DP90e
DP90Se

DIGITAL
PIANO

Owner's Manual

Roland

Look What You Can Do!

Play the Piano

♪ Play various sounds

The unit contains a wide variety of tones (sounds).
You can freely select and perform using these tones.

♪ Play two layered tones

You can layer two tones on a single key.

♪ Play different tones with your left and right hands

You can divide the keyboard into left and right zones, and select a different tone for each zone.

♪ Play duets

You can divide the keyboard into left and right halves, playing it as though it were two pianos.

Practice Songs

♪ Sound a metronome

You can sound a metronome.

♪ Practice along with the built-in songs

The unit contains numerous built-in songs.
For the song titles, refer to "Internal Song List" (separate leaflet).

♪ Practice each hand separately

You can practice along with a song while listening to only the right-hand or left-hand part play back.

Record Songs

♪ Record your performances

You can record your own playing.

♪ Use your computer to create a CD of a song you recorded

A song you've recorded can be copied to your computer, and written to a CD.

🎼 Adjust Your Piano

♪ Adjust the keyboard touch

You can adjust the touch sensitivity of the keyboard to match your own playing style.

♪ Add reverberation to the sound

You can add reverberation (ambience) to create the sensation of performing in a concert hall.

♪ Adjust the brightness of the sound

You can adjust the tone quality of the sound, ranging from a brilliant timbre to a mellow tone.

🎼 Convenient Functions

♪ Transpose the pitch of the keyboard or song

The Transpose function lets you shift the pitch of the keyboard or a song so that you can perform more conveniently.

♪ Disable the buttons

The Panel Lock function lets you prevent sounds or settings from being changed when buttons are pressed inadvertently.

♪ Adjust the resonance of chords

The way in which the piano's soundboard vibrates can be adjusted with "Soundboard Behavior," a setting that lets you modify the way chords resonate.

♪ Switch the temperament

You can switch between various temperaments, such as historic temperaments used during the Baroque era.

♪ Connect to a Wireless LAN

You can use a WNA1100-RL wireless USB adapter (sold separately) to connect to a wireless LAN and use wireless applications, such as the iPad app.

🎼 Environmentally Friendly Energy-Efficient Design

♪ The power will turn off after a specified time has elapsed

When thirty minutes have elapsed since you last played or operated the unit, the power will turn off automatically.

* **If you don't want the power to turn off automatically, change the "Auto Off" setting (p. 39).**
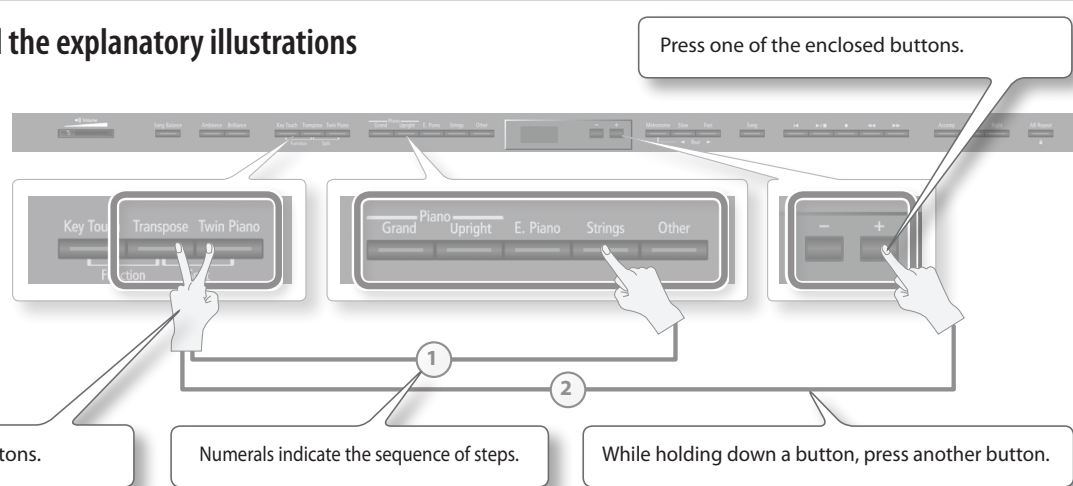
Operation Guide
Panel Descriptions
Before You Play
Performing
Practicing
Convenient Functions
Function Mode
Appendix

♪ Contents

Contents

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

How to read the explanatory illustrations

Press one of the enclosed buttons.

Key Tou | Transpose | Twin Piano
Function

Piano
Grand | Upright | E. Piano | Strings | Other

− | +

Press two buttons.

① Numerals indicate the sequence of steps.

② While holding down a button, press another button.

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" (p. 58), and "IMPORTANT NOTES" (p. 60). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's Manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

♪ Operation Guide

Adding Reverberation (Ambience)

You can add a pleasant reverberation to the sounds, producing the impression that you are performing in a concert hall.

To turn ambience on

Press the [Ambience] button so it's lit.

To adjust the ambience

While holding down the [Ambience] button, press the [–] [+] buttons.

Adjusting the Brightness of the Sound (Brilliance)

You can adjust the brightness of the sound you play from the keyboard or the sounds of a song you play back.

To turn brilliance on

Press the [Brilliance] button so it's lit.

To adjust the brilliance

While holding down the [Brilliance] button, press the [–] [+] buttons.

Adjusting the Overall Volume

Adjust the volume.

Min ←——→ **Max**

Adjusting the Song Volume (Song Balance)

By modifying the playback volume of the song, you can adjust the balance between the song and your keyboard performance.

To turn song balance on

Press the [Song Balance] button so it's lit.

To adjust the song balance

While holding down the [Song Balance] button, press the [–] [+] buttons.

Adjusting the Keyboard Touch (Key Touch)

You can adjust the way in which the keyboard responds to your playing.

To turn key touch on

Press the [Key Touch] button so it's lit.

To adjust the key touch

While holding down the [Key Touch] button, press the [–] [+] buttons.

Transposing Your Performance (Transpose)

You can transpose the notes you play on the keyboard or the notes of a song you play back.

To turn transpose on

Press the [Transpose] button so it's lit.

To adjust the amount of transposition

While holding down the [Transpose] button, press the [–] [+] buttons.

Retaining the settings even after power-off (memory backup)

The unit allows you to adjust numerous settings, but these settings will return to their default values as soon as you turn off the power.

However, by using the Memory Backup feature, you can have the changes you've made in settings be retained.

1. While holding down the [Key Touch] button, press the [Transpose] button.

2. Use the [◀] [▶] (Slow/Fast) buttons to select "Memory Backup."

3. Press the [Song] button.

4. Use the [▶] (Fast) button to select "Y."

Selecting the Tone

To select a single tone

Press one of the tone buttons, and then use the [–] [+] buttons.

Press one
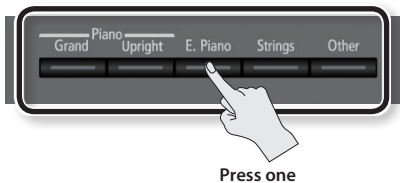
To layer two tones (dual play)

Press two tone buttons.

Press two

To change the tones

Tone 1	Press the [–] [+] buttons.
Tone 2	Hold down the right-most of the lit tone button, and then use the [–] [+] buttons.

Dividing the Keyboard for Two-person Performance (Twin Piano)

This function divides the keyboard into left and right, allowing two people to play the same range of pitches.

To turn twin piano on

Press the [Twin Piano] button so it's lit.

To change how the sounds are heard

While holding down the [Twin Piano] button, press the [–] [+] buttons.

1 (Pair)	The sound of the right-hand keyboard zone will be heard more loudly from the right speaker than from the left speaker.
	The sound of the left-hand keyboard zone will be heard more loudly from the left speaker than from the right speaker.
2 (Individual)	The sound of the right-hand keyboard zone will be heard only from the right speaker.
	The sound of the left-hand keyboard zone will be heard only from the left speaker.

Playing Different Tones with the Right and Left Hands (Split Play)

This function divides the keyboard into left and right zones, allowing you to play a different tone in each zone.

To turn split on

While holding down the [Transpose] button, press the [Twin Piano] button.

To change the tones

Right-hand Tone	1. Press a tone button.
	2. Press the [–] [+] buttons.
Left-hand Tone	1. While holding down the [Transpose] button and [Twin Piano] button, press a tone button.
	2. While holding down the [Transpose] button and [Twin Piano] button, use the [–] [+] buttons.

Changing the keyboard's split point

While holding down the [Transpose] button and [Twin Piano] button, play the key that you want to specify as the split point.

Selecting the Parts that will Play (Part Mute)

Here's how to select the parts that will play.

To select the right-hand part	Press the [Right] button so it's lit.
To select the left-hand part	Press the [Left] button so it's lit.
To select the other parts	Press the [Accomp] button so it's lit.

To adjust the mute volume of a part

Hold down the button of the part whose volume you want to adjust, and use the [–] [+] buttons.

Repeatedly Practicing a Portion of a Song (AB Repeat)

Here's how you can make a specific portion of a song play back repeatedly.

1. Press the [►/■] (Play/Stop) button to play back the song.

2. At the beginning of the portion to be repeated, press the [AB Repeat] button.

3. At the end of the portion to be repeated, press the [AB Repeat] button once again.

Accomp Left Right   AB Repeat

Recording/Playback

Here's how to play back or record a song.

Return to the beginning of the song	Press the [|◄] (Reset) button.
Play/Stop	Press the [►/■] (Play/Stop) button.
Enter recording-standby mode	While stopped, press the [●] (Rec) button.
Record	While in recording-standby mode, press the [►/■] (Play/Stop) button.
Rewind	Press the [◄◄] (Bwd) button.
Fast-forward	Press the [►►] (Fwd) button.

To play all songs

While holding down the [Song] button, press the [►/■] (Play/Stop) button.

To make a new recording

1. Select the tone that you want to play.

2. Press the [●] (Rec) button.

3. Press the [►/■] (Play/Stop) button to start recording.

4. Press the [►/■] (Play/Stop) button to stop recording.

Disabling the Buttons (Panel Lock)

Hold down the [AB Repeat] button until the display shows "Lock."

To cancel panel lock

Hold down the [AB Repeat] button once again for a while.

To overdub

1. Select the tone to be played.

2. Select the song to be dubbed.

3. Press the [●] (Rec) button.

4. Press the [+] button.

5. Press the button of the part that you want to record, making it blink.

6. Press the [►/■] (Play/Stop) button to start recording.

7. Press the [►/■] (Play/Stop) button to stop recording.

♪ Panel Descriptions

[Power] Switch

This turns the power on/off.

Power

* **The power to this unit will be turned off automatically after a predetermined amount of time has passed since it was last used for playing music, or its buttons or controls were operated (Auto Off function).**

If you do not want the power to be turned off automatically, disengage the Auto Off function (p. 39).

* Any settings that you are in the process of editing will be lost when the power is turned off. If you have any settings that you want to keep, you should refer to "Retaining the Settings Even After Power-off (Memory Backup)" (p. 39) and save your settings.

* To restore power, turn the power on again.

* When turning the power on again, you must allow at least five seconds after power-off before you once again turn the power on.
If you fail to allow enough time, the Auto Off function might not be reset, preventing the power from turning on correctly.

USB Memory Port

If a USB flash drive is connected, you can use it to save or play back songs.

Roland

You can do the following things using a USB flash drive.

• WAVE files or MIDI files (SMF) data copied from your computer can be played back by the unit.

• You can make audio recordings of your performances on the unit.

• The audio recordings of songs that you've made can be played on your computer, or burned to a CD.

* Carefully insert the USB flash drives all the way in-until it is firmly in place.

* Use a USB flash drive sold by Roland. We cannot guarantee operation if any other USB flash drive is used.

USB Computer Port

If you use a commercially available USB cable to connect the unit' to your computer, you'll be able to do the following things.

• SMF data played back by MIDI-compatible software can be sounded by the unit.

• MIDI data can be transferred between the unit and your sequencer software (sold separately), opening up a wide range of possibilities for music production and editing.

Headphone Hook

Whenever you are not using the headphones, you can hang them on the headphone hook.
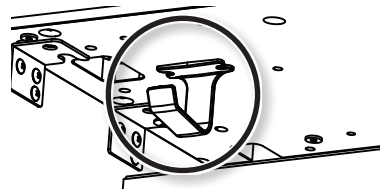
* Don't hang anything other than headphones on this hook, and don't apply excessive force to it.
Doing so may damage the headphone hook.

Front Panel

These buttons and sliders are used to operate the unit.
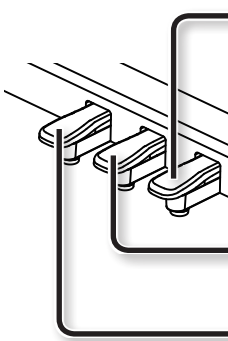
Pedals

Damper Pedal

Use this pedal to sustain the sound. While this pedal is held down, notes will be sustained for an extended time even if you release your fingers from the keyboard.

On an acoustic piano, when you step on the damper pedal, you'll first hear the sound of the dampers releasing the strings. Then, you should also be able to hear the sound of strings adjacent to the ones for the notes actually played resonate sympathetically, resulting in a rich, resounding tone. Additionally, when using half-pedaling techniques, the core of the sound disappears rapidly while a rich, spacious resonance remains, producing a unique form of reverberation. On the unit, the unique, lingering tones produced by the half-pedaling technique are reproduced in addition to released-string sounds (Damper Noise) and resonating sounds (Damper Resonance).

Sostenuto Pedal

The notes you are pressing when this pedal is depressed will be sustained.

Soft Pedal

This pedal is used to make the sound softer.

Playing with the soft pedal depressed produces a sound that is not as strong as when otherwise played with the equivalent strength. This is the same function as the left pedal of an acoustic piano.

The softness of the tone can be varied subtly by the depth to which you press the pedal.

Input Jack

If a digital audio player or other audio playback device is connected here, you'll be able to listen to its playback through the unit.
Use the controls of your audio playback device to adjust the volume.

Output Jacks

If you connect these jacks to amplified speakers, the sound of unit will be heard through them.

* Before turning off the power of the unit, you must first turn off the power of the devices that are connected to the Output jacks.

Rear side

Stereo Input
R L/Mono Output
DC In Use Roland PSB-7U adaptor only
Pedal

Ground Terminal

Depending on the circumstances of a particular setup, you may experience a discomforting sensation, or perceive that the surface feels gritty to the touch when you touch this device. This is due to an infinitesimal electrical charge, which is absolutely harmless. However, if you are concerned about this, connect the ground terminal (see figure) with an external ground. When the unit is grounded, a slight hum may occur, depending on the particulars of your installation. If you are unsure of the connection method, contact the nearest Roland Service Center, or an authorized Roland distributor.

Unsuitable places for connection

• Water pipes (may result in shock or electrocution)

• Gas pipes (may result in fire or explosion)

• Telephone-line ground or lightning rod (may be dangerous in the event of lightning)
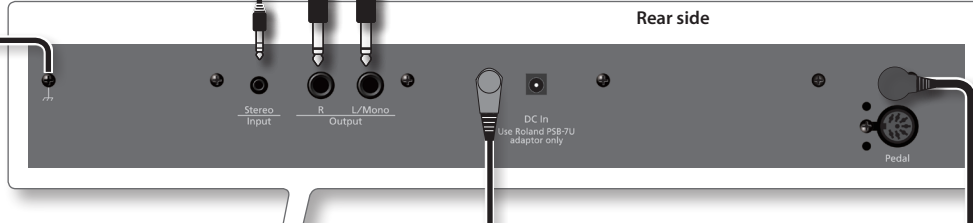
DC In Jack

Connect the included AC adaptor here.

* Before making this connection, you must make sure that the [Power] switch is off.

Pedal Connector

Connect the pedal cord of the dedicated stand to this connector.

Phones Jacks

Here you can connect stereo headphones.

The unit has two headphone jacks, two people can also use headphones simultaneously.

A Headphones 3D Ambience effect will be applied, producing the sensation that the sound is emanating from the piano itself even when using headphones.

* The Headphones 3D Ambience effect applies only to piano tones; it does not apply to other tones.

* You can also turn the Headphones 3D Ambience effect off (p. 46).

* You can use the [Ambience] button to adjust the Headphones 3D Ambience effect.
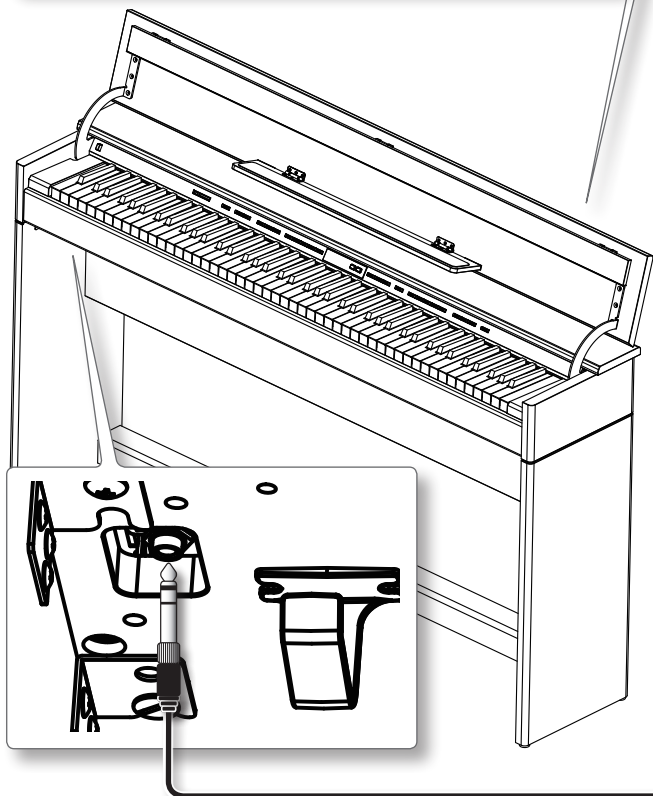
* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

* When connection cables with resistors are used, the volume level of equipment connected to the Input jack may be low. If this happens, use connection cables that do not contain resistors.

♪ Before You Play

Opening the Lid

NOTE

- Always use two hands to open and close the lid.
  Although the unit's lid is designed to close slowly and gently when it is released, the lid immediately closes if it has been opened only slightly. Take care not to allow your fingers to become pinched by the lid.
- If small children will be using the unit, adult supervision should be provided.
- For safety, be sure to close the lid before transporting the piano.

1. **Grasp and lift the lid with both hands.**

Arm

Arm
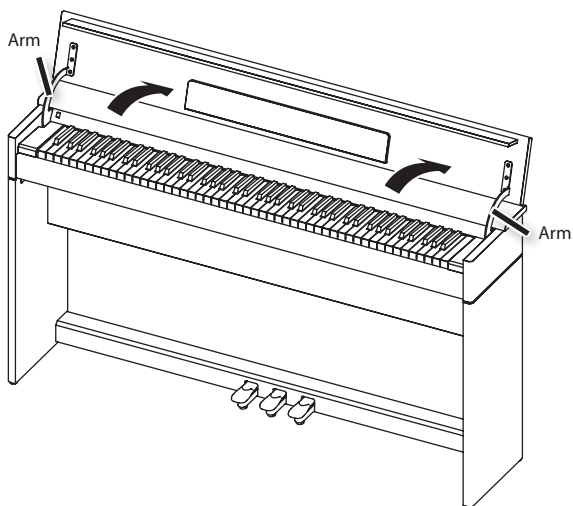
2. **Close the blind and open the music rest as shown in the figure.**
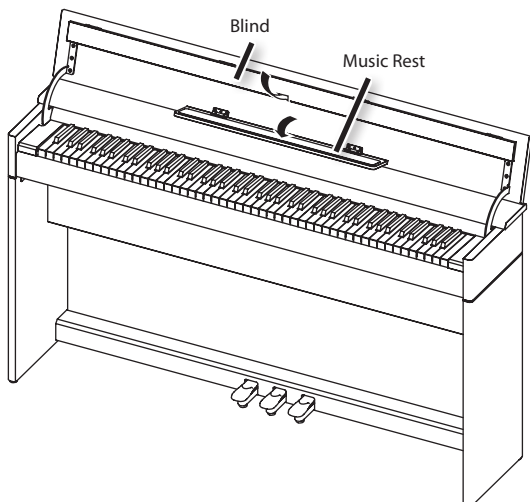
Blind

Music Rest

Closing the Lid

1. **When closing the lid, be sure to close the music rest and open the blind.**

Blind

Music Rest
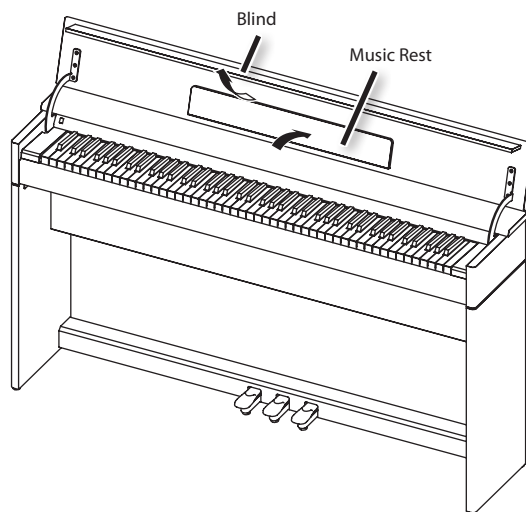
2. **Grasp and gently lower the lid with both hands.**
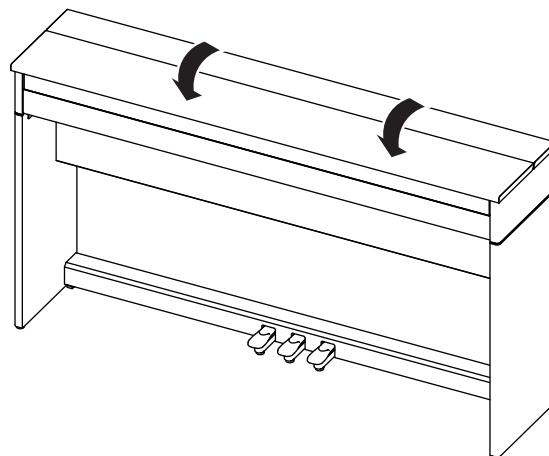
NOTE

When opening or closing the lid, take care not to pinch your finger in the lid or the arms.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix
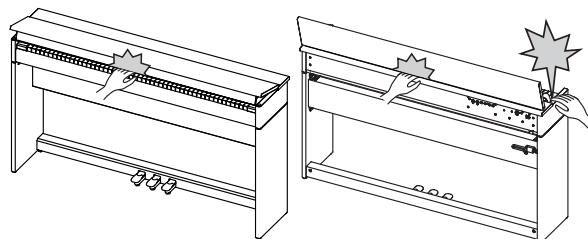
Turning the Power On/Off

Once everything is properly connected (p. 11), be sure to follow the procedure below to turn on their power. If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.

NOTE

Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Turning the power on

1. **Move the [Volume] slider all the way to the left to minimize the volume.**

2. **Press the [Power] switch.**

After a brief interval, you'll be able to produce sounds by playing the keyboard.

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.

3. **Use the [Volume] slider to adjust the volume.**

Adjust the volume while playing something on the keyboard, so you can hear how it sounds.

This will adjust the volume of the speakers if you're using the speakers of the unit, or the volume of the headphones if headphones are connected. Each volume setting (for speaker or headphone) is saved automatically.

Volume adjustment screen when using speakers

Volume adjustment screen when using headphones

MEMO

The unit is designed so that nuances in the dynamics of your playing will be clearly heard even at low volume, and that the sound will remain clear even at high volume.

Turning the power off

1. **Move the [Volume] slider all the way to the left to minimize the volume.**

2. **Press the [Power] switch.**

The power is turned off.

If you don't want the power to turn off automatically, change the "Auto Off" setting to "OFF"!

The power to this unit will be turned off automatically after a predetermined amount of time has passed since it was last used for playing music, or its buttons or controls were operated (Auto Off function).

If you do not want the power to be turned off automatically, disengage the Auto Off function (p. 39).

NOTE

• Any settings that you are in the process of editing will be lost when the power is turned off. If you have any settings that you want to keep, you should refer to "Retaining the Settings Even After Power-off (Memory Backup)" (p. 39) and save your settings.

• To restore power, turn the power on again (p. 13).

• When turning the power on again, you must allow at least five seconds after power-off before you once again turn the power on. If you fail to allow enough time, the Auto Off function might not be reset, preventing the power from turning on correctly.

♪ Performing

Performing with Various Sounds

In addition to piano sounds, the unit lets you enjoy performing with many other sounds (350 types).

These sounds are called "Tones." The Tones are categorized into five groups, each of which is assigned to a different Tone button.

Selecting Tones

Let's start by performing with a piano tone.

When you turn on the power, the Concert (Concert Piano) tone is selected.
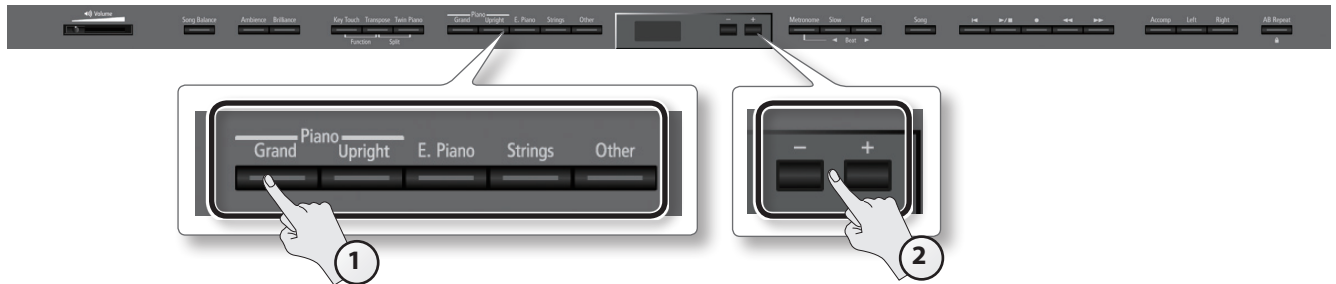
1. **Press a tone button to select the tone group.**

   The currently selected tone number and tone name are displayed.

Tone groups

Tone button	Description
Piano [Grand] button	Selects grand piano sounds.
Piano [Upright] button	Selects upright piano sounds.
[E. Piano] button	Selects various electric piano sounds used in pop or rock.
[Strings] button	Selects the sounds of string instruments such as violins, as well as other instruments used in orchestras.
[Other] button	Selects a variety of sounds such as organ, bass, or accompaniment sounds. * If you select tone numbers 43–51, you'll be able to use the keyboard to play the sounds of a drum set or SFX. * If you've selected an organ sound that provides a rotary effect (*1), such as a Jazz Org or a Balad Or, pressing the [Other] button will switch the speed of the rotary effect.

For details on the tones, refer to "Tone List" (p. 54).

*1 Rotary is an effect which simulates the sound of rotating speakers. There is a choice of two settings: Fast and Slow.

2. **Use the [−] [+] buttons to select a variation within the tone group.**

   * If you've selected a drum set tone or an SFX set tone, some notes of the keyboard will not produce sound.

Auttioning tones (tone demo)

1. **While holding down a tone button, press the [▶/■] (Play/Stop) button.**

   A tone demo that uses the first tone of each tone group will begin playing back.

2. **To stop the tone demo, press the [Song] button or the [▶/■] (Play/Stop) button.**

What are effects?

Some of the tones provide a wide variety of other effects that can modify the sound in various ways.

The rotary effect is one of these effects.

Performing with Two Layered Tones (Dual Play)

You can play two tones simultaneously from each note of the keyboard. This feature is called Dual Play.

As an example, here's how to layer piano and strings tones.
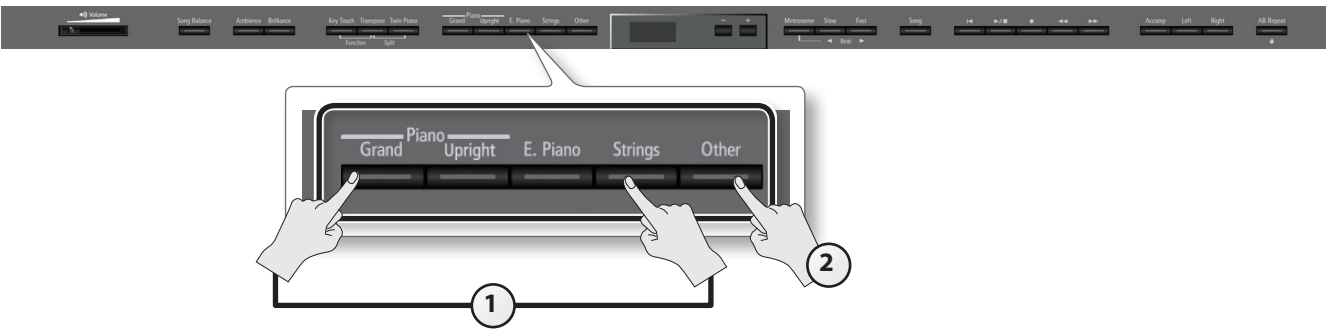
1. **While holding down the Piano [Grand] button, press the [Strings] button.**

Both buttons will light.

When you play the keyboard, you'll hear both the piano and the strings tones.

* Dual play is not available if Split Play (p. 16) or Twin Piano (p. 20) are turned on.
* For some combinations of sounds, the effect is not applied to tone 2, and this may affect how the tone sounds.
* It's not possible to layer Piano [Grand] and Piano [Upright] tones together.

Selecting tones for dual play

Tone name	Corresponding button	How to select tones
Tone 1	Left tone button	Press the [–] [+] buttons.
Tone 2	Right tone button	While holding down the tone button for Tone 2 (the right-most of the lit Tone buttons), and press the [–] [+] buttons.

2. **To exit Dual Play, press one of the tone buttons.**

Advanced techniques

Changing the pitch of tone 2 in steps of an octave: Octave Shift (p. 47)

Specifying the part(s) affected by the damper pedal: Damper Pedal Part (p. 48)

Adjusting the volume balance of the two tones: Dual Balance (p. 46)

Playing Different Tones with the Right and Left Hands (Split Play)

You can play different tones in the left and right sides of the keyboard, divided at a certain key.

This feature is called Split Play, and the key at which the keyboard is divided is called the Split Point.
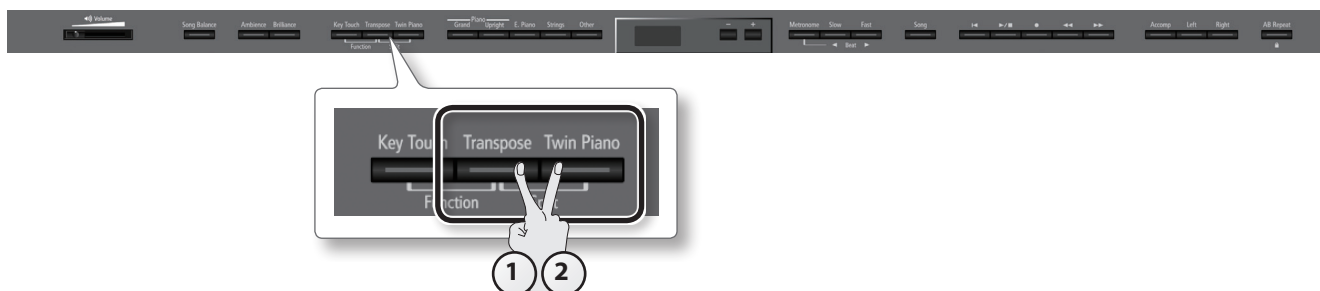
1. **While holding down the [Transpose] button, press the [Twin Piano] button.**

The display will indicate SPLIT.

Name of the right-hand tone

When Split is turned on, the keyboard settings will be as follows.

Split Point (Power-up default: F#3)
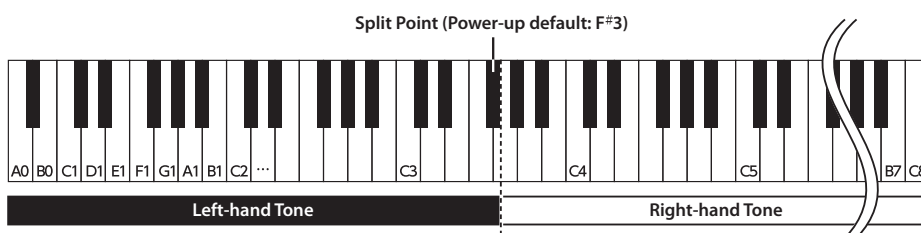
2. **To exit Split Play, hold down the [Transpose] button and press the [Twin Piano] button once again.**

* Depending on which tones are being used together, the tones might sound different because no effect is applied to the left-hand tone.

Advanced technique

Specifying the part(s) affected by the damper pedal: Damper Pedal Part (p. 48)

Changing the right-hand tone

1. **Press a tone button.**

The number and name of tone currently selected for the right-hand zone are shown.

2. **Press the [–] [+] buttons.**

A different tone is selected.

Changing the left-hand tone
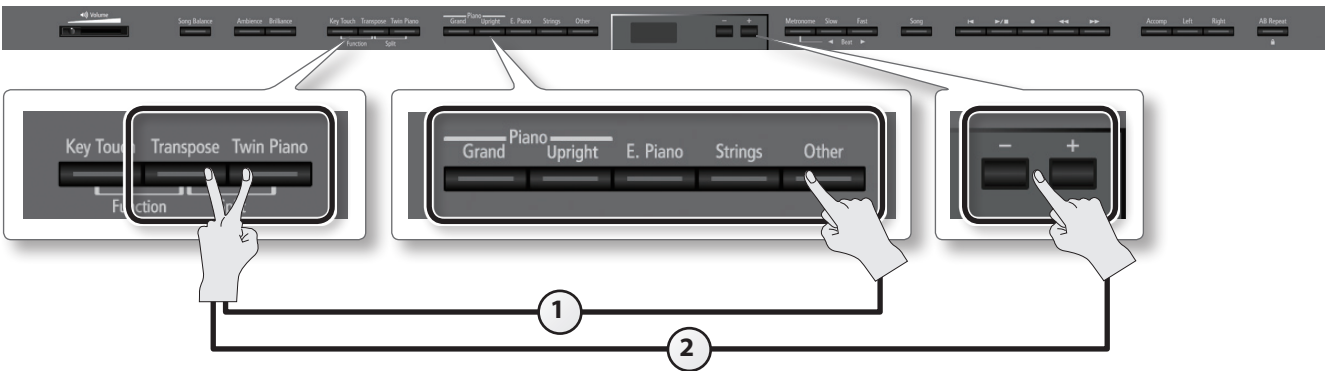
1. **While holding down the [Transpose] button and [Twin Piano] button, press a tone button.**

The number and name of the tone currently selected for the left-hand zone are shown.

```
Bass+Cym
L:  38
```

2. **While holding down the [Transpose] button and [Twin Piano] button, press the [–] [+] buttons.**

A different tone is selected.

Advanced technique

Changing the pitch of the left-hand tone in steps of an octave: Octave Shift (p. 47)

Changing the keyboard's split point

Range in which you can specify the split point (B1–B6)

Left-hand Tone   **Right-hand Tone**

Split Point

Power-up default: F#3

The split point you specify becomes the highest note of the left-hand section.
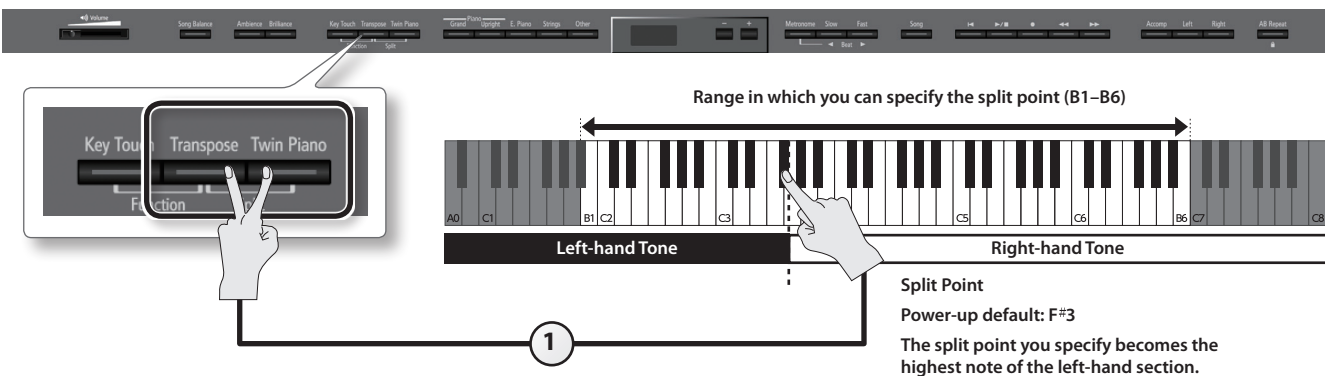
1. **While holding down the [Transpose] button and [Twin Piano] button, press the key that you want to assign as the split point.**

The key you pressed becomes the new split point, and that key will be shown in the display.

Screen	Value
``` Split F"3 ```	B1–B6 (default: F#3)

* In the display, a quotation mark (") signifies a sharp (#).

Saving your settings

The unit's settings will revert to the default values when you turn off the power, but you can save them as described in "Retaining the Settings Even After Power-off (Memory Backup)" (p. 39).

Adjusting the Sound to Your Taste

The unit lets you add reverberation or modify the brightness of the sound.

Adding Reverberation to the Sound (Ambience)

You can add a pleasant reverberation to the sounds of the unit, producing the impression that you are performing in a concert hall.
This effect is called Ambience.

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

The [Ambience] button will light.

2. **While holding down the [Ambience] button, press the [–] [+] buttons.**

The display will indicate the depth of the ambience effect values.

> **Saving your settings**
>
> The unit's settings will revert to the default values when you turn off the power, but you can save them as described in "Retaining the Settings Even After Power-off (Memory Backup)" (p. 39).

Screen	Value	Explanation
Ambience 5	1–10 (default: 2)	Higher values apply deeper ambience. * If you're using headphones and the Headphones 3D Ambience effect (p. 46) is set to "ON," this lets you adjust the depth of the Headphones 3D Ambience effect.

3. **To turn off the ambience effect, press the [Ambience] button once again.**

The [Ambience] button will go out.

* It's not possible to specify the depth of ambience individually for each tone. The effect will be applied in the same way to each tone.

Adjusting the Brightness of the Sound (Brilliance)

You can adjust the brightness of the sounds played on the keyboard or played back by a song.

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

The [Brilliance] button will light.

2. **While holding down the [Brilliance] button, press the [−] [+] buttons.**

The display will indicate the depth of the brilliance effect values.

> **Saving your settings**
>
> The unit's settings will revert to the default values when you turn off the power, but you can save them as described in "Retaining the Settings Even After Power-off (Memory Backup)" (p. 39).

Screen	Value	Explanation
Brliance 5	-10–0–10 (default: 5)	Positive (+) values make the sound brighter; negative (-) values make the sound more mellow.

3. **To turn off the brilliance effect, press the [Brilliance] button once again.**

The [Brilliance] button will go out.

Adjusting the Keyboard Response (Key Touch)

The way in which the keyboard responds to your playing strength can be adjusted to your personal taste.
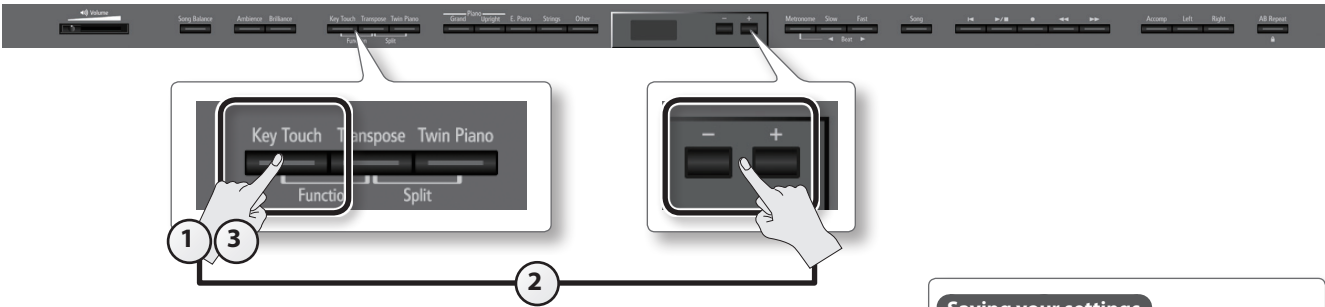
1. **Press the [Key Touch] button.**

The [Key Touch] button will light.

2. **While holding down the [Key Touch] button, press the [−] [+] buttons.**

The display will indicate the key touch setting.

> **Saving your settings**
>
> The unit's settings will revert to the default values when you turn off the power, but you can save them as described in "Retaining the Settings Even After Power-off (Memory Backup)" (p. 39).

Screen	Value	Explanation
KeyTouch H1	FIX	The sound plays at one set volume, regardless of the force used to play the keys.
	L2	This setting produces the lightest keyboard touch.
	L1	You can achieve fortissimo (ff) play with a less forceful touch than M, so the keyboard feels lighter. This setting makes it easy to play, even for children.
	M	This sets the standard keyboard touch. You can play with the most natural touch. This is the closest to the touch of an acoustic piano. This setting is used if the [Key Touch] button is unlit.
	H1 (default)	You have to finger the keyboard more forcefully than M in order to play fortissimo (ff), so the keyboard touch feels heavier. Dynamic fingering adds even more feeling to what you play.
	H2	This setting produces the heaviest keyboard touch.
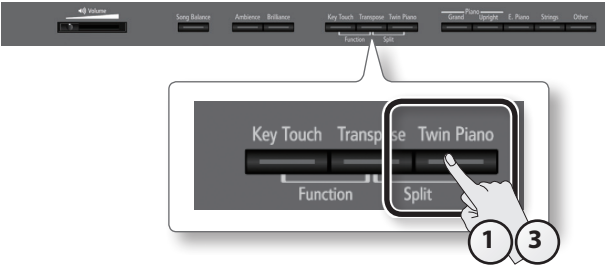
3. **To cancel key touch, press the [Key Touch] button once again.**

The [Key Touch] button will go out.

Dividing the Keyboard for Two-Person Performance (Twin Piano)

You can divide the keyboard into left and right zones so that two people can play the same range of pitches, just as though there were two pianos. This function is called Twin Piano.

For example, you could use Twin Piano to allow a student to play along with their teacher.

Conventional keyboard

Twin Piano

divide point
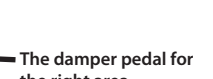
The damper pedal for the left area
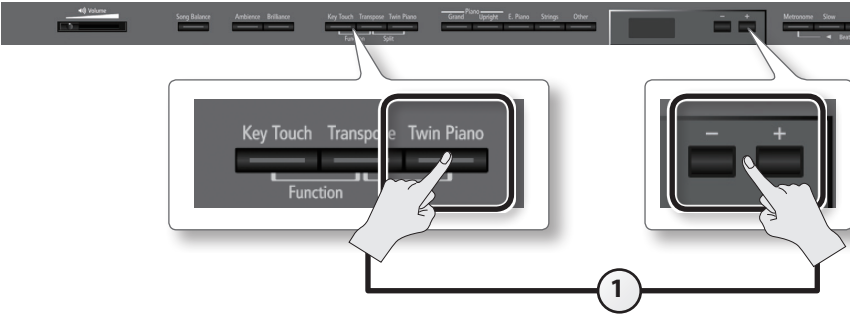
The damper pedal for the right area

1. **Press the [Twin Piano] button.**

The [Twin Piano] button will light, and the Concert (Concert Piano) tone will be selected.

When you turn Twin Piano on, the keyboard and pedal settings will be as shown in the illustration.

> **NOTE**
>
> If Twin Piano is on, damper resonance will not be applied; this may cause the piano to sound different.

2. **Select the tone to be played (p. 14).**

The left and right sections will have the same tone.

3. **To cancel Twin Piano, press the [Twin Piano] button once again.**

The [Twin Piano] button will go out.

Changing the way in which the sound is heard (Twin Piano mode)
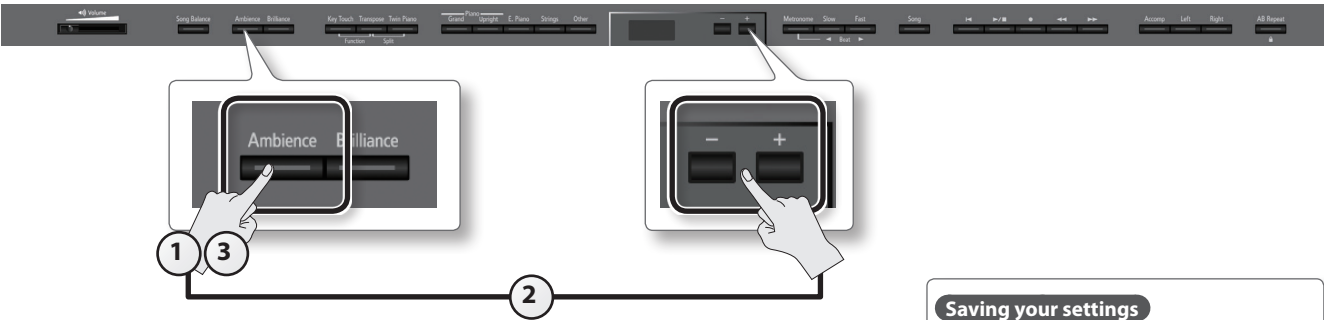

Saving your settings

The unit's settings will revert to the default values when you turn off the power, but you can save them as described in "Retaining the Settings Even After Power-off (Memory Backup)" (p. 39).
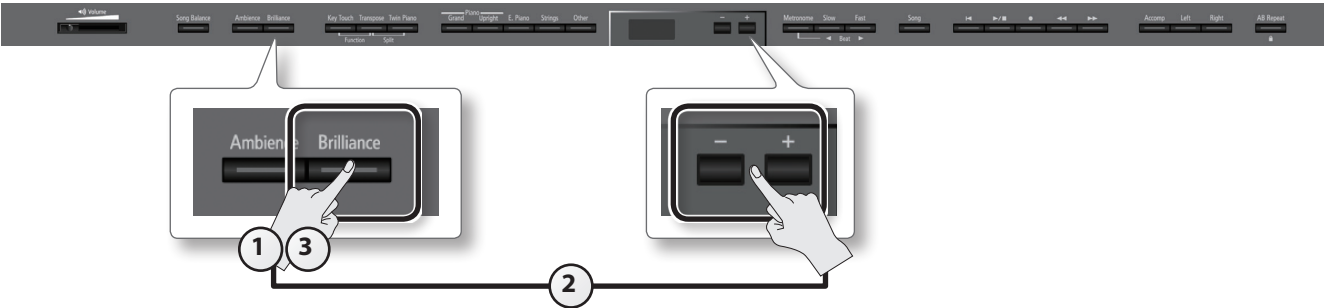
1. **While holding down the [Twin Piano] button, press the [–] [+] buttons.**

The display will indicate Twin Piano mode.

Screen	Value	Explanation
TwinPno *1*	1 (default)	The sound of the right-hand keyboard zone will be heard more loudly from the right speaker than from the left speaker. The sound of the left-hand keyboard zone will be heard more loudly from the left speaker than from the right speaker. When using headphones, you'll be able to hear the other person's playing.
	2	The sound of the right-hand keyboard zone will be heard only from the right speaker. The sound of the left-hand keyboard zone will be heard only from the left speaker. If you're using headphones, the sound of the right-hand keyboard zone will be heard in your right ear, and the sound of the left-hand keyboard zone will be heard in your left ear. * Ambience will turn off. * For some tones, the sound might not be divided to left and right.

Shifting the Pitch (Transpose)

Transpose means to shift the pitches of songs and the keyboard.

The Transpose function makes it easy to do the following.

- You can use unchanged fingering to accompany a singer who is singing in a key different than the original music.
- A song written in a difficult key with numerous sharps (♯) or flats (♭) can be performed in a key that's easier for you to play.
- Notation of a transposing instrument such as trumpet or sax can be played as written, while hearing the transposed pitches.

For example if the song is written in E major but you want to play it using the fingering of the key of C major, you would set Transpose to 4.

If you play C E G → It will sound E G♯ B
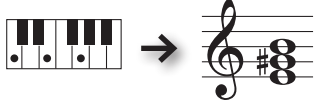
> **MEMO**
>
> With the factory settings, both the song and the keyboard will be transposed. If you want to transpose only the keyboard or only the song, make the appropriate setting as described in "Specifying What the Transpose will Affect (Transpose Mode)" (p. 47).

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

The [Transpose] button will light.

2. **While holding down the [Transpose] button, press the [–] [+] buttons.**

The display will indicate the amount of transposition.

Screen	Value	Explanation
Trnspose +1	-6–0–+5 (semitone units) (default: +1)	Positive (+) values raise the pitch in semitone steps, and negative (-) values lower the pitch in semitone steps.

> **MEMO**
>
> You can also specify this value by holding down the [Transpose] button and playing the note that is the tonic of the key to which you want to transpose.
>
> * If you select a different song, the transposition setting will be canceled.

3. **To cancel the transposition, press the [Transpose] button once again.**

The [Transpose] button will go out.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

♪ Practicing

Practicing with the Metronome

You can sound the metronome while you practice.
While the song selects, the metronome will sound at the tempo and time signature of the song.
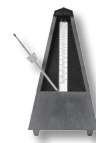
1. **Press the [Metronome] button.**

The [Metronome] button will blink, and the metronome will sound.

The [Metronome] button will blink red and green according to the currently selected time signature; red indicates the strong beats, and green indicates the weak beats.

2. **To stop the metronome, press the [Metronome] button once again.**

The [Metronome] button will go out.
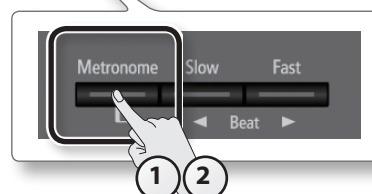
Changing the Tempo

1. **Press the [◀] [▶] (Slow/Fast) buttons.**

```
Tempo ♩=
108
```

When you select or play back a song (p. 24), the tempo of the metronome will be set to that song's tempo.

Changing the Time Signature

1. **While holding down the [Metronome] button, press the [◀] [▶] (Slow/Fast) buttons.**

```
Beat
4/4
```
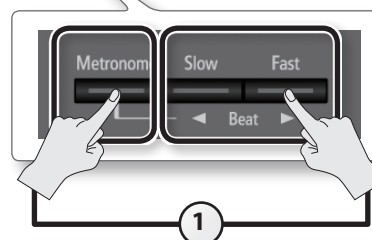
If you specify "0/4" only the weak beats will sound.

When you play back a song, the metronome's time signature will be set to the time signature of that song.

Available time signatures	2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8
	(default: 4/4)

*   You can't change the metronome's time signature while a song is playing.
*   If you record using 0/4, the song's time signature will be set to 4/4 when you save it.

Adjusting the Metronome's Volume

1. **While holding down the [Metronome] button, press the [–] [+] buttons.**

The display will indicate the metronome's volume.
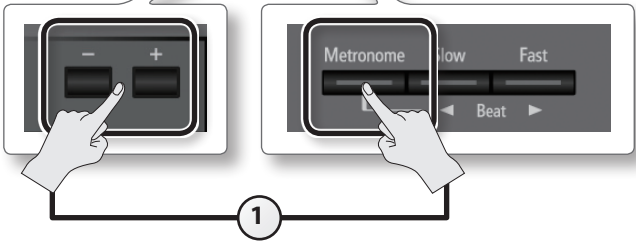
Screen	Value	Explanation
Metr Vol 5	0–10 (default: 5)	When the volume of the metronome is set to "0," the metronome won't sound, but the [Metronome] button will blink.

Adding a Count-in to Synchronize Your Performance

A series of sounds rhythmically played to indicate the tempo before a song starts is called a "count-in."

If you sound a count-in, it will be easier for you to synchronize your own performance to the tempo of the playback.

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

The metronome will sound.

2. **Press the [▶/■] (Play/Stop) button.**

A two-measure count sound will be produced before the song starts playing.
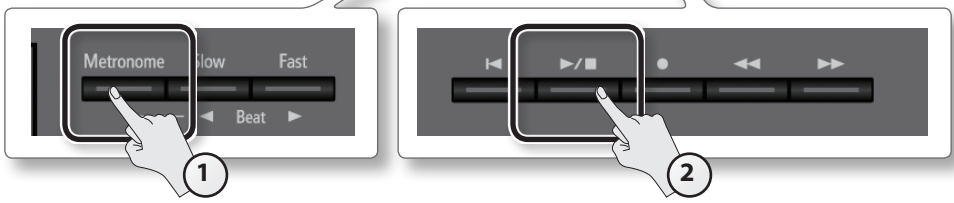
Practicing with a Song

You can practice by playing along with a song.

Selecting and Playing a Song

Here's how to listen to the built-in songs.

You can also play back songs stored on a separately sold USB flash drive.

1. Press the [Song] button.

2. While holding down the [Song] button, use the [–] [+] buttons to select the category.

Display	Explanation	
S	Songs saved on the USB flash drive	
U	Songs saved in the internal memory	
a	Songs built into the unit	Piano Masterpieces
A		Selections
b		Czerny
c		Hanon
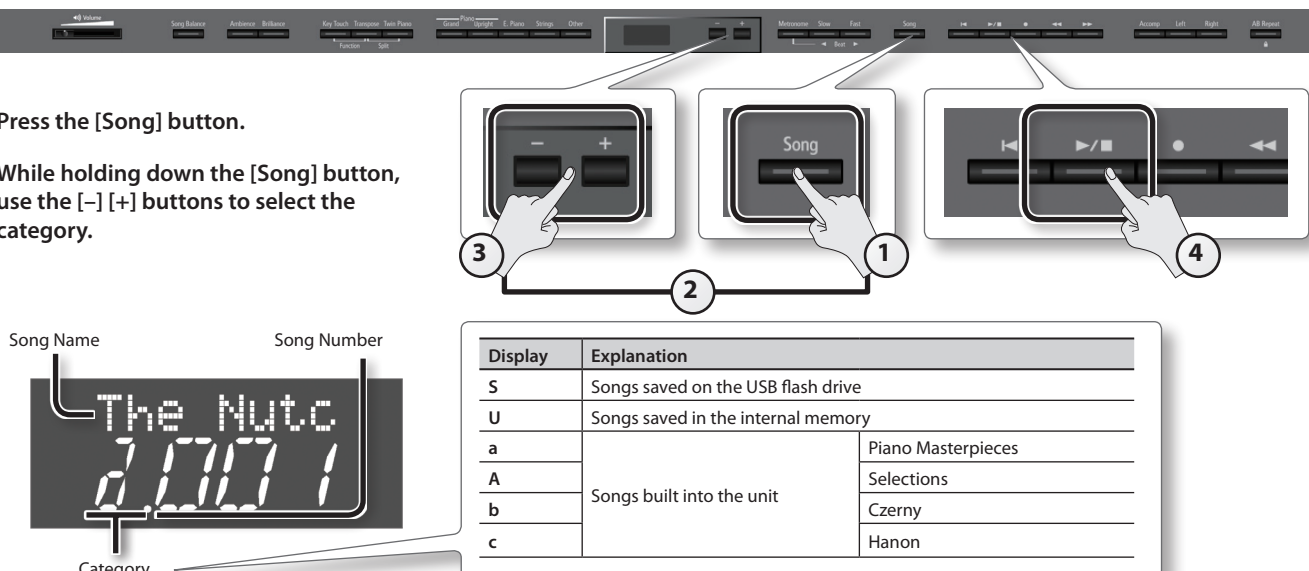
* If an audio file is selected, a " . " (dot) is displayed following the song number.

3. Use the [–] [+] buttons to select a song.

MEMO

Use the following operations to select a song from a folder.

• To enter a folder, use the [–] [+] buttons to select that folder, and then press the [▶/■] (Play/Stop) button.

• To select a song within a folder, use the [–] [+] buttons.

• To exit a folder, use the [–] button to select "Fld. UP," and then press the [▶/■] (Play/Stop) button.

* If one folder contains more than 500 files or folder, some of the files or folders might not be displayed.

4. Press the [▶/■] (Play/Stop) button.

When the song has played to its end, playback will stop.

To pause the playback, press the [▶/■] (Play/Stop) button once again.

The next time you press the [▶/■] (Play/Stop) button, playback will resume from where you paused.

Button operations

[▐◀] (Reset) button	Returns you to the beginning of the song.
[▶/■] (Play/Stop) button	Plays/stops the song. Starts/stops recording.
[●] (Rec) button	Enter recording – standby mode.
[◀◀] (Bwd) button	Rewinds the song.
[▶▶] (Fwd) button	Fast-forwards the song.

MEMO

When the song number is displayed, you can press the [Song] button to see the song playback position (the measure number or the time).
Press the [Song] button once again to return to the song number indication.

Song formats that can be played by the unit

The unit can play back data in the following formats.

• SMF formats 0/1

• Roland Piano Digital format (i-format)

• Audio files: WAV format, 44.1 kHz, 16-bit linear

Playing Songs Consecutively (All Songs Play)

You can consecutively play back the built-in songs or the songs saved in the internal memory or on the USB flash drive repetitively.
This function is called "All Songs Play."

1. **While holding down the [Song] button, use the [–] [+] buttons to select the category.**

2. **While holding down the [Song] button, press the [▶/◼] (Play/Stop) button.**
All Songs Play will be selected, and the [▶/◼] (Play/Stop) button will blink.

   * All Song Play will be cancelled if you stop playback or turn off the power.

Adjusting the Volume Balance of the Song and the Keyboard Performance (Song Balance)

You can adjust the balance between the song and your keyboard performance by changing the volume of the song.
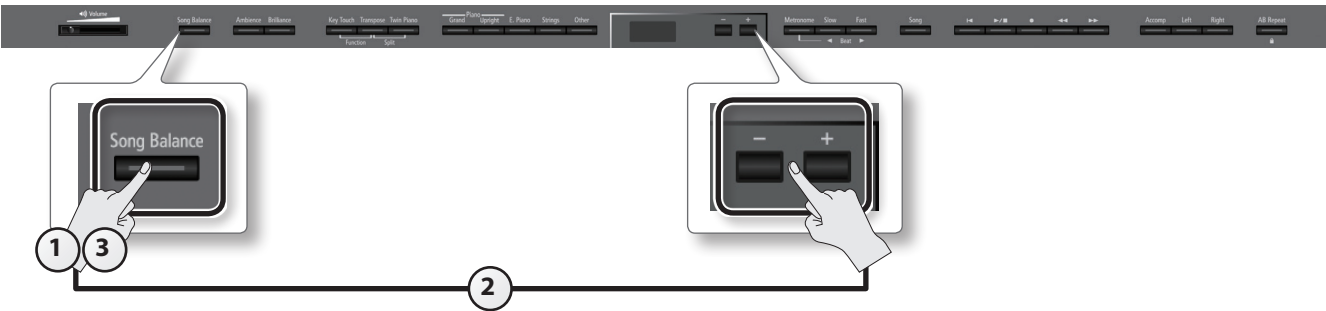
1. **Press the [Song Balance] button.**
The [Song Balance] button will light.

2. **While holding down the [Song Balance] button, press the [–] [+] buttons.**
The display will show the song balance.

Screen	Value	Explanation
Song Bal 5	0–9 (default: 5)	The song's volume decreases the more you lower this value, and at the same time the keyboard performance will take on more prominence. The song's volume increases the more you raise this value, and at the same time the keyboard performance will become less prominent.

3. **To cancel the Song Balance function, press the [Song Balance] button once again.**
The [Song Balance] button will go out.

Adjusting a Song's Tempo for Easier Practicing

You can change the tempo at which a song plays back.

When you're practicing along with a song, this allows you to slow down the tempo of a difficult song in order to play it more comfortably.

1. **Press the [◀] [▶] (Slow/Fast) buttons.**

The tempo will be indicated.

> **MEMO**
>
> If an audio file is selected, you can adjust the tempo in the range of 75–100–125%.

2. **To return the tempo to its original setting, press the [◀] (Slow) and [▶] (Fast) buttons simultaneously.**
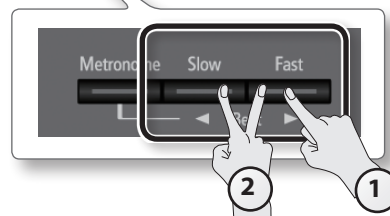
Playing back at a fixed tempo (tempo mute)

With some of the internal songs, the tempo will change during the song. If desired, you can make these songs play back at a fixed, unchanging tempo.

1. **With the tempo displayed, holding down the [▶/■] (Play/Stop) button and press the [◀] [▶] (Slow/Fast) buttons to adjust the tempo.**

The screen will show the tempo and " . " (dot). This " . " indicates that the tempo is muted.

2. **To cancel tempo mute, once again hold down the [▶/■] (Play/Stop) button and press the [◀] [▶] (Slow/Fast) buttons.**

Practicing One Hand at a Time (Part Mute)

Here's how to have only the selected part play back. This allows you to practice playing the left or right-hand part of a song while listening to the other hand played automatically.

Part button

Part

Each part is assigned to the part buttons as shown in the illustration.

Muting

You can "mute" a specific part so that it will not be heard.

* If you've selected a song that does not contain an accompaniment, the [Accomp] button will not light even if you press it.
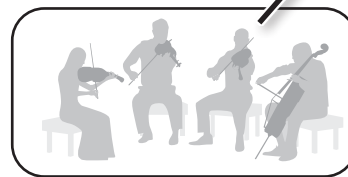
Accompaniment part

Left-hand part

Right-hand part

1. **Press the part button for the part that you don't want to be played.**

The light for the button you pressed will go out, and the selected part will not be heard.

> **MEMO**
>
> • If the accompaniment part is muted, playback will skip the introduction.
> • The mute setting will be cancelled when you switch songs.
> • Although the Part Mute function cannot be used with respect to the playback of an audio file, you can reduce the volume during playback of sounds that are localized at the center of the sound field, such as vocals or bass. Refer to "Center Cancel" (p. 35).

2. **To un-mute the sound, press the part button once again so it's lit.**

Using the sound of a specific part as a "guide" (mute volume)

If desired, you can specify that the sound of a part will play at a reduced volume rather than going completely silent when you press a part button and turn off its indicator.

This setting lets you play a specific part at a reduced volume and use it as a "guide" for your playing.
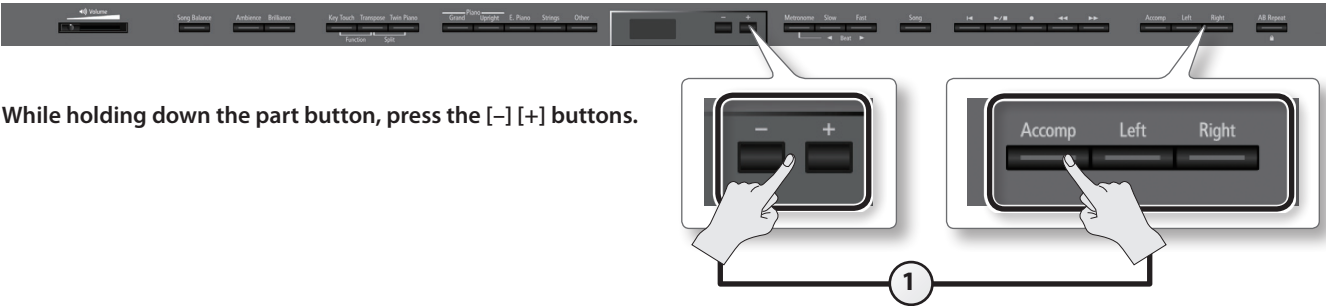
1. **While holding down the part button, press the [–] [+] buttons.**

1

Screen	Value	Explanation
MuteVolA 0		
MuteVolL 0	0–10 (default: 0)	Higher values make the sound louder.
MuteVolR 0		

Repeatedly Practicing a Portion of a Song (AB Repeat)

Here's how you can repeatedly play back a specified portion of the song. You can use this function to repeatedly practice that portion.
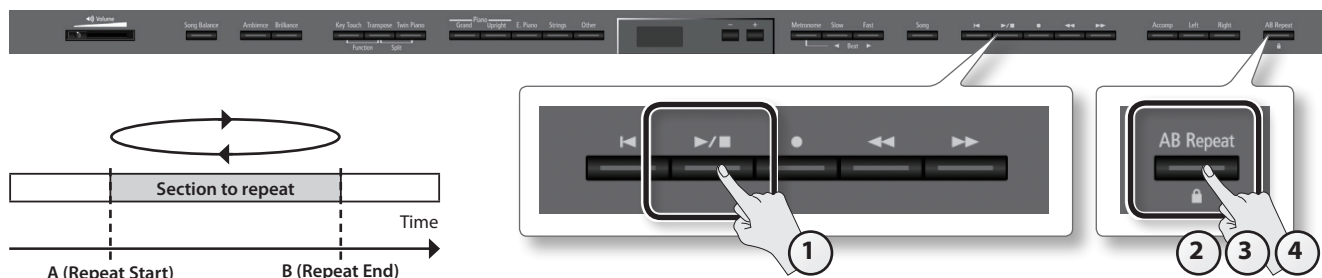
1. Press the [▶/■] (Play/Stop) button.

The song will play back.

2. Press the [AB Repeat] button at the point where you want to start repeating (point A).

The [AB Repeat] button will blink.

3. Press the [AB Repeat] button at the point where you want to stop repeating (point B).

The [AB Repeat] button will light, and playback will begin repeating.

4. To cancel the repeat function, press the [AB Repeat] button once again.

The [AB Repeat] button will go out, the repeat points you specified will be cleared.

MEMO
- The repeat points can be set at the beginning of each measure for an SMF song, or in 1/100th of a second for audio.
- Instead of playing back the song, you can also specify the portion to repeat by using the [◀◀] [▶▶] buttons.

Moving the portion to repeat forward or backward

When AB Repeat is on, you can move the repeated portion forward or backward.
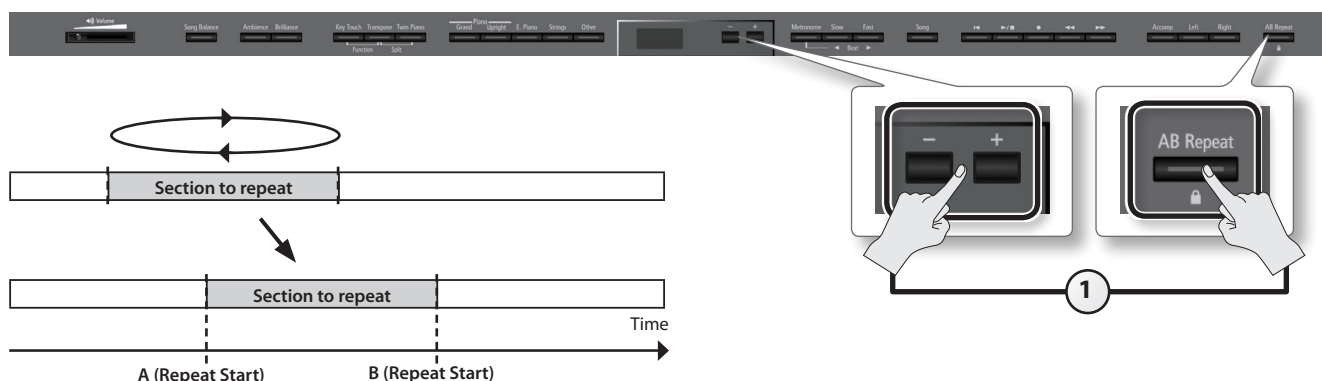
1. While holding down the [AB Repeat] button, press the [–] [+] buttons.

The repeated portion will be moved without its length being changed.

Recording the Song You're Practicing

It's easy to record your own performances.

You can play back a recorded performance to check your playing, or perform along with a recorded performance.

The unit lets you record in the following ways.

Type of recording	Explanation
SMF recording	Parts will be separate. You can re-record a specific portion of the song. You can overdub. * Normally, you should use SMF recording.
Audio recording	Your performance will be recorded as audio data. The recorded song can be used on your computer. * In order to use audio recording, you must connect a USB flash drive (sold separately) to the USB memory port (p. 10).

* SMFs (Standard MIDI Files) use a standard format for music file that was formulated so that files containing music file could be widely compatible, regardless of the manufacturer of the listening device. An enormous variety of music is available, whether it be for listening, for practicing musical instruments, for Karaoke, etc.

SMF Recording

To record a new song, proceed as follows.

This method is convenient when you simply want to record your performance as easily as possible.

Getting ready to record

1. **Select the tone that you want to use for performing (p. 14).**

2. **Press the [●] (Rec) button.**

   The [●] (Rec) button will light, the [►/■] (Play/Stop) button will blink, and the unit will enter recording-standby mode.

   If you decide not to record, press the [●] (Rec) button once again.

3. **If desired, sound the metronome (p. 22).**

   MEMO

   If you change the metronome's tempo and time signature, they will be recorded with the song, allowing the metronome to sound correctly during playback.

Starting/stopping recording

1. **Press the [►/■] (Play/Stop) button.**

   A two-measure count will be heard (the measure number will be shown as "-2" then "-1" in the lower right of the display), and then recording will start.

   When recording starts, the [●] (Rec) button and [►/■] (Play/Stop) button will light.

   MEMO

   You can also initiate recording by simply playing the keyboard. If you initiate recording by playing the keyboard, a count will not be sounded.

2. **Press the [►/■] (Play/Stop) button.**

   Recording will stop, and a message will ask whether you want to save your performance.
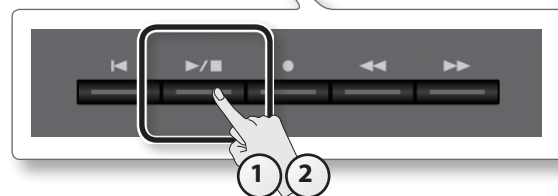
   Save?
   ◄N   Y►

Saving a performance you've recorded

* If you want to save to the USB flash drive (sold separately), connect your USB flash drive to the USB memory port before you continue.

1. **Press the [▶] (Fast) button to select "Y."**

Saving will begin.

The recorded performance is saved at the earliest vacant song number.

The song is automatically given a name in this format: "Song nnn," where "nnn" is the song number.

> **NOTE**
>
> Never turn off the power while the screen indicates "Working..."

Saving to a specific memory, song number, or song name

If you press the [Song] button instead of the **[▶] (Fast)** button, you'll be able to specify the save-destination memory, song number, and song name used for saving.

For details on the procedure, refer to "Saving a Song with the Name You Specify" (p. 37).

Erasing a performance you've recorded

1. **Use the [◀] (Slow) button to select "N."**

A message will ask you to confirm that you want to erase the song.

2. **Press the [▶] (Fast) button to erase the song.**

Listening to a performance you've recorded

1. **Press the [▶/■] (Play/Stop) button.**

Playback will start from the beginning of the recorded performance.

Overdubbing a Recorded Song

When recording an SMF, you can overdub each part separately. For example, you can record the left-hand and right-hand parts separately, or record along with a song.

Recording each hand separately

You can separately record your left-hand performance to the [Left] button and your right-hand performance to the [Right] button. You can also separately re-record each hand afterward.

Getting ready to record

1. **Select the tone that you want to use for performing (p. 14).**

2. **Press the [●] (Rec) button.**

The [●] (Rec) button will light, the [▶/■] (Play/Stop) button will blink, and the unit will enter recording-standby mode.

If you decide not to record, press the [●] (Rec) button once again.

3. **If desired, sound the metronome (p. 22).**

> **MEMO**
>
> If you change the metronome's tempo and time signature, they will be recorded with the song, allowing the metronome to sound correctly during playback.
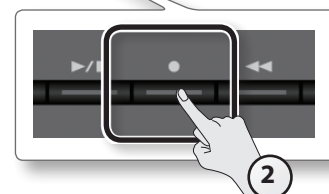
Recording the left hand

1. **Press the [Right] button and the [Accomp] button so their illumination is turned off.**

The [Left] button alone will start blinking, meaning that the unit is ready to record to the [Left] button.
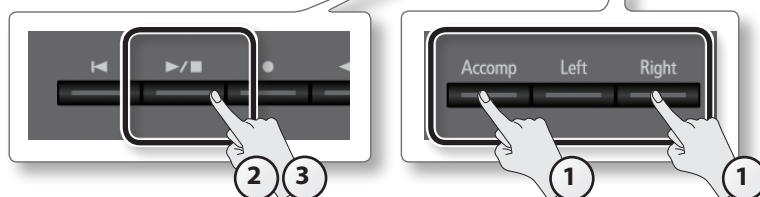
* If you don't specify a part at this time, the recorded performance will be recorded in this order: [Right] button → [Left] button → [Accomp] button.

* If you're using Twin Piano or Split Play, the left side or left-hand tone will be recorded to the [Left] button, and the right side or right-hand tone will be recorded to the [Right] button.

2. **Press the [▶/■] (Play/Stop) button.**

A two-measure count will sound (the measure number in the lower right of the display will indicate "-2," then "-1"), and then recording will start.

When recording starts, the [●] (Rec) button and [▶/■] (Play/Stop) button will light.

> **MEMO**
>
> You can also initiate recording by playing the keyboard. In this case, the count will not sound.

3. **Press the [▶/■] (Play/Stop) button.**

Recording will stop, and a confirmation message will ask whether you want to save the recording.

4. **Either save the performance or erase it (p. 30).**

Overdubbing the right hand

1. **Press the [●] (Rec) button.**

The [●] (Rec) button will light, and the unit will enter recording-standby mode.

At this time, New Song will be selected.

If you decide not to record, press the [●] (Rec) button once again.
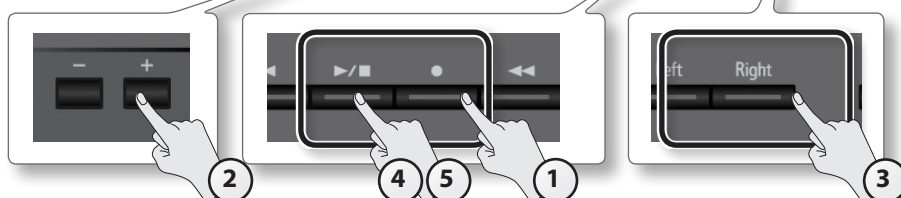
2. **Reselect the song you saved earlier by pressing the [+] button.**

> **MEMO**
>
> The song's tempo and time signature will be as they were when you recorded the left hand.

3. **Press the [Right] button so it's blinking.**

In this state, the right-hand performance will be recorded to the [Right] button. Leave the [Left] button lit.

> **NOTE**
>
> If you select a previously recorded part and then record, your new performance will overwrite that part; the previously recorded performance will be lost.

4. **Press the [▶/■] (Play/Stop) button.**

A two-measure count will be heard (the measure number will be shown as "-2" then "-1" in the lower right of the display), and then recording will start.

The previously recorded performance for the left hand will be played back, so you can listen to it while you play the right-hand part.

When recording starts, the [●] (Rec) button and [▶/■] (Play/Stop) button will light.

> **MEMO**
>
> You can also initiate recording by playing the keyboard. In this case, the count will not sound.

5. **Press the [▶/■] (Play/Stop) button.**

Recording will stop, and a confirmation message will ask whether you want to save the recording.

6. **Either save the performance or erase it (p. 30).**

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Recording a performance you play along with a song

Here's how you can record a performance that you play along with a song.

Getting ready to record

1. **Select the tone that you want record (p. 14).**

2. **Select the song to be dubbed (p. 24).**

3. **Press the [●] (Rec) button.**

The [●] (Rec) button will light, and the unit will enter recording-standby mode.

At this time, New Song will be selected.

If you decide not to record, press the [●] (Rec) button once again.
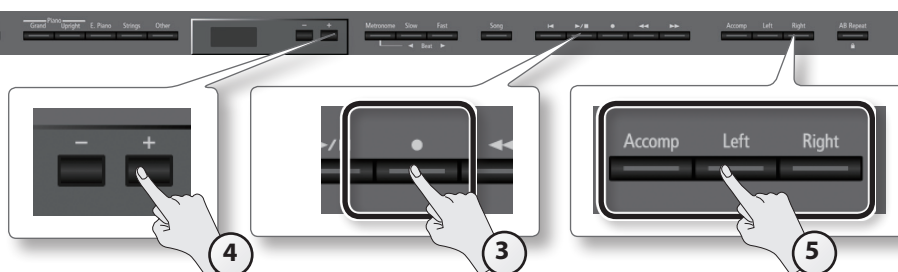
4. **Reselect the song selected in step 2 by pressing the [+] button.**

> **MEMO**
> The song's tempo and time signature will be according to the settings of the song you selected.

5. **Press the part button of the part that you want to record, so it's blinking.**

Parts whose buttons are lit will play back during recording.

> **MEMO**
> If you want to re-record only a portion of the song, use the [◀◀] (Bwd) button or [▶▶] (Fwd) button to move to the measure at which you want to start recording.

Starting/stopping recording

1. **Press the [▶/■] (Play/Stop) button.**

A two-measure count will be heard (the measure number will be shown as "-2" then "-1" in the lower right of the display), and then recording will start.

When recording starts, the [●] (Rec) button and [▶/■] (Play/Stop) button will light.

> **MEMO**
> You can also initiate recording by simply playing the keyboard. If you initiate recording by playing the keyboard, a count will not be sounded.

2. **Press the [▶/■] (Play/Stop) button.**

Recording will stop, and a confirmation message will ask whether you want to save the recording.

3. **Either save the performance or erase it (p. 30).**

Converting a Song Recorded as an SMF to Audio

By converting a song recorded in the form of an SMF to audio, you'll be able to listen to it on your computer. You can also use your computer to burn the song to a music CD, or upload it to the Internet.

Copying an audio recording of a song to your computer

If you save an audio recording of a song on the USB flash drive, you'll be able to listen to it on your computer.

In order for an SMF song recording to be used on your computer, you'll need to convert it to audio (WAV file).

Audio recordings of songs are saved as WAVE files (16-bit, 44.1 kHz).

You can use your computer to burn them to a music CD or upload them to the Internet.
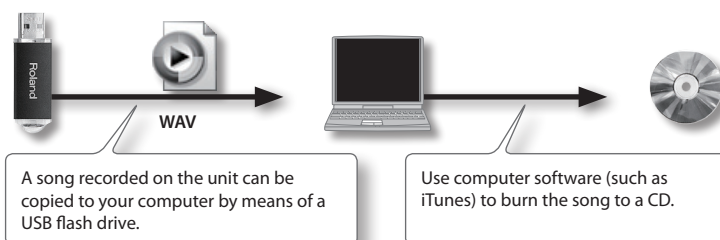
A song recorded on the unit can be copied to your computer by means of a USB flash drive.

Use computer software (such as iTunes) to burn the song to a CD.

1. Connect a USB flash drive (sold separately) to the USB memory port (p. 10).

   * Audio data cannot be saved in the unit itself.

2. Select the song that you want to convert to audio (p. 24).

3. While holding down the [●] (Rec) button, press the [–] [+] buttons to select "Audio."

4. Press the [●] (Rec) button.

The [●] (Rec) button will light, and the [▶/■] (Play/Stop) button will blink; the unit will enter converting-standby mode.

At this time, New Song will be selected.

If you decide not to convert, press the [●] (Rec) button once again.

5. Reselect the song selected in step 2 by pressing the [+] button.

6. Press the [▶/■] (Play/Stop) button.

The song will play back, and the conversion will begin.

MEMO

If, during conversion, you play the keyboard or input something via the USB port (USB MIDI), all sound including those sounds will be converted. Muted parts will not be converted.

NOTE

• Never turn off the power or disconnect the USB flash drive during conversion.

• For some SMF recordings, it might not be possible to perfectly convert the recording in its original form.

7. To end conversion, press the [▶/■] (Play/Stop) button.

A confirmation message will ask whether you want to save the file.

MEMO

Conversion will continue until you press the [▶/■] (Play/Stop) button.

8. Either save the performance or erase it (p. 30).
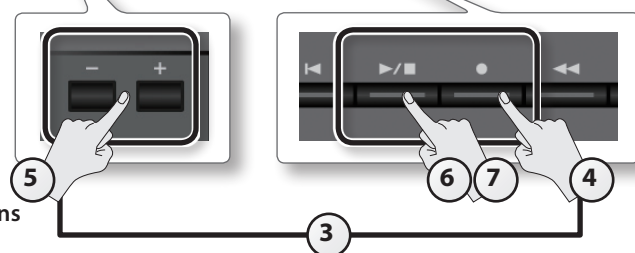
Audio Recording

Here's how to record what you play on the unit as audio data. The recorded song can be used on your computer.

Preparing to record

1. **Connect a USB flash drive (sold separately) to the USB memory port (p. 10).**

   * Audio data cannot be saved in the unit itself.

2. **Select the tone that you want perform (p. 14).**

3. **While holding down the [●] (Rec) button, press the [–] [+] buttons to select "Audio."**

Rec Mode
Audio

4. **Press the [●] (Rec) button.**

The [●] (Rec) button will light, the [▶/■] (Play/Stop) button will blink, and the unit will enter recording-standby mode.

If you decide not to record, press the [●] (Rec) button once again.

5. **If desired, sound the metronome (p. 22).**
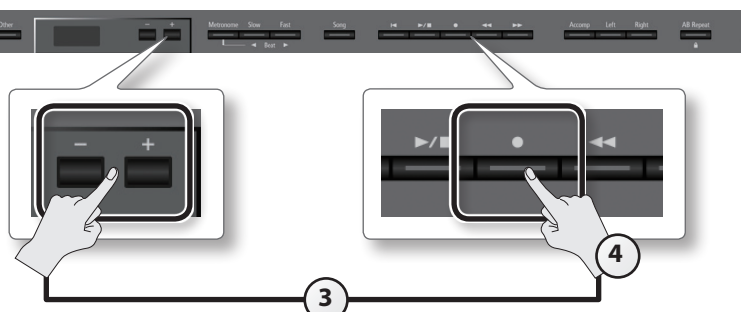
Starting/stopping recording

1. **Press the [▶/■] (Play/Stop) button.**

Recording will start.

When recording starts, the [●] (Rec) button and [▶/■] (Play/Stop) button will light.

   NOTE

   Never turn off the power or disconnect the USB flash drive during recording.

2. **Press the [▶/■] (Play/Stop) button.**

Recording will stop, and a confirmation message will ask whether you want to save the recording.

3. **Either save the performance or erase it (p. 30).**
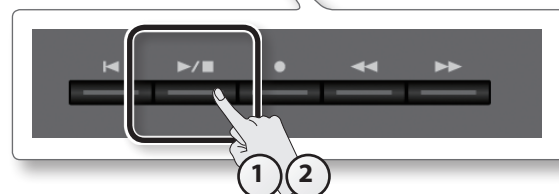
# Transposing a Song for Easier Performance (Audio Transpose)

You can change the key when playing back an audio file. You can play the keyboard while listening to the transposed sound.

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

The [Transpose] button will light.

2. **While holding down the [Transpose] button, press the [–] [+] buttons.**

The display will indicate the amount of transposition.

Screen	Value	Explanation
Trnspose +1	-6–0–+5 (semitone units) (default: +1)	Positive (+) values raise the pitch in semitone steps, and negative (-) values lower the pitch in semitone steps.

MEMO

With the factory settings, both the audio file and the keyboard will be transposed. If you want transposition to affect only the keyboard or only the audio file, make the appropriate setting as described in "Specifying What the Transpose will Affect (Transpose Mode)" (p. 47).

* If you select a different song, the audio transposition setting will be canceled.

3. **To cancel the transposition, press the [Transpose] button once again.**

The [Transpose] button will go out.

Enjoying Karaoke with an Audio File (Center Cancel)

When playing back an audio file, you can minimize the sounds that are heard from the center. For example, this allows you to minimize the melody or vocal on a music CD, so that you can play or sing that part instead.

* For some songs, it might not be possible to completely eliminate the melody sound.

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

The [Right] button will go out, and the melody sound will be minimized.

* The Center Cancel setting will turn off if you select a different song.

2. **When you want the sound to be heard, press the [Right] button once again.**

The [Right] button will light.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Burning an Audio Recording of a Song (WAV file) to a CD

After an audio recording of a song has been saved to the USB flash drive, you can copy it to your computer and burn it to a CD. If you want to burn a CD from a song that you recorded as an SMF, you must first convert it to audio (WAV file) (p. 33).

In order to burn a CD on your computer, you'll need software such as "iTunes."

For details, refer to the owner's manual or the online help of your software.

WAV

A song recorded on the unit can be copied to your computer by means of a USB flash drive.

Use computer software (such as iTunes) to burn the song to a CD.
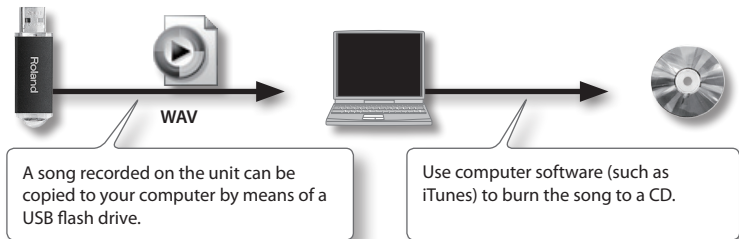
Copy the recorded song to your computer

1. **Connect the USB flash drive containing the song to your computer.**

If you're using Windows, a "Removable disk" icon will appear in "Computer." If you're using Mac OS X, a "NO NAME" icon will appear on the desktop.

2. **Double-click the icon that appeared.**

The contents of the USB flash drive will be displayed.

The audio recording of the song (WAV file) will be among the contents.

3. **Copy the song (WAV file) that you want to burn to CD to your computer's desktop or another location where you can easily find it.**

Copy to desktop

Use iTunes to burn a CD

The following explanation uses iTunes 10 for Windows. If you're using a different version or other software, refer to its online help or owner's manual.

1. **From the Start menu, click [All Programs] - [iTunes].**

2. **From the iTunes [File] menu, click [New Playlist] to create a playlist.**

Newly created playlist

3. **From the desktop (or other location) where you copied it, drag and drop the song (WAV file) to add it to the playlist you created in step 2.**

Drag & drop
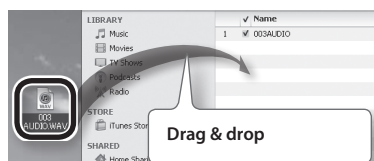
4. **Insert a blank CD-R into your computer.**

5. **Select the playlist that you created in step 2, and in the [File] menu, click [Burn playlist to Disc].**
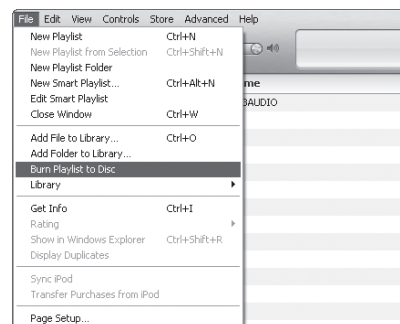
6. **Make the appropriate settings in the disc creation dialog box, and then click the [Burn] button.**
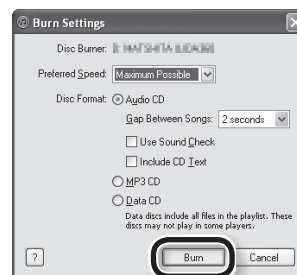
Saving a Song with the Name You Specify

Immediately after you've finished recording, you can save the song to the memory, song number, and song name that you specify.

* If you want to save to the USB flash drive (sold separately), connect your USB flash drive to the USB memory port before you continue.
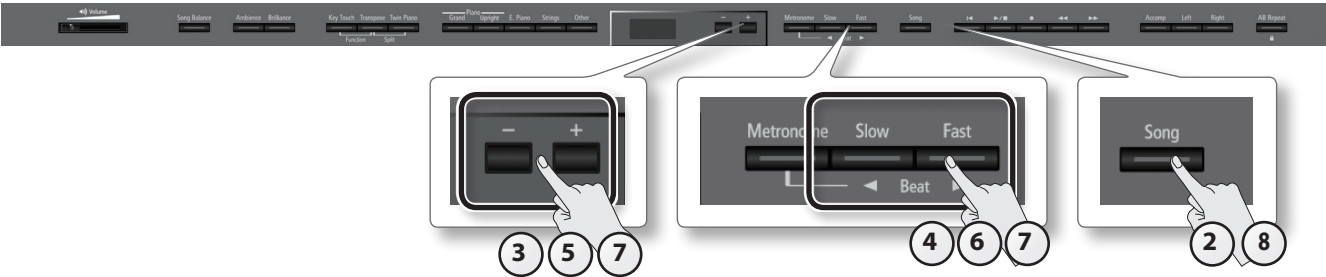
1. **Make sure that you've finished recording, and that the screen shown at the right is displayed.**

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

The media select screen will appear.

3. **Use the [–] [+] buttons to select the save-destination media.**

Display	Save-destination media
U	Internal memory
S	USB flash drive

* If a USB flash drive (sold separately) is not connected, you won't be able to select "USB Memory."

4. **Press the [▶] (Fast) button.**

A screen will appear, allowing you to select the song number of save destination.

5. **Use the [–] [+] buttons to select the song number of save destination.**

No song has been saved in song numbers shown as (Empty) in the song name column.

Choose a song number in which no song has been saved.

If you want to save your song by overwriting an existing song you no longer need, select the song number of that unwanted song.

6. **Press the [▶] (Fast) button.**

A screen will appear, allowing you to specify a name for your song.

7. **Edit the name using the buttons shown in the illustration below.**
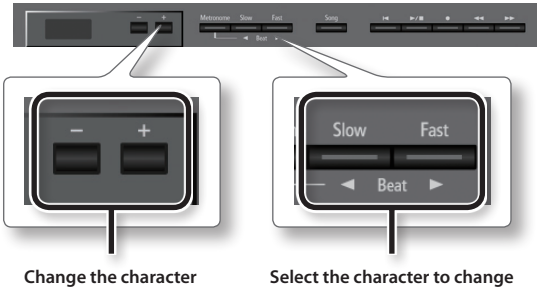
Change the character   Select the character to change

Use the [◀] [▶] (Slow/Fast) buttons to select the position at which you want to specify a character.
Use the [–] [+] buttons to change the character.

8. **Press the [Song] button to save the song.**

If you decide not to save the song, press the [Metronome] button.

NOTE

Never turn off the power or disconnect the USB flash drive while the screen indicates "Working..."

Renaming a Song

Here's how to rename a song you've saved.
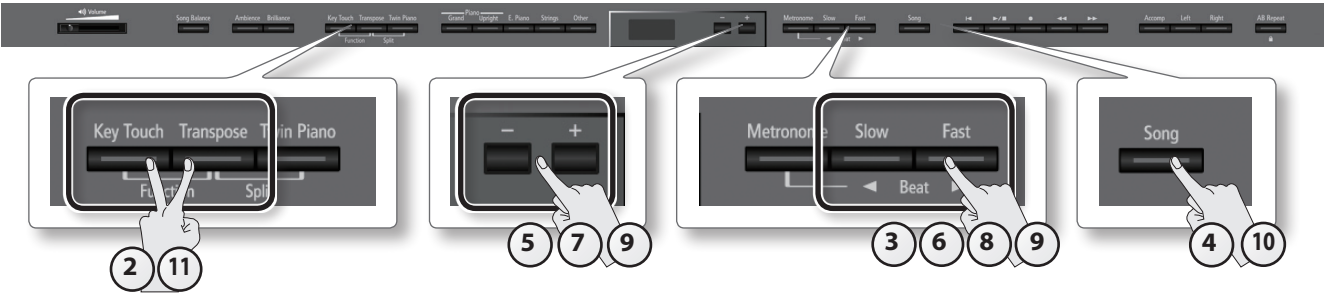
1. Select the song that you want to rename (p. 24).

2. While holding down the [Key Touch] button, press the [Transpose] button.

The [Key Touch] button and [Transpose] button will light, and the unit will enter Function mode.

3. Use the [◀] [▶] (Slow/Fast) buttons to select "SaveSong."

4. Press the [Song] button.

The media select screen will appear.

If you decide not to rename the song, press the [Metronome] button.

5. Use the [–] [+] buttons to select the save-destination media.

Display	Save-destination media
U	Internal memory
S	USB flash drive

6. Press the [▶] (Fast) button.

A screen will appear, allowing you to select the song number of save destination.

7. Use the [–] [+] buttons to select the song number of save destination.

No song has been saved in song numbers shown as (Empty) in the song name column.

If you want to save the song as a new song, choose a song number in which no song has been saved.

If you want to save your song by overwriting an existing song you no longer need, select the song number of that unwanted song.

8. Press the [▶] (Fast) button.

A screen will appear, allowing you to specify the song name.

9. Edit the song name using the buttons shown in the illustration below.

Use the [◀] [▶] (Slow/Fast) buttons to select the position at which you want to specify a character.

Use the [–] [+] buttons to change the character.

10. Press the [Song] button to save the song.

If you decide not to rename the song, press the [Metronome] button.

When the song has been renamed, you will return to the screen of step 3.

Change the character   Select the character to change

NOTE

Never turn off the power or disconnect the USB flash drive while the screen indicates "Working..."

11. Press the [Key Touch] button or the [Transpose] button to finish the procedure.

Convenient Functions

Making the Power Automatically Turn Off After a Time (Auto Off)

With the factory settings, the unit's power will automatically be switched off 30 minutes after you stop playing or operating the unit.

If you don't need the power to turn off automatically, set "Auto Off" to the "OFF" setting as described below.

1. While holding down the [Key Touch] button, press the [Transpose] button.

2. Use the [◀] [▶] (Slow/Fast) buttons to select "Auto Off."

◀Auto Off▶
30

3. Use the [−] [+] buttons to change the setting.

Value	Explanation
OFF	The power will not turn off automatically.
10	The power will automatically turn off if no operation is performed for 10 minutes.
30 (default)	The power will automatically turn off if no operation is performed for 30 minutes.
240	The power will automatically turn off if no operation is performed for 240 minutes (4 hours).

* This setting is automatically stored in the unit.

4. Press the [Key Touch] button or the [Transpose] button to finish the procedure.

NOTE

When turning the unit's power back on after it has been shut down due to the Auto Off function, always make sure to allow at least five seconds to pass after the power has been shut off before you turn the power back on. If you turn it back on too rapidly, the Auto Off function will not have had enough time to reset itself, and you may not be able to turn on the power in the normal way.

Retaining the Settings Even After Power-off (Memory Backup)

The settings of the unit will return to their factory-set state when you turn off the power. However, you can store the settings so that they will be retained even after the power is turned off.

This is called the "memory backup" function.

Parameters Stored in Memory Backup	Page
Ambience (on/off, depth)	p. 18
Brilliance (on/off, depth)	p. 18
Split Point	p. 17
Twin Piano mode	p. 20
Key Touch (on/off, value)	p. 19
Damper Resonance	p. 46
String Resonance	p. 47
Key Off Resonance	p. 47
Dynamic Harmonic	p. 47
Cabinet Resonance	p. 47

Parameters Stored in Memory Backup	Page
Soundboard Behavior	p. 47
Note Volume	p. 47
Note Character	p. 47
Master Tuning	p. 46
Temperament	p. 46
Temperament Key	p. 46
Stretch Tuning	p. 47
Volume Limit	p. 50
Dual Balance	p. 46
Transpose Mode	p. 47
Headphones 3D Ambience	p. 46
Damper Pedal Part	p. 48
MIDI Transmit Channel	p. 48
Visual Control Channel	p. 49

1. While holding down the [Key Touch] button, press the [Transpose] button.

2. Use the [◀] [▶] (Slow/Fast) buttons to select "Backup."

◀Backup ▶

3. Press the [Song] button.

A screen will appear, allowing you to execute the backup.

Backup?
◀N Y▶

4. Press the [▶] (Fast) button to select "Y."

Memory backup will begin.

If you decide to cancel without executing, press the [◀] (Slow) button to select "N."

When the memory backup has been completed, the screen of step 2 will appear.

NOTE

Never turn off the power while the screen indicates "Working..."

5. Press the [Key Touch] button or the [Transpose] button to finish the procedure.

Restoring the Factory Settings (Factory Reset)

Settings that you've stored using the Memory Backup function (p. 39) can be returned to their factory-set state. This is called the "factory reset" function.

NOTE

When you execute "Factory Reset," all stored settings will be erased and returned to the factory settings.

MEMO

This function will not erase the songs from the internal memory or the USB flash drive (sold separately).
If you want to erase the internal memory or the USB flash drive, "Initializing the Memory (Format Media)" (p. 41).

1. While holding down the [Key Touch] button, press the [Transpose] button.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

2. Use the [◀] [▶] (Slow/Fast) buttons to select "FctReset."

```
◀FctReset
```

3. Press the [Song] button.

A screen will appear, allowing you to execute factory reset.

```
ResetOK?
◀N    Y▶
```

4. Press the [▶] (Fast) button to select "Y."

Factory reset will begin.

If you decide to cancel without executing, press the [◀] (Slow) button to select "N."

When the factory reset has been completed, the screen will indicate "END."

NOTE

Never turn off the power while the screen indicates "Working..."

5. Turn the power off, then on again (p. 13).

Copying a Saved Song (Copy Song)

Songs that have been saved in the internal memory can be copied to USB flash drive (sold separately). Alternatively, songs stored on the USB flash drive can be copied to the internal memory.

* Audio files cannot be copied.

* If a USB flash drive (sold separately) is not connected, you won't be able to perform this operation.

1. While holding down the [Key Touch] button, press the [Transpose] button.

2. Press the [◀] [▶] (Slow/Fast) button to choose "Copy Song."

```
◀CopySong▶
```

3. Press the [Song] button.

A screen will appear, allowing you to select the copy-source and destination memory locations.

```
User→USB▶
U -> S
```

If you decide not to copy the song, press the [Metronome] button.

4. Use the [–] [+] buttons to select the copy-source and copy-destination memory locations.

5. Press the [▶] (Fast) button.

```
◀Song 001▶
U.001
```

6. Press the [–] [+] button to select the song that you want to copy.

MEMO

If you choose "ALL," all songs except for audio files in the copy-source memory will be copied.

7. Press the [▶] (Fast) button.

```
◀(Empty)
S.001
```

8. Use the [–] [+] buttons to select the copy-destination number.

No song has been saved at song numbers for which (Empty) is shown as the song name.

Select a song number at which no song has been saved.

If you want to delete an unwanted song and replace it with the song you're copying, select the unwanted song number.

9. Press the [Song] button to copy the song.

If you decide not to copy, press the [Metronome] button.

Once the song has been copied, you'll be returned to the screen of step 2.

NOTE

Never turn off the power or disconnect the USB flash drive while the screen indicates "Working..."

10. Press the [Key Touch] button or the [Transpose] button to finish the procedure.

Deleting a Saved Song (Delete Song)

Here's how to delete a song that you saved on the internal memory or the USB flash drive (sold separately).

MEMO

• If you want to delete all songs that have been saved to the internal memory, initialize the memory.

• If you want to delete a song on the USB flash drive (sold separately), connect your USB flash drive to the USB memory port before you continue.

1. While holding down the [Key Touch] button, press the [Transpose] button.

2. Use the [◀] [▶] (Slow/Fast) buttons to select "Del Song."

```
◀Del Song▶
```

3. Press the [Song] button.

A screen will appear, allowing you to select the memory location that contains the song you want to delete.

```
User       ▶
U -- -- --
```

If you decide not to delete the song, press the [Metronome] button.

4. Use the [–] [+] buttons to select the memory location that contains the song you want to delete.

5. Press the [▶] (Fast) button.

```
◄Song 001
U.001
```

6. Use the [–] [+] buttons to select the song that you want to delete.

7. Press the [Song] button.

A confirmation message will appear.

```
Delete?
◄N      Y►
```

8. Press the [▶] (Fast) button to select "Y."

Deletion of the song will begin.

If you decide to cancel without deleting, press the [◄] (Slow) button to select "N."

Once the song is deleted, you'll be returned to the screen you were in at step 2.

NOTE

Never turn off the power or disconnect the USB flash drive while the screen indicates "Working..."

9. Press the [Key Touch] button or the [Transpose] button to finish the procedure.

Initializing the Memory (Format Media)

Here's how you can completely erase all songs that were saved in the internal memory or the USB flash drive (sold separately).

NOTE

• Once an initialization is performed, all songs that have been saved in the internal memory or the USB flash drive will be erased. The erased data cannot be recovered, so we recommend that you check the contents of memory before you proceed.

• If you're using new USB flash drive (sold separately) with the unit for the first time, you'll need to initialize (format) the USB flash drive before using it. The unit can't use USB flash drive that has not been initialized.

If you want to format USB flash drive, connect the USB flash drive to the USB memory port (p. 10).

1. While holding down the [Key Touch] button, press the [Transpose] button.

2. Use the [◄] [▶] (Slow/Fast) buttons to select "Format."

```
◄Format   ►
```

3. Press the [Song] button.

A screen will appear, allowing you to proceed with the format.

```
User
```

If you decide not to proceed with the format, press the [Metronome] button.

4. Use the [–] [+] buttons to select the memory that you want to initialize.

5. Press the [Song] button.

A confirmation message will appear.

```
Format?
◄N      Y►
```

6. Press the [▶] (Fast) button to select "Y."

Formatting of the media will begin.

If you decide not to initialize, press the [◄] (Slow) button.

Once the initialization is finished, you'll be returned to the screen you were in at step 2.

7. Press the [Key Touch] button or the [Transpose] button to finish the procedure.

Caution when initializing the memory

• Never turn off the power while "Working..." is shown in the display.

• If the screen indicates "Error," please refer to "Error Messages" (p. 53).

• Initializing the unit's internal memory will not initialize settings other than the contents of the internal memory. If you want to return settings other than the contents of the internal memory to their factory-set condition, execute the Factory Reset operation (p. 39).

• Don't disconnect the USB flash drive until USB flash drive initialization has been completed.

Disabling the Buttons (Panel Lock)

When you activate Panel Lock, all buttons will be disabled.

This prevents the tones or settings from being changed if you inadvertently press a button.

1. **Hold down the [AB Repeat] button until the following display appears.**

Panel Lock will be activated.

All button operations will be disabled.

> Lock

2. **To cancel Panel Lock, once again hold down the [AB Repeat] button for a while.**

Panel Lock will also be cancelled when you turn off the power.

MEMO

- If you activate Panel Lock while a song is playing, playback will stop.
- You can't activate Panel Lock during recording, while in Function mode (p. 46), or during Tone Demo (p. 14).

About the Wireless LAN Function

By inserting the wireless USB Adapter (WNA1100-RL; sold separately) into the unit's USB MEMORY port, you'll be able to use wireless-compatible applications (such as the "Piano Partner" iPad app).

iPad etc.   **Wireless LAN access point (e.g., wireless LAN router)**   **unit**

Wireless USB Adapter (sold separately: WNA1100-RL)

Wireless LAN   Wireless LAN
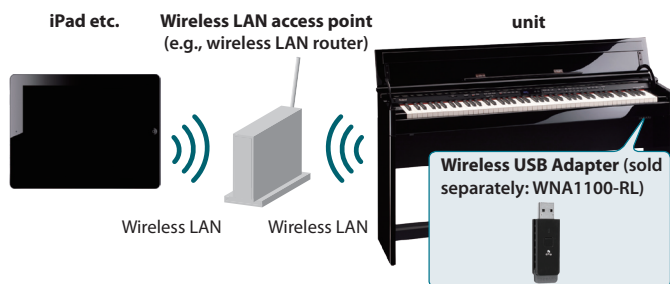
Items required to use the wireless LAN function

- Wireless USB Adapter (sold separately: WNA1100-RL)
- Wireless LAN access point (e.g., wireless LAN router) *1 *2 *3
- iPad etc.

*1 The wireless LAN access point you use must support WPS. If your wireless LAN access point does not support WPS, you can connect using the procedure described in "Connecting to a Wireless LAN Access Point That You Select (Select AP)" (p. 44).

*2 The ability to connect with all kinds of wireless LAN access points is not guaranteed.

*3 If you're unable to connect to the wireless LAN access point, try connecting using Ad-Hoc mode (p. 45).

*4 Depending on the wireless LAN system that you're using, you might be unable to connect, or the connection might be dropped.

*5 Depending on the wireless device used by the wireless LAN function, noise might be heard from the unit. In this case, you may be able to improve the situation by moving the wireless device away from the unit, or by changing the wireless connection mode (WPS / Ad-Hoc mode).

*6 The sound and functionality might be temporarily affected while a connection is being established; this is not a malfunction.

Basic Connection Method (Connect by WPS)

The first time you connect the unit to a wireless network, you'll need to perform the following procedure (WPS) to join the wireless network.

This procedure is required only the first time. (Once you've joined the network, this procedure will no longer be necessary.)

What is WPS?

This is a standard that makes it easy to make security settings when connecting to a wireless LAN access point. We recommend that you use WPS when connecting to a wireless LAN access point.

1. Insert the wireless USB Adapter (WNA1100-RL; sold separately) into the unit's USB MEMORY port.

2. While holding down the [Key Touch] button, press the [Transpose] button.

3. Press the [◀] [▶] (Slow/Fast) buttons to select the "Wireless," then press the [Song] button.

4. Press the [◀] [▶] (Slow/Fast) buttons to select the "Connect," then press the [Song] button.

5. Press the [◀] [▶] (Slow/Fast) buttons to select the "WPS," then press the [Song] button.

"Proceed?" will appear.

6. Perform the WPS operation on your wireless LAN access point (e.g., press the WPS button on your wireless LAN access point).

For details on WPS operation of your wireless LAN access point, refer to the documentation for your wireless LAN access point.

7. Press the [▶] (Fast) button of the unit.

Once successfully connected, "Success" will appear.

* If you fail to connect, refer to "Problems when connecting to a wireless LAN" (p. 52).

8. Press the [Key Touch] or [Transpose] button to exit Function mode.

> **NOTE**
>
> The device (e.g., iPad) running the app must be connected to the same network.

> **MEMO**
>
> - The connection data is stored in memory when you perform the WPS procedure; the device will automatically connect to the wireless network the next time.
> - All connection data will be erased if you perform a factory reset.

This completes the procedure necessary for joining the wireless network. You can use the wireless connection from an iPad app such as Piano Partner.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Wireless LAN Function Settings

You can view or edit the wireless settings.

Basic Operation

1. **While holding down the [Key Touch] button, press the [Transpose] button.**

2. **Press the [◀] [▶] (Slow/Fast) buttons to select the "Wireless," then press the [Song] button.**

3. **Press the [◀] [▶] (Slow/Fast) buttons to select menu, then press the [Song] button.**

Menu	Explanation
Status	This shows the wireless LAN status.
Connect	Connect to a wireless LAN access point.
Option	Make settings for Wireless ID or Ad-Hoc mode (p. 45).

In the explanations in this Chapter, procedures will be indicated using arrows, like this: **"Wireless" → "Status."**

Status Indication

This shows the wireless LAN status.

1. **Select "Wireless" → "Status."**

The status screen will appear.

Display		Explanation
_ o 0	Signal level: Strong	Currently connected to the wireless LAN access point.
_ o o	Signal level: Middle	Three bars are used to indicate the signal level (the strength of the connected wireless LAN access point's radio signal).
_ _ _	Signal level: Weak	The identifier (name) of the connected wireless LAN access point is shown.
Not Con		The wireless USB adapter is inserted, but not connected to a wireless LAN access point.
NotAvail		The wireless USB adapter is not inserted.
DP90S/90 **SSID**		Ad-Hoc mode (p. 45). The Ad-Hoc SSID is shown. Press the [▶] (Fast) button to display the Ad-Hoc key. For details, refer to "Connecting in Ad-Hoc Mode" (p. 45).

2. **Press the [▶] (Fast) button to display the IP address.**

Connecting to a Wireless LAN Access Point That You Select (Select AP)

This method lets you connect by choosing a wireless LAN access point from the list that is displayed.

* Wireless standards 802.11g/n (2.4 GHz) and authentication methods WPA/WPA2 are supported.

1. **Select "Wireless" →"Connect" → "Select AP," then press the [Song] button.**

The Select Access Point screen will appear.

An "*" symbol is shown for the currently-connected wireless LAN access point.

2. **Press the [−] [+] button to choose the wireless LAN access point to which you want to connect, and press the [Song] button.**

   • You will be connected to the selected wireless LAN access point.

   • If you're using this wireless LAN access point for the first time, you'll proceed to the authorization (PASS) screen.

   • If this is a wireless LAN access point to which you have connected in the past, just press the [Song] button and you'll be connected. Once successfully connected, "Success" will appear.

Authorization screen (PASS)

3. **Enter the security code (passphrase) of your wireless LAN access point, and press the [Song] button.**

   How to enter characters

   Use the [◀] [▶] (Slow/Fast) buttons to select the position at which you want to specify a character. Use the [−] [+] buttons to change the character.

   * You cannot enter a space at the end of the passphrase.
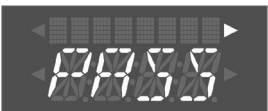
Once successfully connected, "Success" will appear.

   * If you fail to connect, refer to "Problems when connecting to a wireless LAN" (p. 52).

4. **Press the [Key Touch] or [Transpose] button to exit Function mode.**

Other Settings (Option)

Make settings for Wireless ID or Ad-Hoc mode.

1. Select "Wireless" → "Option."

2. Press the [◀] [▶] (Slow/Fast) buttons to select the parameter that you want to change.

3. Press the [–] [+] button to edit the value of the setting.

```
◀ ID         ▶
   0
```

Parameter	Explanation
ID (Wireless ID)	Specifies the final digits of the unit's device name and Ad-Hoc SSID (DP90S/90) that will be shown as the instrument in the wirelessly connected app. Normally, you should specify "0," but if you have more than one of the same instrument, you can set the Wireless ID in the range of 1–99 to change the device name and Ad-Hoc SSID for each instrument, as follows. If Wireless ID=0, "DP90S/90" (default value) If Wireless ID=1, "DP90S/90_1" : If Wireless ID=99, "DP90S/90_99"
Ad-Hoc Ch.	Specifies the channel (1–11) for Ad-Hoc mode. Normally, you won't need to change the channel. Try changing the channel only if you have problems connecting.

Connecting in Ad-Hoc Mode

Here's how to connect in Ad-Hoc mode.

What is Ad-Hoc mode?

Ad-Hoc mode lets you connect the unit directly to an iPad or other wireless device without using a wireless LAN access point. This is a convenient way to use the unit with an iPad or other wireless device if you're in a location where the wireless LAN access point you normally use is unavailable, such as when you're away from home.

iPad etc.   **unit**

Wireless LAN

Wireless USB Adapter (sold separately: WNA1100-RL)

Limitations

The iPad or other wireless device connected in Ad-Hoc mode will be unable to communicate with the Internet or with another wireless device. However, an iPad or other wireless device that has cellular capability will be able to connect to the Internet via the cellular connection.

Please be aware that if you use a cellular connection for Internet connectivity, you may incur costs depending on your rate plan.

1. Select "Wireless" → "Option" → "Ad-Hoc," then press the [Song] button.

2. Press the [▶] (Fast) button to turn the Ad-Hoc Mode "On."
   * To turn off Ad-Hoc Mode, press the [◀] (Slow) button.

3. Once in Ad-Hoc Mode, the Ad-Hoc SSID (DP90S/90) will be displayed. Press the [▶] (Fast) button to display the Ad-Hoc key (a five-character text string). Write down this number.

> The Ad-Hoc key is the five-digit number that's displayed here. Each piano has its own unique number.

```
◀ DP90S/90▶        38023
   SSID             KEY
```

MEMO
- The Ad-Hoc SSID (DP90S/90) will be the value that you specified in the WIRELESS OPTIONS screen "Wireless ID" setting.
- The Ad-Hoc SSID and the Ad-Hoc key can also be verified in the status screen.

4. On the iPad or other wireless device that you want to connect, select the Ad-Hoc SSID shown in the above screen to make the connection. (For example, on an iPad, choose [Settings] → [Wi-Fi] → [Choose a Network] to select the above Ad-Hoc SSID (DP90S/90). A password entry screen will appear; enter the above Ad-Hoc key.)

For details on how to connect to a wireless LAN from an iPad or other device, refer to the owner's manual of that device.

5. Press the [Key Touch] or [Transpose] button to exit Function mode.

6. When you have finished the Ad-Hoc mode connection, restore the iPad settings in [Settings] → [Wi-Fi] → [Choose a Network] to their previous state.

Checking the MAC Address

The MAC address indicated on the bottom of the wireless USB adapter (WNA1100-RL; sold separately).

Various Settings (Function Mode)

The same procedure is used for all settings in Function mode.

1. **While holding down the [Key Touch] button, press the [Transpose] button.**

   The [Key Touch] button and [Transpose] button will light; the unit will be in Function mode.

2. **Press the [◄] [►] (Slow/Fast) buttons to select the function setting that you want to change.**

3. **Press the [–] [+] button to edit the value of the setting.**

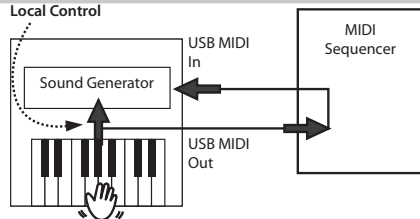4. **Press the [Key Touch] button or the [Transpose] button to exit Function mode.**

Indication	Value	Explanation
Phones3D (*1)		**Applying a Headphones 3D Ambience Effect to the Piano Sound (Headphones 3D Ambience)**
		When using headphones, you can apply a Headphones 3D Ambience effect which produces the sensation that the sound is emanating from the piano itself.
	ON	Headphones 3D Ambience is on.
	OFF	Headphones 3D Ambience is off.
Dual Bal (*1)		**Adjusting the Dual Play Volume Balance (Dual Balance)**
		When using Dual Play, you can adjust the volume balance between tone 1 and tone 2.
	9-1 (tone 1 is louder)–9-9 (same volume)–1-9 (tone 2 is louder)	
Tuning (*1)		**Matching the Pitch with Other Instruments (Master Tuning)**
		When playing ensemble with other instruments and in other such instances, you can match the standard pitch to another instrument.
		The standard pitch generally refers to the pitch of the note that's played when you finger the middle A key (A4). For a cleaner ensemble sound while performing with one or more other instruments, ensure that each instrument's standard pitch is in tune with that of the other instruments. This tuning of all the instruments to a standard pitch is called "master tuning."
	415.3–440.0–466.2 Hz	

Changing the Tuning Method (Temperament) — **Temprmnt (*1)**

You can play classical styles such as Baroque using historic temperaments (tuning methods).

Most modern songs are composed for and played in equal temperament, the most common tuning in use today. But at one time, there were a wide variety of other tuning systems in existence. By playing in the temperament that was in use when a composition was created, you can experience the sonorities of chords originally intended for that song.

Screen	Explanation	Qualities
EQU	Equal	In this tuning, each octave is divided into twelve equal steps. Every interval produces about the same amount of slight dissonance.
MAJ	Just Major	This tuning eliminates ambiguities in the fifths and thirds. It is unsuited to playing melodies and cannot be transposed, but is capable of beautiful sonorities.
MIN	Just Minor	The Just tunings differ from major and minor keys. You can get the same effect with the minor scale as with the major scale.
PYTH	Pythagorean	This tuning, devised by the philosopher Pythagoras, eliminates dissonance in fourths and fifths. Dissonance is produced by third-interval chords, but melodies are euphonious.
KIRN	Kirnberger	This is an improvement of the Meantone and Just tunings that provides a high degree of freedom of modulation. Performances are possible in all keys (III).
MEAN	Meantone	This scale makes some compromises in just intonation, enabling transposition to other keys.
WERC	Werckmeister	This temperament combines the Meantone and Pythagorean tunings. Performances are possible in all keys (first technique, III).
ARB	Arabic	This tuning is suitable for the music of Arabia.

Specifying a Song's Tonic (Temperament Key) — **Tmpr Key (*1)**

When playing with tuning other than equal temperament, you need to specify the temperament key for tuning the song to be performed (that is, the note that corresponds to C for a major key or to A for a minor key).

If you choose an equal temperament, there's no need to select a temperament key.

C, C$^\sharp$, D, E$^\flat$, E, F, F$^\sharp$, G, A$^\flat$, A, B$^\flat$, B

* In the display, a quotation mark (") signifies a sharp (#).

Producing Sympathetic Resonance When You Press the Damper Pedal (Damper Resonance) — **Dmpr Res (*1)**

This adjusts the damper resonance of the acoustic piano sound (the sympathetic vibration produced in strings other than those actually played when you press the damper pedal).

Higher settings will make the sympathetic vibration louder.

OFF, 1–10

Indication	Value	Explanation
Strg Res (*1)	**Producing the Resonance of the Strings When the Keys Are Played (String Resonance)**	
	This adjusts the string resonance of the acoustic piano sound (the sympathetic vibrations of strings for previously played notes that occur when you play another note). Higher settings will make the sympathetic vibration louder.	
	OFF, 1–10	
KOff Res (*1)	**Playing Sounds When the Keys Are Released (Key Off Resonance)**	
	This adjusts sympathetic vibrations such as an acoustic piano's key-off sound (the subtle sound that occurs when you release a note). Higher settings will make the sympathetic vibration louder.	
	OFF, 1–10	
DynHarmo (*1)	**Adjusting the Metallic Sound That Occurs When You Play a Note (Dynamic Harmonic)**	
	This adjusts the metallic resonance that is produced when you play strongly on an acoustic piano. Higher settings will produce a louder metallic sound.	
	OFF, 1–10	
Cabinet (*1)	**Adjusting the Sympathetic Resonance of the Grand Piano Body (Cabinet Resonance)**	
	Adjusts the body resonance of the grand piano itself. Higher values will produce a larger body resonance.	
	OFF, 1–10	
SoundBrd (*1)	**Adjusting the Clarity of Individual Notes in a Chord (SoundBoard Behavior)**	
	When you play a chord, this setting improves the clarity of the individual notes in the chord, creating a more beautiful resonance. Higher settings produce a clearer resonance.	
	OFF, 1–10	
Stretch (*1)	**Using a Piano's Unique Tuning (Stretch Tuning)**	
	This lets you specify the amount of "stretch tuning," a tuning method specifically for pianos, in which the high range is tuned slightly sharper, and the low range is tuned slightly flatter. If you select "ON," a standard tuning curve created for the unit will be used.	
	OFF, 1, 2, USER (USER: -50–0–+50)	
Note Vol (*1)	**Adjusting the volume of each Individual Key (Note Volume)**	
	This lets you adjust the volume of each individual key. Higher settings will make the volume louder. If you select "USER," and then press the [Song] button, you'll be able to edit the Note Volume settings. Press the key whose volume you want to adjust, and use the [–] [+] buttons to adjust its volume.	
	OFF, USER (USER: -50–0)	
NoteChar (*1)	**Adjusting the tonal character of Each Individual Key (Note Character)**	
	This lets you adjust the tonal character of each individual key. Higher settings will make the tone harder, and lower settings will make the tone softer. If you select "USER," and then press the [Song] button, you'll be able to adjust the Note Character settings. Press the key whose tone you want to adjust, and use the [–] [+] buttons to adjust its tone.	
	OFF, USER (USER: -5–0–+5)	
Trnspose (*1)	**Specifying What the Transpose will Affect (Transpose Mode)**	
	This setting specifies what the transpose will affect. You can use the transpose to change the pitch of both the song and the keyboard, only the pitch of the song, or only the pitch of the keyboard.	
	KBD	The sound of the keyboard
	SONG	The song being played back
	BOTH	The sound of the keyboard and the song being played back
Oct Shft	**Changing the Pitch of the Tone in Octave Steps (Octave Shift)**	
	You can change the pitch of the Tone 2 in Dual Play (p. 15) and Lower tone in Split Play (p. 16) an octave at a time. Altering the pitch in one-octave units in this way is called "Octave Shift." For example, you can raise the pitch of the Lower Tone to the same pitch of the Upper Tone in Split Play.	
	-2–0–+2 (octave)	

MEMO

(*1) This parameter can be saved by the "Memory Backup" operation (p. 39).

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Various Settings (Function Mode)

Indication	Value	Explanation
Rec Mode		## Selecting the Format for Recording (Recording Mode) You can choose whether to record as SMF or as audio. **MEMO** You can also switch the recording mode by holding down the [●] (Rec) button and using the [–] [+] buttons.
	SMF	SMF parts will be recorded separately. This allows you to re-record just a single part, or to overdub different parts.
	Audio	The recording will be made as audio data. The recorded song can be used in your computer.
DPdl Prt (*1)		## Changing How the Pedal Effects Are Applied (Damper Pedal Part) When you press the damper pedal during Dual play or Split play, the pedal effect is normally applied to both tones, but you can also select the tone to which the effect is to be applied.
	R+L	All enabled
	R	Applied only to the Tone 1 (in dual mode)/Right-hand Tone (in split mode)
	L	Applied only to the Tone 2 (in dual mode)/Left-hand Tone (in split mode)
CPdl Fnc		## Changing How the Pedals Work (Center Pedal) When you turn on the power, the center pedal functions as the sostenuto pedal (p. 10). You can change the function of the pedal to a variety of other operations.
	SOST	Sets function to sostenuto pedal.
	PLAY	The pedal will have the same function as the [▶/■] (Play/Stop) button.
	LAYR	Pressing the pedal will layer on Tone 2, used for Dual play. * The Layer function can be applied only when using Dual play.
	OCT	Pressing the pedal will layer on a sound one octave higher. * The Octave function cannot be applied while using Twin Piano, Dual play, or Split play.
LocalCtl		## Preventing Doubled Notes When Connected to a Sequencer (Local Control) When you have a MIDI sequencer connected via USB, set this parameter to Local Off. Since most sequencers have their Thru function turned on, notes you play on the keyboard may be sounded in duplicate, or get dropped. To prevent this, you can enable the "Local Off" setting so that the keyboard and internal sound generator will be disconnected.
	OFF	Local Control is off. The keyboard and composer are disconnected from the internal sound generator. Playing the keyboard will not produce sound.
	ON	Local Control is on. The keyboard and composer are connected to the internal sound generator.
MIDI Ch (*1)		## MIDI Transmit Channel Settings (MIDI Transmit Channel) This setting specifies the MIDI channel on which the unit will transmit. MIDI uses sixteen "MIDI channels," which are numbered 1 through 16. By connecting MIDI devices (USB MIDI) and specifying the appropriate MIDI channel for each device, you can play or select sounds on those devices. The unit will receive all sixteen channels (1–16).
	OFF, 1–16	
SaveSong		## Renaming a Song (Save Song) Here's how to rename a song you've saved (p. 38).
CopySong		## Copying a Saved Song (Copy Song) A song you've saved to the internal memory can be copied to the USB flash drive. Alternatively, a song saved to the USB flash drive can be copied to the internal memory. (p. 40)
Del Song		## Deleting a Saved Song (Delete Song) You can delete a saved song from the internal memory or the USB flash drive. (p. 40)
Format		## Initializing the Memory (Format Media) You can delete all songs from the internal memory or a separately sold USB flash drive. (p. 41)

Indication	Value	Explanation
USB Drv		## Changing the USB Driver Settings (USB Driver) Normally, you don't need to install a driver in order to connect the unit to your computer. However, if some problem occurs, or if the performance is poor, using the Roland original driver may solve the problem. In this case, set the unit's "USB Driver" setting to "ORG," and then install the driver in your computer. After changing this setting, you need to turn off the unit, then turn it back on again. **MEMO** This setting is automatically saved in the unit. For details on downloading and installing the Roland original driver, refer to the Roland website. Roland website: **http://www.roland.com/**
	GEN	Choose this if you want to use the generic USB driver that was included with your computer. Normally, you should use this mode.
	ORG	Choose this if you want to use a USB driver downloaded from the Roland website.
USB Mode		## Changing the USB flash drive Setting (USB Memory Mode) In some cases, when USB flash drive is connected to the USB memory port, it may take longer for data to be loaded, or data may fail to be loaded successfully. If this occurs, you may be able to solve the problem by changing the USB flash drive setting. When the unit left the factory, this was set to "2" Normally, there is no need to make this setting. After changing this setting, you need to turn off the unit, then turn it back on again. **MEMO** This setting is automatically saved in the unit.
	1, 2	
VC Mode		## Controlling Video Equipment (Visual Control Mode) Visual Control is a function that lets you control images along with your performance. If you've set Visual Control mode to MVC or VLNK, playing the keyboard of unit will control the images produced by the Visual Control device connected to unit using a USB cable.
	OFF	Visual Control is off.
	MVC	MIDI Visual Control mode is selected.
	VLNK	V-LINK mode is selected.
VC Ch (*1)		## Specifying the Visual Control Channel Here's how to specify the channel on which messages used to control video will be sent.
	1–16	Specifies the MIDI channel used to transmit MIDI messages to the Visual Control device.

What is MIDI Visual Control?

MIDI Visual Control is an internationally-used recommended practice that was added to the MIDI specification so that visual expression could be linked with musical performance. Video equipment that is compatible with MIDI Visual Control can be connected to electronic musical instruments via MIDI in order to control video equipment in tandem with a performance.

What is V-LINK?

V-LINK is Roland's proprietary specification that allows visual expression to be linked with musical performance. Video equipment that is compatible with V-LINK can be connected to electronic musical instruments, making it easy to enjoy a variety of visual effects that are linked with the performance.

Connection examples

Connect a USB cable from this unit's USB port (p. 10) to the USB port of your Visual Control compatible device.

* You'll need a commercially available USB cable in order to connect this unit to a device that supports Visual Control.

Visual control function chart

Playing the lowest 12 keys of this unit (A0–G#1) will transmit the following MIDI messages.

Visual Control function	Transmitted MIDI message	Unit's operation
Switch images	CC 0 (Bank Select): 0–4	Play black keys
	Program Change: 1–7	Play white keys

MEMO
(*1) This parameter can be saved by the "Memory Backup" operation (p. 39).

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Various Settings (Function Mode)

Indication	Value	Explanation
Wireless		**Wireless LAN Function Settings**
		You can view or edit the wireless settings (p. 44).
VolLimit (*1)		**Specifying the Maximum Volume (Volume Limit)**
		You can specify the maximum volume setting. This will prevent undesirably high volumes even if the [Volume] slider are operated unintentionally.
	20, 40, 60 ,80, 100	
Auto Off		**Making the Power Automatically Turn Off After a Time (Auto Off)**
		With the factory settings, the unit's power will automatically be switched off 30 minutes after you stop playing or operating the unit.
		If you don't want the power to turn off automatically, change the "Auto Off" setting to "OFF" as follows. (p. 39)
		MEMO This setting is automatically saved in the unit.
Backup		**Storing Your Settings (Memory Backup)**
		The unit's settings will return to their default settings when you turn off the power, but you can store these settings so that they will retain the changes you made even after the power is turned off, then on again. (p. 39)
FctReset		**Restoring the Factory Settings (Factory Reset)**
		When you execute the "Factory Reset" function, the settings you've edited in Function mode will be restored to their factory-set state. (p. 39)

MEMO

(*1) This parameter can be saved by the "Memory Backup" operation (p. 39).

♪ Troubleshooting

Symptom	Cause/Action	Page
Even though you're using head-phones and the sound is muted, a thumping sound is heard when you play the keyboard	The unit uses a hammer action keyboard in order to simulate an acoustic piano's playing touch as realistically as possible. For this reason, you'll hear the hammers thump when you play the keyboard, just as you would when playing an acoustic piano. Since this unit allows you to adjust its volume, you might notice the sound of the hammers in certain situations, but this does not indicate a malfunction. If vibration transmitted to the floor or walls is a concern, you may be able to minimize the vibration by moving the piano away from the wall, or by laying down a commercially available anti-vibration mat designed for use with pianos.	–
Power turns off on its own	When 30 minutes have elapsed since you last played or operated this unit, the power will turn off automatically. (This is the factory setting). If you don't need the power to turn off automatically, turn the "Auto Off" setting "OFF."	p. 39
Power does not turn on	Is the AC adaptor connected correctly?	p. 63
	Could the power have been turned off by the auto-off function? If you want to turn on the power after the auto-off function has turned it off, operate the [Power] switch to turn the power on again.	p. 39
Nothing appears in the display	Since the unit uses a liquid-crystal display, you may find that it is unable to display letters or other things in environments where temperatures go below 0 degrees Celsius (32 degrees Fahrenheit).	–
Can't perform operations	Could Panel Lock be activated? Disengage the Panel Lock setting.	p. 42
Pedal does not work, or is "stuck"	Is the pedal connected correctly? Plug the cable firmly into the pedal connector.	p. 63
	If you disconnect the pedal cord from the unit while the power is on, the pedal effect may remain "stuck" in the On condition. You must power-off the unit before connecting or disconnecting the pedal cord.	p. 63
	Could you have changed how the pedal effect is applied? If the damper pedal part is set to "R," the pedal will apply only to the right tone; if it is set to "L," the pedal will apply only to the left tone.	p. 48
	Could Twin Piano be turned on? If Twin Piano is on, the right pedal will affect only the right-hand keyboard zone and the left pedal will affect only the left-hand keyboard zone.	p. 20
	Could you have changed the function of the pedal? If you've reassigned the function of the center pedal, this pedal will not operate as the sostenuto pedal.	p. 48
Unable to read from/write to USB flash drive	Are you using (optional) Roland USB flash drive? Reliable performance cannot be guaranteed if you use non-Roland USB flash drive products.	–
	If you are unable to read or write USB flash drive successfully, change the USB memory mode.	p. 49
"Buzz" is heard from external devices	Are the external devices connected to more than one AC power outlet? If you connect external devices, be sure to connect them to the same AC outlet.	–
The volume level of the instrument connected to Input jack is too low.	Raise the volume of the connected device.	–
	Could you be using a connection cable that contains a resistor? Use a connection cable that does not contain a resistor.	–
No sound		
No sound	Could the unit's volume or the volume of the connected equipment be turned down?	p. 6, p. 13
	Could headphones be connected? Could there be a plug inserted in a headphone jack? The speakers will not produce sound if headphones or plug are connected to the headphone jacks.	p. 11
	Has Local Control been set to "OFF"? When Local Control is set to "OFF," no sound is produced by playing the keyboard. Set Local Control to "ON."	p. 48
No sound when you play back a song	Has Local Control been set to "OFF"? When Local Control is set to "OFF," no sound is produced by playing the song. Set Local Control to "ON."	p. 48
	Could the Song Balance be set to "0"?	p. 25
No sound from the left most notes of the keyboard	Could the Visual Control mode be set to "MVC" or "VLNK"? If the Visual Control mode is set to "MVC" or "VLNK," the lowest 12 keys of the keyboard (A0–G#1) are used to control images; they will not produce sound.	p. 49
Notes don't sound right		
Pitch of the keyboard or song is incorrect	Could you have made Transpose settings?	p. 21 p. 35
	Is the Master Tune setting appropriate?	p. 46
	Is the setting for the Temperament correct?	p. 46
	If stretch tuning is "ON," the piano will be tuned in a unique way; notes in the piano's upper range will be tuned slightly sharper, while notes in the lower range will be tuned slightly lower. For this reason, certain pitches may seem to be off, but this is actually the way that an acoustic piano should sound.	p. 47
Not all the notes you play are sounded	The maximum simultaneous polyphony is 128 voices. If you're using Dual Play, or playing along with a song, or making heavy use of the damper pedal, the number of notes being requested by the performance data may exceed the maximum available polyphony, causing notes to drop out.	–
Sounds are heard twice (doubled) when the keyboard is played	Is the unit in Dual play?	p. 15
	When the unit is connected to an external sequencer, set the Local Control to off. Alternatively, the sequencer could be set so its Soft Thru feature is Off.	p. 48
Effect does not apply	When you are using Dual play or Split play, and different effects are specified for the two selected tones, the effect will not be applied to Tone 2 (when using Dual play) or the left-hand tone (when using Split play).	–
Reverberation remains even if You defeat the Ambience effect	The unit's piano sound faithfully simulates the depth and resonance of an acoustic piano, and this may give the impression of reverberation even if you've defeated the Ambience effect. Also, you may be able to eliminate some reverberation by reducing the value set for "Cabinet Resonance."	p. 47
The sound of the higher notes suddenly changes from a certain key	On an acoustic piano, the approximately one and a half octaves of notes at the top of the keyboard will continue sounding regardless of the damper pedal. These notes also have a somewhat different tonal character. The unit faithfully simulate this characteristic of acoustic pianos. On the unit, the range that is unaffected by the damper pedal will change according to the key transpose setting.	–

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Troubleshooting

Symptom	Cause/Action	Page
High-pitched ringing is heard	**If you hear this in headphones:** Piano sounds that have a brilliant and crisp character contain substantial high-frequency components that may sound as though a metallic ringing has been added. This is because the character of an actual piano is being faithfully reproduced, and is not a malfunction. This sound can be adjusted by modifying the following settings. • String Resonance (p. 47) • Ambience (p. 18) **If you don't hear this in headphones:** It is likely that there is some other reason (such as resonances within the unit). Please contact your dealer or a nearby Roland service center.	–
Low notes sound wrong, or are buzzy	If you set the volume to the maximum setting, the sound may be distorted depending on how you perform. If this occurs, turn down the volume.	–
	If you don't hear this in headphones: Performing at high volumes may cause the speakers or objects near the unit to resonate. Fluorescent lights or glass doors may also resonate sympathetically. In particular, this is more likely to occur for lower notes and higher volumes. You can take the following measures to minimize resonances. • Locate the speakers 10–15 cm (4–6 inch) away from walls or other surfaces. • Keep the volume down. • Move away from the objects that are resonating. **If you hear this in headphones:** It is likely that there is some other reason. Please contact your dealer or a nearby Roland service center.	–
Song does not play correctly		
Only the sound of a particular instrument in a song does not play	Could a part be muted? If the button indicator is out, the music on that part is not heard. Press the part button so the indicator is illuminated.	p. 26
Sound is heard from a muted part	Could the part mute volume be set to other than "0"? If you set this to "0," the sound of a muted part will be completely inaudible.	p. 27
Song volume is low / **Volume differs between recording and playback**	Could the Song Balance volume be lowered?	p. 25
Can't play back a song saved in USB flash drive	Could the Audio files of the format be played? Audio files of the following format can be played back. • File extension ".WAV" • 16-bit linear • "44.1 kHz" sampling rate	p. 24
	Is the filename extension "MID"? Files with other filename extensions cannot be handled as song data.	–
Song tempo becomes unstable	When playing a song from USB flash drive, the tempo may become unstable if there is an excessive amount of performance data.	–
Song name in USB flash drive is not shown	The song name will not be shown if the song information in the file is empty or consists only of spaces.	–
	Is the filename extension "MID"? Files with other filename extensions cannot be handled as song data.	–
	Song names can consist only of English letters, numerals, certain symbols, and single-byte characters from the Japanese syllabary; the unit is unable to correctly display the name if other characters are used.	–
Can't record / play back		
Can't record SMF	Has one of the part buttons for recording been selected?	p. 29
Can't record audio	Is a USB flash drive connected to the USB memory port?	–
The recorded performance disappeared	Your recorded performance will disappear if you switch off the unit's power or select a song. There is no way to recover the lost performance. Before you turn off the power, save your recorded performance in the internal memory or the USB flash drive.	–
Problems when connecting to a wireless LAN		
Can't connect to a wireless LAN access point	• Make sure that your wireless LAN access point supports WPS. If your wireless LAN access point does not support WPS, you can connect using the procedure described in "Connecting to a Wireless LAN Access Point That You Select (Select AP)" (p. 44). • The 802.11a/b wireless standard is not supported. Please use the 802.11g/n (2.4 GHz) wireless standard. • The WEP authentication method is not supported. Please use the WPA or WPA2 authentication method. • Make sure that DHCP is enabled for your wireless LAN access point. • If you don't get connected to the previously-connected wireless LAN access point when you turn on the unit, check and make sure the setting described in "Connecting in Ad-Hoc Mode" (p. 45) is OFF. • The connection might not occur successfully due to the state of the radio signal. If so, use the procedure described in "Connecting to a Wireless LAN Access Point That You Select (Select AP)" (p. 44), and select your wireless LAN access point and reconnect. • There is a limit to the connection data that can be remembered. Making a new connection may cause older connection data to be deleted. All connection data will be deleted if you execute a factory reset. If the connection data has been deleted, please re-connect to the wireless LAN access point.	p.43–p.45
The display indicates "Error 46," and can't connect to the wireless LAN access point	• This Access Point is not supported. Please use the WPA or WPA2 authentication method.	
Communication is unstable	Communication may be unstable depending on the usage of the radio frequency spectrum. If communication is unstable, the response may be sluggish, or if using audio communication, there may be dropouts in the audio. The following actions may improve the situation. • Move the wireless LAN access point and the unit closer to each other. • Change the channel setting of the wireless LAN access point.	

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Symptom	Cause/Action	Page
The unit is not found in the instrument connections of the app (such as the iPad app Piano Partner)	• Is the unit powered up? • Is the wireless USB adapter (WNA1100-RL) inserted to the unit? • Is the unit connected to the wireless LAN? • Are the unit and the iPad connected to the same network (the same wireless LAN access point)? • Is the wireless LAN access point set to allow communication between wireless LAN devices? For details on settings, refer to the owner's manual of your wireless LAN access point.	p.43–p.45
Your iPad won't connect to the Internet	• Is the wireless LAN access point connected to the Internet? • Could you be connected in Ad-Hoc mode? The iPad or other wireless device connected in Ad-Hoc mode will be unable to communicate with the Internet or with another wireless device. However, an iPad or other wireless device that has cellular capability will be able to connect to the Internet via the cellular connection. Please be aware that if you use a cellular connection for Internet connectivity, you may incur costs depending on your rate plan.	

Limitations regarding audio files

• Ambience will not be applied to audio files (p. 18).

• The Part Mute function cannot be used when playing audio files (p. 26).

• Audio data cannot be saved in the unit's internal memory. In order to record audio, you must connect a USB flash drive (separately sold) (p. 29, p. 33, p. 34).

• You can't rename an audio file (p. 38).

• Audio files cannot be copied (p. 40).

🎼 Error Messages

Indication	Meaning
Error 1	You can only read the music file. It can not be saved.
Error 2	An error occurred during writing. The external media may be corrupted. Insert other external media and try again. Alternatively, you can initialize the external media. The external media's protect tab may be in the "Protect" (writing prohibited) position may not yet be initialized.
Error 10	No external media is inserted. Insert the external media and try again.
Error 11	There is not sufficient free memory in the save destination. Either insert other external media or delete unneeded files and try again.
Error 14	An error occurred during reading. The external media may be corrupted. Insert other external media and try again. Alternatively, you can initialize the external media.
Error 15	The file is unreadable. The data format is not compatible with the unit.
Error 16	Data was not called up in time for playback of the song. After waiting several seconds, you may be able to play back the song by pressing the [▶/■] (Play/Stop) button again.
Error 18	This audio format is not supported. Please use 44.1 kHz 16-bit linear WAV format audio files.
Error 30	The internal memory capacity of the unit is full.
Error 40	The unit cannot deal with the excessive MIDI data sent from the USB MIDI. Reduce the amount of MIDI data sent to the unit.
Error 43	A MIDI transmission error has occurred. Check the connected USB MIDI device.
Error 46	This Access Point is not supported. Please use the WPA or WPA2 authentication method (p. 43–p. 45).
Error 51	There may be a problem with the system. Repeat the procedure from the beginning. If it is not solved after you have tried several times, contact the Roland service center.
Error 65	The USB memory port was subjected to excessive current. Make sure that there is no problem with the external media, then turn the power off, then on again.

  * External Media: USB flash drive

🎼 Tone List

Piano—Grand

No.	Tone Name	Explanation
1	Concert	The sound of a splendid concert grand piano. This piano sound has our highest recommendation, and can be used for any style of music.
2	Ballade	A mellow grand piano sound, recommended for quiet songs.
3	Bright	A brilliant grand piano sound, recommended when you want the piano to stand out in an ensemble.
4	Magical	A charming sound that layers synth bells with Concert.
5	Pno+Str	Strings layered with Concert.
6	Pno+Pad	A pad layered with Concert.
7	Pno+Cho	A choir layered with Concert.
8	Pure Pno	A grand piano sound notable for its clarity. When using headphones, this will sound the same as the Concert (Concert Piano).
9	FortePno	An early type of piano with a distinctive sound that's somewhat different than today's pianos.
10	MlwForte	A mellow FortePno (Forte Piano) sound.
11	BrtForte	A brilliant FortePno (Forte Piano) sound.
12	Dolcechd	A dream-like sound that can sound like a piano or a harpsichord.
13	Harpsi	A type of keyboard instrument widely used in Baroque music, producing a delicate sound.
14	Hpsd 8+4	The sound of a harpsichord layered with sound an higher octave.

Piano—Upright

No.	Tone Name	Explanation
1	Upright	The sound of an upright piano. The sound will feel closer to you.
2	MellowUp	A mellow upright piano sound.
3	BrightUp	A brilliant upright piano sound.
4	Rock Pno	A robust piano sound, recommended for boogie-woogie playing.
5	Ragtime	A honky-tonk piano sound, recommended for ragtime playing.

E. Piano

No.	Tone Name
1	Trem EP
2	Pop EP
3	Vint EP
4	FM EP
5	EP Belle
6	'60s EP
7	Clav.
8	Stg Phsr
9	'70s EP
10	E.Grand

Strings

No.	Tone Name
1	SymphStr
2	Epic Str
3	Rich Str
4	Orch Str
5	Orchstra
6	Cham Win
7	Harp
8	Violin
9	Velo Str
10	Flute
11	Cello
12	Orch Brs
13	Pizz Str
14	Decy Str *

* Tones indicated by "*" are suitable for playing layered with a piano tone.

Other

No.	Tone Name	No.	Tone Name
1	Vib	26	Thum Vo
2	Celesta	27	Gspl Spn
3	Jz Scat	28	Full Stp
4	SymphCho	29	Melw Bar
5	Pipe Org	30	Lite Org
6	Nasn Flt	31	Lowr Org
7	Jazz Org	32	'60s Org
8	Balad Or	33	Glas Pad
9	Soft Pad	34	Lunr Str
10	Harpvox	35	Dcy C.Pd *
11	Nylon Gt	36	Jazz Gt
12	Steel Gt	37	Ac. Bass
13	Marimba	38	Bass+Cym
14	Mlt Isle	39	Fingr Bs
15	Mrng Lit	40	Brs Sect
16	Balad Bl	41	Alto Sax
17	Acordion	42	Ten Sax
18	Church 1		
19	Church 2		
20	Aerl Cho		
21	Angl Cho		
22	Beau Vox		
23	Fem Aahs		
24	Male Aah		
25	Decy Cho *		

* Tones numbered 43 and higher are accompaniment-use GM2 tones.

* In the tone group "Other" when you hold down the [−] [+] buttons to switch tone in succession, the tones will stop changing at number 43 and number 52.

* To select the next sound, release the [−] [+] buttons, then press it again.

Internal Song List

No.	Song Title	Composer
MASTERPIECE		
a.001	The Nutcracker "Danse des Mirlitons"	Peter Ilyich Tchaikovsky
a.002	The Marriage of Figaro "Overture"	Wolfgang Amadeus Mozart
a.003	Barcarolle	Fryderyk Franciszek Chopin
a.004	Zhavoronok	Mikhail Ivanovich Glinka, Arranged by Mily Alexeyevich Balakirev
a.005	Floral Pursuits	Léo Delibes, Arranged by John Maul
a.006	Sonate für Klavier Nr.23 1	Ludwig van Beethoven
a.007	Sonate für Klavier Nr.23 2	Ludwig van Beethoven
a.008	Sonate für Klavier Nr.23 3	Ludwig van Beethoven
a.009	Valse, op.34-1	Fryderyk Franciszek Chopin
a.010	Polonaise op.53	Fryderyk Franciszek Chopin
a.011	Nocturne No.20	Fryderyk Franciszek Chopin
a.012	Die Forelle	Franz Peter Schubert, Arranged by Franz Liszt
a.013	Reflets dans l'Eau	Claude Achille Debussy
a.014	La Fille aux Cheveux de Lin	Claude Achille Debussy
a.015	La Campanella	Franz Liszt
a.016	Scherzo No.2	Fryderyk Franciszek Chopin
a.017	Étude, op.10-12	Fryderyk Franciszek Chopin
a.018	Sonate No.15	Wolfgang Amadeus Mozart
a.019	Liebesträume 3	Franz Liszt
a.020	Étude, op.10-3	Fryderyk Franciszek Chopin
a.021	Je te veux	Erik Satie
a.022	Valse, op.64-1	Fryderyk Franciszek Chopin
a.023	Golliwog's Cakewalk	Claude Achille Debussy
a.024	Fantaisie-Impromptu	Fryderyk Franciszek Chopin
a.025	Arabesque 1	Claude Achille Debussy
a.026	An der schönen, blauen Donau	Johann Strauss, Sohn
a.027	Auf Flügeln des Gesanges	Felix Mendelssohn
a.028	Mazurka No.5	Fryderyk Franciszek Chopin
a.029	Gymnopédie 1	Erik Satie
a.030	Étude, op.25-1	Fryderyk Franciszek Chopin
a.031	Clair de Lune	Claude Achille Debussy
a.032	Étude, op.10-5	Fryderyk Franciszek Chopin
a.033	Dr. Gradus ad Parnassum	Claude Achille Debussy
a.034	Grande Valse Brillante	Fryderyk Franciszek Chopin
a.035	La prière d'une Vierge	Tekla Badarzewska
a.036	Course en Troïka	Peter Ilyich Tchaikovsky
a.037	To The Spring	Edvard Hagerup Grieg
a.038	Valse, op.64-2	Fryderyk Franciszek Chopin
a.039	Radetzky Marsch	Johann Baptist Strauss
a.040	Träumerei	Robert Alexander Schumann
a.041	Moments Musicaux 3	Franz Peter Schubert
a.042	Prélude, op.28-15	Fryderyk Franciszek Chopin
a.043	Harmonious Blacksmith	Georg Friedrich Händel
a.044	Ungarische Tänze 5	Johannes Brahms
a.045	Türkischer Marsch	Ludwig van Beethoven
a.046	Nocturne No.2	Fryderyk Franciszek Chopin
a.047	Frühlingslied	Felix Mendelssohn
a.048	Präludium	Johann Sebastian Bach
a.049	Jägerlied	Felix Mendelssohn
a.050	Passepied	Claude Achille Debussy
a.051	Für Elise	Ludwig van Beethoven
a.052	Türkischer Marsch	Wolfgang Amadeus Mozart
a.053	Ständchen	Franz Peter Schubert

No.	Song Title	Composer
a.054	Humoreske	Antonín Dvořák
a.055	Blumenlied	Gustav Lange
a.056	Alpenglöckchen	Theodor Oesten
a.057	Menuett G dur	Ludwig van Beethoven
a.058	Venezianisches Gondellied	Felix Mendelssohn
a.059	Alpenabendröte	Theodor Oesten
a.060	Farewell to the Piano	Ludwig van Beethoven
a.061	Brautchor	Wilhelm Richard Wagner
a.062	Forget-Me-Not	Heinrich Lichner
a.063	Wiener Marsch	Carl Czerny
a.064	Le Coucou	Louis Claude Daquin
a.065	Menuett G dur	Johann Sebastian Bach
a.066	Spinnerlied	Albert Ellmenreich
a.067	Gavotte	François Joseph Gossec
a.068	Heidenröslein	Gustav Lange
a.069	Zigeuner Tanz	Heinrich Lichner
a.070	La Cinquantaine	Gabriel Marie
a.071	Csikos Post	Hermann Necke
a.072	Dolly's Dreaming Awakening	Theodor Oesten
a.073	La Violette	Louis Streabbog
a.074	Fröhlicher Landmann	Robert Alexander Schumann
a.075	Sonatine op.36-1	Muzio Clementi
a.076	Sonatine op.20-1	Friedrich Kuhlau
a.077	Sonatine No.5	Ludwig van Beethoven
SELECTIONS		
A.001	Triumphal March from Aida	Giuseppe Verdi
A.002	Ninna Nanna	Johannes Brahms
A.003	Papageno's Aria	Wolfgang Amadeus Mozart
A.004	The Spring	Antonio Lucio Vivaldi
A.005	Polovtsian Dances	Alexander Borodin
A.006	Air on the G String	Johann Sebastian Bach
A.007	Cucaracha	Mexican Popular Song
A.008	Samba Lelè	Brazilian Popular Child Song
A.009	Old MacDonald Had a Farm	Popular Child Song
A.010	When the Saints Go Marching in	Popular Song
CZERNY 100		
b.001 –b.100	Czerny 100	Carl Czerny
HANON		
C.001 –C.020	Hanon 1–20	Charles Hanon

* All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.

* No data for the music that is played will be output from USB Computer port.

* The copyrights to the songs marked by an asterisk "*" are owned by the Roland Corporation.

* MASTERPIECE 3–4, 6–17 are piano solos. They have no accompaniment.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

♪ Main Specifications

Roland DP90e
DP90Se: Digital Piano

Keyboard		
Keyboard	DP90e:	88 keys (PHA-4 Premium Keyboard: with Escapement and Ivory Feel)
	DP90Se:	88 keys (PHA-4 Concert Keyboard: with Escapement and Ebony/Ivory Feel)
Touch Sensitivity	Key Touch: 5 types, fixed touch	
Keyboard Mode	Whole Dual (volume balance adjustable) Split (split point adjustable) Twin Piano	

Pedals	
Pedals	Damper (Progressive Damper Action Pedal, capable of continuous detection) Soft (capable of continuous detection) Sostenuto (function assignable)

Sound Generator	
Piano Sound	SuperNATURAL Piano Sound
MIDI Format	Conforms to GM2, GS, XGlite
Max. Polyphony	128 voices
Tones	Grand Piano: 14 Tones Upright Piano: 5 Tones E. Piano: 10 Tones Strings: 14 Tones Other: 307 Tones (including 8 drum sets, 1 SFX set)
Temperaments	8 types, selectable temperament key
Individual Note Voicing (adjustable in individual notes)	Stretched Tuning: -50.0–+50.0 cent Note Volume: -50–0 Note Character: -5–+5
Master Tuning	415.3–466.2 Hz (adjustable in increments of 0.1 Hz)
Transpose	Key Transpose: -6–+5 (in semitones) Playback Transpose: -6–+5 (in semitones, including audio files)
Effects	Ambience (Off, 10 levels) Brilliance (Off, 21 levels) Only for Piano Tones (Piano Designer): Damper Resonance (Off, 10 levels) String Resonance (Off, 10 levels) Key Off Resonance (Off, 10 levels) Cabinet Resonance (Off, 10 levels) Duplex Scale (Off, 10 levels) Dynemic Harmonic (Off, 10 levels) Soundboard Behavior (Off, 10 levels) Only for Organ Tones: Rotary Speaker Effect (Slow/Fast)

Metronome	
Tempo	Quarter note = 10–500
Beat	2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8
Volume	11 levels

SMF Recorder	
Parts	3 parts
Save Song	Standard MIDI Files (Format 0)
Note Storage	Approx. 30,000 notes
Controls	Song Select, Play/Stop, Rec, Rewinding, Fast-forwarding, Top of song, Part Mute, Mute Volume, Tempo, Tempo Mute, All Songs Play, Count-in, Song Balance, AB Repeat
Tempo	Quarter note = 10–500
Resolution	120 ticks per quarter note

Audio	
Playback	File Format: Audio File (WAV 44.1 kHz, 16-bit linear format)
Recording	Keyboard, SMF data File Format: Audio File (WAV 44.1 kHz, 16-bit linear format)
Transpose	Playback Transpose: -6–+5 (in semitones)
Playback Speed	75–125%
Controls	Song Select, Play/Stop, Rec, Rewinding, Fast-forwarding, Top of song, Playback Speed, All Songs Play, Song Balance, AB Repeat, Center Cancel

Internal Memory	
Save Song	Standard MIDI Files (Format 0)
Songs	Max. 99 songs

External Memory	
External Storage	USB Flash Memory
Playable Software	Standard MIDI Files (Format 0, 1) Roland Original Format (i-Format) Audio File (WAV, 44.1 kHz, 16-bit linear format)
Save Song	Standard MIDI Files (Format 0) Audio File (WAV, 44.1 kHz, 16-bit linear format)

Other	
Internal Songs	Piano Masterpieces: 77 songs Selection: EU= 10 songs/ US= 18 songs/ Other= 10 songs Hanon: 20 songs Czerny #100: 100 songs
Display	16 segments x 4 (LED), 8 characters (backlit LCD) Beat Indicator
Language	English
Music Rest	Folding music rest
Keyboard Lid	Soft-fall fallboard
Other Functions	Wireless Connect (when using optional Wireless USB Adapter) Panel Lock Auto Off V-LINK MIDI Visual Control Demo
Connectors	DC In jack Input jack: Stereo miniature phone type Output (L/Mono, R) jacks: 1/4-inch phone type USB COMPUTER port: USB Type B USB MEMORY port: USB Type A Phones jacks (Stereo, with Twin Piano Individual Mode) x 2: Stereo miniature phone type, Stereo 1/4-inch phone type
Rated Power Output	12 W x 2
Volume Level (SPL)	110 dB * This value was measured according to the method that is based on Roland's technical standard.
Speakers	12 cm (4-3/4 inches) x 2
Headphones	Effects: Headphones 3D Ambience
Control	Volume (Slider, with the speaker volume and the headphones volume automatically select function, with the volume limit function)
Power Consumption	10 W (5–33 W) 10 W: Average power consumption while piano is played with volume at center position 5 W: Power consumption immediately after power-up; nothing being played 33 W: Rated power consumption
Dimensions (including piano stand)	(with lid close) 1,398 (W) x 344 (D) x 781 (H) mm 55-1/16 (W) x 13-9/16 (D) x 30-3/4 (H) inches (with lid open) 1,398 (W) x 339 (D) x 974 (H) mm 55-1/16 (W) x 13-3/8 (D) x 38-3/8 (H) inches * Measurements include stabilizer components attached.
Weight (including piano stand)	DP90e: 46.1 kg/101 lbs 10 oz DP90Se: 47.4 kg/104 lbs 8 oz
Accessories	Owner's manual Assembly manual AC Adaptor Power Cord (for AC Adaptor) Headphone hook Screw set Stabilizer
Options (sold separately)	Headphones USB Flash Memory (*1) Wireless USB Adapter (*1) Audio Cable *1 Use USB Flash Memory and Wireless USB Adapter sold by Roland. We cannot guarantee operation if other products are used.

* In the interest of product improvement, the specifications and/ or appearance of this unit are subject to change without prior notice.

MEMO

♪ USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠ WARNING and ⚠CAUTION Notices

⚠**WARNING**	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠**CAUTION**	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
🚫	The ⊘symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
⬤	The ●symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠ WARNING

Do not disassemble or modify by yourself

Do not open (or modify in any way) the unit or its AC adaptor.

Do not repair or replace parts by yourself

Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

Do not use or store in the following types of locations

- Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
- Damp (e.g., baths, washrooms, on wet floors); or are
- Exposed to steam or smoke; or are
- Subject to salt exposure; or are
- Humid; or are
- Exposed to rain; or are
- Dusty or sandy; or are
- Subject to high levels of vibration and shakiness.

Do not place in an unstable location

Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

Use only the supplied AC adaptor and the correct voltage

Be sure to use only the AC adaptor included with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.

Use only the included power cord

Use only the attached power-supply cord. Also, the included power cord must not be used with any other device.

⚠ WARNING

Do not bend the power cord or place heavy objects on it

Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!

Avoid extended use at high volume

This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.

Don't allow foreign objects or liquids to enter unit; never place containers with liquid on unit

Do not place containers containing liquid (e.g., flower vases) on this product. Never allow foreign objects (e.g., flammable objects, coins, wires) or liquids (e.g., water or juice) to enter this product. Doing so may cause short circuits, faulty operation, or other malfunctions.

Turn off the unit if an abnormality or malfunction occurs

Immediately turn the unit off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:

- The AC adaptor, the power-supply cord, or the plug has been damaged; or
- If smoke or unusual odor occurs
- Objects have fallen into, or liquid has been spilled onto the unit; or
- The unit has been exposed to rain (or otherwise has become wet); or
- The unit does not appear to operate normally or exhibits a marked change in performance.

⚠ WARNING

Adults must provide supervision in places where children are present

When using the unit in locations where children are present, be careful so no mishandling of the unit can take place. An adult should always be on hand to provide supervision and guidance.

Do not drop or subject to strong impact

Protect the unit from strong impact.
(Do not drop it!)

Do not share an outlet with an unreasonable number of other devices

Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

Do not use overseas

Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

⚠ **CAUTION**

Place in a well ventilated location

The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.

Grasp the plug when connecting or disconnecting the AC adaptor

Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.

Periodically clean the AC adaptor's plug

At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.

Manage cables for safety

Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

Avoid climbing on top of the unit, or placing heavy objects on it

Never climb on top of, nor place heavy objects on the unit.

Do not connect or disconnect the AC adaptor with wet hands

Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

Cautions when moving this unit

If you need to move the instrument, take note of the precautions listed below. At least two persons are required to safely lift and move the unit. It should be handled carefully, all the while keeping it level. Make sure to have a firm grip, to protect yourself from injury and the instrument from damage.

- Check to make sure the screws securing the unit to the stand have not become loose. Fasten them again securely whenever you notice any loosening.
- Disconnect the power cord.
- Disconnect all cords coming from external devices.
- Fold down the music rest.
- Close the lid.

Unplug the AC adaptor from the outlet before cleaning

Before cleaning the unit, turn it off and unplug the AC adaptor from the outlet (p. 62).

⚠ **CAUTION**

If there is a possibility of lightning strike, disconnect the AC adaptor from the outlet

Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.

Take care so as not to get fingers pinched by lid

Be careful when opening/closing the lid so you do not get your fingers pinched (p. 12). Adult supervision is recommended whenever small children use the unit.

Precautions concerning use of bench

When using the bench, please observe the following points:

- Do not use the bench as a toy, or as a stepping stool.
- Do not allow two or more persons to sit on the bench.
- Do not adjust the height while sitting on the bench.
- Do not sit on the bench if the bolts holding the bench legs are loose. (If the bolts are loose, immediately re-tighten them using the supplied tool.)
- Never insert your hand into the gap (the metal height adjustment mechanism) under the seat lid. Doing so may cause your hand to be pinched or injured.

Keep small items out of the reach of children

To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.
Included Parts / Removable Parts:
- Screws for stand assembly (p. 62)
- Cord clamps (p. 62)

Handle the ground terminal carefully

If you remove the screw from the ground terminal, be sure to replace it; don't leave it lying around where it could accidently be swallowed by small children. When refastening the screw, make that it is firmly fastened, so it won't come loose.

Take care not to get burned

The area shown in the illustration may become hot, so take care to avoid burns.

Do not remove the speaker grille and speaker

Do not remove the speaker grille and speaker by any means. Speaker not user replaceable. Shock hazardous voltages and currents are present inside the enclosure.

Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter or a motor (such as a refrigerator, washing machine, microwave oven, or air conditioner). Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.

- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.

- To prevent malfunction and equipment failure, always make sure to turn off the power on all your equipment before you make any connections.

- With the factory settings, the unit will automatically be switched off 30 minutes after you stop playing or operating the unit. If the unit's power has been turned off automatically, you can use the [Power] switch to turn the unit back on again. If you don't want the unit to turn off automatically, change the "Auto Off" setting to "Off" as described on "Making the Power Automatically Turn Off After a Time (Auto Off)" (p. 39).

  NOTE
  The settings you were editing will be lost when the unit is turned off. If you want to keep your settings, you must save your settings before turning the unit off.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.

- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.

- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.

- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, do not allow lighting devices that normally are used while their light source is very close to the unit (such as a piano light), or powerful spotlights to shine upon the same area of the unit for extended periods of time. Excessive heat can deform or discolor the unit.

- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.

- Do not allow rubber, vinyl, or similar materials to remain on this unit for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.

- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.

- Do not paste stickers, decals, or the like to this instrument. Peeling such matter off the instrument may damage the exterior finish.

- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.
  You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.

- Do not put anything that contains water on this unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.

Maintenance

- To clean the unit, use a dry, soft cloth; or one that is slightly dampened. Try to wipe the entire surface using an equal amount of strength, moving the cloth along with the grain of the wood. Rubbing too hard in the same area can damage the finish.

- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Since wood will expand and contract depending on how it is used and the environment in which it is located, products made of wood may experience a gradual loosening of the screws over time.

To ensure that your piano remains in safe, optimal condition, you should regularly check the tightness of the screws in the locations shown in the illustration. If you find that any screws are loose, use a screwdriver to tighten them.
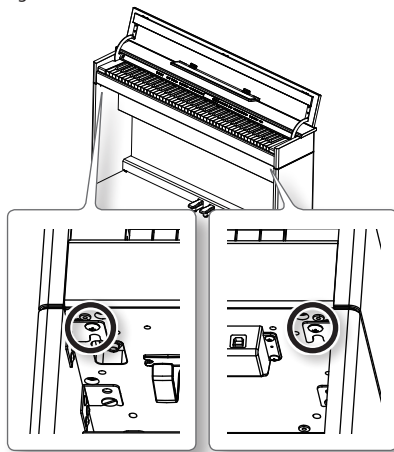
Maintenance of polished-finish pianos (Only for DP90Se)

- Since your piano has a polished finish that is as delicate as that found on finely crafted wooden furniture, it needs careful, periodic care. A few important suggestions concerning the proper care of the unit follow. For dusting, using a soft, clean cloth and/or piano-use feather duster. Be sure to wipe gently. Even the tiniest grains of sand or grit can leave scratches on the surface if too much force is applied while wiping. Do not use any cleaners or detergents, since they might deteriorate the surface of the cabinet, and produce cracks.

  If the cabinet's surface loses its luster, wipe it thoroughly with a soft cloth dampened with a little of the polishing liquid. Do not use any cleaners or detergents, since they might deteriorate the surface of the cabinet, and produce cracks. Do not use dusting cloths that contain chemicals.

- About piano polishing liquid
  - Use polishing liquid as directed by the instructions for the product.
  - Use only polishing liquid that is intended for use on polished-finish pianos. Using any other polishing liquid may cause scratches, deformation, or discoloration. To purchase polishing liquid, contact your nearby musical instrument dealer.
  - Use the polishing liquid only on the polished surfaces of the cabinet. Always wipe the surface with the grain using straight, even strokes. Do not repeatedly wipe the same places using too much pressure, since that might result in the loss of luster.
  - Be sure to keep the polishing liquid out of the reach of small children. If the polishing liquid is accidentally swallowed, first get them to vomit, then take them to a doctor.

Repairs and Data

- Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs. Important data should always be backed up USB flash drives, or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on a USB flash drive.

- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit's memory, USB flash drives once it has been lost. Roland Corporation assumes no liability concerning such loss of data.

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.

- Never strike or apply strong pressure to the display.

- When disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.

- To avoid disturbing others nearby, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you.

- The sound of keys being struck and vibrations produced by playing an instrument can be transmitted through a floor or wall to an unexpected extent. Please take care not to cause annoyance to others nearby.

- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

- Do not apply undue force to the music rest while it is in use.

- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

- When opening/closing the lid or raising/folding down the music rest, please be careful not to get your fingers pinched between the movable part and the panel. In places where small children are present, make sure that an adult provides supervision and guidance.

Before Using External Memories

(Using Optional USB flash drive)

- Do not connect or disconnect USB flash drive while it is being read from, or written to (i.e., while the USB flash drive access indicator will blink).

- Carefully insert the USB flash drive all the way in— until it is firmly in place.
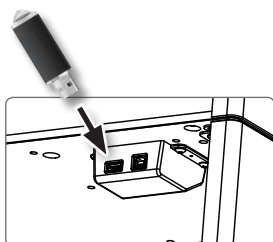
- Never touch the terminals of the USB flash drives. Also, avoid getting the terminals dirty.

- USB flash drives are constructed using precision components; handle the USB flash drives carefully, paying particular note to the following.
  - To prevent damage to the USB flash drives from static electricity, be sure to discharge any static electricity from your own body before handling the USB flash drives.
  - Do not touch or allow metal to come into contact with the contact portion of the USB flash drives.
  - Do not bend, drop, or subject USB flash drives to strong shock or vibration.
  - Do not keep USB flash drives in direct sunlight, in closed vehicles, or other such locations.
  - Do not allow USB flash drives to become wet.
  - Do not disassemble or modify the USB flash drives.

Copyrights / Licenses / Trademarks

- It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform, or broadcast it without the permission of the copyright owner.

- Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product.

- The copyright of content in this product (the sound waveform data, style data, accompaniment patterns, phrase data, audio loops and image data) is reserved by Roland Corporation.

- Purchasers of this product are permitted to utilize said content (except song data such as Demo Songs) for the creating, performing, recording and distributing original musical works.

- Purchasers of this product are NOT permitted to extract said content in original or modified form, for the purpose of distributing recorded medium of said content or making them available on a computer network.

- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.

- XGlite (**XG**) is a registered trademark or a trademark of Yamaha Corporation.

- Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.

- Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.

- Microsoft, Windows, Windows Vista, and DirectX are either registered trademarks or trademarks of Microsoft Corporation.

- Mac OS and iTunes are either registered trademarks or trademarks of Apple Inc.

- Roland, GS, and SuperNATURAL are either registered trademarks or trademarks of Roland Corporation in the United States and/or other countries.

About the Ivory Feel Keyboard

Features of an ivory feel keyboard

Traditional piano keys are made from the best materials-ivory (for white keys) and ebony (for black keys). The Ivory Feel keyboard uses the latest in technology to reproduce the touch and feel of these materials.

An Ivory Feel keyboard offers the following features.

- We're sure you'll develop a fondness for the distinctive texture of these keys, which feels better the more you play them.
- Surfaces incorporate stripes of moisture-absorbing material for improved touch and playability.
- The keys feature subtle gloss and understated coloring, enhancing the look and elegance.
- The white keys are finished with a slight yellowish tinge for the look of real ivory.

Handling

- Do not write on the keyboard with any pen or other implement, and do not stamp or place any marking on the instrument. Ink will seep into the surface lines and become unremovable.
- Do not affix stickers on the keyboard. You may be unable to remove stickers that use strong adhesives, and the adhesive may cause discoloration.

Care and maintenance

Please note the following points. Failure to do so may result in scratches on the surface finish, damaged gloss, or other discoloration or deformation.

- To remove dirt, use a soft cloth.
  Using a moistened and tightly wrung-out cloth, gently wipe off any dirt.
  Do not rub the surface vigorously.
- To remove stubborn dirt, use a commercially available keyboard cleaner that does not contain abrasives.
  Start by wiping lightly. If the dirt does not come off, wipe using gradually increasing amounts of pressure while taking care not to scratch the keys.
- Do not use benzene, paint thinner, or alcohol on the instrument.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

♪ Assembling

* To ensure that you assemble this unit correctly, please read this manual carefully before you begin assembly. Keep this manual nearby for reference when needed.

* Keep this unit horizontal when lifting it during assembly or transport.

* Be careful not to pinch your hands or drop this unit on your foot during assembly or transport.

* You must obtain the assistance of at least one additional person when assembling or transporting this unit.

* Keep small parts such as screws, stabilizers, and cord clamps out of the reach of small children to ensure that these items are not swallowed accidentally.

* The screwdriver needed for assembly is not included. You'll need have a Phillips screwdriver on hand.

* Hand-tighten the screws first, and then tighten them firmly. Start by tightening the screws until they are approximately half hidden. Do not use a power screwdriver when tightening the screws to their final position. Doing so may strip the threads.

* Tighten the screws firmly, and place the unit at a location that is level and sure to remain stable. Never place the unit on a shag carpet. If you do so, the pedal may be unstable, causing damage.

* Do not place the body of the piano directly on the floor. By doing so, you risk damaging the bottom of the piano, the jacks on the bottom of the piano, and the USB case.

Check the Parts
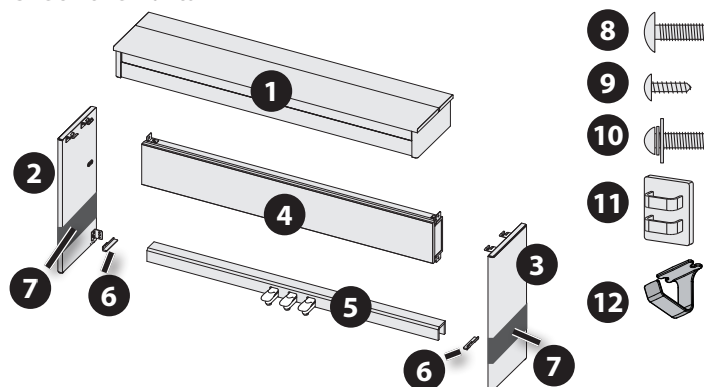
1	Piano main unit	**8**	Screws (large): 8 pcs.
2	Side board (left)	**9**	Screws (small): 6 pcs.
3	Side board (right)	**10**	Screws (with washers): 2 pcs.
4	Speaker box	**11**	Cord clamps: 2 pcs.
5	Pedal board	**12**	Headphone hook
6	Stabilizers (left/right)		
7	Protective sheets		

* To prevent the side boards from getting scratched, do not remove the protective sheets **7** until you are directed to do so.

1. Attach the side board (left) **2** and the side board (right) **3** to the speaker box **4**, and hand-tighten four of the screws (large) **8** to fasten them provisionally (four locations).

Attach the speaker box so that the speaker cord is on the same side as the left side board **2**.

Screws (large): use four screws
8

Front
↑
↓
Rear

Ⓡ Mark

3

4

2

Speaker cord

Ⓛ Mark

8
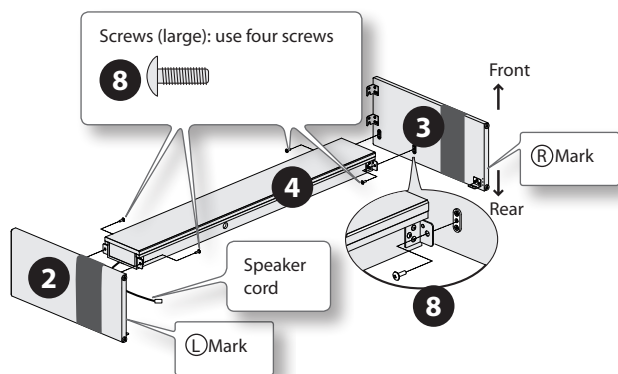
MEMO

The speaker box can also be installed so that it faces toward the rear instead of toward the front. Having the speaker box face out the rear of the instrument allows the speakers to be directed toward listeners when the back of the instrument faces the audience.

Normal direction

Front   Rear
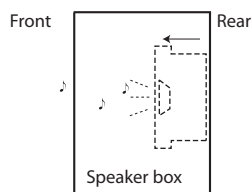
Speaker box

When facing to the rear

Front   Rear
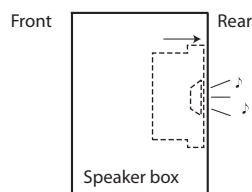
Speaker box

2. Place the unit upright, and use the screws (small) **9** to fasten the stabilizers **6** to the side boards **2**, **3** (six locations).

When standing the assembled unit up, grasp near the speaker box, and gently raise the assembly.

Take care not to attach the left and right stabilizer to the wrong sides.

Rear   Front

Screws (small): use six screws
9

Right

6

Left
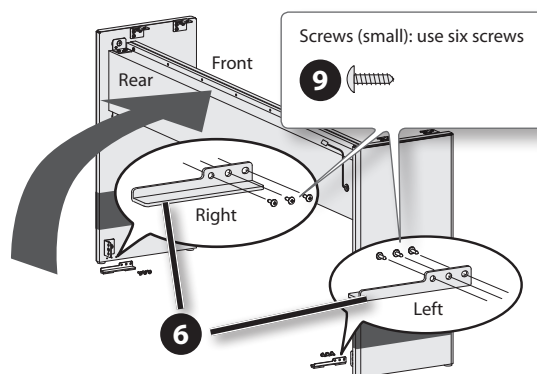
3. Place the pedal board onto the metal fixtures.

If you find it difficult to attach the pedal board **5**, slightly loosen the speaker box screws (large) **8** that you fastened provisionally in step 1.

3

Avoid scratches!

Putting the Pedal Board (a lateral view)

Pedal board **5**

2

Extend the pedal cord

5

Metal fixtures
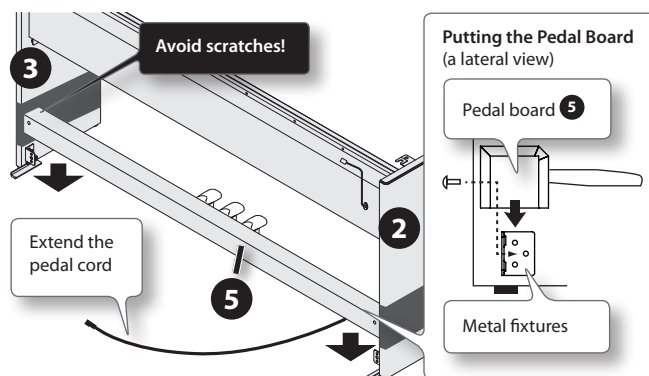
4. Remove the protective sheets **7** from each side board.

5. Hand-tighten the screws (large) **8** to provisionally fasten the pedal board **5** to the side boards **2**, **3** (two locations).

Screws (large): use two screws

8
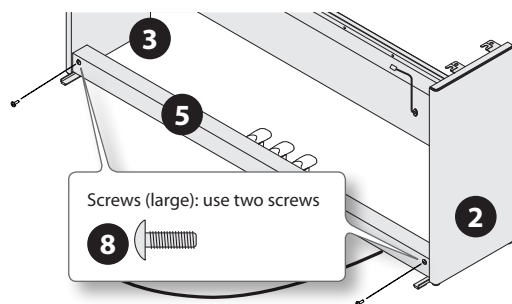
6. Firmly tighten each of the side board screws (four locations) that you provisionally tightened in step 1, making sure that they are secure.
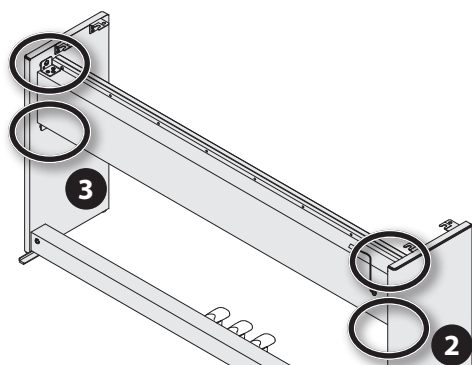
7. Step on the pedals of the pedal board **5**, and make sure that the rubber feet on the bottom of the pedals are in contact with the floor. Firmly tighten the pedal board screws **8** (two locations) that you provisionally tightened in step 5, making sure that they are secure.
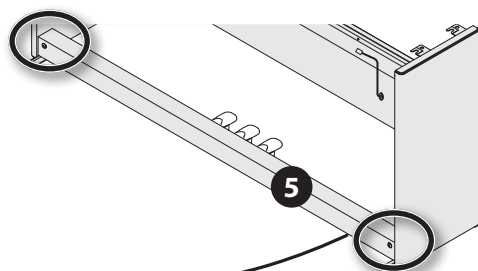
8. Align the protruding screws (one each at right and left) on the bottom of the piano **1** with the openings in the metal fittings on the side board **2**, **3**, then slide the piano forward until the screws are held in place.

Place the keyboard so that it is centered, both front to back and left to right.

NOTE

Grasp the piano **1** in the middle at the front and rear, taking care not to pinch your hands.

Front

Screws (large): use two screws

8 Used in step 9.

Please don't get your fingers pinched
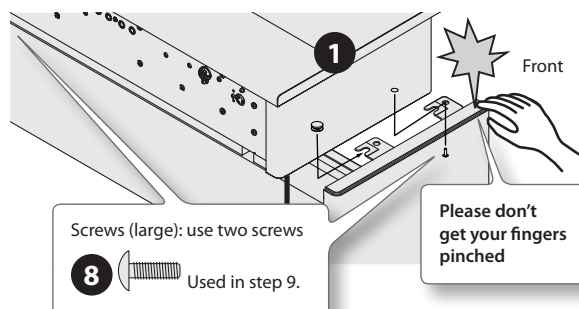
9. Use the screws (large) **8** to fasten the piano main unit **1** to the side boards **2**, **3** (one each for the right and left).

Make sure to insert the screws **8** by hand and give them a few turns by hand before using a screwdriver to tighten them.

10. Connect the speaker cord extending from the rear of the speaker box to the piano main unit's speaker connector.

Rear DP90/DP90S

Speaker connector

Speaker cord

Clip portion

Hold and insert the cord so that the clip portion extends into the stand and is securely connected.
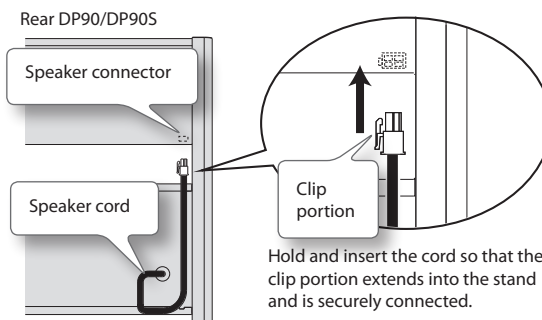
11. Use screws (with washers) **10** to fasten the headphone hook **12**.

Screws (with washers): use two screws

10
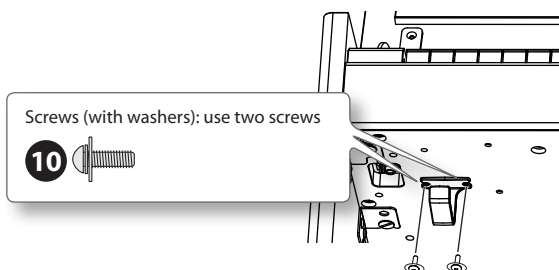
12. Connect the AC adaptor to the DC In jack, the pedal cord to the Pedal jack.

DC In

Use Roland PSB-7U adaptor only

Pedal

Pedal cord

AC adaptor

Firmly plug the AC adaptor and the pedal cord all the way into the sockets.
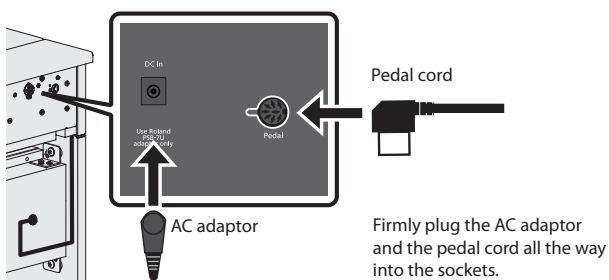
13. Connect the supplied AC adaptor and power cord.

Power cord

To AC outlet

Place the AC adaptor so the side with the indicator faces upwards and the side with textual information faces downwards. The indicator will light when you plug the AC adaptor into an AC outlet.
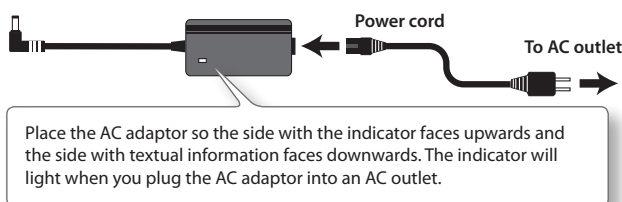
14. As necessary, affix cord clamps to fasten the pedal cord.

Example attachment location

Cord clamps
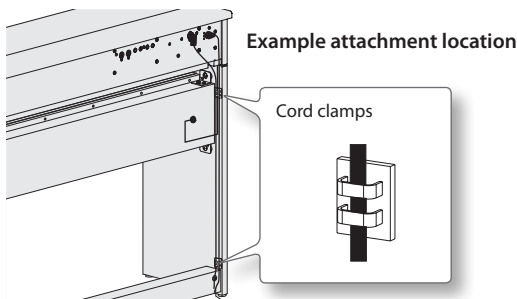
When moving the unit

If you need to move the unit, close the keyboard cover and disconnect the AC adaptor. With at least one other person helping you, lift the unit horizontally and carry it, taking care not to pinch your hands or drop the unit on your feet.

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

Index

Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

AFRICA

REUNION
MARCEL FO-YAM Sarl
25 Rue Jules Hermann,
Chaudron - BP79 97 491
Ste Clotilde Cedex,
REUNION ISLAND
TEL: (0262) 218-429

SOUTH AFRICA
Paul Bothner(PTY)Ltd.
Royal Cape Park, Unit 24
Londonderry Road, Ottery 7800
Cape Town, SOUTH AFRICA
TEL: (021) 799 4900

ASIA

CHINA
Roland Shanghai Electronics
Co.,Ltd.
5F. No.1500 Pingliang Road,
Yangpu Shanghai 200090, CHINA
TEL: (021) 5580-0800

Roland Shanghai Electronics
Co.,Ltd. (BEIJING OFFICE)
3F, Soluxe Fortune Building
63 West Dawang Road,
Chaoyang Beijing, CHINA
TEL: (010) 5960-2565/0777

HONG KONG
Tom Lee Music
11/F Silvercord Tower 1
30 Canton Rd
Tsimshatsui, Kowloon,
HONG KONG
TEL: 852-2737-7688

Parsons Music Ltd.
8th Floor, Railway Plaza, 39
Chatham Road South, T.S.T,
Kowloon, HONG KONG
TEL: 852-2333-1863

INDIA
Rivera Digitec (India) Pvt. Ltd.
411, Nirman Kendra Mahalaxmi
Flats Compound Off. Dr. Edwin
Moses Road, Mumbai-400011,
INDIA
TEL: (022) 2493 9051

INDONESIA
PT. Citra Intirama
Ruko Garden Shopping Arcade
Unit 8 CR, Podomoro City
Jl.Letjend. S.Parman Kav.28
Jakarta Barat 11470, INDONESIA
TEL: (021) 5698-5519/5520

KAZAKHSTAN
Alatau Dybystary
141 Abylai-Khan ave, 1st floor,
050000 Almaty, KAZAKHSTAN
TEL: (727) 2725477
FAX: (727) 2720730

KOREA
Cosmos Corporation
1461-9, Seocho-Dong,
Seocho Gu, Seoul, KOREA
TEL: (02) 3486-8855

MALAYSIA/SINGAPORE
Roland Asia Pacific Sdn. Bhd.
45-1, Block C2, Jalan PJU 1/39,
Dataran Prima, 47301 Petaling
Jaya, Selangor, MALAYSIA
TEL: (03) 7805-3263

PHILIPPINES
G.A. Yupangco & Co. Inc.
339 Gil J. Puyat Avenue
Makati, Metro Manila 1200,
PHILIPPINES
TEL: (02) 899 9801

TAIWAN
ROLAND TAIWAN ENTERPRISE
CO., LTD.
9F-5, No. 112 Chung Shan
North Road Sec. 2 Taipei 104,
TAIWAN R.O.C.
TEL: (02) 2561 3339

THAILAND
Theera Music Co. , Ltd.
100-108 Soi Verng
Nakornkasem, New Road,
Sumpantawong, Bangkok
10100, THAILAND
TEL: (02) 224-8821

VIET NAM
VIET THUONG CORPORATION
386 CACH MANG THANG TAM ST.
DIST.3, HO CHI MINH CITY,
VIET NAM
TEL: (08) 9316540

OCEANIA

**AUSTRALIA/
NEW ZEALAND**
Roland Corporation
Australia Pty.,Ltd.
38 Campbell Avenue, Dee Why
West. NSW 2099, AUSTRALIA

For Australia
TEL: (02) 9982 8266

For New Zealand
TEL: (09) 3098 715

CENTRAL/LATIN AMERICA

ARGENTINA
Instrumentos Musicales S.A.
Av.Santa Fe 2055
(1123) Buenos Aires, ARGENTINA
TEL: (011) 4508-2700

BARBADOS
A&B Music Supplies LTD
12 Webster Industrial Park
Wildey, St.Michael, BARBADOS
TEL: (246) 430-1100

BRAZIL
Roland Brasil Ltda.
Rua San Jose, 211
Parque Industrial San Jose
Cotia - Sao Paulo - SP, BRAZIL
TEL: (011) 4615 5666

CHILE
Comercial Fancy II S.A.
Rut.: 96.919.420-1
Nataniel Cox #739, 4th Floor
Santiago - Centro, CHILE
TEL: (02) 384-2180

COLOMBIA
CENTRO MUSICAL S.A.S.
Parque Industrial del Norte
Bodega 130
GIRARDOTA - ANTIOQUIA,
COLOMBIA
TEL: (454) 57 77 EXT 115

COSTA RICA
JUAN Bansbach Instrumentos
Musicales
Ave.1. Calle 11, Apartado 10237,
San Jose, COSTA RICA
TEL: 258-0211

CURACAO
Zeelandia Music Center Inc.
Orionweg 30
Curacao, Netherland Antilles
TEL: (305) 5926866

DOMINICAN REPUBLIC
Instrumentos Fernando Giraldez
Calle Roberto Pastoriza #325
Sanchez Naco Santo Domingo,
DOMINICAN REPUBLIC
TEL: (809) 683 0305

ECUADOR
Mas Musika
Rumichaca 822 y Zaruma
Guayaquil - ECUADOR
TEL: (593-4) 2302364

EL SALVADOR
OMNI MUSIC
75 Avenida Norte y Final Alameda
Juan Pablo II, Edificio No.4010
San Salvador, EL SALVADOR
TEL: 262-0788

GUATEMALA
Casa Instrumental
Calzada Roosevelt 34-01,zona
11 Ciudad de Guatemala,
GUATEMALA
TEL: (502) 599-2888

HONDURAS
Almacen Pajaro Azul S.A. de C.V.
BO.Paz Barahona
3 Ave.11 Calle S.O
San Pedro Sula, HONDURAS
TEL: (504) 553-2029

MARTINIQUE
Musique & Son
Z.I.Les Mangle
97232 Le Lamentin,
MARTINIQUE F.W.I.
TEL: 596 596 426860

MEXICO
Casa Veerkamp, s.a. de c.v.
Av. Toluca No. 323, Col. Olivar
de los Padres 01780 Mexico D.F.,
MEXICO
TEL: (55) 5668-6699

Faly Music
Sucursal Capu Blvd. Norte N.3213
Col. Nueva Aurora Cp.72070
Puebla, Puebla, MEXICO
TEL: 01 (222) 2315567 o 97
FAX: 01 (222) 2266241

Gama Music S.A. de C.V.
Madero Pte. 810 Colonia Centro
C.P. 64000 Monterrey, Nuevo
León, MEXICO
TEL: 01 (81) 8374-1640 o 8372-4097
www.gamamusic.com

Proscenia
Morelos No. 2273
Col. Arcos Sur
C.P. 44120 Guadalajara, Jalisco,
MEXICO
TEL: 01(33) 3630-0015

NICARAGUA
Bansbach Instrumentos
Musicales Nicaragua
Altamira D'Este Calle Principal
de la Farmacia 5ta.Avenida
1 Cuadra al Lago.#503
Managua, NICARAGUA
TEL: (505) 277-2557

PANAMA
SUPRO MUNDIAL, S.A.
Boulevard Andrews, Albrook,
Panama City, REP. DE PANAMA
TEL: 315-0101

PARAGUAY
WORLD MUSIC
Jebai Center 2018, Centro
CIUDAD DE ESTE, PARAGUAY
TEL: (595) 615 059

PERU
AUDIONET DISTRIBUCIONES
MUSICALES SAC
Jr. Ramon Dagnino N°201- Jesús
María
DISTRITO DE JESUS MARIA
LIMA, PERU
TEL: 9 983 47 301 - 51 433 80 83

TRINIDAD
AMR Ltd
Ground Floor
Maritime Plaza
Barataria TRINIDAD W.I.
TEL: (868) 638 6385

URUGUAY
Todo Musica S.A.
Francisco Acuna de Figueroa
1771
C.P.: 11.800
Montevideo, URUGUAY
TEL: (02) 924-2335

VENEZUELA
Instrumentos Musicales
Allegro,C.A.
Av.las industrias edf.Guitar
import #7 zona Industrial de
Turumo Caracas, VENEZUELA
TEL: (212) 244-1122

EUROPE

**BELGIUM/FRANCE/
HOLLAND/
LUXEMBOURG**
Roland Central Europe N.V.
Houtstraat 3, B-2260, Oevel
(Westerlo) BELGIUM
TEL: (014) 575811

**BOSNIA AND
HERZEGOVINA**
Mix-AP Music
78000 Banja Luka, Veselina
Maslese 3,
BOSNIA AND HERZEGOVINA
TEL: 65 403 168

CROATIA
ART-CENTAR
Degenova 3.
HR - 10000 Zagreb, CROATIA
TEL: (1) 466 8493

CZECH REP.
CZECH REPUBLIC
DISTRIBUTOR s.r.o
Pod Bání 8
180 00 Praha 8, CZECH REP.
TEL: 266 312 557

**DENMARK/ESTONIA/
LATVIA/LITHUANIA**
Roland Scandinavia A/S
Skagerrakvej 7 Postbox 880
DK-2100 Copenhagen,
DENMARK
TEL: 39166222

FINLAND
Roland Scandinavia As, Filial
Finland
Vanha Nurmijarventie 62
01670 Vantaa, FINLAND
TEL: (0) 9 68 24 020

GERMANY/AUSTRIA
ROLAND Germany GmbH.
Adam-Opel-Strasse 4, 64569
Nauheim, GERMANY
TEL: 6152 95546-00

GREECE/CYPRUS
STOLLAS S.A.
Music Sound Light
155, New National Road
Patras 26442, GREECE
TEL: 2610 435400

HUNGARY
Roland East Europe Ltd.
2045. Törökbálint, FSD Park 3. ép.,
Budapest, HUNGARY
TEL: (23) 511 011

IRELAND
Roland Ireland
E2 Calmount Park, Calmount
Avenue, Dublin 12,
Republic of IRELAND
TEL: (01) 4294444

ITALY
Roland Italy S. p. A.
Viale delle Industrie 8,
20020 Arese, Milano, ITALY
TEL: (02) 937-78300

MACEDONIA
MK MJUZIK
Alekso Demnievski-Bauman 9-3,
1400 Veles, MACEDONIA
TEL: 70 264 458

MONTENEGRO
MAX-AP
Przno, Kamenovo bb., 86000
Budva, MONTENEGRO
TEL: 68 050 112

NORWAY
Roland Scandinavia Avd.
Kontor Norge
Lilleakerveien 2 Postboks 95
Lilleaker N-0216 Oslo,
NORWAY
TEL: 2273 0074

POLAND
ROLAND POLSKA SP. Z O.O.
ul. Kty Grodziskie 16B
03-289 Warszawa, POLAND
TEL: (022) 678 9512

PORTUGAL
Roland Systems Group EMEA, S.L.
Branch Office Porto
Edifício Tower Plaza
Rotunda Eng. Edgar Cardoso 23,
4-B
4400-676 Vila Nova de Gaia,
PORTUGAL
TEL: (+351) 22 608 00 60

ROMANIA
Pro Music Concept SRL
440221 Satu Mare
B-dul Independentei nr. 14/a.,
ROMANIA
TEL: (0361) 807-333

RUSSIA
Roland Music LLC
Dorozhnaya ul.3,korp.6
117 545 Moscow, RUSSIA
TEL: (495) 981-4967

SERBIA
Music AP
Sutjeska br. 5 XS - 24413 PALIC,
SERBIA
TEL: (0) 24 539 395

SLOVAKIA
DAN Acoustic s.r.o.
Povazská 18.
SK - 940 01 Nové Zámky,
SLOVAKIA
TEL: (035) 6424 330

SPAIN
Roland Systems Group EMEA, S.L.
Paseo García Faria, 33-35
08005 Barcelona, SPAIN
TEL: 93 493 91 00

SWEDEN
Roland Scandinavia A/S
SWEDISH SALES OFFICE
Mårbackagatan 31, 4 tr.
SE-123 43 Farsta, SWEDEN
TEL: (0) 8 683 04 30

SWITZERLAND
Roland (Switzerland) AG
Landstrasse 5, Postfach,
CH-4452 Itingen, SWITZERLAND
TEL: (061) 975-9987

TURKEY
ZUHAL DIS TICARET A.S.
Galip Dede Cad. No.33
Beyoglu, Istanbul, TURKEY
TEL: (0212) 249 85 10

UKRAINE
EURHYTHMICS Ltd.
P.O.Box: 37-a.
Nedecey Str. 30
UA - 89600 Mukachevo,
UKRAINE
TEL: (03131) 414-40

UNITED KINGDOM
Roland (U.K.) Ltd.
Atlantic Close, SWANSEA SA7
9FJ, UNITED KINGDOM
TEL: (01792) 702701

MIDDLE EAST

BAHRAIN
Moon Stores
No.1231&1249 Rumaytha
Building Road 3931,
Manama 339, BAHRAIN
TEL: 17 813 942

EGYPT
Al Fanny Trading Office
9, EBN Hagar Al Askalany Street,
ARD E1 Golf, Heliopolis,
Cairo 11341, EGYPT
TEL: (022)-417-1828

IRAN
MOCO INC.
Jadeh Makhsous Karaj (K-9),
Nakhe Zarin Ave.
Jalal Street, Reza Alley No.4
Tehran 1389716791, IRAN
TEL: (021)-44545370-5

ISRAEL
Halilit P. Greenspoon &
Sons Ltd.
8 Retzif Ha'alia Hashnia St.
Tel-Aviv-Yafo ISRAEL
TEL: (03) 6823666

JORDAN
MUSIC HOUSE CO. LTD.
FREDDY FOR MUSIC
P. O. Box 922846
Amman 11192, JORDAN
TEL: (06) 5692696

KUWAIT
EASA HUSAIN AL-YOUSIFI &
SONS CO.
Al-Yousifi Service Center
P.O.Box 126 (Safat) 13002,
KUWAIT
TEL: 00 965 802929

LEBANON
Chahine S.A.L.
George Zeidan St., Chahine Bldg.,
Achrafieh, P.O.Box: 16-5857
Beirut, LEBANON
TEL: (01) 20-1441

OMAN
TALENTZ CENTRE L.L.C.
Malatan House No.1
Al Noor Street, Ruwi
SULTANATE OF OMAN
TEL: 2478 3443

QATAR
AL-EMADI TRADING &
CONTRACTING CO.
P.O. Box 62, Doha, QATAR
TEL: 4423-554

SAUDI ARABIA
Adawliah Universal
Electronics APL
Behind Pizza Inn
Prince Turkey Street
Adawliah Building,
PO BOX 2154,
Al Khobar 31952,
SAUDI ARABIA
TEL: (03) 8643601

SYRIA
Technical Light & Sound Center
PO Box 13520 Bldg No.49
Khaled Abn Alwalid St.
Damascus, SYRIA
TEL: (011) 223-5384

U.A.E.
Adawliah Universal
Electronics APL
Omar bin alkhattab street, fish
round about, nayef area, deira,
Dubai, U.A.E.
TEL: (04) 2340442

NORTH AMERICA

CANADA
Roland Canada Ltd.
(Head Office)
5480 Parkwood Way Richmond
B. C., V6V 2M4, CANADA
TEL: (604) 270 6626

Roland Canada Ltd.
(Toronto Office)
170 Admiral Boulevard
Mississauga On L5T 2N6,
CANADA
TEL: (905) 362 9707

U. S. A.
Roland Corporation U.S.
5100 S. Eastern Avenue
Los Angeles, CA 90040-2938,
U. S. A.
TEL: (323) 890 3700

As of Apr. 1, 2013 (ROLAND)

Operation Guide
Panel Descriptions
Before You Play
Performing
Practicing
Convenient Functions
Function Mode
Appendix

─ **For China** ─

有 关 产 品 中 所 含 有 害 物 质 的 说 明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环 保 使 用 期 限

此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。
环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。
不当的使用，将会导致有害物质泄漏的危险。

产 品 中 有 毒 有 害 物 质 或 元 素 的 名 称 及 含 量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
外壳（壳体）	×	○	○	○	○	○
电子部件（印刷电路板等）	×	○	×	○	○	○
附件（电源线、交流适配器等）	×	○	○	○	○	○
○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。						
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。 　　因根据现有的技术水平，还没有什么物质能够代替它。						

Operation Guide

Panel Descriptions

Before You Play

Performing

Practicing

Convenient Functions

Function Mode

Appendix

─ For the U.K. ─

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.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

─ For EU Countries ─

CE   This product complies with the requirements of EMC Directive 2004/108/EC.

─ For the USA ─

FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment requires shielded interface cables in order to meet FCC class B limit.
Any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

─ For Canada ─

CAN ICES-3 (B)/NMB-3 (B)

─ For Korea ─

사용자 안내문

기종별	사용자 안내문
B 급 기기 (가정용 방송통신기자재)	이 기기는 가정용(B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든지역에서 사용할 수 있습니다.

─ For C.A. US (Proposition 65) ─

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

─ For the USA ─

DECLARATION OF CONFORMITY
Compliance Information Statement

Model Name : DP90, DP90S
Type of Equipment : Digital Piano
Responsible Party : Roland Corporation U.S.
Address : 5100 S. Eastern Avenue, Los Angeles, CA 90040-2938
Telephone : (323) 890-3700

Roland