YAMAHA PORTATONE

PSR-740
PSR-640

Owner's Manual

SPECIAL MESSAGE SECTION

This product utilizes batteries or an external power supply (adapter). DO NOT connect this product to any power supply or adapter other than one described in the manual, on the name plate, or specifically recommended by Yamaha.

This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by Yamaha. If a cart, etc., is used, please observe all safety markings and instructions that accompany the accessory product.

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.

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 long periods 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.

NOTICE:

Service charges incurred due to a 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.

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-rechargeable 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.

This product may also use "household" type batteries. Some of these may be rechargeable. Make sure that the battery being charged is a rechargeable type and that the charger is intended for the battery being charged.

When installing batteries, do not mix batteries with new, or with batteries of a different type. Batteries MUST be installed correctly. Mismatches or incorrect installation may result in overheating and battery case rupture.

Warning:

Do not attempt to disassemble, or incinerate any battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by the laws in your area. Note: Check with any retailer of household type batteries in your area for battery disposal information.

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. If your dealer is unable to assist you, please contact Yamaha directly.

NAME PLATE LOCATION:

The name plate is located on the bottom of the product. 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

92-BP (bottom)

PLEASE KEEP THIS MANUAL

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep these precautions in a safe place for future reference.

⚠ *WARNING*

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- If the AC adaptor cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the adaptor plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.
- Use the specified adaptor (PA-6 or an equivalent recommended by Yamaha) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Before cleaning the instrument, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hands.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.

⚠ *CAUTION*

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:

- Do not place the AC adaptor cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord.
- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- Unplug the AC power adaptor when not using the instrument, or during electrical storms.
- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum. Also, be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not use the instrument near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of the other products.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected adaptor and other cables.
- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Use only the stand/rack specified for the instrument. When attaching the stand or rack, use the provided screws only. Failure to do so could cause damage to the internal components or result in the instrument falling over.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

■SAVING USER DATA

- Always save data to a floppy disk frequently, in order to help prevent the loss of important data due to a malfunction or user operating error.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

Always turn the power off when the instrument is not in use.

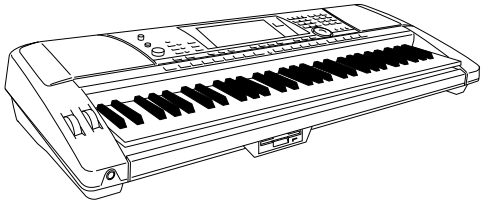
Congratulations!

You are the proud owner of a fine electronic keyboard. The Yamaha PSR-740/640 PortaTone combines the most advanced tone generation technology with state-of-the-art digital electronics and features to give you stunning sound quality with maximum musical enjoyment. A large 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 extensive performance potential, we urge you to read the manual thoroughly while trying out the various features described. Keep the manual in a safe place for later reference.

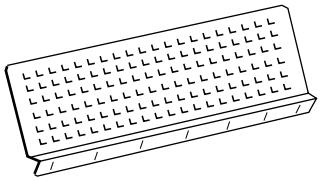
Packing List

Please check that these items have been packed with your PSR-740/640.

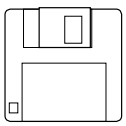
• PSR-740/PSR-640



• Music Stand (page 14)



• Sample Disk



• Owner's Manual

This product (PSR-740) is manufactured under license of U.S.Patents No.5231671, No.5301259, No.5428708, and No.5567901 of IVL Technologies Ltd.

How to use the manual

Setting Up

page 12
Before going on to any other part of the manual, we strongly suggest you read this section first. It shows you how to get started playing and using your new PSR-740/640.

Important Features

page 8
Once you've set up the PSR-740/640, you should read through this section — and explore the relevant page references — to familiarize yourself with the enormous variety of features and functions of the PSR-740/640.

Basic Operation

page 17
This section introduces you to the basic operating conventions of the PSR-740/640, such as editing values and changing settings, and shows you how to use the convenient Help and Direct Access functions.

Contents

page 6
All topics, features, functions, and operations are listed here in the order they appear in the manual, for easy reference.

Panel Controls

page 10
Use this section to find out about all of the buttons and controls of the PSR-740/640.

Panel Display Indications

page 16
This section explains the display indications of the PSR-740/640 and how to read them for optimum operation.

Function Tree

page 22
This lists all functions of the PSR-740/640 according to their hierarchical structure, letting you easily see the relationship of the various functions and quickly locate desired information.

Appendix

page 140
This contains various important lists such as the Voice List, Preset Style List, Effect List, MIDI Data Format, and MIDI Implementation Chart.

Troubleshooting

page 162
If the PSR-740/640 does not function as expected or you have some problem with the sound or operation, consult this section before calling your Yamaha dealer or service center. Most common problems and their solutions are covered here in a very simple and easy-to-understand way.

Index

page 181
This section alphabetically lists virtually all topics, features, functions, and operations with their respective page numbers, letting you quickly and easily find the information you need.

The illustrations and LCD screens as shown in this owner's manual are for instructional purposes only, and may be different from your instrument. The screens from the PSR-740 are used for the instructions and descriptions in this manual.

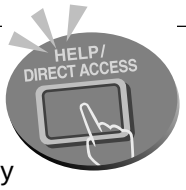
Contents

Important Features

Since the PSR-740/640 has such a wealth of advanced features and functions, you may be at a loss as to how to explore its capabilities and how to best use them for your music. You needn't worry. The PSR-740/640 is very easy to play and use, and each function — no matter how advanced — can be mastered easily.

That's what this section is designed for. It will help you master the PSR-740/640. It introduces you to the important features of the PSR-740/640 with short explanations and page references. Read through the features you're interested in, then turn to the relevant pages in the manual for instructions and other details.

Basic operations

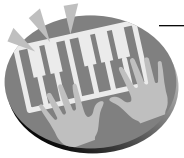


- The PSR-740/640 is packed with sophisticated feature and functions, yet it's also exceptionally easy to use. Panel operations are exceptionally quick and easy, especially with the aid of relevant "online" help messages that automatically appear in the display. (→ Page 17)
- A convenient Direct Access function lets you instantly call up the specific menu or display you need. (→ Page 21)

Listening to the PSR-740/640

- The PSR-740/640 features a wide variety of songs in various musical genres. (→ Page 15)
- In addition, 10 songs are provided in the included disk. (→ Page 76)
- The powerful auto accompaniment function gives you a total of 160 styles (rhythm and accompaniment patterns), providing professional sounding backing parts for your performance. (→ Page 34)
- Special Multi Pads let you instantly and easily play short rhythmic and melodic sequences for adding impact and variety to your performance. (→ Page 48)

Playing the PSR-740/640



- The PSR-740/640 keyboard has 61 keys with full touch-response capability that lets you play with extraordinary expressiveness and dynamic control. (→ Page 136)
- The PSR-740/640 lets you perform with a huge variety of musical instrument voices. (→ Page 26)
  There are two different types of voices: panel voices (the original PSR-740/640 voices) and XG voices.

* The PSR-740 features 267 panel voices, 13 drum kits, and 480 XG voices

* The PSR-640 features 223 panel voices, 12 drum kits, and 480 XG voices

- With the R1, R2, and L voices, you can play two different voices in a layer, and even play two different voices with your right and left hands. (→ Pages 27, 28)

Auto accompaniment (styles)

- The auto accompaniment feature puts a full backing band at your fingertips, with a total of 160 styles (rhythm and accompaniment patterns). (→ Page 34)
- The One Touch Setting feature lets you instantly call up the appropriate voice, effect, and other settings for the selected accompaniment style — with the touch of a single button. (→ Page 44)
- The advanced Groove function gives you the power to customize the preset styles of the PSR-740 by changing the basic "feel" of the rhythm and accompaniment patterns. (PSR-740) (→ Page 45)
- You can also create your original accompaniment styles by recording them directly from the keyboard. (→ Page 110)

Multi Pads

- By simply pressing one of the Multi Pads, you can play short rhythmic or melodic phrases.
- You can also create your original Multi Pad phrases by recording them directly from the keyboard. (→ Page 106)

Registration Memory

- The convenient Registration Memory feature lets you save virtually all panel settings to one of 128 Registration Memory settings, and then instantly recall all your custom panel settings by pressing a single button. (→ Page 62)

Song Recording

- Use the powerful song recording features create your own complete, fully orchestrated compositions and save them floppy disk as a User song. Each User song lets you record up to sixteen independent tracks. (→ Page 92)
  * To quickly and easily mold your musical ideas into complete songs, use the Quick Recording method. (→ Page 94)
  * To build up a song part-by-part and track-by-track, use the Multi Track Recording method. (→ Page 96)
  * You can also "fine tune" the recorded song data with the PSR-740/640's comprehensive song editing functions. (→ Pages 98-105)

Organ Flutes (PSR-740)

- This special function not only gives you a full set of rich and luscious organ sounds, it also lets you create your own original organ voices, just as on a traditional organ, by increasing and decreasing the flute footages, and adding percussive sounds. (→ Page 32)

Digital Effects

- A comprehensive set of professional-sounding digital effects are built into the PSR-740/640, letting you enhance the sound of your performance in a wide variety of ways. These include Reverb, Chorus, DSP, Harmony/Echo, and (on the PSR-740) Master EQ. (→ Page 50)
  * Reverb recreates the rich spacial ambiance of various performance environments, such as a concert hall or a night club. (→ Page 50)

* Chorus enriches the voices by making them sound warmer and thicker — as if several instruments were playing together at the same time. (→ Page 52)
* The DSP effects let you process the sound in special, unusual ways — such as applying distortion or tremolo to a specific part. (The PSR-640 has one DSP system; the PSR-740 features three DSP systems that can be used simultaneously.) (→ Pages 53-55)
* Harmony/Echo lets you enhance your right-hand melodies with a variety of harmony and echo effects. (→ Page 56)
* Master EQ (on the PSR-740) gives you fine control over the overall sound by letting you adjust the tone in five separate frequency bands. (→ Page 59)

Disk Drive

- The PSR-740/640 also features a built-in disk drive that lets you save all your important original data (such as User songs, User styles, User Multi Pads, Registration Memory, etc.) to floppy disk for future recall. (→ Page 65)

Vocal Harmony (PSR-740)

- The amazing Vocal Harmony feature (on the PSR-740) automatically produces backup vocal harmonies for lead vocals that you sing into a microphone. You can even change the gender of the harmony voices — for example, letting you add female backup to your own male voice (or vice versa). (→ Page 82)

MIDI

- MIDI (Musical Instrument Digital Interface) is a worldwide standard interface that allows various electronic music instruments, computers and other devices to communicate with each other. The MIDI features let you seamlessly integrate the PSR-740/640 into a variety of systems and applications:
  * Play other instruments from the PSR-740/640. (→ Page 124)
  * Play the sounds of the PSR-740/640 (including the auto accompaniment) from a connected keyboard. (→ Page 124)
  * Connect the PSR-740/640 directly to a computer, for advanced recording, editing and playing back of song data. (→ Page 126)
  * Use pre-programmed templates to instantly configure the PSR-740/640 for your specific MIDI system/application. (→ Page 128)

Panel logos

The logos printed on the PSR-740/640 panel indicate standards/formats it supports and special features it includes.

GM System Level 1

"GM System Level 1" is an addition to the MIDI standard which guarantees that any data conforming to the standard will play accurately on any GM-compatible tone generator or synthesizer from any manufacturer.

XG

XG is a new Yamaha MIDI specification which significantly expands and improves on the GM System Level 1 standard with greater voice handling capacity, expressive control, and effect capability while retaining full compatibility with GM. By using the PSR-740/640's XG voices, it is possible to record XG-compatible song files.

XF

The Yamaha XF format enhances the SMF (Standard MIDI File) standard with greater functionality and open-ended expandability for the future. The PSR-740/640 is capable of displaying lyrics when an XF file containing lyric data is played.

Vocal Harmony

Vocal Harmony employs state-of-the-art digital signal processing technology to automatically add appropriate vocal harmony to a lead vocal line sung by the user. Vocal Harmony can even change the character and gender of the lead voice as well as the added voices to produce a wide range of vocal harmony effects.

DOC

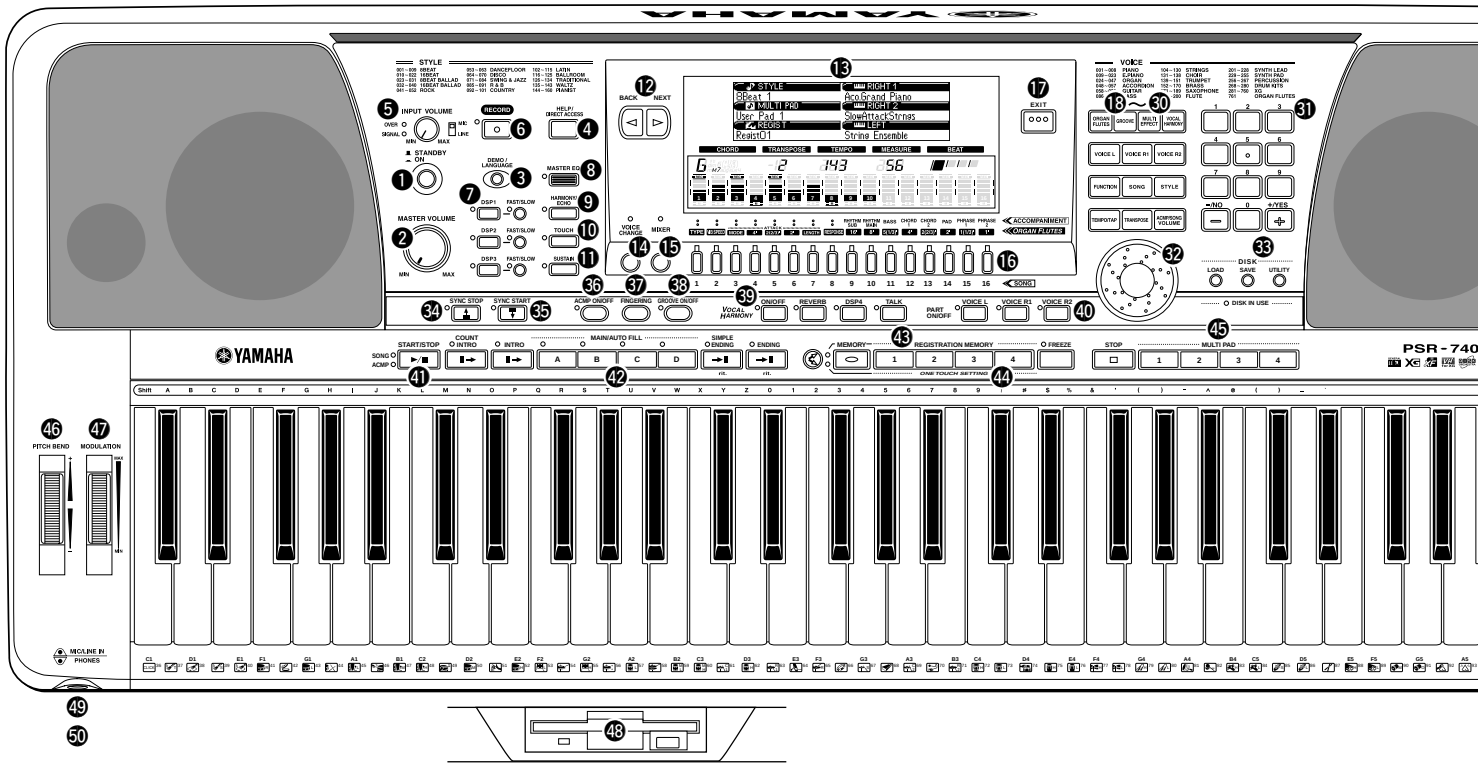
The DOC voice allocation format provides data playback compatibility with a wide range of Yamaha instruments and MIDI devices, including the Clavinova series.

Style File Format

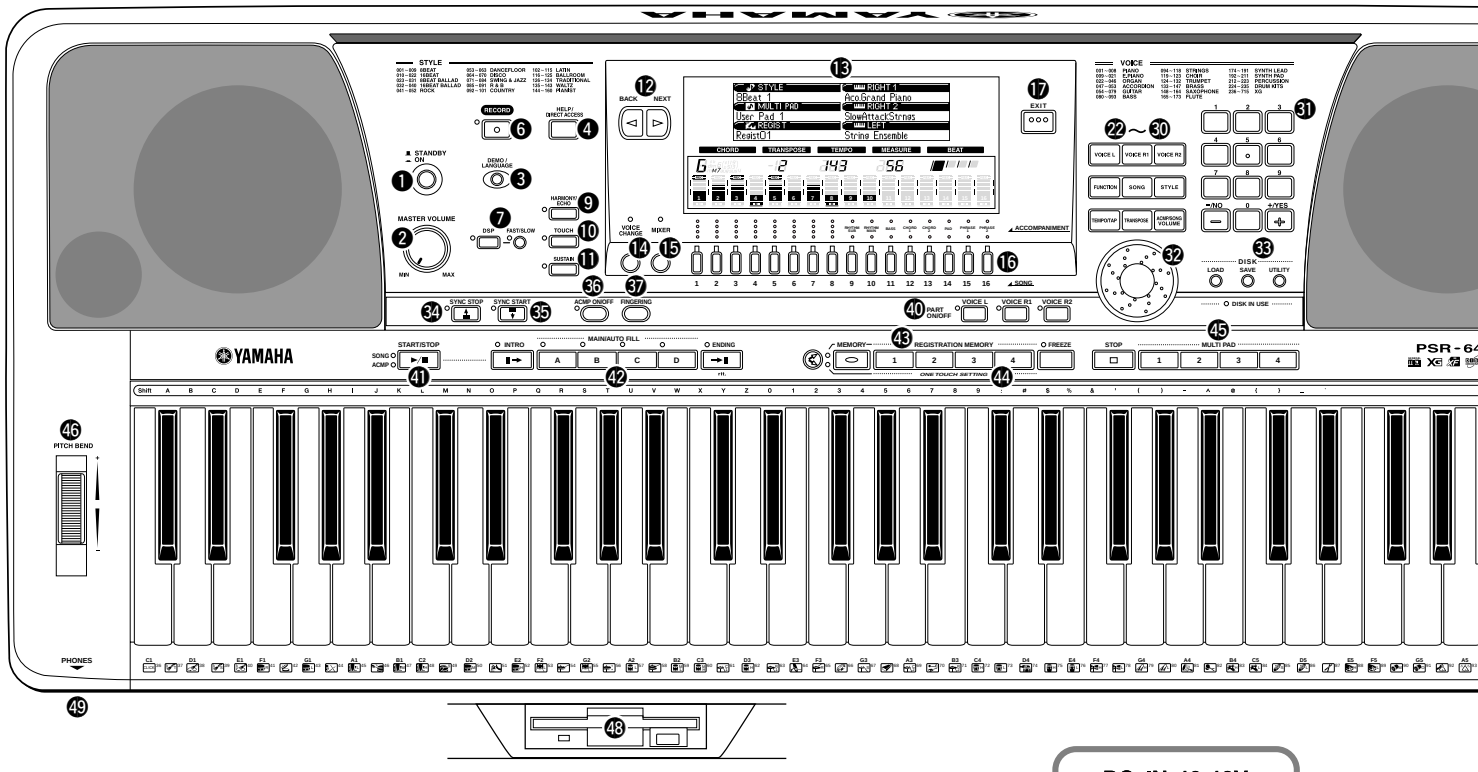
The Style File Format — SFF — is Yamaha's original style file format which uses a unique conversion system to provide high-quality automatic accompaniment based on a wide range of chord types. The PSR-740/640 uses the SFF internally, reads optional SFF style disks, and creates SFF styles using the Style Recording feature.

Panel Controls and Terminals

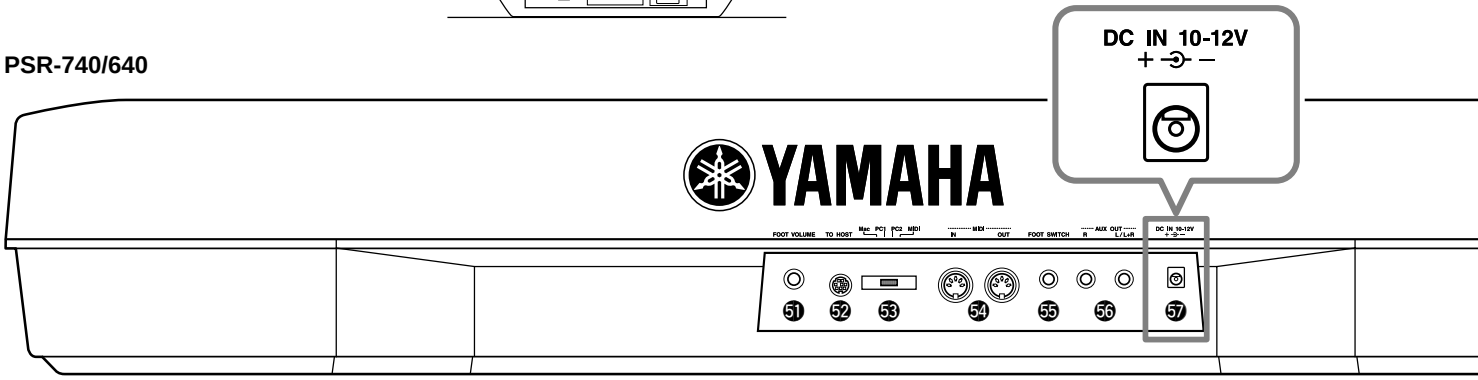
PSR-740

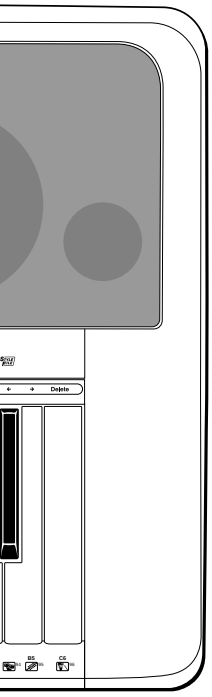


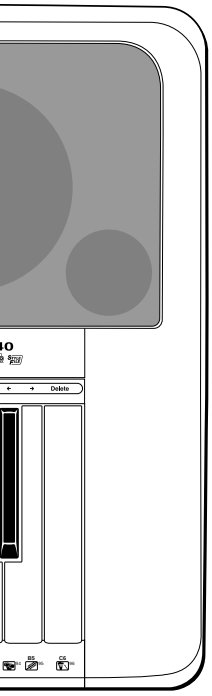
PSR-640

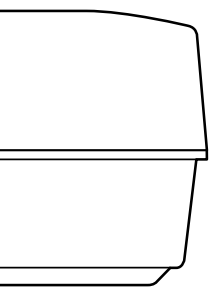


PSR-740/640









Top Panel Controls

Rear Panel Controls

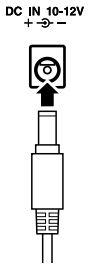
Setting Up

This section contains information about setting up your PSR-740/640 and preparing to play. Be sure to go through this section carefully before turning the power on.

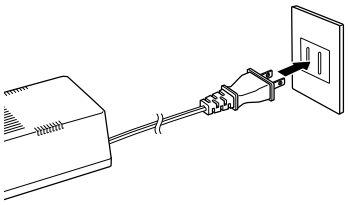
Power supply connections

1 Make sure that the STANDBY/ON switch of the PSR-740/640 is set to STANDBY.

2 Connect the optional AC adaptor (PA-6 or other adaptor specifically recommended by Yamaha) to the power supply jack.



3 Plug the AC adaptor into an AC outlet.



When turning the power OFF, simply reverse the procedure.

⚠ CAUTION

- ***Never interrupt the power supply (e.g. unplug the AC adaptor) during any PSR-740/640 record operation! Doing so can result in a loss of data.***

⚠ WARNING

- ***Use ONLY a Yamaha PA-6 AC Power Adaptor (or other adaptor specifically recommended by Yamaha) to power your instrument from the AC mains. The use of other adaptors may result in irreparable damage to both the adaptor and the PSR-740/640.***
- ***Unplug the AC Power Adaptor when not using the PSR-740/640, or during electrical storms.***

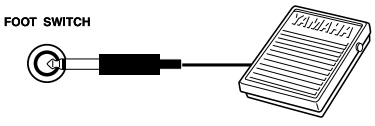
NOTE

- *Recorded data is retained in memory even when the STANDBY switch is turned off if an AC adaptor is connected. For details, see page 159.*

Connecting a footswitch

■ FOOT SWITCH jack

The sustain function lets you produce a natural sustain as you play by pressing a footswitch. Plug an optional Yamaha FC4 or FC5 footswitch into this jack and use it to switch sustain on and off. The footswitch connected to this jack can also be set to replicate the functions of some panel buttons, doing things like starting and stopping accompaniment (page 137).

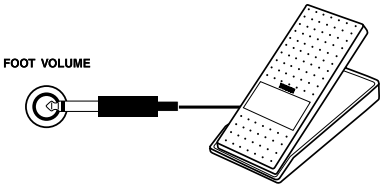


NOTE

- *Be sure that you do not press the footswitch while turning the power on. If you do, the ON/OFF status of the footswitch will be reversed.*
- *When the sustain or sostenuto pedal functions are being used (page 137), some voices may sound continuously or have a long decay after the notes have been released while the pedal is held.*

■ FOOT VOLUME jack

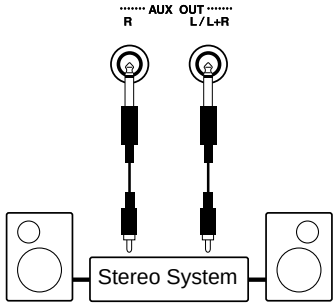
Connecting an optional Yamaha FC7 foot controller lets you use your foot to change the volume as you play the PSR-740/640 (expression function). The foot controller connected to this jack can also be set to replicate the functions of the main volume controls, such as accompaniment or song volume (page 138).



Audio equipment connections

■ AUX OUT R and L/L+R jacks

The rear-panel AUX OUT R and L/L+R jacks deliver the output of the PSR-740/640 for connection to a keyboard amplifier, stereo sound system, a mixing console, or tape recorder. If you will be connecting the PSR-740/640 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-740/640 sound (use phone plugs).

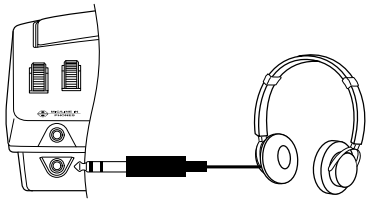


⚠ CAUTION

- ***Connect the PSR-740/640 to external equipment only after turning off power for all devices. To prevent damage to the speakers, set the volume of the external devices at the minimum setting before connecting them. Failure to observe these cautions may result in electric shock or equipment damage.***

■ PHONES jack

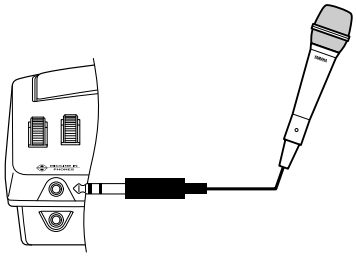
A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal stereo speaker system is automatically shut off when a pair of head phones is plugged into the PHONES jack.
Do not listen with the headphones at high volume for long periods of time. Doing so may cause hearing loss.

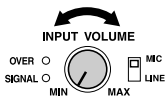


Connecting a microphone (PSR-740)

■ MIC/LINE IN jack

The PSR-740 includes a microphone/line input jack into which just about any standard microphone or line-level source with a 1/4" phone plug can be plugged (a dynamic microphone with an impedance of 250 ohms is recommended). The microphone or line input can be used with the PSR-740's vocal harmony function (pages 82). The panel MIC/LINE switch should be set according to the type of source used and the INPUT VOLUME control can be used to adjust the level of the microphone or line input signal. The SIGNAL and OVER indicators on the panel aid in setting the ideal input level: the green SIGNAL indicator should light when an input signal is present, but if the red OVER indicator lights the level should be reduced by using the INPUT VOLUME control, and if this is not sufficient, by reducing the level of the source signal itself.

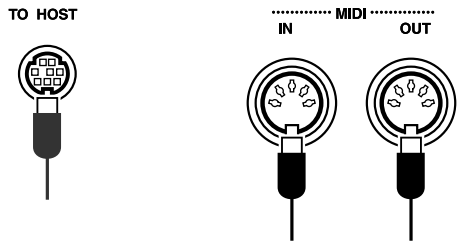




NOTE

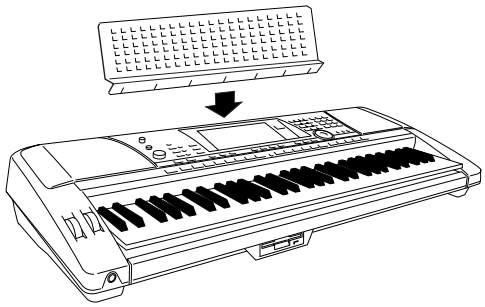
- *The Yamaha MZ106s microphone is recommended for use with the PSR-740.*
- *The level of the microphone sound may vary considerably according to the type of microphone used.*
- *Turn the INPUT VOLUME control all the way down when connecting or disconnecting a microphone.*
- *Placing a microphone which is connected to the PSR-740 too close to the PSR-740 speakers (or those of an external sound system connected to the PSR-740) can cause feedback. Adjust the microphone position and the INPUT VOLUME level or MASTER VOLUME control level if necessary, so that feedback does not occur.*

Connecting external MIDI devices



For more information on using MIDI, refer to page 123.

Music stand



The PSR-740/640 is supplied with a music stand that can be attached to the instrument by inserting it into the slot at the rear of the control panel.

Demo Song Playback

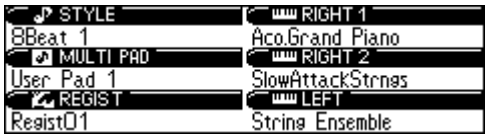
Once you've set up your PSR-740/640, try listening to the pre-programmed demonstration songs. A total of 10 demo songs (8 demo songs for PSR-640) are provided.

⚠ CAUTION

- ***Even when the switch is in the "STANDBY" position, electricity is still flowing to the instrument at the minimum level. When you are not using the PSR-740/640 for a long time, make sure you unplug the AC power adaptor from the wall AC outlet.***

1 Turn the power ON by pressing the [STANDBY/ON] switch.

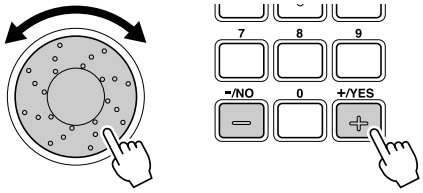
Press the **[STANDBY/ON]** switch again to turn the power OFF.



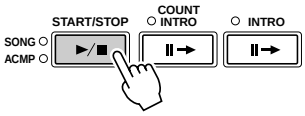
2 Press the [DEMO/LANGUAGE] button.

3 Select a demo song.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]** to scroll to the desired demo song.



4 Press the [START/STOP] button to start the selected demo song.

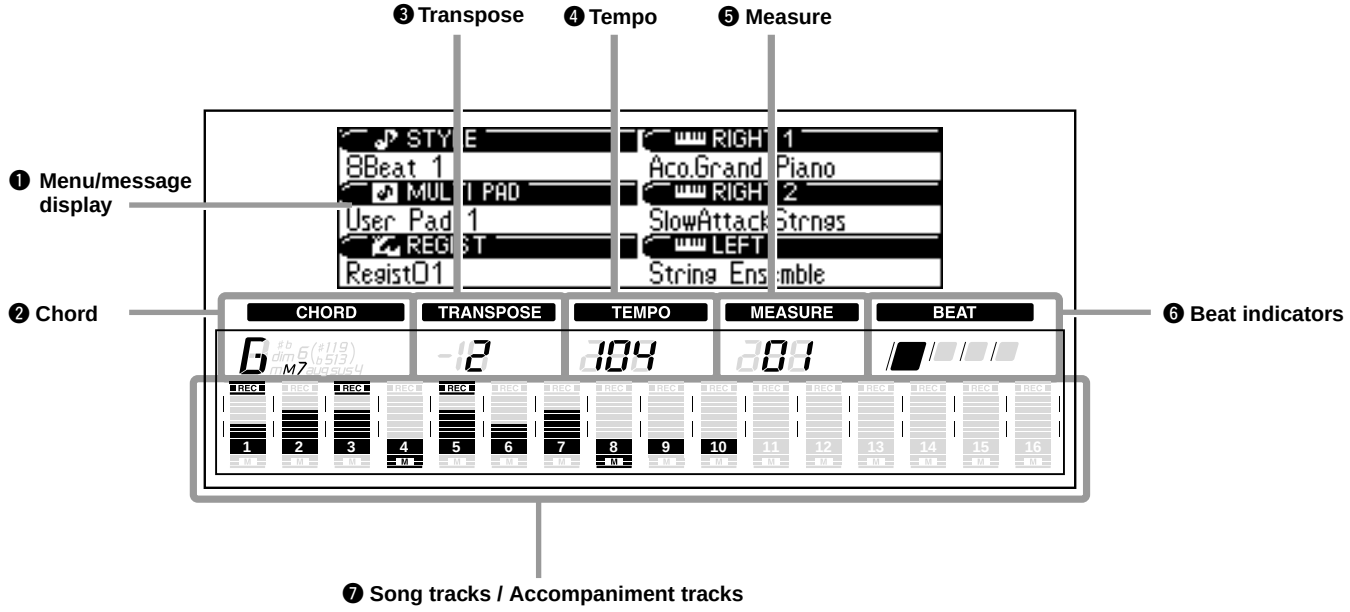


5 Set a volume level with the [MASTER VOLUME] control.

6 Press the [START/STOP] button again to stop the demo song.

Panel Display Indications

The PSR-740/640 features a large multi-function display that shows all important settings for the instrument. The section below briefly explains the various icons and indications in the display.

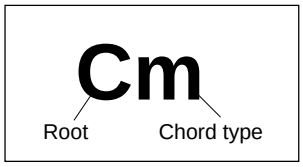


❶ Menu/message display

This shows the menu for each function of the PSR-740/640. It also displays the relevant messages for the current operation.
See the “Basic Operation” section (page 17) for details on the menu/message display.

❷ Chord

Displays the current chord name during AUTO ACCOMPANIMENT playback or SONG recording/playback (page 35).



❸ Transpose

Shows the current transpose value (page 30).

❹ Tempo

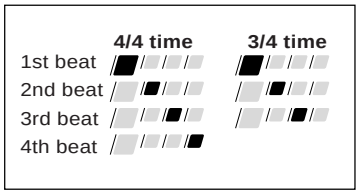
Shows the current tempo of accompaniment/ song playback (page 38).

❺ Measure

Indicates the current measure number during song recording and playback.

❻ Beat indicators

Flashes at the current tempo and indicates the current beat during accompaniment and song playback.



❼ Song tracks/Accompaniment tracks

- **In the Song mode (page 25) and the Demo Song mode (page 15):**
  The icons of all tracks indicate the on/off status and volume/velocity settimgs.
- **In the Style mode (page 25):**
  The icons of tracks 9 - 16 indicate the on/off status and volume/velocity settings for each of the eight accompaniment tracks.
- **In the Record mode (page 25):**
  The icons of all tracks indicate the on/off status and volume/velocity settimgs. The “REC” marks indicate the recording status.

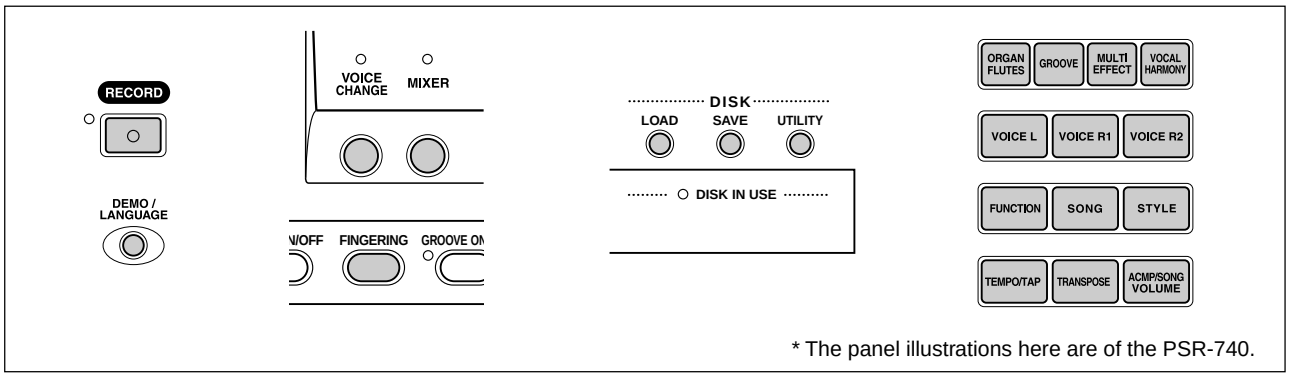
Basic Operation

This section introduces you to the basic operations common to the various functions of the PSR-740/640. In particular, you'll learn how to use the menu/message display at the center of the front panel.

Calling up the Operation Displays

Press the buttons listed below in order to call up the appropriate displays for the various functions of the PSR-740/640.

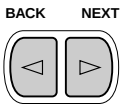
• DEMO/LANGUAGE button ..... pages 15, 18
• VOICE R1 button ..... page 26
• VOICE R2 button ..... page 27
• VOICE L button ..... page 28
• STYLE button ..... pages 25, 34
• SONG button ..... pages 25, 76
• MIXER button ..... page 90
• VOICE CHANGE button ..... page 89
• FUNCTION button ..... pages 91, 134
• ACMP/SONG VOLUME button ..... page 39, 78
• TRANSPOSE button ..... page 30
• TEMPO/TAP button ..... page 38
• FINGERING button ..... page 40
• DISK LOAD button ..... page 70
• DISK SAVE button ..... page 68
• DISK UTILITY button ..... pages 72, 75
• RECORD button ..... pages 25, 92, 106, 110
• ORGAN FLUTES button (PSR-740) ..... page 32
• GROOVE button (PSR-740) ..... page 45
• MULTI EFFECT button (PSR-740) ..... page 54
• VOCAL HARMONY button (PSR-740) ..... page 82



* The panel illustrations here are of the PSR-740.

Pressing one of these buttons instantly calls up the relevant display for the selected function. See the function tree chart for details (page 22).

If you've selected several different functions' displays in succession, you can "retrace your steps" and revisit each display by using the **[BACK]** and **[NEXT]** buttons at the left side of the display. Of course you can also directly select the desired displays by pressing the appropriate buttons (as listed above).



How to leave the current display

As shown in the function tree chart (page 22), there is a wide varierty of functions on the PSR-740/640, each with its own corresponding display. In order to leave the display of each function press the **[EXIT]** button.

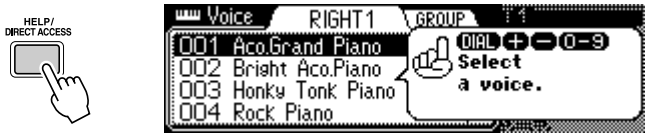
Since the PSR-740/640 has so many different displays, you may occasionally find yourself confused as to which operation's display is currently shown. If this happens, you can return to "home base" by pressing the **[EXIT]** button several times. This returns the PSR-740/640 to the default display — the same display that appears when the power is turned on.

Help — How to Read the Help/Operation Guide

Depending on the selected function or operation, the PSR-740/640 shows a variety of displays and indications. Included in these are "help" messages that guide you through the various operations.
There are two types of messages as shown below.

● Help

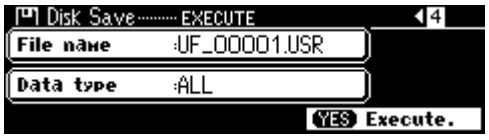
Pressing and holding the **[HELP/DIRECT ACCESS]** button shows a "balloon" to help you to understand the currently selected function or find an appropriate operation.



How to read
This message means "Select a voice with the data dial, the [+/YES] button, the [-/NO] button or the Number buttons [0]-[9]."

● Operation Guide

This gives relevant information for the current operation and remains displayed until you execute the next operation.



How to read
This message means "Press the [+/YES] button to execute the SAVE operation."

NOTE
- *Note that the example Operation Guide displays shown in this manual are in English.*

Selecting the desired language of the Help messages

You can select the desired language of the Help messages from the following:
English, Japanese, German, French, Spanish, and Italian.

1 Press the [DEMO/LANGUAGE] button.

2 Press the [NEXT] button.

3 Select the desired Language.

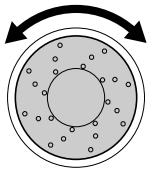
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

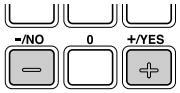
Menu Selection

For certain operations on the PSR-740/640 (such as selecting voices, demo songs and styles), you'll need to select different menus in the display.
For example, the display below (for selecting the function) appears when you press the **[FUNCTION]** button.

In this case you can select the desired function by turning the **data dial** or move the cursor by pressing the **[+/YES]/[-/NO]** buttons.

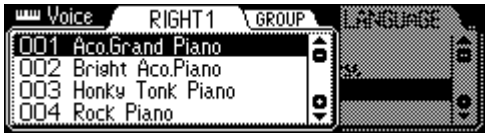
Rotating the data dial to the right (clockwise) moves the cursor downward, while rotating it to the left (counter-clockwise) moves the cursor upward.





Pressing the [+/YES] button moves the cursor downward, while pressing the [-/NO] button moves the cursor upward.

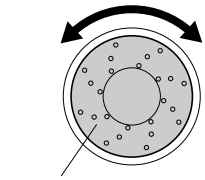
The display below (for selecting voices) appears when you press the **[VOICE R1]** button.



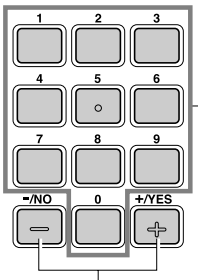
In this case you can also select the voice by using the **data dial** or the **[+/YES]/[-/NO]** buttons as above; you can also input the voice number directly by using the number buttons **[1]-[0]** (See the next page).

Changing (Editing) Values

This section shows you how to set numeric values on the PSR-740/640, such as voice number, song/style number and various parameters. Input the values by using the number buttons **[1]**-**[0]** or the **[+/YES]**/**[-/NO]** buttons.



Rotating the data dial to the right (clockwise) increases the value, while rotating it to the left (counter-clock-wise) decreases it.



Number buttons [1]-[0] described below.

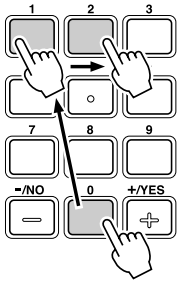
Pressing the [+/YES] button increases the displayed value by 1. Pressing the [-/NO] button decreases the displayed value by 1. Pressing and holding either button causes a continuous increase and decrease.
For items that have initial default values, pressing the [+/YES] and the [-/NO] buttons together at the same time will return the setting to the initial value.

Numeric entry

The explanations here apply only to numbers that have a maximum of three digits, such as those for voices and styles.

• Entering one- or two-digit numbers

One- or two-digit voice numbers can be entered with leading zeroes: e.g. “12” can be entered as “012” by pressing the **[0]**, **[1]** and **[2]** buttons in sequence.

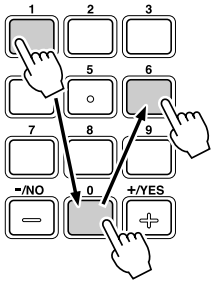


NOTE

- *One- or two-digit numbers can also be entered without leading zeroes.*
  To select number “12,” for example, simply press the [1] button and then the [2] button. The bars below the number on the display will flash for a few seconds, and then disappear when the selected number has been recognized by the PSR-740/640.
- *On some occasions, “- - -” may appear in the parameter value part of the display. This indicates that the parameter is unavailable or cannot be changed (due to the current panel settings).*

• Entering three-digit numbers

The number buttons can be used to directly enter the number of the desired voice, thereby immediately selecting that voice without having to step through a number of other voices. To select voice number 106, for example, press the **[1]**, **[0]** and **[6]** number buttons in sequence.

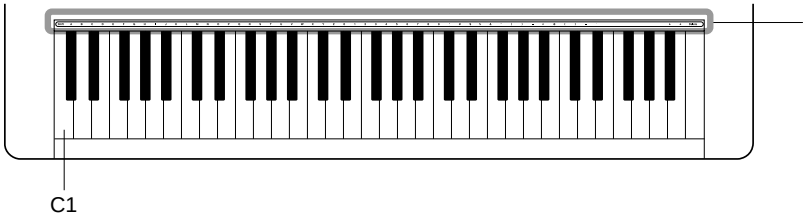


Naming

The allows you to create your own original data such as songs, styles and registration memory settings. You can also freely name the data as desired.
The following data types can be named.

The example display below appears when naming a song on a floppy disk (page 69).

To enter an original name, use the keyboard.



Entering a character	Each key on the keyboard enters a different character, as marked directly above the key.
Moving the cursor	The A♯5 and B5 keys move the cursor backward and forward within the file name.
Entering a lower-case character	The C1 key functions as a shift key that shifts between lower- and upper-case characters: hold the Shift key while pressing a character key to enter the lower-case character.
Delete	The Delete key (C6) deletes the character at the cursor position.

NOTE

• Lowercase letters cannot be used for disk file names.

Direct Access

By using the **[HELP/DIRECT ACCESS]** button, you can instantly call up the desired display. For example, pressing the **[REGISTRATION MEMORY]** button while holding the **[HELP/DIRECT ACCESS]** button automatically selects the display for inputting the Registration Memory bank name.

See page 24 for the Direct Access Chart.

Function Tree

Button	Screen title	Function	See page
DEMO/LANGUAGE	DEMO	Demo song selection	15
	LANGUAGE	Language of the Help selection	18
VOICE R1	VOICE RIGHT1	Voice R1 selection	26
	VOICE GROUP RIGHT1	Voice group R1 selection	26
	DSP		
	TYPE	DSP type selection (PSR-740, only in the Style Record mode)	50
	RETURN LEVEL	DSP return level setting (PSR-740, only in the Style Record mode)	50
	DEPTH	DSP depth setting (PSR-740, only in the Style Record mode)	50
VOICE R2	VOICE RIGHT2	Voice R2 selection	27
	VOICE GROUP RIGHT2	Voice group R2 selection	27
VOICE L	VOICE L	Voice L selection	28
	VOICE GROUP L	Voice group L selection	28
STYLE	STYLE	Accompaniment Style selection	34
	STYLE GROUP	Accompaniment Style group selection	34
SONG	SONG	Song selection	76
	SONG UTILITY		
	SONG PLAY MODE	Song play method selection	77
	SONG START MEASURE	Song measure from which to start playback	79
	SONG REPEAT	Song repeat setting	80
	SONG TRANSPOSE	Song transpose setting	81
VOICE CHANGE	VOICE	Voice selection of the R1/R2/L/Style/Song track	89
	VOICE GROUP	Voice group selection of the R1/R2/L/Style/Song track	89
MIXER	R1/R2/L	Volume adjustment of Voice R1/R2/L DIRECT ACCESS 1, 2, 3	90
	STYLE	Volume adjustment of the accompaniment track	90
	SONG	Volume adjustment of the song track	90
	VOCAL HARMONY	Volume adjustment of the Vocal Harmony part (PSR-740)	90
ORGAN FLUTES	FOOTAGE	Footage setting (PSR-740)	32
	ATTACK MODE	Attack mode setting (PSR-740)	32
	ORGAN TYPE	Organ type setting (PSR-740)	32
	SPEED	Speed setting (PSR-740)	32
GROOVE	GROOVE TYPE	Groove type selection (PSR-740)	45
	GROOVE SWING	Groove swing setting (PSR-740)	45
	DYNAMICS TYPE	Dynamics type selection (PSR-740)	45
	DYNAMICS DEPTH	Dynamics depth setting (PSR-740)	45
MULTI EFFECT	MULTI EFFECT CONNECTION	Multi Effect connection setting (PSR-740)	54
	MULTI EFFECT BLOCK SETTING	Multi Effect block setting (PSR-740)	54
	MULTI EFFECT TYPE	Multi Effect type selection (PSR-740) DIRECT ACCESS 4, 5, 6, 7	54
	MULTI EFFECT DRY/WET	Multi Effect dry/wet setting (PSR-740)	54
VOCAL HARMONY	VOCAL HARMONY TYPE	Vocal Harmony type selection (PSR-740) DIRECT ACCESS 8	85
	VOCAL HARMONY LEAD GENDER TYPE	Gender type selection (PSR-740)	85
	VOCAL HARMONY LEAD PITCH CORRECTION	Lead Pitch Correction (PSR-740)	85
	VOCAL HARMONY PITCH TO NOTE	Pitch to note setting (PSR-740)	85
	VOCAL HARMONY PART	Part setting (PSR-740)	85
	VOCAL HARMONY SONG TRACK	Song track setting (PSR-740)	85
ACMP/SONG VOLUME	ACMP VOLUME	Accompaniment Volume setting	39
	SONG VOLUME	Song Volume setting	78
TRANSPOSE	TRANSPOSE	Transpose setting	30
TEMPO/TAP	TEMPO	Tempo setting	38
FINGERING	FINGERING	Fingering selection	40
DISK LOAD	DISK LOAD	Loading data from a disk	70
DISK SAVE	DISK SAVE	Saving data to a disk	68
DISK UTILTY	DISK UTILTY		
	FORMAT	Formatting a disk	68
	COPY	Copying a song in a disk	72
	DELETE	Deleting a file in a disk	75

Button	Screen title	Function	See page

FUNCTION

Button	Screen title	Function	See page

RECORD

- SONG
  - QUICK ..... User Song Quick recording 94
  - MULTI TRACK ..... User Song Multi track recording 96
    - PUNCH IN/OUT ..... Punch in/out setting 98
    - START MEASURE ..... Measure from which to start playback 98
  - EDIT
    - QUANTIZE ..... Quantize 100
    - SETUP DATA ..... Setup data editing 102
    - NAME ..... Naming User Songs 104
    - CLEAR ..... Clearing user song data 105
- STYLE
  - RECORD ..... User Style recording 112
  - EDIT
    - QUANTIZE ..... Quantize 116
    - NAME ..... Namimg User Styles 118
    - CLEAR ..... Clearing user style data 118
    - CTAB EDIT ..... CTAB setting 119
      - NOTE LIMIT 119
      - HIGH KEY 119
      - SOURCE CHORD 119
- PAD
  - RECORD ..... User Pad recording 106
  - EDIT
    - CHORD MATCH ..... Chord match on/off setting 108
    - NAME ..... Naming user pads 108
    - CLEAR ..... Clearing user pad data 109

Direct Access Chart

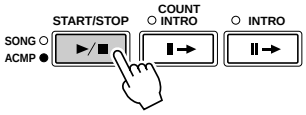
	Function Tree number/function		Operation: HELP/DIRECT ACCESS + button listed below
1	Volume adjustment of Voice L		PART ON/OFF [VOICE L]
2	Volume adjustment of Voice R1		PART ON/OFF [VOICE R1]
3	Volume adjustment of Voice R2		PART ON/OFF [VOICE R2]
4	Multi Effect type selection (DSP1)	PSR-740	[DSP1]
5	Multi Effect type selection (DSP2)	PSR-740	[DSP2]
6	Multi Effect type selection (DSP3)	PSR-740	[DSP3]
7	Multi Effect type selection (DSP4 for the microphone sound)	PSR-740	VOCAL HARMONY [DSP4]
8	Vocal Harmony type selection	PSR-740	VOCAL HARMONY [ON/OFF]
9	Multi pad bank selection		MULTI PAD [STOP]
10	Chord match on/off setting		MULTI PAD [1]-[4]
11	Registration Memory bank selection		REGISTRATION MEMORY [1]-[4]
12	Namimg Registration Memory bank		REGISTRATION MEMORY [MEMORY]
13	DSP type selection	PSR-640	[DSP]
14	Harmony/Echo type selection		[HARMONY/ECHO]
15	Master EQ gain setting	PSR-740	[MASTER EQ]
16	Metronome on/off setting		[TEMPO/TAP]
17	Part octave setting of Voice L		[VOICE L]
18	Part octave setting of Voice R1		[VOICE R1]
19	Part octave setting of Voice R2		[VOICE R2]
20	Split point setting		[ACMP ON/OFF]
21	Touch sensitivity setting		[TOUCH]
22	Selecting footswitch function		Footswitch
23	Selecting foot volume function		Foot Volume
24	Pitch bend range setting		Pitch bend wheel
25	Selecting modulation wheel function	PSR-740	Modulation wheel
26	Reverb depth setting of vocal harmony part	PSR-740	VOCAL HARMONY [REVERB]
27	Talk volume adjustment	PSR-740	VOCAL HARMONY [TALK]

Mode

Depending on the panel operation used, the PSR-740/640 has several fundamentally different conditions (or methods of operation). Each of these conditions is called a mode. This section explains the main modes of the instrument.

Style Mode page 34

Select this mode by pressing the **[STYLE]** button. (This is the default mode when the power is turned on.)
The Style mode is used for playing the full keyboard normally, and when using the auto accompaniment.
Styles are the rhythm/accompaniment pattterns which are played by the auto accompaniment feature.

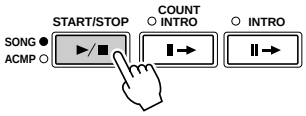


● **Auto accompaniment (ACMP) on/off ..... page 35**
The [ACMP ON/OFF] lamp switches on and off.
When auto accompaniment is on, the left side of the keyboard is used for playing/indicating chords.

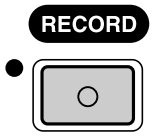
● **Synchronized Start standby (SYNC START) on/off ..... page 35**
The [SYNC START] lamp switches on and off.
When Synchronized Start standby is on, the auto accompaniment starts as soon as you play a key on the keyboard.

Song Mode page 76

Select this mode by pressing the **[SONG]** button or inserting the disk that contains song data into the disk drive. The Song mode is used for playing the full keyboard normally, and for playing back the songs.



Record Mode



Select this mode by pressing the **[RECORD]** button.
In the Record mode you can record your own original performances and songs, create original styles and Multi Pad phrases.

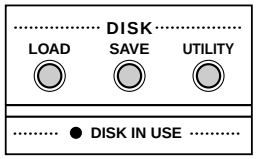
● **Song record mode ..... page 92**
- Rehearsal mode (Sync Start off)
- Record (Synchronized Start) standby
- Recording

● **Style record mode ..... page 110**
- Record (Synchronized Start on/off) standby
- Recording

● **Pad record mode ..... page 106**
- Rehearsal mode (Sync Start off)
- Record (Synchronized Start) standby
- Recording

When Record (Synchronized Start) standby is on, the recording starts as soon as you play a key on the keyboard. If the **[SYNC START]** button is pressed, it will be canceled (the beat indicator dots will go out) and the PSR-740/640 will enter Rehearsal mode.

Disk Mode



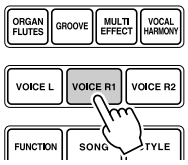
Select this mode by pressing the **[LOAD]** button, **[SAVE]** button or the **[UTILITY]** button.
In the Disk mode you can save and load important data (page 65).
In the Disk mode, no panel operations can be executed (except for disk operations).

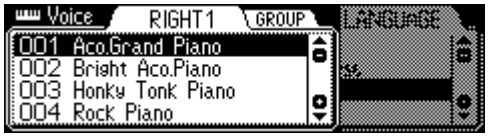
Playing Voices

The PSR-740/640 has a huge selection of various musical instrument voices which you can play. Try out the different voices referring to the voice list at the end of this manual (page 140).

Selecting a Voice

1 Press the [VOICE R1] button.



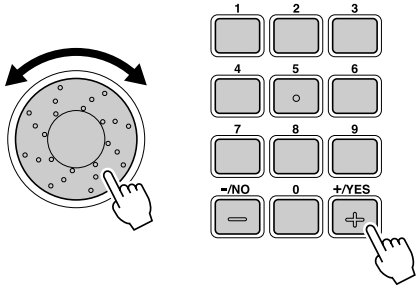


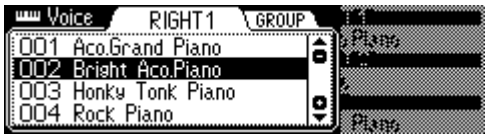
NOTE

• The voice selected here is called voice R1 (RIGHT 1). See page 29 for more information on voice R1.

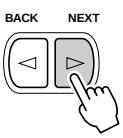
2 Select a voice.

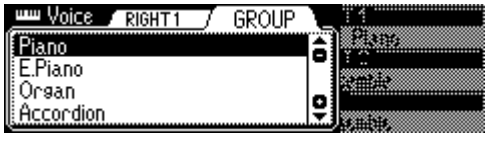
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.
Refer to the Voice List (page 140).





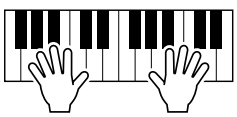
The voices of the PSR-740/640 are divided into different groups or basic categories. You can select different voice groups in succession by pressing the **[NEXT]** button. Selecting a specific voice group makes it easier to select a desired voice, since it lets you narrow down your search to just the voices of a certain category.





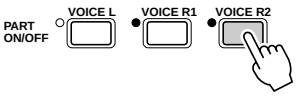
Press the **[BACK]** button to return back to the VOICE RIGHT1 diaplay.

3 Play & adjust the volume.



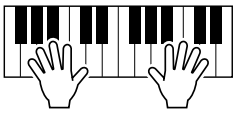
Playing Two Voices (R1, R2) Simultaneously

1 Press the [PART ON/OFF VOICE R2] button.



2 Play the voices.

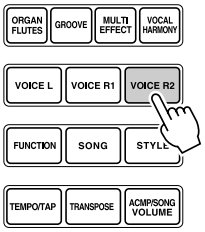
Two different voices are sounded simultaneously in a layer.



Voice R1 (RIGHT 1) is the first voice of the layer and is meant to be played with the right hand. The second voice is called voice R2 (RIGHT 2) and is also played with the right hand.

Selecting a voice for VOICE R2

1 Press the [VOICE R2] button.



2 Select a voice.

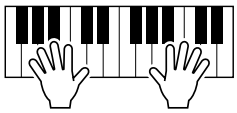
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

To indicate the voice group, press the **[NEXT]** button. To return to the previous display, press the **[BACK]** button.

Refer to the Voice List (page 140).

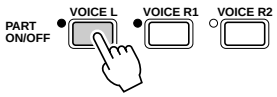
The voices available for selection here (VOICE R2) are the same as those available for VOICE R1 (selected on page 26).

3 Play the voice.



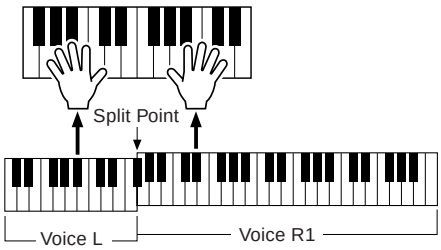
Playing Different Voices with the Left and Right Hands

1 Press the [PART ON/OFF VOICE L] button.



2 Play the voices.

The notes you play with your right and left hands sound two different voices.



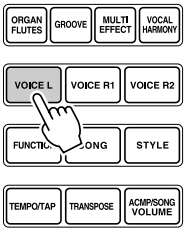
NOTE

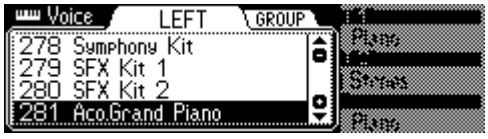
- *The point on the keyboard that separates voice L and voice R1 is called the "split point" (page 29).*

Voice R1 (RIGHT 1) is meant to be played with the right hand. Voice L (LEFT) is played with the left hand.

Selecting a voice for VOICE L

1 Press the [VOICE L] button.



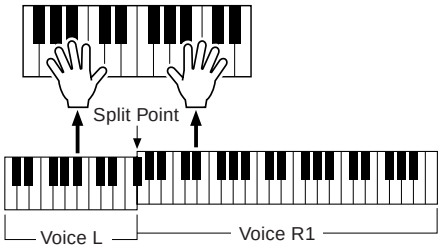


2 Select a voice.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.
Refer to the Voice List (page 140).

The voices available for selection here (VOICE L) are the same as those available for VOICE R1 (selected on page 26).

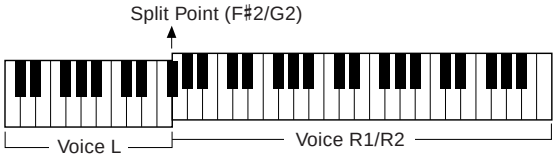
3 Play the voices.



Split Point

The point on the keyboard that separates voice L and voice R1/R2 is called the “split point”.

The split point is set to F♯2/G2 at the factory setting, however you can set this to any key you wish. Refer to page 135 for instructions on setting the split point.



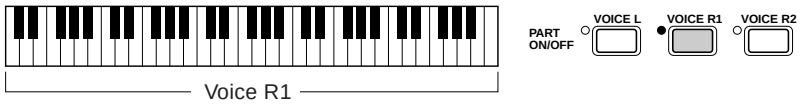
NOTE

• Each key has a note name; for example, the lowest (farthest left) key on the keyboard corresponds to C1 and the highest (farthest right) key to C6 (See below for details).

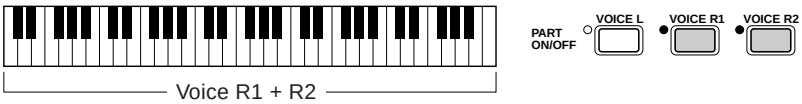
Functions of the Keyboard

As explained above, the keyboard of the PSR-740/640 can sound three different voices. Here’s a short summary of the various ways of playing voices.

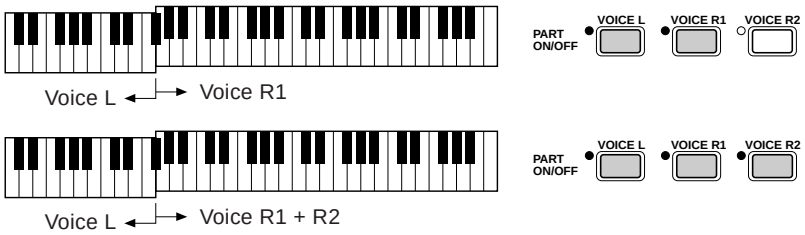
● Playing a Single Voice



● Playing Two Voices



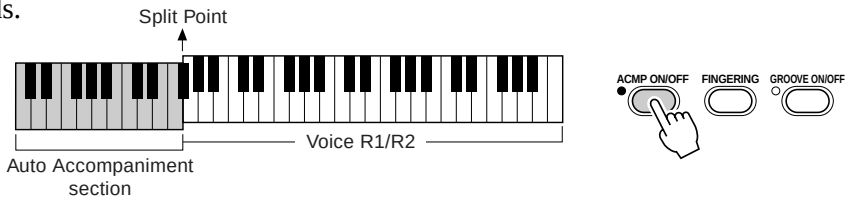
● Playing Separate Voices with the Right and Left Hands



In addition, the keyboard of the PSR-740/640 has other important functions besides playing voices (as shown below).

● Auto Accompaniment Section

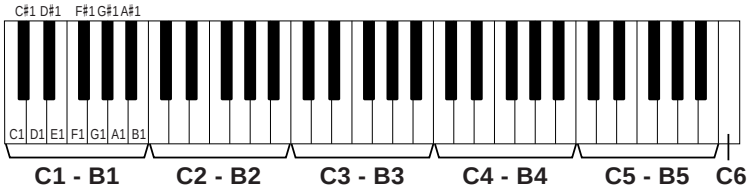
When the auto accompaniment is set to on (page 35), the key range of voice L becomes the range for playing/indicating chords.



● Naming

The keyboard can also be used to name song files on a floppy disk, User Styles, User Pad banks and Registration Memory banks (page 21).

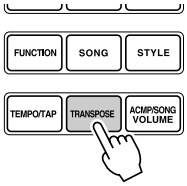
Each key has a note name; for example, the lowest (farthest left) key on the keyboard corresponds to C1 and the highest (farthest right) key to C6.

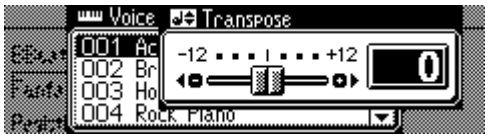


Transpose

This function allows the overall pitch of the PSR-740/640 to be transposed up or down by a maximum of one octave in semitone increments.

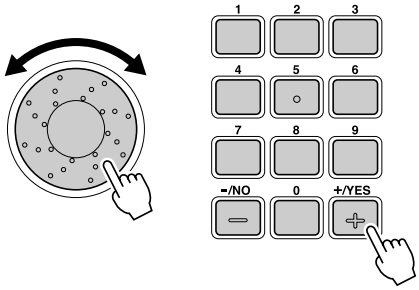
1 **Press the [TRANSPOSE] button.**

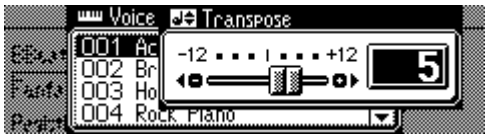




2 **Set the transposition.**

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.



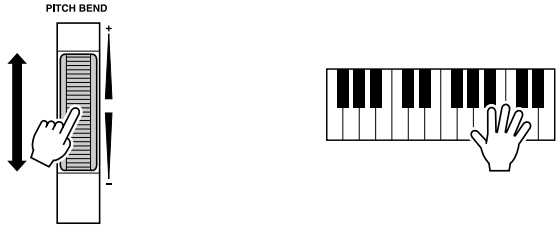


NOTE

- *The Transpose function cannot be applied when a drum kit is the selected voice (page 31).*
- *Press the [+/YES] and [-/NO] buttons simultaneously to instantly reset the transpose value to "0."*
- *The new TRANSPOSE value will take effect from the next key played.*
- *Minus values can be entered by using the number buttons while holding the [-/NO] button.*

Pitch Bend Wheel

Use the PSR-740/640 pitch bend wheel to bend notes up (roll the wheel away from you) or down (roll the wheel toward you) while playing the keyboard. The pitch bend wheel is self-centering and will automatically return to normal pitch when released.

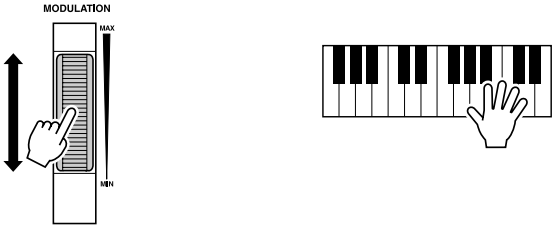


NOTE

- *The maximum pitch bend range can be set via the Pitch Bend Range function in the Utility function group (page 139).*

Modulation Wheel (PSR-740)

The Modulation function applies a vibrato effect to notes played on the keyboard (R1, R2, L voices). Moving the MODULATION wheel all the way towards yourself minimizes the depth of the effect, while rotating it away from yourself increases it.

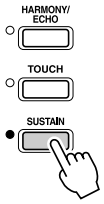


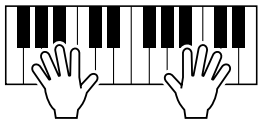
NOTE

- *In order to avoid accidentally applying modulation when you don't intend to, set the depth at its minimum setting.*
- *You can also assign other functions to the MODULATION Wheel (page 139).*

Sustain

When the Sustain features is ON, all notes played on the keyboard have a longer sustain. Press the **[SUSTAIN]** button to turn the SUSTAIN effect ON or OFF.





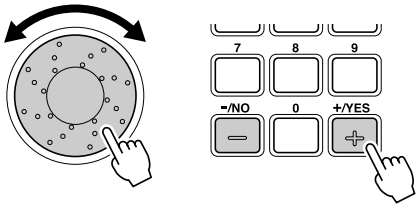
Keyboard Percussion

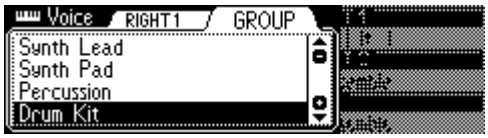
1 Press the [VOICE R1] button.

2 Press the [NEXT] button to display the "VOICE GROUP" selection screen.

3 Select Voice group "Drum Kit."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.





4 Press the [BACK] button to return back to the VOICE selection screen.

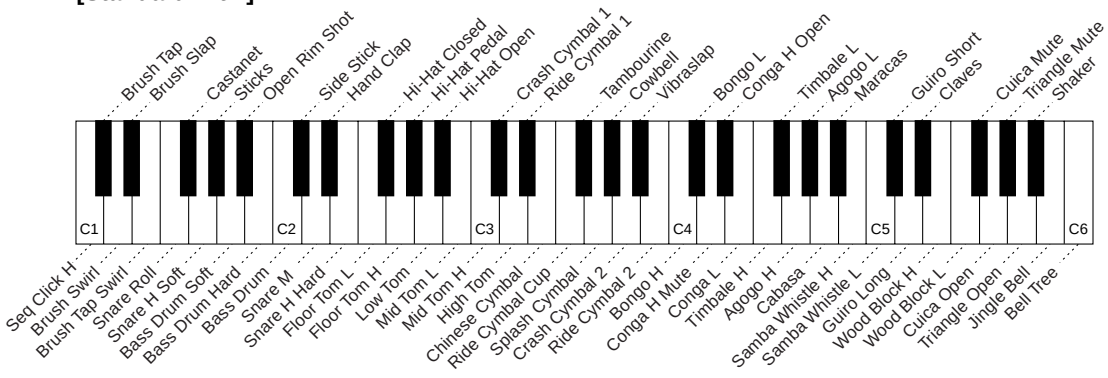
5 Play the voice.

Refer to the illustration below and the drum kit list at the end of the manual (page 148).
The drum and percussion instrument sounds for the standard kit (Std.Kit1) are indicated by symbols printed below the keys.

NOTE

- *The Transpose function cannot be applied when a drum kit is the selected voice (page 30).*
- *Each key has a note name; for example, the lowest (farthest left) key on the keyboard corresponds to C1 and the highest (farthest right) key to C6 (See page 29 for details).*

[Standard Kit 1]



Organ Flutes (PSR-740)

The Organ Flutes function lets you create your own original organ voices, just as on a traditional organ, by increasing and decreasing the flute footages, and adding percussive sounds.

Your original organ voice is stored to voice number 761 (Organ Flutes) for selecting and playing.

■ Parameters

- **Organ Type**
  This determines the type of organ sound or tone generation to be simulated: Sine or Vintage. The vibrato-enhanced variations provide different modulation effects.

  Settings:
  - SINE1
  - SINE2
  - SINE3
  - SINE4
  - VINTAGE1
  - VINTAGE2
  - VINTAGE3
  - VINTAGE4

- **Vibrato Speed**
  This determines the speed of the vibrato effect (when one of the vibrato-enhanced Organ Types is selected).

- **Attack Mode**
  This determines how the attack (or percussive) sound is applied to the organ flutes: First or Each. When this is set to FIRST, the attack sound will only be applied to the first note in a chord or a held group of notes. When this is set to EACH, the attack sound will be applied equally to all notes.

- **Attack Footage**
  This determines the level of each volume in the percussive portion of the voice. Footage settings are 4', 2-2/3', and 2'.

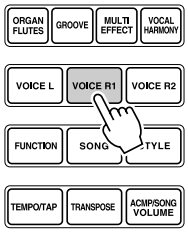
- **Length**
  This determines the decay of the attack sound, or how long the attack portion of the sound sustains. The higher the value, the longer the decay.

- **Response**
  This parameter affects the sustain portion of the organ flutes, increasing or decreasing the response time of the initial swell and release, based on the FOOTAGE parameter (below). The higher the value, the slower the swell and release.

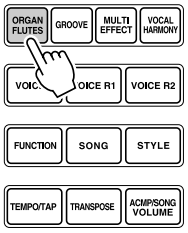
- **Footage**
  The footage settings determine the basic sound of the organ flutes.
  The term “footage” is a reference to the sound generation of traditional pipe organs, in which the sound is produced by pipes of different lengths (in feet). The longer the pipe, the lower the pitch of the sound. Hence, the 16' setting determines the lowest pitched component of the voice, while the 1' setting determines the highest pitched component. The higher the value of the setting, the greater the volume of the corresponding footage. Mixing various volumes of the footages lets you create your own distinctive organ sounds.

Organ Flutes Editing

1 Press the [VOICE R1] button.



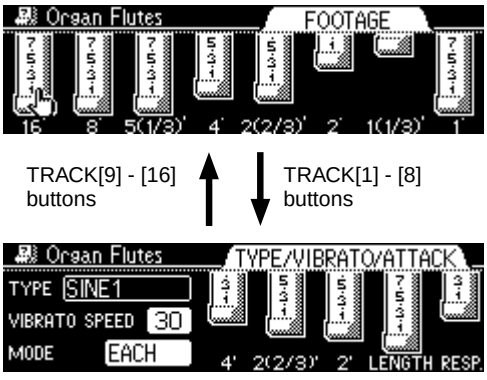
2 Press the [ORGAN FLUTES] button.



3 Adjust the parameters as described above.

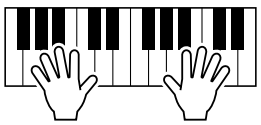
1) Press one of the **[TRACK1]-[TRACK16]** buttons to select the desired parameter.
For details about each parameter, refer to page 32.

- TRACK [1] ..... Organ Type
- TRACK [2] ..... Vibrato Speed
- TRACK [3] ..... Attack Mode
- TRACK [4]-[6] ..... Attack Footage
- TRACK [7] ..... Attack Length
- TRACK [8] ..... Attack Response
- TRACK [9]-[16] ..... Footage



2) Adjust by using the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

4 Play the edited voice.



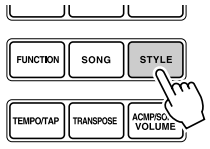
Auto Accompaniment

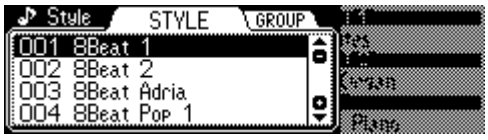
The auto accompaniment feature puts a full backing band at your fingertips. To use it, all you have to do is play the chords with your left hand as you perform and the selected accompaniment style matching your music will automatically play along, instantly following the chords you play. With auto accompaniment, even a solo performer can enjoy playing with the backing of an entire band or orchestra.

The PSR-740/640 features a total of 160 styles or accompaniment patterns (style numbers 1 - 160) in a variety of different musical genres. Try selecting some of the different styles (page 150) and play with the auto accompaniment.

Using Auto Accompaniment (rhythm track only)

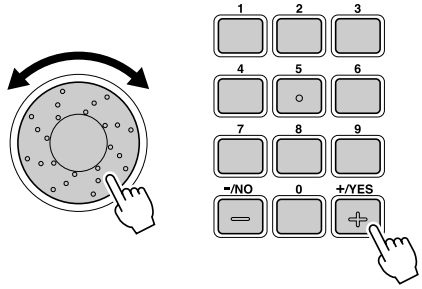
1 Press the [STYLE] button.

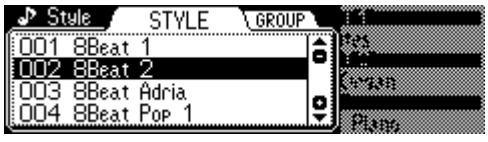




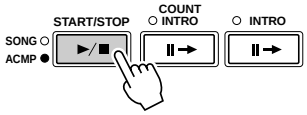
2 Select a style.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.
Refer to the Style List (page 150).





3 Press the [START/STOP] button to start the rhythm tracks of the auto accompaniment, minus the bass and chord tracks.



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

Using Auto Accompaniment (all tracks)

1 Press the [STYLE] button (page 34).

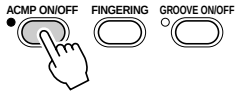
2 Select a style (page 34).

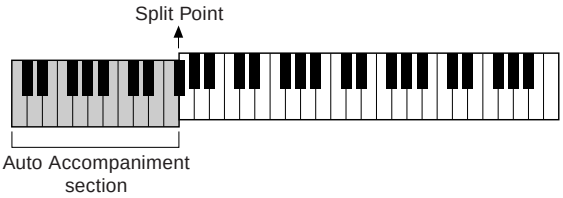
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.
Refer to the Style List (page 150).

3 Turn AUTO ACCOMPANIMENT on.

Press the **[ACMP ON/OFF]** so that its indicator lights.
The specified left-hand section of the keyboard becomes the "Auto Accompaniment" section, and chords played in this section are automatically detected and used as a basis for fully automatic accompaniment with the selected style.

NOTE
- *[ACMP] is the abbreviation of [ACCOMPANIMENT].*

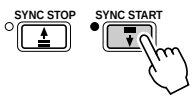




4 Turn SYNCHRONIZED START on.

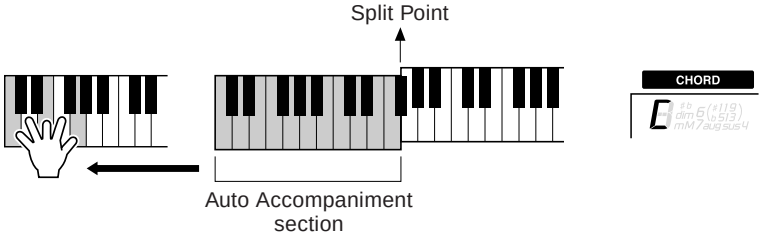
Press the **[SYNC START]** button so that its indicator lights.
The beat lamp also flashes in time with the tempo. This condition is called synchronized start standby. Refer to page 25 for details.

NOTE
- *[SYNC START] is the abbreviation of [SYNCHRONIZED START].*



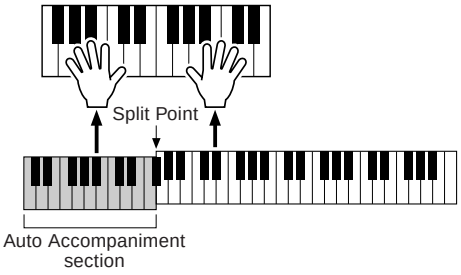
5 As soon as you play a chord with your left hand, the auto accompaniment starts.

For this example, play a C major chord (as shown below).



6 Try playing other chords with your left hand.

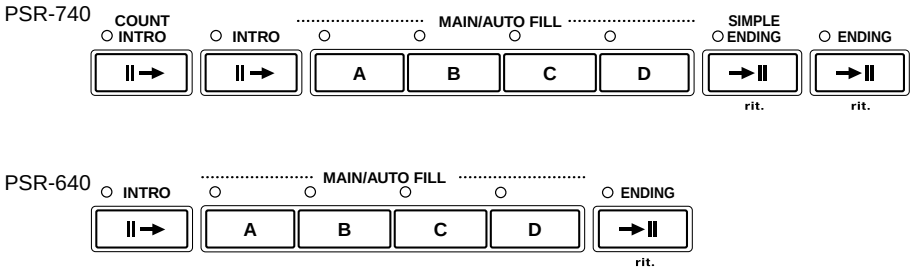
For information on how to enter chords, see "Chord Fingerings" on page 40.



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

Accompaniment Sections

There are various types of Auto Accompaniment sections that allow you to vary the arrangement of the accompaniment to match the song you are playing. They are: Intro, Main (A, B, C, D), Fill-in (A, B, C, D) and Ending. By switching among them as you play, you can easily produce the dynamic elements of a professional-sounding arrangement in your performance.



● **INTRO Section**

This is used for the beginning of the song. When the intro finishes playing, accompaniment shifts to the main section.
The length of the intro (in measures) differs depending on the selected style. The PSR-740 also features two intros: INTRO and COUNT INTRO.

● **MAIN Section**

This is used for playing the main part of the song. It plays an accompaniment pattern of several measures (2 - 4 measures), and repeats indefinitely until another section's button is pressed. There are 4 variations on the basic pattern, A - D and the auto accompaniment changes harmonically based on the chords you play with your left hand.

● **FILL-IN Section**

The fill-in sections let you add dynamic variations and breaks in the rhythm of the accompaniment, to make your performance sound even more professional. Simply press one of the MAIN/AUTO FILL (A, B, C, D) buttons as you play, and the selected fill-in section plays automatically (AUTO FILL), spicing up the auto accompaniment. When the fill-in is finished, it leads smoothly into the selected main section (A, B, C, D). There are four variations for the fill-in sections, each specially programmed to match the selected main section.

● **ENDING Section**

This is used for the ending of the song. When the ending is finished, the auto accompaniment stops automatically. The length of the ending (in measures) differs depending on the selected style. The PSR-740 also features two endings: ENDING and SIMPLE ENDING .

1 **Press the [STYLE] button (page 34).**

2 **Select a style (page 34).**

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

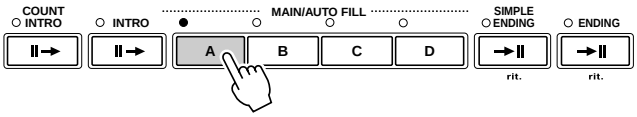
3 **Turn AUTO ACCOMPANIMENT on (page 35).**

4 **Turn SYNCHRONIZED START on (page 35).**

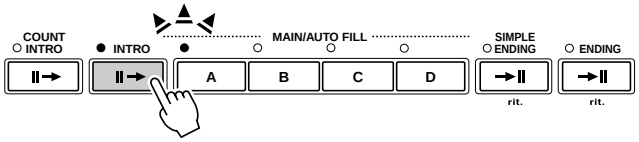
NOTE

• [ACMP] is the abbreviation of [ACCOMPANIMENT] and [SYNC START] is that of [SYNCHRONIZED START].

5 Press the [MAIN A] button.

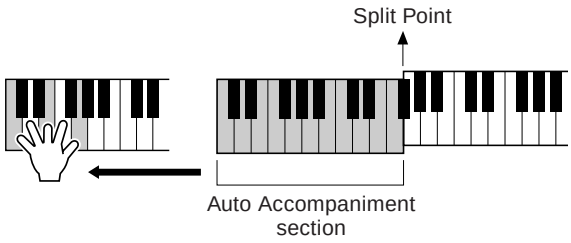


6 Press the [INTRO] button.



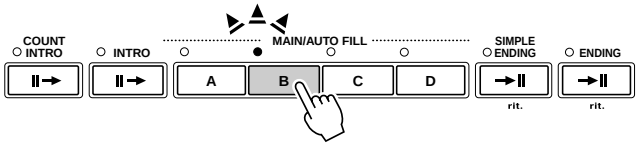
7 As soon as you play a chord with your left hand, the auto accompaniment starts.

For this example, play a C major chord (as shown below).
For information on how to enter chords, see “Chord Fingerings” on page 40.



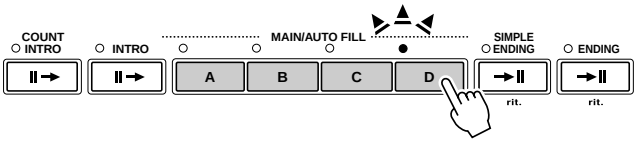
When the playback of the intro is finished, it automatically leads into main A section.

8 Press the [MAIN B] button.



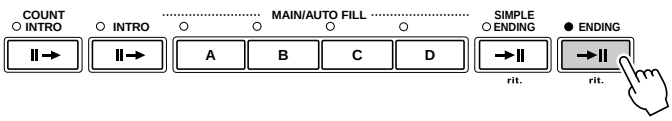
A fill-in plays, automatically followed by the main B section.

9 Press the MAIN buttons as desired during your performance.



The main section corresponding to the pressed button plays following an automatic fill-in.

10 Press the [ENDING] button.



This switches to the ending section. When the ending is finished, the auto accompaniment automatically stops.
You can have the ending gradually slow down (ritardando) by pressing the **[ENDING]** button again while the ending is playing back.

NOTE

- *The indicator of the destination section (MAIN A/B/C/D) will flash while the corresponding fill-in is playing. During this time you can change the destination section by pressing the appropriate MAIN/AUTO FILL [A], [B], [C] or [D] button.*
- *You can use the intro section even in the middle of the song by pressing the [INTRO] button during the song.*
- *If the MAIN/AUTO FILL A/B / C/D button is pressed after the final half beat (eighth note) of the measure, fill-in will begin from the next measure.*

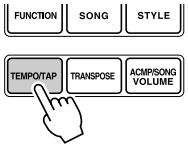
NOTE

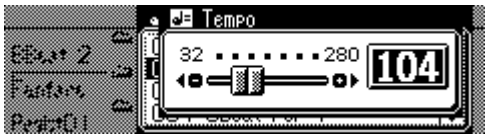
- *If you press the INTRO/COUNT INTRO button while the ending is playing, the intro section will begin playing after the ending is finished.*
- *If you press a MAIN/AUTO FILL button while the ending is playing, fill-in accompaniment will immediately start playing, continuing with the main section.*
- *If you press the [SYNC START] button while an accompaniment is playing, the accompaniment will stop and the PSR-740/640 will enter Synchronized Start standby status.*
- *You can begin the accompaniment by using the ending instead of the intro section.*

Tempo/Tap

Each style of the PSR-740/640 has been programmed with a default or standard tempo; however, this can be changed by using the **[TEMPO/TAP]** button.
The following steps can be used even during playback.

1 Press the [TEMPO/TAP] button.



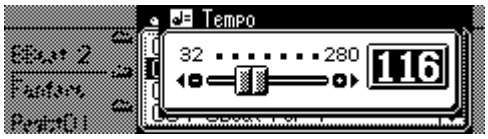


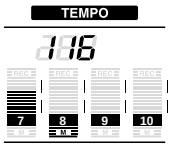
NOTE

- *When you select a different style while the accompaniment is not playing, the "default" tempo for that style is also selected. If the accompaniment is playing, the same tempo is maintained even if you select a different style.*

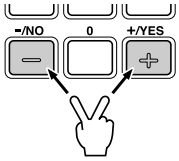
2 Change the tempo.

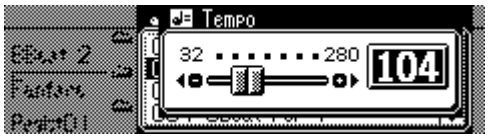
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

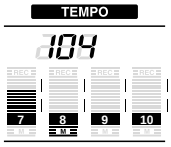




3 To restore the default tempo setting, press the [+/YES]/ [-/NO] buttons simultaneously.







Using the Tap function

The auto accompaniment can be started at any tempo you desire by "tapping" out the tempo with the **[TEMPO/TAP]** button.

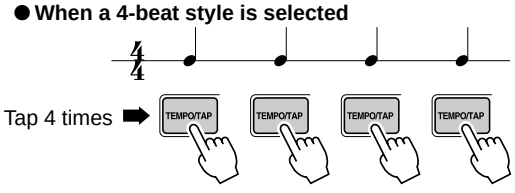
1 Press the [STYLE] button (page 34).

2 Select a style (page 34).

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

3 Press the [TEMPO/TAP] button four times successively (in a consistent rhythm).

● **When a 4-beat style is selected**



* When a 3-beat style is selected, tap 3 times.

The auto accompaniment starts automatically at the tempo you tapped the button.

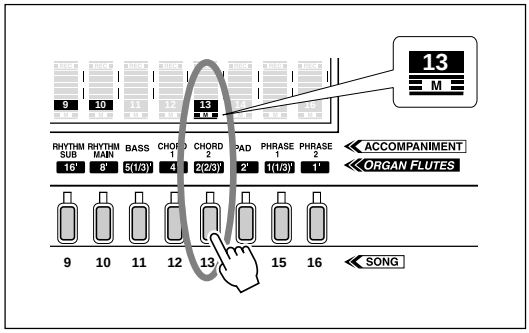
NOTE

- *The Tempo can also be changed during playback by tapping the TEMPO/TAP button twice at the desired tempo.*

Accompaniment Track Muting

The PSR-740/640 has eight accompaniment tracks — RHYTHM SUB, RHYTHM MAIN, BASS, CHORD 1, CHORD 2, PAD, PHRASE 1, and PHRASE 2 — that you can control to modify the "orchestration" and therefore the overall sound of the accompaniment. When a style is selected, the icons corresponding to the tracks which contain data for any section of that style will light.
Individual accompaniment tracks can be turned OFF (muted) or ON by pressing the TRACK buttons (9 - 16) corresponding to the target tracks. The [M] icon will appear when a track is muted. By turning the tracks OFF and ON in different combinations, you can create various arrangements from a single accompaniment style.

Track contents



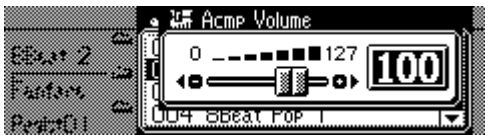
- **RHYTHM SUB, RHYTHM MAIN**
  These are the main rhythm tracks. The RHYTHM tracks produce the drum and percussion sounds.
- **BASS**
  The BASS track always plays a bass line, but the voice will change to fit the selected style — acoustic bass, synth bass, tuba, etc.
- **CHORD 1, CHORD 2**
  These tracks provide the rhythmic chordal accompaniment required by each style. You'll find guitar, piano, and other chordal instruments here.
- **PAD**
  This track plays long chords where necessary, using sustained instruments such as strings, organ, choir.
- **PHRASE 1, PHRASE 2**
  This is where the musical embellishments reside.
  The PHRASE tracks are used for punchy brass stabs, arpeggiated chords, and other extras that make the accompaniment more interesting.

Accompaniment Volume Control

This separate volume control for the auto accompaniment lets you set the optimum level balance between the accompaniment and your right hand performance.

1 **Start the accompaniment (page 35).**

2 **Press the [ACMP/SONG VOLUME] button.**



3 **Adjust the Accompaniment Volume.**

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.
Adjust the level as you play the keyboard with your right hand, listening to the overall balance between the accompaniment and the keyboard-played voice.

NOTE
- *[ACMP] is the abbreviation of [ACCOMPANIMENT].*

4 **Stop the accompaniment (page 35).**

Chord Fingerings

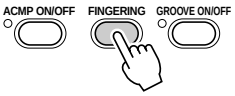
The way in which chords are played or indicated with your left hand (in the auto accompaniment section of the keyboard) is referred to as “fingering.” There are 5 types of fingerings as described below.

- Multi Finger
- Single Finger
- Fingered 1
- Fingered 2
- Full Keyboard

NOTE

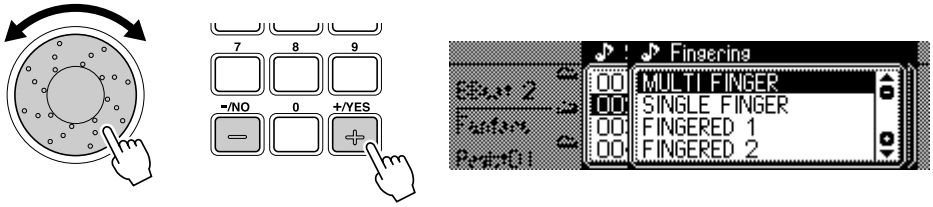
- *The default Fingering Mode is “Multi Finger.”*

1 Press the [FINGERING] button.



2 Select the desired fingering mode.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



The SINGLE FINGER mode

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 AUTO ACCOMPANIMENT section of the keyboard. The following abbreviated chord fingerings are used:

- For a major chord, press the root key only.

- For a seventh chord, simultaneously press the root key and a white key to its left.

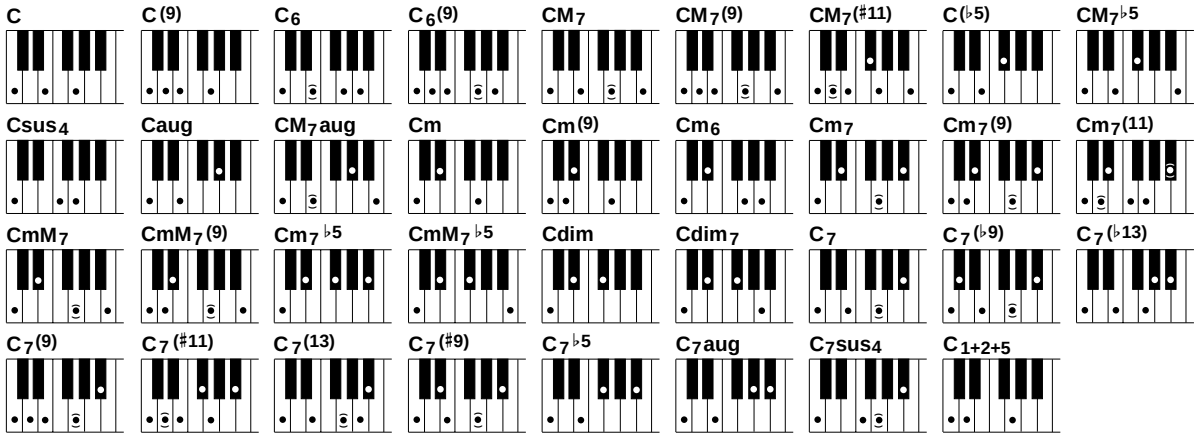
- For a minor chord, simultaneously press the root key and a black key to its left.

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

The FINGERED 1 mode

The Fingered 1 mode lets you finger your own chords on the AUTO ACCOMPANIMENT section of the keyboard (i.e. all keys to the left of and including the split-point key — normally 54) while the PSR-740/640 supplies appropriately orchestrated rhythm, bass and chord accompaniment in the selected style.
The FINGERED 1 mode recognizes the following chords:

● **Example for "C" chords**



Chord Name/[Abbreviation]	Normal Voicing
Major [M]	1 - 3 - 5
Add ninth [(9)]	1 - 2 - 3 - 5
Sixth [6]	1 - (3) - 5 - 6
Sixth ninth [6(9)]	1 - 2 - 3 - (5) - 6
Major seventh [M7]	1 - 3 - (5) - 7 or 1 - (3) - 5 - 7
Major seventh ninth [M7(9)]	1 - 2 - 3 - (5) - 7
Major seventh add sharp eleventh [M7(♯11)]	1 - (2) - 3 - ♯4 - 5 - 7 or 1 - 2 - 3 - ♯4 - (5) - 7
Flatted fifth [(♭5)]	1 - 3 - ♭5
Major seventh flatted fifth [M7♭5]	1 - 3 - ♭5 - 7
Suspended fourth [sus4]	1 - 4 - 5
Augmented [aug]	1 - 3 - ♯5
Major seventh augmented [M7aug]	1 - (3) - ♯5 - 7
Minor [m]	1 - ♭3 - 5
Minor add ninth [m(9)]	1 - 2 - ♭3 - 5
Minor sixth [m6]	1 - ♭3 - 5 - 6
Minor seventh [m7]	1 - ♭3 - (5) - ♭7
Minor seventh ninth [m7(9)]	1 - 2 - ♭3 - (5) - ♭7
Minor seventh add eleventh [m7(11)]	1 - (2) - ♭3 - 4 - 5 - (♭7)
Minor major seventh [mM7]	1 - ♭3 - (5) - 7
Minor major seventh ninth [mM7(9)]	1 - 2 - ♭3 - (5) - 7
Minor seventh flatted fifth [m7♭5]	1 - ♭3 - ♭5 - ♭7
Minor major seventh flatted fifth [mM7♭5]	1 - ♭3 - ♭5 - 7
Diminished [dim]	1 - ♭3 - ♭5
Diminished seventh [dim7]	1 - ♭3 - ♭5 - 6
Seventh [7]	1 - 3 - (5) - ♭7 or 1 - (3) - 5 - ♭7
Seventh flatted ninth [7(♭9)]	1 - ♭2 - 3 - (5) - ♭7
Seventh add flatted thirteenth [7(♭13)]	1 - 3 - 5 - ♭6 - ♭7
Seventh ninth [7(9)]	1 - 2 - 3 - (5) - ♭7
Seventh add sharp eleventh [7(♯11)]	1 - (2) - 3 - ♯4 - 5 - ♭7 or 1 - 2 - 3 - ♯4 - (5) - ♭7
Seventh add thirteenth [7(13)]	1 - 3 - (5) - 6 - ♭7
Seventh sharp ninth [7(♯9)]	1 - ♯2 - 3 - (5) - ♭7
Seventh flatted fifth [7♭5]	1 - 3 - ♭5 - ♭7
Seventh augmented [7aug]	1 - 3 - ♯5 - ♭7
Seventh suspended fourth [7sus4]	1 - 4 - (5) - ♭7
One plus two plus five [1+2+5]	1 - 2 - 5

Chord (C)	Display
C	C
C(9)	C(9)
C6	C6
C6(9)	C6(9)
CM7	CM7
CM7(9)	CM7(9)
CM7(♯11)	CM7(♯11)
C(♭5)	C(♭5)
CM7♭5	CM7♭5
Csus4	Csus4
Caug	Caug
CM7aug	CM7aug
Cm	Cm
Cm(9)	Cm(9)
Cm6	Cm6
Cm7	Cm7
Cm7(9)	Cm7(9)
Cm7(11)	Cm7(11)
CmM7	CmM7
CmM7(9)	CmM7(9)
Cm7♭5	Cm7♭5
CmM7♭5	CmM7♭5
Cdim	Cdim
Cdim7	Cdim7
C7	C7
C7(♭9)	C7(♭9)
C7(♭13)	C7(♭13)
C7(9)	C7(9)
C7(♯11)	C7(♯11)
C7(13)	C7(13)
C7(♯9)	C7(♯9)
C7♭5	C7♭5
C7aug	C7aug
C7sus4	C7sus4
C1+2+5	C

NOTE

- *Notes in parentheses can be omitted.*
- *If you play any three adjacent keys (including black keys), the chord sound will be cancelled and only the rhythm instruments will continue playing (CHORD CANCEL function).*
- *Playing a single key or two same root keys in the adjacent octaves produces accompaniment based only on the root.*
- *A perfect fifth (1 + 5) produces accompaniment based only on the root and fifth which can be used with both major and minor chords.*
- *The chord fingerings listed are all in "root" position, but other inversions can be used — with the following exceptions:*

  m7, m7♭5, 6, m6, sus4, aug, dim7, 7♭5, 6(9), m7(11), 1+2+5.
- *Inversion of the 7sus4 chord are not recognized if the 5th is omitted.*
- *The AUTO ACCOMPANIMENT will sometimes not change when related chords are played in sequence (e.g. some minor chords followed by the minor seventh).*
- *Two-note fingerings will produce a chord based on the previously played chord.*

The FINGERED 2 mode

This is essentially the same as the FINGERED 1 mode, described above, except that the FINGERED 2 mode additionally allows you to specify the lowest note of each chord — simply, the lowest note played in the AUTO ACCOMPANIMENT section of the keyboard is used as the accompaniment bass note. This means you can specify "on-bass" chords in which the main bass note for the chord is not the root of the chord. For a C major chord, for example, you could use E (the third) or G (the fifth) as the bass note rather than C.

The FULL KEYBOARD mode

When the FULL KEYBOARD Mode is selected, the PSR-740/640 will automatically create appropriate accompaniment while you play just about anything using both hands, anywhere on the keyboard. You do not have to worry about specifying the accompaniment chords. The name of the detected chord will appear in the display.

NOTE

- *When the FULL KEYBOARD mode is selected, the split point setting (see below) for the auto accompaniment will be ignored.*

The MULTI-FINGER mode

This is the default accompaniment mode. The MULTI-FINGER mode automatically detects SINGLE FINGER or FINGERED 1 chord fingerings, so you can use either type of fingering without having to switch fingering modes.

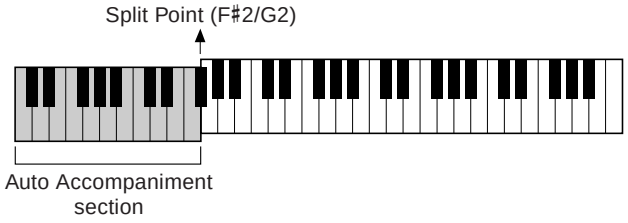
NOTE

- *If you want to play minor, seventh or minor seventh chords using the SINGLE FINGER operation in the MULTI-FINGER Mode, always press the closest white/black key(s) to the root of the chord.*

Accompaniment Split Point

This function lets you change the key range for playing accompaniment chords (the auto accompaniment section).
The point on the keyboard that separates the auto accompaniment section and the right-hand section of the keyboard is called the "split point."

The initial (default) setting of the split point is F♯2/G2; however, this can be set to any key you wish. Refer to page 135 for instructions on how to set the split point.



Synchro Stop

When the Synchro Stop function is engaged, accompaniment playback will stop completely when all keys in the auto-accompaniment section of the keyboard are released. Accompaniment playback will start again as soon as a chord is played. The BEAT indicators in the display will flash while the accompaniment is stopped.

NOTE

- *Synchro Stop cannot be set to on when the fingering mode is set to Full Keyboard or the auto accompaniment on the panel is set to off. Also, Synchro Stop automatically turns off when the Full Keyboard is selected for the fingering mode or when the auto accompaniment on the panel is turned off.*
- *[SYNC STOP] is the abbreviation of [SYNCHRO STOP].*

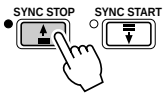
1 Press the [STYLE] button (page 34).

2 Turn AUTO ACCOMPANIMENT on (page 35).

3 Turn SYNCHRONIZED START on (page 35).

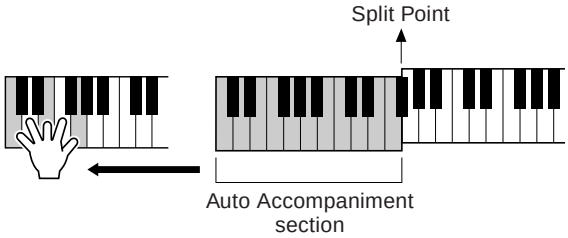
4 Turn SYNCHRONIZED STOP on.

Press the **[SYNC STOP]** button.

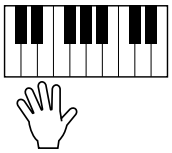


5 As soon as you play a chord with your left hand, the auto accompaniment starts.

For this example, play a C major chord (as shown below).



6 The auto accompaniment stops when you release your left hand from the keys.

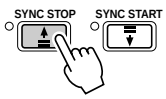


7 Playing a chord with your left hand automatically restarts the auto accompaniment.

To stop the auto accompaniment, simply release your left hand from the keyboard.

8 Turn SYNCHRONIZED STOP off.

Press the **[SYNC STOP]** button.



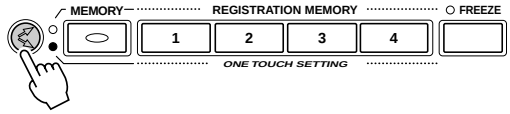
When Synchronized Stop is off, the auto accompaniment does not stop when you release your left hand from the keys.

9 Stop the accompaniment (page 34).

One Touch Setting

One Touch Setting is a powerful and convenient function that lets you instantly reconfigure virtually all auto-accompaniment-related panel settings with the touch of a single button.

1 Press the round One Touch Setting button to call up the One Touch Setting function.

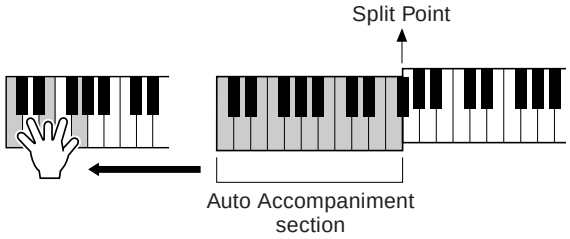


2 Press one of the [ONE TOUCH SETTING] buttons [1]-[4].

Steps #3 - #4 of "Using Auto Accompaniment (all tracks)" can be set with just a single press of a **[ONE TOUCH SETTING]** button. In addition, various panel settings (such as voices, effects, etc.) that match the selected style can be instantly recalled with just a single button press (see below).

3 As soon as you play a chord with your left hand, the auto accompaniment starts.

For this example, play a C major chord (as shown below).



4 Stop the accompaniment.

NOTE

- *You can also try changing the established One Touch Setting data, making your own original settings. To be able to recall your original settings anytime, save them using the Registration Memory function (page 62).*
- *When a User style (number 161-163) is selected, the One Touch Setting cannot be used.*

One Touch Setting parameter list

The PSR-740/640 features four different One Touch Settings for each of the 160 auto accompaniment styles built into the instrument. Each has been specially programmed to match the selected style; each has the best suited voice (or combination of voices), digital effects, and other settings for that style. Simply pressing one of the **[ONE TOUCH SETTING]** buttons lets you instantly reconfigure all relevant settings, conveniently allowing you to start playing in a desired style with all the appropriate sounds — without having to make each setting one by one.

* Set only when the accompaniment is not playing.

Groove (PSR-740)

The Groove and Dynamics function on the PSR-740 lets you temporarily change the “feel” of the accompaniment. Specifically, it allows you to alter the timing, velocity and gate time of notes during playback of any of the accompaniment styles.

- **Groove**
  This lets you play the music with some swing or change the “feel” of the beat by making subtle shifts in the timing (clock) of the accompaniment style.
  - **Groove Type**
    This determines the type of groove timing change. For example, the “16 to 8” setting converts all 16th notes to 8th-note timing.
  - **Groove Swing**
    This determines how much “swing” feel is applied to the accompaniment.
- **Dynamics**
  This changes the velocity (or accent) of certain notes in the accompaniment style to complement or enhance changes made to the Groove settings above.
  - **Dynamics Type**
    This determines the type of dynamic change applied to the accompaniment. (Each type is a different “template” to which the timing of the velocity changes has been programmed.)
  - **Dynamics Depth**
    This determines how strongly the selected dynamics type is applied to the accompaniment (expressed as a percentage). Higher values produce a stronger effect.

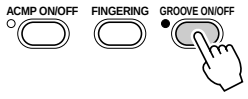
Every time the [GROOVE] button is pressed, the values for the above Groove and Dynamics parameters are automatically set to best suit the selected style.

Applying Groove & Dynamics

1 **Select a style and start the accompaniment (page 35).**

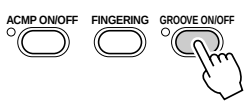
2 **Press the [GROOVE ON/OFF] button.**

The Groove & Dynamics effect will be applied to the accompaniment.



3 **To cancel the groove effect, press the [GROOVE ON/OFF] button again.**

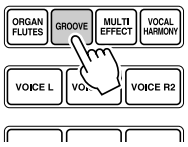
4 **Stop the accompaniment (page 35).**

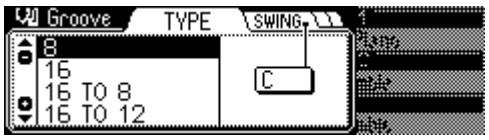


Editing the Groove and Dynamics Effect

When you select a style and turn the **[GROOVE ON/OFF]** button on, the most suitable Groove and Dynamics settings for that style are automatically called up. In this way, simply turning the Groove function on lets you produce a variety of rhythm "feels"; however, you can also edit detailed parameters and change the Groove and Dynamic effect to your liking.

1 Press the [GROOVE] button.

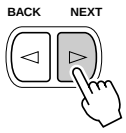


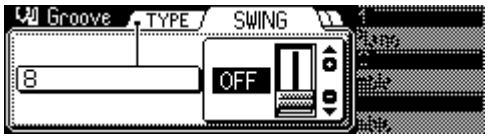


2 Select a Groove Type.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to the Groove Type List (page 47).

3 Press the [NEXT] button to display the Groove SWING screen.





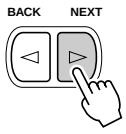
NOTE

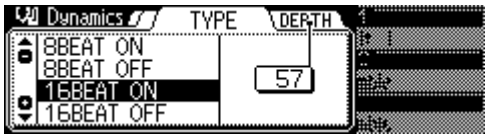
- *Depending on the selected Groove Type, the Groove Swing value may not be adjustable.*

4 Select a Groove Swing.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

5 Press the [NEXT] button to display the Dynamics TYPE screen.

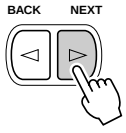


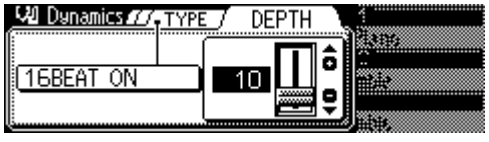


6 Select a Dynamics Type.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.
Refer to the Dynamics Type List (page 47).

7 Press the [NEXT] button to display the Dynamics DEPTH screen.





8 Select a Dynamics Depth.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

■ Groove Type List

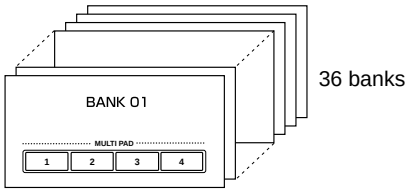
8
16
16 TO 8
16 TO 12
12 TO 8
12 TO 16A
12 TO 16B
24 TO 8
24 TO 16
24 TO 12
THRU

■ Dynamics Type List

8BEAT ON
8BEAT OFF
16BEAT ON
16BEAT OFF
2nd BEAT OFF
DANCE
DISCO
TECHNO
FUSION
REGGAE1
REGGAE2
BOSSA NOVA
TANGO
RHUMBA BASS
RHUMBA CHORD
LATIN
SAMBA
THRU

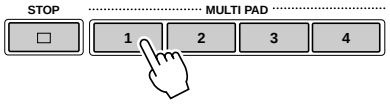
The Multi Pads

The PSR-740/640 Multi Pads can be used to play a number of short pre-recorded rhythmic and melodic sequences that can be used to add impact and variety to your keyboard performances. You can also record your own Multi Pad phrases as described in “Multi Pad Recording” on page 106.
Some pad phrases simply play back as programmed, while others are “chord match” types which, if the Chord Match function is turned on, are automatically transposed to match chords played using the PSR-740/640 auto accompaniment feature.



Playing the Multi Pads

Press any of the Multi Pads.



The corresponding phrase (in this case, for Pad 1) starts playing back in its entirety as soon as the pad is pressed. To stop playback in the middle of the phrase, press the **[STOP]** button.

NOTE

- *Simply tap any of the MULTI PADs at any time to play back the corresponding phrase at the currently set tempo.*
- *You can even play two, three, or four MULTI PADs at the same time.*
- *Pressing the pad during its playback will stop playing and begin playing from the top again.*

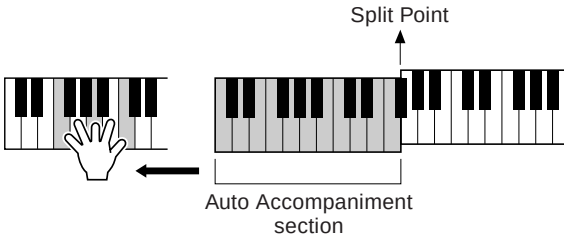
Chord Match

1 Press the [STYLE] button (page 34).

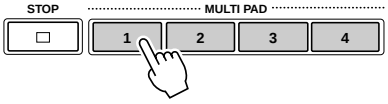
2 Turn AUTO ACCOMPANIMENT on (page 35).

3 Play a chord with your left hand.

For this example, play an F major chord (as shown below).



4 Press any of the Multi Pads.



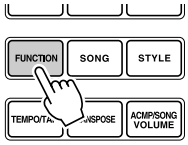
In this example, the phrase for Pad 1 will be transposed into F major before playing back. Try playing other chords and pressing the pads.

NOTE

- *The chord match on/off status depends on the selected Multi Pad. Refer to the Multi Pad Bank list (page 151).*

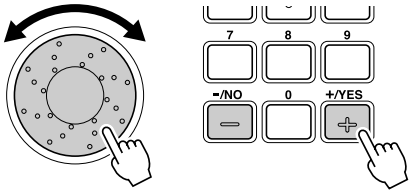
Selecting a Multi Pad Bank

1 Press the [FUNCTION] button.

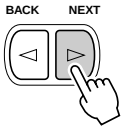


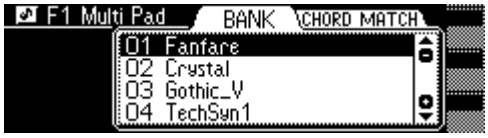
2 Select "Multi Pad."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



3 Press the [NEXT] button to display the Multi Pad BANK screen.





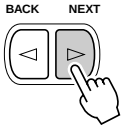
4 Select a Bank.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

Turning Chord Match On/Off

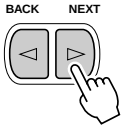
1-3 Use the same operation as in "Selecting a Multi Pad Bank" above.

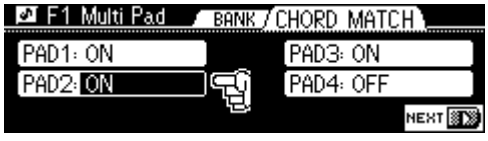
4 Press the [NEXT] button again.



5 Select the desired PAD.

Use the **[NEXT]/[BACK]** button.





6 Turn the CHORD MATCH function on or off.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

NOTE

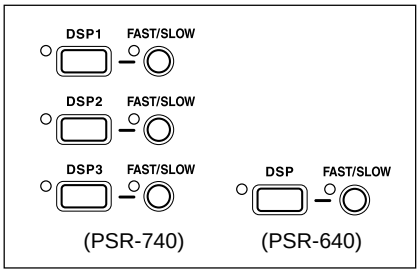
- *The chord match function has no effect with pads that contain percussion phrases.*
- *The chord match on/off setting is restored to its original status whenever a preset Multi Pad Bank is selected.*
- *When the chord match on/off status of a user Multi Pad Bank (see above) is changed, the new status is recorded with the Multi Pad data.*

Digital Effects

With the digital effects built into the PSR-740/640 you can add ambiance and depth to your music in a variety of ways—such as adding reverb that makes you sound like you are playing in a concert hall or adding harmony notes for a full, rich sound.
With the PSR-740, you can take advantage of even more sophisticated features like the Multi Effect function that lets apply several effects together or the Digital Equalizer that lets you adjust volume for each of five frequency bands.

NOTE

• For details about using Digital Effects (Reverb, Chorus, DSP, Multi-Effect, Digital Equalizer) see page 152.



PSR-740 : The PSR-740 features five DSP systems as follows :

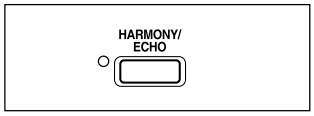
• DSP
This system is always set to on. A total of 102 different DSP types are available; however, these can only be selected in the Style Record mode.

• DSP 1 - 3 (Multi Effect)
The PSR-740 features three DSP systems, each of which can be turned on or off by a panel button (page 54). A total of 74 different DSP types are available.

• DSP 4
This system which can be turned on or off by a panel button (page 83) is applied to the microphone sound (page 82).
A total of 74 different DSP types are available.

PSR-640 : The PSR-640 features one DSP system, which can be turned on or off by a panel button (page 53).
A total of 74 different DSP types are available.

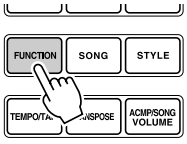
The [FAST/SLOW] button can switch between variations of the DSP effect. For example, this lets you change the rotating speed (fast/slow) of the rotary speaker effect.

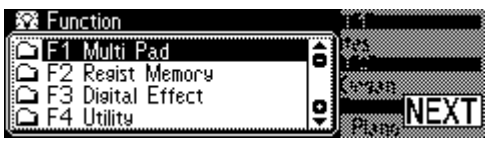


Reverb

Selecting a reverb type

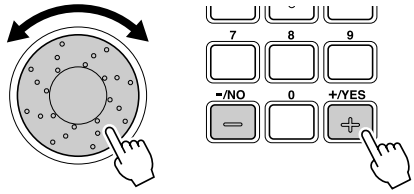
1 **Press the [FUNCTION] button.**

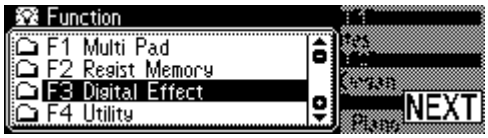




2 Select "Digital Effect."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

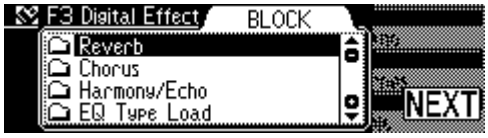




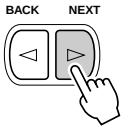
3 Press the [NEXT] button to display the Digital Effect screen.

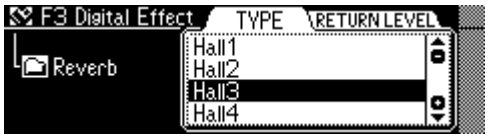
4 Select "Reverb."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



5 Press the [NEXT] button.



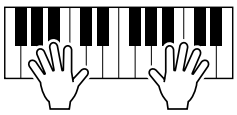


6 Select a reverb type.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to the Reverb Type List (page 154).

7 Play the keyboard.

Try out some of the other reverb types as well.



NOTE

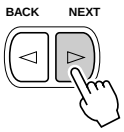
- *When you select a different style, the appropriate reverb type will be selected accordingly.*

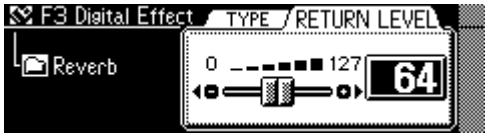
Adjust the depth of the reverb.

The two parameters below affect the depth of the reverb.

- **Reverb Depth (send level)** ..... page 91
  Sets the reverb depth for the specified voice or track, and thus the amount of reverb effect applied to that voice or track.
- **Reverb Return Level** ..... See below
  Sets the amount of reverb returned from the reverb effect stage, thus making it possible to adjust the degree of reverb effect applied to the overall sound.

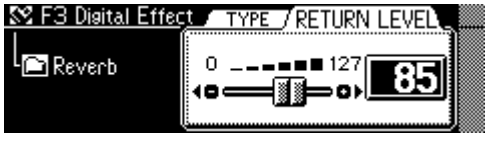
8 Press the [NEXT] button.





9 Adjust the reverb return level.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.



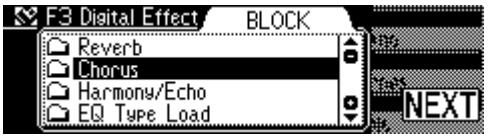
Chorus

Selecting a Chorus Type

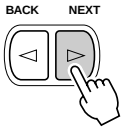
1-3 Use the same operation as in “Reverb” (page 50).

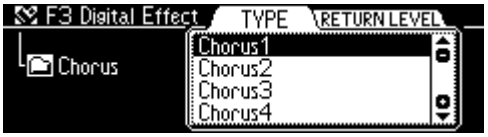
4 Select “Chorus.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



5 Press the [NEXT] button.



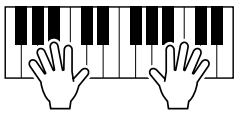


6 Select a chorus type.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to the Chorus Type List (page 154).

7 Play the keyboard.

Try out some of the other chorus types as well.



NOTE

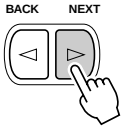
• When you select a different style, the appropriate chorus type will be selected accordingly.

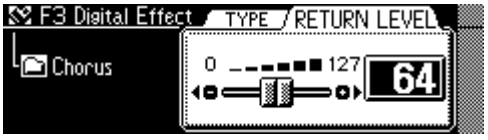
Adjust the depth of the chorus.

The two parameters below affect the depth of the chorus effect.

- **Chorus Depth (send level)** ..... page 91
  Sets the chorus depth for the specified voice or track, and thus the amount of chorus effect applied to that voice or track.
- **Chorus Return Level** ..... See below
  Sets the amount of chorus effect returned from the chorus effect stage, thus making it possible to adjust the degree of chorus effect applied to the overall sound.

8 Press the [NEXT] button.





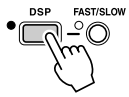
9 Adjust the chorus return level.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

DSP (PSR-640)

Applying the DSP effect

Press the [DSP] button.



The effect will be applied when you play the R1, R2 and L voices from the keyboard.
In addition, when the **[FAST/SLOW]** button is pressed, the indicator lights up indicating that the variation of the DSP effect is selected. When the DSP effect type is Rotary Speaker or Tremolo, the speed of the modulation becomes fast.

NOTE

• When the Voice Set function is ON (page 136), the DSP effect and FAST/SLOW settings may change according to the selected R1 panel voice.

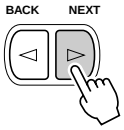
Selecting a DSP Type

1-3 Use the same operation as in “Reverb” (page 50).

4 Select “DSP.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

5 Press the [NEXT] button.



6 Select a DSP type.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to the DSP Type List (page 154).

NOTE

• When the selected DSP type is an Insertion Effect (pages 54, 152), the DSP effect applies only to the Voice R1.

7 Play the keyboard.

Try out some of the other DSP types as well.

Adjust the depth of the DSP.

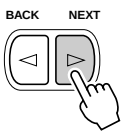
The two parameters below affect the depth of the DSP effect.

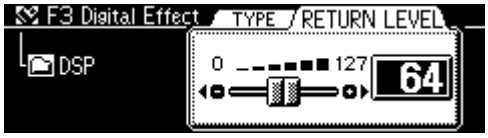
- **DSP Depth (Send level)** ..... page 91
  Sets the DSP depth for the specified voice or track, and thus the amount of DSP effect applied to that voice or track.
- **DSP Return Level** ..... See below
  Sets the amount of DSP effect returned from the DSP effect stage, thus making it possible to adjust the degree of DSP effect applied to the overall sound.

NOTE

• If DSP Insertion Effect is selected (page 54), you won’t be able to set the DSP Return Level.

8 Press the [NEXT] button.





9 Adjust the DSP return level.

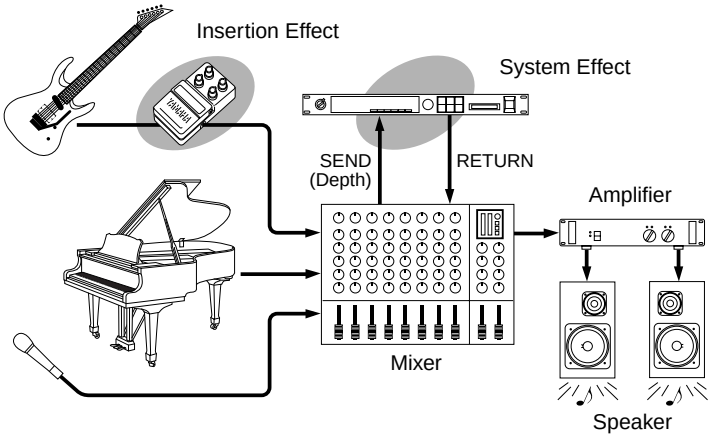
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

System Effects and Insertion Effects

The reverb, chorus and DSP effects are divided into two different types or methods or operation.
There are two types of digital effects: system effects and insertion effects.

- **System Effects**
  Applies the effect to all of the parts input to the mixer. You can set the amount of effect applied with the depth and return level parameters. Reverb and chorus are both system effects.
- **Insertion Effects**
  Applies the effect to only one designated part before inputting the signal to the mixer. You can effectively use the digital effects by applying the desired effect to the specific part. With the insertion effects, only the DSP depth can be set.

The illustration below with the various audio components (instruments, effect devices, and a mixer) represents the inner workings of the DSP effects of the PSR-740/640.



- Reverb
  All types function as system effects.
- Chorus
  All types function as system effects.
- DSP (PSR-640)
  Depending on the selected type, this functions either as a system effect or an insertion effect.
- DSP1-3 (PSR-740)
  All types function as insertion effects

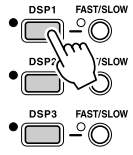
Refer to “About Digital Effects” (page 152) and the Type List.

Multi Effects (DSP1-3) (PSR-740)

The PSR-740 has a multi effect system featuring three separate DSP effect blocks. These three blocks can be connected in any one of six different ways, providing an exceptionally flexible and powerful system for enhancing the sound of the voices.

Applying the DSP effect

Press any of the [DSP1] - [DSP3] buttons.



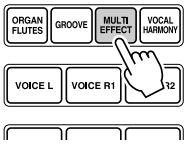
Depending on the effect setting (below), the selected DSP multi effect is applied to one of the keyboard-played voices (R1, R2, L).

NOTE

- *When the Voice Set function is ON (page 136), the Multi Effect (DSP1-3, FAST/SLOW) on/off status will be set automatically according to the selected R1 panel voice.*
- *Some of the song files may contain Multi Effect settings. When you play back such songs, DSP and FAST/SLOW buttons on the panel will automatically be turned off.*

Multi Effect Setting

1 Press the [MULTI EFFECT] button.



2 Specify the multi effect connection.

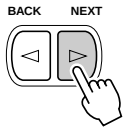
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
There are six types as shown below.

RIGHT1	RIGHT2	LEFT
DSP1→DSP2→DSP3		
DSP1→DSP2	DSP3	
DSP1→DSP2		DSP3
DSP1	DSP2	DSP3
DSP1	DSP2→DSP3	
DSP1		DSP2→DSP3

NOTE

- *When the Voice Set function is ON (page 136), the multi effect connection settings may automatically change according to the selected R1 panel voice.*

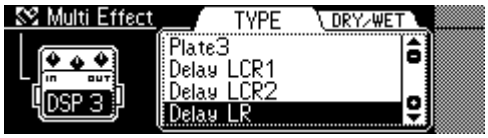
3 Press the [NEXT] button.



4 Select the desired multi effect system.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
DSP4 is the effect for the microphone sound (page 83).

5 Press the [NEXT] button.



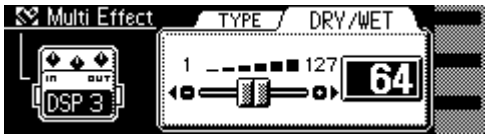
6 Select the effect type for DSP1 - 3.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to the Multi Effect Type List (page 156).

NOTE

- *The DSP 1/2/3 type settings may automatically change when a panel voice is selected for R1.*

7 Press the [NEXT] button.



8 Set the effect depth for DSP1 - 3.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

The Dry/Wet setting determines the amount of effect sound that is heard in comparison to the unprocessed sound. The word "dry" refers to the original sound that has no effects applied to it, while "wet" refers to the effect-processed sound.

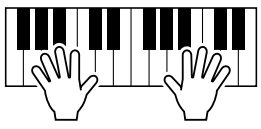
- Dry/Wet [1] ..... Only dry sound is output.
- Dry/Wet [64] ..... Equal balance between the dry and wet levels.
- Dry/Wet [127] ..... Only wet sound is output.

NOTE

- *The dry/wet settings cannot be done for some of the DSP 1/2/3 types.*
- *The Dry/Wet settings for DSP 1/2/3 may automatically change when a panel voice is selected for R1.*

9 Play the keyboard.

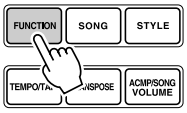
Try some of the other connection settings and types as well.



Harmony/Echo

Selecting a Harmony/Echo type

1 Press the [FUNCTION] button.



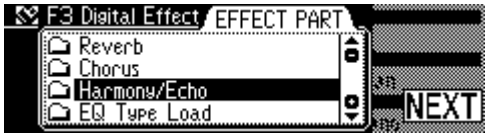
2 Select "Digital Effect."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 Press the [NEXT] button to display the Digital Effect screen.

4 Select "Harmony/Echo."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



5 Press the [NEXT] button.

6 Select a Harmony/Echo type.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to the Harmony/Echo Type List (page 157).

NOTE

- *When the Voice Set function is ON (see page 136), the Harmony/Echo type may change according to the selected R1 panel voice.*

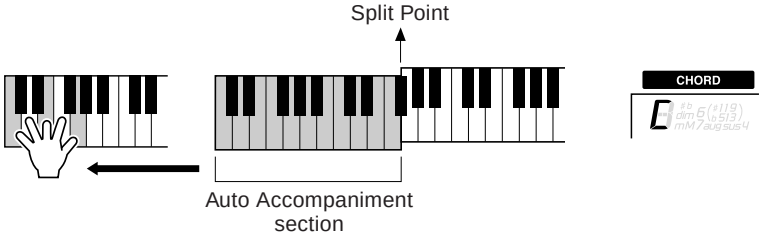
Applying the Harmony/Echo effect

1 Press the [STYLE] button (page 34).

2 Turn AUTO ACCOMPANIMENT on (page 35).

3 Play a chord with your left hand.

For this example, play a C major chord.

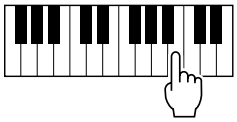


NOTE

- *Harmony/Echo can not be turned on when the Full Keyboard Auto accompaniment fingering mode is selected. Harmony/Echo will be automatically turned off if the Full Keyboard fingering mode is selected while the Harmony/Echo effect is on.*

4 Press the [HARMONY/ECHO] button.

5 Play some notes in the right-hand range of the keyboard.

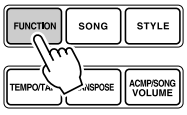


- **When a Harmony type (Duet through Strum) is selected**
  This type automatically add one or more harmony notes to a single-note melody played in the right hand.
- **When an Echo type is selected**
  An echo effect is applied to the note played on the keyboard at the currently set tempo.
  Steps #1 - #3 above are unnecessary for this type.
- **When a Tremolo type is selected**
  A tremolo effect is applied to the note played on the keyboard at the currently set tempo.
  Steps #1 - #3 above are unnecessary for this type.
- **When a Trill type is selected**
  Two notes held on the keyboard are played alternately at the currently set tempo.
  Steps #1 - #3 above are unnecessary for this type.

Adjusting the Harmony/Echo volume

The volume of the Harmony/Echo sound in relation to the keyboard sound can be adjusted as follows:

1 Press the [FUNCTION] button.



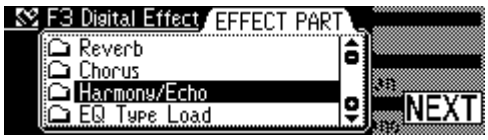
2 Select "Digital Effect."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 Press the [NEXT] button to display the Digital Effect screen.

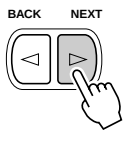
4 Select "Harmony/Echo."

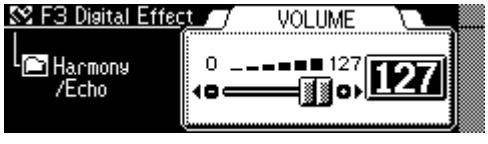
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



5 Press the [NEXT] button to display the Type selection screen.

6 Press the [NEXT] button to display the Harmony/Echo VOLUME screen.





7 Adjust the Harmony/Echo volume.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

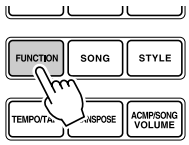
NOTE

- *When the Voice Set function is ON (see page 136), the Harmony/Echo Volume may change according to the selected R1 panel voice.*
- *Changing the volume of the harmony sound may not produce audible effect for some R1 voices (ex. organ sounds) when you select Harmony/Echo types "Duet" through "Strum."*

Change the voice for the Harmony/Echo effect

This allows you to select the voice which is used for the harmony or echo effect.

1 Press the [FUNCTION] button.



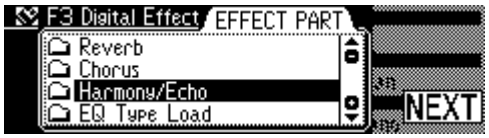
2 Select “Digital Effect.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 Press the [NEXT] button to display the Digital Effect screen.

4 Select “Harmony/Echo.”

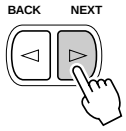
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



5 Press the [NEXT] button to display the Type selection screen.

6 Press the [NEXT] button to display the Harmony/Echo VOLUME screen.

7 Press the [NEXT] button to display the HARMONY PART setting screen.



8 Set the part.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

- Auto ..... Harmony/Echo notes are automatically assigned to the R1 and R2 parts, in that order or priority.
- R1 ..... Harmony/Echo is only applied to the Voice R1. If Voice R1 is off, there will be no Harmony/Echo effect.
- R2 ..... Harmony/Echo is only applied to the Voice R2. If Voice R2 is off, there will be no Harmony/Echo effect.

NOTE

• When the Voice Set function is on (page 136), the Harmony/Echo part setting may change according to the selected R1 panel voice.

Master EQ (PSR-740)

Usually an equalizer is used to correct the sound output from amps or speakers to match the special character of the room. The sound is divided into several frequency bands, then by raising or lowering the level for each band, the correction is made. Adjusting the sound you play according to the genre—classical music being more refined, pops music more crisp, and rock music more dynamic—can also serve to draw out the special characteristics of the music and make your performance more enjoyable.

The PSR-740 possesses a high grade five-band digital equalizer function. With this function, a final effect—tone control—can be added to the output of your instrument.

Frequency Bands (5 bands)

LowGain
LowMidGain
MidGain
HighMidGain
HighGain

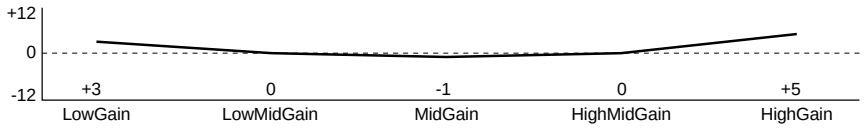
NOTE

• The range of each frequency band can be changed by transmitting the system exclusive message from an external MIDI device to the PSR-740/640 (see page 163).

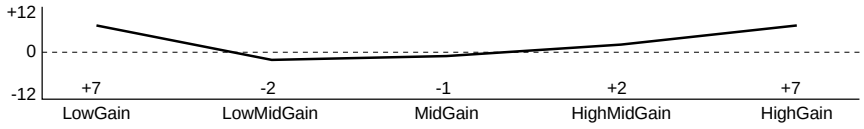
The digital equalizer adjusts the gain (amplitude change) in each of the five frequency bands within a range of -12 to 0 to +12 decibels [dB].

The PSR-740 has five separate preset Master EQ settings (below) for instantly configuring the equalization for a variety of different music styles.

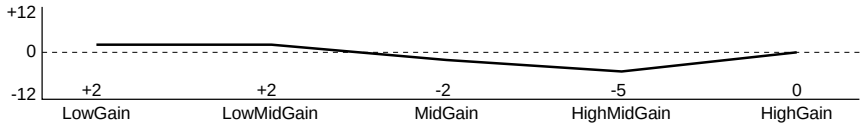
01 Standard



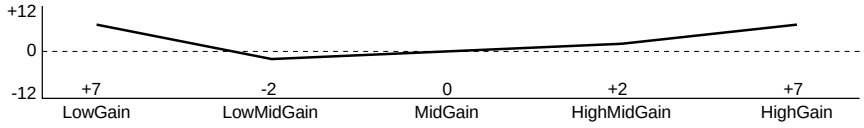
02 Disco



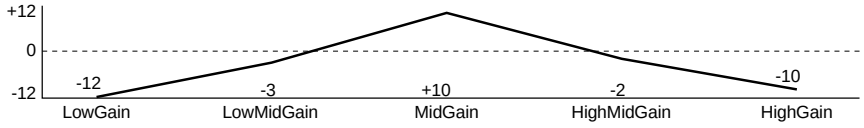
03 Mild



04 Bright



05 Lo Fi



The equalizer can be set in two ways:

- Selecting one of the five presets ..... page 60
- Adjusting the five bands manually ..... page 61

Applying the equalizer

1 Press the [MASTER EQ] button.

This applies the equalizer effect to the entire sound of the instrument.

Listen to the difference in the sound by playing back the auto accompaniment, demo, and songs.

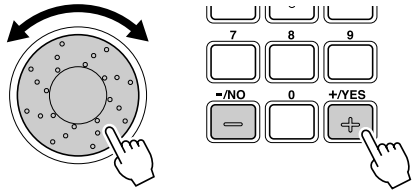
2 To cancel the equalizer effect, press the [MASTER EQ] button again.

Selecting a Master EQ type

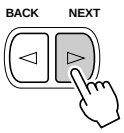
1-3 Use the same operation as in “Reverb” (page 50).

4 Select “EQ Type Load.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



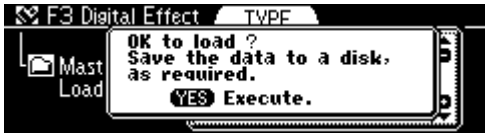
5 Press the [NEXT] button.



6 Select a master EQ type.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
For a list of the equalizer types, see page 59.

7 Press the [NEXT] button.



8 Press the [+/YES] button to actually enable the equalization settings of the selected type.

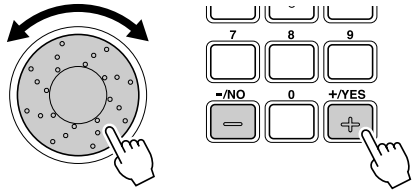
Press the **[-/NO]** button to abort the operation.

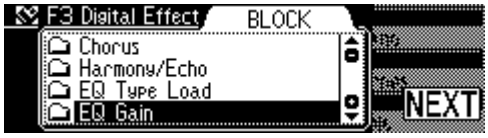
Setting the Gain

1-3 **Use the same operation as in “Reverb” (page 50).**

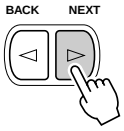
4 **Select “EQ Gain.”**

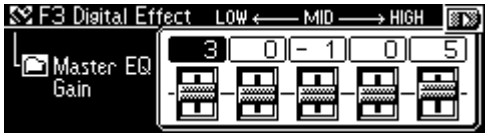
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.





5 **Press the [NEXT] button.**





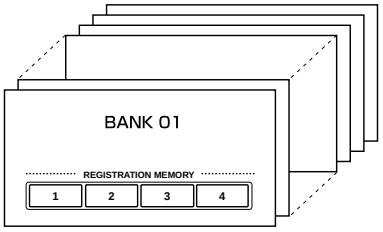
6 **Adjust the gain of each band.**

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

Registration Memory

Since the PSR-740/640 is such a sophisticated instrument with such a variety of controls and functions — voice, style, auto accompaniment, and effect settings, just to name a few — the Registration Memory feature is one of the most convenient and powerful of the instrument. It allows you save virtually all panel settings to a Registration Memory setting, and then instantly recall your custom panel settings by pressing a single button.

Registration Memory provides up to 128 complete control-panel setups (32 banks, 4 setups each) that can be recalled instantly during your performance.



32 banks

NOTE

• The PSR-740/640's initial Registration Memory [1]–[4] settings (when it shipped from the factory) are the same panel settings as when the power switch is first turned on.

Data stored by the Registration Memory

■ VOICE PARAMETERS

NOTE

• Material recorded data is retained in memory even when the STANDBY switch is turned off if an AC adaptor is connected (page 159). It is nevertheless a good idea to save important data to floppy disk so that you can keep them indefinitely and build up your own data library (page 65).

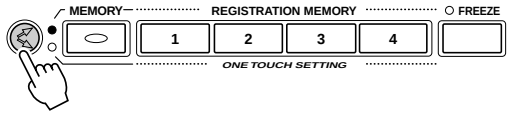
■ ACCOMPANIMENT PARAMETERS

Registration Memory data can be saved to and loaded from floppy disk as needed (page 65).

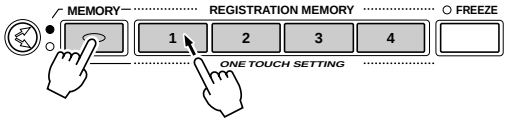
Registering the Panel Settings

1 **Set up the panel controls as required.**

2 **Press the round Registration Memory button to call up the Registration Memory function.**



3 **While holding the [MEMORY] button, press one of the REGISTRATION MEMORY buttons: [1] through [4].**



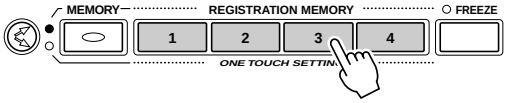
In this example, the panel settings are memorized to button number 1.

NOTE

- *Any data that was previously recorded in the Registration Memory location you selected will be erased and replaced by the new settings.*

Recalling the Registered Panel Settings

Press one of the REGISTRATION MEMORY buttons: [1] through [4].



In this example, the panel settings memorized to button number 3 are recalled.

NOTE

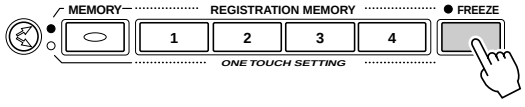
- *Registration data cannot be recalled when the One Touch Setting function is on.*
- *Some parameters cannot be recalled depending on the selected mode. For example, you cannot recall the Voice R2/L voices in the Style Record mode and Pad Record mode even if you press the Registration Memory buttons, since only the Voice R1 voice is used in those modes.*

The Accompanient Freeze function

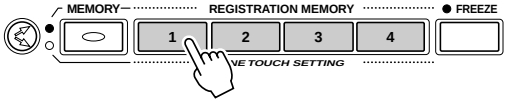
When the FREEZE function is engaged, selecting a different Registration Memory setup will not change any of the accompaniment and Voice L parameters (all other parameters will change as programmed). This allows you to use the auto accompaniment and select different Registration Memory setups, without suddenly disturbing the flow of the accompaniment.

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

The [FREEZE] lamp lights.



2 **Press one of the REGISTRATION MEMORY buttons: [1] through [4].**



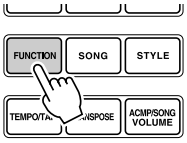
In this example, only the voice parameter (other than Voice L) settings memorized to button number 1 are recalled.

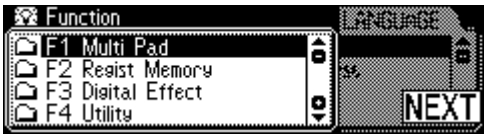
NOTE

- *For details about Accompaniment parameters, see page 62.*
- *The Freeze function will automatically be turned on when one of the following modes, Song, Style Record or Pad Record is engaged.*

Selecting a Registration Bank

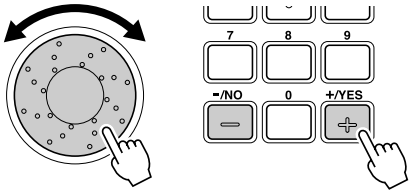
1 Press the [FUNCTION] button.



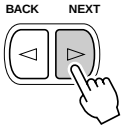


2 Select "Regist Memory."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



3 Press the [NEXT] button to display the Regist Memory BANK screen.



4 Select a bank.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

Naming the Registration Banks

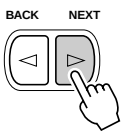
1 Press the [FUNCTION] button.

2 Select "Regist Memory."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 Press the [NEXT] to display the Regist Memory BANK screen.

4 Press the [NEXT] button to display the NAME screen.



5 Enter the desired name for the bank.

Use the keyboard to enter the name. Up to 16 letters or characters can be used.

Disk Operations

Built into the PSR-740/640 is a disk drive. Simply insert a floppy disk, and you've got access to a wide variety of convenient functions, such as recording and playback of User songs (page 92), as well as saving and loading of User styles (page 110), User pads (page 106), and Registration Memory data (page 62).

You can save any number of User styles/pads and registration data to floppy disks, create your own song libraries, or find many other ways to make playing and using the PSR-740/640 more efficient.

- The PSR-740/640 is capable of playing back songs contained on the included sample disk, as well as commercially available song data in the following formats, indicated by the corresponding logos (page 9):

  GENERAL MIDI — You can play back song files collected on these disks using the voices defined in the GM standard.

  XG — You can play back songs using the XG format, an extension of the GM standard that allows for much higher sound quality.

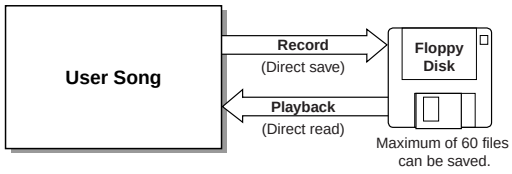
  DISK ORCHESTRA — You can play back song files collected on these disks using the voices defined in Yamaha's DOC format.

NOTE
- *Refer to page 9 for more details on the logos.*

- The PSR-740/640 is compatible with style data contained on the included sample disk, as well as commercially available disk styles in the following format, indicated by the corresponding logo (page 9):

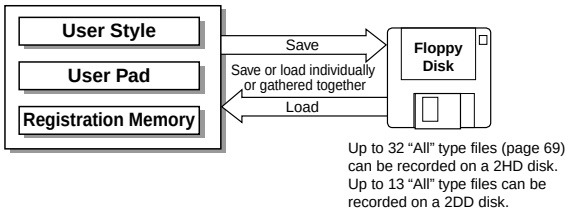
  STYLE FILE — You can load and play with the style files collected on these disks.

- You can record your own performances to User songs and play them back (page 92).



NOTE
- *It may not be possible to record the full 60 files to a disk, depending on the length of the recorded files.*

- The PSR-740/640 features special User style, User pad and Registration Memory functions. The data recorded with these functions can also be saved to disk individually or in any combination. Likewise, data (files) saved to disks can be loaded individually or in any combination to the PSR-740/640.



NOTE
- *The maximum number of files may vary according to the type and volume of the saved files (page 69).*

User data compatible with the PSR-740/640 is indicated in the chart below.

● Data that can be Saved or Loaded with the PSR-740/640

Data Type	Extension	Save	Load
User song (Standard MIDI format0)	.MID	–	–
User style (Style file format)	.USR	O	O
User pad	.USR	O	O
Registration Memory	.USR	O	O

NOTE
- *When saving data, use a floppy disk formatted on the PSR-740/640.*
- *The three letters following the file name (after the period) are referred to as a file "extension." The extension indicates the type of file.*
- *Since the user songs are directly recorded to the disk as you play during recording and read from the disk during playback, the Save/Load functions are not available. The Copy and Delete File operations related to the user songs can be executed.*

- Other disk functions include:

Using the Floppy Disk Drive (FDD) and Floppy Disks

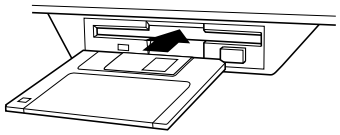
Be sure to handle floppy disks and treat the disk drive with care. Follow the important precautions below.

■ Compatible Disk Type

3.5" 2DD and 2HD type floppy disks can be used.

■ Inserting/Ejecting Floppy Disks

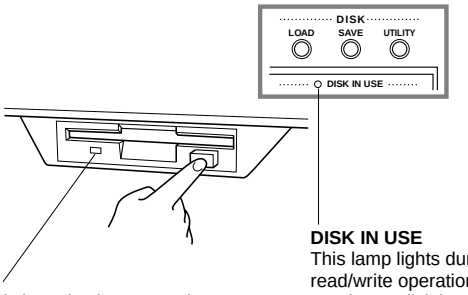
- To insert a floppy disk into the disk drive:
  - Hold the disk so that the label of the disk is facing upward and the sliding shutter is facing forward, towards the disk slot. Carefully insert the disk into the slot, slowly pushing it all the way in until it clicks into place and the eject button pops out.



NOTE

• When the PSR-740/640 is turned on, the LED below the floppy disk slot will be lit indicating that the Disk Drive is ready to use.

- To eject a floppy disk:
  - Before ejecting the disk, be sure to confirm that the FDD is stopped (check if the DISK IN USE lamp is off). Press the eject button slowly as far as it will go; the disk will automatically pop out. When the disk is fully ejected, carefully remove it by hand.



This lamp is always on when the power is on, regardless of the disk operation.

DISK IN USE
This lamp lights during disk read/write operations, such as when a disk has been inserted, during recording, playback, formatting, etc.

  - If the eject button is pressed too quickly, or if it is not pressed in as far as it will go, the disk may not eject properly. The eject button may become stuck in a half-pressed position with the disk extending from the drive slot by only a few millimeters. If this happens, do not attempt to pull out the partially ejected disk, since using force in this situation can damage the disk drive mechanism or the floppy disk. To remove a partially ejected disk, try pressing the eject button once again, or push the disk back into the slot and then repeat the eject procedure.

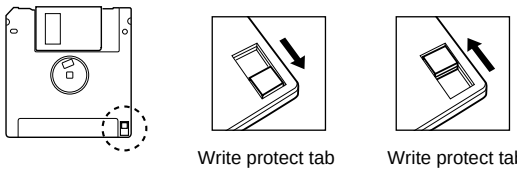
- Never attempt to remove the disk or turn the power off during recording, reading and playing back. Doing so can damage the disk and possibly the disk drive.
- Be sure to remove the floppy disk from the disk drive before turning off the power. A floppy disk left in the drive for extended periods can easily pick up dust and dirt that can cause data read and write errors.

■ Cleaning the Disk Drive Read/Write Head

- 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 Yamaha recommends 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 availability of proper head-cleaning disks.
- Never insert anything but floppy disks into the disk drive. Other objects may cause damage to the disk drive or floppy disks.

■ About the Floppy Disks

- To handle floppy disks with care:
  - Do not place heavy objects on a disk or bend or apply pressure to the disk in any way. Always keep floppy disks in their protective cases when they are not in use.
  - Do not expose the disk to direct sunlight, extremely high or low temperatures, or excessive humidity, dust or liquids.
  - Do not open the sliding shutter and touch the exposed surface of the floppy disk inside.
  - Do not expose the disk to magnetic fields, such as those produced by televisions, speakers, motors, etc., since magnetic fields can partially or completely erase data on the disk, rendering it unreadable.
  - 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.
- To protect your data (write-protect tab):
  - To prevent accidental erasure of important data, slide the disk's write-protect tab to the "protect" position (tab open).



Write protect tab ON (locked or write protected)

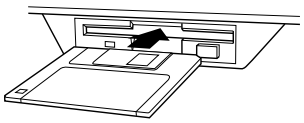
Write protect tab OFF (unlocked or write enabled)

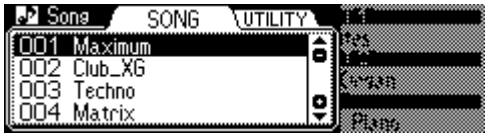
- Data backup
  - For maximum data security Yamaha recommends that you keep two copies of important data on separate floppy disks. This gives you a backup if one disk is lost or damaged.

Sample Disk

Disk song playback

1 Insert the sample disk into the disk drive.



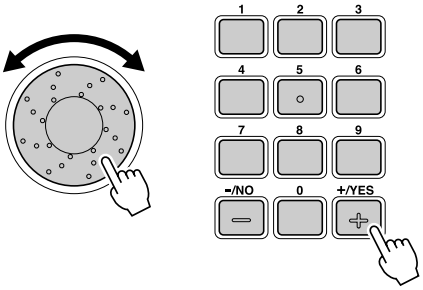


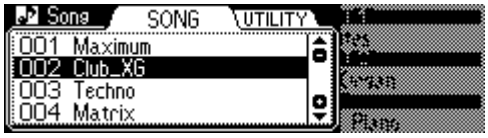
NOTE

- *If a disk has already been inserted into the drive, press the [SONG] button to call up the Song display.*

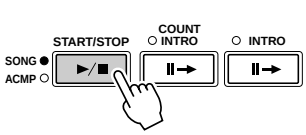
2 Select the desired song.

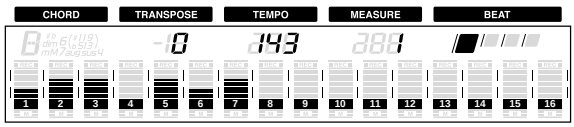
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.





3 Press the [START/STOP] button to start the song.





4 Press the [START/STOP] button again to stop the song.

For details, see “Song Playback” (page 76).

Format

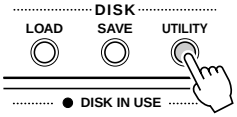
Setting up commercially available floppy disks for use with PSR-740/640 is called formatting.
This function is useful for quickly deleting unnecessary files from an already formatted disk. Be careful when using this operation, since it automatically deletes all data on the disk.

NOTE
- *After formatting, the capacity of a 2HD disk is 1 MB, and that of a 2DD disk is 720 KB.*

1 Insert the floppy disk into the disk drive.

When a (new) blank disk or an incompatible disk is inserted an alert message will be displayed on the screen. In this case, press the **[EXIT]** button to show "OK to format the disk?" and then simply follow the procedure 5 below.

2 Press the [UTILITY] button.

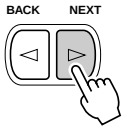


NOTE
- *When the floppy disk's write-protect tab is set to ON (see page 66) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Format function is not possible.*

3 Select "Format."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

4 Press the [NEXT] button to display the Format operation screen.



⚠ ***CAUTION***
- ***If data is already saved on the disk, be careful not to format it. If you format the disk, all the previously recorded data will be deleted.***
- ***While formatting is in progress, never eject the disk or turn off the power to the PSR-740/640.***
- ***If a disk that cannot be read by the PSR-740/640 is inserted into the disk drive, it will be treated the same as an unformatted floppy disk. Take care not to erase important data by accidentally formatting a disk.***

5 Execute the Format operation.

Press the **[+/YES]** button to execute the Format operation.
Press the **[-/NO]** button to abort the Format operation.

The Format operation is completed...

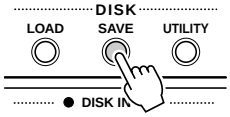
Save

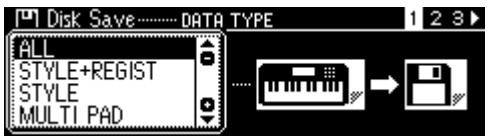
You can save PSR-740/640 User styles, User pad (banks 37-40) and Registration Memory data (banks 01-32) to floppy disks.

NOTE
- *When the floppy disk's write-protect tab is set to ON (see page 66) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Save function is not possible.*

1 Insert the floppy disk into the disk drive.

2 Press the [SAVE] button.





3 Select the file type.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to the file type list below:

All	Save all User Style (161-163), User Pad (bank 37-40), and Registration Memory (bank 01-32) and all setup data into one single file.
Style + Reg.	Save all User Style (161-163) and Registration Memory (bank 01-32) data gathered together into one single file.
Style	Save all User Style (161-163) data gathered together into one single file.
Multi Pad	Save all User Pad (bank 37-40) data gathered together into one single file.
Regist	Save all Registration Memory (bank 01-32) data gathered together into one single file.

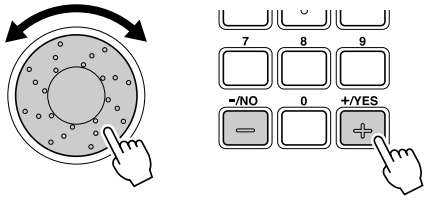
NOTE

- *Although all User Style, User Pad, and Registration Memory data can be saved gathered into one single file, the data can be recalled individually when loaded back into the PSR-740/640.*

4 Press the [NEXT] button to display the FILE selection screen.

5 Select the destination file.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Select NEW when creating a new file.

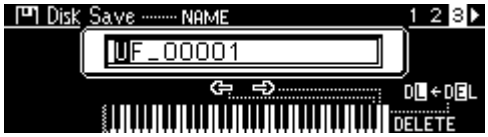


NOTE

- *If you've selected a file that already contains data and you rename the file with the intent of overwriting the data, renaming the file will simply copy that data to the new file name, and leave the original data and file name intact.*

6 Press the [NEXT] button to display the NAME screen.

7 Enter the file name directly from the keyboard (page 21).



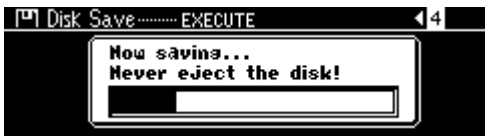
8 Press the [NEXT] button to display the Save operation screen.

CAUTION

- ***While data is being saved, never eject the floppy disk or turn off power to the PSR-740/640.***

9 Execute the Save operation.

Press the **[+/YES]** button to execute the SAVE operation.
Press the **[-/NO]** button to abort the SAVE operation.



The SAVE operation is completed...

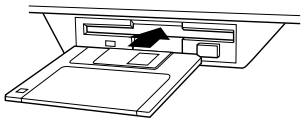
NOTE

- *If there isn't enough space on the disk, an alert message appears, and you will not be able to save any data. You can delete unneeded files on the disk (page 75), or replace the disk with a new one and repeat the Save operation.*
- *If a write error occurs during a save operation, an alert message message appears. If the error reoccurs after repeating the Save operation, there could be something wrong with the disk. Insert a different disk in the drive and repeat the Save operation.*

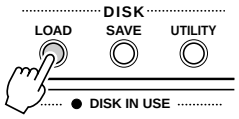
Load

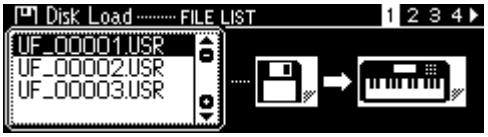
After saving User style (161-163), User pad (banks 37-40), and Registration Memory (bank 01-32) data to a floppy disk, you can reload them into the PSR-740/640.

1 Insert the floppy disk into the disk drive.



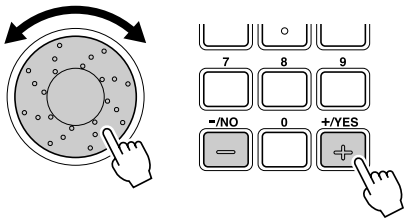
2 Press the [LOAD] button.

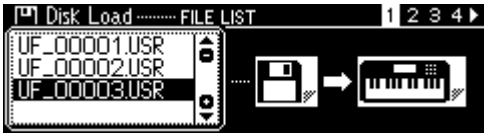




3 Select the file to be loaded.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

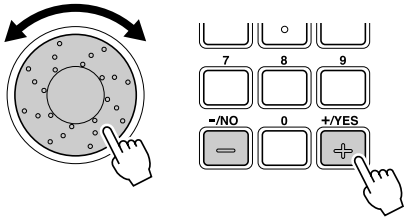


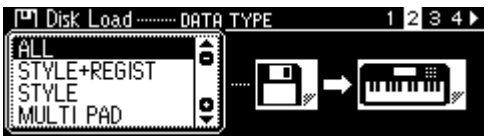


4 Press the [NEXT] button to display the DATA TYPE selection screen.

5 Select the data type to be loaded.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

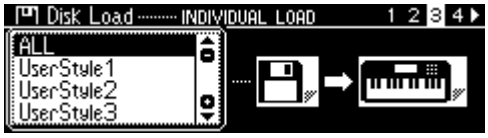




Data types that can be loaded	
All, Style, Pad, Regist	To Step 10
Style+Reg.	To Step 10
Style	To Step 6
Multi Pad	To Step 6
Regist	To Step 6

Please follow the steps as indicated in the chart above, since the actual operation differs depending on the selected data type.

6 Press the [NEXT] button.



7 Select the data to be loaded.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
When "All" is selected, go to step #10 skipping over steps #8 and #9.

8 Press the [NEXT] button to display the LOAD TO screen.

9 Select the destination.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

10 Press the [NEXT] button to display the Load operation screen.

11 Execute the Load operation.

Press the **[+/YES]** button to execute the Load operation.
Press the **[-/NO]** button to abort the Load operation.

The Load operation is completed...

⚠ CAUTION

- ***When data is loaded from a floppy disk to the PSR-740/640, the data already in the memory of the instrument will be replaced by the data on the disk. Save important data into a disk file before doing the Load operation.***
- ***While data is loading, never eject the floppy disk or turn the power off.***

NOTE

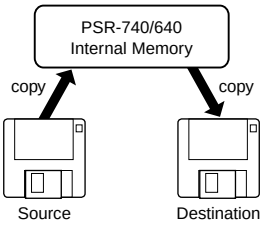
- *An alert message may appear on the display, if a problem occurs that prevents the data from being loaded. (For example, the capacity of the PSR-740/640 [RAM] may be exceeded, something may be wrong with the floppy disk or the data from the disk may be corrupted, etc.).*

Song Copy

This operation allows you to make backup copies of your important data. Primarily, this will come in handy when you are recording and editing song data. For example, if you are quantizing the track of a song (page 100) — which makes permanent changes to the track — making a backup copy of the song allows you to restore the original song data in case you're not satisfied with the results of the quantization. Having a dedicated backup disk for every song you work on is a good idea. In this way, you can save a new copy of the song each time you make an important edit to it.

Copying song data from one floppy disk to another

Prepare a backup disk by formatting it. One file can be copied at a time. As shown in the illustration below, first copy the desired file on the disk to internal memory, then copy it to the destination disk.



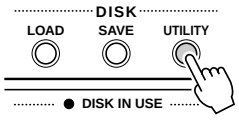
NOTE

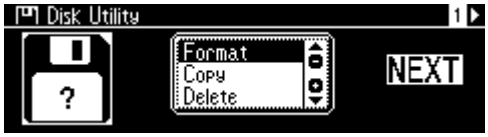
• When the destination disk's write-protect tab is set to ON (see page 66) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Copy function is not possible.

If the quantity of data is large, it may be necessary for the data to be copied in parts.

1 Insert the disk to be copied (source disk) into the disk drive.

2 Press the [UTILITY] button.

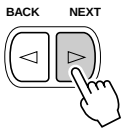




3 Select "Copy."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

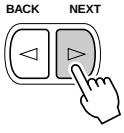
4 Press the [NEXT] button to display the Disk selection screen.



5 Select "ANOTHER."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

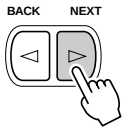
6 Press the [NEXT] button to display the FILE selection screen.



7 Select the source song file.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

8 Press the [NEXT] button to display the NAME screen.



9 Enter the destination song file name directly from the keyboard (page 21).

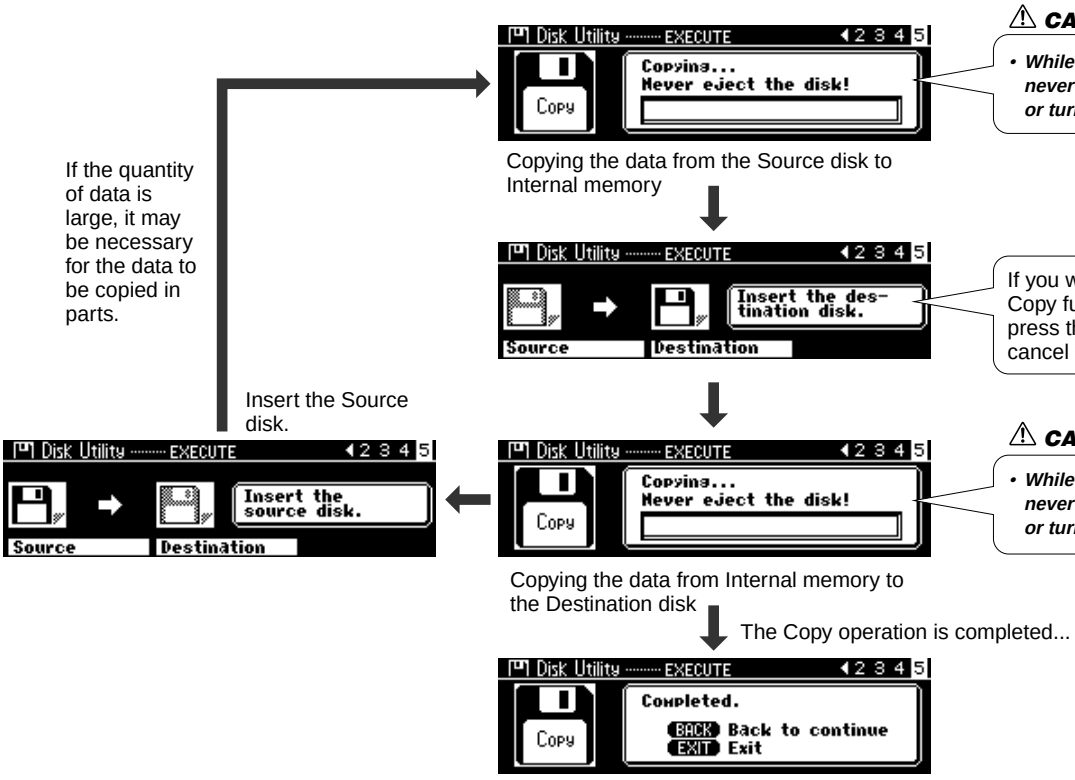
10 Press the [NEXT] button to display the Copy operation screen.

11 Execute the Copy operation.

Press the **[+/YES]** button to execute the Copy operation.
Press the **[-/NO]** button to abort the Copy operation.

NOTE

- *If you insert a wrong disk, different from the source or destination disk, during the Copy operation, an alert message (page 160) will appear on the display.*



⚠ ***CAUTION***

- ***While data is being copied, never eject the floppy disk or turn the power off.***

⚠ ***CAUTION***

- ***While data is being copied, never eject the floppy disk or turn the power off.***

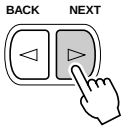
Copying data to another location on the same disk

1 - 4 **Use the same operation as in "Copying data from one floppy disk to another" (page 72).**

5 **Select "SAME."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

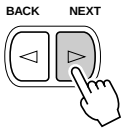
6 **Press the [NEXT] button to display the FILE selection screen.**



7 **Select the song source file.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

8 **Press the [NEXT] button to display the NAME screen.**



9 **Enter the destination song name directly from the keyboard (page 21).**

10 **Press the [NEXT] button to display the Copy operation screen.**

11 **Execute the Copy operation.**

Press the **[+/YES]** button to execute the Copy operation.
Press the **[-/NO]** button to abort the Copy operation.

The Copy operation is completed...

⚠ CAUTION

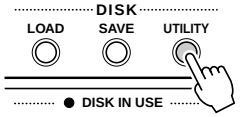
- ***While data is being copied, never eject the floppy disk or turn the power off.***

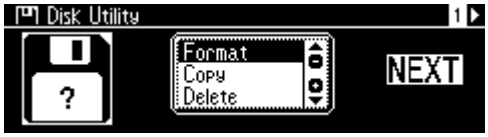
Delete

You can delete individual files (User songs, User styles, User pads, or Registration Memory) from the floppy disk.

1 **Insert the floppy disk into the disk drive.**

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

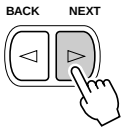




3 **Select "Delete."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

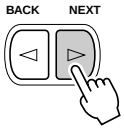
4 **Press the [NEXT] button to display the FILE selection screen.**



5 **Select the file to be deleted.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

6 **Press the [NEXT] button to display the Delete operation screen.**



7 **Execute the Delete operation.**

Press the **[+/YES]** button to execute the Delete operation.
Press the **[-/NO]** button to abort the Delete operation.

The Delete operation is completed...

NOTE

- *When the floppy disk's write-protect tab is set to ON (see page 66) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Delete function is not possible.*

⚠ ***CAUTION***

- ***While the file is being deleted, never eject the floppy disk or turn the power off.***

Disk Song Playback

You can playback a huge variety of songs on the PSR-740/640, including the preset demo songs, the songs on the included sample disk, the User songs that you record to a floppy disk and songs on commercially available XG/GM song collection disks. Except for the preset demo songs, a floppy disk must be inserted in the disk drive to playback a song.

- The following disks are compatible for playback on the PSR-740/640 (including the sample disk). Refer to page 9 for more details on the logos.

  GENERAL MIDI — You can play back song files collected on these disks using the voices defined in the GM standard.

  XG — You can play back songs using the XG format, an extension of the GM standardthat allows for much higher sound quality.

  DISK ORCHESTRA — You can play back song files collected on these disks using the voices defined in Yamaha's DOC format.

- Disk songs can be played back in five different ways: ..... page 77
  - SINGLE
  - SINGLE REPEAT
  - ALL
  - ALL REPEAT
  - RANDOM

- Additional song playback functions:
  - Song Track Muting ..... page 78
  - Tempo/Tap ..... page 38
  - Song Volume Control ..... page 78
  - Song Transpose ..... page 81
  - Playing from a Specified Measure ..... page 79
  - Repeat Play ..... page 80

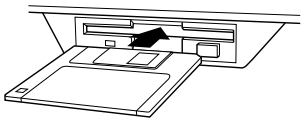
IMPORTANT

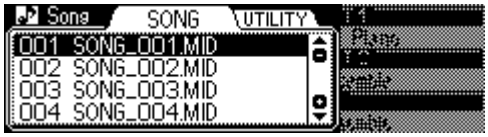
- ***Make sure to read the section "Using the Floppy Disk Drive (FDD) and Floppy Disks" on page 66.***

Song Playback

1 Insert the disk that contains song data into the disk drive.

PSR-740/640 will automatically switch into Song mode.



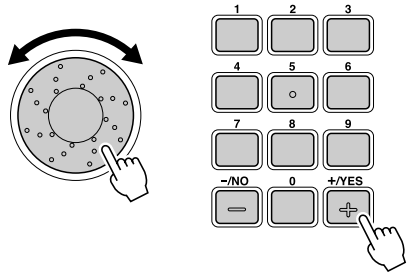


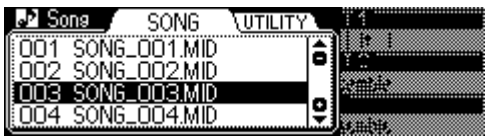
NOTE

- *If a disk has already been inserted into the drive, press the [SONG] button to call up the Song display.*
- *Inserting a disk that does not have any song data will not automatically call up the Song display.*

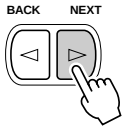
2 Select the desired song.

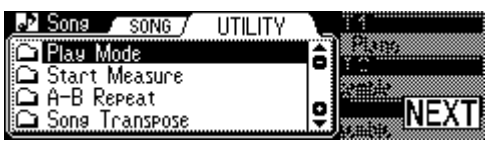
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.





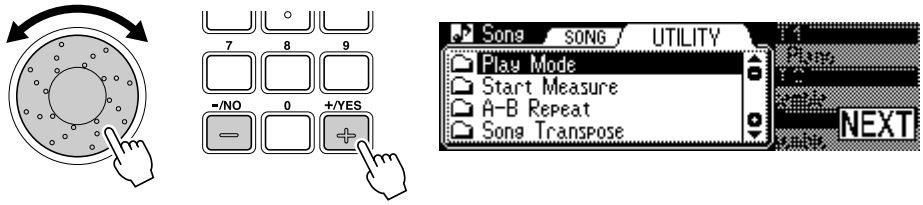
3 Press the [NEXT] button.





4 Select "Play Mode."

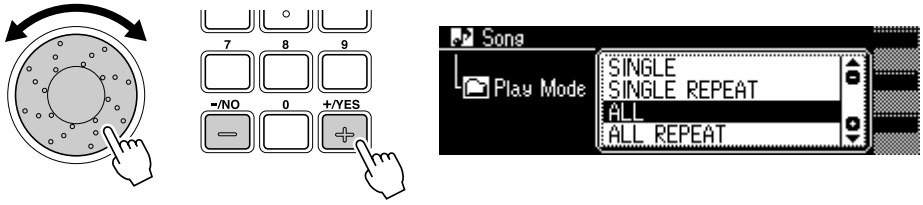
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



5 Press the [NEXT] button to display the Song Play Mode screen.

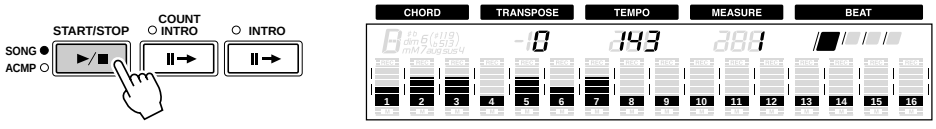
6 Select the desired Play mode.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



- SINGLE ..... Play through the selected song, then stop.
- SINGLE REPEAT ..... Play through the selected song repeatedly.
- ALL ..... Continue playback through all the songs on the floppy disk.
- ALL REPEAT ..... Continue playback through all the songs on the floppy disk repeatedly.
- RANDOM ..... Continue playback through all the songs at random.

7 Press the [START/STOP] button to start the song.



NOTE

• With song data software (Standard MIDI format 0) that includes lyrics, you can view the lyrics in the display during playback.
The PSR-740/640 can display six languages : English, German, French, Spanish, Italian and Japanese.

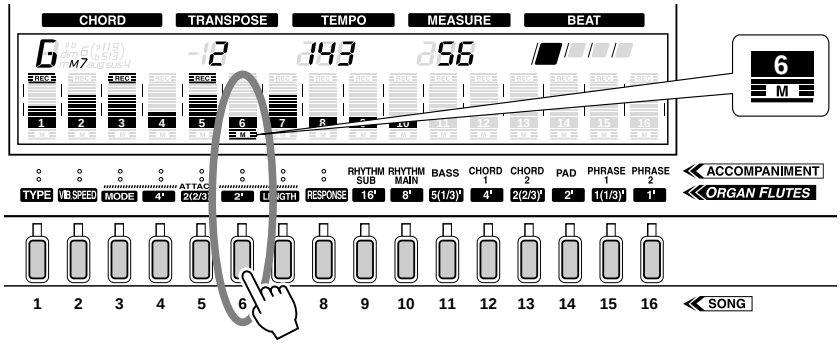
8 Press the [START/STOP] button again to stop the song.

Song Track Muting

1 Press the [START/STOP] button to start the song.

2 Press one of the TRACK buttons below the display.

The [M] icon will appear from the display. Also, the selected track will be turned off and the part will be muted.



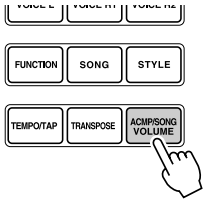
Pressing the same track button again enables output of the playback sound.

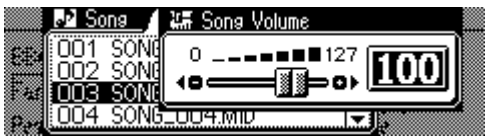
3 Press the [START/STOP] button again to stop the song.

Song Volume Control

1 Press the [START/STOP] to start the song.

2 Press the [ACMP/SONG VOLUME] button.



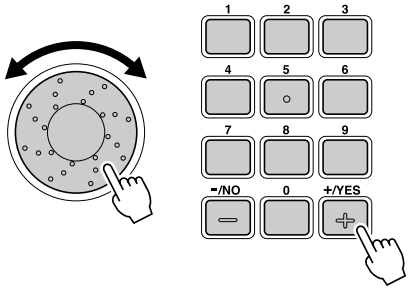


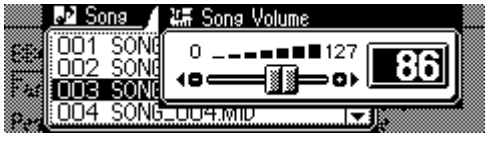
NOTE

- *The volume of the keyboard-played voice(s) is not affected by this operation.*

3 Adjust the Song Volume.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

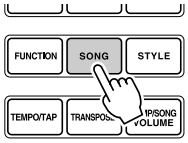




4 Press the [START/STOP] button again to stop the song.

Playing from a Specified Measure

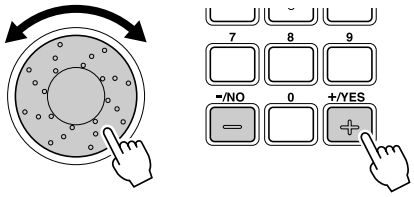
1 **Press the [SONG] button.**

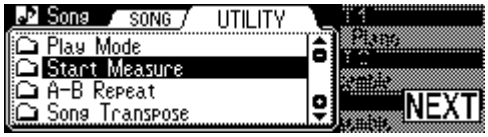


2 **Press the [NEXT] button to display the Song UTILITY screen.**

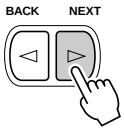
3 **Select "Start Measure."**

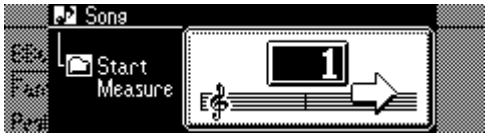
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.





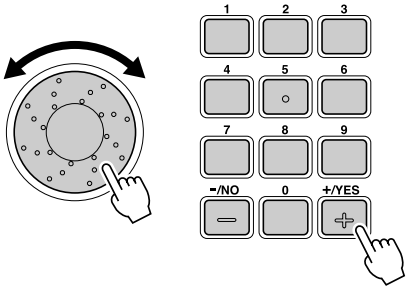
4 **Press the [NEXT] button to display the Song Start Measure screen.**

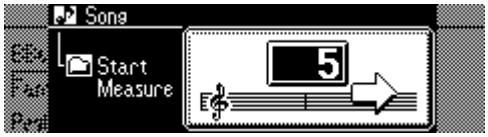




5 **Specify the measure from which to begin playback.**

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.





6 **Press the [START/STOP] to start the song from the specified measure.**

7 **Press the [START/STOP] button again to stop the song.**

NOTE

- *The Start Measure setting made here is automatically cancelled when another song is selected.*

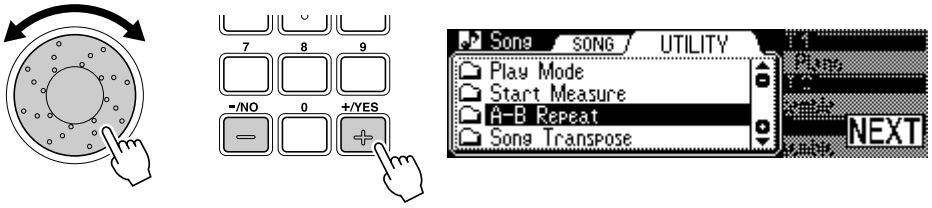
Repeat Play

1 Press the [SONG] button.

2 Press the [NEXT] button to display the Song UTILITY screen.

3 Select "A-B Repeat."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



4 Press the [NEXT] to display the A-B Repeat screen.

5 Press the [START/STOP] button to start the song.

6 Press the [MAIN A] button at the starting point (A) to be repeated.

7 Press the [MAIN B] button at the ending point (B) to be repeated.

Repeat playback is now set and the selected section automatically repeats indefinitely (until disabled or stopped in the steps below).

8 To cancel the the repeat function and continue song playback, press the [MAIN A] button again.

9 Press the [START/STOP] button to stop the song.

NOTE

- *If only the "A" repeat point is specified, repeat playback will occur between the "A" point and the end of the song.*

NOTE

- *Repeat playback will be cancelled if a different song is selected.*

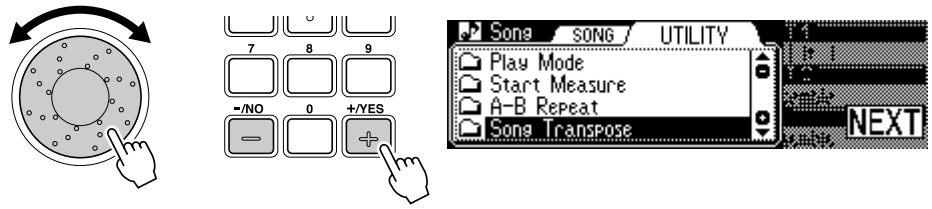
Song Transpose

1 Press the [SONG] button.

2 Press the [NEXT] button to display the Song UTILITY screen.

3 Select "Song Transpose."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



NOTE

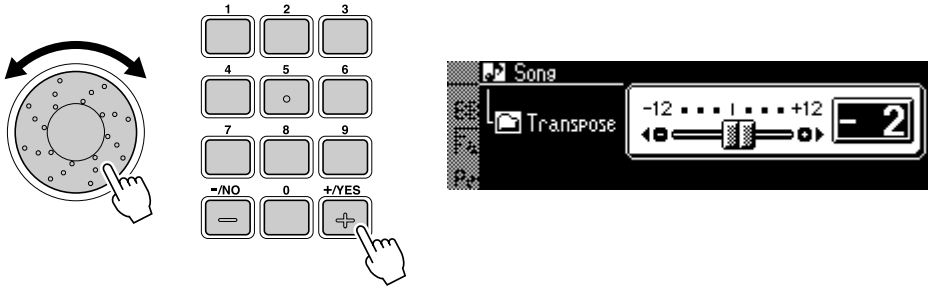
- *This operation does not affect the pitch of the keyboard-played voice(s)*
- *Changes made to the transpose setting (on page 30) affect the entire sound of the PSR-740/640, including the song transpose setting.*
- *Enabling the record mode to record a User song automatically resets the song transpose setting to "0."*

4 Press the [NEXT] button to display the Song Transpose screen.

5 Set the Transpose value.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

The transpose range is from -12 to +12. Each step corresponds to one semitone, allowing a maximum upward or downward transposition of one octave. A setting of "0" produces normal pitch.



NOTE

- *Minus values can be entered by using the number buttons while holding the [-/NO] button.*

6 Press the [START/STOP] to start the song.

7 Press the [START/STOP] button again to stop the song.

NOTE

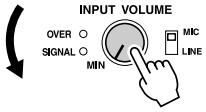
- *Steps #1 through #5 can be executed during playback.*

Vocal Harmony (PSR-740)

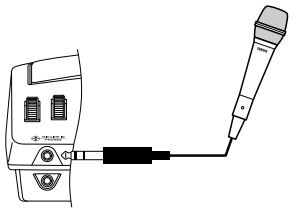
This extraordinarily powerful feature uses advanced voice-processing technology to automatically produce vocal harmony based on a single lead vocal. Four distinct harmony modes as well as an extensive selection of preset harmony types are provided. In addition to straightforward harmony, the PSR-740 also lets you change the apparent gender of the harmony and/or lead vocal sound. For example, if you are a male singer, you can have the PSR-740 automatically generate a two-part female backup. A comprehensive set of parameters gives you exceptionally precise and flexible control over the vocal harmony sound.

Setting up

1 Set the INPUT VOLUME control to "MIN."



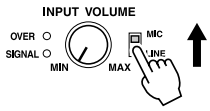
2 Connect a microphone to the MIC/LINE IN jack of the PSR-740.



NOTE

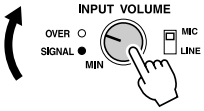
• A standard dynamic microphone with an impedance of about 250 ohms is recommended. (The PSR-740 does not support phantom-powered condenser microphones.)

3 Set the MIC/LINE panel switch to "MIC."



4 Adjust the INPUT VOLUME control while singing into the microphone.

Use the SIGNAL and OVER indicators to determine the appropriate setting.
With the INPUT VOLUME control at the minimum, sing or talk into the microphone at the highest expected volume. Gradually bring the control up toward "MAX" so that the SIGNAL indicator is lit and the OVER indicator flashes occasionally. Then reduce the INPUT VOLUME just enough to keep the OVER indicator from flashing. This should be the optimum level setting



NOTE

• If the OVER indicator lights regardless of the INPUT VOLUME setting, the output level of the microphone (or other source) is probably too high. Compensate by reducing the output level of the source.

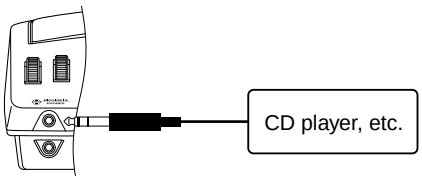
Using the "LINE" setting

Normally, since you will be using a microphone, you may never need to use the "LINE" setting. However, this may come in handy if you want to use a pre-recorded source (on CD or cassette tape) with the vocal harmony feature. (For best results, the source should be a single vocal only; any other singers and instruments in the mix could produce unexpected or undesired results.)

To do this:

1 Set the INPUT VOLUME control to "MIN."

2 Connect the source to the MIC/LINE IN jack. Use a stereo-to-mono cable or a "Y" cable to combine the left- and right-channel output signals from the source device for input to the PSR-740's mono MIC/LINE IN jack.



3 Set the MIC/LINE panel switch to "LINE."

4 Adjust the INPUT VOLUME control.
Play the source at the highest expected volume, and adjust the INPUT VOLUME control to get the optimum input level (as in the "Setting Up" instructions above).

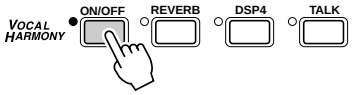
⚠ ***CAUTION***

• Never use the "MIC" setting with a line level signal (CD player, cassette deck, etc.). Doing this could damage the PSR-740 and its input functions.

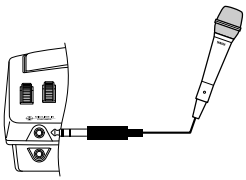
Using the Vocal Harmony effect

1 **Connect a microphone to the MIC/LINE IN jack of the PSR-740 (page 13).**

2 **Press the VOCAL HARMONY [ON/OFF] button to turn the Vocal Harmony effect on.**



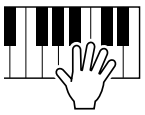
3 **Sing into the microphone.**



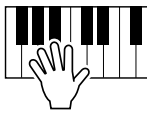
4 **Play the keyboard while singing into the microphone.**

The Vocal Harmony effect can be controlled by the chords you play. How you use chords to control the effect depends on the Vocal Harmony settings. Here are some examples. (For more details, see page 85.)

● **When the Harmony mode is set to VOCODER and the Harmony part is set to UPPER:**
Play the keys with your right hand while you sing. The Vocal Harmony effect changes chords and notes according to what you play above the auto accompaniment split point.



● **When the Harmony mode is set to CHORDAL:**
First, turn on the auto accompaniment (page 35) to start the accompaniment. Play the keys with your left hand while you sing. The Vocal Harmony effect changes chords and notes according to what you play below the auto accompaniment split point (in the auto accompaniment section of the keyboard).



The Vocal Harmony effect features various settings, including the harmony type, the quality of the harmony voice and the way in which chords affect the Vocal Harmony.

5 **Press the [REVERB], [DSP4] and [TALK] buttons (to turn the respective functions on or off as desired).**

- **REVERB** ..... This is the same Reverb effect as described on page 50. This button determines whether the currently selected Reverb effect is applied to the microphone sound or not.
- **DSP4** ..... The PSR-740 has a DSP effect (DSP 4) especially for the microphone sound, and this button turns the DSP 4 effect on/off. The DSP 4 type can be set from the Multi Effect display, or from the Talk Setting display.
- **TALK** ..... This calls up the Talk Settings, which are related to the microphone sound. These include the volume balance between the microphone sound and the overall sound of the PSR-740, the Vocal Harmony type and the DSP type.

6 **Set the INPUT VOLUME to the minimum, then turn off the power.**

⚠ ***CAUTION***

Pickup of extraneous sounds from the microphone can cause distorted Vocal Harmony sound.

- ***Separate the microphone from the instrument's speakers as much as possible.***

NOTE

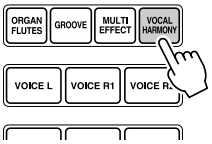
- *If you experience distorted or out-of-tune sound from the Vocal Harmony feature, your vocal microphone may be picking up extraneous sounds (other than your voice) — the Auto Accompaniment sound from the PSR-740, for example. In particular, bass sounds can cause mistracking of the Vocal Harmony feature.*

  The solution to this problem is to ensure that as little extraneous sound as possible is picked up by your vocal microphone:
  - *Sing as closely to the microphone as possible.*
  - *Use a uni-directional microphone.*
  - *Turn down the MASTER VOLUME, ACMP volume or SONG volume control.*

Changing the harmony settings

The Vocal Harmony effect has a variety settings that let you determine the character of the harmony and how the harmony is controlled. These settings can be called up by turning on the VOCAL HARMONY [ON/OFF] button.

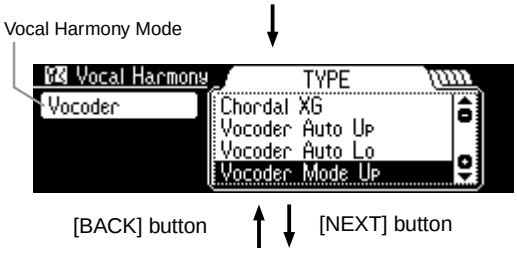
Follow the instructions below to change the settings.



1 **Press the [VOCAL HARMONY] button.**

2 **Select a Vocal Harmony type.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
The Harmony mode (page 85) is automatically determined when the type is selected.



[BACK] button [NEXT] button

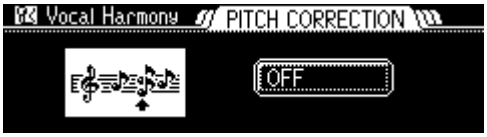
3 **Select the Lead Gender type.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

[BACK] button [NEXT] button

4 **Set the Pitch Correction.**

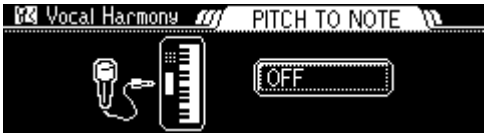
Use the **data data dial**, the **[+/YES]** button or the **[-/NO]** button.



[BACK] button [NEXT] button

5 **Select the Pitch to Note setting.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



[BACK] button [NEXT] button

6 **Select a Harmony part.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

[BACK] button [NEXT] button

7 **Select a song track.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

About the parameters

● Vocal Harmony Type
A total of 50 Vocal Harmony types are available, letting you select from a wide range of harmony effects that can be applied to your voice. For details, see the Vocal Harmony Type List on page 158.

● Lead Gender Type
This determines the vocal character (or gender) of the harmony effect, selectable from the following types:

- OFF ..... The voice character of the harmony does not change.
- UNISON ..... The harmony voice is changed in gender to some point between male and female.
- MALE ..... The gender of the harmony voice is changed to male.
- FEMALE ..... The gender of the harmony voice is changed to female.

● Pitch Correction
Even if the pitch of your voice is slightly "off," you can use this to automatically correct the pitch of your voice, ensuring that it matches with the harmony notes. Pitch Correction cannot be set when the Lead Gender Type is off, or when the Vocal Harmony mode is set to Detune.

● Pitch to Note
This function allows you to have a selected instrument voice sound along with and at the same pitch as your own voice. Select the part you wish to be controlled by your voice.

● Harmony Part
The Vocal Harmony effect is controlled by the notes you play. This parameter lets you determine which notes (keyboard position, accompaniment or song data) will control the harmony. Harmony Part can only be set when the Vocal Harmony mode is set to Vocoder.

- OFF ..... No harmony is applied.
- UPPER ..... Notes played on the right side of the keyboard from the split point control the harmony.
- LOWER ..... Notes played on the left side of the keyboard from the split point control the harmony.

● Song Track
When playing back a song from disk, the note data recorded to the assigned song track control the harmony.

Vocal Harmony Modes

All of the Vocal Harmony types fall into one of four basic categories, or "modes," which produce harmony in different ways. Although the mode cannot be set directly, since it is fixed for each Vocal Harmony type, the appropriate mode is selected automatically when the type is selected. The harmony effect is dependent on the selected harmony mode and part, and this parameter determines how the harmony is applied to your voice. The four modes are described below.

● Chordal
In the Style mode, chords played in the auto accompaniment section of the keyboard control the harmony. In the Song mode, chords contained in song data control the harmony.

● Vocoder
The harmony notes are determined by the notes you play on the keyboard (VOICE R1, R2, L).

● Chromatic
This mode automatically produces a harmony at a fixed pitch interval from that of your voice, and is applied regardless of the harmony part or the notes you play on the keyboard (or song data).

● Detune
This mode automatically produces a slightly "detuned" pitch compared to your voice, creating a rich chorusing effect. It is applied regardless of the harmony part or the notes you play on the keyboard (or song data).

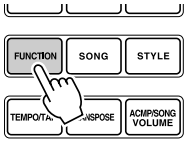
NOTE

• When selecting and playing back a song containing Vocal Harmony data, the Vocal Harmony type is selected automatically. However, if you change the type from the panel while the song is selected, the manually selected harmony type overrides the type specified in the song data.

Talk Setting

To call up the Talk Settings, turn on the VOCAL HARMONY [TALK] button.

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



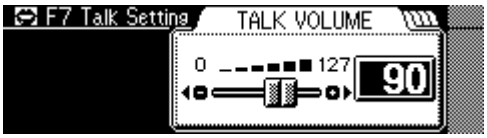
2 **Select "Talk Setting."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

[BACK] button [NEXT] button

3 **Adjust the Talk volume.**

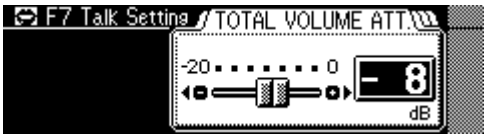
Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.



[BACK] button [NEXT] button

4 **Adjust the Total volume.**

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.



[BACK] button [NEXT] button

5 **Select a DSP type.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

[BACK] button [NEXT] button

6 **Select a Vocal harmony type.**

Use the **data data dial**, the **[+/YES]** button or the **[-/NO]** button.

[BACK] button [NEXT] button

7 **Adjust the Pan, Reverb depth, Chorus depth, and DSP dry/wet.**

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

About the parameters

● **Talk Volume** ..... This determines the volume or level of your voice from the microphone over a range of 0 - 127.

● **Total Volume** ..... This determines the volume or level of the PSR-740 (not including the microphone input) over a range of -20 dB - 0 dB.

● **DSP 4 Type** ..... This determines the effect type for the DSP 4 effect, which is applied especially to the microphone sound. The type can also be set in the Multi Effect display. When the [TALK] button is turned off, the DSP 4 type set in the Multi Effect display is recalled.

● **Vocal Harmony Type** ..... This is the same parameter as the Vocal Harmony type described on page 85. When the [TALK] button is turned on, the current type setting is recalled.

● **Pan, Reverb Depth, Chorus Depth, and DSP Dry/wet.** ..... The Pan, Reverb Depth and Chorus Depth settings are the same as the parameter edit settings. When the [TALK] button is turned on, the current effect settings are recalled. When the button is turned off, the settings returns to the parameter edit settings.

The DSP Dry/wet parameter determines the amount of the DSP 4 effect (see above) applied to the harmony sound.

Part Settings

In addition to the keyboard-played voices, the PSR-740/640 features many different instrumental “parts,” including those contained in the auto accompaniment, song playback, and vocal harmony.

● **Style mode**

	Part
Keyboard	VOICE R1
	VOICE R2
	VOICE L
Auto Accompaniment	RHYTHM SUB
	RHYTHM MAIN
	BASS
	CHORD1
	CHORD2
	PAD
	PHRASE1
	PHRASE2
Vocal Harmony (PSR-740)	MIC
	HARMONY

● **Song mode**

	Part
Keyboard	VOICE R1
	VOICE R2
	VOICE L
Song	TRACK1
	TRACK2
	TRACK3
	TRACK4
	:
	TRACK15
	TRACK16
Vocal Harmony (PSR-740)	MIC
	HARMONY

Use the following functions to change the settings for each part:

● **Voice Change** ..... page 89
This lets you change the voice for each part.

● **Mixer** ..... page 90
This lets you change the volume of each part and adjust the relative balance among all the parts.

● **Parameter Edit** ..... page 91
This lets you change the following settings for each part:

- Octave
  Shifts the pitch of the specified voice or track up or down by one or two octaves. A setting of “0” produces normal pitch.
- Pan
  Positions the sound of the specified voice or track from left to right in the stereo sound field. “-7” is full left, “7” is full right, “0” is center, and all other settings are corresponding positions in between.
- Reverb depth
  Sets the reverb depth for the specified voice or track, and thus the amount of reverb effect applied to that voice or track.
- Chorus depth
  Sets the chorus depth for the specified voice or track, and thus the amount of chorus effect applied to that voice or track.
- DSP depth
  Sets the DSP depth for the specified voice or track, and thus the amount of DSP effect applied to that voice or track.

The parameters which can be set for each part are shown in the chart below.

● **Parameters**

Parameter	Voice R1, R2, L	Style	Song	Vocal Harmony	Range	Function
Voice number	O	O	O	–	Refer to the Voice List (page 140)	Voice Change
Volume	O	O	O	O	0 – 127	Mixer
Octave	O	–	O	–	-2 – 2	Parameter Edit
Pan	O	O	O	O	-64 – 63	Parameter Edit
Reverb depth	O	O	O	O	0 – 127	Parameter Edit
Chorus depth	O	O	O	O	0 – 127	Parameter Edit
DSP depth	O	O	O	O	0 – 127	Parameter Edit

O : available

NOTE

● Voice R1, R2, L

- *When one of the DSP types belonging to the Insertion Effect (page 54) is selected, the effect will be exclusively applied to voice R1 and not to voice R2/L. Therefore the DSP depth for voice R2/L cannot be changed. Also, the DSP depth for voice R1 cannot be altered depending on the selected Insertion Effect type (PSR-640 only).*
- *Save any part settings you want to keep to the PSR-740/640 Registration Memory (page 62). The voice part settings are temporary and will be lost if the power is turned off, a different R1 panel voice is selected while the Voice Set function (page 136) is on, or a Registration Memory is recalled.*

● Song

- *Make sure to first select the appropriate song for which you wish to set the part before calling up the relevant display.*
- *Any part settings made for the song will be lost if you turn off the power, select another song, or select the Style mode (after finishing the part settings). To prevent this, make sure to select the Recording mode and save the song data to disk (page 92).*

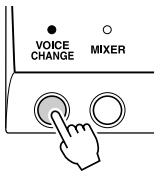
● Auto Accompaniment

- *Only drum kit voices (see page 31) can be selected for the RHYTHM MAIN track.*
- *When using auto accompaniment part settings for the RHYTHM SUB track, any of the voices can be selected but no chord changes will occur when using Auto Accompaniment.*
- *Make sure to first select the appropriate style for which you wish to set the part before calling up the relevant display.*
- *Auto accompaniment part settings can even be set while an accompaniment is playing.*
- *Auto accompaniment part settings affects all sections of the selected style.*
- *Save any part settings you want to keep to the PSR-740/640 Registration Memory (page 62). The Auto accompaniment part setting are temporary and will be lost if the power is turned off, a different style is selected while the Voice Set function (page 136) is on, or a Registration Memory is recalled.*

Voice Change

In addition to being able to change the voices played from the keyboard (R1, R2, L), you can also change the voices for each track of the auto accompaniment and songs.

1 Press the [VOICE CHANGE] button.



2 Select the part for which you want to change voices.

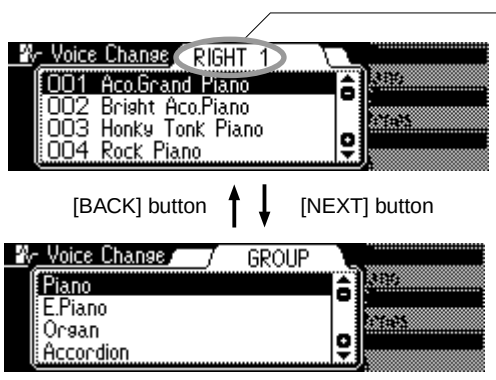
Parts can be selected from the following buttons (depending on the selected mode: Style or Song):

- Voice ..... PART ON/OFF [VOICE R1], [VOICE R2], [VOICE l] buttons
- Accompaniment track ..... [TRACK9]-[TRACK16] buttons (Style mode)
- Song track ..... [TRACK1]-[TRACK16] button (Song mode)

3 Select a voice.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

Refer to the Voice List (page 140).

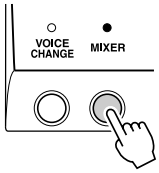


4 Press the [EXIT] button to exit from the VOICE CHANGE screen.

Mixer

1 Press the [MIXER] button.

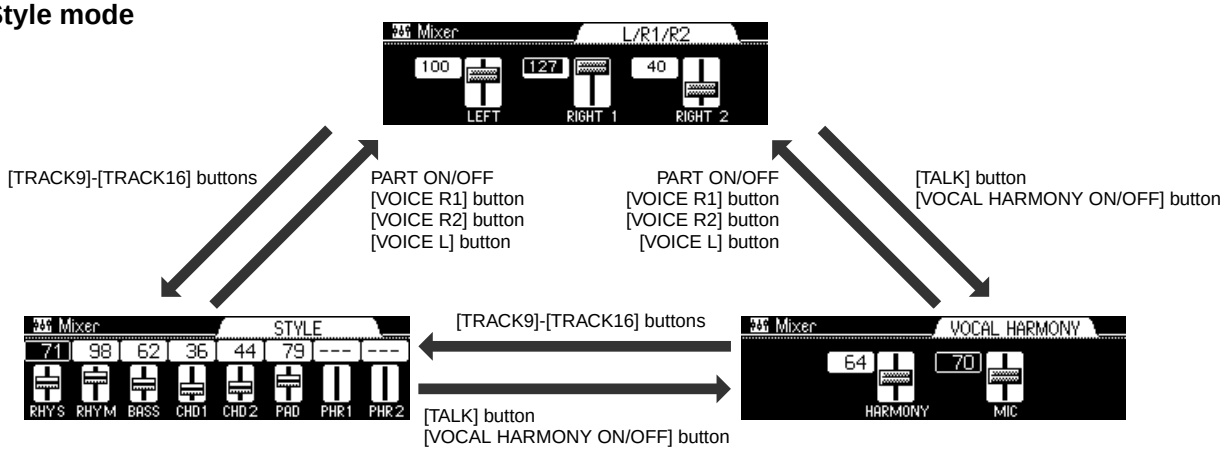
The MIXER indicator flashes.



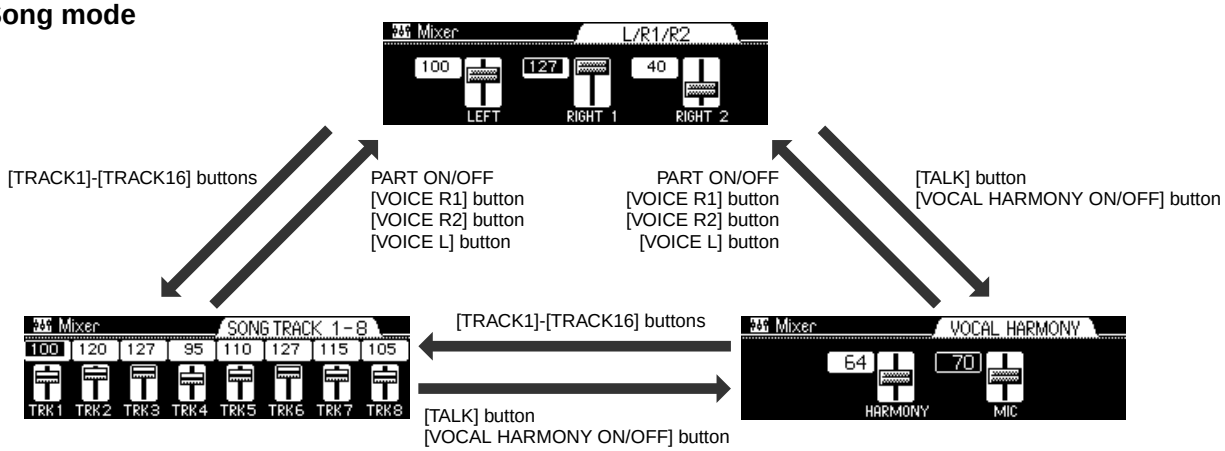
2 Adjust the volume from the corresponding display.

There are three basic Mixer displays: one for the voices, one for the accompaniment or song tracks, and one for vocal harmony. The illustrations below show how to select the various displays.
To adjust the desired volume setting, use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

● **Style mode**



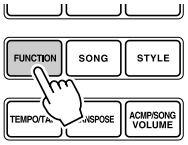
● **Song mode**



3 Press the [EXIT] button again to exit from the MIXER screen.

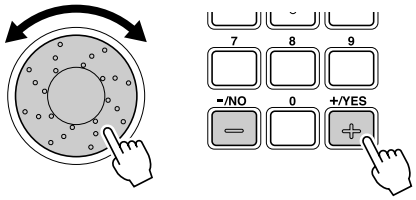
Parameter Edit

1 Press the [FUNCTION] button.



2 Select "Parameter Edit."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



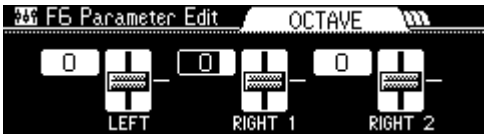
3 Press the [NEXT] button to display the Parameter Edit screen.

4 Adjust the parameter value from the corresponding display.

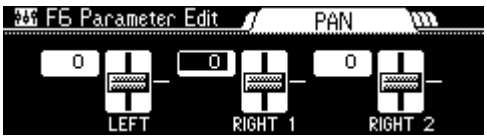
- Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.
- You can switch among the parts just as with the Mixer function above.
- Switch among the parameter displays by using the **[NEXT]** button and **[BACK]** button as shown below.

NOTE

• Minus settings for the Octave and Pan parameters can be directly entered by pressing the appropriate number button while holding the [-/NO] button.

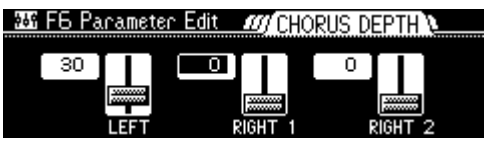


[BACK] button ↑ ↓ [NEXT] button

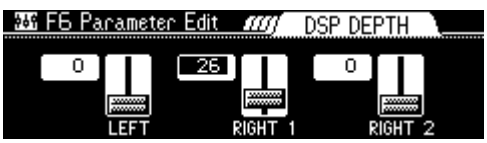


[BACK] button ↑ ↓ [NEXT] button

[BACK] button ↑ ↓ [NEXT] button



[BACK] button ↑ ↓ [NEXT] button



(PSR-640 only)

Song Recording

With the powerful and easy-to-use song recording features, you can record your own keyboard performances to a floppy disk as a User song, and create your own complete, fully orchestrated compositions.

Each User song lets you record up to sixteen independent tracks. These include not only the voices for the keyboard performance (R1, R2, L), but also the auto accompaniment parts and vocal harmony effect (PSR-740 only; page 82).

NOTE

• User Songs are recorded on floppy disks. They cannot be recorded unless a floppy disk is inserted into the disk drive.

The PSR-740/640 provides two different ways to record: Quick Recording and Multi Track Recording. In addition, comprehensive editing functions let you "fine tune" the recorded song data.

After finishing your recording of a User song, you can play it back in the same way as one of the disk songs.

■ Data that can be recorded to User songs

NOTE

• Songs recorded by the PSR-740/640 are saved as SMF (format 0) files. See page 125 for information on the SMF (format 0) format.

NOTE

• Being able to record note on/off and velocity means being able to record forte or piano, crescendo or diminuendo, and other subtle elements of expression from the keyboard as you play them.

• Note ON (key press), note OFF (key release), and velocity (strength of key press) are MIDI data events (playing information) (page 122).

The maximum amount of song memory is 65,000 notes for 2DD disks and 130,000 notes for 2HD disks.

■ User Song Tracks

The tracks which can be recorded to the User songs are organized as shown in the chart below.

Track	Other Parts that can be set	Default Part
1	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE R1
2	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE R2
3	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE L
4	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE R1
5	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE R1
6	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE R1
7	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE R1
8	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	VOICE R1
9	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	Accompaniment Style RHYTHM SUB
10	—	Accompaniment Style RHYTHM MAIN
11	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	Accompaniment Style BASS
12	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	Accompaniment Style CHORD1
13	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	Accompaniment Style CHORD2
14	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	Accompaniment Style PAD
15	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	Accompaniment Style PHRASE1
16	VOICE R1, R2, L, Accompaniment Style track, Vocal Harmony	Accompaniment Style PHRASE2

The PSR-740/640 provides two different ways to record: Quick Recording and Multi Track Recording.

● About Multi Track Recording

In Multi Track Recording, you determine the track assignments (as shown above) before recording. Several tracks can be recorded simultaneously. In addition to being able to record to empty tracks, you can also re-record tracks that already contain recorded data.

● About Quick Recording

In Quick Recording, you can quickly record without having to worry about the track assignments above. Quick Recording automatically makes track assignments according to the simple rules below.

- When Record method is set to “MELODY”
  Your keyboard performances (VOICE R1, R2, L) are recorded to tracks 1 - 3.
- When Record method is set to “ACMP”
  The auto accompaniment parts are recorded to tracks 9 - 16.
- When Record method is set to “MELODY + ACMP”
  Your keyboard performances (VOICE R1 and R2) are recorded to tracks 1 - 2 and the auto accompaniment parts are recorded to tracks 9 -16.

The quick recording method is different from the multi recording method but for both of them, the recorded data is recorded on tracks 1–16.
If you wish to re-record a User song that was originally recorded by the Easy Recording method, use Multi Track Recording.

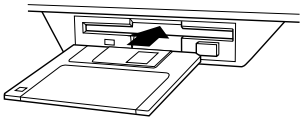
NOTE

The following notes and cautions are important points for you to keep in mind as you record.

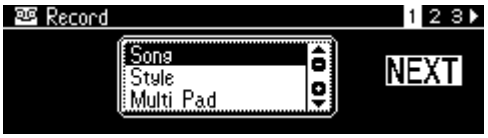
- *Using Metronome function (page 134) can make your recording sessions much more efficient.*
- *Using Registration Memory (page 62) can make your recording sessions much more efficient, since various settings (such as voices, etc.) can be recalled by a single button press. When the record mode is engaged, the Registration Memory Freeze function will be turned on (it cannot be turned off while the record mode is engaged).*
- *When the record mode is engaged, the Synchro Stop function will be turned off (it cannot be turned on while the record mode is engaged).*
- *Whenever you record, any previously recorded material in the same track will be erased.*
- *Song files on commercially available disks which are not write-protected can be selected and recorded to (edited) on the PSR-740/640. If the song data is of a different format from that of the PSR-740/640 User songs, the display prompts you to convert the song data. By pressing the [+/YES] button, you can convert the song data to the PSR-740/640 format (compatible with the PSR-740/640). Once the conversion operation is finished, the PSR-740/640 allows you to record.*
- *If the disk memory becomes full while recording, an alert message will appear on the display and recording will stop.*
- *Be careful to avoid the data loss that will occur during recording if the power is turned off, the AC adaptor is unplugged from the outlet.*

Quick Recording

1 Insert the floppy disk into the disk drive.



2 Press the [RECORD] button to engage the Record mode.

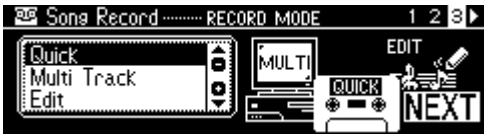


3 Select "Song."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

4 Press the [NEXT] button.

5 Press the [NEXT] button again.



6 Select "Quick."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

7 Press the [NEXT] button.

8 Select a Record method.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

- MELODY ..... This records your keyboard performance (Voices R1/R2/L) without the auto accompaniment.
- ACMP ..... This records only the auto accompaniment. When this is selected, the auto accompaniment is automatically set to on.
- MELODY + ACMP ... It records your keyboard performance (Voices R1/R2) along with the auto accompaniment. When this is selected, auto accompaniment is automatically set to on.

9 Press the [NEXT] button to display the RECORD ready screen.

The beat indicator dots will flash at the currently set tempo, indicating that the record ready (Synchro Start) mode is engaged.

10 Start recording.

- If you've selected **[MELODY]** or **[MELODY + ACMP]** in step #8 above, recording starts as soon as you play a key.
- If you've selected **[ACMP]** in step #8 above, the auto accompaniment and recording start simultaneously as soon as a chord is played in the auto accompaniment section of the keyboard (the left side of the split point).
- Recording can also be started by pressing the **[START/STOP]** button.

NOTE

• Auto accompaniment cannot be turned on or off during recording.

11 Stop recording.

- If you've selected **[MELODY]** in step #8 above, press the **[START/STOP]** button.
- If you've selected **[ACMP]** or **[MELODY + ACMP]** in step #8 above, press the **[START/STOP]** button or the **[ENDING]** button. If you press the **[ENDING]** button while recording the auto accompaniment track, recording will stop automatically after the ending section has finished.

12 Select whether to save the newly recorded data to disk or not.

- To cancel the save operation (for example, when you wish to redo the recording), press the **[-/NO]** button and re-record starting with step #8 above, after the display returns to the TRACK selection screen.
- To save the data to disk, press the **[+/YES]** button.

⚠ ***CAUTION***

• While the file is being saved, never eject the floppy disk or turn the power off.

13 Exit from the Record mode.

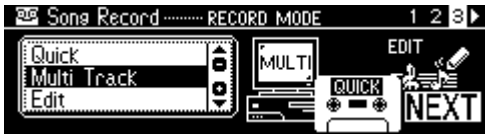
Press the **[RECORD]** button.

Multi Track Recording

1-3 Use the same operation as in “Quick Recording” (page 94).

4 Press the [NEXT] button to display the FILE selection screen.

5 Press the [NEXT] button.



6 Select “Multi Track.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

7 Press the [NEXT] button three times to display the PART setting screen.

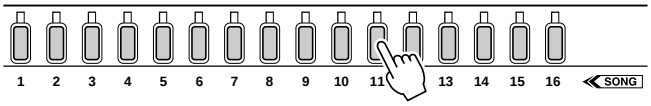
NOTE

- *For information on the punch in and start measure functions, see pages 98.*

8 Select the desired track and part for recording.

1) Select a track.

Press one of the **[TRACK1]**-**[TRACK16]** buttons.



2) Select a part.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

[BACK] button ↑ ↓ [NEXT] button

3) Set the desired track to “REC.”

Press the **[NEXT]** button and use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

NOTE

- *For information on track assignments, see page 93.*
- *To record auto accompaniment data, set the [ACMP] button to ON.*
- *The same part cannot be set to more than one track for recording.*

- Make all necessary settings to each track by repeating steps 1) through 3) above.

9 Press the [NEXT] button to display the Rehearsal screen.

Voices and styles can be set from this display. After completing the desired settings, press the **[EXIT]** button to return to this display.

10 Press the [NEXT] button to display the RECORD Ready screen.

The beat indicator dots will flash at the currently set tempo, indicating that the record ready (Synchro Start) mode is engaged.

11 Start recording.

- Recording starts as soon as you play a key on the keyboard.
- If you enabled the auto accompaniment track for recording (in steps #8 above), recording starts as soon as you play a chord in the auto accompaniment section of the keyboard (the left side of the split point).
- Recording can also be started by pressing the **[START/STOP]** button.

NOTE

• Auto accompaniment cannot be turned on or off during recording.

12 Stop recording.

- If you did not enable the auto accompaniment track for recording (in steps #8 above), press the **[START/STOP]** button.
- If you enabled the auto accompaniment track for recording (in steps #8 above), press the **[START/STOP]** button or the **[ENDING]** button. If you press the **[ENDING]** button while recording the auto accompaniment track, recording will stop automatically after the ending section has finished.

13 Save the recorded data to the disk.

- To cancel the save operation (for example, when you wish to redo the recording), press the **[-/NO]** button and re-record starting with step #8 above, after the display returns to the PART setting screen.
- To save the data to disk, press the **[+/YES]** button.

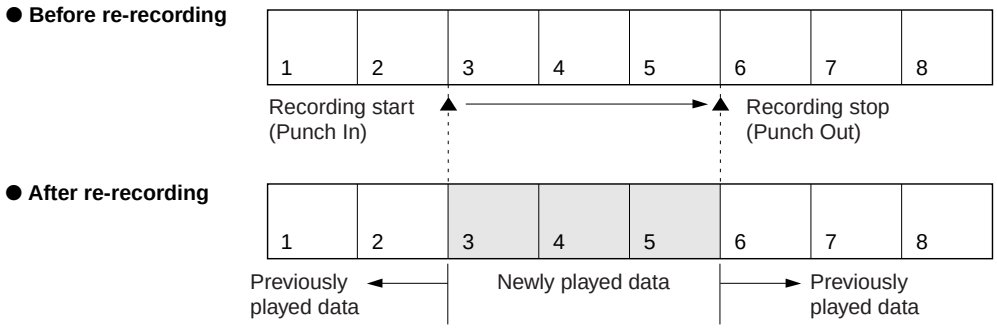
⚠ ***CAUTION***

• While the file is being saved, never eject the floppy disk or turn the power off.

14 Press the [RECORD] button to exit from the Record mode.

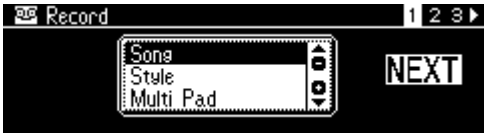
Re-recording — Punch In/Out and Start Measure

This section shows you how to re-record a specific section of a already-recorded song. In the eight-measure example below, the third measures through the fifth measure are re-recorded.



1 **Insert the floppy disk into the disk drive.**

2 **Press the [RECORD] button to engage the Record mode.**



3 **Select "Song."**

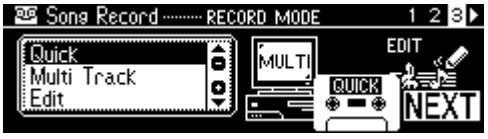
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

4 **Press the [NEXT] button to display the FILE selection screen.**

5 **Select the File you want to re-record.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

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



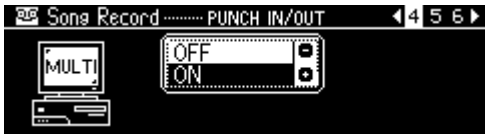
7 **Select "Multi Track."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

8 Press the [NEXT] button to display the PUNCH IN/OUT screen.

9 Select "ON."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

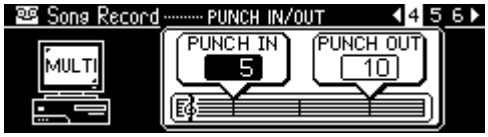


10 Press the [NEXT] button to display the PUNCH IN/OUT measure screen.

11 Set the punch-in measure and the punch-out measure.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

- To move the cursor from "PUNCH IN" to "PUNCH OUT," use the **[NEXT]** button.
- To move the cursor from "PUNCH OUT" to "PUNCH IN," use the **[BACK]** button.



NOTE

• The punch-out measure number cannot be set lower than the punch-in measure number.

12 Press the [NEXT] button to display the START MEASURE screen.

13 Set the start measure (the measure at which playback starts).

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

14 Press the [NEXT] button to display the PART screen.

NOTE

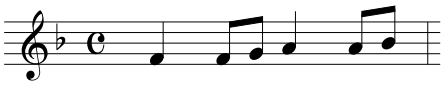
• Punch In/Out recording cannot be used with the auto accompaniment tracks or a vocal harmony part.

• During recording you can use the TRACK buttons to turn playback of previously-recorded tracks on or off as required.

15 Record using the same operation as described in "Multi Track Recording" on page 96, starting with step #7.

Quantize

Quantize lets you “clean up” or “tighten” the timing of a previously recorded track. For example, the following musical passage has been written with exact quarter-note and eighth-note values.



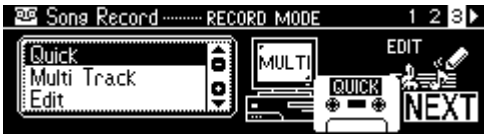
Even though you think you may have recorded the passage accurately, your actual performance may be slightly ahead of or behind the beat (or both!). Quantize allows you to align all the notes in a track so that the timing is absolutely accurate to the specified note value.

1 - 4 Use the same operation as in “Re-recording” (page 98).

5 Select the Song file to be quantized.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

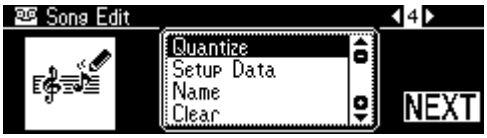
6 Press the [NEXT] button.



7 Select “Edit.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

8 Press the [NEXT] button.



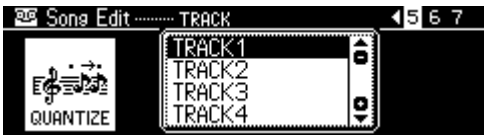
9 Select “Quantize.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

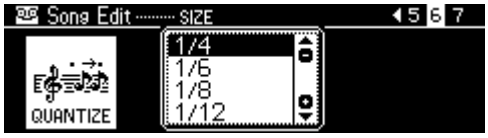
10 Press the [NEXT] button to display the TRACK selection screen.

11 Select the track to be quantized.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



12 Press the [NEXT] button.



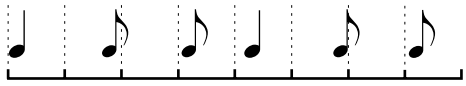
13 Select the Quantize size (resolution).

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Set the Quantize value to correspond to the smallest notes in the track you are working with. For example, if the data was recorded with both quarter notes and eighth notes, use 1/8 for the quantize value. If the quantize function is applied in this case with the value set to 1/4, the eighth notes would be moved on top of the quarter notes.

● **Quantize Size**

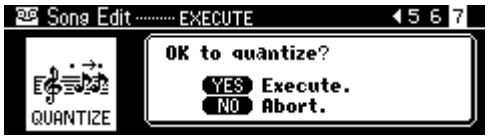
Size	Note
1/4	Quarter note
1/6	Quarter note triplet
1/8	Eighth note
1/12	Eighth note triplet
1/16	Sixteenth note
1/24	Sixteenth note triplet
1/32	Thirty-second note

One measure of 8th notes before quantization



After quantization

14 Press the [NEXT] button to display the Quantize operation screen.



15 Press the [+/YES] button to execute the Quantize operation.

To abort the Quantize operation, press the **[-/NO]** button.

The Quantize operation is completed...

⚠ CAUTION

- ***While the Quantize operation is being executed, never eject the floppy disk or turn the power off.***

16 Press the [RECORD] button to exit from the Record mode.

Editing Setup Data

This function lets you make changes to various voice-related parameters (setup data) for each track of a recorded song. The following parameters can be edited:

- Voice ..... Assigns a voice number to the specified track.
- Volume ..... Sets the volume of the specified track.
- Octave ..... Shifts the pitch of the specified track up or down by one or two octaves. A setting of "0" produces normal pitch.
- Pan ..... Positions the sound of the specified track from left to right in the stereo sound field. A setting of "-7" is full left, "7" is full right, "0" is center, and all other settings are corresponding positions in between.
- Reverb depth ..... Sets the reverb depth for the specified track, and thus the amount of reverb effect applied to that voice or track.
- Chorus depth ..... Sets the chorus depth for the specified track, and thus the amount of chorus effect applied to that voice or track.
- DSP depth ..... Sets the DSP depth for the specified track, and thus the amount of DSP effect applied to that voice or track.

NOTE

• Only one of the Setup parameters can be recorded to each track, and any parameter changes made in the middle of the song will be cancelled. However, in the case of Volume data, any Volume changes in the middle of the song are applied as an offset to the initial Setup Data setting.

1-4 Use the same operation as in "Re-recording" (page 98).

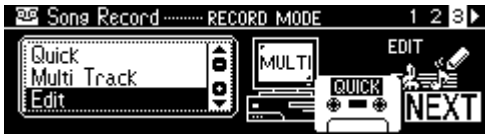
5 Select the file (song) for which you wish to change the setup data.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

6 Press the [NEXT] button to display the MODE selection screen.

7 Select "Edit."

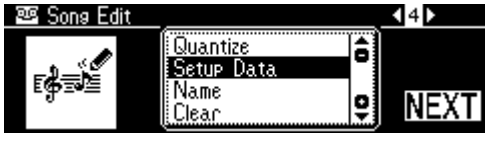
Use the **data data dial**, the **[+/YES]** button or the **[-/NO]** button.



8 Press the [NEXT] button.

9 Select "Setup Data."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



10 Press the [NEXT] button to display the SETUP DATA screen.

11 Edit the setup data.

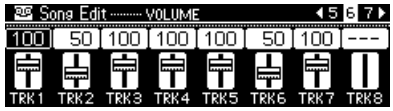
Press the **[NEXT]** and **[BACK]** buttons to switch among the displays (as shown below).

- Select a track by pressing one of the **[TRACK1]**-**[TRACK16]** buttons.
- Use the **data dial**, the **[+/YES]** button, or the **[-/NO]** button to change the desired values in each display.

• **Voice**

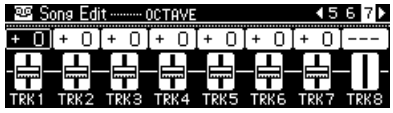
[BACK] button ↑ ↓ [NEXT] button

• **Volume**



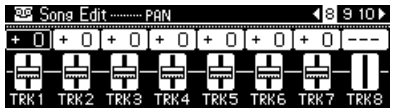
[BACK] button ↑ ↓ [NEXT] button

• **Octave**



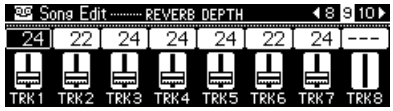
[BACK] button ↑ ↓ [NEXT] button

• **Pan**



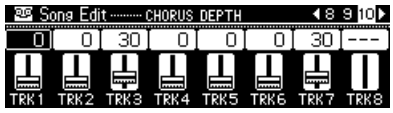
[BACK] button ↑ ↓ [NEXT] button

• **Reverb depth**



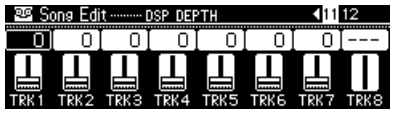
[BACK] button ↑ ↓ [NEXT] button

• **Chorus depth**



[BACK] button ↑ ↓ [NEXT] button

• **DSP depth**



12 Press the [NEXT] button to display the setup data saving screen.

13 Save the changed data to the floppy disk.

- To cancel the save operation (if you wish to redo any edits), press the **[-/NO]** button and continue editing starting with step #11 above, after the display returns to the SETUP DATA screen.
- To save the data to disk, press the **[+/YES]** button.

The Save operation is completed...

⚠ CAUTION

- ***While the file is being saved, never eject the floppy disk or turn the power off.***

14 Press the [RECORD] button to exit from the Record mode.

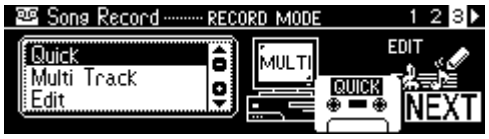
Naming User Songs

1 - 4 Use the same operation as in “Re-recording” (page 98).

5 Select the file (song) for which you wish to change the name.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

6 Press the [NEXT] button.



7 Select “Edit.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

8 Press the [NEXT] button.

9 Select “Name.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

10 Press the [NEXT] button to display the NAME screen.

11 Enter the desired name for the file.

Use the keyboard to enter the name (page 21).
Up to 12 letters or characters can be used.

12 Press the [RECORD] button to exit from the Record mode.

Clearing User Song Data

1-4 **Use the same operation as in “Re-recording” (page 98).**

5 **Select the song file to be cleared.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

6 **Press the [NEXT] button to display the MODE selection screen.**

7 **Select “Edit.”**

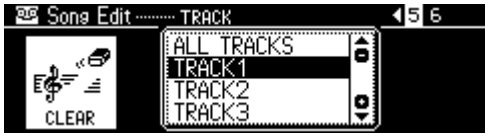
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

8 **Press the [NEXT] button to display the Song Edit screen.**

9 **Select “Clear.”**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

10 **Press the [NEXT] button.**



11 **Select the track to be cleared.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
To clear the data of an entire song, select “ALL TRACKS.”

12 **Press the [NEXT] button.**

13 **Press the [+/YES] button to execute the Clear operation.**

To abort the Clear operation, press the **[-/NO]** button.

⚠ *CAUTION*

- ***While the track is being cleared, never eject the floppy disk or turn the power off.***

14 **Press the [RECORD] button to exit from the Record mode.**

Multi Pad Recording

In addition to the preset Multi Pad sets, the PSR-740/640 has 16 user-recordable sets that you can use to store your own creations. These original User Multi Pads can be played and used in the same way as the presets. User Multi Pad data can also be saved to and loaded from floppy disk.

Your keyboard performance (using voice R1) is recorded to the User pad. Chord Match data (page 48) can also be recorded.

■ Data that can be recorded to User pads

- Note on/off (key press and release)
- Velocity (strength of key press)
- Pitch bend, pitch bend range
- SUSTAIN button on/off
- Modulation wheel (PSR-740)
- Footswitch on/off (sustain, sostenuto, soft)
- Foot Volume on/off (expression)
- Voice Change settings
- Mixer settings
- Parameter Edit settings

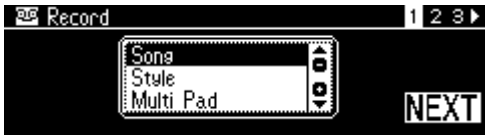
Up to approximately 2,000 notes for each pad can be recorded to the PSR-740/640 MULTI PADs.

NOTE

- *User Pad data is recorded by playing voice R1 from the keyboard. Voice R2, voice L and the auto accompaniment cannot be used.*
- *Material recorded data is retained in memory even when the STANDBY switch is turned off if an AC adaptor is connected (page 159). It is nevertheless a good idea to save important data to floppy disk so that you can keep them indefinitely and build up your own data library (page 65).*

Multi Pad Recording

1 Press the [RECORD] button to engage the Record mode.



2 Select "Multi Pad."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 Press the [NEXT] button.

4 Select a Multi Pad Bank to recoed.

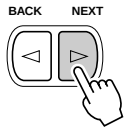
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

NOTE

The following notes and cautions are important points for you to keep in mind as you record your Multi Pad data.

- *Using the Metronome function (page 134) can make your recording sessions much more efficient.*
- *Using Registration Memory (page 62) can make your recording sessions much more efficient, since various settings (such as voices, etc.) can be recalled by a single button press. When the record mode is engaged, the Registration Memory Freeze function will be turned on (it cannot be turned off while the record mode is engaged).*
- *Whenever you record, any previously recorded material in the same track will be erased.*
- *If the memory becomes full while recording, an alert message will appear on the display and recording will stop.*
- *Be careful to avoid the data loss that will occur during recording if the power is turned off, or the AC adaptor is unplugged from the outlet.*

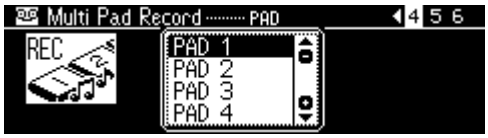
5 Press the [NEXT] button.



6 Select "Record."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

7 Press the [NEXT] button.



8 Select a Pad number to record.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

9 Press the [NEXT] button to display the Rehearsal screen.

Voices can be set from this display. After completing the desired settings, press the **[EXIT]** button to return to this display.

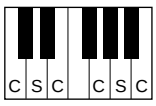
10 Press the [NEXT] button to display the RECORD ready screen.

The beat indicator dots will flash at the currently set tempo, indicating that the record ready (Synchro Start) mode is engaged.

11 Start recording.

- Recording starts as soon as you play a key on the keyboard.
- Recording can also be started by pressing the **[START/STOP]** button.

If you are recording a Chord match phrase, use only the CM7 scale tones (i.e. C, D, E, G, A, and B).



C = chord tone
C, S = scale tones

12 Press the [START/STOP] button to stop recording.

13 Press the [RECORD] button to exit from the Record mode.

Chord Match

1-5 Use the same operation as in "Multi Pad Recording" above.

6 Select "Edit."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

7 Press the [NEXT] button.

8 Select "Chord Match."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

9 Press the [NEXT] button.

10 Turn the Chord Match function on or off.

- Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
- To select the desired pad for setting, press the **[NEXT]/[BACK]** button.

11 Press the [RECORD] button to exit from the Record mode.

Naming User Pads

1-7 Use the same operation as in "Chord Match" above.

8 Select "Name."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

9 Press the [NEXT] button to display the NAME screen.

10 **Enter the desired name for the file.**

Use the keyboard to enter the name (page 21).
Up to 12 letters or characters can be used.

11 **Press the [RECORD] button to exit from the Record mode.**

Clearing User Pad Data

1-7 **Use the same operation as in “Chord Match” above.**

8 **Select “Clear.”**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

9 **Press the [NEXT] button.**

10 **Select the Pad number to be cleared.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
To clear the data from all four pads, select “ALL PADS.”

11 **Press the [NEXT] button.**

12 **Execute the Clear operation.**

Press the **[+/YES]** button to execute the Clear operation.
To abort the Clear operation, press the **[-/NO]** button.

13 **Press the [RECORD] button to exit from the Record mode.**

Style Recording

The PSR-740/640 lets you record up to three original User styles which can be used for auto accompaniment in the same way as the preset styles. User Style data can also be saved to and loaded from floppy disk (page 65).

You can create a User styles by using the internal style data as a starting point. Select a preset style that is closest to the type of style you want to create, and record the auto accompaniment pattern to one track of the section.

The PSR-740/640 provides two basic ways to record styles:

The four editing features below allow you to edit already recorded style data.

■ User Style Tracks

The tracks which can be recorded to the User styles are organized as shown in the chart below.

● **PSR-740**

Section	Track			
COUNT	RHYTHM SUB	CHORD1	PHRASE1	BASS
INTRO	RHYTHM MAIN	CHORD2	PHRASE2	PAD
INTRO	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN A	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN B	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN C	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN D	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN A	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN B	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN C	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN D	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
SIMPLE	RHYTHM SUB	CHORD1	PHRASE1	BASS
ENDING	RHYTHM MAIN	CHORD2	PHRASE2	PAD
ENDING	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD

● **PSR-640**

Section	Track			
INTRO	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN A	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN B	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN C	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN D	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN A	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN B	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN C	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN D	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
ENDING	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD

On the PSR-740, a total of 96 tracks (12 sections x 8 tracks) can be recorded to a one track; on the PSR-640, a total of 80 tracks (10 sections x 8 tracks) can be recorded to one track.

NOTE

• Material recorded data is retained in memory even when the STANDBY switch is turned off if an AC adaptor is connected (page 159). It is nevertheless a good idea to save important data to floppy disk so that you can keep them indefinitely and build up your own data library (page 65).

■ Data that can be recorded to User styles

- Note on/off (key press and release)
- Pitch bend, pitch bend range
- Mixer settings*
- Tempo
- Chorus type and settings
- Modulation wheel (PSR-740)
- Velocity (strength of key press)
- Voice number (drum kit number)*
- Parameter Edit settings*
- Reverb type and settings
- DSP type and settings (PSR-740)
- Foot Volume on/off (expression)

Up to approximately 1,950 notes for a section (a total of about 7,150 notes) can be recorded to the PSR-740/640 style tracks.
Only one event of the item marked with * can be recorded for each track of the sections.

NOTE

• User Style data is recorded by playing voice R1 from the keyboard. Voice R2, voice L and the auto accompaniment cannot be used.

■ About Recording User Styles

In recording a User song, the PSR-740/640 records your keyboard performance as MIDI data. Recording of User styles, however, is done in a different way. Here are some of the aspects in which style recording differs from song recording:

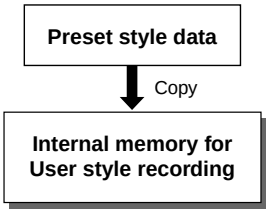
Loop Recording

Auto accompaniment repeats the accompaniment patterns of several measures in a "loop," and style recording is also done using loops. For example, if you start recording with a two-measure main section, the two measures are repeatedly recorded. Notes that you record will play back from the next repetition (loop), letting you record while hearing previously recorded material.

Overdub Recording

This method records new material to a track already containing recorded data, without deleting the original data. In style recording, the recorded data is not deleted, except when using functions such as Clear (page 118) and Drum Cancel (page 113).
For example, if you start recording with a two-measure main section, the two measures are repeated many times. Notes that you record will play back from the next repetition, letting you overdub new material to the loop while hearing previously recorded material.

Using Preset Styles

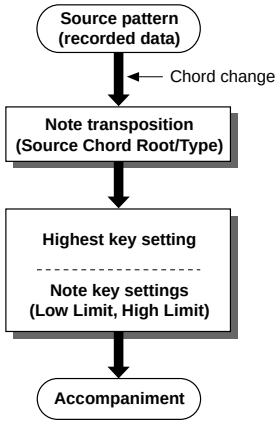


As shown in the chart at left, when you select the internal preset style that is the closest to the type of style you wish to create, the preset style data will be copied to a special memory location for recording.
You create (record) your new, original style by adding or deleting data from the memory location.

All tracks (with the exception of the rhythm track) must be cleared before recording (page 115).

■ Style File (Auto Accompaniment) Format

The Style File Format (SFF) combines all of Yamaha's auto accompaniment know-how into a single unified format.
By using the User style function, you can take advantage of the power of the SFF format and freely create your own User styles.



CTAB ..... page 119

The chart at the left indicates the process by which the accompaniment is played back. (This does not apply to the rhythm track.)
The source pattern in the chart is the original style data. As explained on page 115, in style recording this source pattern is recorded.
As shown in the chart at left, the actual output of the accompaniment is determined by various parameter settings and chord changes (playing chords in the auto accompaniment section of the keyboard) made to this source pattern.

CTAB is a group of parameters which determines how the pitch of the source pattern is converted when you play chords in the auto accompaniment section of the keyboard. The User style function gives you exceptionally detailed and comprehensive control by allowing you to record the source pattern to each track and set the CTAB parameters for each track. The PSR-740/640 lets you set the following four CTAB parameters:

- Source Chord Root
- Source Chord Type
- Highest Key
- Note Range (Low Limit, High Limit)

For details about the CTAB parameters, see page 119.

NOTE

The following notes and cautions are important points for you to keep in mind as you record your User styles.

- *Make sure to clear at least one of the three User styles before recording a new User style. Recording a new User style cannot be started when all three User styles have recorded data.*
- *Be careful to avoid the data loss that will occur during recording if the power is turned off, or the AC adaptor is unplugged from the outlet.*
- *Using Registration Memory (page 62) can make your recording sessions much more efficient, since various settings (such as voices, etc.) can be recalled by a single button press.*
  When the record mode is engaged, the Registration Memory Freeze function will be turned on (it cannot be turned off while the record mode is engaged).
- *Using the Metronome function (page 134) can make your recording sessions much more efficient.*
- *In the Record Ready mode, you can exchange or edit the voice data in the recorded tracks using Mixer on page 90 or Parameter Edit on page 91.*
- *If the memory becomes full while recording, an alert message will appear on the display and recording will stop.*
- *Since recording is done in measure units, you should first select a style that has the same number of measures as the section you intend to record.*
- *If none of the preset styles is appropriate, select one that has the same time signature and number of measures as the one you want to create, then use the Clear function (page 118) to clear all preset data before entering your own.*

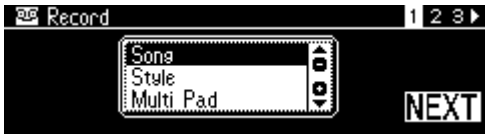
NOTE

- *"CTAB" is the abbreviation of "Channel table".*

Style Recording — Rhythm Track

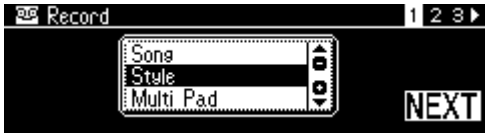
With this operation you can create your own original rhythm patterns by editing existing rhythm track (percussion) data from a preset style.

1 Press the [RECORD] button to engage the Record mode.



2 Select "Style."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



3 Press the [NEXT] button.

4 Select a style to begin with.

Use the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]**-**[0]**.

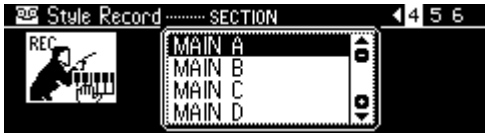
5 Press the [NEXT] button.

6 Select "Record."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

7 Press the [NEXT] button to display the SECTION selection screen.

8 Select the Section to be recorded.



NOTE

- *Multiple sections cannot be recorded at the same time.*

9 Press the [NEXT] button to display the TRACK selection screen.

10 Select a Rhythm track to be recorded.

Select “RHYTHM MAIN” or “RHYTHM SUB” with the **data dial**, the **[+YES]** button or the **[-/NO]** button.

NOTE

- *Only one track can be recorded at a time.*

11 Press the [NEXT] button to display the RECORD ready screen.

12 Select one of the Drum Kits.

Select the desired kit by pressing the **[VOICE R1]** button (page 26). To return to the original display, press the **[EXIT]** button (page 17).

13 Start recording.

You can start recording with one of the following ways:

- Press the **[START/STOP]** button. The following will start to play back: the style selected in step #4, the section selected in step #8 and the rhythm track selected in step #10.
- Press the **[SYNC START]** button to enable synchronized standby (page 25), then play a key on the keyboard. Playback starts as described in the first method above.

NOTE

- *For recording the RHYTHM tracks, the instrument symbols printed on the front edge of the panel show you the instrument assignments to each key. See “Keyboard Percussion” on page 31 for playing each drum/ percussion sound.*

Since the rhythm pattern plays back repeatedly, you can record by overdubbing — listening to the pattern and playing the desired keys. Look at the icons printed under the keys indicating the percussion sounds that are assigned to each key.

You can also delete certain percussion sounds in the following way:

1) Press the **[NEXT]** button.

2) Press the key on the keyboard corresponding to the instrument you want to cancel.

3) To return to the original display, press the **[BACK]** button.

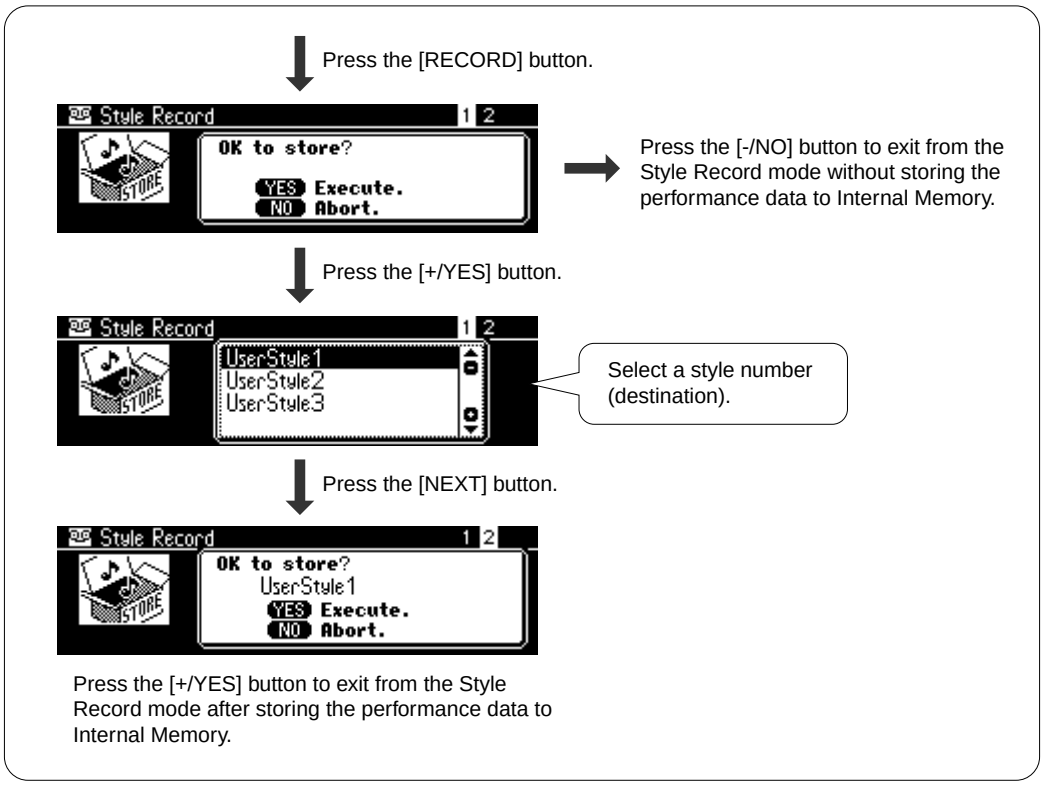
14 Press the [START/STOP] button to stop recording.

15 Press the [RECORD] button to exit from the Record mode.

You should save the recorded data before leaving the recording mode. (Refer to page 114 for details.)

Exiting from the Style Record mode

To leave the style recording mode, follow the instructions in the chart below.



Style Recording — Bass/Phrase/Pad/Chord Tracks

This section explains how to record all tracks (other than the rhythm), using the preset styles.
Unlike recording the rhythm track, in this method you have to clear the track data of the original style before recording.

1-9 Use the same operation as in "Style Recording — Rhythm Track" above.

10 Select a Track to be recorded.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Select from the following: "BASS," "CHORD1," "CHORD2," "PAD," "PHRASE1" and "PHRASE2."

NOTE

- *Only one track can be recorded at a time.*

11 Press the [NEXT] button.

12 Clear the data of the selected track.

Press the **[+/YES]** button to clear the data.
To abort the Clear operation, press the **[-/NO]** button.

13 Select a voice for the track to be recorded.

Select the desired voice by pressing the **[VOICE R1]** button (page 26).
To return to the previous display, press the **[EXIT]** button.

14 Start recording.

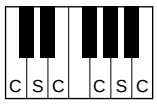
You can start recording with one of the following ways:

- Press the **[START/STOP]** button.
- Press the **[SYNC START]** button to enable synchronized standby (page 25), then play a key on the keyboard.

The recording repeats indefinitely (until stopped) in a loop.
Notes that you record will play back from the next repetition, letting you record while hearing previously recorded material.

Observe the following rules when recording the MAIN and FILL sections:

- Use only the CM7 scale tones when recording the BASS and PHRASE tracks (i.e. C, D, E, G, A, and B).
- Use only the chord tones when recording the CHORD and PAD tracks (i.e. C, E, G, and B).



C = chord tone
C, S = scale tones

Any appropriate chord or chord progression can be used for the INTRO and ENDING sections.

The basic chord for the accompaniment is called the source chord. The default source chord is set as CM7, but you can change it to whatever chord is easy for you to play. For details, see “Style File (Auto Accompaniment) Format” (page 111).

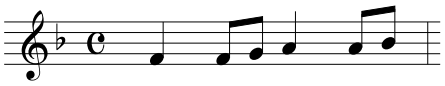
15 Press the [START/STOP] button to stop recording.

16 Press the [RECORD] button to exit from the Record mode.

For information on leaving the recording mode, see page 114.

Quantize

Quantize lets you “clean up” or “tighten” the timing of a previously recorded track. For example, the following musical passage has been written with exact quarter-note and eighth-note values.



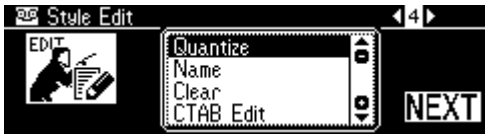
Even though you think you may have recorded the passage accurately, your actual performance may be slightly ahead of or behind the beat (or both!). Quantize allows you to align all the notes in a track so that the timing is absolutely accurate to the specified note value.

1-5 Use the same operation as in “Style Recording — Rhythm Track” (page 112).

6 Select “Edit.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

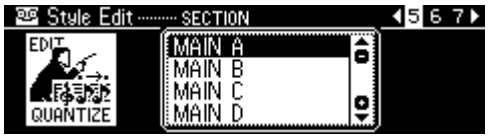
7 Press the [NEXT] button.



8 Select “Quantize.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

9 Press the [NEXT] button.



10 Select the section to be quantized.

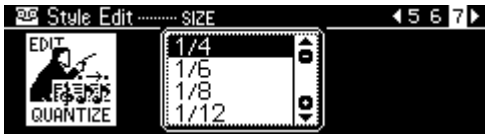
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

11 Press the [NEXT] button.

12 Select the track to be quantized.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

13 Press the [NEXT] button.



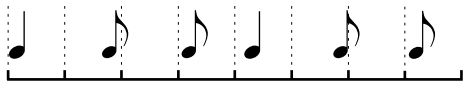
14 Select the Quantize size (resolution).

Use the **data dial**, the **[-/NO]** button or the **[+/YES]** button.
Set the Quantize value to correspond to the smallest notes in the track you are working with. For example, if the data was recorded with quarter notes and eighth notes, use 1/8 for the quantize value. If the quantize function is applied in this case with the value set to 1/4, the eighth notes would be moved on top of the quarter notes.

● **Quantize Size**

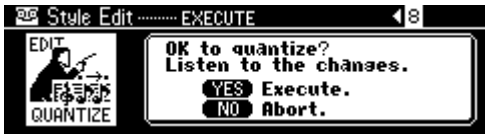
Size	Note
1/4	Quarter note
1/6	Quarter note triplet
1/8	Eighth note
1/12	Eighth note triplet
1/16	Sixteenth note
1/24	Sixteenth note triplet
1/32	Thirty-second note

One measure of 8th notes before quantization



After quantization

15 Press the [NEXT] button.



- You can audition the quantized pattern in this step, allowing you to hear the results of the operation before actually changing the data. To audition the pattern, press the **[START/STOP]** button.

16 Execute the Quantize operation.

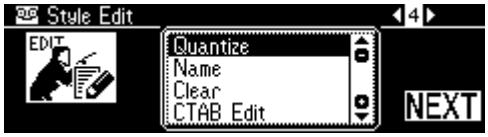
Press the **[+/YES]** button to execute the Quantize operation.
To abort the Quantize operation, press the **[-/NO]** button.

17 Press the [RECORD] button to exit from the Record mode.

For information on leaving the recording mode, see page 114.

Naming User Styles

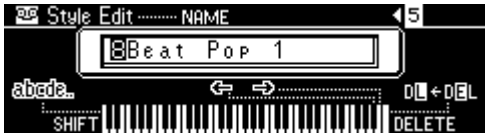
1-7 Use the same operation as in “Quantize” (page 116).



8 Select “Name.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

9 Press the [NEXT] button to display the NAME screen.



10 Enter the desired name for the style.

Use the keyboard to enter the name (page 21).
Up to sixteen letters or characters can be used.

11 Press the [RECORD] button to exit from the Record mode.

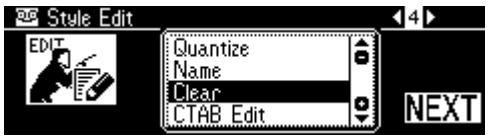
For information on leaving the recording mode, see page 114.

Clearing User Style Data

1-7 Use the same operation as in “Quantize” (page 116).

8 Select “Clear.”

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



9 Press the [NEXT] button to display the SECTION selection screen.

10 Select a Section to be cleared.

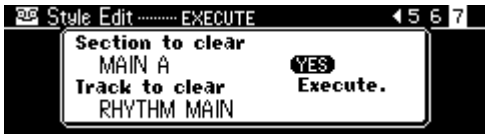
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
When “All Sect” is selected as the section to be cleared, all style data (which includes all sections and all tracks) will be deleted. In this case, go to step #13, skipping over steps #11 and #12.

11 Press the [NEXT] button to display the TRACK selection screen.

12 Select a Track to be cleared.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

13 Press the [NEXT] button to display the Clear operation screen.



14 Execute the Clear operation.

Press the **[+/YES]** button to execute the Clear operation.
To abort the Clear operation, press the **[-/NO]** button.

15 Press the [RECORD] button to exit from the Record mode.

For information on leaving the recording mode, see page 114.

CTAB Parameters

About the CTAB parameters

The CTAB parameters determine how the pitch of the recorded style changes in response to chords played in the auto accompaniment section of the keyboard (when using auto accompaniment).

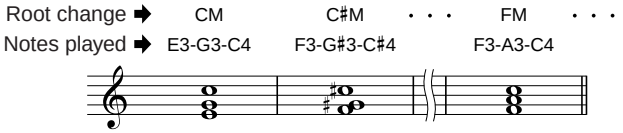
● NOTE LIMIT ..... Note range (Low Limit, High Limit) setteings

Set the note range (low and high limits) for the voices recorded on user style tracks. By setting the note range, you can prevent unrealistic notes (such as high notes from a bass or low notes from a piccolo) from being produced and have them shifted to an octave within the note range.

NOTE

• The pitch difference between the Low Limit and High Limit settings cannot be less than one octave.

Example) When low limit is "C3" and high limit is "D4."



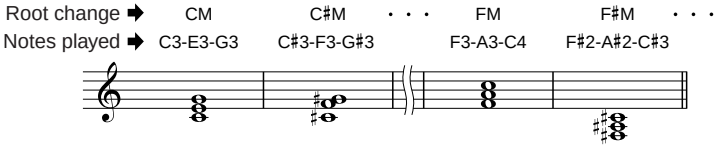
● HIGH KEY ..... Highest Key setting

Set the highest key (upper limit of the octaves) of the note transposing for the Source Chord Root setting. The notes designated higher than the highest key will actually be played back in the octave just below the highest key.

NOTE

• The High Key setting can only be made for the BASS, PHRASE 1, and PHRASE 2 tracks. (It cannot be set for any of the other tracks.

Example) When highest key is "F".



● SOURCE CHORD ..... Source Pattern Chord Root/Type setting

Set the key in which the source pattern will be played when the user style is created. The default setting is CM7. The source chord root is "C" and the source chord type is "M7."
See page 121 for the available chord types, chord notes and scale notes.

Setting the CTAB parameters

1 - 7 **Use the same operation as in “Quantize” (page 116).**

8 **Select “CTAB Edit.”**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

9 **Press the [NEXT] button to display the SECTION selection screen.**

10 **Select the desired section for setting the CTAB parameters.**

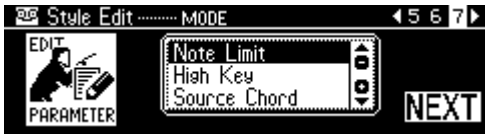
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

11 **Press the [NEXT] button to display the TRACK selection screen.**

12 **Select the desired track for setting the CTAB parameters.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

13 **Press the [NEXT] button.**



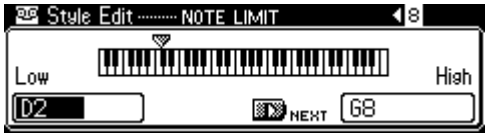
14 **Select the desired CTAB parameter.**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
Refer to page 119 for more information on the CTAB parameters.

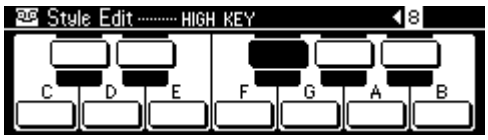
15 **Press the [NEXT] button to display the CTAB parameter setting screen.**

16 **Set the CTAB parameter value.**

- For NOTE LIMIT (sounding range), selected in step #14 above:
  Set by using the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

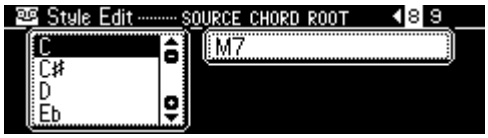


- For HIGH KEY (upper limit of the octaves), selected in step #14 above:
  Set by using **data dial**, the **[+/YES]** button or the **[-/NO]** button.



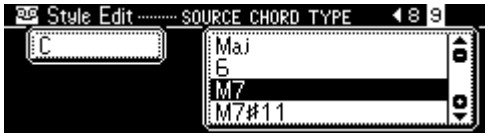
• For SOURCE CHORD (source chord/type), selected in step #14 above:
Set by using the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

• Set the chord root.



[BACK] button ↑ ↓ [NEXT] button

• Set the chord type.



17 Repeat steps #14-#16 as needed.

Press the **[BACK]** button to return back to step #14.

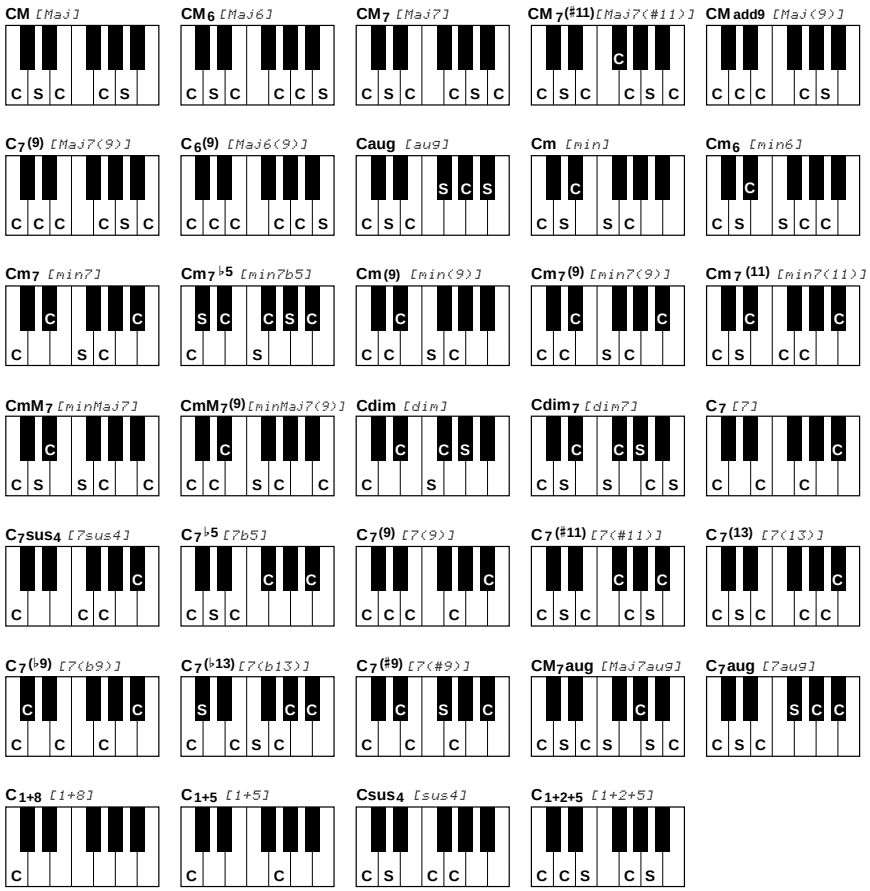
18 Press the [RECORD] button to exit from the Record mode.

For information on leaving the recording mode, see page 114.

Recording by source chord type

When you change the chord of the source pattern from the default CM7 to others, the chord notes and scale notes will change depending on the currently selected chord type. See page 115 for information on chord notes and scale notes.

[ex.] Source Chord Root of "C"



MIDI Functions

In the rear panel of your PSR-740/640, there are MIDI terminals (MIDI IN, MIDI OUT), a TO HOST terminal, and a HOST SELECT switch. By using the MIDI functions you can expand your musical possibilities. This section explains what MIDI is, and what it can do, as well as how you can use MIDI on your PSR-740/640.

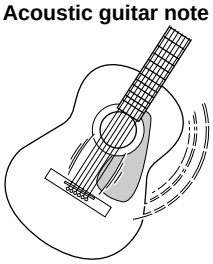
NOTE

• The MIDI settings cannot be made when the Recording mode is active, or during song/auto accompaniment playback.

What's MIDI?

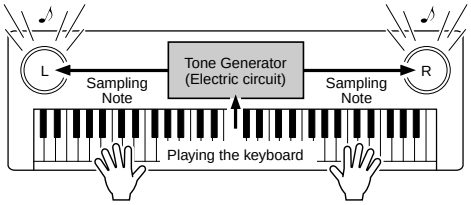
No doubt you have heard the terms "acoustic instrument" and "digital instrument." In the world today, these are the two main categories of instruments. Let's consider an acoustic piano and a classical guitar as representative acoustic instruments. They are easy to understand. With the piano, you strike a key, and a hammer inside hits some strings and plays a note. With the guitar, you directly pluck a string and the note sounds. But how does a digital instrument go about playing a note?

● Acoustic guitar note production



Pluck a string and the body resonates the sound.

● Digital instrument note production



Based on playing information from the keyboard, a sampling note stored in the tone generator is played through the speakers.

As shown in the illustration above, in an electronic instrument the sampling note (previously recorded note) stored in the tone generator section (electronic circuit) is played based on information received from the keyboard. So then what is the information from the keyboard that becomes the basis for note production?
For example, let's say you play a "C" quarter note using the grand piano sound on the PSR-740/640 keyboard. Unlike an acoustic instrument that puts out a resonated note, the electronic instrument puts out information from the keyboard such as "with what voice," "with which key," "about how strong," "when was it pressed" and "when was it released." Then each piece of information is changed into a number value and sent to the tone generator. Using these numbers as a basis, the tone generator plays the stored sampling note.

● Example of Keyboard Information

Voice number (with what voice)	01 (grand piano)
Note number (with which key)	60 (C3)
Note on (when was it pressed) and note off (when was it released)	Timing expressed numerically (quarter note)
Velocity (about how strong)	120 (strong)

MIDI is an acronym that stands for Musical Instrument Digital Interface, which allows electronic musical instruments to communicate with each other, by sending and receiving compatible Note, Control Change, Program Change and various other types of MIDI data, or messages.

The PSR-740/640 can control a MIDI device by transmitting note related data and various types of controller data. The PSR-740/640 can be controlled by the incoming MIDI messages which automatically determine tone generator mode, select MIDI channels, voices and effects, change parameter values and of course play the voices specified for the various parts.

MIDI messages can be divided into two groups: Channel messages and System messages. Below is an explanation of the various types of MIDI messages which the PSR-740/640 can receive/transmit.

● Channel Messages

The PSR-740/640 is an electronic instrument that can handle 16 channels. This is usually expressed as "it can play 16 instruments at the same time." Channel messages transmit information such as Note ON/OFF, Program Change, for each of the 16 channels.

Message Name	PSR-740/640 Operation/Panel Setting
Note ON/OFF	Messages which are generated when the keyboard is played. Each message includes a specific note number which corresponds to the key which is pressed, plus a velocity value based on how hard the key is stuck.
Program Change	Voice setting (control change bank select MSB/LSB setting)
Control Change	Mixer, Parameter Edit setting (volume, pan pot, etc.)

● System Messages

This is data that is used in common by the entire MIDI system. System messages include messages like Exclusive Messages that transmit data unique to each instrument manufacturer and Realtime Messages that control the MIDI device.

NOTE

• The performance data of all songs, styles and Multi Pads is MIDI data.

Message Name	PSR-740/640 Operation/Panel Setting
Exclusive Message	Reverb/chorus/DSP settings, etc.
Realtime Messages	Clock setting Start/stop operation

The messages transmitted/received by the PSR-740/640 are shown in the MIDI Data Format and MIDI Implementation Chart on pages 163 and 178.

MIDI and TO HOST Terminals

In order to exchange MIDI data between multiple devices, each device must be connected by a cable.
There are two ways to connect: from the MIDI terminals of the PSR-740/640 to the MIDI terminals of an external device using a MIDI cable, or from the TO HOST port of the PSR-740/640 to the serial port of a personal computer using a special cable.
If you connect from the PSR-740/640 TO HOST terminal to a personal computer, the PSR-740/640 will be used as a MIDI interface device, meaning that a specialized MIDI interface device is not necessary.

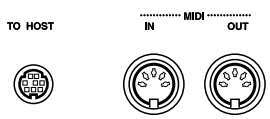
NOTE

• When using the TO HOST terminal to connect to a personal computer using Windows, a Yamaha MIDI driver must be installed in the personal computer. The included disk contains the Yamaha MIDI driver.

• Special MIDI cables (sold separately) must be used for connecting to MIDI devices. They can be bought at music stores, etc.

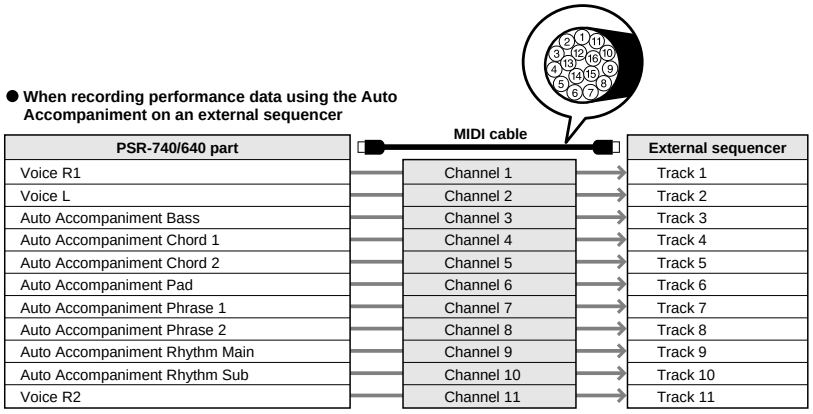
• Never use MIDI cables longer than about 15 meters. Cables longer than this can pick up noise which can cause data errors.

In the rear panel of the PSR-740/640, there are two kinds of terminals, the MIDI terminals and the TO HOST terminal.



- MIDI IN ..... Receives MIDI data from another MIDI device.
- MIDI OUT ..... Transmits the PSR-740/640's keyboard information as MIDI data to another MIDI device.
- TO HOST ..... Transmits and receives MIDI data to and from a personal computer.

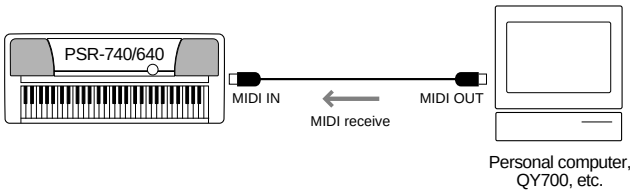
The PSR-740/640 is an electronic musical instrument which is capable of transmitting and receiving over sixteen channels. Imagine that there are sixteen separate pipes in the connected MIDI cable. When transmitting MIDI data from the PSR-740/640 to an external device, MIDI data is sent through the assigned pipe (or MIDI channel) and transmitted to the external device.
For example, several tracks can be transmitted simultaneously, including the auto accompaniment data (as shown below).



As you can see, it is essential to determine which data is to be sent over which MIDI channel when transmitting MIDI data (page 130).

What You Can Do With MIDI

- Use the PSR-740/640 as a multi tone generator (playing 16 channels at one time).



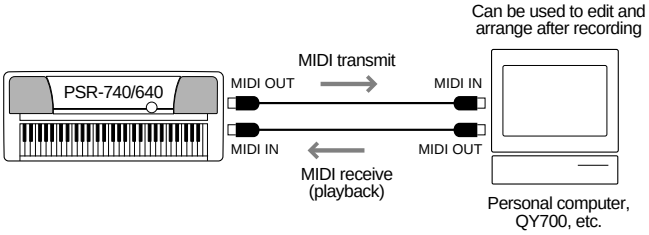
NOTE
• When using a personal computer, special software (sequencer software) is needed.

Set: Receive mode for all channels set “XG/GM.”
MIDI receive settings (page 131).

- Play music from another keyboard (no tone generator) using the PSR-740/640 XG tone generator.

Set: MIDI receive settings (page 131).

- Record performance data (1-16 channels) using the PSR-740/640 Auto Accompaniment features on a external sequencer (such as a personal computer). After recording, edit the data with the sequencer, then play it again on the PSR-740/640 (playback).



Set: MIDI transmit settings (page 130).
Initial Data send (page 133).

MIDI Data Compatibility

This section covers basic information on data compatibility: whether or not other MIDI devices can playback the data recorded by PSR-740/640, and whether or not the PSR-740/640 can playback commercially available song data or song data created for other instruments or on a computer.
Depending on the MIDI device or data characteristics, you may be able to play back the data without any problem, or you may have to perform some special operations before the data can be played back. If you run into problems playing back data, please refer to the information below.

Sequence format

The system which records song data is called "sequence format."
Playback is only possible when the sequence format of the disk matches that of the MIDI device.

● SMF (Standard MIDI File)
This is the most common sequence format.
Standard MIDI Files are generally available as one of two types: Format 0 or Format 1. Many MIDI devices are compatible with Format 0, and most commercially available software is recorded as Format 0.
- The PSR-740/640 is compatible with both Format 0 and Format 1.
- Song data recorded on the PSR-740/640 is automatically recorded as SMF Format 0.

● ESEQ
This sequence format is compatible with many of Yamaha's MIDI devices, including the Clavinova series instruments. This is a common format used with various Yamaha software.
- The PSR-740/640 is compatible with ESEQ.

● XF
The Yamaha XF format enhances the SMF (Standard MIDI File) strandard with greater functionality and open-ended expandability for the future.
- The 740/640 is capable of displaying lyrics when an XF file containing lyric data is played.

● Style File
The Style File Format — SFF — is Yamaha's original style file format which uses a unique conversion system to provide high-quality automatic accompaniment based on a wide range of chord types.
- The PSR-740/640 uses the SFF internally, reads optional SFF style disks, and creates SFF styles using the Style recording feature.

Voice allocation format

With MIDI, voices are assigned to specific numbers, called "program numbers." The numbering standard (order of voice allocation) is referred to as the "voice allocation format."
Voices may not play back as expected unless the voice allocation format of the song data matches that of the compatible MIDI device used for playback.

● GM System Level 1
This is one of the most common voice allocation formats.
Many MIDI devices are compatible with GM System Level 1, as is most commercially available software.
- The PSR-740/640 is compatible with GM System Level 1.

● XG
XG is a major enhancement of the GM System Level 1 format, and was developed by Yamaha specifically to provide more voices and variations, as well as greater expressive control over voices and effects, and to ensure compatibility of data well into the future.
- The PSR-740/640 is compatible with XG.

● DOC
This voice allocation format is compaible with many of Yamaha's MIDI devices, including the Clavinova series instruments.
This is also a common format used with various Yamaha software.
- The PSR-740/640 is compatible with DOC.

NOTE

• Even if the devices and data used satisfy all the conditions above, the data may still not be completely compatible, depending on the specifications of the devices and particular data recording methods.

Connecting to a Personal Computer

You can enjoy using personal computer music software when you connect your PSR-740/640's TO HOST terminal or MIDI terminals to a personal computer.
There are two ways to connect.

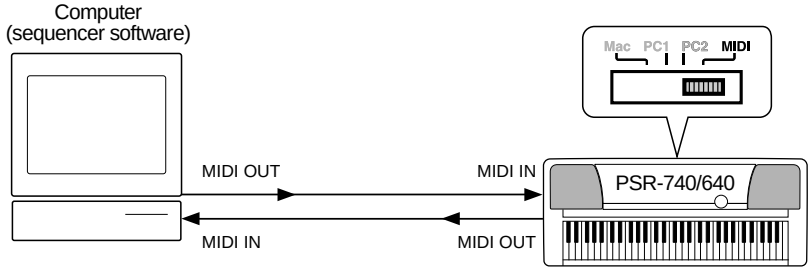
- Connect using the PSR-740/640 MIDI terminals
- Connect using the TO HOST terminal

Connect using the PSR-740/640 MIDI terminals

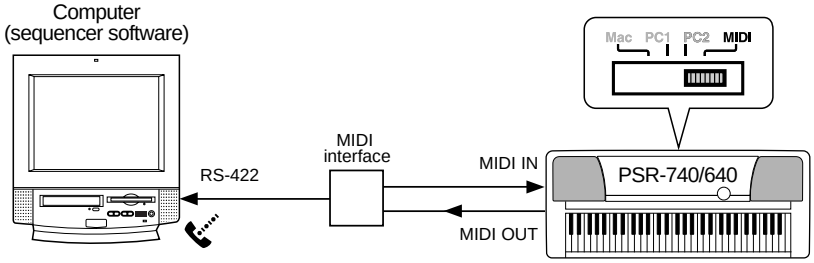
Using a MIDI interface device installed in the personal computer, connect the MIDI terminals of the personal computer and the PSR-740/640.

For the connection cable, use a special MIDI cable.

- When the computer has a MIDI interface installed, connect the MIDI OUT terminal of the personal computer to the MIDI IN terminal of the PSR-740/640. Set the HOST SELECT switch to "MIDI."



- When using a MIDI interface with a Macintosh series computer, connect the RS-422 terminal of the computer (modem or printer terminal) to the MIDI interface, then connect the MIDI OUT terminal on the MIDI interface to the MIDI IN terminal of the PSR-740/640, as shown in the diagram below. Set the HOST SELECT switch on the PSR-740/640 to "MIDI."



- When the HOST SELECT switch is set in the "MIDI" position, input and output in the TO HOST switch is ignored.
- When using a Macintosh series computer, set the MIDI interface clock setting in the application software to match the setting of the MIDI interface you are using. For details, carefully read the owner's manual for the software you are using.

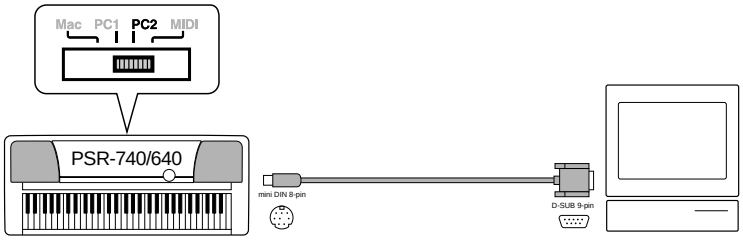
Connect using the TO HOST terminal

Connect the serial port of the personal computer (RS-232C terminal or RS-422 terminal) to the TO HOST terminal of the PSR-740/640.

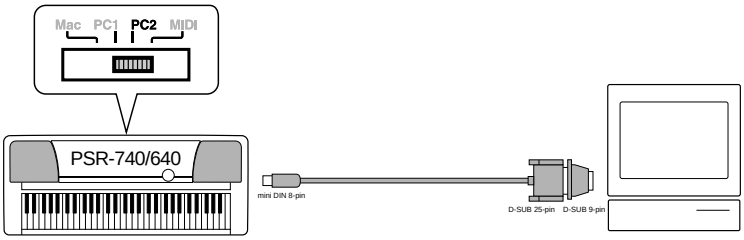
For the connection cable, use the cable below (sold separately) that matches the personal computer type.

● IBM-PC/AT Series

Connect the RS-232C terminal on the computer to the TO HOST terminal on the PSR-740/640 using a serial cable (D-SUB 9P → MINI DIN 8P cross cable). Set the PSR-740/640 HOST SELECT switch in the “PC-2” position.

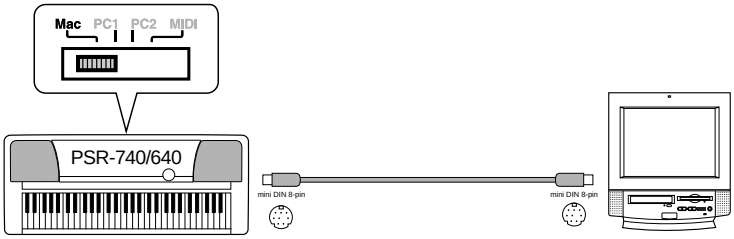


When using a D-SUB 25P → MINI DIN 8P cross cable, connect using a D-SUB 9P plug adaptor on the computer side of the cable.



● Macintosh Series

Connect the RS-422 terminal (modem or printer terminal) on the computer to the TO HOST terminal on the PSR-740/640 using a serial cable (system peripheral cable, 8 bit). Set the PSR-740/640 HOST SELECT switch in the “Mac” position.



Set the MIDI interface clock in the sequencer software you are using to 1 MHz. For details, carefully read the owner’s manual for the software you are using.

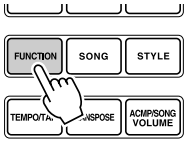
For details about the necessary MIDI settings for computer and sequence software you are using, refer to the relevant owner’s manuals.

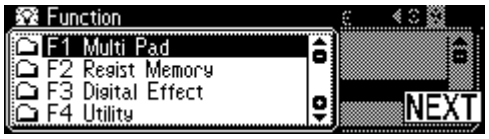
MIDI Template

The PSR-740/640 is capable of transmitting and receiving MIDI data over sixteen independent channels. For proper MIDI operation, it is necessary to determine which data is set to which channel.

The MIDI Template function allows you to instantly configure all appropriate transmit/receive settings with a single button press.

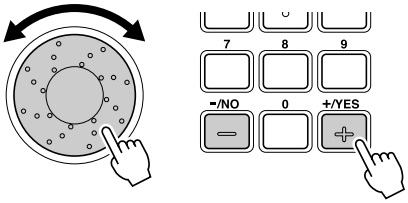
1 Press the [FUNCTION] button.

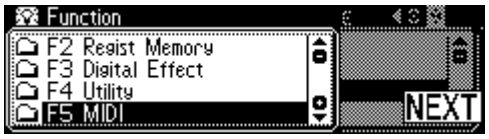




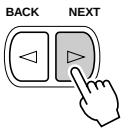
2 Select "MIDI."

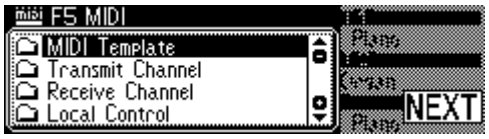
Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.





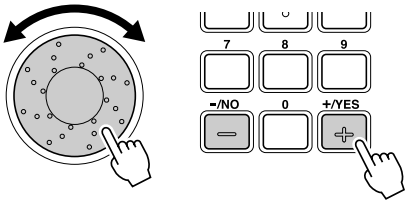
3 Press the [NEXT] button to display the MIDI screen.

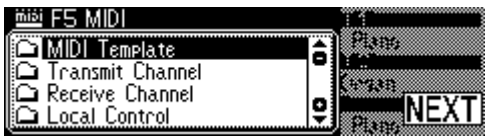




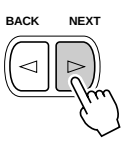
4 Select "MIDI Template."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.



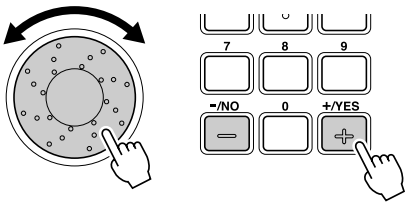


5 Press the [NEXT] button to display the MIDI Template screen.

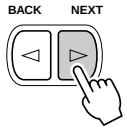


6 Select a MIDI Template.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.
For details, refer to the MIDI Template List (page 129).

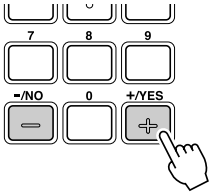


7 Press the [NEXT] button.



8 Load the selected MIDI Template.

Press the **[+/YES]** button to actually load the selected MIDI template settings. To abort the operation, press the **[-/NO]** button.



● MIDI Template List

TX1 KEYBOARD OUT	The transmit channels are set as follows: ch. 1 : Right1 ch. 3 : Left ch. 2 : Right2 chs. 4-16 : Off When outputting the performance data (note on/off messages). Used to play the PSR-740/640 note on/off data with an external tone generator and to record the PSR-740/640 note on/off data to an external sequencer.
TX2 ACMP OUT	The transmit channels 9-16 are set with the Accompaniment tracks. chs. 9-10: Rhythms ch. 14: Pad ch. 11: Bass chs. 15-16: Phrases chs. 12-13: Chords When outputting the style data. Used to play the PSR-740/640 auto accompaniment data with an external tone generator and to record the PSR-740/640 auto accompaniment data to an external sequencer.
TX3 SONG OUT	All transmit channels are set with the Song tracks 1-16. When outputting the song data. Used to play the PSR-740/640 song data with an external tone generator and to record your entire performance on the PSR-740/640 to an external sequencer.
TX4 MASTER KEYBOARD	When using the PSR-740/640 as a master keyboard; in other words, using it strictly as a controller for outputting MIDI data, without using the internal sounds.
RX1 XG MODULE	All receive channels are set to “XG/GM.” When using the PSR-740/640 as a multi-timbral XG tone generator.
RX2 MIDI ACCORDION	The receive channels are set as follows: ch. 1: Remote ch. 3: Bass ch. 2: Chord chs. 4-16: Off When playing the PSR-740/640 by an external MIDI Accordion. The connected MIDI accordion can play the PSR-740/640 and detect chords and basses in the auto accompaniment section.
RX3 MIDI PEDAL	All receive channels are set to “ROOT.” When playing the PSR-740/640 using a connected (optional) MIDI pedal. The connected MIDI pedal detects chords and basses in the auto accompaniment section, allowing you to play on-bass chords.

MIDI Transmit Setting

The PSR-740/640 can simultaneously transmit data on all 16 MIDI channels. The Transmit Channel and Transmit Track functions determine what PSR-740/640 data is transmitted via which MIDI channels.

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

2 **Select "MIDI."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 **Press the [NEXT] button to display the MIDI screen.**

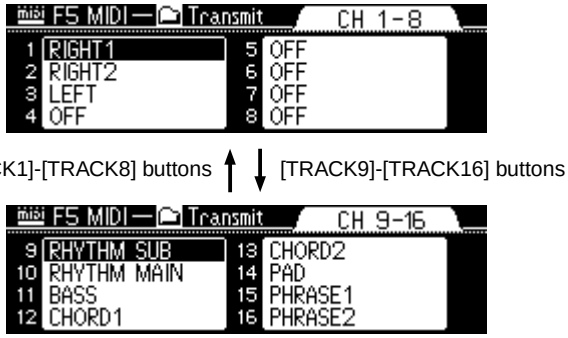
4 **Select "Transmit Channel."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

5 **Press the [NEXT] button to display the MIDI Transmit screen.**

6 **Set a MIDI Transmit Channel and Transmit Track.**

● Press one of the **[TRACK1]-[TRACK16]** buttons to select a MIDI channel.



● Select a track with the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

OFF	Nothing is transmitted.
RIGHT1	Right-hand keyboard playing* (VOICE R1)**
RIGHT2	Right-hand keyboard playing* (VOICE R2)**
LEFT	Left-hand keyboard playing* (VOICE L)**
UPPER	Right-hand keyboard playing* (Outputs MIDI note data normally as explained on page 29.)
LOWER	Left-hand keyboard playing* (Outputs MIDI note data normally as explained on page 29.)
RHYTHM SUB	Auto Accompaniment RHYTHM SUB track
RHYTHM MAIN	Auto Accompaniment RHYTHM MAIN track
BASS	Auto Accompaniment BASS track
CHORD1	Auto Accompaniment CHORD1 track
CHORD2	Auto Accompaniment CHORD2 track
PAD	Auto Accompaniment PAD track
PHRASE1	Auto Accompaniment PHRASE1 track
PHRASE2	Auto Accompaniment PHRASE2 track
TRACK1-16	Song track 1-16

* "Right-hand keyboard playing" and "Left-hand keyboard playing" indicate the performance played on the right side and left side of the keyboard from the split point, respectively.

** Outputs MIDI note data according to the respective octave settings for the voices R1, R2 and L.

NOTE

- *When a track is assigned to more than one MIDI channel, the data from that track is transmitted via the lowest-numbered channel.*
- *MIDI transmit track settings will be retained even after turning the power off. See page 159 for details.*
- *The initial default channel/track settings are:*
  - *ch. 1 = RIGHT1*
  - *ch. 2 = RIGHT2*
  - *ch. 3 = LEFT*
  - *ch. 4 = OFF*
  - *ch. 5 = OFF*
  - *ch. 6 = OFF*
  - *ch. 7 = OFF*
  - *ch. 8 = OFF*
  - *ch. 9 = RHYTHM SUB*
  - *ch. 10 = RHYTHM MAIN*
  - *ch. 11 = BASS*
  - *ch. 12 = CHORD1*
  - *ch. 13 = CHORD2*
  - *ch. 14 = PAD*
  - *ch. 15 = PHRASE1*
  - *ch. 16 = PHRASE2*
- *To avoid MIDI loops which can cause operational errors, check the PSR-740/640 Local Control setting (page 132) and the MIDI THRU settings of any external MIDI devices.*

MIDI Receive Setting

The PSR-740/640 can simultaneously receive data on all 16 MIDI channels, allowing it to function as a 16-channel multi-timbral tone generator. The Receive Channel and Receive Mode functions determine how each channel will respond to received MIDI data.

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

2 **Select "MIDI."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 **Press the [NEXT] button to display the MIDI screen.**

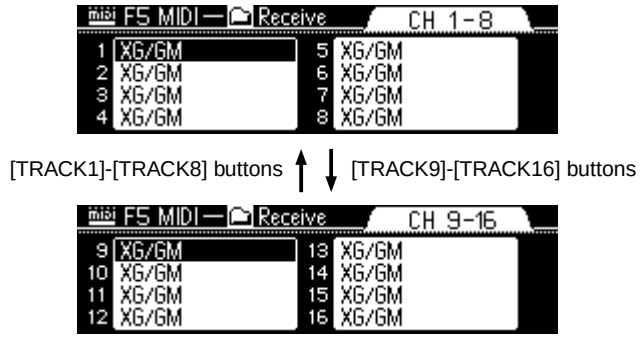
4 **Select "Receive Channel."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

5 **Press the [NEXT] button to display the MIDI Receive screen.**

6 **Set a MIDI Receive Channel and Receive mode.**

● Press one of the **[TRACK1]-[TRACK16]** buttons to select a MIDI channel.



● Select a receive mode with the data dial, the **[+/YES]** button or the **[-/NO]** button.

OFF	No MIDI data is received on channels set to "Off."
XG/GM	Received MIDI data is sent directly to the PSR-740/640 tone generator. If all channels are set to "XG/GM," the PSR-740/640 functions as a 16-channel multi-timbral tone generator.
KEYBOARD	Received MIDI data is handled in the same way as data generated by the PSR-740/640's own keyboard. In other words, a remote keyboard could be used to control the PSR-740/640 AUTO ACCOMPANIMENT functions, etc.
CHORD	The note on/off messages received at the channel(s) set to "CHORD" are recognized as the fingerings in the accompaniment section. The chords to be detected depend on the fingering mode on the PSR-740/640. The chords will be detected regardless of the accompaniment on/off and split point settings on the PSR-740/640 panel.
ROOT	The note on/off messages received at the channel(s) set to "ROOT" are recognized as the bass notes in the accompaniment section. The bass notes will be detected regardless of the accompaniment on/off and split point settings on the PSR-740/640 panel.
V.HARMONY (PSR-740)	Received notes are used as the added Vocal Harmony Vocoder type notes.

NOTE

- *The initial default setting (factory setting) for all channels is "XG/GM."*
- *MIDI receive mode settings will be retained even after turning the power off. See page 159 for details.*

Local Control

"Local Control" refers to the fact that, normally, the PSR-740/640 keyboard controls the internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is "Local Control on" since the internal tone generator is controlled locally by its own keyboard. Local control can be turned off, however, so that the keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT connector when notes are played on the keyboard. At the same time, the internal tone generator can respond to MIDI information received on channels set to the "XG/GM" mode via the MIDI IN connector. This means that while an external MIDI sequencer, for example, plays the PSR-740/640 internal voices, an external tone generator can be played from the PSR-740/640 keyboard.

NOTE

- *The default Local Control setting (factory setting) is "ON."*

1 Press the [FUNCTION] button.

2 Select "MIDI."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 Press the [NEXT] button to display the MIDI screen.

4 Select "Local Control."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

5 Press the [NEXT] button to display the Local Control screen.

6 Turn the Local Control on or off.

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

Clock

Reception of an external MIDI clock signal can be enabled or disabled as required. When disabled ("INTERNAL"), all of the time-based functions (Auto Accompaniment, SONG recording and playback, etc.) are controlled by its own internal clock. When MIDI clock reception is enabled ("EXTERNAL"), however, all timing is controlled by an external MIDI clock signal received via the MIDI IN terminal (in this case the PSR-740/640 TEMPO setting has no effect). The default setting is "INTERNAL."

1 Press the [FUNCTION] button.

2 Select "MIDI."

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 **Press the [NEXT] button to display the MIDI screen.**

4 **Select "Clock."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

5 **Press the [NEXT] button to display the CLOCK screen.**

6 **Set the Clock to "INTERNAL" or "EXTERNAL."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

NOTE

- *The default Clock setting (factory setting) is "INTERNAL."*
- *When the Clock setting is "EXTERNAL," AUTO ACCOMPANIMENT playback cannot be started via the panel [START/STOP] button, or started via the synchro start function. Also, the MULTI PAD playback cannot be initiated by pressing the MULT PADs.*
- *When the Clock setting is "EXTERNAL," "EC" will appear on the TEMPO display, and tempo cannot be changed with the panel button.*

Initial Setup Send

Transmits all current panel settings to a second PSR-740/640 or a MIDI data storage device.
If you want to have the song play back with the panel settings used for recording, execute the Initial Data Send function before recording the performance on the PSR-740/640 to an external sequencer.

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

2 **Select "MIDI."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

3 **Press the [NEXT] button to display the MIDI screen.**

4 **Select "Initial Setup Send."**

Use the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

5 **Press the [NEXT] button to display the Initial Setup Send screen.**

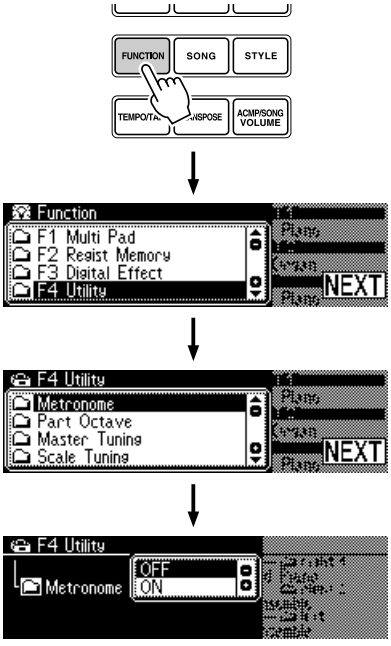
6 **Execute the Initial Setup Send operation.**

Press the **[+/YES]** button to execute the INITIAL SEND operation.
To abort the operation, press the **[-/NO]** button.

Other Functions (Utility)

This section of the manual covers some important functions of the PSR-740/640 that have not been explained in previous sections. These are all combined in the Utility menu of the “Function” section.

Each of the above functions can be set as described below.



1 Press the [FUNCTION] button.

2 Select “Utility.”

3 Press the [NEXT] button.

4 Select a function.

5 Press the [NEXT] button.

6 Set the value.

The operations for each function corresponding to step #6 are covered in the following explanations.

Metronome

When this is set to “ON,” the metronome sounds at the set tempo for the following conditions.

- Accompaniment playback
- Song playback
- Synchro start waiting
- Record standby
- Recording

- Turn Metronome ON or OFF with the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

NOTE

- *The Metronome cannot be turned on when free-tempo song data is selected in the Song mode.*

  The tempo setting of some commercially available songs is fixed. These songs are called “free-tempo software.” When playing back free-tempo song data on the PSR-740/640, the Tempo display shows “- - -” and the beat display does not flash. Also, the measure number in the display does not match the actual measure number of playback, and only gives you an indication of how much of the song has played back.

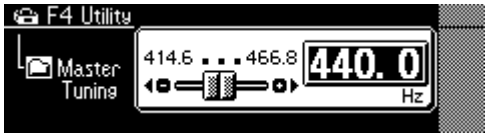
Part Octave

This determines the relative octave settings for the keyboard-played voices R1, R2 and L.

- Select the part (R1, R2, L) by pressing one of the PART ON/OFF buttons (VOICE R1, VOICE R2, VOICE L).
- Set the value with the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

Master Tuning

The Master Tuning function sets the overall pitch of the PSR-740/640.

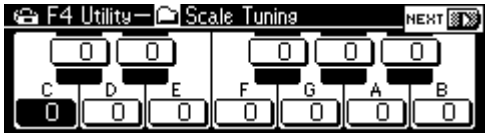


- Set the value with the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

Scale Tuning

Scale tuning allows each individual note of the octave to be tuned over range from -64 to +63 cents in 1-cent increments (1 cent = 1/100th of a semitone). This makes it possible to produce subtle tuning variations, or tune the instrument to totally different scales (e.g. classic or Arabic scales).
The Accompaniment and Multi Pad sounds are affected by Scale Tuning.

NOTE
- *The scale tuning settings are common to each octave on the keyboard.*
- *Minus values can be entered by using the number buttons while holding the [-/NO] button.*



- Select the note to be tuned by pressing the **[NEXT]/[BACK]** button.
- Tune the selected note by using the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

Split Point

The point on the keyboard that separates the auto accompaniment section and the right-hand section of the keyboard is called the “split point.”

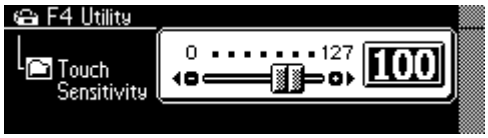
NOTE
- *The default setting (factory setting) is “F#2/G2.”*

- When the auto accompaniment is on, keys played to the left of the split point are used for controlling the auto accompaniment (page 35).
- When the auto accompaniment is off, keys played to the left of the split point are used for playing voice L (page 28).

- Set the value with the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

Touch Sensitivity

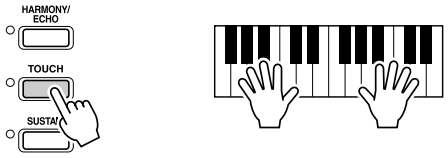
The keyboard of the PSR-740/640 is equipped with a touch response feature that lets you dynamically and expressively control the level of the voices with your playing strength — just as on an acoustic instrument. The Touch Sensitivity parameter gives you detailed control over the touch response feature by letting you set the degree of touch response.



- Set the value with the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

The greater the value, the more sensitive the keyboard is to your playing strength and the more dynamic range that can be brought out of the voices.

A setting of "0" results in a fixed touch response, or no level change no matter how hard or how soft you play the keys. (This setting is good for instrument sounds such as organ or harpsichord, which normally do not have touch response.) You can also achieve the same effect by turning touch response off with the **[TOUCH]** button on the panel (the indicator turns off).



Voice Set

The VOICE SET feature brings out the best in each individual voice by automatically setting a range of important voice-related parameters whenever an R1 panel voice is selected. The parameters that may be set by the VOICE SET feature are listed below. This function lets you turn VOICE SET on or off, as required.

● **Voice Set Parameter List**

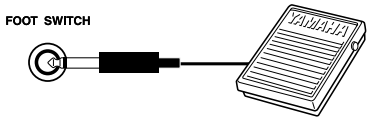
- Voice R1 (Volume, octave, pan, reverb depth, chorus depth, DSP depth*)
- Voice R2 (Voice number, volume, octave, pan, reverb depth, chorus depth, DSP depth*)
- DSP on/off, type, return level and FAST/SLOW on/off
- Harmony Type, Volume, Part
- DSP1-3 dry/wet (PSR-740)
- Multi Effect connection (PSR-740)

* PSR-640 only

- Turn Voice Set ON or OFF by using the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

Footswitch

Various functions can be assigned to the footswitch connected to the SUSTAIN jack.
The polarity of the footswitch can also be changed.



- Select the Functions to be controlled by the footswitch.

Use the data dial, the [+/YES] button or the [-/NO] button.

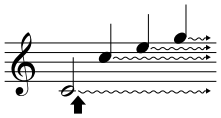
Press the [NEXT] button.

- Set the polarity of the footswitch NORMAL or REVERSE.

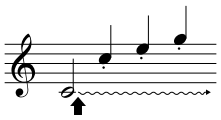
Use the data dial, the [+/YES] button or the [-/NO] button.

● Functions controlled by the footswitch

SUSTAIN	When you press the foot switch, sustain is applied to the keyboard notes.
SOSTENUTO	When you press the foot switch, the sostenuto effect is applied to the keyboard notes.
SOFT	When you press the foot switch, the soft effect is applied to the keyboard notes.
REGISTRATION+	When you press the foot switch, a register with one number higher is recalled. For example, if you step on the foot switch with bank 1-3 recalled, 1-4 will be recalled, then next 2-1 will be recalled.
REGISTRATION-	When you press the foot switch, a register with one number lower is recalled. For example, if you step on the foot switch with bank 3-2 recalled, 3-1 will be recalled, then next 2-4 will be recalled.
START/STOP	Pressing the footswitch has the same effect as pressing the START/STOP button on the panel.
SYNCHRO STOP	Pressing the footswitch has the same effect as pressing the SYNC STOP button on the panel.
BASS HOLD	The bass root note will be held as long as you press the footswitch.
BREAK	When you press the foot switch, accompaniment will stop. Releasing the switch with the foot will cause it to play again from the next measure.
TAP TEMPO	Pressing the footswitch has the same effect as pressing the TAP TEMPO button on the panel.



For "SUSTAIN," if you press and hold the foot switch here, all the notes shown will be sustained.



For "SOSTENUTO," if you press and hold the foot switch here, only the first note will be sustained (the note that you played and held when pressing the foot switch).

NOTE

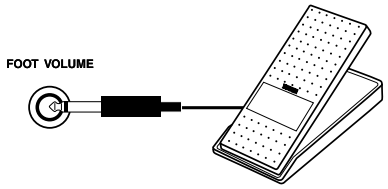
• When using the "REGISTRATION+" or "REGISTRATION-" functions with the fooswitch, make sure to make the appropriate setting ("REGISTRATION+" or "REGISTRATION-") to all of the Registrations you intend to use with the footswitch.

● Polarity

	This parameter lets you configure the foot switch response of the PSR-740/640 to match that of the particular foot switch you are using. If the foot switch works in the opposite way (i.e., pressing the foot switch has no effect, but releasing it does), try changing this setting. The default setting is "NORMAL."

Foot Volume

Various functions can be assigned to the foot volume connected to the FOOT VOL. jack. The polarity of the foot controller can also be changed.

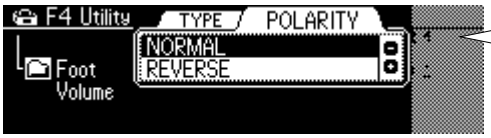


- Select the Functions to be controlled by the foot volume.

Use the data dial, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button.

- Set the polarity of the foot volume to “NORMAL” or “REVERSE.”



Use the data dial, the [+/YES] button or the [-/NO] button.

● Functions controlled by the foot volume

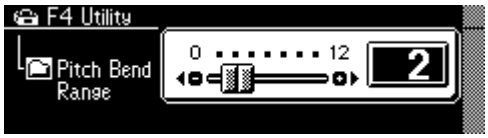
MASTER	Controls the overall volume of the PSR-740/640.
KEYBOARD	Simultaneously controls the volume of the R1, R2 and L voices (your performance).
RIGHT1	Controls the VOICE R1 volume.
RIGHT2	Controls the VOICE R2 volume.
LEFT	Controls the VOICE L volume.
ACMP/SONG	Controls the accompaniment/song volume.
SUSTAIN	These functions are the same as for the foot switch (page 137). All other functions are exclusive to foot volume control.
SOSTENUTO	
SOFT	
REGISTRATION+	
REGISTRATION-	
START/STOP	
SYNC STOP	
BREAK	
BASS HOLD	
TAP TEMPO	

● Polarity

	This parameter lets you configure the foot controller response of the PSR-740/640 to match that of the particular foot controller you are using. If the foot controller works in the opposite way (i.e., pressing the foot controller down with your toes produces the minimum effect), try changing this setting. The default setting is “NORMAL.”

Pitch Bend Range

This determines the maximum pitch bend range for the **PITCH BEND** wheel.
The range is from “0” to “12.” Each increment corresponds to one semitone.



- Set the Pitch Bend Range with the **data dial**, the **[+/YES]** button, the **[-/NO]** button or the number buttons **[1]-[0]**.

Modulation Wheel (PSR-740)

This lets you assign other functions to the **MODULATION** Wheel.

- Select a function with the **data dial**, the **[+/YES]** button or the **[-/NO]** button.

● Modulation Wheel function list

MODULATION	Applies vibrato effects to the voices played from the keyboard.
BRIGHTNESS	Adjusts the brightness of the voices played on the keyboard. Increasing the depth makes the sound brighter, while decreasing it makes it softer.
RESONANCE	Adds resonance to the voices played on the keyboard.

PSR-740/640 Voices

The PSR-740/640 actually includes two voice sets: the “panel” voices and percussion kits, and the XG voices. The panel voices include 267 “pitched” voices (223 “pitched” voices for PSR-640) and 13 drum kits (12 drum kits for PSR-640), while the XG voice set includes 480 voices.

The panel voices are specially recorded and programmed voices exclusive to the PSR-740/640 and other PortaTone instruments. The XG voices conform to Yamaha’s XG format; they also conform to the GM (General MIDI) standard. This allows you to accurately play back any GM- or XG-compatible song data directly on the PSR-740/640 itself, without having to change voices or make special settings. It also allows you to record songs for other GM- or XG-compatible instruments, and have them play back on those instruments as intended.

NOTE

- *The Voice List includes MIDI program change numbers for each voice. Use these program change numbers when playing the PSR-740/640 via MIDI from an external device.*
- *When the sustain or sostenuto pedal functions are being used (page 137), some voices may sound continuously or have a long decay after the notes have been released while the pedal is held.*

● **Voices**

	Panel Voices	Drum Kits (Panel Voices)	XG Voices	Organ Flutes
PSR-740	1-267	268-280	281-760	761
PSR-640	1-223	224-235	236-715	—

● **Maximum Polyphony**

The PSR-740 has 64-note maximum polyphony and the PSR-640 has 32. Auto Accompaniment uses a number of the available notes, so when Auto Accompaniment is used the total number of notes that can be played on the keyboard is correspondingly reduced. The same applies to the Voice R2, Voice L, Multi Pad, and Song functions. When the maximum polyphony is exceeded, notes are played using last-note priority.

[PSR-740]
Panel Voice List

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
Piano				
1	0	112	0	Aco.Grand Piano
2	0	112	1	Bright Aco.Piano
3	0	112	3	Honky Tonk Piano
4	0	114	2	Rock Piano
5	0	112	2	Midi Grand Piano
6	0	113	2	CP 80
7	0	112	6	Harpsichord
8	0	113	6	GrandHarpsichord
E.Piano				
9	0	114	4	Galaxy El.Piano
10	0	117	4	Stage El.Piano
11	0	115	4	Polaris El.Piano
12	0	118	4	SuitcaseEl.Piano
13	0	117	5	SuperDX El.Piano
14	0	112	5	DXModernEl.Piano
15	0	116	4	Vintage El.Piano
16	0	112	4	Funk El.Piano
17	0	115	5	Modern El.Piano
18	0	113	5	Hyper Tines
19	0	116	5	New Tines
20	0	114	5	Venus El.Piano
21	0	113	4	Tremolo El.Piano
22	0	112	7	Clavi
23	0	113	7	Wah Clavi
Organ				
24	0	117	18	Rotor Organ
25	0	112	16	Jazz Organ 1
26	0	113	16	Jazz Organ 2
27	0	120	16	Glass Jazz Organ
28	0	112	17	Click Organ
29	0	113	17	Dance Organ
30	0	115	16	Drawbar Organ
31	0	115	17	MellowDrawOrgan
32	0	116	16	BrightDrawOrgan
33	0	112	18	Rock Organ 1
34	0	113	18	Rock Organ 2
35	0	118	18	Vintage Organ
36	0	114	18	Purple Organ
37	0	115	18	FullRockerOrgan
38	0	116	18	Rotary Drive Org
39	0	116	17	60’s Organ
40	0	118	17	Electric Organ
41	0	114	16	Theater Organ 1
42	0	114	17	Theater Organ 2
43	0	112	19	Pipe Organ
44	0	113	19	Chapel Organ 1
45	0	114	19	Chapel Organ 2
46	0	115	19	Chapel Organ 3
47	0	112	20	Reed Organ
Accordion				
48	0	113	21	Trad.Accordion
49	0	112	21	MusetteAccordion
50	0	112	23	Tango Accordion
51	0	113	23	Bandoneon
52	0	114	21	Soft Accordion
53	0	115	21	Small Accordion
54	0	116	21	Accordion
55	0	113	22	Modern Harp
56	0	112	22	Harmonica
57	0	114	22	Blues Harp
Guitar				
58	0	113	24	Spanish Guitar
59	0	112	24	Classic Guitar
60	0	112	25	Folk Guitar
61	0	113	25	12Strings Guitar
62	0	114	24	SmoothNylonGuitr
63	0	115	25	Campfire Guitar
64	0	112	26	Jazz Guitar
65	0	113	26	Octave Guitar
66	0	114	26	Hawaiian Guitar
67	0	118	27	Solid Guitar
68	0	116	27	BrightCleanGuitr
69	0	112	27	Clean Guitar
70	0	119	27	Elec.12StrGuitar
71	0	113	27	Tremolo Guitar
72	0	114	27	Slap Guitar
73	0	113	28	Funk Guitar
74	0	112	28	Muted Guitar
75	0	113	30	Crunch Guitar
76	0	113	29	Feedback Guitar
77	0	112	29	OverdrivenGuitar
78	0	112	30	DistortionGuitar
79	0	122	27	Wah Guitar
80	0	115	27	PedalSteelGuitar
81	0	114	25	Mandolin
82	0	121	27	SolidChordGuitar
83	0	114	30	StackCrunchGuitr

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
84	0	120	27	VintageTremGuitr
85	0	117	27	60'sCleanGuitar
Bass				
86	0	112	33	Finger Bass
87	0	112	32	Acoustic Bass
88	0	113	32	Upright Bass
89	0	114	32	Aco.Bass&Cymbal
90	0	112	34	Pick Bass
91	0	112	35	Fretless Bass
92	0	113	35	Jaco Bass
93	0	112	36	Slap Bass
94	0	112	37	Funk Bass
95	0	113	36	Fusion Bass
96	0	112	38	Synth Bass
97	0	112	39	Analog Bass
98	0	115	39	Touch Bass
99	0	114	39	Snap Bass
100	0	115	38	Click Bass
101	0	113	39	Dance Bass
102	0	113	38	Hi-Q Bass
103	0	114	38	Rave Bass
Strings				
104	0	112	48	String Ensemble
105	0	116	49	ClassicalStrings
106	0	113	48	OrchestraStrings
107	0	114	48	SymphonicStrings
108	0	116	48	Bow Strings
109	0	113	49	SlowAttackStrngs
110	0	114	49	Strings Quartet
111	0	115	48	Concerto Strings
112	0	115	49	Marcato Strings
113	0	112	49	Chamber Strings
114	0	112	44	Tremolo Strings
115	0	112	45	PizzicatoStrings
116	0	112	50	Synth Strings
117	0	112	51	Analog Strings
118	0	112	55	Orchestra Hit
119	0	112	40	Solo Violin
120	0	113	40	Soft Violin
121	0	112	110	Fiddle
122	0	112	41	Viola
123	0	112	42	Cello
124	0	112	43	Contrabass
125	0	112	46	Harp
126	0	113	46	Hackbrett
127	0	112	106	Shamisen
128	0	112	107	Koto
129	0	112	104	Sitar
130	0	112	105	Banjo
Choir				
131	0	114	52	Hah Choir
132	0	112	52	Choir
133	0	115	52	Uuh Choir
134	0	112	54	Air Choir
135	0	113	53	Gothic Vox
136	0	113	54	Voices
137	0	113	52	Vocal Ensemble
138	0	112	53	Vox Humana
Trumpet				
139	0	115	56	Sweet Trumpet
140	0	112	56	Solo Trumpet
141	0	114	56	Soft Trumpet
142	0	116	56	Jazz Trumpet
143	0	117	56	Air Trumpet
144	0	113	56	Flugel Horn

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
145	0	112	59	Muted Trumpet
146	0	112	57	Solo Trombone
147	0	116	57	Trombone
148	0	114	57	Mellow Trombone
149	0	115	57	Soft Trombone
150	0	112	60	French Horn
151	0	112	58	Tuba
Brass				
152	0	113	61	Big Band Brass
153	0	121	61	Big Brass
154	0	112	61	Brass Section
155	0	116	61	Mellow Brass
156	0	117	61	Small Brass
157	0	118	61	Pop Brass
158	0	119	61	Mellow Horns
159	0	124	61	Step Brass
160	0	123	61	Soft Brass
161	0	113	59	Ballroom Brass
162	0	114	61	Full Horns
163	0	115	61	High Brass
164	0	120	61	Bright Brass
165	0	122	61	Trumpet Ensemble
166	0	113	57	Trombone Section
167	0	112	62	Synth Brass
168	0	112	63	Analog Brass
169	0	113	62	Jump Brass
170	0	114	62	Techno Brass
Saxophone				
171	0	117	66	Sweet Tenor Sax
172	0	114	65	Sweet Alto Sax
173	0	114	71	Sweet Clarinet
174	0	118	66	Growl Sax
175	0	114	66	BreathyTenorSax
176	0	113	65	Breathy Alto Sax
177	0	112	64	Soprano Sax
178	0	112	65	Alto Sax
179	0	112	66	Tenor Sax
180	0	112	67	Baritone Sax
181	0	113	67	RockBaritoneSax
182	0	116	66	Sax Section
183	0	115	66	Sax Combo
184	0	112	71	Clarinet
185	0	113	71	Mellow Clarinet
186	0	113	66	WoodwindEnsemble
187	0	112	68	Oboe
188	0	112	69	English Horn
189	0	112	70	Bassoon
Flute				
190	0	114	73	Sweet Flute
191	0	112	73	Flute
192	0	115	73	Classical Flute
193	0	113	73	Pan Flute
194	0	112	72	Piccolo
195	0	112	75	Ethnic Flute
196	0	112	77	Shakuhachi
197	0	112	78	Whistle
198	0	112	74	Recorder
199	0	112	79	Ocarina
200	0	112	109	Bagpipe
Synth Lead				
201	0	116	81	Fire Wire
202	0	120	81	Wire Lead
203	0	112	80	Square Lead
204	0	112	81	Sawtooth Lead
205	0	113	81	Big Lead

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
206	0	112	98	Stardust
207	0	114	81	Blaster
208	0	115	81	Analogon
209	0	113	84	Adrenaline
210	0	113	80	Vintage Lead
211	0	113	98	Sun Bell
212	0	112	83	Aero Lead
213	0	114	80	Mini Lead
214	0	115	80	Vinylead
215	0	117	81	Warp
216	0	116	80	Hi Bias
217	0	117	80	Meta Wood
218	0	118	80	Tiny Lead
219	0	118	81	Sub Aqua
220	0	119	81	Fargo
221	0	112	84	Portatone
222	0	112	96	Synchronize
223	0	113	87	Impact
224	0	121	81	Funky Lead
225	0	113	96	Rhythmatic
226	0	119	80	Synth Flute
227	0	112	87	Under Heim
228	0	114	96	Clockwork
Synth Pad				
229	0	113	94	Insomnia
230	0	115	88	Golden Age
231	0	112	90	Krypton
232	0	113	99	Cyber Pad
233	0	112	95	Wave 2001
234	0	112	94	Equinox
235	0	114	88	Stargate
236	0	112	92	DX Pad
237	0	112	93	Loch Ness
238	0	114	93	Glass Pad
239	0	112	88	Fantasia
240	0	112	91	Xenon Pad
241	0	112	101	Skydiver
242	0	112	97	Far East
243	0	114	95	Template
244	0	112	89	Area 51
245	0	112	99	Atmosphere Pad
246	0	113	89	Dark Moon
247	0	115	94	Ionosphere
248	0	113	93	Phase IV
249	0	113	88	Symbiont
250	0	114	94	Solaris
251	0	116	88	Time Travel
252	0	117	88	Millenium
253	0	113	95	Transform
254	0	112	103	Baroque
255	0	114	89	Dunes
Percussion				
256	0	113	11	Jazz Vibraphone
257	0	112	11	Vibraphone
258	0	112	12	Marimba
259	0	112	13	Xylophone
260	0	112	114	Steel Drums
261	0	112	8	Celesta
262	0	112	9	Glockenspiel
263	0	112	10	Music Box
264	0	112	14	Tubular Bells
265	0	112	108	Kalimba
266	0	112	47	Timpani
267	0	112	15	Dulcimer

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
Drum Kits				
268	127	0	0	Standard Kit 1
269	127	0	1	Standard Kit 2
270	127	0	4	Hit Kit
271	127	0	8	Room Kit
272	127	0	16	Rock Kit
273	127	0	24	Electronic Kit
274	127	0	25	Analog Kit
275	127	0	27	Dance Kit
276	127	0	32	Jazz Kit
277	127	0	40	Brush Kit
278	127	0	48	Symphony Kit
279	126	0	0	SFX Kit 1
280	126	0	1	SFX Kit 2

[PSR-640]
Panel Voice List

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
Piano				
1	0	112	0	Aco.Grand Piano
2	0	112	1	Bright Aco.Piano
3	0	112	3	Honky Tonk Piano
4	0	114	2	Rock Piano
5	0	112	2	Midi Grand Piano
6	0	113	2	CP 80
7	0	112	6	Harpsichord
8	0	113	6	GrandHarpsichord
E.Piano				
9	0	114	4	Galaxy El.Piano
10	0	115	4	Polaris El.Piano
11	0	118	4	SuitcaseEl.Piano
12	0	117	5	SuperDX El.Piano
13	0	112	5	DXModernEl.Piano
14	0	112	4	Funk El.Piano
15	0	115	5	Modern El.Piano
16	0	113	5	Hyper Tines
17	0	116	5	New Tines
18	0	114	5	Venus El.Piano
19	0	113	4	Tremolo El.Piano
20	0	112	7	Clavi
21	0	113	7	Wah Clavi
Organ				
22	0	117	18	Rotor Organ
23	0	112	16	Jazz Organ 1
24	0	113	16	Jazz Organ 2
25	0	120	16	Glass Jazz Organ
26	0	112	17	Click Organ
27	0	113	17	Dance Organ
28	0	115	16	Drawbar Organ
29	0	115	17	MellowDrawOrgan
30	0	116	16	BrightDrawOrgan
31	0	112	18	Rock Organ 1
32	0	113	18	Rock Organ 2
33	0	114	18	Purple Organ
34	0	116	17	60's Organ
35	0	117	17	Blues Organ
36	0	117	16	16+1 Organ
37	0	118	16	16+2 Organ
38	0	119	16	16+4 Organ
39	0	118	17	Electric Organ
40	0	114	16	Theater Organ 1
41	0	114	17	Theater Organ 2
42	0	112	19	Pipe Organ
43	0	113	19	Chapel Organ 1
44	0	114	19	Chapel Organ 2
45	0	115	19	Chapel Organ 3
46	0	112	20	Reed Organ
Accordion				
47	0	113	21	Trad.Accordion
48	0	112	21	MusetteAccordion
49	0	112	23	Tango Accordion
50	0	113	23	Bandoneon
51	0	114	21	Soft Accordion
52	0	115	21	Accordion
53	0	112	22	Harmonica
Guitar				
54	0	113	24	Spanish Guitar
55	0	112	24	Classic Guitar
56	0	112	25	Folk Guitar
57	0	113	25	12Strings Guitar
58	0	114	24	SmoothNylonGuitr
59	0	115	25	Campfire Guitar
60	0	112	26	Jazz Guitar
61	0	113	26	Octave Guitar
62	0	114	26	Hawaiian Guitar
63	0	118	27	Solid Guitar
64	0	116	27	BrightCleanGuitr
65	0	112	27	Clean Guitar
66	0	119	27	Elec.12StrGuitar
67	0	113	27	Tremolo Guitar
68	0	114	27	Slap Guitar
69	0	113	28	Funk Guitar
70	0	112	28	Muted Guitar
71	0	113	30	Crunch Guitar
72	0	113	29	Feedback Guitar
73	0	112	29	OverdrivenGuitar
74	0	112	30	DistortionGuitar
75	0	115	27	PedalSteelGuitar
76	0	114	25	Mandolin
77	0	121	27	SolidChordGuitar
78	0	120	27	VintageTremGtr
79	0	117	27	60'sCleanGuitar
Bass				
80	0	112	33	Finger Bass
81	0	112	32	Acoustic Bass
82	0	114	32	Aco.Bass&Cymbal
83	0	112	34	Pick Bass
84	0	112	35	Fretless Bass
85	0	113	35	Jaco Bass
86	0	112	36	Slap Bass
87	0	112	37	Funk Bass
88	0	113	36	Fusion Bass
89	0	112	38	Synth Bass
90	0	112	39	Analog Bass
91	0	113	39	Dance Bass
92	0	113	38	Hi-Q Bass
93	0	114	38	Rave Bass
Strings				
94	0	112	48	String Ensemble
95	0	113	48	OrchestraStrings
96	0	114	48	SymphonicStrings
97	0	113	49	SlowAttackStrngs
98	0	114	49	Strings Quartet
99	0	115	48	Concerto Strings
100	0	115	49	Marcato Strings
101	0	112	49	Chamber Strings
102	0	112	44	Tremolo Strings
103	0	112	45	PizzicatoStrings
104	0	112	50	Synth Strings
105	0	112	51	Analog Strings
106	0	112	55	Orchestra Hit
107	0	112	40	Solo Violin
108	0	113	40	Soft Violin
109	0	112	110	Fiddle
110	0	112	41	Viola
111	0	112	42	Cello
112	0	112	43	Contrabass
113	0	112	46	Harp
114	0	113	46	Hackbrett
115	0	112	106	Shamisen
116	0	112	107	Koto
117	0	112	104	Sitar

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
118	0	112	105	Banjo
Choir				
119	0	112	52	Choir
120	0	112	54	Air Choir
121	0	113	53	Gothic Vox
122	0	113	52	Vocal Ensemble
123	0	112	53	Vox Humana
Trumpet				
124	0	115	56	Sweet Trumpet
125	0	112	56	Solo Trumpet
126	0	114	56	Soft Trumpet
127	0	113	56	Flugel Horn
128	0	112	59	Muted Trumpet
129	0	112	57	Trombone
130	0	114	57	Mellow Trombone
131	0	112	60	French Horn
132	0	112	58	Tuba
Brass				
133	0	113	61	Big Band Brass
134	0	112	61	Brass Section
135	0	116	61	Mellow Brass
136	0	117	61	Small Brass
137	0	118	61	Pop Brass
138	0	119	61	Mellow Horns
139	0	113	59	Ballroom Brass
140	0	114	61	Full Horns
141	0	115	61	High Brass
142	0	120	61	Bright Brass
143	0	113	57	Trombone Section
144	0	112	62	Synth Brass
145	0	112	63	Analog Brass
146	0	113	62	Jump Brass
147	0	114	62	Techno Brass
Saxophone				
148	0	117	66	Sweet Tenor Sax
149	0	114	65	Sweet Alto Sax
150	0	114	71	Sweet Clarinet
151	0	114	66	BreathyTenorSax
152	0	113	65	Breathy Alto Sax
153	0	112	64	Soprano Sax
154	0	112	65	Alto Sax
155	0	112	66	Tenor Sax
156	0	112	67	Baritone Sax
157	0	116	66	Sax Section
158	0	115	66	Sax Combo
159	0	112	71	Clarinet
160	0	113	71	Mellow Clarinet
161	0	113	66	WoodwindEnsemble
162	0	112	68	Oboe
163	0	112	69	English Horn
164	0	112	70	Bassoon
Flute				
165	0	112	73	Flute
166	0	113	73	Pan Flute
167	0	112	72	Piccolo
168	0	112	75	Ethnic Flute
169	0	112	77	Shakuhachi
170	0	112	78	Whistle
171	0	112	74	Recorder
172	0	112	79	Ocarina
173	0	112	109	Bagpipe
Synth Lead				
174	0	116	81	Fire Wire
175	0	112	80	Square Lead
176	0	112	81	Sawtooth Lead

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
177	0	113	81	Big Lead
178	0	112	98	Stardust
179	0	114	81	Blaster
180	0	115	81	Analogon
181	0	113	80	Vintage Lead
182	0	113	98	Sun Bell
183	0	112	83	Aero Lead
184	0	114	80	Mini Lead
185	0	115	80	Vinylead
186	0	117	81	Warp
187	0	116	80	Hi Bias
188	0	117	80	Meta Wood
189	0	118	80	Tiny Lead
190	0	118	81	Sub Aqua
191	0	119	81	Fargo
Synth Pad				
192	0	113	94	Insomnia
193	0	115	88	Golden Age
194	0	112	90	Krypton
195	0	113	99	Cyber Pad
196	0	112	95	Wave 2001
197	0	112	94	Equinox
198	0	114	88	Stargate
199	0	112	92	DX Pad
200	0	112	93	Loch Ness
201	0	112	88	Fantasia
202	0	112	91	Xenon Pad
203	0	112	89	Area 51
204	0	112	99	Atmosphere Pad
205	0	113	89	Dark Moon
206	0	115	94	Ionosphere
207	0	113	93	Phase IV
208	0	113	88	Symbiont
209	0	114	94	Solaris
210	0	117	88	Millenium
211	0	113	95	Transform
Percussion				
212	0	113	11	Jazz Vibraphone
213	0	112	11	Vibraphone
214	0	112	12	Marimba
215	0	112	13	Xylophone
216	0	112	114	Steel Drums
217	0	112	8	Celesta
218	0	112	9	Glockenspiel
219	0	112	10	Music Box
220	0	112	14	Tubular Bells
221	0	112	108	Kalimba
222	0	112	47	Timpani
223	0	112	15	Dulcimer
Drum Kits				
224	127	0	0	Standard Kit 1
225	127	0	1	Standard Kit 2
226	127	0	8	Room Kit
227	127	0	16	Rock Kit
228	127	0	24	Electronic Kit
229	127	0	25	Analog Kit
230	127	0	27	Dance Kit
231	127	0	32	Jazz Kit
232	127	0	40	Brush Kit
233	127	0	48	Symphony Kit
234	126	0	0	SFX Kit 1
235	126	0	1	SFX Kit 2

[PSR-740/640]
XG Voice List

PSR-740 Voice Number	PSR-640 Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
281	236	0	0	0	Aco.Grand Piano
282	237	0	1	0	Grand Piano KSP
283	238	0	18	0	MellowGrandPiano
284	239	0	40	0	Piano Strings
285	240	0	41	0	Dream
286	241	0	0	1	Bright Aco.Piano
287	242	0	1	1	Bright Piano KSP
288	243	0	0	2	Elec.Grand Piano
289	244	0	1	2	ElecGrndPianoKSP
290	245	0	32	2	Detuned CP80
291	246	0	40	2	Layered CP 1
292	247	0	41	2	Layered CP 2
293	248	0	0	3	Honkytonk Piano
294	249	0	1	3	HonkytonkPnoKSP
295	250	0	0	4	Electric Piano 1
296	251	0	1	4	Elec.Piano 1 KSP
297	252	0	18	4	MellowEl.Piano1
298	253	0	32	4	ChorusEl.Piano1
299	254	0	40	4	Hard El.Piano
300	255	0	45	4	VlXfadeEl.Piano1
301	256	0	64	4	60's El.Piano 1
302	257	0	0	5	Electric Piano 2
303	258	0	1	5	Elec.Piano 2 KSP
304	259	0	32	5	ChorusEl.Piano2
305	260	0	33	5	DX El.Piano Hard
306	261	0	34	5	DX Legend
307	262	0	40	5	DX PhaseEl.Piano
308	263	0	41	5	DX+AnalogElPiano
309	264	0	42	5	DX Koto El.Piano
310	265	0	45	5	VlXfadeEl.Piano2
311	266	0	0	6	Harpsichord
312	267	0	1	6	Harpsichord KSP
313	268	0	25	6	Harpsichord 2
314	269	0	35	6	Harpsichord 3
315	270	0	0	7	Clavi.
316	271	0	1	7	Clavi.KSP
317	272	0	27	7	Clavi.Wah
318	273	0	64	7	Pulse Clavi.
319	274	0	65	7	Pierce Clavi.
320	275	0	0	8	Celesta
321	276	0	0	9	Glockenspiel
322	277	0	0	10	Music Box
323	278	0	64	10	Orgel
324	279	0	0	11	Vibraphone
325	280	0	1	11	Vibraphone KSP
326	281	0	45	11	Hard Vibraphone
327	282	0	0	12	Marimba
328	283	0	1	12	Marimba KSP
329	284	0	64	12	Sine Marimba
330	285	0	97	12	Balimba
331	286	0	98	12	Log Drums
332	287	0	0	13	Xylophone
333	288	0	0	14	Tubular Bells
334	289	0	96	14	Church Bells
335	290	0	97	14	Carillon
336	291	0	0	15	Dulcimer
337	292	0	35	15	Dulcimer 2
338	293	0	96	15	Cimbalom
339	294	0	97	15	Santur
340	295	0	0	16	Drawbar Organ
341	296	0	32	16	DetunedDrawOrgan
342	297	0	33	16	60sDrawbarOrgan1
343	298	0	34	16	60sDrawbarOrgan2
344	299	0	35	16	70sDrawbarOrgan1
345	300	0	36	16	Drawbar Organ 2
346	301	0	37	16	60sDrawbarOrgan3
347	302	0	38	16	Even Bar Organ
348	303	0	40	16	16+2'2/3 Organ
349	304	0	64	16	Organ Bass
350	305	0	65	16	70sDrawbarOrgan2
351	306	0	66	16	Cheezy Organ
352	307	0	67	16	Drawbar Organ 3
353	308	0	0	17	Percussive Organ
354	309	0	24	17	70s Perc.Organ 1
355	310	0	32	17	DetunedPercOrgan
356	311	0	33	17	Light Organ
357	312	0	37	17	PercussiveOrgan2
358	313	0	0	18	Rock Organ
359	314	0	64	18	Rotary Organ
360	315	0	65	18	SlowRotaryOrgan
361	316	0	66	18	FastRotaryOrgan
362	317	0	0	19	Church Organ
363	318	0	32	19	Church Organ 3
364	319	0	35	19	Church Organ 2
365	320	0	40	19	Notre Dame
366	321	0	64	19	Organ Flute
367	322	0	65	19	Trem.Organ Flute
368	323	0	0	20	Reed Organ
369	324	0	40	20	Puff Organ
370	325	0	0	21	Accordion
371	326	0	32	21	Accord It
372	327	0	0	22	Harmonica
373	328	0	32	22	Harmonica 2
374	329	0	0	23	Tango Accordion
375	330	0	64	23	TangoAccordion2
376	331	0	0	24	Nylon Guitar
377	332	0	16	24	Nylon Guitar 2
378	333	0	25	24	Nylon Guitar 3
379	334	0	43	24	Velo.GuitarHarmo
380	335	0	96	24	Ukulele
381	336	0	0	25	Steel Guitar
382	337	0	16	25	Steel Guitar 2
383	338	0	35	25	12-string Guitar
384	339	0	40	25	Nylon&Steel Gtr
385	340	0	41	25	Steel Gtr & Body
386	341	0	96	25	Mandolin
387	342	0	0	26	Jazz Guitar
388	343	0	18	26	Mellow Guitar
389	344	0	32	26	Jazz Amp
390	345	0	0	27	Clean Guitar
391	346	0	32	27	Chorus Guitar
392	347	0	0	28	Muted Guitar
393	348	0	40	28	Funk Guitar 1
394	349	0	41	28	MutedSteelGuitar
395	350	0	43	28	Funk Guitar 2
396	351	0	45	28	Jazz Man
397	352	0	0	29	OverdrivenGuitar
398	353	0	43	29	Guitar Pinch
399	354	0	0	30	DistortionGuitar
400	355	0	40	30	Feedback Guitar
401	356	0	41	30	FeedbackGuitar2
402	357	0	0	31	Guitar Harmonics
403	358	0	65	31	Guitar Feedback
404	359	0	66	31	GuitarHarmonics2
405	360	0	0	32	Acoustic Bass
406	361	0	40	32	Jazz Rhythm
407	362	0	45	32	VelXfUprightBass
408	363	0	0	33	Finger Bass
409	364	0	18	33	Finger Bass Dark
410	365	0	27	33	Flange Bass
411	366	0	40	33	Bass&DistortedEG
412	367	0	43	33	Finger Slap Bass
413	368	0	45	33	Finger Bass 2
414	369	0	65	33	Modulated Bass
415	370	0	0	34	Pick Bass
416	371	0	28	34	Muted Pick Bass
417	372	0	0	35	Fretless Bass
418	373	0	32	35	Fretless Bass 2
419	374	0	33	35	Fretless Bass 3
420	375	0	34	35	Fretless Bass 4
421	376	0	96	35	Synth Fretless
422	377	0	97	35	Smooth Fretless
423	378	0	0	36	Slap Bass 1
424	379	0	27	36	Resonant Slap
425	380	0	32	36	Punch Thumb Bass
426	381	0	0	37	Slap Bass 2
427	382	0	43	37	Velocity Sw.Slap
428	383	0	0	38	Synth Bass 1
429	384	0	18	38	SynthBass1Dark
430	385	0	20	38	FastResonantBass
431	386	0	24	38	Acid Bass
432	387	0	35	38	Clavi Bass
433	388	0	40	38	TechnoSynthBass
434	389	0	64	38	Orbiter
435	390	0	65	38	Square Bass
436	391	0	66	38	Rubber Bass
437	392	0	96	38	Hammer
438	393	0	0	39	Synth Bass 2
439	394	0	6	39	MellowSynthBass
440	395	0	12	39	Sequenced Bass
441	396	0	18	39	Click Synth Bass
442	397	0	19	39	SynthBass2Dark
443	398	0	32	39	SmoothSynthBass
444	399	0	40	39	ModularSynthBass
445	400	0	41	39	DX Bass
446	401	0	64	39	X Wire Bass
447	402	0	0	40	Violin
448	403	0	8	40	SlowAttackViolin
449	404	0	0	41	Viola
450	405	0	0	42	Cello
451	406	0	0	43	Contrabass
452	407	0	0	44	Tremolo Strings
453	408	0	8	44	SlwAtkTremStrngs
454	409	0	40	44	Suspense Strings
455	410	0	0	45	PizzicatoStrings
456	411	0	0	46	Orchestral Harp
457	412	0	40	46	Yang Chin
458	413	0	0	47	Timpani
459	414	0	0	48	StringEnsemble1
460	415	0	3	48	Stereo Strings
461	416	0	8	48	SlowAttackStrngs
462	417	0	24	48	Arco Strings
463	418	0	35	48	60's Strings
464	419	0	40	48	Orchestra
465	420	0	41	48	Orchestra 2
466	421	0	42	48	TremoloOrchestra
467	422	0	45	48	Velocity Strings
468	423	0	0	49	StringEnsemble2
469	424	0	3	49	StereoSlowStrngs
470	425	0	8	49	Legato Strings
471	426	0	40	49	Warm Strings
472	427	0	41	49	Kingdom
473	428	0	64	49	70's Strings
474	429	0	65	49	StringEnsemble3
475	430	0	0	50	Synth Strings 1
476	431	0	27	50	Resonant Strings
477	432	0	64	50	Synth Strings 4
478	433	0	65	50	Synth Strings 5
479	434	0	0	51	Synth Strings 2
480	435	0	0	52	Choir Aahs
481	436	0	3	52	Stereo Choir
482	437	0	16	52	Choir Aahs 2
483	438	0	32	52	Mellow Choir
484	439	0	40	52	Choir Strings
485	440	0	0	53	Voice Oohs
486	441	0	0	54	Synth Voice
487	442	0	40	54	Synth Voice 2

PSR-740 Voice Number	PSR-640 Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change Number	Voice Name
488	443	0	41	54	Choral
489	444	0	64	54	Analog Voice
490	445	0	0	55	Orchestra Hit
491	446	0	35	55	Orchestra Hit 2
492	447	0	64	55	Impact
493	448	0	0	56	Trumpet
494	449	0	16	56	Trumpet 2
495	450	0	17	56	Bright Trumpet
496	451	0	32	56	Warm Trumpet
497	452	0	0	57	Trombone
498	453	0	18	57	Trombone 2
499	454	0	0	58	Tuba
500	455	0	16	58	Tuba 2
501	456	0	0	59	Muted Trumpet
502	457	0	0	60	French Horn
503	458	0	6	60	French Horn Solo
504	459	0	32	60	French Horn 2
505	460	0	37	60	Horn Orchestra
506	461	0	0	61	Brass Section
507	462	0	35	61	Trp&TrbSection
508	463	0	40	61	Brass Section 2
509	464	0	41	61	High Brass
510	465	0	42	61	Mellow Brass
511	466	0	0	62	Synth Brass 1
512	467	0	12	62	Quack Brass
513	468	0	20	62	Reso Synth Brass
514	469	0	24	62	Poly Brass
515	470	0	27	62	Synth Brass 3
516	471	0	32	62	Jump Brass
517	472	0	45	62	AnalogVeloBrass1
518	473	0	64	62	Analog Brass 1
519	474	0	0	63	Synth Brass 2
520	475	0	18	63	Soft Brass
521	476	0	40	63	Synth Brass 4
522	477	0	41	63	Choir Brass
523	478	0	45	63	AnalogVeloBrass2
524	479	0	64	63	Analog Brass 2
525	480	0	0	64	Soprano Sax
526	481	0	0	65	Alto Sax
527	482	0	40	65	Sax Section
528	483	0	43	65	Hyper Alto Sax
529	484	0	0	66	Tenor Sax
530	485	0	40	66	BreathyTenorSax
531	486	0	41	66	Soft Tenor Sax
532	487	0	64	66	Tenor Sax 2
533	488	0	0	67	Baritone Sax
534	489	0	0	68	Oboe
535	490	0	0	69	English Horn
536	491	0	0	70	Bassoon
537	492	0	0	71	Clarinet
538	493	0	0	72	Piccolo
539	494	0	0	73	Flute
540	495	0	0	74	Recorder
541	496	0	0	75	Pan Flute
542	497	0	0	76	Blown Bottle
543	498	0	0	77	Shakuhachi
544	499	0	0	78	Whistle
545	500	0	0	79	Ocarina
546	501	0	0	80	Square Lead
547	502	0	6	80	Square Lead 2
548	503	0	8	80	LM Square
549	504	0	18	80	Hollow
550	505	0	19	80	Shroud
551	506	0	64	80	Mellow
552	507	0	65	80	Solo Sine
553	508	0	66	80	Sine Lead
554	509	0	0	81	Sawtooth Lead
555	510	0	6	81	Sawtooth Lead 2
556	511	0	8	81	Thick Sawtooth
557	512	0	18	81	Dynamic Sawtooth
558	513	0	19	81	Digital Sawtooth
559	514	0	20	81	Big Lead
560	515	0	24	81	Heavy Synth
561	516	0	25	81	Waspy Synth
562	517	0	40	81	Pulse Sawtooth
563	518	0	41	81	Dr. Lead
564	519	0	45	81	Velocity Lead
565	520	0	96	81	Sequenced Analog
566	521	0	0	82	Calliope Lead
567	522	0	65	82	Pure Pad
568	523	0	0	83	Chiff Lead
569	524	0	64	83	Rubby
570	525	0	0	84	Charang Lead
571	526	0	64	84	Distorted Lead
572	527	0	65	84	Wire Lead
573	528	0	0	85	Voice Lead
574	529	0	24	85	Synth Aahs
575	530	0	64	85	Vox Lead
576	531	0	0	86	Fifths Lead
577	532	0	35	86	Big Five
578	533	0	0	87	Bass & Lead
579	534	0	16	87	Big & Low
580	535	0	64	87	Fat & Perky
581	536	0	65	87	Soft Whirl
582	537	0	0	88	New Age Pad
583	538	0	64	88	Fantasy
584	539	0	0	89	Warm Pad
585	540	0	16	89	Thick Pad
586	541	0	17	89	Soft Pad
587	542	0	18	89	Sine Pad
588	543	0	64	89	Horn Pad
589	544	0	65	89	Rotary Strings
590	545	0	0	90	Poly Synth Pad
591	546	0	64	90	Poly Pad 80
592	547	0	65	90	Click Pad
593	548	0	66	90	Analog Pad
594	549	0	67	90	Square Pad
595	550	0	0	91	Choir Pad
596	551	0	64	91	Heaven
597	552	0	66	91	Itopia
598	553	0	67	91	CC Pad
599	554	0	0	92	Bowed Pad
600	555	0	64	92	Glacier
601	556	0	65	92	Glass Pad
602	557	0	0	93	Metallic Pad
603	558	0	64	93	Tine Pad
604	559	0	65	93	Pan Pad
605	560	0	0	94	Halo Pad
606	561	0	0	95	Sweep Pad
607	562	0	20	95	Shwimmer
608	563	0	27	95	Converge
609	564	0	64	95	Polar Pad
610	565	0	66	95	Celestial
611	566	0	0	96	Rain
612	567	0	45	96	Clavi Pad
613	568	0	64	96	Harmo Rain
614	569	0	65	96	African Wind
615	570	0	66	96	Carib
616	571	0	0	97	Sound Track
617	572	0	27	97	Prologue
618	573	0	64	97	Ancestral
619	574	0	0	98	Crystal
620	575	0	12	98	Synth Drum Comp
621	576	0	14	98	Popcorn
622	577	0	18	98	Tiny Bells
623	578	0	35	98	Round Glocken
624	579	0	40	98	Glocken.Chimes
625	580	0	41	98	Clear Bells
626	581	0	42	98	Chorus Bells
627	582	0	64	98	Synth Mallet
628	583	0	65	98	Soft Crystal
629	584	0	66	98	LoudGlockenspiel
630	585	0	67	98	Christmas Bells
631	586	0	68	98	Vibraphone Bells
632	587	0	69	98	Digital Bells
633	588	0	70	98	Air Bells
634	589	0	71	98	Bell Harp
635	590	0	72	98	Gamelimba
636	591	0	0	99	Atmosphere
637	592	0	18	99	Warm Atmosphere
638	593	0	19	99	Hollow Release
639	594	0	40	99	Nylon El.Piano
640	595	0	64	99	Nylon Harp
641	596	0	65	99	Harp Vox
642	597	0	66	99	Atmosphere Pad
643	598	0	67	99	Planet
644	599	0	0	100	Brightness
645	600	0	64	100	Fantasy Bells
646	601	0	96	100	Smokey
647	602	0	0	101	Goblins
648	603	0	64	101	Goblins Synth
649	604	0	65	101	Creeper
650	605	0	66	101	Ring Pad
651	606	0	67	101	Ritual
652	607	0	68	101	To Heaven
653	608	0	70	101	Night
654	609	0	71	101	Glisten
655	610	0	96	101	Bell Choir
656	611	0	0	102	Echoes
657	612	0	8	102	Echoes 2
658	613	0	14	102	Echo Pan
659	614	0	64	102	Echo Bells
660	615	0	65	102	Big Pan
661	616	0	66	102	Synth Piano
662	617	0	67	102	Creation
663	618	0	68	102	Star Dust
664	619	0	69	102	Resonant&Panning
665	620	0	0	103	Sci-Fi
666	621	0	64	103	Starz
667	622	0	0	104	Sitar
668	623	0	32	104	Detuned Sitar
669	624	0	35	104	Sitar 2
670	625	0	96	104	Tambra
671	626	0	97	104	Tamboura
672	627	0	0	105	Banjo
673	628	0	28	105	Muted Banjo
674	629	0	96	105	Rabab
675	630	0	97	105	Gopichant
676	631	0	98	105	Oud
677	632	0	0	106	Shamisen
678	633	0	0	107	Koto
679	634	0	96	107	Taisho-kin
680	635	0	97	107	Kanoon
681	636	0	0	108	Kalimba
682	637	0	0	109	Bagpipe
683	638	0	0	110	Fiddle
684	639	0	0	111	Shanai
685	640	0	64	111	Shanai 2
686	641	0	96	111	Pungi
687	642	0	97	111	Hichiriki
688	643	0	0	112	Tinkle Bell
689	644	0	96	112	Bonang
690	645	0	97	112	Altair
691	646	0	98	112	Gamelan Gongs
692	647	0	99	112	Stereo Gamelan
693	648	0	100	112	Rama Cymbal
694	649	0	101	112	Asian Bells
695	650	0	0	113	Agogo
696	651	0	0	114	Steel Drums
697	652	0	97	114	Glass Percussion
698	653	0	98	114	Thai Bells
699	654	0	0	115	Woodblock
700	655	0	96	115	Castanets
701	656	0	0	116	Taiko Drum
702	657	0	96	116	Gran Cassa
703	658	0	0	117	Melodic Tom

PSR-740 Voice Number	PSR-640 Voice Number	Bank Select		MIDI Program Change Number	Voice Name
		MSB	LSB		
704	659	0	64	117	Melodic Tom 2
705	660	0	65	117	Real Tom
706	661	0	66	117	Rock Tom
707	662	0	0	118	Synth Drum
708	663	0	64	118	Analog Tom
709	664	0	65	118	Electronic Perc.
710	665	0	0	119	Reverse Cymbal
711	666	0	0	120	GuitarFretNoise
712	667	0	0	121	Breath Noise
713	668	0	0	122	Seashore
714	669	0	0	123	Bird Tweet
715	670	0	0	124	Telephone Ring
716	671	0	0	125	Helicopter
717	672	0	0	126	Applause
718	673	0	0	127	Gunshot
719	674	64	0	0	Cutting Noise
720	675	64	0	1	Cutting Noise 2
721	676	64	0	3	String Slap
722	677	64	0	16	Flute Key Click
723	678	64	0	32	Shower
724	679	64	0	33	Thunder
725	680	64	0	34	Wind
726	681	64	0	35	Stream
727	682	64	0	36	Bubble
728	683	64	0	37	Feed
729	684	64	0	48	Dog
730	685	64	0	49	Horse
731	686	64	0	50	Bird Tweet 2
732	687	64	0	54	Ghost
733	688	64	0	55	Maou
734	689	64	0	64	Phone Call
735	690	64	0	65	Door Squeak
736	691	64	0	66	Door Slam
737	692	64	0	67	Scratch Cut
738	693	64	0	68	Scratch Split
739	694	64	0	69	Wind Chime
740	695	64	0	70	Telephone Ring 2
741	696	64	0	80	CarEngineIgntion
742	697	64	0	81	Car Tires Squeal
743	698	64	0	82	Car Passing
744	699	64	0	83	Car Crash
745	700	64	0	84	Siren
746	701	64	0	85	Train
747	702	64	0	86	Jet Plane
748	703	64	0	87	Starship
749	704	64	0	88	Burst
750	705	64	0	89	Roller Coaster
751	706	64	0	90	Submarine
752	707	64	0	96	Laugh
753	708	64	0	97	Scream
754	709	64	0	98	Punch
755	710	64	0	99	Heartbeat
756	711	64	0	100	FootSteps
757	712	64	0	112	Machine Gun
758	713	64	0	113	Laser Gun
759	714	64	0	114	Explosion
760	715	64	0	115	Firework

Drum Kit List

- "<——" indicates that the drum kit is the same as "Standard Kit1".
- Each percussion voice uses one note.
- The note numbers and note names printed on the keyboard are one octave higher than the MIDI note numbers and note names shown in the list. For example, the note number and note name, #36 and C1, on the keyboard correspond to the MIDI note number and note name, #24 and C0, shown in the list.

Bank MSB		127	127	127	127	127	127	127
Bank LSB		0	0	0	0	0	0	0
Prgram Number		0	1	4	8	16	24	25
Note #	Note	Standard Kit 1	Standard Kit 2	Hit Kit (PSR-740 only)	Room Kit	Rock Kit	Electronic Kit	Analog Kit
13	C♯-1	Surdo Mute	<——	<——	<——	<——	<——	<——
14	D-1	Surdo Open	<——	<——	<——	<——	<——	<——
15	D♯-1	Hi Q	<——	<——	<——	<——	<——	<——
16	E-1	Whip Slap	<——	<——	<——	<——	<——	<——
17	F-1	Scratch Push	<——	<——	<——	<——	<——	<——
18	F♯-1	Scratch Pull	<——	<——	<——	<——	<——	<——
19	G-1	Finger Snap	<——	<——	<——	<——	<——	<——
20	G♯-1	Click Noise	<——	<——	<——	<——	<——	<——
21	A-1	Metronome Click	<——	<——	<——	<——	<——	<——
22	A♯-1	Metronome Bell	<——	<——	<——	<——	<——	<——
23	B-1	Seq Click L	<——	<——	<——	<——	<——	<——
24	C0	Seq Click H	<——	<——	<——	<——	<——	<——
25	C♯0	Brush Tap	<——	<——	<——	<——	<——	<——
26	D0	Brush Swirl	<——	<——	<——	<——	<——	<——
27	D♯0	Brush Slap	<——	<——	<——	<——	<——	<——
28	E0	Brush Tap Swirl	<——	<——	<——	<——	Reverse Cymbal	Reverse Cymbal
29	F0	Snare Roll	<——	<——	<——	<——	<——	<——
30	F♯0	Castanet	<——	<——	<——	<——	Hi Q 2	Hi Q 2
31	G0	Snare H Soft	Snare H Soft 2	Snare Electro	<——	SD Rock H	Snare L	SD Rock H
32	G♯0	Sticks	<——	<——	<——	<——	<——	<——
33	A0	Bass Drum Soft	<——	BD Hard L	<——	<——	Bass Drum H	Bass Drum H
34	A♯0	Open Rim Shot	Open Rim Shot 2	Snare Pitched	<——	<——	<——	<——
35	B0	Bass Drum Hard	<——	BD Wet	<——	Bass Drum H	BD Rock	BD Analog L
36	C1	Bass Drum	Bass Drum 2	BD Hard H	<——	BD Rock	BD Gate	BD Analog H
37	C♯1	Side Stick	<——	Stick Ambient	<——	<——	<——	Analog Side Stick
38	D1	Snare M	Snare M 2	Snare Ambient	SD Room L	SD Rock L	SD Rock L	Analog Snare 1
39	D♯1	Hand Clap	<——	<——	<——	<——	<——	<——
40	E1	Snare H Hard	<——	Snare H Hard 2	SD Room H	SD Rock Rim	SD Rock H	Analog Snare 2
41	F1	Floor Tom L	<——	Hybrid Tom 1	Room Tom 1	Rock Tom 1	E Tom 1	Analog Tom 1
42	F♯1	Hi-Hat Closed	<——	Hi-Hat Closed	<——	<——	<——	Analog HH Closed 1
43	G1	Floor Tom H	<——	Hybrid Tom 2	Room Tom 2	Rock Tom 2	E Tom 2	Analog Tom 2
44	G♯1	Hi-Hat Pedal	<——	Hi-Hat Pedal	<——	<——	<——	Analog HH Closed 2
45	A1	Low Tom	<——	Hybrid Tom 3	Room Tom 3	Rock Tom 3	E Tom 3	Analog Tom 3
46	A♯1	Hi-Hat Open	<——	Hi-Hat Open	<——	<——	<——	Analog HH Open
47	B1	Mid Tom L	<——	Hybrid Tom 4	Room Tom 4	Rock Tom 4	E Tom 4	Analog Tom 4
48	C2	Mid Tom H	<——	Hybrid Tom 5	Room Tom 5	Rock Tom 5	E Tom 5	Analog Tom 5
49	C♯2	Crash Cymbal 1	<——	<——	<——	<——	<——	Analog Cymbal
50	D2	High Tom	<——	Hybrid Tom 6	Room Tom 6	Rock Tom 6	E Tom 6	Analog Tom 6
51	D♯2	Ride Cymbal 1	<——	<——	<——	<——	<——	<——
52	E2	Chinese Cymbal	<——	<——	<——	<——	<——	<——
53	F2	Ride Cymbal Cup	<——	<——	<——	<——	<——	<——
54	F♯2	Tambourine	<——	Tambourine Light	<——	<——	<——	<——
55	G2	Splash Cymbal	<——	<——	<——	<——	<——	<——
56	G♯2	Cowbell	<——	<——	<——	<——	<——	Analog Cowbell
57	A2	Crash Cymbal 2	<——	<——	<——	<——	<——	<——
58	A♯2	Vibraslap	<——	<——	<——	<——	<——	<——
59	B2	Ride Cymbal 2	<——	<——	<——	<——	<——	<——
60	C3	Bongo H	<——	<——	<——	<——	<——	<——
61	C♯3	Bongo L	<——	<——	<——	<——	<——	<——
62	D3	Conga H Mute	<——	<——	<——	<——	<——	Analog Conga H
63	D♯3	Conga H Open	<——	<——	<——	<——	<——	Analog Conga M
64	E3	Conga L	<——	<——	<——	<——	<——	Analog Conga L
65	F3	Timbale H	<——	<——	<——	<——	<——	<——
66	F♯3	Timbale L	<——	<——	<——	<——	<——	<——
67	G3	Agogo H	<——	<——	<——	<——	<——	<——
68	G♯3	Agogo L	<——	<——	<——	<——	<——	<——
69	A3	Cabasa	<——	<——	<——	<——	<——	<——
70	A♯3	Maracas	<——	<——	<——	<——	<——	Analog Maracas
71	B3	Samba Whistle H	<——	<——	<——	<——	<——	<——
72	C4	Samba Whistle L	<——	<——	<——	<——	<——	<——
73	C♯4	Guiro Short	<——	<——	<——	<——	<——	<——
74	D4	Guiro Long	<——	<——	<——	<——	<——	<——
75	D♯4	Claves	<——	<——	<——	<——	<——	Analog Claves
76	E4	Wood Block H	<——	<——	<——	<——	<——	<——
77	F4	Wood Block L	<——	<——	<——	<——	<——	<——
78	F♯4	Cuica Mute	<——	<——	<——	<——	Scratch Push	Scratch Push
79	G4	Cuica Open	<——	<——	<——	<——	Scratch Pull	Scratch Pull
80	G♯4	Triangle Mute	<——	<——	<——	<——	<——	<——
81	A4	Triangle Open	<——	<——	<——	<——	<——	<——
82	A♯4	Shaker	<——	<——	<——	<——	<——	<——
83	B4	Jingle Bell	<——	<——	<——	<——	<——	<——
84	C5	Bell Tree	<——	<——	<——	<——	<——	<——
85	C♯5							
86	D5							
87	D♯5							
88	E5							
89	F5							
90	F♯5							
91	G5							

C1 C♯1 D1 D♯1 E1 F1 F♯1 G1 G♯1 A1 A♯1 B1 C2 C♯2 D2 D♯2 E2 F2 F♯2 G2 G♯2 A2 A♯2 B2 C3 C♯3 D3 D♯3 E3 F3 F♯3 G3 G♯3 A3 A♯3 B3 C4 C♯4 D4 D♯4 E4 F4 F♯4 G4 G♯4 A4 A♯4 B4 C5 C♯5 D5 D♯5 E5 F5 F♯5 G5 G♯5 A5 A♯5 B5 C6

Bank MSB		127	127	127	127	126	126
Bank LSB		0	0	0	0	0	0
Prgram Number		27	32	40	48	0	1
Note #	Note	Dance Kit	Jazz Kit	Brush Kit	Symphonic Kit	SFX Kit 1	SFX Kit 2
13	C#-1	<——	<——	<——	<——		
14	D-1	<——	<——	<——	<——		
15	D#-1	<——	<——	<——	<——		
16	E-1	<——	<——	<——	<——		
17	F-1	<——	<——	<——	<——		
18	F#-1	<——	<——	<——	<——		
19	G-1	<——	<——	<——	<——		
20	G#-1	<——	<——	<——	<——		
21	A-1	<——	<——	<——	<——		
22	A#-1	<——	<——	<——	<——		
23	B-1	<——	<——	<——	<——		
24	C0	<——	<——	<——	<——		
25	C#0	<——	<——	<——	<——		
26	D0	<——	<——	<——	<——		
27	D#0	<——	<——	<——	<——		
28	E0	Reverse Cymbal	<——	<——	<——		
29	F0	<——	<——	<——	<——		
30	F#0	Hi Q 2	<——	<——	<——		
31	G0	AnSD Snappy	SD Jazz H Light	Brush Slap L	<——		
32	G#0	<——	<——	<——	<——		
33	A0	AnBD Dance-1	<——	<——	Bass Drum L		
34	A#0	AnSD OpenRim	<——	<——	<——		
35	B0	AnBD Dance-2	<——	<——	Gran Cassa		
36	C1	AnBD Dance-3	BD Jazz	BD Jazz	Gran Cassa Mute	Cutting Noise	Phone Call
37	C#1	Analog Side Stick	<——	<——	<——	Cutting Noise 2	Door Squeak
38	D1	AnSD Q	SD Jazz L	Brush Slap	Marching Sn M		Door Slam
39	D#1	<——	<——	<——	<——	String Slap	Scratch Cut
40	E1	AnSD Ana+Acoustic	SD Jazz M	Brush Tap	Marching Sn H		Scratch
41	F1	Analog Tom 1	<——	Brush Tom 1	<——		Wind Chime
42	F#1	Analog HH Closed 3	<——	<——	<——		Telephone Ring 2
43	G1	Analog Tom 2	<——	Brush Tom 2	<——		
44	G#1	Analog HH Closed 4	<——	<——	<——		
45	A1	Analog Tom 3	<——	Brush Tom 3	<——		
46	A#1	Analog HH Open 2	<——	<——	<——		
47	B1	Analog Tom 4	<——	Brush Tom 4	<——		
48	C2	Analog Tom 5	<——	Brush Tom 5	<——		
49	C#2	Analog Cymbal	<——	<——	Hand Cym. L		
50	D2	Analog Tom 6	<——	Brush Tom 6	<——		
51	D#2	<——	<——	<——	Hand Cym.Short L		
52	E2	<——	<——	<——	<——	Flute Key Click	Car Engine Ignition
53	F2	<——	<——	<——	<——		Car Tires Squeal
54	F#2	<——	<——	<——	<——		Car Passing
55	G2	<——	<——	<——	<——		Car Crash
56	G#2	Analog Cowbell	<——	<——	<——		Siren
57	A2	<——	<——	<——	Hand Cym. H		Train
58	A#2	<——	<——	<——	<——		Jet Plane
59	B2	<——	<——	<——	Hand Cym.Short H		Starship
60	C3	<——	<——	<——	<——		Burst
61	C#3	<——	<——	<——	<——		Roller Coaster
62	D3	Analog Conga H	<——	<——	<——		Submarine
63	D#3	Analog Conga M	<——	<——	<——		
64	E3	Analog Conga L	<——	<——	<——		
65	F3	<——	<——	<——	<——		
66	F#3	<——	<——	<——	<——		
67	G3	<——	<——	<——	<——		
68	G#3	<——	<——	<——	<——	Shower	Laugh
69	A3	<——	<——	<——	<——	Thunder	Scream
70	A#3	Analog Maracas	<——	<——	<——	Wind	Punch
71	B3	<——	<——	<——	<——	Stream	Heartbeat
72	C4	<——	<——	<——	<——	Bubble	FootSteps
73	C#4	<——	<——	<——	<——	Feed	
74	D4	<——	<——	<——	<——		
75	D#4	Analog Claves	<——	<——	<——		
76	E4	<——	<——	<——	<——		
77	F4	<——	<——	<——	<——		
78	F#4	Scratch Push	<——	<——	<——		
79	G4	Scratch Pull	<——	<——	<——		
80	G#4	<——	<——	<——	<——		
81	A4	<——	<——	<——	<——		
82	A#4	<——	<——	<——	<——		
83	B4	<——	<——	<——	<——		
84	C5	<——	<——	<——	<——	Dog	Machine Gun
85	C#5					Horse	Laser Gun
86	D5					Bird Tweet 2	Explosion
87	D#5						Firework
88	E5						
89	F5						
90	F#5					Ghost	
91	G5					Maou	

C1 C#1 D1 D#1 E1 F1 F#1 G1 G#1 A1 A#1 B1 C2 C#2 D2 D#2 E2 F2 F#2 G2 G#2 A2 A#2 B2 C3 C#3 D3 D#3 E3 F3 F#3 G3 G#3 A3 A#3 B3 C4 C#4 D4 D#4 E4 F4 F#4 G4 G#4 A4 A#4 B4 C5 C#5 D5 D#5 E5 F5 F#5 G5 G#5 A5 A#5 B5 C6

Style List

Style Number	Style Name
	8BEAT
1	8Beat 1
2	8Beat 2
3	8Beat Adria
4	8Beat Pop 1
5	8Beat Pop 2
6	British Pop
7	8Beat Rock
8	8Beat Soft
9	8Beat 3
	16BEAT
10	16Beat 1
11	16Beat 2
12	16Beat 3
13	16Beat 4
14	16Beat 5
15	Soft Fusion
16	Hip Hop Pop
17	16Beat Funk
18	Funky Pop
19	80's Fusion
20	Jazz Rock
21	Fusion Shuffle
22	16Beat 6
	8BEAT BALLAD
23	Piano Ballad
24	U.S. Ballad
25	Slow Rock 1
26	Slow Rock 2
27	Modern 6/8
28	Guitar Ballad
29	Organ Ballad
30	Blues Ballad
31	Epic Ballad
	16BEAT BALLAD
32	16Beat Ballad 1
33	16Beat Ballad 2
34	Rock Ballad
35	Slow Ballad
36	Analog Pop
37	Pop Ballad 1
38	Pop Ballad 2
39	Cool Night
40	Pop Ballad 3
	ROCK
41	Rock 1
42	Hard Rock
43	Rock & Roll 1
44	Rock Shuffle
45	Twist 1
46	4/4 Blues
47	Rock 2
48	8Beat Heat
49	Rock & Roll 2
50	Twist 2
51	Blues Rock
52	6/8 Rock
	DANCEFLOOR
53	Clubdance
54	Techno
55	Entrance
56	Eurobeat
57	Trance 1
58	Trance 2
59	Cool Dance
60	Funky Trip Hop
61	House
62	Handbag
63	Tip

Style Number	Style Name
	DISCO
64	70's Disco
65	90's Disco
66	Disco Soul
67	Miami Pop
68	Disco Tropic
69	Disco Hands
70	Electro Pop
	SWING & JAZZ
71	Swing 1
72	Big Band 1
73	Big Band Ballad
74	Jazz Ballad
75	Jazz Trio
76	Boogie 1
77	Dixieland 1
78	Big Band Boogie
79	Gypsy Swing
80	Bebop
81	Swing 2
82	Big Band 2
83	Boogie 2
84	Dixieland 2
	R & B
85	Gospel Shuffle
86	R & B 1
87	Motown
88	Soul
89	Soul Shuffle
90	R & B 2
91	6/8 Blues
	COUNTRY
92	Country Rock
93	Country 8Beat
94	Country Pop
95	Country Shuffle
96	Country Swing
97	Bluegrass
98	Country Ballad
99	Two Step
100	Cowboy Boogie
101	Hoedown
	LATIN
102	Samba Rio
103	Bossa Nova 1
104	Bossa Nova 2
105	Reggae
106	Swing Reggae
107	Guitar Rhumba
108	Guitar Bossa
109	Salsa
110	Mambo
111	Jazz Samba
112	Pop Bossa 1
113	Pop Bossa 2
114	Pop Reggae
115	Pop Cha Cha
	BALLROOM
116	Slow Fox
117	Quickstep
118	Tango
119	Cha Cha Cha
120	Samba 1
121	Rhumba
122	Pasodoble
123	Jive
124	Beguine 1
125	Foxtrot

Style Number	Style Name
	TRADITIONAL
126	U.S. March
127	German March
128	6/8 March 1
129	Polka
130	Polka Pop 1
131	Polka Pop 2
132	Polka Oberkrainer
133	Tarantella
134	Hully Gully
	WALTZ
135	Pop Waltz
136	Jazz Waltz 1
137	Country Waltz
138	Vienna Waltz
139	Slow Waltz 1
140	Orch. Waltz
141	Waltz Oberkrainer
142	Musette
143	Guitar Waltz
	PIANIST
144	Stride
145	Boogie 3
146	Swing 3
147	Pianoman
148	8Beat 4
149	Ballad 1
150	Ballad 2
151	6/8 Ballad
152	Ragtime
153	March
154	6/8 March 2
155	Bossa Nova 3
156	Beguine 2
157	Samba 2
158	Waltz
159	Slow Waltz 2
160	Jazz Waltz 2

Multi Pad Bank List

Bank name	Chord Match				Repeat			
	Pad1	Pad2	Pad3	Pad4	Pad1	Pad2	Pad3	Pad4
Fanfare	O	O	O	–	–	–	–	–
Crystal	O	O	O	O	–	–	–	–
Gothic_V	O	O	O	O	–	–	–	–
TechSyn1	O	O	O	O	O	O	O	O
TechSyn2	O	O	O	O	O	O	O	O
TechSyn3	O	O	–	–	O	O	O	O
TechSyn4	O	O	–	–	O	O	O	O
PianoSeq	O	O	O	O	–	–	–	–
OrcheHit	O	O	O	O	–	–	–	–
Traffic	–	–	–	–	–	–	–	–
Chirp	–	–	–	–	–	–	–	–
HorrorSE	–	–	–	–	–	–	–	–
Noises	–	–	–	–	–	–	–	–
WaterSE	–	–	–	–	–	–	–	–
AnalogKit	–	–	–	–	–	–	–	–
TechKit	–	–	–	–	–	–	–	–
RockKit	–	–	–	–	–	–	–	–
TomFlam	–	–	–	–	–	–	–	–
LatinPerc1	–	–	–	–	–	–	–	–
LatinPerc2	–	–	–	–	–	–	–	–
Brassy1	O	O	O	O	–	–	–	–
Brassy2	O	O	O	O	–	–	–	–
Swingy	O	O	O	O	O	O	O	O
SynBrass	O	O	O	O	–	–	–	–
GuitarPlay1	O	O	O	O	O	O	O	O
GuitarPlay2	O	O	O	O	O	O	O	O
GuitarPlay3	O	O	O	O	O	O	O	O
GuitarPlay4	O	O	O	O	O	O	O	O
PianoMan	O	O	O	O	O	O	O	–
SalsaPiano	O	O	O	O	O	O	O	O
SambaShow	–	–	–	–	O	O	O	O
Accordion	O	O	O	O	–	–	–	–
Arpeggio	O	O	O	O	–	–	–	–
Classic	O	O	O	O	–	–	–	–
Twinkle	O	O	O	O	–	–	–	–
TimbalesRoll	–	–	–	–	–	–	–	–

O : available

There are two types of Multi Pad data: some types will play back once and stop when they reach to the end. Others will play back repeatedly until you press the [STOP] button.

■ PSR-740

NOTE

• Although not all the effect settings cannot be made by operating the PSR-740 panel manually, some of them may be accessible through MIDI. Refer to the MIDI data format for details.

● Reverb (System effect)

Reverb effect type/depth can be set by panel operation.
When you select a different style, the appropriate reverb type will be selected accordingly.

● Chorus (System effect)

Chorus effect type/depth can be set by panel operation.
When you select a different style, the appropriate chorus type will be selected accordingly.

● DSP (System/Insertion effect)

DSP effect type/depth can be set by a panel operation in the Style record mode.
When you select a different style, the appropriate chorus type will be selected accordingly.

● DSP1 - 3 (Insertion effect)

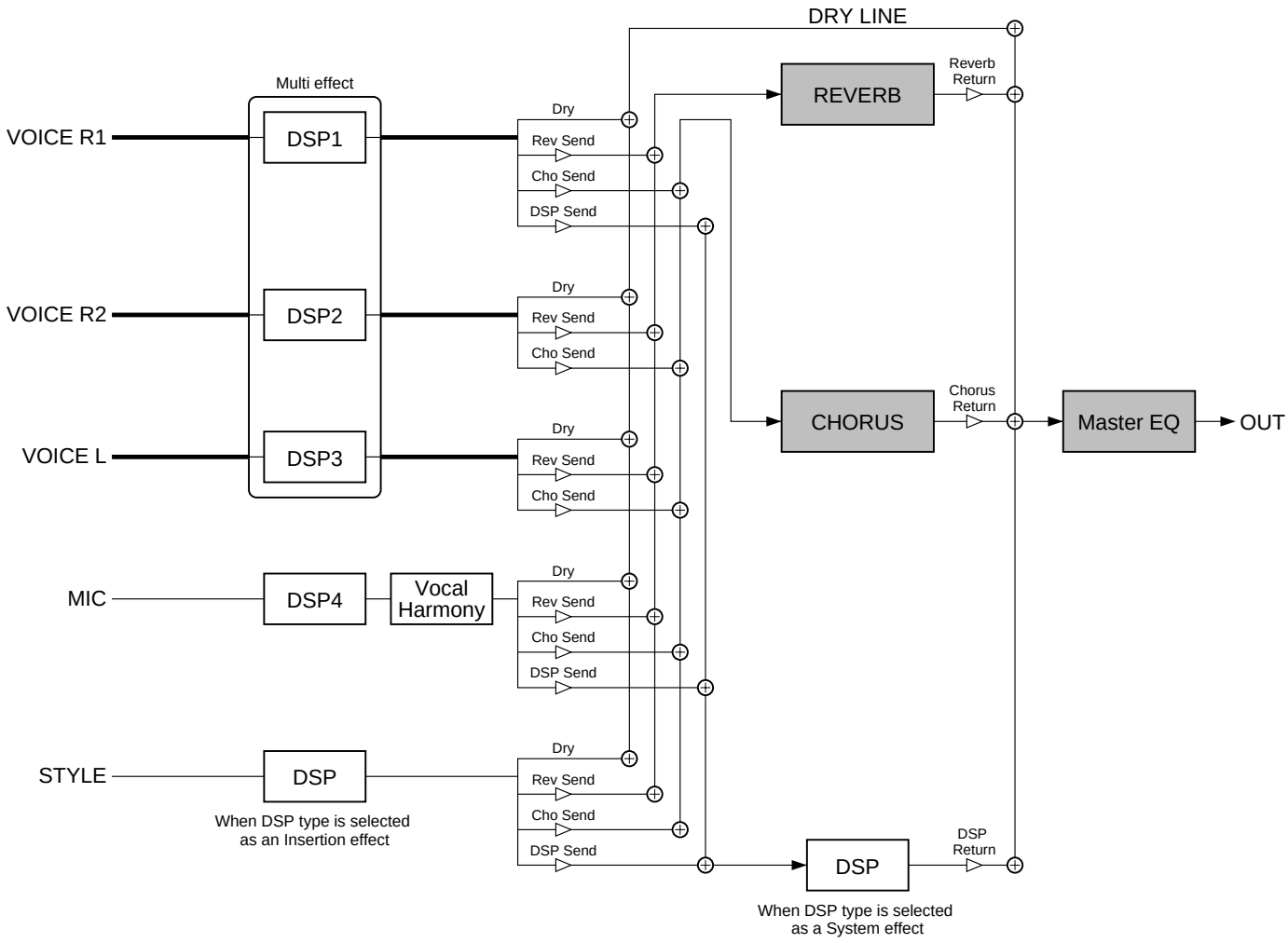
The PSR-740 has a multi effect system featuring three separate DSP effect blocks.
Multi effect on/off status, type and depth can be set by panel operation.

● DSP4

DSP4 is the effect for the microphone sound.
DSP4 effect on/off status, type and depth can be set by panel operation.

● Master EQ

Master EQ on/off status, type and depth can be set by panel operation.



■ PSR-640

NOTE

• Although not all the effect settings cannot be made by operating the PSR-640 panel manually, some of them may be accessible through MIDI. Refer to the MIDI data format for details.

● Reverb (System effect)

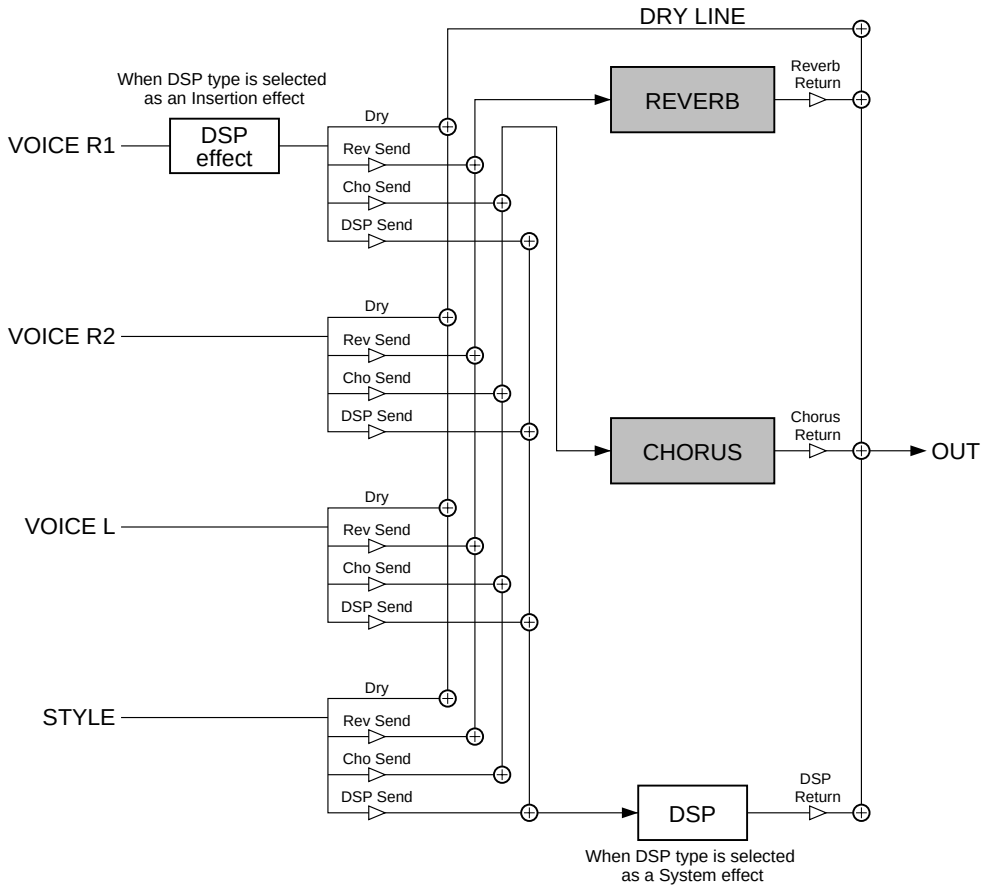
Reverb effect type/depth can be set by panel operation.
When you select a different style, the appropriate reverb type will be selected accordingly.

● Chorus (System effect)

Chorus effect type/depth can be set by panel operation.
When you select a different style, the appropriate chorus type will be selected accordingly.

● DSP (System/Insertion effect)

DSP effect on/off status, type and depth can be set by panel operation.
DSP effect will function as either System or Insertion effect. Whether DSP effect is System or Insertion depends on the selected type. DSP effect configuration will differ between System and Insertion effects as follows:



● Reverb Type List (PSR-740/640)

Reverb Type	System/Insertion	Description
Hall1-5	System	Concert hall reverb.
Room1-7	System	Small room reverb.
Stage1-4	System	Reverb for solo instruments.
Plate1-3	System	Simulated steel plate reverb.
White Room	System	A unique short reverb with a bit of initial delay.
Tunnel	System	Simulation of a tunnel space expanding to left and right.
Canyon	System	A hypothetical acoustic space which extends without limit.
Basement	System	A bit of initial delay followed by reverb with a unique resonance.
No Effect	—	No effect.

● Chorus Type List (PSR-740/640)

Chorus Type	System/Insertion	Description
Chorus1-8	System	Conventional chorus program with rich, warm chorusing.
Celeste1, 2	System	A 3-phase LFO adds modulation and spaciousness to the sound.
Flanger1-5	System	Pronounced three-phase modulation with slight metallic sound.
Symphonic1, 2	System	A multi-phase version of Celeste. (PSR-740)
Phaser	System	Pronounced, metallic modulation with periodic phase change. (PSR-740)
Ensemble Detune	System	Chorus effect without modulation, created by adding a slightly pitch-shifted sound. (PSR-740)
No Effect	—	No effect.

● DSP Type List (PSR-640)

DSPType	System/Insertion	Description
Hall1-5	System	Concert hall reverb.
Room1-7	System	Small room reverb.
Stage1-4	System	Reverb for solo instruments.
Plate1-3	System	Simulated steel plate reverb.
Delay Left - Center - Right1, 2	System	Three independent delays, for the left, right and center stereo positions.
Delay Left - Right	System	Initial delay for each stereo channel, and two separate feedback delays.
Echo	System	Stereo delay, with independent feedback level settings for each channel.
Cross Delay	System	Complex effect that sends the delayed repeats “bouncing” between the left and right channels.
ER1, 2	System	This effect isolates only the early reflection components of the reverb.
Gate Reverb	System	Gated reverb effect, in which the reverberation is quickly cut off for special effects.
Reverse Gate	System	Similar to Gate Reverb, but with a reverse increase in reverb.
Karaoke1-3	System	A delay with feedback of the same types as used for karaoke reverb.
Chorus1-8	System	Conventional chorus program with rich, warm chorusing.
Celeste1, 2	System	A 3-phase LFO adds modulation and spaciousness to the sound.
Flanger1-5	System	Pronounced three-phase modulation with slight metallic sound.
Symphonic1, 2	System	A multi-phase version of Celeste.
Rotary Speaker1-6	Insertion	Rotary speaker simulation.
Tremolo1-3	Insertion	Rich Tremolo effect with both volume and pitch modulation.
Guitar Tremolo	Insertion	Simulated electric guitar tremolo.
Auto Pan1, 2	Insertion	Several panning effects that automatically shift the sound position (left, right, front, back).
Phaser1, 2	System	Pronounced, metallic modulation with periodic phase change.
Distortion Hard	Insertion	Hard-edge distortion.
Distortion Soft	Insertion	Soft, warm distortion.
Distortion Heavy	Insertion	Heavy distortion.
Overdrive	Insertion	Adds mild distortion to the sound.
Amp Simulator	Insertion	A simulation of a guitar amp.
EQ Disco	Insertion	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.
EQ Telephone	Insertion	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.
3Band EQ (MONO)	Insertion	A mono EQ with adjustable LOW, MID, and HIGH equalizing.
2Band EQ (STEREO)	Insertion	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.
Auto Wah1, 2	Insertion	Cyclically modulates the center frequency of a wah filter.
No Effect	—	No effect.
Through	—	Bypass without applying an effect.

● DSP Type List (PSR-740)

DSP Type	System/Insertion	Description
Hall1-5	System	Concert hall reverb.
Room1-7	System	Small room reverb.
Stage1-4	System	Reverb for solo instruments.
Plate1-3	System	Simulated steel plate reverb.
Delay Left - Center - Right1, 2	System	Three independent delays, for the left, right and center stereo positions.
Delay Left - Right	System	Initial delay for each stereo channel, and two separate feedback delays.
Echo	System	Stereo delay, with independent feedback level settings for each channel.
Cross Delay	System	Complex effect that sends the delayed repeats “bouncing” between the left and right channels.
ER1, 2	System	This effect isolates only the early reflection components of the reverb.
Gate Reverb	System	Gated reverb effect, in which the reverberation is quickly cut off for special effects.
Reverb Gate	System	Similar to Gate Reverb, but with a reverse increase in reverb.
White Room	System	A unique short reverb with a bit of initial delay.
Tunnel	System	Simulation of a tunnel space expanding to left and right.
Canyon	System	A hypothetical acoustic space which extends without limit.
Basement	System	A bit of initial delay followed by reverb with a unique resonance.
Karaoke1-3	System	A delay with feedback of the same types as used for karaoke reverb.
Chorus1-8	System	Conventional chorus program with rich, warm chorusing.
Celeste1, 2	System	A 3-phase LFO adds modulation and spaciousness to the sound.
Flanger1-5	System	Pronounced three-phase modulation with slight metallic sound.
Symphonic1, 2	System	A multi-phase version of Celeste.
Rotary Speaker 1-6	System	Rotary speaker simulation.
2way Rotary Speaker	System	Rotary speaker simulation.
Tremolo1-3	System	Rich Tremolo effect with both volume and pitch modulation.
Guitar Tremolo	System	Simulated electric guitar tremolo.
Auto Pan1, 2	System	Several panning effects that automatically shift the sound position (left, right, front, back).
Phaser 1, 2	System	Pronounced, metallic modulation with periodic phase change.
Distortion Hard	System	Hard-edge distortion.
Distortion Soft	System	Soft, warm distortion.
Distortion Heavy	System	Heavy distortion.
Overdrive	System	Adds mild distortion to the sound.
Comp + Distortion	System	Since a Compressor is included in the first stage, steady distortion can be produced regardless of changes in input level.
Amp Simulator	System	A simulation of a guitar amp.
EQ Disco	System	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.
EQ Telephone	System	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.
3Band EQ (MONO)	System	A mono EQ with adjustable LOW, MID, and HIGH equalizing.
2Band EQ (STEREO)	System	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.
Auto Wah1, 2	System	Cyclically modulates the center frequency of a wah filter.
Touch Wah1, 2	System	Changes the center frequency of a wah filter according to the input level.
AWah+Distortion	System	The output of an Auto Wah can be distorted by Distortion.
AWah+Overdrive	System	The output of an Auto Wah can be distorted by Overdrive.
HarmonicEnhancer	System	This effect adds new overtones to the input signal to make the sound stand out.
TWah+Distortion	System	The output of a Touch Wah can be distorted by Distortion.
TWah+Overdrive	System	The output of a Touch Wah can be distorted by Overdrive.
Compressor	System	Holds down the output level when a specified input level is exceeded. A sense of attack can also be added to the sound.
Noise Gate	System	Gates the input when the input signal falls below a specified level.
Pitch change 1, 2	System	Changes the pitch of the input signal.
Voice Cancel	System	Attenuates the vocal part of a CD or other source.
Ensemble Detune	System	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.
Ambience	System	Blurs the stereo positioning of the sound to add spatial width.
Talking Modulator	System	Talking Modulator.
Lo-Fi	System	Degrades the audio quality of the input signal.
Distortion+Delay	System	DISTORTION and DELAY are connected in series.
Overdrive+Delay	System	OVERDRIVE and DELAY are connected in series.
Comp+Dist+Delay	System	COMPRESSOR, DISTORTION and DELAY are connected in series.
Comp+OD+Delay	System	COMPRESSOR, OVERDRIVE and DELAY are connected in series.
Wah+Dist+Delay	System	TOUCH WAH, DISTORTION and DELAY are connected in series.
Wah+OD+Delay	System	TOUCH WAH, OVERDRIVE and DELAY are connected in series.
No Effect	—	No effect.
Through	—	Bypass without applying an effect.

● DSP 1-4 Type List (PSR-740)

DSP Type	System/Insertion	Description
Hall1-5	Insertion	Concert hall reverb.
Room1-7	Insertion	Small room reverb.
Stage1-4	Insertion	Reverb for solo instruments.
Plate1-3	Insertion	Simulated steel plate reverb.
Delay Left - Center - Right1, 2	Insertion	Three independent delays, for the left, right and center stereo positions.
Delay Left - Right	Insertion	Initial delay for each stereo channel, and two separate feedback delays.
Echo	Insertion	Stereo delay, with independent feedback level settings for each channel.
Cross Delay	Insertion	Complex effect that sends the delayed repeats “bouncing” between the left and right channels.
Karaoke1-3	Insertion	A delay with feedback of the same types as used for karaoke reverb.
Chorus1-8	Insertion	Conventional chorus program with rich, warm chorusing.
Celeste1, 2	Insertion	A 3-phase LFO adds modulation and spaciousness to the sound.
Flanger1-5	Insertion	Pronounced three-phase modulation with slight metallic sound.
Symphonic1, 2	Insertion	A multi-phase version of Celeste.
Rotary Speaker 1-6	Insertion	Rotary speaker simulation.
Tremolo1-3	Insertion	Rich Tremolo effect with both volume and pitch modulation.
Guitar Tremolo	Insertion	Simulated electric guitar tremolo.
Auto Pan1, 2	Insertion	Several panning effects that automatically shift the sound position (left, right, front, back).
Phaser	Insertion	Pronounced, metallic modulation with periodic phase change.
Distortion Hard	Insertion	Hard-edge distortion.
Distortion Soft	Insertion	Soft, warm distortion.
Distortion Heavy	Insertion	Heavy distortion.
Overdrive	Insertion	Adds mild distortion to the sound.
Amp Simulator	Insertion	A simulation of a guitar amp.
EQ Disco	Insertion	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.
EQ Telephone	Insertion	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.
3Band EQ (MONO)	Insertion	A mono EQ with adjustable LOW, MID, and HIGH equalizing.
2Band EQ (STEREO)	Insertion	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.
Auto Wah1, 2	Insertion	Cyclically modulates the center frequency of a wah filter.
HarmonicEnhancer	Insertion	This effect adds new overtones to the input signal to make the sound stand out.
Touch Wah1, 2	Insertion	Changes the center frequency of a wah filter according to the input level.
Compressor	Insertion	Holds down the output level when a specified input level is exceeded. A sense of attack can also be added to the sound.
Noise Gate	Insertion	Gates the input when the input signal falls below a specified level.
Ensemble Detune	Insertion	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.
Through	—	Bypass without applying an effect.

Harmony/Echo Type List

Category	Type	Description
Harmony	Duet	An extra note is added to the note played on the keyboard to produce duet type harmony.
	1+5	A parallel voice is produced a fifth above the note played on the keyboard.
	Country	One note is added above the note played on the keyboard for a country-style harmony feel.
	Trio	Two notes are added below the note played on the keyboard for three-part harmony.
	Block	Three or four notes are added to the note played on the keyboard to produce four or five-note chords.
	4Way Close1	Three harmony notes are generated to produce a four-note chord.
	4Way Close2	Similar to the preceding type, but depending on the chords played this type will sometimes produce a more colorful sound.
	4Way Open	Four-note chords with open voice (large intervals between the notes). The result is a very “open” sound. Since the harmony notes can be as much as two octaves below the note played on the keyboard, avoid playing in the lower registers.
	Octave	One note is added an octave below the note played on the keyboard.
	Strum	The notes and assignments are the same as in the Block type, but the notes are arpeggiated.
Echo	Echo 1/4	An echo effect is applied to the note played on the keyboard at the currently set tempo.
	Echo 1/6 	
	Echo 1/8 	
	Echo 1/12 	
Tremolo	Tremolo 1/8 	A tremolo effect is applied to the note played on the keyboard at the currently set tempo.
	Tremolo 1/12 	
	Tremolo 1/16 	
	Tremolo 1/32 	
Trill	Trill 1/12 	Two notes played on the keyboard are played alternately at the currently set tempo.
	Trill 1/16 	
	Trill 1/24 	
	Trill 1/32 	

Vocal Harmony Type List (PSR-740)

Standard Duet
Girl In Duet
Lisa & Tina
Sing B+G
Dream Girls
Men Choir
Women Choir
Closed Choir
Mixed Choir
Country Men
Country Girls
Barber Shop
Jazz Men Choir
Jazz Women Choir
Jazz Closed Choir
Jazz Mixed Choir
Diatonic Jazz
Diatonic Girl
A Cappella Boy
A Cappella Mix
A Cappella Diatonic
Falsetto Duet
Falsetto Trio
Falsetto Diatonic
Falsetto Jazz
Falsetto A Cappella
2 Unison Low
2 Unison High
3 Unison Low
3 Unison High
Voice & Instrument
Chordal XG
Vocoder Auto Up
Vocoder Auto Lo
Vocoder Mode Up
Vocoder Mode Lo
Vocoder Girl Up
Vocoder Girrl Lo
Vocoder Pitch Up
Vocoder Pitch Lo

Karaoke Auto
Karaoke Mode
Karaoke Girl
Karaoke Pitch
Vocoder XG
Sing Bass
Speedy Mouse
Chromatic XG
Detune XG
Thru

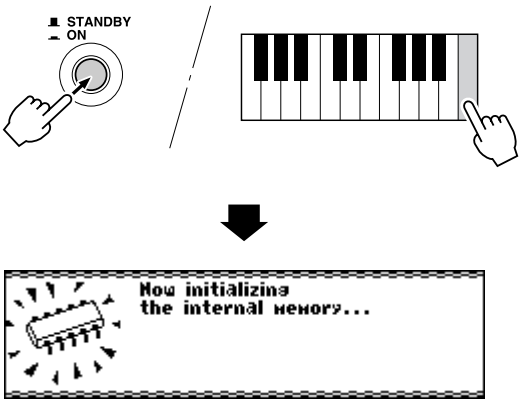
■ Data Backup

Except for the data listed below, all PSR-740/640 panel settings are reset to their initial settings whenever the power is turned on. The data listed below are backed up — i.e. retained in memory — as long as an AC adaptor is connected.

The data listed above will be retained in memory for about a week even if the AC adaptor is not connected. All the data will be reset if the power remains off for longer than about a week. To ensure that your backed-up data are maintained, connect the AC adaptor and turn the power on for a few minutes at least once a week.
It is nevertheless the best way to save important data to floppy disk so that you can keep them indefinitely. All the data listed above can be saved to floppy disk by selecting "All" as the file type (page 69).

■ Data Initialization

All data can be initialized and restored to the factory preset condition by turning on the power while holding the highest (rightmost) white key on the keyboard. "Now initializing the internal memory..." will appear briefly on the display.



⚠ *CAUTION*

- ***All registration and User Style/Pad memory data, plus the other settings listed above, will be erased and/or changed when the data initialization procedure is carried out.***
- ***Carrying out the data initialization procedure will usually restore normal operation if the PSR-740/640 freezes or begins to act erratically for any reason.***

Alert Message List

No file on disk! Insert another disk.	The disk contains no file to be loaded, copied, or be deleted. Insert the disk that contains files to be loaded, copied, or deleted.
Unformatted disk!	An unformatted disk is inserted.
Disk error!	An error occurred during execution of a disk operation. Try changing the disk. This message also may appear when executing the Load operation if the internal memory becomes full.
Disk write-protected!	The floppy disk's write-protect tab is set to ON. Remove the disk, set write-protect to off, reinsert the disk and attempt the operation again.
Disk file protected! Can't copy or record this file.	The file is a purposely "copy-protected" disk. The Copy function is not possible.
No disk! Insert a disk.	There is no floppy disk inserted into the disk drive. Insert a disk.
Disk removed!	An error occured because the disk was removed during a disk operation. Never remove a disk during a disk operation since this could damage both the disk and the drive.
Disk full! Cannot continue.	The disk's memory capacity is full and no additional data can be recorded. Delete one or more unneeded songs (using Delete), and attempt the operation again.
Wrong disk! Reinsert the proper disk.	When using the Copy operation, the inserted disk is different from the source or destination disk. Remove the disk and reinsert the proper Disk.
Same name on disk! Change the file name.	More than one file has the same name on the disk. Change the name.
Cannot record! Maximum of 60 songs can be recorded.	Maximum of 60 songs can be recorded. Delete one or more unneeded songs (using Delete), and attempt the song recording again.
Memory full! Cannot continue.	If the internal memory becomes full during Style/Pad recording, this message will appear on the display and recording will stop.
Memory full! Clear unnecessary data.	This message appears when executing the Quantize or Recording operations (in the Style Recording mode) when the internal memory is full.

Data not found!	This message appears when you attempt to edit, quantize or clear the track which contains no data in the Record mode.
User style full!	This message indicates that recording a new User style cannot be started when all three User styles have recorded data. Make sure to clear at least one of the three User styles before recording a new User style.
Cannot quantize the preset data.	This message appears when you attempt to edit or quantize the track (other than RHYTHM) which contains preset data in the Style Record mode.
Cannot operate during recording.	This function cannot be used during Song/Style/Pad recording.
Cannot set the MIDI function during disk operations, etc.	The MIDI function cannot be set during recording, playback, and disk operations.
Cannot turn harmony ON during Style/Pad recording.	Harmony cannot be turned on during Style/Pad recording.
Cannot turn DSP ON during Style/Pad recording.	DSP cannot be turned on during Style/Pad recording.
Cannot enter the functions during Pad recording.	This message appears to indicate you cannot enter the function when you select Multi Pad function in the Multi Pad Recording mode.
Backup error!	The backup data (page 159) is faulty. Use the data initialization function (page 159).
Now initializing the internal memory...	All data can be initialized and restore to the factory preset condition by turning the STANDBY switch ON while holding the highest (rightmost) white key on the keyboard.
Host is offline!	This message may appear when the Host Select switch is set appropriately and the serial cable is connected to the TO HOST but not to the PC's serial port (or the cable is properly connected to the PC which is currently turned off).

PROBLEM	POSSIBLE CAUSE/SOLUTION
• The speakers produce a “pop” sound whenever the power is turned ON or OFF.	This is normal and is no cause for alarm.
• When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the PortaTone may produce interference. To prevent this, turn off the mobile phone or use it further away from the PortaTone.
• No sound results when the keyboard is played.	• The R1/R2/L voice volume (Mixer) settings could be set too low. Make sure the voice volumes are set at appropriate levels (pages 90). • The Local Control function could be turned off. Make sure Local Control is turned on (page 132). • Check whether the naming function of Registration Memory or song recording (page 62) is called up in the display or not. If the naming function is active, the PSR-740/640 does not produce any sound, even when the keys are played.
• Not all simultaneously-played notes sound. • Auto Accompaniment seems to “skip” when the keyboard is played.	You are probably exceeding the maximum polyphony of the PSR-740/640 . The PSR-740 can play up to 64 notes (32 notes for PSR-640) at the same time — including voice R2, voice L, auto accompaniment, song, and multi pad notes. Notes exceeding this limit will not sound.
• Nothing happens or nothing seems to function, even when pressing a panel button. For example, pressing the [START] button does not start the accompaniment.	Make sure that Disk mode is engaged. In the Disk mode, no panel operations can be executed (except for disk operations). Exit from the display by pressing the [EXIT] button.
• The accompaniment or song does not play back even when pressing the [START/STOP] button. • The Multi Pads do not play back, even when one of the MULTI PAD buttons is pressed.	The MIDI Clock may be set to “EXTERNAL.” Make sure it is set to “INTERNAL” (page 132).
• The auto accompaniment does not start, even when Synchro Start is in standby condition and a key is pressed.	You may be trying to start accompaniment by playing a key in the right-hand range of the keyboard. To start the accompaniment with Synchro Start, make sure to play a key in the left-hand (accompaniment) range of the keyboard.
• The following buttons related to the auto accompaniment do not function. • [SYNC START] button • [SYNC STOP] button • [ACMP ON/OFF] button • REGISTRATION MEMORY [FREEZE] button	Check whether the Song mode (page 25) is selected or not. When the Song mode is active, none of the auto accompaniment functions can be used.
• Certain notes sound at the wrong pitch.	Make sure that the scale tuning value for those notes is set to “0” (page 135).
• Auto accompaniment chords are recognized regardless of the split point or where chords are played on the keyboard.	Check whether the fingering mode is set to “Full” or not. If the Full fingering mode is selected, chords are recognized over the entire range of the keyboard, irrespective of the split point setting.
• The Harmony function does not operate.	• Harmony cannot be turned on when the Full Keyboard fingering mode is selected or if a percussion kit voice is selected. Select an appropriate fingering mode or voice. • Harmony cannot be turned on when a drum kit is selected for the voice R1.
• MIDI data is not transmitted or received, even when MIDI cables are connected properly.	The MIDI terminals can only be used when the HOST SELECT switch is set to “MIDI.” All other settings (“Mac,” “PC-1” and “PC-2”) are for direct transmission/reception with a computer.
• If you experience distorted or out-of-tune sound from the Vocal Harmony feature, your vocal microphone may be picking up extraneous sounds (other than your voice) — the Auto Accompaniment sound from the PSR-740, for example. In particular, bass sounds can cause mistracking of the Vocal Harmony feature.	The solution to this problem is to ensure that as little extraneous sound as possible is picked up by your vocal microphone: • Sing as closely to the microphone as possible. • Use a directional microphone. • Turn down the MASTER VOLUME, ACMP volume, or SONG volume control. • Separate the microphone from the instrument’s speakers as much as possible.

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers.
Hexadecimal numbers may include the letter “H” as a suffix. Also, “n” can freely be defined as any whole number.
To enter data/values, refer to the table below.

Decimal	Hexadecimal	Binary	Decimal	Hexadecimal	Binary
0	00	0000 0000	64	40	0100 0000
1	01	0000 0001	65	41	0100 0001
2	02	0000 0010	66	42	0100 0010
3	03	0000 0011	67	43	0100 0011
4	04	0000 0100	68	44	0100 0100
5	05	0000 0101	69	45	0100 0101
6	06	0000 0110	70	46	0100 0110
7	07	0000 0111	71	47	0100 0111
8	08	0000 1000	72	48	0100 1000
9	09	0000 1001	73	49	0100 1001
10	0A	0000 1010	74	4A	0100 1010
11	0B	0000 1011	75	4B	0100 1011
12	0C	0000 1100	76	4C	0100 1100
13	0D	0000 1101	77	4D	0100 1101
14	0E	0000 1110	78	4E	0100 1110
15	0F	0000 1111	79	4F	0100 1111
16	10	0001 0000	80	50	0101 0000
17	11	0001 0001	81	51	0101 0001
18	12	0001 0010	82	52	0101 0010
19	13	0001 0011	83	53	0101 0011
20	14	0001 0100	84	54	0101 0100
21	15	0001 0101	85	55	0101 0101
22	16	0001 0110	86	56	0101 0110
23	17	0001 0111	87	57	0101 0111
24	18	0001 1000	88	58	0101 1000
25	19	0001 1001	89	59	0101 1001
26	1A	0001 1010	90	5A	0101 1010
27	1B	0001 1011	91	5B	0101 1011
28	1C	0001 1100	92	5C	0101 1100
29	1D	0001 1101	93	5D	0101 1101
30	1E	0001 1110	94	5E	0101 1110
31	1F	0001 1111	95	5F	0101 1111
32	20	0010 0000	96	60	0110 0000
33	21	0010 0001	97	61	0110 0001
34	22	0010 0010	98	62	0110 0010
35	23	0010 0011	99	63	0110 0011
36	24	0010 0100	100	64	0110 0100
37	25	0010 0101	101	65	0110 0101
38	26	0010 0110	102	66	0110 0110
39	27	0010 0111	103	67	0110 0111
40	28	0010 1000	104	68	0110 1000
41	29	0010 1001	105	69	0110 1001
42	2A	0010 1010	106	6A	0110 1010
43	2B	0010 1011	107	6B	0110 1011
44	2C	0010 1100	108	6C	0110 1100
45	2D	0010 1101	109	6D	0110 1101
46	2E	0010 1110	110	6E	0110 1110
47	2F	0010 1111	111	6F	0110 1111
48	30	0011 0000	112	70	0111 0000
49	31	0011 0001	113	71	0111 0001
50	32	0011 0010	114	72	0111 0010
51	33	0011 0011	115	73	0111 0011
52	34	0011 0100	116	74	0111 0100
53	35	0011 0101	117	75	0111 0101
54	36	0011 0110	118	76	0111 0110
55	37	0011 0111	119	77	0111 0111
56	38	0011 1000	120	78	0111 1000
57	39	0011 1001	121	79	0111 1001
58	3A	0011 1010	122	7A	0111 1010
59	3B	0011 1011	123	7B	0111 1011
60	3C	0011 1100	124	7C	0111 1100
61	3D	0011 1101	125	7D	0111 1101
62	3E	0011 1110	126	7E	0111 1110
63	3F	0011 1111	127	7F	0111 1111

- Except the table above, for example 144-159(decimal)/9nH/1001 0000-1001 1111(binary) displays the Note On Message for each channel (1-16).
  176-191/BnH/1011 0000-1011 1111 displays the Control Change Message for each channel (1-16).
  192-207/CnH/1100 0000-1100 1111 displays the Program Change Message for each channel (1-16).
  240/FOH/1111 0000 denotes the start of a System Exclusive Message.
  247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexidecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- aaH (hexidecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- ccH/0ccccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

(1) TRANSMIT FLOW

MIDI OUT

NOTE ON/OFF	9nH
CONTROL CHANGE	BnH
BANK SELECT MSB	BnH,00H
BANK SELECT LSB	BnH,20H
DATA ENTRY MSB	BnH,06H
DATA ENTRY LSB	BnH,26H
MUDULATION	BnH,01H (PSR-740 ONLY)
MAIN VOLUME	BnH,07H
PANPOT	BnH,0AH
EXPRESSION	BnH,0BH
SUSTAIN	BnH,40H
SOSTENUTE	BnH,42H
SOFT PEDAL	BnH,43H
HARMONIC CONTENT	BnH,47H (PSR-740 ONLY)
RELEASE TIME	BnH,48H
BRIGHTNESS	BnH,4AH (PSR-740 ONLY)
REVERB SEND LEVEL	BnH,5BH
CHORUS SEND LEVEL	BnH,5DH
VARIATION SEND LEVEL	BnH,5EH
NRPN LSB	BnH,62H (PSR-740 ONLY)
NRPN MSB	BnH,63H (PSR-740 ONLY)
VIBRATO RATE	BnH,63H,01H,62H,08H,06H,mmH
VIBRATO RATE DEPTH	BnH,63H,01H,62H,09H,06H,mmH
RPN LSB	BnH,64H
RPN MSB	BnH,65H
PITCH BEND SENS.	BnH,65H,00H,64H,00H,06H,mmH
PROGRAM CHANGE	CnH
PITCH BEND CHANGE	EnH
SYSTEM EXCLUSIVE MESSAGE	
<YAMAHA MIDI FORMAT>	
<UNIVERSAL>	
UNIVERSAL NON-REALTIME <XG STANDARD>	F0H 7EH.....F7H
XG PARAMETER CHANGE	F0H 43H 1nH 4CH aaH aaH aaH ddH.....ddH F7H
XG BULK DUMP	F0H 43H 0nH 4CH bbH bbH aaH aaH aaH ddH.....ddH ccH F7H
SPECIAL OPERATORS	
SYSTEM REALTIME MESSAGE	
MIDI CLOCK	F8H
START	FAH
STOP	FCH
ACTIVE SENSING	FEH

(2) RECEIVE FLOW

MIDI IN

NOTE OFF	8nH
NOTE ON/OFF	9nH
CONTROL CHANGE	
BANK SELECT MSB	BnH,00H
BANK SELECT LSB	BnH,20H
MODULATION	BnH,01H
PORTAMENTO TIME	BnH,05H
DATA ENTRY MSB	BnH,06H
DATA ENTRY LSB	BnH,26H
MAIN VOLUME	BnH,07H
PANPOT	BnH,0AH
EXPRESSION	BnH,0BH
SUSTAIN	BnH,40H
PORTAMENTO	BnH,41H
SOSTENUTO	BnH,42H
SOFT PEDAL	BnH,43H
HARMONIC CONTENT	BnH,47H
RELEASE TIME	BnH,48H
ATTACK TIME	BnH,49H
BRIGHTNESS	BnH,4AH
PORTAMENTO CONTROL	BnH,54H
REVERB SEND LEVEL	BnH,5BH
CHORUS SEND LEVEL	BnH,5DH
VARIATION SEND LEVEL	BnH,5EH
DATA INCREMENT	BnH,60H
DATA DECREMENT	BnH,61H
NRPN LSB	BnH,62H
NRPN MSB	BnH,63H
VIBRATO RATE	BnH,63H,01H,62H,08H,06H,mmH
VIBRATO DEPTH	BnH,63H,01H,62H,09H,06H,mmH
VIBRATO DELAY	BnH,63H,01H,62H,0AH,06H,mmH
FILTER CUTOFF FREQ.	BnH,63H,01H,62H,20H,06H,mmH
FILTER RESONANCE	BnH,63H,01H,62H,21H,06H,mmH
EQ BASS	BnH,63H,01H,62H,30H,06H,mmH (PSR-740 ONLY)
EQ TREBLE	BnH,63H,01H,62H,31H,06H,mmH (PSR-740 ONLY)
EQ BASS FREQ	BnH,63H,01H,62H,34H,06H,mmH (PSR-740 ONLY)
EQ TREBLE FREQ	BnH,63H,01H,62H,35H,06H,mmH (PSR-740 ONLY)
AEG ATTACK TIME	BnH,63H,01H,62H,63H,06H,mmH
AEG DECAY TIME	BnH,63H,01H,62H,64H,06H,mmH
AEG RELEASE	BnH,63H,01H,62H,66H,06H,mmH
DRUM INST	
CUTOFF FREQ.	BnH,63H,14H,62H,rrH,06H,mmH
FILTER RESONANCE	BnH,63H,15H,62H,rrH,06H,mmH
AEG ATTACK RATE	BnH,63H,16H,62H,rrH,06H,mmH
AEG DECAY RATE	BnH,63H,17H,62H,rrH,06H,mmH
PITCH COARSE	BnH,63H,18H,62H,rrH,06H,mmH
PITCH FINE	BnH,63H,19H,62H,rrH,06H,mmH
LEVEL	BnH,63H,1AH,62H,rrH,06H,mmH
PANPOT	BnH,63H,1CH,62H,rrH,06H,mmH
REVERB SEND	BnH,63H,1DH,62H,rrH,06H,mmH
CHORUS SEND	BnH,63H,1EH,62H,rrH,06H,mmH
VARIATION SEND	BnH,63H,1FH,62H,rrH,06H,mmH

- VOCAL HARMONY
  - HARMONY MUTE — BnH,63H,00H,62H,01H,06H,mmH (PSR-740 ONLY)
  - DETUNE MODULATION — BnH,63H,01H,62H,1AH,06H,mmH (PSR-740 ONLY)
  - HARMONY1 VOLUME — BnH,63H,02H,62H,10H,06H,mmH (PSR-740 ONLY)
  - HARMONY2 VOLUME — BnH,63H,02H,62H,11H,06H,mmH (PSR-740 ONLY)
  - HARMONY1 PAN — BnH,63H,02H,62H,20H,06H,mmH (PSR-740 ONLY)
  - HARMONY2 PAN — BnH,63H,02H,62H,21H,06H,mmH (PSR-740 ONLY)
  - HARMONY1 DETUNE — BnH,63H,02H,62H,30H,06H,mmH (PSR-740 ONLY)
  - HARMONY2 DETUNE — BnH,63H,02H,62H,31H,06H,mmH (PSR-740 ONLY)
- RPN LSB — BnH,64H
- RPN MSB — BnH,65H
  - PITCH BEND SENS. — BnH,65H,00H,64H,00H,06H,mmH
  - FINE TUNING — BnH,65H,00H,64H,01H,06H,mmH, 26H,llH
  - COARSE TUNING — BnH,65H,00H,64H,02H,06H,mmH
  - NULL — BnH,65H,7FH,64H,7FH
- ALL SOUND OFF — BnH,78H,00H
- RESET ALL CONTROLLERS — BnH,79H,00H
- ALL NOTES OFF — BnH,7BH,00H
- OMNI OFF — BnH,7CH,00H
- OMNI ON — BnH,7DH,00H
- MONO — BnH,7EH
- POLY — BnH,7FH

- PROGRAM CHANGE — CnH
- CHANNEL AFTER TOUCH — DnH
- PITCH BEND CHANGE — EnH

- SYSTEM EXCLUSIVE MESSAGE
  - <YAMAHA MIDI FORMAT>
  - <UNIVERSAL>
- UNIVERSAL REALTIME — F0H 7FH.....F7H
- UNIVERSAL NON-REALTIME — F0H 7EH.....F7H
  - <XG STANDARD>
- XG PARAMETER CHANGE — F0H 43H 1nH 4CH aaH aaH aaH ddH .....ddH F7H
- XG BULK DUMP — F0H 43H 0nH 4CH bbH bbH aaH aaH aaH ddH.....ddH ccH F7H
- PARAMETER REQUEST — F0H 43H 3nH 4CH aaH aaH aaH F7H
- DUMP REQUEST — F0H 43H 2nH 4CH aaH aaH aaH F7H
- SPECIAL OPERATORS
- Others

- SYSTEM REALTIME MESSAGE
  - MIDI CLOCK — F8H
  - START — FAH
  - STOP — FCH
  - ACTIVE SENSING — FEH

(3) TRANSMIT/RECEIVE DATA

(3-1) CHANNEL VOICE MESSAGES

(3-1-1) NOTE OFF (Receive only)

STATUS	1000nnnn(8nH)	n = 0 - 15 VOICE CHANNEL NUMBER
NOTE NUMBER	0kkkkkkk	k = 0 (C-2) - 127 (G8)
VELOCITY	0vvvvvvv	v: ignored

(3-1-2) NOTE ON/OFF

STATUS	1001nnnn(9nH)	n = 0 - 15 VOICE CHANNEL NUMBER
NOTE NUMBER	0kkkkkkk	k = 0 (C-2) - 127 (G8)
VELOCITY	0vvvvvvv	(v≠0) NOTE ON
	00000000	(v=0) NOTE OFF

(3-1-3) PROGRAM CHANGE

STATUS	1100nnnn(CnH)	n = 0 - 15 VOICE CHANNEL NUMBER
PROGRAM NUMBER	0ppppppp	p = 0 - 127

*** PROGRAM NUMBER: XG DRUM VOICE number correspondence**

P = 0	Standard Kit
P = 1	Standard2 Kit
P = 4	Hit Kit
P = 8	Room Kit
P = 16	Rock Kit
P = 24	Elctrnic Kit
P = 25	Analog Kit
P = 27	Dance Kit
P = 32	Jazz Kit
P = 40	Brush Kit
P = 48	Symphony Kit

*** PROGRAM NUMBER: XG SFX KIT number correspondence**

P = 0	SFX1 Kit
P = 1	SFX2 Kit

When DRUM VOICE is selected and program change data for a different DRUM VOICE is received, the currently selected DRUM VOICE will be replaced with the new DRUM VOICE.

(3-1-4) CHANNEL AFTER TOUCH (Receive only)

STATUS	1101nnnn(DnH)	n = 0 - 15 VOICE CHANNEL NUMBER
VALUE	0vvvvvvv	v = 0 - 127 AFTER TOUCH VALUE

(3-1-5) PITCH BEND CHANGE

STATUS	1110nnnn(EnH)	n = 0 - 15 VOICE CHANNEL NUMBER
LSB	0vvvvvvv	PITCH BEND CHANGE LSB
MSB	0vvvvvvv	PITCH BEND CHANGE MSB

(3-1-6) CONTROL CHANGE

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
CONTROL NUMBER	0ccccccc	
CONTROL VALUE	0vvvvvvv	

*** Transmit CONTROL NUMBER.**

c = 0	BANK SELECT MSB	; v = 0:XG NORMAL, 64:SFX NORMAL, 126:XG SFX KIT, 127:XG DRUM	
c = 32	BANK SELECT LSB	; v = 0 - 127	
c = 1	MODULATION	; v = 0 - 127	*2 (PSR-740 ONLY)
c = 6	DATA ENTRY MSB	; v = 0 - 127	*1
c = 38	DATA ENTRY LSB	; v = 0 - 127	*1
c = 7	MAIN VOLUME	; v = 0 - 127	
c = 10	PANPOT	; v = 0 - 127	
c = 11	EXPRESSION	; v = 0 - 127	
c = 64	SUSTAIN	; v = 0-63:OFF , 64-127:ON	*2
c = 66	SOSTENUTO	; v = 0-63:OFF , 64-127:ON	*2
c = 67	SOFT PEDAL	; v = 0-63:OFF , 64-127:ON	*2
c = 71	HARMONIC CONTENT	; v = 0:-64 - 64:0 - 127:+63	*2 (PSR-740 ONLY)
c = 72	RELEASE TIME	; v = 0:-64 - 64:0 - 127:+63	
c = 74	BRIGHTNESS	; v = 0:-64 - 64:0 - 127:+63	*2 (PSR-740 ONLY)
c = 91	REVERB SEND LEVEL	; v = 0 - 127	
c = 93	CHORUS SEND LEVEL	; v = 0 - 127	
c = 94	VARIATION SEND LEVEL	; v = 0 - 127 (When only Connection = 1[System])	
c = 98	NRPN LSB	Refer to “(3-4)NON-REGISTERED PARAMETER NUMBER”	
c = 99	NRPN MSB	Refer to “(3-4)NON-REGISTERED PARAMETER NUMBER”	
c = 100	RPN LSB	Refer to “(3-3)REGISTERED PARAMETER NUMBER”	
c = 101	RPN MSB	Refer to “(3-3)REGISTERED PARAMETER NUMBER”	

*** Receive CONTROL NUMBER.**

c = 0	BANK SELECT MSB	; v = 0:XG NORMAL, 64:SFX NORMAL, 126:XG SFX KIT, 127:XG DRUM	
c = 32	BANK SELECT LSB	; v = 0 - 127	
c = 1	MODULATION	; v = 0 - 127	*2
c = 5	PORTAMENTO TIME	; v = 0 - 127	*2
c = 6	DATA ENTRY MSB	; v = 0 - 127	*1
c = 38	DATA ENTRY LSB	; v = 0 - 127	*1
c = 7	MAIN VOLUME	; v = 0 - 127	
c = 10	PANPOT	; v = 0 - 127	
c = 11	EXPRESSION	; v = 0 - 127	
c = 64	SUSTAIN	; v = 0-63:OFF , 64-127:ON	*2
c = 65	PORTAMENTO	; v = 0-63:OFF , 64-127:ON	*2
c = 66	SOSTENUTO	; v = 0-63:OFF , 64-127:ON	*2
c = 67	SOFT PEDAL	; v = 0-63:OFF , 64-127:ON	*2
c = 71	HARMONIC CONTENT	; v = 0:-64 - 64:0 - 127:+63	*2
c = 72	RELEASE TIME	; v = 0:-64 - 64:0 - 127:+63	*2
c = 73	ATTACK TIME	; v = 0:-64 - 64:0 - 127:+63	*2
c = 74	BRIGHTNESS	; v = 0:-64 - 64:0 - 127:+63	*2
c = 84	PORTAMENT CONTROL	; v = 0 - 127	*2
c = 91	REVERB SEND LEVEL	; v = 0 - 127	
c = 93	CHORUS SEND LEVEL	; v = 0 - 127	
c = 94	VARIATION SEND LEVEL	; v = 0 - 127 (When only Connection=1[System])	
c = 96	DATA INCREMENT	; v = 0 - 127	*1
c = 97	DATA DECREMENT	; v = 0 - 127	*1
c = 98	NRPN LSB	Refer to “(3-4)NON-REGISTERED PARAMETER NUMBER”	
c = 99	NRPN MSB	Refer to “(3-4)NON-REGISTERED PARAMETER NUMBER”	
c = 100	RPN LSB	Refer to “(3-3)REGISTERED PARAMETER NUMBER”	
c = 101	RPN MSB	Refer to “(3-3)REGISTERED PARAMETER NUMBER”	

*1 Only when setting the appointed parameter with RPN, NRPN.
*2 Does not effect Rhythm Voice.

- Until a PROGRAM CHANGE message is received, the BANK SELECT operation will be suspended.
  When a Voice, including VOICE BANK, is changed, set the BANK SELECT and Program Change Message, and transmit in the following order, BANK SELECT MSB, LSB, PROGRAM CHANGE.
- MODULATION controls the Vibrato Depth.
- PORTAMENTO TIME controls the Pitch Change Speed when the Portamento Switch = ON. 0 being the shortest time, and 127 being the longest.
- PANPOT changes the value for the melody voice and rhythm voice in relation to the preset value.
- Portamento time is fixed to 0 when the PORTAMENTO CONTROL is used.
- HARMONIC CONTENT applies adjustment to the resonance value that is set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment. As values get higher the sound becomes increasingly eccentric. Note that for some voices the effective parameter range is narrower than the legal parameter range.
- RELEASE TIME applies adjustment to the envelope release time set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment.
- ATTACK TIME applies adjustment to the envelope attack time set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment.
- BRIGHTNESS applies adjustment to the cut-off frequency set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment. Lower voices produce a softer sound. For some voices the effective parameter range is narrower than the legal parameter range.

(3-2) CHANNEL MODE MESSAGES

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
CONTROL NUMBER	0ccccccc	c = CONTROL NUMBER
CONTROL VALUE	0vvvvvvv	v = DATA VALUE

(3-2-1) ALL SOUND OFF (Receive only) (CONTROL NUMBER = 78H , DATA VALUE = 0)
Switches off all sound from the channel.
Does not reset Note On and Hold On conditions established by Channel Messages.

(3-2-2) RESET ALL CONTROLLERS (Receive only)
(CONTROL NUMBER = 79H , DATA VALUE = 0)

Resets controllers as follows.

PITCH BEND CHANGE	0 (Center)
AFTER TOUCH	0 (min.)
MODULATION	0 (min.)
EXPRESSION	127 (max.)
SUSTAIN	0 (off)
SOSTENUTO	0 (off)
SOFT PEDAL	0 (off)
NRPN	Sets number to null. (Internal data remains unchanged)
RPN	Sets number to null. (Internal data remains unchanged)
PORTAMENT CONTROL	Resets portamento source note number
PORTAMENTO	0 (off)

(3-2-3) ALL NOTES OFF (Receive only)
(CONTROL NUMBER = 7BH , DATA VALUE = 0)

Switches off all of the channel's "on" notes.
However, any notes being held by SUSTAIN or SOSTENUTO continue to sound until SUSTAIN/SOSTENUTO goes off.

(3-2-4) OMNI OFF (Receive only) (CONTROL NUMBER = 7CH , DATA VALUE = 0)
Same processing as for All Notes Off.

(3-2-5) OMNI ON (Receive only) (CONTROL NUMBER = 7DH , DATA VALUE = 0)
Same processing as for All Notes Off. Omni On is not executed.

(3-2-6) MONO (Receive only) (CONTROL NUMBER = 7EH , DATA VALUE = 0)
Same processing as for All Notes Off.
If the 3rd byte is in a range of 0-16 the corresponding channel will be changed to Mode 4 (m=1).

(3-2-7) POLY (Receive only) (CONTROL NUMBER = 7FH , DATA VALUE = 0)
Same processing as for All Sounds Off and the corresponding channel will be changed to Mode 3.

(3-3) REGISTERED PARAMETER NUMBER (RPN)

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
RPN LSB	01100100(64H)	
RPN LSB NUMBER	0ppppppp	p = RPN LSB(refer to the list below)
RPN MSB	01100101(65H)	
RPN MSB	0qqqqqqq	q = RPN MSB(refer to the list below)
DATA ENTRY MSB	00000110(06H)	
DATA VALUE	0mmmmmmm	m = Data Value
DATA ENTRY LSB	00100110(26H)	
DATA VALUE	0lllllll	l = Data Value

First appoints the parameter for RPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

RPN MSB	RPN LSB	D.ENTRY MSB	D.ENTRY LSB	PARAMETER NAME	DATA RANGE
00H	00H	mmH	—	PITCH BEND SENSITIVITY	00H - 18H(0 - 24 semitones)
01H	00H	mmH	llH	FINE TUNE	{mmH,llH} = {00H,00H}-{40H,00H}-{7FH,7FH} (-8192*100/8192) - 0 - (+8192*100/8192)
02H	00H	mmH	—	COARSE TUNE	28H - 40H - 58H (-24 - 0 - +24 semitones)
7FH	7FH	—	—	NULL	Clears the current RPN number setting. Does not change the internal parameter settings.

(3-4) NON-REGISTERED PARAMETER NUMBER (NRPN) (PSR-640 Receive only)

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
NRPN LSB	01100010(62H)	
NRPN LSB NUMBER	0ppppppp	p = NRPN LSB(refer to the list below)
NRPN MSB	01100011(63H)	
NRPN MSB NUMBER	0qqqqqqq	q = NRPN MSB(refer to the list below)
DATA ENTRY MSB	00000110(06H)	
DATA VALUE	0mmmmmmm	m = Data Value

First appoints the parameter for NRPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

NRPN MSB	NRPN LSB	D.ENTRY MSB	D.ENTRY LSB	PARAMETER NAME	DATA RANGE
01H	08H	mmH	—	VIBRATO RATE	00H - 40H - 7FH (-64 - 0 - +63)
01H	09H	mmH	—	VIBRATO DEPTH	00H - 40H - 7FH (-64 - 0 - +63)
01H	0AH	mmH	—	VIBRATO DELAY	00H - 40H - 7FH (-64 - 0 - +63)
01H	20H	mmH	—	FILTER CUTOFF FREQUENCY	00H - 40H - 7FH (-64 - 0 - +63)
01H	21H	mmH	—	FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 - +63)
01H	30H	mmH	—	EQ BASS	00H - 40H - 7FH (-64 - 0 - +63) (PSR-740 ONLY)
01H	31H	mmH	—	EQ TREBLE	00H - 40H - 7FH (-64 - 0 - +63) (PSR-740 ONLY)
01H	34H	mmH	—	EQ BASS FREQUENCY	00H - 40H - 7FH (-64 - 0 - +63) (PSR-740 ONLY)
01H	35H	mmH	—	EQ TREBLE FREQUENCY	00H - 40H - 7FH (-64 - 0 - +63) (PSR-740 ONLY)
01H	63H	mmH	—	EG ATTACK TIME	00H - 40H - 7FH (-64 - 0 - +63)
01H	64H	mmH	—	EG DECAY TIME	00H - 40H - 7FH (-64 - 0 - +63)
01H	66H	mmH	—	EG RELEASE	00H - 40H - 7FH (-64 - 0 - +63)
14H	rrH	mmH	—	DRUM FILTER CUTOFF FREQ.	00H - 40H - 7FH (-64 - 0 - +63)
15H	rrH	mmH	—	DRUM FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 - +63)
16H	rrH	mmH	—	DRUM AEG ATTACK RATE	00H - 40H - 7FH (-64 - 0 - +63)
17H	rrH	mmH	—	DRUM AEG DECAY RATE	00H - 40H - 7FH (-64 - 0 - +63)
18H	rrH	mmH	—	DRUM PITCH COARSE	00H - 40H - 7FH (-64 - 0 - +63)
19H	rrH	mmH	—	DRUM PITCH FINE	00H - 40H - 7FH (-64 - 0 - +63)
1AH	rrH	mmH	—	DRUM LEVEL	00H - 7FH (0 - max.)
1CH	rrH	mmH	—	DRUM PANPOT	00H,01H - 40H - 7FH (random,left - center - right)
1DH	rrH	mmH	—	DRUM REVERB SEND LEVEL	00H - 7FH (0 - max.)
1EH	rrH	mmH	—	DRUM CHORUS SEND LEVEL	00H - 7FH (0 - max.)
1FH	rrH	mmH	—	DRUM VARIATION SEND LEVEL	00H - 7FH (0 - max.)
00H	01H	mmH	—	HARMONY MUTE	(PSR-740 ONLY)
01H	1AH	mmH	—	DETUNE MODULATION	(PSR-740 ONLY)
02H	10H	mmH	—	HARMONY1 VOLUME	(PSR-740 ONLY)
02H	11H	mmH	—	HARMONY2 VOLUME	(PSR-740 ONLY)
02H	20H	mmH	—	HARMONY1 PAN	(PSR-740 ONLY)
02H	21H	mmH	—	HARMONY2 PAN	(PSR-740 ONLY)
02H	30H	mmH	—	HARMONY1 DETUNE	(PSR-740 ONLY)
02H	31H	mmH	—	HARMONY2 DETUNE	(PSR-740 ONLY)

The MSG14H-1FH (for drums) message is accepted as long as the channel is set with a drum voice.
rrH : drum instrument note number

(3-5) SYSTEM REALTIME MESSAGES

(3-5-1) MIDI CLOCK
STATUS 11111000 (F8H)
Transmission: 96 clocks per measure are transmitted.
Reception: If the instrument's clock is set to external, after FAH is received from the external device the instrument's clock will sync with the 96 beats per measure received from the external device.

Decides whether the internal clock, or Timing Clocks received via the MIDI IN will be used.

(3-5-2) START
STATUS 11111010 (FAH)
Transmission: Transmitted when instrument's Rhythm or Song playback is started.
Reception: Depending upon the condition, Rhythm, Song Playback, or Song Rec will start.

(3-5-3) STOP
STATUS 11111100 (FCH)
Transmission: Transmitted when instrument's Rhythm or Song playback is stopped.
Reception: Depending upon the condition, Rhythm, Song Playback, or Song Rec will stop.

(3-5-4) ACTIVE SENSING
STATUS 11111110 (FEH)
Transmission: Transmitted approximately once every 200msec.
Reception: Depending upon the condition, Rhythm, Song Playback, or Song Rec will stop.

(3-6) SYSTEM EXCLUSIVE MESSAGE

(3-6-1) YAMAHA MIDI FORMAT

(3-6-1-1) SECTION CONTROL

(PSR-640)

binary	hexadecimal		
11110000	F0	Exclusive status	
01000011	43	YAMAHA ID	
01111110	7E	Style	
00000000	00		
0ssssss	SS	Switch No.	
		00H	: INTRO A
		01H	: INTRO B
		02H	: INTRO C
		03H - 07H	: INTRO D
		08H	: MAIN A
		09H	: MAIN B
		0AH	: MAIN C
		0BH - 0FH	: MAIN D
		10H	: FILL IN A
		11H	: FILL IN B
		12H	: FILL IN C
		13H - 17H	: FILL IN D
		18H	: BREAK FILL IN A
		19H	: BREAK FILL IN B
		1AH	: BREAK FILL IN C
		1BH - 1FH	: BREAK FILL IN D
		20H	: ENDING A
		21H	: ENDING B
		22H	: ENDING C
		23H - 27H	: ENDING D
0ddddddd	DD	Switch On/Off: 00H(Off),7FH(On)	
11110111	F7	End of Exclusive	

(PSR-740)

binary	hexadecimal		
11110000	F0	Exclusive status	
01000011	43	YAMAHA ID	
01111110	7E	Style	
00000000	00		
0ssssss	SS	Switch No.	
		00H	: INTRO A
		01H	: INTRO B
		02H	: INTRO C
		03H	: INTRO D
		04H	: COUNT INTRO A
		05H	: COUNT INTRO B
		06H	: COUNT INTRO C
		07H	: COUNT INTRO D
		08H	: MAIN A
		09H	: MAIN B
		0AH	: MAIN C
		0BH - 0FH	: MAIN D
		10H	: FILL IN A
		11H	: FILL IN B
		12H	: FILL IN C
		13H - 17H	: FILL IN D
		18H	: BREAK FILL IN A
		19H	: BREAK FILL IN B
		1AH	: BREAK FILL IN C
		1BH - 1FH	: BREAK FILL IN D
		20H	: ENDING A
		21H	: ENDING B
		22H	: ENDING C
		23H	: ENDING D
		24H	: SIMPLE ENDING A
		25H	: SIMPLE ENDING B
		26H	: SIMPLE ENDING C
		27H	: SIMPLE ENDING D
0ddddddd	DD	Switch On/Off: 00H(Off),7FH(On)	
11110111	F7	End of Exclusive	

When an ON code is received, the appointed section will be changed.

(3-6-1-2) TEMPO CONTROL

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01111110	7E	Style
00000000	01	
0ttttttt	TT	Tempo4
0ttttttt	TT	Tempo3
0ttttttt	TT	Tempo2
0ttttttt	TT	Tempo1
11110111	F7	End of Exclusive

The internal clock will be set to the received Tempo value.
Tempo Meta Event is a large data block (24-bit),it is divided into 4 groups with 7-bits going into each of the Tempos 1-4 (4 receives the remaining 3 bits).

(3-6-2) UNIVERSAL SYSTEM EXCLUSIVE

(3-6-2-1) UNIVERSAL REALTIME MESSAGE

(3-6-2-1-1) MIDI MASTER VOLUME (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01111111	7F	Universal Realtime
01111111	7F	ID of target Device
00000100	04	Sub-ID #1=Device Control Message
00000001	01	Sub-ID #2=Master Volume
0sssssss	SS	Volume LSB
0ttttttt	TT	Volume MSB
11110111	F7	End of Exclusive
or		
11110000	F0	Exclusive status
01111111	7F	Universal Realtime
0xxxnnnn	XN	When N is received N=0-F, whichever is received. When N is transmitted N always=0. X = don't care
00000100	04	Sub-ID #1=Device Control Message
00000001	01	Sub-ID #2=Master Volume
0sssssss	SS	Volume LSB
0ttttttt	TT	Volume MSB
11110111	F7	End of Exclusive

The volume for all channels will be changed simultaneously.
The TT value is used as the MIDI Master Volume value. (the ss value is ignored.)

(3-6-2-2) UNIVERSAL NON REALTIME MESSAGE

(3-6-2-2-1) GENERAL MIDI SYSTEM ON

binary	hexadecimal	
11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
01111111	7F	ID of target Device
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive
or		
11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
0xxxnnnn	XN	When N is received N=0-F, whichever is received. When N is transmitted N always=0. X = don't care
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive

Depending upon the received ON message, the System Mode will be changed to XG.
Except MIDI Master Tuning, all control data be reset to default values.
This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.
The bank select message for the channel 10 and the NRPN message are not received in the GM mode.

(3-6-3) XG STANDARD

(3-6-3-1) XG PARAMETER CHANGE

(3-6-3-1-1) XG SYSTEM ON

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	Model ID
00000000	00	Address High
00000000	00	Address Mid
01111110	7E	Address Low
00000000	00	Data
11110111	F7	End of Exclusive

Depending upon the received ON message, the SYSTEM MODE will be changed to XG.Controllers will be reset, all values of Multi Part and Effect, and All System values denoted by "XG" data within All System will be reset to default values in the table.
This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

(3-6-3-1-2) XG PARMETER CHANGE

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

For parameters with data size of 2 or 4, transmit the appropriate number of data bytes.
For more information on Address and Parameters, refer to < Table 1-2 > - < Table 1-8 >.

The data types listed below are transmitted and received.
System Data
Multi Effect1 Data
Multi EQ Data (PSR-740 ONLY)
Multi Effect2 Data (PSR-740 ONLY)
Special Effect Data (PSR-740 ONLY)
Multi Part Data
A/D Part Data (PSR-740 ONLY)
Drums Setup Data

(3-6-3-2) XG BULK DUMP

binary	hexadecimal	
01110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0N	Device Number
01001100	4C	Model ID
0bbbbbbb	BB	ByteCount MSB
0bbbbbbb	BB	ByteCount LSB
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
0ddddddd	DD	Data
|	|	
0ccccccc	CC	Check sum
11110111	F7	End of Exclusive

For more information on Address and Byte Count, refer to < Table 1-2 > - < Table 1-8 >.
The Check Sum value is set such that the sum of Byte Count, Address, Data, and Check Sum has value zero in its seven least significant bits.
If the top of the block is appointed to the Address the XG Bulk Dump, Bulk Request will be received.
The Block is a unit that consists of the data, arranged in the list, as the Total Size.

The data types listed below are transmitted and received.(These are transmitted only after a Bulk Dump request is received.)
System Data
System Information (Transmit ONLY)
Multi Effect1 Data
Multi EQ Data (PSR-740 ONLY)
Multi Effect2 Data (PSR-740 ONLY)
Special Effect Data (PSR-740 ONLY)
Multi Part Data
A/D Part Data (PSR-740 ONLY)
Drums Setup Data

(3-6-3-3) XG PARAMETER REQUEST (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0011nnnn	3n	Device Number
01001100	4C	Model ID
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > - < Table1-8 >.

The data types listed below are received.
System Data
Multi Effect1 Data
Multi EQ Data (PSR-740 ONLY)
Multi Effect2 Data (PSR-740 ONLY)
Special Effect Data (PSR-740 ONLY)
Multi Part Data
A/D Part Data (PSR-740 ONLY)
Drums Setup Data

(3-6-3-4) XG DUMP REQUEST (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0010nnnn	2n	Device Number
01001100	4C	Model ID
00aaaaaa	AA	Address High
00aaaaaa	AA	Address Mid
00aaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > - < Table1-8 >.

The data types listed below are received.
System Data
System Information
Multi Effect1 Data
Multi EQ Data (PSR-740 ONLY)
Multi Effect2 Data (PSR-740 ONLY)
Special Effect Data (PSR-740 ONLY)
Multi Part Data
A/D Part Data (PSR-740 ONLY)
Drums Setup Data

(3-6-4) CLAVINOVA MIDI COMPLIANCE

(3-6-4-1) DOC MULTI TIMBRE ON / OFF (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova commmon ID
00010nnn	1N	N: 3(DOC Multi Timbre Off), 4(DOC Multi Timbre On)
11110111	F7	End of Exclusive

(3-6-4-2) MIDI FA CANCEL(Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
01100001	61	MIDI FA Cancel
11110111	F7	End of Exclusive

If this message is received, even if FAH is received the accompaniment/song will not start.

(3-6-4-3) BULK DATA ORGAN FLUTE DATA (PSR-740 ONLY)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00000110	06	Bulk ID
00001011	0B	Bulk No.(0BH : ORGAN FLUTE DATA)
00000000	00	Data Length
00000000	00	Data Length
00000001	01	Data Length
00000110	06	Data Length
0ddddddd	d1	Bulk Data 1st
	:	
0ddddddd	d22	Bulk Data 22th
00cccccc	cc	don't care
11110111	F7	End of Exclusive

[BULK DATA]

1st	0nH	n: channel No.		Discription
2nd	Drawber	[1']	00 - 07H	0 : -∞ [dB]
3rd		[1 1/3']	00 - 07H	1 : -12 [dB]
4th		[aux. 1]	00H	2 : -9 [dB]
5th		[2']	00 - 07H	3 : -6 [dB]
6th		[2 2/3']	00 - 07H	4 : -4.5 [dB]
7th		[4']	00 - 07H	5 : -3 [dB]
8th		[5 1/3']	00 - 07H	6 : -1.5 [dB]
9th		[8']	00 - 07H	7 : 0 [dB]
10th		[16']	00 - 07H	
11th		[Attack 2']	00 - 07H	
12th		[Attack 2 2/3']	00 - 07H	
13th		[Attack 4']	00 - 07H	
14th	Settings	[Attack Length]	00 - 07H	
15th		[Response]	00 - 07H	
16th		[Attack Mode]	00 - 01H	00H : Each, 01 : First
17th		[Wave Variation]	00 - 01H	00H: Sine, 01H: Tone Wheel
18th		[Volume]	00 - 08H	
19th		[aux. 4]	00H	
20th		[aux. 5]	00H	
21th		[aux. 6]	00H	
22th		[aux. 7]	00H	

(3-6-5) SPECIAL OPERATORS

(3-6-5-1) VOLUME ,EXPRESSION AND PAN REALTIME CONTROL OFF

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel
01000101	45	Volume and Expression Realtime Control Off
0vvvvvvv	VV	Value VV: Off=7FH, on=OOH
11110111	F7	End of Exclusive

When "On" is received, subsequent volume, expression, and PAN changes are only valid after the reception of the next key on.
Normal operation resumes when "Off" is received.

(3-6-5-2) Vocal Harmony Pitch to Note (PSR-740 ONLY)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00000000	00	Pitch to Note Parameter No.
0sssssss	SS	Pitch To Note switch 00H : Off 01H : On
11110111	F7	End of Exclusive

(3-6-5-3) Vocal Harmony Pitch to Note Part (PSR-740 ONLY)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00000001	01	Pitch to Note Part Parameter No.
0sssssss	SS	Pitch To Note Part No. 00H : Right1 01H : Right2 02H : Left 04H : Upper
11110111	F7	End of Exclusive

(3-6-5-4) Vocal Harmony Vocoder Part (Harmony Part(Panel)) (PSR-740 ONLY)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00010000	10	Vocoder Part Parameter No.
0sssssss	SS	Harmony Part No. 00H : Off 01H : Upper 02H : Lower
11110111	F7	End of Exclusive

(3-6-5-5) Voval Harmony Additional Reverb Depth(Receive only) (PSR-740 ONLY)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00010001	11	Voval Harmony Additional Reverb Depth Parameter No.
0sssssss	SS	Value (0 - 7FH)
11110111	F7	End of Exclusive

(3-6-5-6) Vocal Harmony Additional Chorus Depth(Receive only) (PSR-740 ONLY)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00010010	12	Voval Harmony Additional Chorus Depth Parameter No.
0sssssss	SS	Value (0 - 7FH)
11110111	F7	End of Exclusive

(3-6-6) Others

(3-6-6-1) MIDI MASTER TUNING(Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	When N is received N=0-F, whichever is received. When N is transmitted N always=0.
00100111	27	Model ID
00110000	30	Sub ID
00000000	00	
00000000	00	
0mmmmmmm	MM	Master Tune MSB
0lllllll	LL	Master Tune LSB
0ccccccc	CC	don't care
11110111	F7	End of Exclusive

Changes tuning of all channels.
MM, LL values are used to define the MIDI Master Tuning value.

T = M-128

T : Tuning value (-99cent - +99cent)
M : A single byte value (28-228) consists of bytes 0-3 of MM = MSB,
bytes 0-3 of LL = LSB.

In this setting, GM System ON, XG System ON will not be reset.

< Table 1-1> Parmeter Basic Address

	Parameter Change Address (H)	(M)	(L)	Description
SYSTEM	00	00	00	System
	00	00	7D	Drum Setup Reset
	00	00	7E	XG System On
	00	00	7F	All Parameter Reset
INFORMATION	01	00	00	System Information
EFFECT 1	02	01	00	Effect1(Reverb,Chorus,Variation)
MULTI EQ	02	40	00	Multi EQ(PSR-740 ONLY)
EFFECT 2	03	00	00	Effect2(PSR-740 ONLY)
SPECIAL EFFECT	04	00	00	Special Effect2(PSR-740 ONLY)
MULTI PART	08	00	00	Multi Part 1
		:		:
	08	0F	00	Multi Part 16
A/D PART	10	00	00	A/D Part 1(PSR-740 ONLY)
DRUM	30	0D	00	Drum Setup 1 ——→
	31	0D	00	Drum Setup 2

Address			Parameter
	:		:
3n	0D	0	note number 13
3n	0E	0	note number 14
	:		:
3n	5B	0	note number 91

<Table 1-2> MIDI Parameter Change table (SYSTEM)

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
00	00	00	4	0000	Master Tune	-102.4..+102.3[cent]	00 04 00 00
	01			..07FF		1st bit3-0 → bit15-12	(400)
	02					2nd bit3-0 → bit11-8	(With XG, GM On, it will not reset.)
	03					3rd bit3-0 → bit7-4	
						4th bit3-0 → bit3-0	
	04		1	00..7F	Master Volume	0..127	7F
	05		1		Not Used		
	06		1	28..58	Transpose	-24..+24[semitones]	40
	7D			0n	Drum Setup Reset	n=Drum Setup Number	
	7E			00	XG System On	00=XG Sytem on	
	7F			00	All Parameter Reset	00=on (receive only)	

TOTAL SIZE 7

<Table 1-3> MIDI Parameter table (System information)

Address (H)			Size (H)	Data (H)	Prameter Name	Description
01	00	00	E	20..7F	Model Name	32..127(ASCII)
		:				
		0D				
		0E	1	00		
		0F	1	00		

TOTAL SIZE 10

(Transmitted by Dump Request. Not received. Bulk Dump Only)

<Table 1-4> MIDI Parameter Change table (EFFECT 1)

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
02	01	00	2	00..7F	Reverb Type MSB	Refer to the Ef. Type List	01(=HALL1)
				00..7F	Reverb Type LSB	00 : basic type	00
		02	1	00..7F	Reverb Parameter 1	Refer to the Ef. Parameter List	Depend on Reverb type
		03	1	00..7F	Reverb Parameter 2	Refer to the Ef. Parameter List	Depend on Reverb type
		04	1	00..7F	Reverb Parameter 3	Refer to the Ef. Parameter List	Depend on Reverb type
		05	1	00..7F	Reverb Parameter 4	Refer to the Ef. Parameter List	Depend on Reverb type
		06	1	00..7F	Reverb Parameter 5	Refer to the Ef. Parameter List	Depend on Reverb type
		07	1	00..7F	Reverb Parameter 6	Refer to the Ef. Parameter List	Depend on Reverb type
		08	1	00..7F	Reverb Parameter 7	Refer to the Ef. Parameter List	Depend on Reverb type
		09	1	00..7F	Reverb Parameter 8	Refer to the Ef. Parameter List	Depend on Reverb type
		0A	1	00..7F	Reverb Parameter 9	Refer to the Ef. Parameter List	Depend on Reverb type
		0B	1	00..7F	Reverb Parameter 10	Refer to the Ef. Parameter List	Depend on Reverb type
		0C	1	00..7F	Reverb Return	-∞..0..+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 the Ef. Parameter List	Depend on Reverb type
		11	1	00..7F	Reverb Parameter 12	Refer to the Ef. Parameter List	Depend on Reverb type
		12	1	00..7F	Reverb Parameter 13	Refer to the Ef. Parameter List	Depend on Reverb type
		13	1	00..7F	Reverb Parameter 14	Refer to the Ef. Parameter List	Depend on Reverb type
		14	1	00..7F	Reverb Parameter 15	Refer to the Ef. Parameter List	Depend on Reverb type
		15	1	00..7F	Reverb Parameter 16	Refer to the Ef. Parameter List	Depend on Reverb type

TOTAL SIZE 6

02	01	20	2	00..7F	Chorus Type MSB	Refer to the Ef. Type List	41(=Chorus1)
				00..7F	Chorus Type LSB	00 : basic type	00
		22	1	00..7F	Chorus Parameter 1	Refer to the Ef. Parameter List	Depend on Chorus Type
		23	1	00..7F	Chorus Parameter 2	Refer to the Ef. Parameter List	Depend on Chorus Type
		24	1	00..7F	Chorus Parameter 3	Refer to the Ef. Parameter List	Depend on Chorus Type
		25	1	00..7F	Chorus Parameter 4	Refer to the Ef. Parameter List	Depend on Chorus Type
		26	1	00..7F	Chorus Parameter 5	Refer to the Ef. Parameter List	Depend on Chorus Type
		27	1	00..7F	Chorus Parameter 6	Refer to the Ef. Parameter List	Depend on Chorus Type
		28	1	00..7F	Chorus Parameter 7	Refer to the Ef. Parameter List	Depend on Chorus Type
		29	1	00..7F	Chorus Parameter 8	Refer to the Ef. Parameter List	Depend on Chorus Type
		2A	1	00..7F	Chorus Parameter 9	Refer to the Ef. Parameter List	Depend on Chorus Type
		2B	1	00..7F	Chorus Parameter 10	Refer to the Ef. Parameter List	Depend on Chorus Type
		2C	1	00..7F	Chorus Return	-∞..0..+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	-∞..0..+6dB(0..64..127)	00

TOTAL SIZE 0F

02	01	30	1	00..7F	Chorus Parameter 11	Refer to the Ef. Parameter List	Depend on Chorus Type
		31	1	00..7F	Chorus Parameter 12	Refer to the Ef. Parameter List	Depend on Chorus Type
		32	1	00..7F	Chorus Parameter 13	Refer to the Ef. Parameter List	Depend on Chorus Type
		33	1	00..7F	Chorus Parameter 14	Refer to the Ef. Parameter List	Depend on Chorus Type
		34	1	00..7F	Chorus Parameter 15	Refer to the Ef. Parameter List	Depend on Chorus Type
		35	1	00..7F	Chorus Parameter 16	Refer to the Ef. Parameter List	Depend on Chorus Type

TOTAL SIZE 6

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
02	01	40	2	00..7F	Variation Type MSB	Refer to the Ef. Type List	05(=DELAY L,C,R)
				00..7F	Variation Type LSB	00 : basic type	00
		42	2	00..7F	Vari. Param. 1 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 1 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		44	2	00..7F	Vari. Param. 2 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 2 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		46	2	00..7F	Vari. Param. 3 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 3 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		48	2	00..7F	Vari. Param. 4 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 4 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		4A	2	00..7F	Vari. Param. 5 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 5 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		4C	2	00..7F	Vari. Param. 6 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 6 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		4E	2	00..7F	Vari. Param. 7 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 7 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		50	2	00..7F	Vari. Param. 8 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 8 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		52	2	00..7F	Vari. Param. 9 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 9 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		54	2	00..7F	Vari. Param. 10 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 10 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		56	1	00..7F	Variation Return	-∞..0..+6dB(0..64..127)	40
		57	1	01..7F	Variation Pan	L63..C..R63(1..64..127)	40
		58	1	00..7F	Send Vari. To Reverb	-∞..0..+6dB(0..64..127)	00
		59	1	00..7F	Send Vari. To Chorus	-∞..0..+6dB(0..64..127)	00
		5A	1	00..01	Variation Connection	0:insertion,1:system	00
		5B	1	00..7F	Variation Part	part1..16(0..15),AD1(64),off(16..63,65..127)	7F
		5C	1	00..7F	MW Vari. Ctrl Depth	-64..+63	40
		5D	1	00..7F	PB Vari. Ctrl Depth	-64..+63	40
		5E	1	00..7F	CAT Vari. Ctrl Depth	-64..+63	40
		5F	1	00..7F	Not Used		
		60	1	00..7F	Not Used		
TOTAL SIZE 21							
02	01	70	1	00..7F	Variation Parameter 11	option Parameter	Depend on Variation Type
		71	1	00..7F	Variation Parameter 12	option Parameter	Depend on Variation Type
		72	1	00..7F	Variation Parameter 13	option Parameter	Depend on Variation Type
		73	1	00..7F	Variation Parameter 14	option Parameter	Depend on Variation Type
		74	1	00..7F	Variation Parameter 15	option Parameter	Depend on Variation Type
		75	1	00..7F	Variation Parameter 16	option Parameter	Depend on Variation Type
TOTAL SIZE 6							

< Table 1-5 > MIDI Parameter Change table (MULTI EQ)(PSR-740 ONLY)

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
02	40	00	1	34..4C	EQ Type	0:FLAT 1:JAZZ 2:POPS 3:ROCK 4:CLASSIC	00
		01	1	34..4C	EQ Gain1	-12..+12[dB]	40
		02	1	04..28	EQ Frequency1	32..2000[Hz]	0C
		03	1	01..78	EQ Q1	0.1..12.0	07
		04	1	00..01	EQ Shape1	00:Shelving,01:Peaking	00
		05	1	34..4C	EQ Gain2	-12..+12[dB]	40
		06	1	0E..36	EQ Frequency2	0.1..10[KHz]	1C
		07	1	01..78	EQ Q2	0.1..12.0	07
		08	1		Not Used		
		09	1	34..4C	EQ Gain3	-12..+12[dB]	40
		0A	1	0E..36	EQ Frequency3	0.1..10[KHz]	22
		0B	1	01..78	EQ Q3	0.1..12.0	07
		0C	1		Not Used		
		0D	1	34..4C	EQ Gain4	-12..+12[dB]	40
		0E	1	0E..36	EQ Frequency4	0.1..10[KHz]	2E
		0F	1	01..78	EQ Q4	0.1..12.0	07
		10	1		Not Used		
		11	1	34..4C	EQ Gain5	-12..+12[dB]	40
		12	1	1C..3A	EQ Frequency5	0.5..16.0[KHz]	34
		13	1	01..78	EQ Q5	0.1..12.0	07
		14	1	00..01	EQ Shape5	00:Shelving,01:Peaking	00
TOTAL SIZE 15							

< Table 1-6 > MIDI Parameter change table (Effect2)(PSR-740 ONLY)

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
03	0n	00	2	00..7F	Insertion Type MSB	Refer to the Ef. Type List “49(=DISTORTION)”	
				00..7F	Insertion Type LSB	00 : basic type	00
		02	1	00..7F	Insertion Parameter1	Refer to the Ef. Parameter List	Depend on Insertion Type
		03	1	00..7F	Insertion Parameter2	Refer to the Ef. Parameter List	Depend on Insertion Type
		04	1	00..7F	Insertion Parameter3	Refer to the Ef. Parameter List	Depend on Insertion Type
		05	1	00..7F	Insertion Parameter4	Refer to the Ef. Parameter List	Depend on Insertion Type
		06	1	00..7F	Insertion Parameter5	Refer to the Ef. Parameter List	Depend on Insertion Type
		07	1	00..7F	Insertion Parameter6	Refer to the Ef. Parameter List	Depend on Insertion Type
		08	1	00..7F	Insertion Parameter7	Refer to the Ef. Parameter List	Depend on Insertion Type
		09	1	00..7F	Insertion Parameter8	Refer to the Ef. Parameter List	Depend on Insertion Type
		0A	1	00..7F	Insertion Parameter9	Refer to the Ef. Parameter List	Depend on Insertion Type
		0B	1	00..7F	Insertion Parameter10	Refer to the Ef. Parameter List	Depend on Insertion Type
		0C	1	00..7F	Insertion Part	Part1..16,OFF	7F
		0D	1	00..7F	MW INS CTRL DPT		40
		0E	1	00..7F	BEND INS CTRL DPT		40
		0F	1	00..7F	CAT INS CTRL DPT		40
		10	1	00..7F	Not Used		
		11	1	00..7F	Not Used		
TOTAL SIZE 12							
03	0n	20	1	00..7F	Insertion Parameter11	Refer to the Ef. Parameter List	Depend on Insertion 1 Type
		21	1	00..7F	Insertion Parameter12	Refer to the Ef. Parameter List	Depend on Insertion 1 Type
		22	1	00..7F	Insertion Parameter13	Refer to the Ef. Parameter List	Depend on Insertion 1 Type
		23	1	00..7F	Insertion Parameter14	Refer to the Ef. Parameter List	Depend on Insertion 1 Type
		24	1	00..7F	Insertion Parameter15	Refer to the Ef. Parameter List	Depend on Insertion 1 Type
		25	1	00..7F	Insertion Parameter16	Refer to the Ef. Parameter List	Depend on Insertion 1 Type
TOTAL SIZE 06							

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
03	0n	30	2	00..7F	Ins. Param.1 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.1 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	32	2	00..7F	Ins. Param.2 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.2 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	34	2	00..7F	Ins. Param.3 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.3 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	36	2	00..7F	Ins. Param.4 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.4 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	38	2	00..7F	Ins. Param.5 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.5 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	3A	2	00..7F	Ins. Param.6 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.6 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	3C	2	00..7F	Ins. Param.7 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.7 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	3E	2	00..7F	Ins. Param.8 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.8 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	40	2	00..7F	Ins. Param.9 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.9 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type
03	0n	42	2	00..7F	Ins. Param.10 MSB	Refer to the Ef. Parameter List	Depend on Insertion Type
				00..7F	Ins. Param.10 LSB	Refer to the Ef. Parameter List	Depend on Insertion Type

TOTAL SIZE 14

For effect types that do not require MSB, the Parameters for Address 02-0B will be received. Address 30-42 will not be received.
For effect types that require MSB, the Parameters for Address 30-42 will be received. Address 02-0B will not be received.
When Bulk Dumps that include Effect Type data are transmitted, the Parameters for Address 02 - 0B will always be transmitted.
But, effects that require MSB, when the bulk dump is received the Parameters for Address 02 - 0B will not be received.
n=Insertion Effect No.(0-1)

< Table 1-7 > MIDI Parameter Change table (SPECIAL EFFECT) (PSR-740 ONLY)

Address (H)			Size (H)	Data (H)	Prameter Name	Description (H)	Default Value (H)
04	00	00	2	00..7F	Insertion Effect Type MSB	Refer to the Effect Map	49(=DISTORTION)
				00..7F	Insertion Effect Type LSB	00 : basic type	00
		02	1	00..7F	Insertion Effect Parameter1	Refer to the Ef. Parameter List	depends on insertion 1 type
		03	1	00..7F	Insertion Effect Parameter2	Refer to the Ef. Parameter List	depends on insertion 1 type
		04	1	00..7F	Insertion Effect Parameter3	Refer to the Ef. Parameter List	depends on insertion 1 type
		05	1	00..7F	Insertion Effect Parameter4	Refer to the Ef. Parameter List	depends on insertion 1 type
		06	1	00..7F	Insertion Effect Parameter5	Refer to the Ef. Parameter List	depends on insertion 1 type
		07	1	00..7F	Insertion Effect Parameter6	Refer to the Ef. Parameter List	depends on insertion 1 type
		08	1	00..7F	Insertion Effect Parameter7	Refer to the Ef. Parameter List	depends on insertion 1 type
		09	1	00..7F	Insertion Effect Parameter8	Refer to the Ef. Parameter List	depends on insertion 1 type
		0A	1	00..7F	Insertion Effect Parameter9	Refer to the Ef. Parameter List	depends on insertion 1 type
		0B	1	00..7F	Insertion Effect Parameter10	Refer to the Ef. Parameter List	depends on insertion 1 type
		0C	1	00..7F	Insertion Effect Part	Part1...16(0...15) AD1(64) Off(16...63, 65...127)	7F
		0D	1	00..7F	Not Used		
		0E	1	00..7F	Not Used		
		0F	1	00..7F	Not Used		
		10	1	00..7F	Not Used		
		11	1	00..7F	Not Used		

TOTAL SIZE 12

04	00	14	1	00..7F	Unique Insertion Effect External Control CH1(Harmony Channel)	1...16(0...15) Off(127)	7F
		15	1	00..7F	Unique Insertion Effect External Control CH2(Melody Channel)	1...16(0...15) Off(127)	7F

TOTAL SIZE 2

04	00	20	1	00..7F	Insertion Effect Parameter11	Refer to the Ef. Parameter List	depends on insertion 1 type
		21	1	00..7F	Insertion Effect Parameter12	Refer to the Ef. Parameter List	depends on insertion 1 type
		22	1	00..7F	Insertion Effect Parameter13	Refer to the Ef. Parameter List	depends on insertion 1 type
		23	1	00..7F	Insertion Effect Parameter14	Refer to the Ef. Parameter List	depends on insertion 1 type
		24	1	00..7F	Insertion Effect Parameter15	Refer to the Ef. Parameter List	depends on insertion 1 type
		25	1	00..7F	Insertion Effect Parameter16	Refer to the Ef. Parameter List	depends on insertion 1 type

TOTAL SIZE 6

< Table 1-8 > MIDI Parameter Change table (MULTI PART)

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
08	nn	00	1	00..20	Element Reserve	0..32	0(Part10),2(Others)
	nn	01	1	00..7F	Bank Select MSB	0..127	7F(Part10),00(Others)
	nn	02	1	00..7F	Bank Select LSB	0..127	00
	nn	03	1	00..7F	Program Number	1..128	00
	nn	04	1	00..0F, 7F	Rcv Channel	0..16;1..16,127;off	Part No.
	nn	05	1	00..01	Mono/Poly Mode	0:mono,1:poly	01
	nn	06	1	00..02	Same Note Number Key On Assign	0:single 1:multi 2:inst (for DRUM)	00
	nn	07	1	00..03	Part Mode	0:normal 1..3:drum thru,drum1..2	00 (Except Part10) 02 (Part10)
	nn	08	1	28..58	Note Shift	-24..+24[semitones]	40
	nn	09	2	00..FF	Detune	-12.8..+12.7[Hz]	08 00
	nn	0A				1st bit3..0 → bit7..4 2nd bit3..0 → bit3..0	(80)
	nn	0B	1	00..7F	Volume	0..127	64
	nn	0C	1	00..7F	Velocity Sense Depth	0..127	40
	nn	0D	1	00..7F	Velocity Sense Offset	0..127	40
	nn	0E	1	00..7F	Pan	0:random L63..C..R63(1..64..127)	40
	nn	0F	1	00..7F	Note Limit Low	C-2..G8	00
	nn	10	1	00..7F	Note Limit High	C-2..G8	7F
	nn	11	1	00..7F	Dry Level	0..127	7F
	nn	12	1	00..7F	Chorus Send	0..127	00
	nn	13	1	00..7F	Reverb Send	0..127	28
	nn	14	1	00..7F	Variation Send	0..127	00
	nn	15	1	00..7F	Vibrato Rate	-64..+63	40
	nn	16	1	00..7F	Vibrato Depth	-64..+63	40
	nn	17	1	00..7F	Vibrato Delay	-64..+63	40
	nn	18	1	00..7F	Filter Cutoff Freq.	-64..+63	40
	nn	19	1	00..7F	Filter Resonance	-64..+63	40
	nn	1A	1	00..7F	EG Attack Time	-64..+63	40
	nn	1B	1	00..7F	EG Decay Time	-64..+63	40
	nn	1C	1	00..7F	EG Release Time	-64..+63	40

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
	nn	1D	1	28..58	MW Pitch Control	-24..+24[semitones]	40
	nn	1E	1	00..7F	MW Filter Control	-9600..+9450[cent]	40
	nn	1F	1	00..7F	MW Amp. Control	-100..+100[%]	40
	nn	20	1	00..7F	MW LFO PMod Depth	0..127	0A
	nn	21	1	00..7F	MW LFO FMod Depth	0..127	00
	nn	22	1	00..7F	MW LFO AMod Depth	0..127	00
	nn	23	1	28..58	Bend Pitch Control	-24..+24[semitones]	42
	nn	24	1	00..7F	Bend Filter Control	-9600..+9450[cent]	40
	nn	25	1	00..7F	Bend Amp. Control	-100..+100[%]	40
	nn	26	1	00..7F	Bend LFO PMod Depth	0..127	00
	nn	27	1	00..7F	Bend LFO FMod Depth	0..127	00
	nn	28	1	00..7F	Bend LFO AMod Depth	0..127	00
TOTAL SIZE 29							
	nn	30			Not Used		
		:			:		
	nn	40			Not Used		
	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	4D	1	28..58	CAT Pitch Control	-24..+24[semitones]	40
	nn	4E	1	00..7F	CAT Filter Control	-9600..+9450[cent]	40
	nn	4F	1	00..7F	CAT Amplitude Control	-100..+100[%]	40
	nn	50	1	00..7F	CAT LFO PMod Depth	0..127	00
	nn	51	1	00..7F	CAT LFO FMod Depth	0..127	00
	nn	52	1	00..7F	CAT LFO AMod Depth	0..127	00
	nn	53			Not Used		
		:			:		
		66			Not Used		
	nn	67	1	00..01	Portamento Switch	off/on	00
	nn	68	1	00..7F	Portamento Time	0..127	00
	nn	69			Not Used		
		:			:		
		6E			Not Used		
TOTAL SIZE 3F							

nn = PartNumber

If there is a Drum Voice assigned to the Part, the following parameters are ineffective.

- Bank Select LSB
- Pitch EG
- Portamento
- Soft Pedal
- Mono/Poly
- Scale Tuning

< Table 1-9 > MIDI Parameter Change table (A/D PART) (PSR-740 ONLY)

Address (H)			Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
10	nn	00	1		Not Use		
		01	1		Not Use		
		02	1		Not Use		
		03	1		Not Use		
		04	1	00..0F, 7F	Rcv Channel	A1...A16, OFF	7F
		05	1		Not Use		
		:					
		0A	1		Not Use		
		0B	1	00..7F	Volume	0...127	00
		0C	1		Not Use		
		0D	1		Not Use		
		0E	1	01...7F	Pan	L63...C...R63 (1...127)	40
		0F	1		Not Use		
		10	1		Not Use		
		11	1	00..7F	Dry Level	0...127	7F
		12	1	00..7F	Chorus Send	0...127	00
		13	1	00..7F	Reverb Send	0...127	00
		14	1	00..7F	Variation Send	0...127	00
TOTAL SIZE 15							

< Table 1-10 > MIDI Parameter Change table (DRUM SETUP)

Address (H)			Size (H)	Data (H)	Prameter Name	Description (H)	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	Depend on the Note
3n	rr	03	1	00..7F	Alternate Group	0:off,1..127	Depend on the Note
3n	rr	04	1	00..7F	Pan	0:random L63..C..R63(1..64..127)	Depend on the Note
3n	rr	05	1	00..7F	Reverb Send Level	0..127	Depend on the Note
3n	rr	06	1	00..7F	Chorus Send Level	0..127	Depend on the Note
3n	rr	07	1	00..7F	Variation Send Level	0..127	7F
3n	rr	08	1	00..01	Key Assign	0:single,1:multi	00
3n	rr	09	1	00..01	Rcv Note Off	off/on	Depend on the Note
3n	rr	0A	1	00..01	Rcv Note On	off/on	01
3n	rr	0B	1	00..7F	Filter Cutoff Freq.	-64..63	40
3n	rr	0C	1	00..7F	Filter Resonance	-64..63	40
3n	rr	0D	1	00..7F	EG Attack Rate	-64..63	40
3n	rr	0E	1	00..7F	EG Decay1 Rate	-64..63	40
3n	rr	0F	1	00..7F	EG Decay2 Rate	-64..63	40
TOTAL SIZE 10							

n:Drum Setup Number(0 - 1)
rr:note number(0DH - 5BH)
If XG SYSTEM ON and/or GM On message is received, all Drum Setup Parameter will be reset to default values.
According to the Drum Setup Reset message, individual Drum Setup Parameters can be reset to default values.

< Table 1-11 > Effect Type List

XG ESSENTIAL EFFECT
Same as LSB=0
XG OPTION EFFECT
XG OPTION EFFECT(Only PSR-740)
Expanded type for PSR-740/640
* If the received value does not contain an effect type in the TYPE LSB, the LSB will be directed to TYPE 0.
* Panel Effects are based on the "[Number] Effect Name".

REVERB TYPE (PSR-740/640)

TYPE MSB		TYPE LSB										
DEC	HEX	00	01	02	03...07	08	09...15	16	17	18	19	20
000	00	NO EFFECT										
001	01	[1]HALL1	[5]HALL2					[2]HALL2	[3]HALL3	[4]HALL4		
002	02	[10]ROOM1	[11]ROOM2	[12]ROOM3				[6]ROOM1	[7]ROOM2	[8]ROOM3	[9]ROOM4	
003	03	[15]STAGE1	[16]STAGE2					[13]STAGE1	[14]STAGE2			
004	04	[19]PLATE						[17]PLATE1	[18]PLATE2			
005	05	NO EFFECT										
:	:	:										
015	0F	NO EFFECT										
016	10	[20]WHITE ROOM										
017	11	[21]TUNNEL										
018	12	[22]CANYON										
019	13	[23]BASEMENT										
020	14	NO EFFECT										
:	:	:										
127	7F	NO EFFECT										

CHORUS TYPE (PSR-740/640)

TYPE MSB		TYPE LSB										
DEC	HEX	00	01	02	03...07	08	09...15	16	17	18	19	20
000	00	NO EFFECT										
001	01	NO EFFECT										
:	:	:										
064	40	NO EFFECT										
065	41	[6]CHORUS1	[7]CHORUS2	[5]CHORUS5		[8]CHORUS4						
066	42	[9]CELESTE1	[4]CHORUS4	[10]CELESTE3		[2]CHORUS2		[3]CHORUS3	[1]CHORUS1			
067	43	[15]FLANGER 1	[14]FLANGER4			[11]FLANGER1		[12]FLANGER2	[13]FLANGER3			
068	44	[17]SYMPHONIC (PSR-740)						[16]Symphonic (PSR-740)				
069	45	NO EFFECT										
:	:	:										
071	47	NO EFFECT										
072	48	[18]PHASER 1 (PSR-740)										
073	49	NO EFFECT										
:	:	:										
086	56	NO EFFECT										
087	57	[19]ENSEMBLE DETUNE(PSR-740)										
088	58	NO EFFECT										
:	:	:										
127	7F	NO EFFECT										

VARIATION TYPE (0-63) (PSR-640)

TYPE MSB		TYPE LSB										
DEC	HEX	00	01	02	03...07	08	09...15	16	17	18	19	20
000	00	NO EFFECT										
001	01	[1]HALL1	[5]HALL2					[2]HALL2	[3]HALL3	[4]HALL4		
002	02	[10]ROOM1	[11]ROOM2	[12]ROOM3				[6]ROOM1	[7]ROOM2	[8]ROOM3	[9]ROOM4	
003	03	[15]STAGE1	[16]STAGE2					[13]STAGE1	[14]STAGE2			
004	04	[19]PLATE						[17]PLATE1	[18]PLATE2			
005	05	[21]DELAY L,C,R						[20]Delay LCR				
006	06	[22]DELAY L,R										
007	07	[23]ECHO										
008	08	[24]CROSS DELAY										
009	09	[25]ER1	[26]ER2									
010	0A	[27]GATE REVERB										
011	0B	[28]REVERS GATE										
012	0C	NO EFFECT or THRU*										
:	:	:										
019	13	NO EFFECT or THRU*										
020	14	[29]KARAOKE 1	[30]KARAOKE 2	[31]KARAOKE 3								
021	15	NO EFFECT or THRU*										
:	:	:										
063	3F	NO EFFECT or THRU*										

* No effect when Effect Connection = System.
Through when Effect Connection = Insertion.

VARIATION TYPE (64-127) (PSR-640)

TYPE MSB		TYPE LSB										
DEC	HEX	00	01	02	03...07	08	09...15	16	17	18	19	20
064	40	THRU										
065	41	[37]CHORUS1	[38]CHORUS2	[36]CHORUS5		[39]CHORUS4						
066	42	[40]CELESTE1	[35]CHORUS4	[41]CELESTE3		[33]CHORUS2		[34]CHORUS3	[32]CHORUS1	[53]Rotary Sp5		
067	43	[46]FLANGER 1	[45]FLANGER 4			[42]FLANGER1		[43]FLANGER2	[44]FLANGER3			
068	44	[48]SYMPHONIC						[47]Symphonic				
069	45	[54]ROTARY SP.						[49]Rotary Sp1				
070	46	[57]TREMOLO						[55]Tremolo1	[52]Rotary Sp4			
071	47	[60]AUTO PAN						[59]AutoPan	[50]Rotary Sp2	[51]Rotary Sp3	[56]Tremolo2	[58]Gtr Tremolo
072	48	[61]PHASER				[62]PHASER 2						
073	49	[65]DISTORTION										
074	4A	[66]OVER DRIVE										
075	4B	[67]AMP SIM.						[63]DIST.HARD	[64]DIST.SOFT			
076	4C	[70]3BAND EQ						[68]EQ DISCO	[69]EQ TEL			
077	4D	[71]2BAND EQ										
078	4E	[73]AUTO WAH						[72]Auto Wah				
079	4F	NO EFFECT or THRU*										
:	:	:										
127	7F	NO EFFECT or THRU*										

* No effect when Effect Connection = System.
Through when Effect Connection = Insertion.

VARIATION TYPE (0-63) (PSR-740)

TYPE MSB		TYPE LSB										
DEC	HEX	00	01	02	03...07	08	09...15	16	17	18	19	20
000	00	NO EFFECT										
001	01	[1]HALL1	[5]HALL2					[2]HALL2	[3]HALL3	[4]HALL4		
002	02	[10]ROOM1	[11]ROOM2	[12]ROOM3				[6]ROOM1	[7]ROOM2	[8]ROOM3	[9]ROOM4	
003	03	[15]STAGE1	[16]STAGE2					[13]STAGE1	[14]STAGE2			
004	04	[19]PLATE						[17]PLATE1	[18]PLATE2			
005	05	[21]DELAY L,C,R						[20]Delay LCR				
006	06	[22]DELAY L,R										
007	07	[23]ECHO										
008	08	[24]CROSS DELAY										
009	09	[25]ER1	[26]ER2									
010	0A	[27]GATE REVERB										
011	0B	[28]REVERS GATE										
012	0C	NO EFFECT or THRU*										
:	:	:										
015	0F	NO EFFECT or THRU*										
016	10	[29]WHITE ROOM										
017	11	[30]TUNNEL										
018	12	[31]CANYON										
019	13	[32]BASEMENT										
020	14	[33]KARAOKE 1	[34]KARAOKE 2	[35]KARAOKE 3								
021	15	NO EFFECT or THRU*										
:	:	:										
063	3F	NO EFFECT or THRU*										

* No effect when Effect Connection = System.
Through when Effect Connection = Insertion.

VARIATION TYPE (64-127) (PSR-740)

TYPE MSB		TYPE LSB										
DEC	HEX	00	01	02	03...07	08	09...15	16	17	18	19	20
064	40	THRU										
065	41	[41]CHORUS1	[42]CHORUS2	[40]CHORUS5		[43]CHORUS4						
066	42	[44]CELESTE1	[39]CHORUS4	[45]CELESTE3		[37]CHORUS2		[38]CHORUS3	[36]CHORUS1	[57]Rotary Sp5		
067	43	[50]FLANGER 1	[49]FLANGER 4			[46]FLANGER1		[47]FLANGER2	[48]FLANGER3			
068	44	[52]SYMPHONIC						[51]Symphonic				
069	45	[58]ROTARY SP.						[53]Rotary Sp1				
070	46	[62]TREMOLO						[60]Tremolo1	[56]Rotary Sp4			
071	47	[65]AUTO PAN						[64]AutoPan	[54]Rotary Sp2	[55]Rotary Sp3	[61]Tremolo2	[63]Gtr Tremolo
072	48	[66]PHASER				[67]PHASER 2						
073	49	[70]DISTORTION	[72]COMP +DISTORTION									
074	4A	[71]OVER DRIVE										
075	4B	[73]AMP SIM.						[68]DIST.HARD	[69]DIST.SOFT			
076	4C	[76]3BAND EQ						[74]EQ DISCO	[75]EQ TEL			
077	4D	[77]2BAND EQ										
078	4E	[79]AUTO WAH	[82]AUTO WAH +DIST	[83]AUTO WAH +OVERDRIVE				[78]Auto Wah				
079	4F	THRU										
080	50	[89]PITCH CHANGE1	[90]PITCH CHANGE2									
081	51	[84]HARMONIC ENHANCER										
082	52	[80]TOUCH WAH 1	[85]TOUCH WAH +DIST	[86]TOUCH WAH +OVERDRIVE		[81]TOUCH WAH 2						
083	53	[87]COMPRESSOR										
084	54	[88]NOISE GATE										
085	55	[91]VOICE CANCEL										
086	56	[59]2WAY ROTARY SP										
087	57	[92]ENSEMBLE DETUNE										
088	58	[93]AMBIENCE										
089	59	THRU										
:	:											
092	5C	THRU										
093	5D	[94]TALKING MODULATOR										
094	5E	[95]LO-FI										
095	5F	[96]DIST+DELAY	[97]OVERDRIVE +DELAY									
096	60	[98]COMP+DIST +DELAY	[99]COMP +OVERDRIVE +DELAY									
097	61	[100]WAH+DIST +DELAY	[101]WAH +OVERDRIVE +DELAY									
098	62	THRU										
:	:											
127	7F	THRU										

INSERTION TYPE (PSR-740)

TYPE MSB		TYPE LSB										
DEC	HEX	00	01	02	03...07	08	09...15	16	17	18	19	20
000	0	THRU										
001	1	[1]HALL 1	[5]HALL 2					[2]HALL2	[3]HALL3	[4]HALL4		
002	2	[10]ROOM 1	[11]ROOM 2	[12]ROOM 3				[6]ROOM1	[7]ROOM2	[8]ROOM3	[9]ROOM4	
003	3	[15]STAGE 1	[16]STAGE 2					[13]STAGE1	[14]STAGE2			
004	4	[19]PLATE						[17]PLATE1	[18]PLATE2			
005	5	[21]DELAY L,C,R						[20]Delay LCR				
006	6	[22]DELAY L,R										
007	7	[23]ECHO										
008	8	[24]CROSS DELAY										
009	9	THRU										
:	:	:										
019	13	THRU										
020	14	[25]KARAOKE 1	[26]KARAOKE 2	[27]KARAOKE 3								
021	15	THRU										
:	:	:										
064	40	THRU										
065	41	[33]CHORUS 1	[34]CHORUS 2	[32]CHORUS 3		[35]CHORUS 4						
066	42	[36]CELESTE 1	[31]CELESTE 2	[37]CELESTE 3		[29]CELESTE 4		[30]CHORUS3	[28]CHORUS1	[49]Rotary Sp5		
067	43	[42]FLANGER 1	[41]FLANGER 2			[38]FLANGER 3		[39]FLANGER2	[40]FLANGER3			
068	44	[44]SYMPHONIC						[43]Symphonic				
069	45	[50]ROTARY SPEAKER 1						[45]Rotary Sp1				
070	46	[53]TREMOLO						[51]Tremolo1	[48]Rotary Sp4			
071	47	[56]AUTO PAN						[55]AutoPan	[46]Rotary Sp2	[47]Rotary Sp3	[52]Tremolo2	[54]Gtr Tremolo
072	48	[57]PHASER 1										
073	49	[60]DISTORTION										
074	4A	[61]OVER DRIVE										
075	4B	[62]AMP SIMULATOR						[58]DIST.HARD	[59]DIST.SOFT			
076	4C	[65]3-BAND EQ						[63]EQ DISCO	[64]EQ TEL			
077	4D	[66]2-BAND EQ										
078	4E	[68]AUTO WAH(LFO)						[67]Auto Wah				
079	4F	THRU										
080	50	THRU										
081	51	[69]HARMONIC ENHANCER										
082	52	[70]TOUCH WAH 1				[71]TOUCH WAH 2						
083	53	[72]COMPRESSOR										
084	54	[73]NOISE GATE										
085	55	THRU										
086	56	THRU										
087	57	[74]ENSEMBLE DETUNE										
088	58	THRU										
:	:	:										
127	7F	THRU										

< Table 1-12 > Effect Parameter List

HALL1,HALL2, ROOM1,ROOM2,ROOM3, STAGE1,STAGE2, PLATE (reverb, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Reverb Time	0.3-30.0s	0-69	table#4		
2	Diffusion	0-10	0-10			
3	Initial Delay	0.1mS-99.3mS	0-63	table#5		
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
5	LPF Cutoff	1.0k-Thru	34-60	table#3		
6						
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Rev Delay	0.1mS-99.3mS	0-63	table#5		
12	Density	0-4 (reverb, variation block)	0-4		PSR-740	
		0-4 (reverb, variation block)	0-3		PSR-640	
		0-2 (insertion block)	0-2			
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			
16						

WHITE ROOM, TUNNEL, CANYON, BASEMENT (reverb, variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Reverb Time	0.3-30.0s	0-69	table#4		
2	Diffusion	0-10	0-10			
3	Initial Delay	0.1mS-99.3mS	0-63	table#5		
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
5	LPF Cutoff	1.0k-Thru	34-60	table#3		
6	Width	0.5-10.2m	0-37	table#11		
7	Heigt	0.5-20.2m	0-73	table#11		
8	Depth	0.5-30.2m	0-104	table#11		
9	Wall Vary	0-30	0-30			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Rev Delay	0.1mS-99.3mS	0-63	table#5		
12	Density	0-4	0-4		PSR-740	
		0-4	0-3		PSR-640	
13	Er/Rev Balance	E63>R - E=R - E<R63	1-127			
14	High Damp	0.1-1.0	1-10		PSR-740 only	
15	Feedback Level	-63-+63	1-127			
16						

DELAY L,C,R (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
2	Rch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
3	Cch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
4	Feedback Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
5	Feedback Level	-63-+63	1-127			
6	Cch Level	0-127	0-127			
7	High Damp	0.1-1.0	1-10			
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
14	EQ Low Gain	-12-+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12-+12dB	52-76			

DELAY L,R (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
2	Rch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
3	Feedback Delay 1	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
4	Feedback Delay 2	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (Insertion block)	1-7150			
5	Feedback Level	-63-+63	1-127			
6	High Damp	0.1-1.0	1-10			
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
14	EQ Low Gain	-12-+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12-+12dB	52-76			

ECHO (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay1	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550			
2	Lch Feedback Level	-63-+63	1-127			
3	Rch Delay1	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	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 (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550			
7	Rch Delay2	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550			
8	Delay2 Level	0-127	0-127			
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
14	EQ Low Gain	-12-+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12-+12dB	52-76			

CROSS DELAY (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	L->R Delay	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550			
2	R->L Delay	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	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			
6						
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
14	EQ Low Gain	-12-+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12-+12dB	52-76			

EARLY REF1,EARLY REF2(variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5			
2	Room Size	0.1-7.0	0-44	table#6		
3	Diffusion	0-10	0-10			
4	Initial Delay	0.1mS-99.3mS	0-63	table#5		
5	Feedback Level	-63-+63	1-127			
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
7	LPF Cutoff	1.0k-Thru	34-60	table#3		
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Liveness	0-10	0-10			
12	Density	0-3	0-3			
13	High Damp	0.1-1.0	1-10			
14						
15						
16						

GATE REVERB, REVERSE GATE (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Type	TypeA,TypeB	0-1			
2	Room Size	0.1-20.0	0-127	table#6		
3	Diffusion	0-10	0-10			
4	Initial Delay	0.1mS-200.0mS	0-127	table#5		
5	Feedback Level	-63-+63	1-127			
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
7	LPF Cutoff	1.0k-Thru	34-60	table#3		
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Liveness	0-10	0-10			
12	Density	0-3	0-3			
13	High Damp	0.1-1.0	1-10			
14						
15						
16						

KARAOKE1,2,3 (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Delay Time	0.1mS-400.0mS	0-127	table#7		
2	Feedback Level	-63-+63	1-127			
3	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
4	LPF Cutoff	1.0k-Thru	34-60	table#3		
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13						
14						
15						
16						

CHORUS1,2,3,4, CELESTE1,2,3,4 (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Feedback Level	-63-+63	1-127			
4	Delay Offset	0.0mS-50mS	0-127	table#2		
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	PSR-740 only	
12	EQ Mid Gain	-12-+12dB (variation block)	52-76		PSR-740 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		PSR-740 only	
14						
15	Input Mode	mono/stereo	0-1			
16						

FLANGER1,2,3 (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Feedback Level	-63-+63	1-127			
4	Delay Offset	0.0mS-50mS	0-127	table#2		
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	PSR-740 only	
12	EQ Mid Gain	-12-+12dB (variation block)	52-76		PSR-740 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		PSR-740 only	
14	LFO Phase Difference	-180-+180deg(resolution=3deg.)	4-124			
15						
16						

SYMPHONIC (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Delay Offset	0.0mS-50mS	0-127	table#2		
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	PSR-740 only	
12	EQ Mid Gain	-12-+12dB (variation block)	52-76		PSR-740 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		PSR-740 only	
14						
15						
16						

ENSEMBLE DETUNE (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Detune	-50-+50cent	14-114			
2	Lch Init Delay	0.0mS-50mS	0-127	table#2		
3	Rch Init Delay	0.0mS-50mS	0-127	table#2		
4						
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Low Frequency	32Hz-2.0kHz (variation, insertion block)	4-40	table#3		
12	EQ Low Gain	-12-+12dB (variation, insertion block)	52-76			
13	EQ High Frequency	500Hz-16.0kHz (variation, insertion block)	28-58	table#3		
14	EQ High Gain	-12-+12dB (variation, insertion block)	52-76			
15						
16						

AMBIENCE (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Delay Time	0.0mS-50mS	0-127	table#2		
2	Output Phase	normal/invers	0-1			
3						
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3		
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13						
14						
15						
16						

ROTARY SPEAKER (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		●
2	LFO Depth	0-127	0-127			
3						
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	PSR-740 only	
12	EQ Mid Gain	-12-+12dB (variation block)	52-76		PSR-740 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		PSR-740 only	
14						
15						
16						

2WAY ROTARY SPEAKER (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Rotor Speed	0.0Hz-39.7Hz	0-127	table#1		●
2	Drive Low	0-127	0-127			
3	Drive High	0-127	0-127			
4	Low/High	L63>H - L=H - L<H63	1-127			
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3		
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10						
11	Crossover Frequency	100Hz-10.0kHz	14-54	table#3		
12	Mic L-R Angle	0deg-180deg(resolution=3deg.)	0-60			
13						
14						
15						
16						

TREMOLO (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		●
2	AM Depth	0-127	0-127			
3	PM Depth	0-127	0-127			
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10						
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	PSR-740 only	
12	EQ Mid Gain	-12-+12dB (variation block)	52-76		PSR-740 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		PSR-740 only	
14	LFO Phase Difference	-180-+180deg(resolution=3deg.)	4-124			
15	Input Mode	mono/stereo	0-1			
16						

AUTO PAN (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		●
2	L/R Depth	0-127	0-127			
3	F/R Depth	0-127	0-127			
4	PAN Direction	L<->R,L->R,L<-R,Lturn,Rturn,L/R	0-5			
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10						
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	PSR-740 only	
12	EQ Mid Gain	-12-+12dB (variation block)	52-76		PSR-740 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		PSR-740 only	
14						
15						
16						

PHASER 1 (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Phase Shift Offset	0-127	0-127			
4	Feedback Level	-63-+63	1-127			
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Stage	4,5,6 (chorus, insertion block)	4-6			
		4-12 (variation block)	4-12		PSR-740	
		6-10 (variation block)	6-10		PSR-640	
12	Diffusion	mono/stereo	0-1			
13						
14						
15						
16						

PHASER 2 (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Phase Shift Offset	0-127	0-127			
4	Feedback Level	-63-+63	1-127			
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Stage	3,4,5,6	3-6		PSR-740	
12		3,4,5	3-5		PSR-640	
13	LFO Phase Difference	-180deg-+180deg (resolution=3deg.)	4-124			
14						
15						
16						

DISTORTION, OVERDRIVE (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Drive	0-127	0-127			●
2	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
3	EQ Low Gain	-12-+12dB	52-76			
4	LPF Cutoff	1.0k-Thru	34-60	table#3		
5	Output Level	0-127	0-127			
6						
7	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3	PSR-740	
		500Hz-10.0kHz	28-54	table#3	PSR-640	
8	EQ Mid Gain	-12-+12dB	52-76			
9	EQ Mid Width	1.0-12.0	10-120			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Edge(Clip Curve)	0-127	0-127	mild-sharp		
12						
13						
14						
15						
16						

COMP+DIST (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Drive	0-127	0-127			●
2	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3		
3	EQ Low Gain	-12-+12dB	52-76			
4	LPF Cutoff	1.0k-Thru	34-60	table#3		
5	Output Level	0-127	0-127			
6						
7	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3		
8	EQ Mid Gain	-12-+12dB	52-76			
9	EQ Mid Width	1.0-12.0	10-120			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Edge(Clip Curve)	0-127	0-127	mild-sharp		
12	Attack	1ms-40ms	0-19	table#8		
13	Release	10ms-680ms	0-15	table#9		
14	Threshold	-48dB—6dB	79-121			
15	Ratio	1.0-20.0	0-7	table#10		
16						

AMP SIMULATOR (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Drive	0-127	0-127			●
2	AMP Type	Off,Stack,Combo,Tube	0-3			
3	LPF Cutoff	1.0k-Thru	34-60	table#3		
4	Output Level	0-127	0-127			
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Edge(Clip Curve)	0-127	0-127	mild-sharp		
12						
13						
14						
15						
16						

3BAND EQ(MONO) (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	EQ Low Gain	-12-+12dB	52-76			
2	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3	PSR-740	
		500Hz-10.0kHz	28-54	table#3	PSR-640	
3	EQ Mid Gain	-12-+12dB	52-76			
4	EQ Mid Width	1.0-12.0	10-120			
5	EQ High Gain	-12-+12dB	52-76			
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3		
7	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
8						
9						
10						
11						
12						
13						
14						
15	Input Mode	mono/stereo	0-1			
16						

2BAND EQ(STEREO) (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
2	EQ Low Gain	-12-+12dB	52-76			
3	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
4	EQ High Gain	-12-+12dB	52-76			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

AUTO WAH (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Cutoff Frequency Offset	0-127	0-127			●
4	Resonance	1.0-12.0	10-120			
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	PSR-740	
		50Hz-2.0kHz	8-40	table#3	PSR-640	
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Drive	0-127(variation block)	0-127			
12						
13						
14						
15						
16						

AUTO WAH+DIST, AUTO WHA+ODRV (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Cutoff Frequency Offset	0-127	0-127			●
4	Resonance	1.0-12.0	10-120			
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3		
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Drive	0-127	0-127			
12	EQ Low Gain(distortion)	-12-+12dB	52-76			
13	EQ Mid Gain(distortion)	-12-+12dB	52-76			
14	LPF Cutoff	1.0kHz-thru	34-60	table#3		
15	Output Level	0-127	0-127			
16						

TOUCH WAH 1 (variation, insertion block), TOUCH WAH+DIST (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Sensitive	0-127	0-127			
2	Cutoff Frequency Offset	0-127	0-127			●
3	Resonance	1.0-12.0	10-120			
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3		
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Drive	0-127(variation block)	0-127			
12						
13						
14						
15						
16						

TOUCH WAH 2 (variation, insertion block), TOUCH WAH+ODRV (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Sensitive	0-127	0-127			
2	Cutoff Frequency Offset	0-127	0-127			●
3	Resonance	1.0-12.0	10-120			
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3		
7	EQ Low Gain	-12-+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Drive	0-127(variation block)	0-127			
12	EQ Low Gain(distortion)	-12-+12dB(variation block)	52-76			
13	EQ Mid Gain(distortion)	-12-+12dB(variation block)	52-76			
14	LPF Cutoff	1.0kHz-thru(variation block)	34-60	table#3		
15	Output Level	0-127(variation block)	0-127			
16	Release	10-680ms	52-67			

PITCH CHANGE 1 (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Pitch	-24-+24	40-88			
2	Initial Delay	0.1mS-400.0mS	0-127	table#7		
3	Fine 1	-50-+50	14-114			
4	Fine 2	-50-+50	14-114			
5	Feedback Level	-63-+63	1-127			
6						
7						
8						
9						
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 Level 2	0-127	0-127			
15						
16						

PITCH CHANGE 2 (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Pitch	-24-+24	40-88			
2	Initial Delay	0.1mS-400.0mS	0-127	table#7		
3	Fine 1	-50-+50cent	14-114			
4	Fine 2	-50-+50cent	14-114			
5	Feedback Level	-63-+63	1-127			
6						
7						
8						
9						
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 Level 2	0-127	0-127			
15						
16						

COMPRESSOR (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Attack	1-40ms	0-19	table#8		
2	Release	10-680ms	0-15	table#9		
3	Threshold	-48—6dB	79-121			
4	Ratio	1.0-20.0	0-7	table#10		
5	Output Level	0-127	0-127			
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

NOISE GATE (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Attack	1-40ms	0-19	table#8		
2	Release	10-680ms	0-15	table#9		
3	Threshold	-72—30dB	55-97			
4	Output Level	0-127	0-127			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

VOICE CANCEL (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11	Low Adjust	0-26	0-26			
12	High Adjust	0-26	0-26			
13						
14						
15						
16						

NO EFFECT (reverb, chorus, variation block), THRU (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

HARMONIC ENHANCER (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	HPF Cutoff	500Hz-16kHz	28-58	table#3		
2	Drive	0-127	0-127			
3	Mix Level	0-127	0-127			
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

TALKING MODULATION (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Vowel	a,i,u,e,o	0-4			
2	Move speed	1-62	1-62			
3	Drive	0-127	0-127			
4	Output Level	0-127	0-127			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

LO-FI (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Sampling Freq Control	a,i,u,e,o	0-4			
2	Word Length	1-62	1-62			
3	Output Gain	0-127	0-127			
4	LPF Cutoff	0-127	0-127			
5	Filter Type	Thru,PowerBass,Radio,Tel,Clean,Low	0-5			
6	LPF Resonance	1.0-12.0	10-120			
7	Bit Assign	0-6	0-6			
8	Emphasis	Off/On	0-1			
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13						
14						
15	Input Mode	mono/stereo				
16						

DIST+DELAT (variation block), OVERDRIVE+DELAT (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay Time	0.1-1486.0ms	1-14860			
2	Rch Delay Time	0.1-1486.0ms	1-14860			
3	Delay Feedback Time	0.1-1486.0ms	1-14860			
4	Delay Feedback Level	-63-+63	1-127			
5	Delay Mix	0-127	0-127			
6	Dist Drive	0-127	0-127			
7	Dist Output Level	0-127	0-127			
8	Dist EQ Low Gain	-12-+12dB	52-76			
9	Dist EQ Mid Gain	-12-+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13						
14						
15						
16						

COMP+DIST+DELAT (variation block), COMP+OVERDRIVE+DELAT (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Delay Time	0.1-1486.0ms	1-14860			
2	Delay Feedback Level	-63-+63	1-127			
3	Delay Mix	0-127	0-127			
4	Dist Drive	0-127	0-127			
5	Dist Output Level	0-127	0-127			
6	Dist EQ Low Gain	-12-+12dB	52-76			
7	Dist EQ Mid Gain	-12-+12dB	52-76			
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Comp. Attack	1ms-40ms	0-19	table#8		
12	Comp. Release	10ms-680ms	0-15	table#9		
13	Comp. Threshold	-48dB—6dB	79-121			
14	Comp. Ratio	1.0-20.0	0-7	table#10		
15						
16						

WAH+DIST+DELAT (variation block), WAH+OVERDRIVE+DELAT (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Delay Time	0.1-1486.0ms	1-14860			
2	Delay Feedback Level	-63-+63	1-127			
3	Delay Mix	0-127	0-127			
4	Dist Drive	0-127	0-127			
5	Dist Output Level	0-127	0-127			
6	Dist EQ Low Gain	-12-+12dB	52-76			
7	Dist EQ Mid Gain	-12-+12dB	52-76			
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Wah Sensitive	0-127	0-127			
12	Wah Cutoff Freq Offset	0-127	0-127			
13	Wah Resonance	1.0-12.0	10-120			
14	Wah Release	10-680ms	52-67			
15						
16						

* "Dry/Wet" is avilable when variation connection = Insertion.

< Table 1-13 > Effect Data Value Assign Table

Table#1
LFO Frequency

Data	Value	Data	Value	Data	Value	Data	Value
0	0.00	32	1.35	64	2.69	96	8.41
1	0.04	33	1.39	65	2.78	97	8.75
2	0.08	34	1.43	66	2.86	98	9.08
3	0.13	35	1.47	67	2.94	99	9.42
4	0.17	36	1.51	68	3.03	100	9.76
5	0.21	37	1.56	69	3.11	101	10.1
6	0.25	38	1.60	70	3.20	102	10.8
7	0.29	39	1.64	71	3.28	103	11.4
8	0.34	40	1.68	72	3.37	104	12.1
9	0.38	41	1.72	73	3.45	105	12.8
10	0.42	42	1.77	74	3.53	106	13.5
11	0.46	43	1.81	75	3.62	107	14.1
12	0.51	44	1.85	76	3.70	108	14.8
13	0.55	45	1.89	77	3.87	109	15.5
14	0.59	46	1.94	78	4.04	110	16.2
15	0.63	47	1.98	79	4.21	111	16.8
16	0.67	48	2.02	80	4.37	112	17.5
17	0.72	49	2.06	81	4.54	113	18.2
18	0.76	50	2.10	82	4.71	114	19.5
19	0.80	51	2.15	83	4.88	115	20.9
20	0.84	52	2.19	84	5.05	116	22.2
21	0.88	53	2.23	85	5.22	117	23.6
22	0.93	54	2.27	86	5.38	118	24.9
23	0.97	55	2.31	87	5.55	119	26.2
24	1.01	56	2.36	88	5.72	120	27.6
25	1.05	57	2.40	89	6.06	121	28.9
26	1.09	58	2.44	90	6.39	122	30.3
27	1.14	59	2.48	91	6.73	123	31.6
28	1.18	60	2.52	92	7.07	124	33.0
29	1.22	61	2.57	93	7.40	125	34.3
30	1.26	62	2.61	94	7.74	126	37.0
31	1.30	63	2.65	95	8.08	127	39.7

Table#2
Modulation Delay Offset

Data	Value	Data	Value	Data	Value	Data	Value
0	0.0	32	3.2	64	6.4	96	9.6
1	0.1	33	3.3	65	6.5	97	9.7
2	0.2	34	3.4	66	6.6	98	9.8
3	0.3	35	3.5	67	6.7	99	9.9
4	0.4	36	3.6	68	6.8	100	10.0
5	0.5	37	3.7	69	6.9	101	11.1
6	0.6	38	3.8	70	7.0	102	12.2
7	0.7	39	3.9	71	7.1	103	13.3
8	0.8	40	4.0	72	7.2	104	14.4
9	0.9	41	4.1	73	7.3	105	15.5
10	1.0	42	4.2	74	7.4	106	17.1
11	1.1	43	4.3	75	7.5	107	18.6
12	1.2	44	4.4	76	7.6	108	20.2
13	1.3	45	4.5	77	7.7	109	21.8
14	1.4	46	4.6	78	7.8	110	23.3
15	1.5	47	4.7	79	7.9	111	24.9
16	1.6	48	4.8	80	8.0	112	26.5
17	1.7	49	4.9	81	8.1	113	28.0
18	1.8	50	5.0	82	8.2	114	29.6
19	1.9	51	5.1	83	8.3	115	31.2
20	2.0	52	5.2	84	8.4	116	32.8
21	2.1	53	5.3	85	8.5	117	34.3
22	2.2	54	5.4	86	8.6	118	35.9
23	2.3	55	5.5	87	8.7	119	37.5
24	2.4	56	5.6	88	8.8	120	39.0
25	2.5	57	5.7	89	8.9	121	40.6
26	2.6	58	5.8	90	9.0	122	42.2
27	2.7	59	5.9	91	9.1	123	43.7
28	2.8	60	6.0	92	9.2	124	45.3
29	2.9	61	6.1	93	9.3	125	46.9
30	3.0	62	6.2	94	9.4	126	48.4
31	3.1	63	6.3	95	9.5	127	50.0

Table#3
EQ Frequency

Data	Value	Data	Value
0	THRU(0)	32	800
1	22	33	900
2	25	34	1.0k
3	28	35	1.1k
4	32	36	1.2k
5	36	37	1.4k
6	40	38	1.6k
7	45	39	1.8k
8	50	40	2.0k
9	56	41	2.2k
10	63	42	2.5k
11	70	43	2.8k
12	80	44	3.2k
13	90	45	3.6k
14	100	46	4.0k
15	110	47	4.5k
16	125	48	5.0k
17	140	49	5.6k
18	160	50	6.3k
19	180	51	7.0k
20	200	52	8.0k
21	225	53	9.0k
22	250	54	10.0k
23	280	55	11.0k
24	315	56	12.0k
25	355	57	14.0k
26	400	58	16.0k
27	450	59	18.0k
28	500	60	THRU(20.0k)
29	560		
30	630		
31	700		

Table#4
Reverb time

Data	Value	Data	Value	Data	Value
0	0.3	32	3.5	64	17.0
1	0.4	33	3.6	65	18.0
2	0.5	34	3.7	66	19.0
3	0.6	35	3.8	67	20.0
4	0.7	36	3.9	68	25.0
5	0.8	37	4.0	69	30.0
6	0.9	38	4.1		
7	1.0	39	4.2		
8	1.1	40	4.3		
9	1.2	41	4.4		
10	1.3	42	4.5		
11	1.4	43	4.6		
12	1.5	44	4.7		
13	1.6	45	4.8		
14	1.7	46	4.9		
15	1.8	47	5.0		
16	1.9	48	5.5		
17	2.0	49	6.0		
18	2.1	50	6.5		
19	2.2	51	7.0		
20	2.3	52	7.5		
21	2.4	53	8.0		
22	2.5	54	8.5		
23	2.6	55	9.0		
24	2.7	56	9.5		
25	2.8	57	10.0		
26	2.9	58	11.0		
27	3.0	59	12.0		
28	3.1	60	13.0		
29	3.2	61	14.0		
30	3.3	62	15.0		
31	3.4	63	16.0		

Table#5
Delay Time(200.0ms)

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	50.5	64	100.8	96	151.2
1	1.7	33	52.0	65	102.4	97	152.8
2	3.2	34	53.6	66	104.0	98	154.4
3	4.8	35	55.2	67	105.6	99	155.9
4	6.4	36	56.8	68	107.1	100	157.5
5	8.0	37	58.3	69	108.7	101	159.1
6	9.5	38	59.9	70	110.3	102	160.6
7	11.1	39	61.5	71	111.9	103	162.2
8	12.7	40	63.1	72	113.4	104	163.8
9	14.3	41	64.6	73	115.0	105	165.4
10	15.8	42	66.2	74	116.6	106	166.9
11	17.4	43	67.8	75	118.2	107	168.5
12	19.0	44	69.4	76	119.7	108	170.1
13	20.6	45	70.9	77	121.3	109	171.7
14	22.1	46	72.5	78	122.9	110	173.2
15	23.7	47	74.1	79	124.4	111	174.8
16	25.3	48	75.7	80	126.0	112	176.4
17	26.9	49	77.2	81	127.6	113	178.0
18	28.4	50	78.8	82	129.2	114	179.5
19	30.0	51	80.4	83	130.7	115	181.1
20	31.6	52	81.9	84	132.3	116	182.7
21	33.2	53	83.5	85	133.9	117	184.3
22	34.7	54	85.1	86	135.5	118	185.8
23	36.3	55	86.7	87	137.0	119	187.4
24	37.9	56	88.2	88	138.6	120	189.0
25	39.5	57	89.8	89	140.2	121	190.6
26	41.0	58	91.4	90	141.8	122	192.1
27	42.6	59	93.0	91	143.3	123	193.7
28	44.2	60	94.5	92	144.9	124	195.3
29	45.7	61	96.1	93	146.5	125	196.9
30	47.3	62	97.7	94	148.1	126	198.4
31	48.9	63	99.3	95	149.6	127	200.0

Table#6
Room Size

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	5.1	64	10.1	96	15.1
1	0.3	33	5.3	65	10.3	97	15.3
2	0.4	34	5.4	66	10.4	98	15.5
3	0.6	35	5.6	67	10.6	99	15.6
4	0.7	36	5.7	68	10.8	100	15.8
5	0.9	37	5.9	69	10.9	101	15.9
6	1.0	38	6.1	70	11.1	102	16.1
7	1.2	39	6.2	71	11.2	103	16.2
8	1.4	40	6.4	72	11.4	104	16.4
9	1.5	41	6.5	73	11.5	105	16.6
10	1.7	42	6.7	74	11.7	106	16.7
11	1.8	43	6.8	75	11.9	107	16.9
12	2.0	44	7.0	76	12.0	108	17.0
13	2.1	45	7.2	77	12.2	109	17.2
14	2.3	46	7.3	78	12.3	110	17.3
15	2.5	47	7.5	79	12.5	111	17.5
16	2.6	48	7.6	80	12.6	112	17.6
17	2.8	49	7.8	81	12.8	113	17.8
18	2.9	50	7.9	82	12.9	114	18.0
19	3.1	51	8.1	83	13.1	115	18.1
20	3.2	52	8.2	84	13.3	116	18.3
21	3.4	53	8.4	85	13.4	117	18.4
22	3.5	54	8.6	86	13.6	118	18.6
23	3.7	55	8.7	87	13.7	119	18.7
24	3.9	56	8.9	88	13.9	120	18.9
25	4.0	57	9.0	89	14.0	121	19.1
26	4.2	58	9.2	90	14.2	122	19.2
27	4.3	59	9.3	91	14.4	123	19.4
28	4.5	60	9.5	92	14.5	124	19.5
29	4.6	61	9.7	93	14.7	125	19.7
30	4.8	62	9.8	94	14.8	126	19.8
31	5.0	63	10.0	95	15.0	127	20.0

Table#7
Delay Time(400.0ms)

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	100.9	64	201.6	96	302.4
1	3.2	33	104.0	65	204.8	97	305.5
2	6.4	34	107.2	66	207.9	98	308.7
3	9.5	35	110.3	67	211.1	99	311.8
4	12.7	36	113.5	68	214.2	100	315.0
5	15.8	37	116.6	69	217.4	101	318.1
6	19.0	38	119.8	70	220.5	102	321.3
7	22.1	39	122.9	71	223.7	103	324.4
8	25.3	40	126.1	72	226.8	104	327.6
9	28.4	41	129.2	73	230.0	105	330.7
10	31.6	42	132.4	74	233.1	106	333.9
11	34.7	43	135.5	75	236.3	107	337.0
12	37.9	44	138.6	76	239.4	108	340.2
13	41.0	45	141.8	77	242.6	109	343.3
14	44.2	46	144.9	78	245.7	110	346.5
15	47.3	47	148.1	79	248.9	111	349.6
16	50.5	48	151.2	80	252.0	112	352.8
17	53.6	49	154.4	81	255.2	113	355.9
18	56.8	50	157.5	82	258.3	114	359.1
19	59.9	51	160.7	83	261.5	115	362.2
20	63.1	52	163.8	84	264.6	116	365.4
21	66.2	53	167.0	85	267.7	117	368.5
22	69.4	54	170.1	86	270.9	118	371.7
23	72.5	55	173.3	87	274.0	119	374.8
24	75.7	56	176.4	88	277.2	120	378.0
25	78.8	57	179.6	89	280.3	121	381.1
26	82.0	58	182.7	90	283.5	122	384.3
27	85.1	59	185.9	91	286.6	123	387.4
28	88.3	60	189.0	92	289.8	124	390.6
29	91.4	61	192.2	93	292.9	125	393.7
30	94.6	62	195.3	94	296.1	126	396.9
31	97.7	63	198.5	95	299.2	127	400.0

Table#8
Compressor Attack Time

Data	Value
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	12
11	14
12	16
13	18
14	20
15	23
16	26
17	30
18	35
19	40

Table#9
Compressor Release Time

Data	Value
0	10
1	15
2	25
3	35
4	45
5	55
6	65
7	75
8	85
9	100
10	115
11	140
12	170
13	230
14	340
15	680

Table#10
Compressor Ratio

Data	Value
0	1.0
1	1.5
2	2.0
3	3.0
4	5.0
5	7.0
6	10.0
7	20.0

Table#11
Reverb Width;Depth;Height

Data	Value	Data	Value	Data	Value	Data	Value
0	0.5	32	8.8	64	17.6	96	27.5
1	0.8	33	9.1	65	17.9	97	27.8
2	1.0	34	9.4	66	18.2	98	28.1
3	1.3	35	9.6	67	18.5	99	28.5
4	1.5	36	9.9	68	18.8	100	28.8
5	1.8	37	10.2	69	19.1	101	29.2
6	2.0	38	10.4	70	19.4	102	29.5
7	2.3	39	10.7	71	19.7	103	29.9
8	2.6	40	11.0	72	20.0	104	30.2
9	2.8	41	11.2	73	20.2		
10	3.1	42	11.5	74	20.5		
11	3.3	43	11.8	75	20.8		
12	3.6	44	12.1	76	21.1		
13	3.9	45	12.3	77	21.4		
14	4.1	46	12.6	78	21.7		
15	4.4	47	12.9	79	22.0		
16	4.6	48	13.1	80	22.4		
17	4.9	49	13.4	81	22.7		
18	5.2	50	13.7	82	23.0		
19	5.4	51	14.0	83	23.3		
20	5.7	52	14.2	84	23.6		
21	5.9	53	14.5	85	23.9		
22	6.2	54	14.8	86	24.2		
23	6.5	55	15.1	87	24.5		
24	6.7	56	15.4	88	24.9		
25	7.0	57	15.6	89	25.2		
26	7.2	58	15.9	90	25.5		
27	7.5	59	16.2	91	25.8		
28	7.8	60	16.5	92	26.1		
29	8.0	61	16.8	93	26.5		
30	8.3	62	17.1	94	26.8		
31	8.6	63	17.3	95	27.1		

[Portable Keyboard]
Model : PSR-740

MIDI Implementation Chart

Date :3-MAR-1999
Version : 1.0

Function...		Transmitted	Recognized	Remarks
Basic	Default	1 - 16 *1	1 - 16 *2	
Channel	Changed	1 - 16 *1	1 - 16 *2	
Mode	Default	3	3	
	Messages	x	x	
	Altered	**********	x	
Note Number	: True voice	0 - 127 **********	0 - 127 0 - 127	
Velocity	Note ON	o 9nH,v=1-127	o 9nH,v=1-127	
	Note OFF	x 9nH,v=0	x	
After Touch	Key's	x	x	
	Ch's	x	o	
Pitch Bend		o	o	
Control Change	0,32	o	o	Bank Select
	1,7,10,11	o	o	
	5	x	o	Portamento Time
	6,38	o	o	Data Entry
	64,66-67	o	o	
	65	x	o	Portamento
	71-72,74	o	o	Sound Controller
	73	x	o	Sound Controller
	84	x	o	Portament Cntrl
	91,93-94	o	o	Effect SendLevel
	96-97	x	o	Data Inc,Dec
	98-99	o	o	NRPN LSB,MSB
	100-101	o	o	RPN LSB,MSB
Prog Change	: True #	o 0 - 127 **********	o 0 - 127	
System Exclusive		o	o	
Common	: Song Pos.	x	x	
	: Song Sel.	x	x	
	: Tune	x	x	
System Real Time	: Clock	o	o	
	: Commands	o	o	
Aux Mes-sages	: All Sound Off	x	o	
	: Reset All Cntrls	x	o	
	: Local ON/OFF	x	x	
	: All Notes OFF	x	o(123-127)	
	: Active Sense	o	o	
	: Reset	x	x	

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON ,MONO o : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF,MONO" x : No

[Portable Keyboard]
Model : PSR-640

MIDI Implementation Chart

Date :3-MAR-1999
Version : 1.0

Function...		Transmitted		Recognized		Remarks
Basic	Default	1 - 16	*1	1 - 16	*2	
Channel	Changed	1 - 16	*1	1 - 16	*2	
	Default	3		3		
Mode	Messages	x		x		
	Altered	**********		x		
Note		0 - 127		0 - 127		
Number	:True voice	**********		0 - 127		
Velocity	Note ON	o 9nH,v=1-127		o 9nH,v=1-127		
	Note OFF	x 9nH,v=0		x		
After	Key's	x		x		
Touch	Ch's	x		o		
Pitch Bend		o		o		
	0,32	o		o		Bank Select
	1,5	x		o		
	7,10,11	o		o		
	6,38	o		o		Data Entry
Control	64,66-67	o		o		
	65	x		o		Portamento
Change	72	o		o		Sound Controller
	71,73-74	x		o		Sound Controller
	84	x		o		Portament Cntrl
	91,93-94	o		o		Effect SendLevel
	96-97	x		o		Data Inc,Dec
	98-99	x		o		NRPN LSB,MSB
	100-101	o		o		RPN LSB,MSB
Prog Change	:True #	o 0 - 127 **********		o 0 - 127		
System Exclusive		o		o		
	: Song Pos.	x		x		
Common	: Song Sel.	x		x		
	: Tune	x		x		
System	: Clock	o		o		
Real Time	: Commands	o		o		
	: All Sound Off	x		o		
Aux	: Reset All Cntrls	x		o		
	: Local ON/OFF	x		x		
Mes-	: All Notes OFF	x		o(123-127)		
sages	: Active Sense	o		o		
	: Reset	x		x		

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON ,MONO o : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF,MONO x : No

*1 The tracks for each channel can be selected on the panel. See page 130 for more information.

*2 Incoming MIDI messages control the PSR-740/640 as 16 channel multi timbral tone generator when initially shipped (factory set). The MIDI messages don't affect the panel controls including the Panel Voice selection since they are directly sent to the tone generator of the PSR-740/640.
However, the following MIDI messages affects the panel controls such as Panel Voice, Style, Multi Pad and Song settings:
- MIDI MASTER TUNE, MASTER TUNE (XG System Parameter).
- TRANSPOSE (XG System Parameter).
- System Exclusive Messages related to the REVERB, CHORUS, DSP EFFECT and MULTI EFFECT (PSR-740 only) settings.
- XG MULTI EQ PARAMETER (PSR-740 only)

Also, the MIDI messages affect the panel settings when one of the folowing MIDI reception modes is selected.
These modes can be selected on the panel (see page 131).

Keyboard : The Note On/Off messages received at the designated Keyboard (receive) channel are processed the same as the notes normally played on the keyboard. In this mode, only the following channel messages will be recognized:
- Note On/Off
- Control Changes
  Bank Select (R1 voice only)
  Modulation
  Volume(R1 voice only)
  Data entry
  Pan (R1 voice only)
  Expression
  Sustain
  Sostenuto
  Soft Pedal
  Harmonic Content
  Release time
  Brightness
  Reverb send level (R1 voice only)
  Chorus send level (R1 voice only)
  Variation send level (R1 voice only)
  NRPN (Vibrato rate, Vibrato depth) (R1 voice only) (PSR-740 only)
  RPN (Pich bend sensitivity)
  All Notes Off
- Program Change (R1 voice only)
- Pitch Bend

Root : The note on/off messages received at the channel(s) set to "Root" are recognized as the bass notes in the accompaniment section.
The bass notes will be detected regardless of the accompaniment on/off the PSR-740/640.
However, the following MIDI messages affects and split point settings on the PSR-740/640 panel.

Chord : The note on/off messages received at the channel(s) set to "Chord" are recognized as the fingerings in the accompaniment section.
The chords to be detected Parameter. depend on the fingering mode on the PSR-740/640.
The chords will be detected regardless of the accompaniment on/off and split point settings on the PSR-740/640 panel.

V. Harmony : See "Vocal Harmony MIDI Specifications" (see below). (PSR-740 only)

Off : The MIDI channel messages will not be received at the designated channel.

Vocal Harmony MIDI Specifications (PSR-740 ONLY)

Channel message

			Harmony ch	Melody ch	
1) Note on / off					
9n kk vv	note on message		O	O	Specifies pitch in the Vocoder mode. Velocity not recognized. Also used as Gender Threshold source for the Melody channel.
8n kk vv	note off message		O	O	Turns the current note off in the Vocoder mode.
9n kk 00					Also used as Gender Threshold source for the Melody channel.
2) Control change					
Bn 40 vv	damper pedal		O	O	
64	RPN		O	O	
65	RPN		O	O	
62	NRPN		O	O	
63	NRPN		O	O	
06	Data entry MSB		O	O	
64	Data Increment		O	O	
26	Data Decrement		O	O	
7B	All note off		O	O	
3) RPN					
MSB	LSB				
00	00	Pitch bend sensitivity	O	O	
7F	7F	NULL	O	O	
4) NRPN					
MSB	LSB				
00	00	Harmony mute	O	X	
01	08	Vibrato rate modulation	O	O	
01	09	Vibrato depth modulation	O	O	
01	0A	Vibrato delay modulation	O	O	
01	1A	Detune modulation	O	X	Controls the overall amount of detune.
02	10	Harmony 1 volume	O	X	
02	11	Harmony 2 volume	O	X	
02	20	Harmony 1 pan	O	X	
02	21	Harmony 2 pan	O	X	
02	30	Harmony 1 detune	O	X	
02	31	Harmony 2 detune	O	X	
5) Pitch bend					
E0 nn nn			O	O	Only effective when melody channel Lead Gender ON.

A

B

C

D

E

F

G

H

I

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Specifications

Keyboards
- 61 standard-size keys (C1 — C6) with touch response.

Display
- Large multi-function LCD display

Setup
- STANDBY/ON
- Master Volume : MIN — MAX
- Input Volume : MIC/LINE (PSR-740)

Demo
- PSR-740 : 10 Songs
- PSR-640 : 8 Songs

Language
- English, German, French, Spanish, Italian, Japanese

Realtime Controls
- Pitch Bend wheel
- Modulation wheel (PSR-740)

Control & Number Buttons
- VOICE L
- VOICE R1
- VOICE R2
- FUNCTION
- SONG
- STYLE
- TEMPO/TAP
- TRANSPOSE
- ACMP/SONG VOLUME
- VOICE CHANGE
- MIXER
- ORGAN FLUTE (PSR-740)
- GROOVE (PSR-740)
- MULTI EFFECT (PSR-740)
- VOCAL HARMONY (PSR-740)
- DIRECT ACCESS
- NEXT/BACK
- EXIT
- Data dial, [1] — [0], [+/YES], [–/NO]

Voice
PSR-740
- 267 Panel Voices +13 Drum Kits + 480 XG Voices + 1 Organ Voice
- Polyphony : 64

PSR-640
- 223 Panel Voices +12 Drum Kits + 480 XG Voices
- Polyphony : 32

- Voice Set
- R1/R2/L Voices
- Part on/off (R1/R2/L)
- Voice Change : Voice number
- Mixer : Volume
- Parameter Edit : Octave, Pan, Reverb Depth, Chorus Depth, DSP Depth

Organ Flutes (PSR-740)
- Organ type : 8 types
- Vibrato Speed
- Attack Mode
- Attack Footage
- Length
- Response
- Footage

Auto Accompaniment
- 160 Styles
- Accompaniment Track : RHYTHM1/2, BASS, CHORD 1/2, PAD, PHRASE1/2
- Accompaniment Track Settings : ON/OFF
- Accompaniment Control : ACMP ON/OFF, SYNC START, SYNC STOP, START/STOP,COUNT INTRO (PSR-740), INTRO, MAIN/AUTO FILL, SIMPLE ENDING/rit. (PSR-740), ENDING/rit.
- Beat Indicator
- Accompaniment Volume
- Voice Change : Voice number
- Mixer : Volume
- Parameter Edit : Pan, Reverb depth, Chorus depth, DSP depth (PSR-640)
- One Touch Setting
- Fingering Mode : Multi Finger/Single Finger/Fingered 1/Fingered 2/Full Keyboard

Groove (PSR-740)
- Groove type : 11 types
- Dynamics type : 18 types

Multi Pads
- 36 Multi Pad Banks
- 4 Pads + STOP
- Chord Match
- Naming

Digital Effects
PSR-740
- Reverb : 24 types
- Chorus : 20 types
- DSP (system/insertion) : 102 types
- DSP1 - 3 (Multi Effect) : 74 types
- DSP4 (microphone sound) : 74 types
- Harmony/Echo : 22 types
- Master EQ : 5types

PSR-640
- Reverb : 24 types
- Chorus : 16 types
- DSP (system/insertion) : 74 types
- Harmony/Echo : 22 types

Registration Memory
- 32 Registration Banks : 1 — 4
- Naming
- Accompaniment Freeze

Disk Operations
- Song playback/recording
- Load
- Save
- Utility : Format, Song Copy, Delete File

Song
- Song Volume
- Song Track Settings : ON/OFF
- Repeat Play
- Song Transpose

Song Recording
- Quick Record, Multi Record
- Recording Tracks: 1 — 16
- Punch In/Punch Out
- Quantize
- Naming
- Clear
- Setup Data : Volume, Octave, Pan, Reverb depth, Chorus depth, DSP depth

Multi Pad Recording
- User Pad Bank : 4 (37 — 40)
- Naming
- Clear
- Chord Match

Style Recording
- User Styles : 3 (161 — 163)
- Recording Tracks
  PSR-740 : 12 Sections x 8 tracks
  PSR-640 : 10 Sections x 8 tracks
- Drum Cancel
- Quantize
- Naming
- Clear
- Ctab :

MIDI
- Transmit settings
- Receive settings
- Local Control
- Clock
- Initial Data Send
- MIDI template

Other functions
- Metronome
- Part Octave
- Master Tuning
- Scale Tuning
- Split Point
- Touch Sensitivity
- Voice Set
- Footswitch function
- Foot Volume function
- Pitch Bend Range
- Modulation Wheel function (PSR-740)

Auxiliary Jacks
- DC IN 10-12V
- PHONES
- FOOT SWITCH
- FOOT VOLUME
- AUX OUT (R, L+R/L)
- MIDI IN/OUT, TO HOST
- MIC/LINE IN (PSR-740)

Amplifiers
- 6W + 6W

Speakers
- 12 cm (4-3/4") x 2 + 5cm x 2

Power Consumption
- 24W

Power Supply
- Adaptor : Yamaha PA-6 power adaptor

Dimensions (W x D x H)
- 973 x 399 x 161 (mm)
  (38-5/16" x 15-11/16" x 6-5/16")

Weight
- PSR-740 : 10.2kg
- PSR-640 : 10kg

Supplied Accessories
- Sample Disk
- Music Stand
- Owner's Manual

Optional Accessories
- Headphones : HPE-150
- AC Power Adaptor : PA-6
- Foot Switch : FC4, FC5
- Keyboard Stand : L-6, L-7

** Specifications and descriptions in this owner's manual are for information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.*

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.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

(class B)

OBSERVERA!
Apparaten kopplas inte ur växelströmskällan (nätet) sá länge som den ar ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSEL: Netspændingen til dette apparat er IKKE afbrudt, sálænge netledningen siddr i en stikkontakt, som er t endt — ogsá selvom der or slukket pá apparatets afbryder.

VAROITUS: Laitteen toisiopiiriin kytketty käyttökytkin ei irroita koko laitetta verkosta.

(standby)

Limited Warranty

90 DAYS LABOR **1 YEAR PARTS**

Yamaha Corporation of America, hereafter referred to as Yamaha, warrants to the original consumer of a product included in the categories listed below, that the product will be free of defects in materials and/or workmanship for the periods indicated. This warranty is applicable to all models included in the following series of products:

PSR SERIES OF PORTATONE ELECTRONIC KEYBOARDS

If during the first 90 days that immediately follows the purchase date, your new Yamaha product covered by this warranty is found to have a defect in material and/or workmanship, Yamaha and/or its authorized representative will repair such defect without charge for parts or labor.

If parts should be required after this 90 day period but within the one year period that immediately follows the purchase date, Yamaha will, subject to the terms of this warranty, supply these parts without charge. However, charges for labor, and/or any miscellaneous expenses incurred are the consumers responsibility. Yamaha reserves the right to utilize reconditioned parts in repairing these products and/or to use reconditioned units as warranty replacements.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY WHICH YAMAHA MAKES IN CONNECTION WITH THESE PRODUCTS. ANY IMPLIED WARRANTY APPLICABLE TO THE PRODUCT, INCLUDING THE WARRANTY OF MERCHANT ABILITY IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY. YAMAHA EXCLUDES AND SHALL NOT BE LIABLE IN ANY EVENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations that relate to implied warranties and/or the exclusion of incidental or consequential damages. Therefore, these limitations and exclusions may not apply to you.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

CONSUMERS RESPONSIBILITIES

If warranty service should be required, it is necessary that the consumer assume certain responsibilities:

1. Contact the Customer Service Department of the retailer selling the product, or any retail outlet authorized by Yamaha to sell the product for assistance. You may also contact Yamaha directly at the address provided below.
2. Deliver the unit to be serviced under warranty to: the retailer selling the product, an authorized service center, or to Yamaha with an explanation of the problem. Please be prepared to provide proof purchase date (sales receipt, credit card copy, etc.) when requesting service and/or parts under warranty.
3. Shipping and/or insurance costs are the consumers responsibility.* Units shipped for service should be packed securely.

   *Repaired units will be returned PREPAID if warranty service is required within the first 90 days.

   IMPORTANT: Do NOT ship anything to ANY location without prior authorization. A Return Authorization (RA) will be issued that has a tracking number assigned that will expedite the servicing of your unit and provide a tracking system if needed.
4. Your owners manual contains important safety and operating instructions. It is your responsibility to be aware of the contents of this manual and to follow all safety precautions.

EXCLUSIONS

This warranty does not apply to units whose trade name, trademark, and/or ID numbers have been altered, defaced, exchanged removed, or to failures and/or damages that may occur as a result of:

1. Neglect, abuse, abnormal strain, modification or exposure to extremes in temperature or humidity.
2. Improper repair or maintenance by any person who is not a service representative of a retail outlet authorized by Yamaha to sell the product, an authorized service center, or an authorized service representative of Yamaha.
3. This warranty is applicable only to units sold by retailers authorized by Yamaha to sell these products in the U.S.A., the District of Columbia, and Puerto Rico. This warranty is not applicable in other possessions or territories of the U.S.A. or in any other country.

Please record the model and serial number of the product you have purchased in the spaces provided below.

Model_____ Serial #_____ Sales Slip #_____

Purchased from_____ Date_____
(Retailer)

YAMAHA CORPORATION OF AMERICA
Electronic Service Division
6600 Orangethorpe Avenue
Buena Park, CA 90620

KEEP THIS DOCUMENT FOR YOUR RECORDS. DO NOT MAIL!

For details of products, please contact your nearest Yamaha or the authorized distributor listed below.

Pour plus de détails sur les produits, veuillez-vous adresser à Yamaha ou au distributeur le plus proche de vous figurant dans la liste suivante.

Die Einzelheiten zu Produkten sind bei Ihrer unten aufgeführten Niederlassung und bei Yamaha Vertragshändlern in den jeweiligen Bestimmungsländern erhältlich.

Para detalles sobre productos, contacte su tienda Yamaha más cercana o el distribuidor autorizado que se lista debajo.

NORTH AMERICA

CANADA
Yamaha Canada Music Ltd.
135 Milner Avenue, Scarborough, Ontario, M1S 3R1, Canada
Tel: 416-298-1311

U.S.A.
Yamaha Corporation of America
6600 Orangethorpe Ave., Buena Park, Calif. 90620, U.S.A.
Tel: 714-522-9011

CENTRAL & SOUTH AMERICA

MEXICO
Yamaha de Mexico S.A. De C.V., Departamento de ventas
Javier Rojo Gomez No.1149, Col. Gpe Del Moral, Deleg. Iztapalapa, 09300 Mexico, D.F.
Tel: 686-00-33

BRAZIL
Yamaha Musical do Brasil LTDA.
Av. Rebouças 2636, São Paulo, Brasil
Tel: 011-853-1377

ARGENTINA
Yamaha Music Argentina S.A.
Viamonte 1145 Piso2-B 1053, Buenos Aires, Argentina
Tel: 1-371-7021

PANAMA AND OTHER LATIN AMERICAN COUNTRIES/ CARIBBEAN COUNTRIES
Yamaha de Panama S.A.
Torre Banco General, Piso 7, Urbanización Marbella, Calle 47 y Aquilino de la Guardia, Ciudad de Panamá, Panamá
Tel: 507-269-5311

EUROPE

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Danfay Ltd.
61D, Sallynoggin Road, Dun Laoghaire, Co. Dublin
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Yamaha Europa GmbH.
Siemensstraße 22-34, 25462 Rellingen, F.R. of Germany
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Yamaha Music Belgium
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Tel: 02-7258220

FRANCE
Yamaha Musique France, Division Claviers
BP 70-77312 Marne-la-Vallée Cedex 2, France
Tel: 01-64-61-4000

ITALY
Yamaha Musica Italia S.P.A., Home Keyboard Division
Viale Italia 88, 20020 Lainate (Milano), Italy
Tel: 02-935-771

SPAIN/PORTUGAL
Yamaha-Hazen Electronica Musical, S.A.
Jorge Juan 30, 28001, Madrid, Spain
Tel: 91-577-7270

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Philippe Nakas S.A.
Navarinou Street 13, P.Code 10680, Athens, Greece
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SWEDEN
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DENMARK
YS Copenhagen Liaison Office
Generatorvej 8B
DK-2730 Herlev, Denmark
Tel: 44 92 49 00

FINLAND
F-Musiikki Oy
Kluuvikatu 6, P.O. Box 260,
SF-00101 Helsinki, Finland
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NORWAY
Norsk filial av Yamaha Scandinavia AB
Grini Næringspark 1
N-1345 Østerås, Norway
Tel: 67 16 77 70

ICELAND
Skifan HF
Skeifan 17 P.O. Box 8120
IS-128 Reykjavik, Iceland
Tel: 525 5000

OTHER EUROPEAN COUNTRIES
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Siemensstraße 22-34, 25462 Rellingen, F.R. of Germany
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OTHER COUNTRIES
Yamaha Music Gulf FZE
LB21-128 Jebel Ali Freezone
P.O.Box 17328, Dubai, U.A.E.
Tel: 971-4-81-5868

ASIA

HONG KONG
Tom Lee Music Co., Ltd.
11/F., Silvercord Tower 1, 30 Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: 2737-7688

INDONESIA
PT. Yamaha Music Indonesia (Distributor) PT. Nusantik
Gedung Yamaha Music Center, Jalan Jend. Gatot Subroto Kav. 4, Jakarta 12930, Indonesia
Tel: 21-520-2577

KOREA
Cosmos Corporation
1461-9, Seocho Dong, Seocho Gu, Seoul, Korea
Tel: 02-3486-0011

MALAYSIA
Yamaha Music Malaysia, Sdn., Bhd.
Lot 8, Jalan Perbandaran, 47301 Kelana Jaya, Petaling Jaya, Selangor, Malaysia
Tel: 3-703-0900

PHILIPPINES
Yupangco Music Corporation
339 Gil J. Puyat Avenue, P.O. Box 885 MCPO, Makati, Metro Manila, Philippines
Tel: 819-7551

SINGAPORE
Yamaha Music Asia Pte., Ltd.
11 Ubi Road #06-00, Meiban Industrial Building, Singapore
Tel: 65-747-4374

TAIWAN
Yamaha KHS Music Co., Ltd.
10F, 150, Tun-Hwa Northroad, Taipei, Taiwan, R.O.C.
Tel: 02-2713-8999

THAILAND
Siam Music Yamaha Co., Ltd.
121/60-61 RS Tower 17th Floor, Ratchadaphisek RD., Dindaeng, Bangkok 10320, Thailand
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Music Houses of N.Z. Ltd.
146/148 Captain Springs Road, Te Papapa, Auckland, New Zealand
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V386510 909POCP3.3-03C0 Printed in Japan