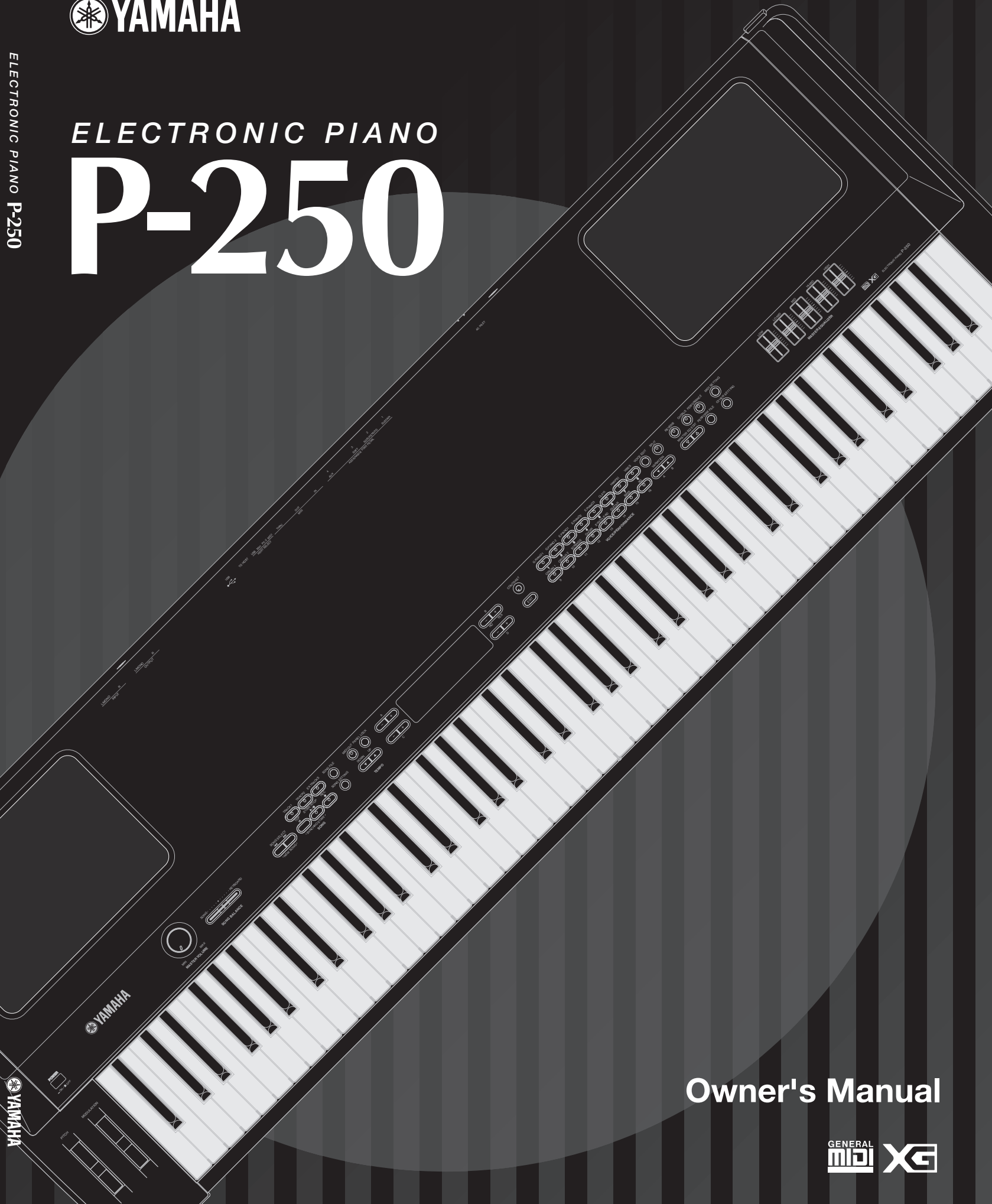




ELECTRONIC PIANO P-250

ELECTRONIC PIANO

P-250

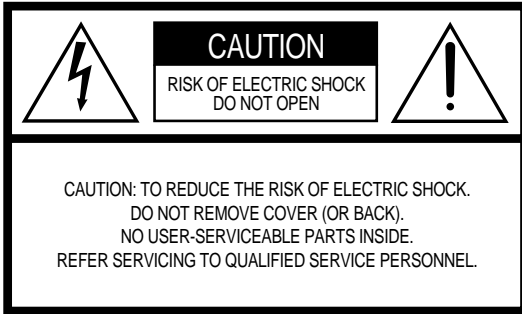


Owner's Manual



SPECIAL MESSAGE SECTION

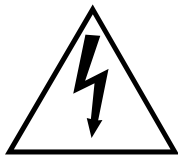
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See the bottom of the keyboard enclosure for graphic symbol markings.



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



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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:

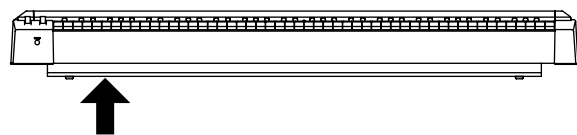
Battery Notice: This product MAY contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

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

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

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



P-250

On P-250 units distributed in countries other than the U.S. and Canada, the name plate location may be different than that shown in the illustration above.

Model _____

Serial No. _____

Purchase Date _____

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep this manual 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:

Power supply/Power cord

- Use only the voltage specified for the instrument. The required voltage is printed on the name plate of the instrument.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- Use only the supplied power cord/plug.
- Do not place the power 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.

Do not open

- 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 the instrument inspected by qualified Yamaha service personnel.

Water warning

- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers of liquid on it that might spill into any openings.
- Never insert or remove an electric plug with wet hands.

Fire warning

- Do not put burning items, such as candles, on the unit. Burning items may fall over and cause a fire.

If you notice any abnormality

- If the power 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 electric plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.



CAUTION

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

Power supply/Power cord

- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling on the cord can damage it.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, and during electrical storms.
- 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.

Location

- Do not expose the instrument to excessive dust or vibration, 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 in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise.
- Do not place the instrument in an unstable position from which it might accidentally fall over.
- Do not place objects in front of the instrument's air vent, since this may prevent adequate ventilation of the internal components, and possibly result in the instrument overheating.
- Before moving the instrument, remove all connected cables.
- Use only the stand specified for the instrument. When attaching the stand or rack, use the provided screws only. Failure to do so could cause damage to internal components or result in the instrument falling over.

Connections

- 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.

Maintenance

- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

Handling precaution

- Do not insert a finger or hand in any gaps on the instrument.
- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard. If this happens, turn off the power immediately and unplug the power cord from the AC outlet. Then, have the instrument inspected by qualified Yamaha service personnel.
- Do not place vinyl, plastic or rubber objects on the instrument since they might discolor the panel or keyboard.
- Do not rest your weight, or place heavy objects on the instrument. Do not use excessive force on the buttons, switches or connectors.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this may cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

Yamaha is not 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.

Saving data

Saving and backing up your data

For instruments with DRAM (RAM that does not retain data)

- Current memory data (see page 33) is lost when you turn off the power to the instrument. Save the data to the storage memory (see pages 44 and 54).

Introduction

Thank you for purchasing the P-250 Electronic Piano.

The P-250 is a product of Yamaha's extensive experience in creating fine musical instruments. Its beautiful sound and versatile editing functions enable you to use the P-250 in virtually any situation, ranging from live performance to recording.

In order to take maximum advantage of the many advanced features and capabilities offered by the P-250, we urge you to read this manual carefully, and keep it in a safe, accessible location for future reference.

How to Use this Manual

This manual consists of three main sections: **Basic Operation**, **Edit Operation**, and **Appendix**.

Begin by reading the **Basic Operation** section to learn about the basic functions of the P-250. Then, proceed to the **Edit Operation** and **Appendix** sections for information about a particular function or to master an advanced technique. Page references will help you locate specific information.

Basic Operation includes a quick guide that explains how to connect and set up your P-250 and use its basic functions. It also describes the concept and structure of the P-250 in plain language.

Edit Operation explains detailed functions and settings for convenient and advanced techniques.

Appendix includes a list of voice and performance presets, reference materials, a *Troubleshooting* section and an *Index*.

■ Accessories and Options

Supplied Accessories

AC power cord
 FC3 foot pedal
 Music rest
 Owner's manual
 Data List
 CD-ROM (TOOLS for P-250)
 TOOLS for P-250 Installation Guide

Options

Yamaha FC3 foot pedal
 Yamaha FC4/FC5 foot switch
 Yamaha FC7 foot controller
 Yamaha LP-3/LG-100 keyboard stand
 Yamaha HPE-170/RH headphones

* The illustrations and LCD screens in this owner's manual are intended for instructional purposes only, and may appear somewhat different from those on your instrument.

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■ Features

- High-quality piano presets that sound virtually identical to an acoustic piano, due to three-stage dynamic sampling, damper pedal tonal control, and subtle voicing nuances that are generated upon key release.
- An 88-key graded-hammer keyboard that replicates piano-like strokes
- Maximum 128-voice polyphony, 45 original voices by AWM tone generation, plus 480 standard voices and 12 drum kits that are XG-compatible
- Simple and easy operation via a back-lit LCD and user-friendly control panel
- Various effects that add richness, depth and breadth to the sound
- Versatile MIDI functions
- A master equalizer that enables you to adjust the tone easily from the panel
- A foot control function, as well as pitch bend and modulation wheels, that serve as convenient and powerful tools for live performance
- A performance function that stores various parameters and settings, and recalls them quickly
- A 16-track sequencer function that records and plays performance data

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Edit Operation

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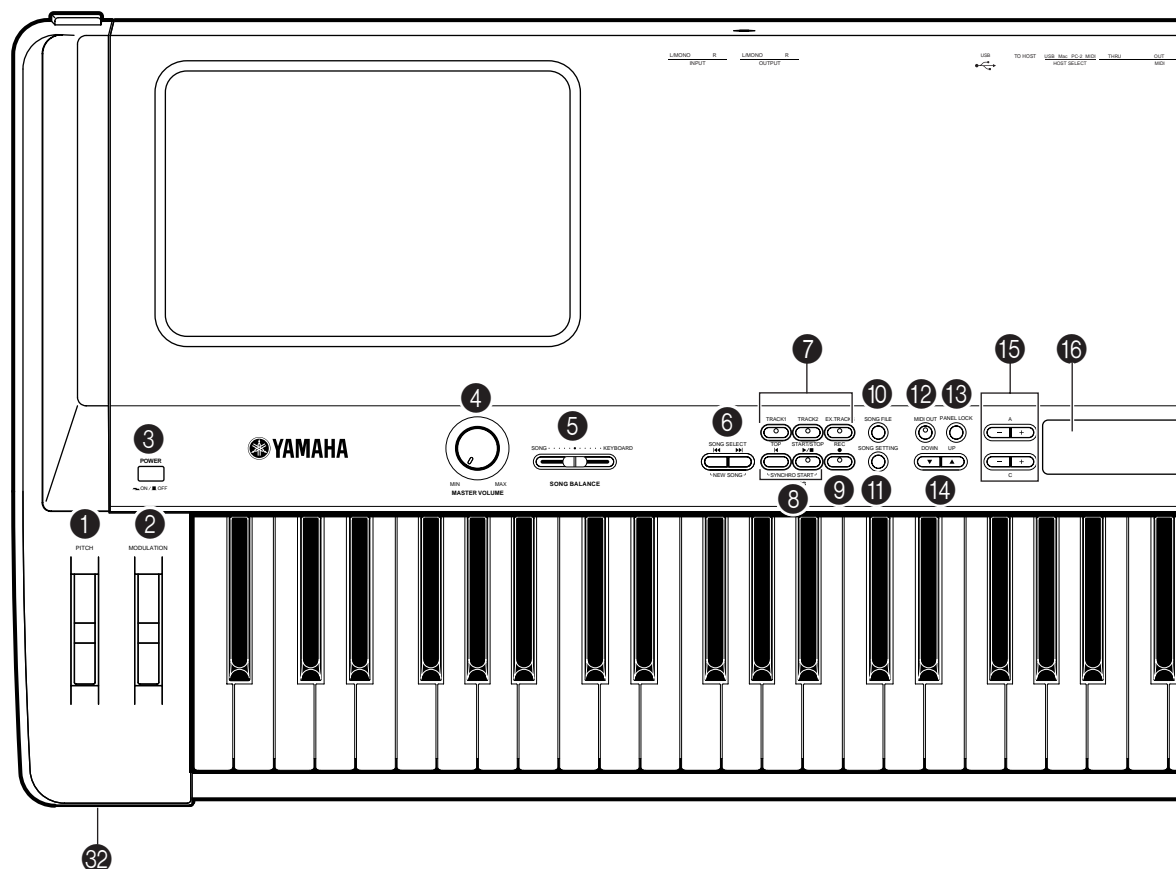
Basic Operation

Basic Operation includes a quick guide that explains how to connect and set up your P-250 and use its basic functions. It also describes the concept and structure of the P-250 in plain language.

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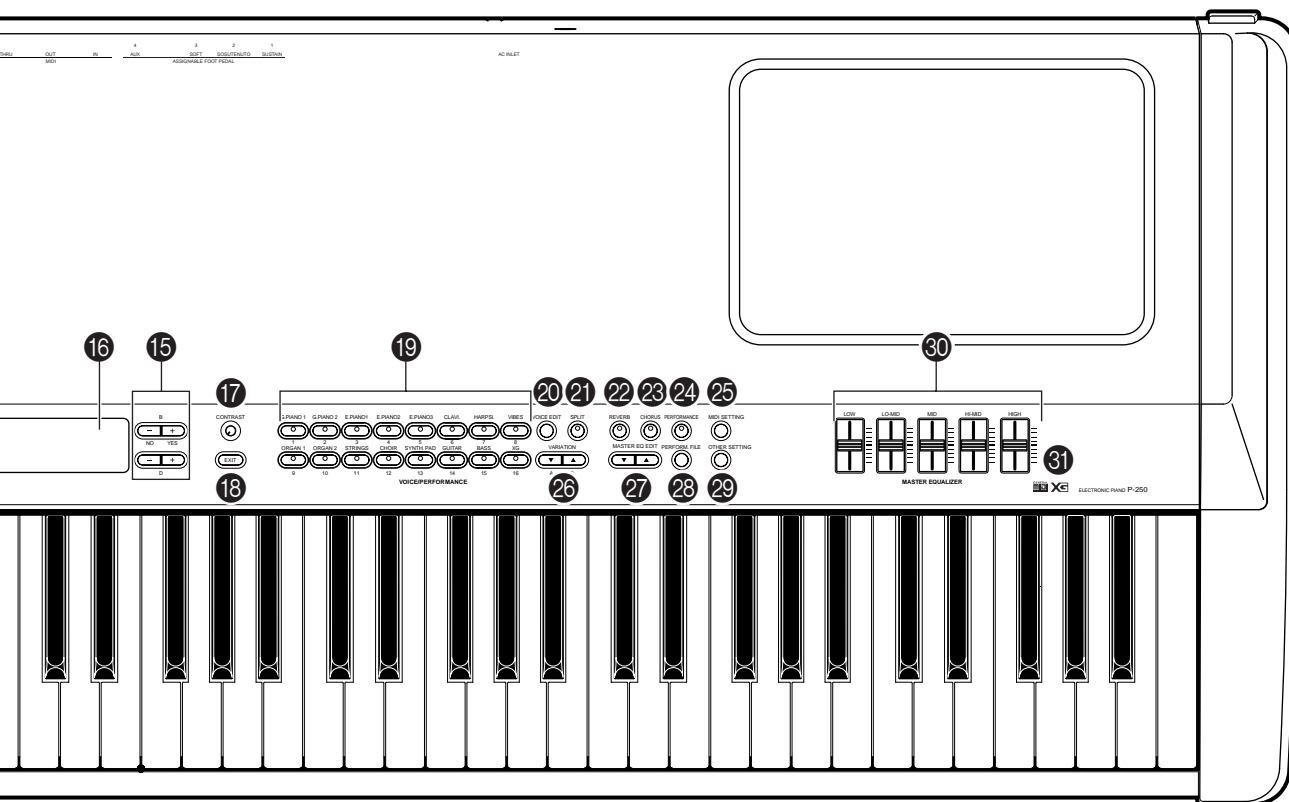
Names and Functions

■ Top Panel



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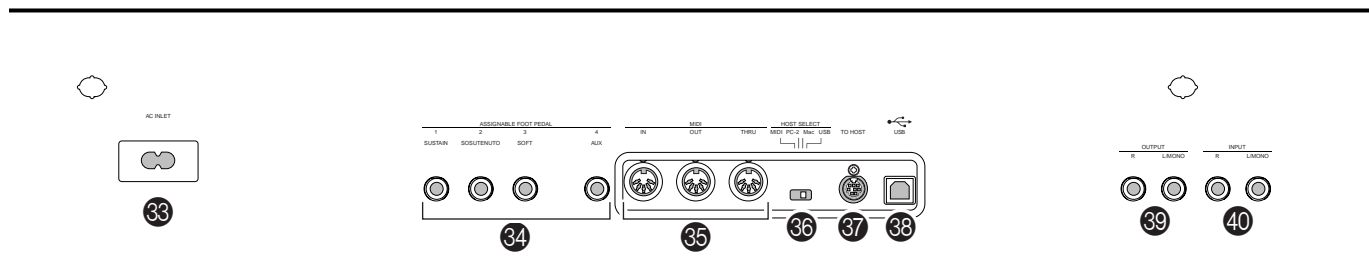
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■ Rear Panel Controls

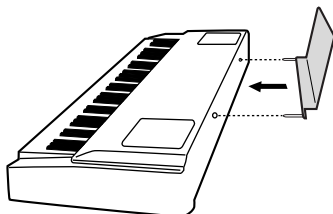


Setting Up

■ Installing the Accessories

■ Music rest

To attach the music rest, insert its pins into the holes on the P-250's rear panel, as shown in the diagram below.

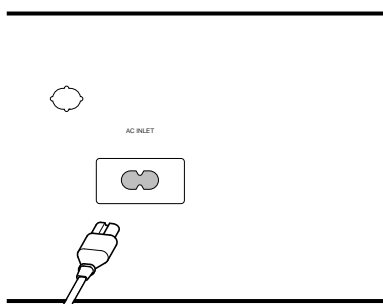


■ Pedal

Connect the included pedal (FC3) to the [1(SUSTAIN)], [2(SOSTENUTO)], or [3(SOFT)] jack on the rear panel. In most situations, you will likely connect the pedal to the [1(SUSTAIN)] jack for use as a sustain pedal (page 23).

■ Before Powering Up

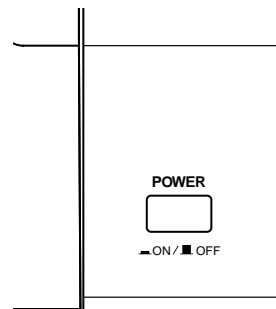
- 1 Make sure the [POWER] switch is OFF.
- 2 Plug the appropriate end of the included power cable into the [AC INLET].



- 3 Plug the other end of the power cable into an AC outlet.

■ Powering Up

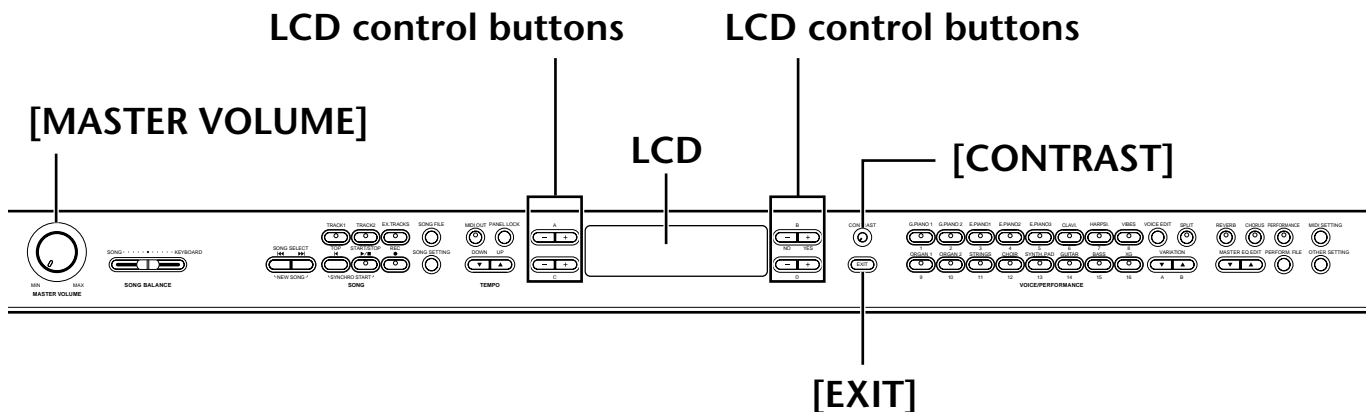
- 1 Turn the power ON by pressing the [POWER] switch.



- 2 Rotate the [CONTRAST] knob to adjust the brightness of the LCD.
- 3 Adjust the [MASTER VOLUME] control to a comfortable listening level while playing the keyboard or playing back the demonstration songs.

LCD and LCD control buttons

You can use the LCD control buttons (A, B, C, and D) to select and set the items displayed on the LCD. Verify the operation by checking the LCD. When you press the [EXIT] button, the unit displays the initial power-on screen.



Connecting to External Devices

CAUTION

Before you connect the P-250 to other electronic components, first set all volume levels to minimum (0), then turn off the power to all components.

As a standard practice, before you turn the power on or off to any component, set all volume levels to minimum (0). Otherwise, electrical shock or damage to the components may result.

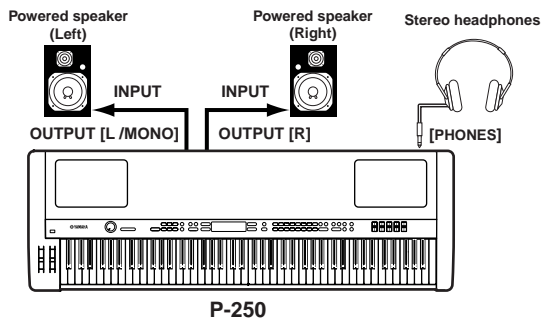
Connecting to External Audio Equipment

Although the P-250 has built-in speakers, you can connect an external stereo system or powered speakers as a monitor. You can also connect a set of headphones (page 23).

There are several ways to connect the P-250 to external audio equipment, as described in the following illustrations. Refer to the illustration most similar to your intended setup.

Connecting stereo powered speakers

A pair of powered speakers can accurately produce the instrument's rich sounds as well as the pan and effect settings. Connect your powered speakers to the OUTPUT [L/MONO] and [R] jacks on the rear panel.

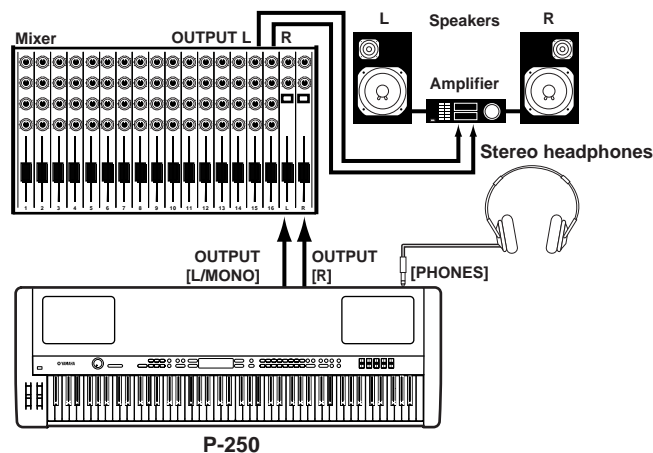


TIP

To use a single powered speaker, connect it to the OUTPUT [L/MONO] jack on the rear panel.

Connecting to a mixer

A mixer is often used for recording and live performance, enabling you to play the P-250 through a large-scale sound system.

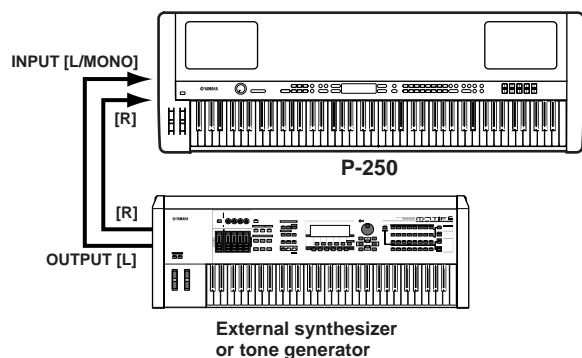


TIP

Connecting a pair of headphones does not affect audio output from the OUTPUT [L/MONO] and [R] jacks. You can monitor the output via headphones or at the OUTPUT jacks.

Connecting to an external instrument

The stereo outputs from another instrument can be connected to the INPUT [L/MONO] and [R] jacks, allowing the sound of an external instrument to be reproduced via the P-250's speakers.



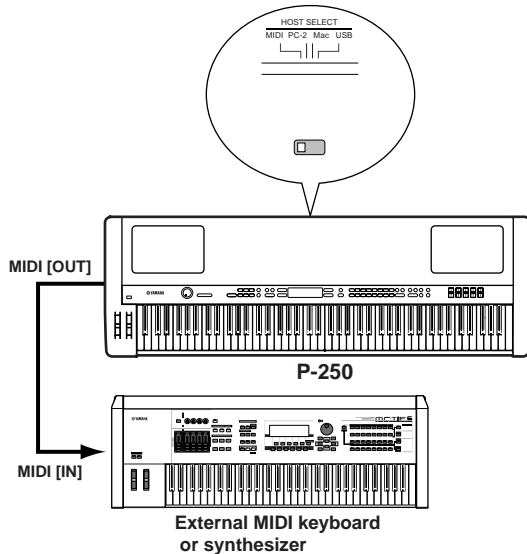
■ Connecting External MIDI Equipment

Using a standard MIDI cable (available separately), you can connect an external MIDI device, and control it from the P-250. You can also use an external MIDI keyboard or sequencer to control the P-250's internal sounds. Several different MIDI connection examples are illustrated below:

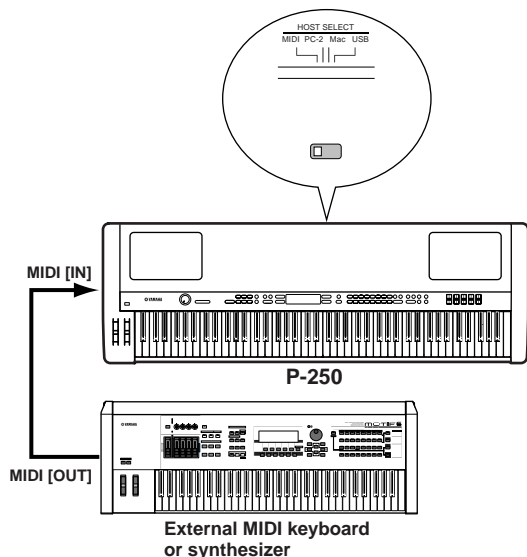
TIP

The HOST SELECT switch should be set to "MIDI." Otherwise, MIDI information will not be transmitted from the P-250's MIDI OUT connector.

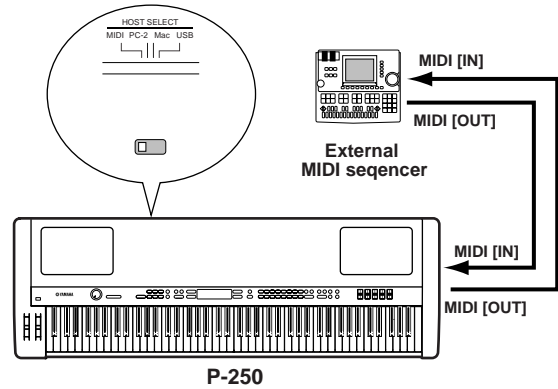
■ Controlling an external device from the P-250



■ Controlling the P-250 from an external device



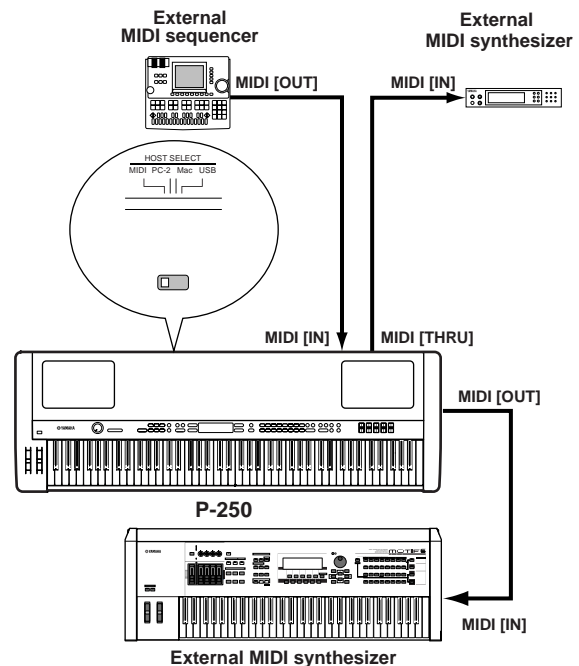
■ Recording your performance on the P-250 to an external MIDI sequencer (such as the QY series), or playing the P-250 (as a tone generator) from an external MIDI sequencer



NOTE

The P-250 does not receive or transmit MIDI Start (FAh), Continue (FBh), or Stop (FCh) messages.

■ Controlling another MIDI device via the MIDI [THRU] connector



In this example, P-250 performance data is transmitted from the MIDI [OUT] connector. MIDI data input from an external MIDI sequencer is output as is from the MIDI [THRU] connector.

TIP

The MIDI cable should be shorter than 15 meters, and there should be no more than three devices in a MIDI chain (chained in series via each unit's MIDI [THRU] connector). To connect more units, use a MIDI thru box for parallel connections. You may encounter errors if the MIDI cables are too long or if too many devices are chained together via their MIDI [THRU] connectors.

NOTE

The P-250 does not receive or transmit MIDI Start (FAh), Continue (FBh), or Stop (FCh) messages.

■ Connecting to a Personal Computer

When a computer is connected, it can be used to control the P-250 or transfer P-250 data to or from the computer via MIDI. For example, you can edit the P-250's voices or store the P-250's voice data in the computer.

There are three ways in which to connect your P-250 to a computer:

- 1 **USB connection (the computer's USB port to the P-250 [USB] connector)**
- 2 **Serial connection (the computer's serial port to the P-250 [TO HOST] connector)**
- 3 **MIDI connection (the computer's MIDI interface or external MIDI interface to the P-250 MIDI [IN] and [OUT] connectors)**

TIP

After you connect the P-250 to the computer, make sure that Local On/Off (pages 22 and 74) is set correctly according to the system environment.

TIP

You will need MIDI application software (sequencer, editor, etc.) compatible with your computer platform. (Refer to the separate Installation Guide.)

NOTE

When you connect the P-250 to a personal computer, first turn off the power to both the P-250 and the computer before you connect any cables and set the HOST SELECT switch. After you make connections and set the switch, turn on the power to the computer first, then to the P-250.

NOTE

If you are not using the connection between the P-250 and your computer, you must disconnect the cable from the [TO HOST] or [USB] connector. If the cable is connected, the P-250 may not function properly.

The connectors that can be used depend on the setting of the [HOST SELECT] switch.

[HOST SELECT] Switch Setting	Usable connectors
MIDI	MIDI [IN], [OUT], [THRU] connectors
PC-2, Mac	[TO HOST]
USB	[USB]

Different computers require different connections, as follows.

Setting the [HOST SELECT] switch

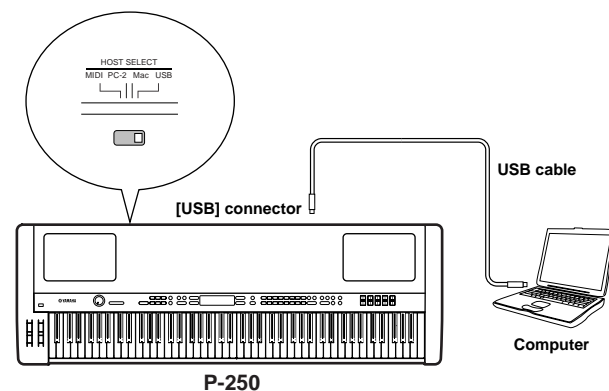
Set the [HOST SELECT] switch according to the type of connected computer:

- Macintosh:
"Mac" (data transfer rate: 31,250bps, 1MHz clock)
- Windows:
"PC-2" (data transfer rate: 38,400bps)

NOTE

If your system does not work properly with the connections and settings listed above, check your software operation manual and set the HOST SELECT switch to the proper data transfer rate.

■ 1 USB connection (the computer's USB port to the P-250 [USB] connector)

**TIP**

About the USB driver:

You must install the specified USB driver (YAMAHA USB MIDI Driver) in your computer before you can transfer data between the computer and the P-250.

The YAMAHA USB MIDI Driver can be installed from the included "TOOLS for P-250" CD-ROM.

The YAMAHA USB MIDI Driver supports the following OS versions:

Windows 98, Windows 98SE, Windows Me, Windows 2000, Windows XP
Mac OS 8.6 through 9.2.1

TIP

You will need MIDI application software (sequencer, editor, etc.) compatible with your computer platform.

CAUTION

If you want to use a USB cable to connect the P-250 to your computer, you must connect the USB cable before you turn on the power to the P-250.

Also, do not turn the power of the P-250 on or off while application software that uses USB MIDI is running.

TIP

The P-250 will begin transmission soon after the USB connection is made.

NOTE

When using a USB cable to connect the P-250 to your computer, make the connection directly without passing through a USB hub.

CAUTION

Depending on the state of your computer, the operations of the P-250 may become unstable. Do not use your computer in a way that causes it to become unstable.

CAUTION

If you turn the power of the P-250 on or off, or connect or disconnect the USB cable in the following states, problems will occur in the computer system, possibly causing it to freeze (hang up), or causing the P-250 to stop functioning:

- While installing the driver
- While starting or shutting down the operating system
- While the computer is in Save Energy (Sleep) mode
- While a MIDI application program is starting up.

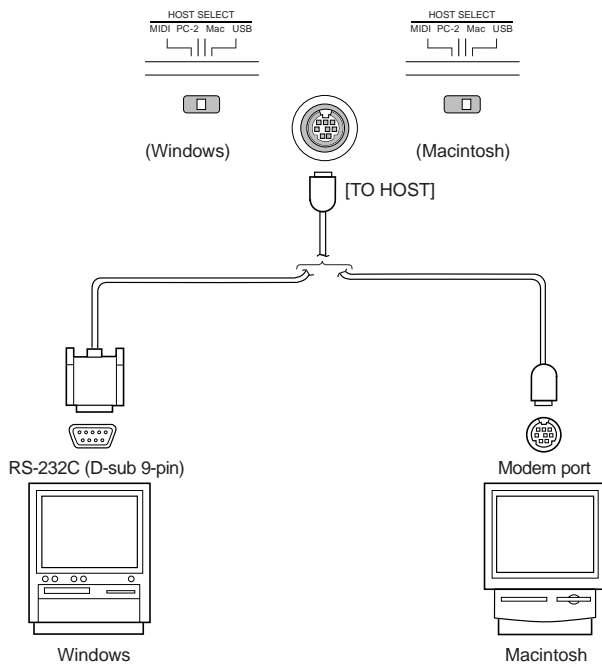
CAUTION

Performing the following actions may cause your computer to hang up or cause the P-250 to stop functioning:

- Turning the power on or off, or connecting or disconnecting the cable too often
- Shifting to power-conservation (sleep) mode while MIDI data is being transferred, or returning from sleep mode
- Disconnecting or connecting the cable while the P-250 is on
- Turning the power to the P-250 on or off, starting up your computer, or installing the driver while a large amount of data is being transferred

2 Serial connection (computer's serial port to P-250 [TO HOST] connector)

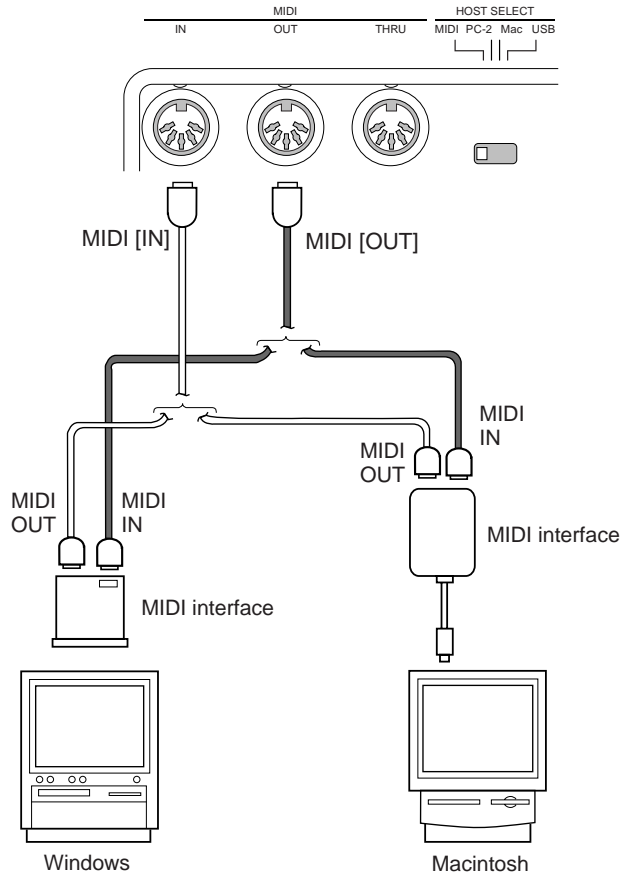
- Using the computer's MIDI interface



TIP

Note for Windows users regarding the MIDI driver:
 To transfer data via the computer's serial port and the P-250 [TO HOST] connector, you need to install a specified MIDI driver (Yamaha CBX driver for Windows). You can download this driver from the XG Library on the Yamaha Web site (<http://www.yamaha-xg.com/>) or install it from the included "TOOLS for P-250" CD-ROM.

- Using an external MIDI interface

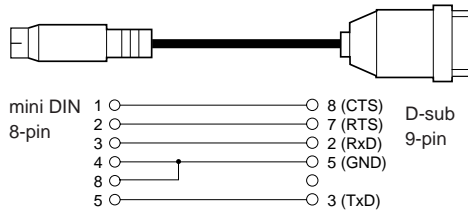


Type of serial cables and pin assignments

Depending on the type of computer you connect, use one of the following serial cables:

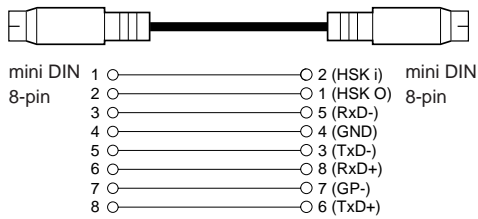
Windows (with a 9-pin D-sub serial port)

8-pin mini DIN plug → D-sub 9-pin plug
(Yamaha CCJ-PC2 or equivalent)



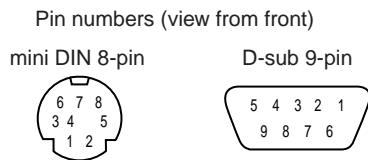
Macintosh

System peripheral plug → 8-pin plug
(Yamaha CCJ-MAC or equivalent)



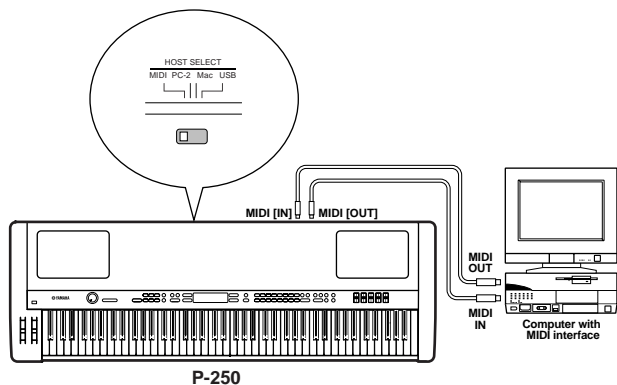
Pin assignment

The following diagram shows the pin assignments for each cable.

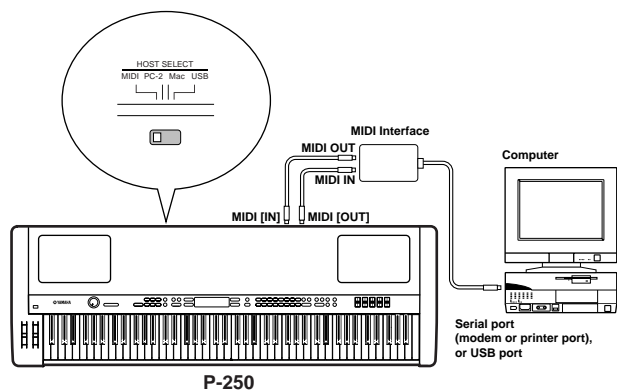


3 MIDI connection (the computer's MIDI interface or external MIDI interface to the P-250 MIDI IN and OUT connectors)

- Using the computer's MIDI interface



- Using an external MIDI interface



TIP

Please use the appropriate MIDI interface for your computer.

TIP

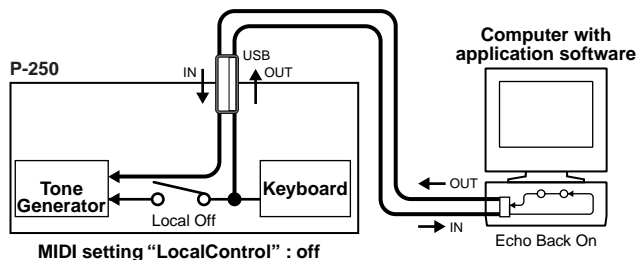
If you are using a computer that features a USB interface, connect the computer and the P-250 with a USB cable.

Local On/Off when a computer is connected

If the P-250 is connected to a computer, keyboard performance data is generally sent to the computer, then returned from the computer to trigger the P-250 internal tone generator. If the Local Switch is set to "on," the P-250 will play the song in unison, since the internal tone generator is receiving performance data from both the keyboard and the computer.

Use the following setting as a guideline; specific instructions may differ depending on your computer and the software used.

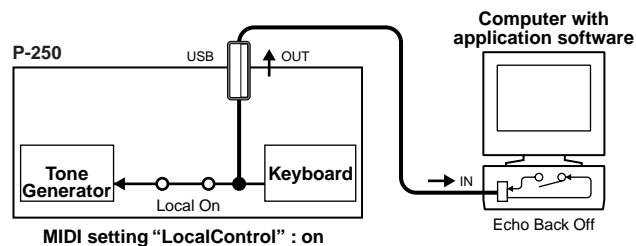
MIDI "Echo" is enabled on the software/computer



TIP

To transmit or receive System Exclusive data (page 75, page 31 of the separate "Data List") such as with the Bulk Dump function, use the setting example below, making sure that MIDI "Echo" on the computer software is set to "off."

MIDI "Echo" is disabled on the software/computer



TIP

The P-250 receives and responds to MIDI data from the computer application (sequencer), regardless of the Local On/Off setting on the P-250.

MIDI "Echo" is a function that takes any data received via MIDI IN and "echoes" it (or transmits it as is) through MIDI OUT. In some software applications, this function is also called "MIDI Thru."

TIP

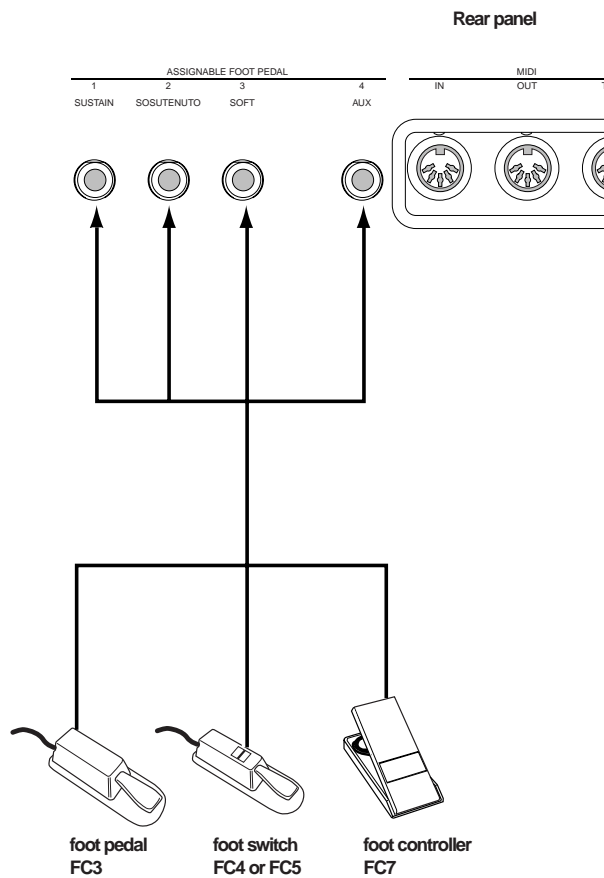
Refer to the owner's manual for your software for specific instructions.

■ Connecting Pedals

You can connect an optional foot switch (FC4, FC5), foot pedal (FC3), or foot controller (FC7) (instead of the included FC3 foot pedal) to the ASSIGNABLE FOOT PEDAL [1 (SUSTAIN)], [2 (SOSTENUTO)], [3 (SOFT)], [4 (AUX)] jacks on the rear panel to control various parameters (page 69).

TIP

For more information on basic operation of the pedals and assigning the functions to them, refer to pages 39 and 69 respectively.



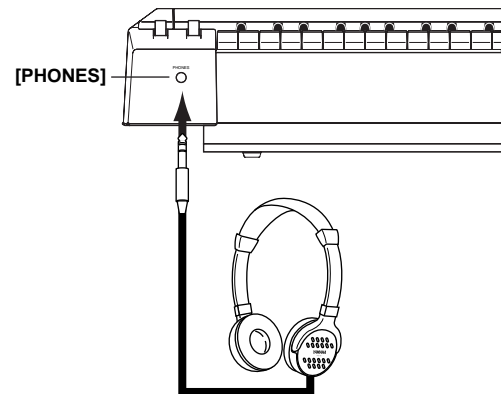
TIP

Optional pedals:

- Yamaha FC3 foot pedal
- Yamaha FC7 foot controller
- Yamaha FC4 foot switch
- Yamaha FC5 foot switch

■ Connecting headphones

You can connect headphones to the [PHONES] jack located on the front panel.



P-250 Quick Guide

■ Listening to Demo and Preset Songs

For each voice group, the P-250 contains one demo song and one preset song that shows off the characteristics of the voices. This section explains how to listen to demo and preset songs for the voice groups.

■ Listening to the demo songs

1 Engage Demo Song mode.

Simultaneously press the [MIDI SETTING] button and the [OTHER SETTING] button.

The VOICE/PERFORMANCE button indicators flash in succession.



2 Select a song and start playback.

Press the VOICE/PERFORMANCE button for the demo song that you want to hear.

The corresponding VOICE/PERFORMANCE button indicator lights up and playback starts.

Demo songs will play back consecutively from the upper-left VOICE/PERFORMANCE button until you stop playback.

TIP

To adjust the volume level

To adjust the volume level of the demo songs, use the [MASTER VOLUME] dial.

To adjust the volume balance between song playback and keyboard, use the [SONG BALANCE] slider. (page 49)

3 Stop playback.

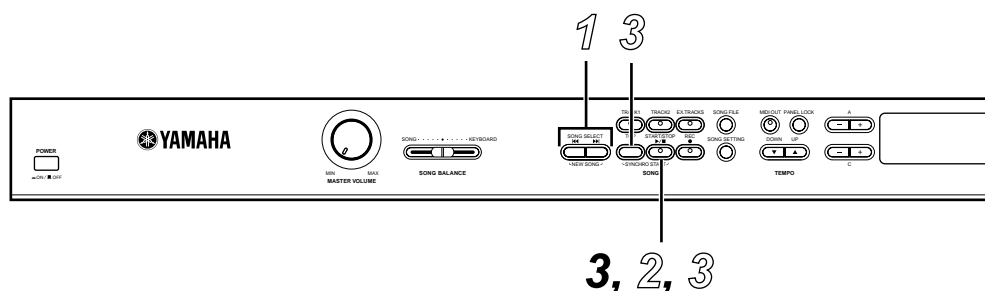
Press the VOICE/PERFORMANCE button for the current demo song or press the SONG [START/STOP] button.

4 Exit Demo Song mode.

Press the [EXIT] button.

By pressing the [MIDI SETTING] and the [OTHER SETTING] buttons simultaneously, then press the A[-] or [+] button to get the [Piano Demo] display, you can hear the piano demo. The piano demo lets you compare the result of enabling/disabling each sampling technology.

- GRANDPIANO1 Stereo Piano (stereo sampling)
- GRANDPIANO2 Mono Piano (mono sampling)
- E.PIANO1 mezzo piano (dynamic sampling, mezzopiano)
- E.PIANO2 mezzo forte (dynamic sampling, mezzoforte)
- E.PIANO3 forte (dynamic sampling, forte)
- CLAVI. with Sustain (with sustain sampling)
- HARPSICHORD no Sustain (without sustain sampling)
- VIBRAPHON with KeyOff (with key-off sampling)
- ORGAN1 no KeyOff (without key-off sampling)
- ORGAN2 with StringRes (with string resonance)
- STRINGS no StringRes (without string resonance)



Listening to the preset songs

1 Select the desired song.

Press the SONG SELECT [◀◀]/[▶▶] buttons to select the number of the tune you want to hear. The song number is displayed as [P-***].



TIP

- You can also use the C [-]/[+] buttons to select a song after you press the SONG SELECT [◀◀]/[▶▶] buttons.
- "P-000: NewSong" is a blank song provided so you can record your playing. (page 47)
- Use the "SongRepeat" parameter in the [SONG SETTING] menu to select repeat playback of all songs or repeat playback of a single song. (page 64)

2 Start playback.

Press the SONG[START/STOP] button to start playback.

the bar number



NOTE

In songs recorded at a free tempo, the actual number of bars occasionally may not match the number of bars indicated on screen.

NOTE

Some preset songs contain song data recorded at a free tempo.

Adjusting the tempo

You can use the TEMPO [DOWN]/[UP] buttons to adjust the playback tempo as required. The default tempo (the song's original tempo) is set when you press the [DOWN] and [UP] buttons simultaneously. Press either SONG SELECT [◀◀]/[▶▶] button to return to the song selection screen.

TIP

You can also use the D[-]/[+] buttons to change the tempo.

TIP

Whenever you select a new preset song, the tempo is automatically reset to the song's original value.

3 Stop playback.

When playback is complete, the P-250 automatically stops and locates the top of the song. To stop playback in the middle of a song and locate the top of the song, press the [TOP] button. You can also pause playback by pressing the [START/STOP] button.

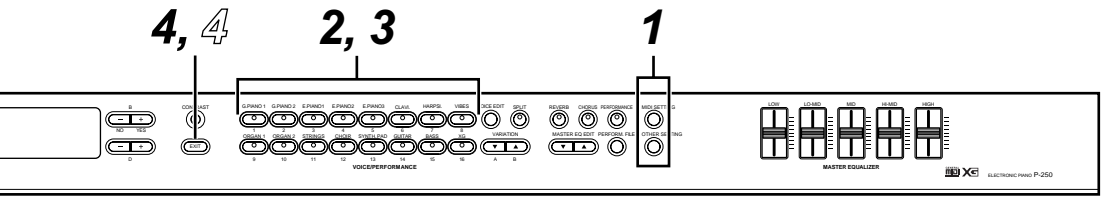
Fast forward and rewind

You can perform the following operations while the song selection screen is displayed:

- Use the B [-]/[+] buttons to move back and forth (rewind and fast forward) through the song while the song is played or stopped.
- Press the SONG SELECT [◀◀] or C [-] button during playback to restart playback from the top of the song.
- Press the SONG SELECT [▶▶] or C[+] button during playback to start playback from the next song.
- Press the SONG SELECT [◀◀] or C [-] button while playback is paused in a song to locate the top of the song.

4 Return to the main screen.

Press the [EXIT] button.



■ Selecting, Editing, and Storing a Voice

The P-250 features a large number of high grade piano, organ, and other voices. Follow the steps below to play your favorite voices, change the parameters, and store the edited voices.

1 Make sure the Performance mode is turned off.

If it's on, press the [PERFORMANCE] button to turn off the button indicator.

2 Select a voice.

Press one of the VOICE/PERFORMANCE buttons (from [GRAND PIANO 1] through [XG]) to select your favorite voice. You can also switch between voices in the same group by pressing one of the VARIATION buttons [▼]/[▲] or A [-]/[+] buttons repeatedly.

3 Play the keyboard.

4 Change the voice.

You can change a voice in another group by pressing a VOICE/PERFORMANCE button. You can also play voices in Dual or Split mode. For more information, see pages 35 and 36.

5 Apply the reverb effect.

Press the [REVERB] button repeatedly to toggle the reverb on and off. When the button indicator is off, the reverb is off. (See page 37.)

6 Apply the chorus effect.

Press the [CHORUS] button repeatedly to toggle the chorus on or off. When the LED is off, the chorus is off. (See page 37.)

7 Use the Master Equalizer.

By moving the MASTER EQUALIZER [LOW], [LO-MID], [MID], [HI-MID], [HIGH] controls, you can adjust the tonal quality. (See page 38.)

8 Use the pitch bend and modulation wheels.

Moving either wheel up or down creates expressive playing effects, pitch bend, modulation, etc. (See page 38.)

9 Use the pedal.

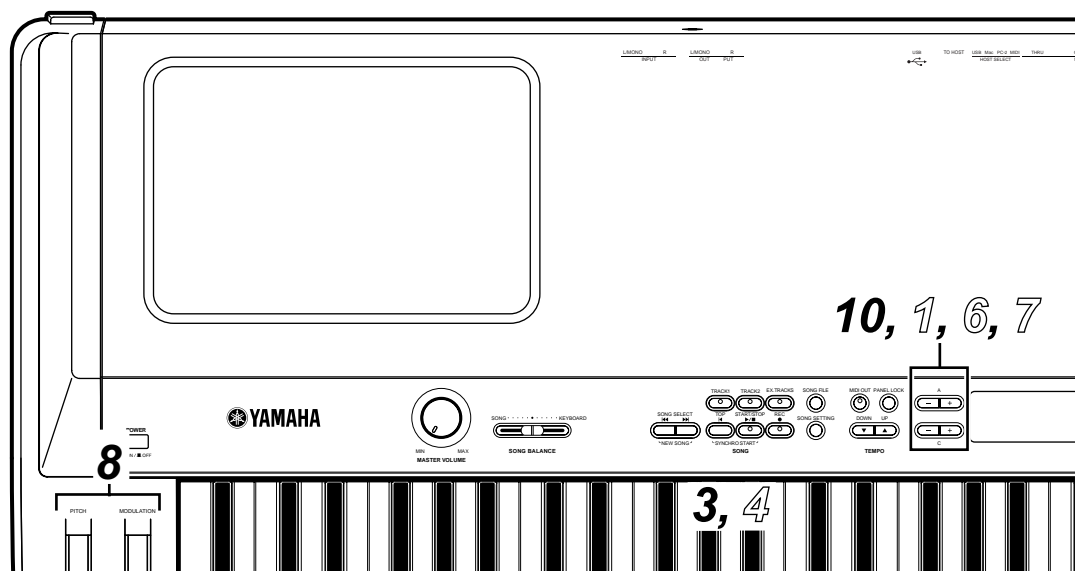
When the FC3 foot pedal is connected to a jack on the rear panel, such as the [1 (SUSTAIN)] jack, it can be used to create expressive playing effects. (See page 39.)

10 Use the Edit function.

Press the [VOICE EDIT] button, then press the A [-]/[+] buttons to select an item to edit, then press the C [-]/[+] and D [-]/[+] buttons to edit tonal color.

11 Store the edits.

Press the B [+(YES)] button to store the edited voice.



■ Selecting, Editing, and Storing a Performance

A performance is a group of stored settings regarding the tone generator, MIDI, and so on. The P-250 features 32 preset performances. You can select and play any of these performances. You can also change the parameters, and store the edits as a new performance.

1 Load a preset performance.

Press the [PERFORM. FILE] button, then press the A [-]/[+] button to select "LoadFromMem." Press the C [-]/[+] button to select "000:PresetPerformance," then press the B [+](YES) button. When the unit displays "Sure?-->," press the B [+](YES) button again.

2 Make sure the Performance mode is turned on.

If it's off, press the [PERFORMANCE] button. The button indicator blinks.

3 Select the desired performance.

Press the [EXIT] button, then press the VARIATION [▼]/[▲] buttons to switch between Banks A and B (page 30), then press any of the VOICE/PERFORMANCE [1] — [16] buttons to select the desired performance.

4 Play the keyboard.

5 Change the performance.

You can change a performance by pressing another VOICE/PERFORMANCE button. To select a performance in another bank, press the VARIATION [▼]/[▲] buttons to flash the [PERFORMANCE] indicator, then press the desired VOICE/PERFORMANCE button.

6 Use the Edit function.

Press the [VOICE EDIT] button, then press the A [-]/[+] buttons to select an item to edit, then press the C [-]/[+] and D [-]/[+] buttons to customize the voice.

7 Store a performance.

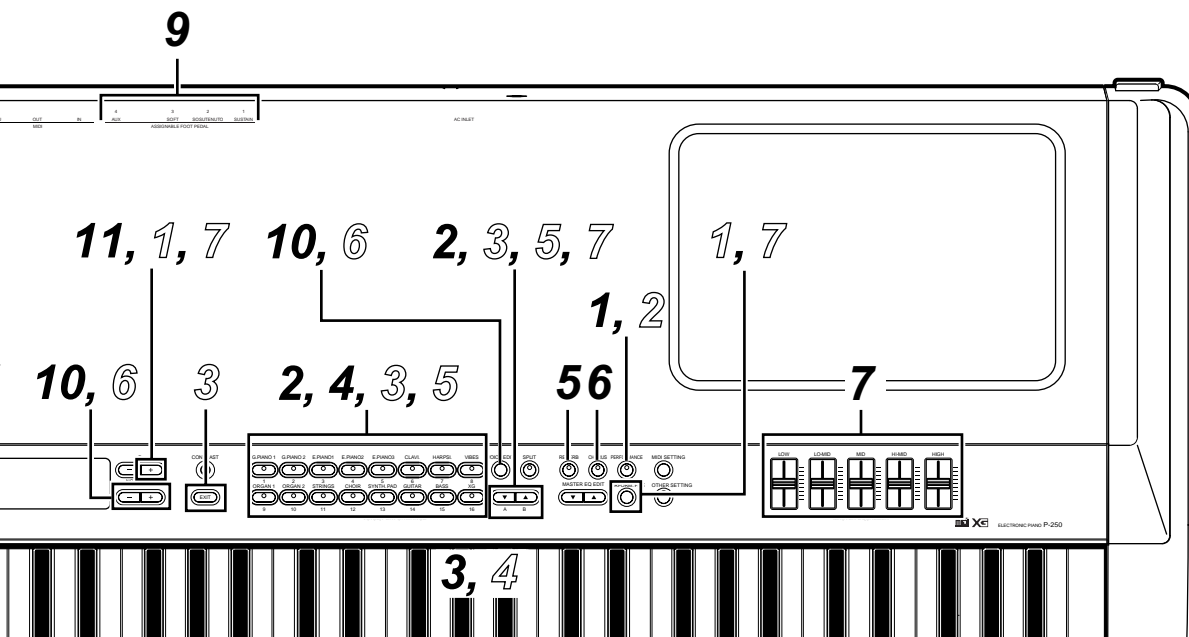
You can store an edited voice as a performance (page 30).

Press the [PERFORM. FILE] button, then press the A [-]/[+] buttons to select "Performance," and press the C [-]/[+] or VARIATION [▼]/[▲] buttons to select a location to store the performance. Finally, press the B [+](YES) button.

■ Editing a Voice and Storing It as a Performance

When you are editing the parameters of a selected voice, you may occasionally want to store the current settings of the P-250 as a performance. In this case, follow the steps below:

Edit the desired voice following the Steps 1-10 described in the "Selecting, Editing, and Storing a Voice" section. Then, proceed to Step 7 in the "Selecting, Editing, and Storing a Performance" section to store the settings the entire keyboard as a performance.



P-250 Design

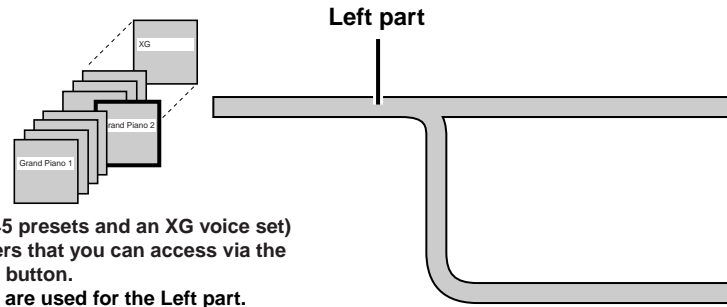
This chapter explains the terms “Voice,” “Performance,” “Song,” and “Memory.”

■ Voice

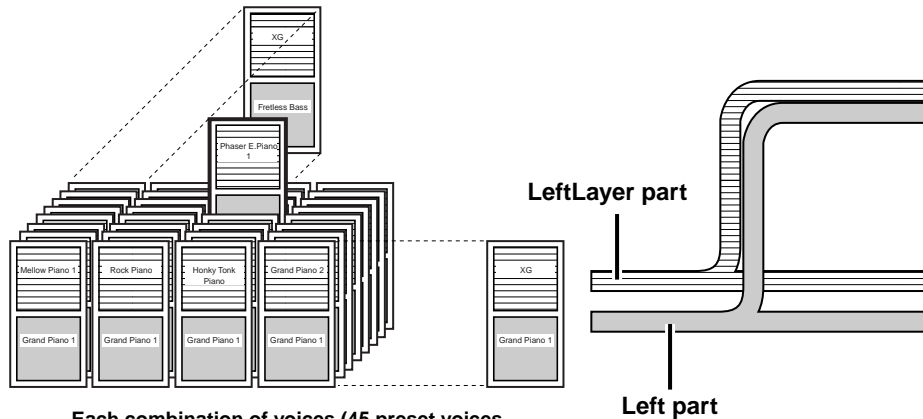
The P-250 features 45 preset voices and an XG voice set (equivalent to a single voice). You can combine any of these voices in Dual or Split mode and play them simultaneously on the keyboard. The diagram below illustrates voices in Dual and Split modes.

You can set the effects and various controls for each voice. These settings are automatically recalled when you select a voice. In Dual or Split mode, you can set the parameters for each combination of voices. For example, the same voice used in different voice combinations can have different parameter settings for each combination.

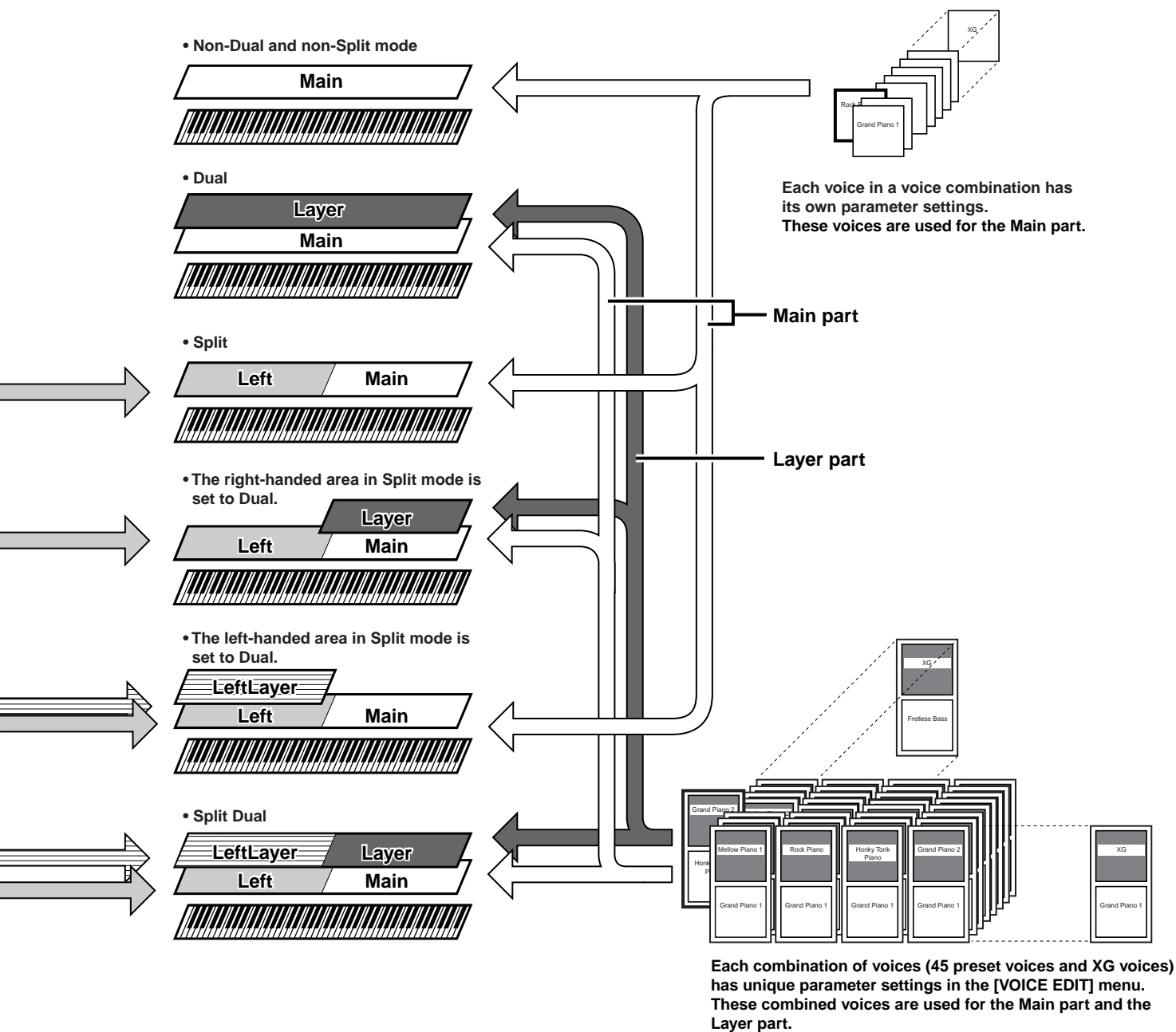
For a list of parameters, see page 58. For information on editing the parameters, see “Editing” on page 61 and “Voice Edit” on page 65.



Each voice (45 presets and an XG voice set) has parameters that you can access via the [VOICE EDIT] button. These voices are used for the Left part.



Each combination of voices (45 preset voices and XG voices) has unique parameter settings in the [VOICE EDIT] menu. These combined voices are used for the Left part and the LeftLayer part.



■ Performances

On the P-250, a “performance” refers to a group of settings that control the tone generator, MIDI, and so on. You can recall any of 32 performances from the panel by pressing just one button.

The performances are divided into two banks (A and B). Performances in Bank A are called A01-A16, and performances in Bank B are called B01-B16.

Refer to “Performance Operation” (page 41) for more information on recalling performances.

■ Performance parameters

Performance parameters are stored in a performance. You can edit these parameters and store them as a new performance.

Parameter menu	Parameter function	Parameter name on screen	Reference page
Name	Naming a performance	(Performance name)	43
Voice	Turning the reverb on/off	N/A	37
	Setting Dual or Split mode	N/A	35—36
	Selecting a voice *1	N/A	34
[VOICE EDIT]	Setting the octave *1	Octave	65
	Setting the volume level *1	Volume	65
	Setting the position of left and right channels *1	Pan	66
	Adjusting fine pitch offset between two voices in Dual mode *2	Detune	66
	Selecting the reverb type	ReverbType	66
	Setting the reverb depth *1	ReverbSend	66
	Setting the chorus type	ChorusType	66
	Setting the chorus depth *1	ChorusSend	67
	Turning the chorus on/off *2	ChorusOnOff	67
	Selecting the insertion effect type *1	Ins.Type	67
	Setting the speed of the vibraphone vibrato effect *1	VibeRotorSpeed	67
	Turning the vibraphone vibrato on/off *1	VibeRotorOnOff	67
	Adjusting the speed of the rotary speaker *1	RotarySpeed	67
	Adjusting the insertion effect depth *1	Dry/WetBalance	68
	Adjusting the brightness of the sound *1	Brightness	68
	Adjusting the resonance effect *1	HarmonicContent	68
	Adjusting the low-range frequency of the part EQ *1	EQ LowFreq.	68
	Adjusting the high-range frequency of the part EQ *1	EQ HighFreq.	68
	Adjusting the low-range gain (amount of boost/cut) of the part EQ *1	EQ LowGain	68
	Adjusting the high-range gain (amount of boost/cut) of the part EQ *1	EQ HighGain	68
	Setting the touch sensitivity *1	TouchSense	68
	Assigning the Pedal 1 function *2	Pedal 1	69
	Assigning the Pedal 2 function *2	Pedal 2	69
	Assigning the Pedal 3 function *2	Pedal 3	69
	Assigning the Pedal 4 function *2	Pedal 4	69
	Assigning the modulation wheel function *2	Modulation	69
	Setting the MSB of the Send Bank Select message *1	SendBankMSB	70
Setting the LSB of the Send Bank Select message *1	SendBankLSB	70	
Setting the Program Change message *1	SendPG#	70	
Turning the Internal tone generator on/off *1	InternalTG	70	

[MASTER EQ EDIT]	Setting the Master Equalizer type ^{*3}	Edit or Master Equalizer type name	71
	Adjusting the low range gain of the Master Equalizer ^{*3}	LowGain	71
	Adjusting the low-middle range gain of the Master Equalizer ^{*3}	LowMidGain	71
	Adjusting the middle range gain of the Master Equalizer ^{*3}	MidGain	71
	Adjusting the high-middle range gain of the Master Equalizer ^{*3}	HighMidGain	71
	Adjusting the high range gain of the Master Equalizer ^{*3}	HighGain	71
	Adjusting the low frequency of the Master Equalizer ^{*3}	LowFreq.	71
	Adjusting the low-middle frequency of the Master Equalizer ^{*3}	LowMidFreq.	71
	Adjusting the middle frequency of the Master Equalizer ^{*3}	MidFreq.	71
	Adjusting the high-middle frequency of the Master Equalizer ^{*3}	HighMidFreq.	71
	Adjusting the high frequency of the Master Equalizer ^{*3}	HighFreq.	71
	Adjusting the low range resonance of the Master Equalizer ^{*3}	LowQ	72
	Adjusting the low-middle range resonance of the Master Equalizer ^{*3}	LowMidQ	72
	Adjusting the middle range resonance of the Master Equalizer ^{*3}	MidQ	72
	Adjusting the high-middle range resonance of the Master Equalizer ^{*3}	HighMidQ	72
Adjusting the high range resonance of the Master Equalizer ^{*3}	HighQ	72	
[MIDISETTING] (partial)	Setting the MIDI transmit channel	MidiOutChannel	74
	Setting the MIDI receive channel	MidiInChannel	74
	Turning the Local control on/off	LocalControl	74
	Specifying keyboard performance or song data to be transmitted via MIDI	MidiOutSelect	74
[OTHERSETTING] (partial)	Selecting a touch response	TouchResponse	76
	Selecting a tuning curve for a piano voice	PianoTuningCurve	76
	Selecting a scale	Scale	77
	Setting the split point	SplitPoint	77
	Setting the key (transposition)	Transpose	77
	Specifying the depth of the soft pedal	SoftPedalDepth	77
	Specifying the depth of string resonance	StringResonanceDepth	77
	Specifying the depth of sustain sampling for the damper pedal	SustainSamplingDepth	78
	Specifying the volume of the key-off sound	KeyOffSamplingDepth	78
	Selecting a pedal function for vibraphone	VibraphonePedalMode	78
	Assigning the START/STOP function to a pedal	PedalStart/Stop	78
	Setting the point at which the pedal starts to affect the sound	HalfPedalPoint	78
	Setting the pitch bend range	PitchBendRange	79
Assigning a function to the [SONG BALANCE] slider	SongBalanceAssign	79	

*1...The number of parameters varies if Dual (page 35) or Split (page 36) mode is selected.

*2...The number of parameters varies depending on the Split mode setting (page 36).

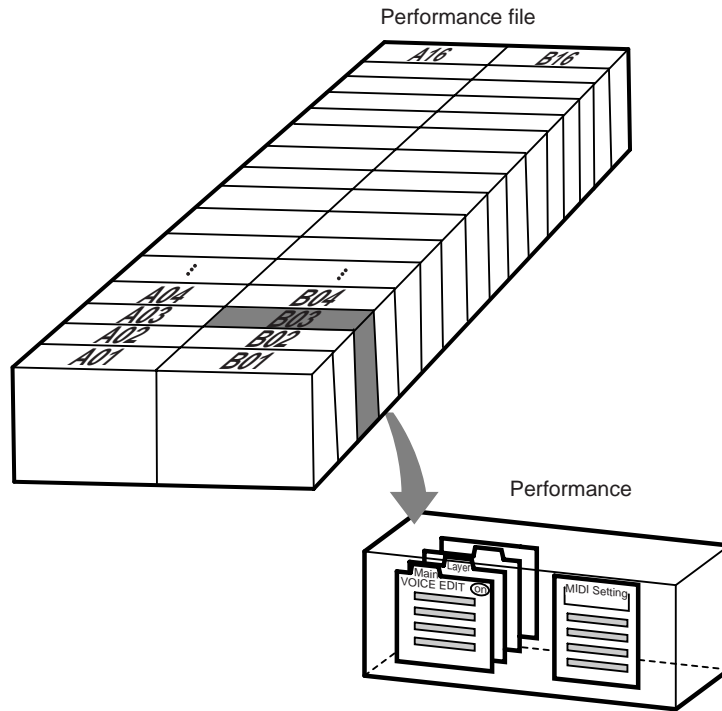
*3...If the Master Equalizer is locked (EqualizerLock:On), recalling a performance on the top panel will not update the parameter settings.

Performance file

A performance file consists of a group of 32 performances.

The P-250 features one special performance file that consists of unique preset performances. It is called the “preset performance file.” You can edit any performance in the preset performance file to create a new performance, and store the edited performance file in memory (as described later). For more information on using the performance file, see “Handling Performance Files [PERFORM.FILE]” (page 42).

A performance file stored in memory can be controlled from a connected computer. For more information on connecting a computer, see “Connecting to a Personal Computer” (page 19).



■ Songs

The P-250 enables you to record and play back your keyboard performance, as well as to recall and play back the internal demo songs. The P-250 features sixteen recording tracks, which enable you to record different parts on different tracks or play only the selected tracks. See “Song Operation” (page 46) for more information on using songs.

■ Song file

A song can be stored as a song file in memory (as described later). See “Song Playback” (page 51) for information on song files.

You can import a P-250 song file into a connected computer (page 19). The imported song file is in the “SMF format 0.” You can also import song data as a song file from a computer into the P-250 for playback. Refer to “Connecting to a Personal Computer” (page 19) for information on connecting the P-250 to a computer.

The following song data can be played on the P-250:

- Sequence Format
 - SMF (Standard MIDI File) formats 0 and 1
 - ESEQ
- Voice Allocation Format
 - XG voice arrangement
 - GM system level 1 voice arrangement

Refer to “Data compatibility” on page 88 for more information on formats.

■ About P-250 Memory

■ Storage memory

Storage memory is an area in memory that stores performance files and multiple song files. The performance files and song files in storage memory are not erased when the power to the P-250 is turned off. The memory size is approximately 1.5 MB.

■ Current memory

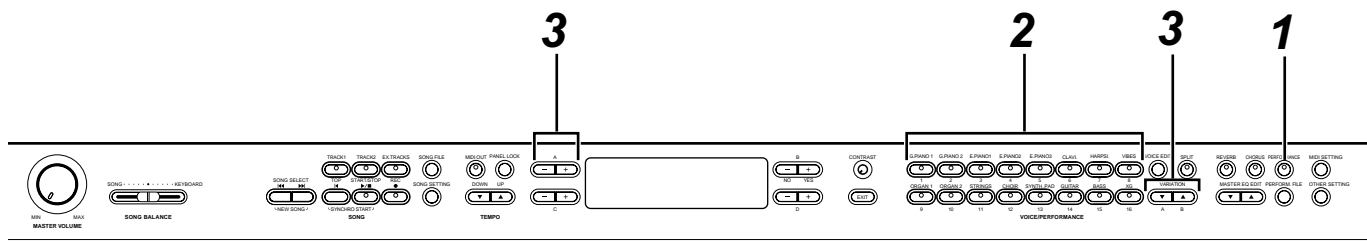
Current memory is a memory area that contains the currently-selected performance files and song file. You can recall a performance in the performance file in current memory from the top panel. A song in current memory is recorded or played back.

⚠ CAUTION

The content of current memory is erased when the power is turned off.

Basic Operation

■ Selecting a Voice



1 Exit Performance mode.

Press the [PERFORMANCE] button to turn off the button indicator.

TIP

Details about Performance on/off are provided in the “Performance Operation.” (page 41)

2 Select a voice group.

Press a VOICE/PERFORMANCE button.

3 Select a voice.

Use the VARIATION [▼]/[▲] or A [-]/[+] buttons to select a voice.

If you select XG

If you select XG, you can select the XG voice group first, then select the desired voice.

3-1 Simultaneously press the [-]/[+] screen buttons located next to the XG voice name on the display to access a screen on which you can select XG voices.

3-2 Use the A [-]/[+] buttons to select the voice group.

3-3 Use the C [-]/[+] buttons to select the desired voice.

TIP

XG is a major enhancement of the GM System Level 1 format. It was developed by Yamaha specifically to provide more voices and variations, as well as greater expressive control over voices and effects, and to ensure data compatibility well into the future.

TIP

If you select XG and press the VARIATION [▼]/[▲] buttons simultaneously, the XG voice selection screen will appear.

Voice selection is a performance parameter (page 30).

Voice Group	Voice Name	Voice Group	Voice Name	Voice Group	Voice Name
GRANDPIANO1 [G.PIANO1]	Grand Piano 1	CLAVI. [CLAVI.]	Phaser Clavi.	STRINGS [STRINGS]	Strings
	Mellow Piano 1		Clavi.		Synth Strings
	Rock Piano		Wah Clavi.		Slow Strings
	HonkyTonk Piano	HARPSICHORD [HARPSI.]	Harpsichord 8'	CHOIR [CHOIR]	Choir
GRANDPIANO2 [G.PIANO2]	Grand Piano 2	Harpsichord 8'+4'	Slow Choir		
E.PIANO1 [E.PIANO1]	Mellow Piano 2	VIBRAPHONE [VIBES]	Vibraphone	SYNTH. PAD [SYNTH. PAD]	Scat
	Chorus E.Piano		Marimba		Synth Pad 1
	Phaser E.Piano		Celesta		Synth Pad 2
	AutoPan E.Piano	ORGAN1 [ORGAN1]	Jazz Organ	GUITAR [GUITAR]	Nylon Guitar
Standard E.Piano	Theater Organ		Steel Guitar		
E.PIANO2 [E.PIANO2]	DX E.Piano 1		Rock Organ		BASS [BASS]
	DX E.Piano 2	Draw Organ	Bass&Cymbal		
	Synth Piano	Pipe Organ Principal	Electric Bass		
E.PIANO3 [E.PIANO3]	Tremolo Vintage E.P.	ORGAN2 [ORGAN2]	Pipe Organ Tutti	Fretless Bass	
	Vintage E.Piano		Pipe Organ Flute		
	Amp.Sim.Vintage E.P.				

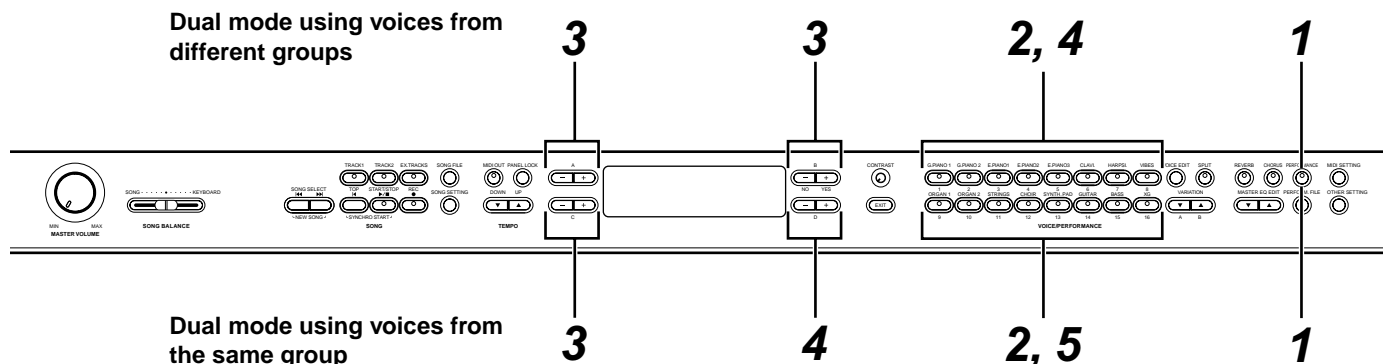
Names in brackets indicate how the unit displays the voice group names on the top panel.

TIP

Details on XG voices are provided in the “XG voices list.” (page 6 of the separate “Data List”)

■ Playing in Dual Mode

In Dual mode, you can play two voices in unison. In this way, you can simulate a melody duet or combine two similar voices to create a thicker sound.



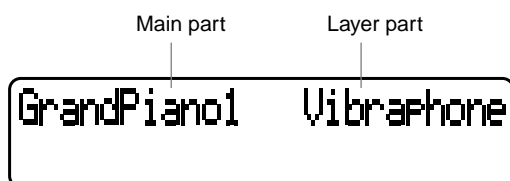
■ Dual mode using voices in different voice groups

1 Exit Performance mode.

Press the [PERFORMANCE] button to turn off the button indicator.

2 Enter Dual mode.

Press the two desired VOICE/PERFORMANCE buttons simultaneously.



TIP

If you want to select Dual mode for the left-hand area when the entire keyboard is divided into left and right areas (page 36), hold down the [SPLIT] button and simultaneously press two VOICE/PERFORMANCE buttons.

3 Select a voice.

Use the A [-]/[+] buttons and B [-(NO)]/[+(YES)] buttons to select a voice.

The voice with the lower voice group number (see page 90) is referred to as Main part. The other voice is referred to as Layer part.

TIP

You can also use the VARIATION [▼]/[▲] buttons to select voice 1.

TIP

Details on selecting XG voices are provided on page 34.

4 Exit Dual mode.

Press any VOICE/PERFORMANCE button.

■ Dual mode using voices in the same voice group

1 Exit Performance mode.

Press the [PERFORMANCE] button to turn off the button indicator.

2 Select a voice group.

Press the VOICE/PERFORMANCE button.

3 Select a voice.

Use the A [-]/[+] buttons to select a voice.

4 Select another voice.

Use the B [-]/[+] buttons to select another voice in the same voice group.

To select the same voice, press the B [-(NO)] or [+(YES)] button once.

To select a different voice within the same voice group, press the B [-(NO)] or [+(YES)] button repeatedly.

TIP

If you want to select Dual mode for the left-hand area when the entire keyboard is divided into left and right areas (page 36), press the D [-] or [+] button.

5 Exit Dual mode.

Press any VOICE/PERFORMANCE button.

TIP

If you connect the P-250 to an external tone generator via MIDI (page 18), you can layer the sounds of the P-250 and the tone generator and play them simultaneously (Layer mode) using the "MidiOutChannel" (page 74) and "InternalTG" (page 70) settings.

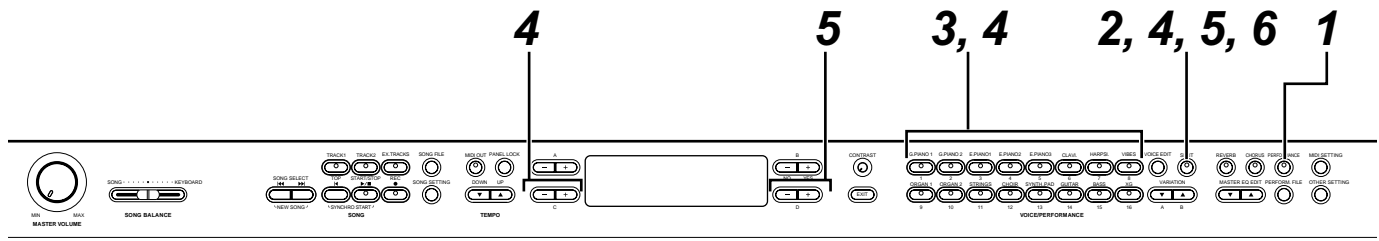
TIP

Details on recording in Dual mode are provided on page 50.

The Dual mode setting is a performance parameter (page 30).

■ Playing in Split Mode

In Split mode, you can play two different voices that are assigned to the left and right-hand areas on the keyboard respectively. For example, you can play a bass part using the Wood Bass voice with your left hand, and play a melody with your right hand.



1 Exit Performance mode.

Press the [PERFORMANCE] button to turn off the button indicator.

2 Enter Split mode.

Press the [SPLIT] button.

3 Select a voice for the right hand.

Use the VOICE/PERFORMANCE buttons and VARIATION [▼]/[▲] buttons to select a voice for the right-hand.

TIP

You can also use the A [-]/[+] buttons to select a voice for the right-hand.

TIP

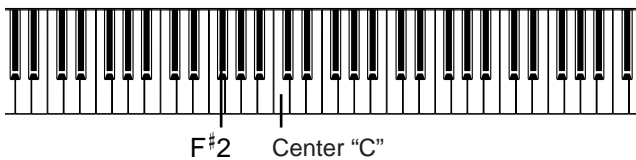
Details on selecting XG voices are provided on page 34.

4 Select a voice for the left hand.

Hold down the [SPLIT] button, then press a VOICE/PERFORMANCE button to select a voice group for the left-hand.
Press the C [-]/[+] buttons to select a voice.

5 Specify the split point (the border between the ranges).

The standard setting for the split point is "F#2."



TIP

A specified "split point" key is included in the left-hand range.

Hold down the [SPLIT] button, then use the D [-]/[+] buttons to specify the split point.

Alternatively, press and hold down the [SPLIT] button and play the key you wish to assign as the split point.



Release the [SPLIT] button to return to the main screen.

TIP

The split point can also be set by using the "SplitPoint" parameter in the "OTHER SETTING" menu (page 77).

6 Exit Split mode and return to Play mode.

Press the [SPLIT] button.

You can use Dual mode (see page 35) in each area (right-hand and left-hand) of Split mode.



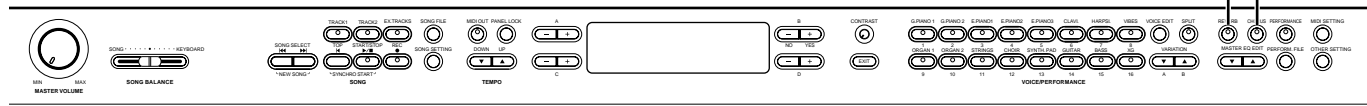
The Split mode setting is a performance parameter (page 30).

TIP

If you connect the P-250 to an external tone generator via MIDI (page 18) in Split mode, you can play the sounds of the P-250 and the tone generator respectively on the right and left halves of the keyboard (in Split mode) by setting the "MidiOutChannel" (page 74) and "InternalTG" (page 70) parameters in the "VOICE EDIT" menu.

TIP

Details on recording in Split mode are provided on page 50.



Effect Structure

The P-250 features system effects and insertion effects.

System effects

The system effects are applied to all parts globally. The amount of effect can be set per part. The P-250 system effects include one reverb and one chorus. The amount of reverb and chorus is set via the “ReverbSend” (page 66) and “ChorusSend” (page 67) parameters in the “VOICE EDIT” menu.

- Reverb

Reverb can add a natural ambience and space to a sound, simulating the natural reverberation of a concert hall or live venue.

Refer to the “XG Effect Type list” on page 12 of the separate “Data List” for a complete list of reverb types included in the P-250.

- Chorus

Chorus adds spread and spaciousness, and is an effect that modifies the sound of a single instrument to simulate a group of the same instrument.

Refer to the “XG Effect Type list” on page 12 of the separate “Data List” for a complete list of chorus types included in the P-250.

Insertion effects

Insertion effects are applied to specified parts. The P-250 features three insertion effect channels, which means that you can apply the insertion effects to three parts.

The amount of insertion effect is adjusted via the “Dry/WetBalance” parameter (page 68) in the “VOICE EDIT” menu.

TIP

The P-250 also has one channel of variation effect, which can be used for the system effect or insertion effect. Refer to the “XG Effect Type List” on page 12 of the separate “Data List” for more information on the type of effects you can use for this channel. You can control the variation effect only through MIDI messages.

Using the Effects

Reverb

Press the [REVERB] button repeatedly to toggle the reverb on and off.

When the reverb is turned on, the indicator above the [REVERB] button lights up.

Even if the reverb effect is turned off, a “soundboard reverb” effect is applied when you select the GRAND PIANO1 or GRAND PIANO2 voice group.

TIP

You can select a reverb type via the “ReverbType” parameter in the “VOICE EDIT” menu, and adjust the reverb amount for the selected voice via the “ReverbSend” parameter (page 66).

Reverb On/Off is a performance parameter (page 30).

Chorus

Press the [CHORUS] button repeatedly to toggle the chorus on and off.

When the chorus is turned on, the indicator above the [CHORUS] button lights up.

You can turn the chorus effect on or off by pressing the [CHORUS] buttons on the panel or by setting the “ChorusOnOff” parameter in the “VOICE EDIT” menu (see page 67). The [CHORUS] button setting on the panel is cancelled if you select another voice. The “ChorusOnOff” parameter setting is saved for each voice. That is, if you select a voice, the chorus setting is automatically turned on or off, depending on the saved chorus setting.

TIP

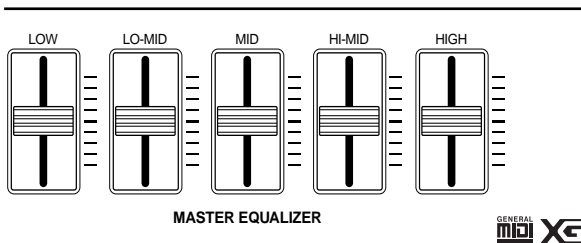
You can select a chorus type via the “ChorusType” parameter in the “VOICE EDIT” menu, and adjust the chorus amount for the selected voice via the “ChorusSend” parameter. You can also turn the chorus on or off by using the “ChorusOnOff” parameter. (page 66, 67)

Using the Master Equalizer

The five-band (LOW, LO-MID, MID, HI-MID, HIGH) Master Equalizer enables you to adjust the sound quality.

For example, you can enhance the high range of the P-250 sound so that it will stand out from an ensemble. Or, you can boost the lower range to create a dynamic sound. Use the master equalizer to suit the situation or to produce a desired tonal color.

Raise or lower the MASTER EQUALIZER sliders to boost or cut the corresponding frequency band.



When the corresponding slider is set to center, the equalizer level is set to normal.

TIP

To set the master equalizer frequency and Q, use the [MASTER EQ EDIT] button (page 71), which also enables you to set the gain. However, the latest gain setting by the sliders or [MASTER EQ EDIT] button will remain in effect.

All parameters accessed via the [MASTER EQ EDIT] button are performance parameters (page 30).

TIP

The master equalizer is globally applied to the P-250 the sound currently being played.

TIP

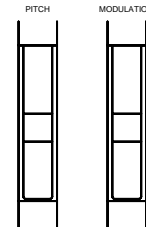
You can also access the channel equalizer via the [VOICE EDIT] button. This equalizer enables you to adjust the sound of each voice independently. (page 68)

TIP

When you set the "EqualizerLock" parameter (page 79), which is accessed via the [OTHER SETTING] button, to ON, the master equalizer settings will not be affected by performance recall or MIDI song playback.

Using the Pitch Bend and Modulation Wheels

You can apply real-time vibrato or a pitch bend effect to a sound by using the pitch bend and modulation wheels. Using these wheels will increase the expressiveness of the sound, particularly in solo phrases.



Pitch bend wheel

Use the pitch bend wheel to bend notes up or down while playing the keyboard to add a pitch bend effect.

TIP

The pitch bend effect is applied only to the sound you are playing on the keyboard.

TIP

To set the bend range, use the "PitchBendRange" parameter, which is accessed by the [OTHER SETTING] button (page 79).

TIP

If you set the "PitchBendRange" parameter too high, high notes may sound out of tune.

"PitchBendRange" is a performance parameter (page 30).

Modulation wheel

You can apply vibrato effects to the sound, or change the amount of reverb or modulation effects, by moving the modulation wheel up and down.

TIP

You can specify in Edit mode the effect you wish to control with the modulation wheel (see page 69).

TIP

If you do not need to use the modulation wheel, you can turn it off so that you will not activate it accidentally during performance, or to avoid unnecessary transmission of MIDI messages (see page 69).

TIP

The modulation wheel for some voices is disabled by default. In that case, operating the wheel will have no effect, unless you turn the wheel on.

Using Pedals

The P-250 features four pedal jacks. Different pedals can be used for various purposes, as described below.

See page 23 for information on connecting the pedals.

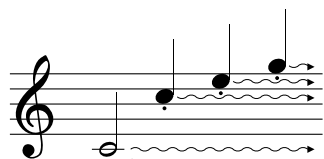
NOTE

This section explains how to use the pedals based on the default settings after the power is turned on. Since you can assign various functions to the pedal jacks, the resultant effect may differ, depending on the default settings. For more information, refer to [Pedal 1]/[Pedal 2]/[Pedal 3]/[Pedal 4] (page 69) in the Voice Edit section.

Applying the sustain effect

Connect the included foot pedal FC3 to the PEDAL [1 (SUSTAIN)] jack to sustain the current sound.

When you press and hold down the pedal, the effect is applied and all notes being played will sustain, even after you release the keys.



When you press the pedal here, the sound of notes you are playing, as well as subsequent notes will sustain.

If you press the pedal while you are playing the "GrandPiano 1" voice, the soundboard and string resonance effects (sustain sampling) are applied.

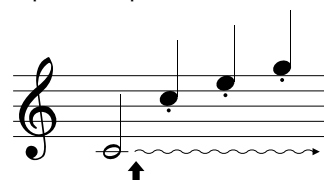
TIP

Use the "SustainSamplingDepth" parameter in the "OTHER SETTING" menu to adjust the depth of the resonance effect for the damper pedal (page 78).

Applying the sostenuto effect

Connect the included foot pedal FC3 to the PEDAL [2(SOSTENUTO)] jack to add a sostenuto effect to the current sound.

When you press the pedal, the effect will be applied to only the notes you are playing at that time, and the effect can remain longer even after you release the keys. The effect will not be applied to notes you play after you press the pedal.



When you press the pedal here, the sound of notes you are playing at the moment will sustain.

Applying the soft effect

Connect the included foot pedal FC3 to the PEDAL [3 (SOFT)] jack to add a soft effect to the current sound. When you press and hold down the pedal, all the notes you play after you press the pedal will sound softer. (Note that the effect is not applied to the notes you were playing when the pedal was pressed. Press the pedal just before you start playing the notes to which you wish to apply the effect.)

Applying the expression effect

Connect an optional FC7 foot controller to the PEDAL [4(AUX)] jack to add an expression effect to the current sound.

The faster you press the foot controller, the greater the effect applied.

TIP

Use the "PedalStart/Stop" parameter in the "OTHER SETTING" menu to assign the Start/Stop function (same as the [START/STOP] button on the panel) to the pedal connected to the PEDAL [2 (SOSTENUTO)], [3 (SOFT)], or [4 (AUX)] jack (page 78).

TIP

You can reverse the effects of the pedals (such as on/off status and intensity) using the "PedalType" parameter (page 78) in the "OTHER SETTING" menu.

Using Panel Lock

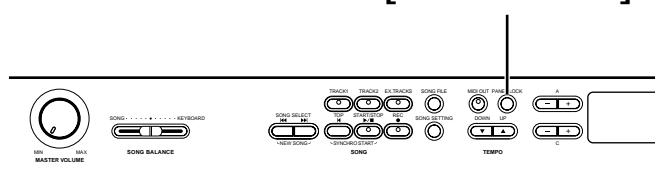
The Panel Lock function temporarily disables the operation of the P-250 panel (locks the panel controls) so that you will not inadvertently change the voice or mode during performance.

Press the [PANEL LOCK] button twice quickly to turn the panel lock on or off.

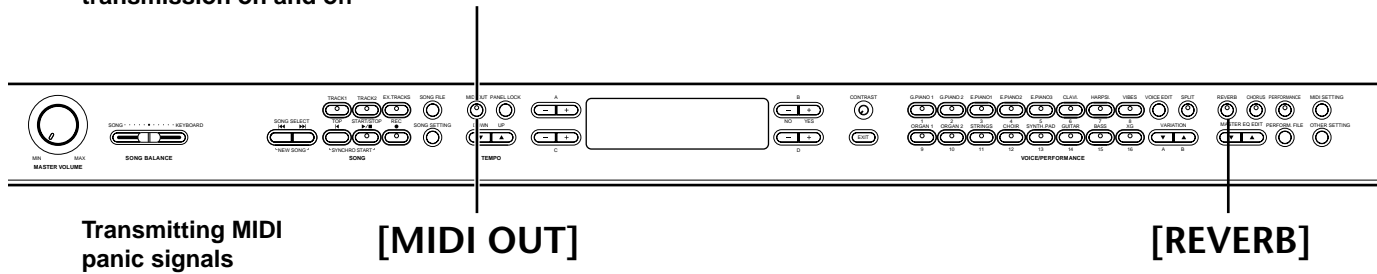
When the panel is locked, [PANEL LOCK] appears on the display.

***** PANEL LOCK *****
Grand Piano 1

[PANEL LOCK]



■ Toggling MIDI transmission on and off [MIDI OUT]



Transmitting MIDI panic signals

[MIDI OUT]

[REVERB]

■ Toggling MIDI Transmission On/Off

You can toggle MIDI transmission from the P-250 on or off with just one press.

Press the [MIDI OUT] button to set the P-250 so that it will or will not transmit MIDI messages.

When the P-250 is ready for MIDI transmission, the [MIDI OUT] button indicator lights up. The indicator turns off when MIDI transmission is disabled.

TIP

If MIDI transmission is turned off, the P-250 cannot communicate with a connected computer.

TIP

MIDI messages that are transmitted while MIDI transmission is turned off include Sustain Off, Sostenuto Off, and Soft Off.

TIP

If MIDI transmission is turned off while you are playing the keys, the Key Off message is output when you release the keys.

■ Transmitting MIDI Panic Signals

You can set the P-250 so that it will transmit MIDI panic signals to stop an accidentally sustained sound triggered from an external tone generator.

Press and hold down the [MIDI OUT] button and press the [REVERB] buttons.

The display indicates the transmission of the panic signals.

*** MIDI PANIC SEND ***

NOTE

MIDI panic signals are designed for use in an emergency and are not guaranteed to stop the sound.

NOTE

If [REC] button has been pressed, MIDI panic signals cannot be transmitted.

TIP

MIDI panic signals

ALL NOTE OFF, ALL SOUND OFF, ALL RESET CONTROLLER, SUSTAIN OFF, MODULATION DEPTH OFF, PITCH BEND CENTER, CHANNEL PRESSURE OFF

TIP

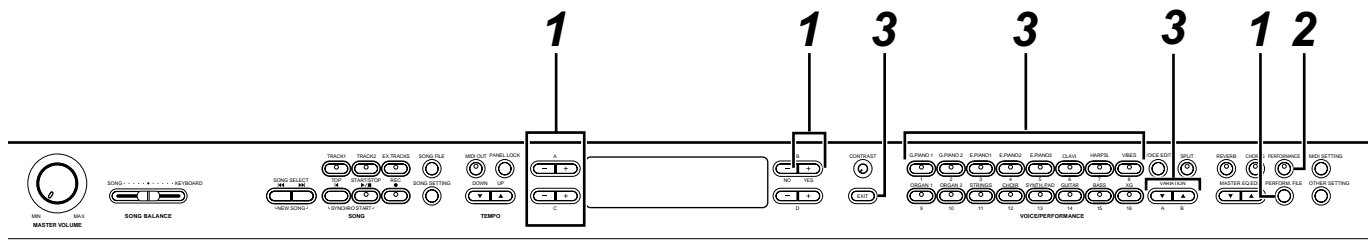
MIDI panic signals are transmitted on all channels.

TIP

MIDI panic signal transmission is effective in any mode other than MIDI transmission off (page 40).

Performance Operation

■ Selecting a Performance



1 Load a preset performance file.

Press the [PERFORM. FILE] button, then press the A [-]/[+] buttons to select "LoadFromMem." Press the C [-]/[+] buttons to select the desired performance file, then press the B [+](YES)] button.

If you wish to select a preset performance file that has its performance parameters already set, press the C [-]/[+] buttons to select "000:PresetPerformance".

2 The unit enters Performance mode (if the unit was in another mode).

Press the [PERFORMANCE] button.

3 Select the desired performance.

Press the [EXIT] button, then use the VARIATION [▼]/[▲] buttons to switch between Banks A and B. Then press one of the VOICE/PERFORMANCE buttons to select the desired performance.



CAUTION

If the [PERFORMANCE] button indicator is flashing, the currently-selected performance may not match the performance name displayed on the LCD.

TIP

Performance OFF You can select a voice using the VOICE/PERFORMANCE buttons. (The button indicator turns off.)

Performance ON You can select a performance using the VOICE/PERFORMANCE buttons. (The button indicator flashes or lights up.)

Press the [PERFORMANCE] button repeatedly to toggle between Performance mode on and off.

TIP

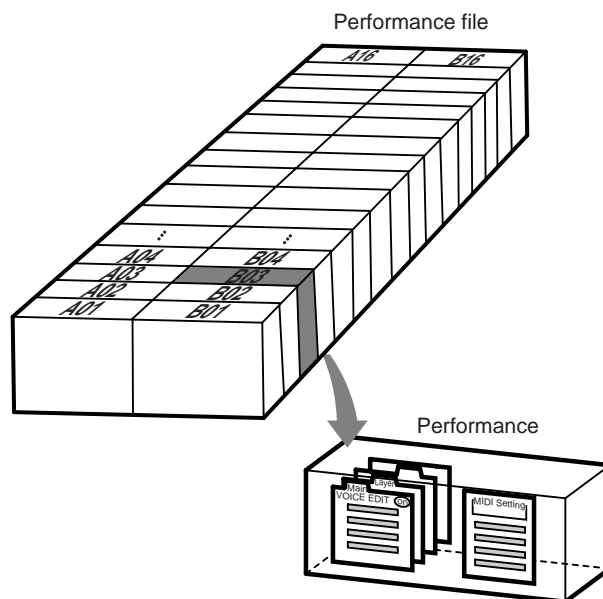
To display the voice names for all parts, press the A [+] button in the performance screen.

TIP

To check the name of the currently-selected performance file, press the A[-] button. As long as you hold down the A [-] button, the performance file name remains on the screen.

TIP

To turn Performance mode off while keeping the performance parameter setting as is, press and hold down the B [- (NO)] button and press the [PERFORMANCE] button while the performance screen is displayed. At this time, if you press only the [PERFORMANCE] button (without holding down the B [- (NO)] button), the previous performance setting (that existed before Performance mode was turned on) is retained.



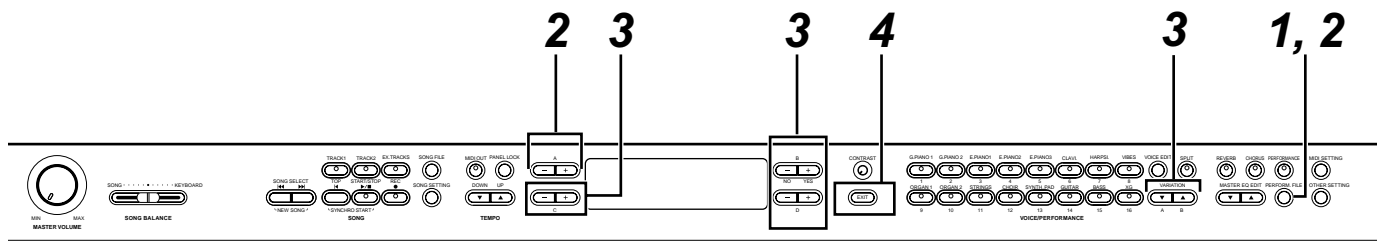
Handling Performance Files [PERFORM.FILE]

The following parameters are provided for the performance files:

Operation	Parameter name	Reference page
Storing a performance	"Performance"	43
Renaming a performance	"Perf.Name"	43
Saving a performance file in storage memory	"SaveToMemory"	44
Loading a performance file from storage memory	"LoadFromMem."	44
Deleting a performance file from storage memory	"DeleteFile"	45
Renaming a performance file	"RenameFile"	45

Basic Operation for the Performance File

A message (information or confirmation dialog) sometimes appears on the LCD to facilitate operation. Refer to the "Message List" on page 82 for an explanation of each message, the appropriate actions to take, and troubleshooting information.



1 Access the Performance File menu.

Press the [PERFORM. FILE] button.

To close the Performance File menu during the procedure, press the [EXIT] button once or twice.

2 Select the desired parameter.

Press the [PERFORM. FILE] or A [-]/[+] buttons repeatedly to display the option desired from the following list:

- Performance
- Perf.Name
- SaveToMemory
- LoadFromMem.
- DeleteFile
- RenameFile

3 Set the parameter or execute the command.

Use the B [-(NO)]/[+(YES)], C [-]/[+], D [-]/[+], and [VARIATION] [▼]/[▲] buttons.

For more information regarding specific details of this procedure, refer to the corresponding section below.

4 Close the Performance File menu.

Press the [EXIT] button.

■ Storing a Performance [Performance]



Refer to page 42 for information on the basic operation of performance files. The following steps are supplement for Step 3 on page 42.

CAUTION

If you edit a performance from the preset performance file ("PresetPerformance.PER"), storing the performance by the procedure described above will overwrite the existing performance data in the performance file without any warning. To avoid overwriting, first change the performance file name using the "RenameFile" parameter (page 45).

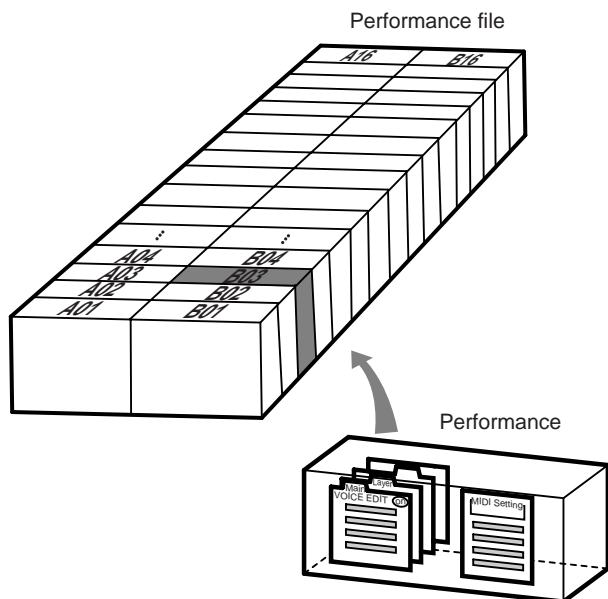
3-1 Select a performance.

Use the C[-]/[+] buttons and VARIATION [▼]/[▲] buttons to select the performance from 32 settings.

3-2 Execute the operation.

Press the B [+ (YES)] button located next to "Set?-->."

During the operation, "Executing" is displayed on the screen. When the operation is complete, "Completed" is displayed.



■ Renaming a Performance [Perf.Name]



Refer to page 42 for information on the basic operation of performance files. The following steps are supplement for Step 3 on page 42.

CAUTION

If you change the name of a performance from the preset performance file ("PresetPerformance.PER") using the procedure described above, the performance will overwrite the existing performance data in the performance file without warning. To avoid overwriting, first change the performance file name using the "RenameFile" parameter (page 45).

3-1 Rename the performance.

To move the cursor (a small underline), use the C [-]/[+] buttons.

To insert a space, press the C [-]/[+] buttons simultaneously.

To select a character on the cursor, press the D [-]/[+] buttons.

To delete the selected character, press the D [-]/[+] buttons simultaneously.

You can use up to 20 characters to create a performance name.

3-2 Execute the operation.

Press the B [+ (YES)] button located next to "Set?-->."

During the operation, "Executing" is displayed on the screen. When the operation is complete, "Completed" is displayed.

TIP

About the performance name on-screen...

You can change the type of characters used to display the performance name on-screen using the "CharacterCode" (page 55) parameter, which you can access via the [SONG FILE] button. (The selected LCD character type will be used to display song file and performance.)

■ Saving a Performance File to Storage Memory [SaveToMemory]

```
SaveToMemory Execute?-->
000:PresetPerformance
```

Refer to page 42 for information on the basic operation of performance files. The following steps are supplement for Step 3 on page 42.

⚠ CAUTION

Do not turn off the power to the P-250 while the screen displays "Executing." Otherwise, the data currently held in storage memory may be lost.

3-1 Name the performance file.

To move the cursor (a small underline), use the C [-]/[+] buttons.

To insert a space, press the C [-]/[+] buttons simultaneously.

To select a character on the cursor, use the D [-]/[+] buttons.

To delete a character, press the D [-]/[+] buttons simultaneously.

You can use up to 58 characters for a performance file name. If the name is longer than the screen, use the C [-]/[+] buttons to move the cursor and scroll the name.

3-2 Execute the operation.

Press the B [(+)(YES)] button located next to "Execute?-->."

"Sure?" is displayed on screen. Press the B [(+)(YES)] button again to confirm the operation. (To cancel the operation, press the B [-(NO)] button.)

During the operation, "Executing" is displayed on the screen. When the operation is complete, "Completed" is displayed.

If storage memory contains one or more performance files, and you save a new performance file, the performance files are automatically sorted alphabetically and renumbered.

TIP

Performance File Title

- You can change the type of characters on screen using the "CharacterCode" (page 55) parameter in the "SONG FILE" menu.
(The selected LCD character type will be used to display song files and performance files.)
- When you later select a saved performance file, the name with an extension ".PER" will appear.

⚠ CAUTION

If the currently-displayed file name uses a character type that is different than the character type used when you created the file, you may be unable to access the file.

■ Loading a Performance File from Storage Memory [LoadFromMem.]

```
LoadFromMem. Execute?-->
000:PresetPerformance
```

Refer to page 42 for information on the basic operation of performance files. The following steps are supplement for Step 3 on page 42.

⚠ CAUTION

Do not turn off the power to the P-250 while the screen displays "Executing." Otherwise, the data currently held in storage memory may be lost.

3-1 Select a performance file.

Use the C [-]/[+] buttons to select the desired performance file to load.

3-2 Execute the operation.

Press the B [(+)(YES)] button located next to "Execute?-->."

"Sure?-->" is displayed on screen. Press the B [(+)(YES)] button again to confirm the operation. (To cancel the operation, press the B [-(NO)] button.)

During the operation, "Executing" is displayed on the screen. When the operation is complete, "Completed" is displayed.

TIP

The performance file that has been recalled from storage memory at the time of shutdown will remain recalled next time you turn on the unit.

■ Deleting a Performance File [DeleteFile]

You can delete a performance file in storage memory. (You cannot delete a preset performance or the current performance file.)

```
DeleteFile  Execute?-->
001:MyPerformance.PER
```

Refer to page 42 for information on the basic operation of performance files. The following steps are supplement for Step 3 on page 42.

⚠ CAUTION

Do not turn off the power to the P-250 while the screen displays "Executing." Otherwise, the data currently held in storage memory may be lost.

3-1 Select a performance file to delete.

Use the C [-]/[+] buttons to select a performance file.

3-2 Execute the operation.

Press the B [(YES)] button located next to "Execute?-->."

Follow the instructions on screen.

TIP

Deleting the performance file does not erase the currently-loaded performance. After you delete a performance file, the subsequent performance file numbers are updated automatically.

■ Renaming a Performance File [RenameFile]

You can change the performance file name in storage memory. (You cannot change the name of a preset performance file.)

```
RenameFile  Execute?-->
001:MyPerformance
```

Refer to page 42 for information on the basic operation of performance files. The following steps are supplement for Step 3 on page 42.

⚠ CAUTION

Do not turn off the power to the P-250 while the screen displays "Executing." Otherwise, the data currently held in storage memory may be lost.

3 Rename the performance file as described in the [SaveToMemory] section (page 44).

After you rename a performance file, all performances are sorted alphabetically and renumbered.

TIP

Use "CharacterCode" in the "SONG FILE" menu to change the type of characters on screen. (The selected LCD character type will be used to display song files and performances.)

Song Operation

■ Recording Songs

This chapter explains how to record your playing using the P-250 recording function.

You can, for example, play back what you played on the keyboard. You can also record just one part, then practice the other part while playing back the recorded the part.

Also, since you can record up to 16 tracks separately, you could record each part separately to build a song.

Recording vs. Saving:

The format of data recorded on a cassette tape differs from that of data recorded on the P-250.

A cassette tape records audio signals. On the other hand, the P-250 “saves” information regarding note timing, voices, and a tempo value — but not audio signals. When you play back recorded songs, the P-250 produces sound based on the saved information.

Therefore, recording on the P-250 may be more accurately called “saving information.” However, this book often uses the word “recording,” or if re-recording over existing data, “overwriting.”

A message (information or confirmation dialog) sometimes appears on screen to facilitate operation. Refer to the “Message List” on page 82 for an explanation of each message, the appropriate actions to take, and troubleshooting information.

TIP

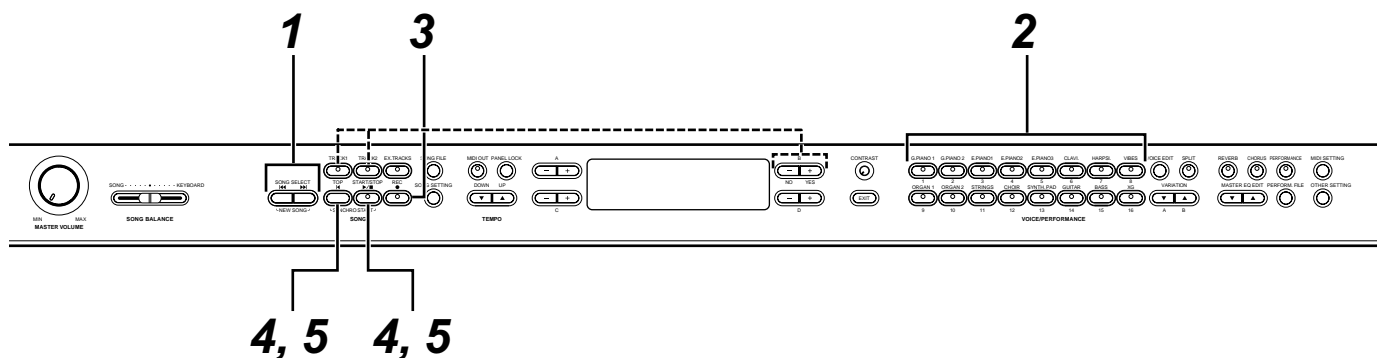
An alternative way to record:

You can record your performance (audio data) to a cassette tape recorder or other recording device via the [OUTPUT] connector. (page 17)

TIP

When the P-250 enters recording mode while Performance mode is on, Performance mode is temporarily turned off. (page 41) The performance parameter settings remain the same.

■ Recording a New Song



■ Recording

1 Select “NewSong” for recording.

Press the SONG SELECT [L]/[R] buttons simultaneously.

```
PresetSong      Bar 001
P-000:NewSong
```

NOTE

If you select a song other than “P-000:NewSong” and record on a track that already contains data, the existing data on that track will be lost.

2 Select a voice.

Select a voice (or voices) for recording. (page 34)
Set other parameters, such as reverb and chorus.

TIP

Set the tempo in Step 3.

TIP

See page 50 for more information on recording in Dual/Split mode.

Adjust the [MASTER VOLUME] slider to set the volume level to suit your preference. You can also use the slider to adjust the level during playback.

When the settings are complete, press the SONG SELECT [L] or [R] button to return to the “NewSong” screen.

3 Enter record mode and select a recording track.

To select Track 1:

Press and hold down the [REC] button and press the [TRACK 1] button.

The [TRACK 1] and [START/STOP] indicators flash in red.

To select Track 2:

Press and hold down the [REC] button and press the [TRACK 2] button.

The [TRACK 2] and [START/STOP] indicator flash in red.

To select a track from Track 3 through 16:

Hold down the [REC] button, then use the B [-]/[+] buttons to select a recording track (3—16).

While holding down the [REC] key, press the [EX.TRACKS] button.

The [EX.TRACK] and [START/STOP] indicators flash red.

(To stop recording, press the [REC] button again or press the [STOP] button.)

TIP

If the “ClickOnOff” parameter in the “SONG SETTING” menu is set to on, the click sound will be heard.

Record Standby screen

```
SongRecording    Bar 012
P-000:NewSong
```

Set the tempo, if necessary.

Press the TEMPO [DOWN] or [UP] button to set the tempo. If the Record Standby screen does not appear, press the SONG SELECT [L] or [R] button.

4 Start and stop recording.

Recording begins automatically as soon as you play a note on the keyboard.

(Optional) Press the SONG [START/STOP] button to start recording.

The Recording screen indicates the current measure number.

Recording screen

Recording bar number

```
SongRecording    Bar 012
P-000:NewSong
```

TIP

When you press the SONG [START/STOP] button during recording, recording is paused. To resume recording, press the SONG [START/STOP] button again or play a note on the keyboard.

TIP

When you press the [REC] button, recording pauses.

To stop recording, press the [TOP] button. The P-250 locates the top of the song.

When the track is 1 or 2, the flashing red light changes to a steady green light. (Record mode is automatically cancelled.)

5 Play back the recorded song.

Press the SONG [START/STOP] button to play back the recording.

When playback is complete, the P-250 automatically stops and locates the top of the song. To stop playback in the middle of a song, press the [TOP] button. You can also pause playback by pressing the [START/STOP] button.

TIP

To erase recorded data from a track, use the "Channel Clear" parameter in the "SONG SETTING" menu (page 63).

6 Save the recorded song.

When you turn off the power to the P-250, the recorded performance data will be lost. If you wish to keep the recording, save the data using the "SaveToMemory" parameter (page 54) in the "SONG FILE" menu.

TIP

Press one of the SONG SELECT [◀◀] or [▶▶] buttons once to return to the recording or song selection screen during song recording or playback.

TIP

If you are not satisfied with the recording and wish to record again, specify the same song and track and repeat these steps. The original recording will be overwritten by the new recording.

Re-recording part of a song

This section explains how to record part of a song again.

1 Pause the song at the beginning of the part you wish to re-record.

To move through the measures, use the B [-]/[+] buttons while the playback screen is displayed, or play back the recording and press the SONG [START/STOP] button to locate a point slightly prior to the beginning of the part you wish to re-record.

```
PresetSong          Bar 009
P-000:NewSong
```

TIP

If the playback screen is not displayed, press the SONG SELECT [◀◀] or [▶▶] button.

2 Select a voice or voices for recording, if necessary.

Repeat Step 2 on page 47. Repeat Step 1 on page 47 if you wish to change the previous settings.

3 Select the recording method (Start/End).

Press and hold down the [REC] button, and press the C [-]/[+] buttons repeatedly to specify how the recording should start. Press the D [-]/[+] buttons repeatedly to specify how the recording should end.

While you are holding down the [REC] button, the following recording method selection screen appears.

```
RecMode ExtraTrackCh= 3
Start:Norm End:Replace
```

Starting methods (start):

Norm (Normal)— The existing data will be erased after re-recording starts.

Key On— Data that exists prior to the point where you start playing will not be erased.

Ending methods (End):

Replace— The data after the point you stop recording will also be erased.

Punch Out— The data after the point you stop recording will not be erased.

Then, resume Step 3 on page 47.

TIP

If you cancel recording by pressing the [REC] button, recording stops at the point at which you press the button. If you cancel recording by pressing the [TOP] button, the P-250 locates the top of the song.

■ Other Recording Techniques

■ Adding data to or recording over an existing song

The previous section explains how to record your performance from the beginning by selecting a blank “P-000:NewSong.” You can also add data from your playing to or overwrite existing songs (such as preset songs [P-001—016], commercially-available music data, or your old recorded performances).

1 Select a song for recording (P-***).

Select one of the preset songs (P-001—016) instead of “P-000: NewSong” as described in Step 1 of “Recording” on page 47. To select a song from previously-recorded data, see Steps 1 and 2 on page 51. To continue recording, follow the procedure described in “Recording a New Song” on page 47.

NOTE

If you record on a track that already contains data, the existing data on the track will be lost.

■ Changing the voice or tempo after recording

You can change the voice or song tempo after recording. For example, you can change the voice to create a different ambience, or adjust the song tempo to suit your taste. You can also change these elements in the middle of a song.

CAUTION

This operation is effective only when “RecMode” (page 48) is set to “Start:Norm.”

1 Select the song you wish to edit by using the SONG SELECT [◀◀]/[▶▶] buttons.

TIP

For information on the data you can edit, in addition to the voice and tempo, refer to “Types of recorded (written) data” on page 50.

2 To change the voice or tempo in the middle of the song, specify the measure using the B [-]/[+] buttons.

3 Change the settings (voice, reverb, etc.).

For example, if you wish to change the recorded Standard E.Piano voice to DX E.Piano1, use the VOICE/PERFORMANCE buttons and the A [-]/[+] buttons to select E.Piano2.

TIP

Change the tempo in Step 4.

When the setting is complete, press one of the SONG SELECT [◀◀]/[▶▶] buttons to return to the song selection screen.

CAUTION

The edited settings (except for the tempo setting) will be saved in memory. You will not be able to restore the previous settings. Proceed with caution!

4 Press and hold down the [REC] button and select the track to change.

The indicator for the selected track lights up in red. You can change the tempo setting at this point, if you wish.

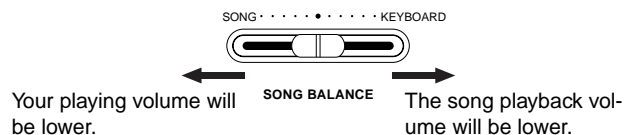
At this point, do not play the keyboard or press the [START/STOP] button. Otherwise, recording will start, erasing the recorded data.

5 Press the [TOP] or [REC] button to exit record mode.

■ Adjusting the volume balance between playback and the sound of your playing by using the [SONG BALANCE] slider

While recording multiple parts into tracks one by one, you can adjust the volume balance between the playback of the recorded parts and your current performance.

1 Move the [SONG BALANCE] slider to the left or right to make the adjustment.



TIP

You can change the function assigned to the [SONG BALANCE] slider by setting the “SongBalanceAssign” parameter (page 79), which is accessed via the [OTHER SETTING] button.

Recording in Dual or Split mode

When you record in Dual or Split mode, the P-250 records each voice onto a separate track. The following table shows how tracks are assigned to each voice.

⚠ CAUTION

When you record multiple parts into tracks one by one, or when you record new data over an existing song (see page 49), the existing data will be erased. Proceed with caution!

In the following example, Tracks 1, 2, and EXTRA TRACK “n” have been selected for recording.

		Assigned recording tracks			
		TRACK1	TRACK2	EXTRA TRACKn	
		↓	↓	↓	
Tracks to be recorded	Dual	Main	TRACK 1	TRACK 2	TRACK n
		Layer	TRACK 3	TRACK 4	TRACK n+2
	Split	Main	TRACK 1		TRACK n
		Left	TRACK 2		TRACK n+1
	Split Dual	Main	TRACK 1		TRACK n
		Left	TRACK 2		TRACK n+1
		Layer	TRACK 3		TRACK n+2
		LeftLayer	TRACK 4		TRACK n+3

The variable “n” represents a track number from 3 through 16.

If “n+1,” “n+2,” and “n+3” exceed 16, TRACKs 1, 2, and 3 are used.

TIP

A switch between Dual and Split mode in a song will not be recorded.

Types of data recorded

Data recorded in the tracks:

- Note data (notes you play)
- Voice selection
- P-250 pedals and modulation wheel on/off
- Reverb depth “ReverbSend”
- Chorus depth “ChorusSend”
- Insertion effect depth “Dry/WetBalance”
- Sound brightness “Brightness”
- Resonance effect setting “Harmonic Content”
- Equalizer’s low-range frequency setting “EQLow-Freq.”
- Equalizer’s low-range gain setting “EQLowGain”
- Equalizer’s low-range frequency setting “EQLow-Freq.”
- Equalizer’s low-range gain setting “EQLowGain”
- Voice octave setting “Octave”
- Voice volume level “Volume”
- Stereo image of each voice “Pan”
- Fine pitch adjustment between two voices (Dual only) “Detune”
- Volume level changes for each voice with response to the way you play “TouchSense”
- Voice transpose setting “Transpose”
- Scale
- Soft pedal depth
- String resonance depth
- Sustain sampling depth
- Key-off volume “KeyOffSamplingDepth”
- Modulation
- Pitch bend
- Pitch bend range

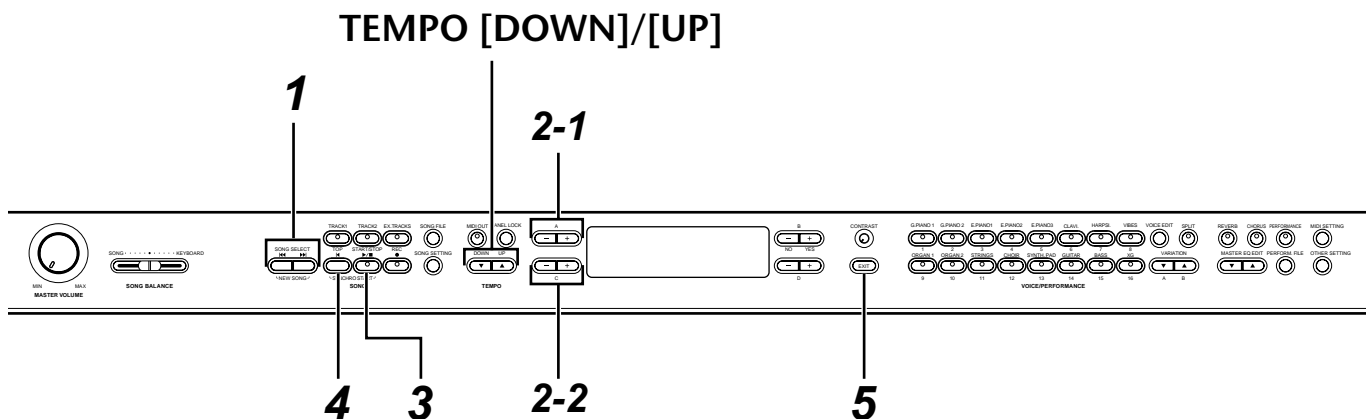
Data shared by tracks

- Tempo
 - Time signature
 - Reverb type
 - Chorus type
 - Insertion effect type
- * You can change all data except for note data including “Octave” and “Transpose”, after recording.
- * You can change the time signature while playback or recording is stopped, at the top of the song, or at a position reached by pressing the B [-]/[+] buttons.

Song Playback

The P-250 enables you to play back a recorded performance. You can also play the keyboard while the P-250 is playing back a song.

■ Playback



1 Display the song selection screen.

Press either SONG SELECT [◀] or [▶] button.



TIP

Use the "SongRepeat" parameter in the "SONG SETTING" menu (page 64) to select repeat playback of all songs or repeat playback of a single song.

2 Select the desired song.

2-1 Use A [-]/[+] to select from "PresetSong" or "MemorySong".

If the internal storage memory contains one or more songs, the P-250 will display "MemorySong."

NOTE

If the song name extends beyond what can be displayed in the screen, you can press the D [+] button to step one character to the right. Press the D [-] button to step one character to the left.

2-2 Use the C [-]/[+] or SONG SELECT [◀]/[▶] buttons to select a song.

3 Start playback.

Press the [START/STOP] button.

Starting playback automatically when you start playing the keyboard (Synchro Start)

You can start playback as soon as you start playing the keyboard. This is called the "Synchro Start" function.

To enter Synchro Start standby mode, press and hold down the [TOP] button and press the [START/STOP] button. The [START/STOP] indicator flashes. Now play the keyboard. Playback starts simultaneously.

To cancel the Synchro Start function, press the [TOP] button while the P-250 is in Synchro Start standby mode.



Use the B [-]/[+] buttons to move back and forth (fast reverse and fast forward) through the song. You can play the keyboard while the P-250 is playing back a song. You can also play the notes in a voice different from the playback voice by selecting a voice from the panel. In this case, to adjust the volume balance between the song playback and the sound you are playing on the keyboard, use the [SONG BALANCE] slider. (page 49) Press either SONG SELECT [◀]/[▶] button to return to the song selection screen.

Adjusting the tempo

You can use the TEMPO [DOWN]/[UP] buttons to adjust the playback tempo as required before or during playback. The default tempo (the song's original tempo) is set when you press the [DOWN] and [UP] buttons simultaneously.

Press the SONG SELECT [◀◀] or [▶▶] button to return to the song selection screen.

TIP

In the song selection screen:

- Press the SONG SELECT [◀◀] or the C[-] button while playback is stopped in the middle of a song to locate the top of the song.
- Press the SONG SELECT [◀◀] or the C[-] button during playback to restart playback from the top of the song.
- Press the SONG SELECT [▶▶] or the C[+] button during playback to start playback from the next song.

NOTE

In songs recorded at a free tempo, the actual number of bars occasionally may not match the number of bars indicated on screen.

NOTE

Some preset songs contain song data recorded at a free tempo.

4 Stop playback.

When playback is complete, the P-250 automatically stops and locates the top of the song.

To stop playback in the middle of a song, press the [TOP] button. You can also pause playback by pressing the [START/STOP] button.

5 Return to the main screen.

Press the [EXIT] button.

Turning Track Playback On and Off

When you select a song on the P-250, the indicators for tracks that contain data ([TRACK 1], [TRACK 2], [EX.TRACKS]) light up green. While the P-250 is playing or stopped, pressing these track buttons turns off the indicators, and the data on those tracks will not be played. Press the track buttons repeatedly to toggle track playback on and off.

You can play the part that is turned off.

TIP

Songs containing a large amount of data may not be read properly by the instrument, and as such you may not be able to select them. The maximum capacity is about 200—300KB. However, this may vary, depending on the data content of each song.

TIP

Change the character type (CharacterCode) as appropriate for the selected song (page 55).

See page 33 for information on the type of song data that the P-250 can play back.

TIP

If the P-250 starts playing back while Performance mode is on, Performance mode will be temporarily turned off. The performance parameter settings remain the same.

Handling Song Files [SONG FILE]

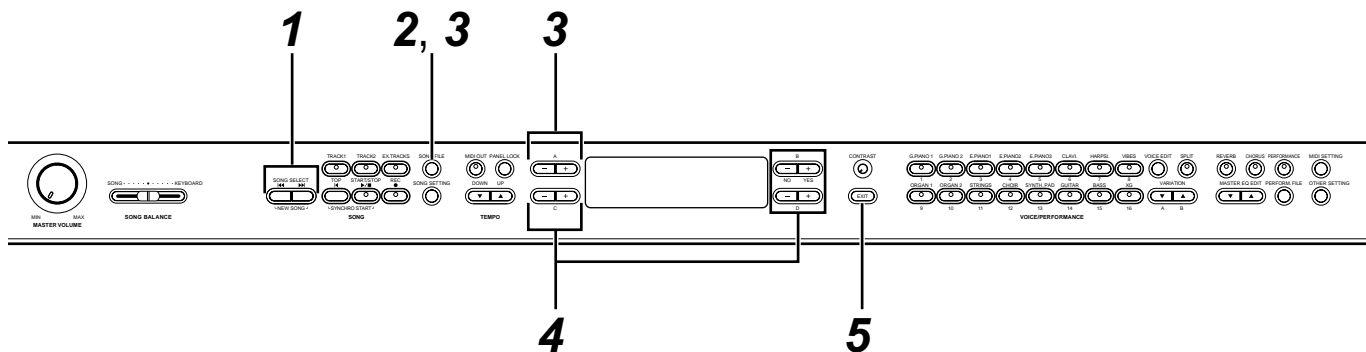
Song File screens, which are accessed via the [SONG FILE] button, enable you to save, delete, and rename recorded songs, and change the type of characters on screen.

The following parameters are provided for these operations:

Operation	Parameter	Reference page
Saving a Song File in Storage Memory	SaveToMemory	54
Deleting a Song File from Storage Memory	DeleteSong	54
Renaming a Song (Song File)	RenameSong	55
Changing the On-Screen Character Type	CharacterCode	55

■ Basic Song File Operation

Message are occasionally displayed on screen to facilitate operation. Refer to the “Message List” on page 82 for an explanation of each message, the appropriate actions to take, and troubleshooting information.



1 Select the desired song.
Select a song you wish to save or rename.

2 Access the Song File menu.
Press the [SONG FILE] button.



To close the Song File menu, press the [EXIT] button once or twice.

3 Select the desired parameter.
Press the [SONG FILE] or A [-]/[+] buttons repeatedly to display the desired item from the following:

- SaveToMemory
- DeleteSong
- RenameSong
- CharacterCode

4 Set the parameter or execute the command.
Use the B [- (NO)]/[+ (YES)], C [-]/[+], or D [-]/[+] buttons.

For more information regarding this procedure, refer to the corresponding section.

5 Close the Song File menu.
Press the [EXIT] button.

■ Saving a Song File in Storage Memory [SaveToMemory]

If you record a song and then turn off the power, the song will be erased. To save a recorded song, you must save it into the P-250 storage memory. You can also save preset songs, as well as additional or overwritten recordings (page 49) to storage memory.

```
SaveToMemory Execute?-->
F-000:NewSong
```

Refer to page 53 for information on the basic operation of song files. The following steps are supplement for Step 4 on page 53.

⚠ CAUTION

Do not turn off the power to the P-250 while the screen displays "Executing." Otherwise, the data currently held in storage memory may be lost.

4-1 Name the song.

To move the cursor (a small underline), use the C [-]/[+] buttons.

To insert a space, press the C [-]/[+] buttons simultaneously.

To select a character marked by the cursor, use the D [-]/[+] buttons.

To delete a character, press the D [-]/[+] buttons simultaneously.

You can use up to 58 characters for a song name. If the name is longer than the screen, use the C [-]/[+] buttons to move the cursor and scroll the name.

4-2 Execute the operation.

Press the B [+](YES) button located next to "Execute?-->."

"Sure?-->" is displayed on screen. Press the B [+](YES) button again to confirm the operation. (To cancel the operation, press the B [-](NO) button.)

During the operation, "Executing" is displayed on screen. When the operation is complete, "Completed" is displayed.

The song is automatically numbered as "Mxx," where "M" means "Memory" and "xx" is a number.

If storage memory contains one or more songs, and you save a new song, the P-250 automatically sorts the songs alphabetically and rennumbers them.

TIP

Song Title

- You can change the type of characters on screen using the "CharacterCode" (page 55) parameter.
- When you later select a saved song, the name with an extension ".MID" will appear.

■ Deleting a Song File from Storage Memory [Delete-Song]

You can delete song files in storage memory. You cannot delete preset songs or the currently-selected song.

```
DeleteSong Execute?-->
M-001:MY SONG.MID
```

Refer to page 53 for information on the basic operation of song files. The following steps are supplement for Step 4 on page 53.

⚠ CAUTION

Do not turn off the power to the P-250 while the screen displays "Executing." Otherwise, the data currently held in storage memory may be lost.

4-1 Select a song to delete.

Use the C [-]/[+] buttons to select a song.

4-2 Execute the operation.

Press the B [+](YES) button located next to "Execute?-->."

Follow the instructions on-screen.

Deleting the memory song does not erase the song data from the current memory. However, if you return to the song selection screen, song information other than the song name is replaced by a dashed line "_____".

After you delete a song, the P-250 automatically updates the song numbers.

TIP

To delete the currently-selected song, select "ALL" for the "ChannelClear" parameter (page 63) accessed from the [SONG SETTING] button. Alternatively, press the SONG SELECT [◀][▶] buttons simultaneously to display "SongChanged Save?". This message means: "A song has been edited. Do you wish to save the change?" Press the B [-](NO) button. The currently-selected song is deleted and a blank "NewSong" is selected.

■ Renaming a Song (Song File) [RenameSong]

You can change the title of any song, except for preset songs and “P-000:NewSong”.



Refer to page 53 for information on the basic operation of song files. The following steps are supplement for Step 4 on page 53.

CAUTION

Do not turn off the power to the P-250 while the screen displays “Executing.” Otherwise, the data currently held in storage memory may be lost.

4 Name the song as described in the “SaveToMemory” section (page 54).

After you rename a song, all songs are sorted alphabetically and renumbered.

■ Changing the On-Screen Character Type [CharacterCode]

You can change the type of characters that appear on-screen.



To select International or Japanese, use the D [-]/[+] buttons.

Character list

International

0~9	A~Z	a~z	Ä	Ë	Ï	Ö	Ü	ä	ë	ï	ö	ü	à	è	ì	ò	ù	á	é				
í	ó	ú	â	ê	î	ô	û	Ñ	ñ	ß	Ç	ç	°	¡	;	!	#	\$	%	&	'	()
+	,	-	.	;	=	@	[]	^	_	`	{	}	~									

Japanese

0~9	A~Z	a~z	ア	ン	ア	オ	ヤ	ユ	ヨ	ツ	ッ	°	。	。	「	」	,	.				
!	#	\$	%	&	'	()	+	,	-	.	;	=	@	[]	^	_	`	{	}	~

TIP

The [CharacterCode] setting is also reflected in the display of the performance and performance file names.

Edit Operation

Edit Operation explains detailed functions and settings for convenient and advanced techniques.

Editing	58
Settings for Song Recording and Playback [SONG SETTING].	62
Editing a Voice in Detail [VOICE EDIT].	65
Adjusting the Master Equalizer [MASTER EQ EDIT].	71
MIDI [MIDI SETTING].	73
Other Settings [OTHER SETTING]	76

Editing

You can set various parameters to make the best use of P-250 functions. For a basic procedure to make these settings, refer to page 61.

■ Parameter List

The following parameters are available.

Song recording and playback [SONG SETTING]

Operation	Parameter name on the screen	Reference page
Correcting note timing	Quantize	62
Specifying whether playback starts immediately along with the first voicing	QuickPlay	62
Auditioning channel	ChannelListen	63
Deleting data from a channel	ChannelClear	63
Specifying the range and playing back repeatedly	FromToRepeat	63
Specifying a phrase for playback by phrase number	PhraseMark	63
Playing back a song repeatedly	SongRepeat	64
Setting the click time signature	TimeSignature	64
Setting the click volume	ClickVolume	64
Turning the click on/off	ClickOnOff	64

Voices [VOICE EDIT]

In Dual mode, assign parameters with an asterisk (*) to the Main part and Layer part voices. In Split Dual mode, assign them to the Main, Layer, Left, and LeftLayer part voices.

Operation	Parameter name on the screen	Reference page
Setting the octave*	Octave	65
Setting the volume level*	Volume	65
Setting the position of right and left channels*	Pan	66
Adjusting fine pitch offset between two voices in Dual mode	Detune	66
Selecting the reverb type	ReverbType	66
Setting the reverb depth*	ReverbSend	66
Setting the chorus type	ChorusType	66
Setting the chorus depth*	ChorusSend	67
Turning the chorus on/off	ChorusOnOff	67
Selecting the insertion effect type*	Ins.Type (Ins)	67
Setting the speed of the vibraphone vibrato effect*	VibeRotorSpeed (RotorSpeed)	67
Turning the vibraphone vibrato on/off*	VibeRotorOnOff (RotorOnOff)	67
Adjusting the speed of the rotary speaker*	RotarySpeed (Rot.Speed)	67
Adjusting the insertion effect depth*	Dry/WetBalance (Dry/Wet)	68
Adjusting the brightness of the sound*	Brightness	68
Adjusting the resonance effect*	HarmonicContent (Harmonic)	68
Adjusting the low-range frequency of the part EQ*	EQ LowFreq. (EQ L.Freq)	68
Adjusting the low-range gain (amount of boost/cut) of the part EQ*	EG LowGain	68
Adjusting the high-range frequency of the part EQ*	EQ HighFreq. (EQ H.Freq)	68
Adjusting the high-range gain (amount of boost/cut) of the part EQ*	EG HighGain	68
Setting the touch sensitivity*	TouchSense	68
Assigning the Pedal 1 function	Pedal 1	69
Assigning the Pedal 2 function	Pedal 2	69
Assigning the Pedal 3 function	Pedal 3	69

Assigning the Pedal 4 function	Pedal 4	69
Assigning the modulation wheel function	Modulation	69
Setting the MSB of the Send Bank Select message*	SendBankMSB (SendMSB)	70
Setting the LSB of the Send Bank Select message*	SendBankLSB (SendLSB)	70
Setting the Program Change message*	SendPG#	70
Turning the Internal tone generator on/off*	InternalTG	70

Master Equalizer [MASTER EQ EDIT]

Operation	Parameter name on the screen	Reference page
Setting the Master Equalizer type	Edit or Master Equalizer type name	71
Adjusting the low range gain of the Master Equalizer	LowGain	71
Adjusting the low-middle range gain of the Master Equalizer	LowMidGain	71
Adjusting the middle range gain of the Master Equalizer	MidGain	71
Adjusting the high-middle range gain of the Master Equalizer	HighMidGain	71
Adjusting the high range gain of the Master Equalizer	HighGain	71
Adjusting the low frequency of the Master Equalizer	LowFreq.	71
Adjusting the low-middle frequency of the Master Equalizer	LowMidFreq.	71
Adjusting the middle frequency of the Master Equalizer	MidFreq.	71
Adjusting the high-middle frequency of the Master Equalizer	HighMidFreq.	71
Adjusting the high frequency of the Master Equalizer	HighFreq.	71
Adjusting the low range resonance of the Master Equalizer	LowQ	72
Adjusting the low-middle range resonance of the Master Equalizer	LowMidQ	72
Adjusting the middle range resonance of the Master Equalizer	MidQ	72
Adjusting the high-middle range resonance of the Master Equalizer	HighMidQ	72
Adjusting the high range resonance of the Master Equalizer	HighQ	72

MIDI [MIDI SETTING]

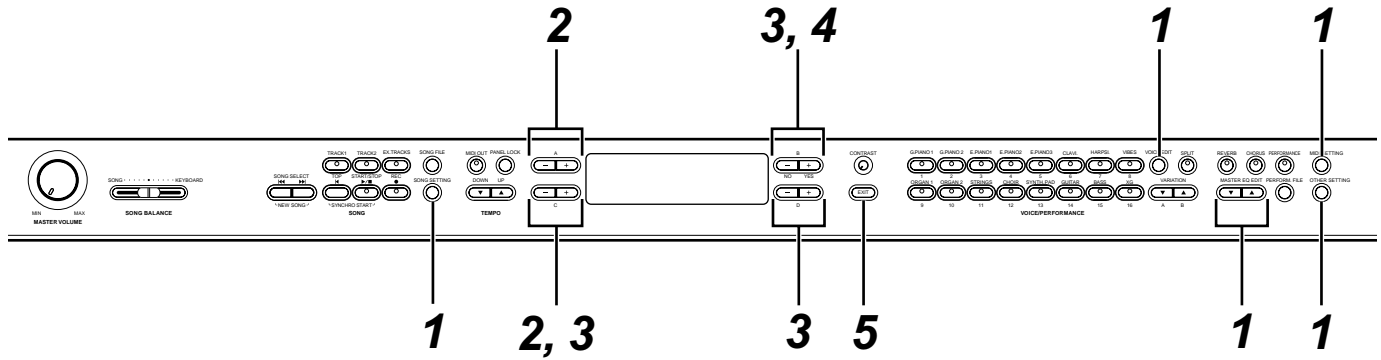
Operation	Parameter name on the screen	Reference page
Setting the MIDI transmit channel	MidiOutChannel	74
Setting the MIDI receive channel	MidiInChannel	74
Turning the Local control on/off	LocalControl	74
Specifying keyboard performance or song data to be transmitted via MIDI	MidiOutSelect	74
Specifying the type of data received via MIDI	ReceiveParameter	75
Specifying the type of data transmitted via MIDI	TransmitParameter	75
Transmitting the initial settings on the panel	InitialSetup	75
Executing Voice Data Bulk Dump	VoiceBulkDump	75

Other settings [OTHER SETTING]

Operation	Parameter name on the screen	Reference page
Selecting a touch response	TouchResponse	76
Fine-tuning the pitch	Tune	76
Selecting a tuning curve for a piano voice	PianoTuningCurve	76
Selecting a scale	Scale	77
Setting the Split Point	SplitPoint	77
Setting the key	Transpose	77
Specifying the depth of the soft pedal	SoftPedalDepth	77
Specifying the depth of the string resonance	StringResonanceDepth	77
Specifying the depth of sustain sampling for the damper pedal	SustainSamplingDepth	78
Specify the volume of the key-off sound	KeyOffSamplingDepth	78
Selecting a pedal function for vibraphone	VibraphonePedalMode	78
Assigning the START/STOP function to a pedal	PedalStart/Stop	78

Selecting a type of pedal	PedalType	78
Setting the point at which the pedal starts to affect the sound	HalfPedalPoint	78
Pitch bend range	PitchBendRange	79
Setting the [SONG BALANCE] function assignment	SongBalanceAssign	79
Turning the speaker on/off	Speaker	79
Setting the Master Equalizer lock	EqualizerLock	79
Selecting items saved at shutdown	MemoryBackUp	79
Restoring the normal (default) settings	FactorySet	79

■ Basic Editing Flow



1 Access a setting menu.

Press the desired setting button ([SONG SETTING], [VOICE EDIT], [MASTER EQ EDIT], [MIDI SETTING], or [OTHER SETTING]) to access the corresponding setting menu.

Press the [EXIT] button at any time to close the setting menu.

2 Select the desired parameter or part.

Press the setting button, A [-]/[+], and/or C [-]/[+] buttons repeatedly as required.

3 Set the parameter or part.

Some parameters or parts lead you to more options. Use the B [-](NO)/[+] (YES), C [-]/[+], and D [-]/[+] buttons to select or set the option.

To restore the default parameter value, press the [-] and [+] buttons simultaneously.

4 Write, execute, or save the data.

There are three ways to respond to the messages displayed at this juncture.

If "Execute?-->" or "Start?-->" appears:

Press the B [(+) (YES)] button to display confirmation message "Sure?-->."

To proceed, press the B [(+) (YES)] button again. The P-250 displays "Executing" and writes the data. When the operation is complete, it displays "Completed" for three seconds, then returns to the previous screen. To cancel the operation, press the B [-](NO)] button instead of the B [(+) (YES)] button.

If the P-250 does not display the previous screen three seconds after it displays "Completed," press the B [(+) (YES)] or [EXIT] button. The P-250 then displays the previous screen.

```
Quantize      Execute?-->
                                     1/4
```

If "Set?-->" appears:

Press the B [(+) (YES)] button to execute the setting. The P-250 displays "Executing" and saves the data. When the operation is complete, the P-250 displays "Completed" for three seconds, then displays the previous screen.

```
Main          Set?-->
Octave        0
```

5 Close the parameter setting menu.

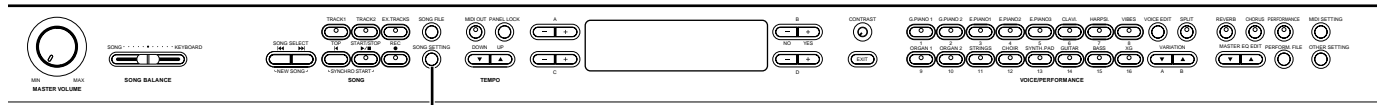
Press the [EXIT] button.

If you wish to save the parameter setting for a particular performance file:

Press the [PERFORM.FILE] button, press the A [-]/[+] buttons to select "Performance" on the screen, press the C [-]/[+] or VARIATION [▼]/[▲] buttons to select the destination performance, then press the B [(+) (YES)] button.

Settings for Song Recording and Playback [SONG SETTING]

You can make detailed settings for the selected song. First, select the desired song (page 51). Select the desired song and press the [SONG SETTING] button to access the [Song Setting] menu.



[SONG SETTING]

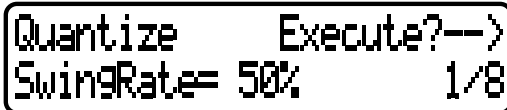
- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Correcting note timing [Quantize]

TERMINOLOGY

Quantize: To correct the timing of notes. (To perform an operation to the MIDI data that will bring notes closer to a specified grid of acceptable timing values.)

The P-250 enables you to correct the timing of notes. For example, you can adjust recorded notes to precise eighth or sixteenth notes, or make the entire song feel more lively by adding a swing rhythm. You can modify any song, and listen while you change the settings.



Press the D [-]/[+] buttons to specify the note type, and press one of the B [-(NO)]/[+(YES)] buttons to specify whether or not you wish to store the changed value.

If you select “1/8” or “1/16” for correction, “SwingRate=xx%” is displayed. You can specify the swing rate from 0% to 100% by using the C [-]/[+] buttons. Setting the swing rate to an appropriate value will make the song sound more lively and swinging.

Adjusting the timing

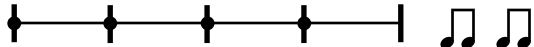
OFF		
1/4.....		Quarter note
1/8.....		Eighth note
1/12.....		Eighth note triplets
1/16.....		Sixteenth note
1/24.....		Sixteenth note triplets

Adjusting the timing of 1/8 notes:

Your playing timing on the Keyboard

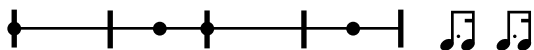


Swing rate = 50% : not swinging



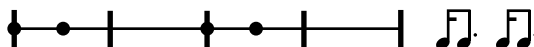
Swing rate = 75% (51% or higher) :

The timing of even beat notes is slightly delayed.



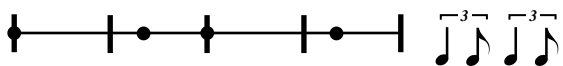
Swing rate = 25% (49% or lower) :

The timing of even beat notes is slightly early.



Swing rate = 67% :

The timing of the even beat notes is moved to the third beat of the triplets.



NOTE

Save the edited song data to memory using “SaveToMemory.” (page 54)

■ Specifying whether playback starts immediately along with the first voicing [QuickPlay]

Press the D [-]/[+] buttons to specify whether a song that starts in the middle of a bar or with a silence prior to the first note should be played from the first note (ON) or from the top of the bar (rest or blank) (OFF).



- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Auditioning channel [ChannelListen]

You can select a single channel to listen to its contents.

```
ChannelListen Start?-->
                          Ch1
```

Playback starts from the first note.

Press the D [-]/[+] buttons to select a channel for playback. Press and hold down the B [+](YES) button to play the channel.

TIP

Channels that do not contain any data are not displayed. However, for some songs, all channels (including channels that contain no data) may be displayed.

■ Deleting data from a channel [ChannelClear]

You can delete data from the 16 channels one by one or all together.

```
ChannelClear Execute?-->
                          Ch1
```

Press the D [-]/[+] buttons to select a channel to delete, and press the B [+](YES) button to delete the data.

TIP

Channels that do not contain data are not displayed. However, for some songs, all channels (including channels that contain no data) may be displayed.

NOTE

Save the edited song data to memory using the “SaveToMemory” (page 54) parameter.

■ Specifying the range and playing back repeatedly [FromToRepeat]

You can specify a range (in steps of beats) that you wish to play back repeatedly.

- Playback repeats after it reaches the end point. (The end point is not played.)
- If you start playing back a song with “Repeat On” selected, the count down starts, followed by the repeated playback of the specified part until you press the [TOP] button.
- If you select “Repeat Off,” normal playback starts.

```
FromToRepeat RepeatOff
From001:001   To008:002
```

Press the B [-](NO)/[+](YES) buttons to select “Repeat On” or “Repeat Off.” Press the C [-]/[+] buttons to specify the start point of the repeated range, and press the D [-]/[+] buttons to specify the end point of the repeated range.

TIP

Press the C [-]/[+] and D [-]/[+] buttons to specify the range to be repeated during song playback.

TIP

When you select another song, the specified range is automatically cancelled and the Repeat function is turned off.

NOTE

If you set the [FromToRepeat] parameter for a song recorded at free tempo, the timing of the metronome sound and the song may occasionally not match.

NOTE

Some preset songs contain song data recorded at free tempo.

■ Specifying a phrase for playback by phrase number [PhraseMark]

If you select a song that contains “PhraseMark” data you can specify phrase numbers to play back from the mark point, or to play back repeatedly.

- If you start playing back a song with “Repeat On” selected, the metronome sound starts ticking, followed by the repeated playback of the specified phrase until you press the [TOP] button.
- If you select “Repeat Off,” normal playback starts from the specified phrase.

```
PhraseMark RepeatOff
001
```

Press the C [-]/[+] buttons to specify a phrase number, and press the B [-](NO)/[+](YES) buttons to select “Repeat On” or “Repeat Off.”

You can set the phrase number to Off (not specified), or from 1 through the last phrase number in the song.

- If you select a song that doesn’t contain “PhraseMark” data, you can select only “Off”.

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Playing back a song repeatedly [SongRepeat]

You can repeatedly play back all songs, or a single song selected from the preset songs or from storage memory.

SongRepeat Off
OneSong

- When you start playback, the P-250 plays the currently-selected song, then starts repeat playback of the specified songs, continuing until you press the [TOP] button.
- Press the B [-](NO)/[+](YES) buttons to select “On” or “Off,” and press the D [-]/[+] buttons to specify the songs to be repeated.

Range to be repeated:

- MemorySongs ... All songs in the storage memory
- PresetSongs All preset songs
- All All songs in the storage memory and all preset songs
- OneSong Song selected on the panel

■ Setting the click time signature [TimeSignature]

TimeSignature
4 / 4

TERMINOLOGY

TimeSignature = The standard method of denoting the meter of a piece of music.

Press the C [-]/[+] buttons to set the numerator of the time signature, and press the D [-]/[+] buttons to set the denominator of the time signature.

For example, to specify “3/4,” press the C [-]/[+] buttons to select “3” and the D [-]/[+] buttons to select “4.”

■ Setting the click volume [ClickVolume]

ClickVolume
100

Press the D [-]/[+] buttons to set the volume (0—127).

■ Turning the click on/off [ClickOnOff]

ClickOnOff Off

Use the D [-]/[+] buttons to select one of the following:

- Off No click sounds.
- BellOn Chime sounds on the first beat in a measure. Click sounds on the rest of the beats.
- BellOff Click sounds on every beat.

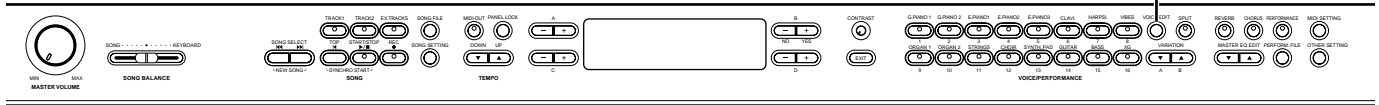
TIP

Click does not sound in any mode other than recording, regardless of the “ClickOnOff” setting.

Editing a Voice in Detail [VOICE EDIT]

This menu enables you to make detailed settings for the voices in Dual or Split mode, as well as for the effects. You can make these settings for each voice or for a combination of voices. In addition, you can listen to the notes you play on the keyboard while you change the settings.

[VOICE EDIT]



- Refer to page 61 for general information on setting the parameters.
 - Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.
- All parameters accessed via the [VOICE EDIT] button are performance parameters (page 30).

Basic voice editing using [VOICE EDIT]

- 1 Select a voice and press the [VOICE EDIT] button to access the “VOICE EDIT” menu.
- 2 Press the A [-]/[+] buttons to select the part for which you wish to change the voice.

The range of the displayed voice part varies depending on the selected voice.

- Main Voices for the Main part (page 29).
The Main part voice is used in non-Split, non-Dual mode, or in Split mode when the right-hand area is not in Dual mode.
- Main x Layer Voices for the Main or Layer part (page 29). These voices are used in Dual mode, or in Split mode when the right-hand area is in Dual mode.
- Left..... Voices for the Left part (page 28).
These voices are used in Split mode when the left-hand area is not in Dual mode.
- Left x Layer..... Voices for the Left or Layer part (page 28). These voices are used in Split mode when the left-hand area is in Dual mode.

TIP

In Dual mode, assign parameters with an asterisk (*) to the Main part and Layer part voices. In Split Dual mode, assign them to the Main, Layer, Left, and Left/Layer part voices.

TIP

Parameter names enclosed in parentheses () are displayed in Dual mode.

Setting the octave* [Octave]

The pitch of a note can be shifted up or down by one or two octaves.



In Dual mode:



Voice for editing (Main part or Layer part)

Press the D [-]/[+] buttons to set the pitch to the range from -2 (two octaves lower) through 0 (no pitch shift) to +2 (two octaves higher).

Setting the volume level* [Volume]

You can set the volume level for each voice.



In Dual mode:



Voice for editing (Main part or Layer part)

Press the D [-]/[+] buttons to set the volume level (0 to 127).

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

- All parameters accessed via the [VOICE EDIT] button are performance parameters (page 30).

■ Setting the position of the right and left channels* [Pan]

TERMINOLOGY

Pan = Moving the sound from left to right, or right to left

You can specify the position in the stereo image from which the sound is output.

```
Main          Set?-->
Pan           C
```

In Dual mode:

```
MainxLayer    Set?-->
Pan(GrndPno1) C
```

Voice for editing (Main part or Layer part)

Press the D [-]/[+] buttons to set the pan position in the range of L64 (hard left)— C (center) — R63 (hard right).

■ Adjusting fine pitch offset between two voices in Dual mode [Detune]

TERMINOLOGY

Detune = Shifting the pitch of one sound relative to another

The pitch of the two voices selected in Dual mode can be “skewed” slightly away from each other.

```
MainxLayer    Set?-->
Detune        + 3
```

Press the D [-]/[+] buttons to set the skewing value (–20 — +20).

Positive (+) settings will raise the pitch of the first sound and lower the pitch of the second sound.

Negative settings will lower the pitch of the first sound and raise the pitch of the second sound.

■ Selecting the reverb type [ReverbType]

```
Main          Set?-->
ReverbType    Hall1
```

TIP

You cannot set this parameter for the voice parts “Left” and “Left X Layer.”

- Press the D [-]/[+] button to select one of the following:
- Room Reverberation in a room
 - Hall1 Reverberation in a concert hall
 - Hall2 Reverberation in a hall slightly larger than Hall1
 - Stage Reverberation suitable for a solo instrument
 - Plate Reverberation similar to vintage plate reverb (created by suspending a steel plate with springs)

■ Setting the reverb depth* [ReverbSend]

Press the D [-]/[+] buttons to set the value (0—127).

```
Main          Set?-->
ReverbSend    14
```

In Dual mode:

```
MainxLayer    Set?-->
ReverbSend(DX E.P.1) 26
```

Voice for editing (Main part or Layer part)

■ Setting the chorus type [ChorusType]

```
Main          Set?-->
ChorusType    Chorus
```

TIP

You cannot set this parameter for the voice parts “Left” and “Left X Layer.”

- Press the D [-]/[+] buttons to select one of the following:
- Chorus Adds a rich spread to the sound.
 - Celeste Adds a swell and spread to the sound.
 - Flanger Adds an ascending or descending jet sweep.

- Refer to page 61 for general information on setting the parameters.
 - Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.
- All parameters accessed via the [VOICE EDIT] button are performance parameters (page 30).

■ **Setting the chorus depth* [ChorusSend]**



In Dual mode:



Voice for editing (Main part or Layer part)

Press the D [-]/[+] buttons to set the value (0—127).

■ **Turning the chorus on/off [ChorusOnOff]**

You can set the [CHORUS] button on or off for each voice. When you select a voice, the voice automatically uses this chorus on/off setting.



Press the D [-]/[+] buttons to turn On/Off.

■ **Selecting the insertion effect type* [Ins.Type(Ins)]**

You can select other effects (than reverb and chorus).



Press the D [-]/[+] buttons to select one of the following:

- Delay LCR Delays the sound on left, center, and right.
- Delay LR..... Delays the sound on left and right.
- Echo Echo-like delay
- CrossDelay Left and right delays are crossed.
- Symphonic Adds a rich, deep dimension to the sound.
- Rotary..... Reproduces the vibrato effect of rotary speakers.
- Tremolo..... The volume level changes in cycles.
- VibeRotor Vibrato effect typical of a vibraphone
- AutoPan..... Moves the sound left and right.
- Phaser..... Changes the phase periodically to create a swell.
- AutoWah Changes the center frequency of the wah filter periodically.

- SoundBoard Creates reverberation that simulates a piano sound board.
- AmpSimulator..... Distortion effects
- Off No effect

■ **Setting the speed of the vibraphone vibrato effect* [VibeRotorSpeed(RotorSpeed)]**

TERMINOLOGY

Rotor = The rotating portion of an electric motor.

This parameter is displayed only if VibeRotor is selected for the “Ins.Type” parameter.

This parameter enables you to set the speed of vibrato when you select the Vibraphone voice and use a vibe rotor pedal.



Press the D [-]/[+] buttons to set the speed (1—10).

■ **Turning the Vibraphone vibrato on/off* [VibeRotorOnOff (RotorOnOff)]**

This parameter is displayed only if VibeRotor is selected for the “Ins.Type” parameter.

This parameter turns on/off the vibrato effect that is applied when you use the VibeRotor pedal.



Press the D [-]/[+] buttons to turn the parameter On or Off.

■ **Adjusting the speed of the rotary speaker* [RotarySpeed (Rot.Speed)]**

This parameter is displayed only if Rotary is selected for the “Ins.Type” parameter.

This parameter sets the rotation speed of the rotary speaker effect.



Press the D [-]/[+] buttons to simulate a speaker turning Slow or Fast.

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

• All parameters accessed via [VOICE EDIT] are performance parameters (page 30).

■ **Adjusting the insertion effect depth* [Dry/WetBalance(Dry/Wet)]**

This parameter sets the depth of the insertion effect. Some insertion effects do not allow you to set the dry/wet balance.

```
Main          Set?-->
Dry/WetBalance  D<W63
```

Press the D [-]/[+] buttons to specify the dry/wet balance in the range from “D63>W” (mostly dry sound) through “D=W” (dry/wet balance is even) to “D<W63” (only the effect sound is output).

■ **Adjusting the brightness of the sound* [Brightness]**

```
Main          Set?-->
Brightness     0
```

Use the D [-]/[+] buttons to set the value (-64 to +63).

■ **Adjusting the resonance effect* [Harmonic-Content (Harmonic)]**

```
Main          Set?-->
HarmonicContent 0
```

TERMINOLOGY

Resonance = Vibration or oscillation at a certain frequency

Press the D [-]/[+] buttons to set the value (-64 — +63).

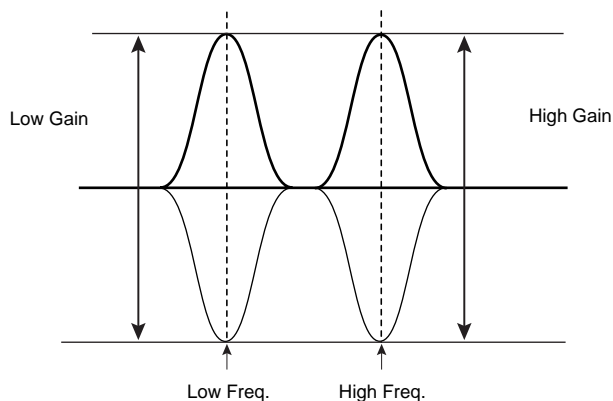
■ **Adjusting the low-range frequency of the part EQ* [EQ LowFreq.(EQ L.Freq)]**

■ **Adjusting the high-range frequency of the part EQ* [EQ HighFreq.(EQ H.Freq)]**

For the Part equalizer (Part EQ), you can adjust the gain of two bands for each voice.

TIP

The P-250 has two types of equalizer: five-band Master Equalizer (Master EQ) and two-band Part Equalizer (part EQ). Refer to pages 38 and 71 for more information on the Master Equalizer.



```
Main          Set?-->
EQ LowFreq.    32
```

Press the D [-]/[+] buttons to specify the low-range frequency (32Hz to 2.0kHz) and the high-range frequency (500Hz to 16.0 kHz).

■ **Adjusting the low-range gain (amount of boost/cut) of the part EQ* [EQLowGain]**

■ **Adjusting the high-range gain (amount of boost/cut) of the part EQ* [EQHighGain]**

```
Main          Set?-->
EQ LowGain     0
```

Press the D [-]/[+] buttons to specify the gain for each band (-12 — +12dB).

■ **Setting the touch sensitivity* [TouchSense]**

This parameter enables you to determine the manner and degree to which the volume level changes in response to your touch on the keyboard (how hard you play).

```
Main          Set?-->
TouchSense     64
```

In Dual mode:

```
MainxLayer    Set?-->
TouchSense(GrndPno1) 64
```

Voice for editing (Main part or Left part)

Press the D [-]/[+] buttons to set the sensitivity from 0 (softest) to 64 (largest change in the level) to 127 (loudest and fixed).

TIP

See page 74 for differences between the “TouchSense” parameter and the “TouchResponse” parameter in the “OTHER SETTING” menu.

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

- All parameters accessed via the [VOICE EDIT] button are performance parameters (page 30).

■ Assigning the Pedal 1 function [Pedal 1]

■ Assigning the Pedal 2 function [Pedal 2]

■ Assigning the Pedal 3 function [Pedal 3]

You can assign a function to a pedal connected to the pedal jack.

Mainxlayer	Set?-->
Pedal 1	Sustain

Press the D [-]/[+] buttons to select one of the following functions:

- Sustain..... On/Off switch-type damper (page 39)
- SustainCont ... Damper effect that sustains notes longer when you press the pedal further down (page 39)
- Sostenuto..... Sostenuto pedal (page 39)
- Soft..... Soft pedal (page 39)
- Expression Adds accents to notes being played.
- Off..... No function is assigned.

■ Assigning the Pedal 4 function [Pedal 4]

Mainxlayer	Set?-->
Pedal 4	Expression

Press the D [-]/[+] buttons to select one of the following functions:

- Sustain..... On/Off switch-type damper (page 39)
- SustainCont ... Damper effect that sustains notes longer when you press the pedal further down (page 39)
- Sostenuto..... Sostenuto pedal (page 39)
- Soft..... Soft pedal (page 39)
- Expression Adds accents to notes being played.
- ReverbSend ... Adds reverb accents to notes being played.
- ChorusSend ... Adds chorus accents to notes being played.
- Brightness..... Adds brightness accents to notes being played.
- Harmonic
- Content..... Adds resonance accents to notes being played.
- After Touch Adds after-touch accents to notes being played. (MIDI transmit only)
- Ctrl#0—#119 .. Adds accents by controller #0—119 to notes being played. (MIDI transmit only)
- Off..... No function is assigned.

TIP

Recommended pedals:

For the Sustain, SustainCont, Sostenuto, and Soft functions, use FC3, FC4/FC5, FC7 pedals. For other functions, use FC7.

■ Assigning the modulation wheel function [Modulation]

You can specify the parameter controlled by the modulation wheel.

Main	Set?-->
Modulation	Ctrl#100

Press the D [-]/[+] buttons to select one of the following functions:

- Expression..... Adds accents to notes being played.
- Main
- Volume Changes the volume level of the Main part notes being played.
- Layer
- Volume Changes the volume level of the Layer part notes being played. (Displayed only when Main is in Dual mode.)
- LeftVolume Changes the volume level of the Left part note being played.
- LeftLayer
- Volume Changes the volume level of the LeftLayer part note being played. (Displayed only when Left is in Dual mode.)
- RotarySpeed... Changes the rotary speaker's rotation speed during performance
- VibeRotor Changes the vibraphone's vibrato speed during performance
- Modulation Adds modulation accents.
- ReverbSend.... Adds reverb accents to notes being played.
- ChorusSend ... Adds chorus accents to notes being played.
- Brightness Adds brightness accents to notes being played.
- Harmonic Adds resonance accents to notes being played.
- After Touch..... Adds after-touch accents to notes being played. (MIDI transmit only)
- Ctrl#0—#119 .. Adds accents by controller #0—119 to notes being played. (MIDI transmit only)
- Off..... No function is assigned.

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

- All parameters accessed via the [VOICE EDIT] button are performance parameters (page 30).

- Setting the MSB of the Send Bank Select message* [SendBankMSB(SendMSB)]
- Setting the LSB of the Send Bank Select message* [SendBankLSB(SendLSB)]
- Setting the Program Change message* [SendPG#]

```

Main          Set?-->
SendBankMSB   127
  
```

Press the D[-]/[+] buttons to select “PRESET” (preset value) or a fixed value ranging from 0 through 127 (For the “SendPG#” parameter, from 1 through 128).

If you select “PRESET,” the same value as that is sent to the internal tone generator will be output. If you change one of these three parameter settings from a fixed value to “PRESET,” the rest of the parameters will be also changed to “PRESET.” On the other hand, if you change one of the settings from “PRESET” to a fixed value, the rest of the parameters will be set to the same fixed value.

- Turning the Internal tone generator on/off* [InternalTG]

```

Main          Set?-->
InternalTG    Off
  
```

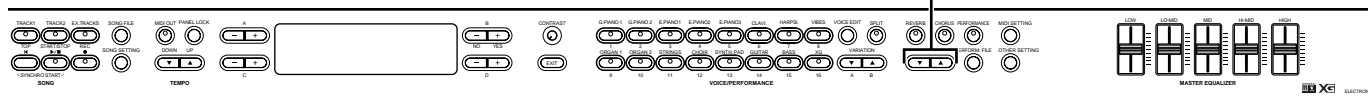
Press the D[-]/[+] buttons to turn the Internal Voice on/off.

Adjusting the Master Equalizer [MASTER EQ EDIT]

The P-250 enables you to set the Master Equalizer settings.

You can also set the EQ gain by moving the MASTER EQUALIZER sliders (page 38) on the panel. Regardless of the method you use, the latest gain setting is effective.

[MASTER EQ EDIT]



- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

- All parameters accessed via the [MASTER EQ EDIT] button are performance parameters (page 30).

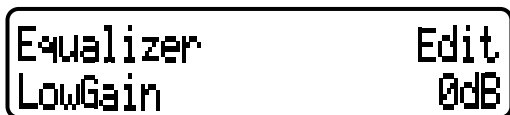
■ Setting the Master Equalizer type

You can set the Master Equalizer parameters to the preset values.

Press the B [-]/[+] buttons to select from Mellow 3-1 (mellow and round sound), Normal, Bright 1-3 (bright sound), and Edit. If you select “Edit,” the settings for the other parameters accessed via the [MASTER EQ EDIT] buttons become enabled. However, the position of the [MASTER EQUALIZER] sliders is used as a gain value. If you set the other parameters, this parameter is set to Edit.

- Adjusting the low range gain of the Master Equalizer [LowGain]
- Adjusting the low-middle range gain of the Master Equalizer [LowMidGain]
- Adjusting the middle range gain of the Master Equalizer [MidGain]
- Adjusting the high-middle range gain of the Master Equalizer [HighMidGain]
- Adjusting the high range gain of the Master Equalizer [HighGain]

You can specify the gain of each band of Master EQ.



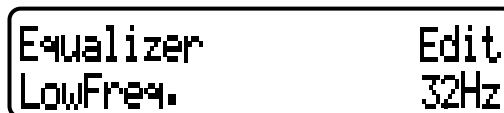
Press the D [-]/[+] buttons to specify each gain level (-9 to +9dB).

TIP

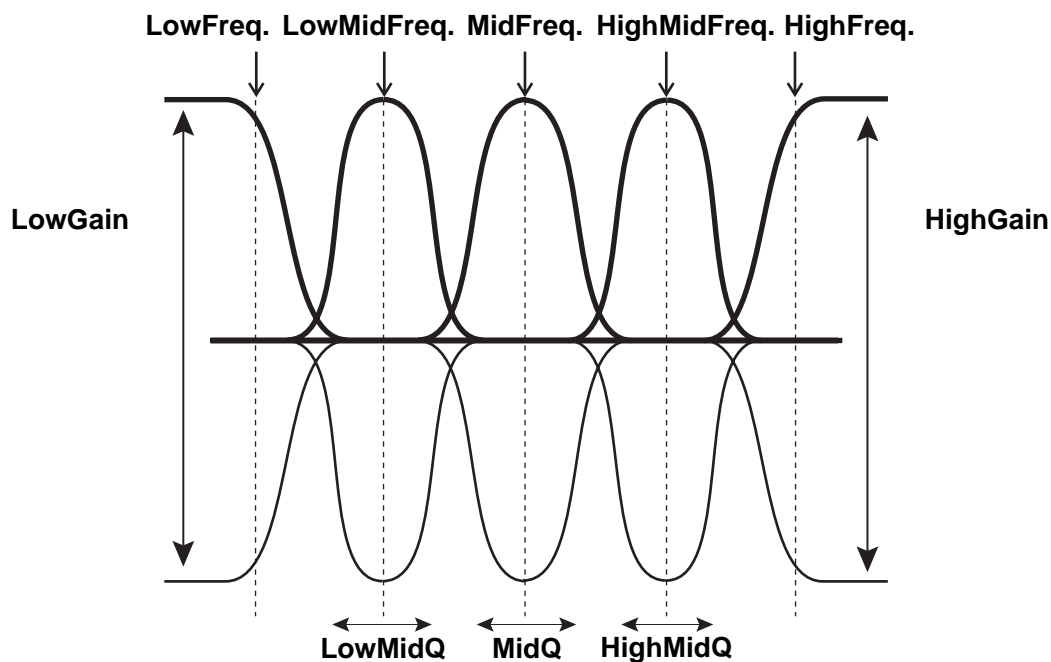
You can specify the gain in the range of -12dB through +12dB for MIDI input signal. The range of indication is also -12dB through +12dB.

- Adjusting the low frequency of the Master Equalizer [LowFreq.]
- Adjusting the low-middle frequency of the Master Equalizer [LowMidFreq.]
- Adjusting the middle frequency of the Master Equalizer [MidFreq.]
- Adjusting the high-middle frequency of the Master Equalizer [HighMidFreq.]
- Adjusting the high frequency of the Master Equalizer [HighFreq.]

You can specify the center frequency for each band of the Master Equalizer.



Press the D [-]/[+] buttons to specify the frequencies (Lo: 32Hz to 2.0kHz; Lo Mid to Hi Mid: 100Hz to 10.0kHz; Hi: 500Hz to 16.0kHz).



- Adjusting the low range resonance of the Master Equalizer [LowQ]
- Adjusting the low-middle range resonance of the Master Equalizer [LowMidQ]
- Adjusting the middle range resonance of the Master Equalizer [MidQ]
- Adjusting the high-middle range resonance of the Master Equalizer [HighMidQ]
- Adjusting the high range resonance of the Master Equalizer [HighQ]

Equalizer	Edit
LowQ	0.7

Press the D [-]/[+] buttons to set the Q for each band (0.1—12.0).

TIP

If you set the Q to a lower value and the gain to a higher value, the sound may distort. In this case, raise the Q or lower the gain.

TIP

If you set the "EqualizerLock" parameter (accessed via the [OTHER SETTING] button to "ON," the Master Equalizer settings will not be affected by performance recall or MIDI/song playback.

MIDI [MIDI SETTING]

You can set detailed MIDI-related parameters, such as setting up the MIDI transmit and receive channels.

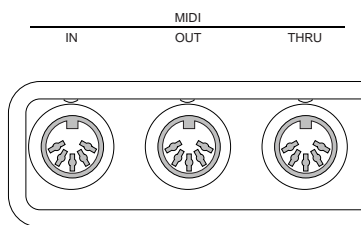
■ About MIDI

MIDI (Musical Instrument Digital Interface) is a standard format for data transmission and reception. It enables the transfer of performance data and commands between MIDI devices and personal computers.

Using MIDI, you can control a connected MIDI device from the P-250, or control the P-250 from a connected MIDI device or computer.

Refer to “Connecting External MIDI Equipment” on page 18 for more information on connecting MIDI devices.

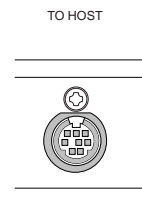
■ [MIDI] connector



- MIDI [IN]: Receives MIDI data.
- MIDI [OUT]: Transmits MIDI data.
- MIDI [THRU]: Transmits data received at the MIDI [IN] connector without modifying the data.

■ [TO HOST] connector

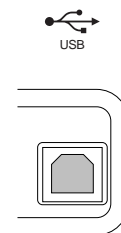
Use this connector to connect the P-250 to a computer.



The type of connecting cable varies depending on the computer. Refer to “Connecting to a Personal Computer” on page 19 for more information.

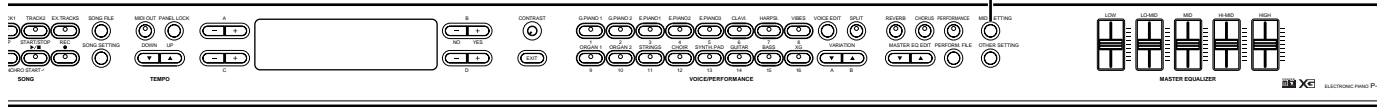
■ [USB] connector

Use this connector to connect the P-250 to a computer.



Press the [MIDI SETTING] button to enter MIDI Setting mode.

[MIDI SETTING]



- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

Edit Operation

■ Setting the MIDI transmit channel [MidiOutChannel]

This parameter enables you to specify the channel on which the P-250 transmits MIDI data.



Press the C [-]/[+] buttons to select the voice part (Main, Left, Layer, Left Layer), and press the D [-]/[+] buttons to specify a channel (Ch1—Ch16, Off: Not transmitted).

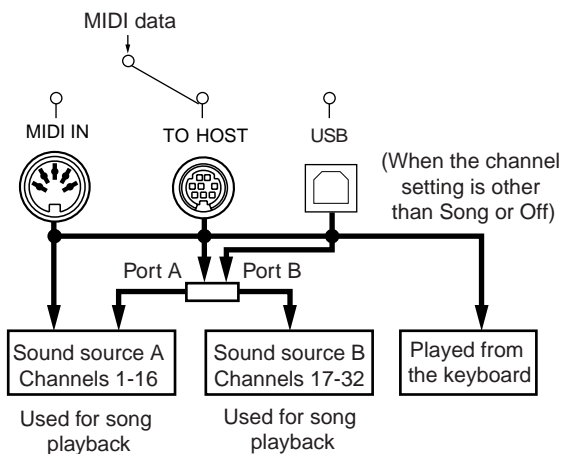
[MidiOutChannel] is a performance parameter (page 30).

■ Setting the MIDI receive channel [MidiInChannel]

You can specify which channel receives part.



Press the C [-]/[+] buttons to select a channel (Ch1—Ch32), and press the D [-]/[+] buttons to select the MIDI receive part (Song, Main, Left, Layer, Left Layer, Keyboard, or Off).



[MidiInChannel] is a performance parameter (page 30).

■ Turning the Local Control On/Off [LocalControl]

“Local Control On” is a state in which the P-250 produces sound from its tone generator when you play the keyboard. In the “Local Control Off” state, the keyboard and the tone generator are cut off from each other. This means that even if you play the keyboard, the P-250 will not produce sound. Instead, the keyboard data can be transmitted via MIDI to a connected MIDI device, which can in turn produce the sound. The “Local Control Off” setting is useful if you wish to play an external sound source while playing the keys on the P-250.



Press the D [-]/[+] buttons to turn Local Control on or off.

[LocalControl] is a performance parameter (page 30).

■ Specifying keyboard performance or song data to be transmitted via MIDI [MidiOutSelect]

You can specify whether the data from your performance on the keyboard or song playback data (including demo songs) is sent via MIDI.



Press the D [-]/[+] buttons to select one of the following:
Keyboard..... Data from your performance on the keyboard

Song..... Song playback data

[MidiOutSelect] is a performance parameter (page 30).

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Specifying the type of data received via MIDI [ReceiveParameter]

This parameter enables you to specify the MIDI data type the P-250 will receive.

```
ReceiveParameter
Note                               On
```

Press the C [-]/[+] buttons to select the data type (Note, Control, Program, AfterTouch, PitchBend, SysEx), and press the D [-]/[+] buttons to specify On or Off.

■ Specifying the type of data transmitted via MIDI [TransmitParameter]

This parameter enables you to specify the MIDI data type the P-250 will transmit.

```
TransmitParameter
Note                               On
```

Press the C [-]/[+] buttons to select the data type: (Note, Control, AfterTouch, Program, PitchBend, SystemReal-Time, SysEx), then press the D [-]/[+] buttons to specify On or Off.

■ Transmitting the initial settings on the panel [InitialSetup]

You can transmit the panel data, such as voice selection, to a connected sequencer. Before you record your playing on the keyboard to a connected sequencer, it is useful if you first send and record (at the beginning of your recording) the panel setup data for your performance during playback.

```
InitialSetup  Start?-->
```

Press the B [+ (YES)] button to start transmission.

■ Executing Voice Data Bulk Dump [VoiceBulkDump]

You can transmit the voice data specified in the “VOICE EDIT” menu (page 65) as MIDI bulk data.

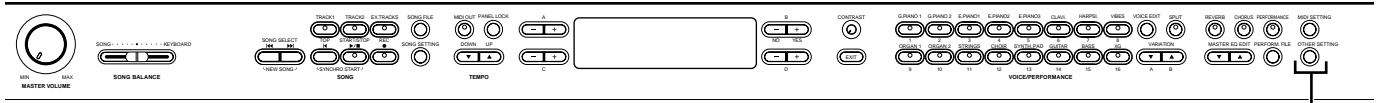
```
VoiceBulkDump  Start?-->
```

Press the B [+] button to start the transmission. You can interrupt voice data bulk dump transmission by pressing the B [- (NO)] button.

Other Settings [OTHER SETTING]

The P-250 enables you to set detailed parameters for touch, tuning, scale, etc.

Press the [OTHER SETTING] button to enter Other Setting mode.



[OTHER SETTING]

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Selecting a touch response [TouchResponse]

You can specify a touch response (how the sound responds to the way you play the keys).



Press the D[-]/[+] buttons to select one of the following:

- Light With this setting, a soft touch can produce a loud sound. Each note will sound at a more even level.
- Medium Standard touch
- Heavy You must play with a stronger touch to make the sound louder. This is suitable for expressive performance from pianissimo to fortissimo.
- Fixed..... The volume level is fixed. The force with which you play will not affect the loudness.

If you select “Fixed,” press the B [-]/[+] buttons to set the volume (1—127).

[TouchResponse] is a performance parameter.

TIP

Difference between “TouchResponse” and “TouchSense” in the “VOICE EDIT” menu (page 66):
 “TouchSense” specifies for each part how loud the sound is produced. The Note On velocity data transmitted via MIDI is always fixed, but the volume level changes.
 “TouchResponse” specifies how sensitive the instrument is in response to your key strokes. When you play the keyboard with a consistent force, the Note On velocity data transmitted via MIDI change.

■ Fine-tuning the pitch [Tune]

You can fine tune the pitch of the entire instrument. This function is useful when you play the P-250 along with other instruments or CD music.



Press the D [-]/[+] buttons to set the A3 pitch (427.0Hz to 453.0, in 0.1Hz steps).

■ Selecting a tuning curve for a piano voice [PianoTuningCurve]

You can select a tuning curve for [GRANDPIANO1] and [GRANDPIANO2]. Select [Flat] if you feel the tuning curve of the piano voice does not quite match that of the other instruments.



- Use D [-]/[+] to select one of the following:
 Stretch..... Tuning curve typical for piano
 Flat..... With this tuning curve, the frequency is doubled per octave over the entire range.

[PianoTuningCurve] is a performance parameter (page 30).

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Selecting a scale [Scale]

The P-250 enables you to select various scales. Equal Temperament is the most common contemporary piano tuning scale. However, history has known numerous other scales, many of which serve as the basis for certain genres of music. You can experience the tunings of these genres.

Scale BaseNote=C
PureMajor

Press the D [-]/[+] buttons to select from the scales below.

Equal

One octave is divided into twelve equal intervals. This is currently the most popular piano tuning scale.

PureMajor/PureMinor

Based on natural overtones, three major chords using these scales produce a beautiful, pure sound. They are sometimes used for chorus parts.

Pythagorean

This scale, designed by Pythagoras, a Greek philosopher, is composed of only five pitches. The 3rd produces swells, but the 4th and 5th are beautiful and suitable for some leads.

MeanTone

This scale is an improvement on the Pythagorean scale in that the swell of the 3rd has been eliminated. It became popular during the late 16th century through the late 18th century. Handel used this scale.

Werckmeister/KirnBerger

These scales combine Mean Tone and Pythagorean in different ways. With these scales, modulation changes the impression and feel of the songs. These scales were often used in the era of Bach and Beethoven. They are also often used now to reproduce the music of that era on harpsichords.

If you select a scale other than Equal, you need to specify the root note. Press the B [-](NO)/[+](YES) buttons to select from C, C#, D, E♭, E, F, F#, G, A♭, A, B♭, or B.

[Scale] is a performance parameter (page 30).

■ Setting the split point [SplitPoint]

Set the split point on the keyboard that separates the right and left-hand sections.

SplitPoint F#2

Press the D [-]/[+] buttons to set the value (A-1 — C7).

[SplitPoint] is a performance parameter (page 30).

■ Setting the key [Transpose]

The P-250's Transpose function makes it possible to shift the pitch of the entire keyboard up or down in semitone intervals to facilitate playing in difficult key signatures, and to let you easily match the pitch of the keyboard to the range of a singer or other instruments.

For example, if you set the transposition amount to “5,” playing key C produces pitch F. In this way, you can play the song as if it were in C major, and the P-250 will transpose it to the key of F.

Transpose Master 0

Press the C [-]/[+] buttons to select one of the following to transpose:

MasterAny sound of the instrument (actual playing, playback song)

Keyboard.....Actual playing

SongPlayback song

Press the D [-]/[+] buttons to set the transposition amount from -12 (-1 octave) to 0 (standard pitch) to +12 (+1 octave).

[Transpose] is a performance parameter (page 30).

■ Specifying the depth of the soft pedal [SoftPedalDepth]

SoftPedalDepth 5

Press the D [-]/[+] buttons to set the value (1—10).

[SoftPedalDepth] is a performance parameter (page 30).

■ Specifying the depth of string resonance [StringResonanceDepth]

This parameter is effective on the voice group GRANDPIANO1.

StringResonanceDepth 5

Press the D [-]/[+] buttons to set the value (Off, 1—10).

[StringResonanceDepth] is a performance parameter (page 30).

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Specifying the depth of sustain sampling for the damper pedal [SustainSamplingDepth]

This parameter is effective only on the voice group GRANDPIANO1.

SustainSamplingDepth
5

Press the D [-]/[+] buttons to set the value (Off, 1—10).

[SustainSamplingDepth] is a performance parameter (page 30).

■ Specifying the volume of the key-off sound [KeyOffSamplingDepth]

You can adjust the volume of the key-off sound (the subtle sound that occurs when you release a key).

This is effective on the voice groups GRANDPIANO1, E.PIANO1, CLAVI., and HARPSICHORD.

KeyOffSamplingDepth
5

Press the D [-]/[+] buttons to set the value (Off, 1—10).

[KeyOffSamplingDepth] is a performance parameter (page 30).

■ Selecting a pedal function for vibraphone [VibraphonePedalMode]

This parameter enables you to select whether the sound is sustained (a) while you press the keys on the keyboard (“PianoLike”) or (b) while you press and hold down the sustain pedal, like playing a real vibraphone (“Normal”).

VibraphonePedalMode
PianoLike

Press the D [-]/[+] buttons to specify PianoLike or Normal.

[VibraphonePedalMode] is a performance parameter (page 30).

■ Assigning the START/STOP function to a pedal [PedalStart/Stop]

If you assign the START/STOP function to a pedal and activate the function, the pedal function assigned to the pedal in the VOICE EDIT menu (page 69) is disabled.

PedalStart/Stop
Pedal 2 Off

Press the C [-]/[+] buttons to select a pedal (Pedal 2, Pedal 3, Pedal 4) to assign the function, and press the D [-]/[+] buttons to specify On or Off.

[PedalStart/Stop] is a performance parameter (page 30).

■ Selecting a type of pedal [Pedal Type]

A pedal connected to the PEDAL [1 (SUSTAIN)], [2 (SOSTENUTO)], [3 (SOFT)], [4 (AUX)] connector may switch on and off differently. For example, some pedals turn on the effects when pressed, and others turn them off. Use this parameter to reverse this mechanism.

PedalType
Pedal 1 Make

Press the C [-]/[+] buttons to select a pedal from Pedal 1, Pedal 2, Pedal 3, or Pedal 4, then press the D [-]/[+] buttons to specify Make or Break.

■ Setting the point at which the pedal starts to affect the sound [HalfPedalPoint]

This parameter enables you to specify the point to which you must depress the pedal before the assigned effect is applied. (This setting applies to effects that can be assigned to each pedal, such as damper or sostenuto (page 69). Expression is not affected by this setting.) If the effect is an on/off type, this setting specifies the point at which the effect will be switched on or off.

HalfPedalPoint
0

Press the D [-]/[+] buttons to specify from -2 (effective with the shallowest press) to 0 to +2 (effective with the deepest press).

[HalfPedalPoint] is a performance parameter (page 30).

- Refer to page 61 for general information on setting the parameters.
- Refer to pages 3—5 of the separate “Data List” for information on the default parameter settings.

■ Setting the pitch bend range [PitchBendRange]

This parameter specifies the amount of change that can be produced by the pitch bend function (Pitch, page 38), which smoothly varies the pitch. This parameter is effective only on the notes played on the keyboard.

PitchBendRange 2

Press the D [-]/[+] buttons to specify a range from 0 to -12 (pitch is lowered by 12 semitones [one octave]).

[PitchBendRange] is a performance parameter (page 30).

■ Assigning a function to the [SONG BALANCE] slider [SongBalanceAssign]

SongBalanceAssign Off

Press the D [-]/[+] buttons to select one of the following:
Off..... The slider does not work.

SongBalance.. Changes the level balance between song playback sound and notes played on the keyboard.

DualBalance.. Changes the level balance between the Main (Left) part and Layer (LeftLayer) part.

SplitBalance... Changes the level balance between the Main (Layer) part and Left (LeftLayer) part.

[SongBalanceAssign] is a performance parameter (page 30).

■ Switching the speaker on/off [Speaker]

This switch turns the internal speakers on or off

Speaker Normal (HeadphoneSW)

Press the D [-]/[+] buttons to select one of the following:
Normal

(HeadphoneSW) ... The speakers output sound only when the headphones are not connected.

On..... The speakers always output sound.

Off..... The speakers do not output sound.

■ Locking the Master Equalizer settings [EqualizerLock]

This function prevents the Master Equalizer settings from being changed when a performance is recalled or during MIDI or song playback.

TIP

You can still adjust the [MASTER EQUALIZER] sliders and [MASTER EQ EDIT] parameters on the panel when [EqualizerLock] is set to “On.”

EqualizerLock On

Press the D [-]/[+] buttons to turn this parameter on or off.

■ Selecting items saved at shutdown [MemoryBackUp]

You can back up some settings, such as the voice selection and MIDI setting, so that they will not be lost after you turn off the power to the P-250.

- Memory songs (saved in the P-250's memory), the MemoryBackUp parameter (this parameter), and the CharacterCode parameter (page 55) are always backed up.

MemoryBackUp Transpose Off

Press the C [-]/[+] buttons to select the desired item (Transpose, Equalizer, ReverbOnOff, SplitPoint, Main/LeftVoice, SongSetting, MidiSetting, Other Setting), and press the D [-]/[+] buttons to select On or Off.

“Transpose” and “SplitPoint” in the “OTHER SETTING” menu are excluded.

■ Restoring the normal (default) settings [FactorySet]

You can reset the P-250 to its normal (factory default) settings (page 3 of the separate “Data List”).

- The “CharacterCode” parameter setting in the [Song File] menu does not change.
- The “MemoryBackUp” parameter setting (On/Off) (see above) is reset to its default setting.
- You can specify whether the files in storage memory are erased or retained.

FactorySet Execute?-->
MemoryFileExcluded

Press the D [-]/[+] buttons to specify MemoryFileExcluded or MemoryFileIncluded, then press the B [+] button to execute.

Alternative method for restoring the normal settings

Press and hold down the white key on the right end (C7) of the keyboard, then press the [POWER] switch to turn on the power to the P-250. The files saved in storage memory are not erased.

If you wish to erase the files in memory at this time, press and hold down the right-most white key (C7) and black key (B|6), then press the [POWER] switch.

Appendix

Appendix includes a list of voice and performance presets, reference materials, a Troubleshooting section and an Index.

Message List82
Troubleshooting86
Midi Data Compatibility88
Preset Voice List90
Preset Performance List92
Application Index94
Index96

Message List

The messages are listed in alphabetical order.

Message	Meaning
<code>BulkDataReceiving Completed</code>	This will be displayed following the “BulkDataReceiving Voice” message. This indicates that the P-250 finished receiving the bulk data. Once you have verified this message, you may proceed to the next step.
<code>BulkDataReceiving Error</code>	Receiving bulk data has failed. Check the parameter settings and try again.
<code>BulkDataReceiving Voice</code>	The P-250 is receiving the voice setting bulk data while this message is displayed. Wait until the message disappears, then proceed to the next step.
<code> Canceled</code>	This message confirms that in the “VoiceBulkDump” operation (page 75), you pressed the B [-(NO)] button to cancel the operation while data was being transmitted.
<code> Completed</code>	This message is displayed following the message “Executing.” The P-250’s internal processing is complete. You may proceed to the next step.
<code> DataFmtErr</code>	This message is displayed if the file format is incorrect when you load a performance file using the “LoadFromMem.” function.
<code> DuplicateName</code>	“Duplicate song name or performance file name”: This message is displayed when you attempt to rename and save a song using the “RenameSong” function (page 55) or a performance file using the “RenameFile” function (page 43) if an identically-named song or performance file already exists in memory. Three seconds after this message is displayed, the P-250 displays the previous screen. Please specify a different name.
<code> Execute?--></code>	This message prompts you to execute a file-related operation. Press the B [+ (YES)] button to proceed, or press the [EXIT] button to cancel.
<code> Executing</code>	The P-250 is processing the data internally. Wait until the message disappears, then proceed to the next step.
<code>FactorySet Completed MemoryFileExcluded</code>	The normal (factory default) settings (except for the memory file setting) (“FactorySet” on page 79) have been restored. This message also appears if you press and hold down the C7 key and turn on the power to the P-250 (page 79).
<code>FactorySet Completed MemoryFileIncluded</code>	The normal (factory default) settings (including the memory file setting) (“FactorySet” on page 79) have been restored. This message also appears if you press and hold down the C7 and B*6 keys and turn on the power to the P-250 (page 79).

Message	Meaning
FlashMemoryLifeTime Exit-->	The P-250's flash memory (storage memory) has expired. Consult your Yamaha dealer. If this message appears, the P-250 will not back up the songs and settings in memory. Press the [EXIT] button to return to the previous screen.
HostError	<p>There is a problem with the TO HOST/USB connector.</p> <p>When using the P-250 connected to your personal computer ... The driver or MIDI application on your computer is not functioning correctly, perhaps because the computer is turned off, the cable is not connected correctly, or the HOST SELECT switch is not set correctly. In this case, turn off the power to the P-250 and your computer, and check the cable connections and HOST SELECT switch setting. Then turn on the power first to your computer, then to the P-250, then check that the driver and MIDI application on your computer are functioning correctly.</p> <p>When using the P-250 by itself ... This message may appear if a cable is left connected to the [TO HOST] or [USB] connector on the P-250. In this case, turn off the power of the P-250, disconnect the cable, and then turn on the power again. If the cable is left connected, the P-250 may not function correctly.</p>
LastPowerOffIllegal MemoryFileChecking	You turned off the power to the P-250 while it was writing a file to storage memory. This message appears next time you turn on the power. The P-250 checks whether the contents of storage memory can be recovered.
LastPowerOffIllegal MemoryFileErrorRecovered	This message appears following the message "LastPowerOffIllegalMemoryFileChecking," indicating that the P-250 recovered data in the storage memory as much as possible.
LastPowerOffIllegal MemoryFileErased	This message appears following the message "LastPowerOffIllegalMemoryFileChecking," indicating that the P-250 could not recover data in the storage memory and that all memory files were deleted.
MemoryError	While a song was being read, the P-250 detected defects in memory. Reset the P-250 to its normal (factory default) settings with "MemoryFileIncluded" (page 79) after you back up all song data.
MemoryError	This message indicates that there may be a problem with the memory. If the message appears repeatedly when you continue using the P-250, back up the song data and performance file, then restore the default setting by using "FactorySet" with "MemoryFileIncluded" selected (page 79).
MemoryFull	There is not enough memory space left and you cannot save any more songs and files. Save or delete some songs and performance files in the storage memory, then save new data to memory.

Message	Meaning
NoSong	This message will appear if there is no song for the "SaveToMemory" (page 54) operation to save. In this case, no song will be saved.
NoFileToDelete	You tried to delete a file that does not exist in the storage memory. You cannot delete the file.
NoSongToDelete	You tried to delete a song that does not exist in the storage memory. You cannot delete the song.
OverWrite?	"Overwrite?" When you record additional material on a song that already contains data, or if you have edited a performance file that already contains data, this message asks you to confirm that you really want to save the new data by overwriting the previous song. Press the B [+ (YES)] button to allow overwriting. Press the B [- (NO)] button to cancel the operation.
PleaseWait	You tried to start playing a song or perform another operation right after you selected the song. Wait until the message disappears.
ProtectedFile	You tried to edit data in internally-protected files. You cannot edit such files.
ProtectedSong	After you load an internally-protected song, such as commercially-available music data, into the P-250's current memory or storage memory, you tried to save the song to a personal computer. You cannot save such a song to a personal computer, etc.
Set?-->	This message prompts you to select whether to save the edited settings. Press the B [+ (YES)] button to save the settings. Press the [EXIT] button to cancel.
SongChanged Save?	You tried to perform another operation before saving the recorded song to storage memory. If you continue the operation, the recorded song will be lost. To delete the new recording, press the B [- (NO)] button. To keep the recording, press the B [+ (YES)] button. The P-250 displays the "SaveToMemory" (page 54) parameter screen. Save the recorded song, then proceed another operation.
SongError	<ol style="list-style-type: none"> 1. This message will appear if a problem is found with the song data when you select a song or while the song is playing. In this case, re-select the song, and try once again to play it back. If the message still appears, the song data may have been damaged. 2. This message will appear if a different "CharacterCode" (page 55) is selected than when you assigned the song name. In this case, switch the "CharacterCode," re-select the song, and start the playback.
SongError	

Message	Meaning
SongTooBig	<ol style="list-style-type: none"> 1. This message will be displayed if current memory fills up during recording. Recording will stop automatically at this point. The data that had been recorded up to that point will remain. This message will also be displayed if you attempt to enter Record mode for additional recording if that song already occupies all of current memory. In this case, additional recording will not be possible. If there is an already-recorded track that you do not need to keep, you can use "Channel-Clear" (page 63) to delete the unneeded track so that you will then be able to record the equivalent amount of additional material. 2. This message will be displayed when you select a song if that song is larger than the capacity of the current memory. This song cannot be loaded into the P-250, and cannot be played back. Please select a different song.
SongTooBig	This message will be displayed when you edit a song if that song is larger than the capacity of the current memory. This song cannot be edited on the P-250.
Start?-->	This message prompts you to start the operation. To start, press the B [+ (YES)] button. Press the [EXIT] button to cancel the operation.
Sure?-->	This message prompts you to confirm the execution. Press the B [+ (YES)] button to continue. Press the B [- (NO)] button to cancel.
VoiceBulkDump Error	This message means that the P-250 was unable to transmit voice bulk data. If this message appears, make sure that the power to your computer is not turned off, that the cable is connected correctly, that the HOST SELECT switch is set correctly, and that the driver on your computer is functioning correctly. Then try transmitting the data once again.
WrongName	You used a period or space at the beginning of a song name or file name, or you tried to edit a song name or file name that includes unsupported characters. The P-250 could not process the name. The P-250 will display the previous screen in three seconds. Rename the song correctly.

Troubleshooting

Problem	Possible causes	Solution
The P-250 does not turn on.	The P-250 has not been plugged in properly.	Securely insert the female plug into the socket on the P-250, and the male plug into a proper AC outlet. (page 16)
A click or pop is heard when the power is turned on or off.	Electrical current is being applied to the instrument.	This is normal.
Noise is heard from the P-250 speakers.	A mobile phone is being used near the P-250 (or the ring tone is sounding).	Turn off the mobile phone, or use it further away from the P-250. Using a mobile phone in close proximity to the P-250 may produce interference.
The overall volume is too low, or there is no sound at all.	The [MASTER VOLUME] is set too low (page 16).	Raise the [MASTER VOLUME] level.
	Headphones are connected (applicable only if the Speaker setting is [Normal HeadphoneSW]). (page 79)	Disconnect the headphone plug.
	Speaker setting is off.	Set "Speaker" to "Normal" or "ON". (page 79)
	The "Local Control" function is set to off. (page 74)	Turn the "Local Control" function on.
	The "InternalTG" is set to off (page 70).	Set the "InternalTG" to on.
	"Expression" is assigned to one of the connected pedals or the modulation wheel.	Assign any function other than "Expression" to the pedal.
	The Master EQ gain level is low (page 38).	Raise the Master EQ gain level.
	The Part EQ gain level is low (page 68).	Raise the Part EQ gain level.
The keyboard volume is lower than the song playback volume.	The volume level for the keyboard performance is set too low.	Move the [SONG BALANCE] slider toward "KEYBOARD" to increase the keyboard volume.
The speakers do not turn off when a pair of headphones is connected.	The speaker setting is on.	Set "Speaker" to "Normal". (page 79)
The buttons do not respond.	While you are using a function, some buttons not used for the function are disabled.	If a song is recording or playing, stop recording or playback. Otherwise, press the [EXIT] button to return to the main screen. Then, perform the desired operation.
The sound sustains and does not decay when I press the pedal to which [Sostenuto] is assigned.	With the voices in the ORGAN1, ORGAN2, STRINGS, CHOIR, or SYNTH.PAD group, or part of the XG group, the sound continues sustaining while you hold down the sostenuto pedal.	This is normal.
Higher or lower notes do not sound correctly when the transpose or octave setting is made.	The setting range for the transposition and octave setting is C-2 - G8. (With the normal setting, the unit's 88 keys cover the range of A-1 - C7.) If the lowest key is set to a note lower than C-2, it will produce a sound one octave higher. If the highest key is set to a note higher than G8, it will produce a sound one octave lower.	This is normal.
The tempo does not change even though I recorded with tempo changes.	Depending on the timing of the tempo changes, the changed tempo may not be recorded. In this case, the recording will be played back at the original tempo. Make tempo changes when the recording track is selected and the red track indicator is flashing. The same trick applies to editing the tempo after recording.	This is normal. Check the location at which the tempo was changed.

Problem	Possible causes	Solution
<p>Performance in Dual or Split mode is not recorded. Track data is lost unexpectedly.</p>	<p>For Dual or Split mode recording, the recording track for the second voice or the voice for the left-hand part is automatically assigned (page 50). Therefore, if the track already contains data, the data will be overwritten during recording. Also, switching to Dual mode or Split mode in the middle of a song is not recorded. Therefore, the notes you play with the second voice (or the notes lower than the Split point) will not be recorded.</p>	<p>This is normal.</p>
<p>I cannot change the time signature in the song after recording.</p>	<p>Due to limitations, the time signature of some recorded songs may not be changed after the recording is complete.</p>	<p>Press the [TOP] button to locate the top of the song, use the B [-]/[+] buttons to locate the measure in which you wish to change the time signature, then change it.</p>
<p>The song title is not correct.</p>	<p>The “CharacterCode” setting may be different than that used when you named the song. Also, if the song was recorded on another instrument, the title might be displayed incorrectly.</p>	<p>Use the “CharacterCode” parameter (page 55) in the “SONG FILE” menu to change the setting. However, if the song was recorded on another instrument, changing the “CharacterCode” parameter setting may not resolve the problem.</p>
<p>When I turn on the power to the P-250 in the normal way (without trying to reset it to the default settings), the performance file (that was selected before shutdown) is not loaded.</p>	<p>The “CharacterCode” setting (page 53) has been changed since you named the performance file.</p>	<p>Set the “CharacterCode” parameter to the previous setting you made when you named the performance file.</p>
	<p>Before shutdown, the performance file was erased.</p>	<p>Save the desired performance file to memory and load it again.</p>
	<p>Storage memory may be defective.</p>	<p>If the symptom does not go away, back up the files in memory, then set the “FactorySet” parameter to “MemoryFileIncluded” and reset the unit to the default settings.</p>

Midi Data Compatibility

This section covers basic information on data compatibility, including whether or not other MIDI devices can play back the data recorded by P-250, and whether or not the P-250 can play back 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.

Basic Check Points

The data and the MIDI device must match in regards to the items below.

- Sequence format
- Voice allocation format

Sequence Format

A system that records song data generally utilizes a specific “sequence format.”

- Playback is possible only when the sequence format of the disk matches that of the MIDI device.

[Common Sequence Formats]

■ 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 P-250 is compatible with both Format 0 and Format 1.
- Performance data recorded on the P-250 is saved in SMF Format 0 in memory.

■ ESEQ

This sequence format is compatible with many of Yamaha’s MIDI devices, including P-250 series instruments.

- The P-250 is compatible with ESEQ.

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.

[Main Voice Allocation Formats]

■ GM System Level 1 (logo)

This logo (GM logo) is affixed to tone generators and music data that supports “GM system level 1.”

“GM system level 1” is a standard specification for the sound map and MIDI functionality of a tone generator, and is designed to ensure that music data will produce essentially identical playback on tone generators from different manufacturers or models.

- Many MIDI devices are compatible with GM System Level 1, as is most commercially available software.
- The P-250 is compatible with GM System Level 1.

■ XG (logo)

This logo (XG logo) appears on tone generators and music data that supports “XG.”

XG is Yamaha’s tone generator format that extends “GM system level 1” to allow richer expressive power and future data compatibility.

- The P-250 is compatible with XG.
- Performance data recorded with preset voices on the P-250 can be played on other XG-compatible instruments.

Preset Voice List

○: YES, ×: No

Voice group (Panel display) <sound group number>	Voice name	Stereo sampling	Touch Sense	Dynamic sampling	Key-off sampling	String resonance	Voice description
GRANDPIANO1 (G.PIANO1) <1>	GrandPiano1	○	○	○	○	○	This sound was sampled from a full concert grand piano. Three stages of dynamics were sampled, and no effort has been spared in making the sound virtually identical to that of an acoustic piano. Even the tonal changes produced by the damper pedal and the subtle sounds of releasing a key are reproduced. The sympathetic vibration (string resonance) that occurs between the strings of an acoustic piano has also been simulated. This sound is suitable for any style of music.
	MellowPiano1	○	○	○	○	○	A warm and mellow piano sound. Ideal for accompaniment of ballads or other songs.
	RockPiano	○	○	○	○	○	A bright-sounding piano. Ideal for rock styles.
	HonkyTonk Piano	○	○	○	○	×	A honky-tonk style piano. Enjoy a tonal character that is quite different than a grand piano.
GRAND PIANO2 (G.PIANO2) <2>	GrandPiano2	○	○	×	×	×	A spacious and clear piano sound with a bright resonance. Ideal for popular music.
	Mellow Piano2	○	○	×	×	×	A mellow piano sound with a different character than Mellow Piano 1.
E.PIANO1 (E.PIANO1) <3>	Chorus E.Piano	×	○	○	○	×	The sound of an electric piano that generates sound by striking metal poles with a hammer. Softly played notes will have a mellow character, and strongly played notes will sound more forceful. A chorus effect is applied to create spaciousness.
	Phaser E.Piano	×	○	○	○	×	A distinctive phaser effect makes this ideal for fusion styles.
	AutoPan E.Piano	×	○	○	○	×	An electric piano with a characteristic panning effect.
	Standard E.Piano	×	○	○	○	×	A straightforward electric piano sound with reverb as the only effect.
E.PIANO2 (E.PIANO2) <4>	DX E.Piano 1	○	○	○	×	×	The sound of an electronic piano as simulated by an FM synthesizer such as the DX7. Differences in playing dynamics will affect the tone. Ideal for popular songs.
	DX E.Piano 2	×	○	×	×	×	An FM synthesizer electronic piano sound using a different algorithm than DX E.Piano 1, with a bright-sounding character.
	Synth Piano	×	○	×	×	×	A synthesized electronic piano sound often heard in popular music. This also sounds good when played together with a piano.
E.PIANO3 (E.PIANO3) <5>	Tremolo Vintage E.P.	×	○	○	×	×	The sound of an electric piano of a different type than E.Piano 1, often used in rock and popular music.
	Vintage E.Piano	×	○	○	×	×	An electric piano sound with a vintage character, and reverb as the only effect.
	Amp.Sim. Vintage E.P.	×	○	○	×	×	The sound of an electric piano distorted by an amp simulator effect. Ideal for rock music.
CLAVI. (CLAVI.) <6>	Phaser Clavi.	×	○	×	○	×	This is the voice of a keyboard that produces sound by striking the strings with magnetic pickups. This funky sound is popular in black contemporary music. Because of its unique structure, the instrument produces a peculiar sound when you release the keys. The popular phaser effect is applied.
	Clavi.	×	○	×	○	×	A struck-string keyboard instrument with electromagnetic pickups. A straightforward sound with only reverb applied.
	Wah Clavi.	×	○	×	○	×	A distinctive effect is preset.

Voice group (Panel display) <sound group number>	Voice name	Stereo sampling	Touch Sense	Dynamic sampling	Key-off sampling	String resonance	Voice description
HARPSICHORD (HARPSI.) <7>	Harpsichord8'	○	×	×	○	×	The sound of an instrument frequently used in baroque music. Variations in playing touch will not affect the volume, and a characteristic sound will be heard when you release the key.
	Harpsichord 8'+4'	○	×	×	○	×	A harpsichord with an added upper octave. Produces a more brilliant sound.
VIBRAPHONE (VIBES) <8>	Vibraphone	○	○	○	×	×	Vibraphone played with relatively soft mallets. The tone becomes more metallic the harder you play. Distinctive vibraphone effects and stereo sampling provide a spacious sound.
	Marimba	○	○	×	×	×	A marimba sound, sampled in stereo for spaciousness and realism.
	Celesta	○	○	○	×	×	The celesta sound often used memorably in an orchestra.
ORGAN1 (ORGAN1) <9>	JazzOrgan	×	×	×	×	×	The sound of a "tonewheel" type electric organ. Often heard in jazz and rock idioms.
	Theater Organ	×	×	×	×	×	A bright electric organ sound.
	Rock Organ	×	×	×	×	×	An aggressive electric organ sound, ideal for rock.
	Draw Organ	×	×	×	×	×	A standard electric organ sound.
ORGAN2 (ORGAN2) <10>	PipeOrgan Principal	○	×	×	×	×	This voice features the combination of pipes (8'+4'+2') of a principal (brass instrument) organ. It is suitable for Baroque church music.
	PipeOrgan Tutti	○	×	×	×	×	This voice features a full coupler of a pipe organ, famous for the sound used in Toccatta and Fugue by Bach.
	PipeOrgan Flute	○	×	×	×	×	A pipe organ sound that combines flute-type (woodwind type) stops of different pitches (8' + 4'). This is a gentle sound that is ideal for accompanying hymns.
STRINGS (STRINGS) <11>	Strings	○	○	×	×	×	Stereo-sampled, large-scale string ensemble with realistic reverb. Try combining this voice with piano in Dual mode.
	SynthStrings	○	○	×	×	×	A bright and spacious strings sound. Suitable for sustained parts backing an ensemble.
	SlowStrings	○	○	×	×	×	The sound of a string ensemble, with a slow attack. Suitable for playing together with grand piano sounds or electric piano sounds.
CHOIR (CHOIR) <12>	Choir	×	○	×	×	×	A big, spacious choir voice. Perfect for creating rich harmonies in slow pieces.
	SlowChoir	×	○	×	×	×	The sound of a choir with a slow attack. Suitable for playing together with grand piano sounds or electric piano sounds.
	Scat	×	○	○	×	×	You can enjoy jazz "scatting" with this voice. Depending on how hard and what note range you play, different sounds will be produced.
SYNTH.PAD (SYNTH.PAD) <13>	SynthPad1	×	○	×	×	×	A warm, mellow, and spacious synth sound. Ideal for sustained parts in the background of an ensemble.
	SynthPad2	×	○	×	×	×	A clear and spacious synth sound. Ideal for sustained parts in the background of an ensemble.
GUITAR (GUITAR) <14>	NylonGuitar	×	○	×	×	×	A warm and natural nylon-string guitar sound. Enjoy the atmosphere it adds to a quiet song.
	SteelGuitar	×	○	×	×	×	A bright steel guitar sound. Ideal for popular music.
BASS (BASS) <15>	WoodBass	×	○	×	×	×	The sound of a finger-plucked upright bass. Frequently used in jazz and Latin music.
	Bass& Cymbal	×	○	×	×	×	The sound of a cymbal has been layered onto the bass. Effective when used for jazz walking-bass lines.
	ElectricBass	×	○	×	×	×	The sound of an electric bass. Frequently used in jazz, rock, and popular music.
	FretlessBass	×	○	×	×	×	The sound of a fretless bass. Suitable for styles such as jazz and fusion.

Voice group (Panel display) <sound group number>	Voice name	MSB (0-127)	LSB (0-127)	prg# (1-128)
GRANDPIANO1 (G.PIANO1) <1>	Grand Piano 1	0	122	1
	Mellow Piano 1	0	123	1
	Rock Piano	0	122	3
	HonkyTonk Piano	0	122	4
GRAND PIANO2 (G.PIANO2) <2>	Grand Piano 2	0	112	1
	Mellow Piano 2	0	114	1
E.PIANO1 (E.PIANO1) <3>	Chorus E.Piano	0	122	5
	Phaser E.Piano	0	124	5
	AutoPan E.Piano	0	125	5
	Standard E.Piano	0	126	5
E.PIANO2 (E.PIANO2) <4>	DX E.Piano 1	0	122	6
	DX E.Piano 2	0	123	6
	Synth Piano	0	122	89
E.PIANO3 (E.PIANO3) <5>	Tremolo Vintage E.P.	0	123	5
	Vintage E.Piano	0	121	5
	Amp.Sim.Vintage E.P.	0	120	5
CLAVI. (CLAVI.) <6>	Phaser Clavi.	0	124	8
	Clavi.	0	122	8
	Wah Clavi.	0	123	8
HARPSICHORD (HARPSI.) <7>	Harpsichord 8'	0	122	7
	Harpsichord 8'+4'	0	123	7
VIBRAPHONE (VIBES) <8>	Vibraphone	0	122	12
	Marimba	0	122	13
	Celesta	0	122	9

Voice group (Panel display) <sound group number>	Voice name	MSB (0-127)	LSB (0-127)	prg# (1-128)
ORGAN1 (ORGAN1) <9>	Jazz Organ	0	122	17
	Theater Organ	0	124	17
	Rock Organ	0	122	19
	Draw Organ	0	125	17
ORGAN2 (ORGAN2) <10>	Pipe Organ Principal	0	123	20
	Pipe Organ Tutti	0	122	20
	Pipe Organ Flute	0	124	20
STRINGS (STRINGS) <11>	Strings	0	122	49
	Synth Strings	0	122	51
	Slow Strings	0	122	50
CHOIR (CHOIR) <12>	Choir	0	122	53
	Slow Choir	0	123	53
	Scat	0	122	54
SYNTH.PAD (SYNTH.PAD) <13>	Synth Pad 1	0	122	90
	Synth Pad 2	0	122	92
GUITAR (GUITAR) <14>	Nylon Guitar	0	122	25
	Steel Guitar	0	122	26
BASS (BASS) <15>	Wood Bass	0	122	33
	Bass&Cymbal	0	124	33
	Electric Bass	0	122	34
	Fretless Bass	0	122	36

Preset Performance List

#	Performance name	Type	Sounds used				Performance notes
			Main	Layer	Left	LeftLayer	
A01	Piano+ Pad	Dual	GrandPiano1	WarmPad			Grand piano layered with a warm-sounding pad. Usable in a variety of situations from rapid passages to ballads.
A02	Piano+ E.Piano	Dual	GrandPiano1	ChorusE.P.			Widely-used layered sound with piano and electric piano. Ideal for 80's pop.
A03	Piano+ DX E.P.1	Dual	GrandPiano1	DX E.Piano1			Widely-used layered sound with piano and DX electric piano. Enjoy harmonies with the sparkling electric piano.
A04	Piano+ DX E.P.2	Dual	GrandPiano2	DX E.Piano2			Another type of layered piano and DX electric piano.
A05	Piano+ SoftStr	Dual	GrandPiano2	S.SlwStr			Piano layered with soft strings.
A06	HonkyTonk Piano	Dual	GrandPiano1	GrandPiano1			Honky-tonk piano that simulates slight detuning.
A07	E.Piano+ Pad	Dual	AutoPanE.P	SynthPad1			Auto-panned electric piano layered with a soft pad. Beautifully spacious stereo spread.
A08	E.Piano+ DX E.P.	Dual	StandardE.P	DX E.Piano1			Layered electric piano and DX electric piano.

#	Performance name	Type	Sounds used				Performance notes
			Main	Layer	Left	LeftLayer	
A09	E.Piano+ SlowStr	Dual	ChorusE.P.	SlowStrings			Chorused electric piano layered with slow-attack strings.
A10	E.Piano+ Vintage E.P.	Dual	StandardE.P	VintageE.P.			Standard electric piano layered with vintage-type electric piano.
A11	DX E.P.+ SoftStr	Dual	DX E.Piano2	S.SlwStr			DX electric piano layered with soft strings.
A12	DX E.P.+ SynthPiano	Dual	DX E.Paino2	SynthPiano			DX electric piano layered with synth piano.
A13	PipeOrgan+ Choir	Dual	PipeOrganTu	Choir			Magnificent layered sound with pipe organ and chorus.
A14	Strings+ Choir	Dual	Strings	Choir			Classical layered sound with strings and chorus.
A15	Orchestral Harp	Dual	NyInHarp	Harp			Beautiful layered sound of two harps, slightly delayed.
A16	PolySynth Pad	Dual	PolySyPd	NewAgePd			Dense and rich motion pad. Key-on modifies the sound.
B01	WoodBass/ GrandPiano	Split	Grand Piano 1		Wood Bass		Standard wood bass split with piano. Ideal for playing jazz by yourself.
B02	WoodBass/ NylonGuitar	Split	Nylon Guitar		Wood Bass		Nylon-string guitar split with wood bass.
B03	WoodBass/ VibraPhone	Split	Vibraphone		Wood Bass		Standard wood bass split with vibraphone.
B04	Bass+Cym/ JazzOrgan	Split	JazzOrgan		Bass & Cymbal		Play rhythm with bass and cymbal in the left hand, and solo organ in the right hand.
B05	E.Bass/ PhaserE.P.	Split	PhaserE. Piano		Electric Bass		Electric piano with phaser (typical of 70's fusion), split with electric bass.
B06	Bass+ Cym/Scat	Split	Scat		Bass+ Cymbal		Play scat in the right hand, and bass and cymbal in the left. Scat sounds are velocity-switched.
B07	Organ Upper/ Lower	Dual +Split	JazzOrgan	SoloSine	Jazz Organ		Simulates a dual-manual organ. Play chords in the left hand, and solo with the right.
B08	E.Piano/ GrandPiano	Split	Grand Piano 1		Phaser E.Piano		Play chords in the left hand on an electric piano with phaser applied, and piano solo in the right.
B09	JazzOrg/ GrandPiano	Split	Grand Piano1		Jazz Organ		Play organ backing in the left hand, and piano solo in the right.
B10	SynBass/ SynBrass	Dual +Split	SynBrss1	SynBrss1	SynBass 1Dark		Play synth bass in the left hand, and bright synth brass in the right.
B11	Delay E.Piano	Single	Standard E.Piano				Electric piano with delay applied to create a sense of space.
B12	Room Piano	Single	GrandPiano1				Piano that sounds as if heard at a distance in a spacious room.
B13	Old piano	Single	GrandPiano2				Simulation of a piano sound heard on an old record. Distorts slightly as you play harder.
B14	Baroque Ensemble	Dual +Split	Hc8'+4'	PipeOrganP	Strings	Choir	Play strings and chorus in the left hand, and harpsichord and pipe organ in the right.
B15	AOR Split	Dual +Split	GrandPiano2	SynthPad1	E.Bass	MuteGtr	Rich sound that lets you play muted guitar and bass in the left hand, and piano and pad in the right.
B16	Drum Kit	Drm	StandardKit1				The P-250 provides high-quality drum sounds as well as piano sounds. Try out your drumming skills!

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IMPORTANT SAFETY INSTRUCTIONS

INFORMATION RELATING TO PERSONAL INJURY, ELECTRICAL SHOCK, AND FIRE HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING- When using any electrical or electronic product, basic precautions should always be followed. These precautions include, but are not limited to, the following:

- 1.** Read all Safety Instructions, Installation Instructions, Special Message Section items, and any Assembly Instructions found in this manual **BEFORE** making any connections, including connection to the main supply.
- 2.** Main Power Supply Verification: Yamaha products are manufactured specifically for the supply voltage in the area where they are to be sold. If you should move, or if any doubt exists about the supply voltage in your area, please contact your dealer for supply voltage verification and (if applicable) instructions. The required supply voltage is printed on the name plate. For name plate location, please refer to the graphic found in the Special Message Section of this manual.
- 3.** This product may be equipped with a polarized plug (one blade wider than the other). If you are unable to insert the plug into the outlet, turn the plug over and try again. If the problem persists, contact an electrician to have the obsolete outlet replaced. Do **NOT** defeat the safety purpose of the plug.
- 4.** Some electronic products utilize external power supplies or adapters. Do **NOT** connect this type of product to any power supply or adapter other than one described in the owners manual, on the name plate, or specifically recommended by Yamaha.
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- 6.** Ventilation: Electronic products, unless specifically designed for enclosed installations, should be placed in locations that do not interfere with proper ventilation. If instructions for enclosed installations are not provided, it must be assumed that unobstructed ventilation is required.
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- 9.** This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by the manufacturer. If a cart, rack, or stand is used, please observe all safety markings and instructions that accompany the accessory product.
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- 11.** Care should be taken that objects do not fall and liquids are not spilled into the enclosure through any openings that may exist.
- 12.** Electrical/electronic products should be serviced by a qualified service person when:
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 - b. Objects have fallen, been inserted, or liquids have been spilled into the enclosure through openings; or
 - c. The product has been exposed to rain; or
 - d. The product does not operate, exhibits a marked change in performance; or
 - e. The product has been dropped, or the enclosure of the product has been damaged.
- 13.** Do not attempt to service this product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.
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PLEASE KEEP THIS MANUAL

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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

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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.

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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)

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

(2 wires)

- This applies only to products distributed by Yamaha-Kemble Music (U.K.) Ltd.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

(polarity)

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