUTION

- ***Formats an internal hard disk for use with the PSR-7000. Any previous data on the disk will be completely erased by the format operation.***

CHECK

Performs a check on the internal hard disk. Be sure to save all important data to floppy disk before executing the CHECK operation.

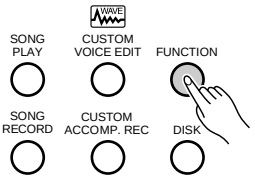
To check the disk press the **EXECUTE** button. "Are you sure?" will appear on the display. Press the **YES** button to execute the check operation (this may take a while). If any errors are detected appropriate messages will be shown on the display.

The PSR-7000 "Functions"

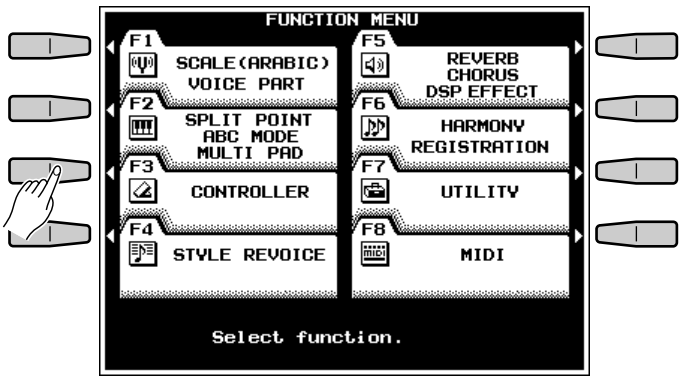
The PSR-7000 [FUNCTION] button selects 8 groups of functions that access a number of related parameters. Here's a list of the functions and the manual page numbers on which they are described in detail.

General Function Selection & Editing Procedure

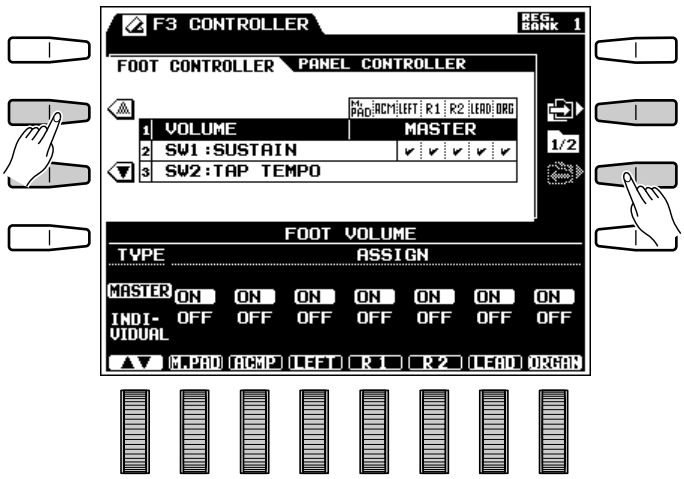
Press the **[FUNCTION]** button to engage the function mode.



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.



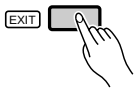
In cases where the number of parameters included in the function group is too large to fit on a single display page, several pages may be available, selectable via the ➡ and ⬅ LCD buttons.



In all cases the selected parameter can be edited via the appropriated labeled or positioned LCD dials.

The [EXIT] Button

The **[EXIT]** or **[FUNCTION]** button can be used at any time to exit from a function and return to the function menu. Pressing the **[EXIT]** or **[FUNCTION]** button while the **FUNCTION MENU** is showing will return you to the normal play mode.



F1: Scale (Arabic)/Voice Part

The PSR-7000 has a range of advanced tuning and other voice-related functions which are all included in the F1 function group.

SCALE (ARABIC)

Selects either the normal equal temperament scale or an "arabic" scale in which each note can be tuned over a 127-cent range.

Use the **SCALE** LCD dials to select either the **EQUAL TEMPERAMENT** or **ARABIC** scale.

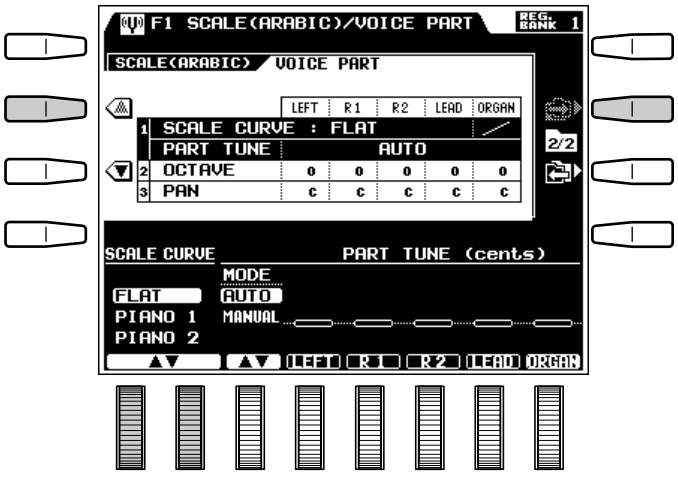
When the ARABIC scale is selected you can use the **TUNE NOTE** LCD dials to select the note you want to tune (the selected note will be highlighted in the graphic keyboard in the upper section of the display), then use the large ▲ and ▼ LCD dial to coarse-tune the selected key in 25-cent steps, and the small ▲ and ▼ LCD dial to fine-tune the selected note in 1-cent steps. The tuning range is from "–64" through "0" to "+63". Each increment equals one cent (one "cent" is one hundredth of a semitone). The current tuning of each note is shown in the corresponding key of the graphic keyboard display.

VOICE PART

● SCALE CURVE

Selects one of three overall scale curves for the PSR-7000 keyboard: FLAT, PIANO 1, or PIANO 2. The FLAT curve corresponds precisely to "normal" tuning, and is generally used in most electronic instruments, the PIANO 1 and PIANO 2 curves simulate the slight tuning variations that most piano tunes use to give a piano a slightly warmer or richer sound. Please note that the scale curve does not apply to the ORGAN voices.

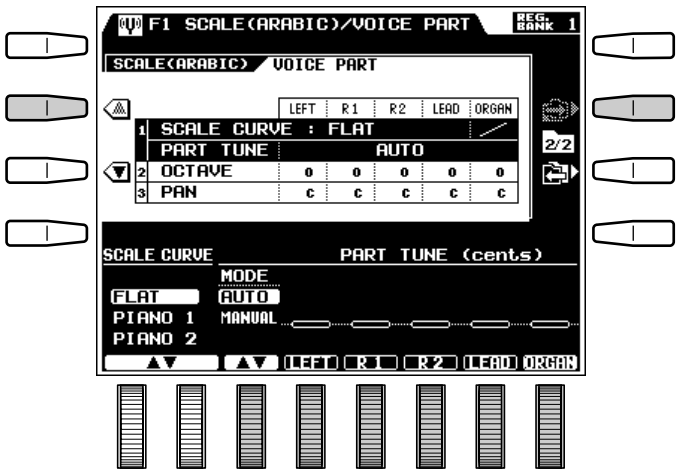
Use the **SCALE CURVE** LCD dials to select the desired scale curve.



● PART TUNE

Individual tuning parameters are provided for the LEFT, RIGHT 1, RIGHT 2, LEAD, and ORGAN voices, allowing each voice to be tuned over a ±100-cent range.

When the AUTO mode is selected, part tuning is automatic and the individual parts cannot be tuned manually. To tune manually, first use the **MODE** LCD dial to select the **MANUAL** mode, then use the **LEFT**, **R1**, **R2**, **LEAD**, or **ORGAN** LCD dial to tune the corresponding voice as required. The current tuning value for each part is shown next to the PART TUNE parameter in the upper section of the display.

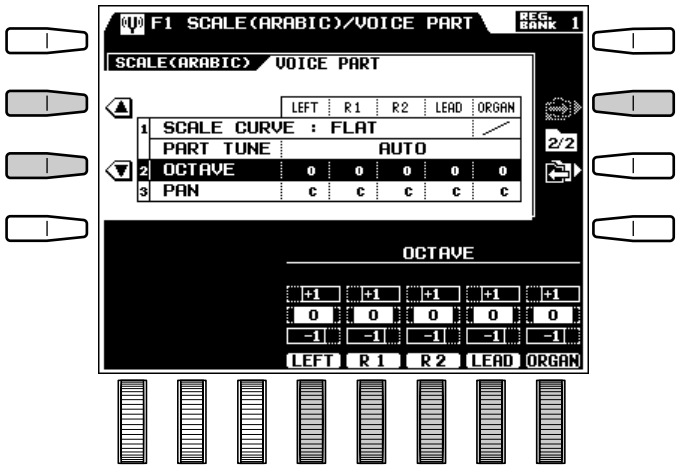


● OCTAVE

Shifts the pitch of the LEFT, RIGHT 1, RIGHT 2, LEAD, or ORGAN voice up one octave ("+1") or down one octave ("–1"). A setting of "0" produces the normal pitch for that voice. Use the **LEFT**, **R1**, **R2**, **LEAD**, or **ORGAN** LCD dial to set as required.

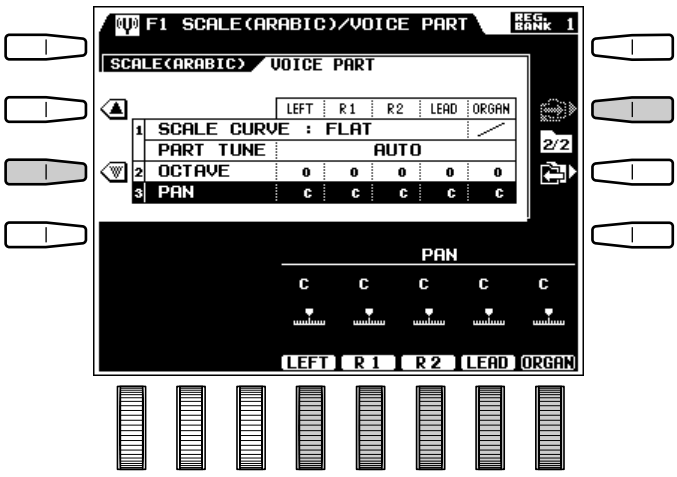
NOTES

- *These parameters are also available in the Octave Change function — page 22.*
- *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.*



● PAN

Sets the apparent position of the LEFT, RIGHT 1, RIGHT 2, LEAD, or ORGAN voice in the stereo sound field. The graphic display indicates the approximate location of the sound between the left and right speakers. Use the **LEFT**, **R1**, **R2**, **LEAD**, or **ORGAN** LCD dial to set as required.



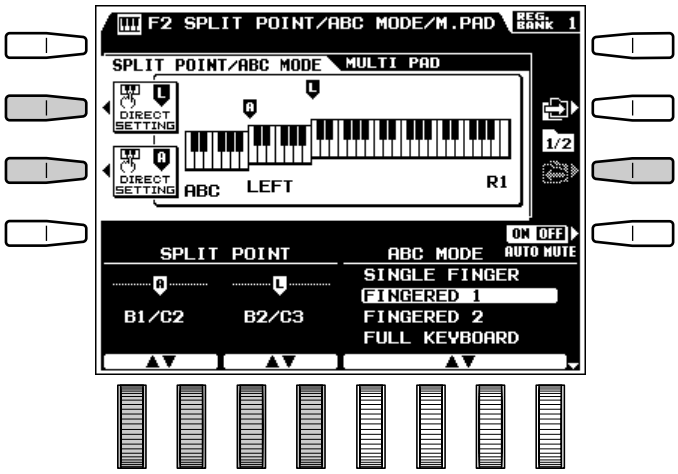
F2: Split Point/ABC Mode/Multi Pad

The F2 functions all pertain to the PSR-7000's accompaniment features — i.e. the accompaniment split point, the ABC mode, and the multi-pad repeat and chord match modes.

SPLIT POINT/ABC MODE

● SPLIT POINT

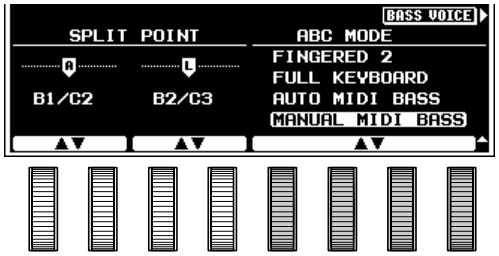
The PSR-7000 has two programmable split points — one which divides the LEFT and RIGHT/LEAD/ORGAN orchestra parts (page 20), and one which divides the auto-accompaniment and manual sections of the keyboard when AUTO BASS CHORD accompaniment is engaged (page 31). The former is indicated by the "L" marker and the latter by the "A" marker above the graphic keyboard. The current split points are indicated on the display both by the split markers and the "splits" in the graphic keyboard. The "L" split point only appears on the graphic keyboard display when the LEFT orchestra part is on, and the "A" split point only appears when the AUTO BASS CHORD auto accompaniment feature is on.



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

● ABC MODE

Use the **ABC MODE** LCD dials to select the **SINGLE FINGER**, **FINGERED 1**, **FINGERED 2**, **FULL KEYBOARD**, **AUTO MIDI BASS**, or **MANUAL MIDI BASS** mode. If you select the **MANUAL MIDI BASS** mode, and press the **BASS VOICE** LCD button which appears, you can use the **GROUP** and ▲/▼ LCD dials to specify the bass voice to be used. Press the **ABC MODE** LCD button to return to the ABC MODE display as required.



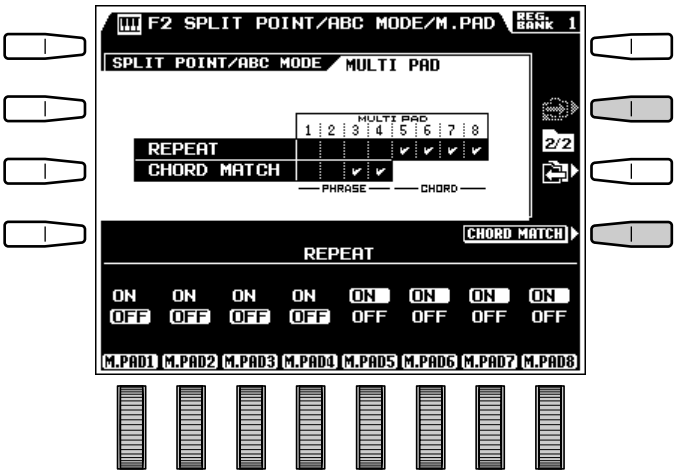
MULTI PAD

The repeat and chord match settings for PHRASE/CHORD MULTI PAD playback can be accessed via this display. The repeat and chord match parameters can be accessed by pressing the **REPEAT** or **CHORD MATCH** LCD button.

● REPEAT

When a check mark appears in a **REPEAT** box in the MULTI PAD display, the corresponding pad — PHRASE or CHORD — will playback repeatedly until stopped by either pressing the same MULTI PAD again, or by pressing the **[REC/STOP]** button.

Use the LCD dials to turn repeat for the corresponding pads ON or OFF as required.



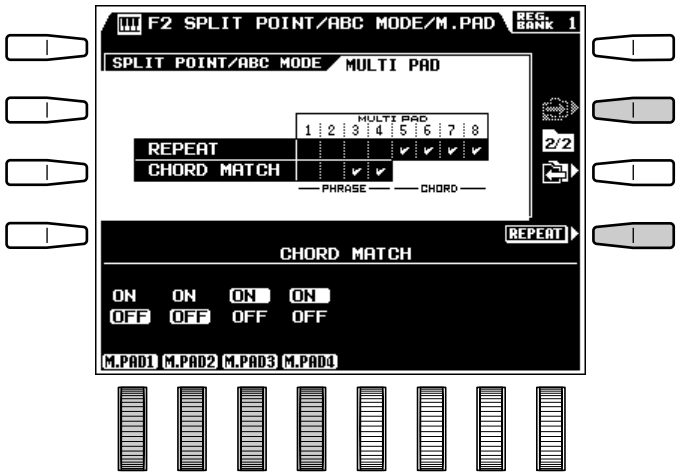
NOTES

- *The default repeat settings are: pads 1…4 OFF; pads 5…8 ON.*

● CHORD MATCH

When a check mark appears in a **CHORD MATCH** box in the MULTI PAD display, the phrase played by the corresponding PHRASE pad will be automatically re-harmonized to match the accompaniment chords if the PHRASE pad is played while AUTO BASS CHORD accompaniment is playing.

Use the LCD dials to turn the chord match function for the corresponding pads ON or OFF as required.



NOTES

- *The chord match function is only available for pads 1 through 4 (the PHRASE pads).*
- *The default chord match settings are: 1 & 2 OFF; 3 & 4 ON.*

F3: Controller

The F3 function group includes a range of functions that affect how the PSR-7000 responds to control via the keyboard, a foot controller plugged into the rear-panel FOOT VOLUME jack, footswitches plugged into the rear-panel FOOT SW jacks, the [SUSTAIN] button, the PITCH BEND wheel, and the MODULATION wheel.

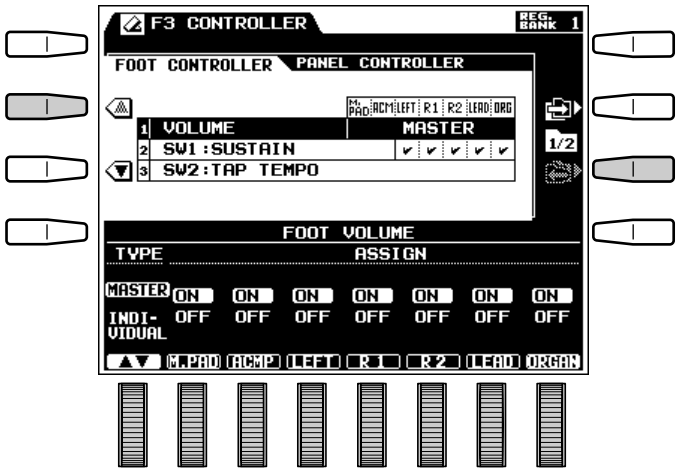
FOOT CONTROLLER

● VOLUME

Determines whether an optional YAMAHA FC7 Foot Controller plugged into the rear-panel **FOOT VOLUME** jack will control master volume, or only the volume of specified parts and voices.

Use the **TYPE** LCD dial to select **VOLUME** for master volume control or **INDIVIDUAL** for individual part/voice volume control.

Individual part and voice assignment parameters for the **M.PAD**, **ACMP**, **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** parts are available when the INDIVIDUAL type is selected. Use the corresponding LCD dials to turn volume control for the corresponding parts **ON** or **OFF** as required.



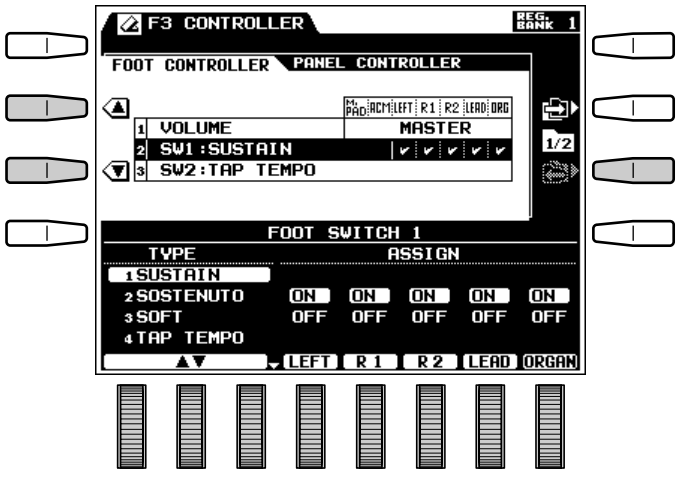
NOTES

- *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 voices you want to control turned on while the remaining parts are turned off.*

● SW1 (FOOTSWITCH 1) & SW2 (FOOTSWITCH 2)

Determine the functions of footswitches plugged into the rear-panel **FOOT SWITCH 1** and **FOOT SWITCH 2** jacks, and to which of the PSR-7000 voices the footswitches will apply.

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

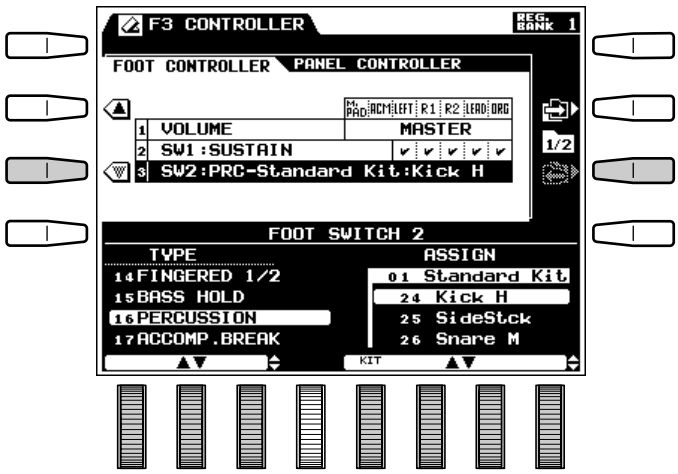


When the **SUSTAIN**, **SOSTENUTO**, or **SOFT** type is selected, use the **LEFT**, **R1**, **R2**, and **LEAD** LCD dials to turn footswitch control for the corresponding parts **ON** or **OFF** as required.

The **SUSTAIN** type can be independently assigned to the ORGAN 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.*
- *The panel [SUSTAIN] button will not function while a footswitch to which the sustain effect is assigned is used.*



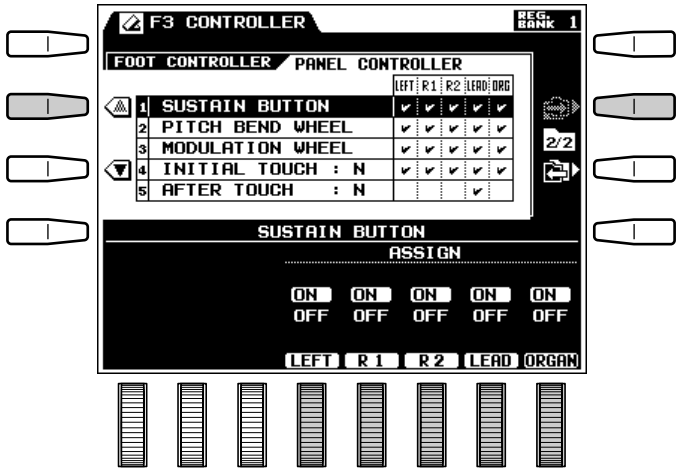
SUSTAIN	Standard sustain footswitch operation. When the footswitch is pressed notes played have a long sustain. Releasing the footswitch immediately stops (damps) any sustained notes.
SOSTENUTO	If you play a note or chord on the keyboard and press the footswitch while the note(s) are held, those notes will be sustained as long as the footswitch is held (as if the damper pedal had been pressed) but all subsequently played notes will not be sustained. This makes it possible to sustain a chord, for example, while other notes are played "staccato."
SOFT	Pressing the footswitch subtly reduces the volume and slightly changes the timbre of notes played. The SOFT effect only applies to certain voices — PIANO, for example.
TAP TEMPO	While the accompaniment is stopped, or during the SYNCHRO START mode before the accompaniment is started, the footswitch can be used to set any desired tempo (within the PSR-7000's 32 to 280 beats per minute range) by simply tapping on the switch 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. 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 [START/STOP] button is pressed.
REGISTRATION +	Recall next highest (increment) registration. "1-1" is selected after "16-8".
REGISTRATION –	Recall next lowest (decrement) registration. "16-8" is selected after "1-1".
START/STOP	Same as panel [START/STOP] button.
ROTARY SPEAKER	Alternately selects the SLOW and FAST speeds of the rotary speaker when a DSP EFFECT Rotary Speaker effect is selected (page 120).
HARMONY	Harmony occurs only while footswitch pressed.
INTRO/FILL to A	Same as panel [INTRO/FILL to A] button.
INTRO/FILL to B	Same as panel [INTRO/FILL to B] button.
ENDING/rit.	Same as panel [ENDING/rit.] button.
FADE IN/OUT	Same as panel [FADE IN/OUT] button.
F.CHORD 1/2	The footswitch alternately switches between the ABC FINGERED 1 and FINGERED 2 modes (page 24).
BASS HOLD	Holds the bass note so that "pedal bass" progressions can be produced using ABC.
PERCUSSION	Footswitch plays a percussion instrument selected by the ASSIGN LCD dials (the latter appears when the PERCUSSION type is selected).
ACCOMP. BREAK	Pressing the footswitch produces a break in the accompaniment for as long as the pedal is held. The accompaniment will start again from the top of the next odd-numbered measure when the pedal is released.
PUNCH IN/OUT	Sets punch-in and punch-out points when song record mode is set to "Punch" (page 69).

PANEL CONTROLLER

● SUSTAIN BUTTON

Determines to which of the PSR-7000 voices the panel **[SUSTAIN]** button will apply.

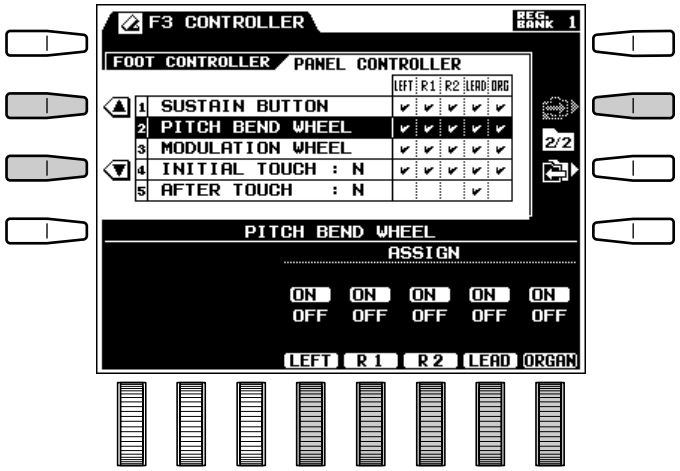
Use the **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD dials to turn **[SUSTAIN]** button control for the corresponding voices **ON** or **OFF** as required. Accompaniment part assignments are the same as those set for the footswitch.



● PITCH BEND WHEEL

Determines to which of the PSR-7000 voices the **PITCH BEND** wheel will apply.

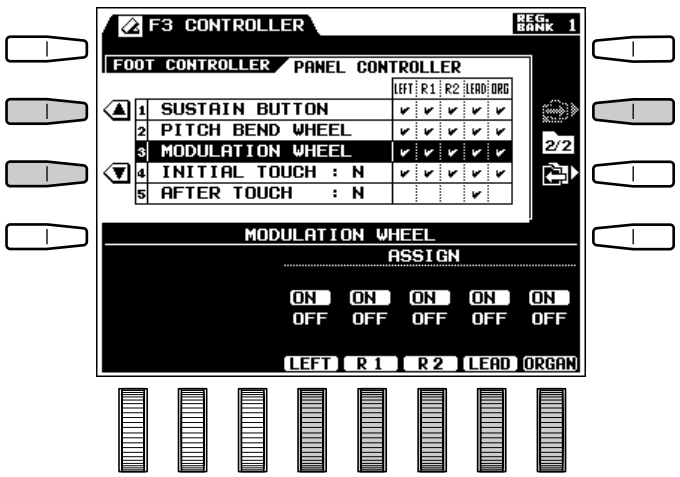
Use the **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD dials to turn PITCH BEND wheel control for the corresponding voices **ON** or **OFF** as required.



● MODULATION WHEEL

Determines to which of the PSR-7000 voices the **MODULATION** wheel will apply.

Use the **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD dials to turn MODULATION wheel control for the corresponding parts **ON** or **OFF** as required.



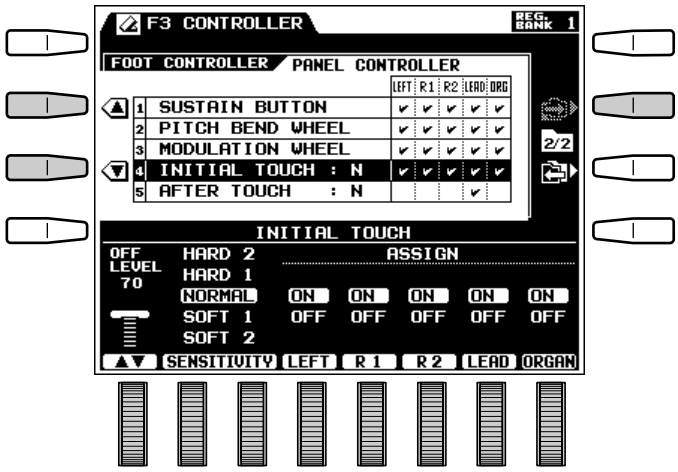
● INITIAL TOUCH

Sets the touch response OFF level and sensitivity curve of the keyboard initial touch response, and determines to which of the PSR-7000 voices touch response will apply.

Use the **OFF LEVEL** LCD dial to set the level at which touch response is turned off.

Use the **SENSITIVITY** LCD dials to select the desired sensitivity curve.

Use the **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD dials to turn initial touch response control for the corresponding parts **ON** or **OFF** as required.

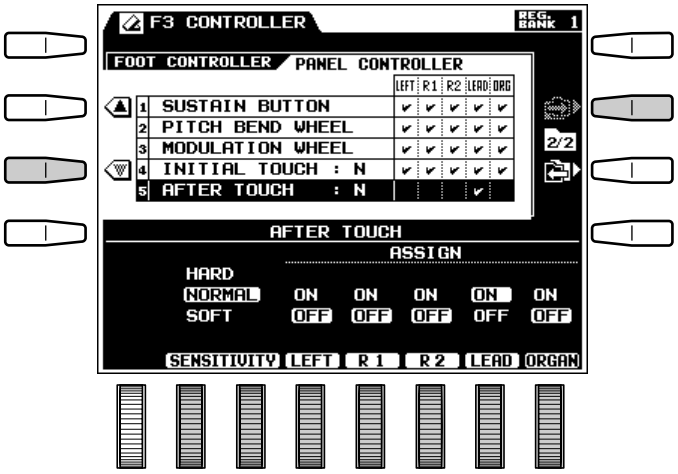


HARD 2	Requires the keys to be played very hard to produce maximum loudness.
HARD 1	Requires the keys to be played quite hard to produce maximum loudness.
NORMAL	Produces a fairly “standard” keyboard response.
SOFT 1	Not a sensitivity as the “SOFT 2” setting, but maximum loudness can still be easily produced with relatively light key pressure.
SOFT 2	Allows maximum loudness to be produced with very light key pressure.

● AFTER TOUCH

Sets the keyboard aftertouch sesitivity. Use the **SENSITIVITY** LCD dials to select the desired sensitivity. When the **SOFT** type is selected maximum variation can be produced with minimum aftertouch presure.

Use the **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD dials to turn aftertouch for the corresponding parts **ON** or **OFF** as required.

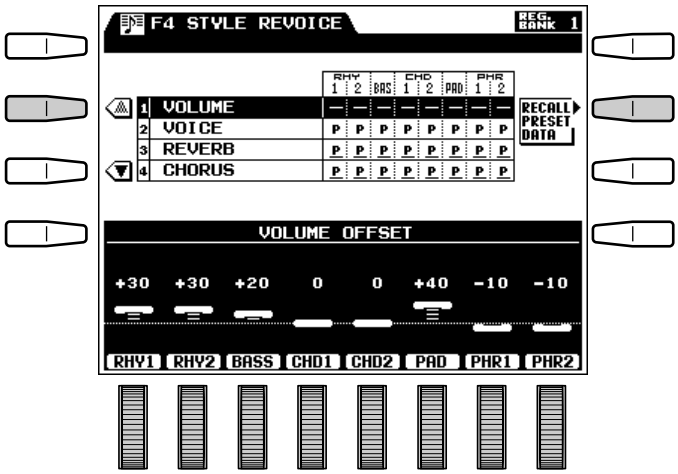


F4: Style Revoice

This function allows you to "revoice" the currently selected style: i.e. change the volume, voice, reverb depth, and chorus depth settings for each accompaniment part. Style Revoice settings are retained in memory as long as a good set of backup batteries is installed (see page 2).

● VOLUME OFFSET

Use the **RHY1**, **RHY2**, **BASS**, **CHD1**, **CHD2**, **PAD**, **PHR1**, and **PHR2** LCD dials to set the volume offset for the corresponding accompaniment parts. The volume offset range is from "–50" to "+50". These settings are relative to the volume parameters available via the ACCOMPANIMENT VOLUME MIXER display. The amount of volume offset set for each part is shown by a graphic volume bar to the right of the **VOLUME** parameter in the upper section of the display. Press the **RECALL PRESET DATA** LCD button to recall all preset volume offset settings (all "0").

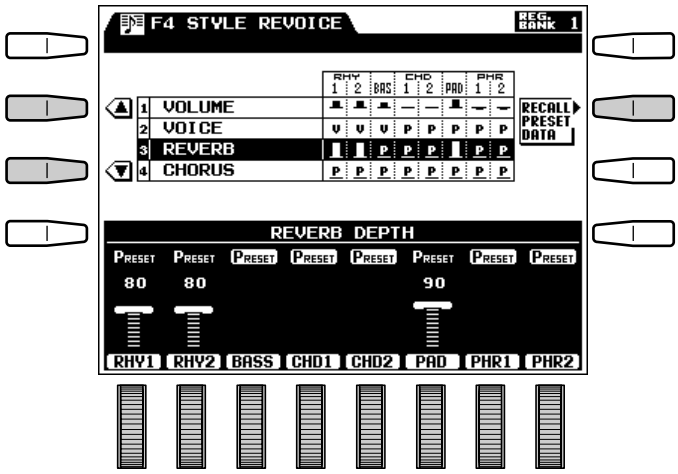


● VOICE

Use the **[➡]** LCD button to switch between the **RHY1**/**RHY2**/**BASS**/**CHD1** and **CHD2**/**PAD**/**PHR1**/**PHR2** parameter groups. Use the **GROUP** LCD dials for each part to select the voice group, and the ▲/▼ LCD dials to select the individual voice for that part. Select "– –" to specify the preset voice for any individual part. When the preset voice is selected a "**P**" appears in the corresponding box to the right of the **VOICE** parameter in the upper section of the display. A "**U**" appears when a non-preset voice has been specified. Press the **RECALL PRESET DATA** LCD button to recall all preset voices.

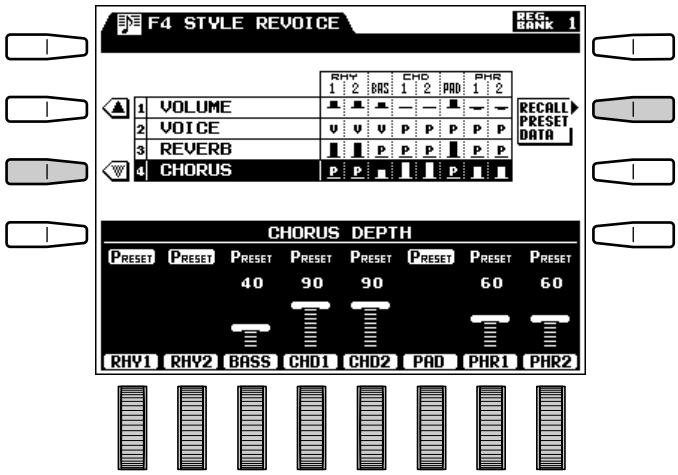
● REVERB DEPTH

Use the **RHY1**, **RHY2**, **BASS**, **CHD1**, **CHD2**, **PAD**, **PHR1**, and **PHR2** LCD dials to set the reverb depth for the corresponding accompaniment parts. The reverb depth range is from "0" (no reverb) to "100" (maximum reverb), or "**PRESET**". When the preset reverb depth is selected a "**P**" appears in the corresponding box to the right of the **REVERB** parameter in the upper section of the display. The reverb depth for each part which has a non-preset setting is shown by a graphic depth bar to the right of the **REVERB** parameter in the upper section of the display. Press the **RECALL PRESET DATA** LCD button to recall all preset reverb depth settings.



● CHORUS DEPTH

Use the **RHY1**, **RHY2**, **BASS**, **CHD1**, **CHD2**, **PAD**, **PHR1**, and **PHR2** LCD dials to set the chorus depth for the corresponding accompaniment parts. The chorus depth range is from "0" (no chorus) to "100" (maximum chorus), or "**PRESET**". When the preset chorus depth is selected a "**P**" appears in the corresponding box to the right of the **CHORUS** parameter in the upper section of the display. The chorus depth for each part which has a non-preset setting is shown by a graphic depth bar to the right of the **CHORUS** parameter in the upper section of the display. Press the **RECALL PRESET DATA** LCD button to recall all preset chorus depth settings.



F5: Reverb/Chorus/DSP Effect

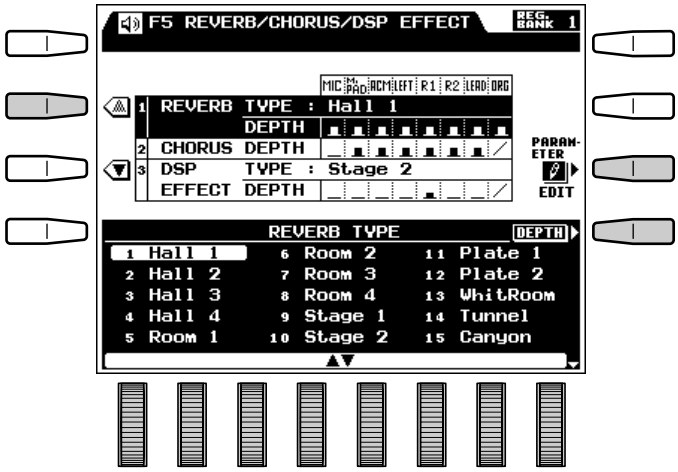
The PSR-7000 has 16 reverb-based effects, a chorus effect, and 50 DSP (Digital Signal Processor) effects that can be selected via the REVERB/CHORUS/DSP EFFECT function display. The selected reverb, chorus, and DSP effect settings are applied to the sound when the [REVERB], [CHORUS], and [DSP EFFECT] buttons are used (see page38).

REVERB TYPE & DEPTH

● REVERB TYPE

Selects the reverb type.

If the **REVERB TYPE** parameters are not showing on the lower section of the display, press the **TYPE** LCD button. Use the LCD dials to select the desired reverb effect. The name of the current reverb type is shown to the right of the REVERB TYPE parameter in the upper section of the display.



The Reverb Effects

1 Hall 1	9 Stage 1
2 Hall 2	10 Stage 2
3 Hall 3	11 Plate 1
4 Hall 4	12 Plate 2
5 Room 1	13 White Room
6 Room 2	14 Tunnel
7 Room 3	15 Canyon
8 Room 4	16 Basement

NOTES

- *Try out all of the effects to get a feel for what they can do to your sound.*
- *When a new style is selected, an appropriate reverb type for that style is automatically selected.*

● REVERB PARAMETER EDIT

When the **REVERB TYPE** parameters are selected as described above, the **PARAMETER EDIT** LCD button will appear, pressing this button gives you access to the individual reverb parameters for the currently selected reverb type. Use the LCD dial below the number corresponding to the parameter you want to edit. Press the **TYPE** LCD button to return to the **REVERB TYPE** parameters when done.

NOTES

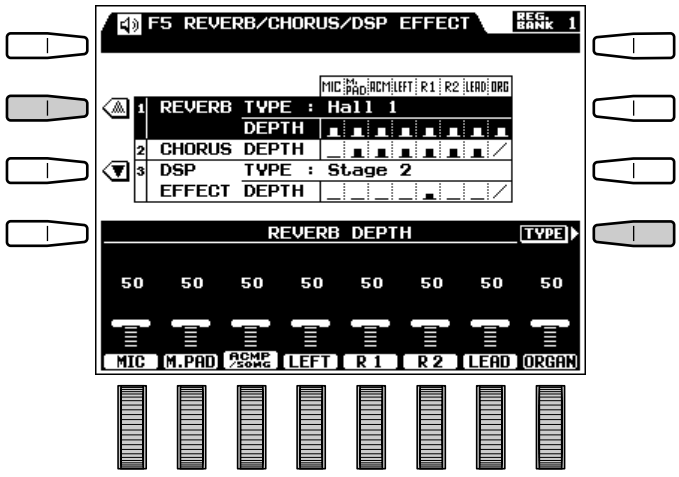
- *The default parameters will automatically be reselected whenever a new reverb type is selected.*

1. **REVERB TIME** Range: 0.3 … 30 sec.
   Sets the amount of time it takes for the reverb sound to decay by 60 dB (virtually to silence).
2. **DIFFUSION** Range: 0 … 10
   Adjusts the left-right "spread" of the reverb sound. The higher the value the greater the spread.
3. **INITIAL DELAY** Range: 0 … 63
   The length of the initial delay before the actual reverb sound begins (in milliseconds). The higher the value the longer the initial delay.
4. **HPF CUTOFF** Range: Thru, 22Hz … 8.0kHz
   The cutoff frequency of the high-pass filter applied to the reverb sound. No filter is applied when set to "Thru".
5. **LPF CUTOFF** Range: 1.0kHz … 18kHz, Thru
   The cutoff frequency of the low-pass filter applied to the reverb sound. No filter is applied when set to "Thru".

● REVERB DEPTH

Independently sets the depth of the selected reverb effect for the microphone, multi pads, accompaniment/song, left voice, right 1 voice, right 2 voice, lead voice, and organ flute voice.

If the **REVERB DEPTH** parameters are not showing on the lower section of the display, press the **DEPTH** LCD button. Use the **MIC**, **M.PAD**, **ACMP/SONG**, **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD dials to set the depth of the reverb effect as required for the corresponding parts. The depth range is from "0" (no reverb effect) to "100" (maximum reverb depth).



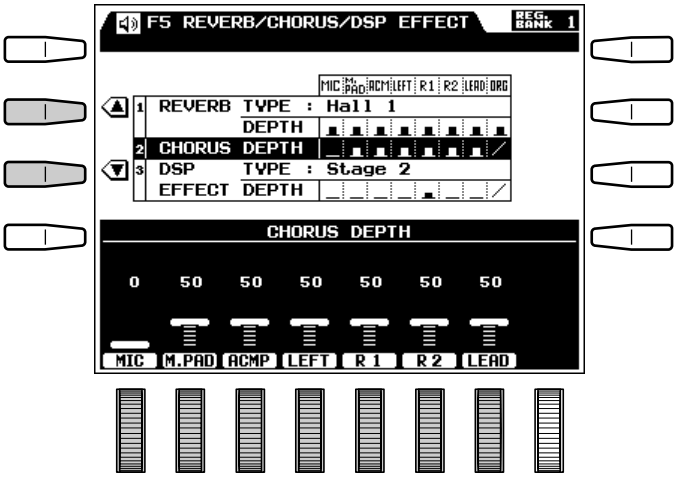
NOTES

- *In addition to the graphic depth controls directly above the LCD dials, reverb depth for each part is represented by a vertical bar to the right of the REVERB DEPTH parameter in the upper section of the display. The longer the bar, the greater the reverb depth.*
- *Each part and voice has a preset depth value and range over which the depth can be varied. Depth variations may therefore not have the same audible effect with all voices.*

CHORUS DEPTH

Independently sets the depth of the chorus effect for the microphone, multi pads, accompaniment, left voice, right 1 voice, right 2 voice, and lead voice

Use the **MIC**, **M.PAD**, **ACMP**, **LEFT**, **R1**, **R2**, and **LEAD** LCD dials to set the depth of the chorus effect as required for the corresponding parts. Please note that chorus does not apply to the ORGAN voices. The depth range is from "0" (no chorus effect) to "100" (maximum chorus depth).



NOTES

- *In addition to the graphic depth controls directly above the LCD dials, the chorus depth for each part is represented by a vertical bar to the right of the CHORUS DEPTH parameter in the upper section of the display. The longer the bar, the greater the chorus depth.*
- *When a new style is selected, the preset chorus type and depth value for that style is automatically recalled.*
- *Each part and voice has a preset depth value and range over which the depth can be varied. Depth variations may therefore not have the same audible effect with all voices.*

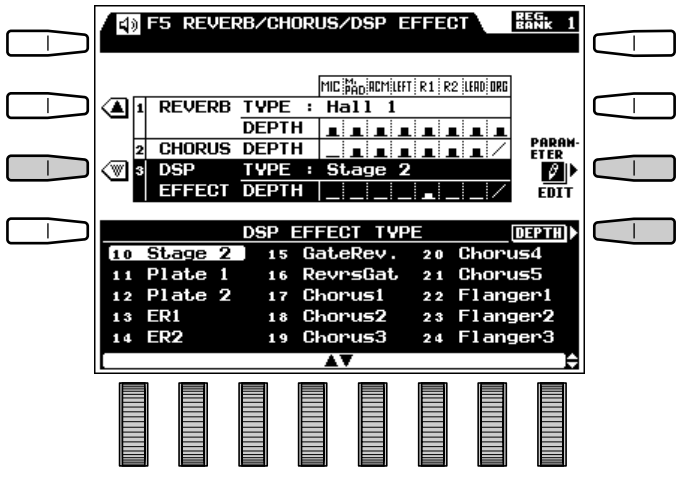
DSP EFFECT TYPE & DEPTH

● DSP EFFECT TYPE

Selects the effect to be applied when the **[DSP EFFECT]** button is turned on (page 39).

If the **DSP EFFECT TYPE** parameters are not showing on the lower section of the display, press the **TYPE** LCD button. Use the LCD dials to select the desired type. The name of the current DSP effect type is shown to the right of the DSP EFFECT parameter in the upper section of the display. See "THE DSP EFFECTS AND PARAMETERS", below for a list of the effects and their parameters.

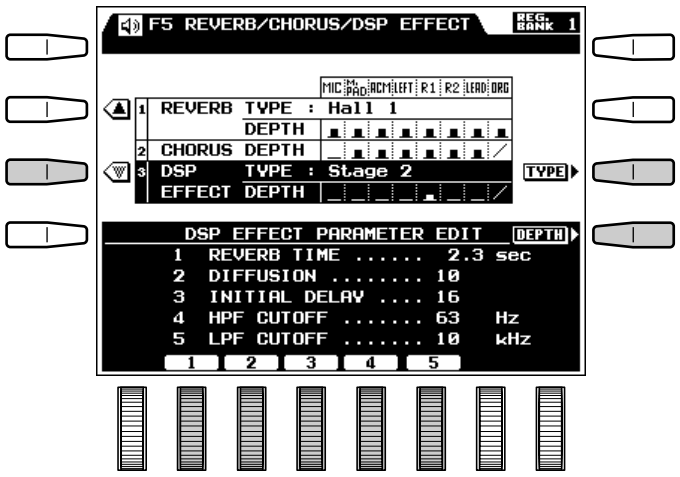
When an ORGAN FLUTE voice is being used, the most suitable DSP type is selected automatically and cannot be changed.



● DSP EFFECT PARAMETER EDIT

When the **DSP EFFECT TYPE** parameters are selected as described above, the **PARAMETER EDIT** LCD button will appear, pressing this button gives you access to the individual DSP effect parameters for the currently selected DSP type. Use the LCD dial below the number corresponding to the parameter you want to edit. Press the **TYPE** LCD button to return to the **DSP EFFECT TYPE** parameters when done. See "THE DSP EFFECTS AND PARAMETERS", below for a list of the effects and their parameters.

The **PRIORITY** LCD dial lets you determine whether the preset DSP EFFECT type and depth settings for the LEAD or RIGHT 1 voice will be selected whenever a voice is selected, or whether the settings you make in this display affect all voices. Select **LEAD** or **RIGHT 1** to use the preset DSP EFFECT settings for those voices, or **MANUAL** to use your own settings for all voices.



NOTES

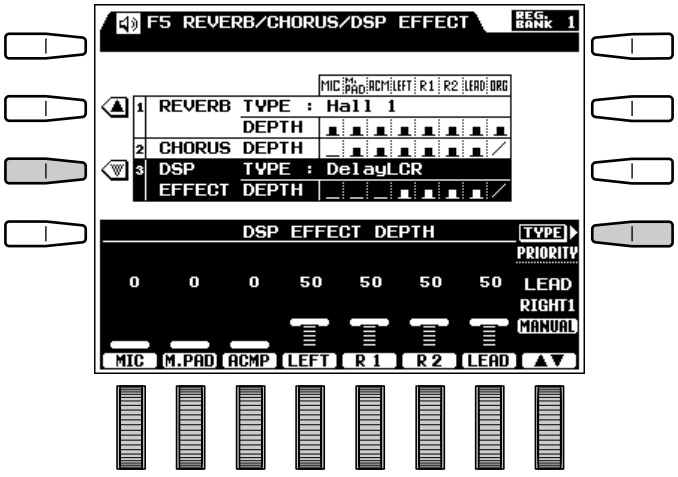
- *The default parameters will automatically be reselected whenever a new DSP effect type is selected.*
- *These parameters cannot be changed when an ORGAN FLUTE voice is being used.*
- *Some of the DSP types include parameters which cannot be selected or changed. Such parts will appear inverted.*

● DSP EFFECT DEPTH

Independently sets the depth of the selected DSP effect for the microphone, multi pads, accompaniment, left voice, right 1 voice, right 2 voice, and lead voice

If the **DSP EFFECT DEPTH** parameters are not showing on the lower section of the display, press the **DEPTH** LCD button. Use the **MIC**, **M.PAD**, **ACMP**, **LEFT**, **R1**, **R2**, and **LEAD** LCD dials to set the depth of the DSP effect as required for the corresponding parts. Please note that DSP Effect does not apply to the ORGAN voices. The depth range is from "0" (no DSP effect) to "100" (maximum DSP effect depth).

When an ORGAN FLUTE voice is being used, the most suitable DSP type is selected automatically. Also the LEAD , RIGHT 1 and RIGHT 2 depth settings cannot be changed. The ORGAN FLUTE depth setting can be changed via the ORGAN FLUTE LIST DISPLAY (see the ROTARY SPEAKER DEPTH control on page 18).



NOTES

- *In addition to the graphic depth controls directly above the LCD dials, DSP effect depth for each part is represented by a vertical bar to the right of the DSP EFFECT DEPTH parameter in the upper section of the display. The longer the bar, the greater the DSP effect depth.*
- *See page 153 for a list including descriptions of the DSP effects and parameters.*

F6: Harmony/Registration

HARMONY

Selects the type of harmony to be applied when the **[HARMONY]** button is turned on (page 37), and the volume of the harmony sound.

Use the **TYPE** LCD dials to select the desired harmony type. Use the **VOLUME** LCD dial to set the volume of the harmony sound.

The Harmony Types

1. Duet	9. Tremolo Duet
2. Trio	10. Strumming
3. 4 Part	11. BackingVocal
4. 4 Part Jazz	12. Add Trp.&Sax
5. Country	13. Add Strings
6. Octave	14. Gtr. Picking
7. Tremolo Slow	15. Banjo Player
8. Tremolo Fast	16. In The Forest

NOTES

- *The HARMONY feature cannot be turned on when the FULL KEYBOARD ABC mode is engaged.*

REGISTRATION

● NAME

You can enter descriptive names up to 16 characters in length for each registration setup via the **NAME** function. The name entered is applied to the currently selected registration setup.

If necessary, begin by select the desired registration bank and number. 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 registration setups names that make them easily identifiable. If you've created a registration setup for a song named "MySong", a good registration name might be something like "MySong-Reg".*

● FREEZE GROUP SETTING

You can specify which settings are affected by the FREEZE function via the FREEZE GROUP SETTING function.

Use the **GROUP SELECT** LCD dials to select a setting you want to freeze or "un-freeze", then use the **MARK** LCD dial to set or remove the check mark for that setting. Repeat until all settings are marked or un-marked as required.

F7: Utility

The F7: UTILITY function accesses utility functions that let you turn memory backup on or off, set a number of display modes, and recall the factory preset data.

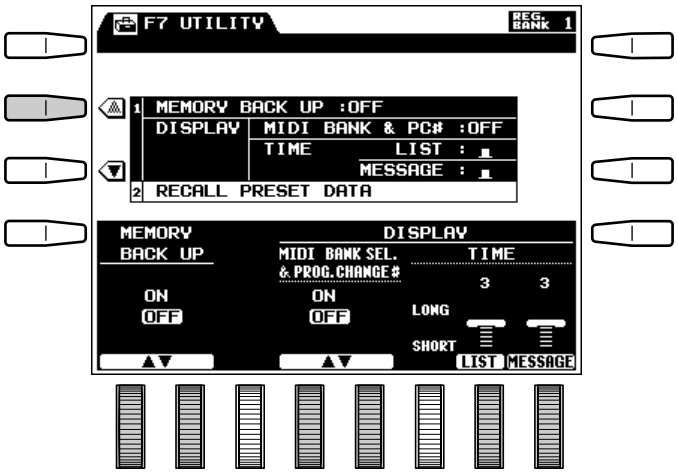
MEMORY BACKUP

● MEMORY BACKUP

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

NOTES

- *The data backed up (retained in memory even when the power is turned off) by the PSR-7000 are listed on page 140 in the MEMORY BACKUP column. When memory backup is turned OFF, the initial factory settings are automatically recalled whenever the power is turned on.*



● DISPLAY - MIDI BANK SEL. & PROG. CHANGE #, TIME

Determines whether the MIDI bank select and program change numbers for each voice will be shown along with the voice number and name on the voice list display, and how long the list and message displays remain on the LCD before they disappear.

Use the **MIDI BANK SEL. & PROG. CHANGE #** LCD dials to turn the MIDI bank select and program change numbers **ON** or **OFF**.

Use the **TIME LIST** and **TIME MESSAGE** LCD dials to set the on-screen time of the list and message displays, respectively. The higher the value the longer the on-screen time.

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, then press the **EXECUTE** LCD button — the "Ready to recall preset data" 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). "Completed" will appear briefly when the job is finished.

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-7000 offers a range of MIDI functions that allow it to be used in even sophisticated MIDI systems.

NOTES

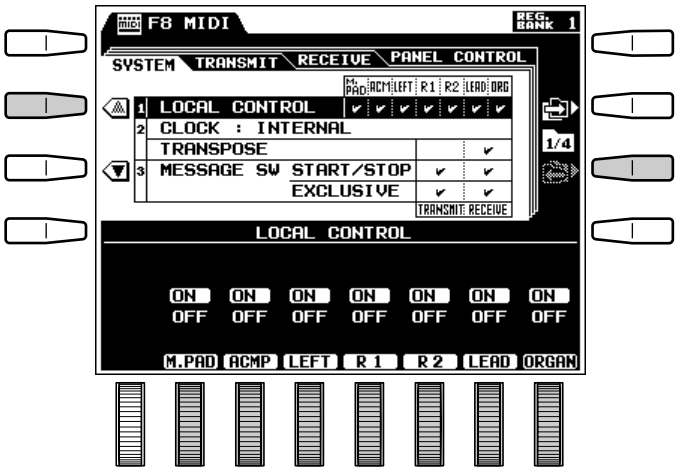
- *Always use a high-quality MIDI cable to connect MIDI OUT to MIDI IN terminals. Never use MIDI cables longer than about 15 meters, since cables longer than this can pick up noise which can cause data errors.*

SYSTEM

LOCAL CONTROL

The LOCAL CONTROL parameters determine whether the corresponding PSR-7000 parts/voices are controlled via the PSR-7000 keyboard or not. When local control is on, the PSR-7000 keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. Local control can be turned off, however, so that the PSR-7000 keyboard does not play the specified 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-7000's voices, an external tone generator can be played from the PSR-7000 keyboard.

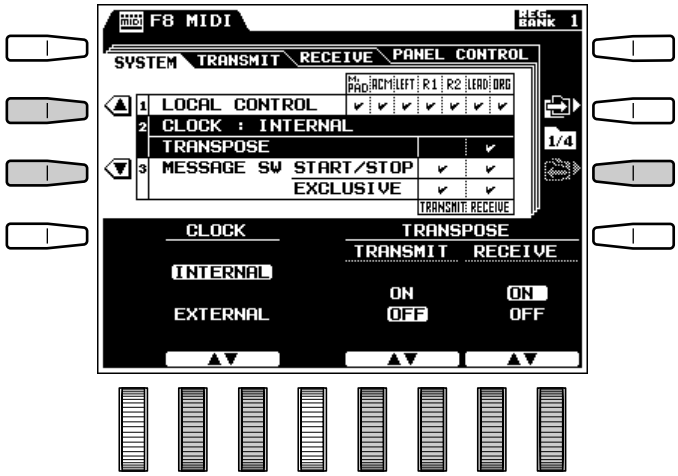
Use the **M.PAD**, **ACMP**, **LEFT**, **R1**, **R2**, **LEAD**, and **ORGAN** LCD dials to turn local control of the corresponding parts/voices **ON** or **OFF**. A check mark appears in the appropriate **LOCAL CONTROL** box in the upper part of the display when local control of the corresponding part/voice is turned on.



CLOCK & TRANSPOSE

● CLOCK

Determines whether the PSR-7000 is controlled by its own internal clock or a MIDI clock signal received from an external device. **INTERNAL** is the normal **CLOCK** setting when the PSR-7000 is being used alone. If you are using the PSR-7000 with an external sequencer, MIDI computer, or other MIDI device, and you want the PSR-7000 to be synchronized to the external device, set this function to **EXTERNAL**. In the latter case, the external device must be connected to the PSR-7000 MIDI IN connector, and must be transmitting an appropriate MIDI clock signal.



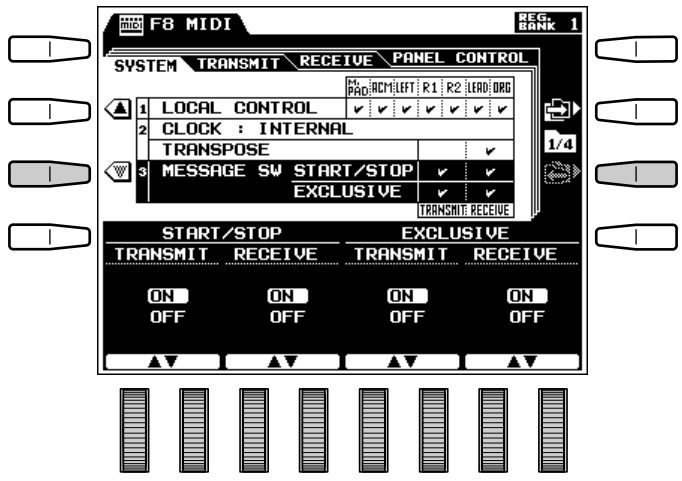
● TRANSPOSE

When the **TRANSPOSE TRANSMIT** parameter is turned **OFF**, the PSR-7000 transpose settings are not applied to transmitted MIDI data. When turned **ON**, the PSR-7000 transpose settings apply to transmitted MIDI data in the same they do to notes played on the PSR-7000 itself. When the **TRANSPOSE RECEIVE** parameter is turned **OFF** note data received by the PSR-7000 is not transposed, and when set to **ON** the received note data is transposed according to the current PSR-7000 transpose setting. A check mark appears in the **TRANSPOSE TRANSMIT** or **RECEIVE** box when the corresponding parameter is **ON**.

MESSAGE SWITCH

● START/STOP

The **START/STOP TRANSMIT** parameter turns MIDI transmission of MIDI start and stop commands corresponding to starting or stopping the PSR-7000 accompaniment or song play/record functions **ON** or **OFF**. The **START/STOP RECEIVE** parameter turns MIDI reception of MIDI start and stop commands generated by external equipment **ON** or **OFF**. A check mark appears in the **MESSAGE SW START/STOP TRANSMIT** or **RECEIVE** box when the corresponding parameter is **ON**.



● EXCLUSIVE

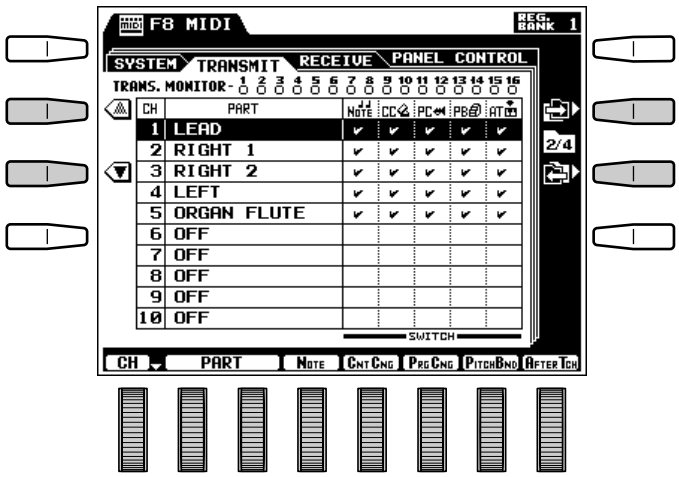
The **EXCLUSIVE TRANSMIT** parameter turns MIDI transmission of MIDI exclusive data (voice and setup data) **ON** or **OFF**. The **EXCLUSIVE RECEIVE** parameter turns MIDI reception of MIDI exclusive data generated by external equipment **ON** or **OFF**. A check mark appears in the **MESSAGE SW EXCLUSIVE TRANSMIT** or **RECEIVE** box when the corresponding parameter is **ON**.

TRANSMIT

This display page allows you to specify which PSR-7000 voices and parts will be transmitted via which MIDI channels (there are 16 MIDI channels), and to specify which types of data will be transmitted for each channel.

● TRANSMIT MONITOR

The **TRANS. MONITOR** (transmit monitor) at the top of the display indicates when data is being transmitted on any of the 16 MIDI channels: The dots corresponding to each channel (1 … 16) flash briefly whenever any data is transmitted on the channel(s).



● CHANNEL

Use either the ▲ and ▼ LCD buttons to the left of the display, or the **CH** LCD dial to select the channel to which you want to assign a part or change a data switch setting. The channel numbers are show in the leftmost column in the display.

● PART

The **PART** LCD dials select the voice or part which will be transmitted via the currently selected channel. Only one voice or part can be specified per channel. Any of the parts listed below can be selected. If one part is assigned to multiple channels, only the lowest-numbered channel will be used.

OFF	No data will be transmitted on the selected channel.
RIGHT 1 **RIGHT 2** **LEAD** **LEFT** **ORGAN FLUTE**	Only data corresponding to the specified voice will be transmitted on the selected channel.
HARMONY 1 **HARMONY 2** **HARMONY 3**	The Harmony feature (page 37) produces a maximum of three harmony notes. These settings correspond to each of the harmony notes.
MULTI PAD 1 **MULTI PAD 2** **MULTI PAD 3** **MULTI PAD 4**	Multi pad phrases from the corresponding pad are transmitted via the selected channel. When a pad is played in the PERCUSSION mode, however, the data is transmitted on the channel to which MULTI PAD 1 is assigned. CHORD pad data is transmitted as note data on the channels to which the appropriate accompaniment parts are assigned (RHY 1 … ACCOMP PHRASE2).
ACCOMP RHY 1 **ACCOMP RHY 2** **ACCOMP BASS** **ACCOMP CHORD 1** **ACCOMP CHORD 2** **ACCOMP PAD** **ACCOMP PHRASE1** **ACCOMP PHRASE2**	The specified accompaniment part is transmitted via the selected channel.

● NOTE, CONTROL CHANGE, PROGRAM CHANGE, PITCH BEND, & AFTER TOUCH SWITCH

These "switches" turn transmission of the specified data type on or off. Use the **NOTE**, **CNTCNG**, **PRGCNG**, **PITCHBND**, and **AFTERTCH** LCD dials to turn transmission of the corresponding data on or off. A check mark appears in the appropriate box when the corresponding switch is turned on.

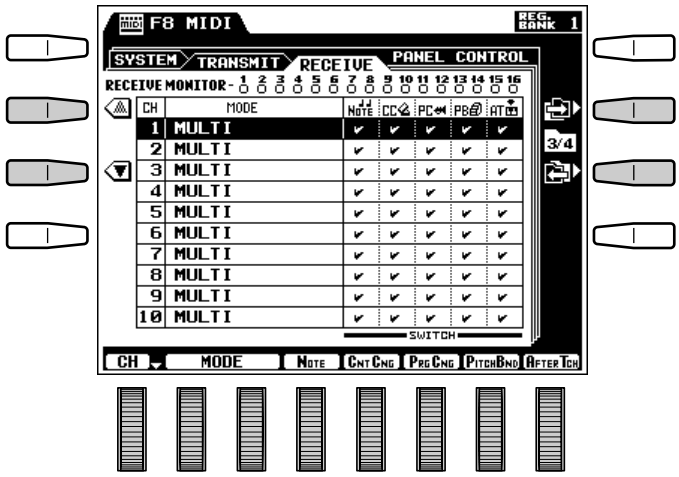
NOTE	This switch turns transmission of the note data on or off. When off, no notes will be produced by an external instrument or tone generator even when the voice or part assigned to the selected channel is played. Note transmission can be turned off, for example, you only want the external device to respond to program change numbers, changing the selected voice without actually playing it.
CNTCNG	Turns transmission of control change data on or off. Control change data includes modulation wheel, foot controller, and any other controller data (except the pitch bend wheel, which has its own switch, below).
PRGCNG	Turns transmission of program change data on or off. Program change data corresponds to voice or "patch" numbers, and is used to select the corresponding voices on an external MIDI device.
PITCHBND	Turns transmission of pitch bend wheel data on or off.
AFTERTCH	Turns transmission of keyboard aftertouch data on or off.

RECEIVE

This display page allows you to specify the MIDI receive mode for each PSR-7000 MIDI channels, and to specify which types of data will be received via each channel.

● RECEIVE MONITOR

The **RECEIVE MONITOR** at the top of the display indicates when data is being received on any of the 16 MIDI channels: The dots corresponding to each channel (1 … 16) flash briefly whenever any data is received on the channel(s).



● CHANNEL

Use either the ▲ and ▼ LCD buttons to the left of the display, or the **CH** LCD dial to select the channel to which you want to assign a mode or change a data switch setting. The channel numbers are show in the leftmost column in the display.

● MODE

The **MODE** LCD dials select the receive mode for the currently selected channel. Any of the following modes can be selected:

OFF	No data will be received on the selected channel.
MULTI	This is the “Multi-Timbre” mode in which the corresponding channel of the internal tone generator is directly controlled by the received MIDI data.
MIDI BASS	When the AUTO MIDI BASS or MANUAL MIDI BASS ABC accompaniment mode is selected this receive mode can be selected to allow reception of bass note data from an external MIDI bass pedal unit or other device.
PANEL CONTROL	When this mode is selected the received MIDI data controls the PSR-7000 panel operations rather than playing the internal tone generator. Which panel operations are controlled by which types of MIDI data are specified in the PANEL CONTROL display page, described below.
KEYBOARD	This is the “normal” receive mode in which MIDI note data received by the PSR-7000 (A-1 … C7) plays the corresponding notes in the same way as if they were played on the keyboard. Pitch bend, modulation, expression, and sustain control data is also accepted. Program change and main volume data affects the RIGHT 1 voice only.

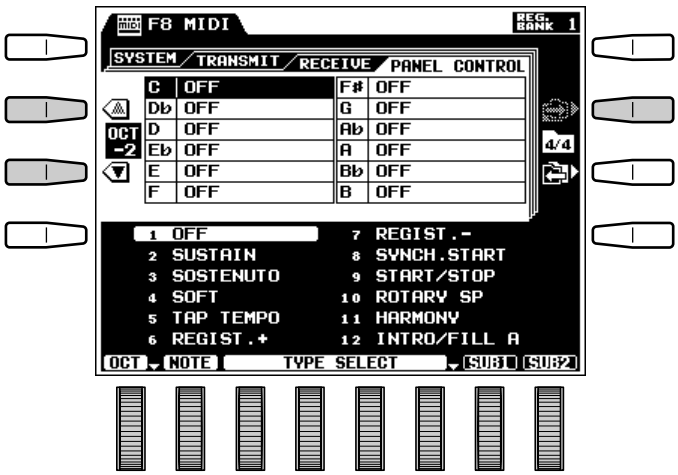
● NOTE, CONTROL CHANGE, PROGRAM CHANGE, PITCH BEND, & AFTER TOUCH SWITCH

These “switches” turn reception of the specified data type on or off. Use the **NOTE**, **CNTCNG**, **PRGCNG**, **PITCHBND**, and **AFTERTCH** LCD dials to turn reception of the corresponding data on or off. A check mark appears in the appropriate box when the corresponding switch is turned on.

NOTE	This switch turns reception of the note data on or off. When off, no notes will be produced by the PSR-7000 even when note data is received on the selected channel.
CNTCNG	Turns reception of control change data on or off. Control change data includes modulation wheel, foot controller, and any other controller data (except the pitch bend wheel, which has its own switch, below).
PRGCNG	Turns reception of program change data on or off. Program change data corresponds to voice or "patch" numbers, and will select the corresponding voices on the PSR-7000 when the PRGCNG parameter is on.
PITCHBND	Turns reception of pitch bend wheel data on or off.
AFTERTCH	Turns reception of keyboard aftertouch data on or off.

PANEL CONTROL

The parameters in this display page assign specific PSR-7000 panel controls to notes. The assigned notes then control the corresponding panel control operations when received via a MIDI channel which is set to the **PANEL CONTROL** receive mode in the **RECEIVE** display, above.



● OCTAVE

Use either the ▲ and ▼ LCD buttons to the left of the display, or the **OCT** LCD dial to select the octave in which you want to assign a note. The selected octave appears between the ▲ and ▼ LCD buttons to the left of the display. The "C" note in octave "3" corresponds to C3 (middle C) on the keyboard.

● NOTE

Use the **NOTE** LCD dial to select the note to which you want to assign a panel control function.

● TYPE SELECT & SUB

Use the **TYPE SELECT** LCD dials to assign a panel control function to the selected note. The available panel control function types are listed below along with the corresponding note-on (note played) and note-off (note released) events for each type. In some cases the **SUB1** and **SUB2** LCD dials are also used for type selection, as listed below.

TYPE	Note-on event	Note-off event
1. OFF	None	None
2. SUSTAIN	SUSTAIN ON	SUSTAIN OFF
3. SOSTENUTO	SOSTENUTO ON	SOSTENUTO OFF
4. SOFT	SOFT ON	SOFT OFF
5. TAP TEMPO	TAP TEMPO ON	—
6. REGIST.+	REGISTRATION UP	—
7. REGIST.–	REGISTRATION DOWN	—
8. SYNCHRO START	[SYNCHRO START] ON	—
9. START/STOP	[START/STOP] ON	—
10. ROTARY SP	ROTARY SPEAKER SLOW ↔ FAST	
11. HARMONY	HARMONY ON	HARMONY OFF
12. INTRO/FILLtoA	[INTRO/FILL to A] ON	[INTRO/FILL to A] RELEASED
13. INTRO/FILLtoB	[INTRO/FILL to B] ON	[INTRO/FILL to B] RELEASED
14. MAIN A	[MAIN A] ON	—
15. MAIN B	[MAIN B] ON	—
16. ENDING/rit.	[ENDING/rit.] ON	—
17. FADE IN/OUT	[FADE IN/OUT] ON	—
18. FINGERED1/2	Switch between FINGERED 1 and 2	—
19. BASS HOLD	BASS HOLD ON	BASS HOLD OFF
20. PERCUSSION	PERCUSSION KEY ON with velocity*	PERCUSSION KEY OFF.
21. ACCOMP. BREAK	ACCOMP. BREAK ON	ACCOMP. BREAK OFF
22. TEMPO +	TEMPO [+] ON	TEMPO [+] RELEASED
23. TEMPO –	TEMPO [–] ON	TEMPO [–] RELEASED
24. MULTI PAD	Specified MULTI PAD ON**	MULTI PAD RELEASED
25. CHORD	Enter specified chord***	

* *Use SUB1 LCD dial to select PERCUSSION 1 or PERCUSSION 2. The PERCUSSION 1 and 2 voices are the same as those assigned to the footswitches — SW1 and SW2 — via the FOOT CONTROLLER function display (page 112).*

** *Use SUB1 LCD dial to select MULTI PAD 1 … MULTI PAD 8.*

*** *Use SUB1 LCD dial to select chord root, and SUB2 LCD dial to select chord type.*

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 volume are turned all the way down. Set the volume controls and foot volume to a reasonable listening level.
	Are the desired parts turned on?
	A pair of headphones is plugged into the PHONES jack. Unplug the headphones.
	Is the FOOT SWITCH connected to the FOOT VOLUME connector?
	The FADE OUT switch is on and has reached the end of its duration, muting the sound. Press the FADE IN/OUT switch so that its indicator goes out.
	MIDI local control is turned OFF. Turn MIDI local control ON using F8 MIDI function.
The style list or voice list does not appear even when a style or voice group button is pressed.	The [LIST HOLD] button is engaged (its LED is lit). Press the [LIST HOLD] button so that its indicator goes out, then try selecting a style or voice (page 11).
The style list, voice list or one touch setting list does not automatically disappear.	The [LIST HOLD] button is engaged (its LED is lit). Press the [LIST HOLD] button so that its indicator goes out.
Pressing the SUSTAIN button on the panel will not switch on the SUSTAIN function.	The panel SUSTAIN button does not function when SUSTAIN is assigned to the connected FOOT SWITCH. Disconnect the FOOT SWITCH or use the FOOT SWITCH to control sustain.
The accompaniment does not start.	The MIDI CLOCK setting is set to EXTERNAL. Reset the MIDI CLOCK to INTERNAL using F8 MIDI function.
Some notes do not sound or are prematurely cut off.	The maximum polyphony has been exceeded. You can play up to 64 notes at the same time—including auto-accompaniment, song memory, multi pad notes etc.. Notes exceeding this limit will not sound. When using ABC or HARMONY, be careful not to exceed the limit.
When a voice or style is changed, the previously selected effect is changed or the sound is prematurely cut off.	This is normal, each voice or style has its own suitable preset values.
There is a slight difference in sound quality between notes played on the keyboard.	This is normal and is a result of the PSR-7000's sampling system.
Some voice's have a looping sound.	
Some noise or vibrato is noticeable in higher pitches depending upon the voice.	
Some voice's will jump an octave in pitch when playing up or down scales in the upper or lower registers.	Some voice's have a pitch limit which has been reached. This is normal.
The ABC chord does not change even when a different chord is played or the chord is not recognized.	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.
	Is the ABC MODE set to MANUAL MIDI BASS?
The disk's remaining memory value does not coincide with the actual value.	The value is an approximate value.
When using a MIDI controller, effects do not function as usual or not at all.	It will depend on the selected voice.
If any trouble other than what is listed above occurs try the solution at the right.	Turn the power off and remove the AC cord from wall and then try to change the backup batteries or take out the backup batteries and replace them after approximately 1 minute.

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RIGHT

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
PIANO				
1	0	112	0	GrandPiano 1
2	0	112	1	BrightPiano1
3	0	112	5	CP 70
4	0	113	4	Funky E.P.
5	0	113	5	Hyper E.P.
6	0	112	4	E.Piano 1
7	0	112	6	Harpsichord1
8	0	0	7	Clavi.
9	0	0	0	GrandPiano 2
10	0	0	1	BrightPiano2
11	0	0	4	E.Piano 2
12	0	0	5	E.Piano 3 DX
13	0	0	2	MIDI Grand
14	0	114	4	Rock E.Piano
15	0	0	6	Harpsichord2
16	0	112	7	Clavi Wah
17	0	0	3	Honky-tonk
18	0	115	4	E.Piano 4
19	0	116	4	E.Piano 5
20	0	117	5	Ballad DX
21	0	118	5	E.P.DX 7000
22	0	114	5	Bell E.Piano
23	0	115	5	Dream E.P.
24	0	0	8	Celesta
ORGAN				
1	0	115	17	ClickOrgan1
2	0	116	17	ClickOrgan2
3	0	117	16	Drawbar Org1
4	0	0	16	Perc.Organ
5	0	112	19	TheaterOrgan
6	0	118	16	Drawbar Org2
7	0	0	18	Rock Organ 1
8	0	0	19	Pipe Organ
9	0	0	17	Drawbar Org3
10	0	117	17	Elec.Organ 1
11	0	116	16	Elec.Organ 2
12	0	119	16	Mellow Organ
13	0	112	18	Rock Organ 2
14	0	115	16	Drawbar Org4
15	0	112	20	Street Organ
16	0	0	20	Reed Organ
STRINGS/CHOIR				
1	0	113	48	Strings 1
2	0	0	51	Strings 2
3	0	112	48	Chamber
4	0	115	48	Violin Str.
5	0	112	40	Violin 1
6	0	112	52	Choir
7	0	113	54	Synth Choir
8	0	112	54	Xenon Pad
9	0	0	48	Strings 3
10	0	0	49	Soft Strings
11	0	114	48	Slow Strings
12	0	0	45	Pizzicato
13	0	0	40	Violin 2
14	0	0	41	Viola
15	0	0	42	Cello
16	0	0	52	Choir Aah
17	0	0	44	Tremolo Str.
18	0	0	50	Syn.Strings
19	0	0	53	Choir Ooh
20	0	0	54	Synth Voice
21	0	0	110	Fiddle
22	0	0	55	OrchestraHit
23	0	0	46	Harp
24	0	112	46	Synth Harp
SAX/WOODWIND				
1	0	112	64	SopranoSax 1
2	0	112	65	Alto Sax 1
3	0	112	66	Tenor Sax 1
4	0	0	67	Baritone Sax
5	0	113	73	Flute 1
6	0	0	75	Pan Flute
7	0	112	68	Oboe 1
8	0	0	71	Clarinet
9	0	0	64	SopranoSax 2
10	0	113	65	Alto Sax 2
11	0	113	66	Tenor Sax 2
12	0	114	66	Growl Sax
13	0	114	65	Chorus Sax
14	0	115	65	Octave Sax
15	0	116	65	Sax+Clarinet
16	0	115	66	Sax+Trombone
17	0	0	65	Alto Sax 3
18	0	0	66	Tenor Sax 3
19	0	0	68	Oboe 2
20	0	0	69	English Horn
21	0	112	73	Flute 2
22	0	0	72	Piccolo
23	0	0	74	Recorder
24	0	0	70	Bassoon
25	0	0	73	Flute 3
26	0	0	77	Shakuhachi
27	0	0	82	Calliope
28	0	0	78	Whistle
29	0	0	79	Ocarina
30	0	0	76	Blown Bottle
TRUMPET/BRASS				
1	0	113	56	Trumpet 1
2	0	112	56	Mellow Trp.
3	0	112	59	MuteTrumpet1
4	0	115	56	FlugelHorn 1
5	0	0	57	Trombone 1
6	0	0	61	Brass 1
7	0	0	62	SynthBrass 1
8	0	114	63	Wah Brass
9	0	112	57	Tromb. Sect.
10	0	112	61	Brass+Sax
11	0	113	61	Brass+Trmpet
12	0	114	61	Brass+Tromb.
13	0	115	61	Brass 2
14	0	117	61	Brass 3
15	0	113	63	SynthBrass 2
16	0	112	63	Jump Brass
17	0	118	61	Sfz.Brass
18	0	119	61	Big Brass 1
19	0	116	61	Big Brass 2
20	0	0	63	SynthBrass 3
21	0	115	63	Sweep Brass
22	0	113	62	Techno Brass
23	0	0	60	French Horn
24	0	0	56	Trumpet 2
25	0	0	59	MuteTrumpet2
26	0	114	56	FlugelHorn 2
27	0	113	57	Trombone 2
GUITAR/BASS				
1	0	0	24	NylonGuitar1
2	0	0	25	Steel Guitar
3	0	0	26	Jazz Guitar
4	0	0	28	Muted Guitar
5	0	114	27	Solid Guitar
6	0	115	27	CleanGuitar1
7	0	113	29	RockGuitar 1
8	0	112	27	Pedal Steel
9	0	112	24	NylonGuitar2
10	0	112	25	12String Gtr
11	0	113	27	Hawaiian Gtr
12	0	116	27	FullAcoustic
13	0	0	27	CleanGuitar2
14	0	0	29	OverdriveGtr
15	0	114	29	Fuzz Guitar
16	0	0	30	DistortionGt
17	0	112	29	RockGuitar 2
18	0	0	32	AcousticBass
19	0	0	35	FretlessBass
20	0	0	33	FingeredBass
21	0	0	34	Picked Bass
22	0	0	43	Contrabass
23	0	112	38	TechnoBass 1
24	0	112	39	TechnoBass 2
25	0	0	36	Slap Bass 1
26	0	0	37	Slap Bass 2
27	0	112	36	Slap Bass 3
28	0	0	38	Synth Bass 1
29	0	0	39	Synth Bass 2
30	0	113	38	Wow Bass 1
31	0	113	39	Wow Bass 2
32	0	114	39	Reso. Bass
33	0	0	31	GtrHarmonics
34	0	0	58	Tuba
ACCORDION/WORLD				
1	0	117	21	Accordion 1
2	0	0	21	Musette 1
3	0	112	21	Trad. Acc. 1
4	0	112	23	Tango Acc. 1
5	0	117	27	Hackbrett
6	0	112	107	Zither
7	0	0	105	Banjo
8	0	0	22	Harmonica
9	0	113	21	Accordion 2
10	0	121	21	Musette 2
11	0	114	21	Gerda's Acc.
12	0	115	21	Squeeze Box
13	0	0	23	Bandoneon 1
14	0	113	23	SmallAccord.
15	0	118	21	Bandoneon 2
16	0	114	23	Tango Acc. 2
17	0	120	21	Accordion 3
18	0	119	21	Bandoneon 3
19	0	115	23	Bavarian Acc
20	0	122	21	Trad. Acc. 2
21	0	0	109	Bagpipe

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
22	0	0	108	Kalimba
23	0	0	111	Shanai
24	0	0	106	Shamisen
25	0	0	107	Koto
26	0	0	104	Sitar
27	0	0	15	Dulcimer
SYNTH/PAD				
1	0	112	81	Analog Lead
2	0	112	80	Sub Aqua
3	0	113	81	Power Lead
4	0	118	81	Pulse Lead
5	0	115	81	Waspy Synth
6	0	116	81	Wire Lead
7	0	0	80	Square Lead
8	0	0	81	Saw. Lead
9	0	112	62	Reso.Synth
10	0	114	81	Phase IV
11	0	112	82	70's Lead
12	0	117	81	Dynamic Lead
13	0	112	91	Fantasia
14	0	0	99	Atmosphere
15	0	0	88	New Age Pad
16	0	112	90	Darkmoon
17	0	114	90	Analog Pad
18	0	114	54	Angels
19	0	113	90	DX Pad
20	0	0	89	Warm Pad
21	0	0	91	Choir Pad
22	0	0	102	Echo Pad
23	0	0	90	PolysynthPad
24	0	0	87	Bass & Lead
25	0	0	85	Voice Lead
26	0	0	83	Chiff Lead
27	0	0	84	Charang Lead
28	0	0	86	Fifth Lead
29	0	0	92	Bowed Pad
30	0	0	93	Metallic Pad
31	0	0	94	Halo Pad
32	0	0	95	Polar Pad
SOUND EFFECT				
1	0	112	101	Wave 2001
2	0	112	95	Tranform
3	0	0	96	Rain
4	0	0	97	Soundtrack
5	0	0	100	Brightness
6	0	0	101	Goblins
7	0	0	98	Crystal
8	0	0	103	Sci-Fi
9	0	0	120	GtrFretNoise
10	0	0	121	Breath Noise
11	0	0	122	Seashore
12	0	0	123	Bird Tweet
13	0	0	124	Telephone
14	0	0	125	Helicopter
15	0	0	126	Applause
16	0	0	127	Gunshot

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
PERCUSSIVE				
1	0	0	9	Glockenspiel
2	0	0	10	Music Box
3	0	112	11	Vibraphone 1
4	0	0	12	Marimba
5	0	0	13	Xylophone
6	0	0	14	TubularBells
7	0	0	112	Tinkle Bell
8	0	0	113	Agogo
9	0	0	11	Vibraphone 2
10	0	0	114	Steel Drums
11	0	0	115	Woodblock
12	0	0	47	Timpani
13	0	0	116	Taiko Drum
14	0	0	117	Melodic Tom
15	0	0	118	Synth Drum
16	0	0	119	Rev.Cymbal
DRUM KIT				
1	127	0	0	Standard Kit
2	127	0	8	Room Kit
3	127	0	16	Rock Kit
4	127	0	24	Electric Kit
5	127	0	25	Analog Kit
6	127	0	32	Jazz Kit
7	127	0	40	Brush Kit
8	127	0	48	Classic Kit

LEFT

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
PIANO/ORGAN				
1	0	112	0	GrandPiano
2	0	112	1	BrightPiano
3	0	112	5	CP 70
4	0	113	4	Funky E.P.
5	0	0	4	E.Piano 1
6	0	112	21	Trad. Acc. 1
7	0	112	6	Harpsichord1
8	0	112	18	Rock Organ 1
9	0	0	7	Clavi.
10	0	0	2	MIDI Grand
11	0	113	5	Hyper E.P.
12	0	114	4	Rock E.Piano
13	0	0	6	Harpsichord2
14	0	112	7	Clavi Wah
15	0	0	3	Honky-tonk
16	0	115	4	E.Piano 4
17	0	116	4	E.Piano 5
18	0	117	5	Ballad DX
19	0	118	5	E.P.DX 7000
20	0	114	5	Bell E.Piano
21	0	115	5	Dream E.P.
22	0	0	8	Celesta
23	0	115	17	ClickOrgan1
24	0	116	17	ClickOrgan2
25	0	117	16	Drawbar Org1
26	0	0	16	Perc.Organ
27	0	112	19	TheaterOrgan
28	0	0	18	Rock Organ 2
29	0	0	19	Pipe Organ
30	0	0	17	Drawbar Org2
31	0	117	17	Elec.Organ 1
32	0	116	16	Elec.Organ 2
33	0	119	16	Mellow Organ
34	0	115	16	Drawbar Org3
35	0	112	20	Street Organ
36	0	120	16	Drawbar Org4
37	0	118	17	Drawbar Org5
38	0	118	16	Drawbar Org6
39	0	117	21	Accordion 1
40	0	0	21	Musette 1
41	0	117	27	Hackbrett
42	0	112	107	Zither
43	0	112	23	Tango Acc. 1
44	0	0	22	Harmonica
45	0	113	21	Accordion 2
46	0	121	21	Musette 2
47	0	114	21	Gerda's Acc.
48	0	115	21	Squeeze Box
49	0	0	23	Bandoneon 1
50	0	113	23	SmallAccord.
51	0	118	21	Bandoneon 2
52	0	114	23	Tango Acc. 2
53	0	120	21	Accordion 3
54	0	119	21	Bandoneon 3
55	0	115	23	Bavarian Acc
56	0	122	21	Trad. Acc. 2

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
STRINGS/CHOIR				
1	0	113	48	Strings 1
2	0	0	51	Strings 2
3	0	112	48	Chamber
4	0	115	48	Violin Str.
5	0	112	40	Violin 1
6	0	112	52	Choir
7	0	113	54	Synth Choir
8	0	112	54	Xenon Pad
9	0	0	48	Strings 3
10	0	0	49	Soft Strings
11	0	114	48	Slow Strings
12	0	0	45	Pizzicato
13	0	0	40	Violin 2
14	0	0	41	Viola
15	0	0	42	Cello
16	0	0	52	Choir Aah
17	0	0	44	Tremolo Str.
18	0	0	50	Syn.Strings
19	0	0	53	Choir Ooh
20	0	0	54	Synth Voice
21	0	0	110	Fiddle
22	0	0	55	OrchestraHit
23	0	0	46	Harp
24	0	112	46	Synth Harp
BRASS/WOODWIND				
1	0	112	64	SopranoSax 1
2	0	112	65	Alto Sax 1
3	0	112	66	Tenor Sax 1
4	0	0	67	Baritone Sax
5	0	113	73	Flute 1
6	0	0	75	Pan Flute
7	0	112	68	Oboe
8	0	0	71	Clarinet
9	0	0	64	SopranoSax 2
10	0	113	65	Alto Sax 2
11	0	113	66	Tenor Sax 2
12	0	114	66	Growl Sax
13	0	114	65	Chorus Sax
14	0	115	65	Octave Sax
15	0	116	65	Sax+Clarinet
16	0	115	66	Sax+Trombone
17	0	0	65	Alto Sax 3
18	0	0	66	Tenor Sax 3
19	0	0	69	English Horn
20	0	112	73	Flute 2
21	0	0	72	Piccolo
22	0	0	70	Bassoon
23	0	0	82	Calliope
24	0	0	76	Blown Bottle
25	0	113	56	Trumpet
26	0	112	56	Mellow Trp.
27	0	112	59	MuteTrumpet
28	0	115	56	FlugelHorn 1
29	0	113	57	Trombone
30	0	0	61	Brass 1
31	0	0	62	SynthBrass 1
32	0	114	63	Wah Brass
33	0	112	57	Tromb. Sect.
34	0	112	61	Brass+Sax
35	0	113	61	Brass+Trmpet
36	0	114	61	Brass+Tromb.
37	0	115	61	Brass 2
38	0	117	61	Brass 3
39	0	113	63	SynthBrass 2
40	0	112	63	Jump Brass
41	0	118	61	Sfz.Brass
42	0	119	61	Big Brass 1
43	0	116	61	Big Brass 2
44	0	0	63	SynthBrass 3
45	0	113	62	Techno Brass
46	0	0	60	French Horn
47	0	114	56	FlugelHorn 2
SYNTH/PAD				
1	0	112	91	Fantasia
2	0	0	99	Atmosphere
3	0	0	88	New Age Pad
4	0	112	90	Darkmoon
5	0	114	90	Analog Pad
6	0	114	54	Angels
7	0	113	90	DX Pad
8	0	0	89	Warm Pad
9	0	0	91	Choir Pad
10	0	0	102	Echo Pad
11	0	0	90	PolysynthPad
12	0	112	101	Wave 2001
13	0	112	95	Tranform
14	0	0	101	Goblins
15	0	0	103	Sci-Fi
16	0	0	95	Polar Pad
17	0	112	81	Analog Lead
18	0	112	80	Sub Aqua
19	0	113	81	Power Lead
20	0	118	81	Pulse Lead
21	0	115	81	Waspy Synth
22	0	116	81	Wire Lead
23	0	0	80	Square Lead
24	0	0	81	Saw. Lead
25	0	112	62	Reso.Synth
26	0	114	81	Phase IV
27	0	112	82	70's Lead
28	0	117	81	Dynamic Lead
29	0	115	63	Sweep Synth
30	0	0	87	Bass & Lead
31	0	0	85	Voice Lead
32	0	0	86	Fifth Lead
33	0	0	96	Rain
34	0	0	97	Soundtrack
35	0	0	100	Brightness
36	0	0	83	Chiff Lead
37	0	0	92	Bowed Pad
38	0	0	93	Metallic Pad
39	0	0	94	Halo Pad
40	0	0	98	Crystal
GUITAR/PERCUSSIVE				
1	0	0	24	NylonGuitar1
2	0	0	25	Steel Guitar
3	0	0	26	Jazz Guitar
4	0	0	28	Muted Guitar
5	0	114	27	Solid Guitar
6	0	115	27	CleanGuitar1
7	0	0	29	OverdriveGtr
8	0	112	27	Pedal Steel
9	0	112	24	NylonGuitar2
10	0	112	25	12String Gtr
11	0	113	27	Hawaiian Gtr
12	0	0	27	CleanGuitar2
13	0	112	29	RockGuitar
14	0	0	30	DistortionGt
15	0	0	32	AcousticBass
16	0	0	35	FretlessBass
17	0	0	33	FingeredBass
18	0	0	34	Picked Bass
19	0	0	36	Slap Bass 1
20	0	0	37	Slap Bass 2
21	0	112	36	Slap Bass 3
22	0	0	38	Synth Bass 1
23	0	0	39	Synth Bass 2
24	0	114	39	Reso. Bass
25	0	112	38	TechnoBass 1
26	0	112	39	TechnoBass 2
27	0	113	38	Wow Bass 1
28	0	113	39	Wow Bass 2
29	0	0	43	Contrabass
30	0	0	58	Tuba
31	0	112	11	Vibraphone 1
32	0	0	12	Marimba
33	0	0	13	Xylophone
34	0	0	14	TubularBells
35	0	0	9	Glockenspiel
36	0	0	10	Music Box
37	0	0	112	Tinkle Bell
38	0	0	105	Banjo

LEAD

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
TRUMPET/BRASS				
1	0	127	56	Solo Trumpet
2	0	126	56	Mellow Trp.
3	0	127	59	Mute Trumpet
4	0	125	56	FlugelHorn 1
5	0	127	57	Trombone
6	0	126	57	SoftTrombone
7	0	122	61	Tight Brass
8	0	125	62	Brass Lead
9	0	124	56	Soft Trumpet
10	0	123	56	FlugelHorn 2
11	0	127	60	French Horn
12	0	121	61	Sfz.Brass
13	0	126	61	Brass+Sax
14	0	125	61	Brass+Tromb.
15	0	124	61	Big Brass 1
16	0	123	61	Big Brass 2
17	0	127	62	SynthBrass 1
18	0	126	62	SynthBrass 2
19	0	126	63	Wah Brass
20	0	124	62	Techno Brass
21	0	125	63	Jump Brass
22	0	123	62	Quack Brass
23	0	127	63	Analog Brass
SAX/WOODWIND				
1	0	127	64	Soprano Sax
2	0	127	65	Alto Sax
3	0	127	66	Tenor Sax
4	0	127	67	Baritone Sax
5	0	127	71	Clarinet
6	0	127	22	Harmonica
7	0	127	73	Flute 1
8	0	127	75	Pan Flute
9	0	126	65	Sax+Clarinet
10	0	125	66	Sax+Trombone
11	0	126	66	Chorus Sax
12	0	124	66	Growl Sax
13	0	127	68	Oboe
14	0	127	69	English Horn
15	0	127	70	Bassoon
16	0	127	72	Piccolo
17	0	127	82	Calliope
18	0	126	73	Flute 2
19	0	127	78	Whistle
20	0	127	76	Blown Bottle
21	0	127	77	Shakuhachi

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
STRINGS/CHOIR				
1	0	127	40	Violin
2	0	127	42	Cello
3	0	125	48	Violin Str.
4	0	127	48	Strings
5	0	127	52	Choir Aah 1
6	0	125	52	Choir Aah 2
7	0	127	53	Choir Ooh
8	0	126	52	Big Choir
9	0	127	99	Atmosphere
10	0	127	88	New Age
11	0	127	103	Sci-Fi
12	0	125	54	Bell Voice
13	0	127	44	Tremolo Str.
14	0	127	49	Chamber
15	0	123	54	Xenon Lead
16	0	124	54	Angel
17	0	126	40	Soft Violin
18	0	127	41	Viola
19	0	127	110	Fiddle
20	0	126	48	Slow Strings
21	0	126	54	Synth Choir
22	0	127	54	Synth Voice
23	0	127	50	Synth String
24	0	127	55	OrchestraHit
GUITAR/BASS				
1	0	127	24	Concert Gtr
2	0	127	25	Folk Guitar
3	0	126	25	12String Gtr
4	0	127	26	Jazz Guitar
5	0	124	27	Hawaiian Gtr
6	0	127	27	Clean Guitar
7	0	126	29	RockGuitar 1
8	0	127	28	Echo Muted
9	0	125	27	Wah Guitar
10	0	125	26	FullAcoustic
11	0	126	26	OctaveGuitar
12	0	126	27	Tremolo Gtr
13	0	127	30	DistortionGt
14	0	126	30	Fuzz Guitar
15	0	127	29	OverdriveGtr
16	0	125	29	RockGuitar 2
17	0	127	32	Double Bass
18	0	127	35	FretlessBass
19	0	127	36	Slap Bass 1
20	0	127	37	Slap Bass 2
21	0	126	24	Nylon Guitar
22	0	123	27	BrightGuitar
23	0	125	25	Gut Guitar
24	0	127	31	GtrHarmonics
25	0	127	39	Reso. Bass
26	0	126	38	Wow Bass 1
27	0	125	39	Wow Bass 2
28	0	125	38	Wow Bass 3
29	0	127	38	TechnoBass 1
30	0	126	39	TechnoBass 2
31	0	124	38	Jungle Bass

Display No.	BankSelect MSB	BankSelect LSB	Program Change No.	Voice Name
SYNTH/PERCUSSIVE				
1	0	125	81	Analog Lead
2	0	126	80	Sub Aqua
3	0	127	81	Saw. Lead 1
4	0	126	81	Reso. Saw.
5	0	125	82	70's Lead
6	0	127	90	Dark Moon
7	0	127	80	Mini Lead 1
8	0	124	81	Big Lead
9	0	127	101	Wave 2001
10	0	123	81	Blowing Lead
11	0	126	82	Dragon Flute
12	0	122	81	Rain Hold
13	0	127	98	Quack Bell
14	0	124	63	Reso. Brass
15	0	125	80	Mini Lead 2
16	0	121	81	Saw. Lead 2
17	0	120	82	Phase IV
18	0	121	82	Wire Lead
19	0	122	82	Dynamic Lead
20	0	123	82	Pulse Lead
21	0	127	87	Bass & Lead
22	0	124	82	Seq.Anlog
23	0	127	9	Glockenspiel
24	0	127	12	Marimba

Percussion Kit List • Verzeichnis der Schlagzeug- und Percussion-Sets
Liste des kits de percussion

Bank MSB#		127	127	127	127	127	127	127	127
Program #		1	9	17	25	26	33	41	49
Note#	Note	Standard Kit	Room Kit	Rock Kit	Electro Kit	Analog Kit	Jazz Kit	Brush Kit	Classic Kit
13	C♯0	SurdoMut	<——	<——	<——	<——	<——	<——	<——
14	D0	SurdoOpn	<——	<——	<——	<——	<——	<——	<——
15	D♯0	Hi Q	<——	<——	<——	<——	<——	<——	<——
16	E0	WhipSlap	<——	<——	<——	<——	<——	<——	<——
17	F0	ScraPush	<——	<——	<——	<——	<——	<——	<——
18	F♯0	ScraPull	<——	<——	<——	<——	<——	<——	<——
19	G0	FingSnap	<——	<——	<——	<——	<——	<——	<——
20	G♯0	Click	<——	<——	<——	<——	<——	<——	<——
21	A0	MetroClk	<——	<——	<——	<——	<——	<——	<——
22	A♯0	MetroBel	<——	<——	<——	<——	<——	<——	<——
23	B0	SeqClckL	<——	<——	<——	<——	<——	<——	<——
24	C1	SeqClckH	<——	<——	<——	<——	<——	<——	<——
25	C♯1	BrushTap	<——	<——	<——	<——	<——	<——	<——
26	D1	BrshSwlL	<——	<——	<——	<——	<——	<——	<——
27	D♯1	BrshSlap	<——	<——	<——	<——	<——	<——	<——
28	E1	BrshSwlH	<——	<——	RevCymbl	RevCymbl	<——	<——	<——
29	F1	SnareRol	<——	<——	<——	<——	<——	<——	<——
30	F♯1	Castanet	<——	<——	Hi Q	Hi Q	<——	<——	<——
31	G1	Snare L	<——	SDRock M	Snare M	SDRock H	<——	BrshSlpL	<——
32	G♯1	Sticks	<——	<——	<——	<——	<——	<——	<——
33	A1	Kick L	<——	Kick M	Kick H 4	Kick M	<——	<——	<——
34	A♯1	Open Rim	<——	<——	<——	<——	<——	<——	<——
35	B1	Kick M	<——	Kick H 3	KickRock	KickAnaL	<——	<——	<——
36	C2	Kick H	KickRoom	KickRock	KickGate	KickAnaH	KickJazz	KickSoft	GranCasa
37	C♯2	SideStck	<——	<——	<——	A.SdeStk	<——	<——	<——
38	D2	Snare M	<——	SD Rock	SDRock L	AnaSD L	<——	BrshSlap	<——
39	D♯2	HandClap	<——	<——	<——	<——	<——	<——	<——
40	E2	Snare H	<——	SDRokRim	SDRock H	AnSD H	<——	BrushTap	<——
41	F2	F Tom L	RoomTom1	RockTom1	E Tom 1	AnaTom 1	JazzTom1	BrshTom1	JazzTom1
42	F♯2	C.Hi-Hat	<——	<——	<——	AnaC.HH1	<——	<——	<——
43	G2	F Tom H	RoomTom2	RockTom2	E Tom 2	AnaTom 2	JazzTom2	BrshTom2	JazzTom2
44	G♯2	P.Hi-Hat	<——	<——	<——	AnaC.HH2	<——	<——	<——
45	A2	Low Tom	RoomTom3	RockTom3	E Tom 3	AnaTom 3	JazzTom3	BrshTom3	JazzTom3
46	A♯2	O.Hi-Hat	<——	<——	<——	Ana O.HH	<——	<——	<——
47	B2	MidTom L	RoomTom4	RockTom4	E Tom 4	AnaTom 4	JazzTom4	BrshTom4	JazzTom4
48	C3	MidTom H	RoomTom5	RockTom5	E Tom 5	AnaTom 5	JazzTom5	BrshTom5	JazzTom5
49	C♯3	CrashCy1	<——	<——	<——	AnaCymbl	<——	<——	HndCymOL
50	D3	High Tom	RoomTom6	RockTom6	E Tom 6	AnaTom 6	JazzTom6	BrshTom6	JazzTom6
51	D♯3	RideCym1	<——	<——	<——	<——	<——	<——	HndCymCL
52	E3	ChineCym	<——	<——	<——	<——	<——	<——	<——
53	F3	Ride Cup	<——	<——	<——	<——	<——	<——	<——
54	F♯3	Tambourn	<——	<——	<——	<——	<——	<——	<——
55	G3	SplashCy	<——	<——	<——	<——	<——	<——	<——
56	G♯3	Cowbell	<——	<——	<——	AnaCwbel	<——	<——	<——
57	A3	CrashCy2	<——	<——	<——	<——	<——	<——	HndCymOH
58	A♯3	Vibraslp	<——	<——	<——	<——	<——	<——	<——
59	B3	RideCym2	<——	<——	<——	<——	<——	<——	HndCymCH
60	C4	Bongo H	<——	<——	<——	<——	<——	<——	<——
61	C♯4	Bongo L	<——	<——	<——	<——	<——	<——	<——
62	D4	CongaMut	<——	<——	<——	AnaCongH	<——	<——	<——
63	D♯4	CongaOpn	<——	<——	<——	AnaCongM	<——	<——	<——
64	E4	Conga L	<——	<——	<——	AnaCongL	<——	<——	<——
65	F4	TimbaleH	<——	<——	<——	<——	<——	<——	<——
66	F♯4	TimbaleL	<——	<——	<——	<——	<——	<——	<——
67	G4	Agogo H	<——	<——	<——	<——	<——	<——	<——
68	G♯4	Agogo L	<——	<——	<——	<——	<——	<——	<——
69	A4	Cabasa	<——	<——	<——	<——	<——	<——	<——
70	A♯4	Maracas	<——	<——	<——	AnaMarcs	<——	<——	<——
71	B4	SambaWhH	<——	<——	<——	<——	<——	<——	<——
72	C5	SambaWhL	<——	<——	<——	<——	<——	<——	<——
73	C♯5	GuiroSht	<——	<——	<——	<——	<——	<——	<——
74	D5	GuiroLng	<——	<——	<——	<——	<——	<——	<——
75	D♯5	Claves	<——	<——	<——	AnaClavs	<——	<——	<——
76	E5	WdBlockH	<——	<——	<——	<——	<——	<——	<——
77	F5	WdBlockL	<——	<——	<——	<——	<——	<——	<——
78	F♯5	CuicaMut	<——	<——	ScraPush	ScraPush	<——	<——	<——
79	G5	CuicaOpn	<——	<——	ScraPull	ScraPull	<——	<——	<——
80	G♯5	TrianglM	<——	<——	<——	<——	<——	<——	<——
81	A5	TrianglO	<——	<——	<——	<——	<——	<——	<——
82	A♯5	Shaker	<——	<——	<——	<——	<——	<——	<——
83	B5	JinglBel	<——	<——	<——	<——	<——	<——	<——
84	C6	BellTree	<——	<——	<——	<——	<——	<——	<——

* "<——" indicates the content is the same as that of Standard Kit.
* "<——" zeigt an, daß der Inhalt identisch mit dem Standardset ist.
* "<——" indique que le contenu est le même que celui du kit standard.
* "<——" indica que el contenido es el mismo que el del juego estándar.

Style List • Rhythmusverzeichnis • Liste des styles

Display No.	Style Name
ROCK/ROCK'N'ROLL	
1	Rock&Roll 1*
2	Twist
3	Hard Rock
4	Rock Shuffle
5	Slow Rock*
6	Org RkBallad*
7	LiteRkBallad*
8	Rock Pop
9	Rock&Roll 2*
10	BoogieWoogie
11	Speed Metal
12	Rock Ballad*
13	6/8 Heavy Rk
14	Upbeat Pop*
15	CowboyBoogie*
16	Jive*
POP/BEAT	
1	16Beat Pop
2	8Beat Light*
3	Pop Shuffle
4	Up Pop Shfle*
5	Detroit Pop
6	Pop Rock*
7	Upbeat Pop*
8	Guitar Pop*
9	Pop Rhumba 1
10	Pop Rhumba 2
11	Light Pop*
12	Folk Rock*
13	Surf Shuffle
14	Disco Pop*
15	Dance Pop*
16	Party Pop 1*
BALLAD	
1	8Beat Ballad
2	6/8 Ballad 1*
3	Epic Ballad
4	Slow Ballad
5	16Bt Ballad1*
6	16Bt Ballad2
7	16Bt Ballad3
8	Piano Ballad
9	8Beat Light*
10	6/8 Ballad 2
11	Slow Rock*
12	FusionBallad*
13	Rock Ballad*
14	Org RkBallad*
15	LiteRkBallad*
16	Cntry Ballad*
DANCE	
1	Dance Pop*
2	Eurobeat
3	Dance Party
4	Pop Rap
5	Techno 1
6	Techno 2
7	Synth Boogie
8	Acid Jazz

Display No.	Style Name
DISCO	
1	Disco Party
2	Disco Soul*
3	Disco Pop*
4	Disco Fox
5	Party Pop 1*
6	Party Pop 2
7	70s Disco
8	Disco Tropic
RHYTHM&BLUES	
1	R&B
2	Funk
3	Soul
4	6/8 Blues*
5	6/8 Gospel
6	Gospel Waltz*
7	Disco Soul*
8	16Bt Ballad1*
JAZZ/SWING	
1	Swing*
2	Big Band
3	BigBndBallad
4	Jazz Ballad
5	Cool Jazz
6	Uptempo Jazz
7	Swing Waltz*
8	Dixieland
9	Ragtime
10	Charleston
11	Gypsy Jazz
12	Fusion
13	Fusion Shfle
14	FusionBallad*
15	Jazz Waltz*
16	6/8 Blues*
LATIN	
1	Pop Samba
2	Samba 1
3	Salsa
4	Bossa Fast
5	Pop Bossa
6	Beguine*
7	Pop Reggae
8	Merengue
9	Samba 2*
10	Reggae 16
11	Reggae 12
12	Bossa Slow
13	Mambo
14	Son
15	Bolero Lento
16	Espagnole

Display No.	Style Name
COUNTRY&WESTERN	
1	CountryRock1
2	CountryRock2
3	Bluegrass
4	Cntry Ballad*
5	CowboyBoogie*
6	Two Step
7	CountryShfle
8	Cntry Waltz1*
9	Cntry Waltz2*
10	Folk Rock*
11	Light Pop*
12	Up Pop Shfle*
13	Guitar Pop*
14	Pop Rock*
15	6/8 Ballad 1*
16	Rock&Roll 1*
MARCH/WALTZ	
1	March 1
2	6/8 March 1
3	Trad. Waltz1*
4	Polka 1
5	Tarantella
6	Musette
7	Showtune
8	Polka Pop
9	March 2
10	6/8 March 2
11	Trad. Waltz2
12	Polka 2
13	Cntry Waltz1*
14	Cntry Waltz2*
15	Vienn.Waltz*
16	EnglishWaltz*
17	Jazz Waltz*
18	Swing Waltz*
19	Gospel Waltz*
BALLROOM	
1	Vienn.Waltz*
2	EnglishWaltz*
3	Slowfox
4	Foxtrot
5	Quickstep
6	TangoArgent
7	Cha Cha
8	Rhumba
9	Samba 2*
10	Conga
11	Pasodoble
12	Jive
13	Rock&Roll 2*
14	Swing*
15	Beguine*
16	Trad. Waltz1*

* The styles with an asterisk (*) alonside appear in more than one group. They can be selected from within any group.

○ : YES
× : NO

	REGISTRATION	REGISTRATION FREEZE group name	ONE TOUCH SETTING	DISK DATA group	MEMORY BACK UP	RECALL group name	FACTORY PRESET
PANEL							
ORGAN FLUTE VOICE	○	VOICE	○	SETUP	○	—	Big Organ
LEAD VOICE	○	VOICE	○	SETUP	○	—	Tenor Sax
RIGHT1 VOICE	○	VOICE	○	SETUP	○	—	GrandPiano 1
RIGHT2 VOICE	○	VOICE	○	SETUP	○	—	Strings 1
LEFT VOICE	○	VOICE	○	SETUP	○	—	Strings 1
RIGHT ORCHESTRA PART SELECT	×	—	×	×	○	—	R1
ROTARY SP. ON/OFF	○	EFFECTS	○	SETUP	○	—	ON
ROTARY SP. SLOW/FAST	○	EFFECTS	○	SETUP	○	—	FAST
ORGAN FLUTE ON/OFF	○	VOICE	○	SETUP	○	—	OFF
LEAD ON/OFF	○	VOICE	○	SETUP	○	—	OFF
RIGHT1 ON/OFF	○	VOICE	○	SETUP	○	—	ON
RIGHT2 ON/OFF	○	VOICE	○	SETUP	○	—	OFF
LEFT ON/OFF	○	VOICE	○	SETUP	○	—	OFF
LEFT HOLD	○	VOICE	○	SETUP	○	—	OFF
HARMONY	○	HARMONY	○	SETUP	○	—	OFF
SUSTAIN	○	VOICE	○	SETUP	○	—	OFF
TOUCH RESPONSE	○	VOICE	○	SETUP	○	—	ON
REVERB	○	EFFECTS	○	SETUP	○	—	ON
CHORUS	○	EFFECTS	○	SETUP	○	—	ON
DSP EFFECT	○	EFFECTS	○	SETUP	○	—	ON
REGISTRATION							
NUMBER	×	—	×	×	×	—	—
BANK	×	—	×	×	×	—	1
FREEZE	×	—	×	×	○	—	OFF
STYLE	○	ACCOMP.	×	SETUP	○	—	Eurobeat
ACCOMP. DIRECTOR							
FADE IN/OUT	×	—	×	×	×	—	OFF
INTRO A/FILL to A	×	—	×	×	×	—	OFF
INTRO B/FILL to B	×	—	×	×	×	—	OFF
MAIN A,MAIN B	○	ACCOMP.	×	SETUP	○	—	MAIN A
ENDING/rit.	×	—	×	×	×	—	OFF
SYNCHRO START	×	—	×	×	×	—	OFF
ARRANGER							
PHRASE	○	ACCOMP.	○	SETUP	○	—	ON
PAD	○	ACCOMP.	○	SETUP	○	—	ON
CHORD	○	ACCOMP.	○	SETUP	○	—	ON
BASS	○	ACCOMP.	○	SETUP	○	—	ON
RHYTHM	○	ACCOMP.	○	SETUP	○	—	ON
ABC	○	ACCOMP.	○	SETUP	○	—	ON
ONE TOUCH SETTING	×	—	×	×	×	—	—
MULTI PAD SELECT	○	MULTI PAD	×	SETUP	○	—	PHRASE/ CHORD
TEMPO	○	TEMPO	○	SETUP	○	—	122
LIST HOLD	×	—	×	×	×	—	OFF
SONG PLAY	×	—	×	×	×	—	OFF
SONG RECORD	×	—	×	×	×	—	OFF
CUSTOM VOICE EDIT	×	—	×	×	×	—	OFF
CUSTOM ACCOMP. REC	×	—	×	×	×	—	OFF
FUNCTION	×	—	×	×	×	—	OFF
DISK	×	—	×	×	×	—	OFF
MIXER							
MAIN							
ORGAN FLUTE	○	VOICE	○	SETUP	○	×	100
LEAD	○	VOICE	○	SETUP	○	×	90
RIGHT1	○	VOICE	○	SETUP	○	×	80
RIGHT2	○	VOICE	○	SETUP	○	×	80
LEFT	○	VOICE	○	SETUP	○	×	60
ACCOMP.	○	ACCOMP.	○	SETUP	○	×	100
MULTI PAD	○	MULTI PAD	×	SETUP	○	×	100
SONG	○	SONG	×	SETUP	○	×	100

	REGISTRATION	REGISTRATION FREEZE group name	ONE TOUCH SETTING	DISK DATA group	MEMORY BACK UP	RECALL group name	FACTORY PRESET
ACCOMPANIMENT							
PHRASE1	O	ACCOMP.	O	SETUP	O	×	100
PHRASE2	O	ACCOMP.	O	SETUP	O	×	100
PAD	O	ACCOMP.	O	SETUP	O	×	100
CHORD1	O	ACCOMP.	O	SETUP	O	×	100
CHORD2	O	ACCOMP.	O	SETUP	O	×	100
BASS	O	ACCOMP.	O	SETUP	O	×	100
RHYTHM1	O	ACCOMP.	O	SETUP	O	×	100
RHYTHM2	O	ACCOMP.	O	SETUP	O	×	100
TRANSPOSE	O	TRANSPOSE	×	SETUP	O	×	0
TUNE	×	—	×	SETUP	O	×	440.0Hz
EQ.							
TYPE	O	EQUALIZER	O	SETUP	O	×	STANDARD
USER LOW GAIN	O	EQUALIZER	O	SETUP	O	×	2
USER LOW-MID GAIN	O	EQUALIZER	O	SETUP	O	×	0
USER MID GAIN	O	EQUALIZER	O	SETUP	O	×	0
USER MID-HI GAIN	O	EQUALIZER	O	SETUP	O	×	0
USER HI GAIN	O	EQUALIZER	O	SETUP	O	×	4
O.T.S.							
NUMBER for each style	×	—	×	SETUP	O	×	1
TEMPO SET ON/OFF	×	—	×	SETUP	O	×	ON
LANGUAGE	×	—	×	SETUP	O	×	ENGLISH
F1							
SCALE							
SCALE	O	SCALE	O	SETUP	O	×	EQUAL TEM-PERAMENT
TUNE (NOTE:C)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:Db)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:D)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:Eb)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:E)	O	SCALE	O	SETUP	O	SCALE	-50
TUNE (NOTE:F)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:F#)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:G)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:Ab)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:A)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:Bb)	O	SCALE	O	SETUP	O	SCALE	0
TUNE (NOTE:B)	O	SCALE	O	SETUP	O	SCALE	-50
SCALE CURVE	O	SCALE	O	SETUP	O	×	FLAT
VOICE PART							
PART TUNE MODE	O	VOICE	O	SETUP	O	×	AUTO
TUNE (ORGAN FLUTE)	O	VOICE	O	SETUP	O	×	0cent
TUNE (LEAD)	O	VOICE	O	SETUP	O	×	+3cent
TUNE (RIGHT1)	O	VOICE	O	SETUP	O	×	0cent
TUNE (RIGHT2)	O	VOICE	O	SETUP	O	×	-3cent
TUNE (LEFT)	O	VOICE	O	SETUP	O	×	0cent
OCTAVE (ORGAN FLUTE)	O	VOICE	O	SETUP	O	×	0
OCTAVE (LEAD)	O	VOICE	O	SETUP	O	×	0
OCTAVE (RIGHT1)	O	VOICE	O	SETUP	O	×	0
OCTAVE (RIGHT2)	O	VOICE	O	SETUP	O	×	0
OCTAVE (LEFT)	O	VOICE	O	SETUP	O	×	0
PAN (ORGAN FLUTE)	O	VOICE	O	SETUP	O	×	CENTER
PAN (LEAD)	O	VOICE	O	SETUP	O	×	CENTER
PAN (RIGHT1)	O	VOICE	O	SETUP	O	×	CENTER
PAN (RIGHT2)	O	VOICE	O	SETUP	O	×	CENTER
PAN (LEFT)	O	VOICE	O	SETUP	O	×	CENTER
F2							
SPLIT POINT (ABC)	O	ACCOMP.	O	SETUP	O	×	F#2/G2
SPLIT POINT (LEFT)	O	VOICE	O	SETUP	O	×	F#2/G2
ABC MODE	O	ACCOMP.	×	SETUP	O	×	FINGERED 1
AUTO MUTE	O	ACCOMP.	×	SETUP	O	×	ON
MANUAL MIDI BASS VOICE	O	ACCOMP.	×	SETUP	O	×	AcousticBass
M.PAD REPEAT	O	MULTI PAD	×	SETUP	O	×	PHRASE: OFF, CHORD: ON
M.PAD CHORD MATCH	O	MULTI PAD	×	SETUP	O	×	M.PAD1/2:OFF, M.PAD3/4:ON

	REGISTRATION	REGISTRATION FREEZE group name	ONE TOUCH SETTING	DISK DATA group	MEMORY BACK UP	RECALL group name	FACTORY PRESET
F3							
FOOT VOLUME TYPE	O	CONTROLLER	×	SETUP	O	×	MASTER
FOOT VOLUME ASSIGN	O	CONTROLLER	×	SETUP	O	×	ALL ON
FOOT SW1 TYPE	O	CONTROLLER	×	SETUP	O	×	SUSTAIN
SUSTAIN ASSIGN for FOOT SW1/2, SUSTAIN BUTTON	O	CONTROLLER	O	SETUP	O	×	ALL ON
SOSTENUTO ASSIGN for FOOT SW1/2	O	CONTROLLER	×	SETUP	O	×	ALL ON
SOFT ASSIGN for FOOT SW1/2	O	CONTROLLER	×	SETUP	O	×	ALL ON
PERCUSSION for FOOT SW1	O	CONTROLLER	×	SETUP	O	×	01 STANDARD KIT/ 37 CrashCy1
FOOT SW2 TYPE	O	CONTROLLER	×	SETUP	O	×	TAP TEMPO
PERCUSSION for FOOT SW2	O	CONTROLLER	×	SETUP	O	×	01 STANDARD KIT/ 24 Kick H
PITCH BEND WHEEL ASSIGN	O	CONTROLLER	O	SETUP	O	×	ALL ON
MODULATION WHEEL ASSIGN	O	CONTROLLER	O	SETUP	O	×	ALL ON
INITIAL TOUCH SENS.	O	CONTROLLER	O	SETUP	O	×	NORMAL
INITIAL TOUCH ASSIGN	O	CONTROLLER	O	SETUP	O	×	ALL ON
INITIAL TOUCH OFF LEVEL	O	CONTROLLER	O	SETUP	O	×	70
AFTER TOUCH SENS.	O	CONTROLLER	O	SETUP	O	×	NORMAL
AFTER TOUCH PART	O	CONTROLLER	O	SETUP	O	×	LEAD: ON ORGAN FL,R1, R2,LEFT: OFF
F5							
REVERB DEPTH (ORGAN FLUTE, LEAD,R1,R2,LEFT)	O	VOICE	O	SETUP	O	×	ALL PARTS 50
REVERB DEPTH (ACMP/SONG)	O	ACCOMP.	O	SETUP	O	×	50
REVERB DEPTH (M.PAD)	O	MULTI PAD	O	SETUP	O	×	50
REVERB DEPTH (MIC)	O	MIC	×	SETUP	O	×	50
REVERB TYPE	O	EFFECTS	×	SETUP	O	×	HALL 1
REVERB PARAMETER 1~5	O	EFFECTS	×	SETUP	O	×	TYPE default
CHORUS DEPTH (LEAD, R1, R2, LEFT, ACMP, M.PAD)	O	VOICE	O	SETUP	O	×	ALL PARTS 50
CHORUS DEPTH (MIC)	O	MIC	×	SETUP	O	×	0
EFFECT PRIORITY	O	EFFECTS	O	SETUP	O	×	RIGHT1
EFFECT DEPTH (LEAD, R2,LEFT, ACMP,M.PAD)	O	EFFECTS	O	SETUP	O	×	0
EFFECT DEPTH (RIGHT1)	O	EFFECTS	O	SETUP	O	×	33
EFFECT DEPTH (MIC)	O	EFFECTS	O	SETUP	O	×	0
EFFECT TYPE	O	EFFECTS	O	SETUP	O	×	Stage 2
EFFECT PARAMETER 1~5	O	EFFECTS	O	SETUP	O	×	TYPE default
F6							
HARMONY TYPE	O	HARMONY	O	SETUP	O	×	2 Trio
HARMONY VOLUME	O	HARMONY	O	SETUP	O	×	50
REGISTRATION NAME	O	—	O	REGISTRATION	O	×	Registration
REGISTRATION FREEZE GROUP	×	—	×	SETUP	O	×	ACCOMP, TEMPO:ON, OTHERS:OFF
F7							
MEMORY BACK UP	×	—	×	—	O*2	×	OFF
DISPLAY- MIDI BANK SEL. & PROG. CHANGE #	×	—	×	SETUP	O	×	OFF
TIME OUT (LIST,MESSAGE)	×	—	×	SETUP	O	×	3

	REGISTRATION	REGISTRATION FREEZE group name	ONE TOUCH SETTING	DISK DATA group	MEMORY BACK UP	RECALL group name	FACTORY PRESET
F8							
LOCAL CONTROL (ORGAN FLUTE, LEAD, R1, R2, LEFT, ACMP, M.PAD)	×	—	×	SETUP	O	×	ALL PARTS ON
CLOCK	×	—	×	SETUP	O	×	INTERNAL
TRANSPOSE TRANSMIT	×	—	×	SETUP	O	×	OFF
TRANSPOSE RECEIVE	×	—	×	SETUP	O	×	ON
START/STOP TRANS.	×	—	×	SETUP	O	×	ON
START/STOP RECEIVE	×	—	×	SETUP	O	×	ON
EXCLUSIVE TRANS.	×	—	×	SETUP	O	×	ON
EXCLUSIVE RECEIVE	×	—	×	SETUP	O	×	ON
TRNS. CH1 PART,SWITCH	×	—	×	SETUP	O	×	LEAD,ALL ON
TRNS. CH2 PART,SWITCH	×	—	×	SETUP	O	×	RIGHT1,ALL ON
TRNS. CH3 PART,SWITCH	×	—	×	SETUP	O	×	RIGHT2,ALL ON
TRNS. CH4 PART,SWITCH	×	—	×	SETUP	O	×	LEFT,ALL ON
TRNS. CH5 PART,SWITCH	×	—	×	SETUP	O	×	ORGAN FLUTE, ALL ON
TRNS. CH6~16 PART,SWITCH	×	—	×	SETUP	O	×	OFF,ALL OFF
RECEIVE CH1~16 MODE, SWITCH	×	—	×	SETUP	O	×	MULTI,ALL ON
PANEL CONTROL	×	—	×	SETUP	O	×	*1
DATA							
SONG	×	—	×	(DISK DIRECT)	×	—	—
ORGAN FLUTE	1TYPE	—	1TYPE	ORGAN FLUTE	O*2	ORGAN FLUTE	default data
CUSTOM STYLE	×	—	×	CUSTOM STYLE	O*2	×	default (some of preset)
CUSTOM VOICE	×	—	×	CUSTOM VOICE	O*2	×	default (some of preset)
WAVE for CUSTOM VOICE	×	—	×	CUSTOM VOICE	O*2	×	NO DATA
REGISTRATION	—	—	×	REGISTRATION	O*2	×	default (1data)
MULTI PAD	×	—	×	MULTI PAD	O*2	MULTI PAD	default data
F4 STYLE REVOICE	×		×	STYLE REVOICE	O*2	STYLE REVOICE	default (preset)

*1 MIDI PANEL CONTROL default

NOTE C-2 ~ B0, D♭2 ~ G8 :OFF

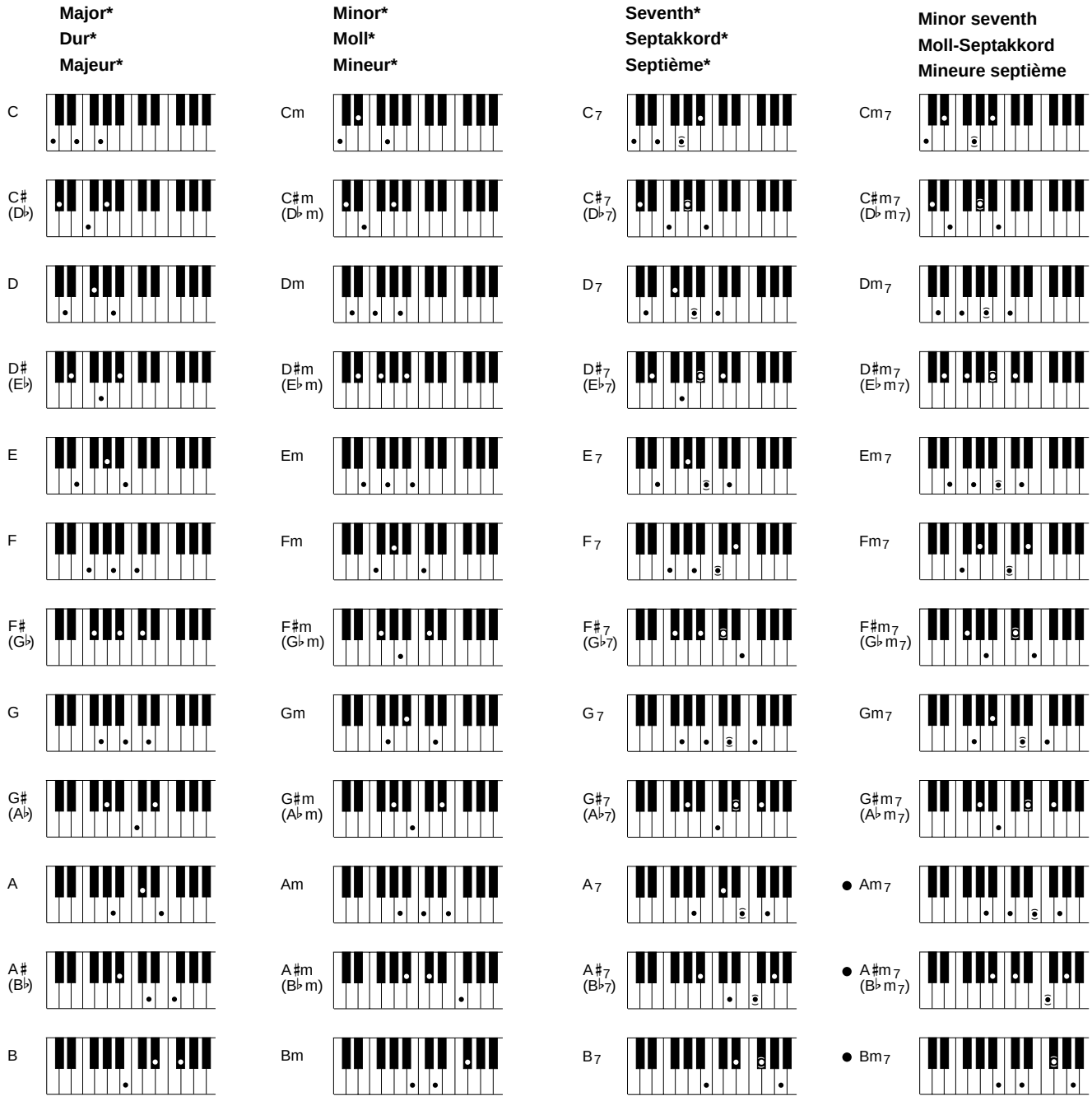
NOTE C1 :START/STOP D♭1 :INTRO/FILL A D1 :INTRO/FILL B
E♭1 :ENDING/rit. E1 :REGIST+ F1 :REGIST-
F♯1 :ROTARY SP G1 :HARMONY A♭1 :CHD C
A1 :CHD F7 B♭1 :CHD G B1 :CHD G7
C2 :FADE IN/OUT

*2 This data is backed up irrespective of F7 BACK UP=ON /OFF.

Fingering Chart • Akkordliste • Tablature

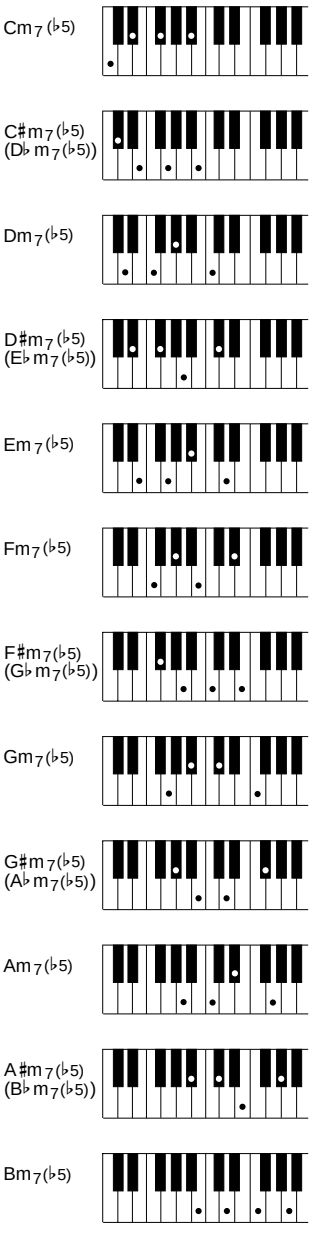
- *Notes in parentheses ( ) can be omitted.*
- *Chord types marked with an asterisk (*) can be played in any inversion (i.e. the root does not have to be the lowest note in the chord).*
- *If you play any three adjacent keys (including black keys), the chord sound will be canceled and only the rhythm instruments will continue playing (CHORD CANCEL function).*
- *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).*
- *Wenn Sie drei nebeneinanderliegende Tasten (weiße und schwarze Tasten) anschlagen, wird die Akkordbegleitung unterdrückt, so daß lediglich der Rhythmus zu hören ist.*
- *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.*

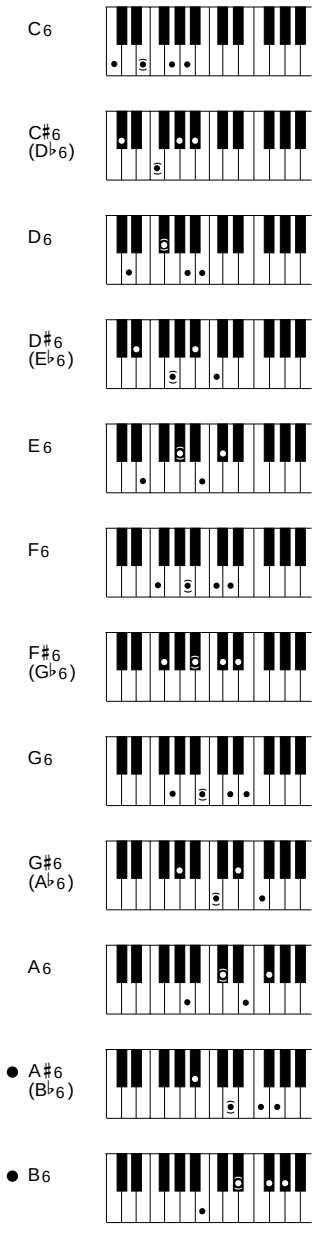


- *Les notes entre parenthèses ( ) peuvent être omises.*
- *Les accords marqués d'un astérisque (*) peuvent être joués dans n'importe qu'elle inversion (il n'est pas nécessaire que la note fondamentale de l'accord soit la note la plus basse).*
- *Si vous jouez trois touches adjacentes (y compris les touches noires), le son de la partie accords sera annulé et seuls les instruments rythmiques continueront à jouer (fonction CHORD CANCEL, annulation d'accord).*
- *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.*

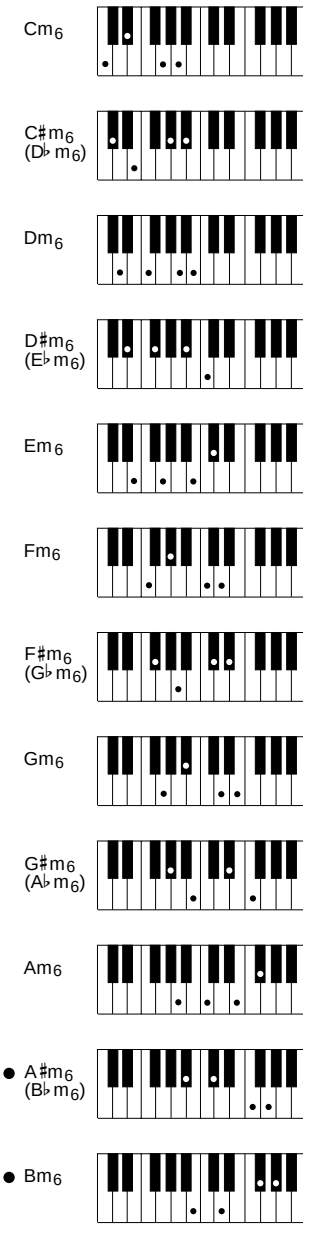
Minor seventh flatted fifth
Moll-Septakkord mit verminderter Quinte
Quinte diminuée sur mineure septième



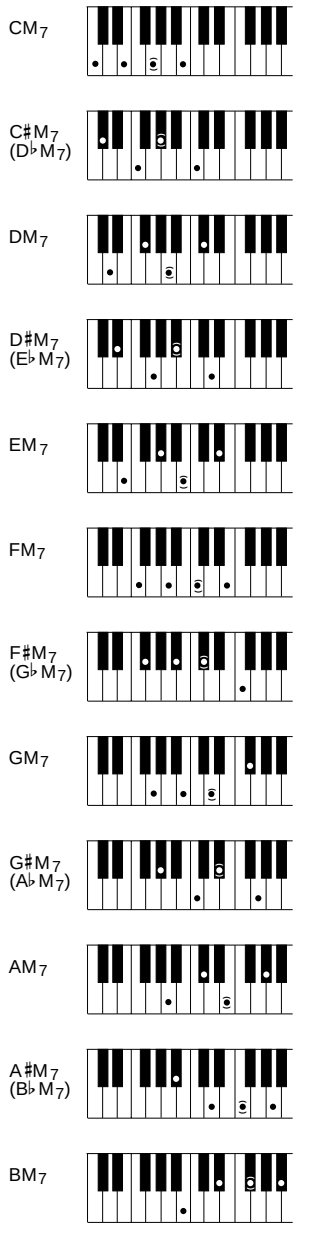
Sixth
Dur-Akkord mit hinzugefügter Sexte
Sixte



Minor sixth
Moll-Akkord mit hinzugefügter Sexte
Mineure sixte



Major seventh*
Dur-Akkord mit großer Septime*
Majeure septième*



	Suspended fourth **Vorgehaltene Quarte** **Quarte sur sensible**	**Augmented** **Übermäßig** **Augmenté**	**Diminished*** **Vermindert*** **Diminué***	**Seventh suspended fourth** **Dur-Septakkord mit vorgehaltener Quarte** **Quarte sur septième sensible**
	Csus4	Caug	Cdim	C7sus4
	C♯sus4 (D♭sus4)	C♯aug (D♭aug)	C♯dim (D♭dim)	C♯7sus4 (D♭7sus4)
	Dsus4	Daug	Ddim	D7sus4
	D♯sus4 (E♭sus4)	D♯aug (E♭aug)	D♯dim (E♭dim)	D♯7sus4 (E♭7sus4)
	Esus4	Eaug	Edim	E7sus4
	Fsus4	Faug	Fdim	F7sus4
	F♯sus4 (G♭sus4)	F♯aug (G♭aug)	F♯dim (G♭dim)	F♯7sus4 (G♭7sus4)
	Gsus4	Gaug	Gdim	G7sus4
	G♯sus4 (A♭sus4)	G♯aug (A♭aug)	G♯dim (A♭dim)	G♯7sus4 (A♭7sus4)
	Asus4	Aaug	Adim	● A7sus4
	A♯sus4 (B♭sus4)	A♯aug (B♭aug)	A♯dim (B♭dim)	● A♯7sus4 (B♭7sus4)
	Bsus4	● Baug	Bdim	● B7sus4

Diminished seventh
Verminderter Septakkord
Septième diminuée

Cdim7
C♯dim7 (D♭dim7)
Ddim7
D♯dim7 (E♭dim7)
Edim7
Fdim7
F♯dim7 (G♭dim7)
Gdim7
G♯dim7 (A♭dim7)
Adim7
● A♯dim7 (B♭dim7)
● Bdim7

Seventh flatted fifth
Dur-Septakkord mit verminderter Quinte
Quinte diminuée en septième

C7(♭5)
C♯7(♭5) (D♭7(♭5))
D7(♭5)
D♯7(♭5) (E♭7(♭5))
E7(♭5)
F7(♭5)
F♯7(♭5) (G♭7(♭5))
G7(♭5)
G♯7(♭5) (A♭7(♭5))
● A7(♭5)
● A♯7(♭5) (B♭7(♭5))
● B7(♭5)

Minor major seventh*
Moll-Akkord mit großer Septime*
Septième majeure sur mineur*

CmM7
C♯mM7 (D♭mM7)
DmM7
D♯mM7 (E♭mM7)
EmM7
FmM7
F♯mM7 (G♭mM7)
GmM7
G♯mM7 (A♭mM7)
AmM7
A♯mM7 (B♭mM7)
BmM7

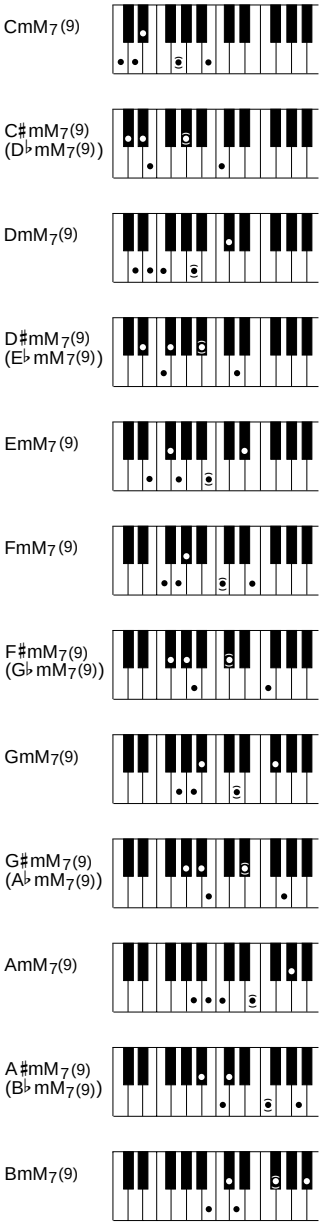
Seventh augmented*
Übermäßiger Dur-Septakkord*
Septième augmentée*

C7aug
C♯7aug (D♭7aug)
D7aug
D♯7aug (E♭7aug)
E7aug
F7aug
F♯7aug (G♭7aug)
G7aug
G♯7aug (A♭7aug)
A7aug
A♯7aug (B♭7aug)
B7aug

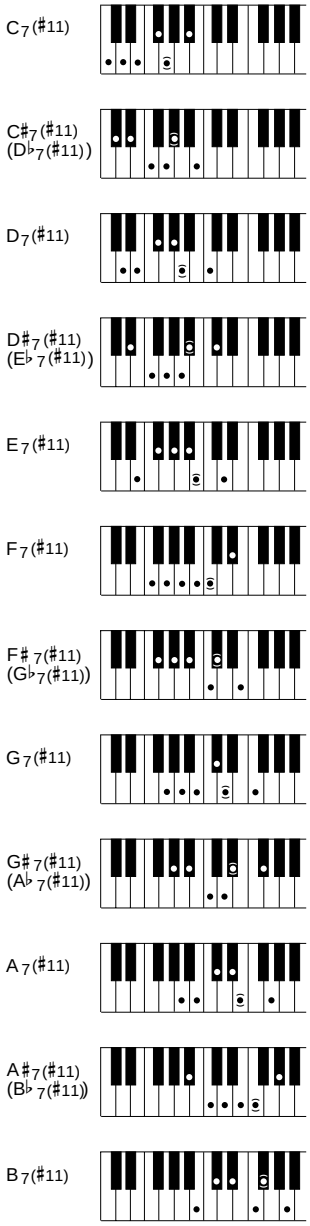
	Seventh ninth* **Dur-Septakkord mit None*** **Neuvième sur septième***	**Minor added ninth*** **Moll-Septakkord mit hinzugefügter None*** **Neuvième sur mineure***	**Minor seventh ninth*** **Moll-Septakkord mit None*** **Neuvième sur septième mineure***	**Major seventh sharp eleventh*** **Dur-Akkord mit großer Septime und übermäßiger Undezime*** **Septième majeure onzième dièse***
C	$C_7(9)$	$Cm(9)$	$Cm_7(9)$	$CM_7(\sharp11)$
C♯	$C\sharp_7(9)$ ($D\flat_7(9)$)	$C\sharp m(9)$ ($D\flat m(9)$)	$C\sharp m_7(9)$ ($D\flat m_7(9)$)	$C\sharp M_7(\sharp11)$ ($D\flat M_7(\sharp11)$)
D	$D_7(9)$	$Dm(9)$	$Dm_7(9)$	$DM_7(\sharp11)$
D♯	$D\sharp_7(9)$ ($E\flat_7(9)$)	$D\sharp m(9)$ ($E\flat m(9)$)	$D\sharp m_7(9)$ ($E\flat m_7(9)$)	$D\sharp M_7(\sharp11)$ ($E\flat M_7(\sharp11)$)
E	$E_7(9)$	$Em(9)$	$Em_7(9)$	$EM_7(\sharp11)$
F	$F_7(9)$	$Fm(9)$	$Fm_7(9)$	$FM_7(\sharp11)$
F♯	$F\sharp_7(9)$ ($G\flat_7(9)$)	$F\sharp m(9)$ ($G\flat m(9)$)	$F\sharp m_7(9)$ ($G\flat m_7(9)$)	$F\sharp M_7(\sharp11)$ ($G\flat M_7(\sharp11)$)
G	$G_7(9)$	$Gm(9)$	$Gm_7(9)$	$GM_7(\sharp11)$
G♯	$G\sharp_7(9)$ ($A\flat_7(9)$)	$G\sharp m(9)$ ($A\flat m(9)$)	$G\sharp m_7(9)$ ($A\flat m_7(9)$)	$G\sharp M_7(\sharp11)$ ($A\flat M_7(\sharp11)$)
A	$A_7(9)$	$Am(9)$	$Am_7(9)$	$AM_7(\sharp11)$
A♯	$A\sharp_7(9)$ ($B\flat_7(9)$)	$A\sharp m(9)$ ($B\flat m(9)$)	$A\sharp m_7(9)$ ($B\flat m_7(9)$)	$A\sharp M_7(\sharp11)$ ($B\flat M_7(\sharp11)$)
B	$B_7(9)$	$Bm(9)$	$Bm_7(9)$	$BM_7(\sharp11)$

	Added ninth* **Hinzugefügte None*** **Neuvième ajoutée***	**Major seventh ninth*** **Dur-Akkord mit großer Septime und None*** **Neuvième sur septième majeure***	**Six ninth** **Dur-Akkord mit Sexte und None** **Neuvième sur sixte majeure**	**Minor seventh eleventh** **Moll-Septakkord mit Unidezime** **Onzième sur septième mineure**
	Cadd9	CM7(9)	C6(9)	Cm7(11)
	C♯add9 (D♭add9)	C♯M7(9) (D♭M7(9))	C♯6(9) (D♭6(9))	C♯m7(11) (D♭m7(11))
	Dadd9	DM7(9)	D6(9)	Dm7(11)
	D♯add9 (E♭add9)	D♯M7(9) (E♭M7(9))	D♯6(9) (E♭6(9))	D♯m7(11) (E♭m7(11))
	Eadd9	EM7(9)	E6(9)	Em7(11)
	Fadd9	FM7(9)	F6(9)	Fm7(11)
	F♯add9 (G♭add9)	F♯M7(9) (G♭M7(9))	F♯6(9) (G♭6(9))	F♯m7(11) (G♭m7(11))
	Gadd9	GM7(9)	G6(9)	Gm7(11)
	G♯add9 (A♭add9)	G♯M7(9) (A♭M7(9))	G♯6(9) (A♭6(9))	G♯m7(11) (A♭m7(11))
	Aadd9	AM7(9)	A6(9)	● Am7(11)
	A♯add9 (B♭add9)	A♯M7(9) (B♭M7(9))	● A♯6(9) (B♭6(9))	● A♯m7(11) (B♭m7(11))
	Badd9	BM7(9)	● B6(9)	● Bm7(11)

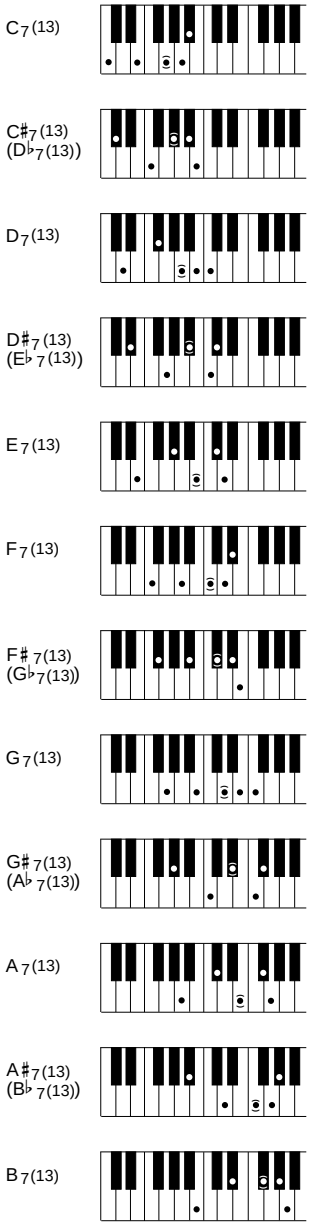
Minor major seventh ninth*
Moll-Akkord mit großer Septime und None*
Neuvième sur septième majeure sur mineur*



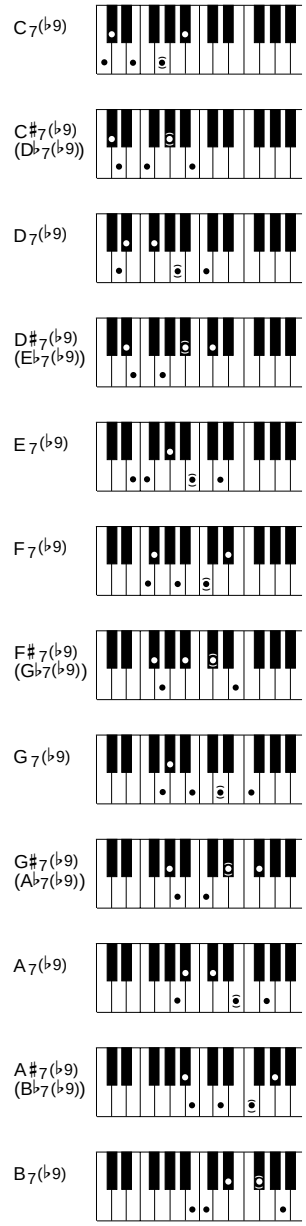
Seventh sharp eleventh*
Dur-Septakkord mit übermäßiger Unidezime*
Septième onzième dièse*



Seventh added thirteenth*
Dur-Septakkord mit hinzugefügter Tredezime*
Treizième ajoutée sur septième*



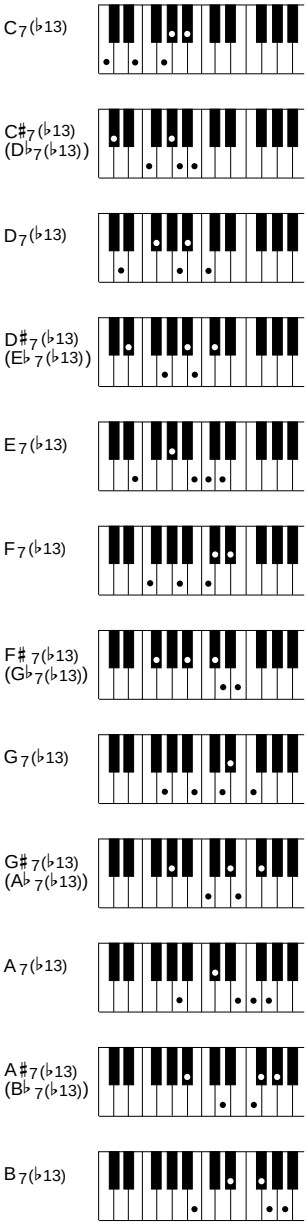
Seventh flatted ninth*
Dur-Septakkord mit verminderter None*
Neuvième diminuée en septième*



Seventh added flatted thirteenth*

Dur-Septakkord mit hinzugefügter verminderter Tredezime*

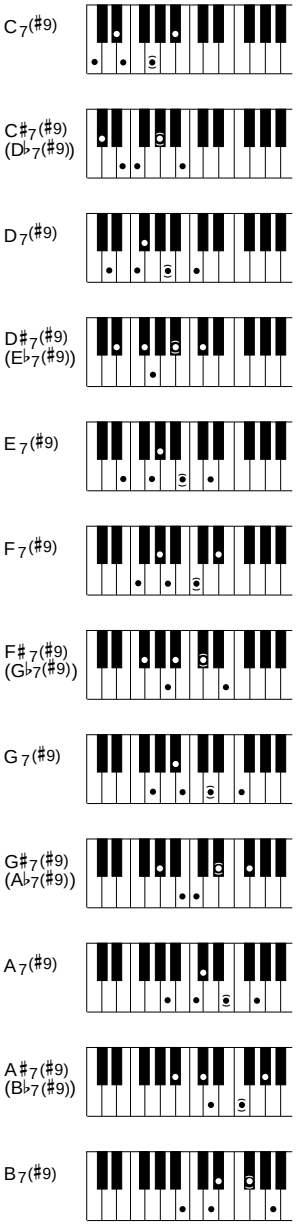
Treizième diminuée ajoutée sur septième*



Seventh sharp ninth*

Dur-Septakkord mit übermäßiger None*

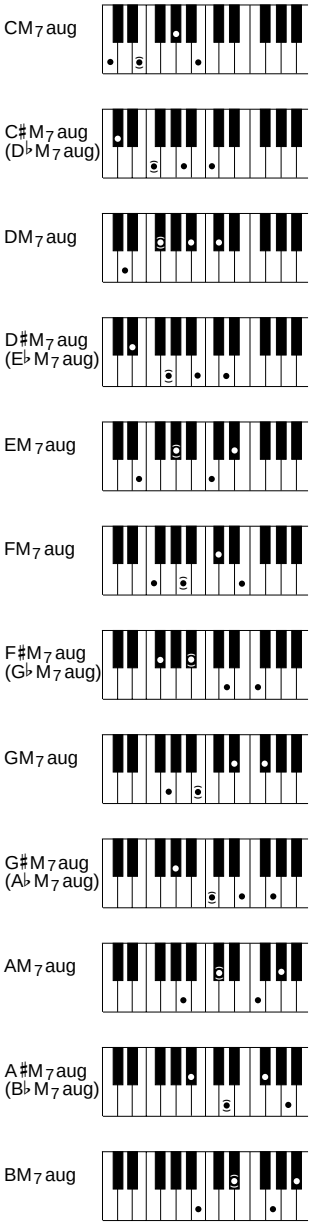
Neuvième dièse sur septième*



Major seventh augmented*

Dur-Akkord mit großer Septime und übermäßiger Quinte*

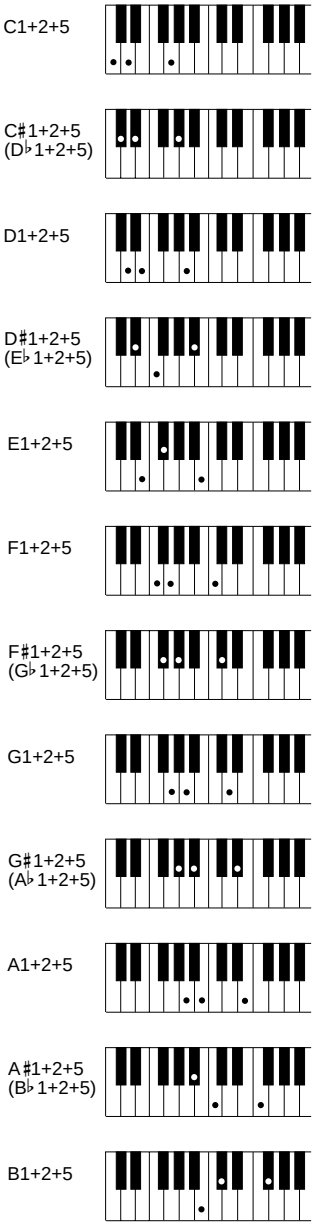
Quinte sur septième majeure augmentée*



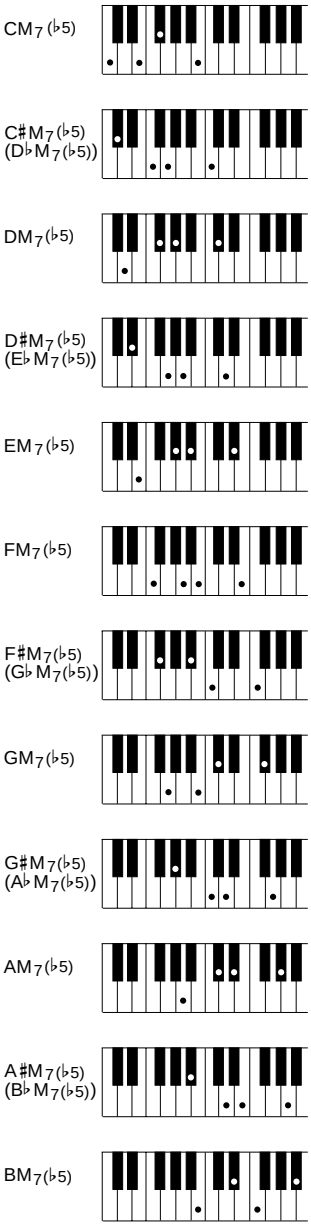
One plus two plus five

Eines plus Zwei plus Fünf

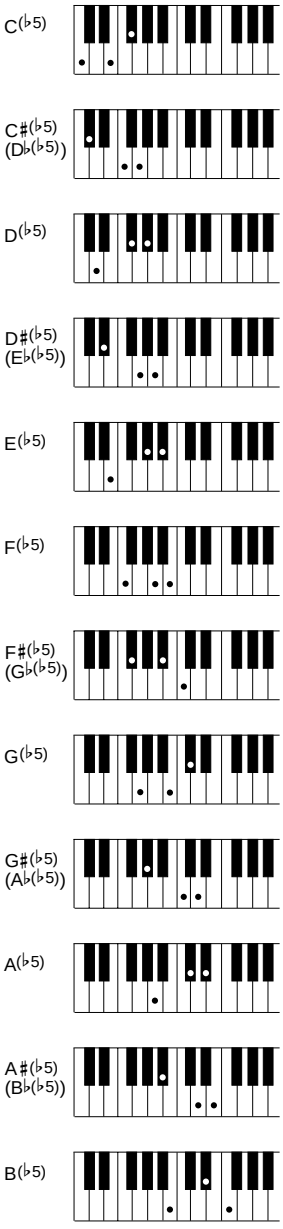
Un + deux + cinq



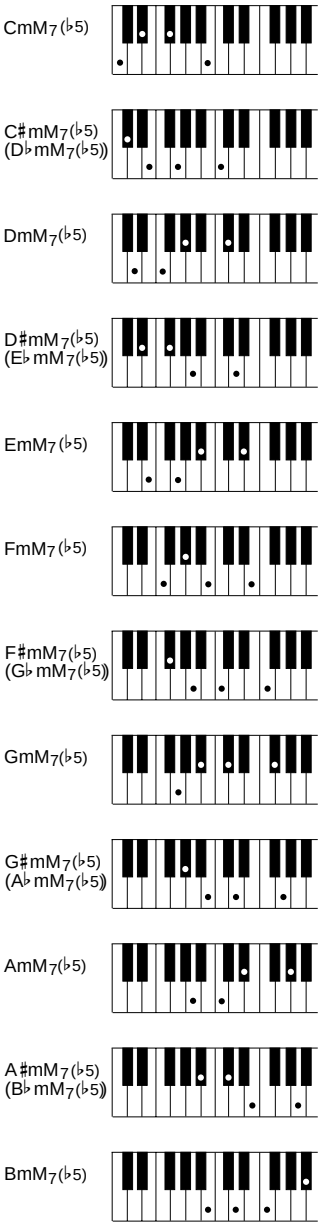
Major seventh flatted fifth*
Dur-Akkord mit großer Septime und verminderter Quinte*
Quinte diminuée sur majeure septième*



Flatted fifth*
Dur-Akkord mit verminderter Quinte*
Quinte diminuée*



Minor major seventh flatted fifth*
Moll-Akkord mit großer Septime und verminderter Quinte*
Quinte diminuée sur septième majeure sur mineur*



1. Hall 1	**2. Hall 2**	**3. Hall 3**	**4. Hall 4**	**5. Room 1**	**6. Room 2**
7. Room 3	**8. Room 4**	**9. Stage 1**	**10. Stage 2**	**11. Plate 1**	**12. Plate 2**

These are all reverberation ("reverb" for short) effects. Reverb is the warm musical "ambience" you experience when listening to music in a hall or other natural environment.

1. **REVERB TIME** Range: 0.3 … 30 sec.
   Sets the amount of time it takes for the reverb sound to decay by 60 dB (virtually to silence).
2. **DIFFUSION** Range: 0 … 10
   Adjusts the left-right "spread" of the reverb sound. The higher the value the greater the spread.
3. **INITIAL DELAY** Range: 0 … 63
   The length of the initial delay before the actual reverb sound begins (in milliseconds). The higher the value the longer the initial delay.
4. **HPF CUTOFF** Range: Thru, 22Hz … 8.0kHz
   The cutoff frequency of the high-pass filter applied to the reverb sound. No filter is applied when set to "Thru".
5. **LPF CUTOFF** Range: 1.0kHz … 18kHz, Thru
   The cutoff frequency of the low-pass filter applied to the reverb sound. No filter is applied when set to "Thru".

13. EaryRef1	**14. EaryRef2**	**15. GateRev.**	**16. RevrsGat**

EaryRef (Early Reflections) effects are created using different groupings of "early reflections" — the first cluster of reflections that occurs after the direct sound but before the dense reflections that are known as reverberation begin.

The GateRev (Gate Reverb) and RevrsGat (Reverse Gate) effects combine reverb with a selectable "gate".

1. **EARLY REF TYPE (EarlyRef1 & 2)** Range: S-H, L-H, RDM, RVS, PLT, SPR
   The "S-H" and "L-H" settings select typical groupings of early reflections that would occur in a small or large hall, respectively. "RDM" (Random) produces an irregular series of reflections that could not occur naturally. "RVS" (Reverse) generates a series of reflections that increase in level — like the effect produced by playing a recorded reverberation sound backwards. "PLT" (Plate) produces a typical grouping of reflections that would occur in a plate reverb unit, and "SPR (Spring) simulates the early reflections of a spring type reverb unit.

1. **GATE TYPE (Gaterev. & RevrsGat)** Range: TYPE A, TYPE B
2. **ROOM SIZE** Range: 0.1 … 7.0
   Sets the separation between reflections. Higher values produce greater separation between reflections, and therefore the effect of a bigger room.
3. **DIFFUSION** Range: 0 … 10
   Adjusts the left-right "spread" of the early reflection or gated reverb sound. The higher the value the greater the spread.
4. **INITIAL DELAY** Range: 0 … 63
   Sets the delay time before the early reflection or gated reverb sound begins.
5. **FEEDBACK LEVEL** Range: –63 … 0 … +63
   Determines the amount of effect-sound feedback returned to the input of the effect stage. Higher negative or positive values produce a more extended effect.

17. Chorus 1	**18. Chorus 2**	**19. Chorus 3**	**20. Chorus 4**	**21. Chorus 5**
22. Flanger1	**23. Flanger2**	**24. Flanger3**	**25. Flanger4**	

The chorus effects combine delay and modulation to effectively thicken and add warmth to the sound.

Flanging is a fairly pronounced effect based primarily on delay time modulation. By adjusting the various parameters you should be able to create an extremely broad range of sounds, from gentle shimmering to wild sweeps.

1. **LFO FREQUENCY** Range: 0 … 127
   Sets the speed of LFO (Low Frequency Oscillator) modulation, and therefore the rate of effect variation.
2. **LFO PM DEPTH** Range: 0 … 127
   Sets the depth of phase modulation. Higher values produce deeper modulation and therefore a more pronounced effect.

3. **FEEDBACK LEVEL** Range: –63 … 0 … +63
   Determines the amount of effect-sound feedback returned to the input of the effect stage. Higher negative or positive values produce a more pronounced effect.
4. **DELAY OFFSET** Range: 0 … 63
   Varies the flanger delay time (the flanger effect is basically produced by modulating the delay time of one signal in relation to another). Shorter delay times produce the greatest effect in the high-frequency range, while longer delay times extend the effect to the middle and lower frequencies.

26. Symphon.

Symphonic is a broad, sweeping effect that adds a sense of scale to the sound.

1. **LFO FREQUENCY** Range: 0 … 127
   Sets the speed of LFO (Low Frequency Oscillator) modulation, and therefore the rate of effect variation.
2. **LFO DEPTH** Range: 0 … 127
   Sets the depth of modulation. Higher values produce deeper modulation and therefore a more pronounced effect.
3. **DELAY OFFSET** Range: 0 … 63
   Varies the symphonic effect delay time (the Symphonic effect is basically produced by modulating the delay time of one signal in relation to another). Shorter delay times produce the greatest effect in the high-frequency range, while longer delay times extend the effect to the middle and lower frequencies.

27. Phaser

A traditional “phaser” effect, producing a gentle phase-shift sound that can be used to add extra animation to your sound.

1. **LFO FREQUENCY** Range: 0 … 127
   Sets the speed of LFO (Low Frequency Oscillator) modulation, and therefore the rate of effect variation.
2. **LFO DEPTH** Range: 0 … 127
   Sets the depth of modulation. Higher values produce deeper modulation and therefore a more pronounced effect.
3. **PHASE SHIFT** Range: 0 … 127
   Sets the phase difference between the left and right channel phaser signals. The larger the value, the greater the “spread” in the sound. A setting of “0” produces a centered effect.
4. **FEEDBACK LEVEL** Range: –63 … 0 … +63
   Determines the amount of effect-sound feedback returned to the input of the effect stage. Higher negative or positive values produce a more pronounced effect.

28. Rot.Sp.1 | 29. Rot.Sp.2 | 30. Rot.Sp.3 | 31. Rot.Sp.4 | 32. Rot.Sp.5

These effects simulate the swirling sound of the rotary speakers often used with electronic organs.

1. **LFO FREQUENCY** Range: 0 … 127
   Sets the speed of LFO (Low Frequency Oscillator) modulation, and therefore the rate of effect variation.
2. **LFO DEPTH** Range: 0 … 127
   Sets the depth of modulation. Higher values produce deeper modulation and therefore a more pronounced effect.

33. Tremolo1 | 34. Tremolo2 | 35. GtrTrem.

Although “tremolo” effects, these effects also include a pitch-modulation depth parameter that can be used to add a touch of vibrato.

1. **LFO FREQUENCY** Range: 0 … 127
   Sets the speed of LFO (Low Frequency Oscillator) modulation, and therefore the rate of effect variation.

2. **AM DEPTH** Range: 0 … 127
   Sets the depth of amplitude modulation. Higher values produce deeper modulation and therefore a more pronounced tremolo effect.
3. **PM DEPTH** Range: 0 … 127
   Sets the depth of pitch modulation. Higher values produce deeper modulation and therefore a more pronounced vibrato effect.

36. Auto Pan

This is a sophisticated pan program that allows creation of "rotary" pan in addition to straightforward pan effects.

1. **LFO DEPTH** Range: 0 … 127
   Sets the overall depth of modulation. Higher values produce deeper modulation and therefore a more pronounced pan sweep.
2. **L/R DEPTH** Range: 0 … 127
   Sets the "depth" of the pan sweep from left to right and right to left.
3. **F/R DEPTH** Range: 0 … 127
   This parameter sets the apparent depth of the sweep from front to rear.
4. **PAN DIRECTION** Range: L◀▶R, L▶R, L◀R, Lturn, Rturn, L/R
   Determines the direction in which the sound sweeps across the stereo sound field.

37. Auto Wah

A fully automatic wah effect that can be set to produce a wide range of sounds.

1. **LFO FREQUENCY** Range: 0 … 127
   Sets the speed of LFO (Low Frequency Oscillator) modulation, and therefore the rate of effect variation.
2. **LFO DEPTH** Range: 0 … 127
   Sets the depth of modulation. Higher values produce deeper modulation and therefore a more pronounced effect.
3. **CUTOFF FREQUENCY** Range: 0 … 127
   Sets the basic frequency around which the wah filter sweep will occur.
4. **RESONANCE** Range: 1 … 12
   Creates a resonant peak at the frequency determined by the CUTOFF FREQUENCY parameter, above. The higher the value the higher the peak, and the more the sound at that frequency is emphasized.

38. DelayLCR | 39. DelayL,R

In the DelayLCR effect, independent delays are provided for the left and right channels, plus a center delay. The DelayL,R variation provides independently programmable delays for the left and right channels.

1. **L CH DELAY**
2. **R CH DELAY**
3. **C CH DELAY** Range: 0.1 … 715 ms
   Set the delay time between the direct sound and the first repeat. Independent parameters are provided for the left ("L CH"), center ("C CH"), and right ("R CH") channels. Only the L CH DELAY and R CH DELAY time parameters are available for the DelayL,R effect.
4. **FEEDBACK DELAY (DelayLCR)**
3. **FEEDBACK DELAY 1 & 4.FEEDBACK DELAY2 (DelayL,R)** Range: 0.1 … 715 ms
   Sets the delay time between repeats. The higher the value the longer the delay. In the DelayL,R effect independent feedback delay parameters are provided for the left and right channels.
5. **FEEDBACK LEVEL** Range: –63 … 0 … +63
   Determines the amount of effect-sound feedback returned to the input of the delay stage. Higher values produce a greater number of repeats.

40. Echo

Although similar to the DelayL,R effect, Echo features independent feedback level parameters for the left and right channels, plus a "high damp" parameter that simulates the high-frequency damping characteristics of most natural acoustic environments.

1. **L CH DELAY**
3. **R CH DELAY** Range: 0.1 … 715 ms
   Set the delay time between the direct sound and the first repeat. Independent parameters are provided for the left ("L CH") and right ("R CH") channels.
2. **L CH FB LEVEL**
4. **R CH FB LEVEL** Range: –63 … 0 … +63
   Determine the amount of effect-sound feedback returned to the input of the corresponding delay stage channel: L CH FB LEVEL for the left channel and R CH FB LEVEL for the right channel. Higher values produce a greater number of repeats.
5. **HIGH DAMP** Range: 0.1 … 1
   Produces a natural decay in the high-frequency components of subsequent repeats. The lower the value the faster and more pronounced the drop-off in high-frequencies.

41. CrossDly

This is a "cross delay" effect in which the repeats from a sound in one channel are produced in the opposite channel.

1. **L→R DELAY**
2. **R→L DELAY** Range: 0.1 … 355 ms
   The L→R DELAY and R→L DELAY parameters independently set the delay times for repeats crossing from left to right, and from right to left, respectively.
3. **FEEDBACK LEVEL** Range: –63 … 0 … +63
   Determines the amount of effect-sound feedback returned to the input of the delay stage. Higher values produce a greater number of repeats.
4. **INPUT SELECT** Range: L, R, L&R
   Selects the first channel to be delayed ("L", "R"), or both channels simultaneously ("L&R").
5. **HIGH DAMP** Range: 0.1 … 1
   Produces a natural decay in the high-frequency components of subsequent repeats. The lower the value the faster and more pronounced the drop-off in high-frequencies.

42. DistHARD | 43. DistSOFT

Two distortion effects that can drastically alter you sound.

1. **DRIVE** Range: 0 … 127
   Sets the intensity of the distortion effect. Higher values produce more distortion.
2. **AMP TYPE** Range: OFF, STACK, COMBO, TUBE
   Simulates a variety of amplifier types via which the distortion sound might be reproduced.

OFF	Flat amp — the sound of a "direct feed" to a recording or sound reinforcement console.
STACK	The powerful, expansive sound of "stackable" speaker cabinets.
COMBO	A single 12" speaker unit in a compact enclosure.
TUBE	Simulates the warm, relatively "soft" distortion produced by vacuum tube amplifiers.

3. **LPF CUTOFF** RANGE: 1.0kHz … 18kHz, Thru
   The cutoff frequency of the low-pass filter applied to the distortion sound. No filter is applied when set to "Thru".
4. **OUTPUT LEVEL** Range: 0 … 127
   Sets the output level of the distortion sound. Higher values produce higher level.

44. EQ DISCO	45. EQ TEL.

Both of these effects are based on a two-band equalizer with independent high and low frequency and gain parameters.

1. **EQ LOW FREQUENCY** Range: 50Hz … 2.0kHz
   Sets the boost/cut frequency of the low equalizer.
2. **EQ LOW GAIN** Range: –12dB … 0dB … +12dB
   Sets the amount of boost or cut applied to the low-band frequencies. A setting of "0" produces no boost or cut. Minus values produce cut and plus values produce boost.
3. **EQ HI FREQUENCY** Range: 500Hz … 16kHz
   Sets the boost/cut frequency of the high equalizer band.
4. **EQ HI GAIN** Range: –12dB … 0dB … +12dB
   Sets the amount of boost or cut applied to the high-band frequencies. A setting of "0" produces no boost or cut. Minus values produce cut and plus values produce boost.

46. Karaoke1	47. Karaoke2	48. Karaoke3

The "Karaoke" effects are simple delay effects that simulate the type of "echo" used in most karaoke systems.

1. **DELAY TIME** Range: 0 … 63
   Sets the delay time between the direct sound and the first repeat.
2. **FEEDBACK LEVEL** Range: –63 … 0 … +63
   Determines the amount of effect-sound feedback returned to the input of the delay stage. Higher values produce a greater number of repeats.
3. **HPF CUTOFF** Range: Thru, 22Hz … 8.0kHz
   The cutoff frequency of the high-pass filter applied to the delay sound. No filter is applied when set to "Thru".
4. **LPF CUTOFF** Range: 1.0kHz … 18kHz, Thru
   The cutoff frequency of the low-pass filter applied to the delay sound. No filter is applied when set to "Thru".

49. Distort.	50. OverDriv

Distortion and overdrive effects that can produce distortion ranging from subtle to sizzling.

1. **DRIVE** Range: 0 … 127
   Sets the intensity of the distortion or overdrive effect. Higher values produce more distortion.
2. **EQ LOW FREQUENCY** Range: 50Hz … 2.0kHz
   Sets the boost/cut frequency of the low equalizer.
3. **EQ LOW GAIN** Range: –12dB … 0dB … +12dB
   Sets the amount of boost or cut applied to the low-band frequencies. A setting of "0" produces no boost or cut. Minus values produce cut and plus values produce boost.
4. **LPF CUTOFF** RANGE: 1.0kHz … 18kHz, Thru
   The cutoff frequency of the low-pass filter applied to the distortion sound. No filter is applied when set to "Thru".
5. **OUTPUT LEVEL** Range: 0 … 127
   Sets the output level of the distortion sound. Higher values produce higher level.

51. Unison.	52. 5th Harmo

Both of these effects produce a pitch-changed note in addition to the note played. With the default settings "Unison" produces a note one octave above the original note while "5th Harmony" produces a note one fifth above the original note.

1. PITCH Range: -12 … +12
Sets the pitch of the added note in semitone steps.

2. INITIAL DELAY Range: 0 … 127
Sets the delay between the initial note and the pitch changed note. "0" results in no delay. The higher the value the greater the delay.

3. FINE1

4. FINE2 Range: -50 … +50
These parameters fine tune the pitch of the pitch-changed note. Two FINE parameters are provided to allow "detuning" effects.

5. FEEDBACK GAIN RANGE: -63 … +63
Sets the amount of feedback applied. Feedback allows a series of pitch-changed notes to be produced — the higher the feedback value the greater the number of notes produced.

53. TouchWah	54. Wah+Dist

These are wah effects in which the depth of the wah is controlled by keyboard touch response.

1. SENSITIVITY Range: 0 … 127
Sets the sensitivity of the effect to keyboard touch. The higher the value the greater the sensitivity.

2. CUTOFF FREQUENCY Range: 0 … 127
Sets the cutoff frequency of the wah effect. The higher the value the higher the cutoff frequency.

3. RESONANCE Range: 1 … 12
Sets the level of a resonant peak at the cutoff frequency. Higher values produce greater emphasis at the cutoff frequency.

55. Compressor	56. NoiseGat

The compressor can be used to smooth out level variations when playing voices such as guitar for a "tighter" sound.
The noise gate effectively minimizes hum and noise.
A compressor and noise gate effect with similar parameters.

1. ATTACK Range: 1 ms … 40 ms
Sets the attack time of the compressor/noise gate. Higher values produce a longer attack time.

2. RELEASE Range: 10 ms … 680 ms
Sets the release time of the compressor/noise gate. Higher values produce a longer release time.

3. THRESHOLD Range: -48 dB … -6 dB
Sets the threshold level at which the compressor/noise gate begins to take effect.

4. RATIO (Compressor only) Range: 10 … 20
Sets the compression ratio of the compressor. Higher values produce greater compression..

5. OUTPUT LEVEL Range: 0 … 127
Sets the output level of the effect sound. Higher values produce higher level.

MIDI Implementation Chart • Implementierungstabelle • Table d'implémentation

[PortaTone] Date: 1995. 07. 18
Model: PSR-7000 MIDI Implementation Chart Version: 1.0

Function	Transmitted	Recognized	Remarks
Basic Default	1~16 CH (*1)	1~16 CH (*2)	
Channel Changed	1~16 CH (*1)	1~16 CH (*2)	
Default	3	3	
Mode Messages	×	×	
Altered	**********	×	
Note	0~127	0~127 (*3)	
Number : True voice	**********	0~127	
Velocity Note on	○ 9nH, v=1~127	○ 9nH, v=1~127	
Note off	× 9nH, v=0	×	
After key's	×	×	
Touch Ch's	○	○	
Pitch Bender	○	○	
Control Change 0, 32	○	○	Bank select MSB, LSB (*4)
1	○	○	Modulation
6, 38	○	○	Data entry MSB, LSB
7	○	○	Volume
10	○	○	Pan
11	○	○	Expression
64	○	○	Sustain
66	○	○	Sostenuto
67	○	○	Soft pedal
71	× (*5)	○	Harmonic content
72	× (*5)	○	Release time
73	× (*5)	○	Attack time
74	× (*5)	○	Brightness
84	× (*5)	○	Portamento control
91	○	○	Reverb send level
93	○	○	Chorus send level
94	○	○	Variation effect send level
96, 97	×	○	Data increment, decrement
98, 99	× (*5)	○	NRPN LSB, MSB (*6)
100, 101	○	○	RPN LSB, MSB (*7)
120	×	○	All sound off
121	×	○	Reset all controllers (*8)
Program	○ 0~127	○ 0~127	
Change : True #	**********	0~127	
System Exclusive	○	○	(*9)
System : Song Position	×	×	
: Song Select	×	×	
Common : Tune	×	×	
System : Clock	○	○	
Real Time : Commands	○	○	
Aux : Local ON/OFF	×	×	
: All Notes Off	○	○ (123 – 127)	
Messages : Active Sense	○	○	
: Reset	×	×	

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○: Yes
Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×: No

*1 The RIGHT1, RIGHT2, LEAD, LEFT, ORGAN FLUTE, HARMONY, MULTI PAD, and ACCOMPANIMENT parts can be independently transmitted via the panel controls.

*2 The tone generator normally functions as a 16-channel multi-timbre tone generator in response to MIDI input. MIDI messages therefore do not normally affect the panel voices or other panel settings. The MIDI messages listed below, however, do affect the panel voice, style, multi pad, and song settings:

- MIDI master tuning, MIDI master volume, MASTER TRANSPOSE.
- Drum setup-related exclusive messages.
- System exclusive messages which change the reverb, chorus, or DSP effect settings.

The KEYBOARD mode can be selected via panel control. Note on/off messages received on KEYBOARD MODE channels are handled in the same way as note on/off data from the internal keyboard.
Only the following channel messages are recognized in this mode:

- Key on/key off.
- Control change: bank select (RIGHT1 only), modulation, main volume, (RIGHT1 only), expression, sustain.
- Program change (RIGHT1 only).
- Pitch bend, all notes off.

*3 Limited to the range 21…108 on KEYBOARD MODE channels.

*4 BANK SELECT MSB

MSB 00H	LSB 00H	Preset GM tone generator.
MSB 00H	LSB 70H~7FH	Non-GM preset panel voices.
MSB 6FH	LSB 00H~11H	ORGAN FLUTE voices.
MSB 6FH	LSB 60H~7FH	Custom voice orchestra voices.
MSB 7FH	LSB 00H	Preset drum kit voices.
MSB 7FH	LSB 6FH	Custom voice drum kit voices.

Channel 10 is reserved for drum kit voices after a GM ON message is received.
No voice change occurs when only a bank change message is received. The latest bank change message is applied when a program change message is received.

*5 These Control Change messages are not transmitted by the PSR-7000 panel operation, but may be transmitted by the accompaniment style playing.

*6 NRPN transmission/reception
The following parameters are supported.

NRPN MSB	NRPN LSB	Data entry MSB	Data entry LSB	Parameter Name/Range	Default
01H	08H	mmH	- -	Vibrato Rate mm : 00H - 40H - 7FH (-64 - 0 - +63)	40H
01H	09H	mmH	- -	Vibrato Depth mm : 00H - 40H - 7FH (-64 - 0 - +63)	40H
01H	0AH	mmH	- -	Vibrato Delay mm : 00H - 40H - 7FH (-64 - 0 - +63)	40H
01H	20H	mmH	- -	Filter Cutoff Freq. mm : 00H - 40H - 7FH (-64 - 0 - +63)	40H
01H	21H	mmH	- -	Filter Resonance mm : 00H - 40H - 7FH (-64 - 0 - +63)	40H
01H	63H	mmH	- -	EG Attack Time mm : 00H - 40H - 7FH (-64 - 0 - +63)	40H
01H	64H	mmH	- -	EG Decay Time mm : 00H - 40H - 7FH (-64 - 0 - +63)	40H
01H	66H	mmH	- -	EG Release Time mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
14H	rrH	mmH	- -	Drum Filter Cutoff Freq. rr: drum instrument note number mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
15H	rrH	mmH	- -	Drum Filter Resonance rr: drum instrument note number mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
16H	rrH	mmH	- -	Drum EG Attack Rate rr: drum instrument note number mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
17H	rrH	mmH	- -	Drum EG Decay Rate rr: drum instrument note number mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
18H	rrH	mmH	- -	Drum Instrument Pitch Course rr: drum instrument note number mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
19H	rrH	mmH	- -	Drum Instrument Pitch Fine rr: drum instrument note number mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
1AH	rrH	mmH	- -	Drum Instrument Level rr: drum instrument note number mm: 00H - 7FH (0 - 127)	Depends on note
1CH	rrH	mmH	- -	Drum Instrument Panpot rr: drum instrument note number mm: 00H - 40H - 7FH (L - Center - R)	Depends on note
1DH	rrH	mmH	- -	Drum Instrument Reverb Send Level rr: drum instrument note number mm: 00H - 7FH (0 - 127)	Depends on note
1EH	rrH	mmH	- -	Drum Instrument Chorus Send Level rr: drum instrument note number mm: 00H - 7FH (0 - 127)	Depends on note
1FH	rrH	mmH	- -	Drum Instrument DSP Send Level rr: drum instrument note number mm : 00H - 7FH (0 - 127)	Depends on note

Data entry LSB is ignored.

If MSB data is 14H through 1FH, it is applied as available data when the channel is set to the drum mode and when DRUM SET UP 2 or 3 is selected. (default set is SET UP 2)

*7 RPN transmission/reception
The following parameters are supported.

RPN MSB	RPN LSB	Data entry MSB	Data entry LSB	Parameter Name/Range	Default
00H	00H	mmH	- -	Pitch bend Sensitivity mm: 00H - 02H - 0CH (0 - 2 - 12)	02H
00H	01H	mmH	- -	Fine Tuning mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
00H	02H	mmH	- -	Course Tuning mm: 00H - 40H - 7FH (-64 - 0 - +63)	40H
7FH	7FH	- -	- -	RPN Null Clears current RPN and NRPN number settings.	- -

Data entry LSB is ignored.

*8 Pitch Bend, modulation, expression, sustain, sostenuto and softpedal are returned to their default values.
Clears current RPN and NRPN number settings.
Resets portamento source note number.

*9 Exclusive
The following system exclusive messages are recognized.

<GM system ON> F0H, 7EH, 7FH, 09H, 01H, F7H
All parameters except MIDI master Tuning and Dsp setting are reset to their default values.
Remote Channel setting is cancelled.
This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

<MIDI Master Volume> F0H, 7FH, 7FH, 04H, 01H, ll, mm, F7H
Allows the volume of all channels to be changed simultaneously.
"mm" is used as the MIDI Master Volume value ("ll" is ignored).
The default value for "mm" is 7FH.

<MIDI Master Tuning>
F0H, 43H, 1nH, 27H, 30H, 00H, 00H, mm, ll, cc, F7H
"mm, ll" is used as the MIDI Master Tuning value.
The tuning value is represented as follows:
T=M-128 (28≦M≦228), T=-100 (M<28), T=100 (M>228)
T is the actual tuning value in 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.
The default values of "mm" and "ll" are 08H and 00H respectively.
n and cc are also recognized.
This value is not reset by a GM System ON or Reset All Controllers message.
This value affects not only MIDI reception part but the entire system of the PSR-7000.

<XG Native Parameter Change>
F0H, 43H, 1nH, 4CH, aaH, bbH, ccH, ddH.....F7H
n: device number (n=0~FH)
aa,bb,cc: address High, Mid, Low
dd: data
A corresponding data size is transmitted when the data size is 2 or 4 parameters.
Note: This product is compatible with the XG format parameters listed in the chart, but not with the many other parameters included in the XG full format.

<XG System On> F0H, 43H, 1nH, 4CH, 00H, 00H, 7E, 00H, F7H
n: device number (n=0~FH)
All parameters other than MIDI master tuning are reset to their default values.
This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

<XG System Data Parameter Change>
See Tables 1-1, 1-2.

<Multi Effect1 Data Parameter Change>
See Tables 1-1, 1-3.

<Multi Part Data Parameter Change>
See Tables 1-1, 1-4.

<Drums Setup Data Parameter Change>
See Tables 1-1, 1-5.

<XG Native Bulk Dump>
F0H, 43H, 0nH, 4CH, bl, bh, aaH, bbH, ccH, <Data>, cs, F7H
n: device number (n=0~FH)
bl, bh: byte count (only data portion shown)
aa,bb,cc: address High, Mid, Low (Refer to the accompanying chart)
cs: Checksum (Byte Count + Start Address + Data + Checksum=0 : calculated binary in first 7 bit)
The data series listed under "Total Size" in the chart is one bulk dump. Only the header address is used as the bulk data address.
Since an error can occur when a large amount of bulk data is received, data series longer than 512 bytes are divided into groups of less than 512 bytes each, and transmitted with a time interval of greater than 120 ms between each group.
Note: This product is compatible with the XG format parameters listed in the chart, but not with the many other parameters included in the XG full format.

<XG System Data Bulk Dump>
See Tables 1-1, 1-2.

<Multi Effect1 Data Bulk Dump>
See Tables 1-1, 1-3.

<Drums Setup Data Bulk Dump>
See Tables 1-1, 1-5.

<Parameter Request>
F0H, 43H, 3nH, 4CH, aaH, bbH, ccH, F7H
n: device number (n=0~FH)
aa,bb,cc: address High, Mid, Low
Requests are accepted for parameters which can be changed.
Only the header address is interpreted as the parameter request address for a Data Size of 2 or 4 parameters.

<Dump Request>
F0H, 43H, 2nH, 4CH, aaH, bbH, ccH, F7H
n: device number (n=0~FH)
aa,bb,cc: address High, Mid, Low
The data series listed under "Total Size" in the chart is one bulk dump. Only the header address is interpreted as the bulk data address.

<Table 1-1>

Parameter Base Address
Model ID = 4C

Parameter Change				
	Address			
	(H)	(M)	(L)	Description
XG	00	00	00	System
SYSTEM	00	00	7D	Drum Setup Reset
	00	00	7E	XG System On
	00	00	7F	Reset All Parameters
EFFECT 1	02	01	00	Effect1(Reverb,Chorus,Variation)
DRUM	30	18	00	Drum Setup 1
	31	18	00	Drum Setup 2

→

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

<Table 1-2>

MIDI Parameter Change table (SYSTEM)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
00 00 00	4	0000 - 07FF	MASTER TUNE	-102.4 - +102.3[cent]	00 04 00 00
01				1st bit3-0→bit15-12	-400
02				2nd bit3-0→bit11-8	
03				3rd bit3-0→bit7-4	
				4th bit3-0→bit3-0	
04	1	00 - 7F	MASTER VOLUME	0 - 127	7F
06	1	28 - 58	TRANSPOSE	-24 - +24[semitones]	40
7D		n	DRUM SETUP RESET	n=Drum setup number	
7E		00	XG SYSTEM ON	00=XG sytem ON	
7F		00	RESET ALL PARAMETERS	00=ON (receive only)	
TOTAL SIZE	07				

<Table 1-3>

MIDI Parameter Change table (EFFECT 1)

Refer to the “Effect MIDI Map” for a complete list of Reverb, Chorus and Variation type numbers.
Refer to the “Effect Parameter List” for a detailed description of each parameter.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 01 00	2	00-7F	REVERB TYPE MSB	Refer to Effect Program List	01(=HALL1)
		00-7F	REVERB TYPE LSB	00 : basic type	00
02	1	00-7F	REVERB PARAMETER 1	Refer to Effect Parameter List	Depends on reverb type
03	1	00-7F	REVERB PARAMETER 2	Refer to Effect Parameter List	Depends on reverb type
04	1	00-7F	REVERB PARAMETER 3	Refer to Effect Parameter List	Depends on reverb type
05	1	00-7F	REVERB PARAMETER 4	Refer to Effect Parameter List	Depends on reverb type
06	1	00-7F	REVERB PARAMETER 5	Refer to Effect Parameter List	Depends on reverb type
07	1	00-7F	REVERB PARAMETER 6	Refer to Effect Parameter List	Depends on reverb type
08	1	00-7F	REVERB PARAMETER 7	Refer to Effect Parameter List	Depends on reverb type
09	1	00-7F	REVERB PARAMETER 8	Refer to Effect Parameter List	Depends on reverb type
0A	1	00-7F	REVERB PARAMETER 9	Refer to Effect Parameter List	Depends on reverb type
0B	1	00-7F	REVERB PARAMETER 10	Refer to Effect Parameter List	Depends on reverb type
0C	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB(0...64...127)	40
0D	1	01-7F	REVERB PAN	L63...C...R63(1...64...127)	40
TOTAL SIZE	0E				
02 01 10	1	00-7F	REVERB PARAMETER 11	Refer to Effect Parameter List	Depends on reverb type
11	1	00-7F	REVERB PARAMETER 12	Refer to Effect Parameter List	Depends on reverb type
12	1	00-7F	REVERB PARAMETER 13	Refer to Effect Parameter List	Depends on reverb type
13	1	00-7F	REVERB PARAMETER 14	Refer to Effect Parameter List	Depends on reverb type
14	1	00-7F	REVERB PARAMETER 15	Refer to Effect Parameter List	Depends on reverb type
15	1	00-7F	REVERB PARAMETER 16	Refer to Effect Parameter List	Depends on reverb type
TOTAL SIZE	6				
02 01 20	2	00-7F	CHORUS TYPE MSB	Refer to Effect MIDI Map	41(=CHORUS1)
		00-7F	CHORUS TYPE LSB	00 : basic type	00
22	1	00-7F	CHORUS PARAMETER 1	Refer to Effect Parameter List	Depends on chorus type
23	1	00-7F	CHORUS PARAMETER 2	Refer to Effect Parameter List	Depends on chorus type
24	1	00-7F	CHORUS PARAMETER 3	Refer to Effect Parameter List	Depends on chorus type
25	1	00-7F	CHORUS PARAMETER 4	Refer to Effect Parameter List	Depends on chorus type
26	1	00-7F	CHORUS PARAMETER 5	Refer to Effect Parameter List	Depends on chorus type
27	1	00-7F	CHORUS PARAMETER 6	Refer to Effect Parameter List	Depends on chorus type
28	1	00-7F	CHORUS PARAMETER 7	Refer to Effect Parameter List	Depends on chorus type
29	1	00-7F	CHORUS PARAMETER 8	Refer to Effect Parameter List	Depends on chorus type
2A	1	00-7F	CHORUS PARAMETER 9	Refer to Effect Parameter List	Depends on chorus type
2B	1	00-7F	CHORUS PARAMETER 10	Refer to Effect Parameter List	Depends on chorus type
2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB(0...64...127)	40
2D	1	01-7F	CHORUS PAN	L63...C...R63(1...64...127)	40
2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB(0...64...127)	00
TOTAL SIZE	0F				
02 01 30	1	00-7F	CHORUS PARAMETER 11	Refer to Effect Parameter List	Depends on chorus type
31	1	00-7F	CHORUS PARAMETER 12	Refer to Effect Parameter List	Depends on chorus type
32	1	00-7F	CHORUS PARAMETER 13	Refer to Effect Parameter List	Depends on chorus type
33	1	00-7F	CHORUS PARAMETER 14	Refer to Effect Parameter List	Depends on chorus type
34	1	00-7F	CHORUS PARAMETER 15	Refer to Effect Parameter List	Depends on chorus type
35	1	00-7F	CHORUS PARAMETER 16	Refer to Effect Parameter List	Depends on chorus type
TOTAL SIZE	6				
02 01 40	2	00-7F	VARIATION TYPE MSB	Refer to Effect Program List	05(=DELAY L,C,R)
		00-7F	VARIATION TYPE LSB	00 : basic type	00
42	2	00-7F	VARIATION PARAMETER 1 MSB	Refer to Effect Parameter List	Depends on variation type
		00-7F	VARIATION PARAMETER 1 LSB	Refer to Effect Parameter List	Depends on Variation type

	44	2	00-7F	VARIATION PARAMETER 2 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 2 LSB	Refer to Effect Parameter List	Depends on Variation type
	46	2	00-7F	VARIATION PARAMETER 3 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 3 LSB	Refer to Effect Parameter List	Depends on Variation type
	48	2	00-7F	VARIATION PARAMETER 4 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 4 LSB	Refer to Effect Parameter List	Depends on Variation type
	4A	2	00-7F	VARIATION PARAMETER 5 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 5 LSB	Refer to Effect Parameter List	Depends on Variation type
	4C	2	00-7F	VARIATION PARAMETER 5 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 6 LSB	Refer to Effect Parameter List	Depends on Variation type
	4E	2	00-7F	VARIATION PARAMETER 7 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 7 LSB	Refer to Effect Parameter List	Depends on Variation type
	50	2	00-7F	VARIATION PARAMETER 8 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 8 LSB	Refer to Effect Parameter List	Depends on Variation type
	52	2	00-7F	VARIATION PARAMETER 9 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 9 LSB	Refer to Effect Parameter List	Depends on Variation type
	54	2	00-7F	VARIATION PARAMETER 10 MSB	Refer to Effect Parameter List	Depends on Variation type
			00-7F	VARIATION PARAMETER 10 LSB	Refer to Effect Parameter List	Depends on Variation type
	56	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB(0...64...127)	40
	57	1	01-7F	VARIATION PAN	L63...C...R63(1...64...127)	40
	58	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB(0...64...127)	00
	59	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB(0...64...127)	00
	5A	1	00-01	VARIATION CONNECTION	0:INSERTION,1:SYSTEM	00
	5B	1	00-01	VARIATION PART	OFF(127) Part 1-16 (0-15)	7F
TOTAL SIZE		21				
02 01	70	1	00-7F	VARIATION PARAMETER 11	Refer to Effect Parameter List	Depends on variation type
	71	1	00-7F	VARIATION PARAMETER 12	Refer to Effect Parameter List	Depends on variation type
	72	1	00-7F	VARIATION PARAMETER 13	Refer to Effect Parameter List	Depends on variation type
	73	1	00-7F	VARIATION PARAMETER 14	Refer to Effect Parameter List	Depends on variation type
	74	1	00-7F	VARIATION PARAMETER 15	Refer to Effect Parameter List	Depends on variation type
	75	1	00-7F	VARIATION PARAMETER 16	Refer to Effect Parameter List	Depends on variation type
TOTAL SIZE		6				

* "VARIATION" refers to the DSP EFFECT on the panel.

<Table 1-4>

MIDI Parameter Change table (MULTI PART)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
08 nn 07	1	00 - 01	PART MODE	0:NORMAL 1:Preset Drum 2 - 3:Drum Setup 1 – 2	00 (Part other than 10) 01 (Part10)
nn 11	1	00 - 7F	DRY LEVEL	0 - 127	7F
nn 41	1	00 - 7F	SCALE TUNING C	-64 - +63[cent]	40
nn 42	1	00 - 7F	SCALE TUNING C#	-64 - +63[cent]	40
nn 43	1	00 - 7F	SCALE TUNING D	-64 - +63[cent]	40
nn 44	1	00 - 7F	SCALE TUNING D#	-64 - +63[cent]	40
nn 45	1	00 - 7F	SCALE TUNING E	-64 - +63[cent]	40
nn 46	1	00 - 7F	SCALE TUNING F	-64 - +63[cent]	40
nn 47	1	00 - 7F	SCALE TUNING F#	-64 - +63[cent]	40
nn 48	1	00 - 7F	SCALE TUNING G	-64 - +63[cent]	40
nn 49	1	00 - 7F	SCALE TUNING G#	-64 - +63[cent]	40
nn 4A	1	00 - 7F	SCALE TUNING A	-64 - +63[cent]	40
nn 4B	1	00 - 7F	SCALE TUNING A#	-64 - +63[cent]	40
nn 4C	1	00 - 7F	SCALE TUNING B	-64 - +63[cent]	40

nn = MIDI Channel (00 – 0F)

<Table 1-5>

MIDI Parameter Change table (DRUM SETUP)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
3n rr 00	1	00 - 7F	PITCH COARSE	-64 - +63	40
3n rr 01	1	00 - 7F	PITCH FINE	-64 - +63[cent]	40
3n rr 02	1	00 - 7F	LEVEL	0 - 127	Depends on note
3n rr 04	1	00 - 7F	PAN	0:random 1: L63 : 64: C (center) : 127: R63	Depends on note
3n rr 05	1	00 - 7F	REVERB SEND	0 - 127	Depends on note
3n rr 06	1	00 - 7F	CHORUS SEND	0 - 127	Depends on note
3n rr 07	1	00 - 7F	VARIATION SEND	0 - 127	7F
3n rr 0B	1	00 - 7F	FILTER CUTOFF FREQUENCY	-64 - 63	40
3n rr 0C	1	00 - 7F	FILTER RESONANCE	-64 - 63	40
3n rr 0D	1	00 - 7F	EG ATTACK	-64 - 63	40
3n rr 0E	1	00 - 7F	EG DECAY1	-64 - 63	40
3n rr 0F	1	00 - 7F	EG DECAY2	-64 - 63	40
TOTAL SIZE	10				

[Note]
n: Drum Setup number (0 to 1)
rr: Note number (0D to 54)
Receipt of "XG System On" or "GM System On" message generates reinitialization of all DRUM SETUP parameters.
"Drum Setup Reset" message can be used to reinitialize drum setup parameters.

● Effect MIDI Map

Reverb Type

MSB (HEX)	TYPE LSB (HEX)									
	00	01	02	03~07	08	09	0A	0B	0C	0D~
00	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
01	[1]Hall 1	Hall 2	<——	<——	[2]Hall 2	[3]Hall 3	[4]Hall 4	<——	<——	<——
02	Room 1	Room 2	Room 3	<——	[5]Room 1	[6]Room 2	[7]Room 3	[8]Room 4	<——	
03	Stage 1	Stage 2	<——	<——	[9]Stage 1	[10]Stage 2	<——	<——	<——	<——
04	Plate	<——	<——	<——	[11]Plate 1	[12]Plate 2	<——	<——	<——	<——
05	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
:	:	<——	<——	<——	<——	<——	<——	<——	<——	<——
00F	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
10	[13]WhiteRoom	<——	<——	<——	<——	<——	<——	<——	<——	<——
11	[14]Tunnel	<——	<——	<——	<——	<——	<——	<——	<——	<——
12	[15]Canyon	<——	<——	<——	<——	<——	<——	<——	<——	<——
13	[16]Basement	<——	<——	<——	<——	<——	<——	<——	<——	<——
14	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
:	:	<——	<——	<——	<——	<——	<——	<——	<——	<——
7F	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——

<—— ..... same as BASIC EFFECT(LSB=0) [ ] ..... Panel Effect Number

Chorus Type

MSB (HEX)	TYPE LSB (HEX)									
	00	01	02	03~07	08	09	0A	0B	0C	0D~
00	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
01	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
:	:	<——	<——	<——	<——	<——	<——	<——	<——	<——
40	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
41	Chorus 1	Chorus 5	Chorus 3	<——	<——	<——	<——	<——	<——	<——
42	Chorus 4	Celeste 2	Celeste 3	<——	Chorus 2	Chorus 3	Chorus 1	<——	<——	<——
43	Flanger 1	Flanger 4	<——	<——	Flanger 1	Flanger 2	Flanger 3	<——	<——	<——
44	Symphonic	<——	<——	<——	Symphonic 1	<——	<——	<——	<——	<——
45	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
:	:	<——	<——	<——	<——	<——	<——	<——	<——	<——
7F	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——

<—— ..... same as BASIC EFFECT(LSB=0)

Variation Type (DSP EFFECT)

MSB (HEX)	TYPE LSB (HEX)									
	00	01	02	03~07	08	09	0A	0B	0C	0D~
00	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
01	[1]Hall 1	Hall 2	<——	<——	[2]Hall 2	[3]Hall 3	[4]Hall 4	<——	<——	<——
02	Room 1	Room 2	Room 3	<——	[5]Room 1	[6]Room 2	[7]Room 3	[8]Room 4	<——	<——
03	Stage 1	Stage 2	<——	<——	[9]Stage 1	[10]Stage 2	<——	<——	<——	<——
04	Plate	<——	<——	<——	[11]Plate 1	[12]Plate 2	<——	<——	<——	<——
05	Delay L,C,R	<——	<——	<——	[38]Delay LCR	<——	<——	<——	<——	<——
06	[39]Delay L,R	<——	<——	<——	<——	<——	<——	<——	<——	<——
07	[40]Echo	<——	<——	<——	<——	<——	<——	<——	<——	<——
08	[41]Cross Delay	<——	<——	<——	<——	<——	<——	<——	<——	<——
09	[13]Early Ref 1	[14]Early Ref 2	<——	<——	<——	<——	<——	<——	<——	<——
0A	[15]Gate Reverb	<——	<——	<——	<——	<——	<——	<——	<——	<——
0B	[16]ReverseGate	<——	<——	<——	<——	<——	<——	<——	<——	<——
0C	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
:	:	<——	<——	<——	<——	<——	<——	<——	<——	<——
13	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
14	[46]Karaoke1	[47]Karaoke2	[48]Karaoke3	<——	<——	<——	<——	<——	<——	<——
15	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
:	:	<——	<——	<——	<——	<——	<——	<——	<——	<——
3F	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
40	True	<——	<——	<——	<——	<——	<——	<——	<——	<——
41	Chorus 1	[21]Chorus 5	Chorus 3	<——	<——	<——	<——	<——	<——	
42	[20]Chorus 4	Celeste 2	Celeste 3	<——	[18]Chorus 2	[19]Chorus 3	[17]Chorus 1	[32]Rotary Sp5	<——	<——
43	Flanger 1	[25]Flanger 4	<——	<——	[22]Flanger 1	[23]Flanger 2	[24]Flanger 3	<——	<——	<——
44	Symphonic	<——	<——	<——	[26]Symphonic	<——	<——	<——	<——	<——
45	Rotary SP.	<——	<——	<——	[28]Rotary Sp1	<——	Rotary Sp3	Rotary Sp4	<——	<——
46	Tremolo	<——	<——	<——	[33]Tremolo1	<——	[31]Rotary Sp4	Tremolo 4	<——	<——
47	Auto Pan	<——	<——	<——	[36]AutoPan	[29]Rotary Sp2	[30]Rotary Sp3	[34]Tremolo2	[35]Gtr Tremolo	<——
48	[27]Phaser	<——	<——	<——	<——	<——	<——	<——	<——	<——
49	[49]Distortion	<——	<——	<——	<——	<——	<——	<——	<——	<——
4A	[50]Over Drive	<——	<——	<——	<——	<——	<——	<——	<——	<——
4B	Amp Sim.	<——	<——	<——	[42]Dist. HARD	[43]Dist. SOFT	<——	<——	<——	<——
4C	3Band EQ	<——	<——	<——	[44]EQ DISCO	[45]EQ TEL	<——	<——	<——	<——
4D	2Band EQ	<——	<——	<——	<——	<——	<——	<——	<——	<——
4E	Auto Wah	<——	<——	<——	[37]Auto Wah	<——	<——	<——	<——	<——
4F	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
50	Pitch Change ([51]Unison, [52]5thHarmony)	<——	<——	<——	<——	<——	<——	<——	<——	<——
51	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
52	[53]Touch Wah	[54]Wah+Dist.	<——	<——	<——	<——	<——	<——	<——	
53	[55]Compresser	<——	<——	<——	<——	<——	<——	<——	<——	<——
54	[56]Noise Gate	<——	<——	<——	<——	<——	<——	<——	<——	<——
55	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——
:	:	<——	<——	<——	<——	<——	<——	<——	<——	<——
7F	No Effect	<——	<——	<——	<——	<——	<——	<——	<——	<——

<—— ..... same as BASIC EFFECT(LSB=0) [ ] ..... Panel Effect Number

** The effect name appearing in the LCD display may be abbreviated.*

● Effect Parameter List

BASIC TYPE	No.	Parameter	Display*	Value
CHORUS CELESTE	1	LFO Frequency	0.00~39.7Hz	0-127
	2	LFO PM Depth	0~127	0-63
	3	Feedback Level	-63~+63	1-127
	4	Delay Offset	0~127	0-127
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	EQ Mid Frequency	100Hz~10.0kHz	14-54
	12	EQ Mid Gain	-12~+12dB	52-76
	13	EQ Mid Width	1.0~12.0	10-120
	14	LFO AM Depth	0~127	0-127
	15	Input Mode	mono/stereo	0-1
FLANGER	1	LFO Frequency	0.00~39.7Hz	0-127
	2	LFO Depth	0~127	0-127
	3	Feedback Level	-63~+63	1-127
	4	Delay Offset	0~63	0-63
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	EQ Mid Frequency	100Hz~10.0kHz	14-54
	12	EQ Mid Gain	-12~+12dB	52-76
	13	EQ Mid Width	1.0~12.0	10-120
	14	LFO Phase Difference	-180~+180deg	4-124
SYMPHONIC	1	LFO Frequency	0.00~39.7Hz	0-127
	2	LFO Depth	0~127	0-127
	3	Delay Offset	0~127	0-127
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	EQ Mid Frequency	100Hz~10.0kHz	14-54
	12	EQ Mid Gain	-12~+12dB	52-76
	13	EQ Mid Width	1.0~12.0	10-120
ROTARY SPEAKER	1	LFO Frequency	0.00~39.7Hz	0-127
	2	LFO Depth	0~127	0-127
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	EQ Mid Frequency	100Hz~10.0kHz	14-54
	12	EQ Mid Gain	-12~+12dB	52-76
	13	EQ Mid Width	1.0~12.0	10-120
TREMOLO	1	LFO Frequency	0.00~39.7Hz	0-127
	2	AM Depth	0~127	0-127
	3	PM Depth	0~127	0-127
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	11	EQ Mid Frequency	100Hz~10.0kHz	14-54
	12	EQ Mid Gain	-12~+12dB	52-76
	13	EQ Mid Width	1.0~12.0	10-120
	14	LFO Phase Difference	-180~+180deg	4-124
	15	Input Mode	mono/stereo	0-1
AUTO PAN	1	LFO Frequency	0.00~39.7Hz	0-127
	2	L/R Depth	0~127	0-127
	3	F/R Depth	0~127	0-127
	4	PAN Direction	L<->R,L->R,L<-R,Lturn, Rturn,L/R	0-5
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	11	EQ Mid Frequency	100Hz~10.0kHz	14-54
	12	EQ Mid Gain	-12~+12dB	52-76
	13	EQ Mid Width	1.0~12.0	10-120

BASIC TYPE	No.	Parameter	Display*	Value
PHASER	1	LFO Frequency	0.00~39.7Hz	0-127
	2	LFO Depth	0~127	0-127
	3	Phase Shift Offset	0~127	0-127
	4	Feedback Level	-63~+63	1-127
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Stage	3~10	3-10
	12	Diffusion	Mono/Stereo	0-1
	13	LFO Phase Difference	-180~+180deg.	4-124
DISTORTION OVERDRIVE	1	Drive	0~127	0-127
	2	EQ Low Frequency	50Hz~2.0kHz	8-40
	3	EQ Low Gain	-12~+12dB	52-76
	4	LPF Cutoff	1.0k~Thru	34-60
	5	Output Level	0~127	0-127
	7	EQ Mid Frequency	500Hz~10.0kHz	28-54
	8	EQ Mid Gain	-12~+12dB	52-76
	9	EQ Mid Width	1.0~12.0	10-120
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Edge(Clip Curve)	0~127	0-127
GUITAR AMP SIMULATOR	1	Drive	0~127	0-127
	2	AMP Type	Off,Stack,Combo,Tube	0-3
	3	LPF Cutoff	1.0k~Thru	34-60
	4	Output Level	0~127	0-127
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Edge(Clip Curve)	0~127	0-127
3BAND EQ	1	EQ Low Gain	-12~+12dB	52-76
	2	EQ Mid Frequency	500Hz~10.0kHz	28-54
	3	EQ Mid Gain	-12~+12dB	52-76
	4	EQ Mid Width	1.0~12.0	10-120
	5	EQ High Gain	-12~+12dB	52-76
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ High Frequency	500Hz~16.0kHz	28-58
2BAND EQ	1	EQ Low Frequency	50Hz~2.0kHz	8-40
	2	EQ Low Gain	-12~+12dB	52-76
	3	EQ High Frequency	500Hz~16.0kHz	28-58
	4	EQ High Gain	-12~+12dB	52-76
	11	EQ Mid Frequency	100Hz~10.0kHz	14-54
	12	EQ Mid Gain	-12~+12dB	52-76
	13	EQ Mid Width	1.0~12.0	10-120
AUTO WAH	1	LFO Frequency	0.00~39.7Hz	0-127
	2	LFO Depth	0~127	0-127
	3	Cutoff Frequency Offset	0~127	0-127
	4	Resonance	1.0~12.0	10-120
	6	EQ Low Frequency	50Hz~2.0kHz	8-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Drive	0~127	0-127
HALL ROOM STAGE PLATE	1	Reverb Time	0.3~30.0s	0-69
	2	Diffusion	0~10	0-10
	3	Initial Delay	0~63	0-63
	4	HPF Cutoff	Thru~8.0kHz	0-52
	5	LPF Cutoff	1.0k~Thru	34-60
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Rev Delay	0~63	0-63
	12	Density	0~3	0-3
	13	Er/Rev Balance	E63>R ~ E=R ~ E<R63	1-127
	14	High Damp	0.1~1.0	1-10
	15	Feedback Level	-63~+63	1-127

BASIC TYPE	No.	Parameter	Display*	Value
DELAY L,C,R	1	Lch Delay	0.1~715.0ms	1-7150
	2	Rch Delay	0.1~715.0ms	1-7150
	3	Cch Delay	0.1~715.0ms	1-7150
	4	Feedback Delay	0.1~715.0ms	1-7150
	5	Feedback Level	-63~+63	1-127
	6	Cch Level	0~127	0-127
	7	High Damp	0.1~1.0	1-10
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	HPF Cutoff	Thru~8.0kHz	0-52
	12	LPF Cutoff	1.0k~Thru	34-60
	13	EQ Low Frequency	50Hz~2.0kHz	8-40
	14	EQ Low Gain	-12~+12dB	52-76
	15	EQ High Frequency	500Hz~16.0kHz	28-58
	16	EQ High Gain	-12~+12dB	52-76
DELAY L,R	1	Lch Delay	0.1~715.0ms	1-7150
	2	Rch Delay	0.1~715.0ms	1-7150
	3	Feedback Delay 1	0.1~715.0ms	1-7150
	4	Feedback Delay 2	0.1~715.0ms	1-7150
	5	Feedback Level	-63~+63	1-127
	6	High Damp	0.1~1.0	1-10
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	HPF Cutoff	Thru~8.0kHz	0-52
	12	LPF Cutoff	1.0k~Thru	34-60
	13	EQ Low Frequency	50Hz~2.0kHz	8-40
	14	EQ Low Gain	-12~+12dB	52-76
	15	EQ High Frequency	500Hz~16.0kHz	28-58
	16	EQ High Gain	-12~+12dB	52-76
ECHO	1	Lch Delay1	0.1~355.0ms	1-3550
	2	Lch Feedback Level	-63~+63	1-127
	3	Rch Delay1	0.1~355.0ms	1-3550
	4	Rch Feedback Level	-63~+63	1-127
	5	High Damp	0.1~1.0	1-10
	6	Lch Delay2	0.1~355.0ms	1-3550
	7	Rch Delay2	0.1~355.0ms	1-3550
	8	Delay2 Level	0~127	0-127
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	HPF Cutoff	Thru~8.0kHz	0-52
	12	LPF Cutoff	1.0k~Thru	34-60
	13	EQ Low Frequency	50Hz~2.0kHz	8-40
	14	EQ Low Gain	-12~+12dB	52-76
	15	EQ High Frequency	500Hz~16.0kHz	28-58
	16	EQ High Gain	-12~+12dB	52-76
CROSS DELAY	1	L->R Delay	0.1~355.0ms	1-3550
	2	R->L Delay	0.1~355.0ms	1-3550
	3	Feedback Level	-63~+63	1-127
	4	Input Select	L,R,L&R	0-2
	5	High Damp	0.1~1.0	1-10
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	HPF Cutoff	Thru~8.0kHz	0-52
	12	LPF Cutoff	1.0k~Thru	34-60
	13	EQ Low Frequency	50Hz~2.0kHz	8-40
	14	EQ Low Gain	-12~+12dB	52-76
	15	EQ High Frequency	500Hz~16.0kHz	28-58
	16	EQ High Gain	-12~+12dB	52-76
EARLY REF	1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5
	2	Room Size	0.1~7.0	0-44
	3	Diffusion	0~10	0-10
	4	Initial Delay	0~63	0-63
	5	Feedback Level	-63~+63	1-127
	6	HPF Cutoff	Thru~8.0kHz	0-52
	7	LPF Cutoff	1.0k~Thru	34-60
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Liveness	0~10	0-10
	12	Density	0~3	0-3
	13	High Damp	0.1~1.0	1-10

BASIC TYPE	No.	Parameter	Display*	Value
GATE REVERB REVERSE GATE	1	Type	TypeA,TypeB	0-1
	2	Room Size	0.1~7.0	0-44
	3	Diffusion	0~10	0-10
	4	Initial Delay	0~63	0-63
	5	Feedback Level	-63~+63	1-127
	6	HPF Cutoff	Thru~8.0kHz	0-52
	7	LPF Cutoff	1.0k~Thru	34-60
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Liveness	0~10	0-10
	12	Density	0~3	0-3
	13	High Damp	0.1~1.0	1-10
PITCH CHENGE	1	Pitch	-24~+24	40-88
	2	Initial Delay	0~127	0-127
	3	Fine 1	-50~+50	14-114
	4	Fine 2	-50~+50	14-114
	5	Feedback Gain	-99~+99%	1-127
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Pan 1	L63~R63	1-127
	12	Output Level 1	0~127	0-127
	13	Pan 2	L63~R63	1-127
	14	Output Level2	0~127	0-127
TOUCH WAH WAH+DIST.	1	Sensitive	0~127	0-127
	2	Cutoff Frequency Offset	0~127	0-127
	3	Resonance	1.0~12.0	10-120
	6	EQ Low Frequency	32Hz~2.0kHz	4-40
	7	EQ Low Gain	-12~+12dB	52-76
	8	EQ High Frequency	500Hz~16.0kHz	28-58
	9	EQ High Gain	-12~+12dB	52-76
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Drive	0~127	0-127
COMPRESSOR	1	Attack	1~40ms	0-19
	2	Release	10~680ms	0-15
	3	Threshold	-48~-6UdB	79-121
	4	Ratio	1.0~20.0	0-7
	5	Output Level	0~127	0-127
NOISE GATE	1	Attack	1~40ms	0-19
	2	Release	10~680ms	0-15
	3	Threshold	-72~-30dB	55-97
	4	Output Level	0~127	0-127
WHITE ROOM TUNNEL CANYON BASEMENT	1	Reverb Time	0.3~30.0s	0-69
	2	Diffusion	0~10	0-10
	3	Initial Delay	0~63	0-63
	4	HPF Cutoff	Thru~8.0kHz	0-52
	5	LPF Cutoff	1.0k~Thru	34-60
	6	Width	0.5~10.2m	0-37
	7	Heigt	0.5~20.2m	0-73
	8	Depth	0.5~30.2m	0-104
	9	Wall Vary	0~30	0-30
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127
	11	Rev Delay	0~63	0-63
	12	Density	0~3	0-3
	13	Er/Rev Balance	E63>R ~ E=R ~ E<R63	1-127
	14	High Damp	0.1~1.0	1-10
	15	Feedback Level	-63~+63	1-127
KARAOKE	1	Delay Time	0~127	0-127
	2	Feedback Level	-63~+63	1-127
	3	HPF Cutoff	Thru~8.0kHz	0-52
	4	LPF Cutoff	1.0k~Thru	34-60
	10	Dry/Wet	D63>W ~ D=W ~ D<W63	1-127

** Only parameters 1 through 5 can be edited via panel control for effects which can be selected via panel control. The 3 band equalizer is an exception to this rule.*

** Basic Type effects are different from DSP Effect Types appearing in the LCD display.*

Sample Data Disks

EMS PK27S001	**Sound Effects** 24 great new sound effects - animals, machines, movies,..
EMS PK27S003	**Vocal Hooks** Shouts, Sung Chorus, Females, Bass Vox
EMS PK27S004	**Instruments** DX Piano, Clavi, Classic Organ, Vintage E. Piano, new synths,... (2 disks)
EMS PK27S005	**House & Techno** Drum Loops, Scratches, Hits, Vox, Synths, Basses
EMS PK27S006	**Dance & Soul** Drum Loops, Hits, Pads, Basses, Synths, Percussion
EMS PK27S007	**Latin & Ethnic** Latin, Afro & Ethnic Loops, Ethnic Instruments, Pan Pipe, Flamenco Guitar
EMS PK27S008	**Jazz & Funk** Jazz & Funk Loops, Bass & Slide, Organ, Synth Clav, Saxophone
EMS PK27S009	**Rock & Pop** Drum Loops, Hits, Stabs & Squeals, Guitars, Organs, Synths
EMS PK27S010	**Ambient Textures** Ethereal synth sounds for film style composition and soundtracks
EMS PK27S011	**Grand Piano** A high quality multi-sampled grand piano
EMS PK27S012	**Eastern Elements** Assortment of exotic ethnic instruments and rhythmic loops
EMS PK27S013	**Traditional Keys** More great keyboards - theatre organ, church organ, harpsichord,..
EMS PK27S014	**Real Drums** New sampled drums as they really sound !
SP-2701YE	**Traditional Instruments 1 & 2** Accordeon, Trumpet, Tuba, Mandolin, Zither, Harmonica, etc. (2 disks)
SP-2702YE	**Analogue Synthesizer 1 & 2** Pads, Basses, SynBrass, Sweeps, Sync Sounds, etc. (2 disks)
SP-2703YE	**Pop & Rock Instruments / World Of Guitars** Clean & Heavy Guitars, E.Piano, Sax, 12-strings, etc. (2 disks)
SP-2704YE	**Classical Instruments / Ethnics** Violins, Cello, Reeds, Gongs, Bells, Pads, Synth sounds, etc. (2 disks)
SP-2705YE	**Gaudi / Super Effects** Spoken German, Sci-Fi, Electric Atmospheres, etc. (2 disks)

** Not all titles in the above list are available in all areas.*
Please consult your Yamaha dealer for details of availability.

Specifications • Technische Daten • Spécifications

KEYBOARD:
61 Keys (C1~C6) with Touch Response (Initial/After)

POLYPHONY:
64 Notes max.

VOICES:
Preset 473 voices (including 9 Percussion kits)
Custom 32 voices (Programmable)

ACCOMPANIMENT:
Accompaniment styles:
Preset 120 + Disk 32 styles
Custom 32 styles
Auto Bass Chord:
Single Finger/Fingered 1/Fingered 2/Full Keyboard/
Auto MIDI Bass/Manual MIDI Bass
Chord Assist
Arranger:
RHYTHM, BASS, CHORD, PAD, PHRASE

ONE TOUCH SETTING:
4 settings are available for each preset style

EXPRESSION & EFFECT:
Reverb 16 types
Chorus 10 types
DSP Effect 56 types
Lead Effect 18 types
Harmony 16 types
Digital Equalizer (5 bands, 6 types)
Sustain
Left Hold
Pitch Bend Wheel
Modulation Wheel

MULTI PAD:
1~8 (Phrase/Chord, Percussion)

SONG RECORD:
Quick Record:
Manual/Accomp. Tracks
Chord Step Record, Edit (Delete)
Multi Track Record:
1~16 Tracks
Punch In, Volume, Edit (Quantize, Track Mix, Initial Edit, Delete)

SONG PLAY:
Single, All, Chain, Random
Solo/Play/Mute

REGISTRATION MEMORY:
16 banks x 8 setups, Freeze

HELP FUNCTION:
Five languages
(English, German, French, Spanish and Italian)

DISPLAY:
LCD (240 x 320 dots)

DISK:
Load from Disk, Save to Disk, Rename File/Song,
Delete File/Song, Format FD, Song Copy
Hard Disk Interface

** 3.5" FDD, Compatibility with DOC (Yamaha Disk Orchestra Collection) PianoSoft, General MIDI, and SFF software.*

FUNCTIONS:
F1: Scale (Arabic)/Voice Part
F2: Split Point/ABC Mode/Multi Pad
F3: Controller
F4: Style Revoice
F5: Reverb/Chorus/DSP Effect
F6: Harmony/Registration
F7: Utility
F8: MIDI

DEMONSTRATIONS:
14 Songs

CONNECTORS:
MIDI (IN/OUT/THRU), AUX IN (R, L/L+R),
AUX OUT (R, L/L+R), FOOT SWITCH 1/2,
FOOT VOLUME, PHONES, MIC

AMPLIFIER:
20W x 2

SPEAKERS:
16cm x 2, 5cm x 2

DIMENSIONS (W x H x D):
1058 mm (41-2/3") x 446 mm (17-1/2") x 178 mm (7")

WEIGHT:
14.5 kg (31 lbs. 15 oz)

SUPPLIED ACCESSORIES:
- AC Cord
- Music Stand
- Supplied Disk
- Owner's Manual

OPTIONAL ACCESSORIES:
- Foot switch FC5
- Foot Volume FC7
- Headphones HPE-150
- Keyboard stand L-5, LW-12
- Hard Disk

** Specifications subject to change without notice.*
** Änderungen ohne Vorankündigung vorbehalten.*
** Sous toute réserve de modification des caractéristiques sans préavis.*
** Especificaciones sujetas a cambios sin previo aviso.*

IMPORTANT SAFETY INSTRUCTIONS

INFORMATION RELATING TO PERSONAL INJURY, ELECTRICAL SHOCK, AND FIRE HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING- When using any electrical or electronic product, basic precautions should always be followed. These precautions include, but are not limited to, the following:

1. Read all Safety Instructions, Installation Instructions, Special Message Section items, and any Assembly Instructions found in this manual BEFORE marking any connections, including connection to the main supply.

2. Main Power Supply Verification: Yamaha products are manufactured specifically for the supply voltage in the area where they are to be sold. If you should move, or if any doubt exists about the supply voltage in your area, please contact your dealer for supply voltage verification and (if applicable) instructions. The required supply voltage is printed on the name plate. For name plate location, please refer to the graphic found in the Special Message Section of this manual.

3. This product may be equipped with a polarized plug (one blade wider than the other). If you are unable to insert the plug into the outlet, turn the plug over and try again. If the problem persists, contact an electrician to have the obsolete outlet replaced. Do NOT defeat the safety purpose of the plug.

4. Some electronic products utilize external power supplies or adapters. Do NOT connect this type of product to any power supply or adapter other than one described in the owners manual, on the name plate, or specifically recommended by Yamaha.

5. **WARNING:** Do not place this product or any other objects on the power cord or place it in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. NOTE: The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.

6. Ventilation: Electronic products, unless specifically designed for enclosed installations, should be placed in locations that do not interfere with proper ventilation. If instructions for enclosed installations are not provided, it must be assumed that unobstructed ventilation is required.

7. Temperature considerations: Electronic products should be installed in locations that do not significantly contribute to their operating temperature. Placement of this product close to heat sources such as; radiators, heat registers and other devices that produce heat should be avoided.

8. This product was NOT designed for use in wet/damp locations and should not be used near water or exposed to rain. Examples of wet/damp locations are; near a swimming pool, spa, tub, sink, or wet basement.

9. This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by the manufacturer. If a cart, rack, or stand is used, please observe all safety markings and instructions that accompany the accessory product.

10. The power supply cord (plug) should be disconnected from the outlet when electronic products are to be left unused for extended periods of time. Cords should also be disconnected when there is a high probability of lightening and/or electrical storm activity.

11. Care should be taken that objects do not fall and liquids are not spilled into the enclosure through any openings that may exist.

12. Electrical/electronic products should be serviced by a qualified service person when:

a. The power supply cord has been damaged; or
b. Objects have fallen, been inserted, or liquids have been spilled into the enclosure through openings; or
c. The product has been exposed to rain: or
d. The product dose not operate, exhibits a marked change in performance; or
e. The product has been dropped, or the enclosure of the product has been damaged.

13. Do not attempt to service this product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

14. This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist. IMPORTANT: The louder the sound, the shorter the time period before damage occurs.

15. Some Yamaha products may have benches and/or accessory mounting fixtures that are either supplied as a part of the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

PLEASE KEEP THIS MANUAL

FCC INFORMATION (U.S.A.)

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!
This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA90620

The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

CANADA

THIS DIGITAL APPARATUS DOES NOT EXCEED THE "CLASS B" LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATION OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE LA "CLASSE B" PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE EDICTE PAR LE MINISTERE DES COMMUNICATIONS DU CANADA.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

- This applies only to products distributed by Yamaha Canada Music Ltd.
- Dies bezieht sich nur auf die von der Yamaha Canada Music Ltd. vertriebenen Produkte.
- Ceci ne s'applique qu'aux produits distribués par Yamaha Canada Music Ltd.
- Esto se aplica solamente a productos distribuidos por Yamaha Canada Music Ltd.

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured makings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

- This applies only to products distributed by Yamaha-Kemble Music (U.K.) Ltd.

Entsorgung leerer Batterien (nur innerhalb Deutschlands)

Leisten Sie einen Beitrag zum Umweltschutz. Verbrauchte Batterien oder Akkumulatoren dürfen nicht in den Hausmüll. Sie können bei einer Sammelstelle für Altbatterien bzw. Sondermüll abgegeben werden. Informieren Sie sich bei Ihrer Kommune.

OBSERVERA!
Apparaten kopplas inte ur växelströmskällan (nätet) så länge som den ar ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSEL: Netspændingen til dette apparat er IKKE afbrudt, sålænge netledningen siddr i en stikkontakt, som er t endt — også selvom der or slukket på apparatets afbryder.

VAROITUS: Laitteen toisiopiiriin kytketty käyttökytkin ei irroita koko laitetta verkosta.