

VR-09



VR-730





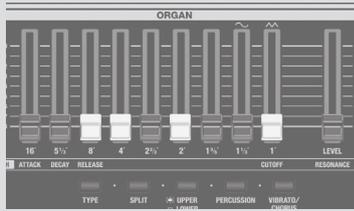
# An Overview of This Unit

## Sound Sections

This unit has three sound sections—organ, piano, and synthesizer—and each section occupies a separate area of the panel. You can also play two sounds simultaneously, or divide the keyboard into two regions and play different sounds in the left and right regions.

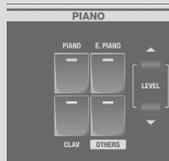
### Organ section

Here you can use the harmonic bars to shape the organ sound to your taste.



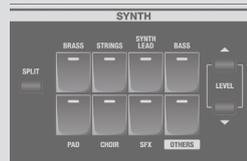
### Piano section

Here you can choose various piano sounds.



### Synthesizer section

Here you can select synthesizer sounds.



### MODE buttons



Here you can select an individual organ sound, piano sound, or synthesizer sound at a single touch.

### REFERENCE

- “Selecting Sounds” (p. 13)
- “Modifying the Organ Sound” (p. 17)
- “Modifying the Synthesizer Sound” (p. 23)
- “Combining Two Sounds” (p. 28)

\* The illustration shows the VR-09.

## Effect/Rotary

You can apply effects and a rotary speaker simulation.

By operating the knobs and buttons you can make the sound change in real time.



### REFERENCE

- “Adding Effects to the Sound” (p. 24)
- “Using the Rotary Effect” (p. 20)

## Registration

Sound and effect settings as well as combinations of sounds can be stored as a “registration.”

You can easily switch between sounds by recalling a previously-stored registration.



### REFERENCE

“Selecting Your Favorite Sounds (Registration)” (p. 15)

## Drum section

The drum section lets you do the following.

- Play drum sounds or sound effects from the keyboard (p. 16).
- Perform while playing back internal rhythm patterns or songs from a USB flash drive (p. 33, p. 35).
- Record your performance (p. 34).
- Perform using the looper (p. 38).



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7	CURSOR [▲] [▼] buttons	Use these to select parameters.	—
	[VALUE] dial	Use this to modify a value.	—
	[MENU] button	Accesses the menu screen.	p. 45
	[ENTER] button	Confirms a value or executes an operation.	—
	[EXIT] button	Returns to the previous screen, or cancels an operation.	—
8	[TRANPOSE] button	Raises or lowers the keyboard range in steps of one semitone.	p. 27
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<b>Piano section</b>			
Here you can select piano sounds and adjust the volume of the piano sound.			
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	[E. PIANO] button	Selects electric piano sounds.	
	[CLAV] button	Selects clavi sounds.	
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<b>Synthesizer section</b>			
Here you can select synthesizer sounds and adjust the volume of the synthesizer sound.			
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11	[BANK] button	Selects the registration bank.	p. 15
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Here you can select drum kits or rhythm patterns, and select and play songs.			
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	ROTARY SOUND [FAST/SLOW] button	Changes the speed of the rotary speaker.	p. 20
15	Pitch bend/Modulation lever	You can use the lever to modify the sound in real time.	p. 26

## Rear Panel (Connecting Devices)

### DAMPER jack

You can connect a pedal switch or a damper pedal (DP series; sold separately) here.

The pedal switch can be used to sustain the notes.

While you continue holding down the pedal, notes will continue sounding even after you take your fingers off the keys.

You can also use the pedal switch to control the looper (Damper Assign: p. 48).



### EXPRESSION PEDAL jack

Connect an expression pedal (EV series; sold separately) to this jack.

You can use the expression pedal to control the volume.

\* Use only the specified expression pedal (EV series; sold separately). By connecting any other expression pedal, you risk causing malfunction and/or damage to the unit.

#### MEMO

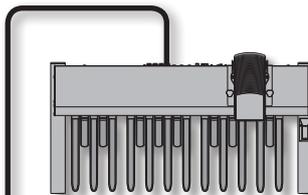
You can also connect a pedal switch (DP-2; sold separately) here to control the looper (ExpressionAssign:p.48).



### PK IN connector

Connect a pedalboard (PK-9; sold separately) to this connector.

This allows you to play the pedal part of the organ.



### PHONES jack



Connect your headphones (sold separately) to this jack.



### MIDI connectors

page 54

Connect an external MIDI device here to transfer performance data.

\* The MIDI connectors and the MIDI functionality of the USB COMPUTER port cannot be used simultaneously.

### EXT INPUT jack

If you use a stereo mini-plug cable to connect your audio player or other audio source here, the sound from the connected device will be output from the OUTPUT jacks. Use the controls of the connected device to adjust its volume.

\* This sound cannot be recorded.



### OUTPUT jacks

Connect an amp or mixer to these jacks to output the sound.



### DC IN jack

Connect the included AC adaptor to this jack.

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.



### [POWER] switch

page 11

Press this switch to turn it on/off.

### USB COMPUTER port

page 54

You can use a commercially available USB cable to connect this unit to your computer so that performance data (MIDI data) can be transmitted and received.

\* The MIDI connectors and the MIDI functionality of the USB COMPUTER port cannot be used simultaneously.



\* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

\* If you turn the power of this instrument on/off while a MIDI device is connected to the MIDI OUT connector, unexpected data might be transmitted from the MIDI OUT connector. If a problem occurs, disconnect the MIDI device while this instrument is still powered-on.

\* When you operate the expression pedal, 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.

# Getting Ready

## Installing Batteries

If eight commercially available rechargeable Ni-MH batteries (AA, HR6) are installed, you'll be able to play this unit without connecting the AC adaptor.

- \* If you handle batteries improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (leaflet "USING THE UNIT SAFELY" and Owner's manual).
- \* We recommend that you keep batteries installed in the unit even though you'll be powering it with the AC adaptor. That way, you'll be able to continue a performance even if the cord of the AC adaptor gets accidentally disconnected from the unit.
- \* When this unit is operating on batteries, power cannot be supplied to the PK-9 that is connected to the PK IN connector. Use the AC adaptor that is included with the PK-9.

### Types of batteries that can be used

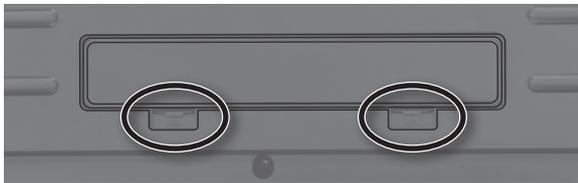
If operating this unit on batteries, please use rechargeable Ni-MH batteries.

Using rechargeable Ni-MH batteries will allow approximately 5 hours of continuous operation at room temperature. (However, the duration will be approximately 3 hours if USB flash drive is connected. The duration of continuous operation may differ depending on the conditions of use.)

#### NOTE

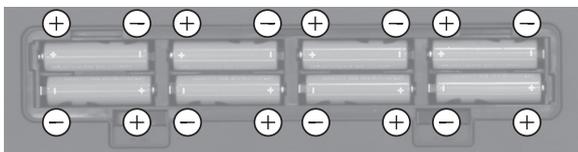
Do not use alkaline batteries or carbon-zinc battery batteries.

1. While pressing the tabs of the battery compartment cover on this unit's bottom panel, remove the cover.



- \* When turning the unit over, be careful so as to protect the buttons and knobs from damage. Also, handle the unit carefully; do not drop it.

2. Insert the batteries into the battery compartment, taking care to observe the correct polarity (+/- orientation).



#### NOTE

Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.

3. Securely close the battery compartment cover.

## When to Replace the Batteries

When the batteries run low, the display will indicate "Charge Battery." Stop use, and recharge the batteries.

#### NOTE

If you continue using the unit after the "Charge Battery" indication appears, the "Battery Low!" indication will appear, and further operation will not be possible.

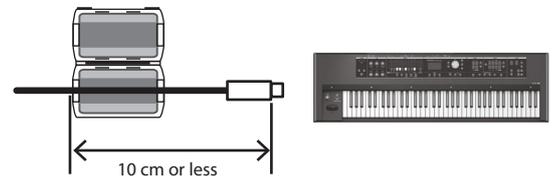
## Attaching the Ferrite Core

VR-730 only

If you use the USB cable, you must attach the included ferrite core. This is for the purpose of preventing electromagnetic noise; do not remove it.

1. Open the ferrite core and position it over the cable.

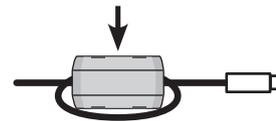
\* You must attach the ferrite core near the plug (10 cm or less) that is connected to this unit.



2. Wrap the cable around the ferrite core; one turn is enough.



3. Close it firmly; you should hear a distinct sound as it clicks shut.



#### NOTE

- Take care not to get your fingers pinched when attaching the ferrite core.
- Make sure you don't apply undue force and damage the cable when clamping on the ferrite core. Depending on the thickness of the cable, you might not be able to close the ferrite core with the cable wrapped once around it. Use a cable of a thickness that allows the ferrite core to be attached with the cable wrapped once around it.

## Placing This Unit on a Stand

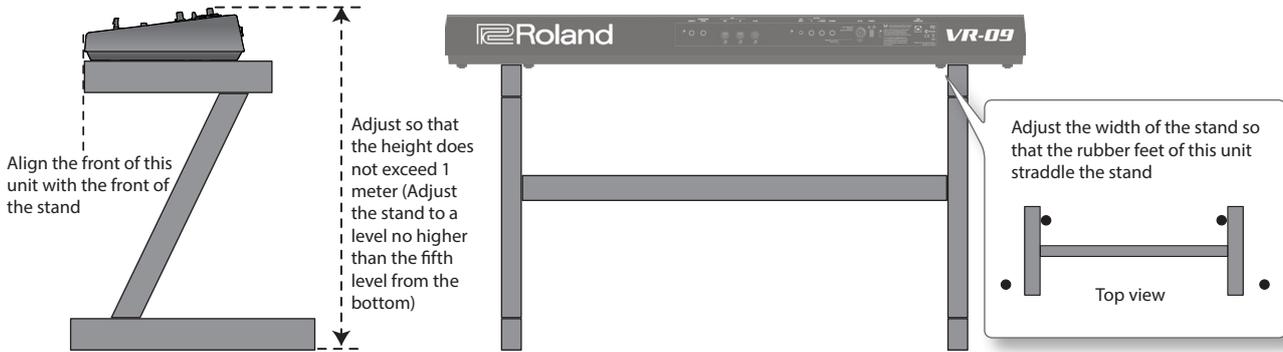
Be careful not to pinch your fingers when setting up the stand.

If you place this unit on a stand, you must use the KS-18Z or the KS-12.

Place the instrument on the stand as follows.

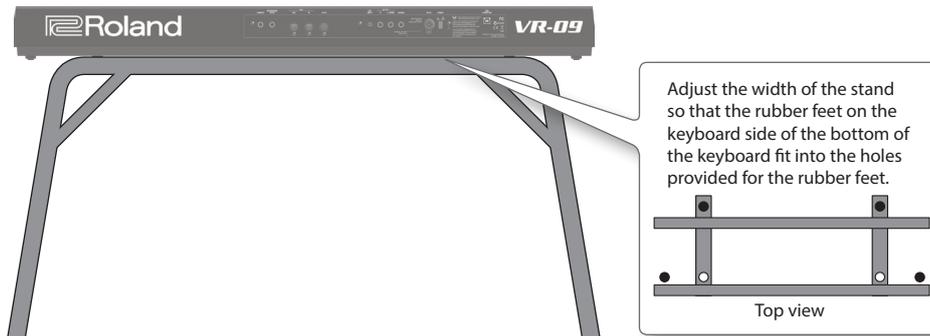
\* If using a pedalboard (PK-9; sold separately), please use the KS-12.

### KS-18Z



\* The illustration shows the VR-09.

### KS-12



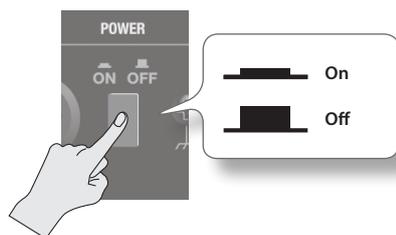
\* The illustration shows the VR-09.

## Turning the Power On/Off

### Turning the Power On

1. Before turning on this unit's power, consider these two questions:
  - Is the AC adaptor and any other equipment connected correctly?
  - Have the volume controls of this unit and all connected audio devices been turned to their lowest settings?

2. Press the [POWER] switch of this unit to turn it on.



3. Turn on the power for any connected audio devices.
4. While playing the keyboard and listening to the sound, slowly increase the volume of this unit and the volume of the connected equipment until you obtain the desired volume.

### Turning the Power Off

1. Before turning off the power, consider the following question:
  - Have the volume controls of this unit and all connected audio devices been turned to their lowest settings?
2. Turn off the power for all connected audio devices.
3. Turn off the [POWER] switch of this unit.

#### Concerning the Auto Off function

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. 41).

- 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 save them beforehand.
- To restore power, turn the power on again.

## Listening to the Demo Songs

Here's how to listen to the demo songs.

1. Turn the power on.
2. Press the [▶/■] (START/STOP) button.  
The demo screen is shown in the display.



3. Press the [▶/■] (START/STOP) button.

Demo playback starts.

When the selected demo song finishes playing, the next demo song will begin playing.

4. Press the [▶/■] (START/STOP) button.

The demo song will stop playing.

#### MEMO

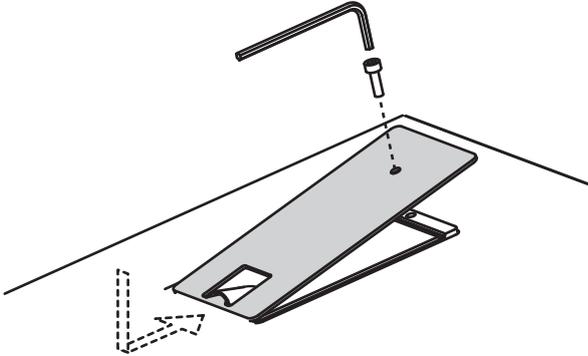
If the [LOOPER] button or [SONG/RHYTHM] button is lit, pressing the [▶/■] (START/STOP) button will not bring up the demo screen.

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

## Using the Included USB Memory Protector

VR-09 only

You can use the included USB memory protector to prevent theft of the USB flash drive connected to the VR-09.



### NOTE

- You must use the included screws.
- You must use the included Allen wrench to tighten or remove the screws. Using a tool that does not match the screw heads will damage them.
- Be careful not to over-tighten the screws. Doing so may damage the screw's head, causing the wrench to rotate uselessly.
- To tighten the screws, turn the Allen wrench clockwise. To loosen the screws, turn the Allen wrench counter-clockwise.



- Keep the removed screws out of the reach of small children to ensure they are not swallowed accidentally.
- Never allow foreign objects (e.g., coins, wires) to enter the USB memory box.
- When opening/closing the USB flash drive cover, 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.

# Selecting Sounds

## Selecting Sounds with One Touch

By using the Mode buttons you can play organ, piano, and synthesizer sounds individually.

### REFERENCE

For details about the sounds, refer to "Sound List" in the "Data List" (PDF).

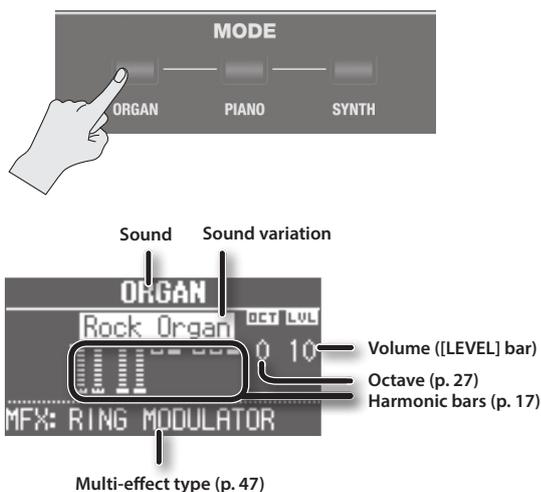
You can download the "Data List" (PDF) from the Roland website.

<http://www.roland.com/manuals/>

## Selecting Organ Sounds

### 1. Press the MODE [ORGAN] button.

The MODE [ORGAN] button will light.

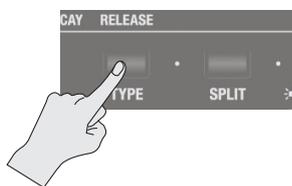


### MEMO

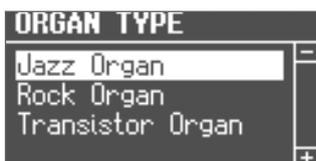
Use the CURSOR [▲] [▼] buttons to move the cursor to an item, and turn the [VALUE] dial to change the sound variation/multi-effect type.

## Selecting the organ sound variation

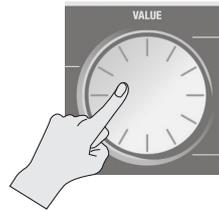
### 1. In the organ section, press the [TYPE] button.



The ORGAN TYPE screen is shown in the display.



### 2. Turn the [VALUE] dial to select the desired type of sound.



### MEMO

- You can play the keyboard to audition the sound at which the cursor is located.
- While the ORGAN TYPE screen is displayed, you can press the [TRANSPOSE] button to retain the ORGAN TYPE screen. Press the [EXIT] button to return to the previous screen.
- This unit's organ sounds reproduce the distinctive way in which a vintage organ triggers the sound at a shallow key depth. This is called the "quick firing function."
- The organ sounds of this unit are produced by a "virtual tonewheel sound engine" that uses digital technology to faithfully simulate the way in which a tonewheel organ generates sound.



## What's the quick-firing keyboard?

Contacts for traditional organ keys are extremely shallow, meaning that sounds are produced with the slightest touch of the keys. This gives it special qualities that allow glissando and similar performance techniques to be used very effectively.

However, a well-known side effect of this behavior is that when a key is released suddenly, it can rebound, causing that note to be unintentionally triggered a second time. On the other hand, some performers actively make use of these characteristics to realize a surprising, rapid-fire playing technique.

This unit's quick-firing function faithfully simulates these characteristics. Because the sounds of the organ section are triggered at high speed, rebounding may occur if you release a key suddenly; this is not a malfunction.

\* Quick-firing keyboard will not be used when you're playing non-organ sounds, or when you're playing a non-organ sound together with an organ sound.

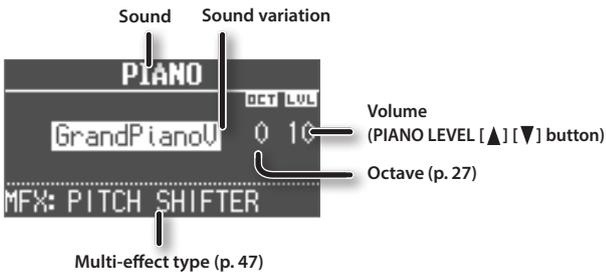
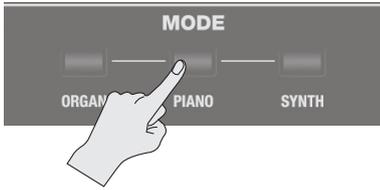
## What's the virtual tonewheel sound generator?

Traditional tonewheel organs generate sound using 91 toothed wheels called "tonewheels." Each tonewheel is a toothed, gear-like wheel with a different number of teeth that make it produce a specific pitch. A motor spins these wheels past magnetic coils which generate audio signals at the corresponding pitches. The settings of the harmonic bars in conjunction with the keys played on the keyboard determine which of these pitches are combined to produce the sound of the organ.

This unit's virtual tonewheel sound engine uses digital technology to faithfully recreate the principles by which a tonewheel organ produces its sound.

## Selecting Piano Sounds

1. Press the MODE [PIANO] button.  
The MODE [PIANO] button will light.

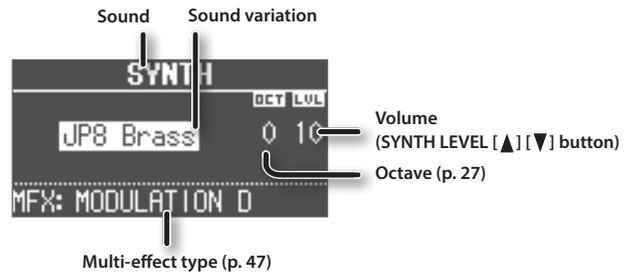
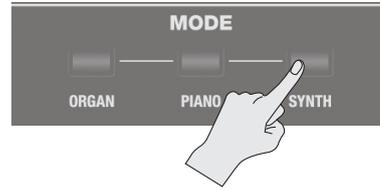


**MEMO**

Use the CURSOR [▲][▼] buttons to move the cursor to an item, and turn the [VALUE] dial to change the sound variation/multi-effect type.

## Selecting Synthesizer Sounds

1. Press the MODE [SYNTH] button.  
The MODE [SYNTH] button will light.

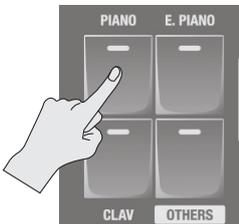


**MEMO**

Use the CURSOR [▲][▼] buttons to move the cursor to an item, and turn the [VALUE] dial to change the sound variation/multi-effect type.

## Selecting the piano sound variation

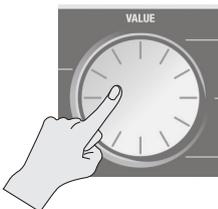
1. Press one of the sound buttons in the piano section.



The sound variation select screen appears.



2. Turn the [VALUE] dial to select the desired sound variation.

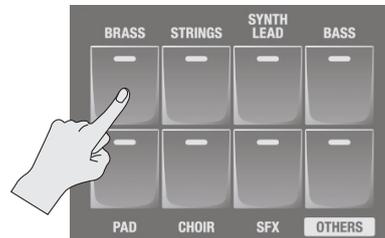


**MEMO**

- You can play the keyboard to audition the sound at which the cursor is located.
- If you press the [TRANPOSE] button while the sound variation select screen is shown, the select screen will be held. Press the [EXIT] button to return to the previous screen.

## Selecting the Synthesizer sound variation

1. Press one of the sound buttons in the synthesizer section.



The sound variation select screen appears.



2. Turn the [VALUE] dial to select the desired sound variation.



**MEMO**

- You can play the keyboard to audition the sound at which the cursor is located.
- If you press the [TRANPOSE] button while the sound variation select screen is shown, the select screen will be held. Press the [EXIT] button to return to the previous screen.

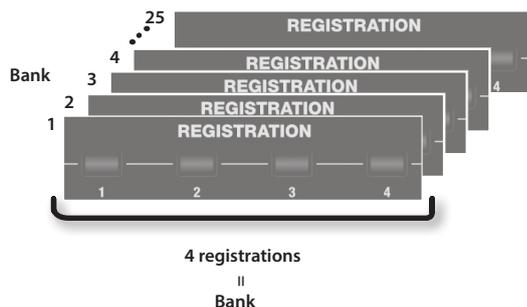
## Selecting Your Favorite Sounds (Registration)

You can assign a name to your favorite organ, piano, and synthesizer sounds (or combination of sounds), and store it as a "registration."

A registration can be recalled instantly by pressing a single button. This is a convenient way to switch sounds for each song, or to instantly switch between settings during a live performance.

Registrations are organized into banks, with 4 registrations in each bank.

There are 25 banks, allowing you to store a total of 100 registrations.



**MEMO**

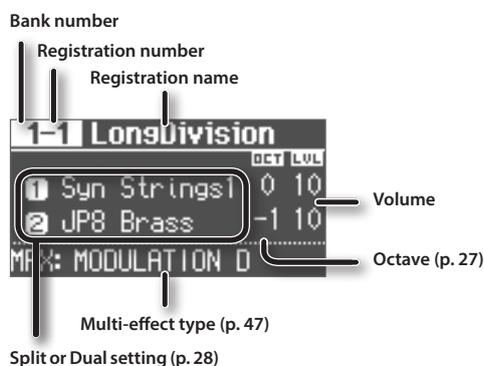
- When this unit is shipped from the factory, several banks contain registrations with the same settings.
- Sets of registrations can be saved on a USB flash drive (p. 41).
- The registrations saved on a USB flash drive can be loaded individually or as a set (p. 42).

## Recalling a Registration

1. Press the [1]–[4] buttons to select a registration.



The registration screen is shown in the display.



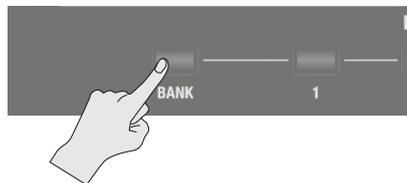
**MEMO**

- You can select a registration by moving the cursor to the registration number and turning the [VALUE] dial.
- You can select the next registration by pressing the [NEXT] button.
- If registration 4 is selected, pressing the [NEXT] button will select registration 1 of the next bank.

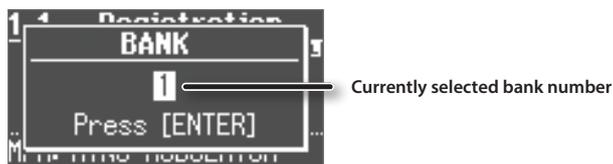
## Switching Registration Banks

### Switching banks (Banks 1–4)

1. Press the [BANK] button.



The BANK screen is shown in the display.



2. Press the [1]–[4] buttons to select the desired bank.
3. Press the [1]–[4] buttons to select a registration.  
You'll switch to a registration of the bank you selected.

### Switching banks (Banks 5–25)

1. Press the [BANK] button.  
The BANK screen is shown in the display.
2. Turn the [VALUE] dial to select the desired bank.



3. Press the [ENTER] button.
4. Press the [1]–[4] buttons to select a registration.  
You'll switch to a registration of the bank you selected.

## Storing a Registration

1. Select the desired sounds and effect settings.
2. Hold down one of the [1]–[4] buttons until the following screen appears.

The WRITE REGISTRATION screen is shown in the display.



3. Select the store-destination.

Use the CURSOR [▲][▼] buttons and the [VALUE] dial to select the store-destination bank and registration number.

4. Specify a name for the registration.

Button/Dial	Operation
CURSOR [▲][▼] buttons	Select the character that you want to change.
[VALUE] dial	Changes the character.
MODE [ORGAN] (Del) button	Delete the character.
MODE [PIANO] (Space) button	Inserts a space.

6. Press the [ENTER] button or the MODE [SYNTH] (Write) button.

Your settings will be stored in the selected registration.

### REFERENCE

About the settings stored in a registration, refer to “Settings That Are Stored in the Registrations” (p. 62).

## Selecting Drum Sounds

You can play drum sounds and sound effects from this unit’s keyboard.

A drum kit lets you choose from a selection of sounds.

When you switch drum kits, the sounds assigned to each key will change.

### REFERENCE

Refer to “Drum Kit List” in the “Data List” (PDF) for details on the percussion instrument sounds that are assigned to each key. You can download the “Data List” (PDF) from the Roland website.

<http://www.roland.com/manuals/>

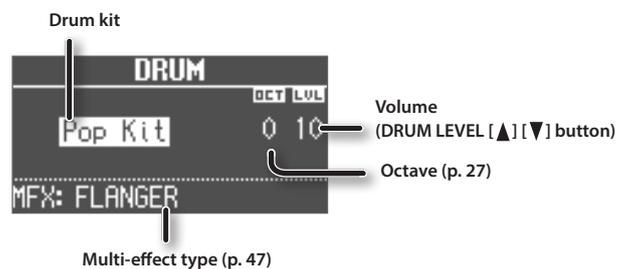
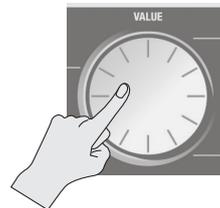
1. Press the [DRUM] button to make it light.



The DRUM screen appears.



2. Turn the [VALUE] dial to select a drum kit.



### MEMO

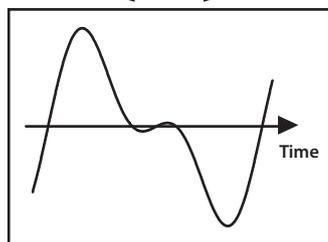
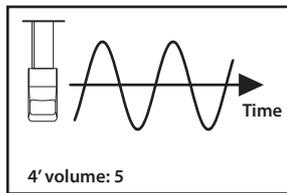
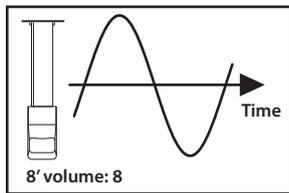
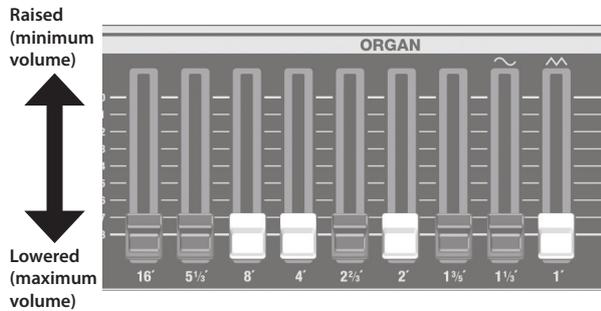
- By using the looper function (p. 38) to overdub-record drum sounds, you can create rhythm patterns using these sounds.
- You can play the keyboard to audition the sound at which the cursor is located.
- If you press the [TRANPOSE] button while the DRUM screen is shown, the DRUM screen will be held. Press the [EXIT] button to return to the previous screen.
- You can use the DRUM LEVEL [▲][▼] buttons to adjust the volume of the drum kit (p. 33).

# Modifying the Organ Sound

## Using the Harmonic Bars

The harmonic bars are assigned to sounds of different footage (pitch). You can create a wide variety of organ sounds by layering these sounds.

The volume will be loudest when the harmonic bars are fully lowered; there will be no sound when the harmonic bars are fully raised.



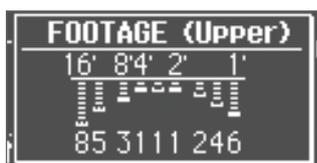
### 1. Select an organ sound (p. 13).

The organ sound editing screen appears.



### 2. Slide the harmonic bars to adjust the sound.

The volume of each footage is shown numerically.



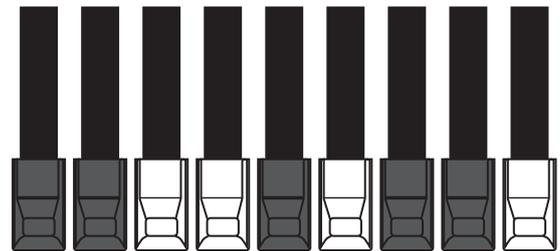
#### MEMO

While the FOOTAGE screen is displayed, you can press the [TRANSPOSE] button to retain the FOOTAGE screen. Press the [EXIT] button to return to the previous screen.



## Harmonic bars and the pitch of the sound

When the middle C (C4) note is pressed, each harmonic bar will sound the following notes.



one octave 5th below



The harmonic bars are categorized into two colors. The white bars are octave multiples of 8', and the black bars are a lower octave or are not octave multiples.

## A tonewheel organ's overtone structure

In certain regions of a tonewheel organ's keyboard, the overtones will not correspond to the configuration of the harmonic bars. In order to prevent unpleasantly high or low pitches, the high footage is "folded back down" in one octave units for the high range, while the low footage is "folded back up" in one-octave units for the low range. This unit faithfully reproduces this characteristic of tonewheel organs.

## When you've selected "Transistor Organ" as the organ sound

The footage structure will be different for Transistor organ.

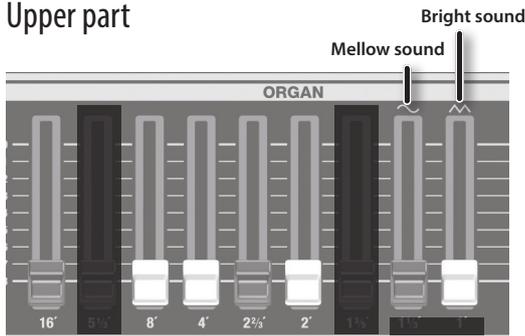
You'll be able to operate the following harmonic bars. The other harmonic bars will be unavailable.

Part (p. 29)	Harmonic bars that can be operated
Upper part	16', 8', 4', 2 2/3', 2' (5 bars)
Lower part	8', 4', 2', 1 3/5' (4 bars)

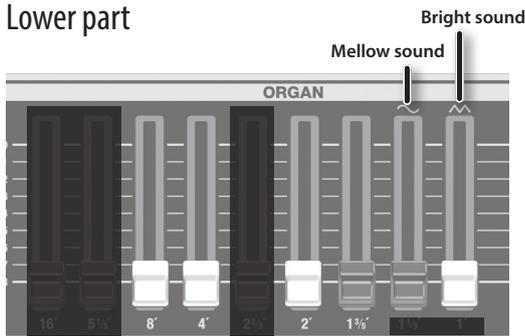
The bars at the right with the "〰" and "〰" icons will respectively adjust the volume of "mellow sound" and "bright sound."

If these two bars are fully raised, no organ sound will be heard.

### Upper part



### Lower part

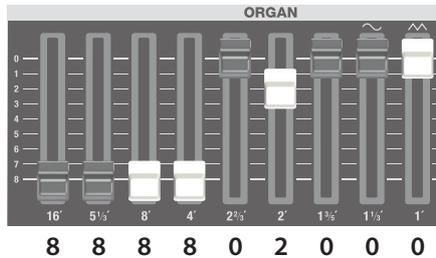


## Setting Example of Harmonic Bars

### Hard rock

Here's a typical setting for hard rock of the '70s. As desired, you can add a bit of 2' (the 2-foot bar). Also, add the overdrive (p. 24).

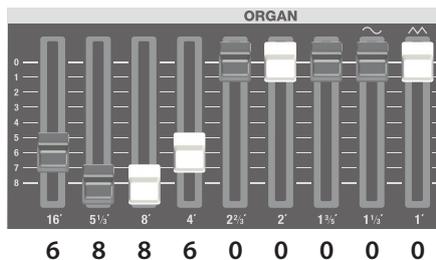
**Organ type:** Rock Organ  
**Percussion:** On



### Pops

Here's a typical setting for pops of the '60s.

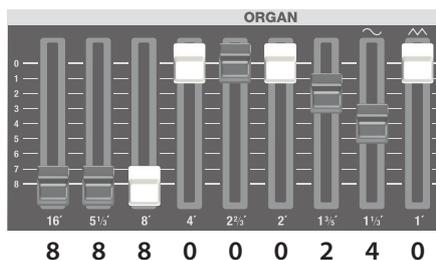
**Organ type:** Jazz Organ  
**Percussion:** On



### Progressive rock

Here's a setting for the progressive rock that was popular in the '70s. Add the C-3 chorus (p. 22) and the overdrive (p. 24).

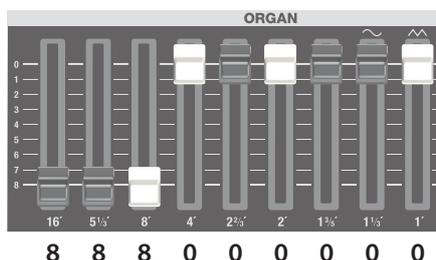
**Organ type:** Rock Organ  
**Percussion:** On



### Jazz

This is a standard setting for jazz organ. Add the C-3 chorus (p. 22).

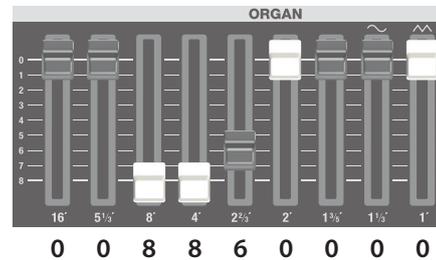
**Organ type:** Jazz Organ  
**Percussion:** On



### Rock

Here's a typical setting for rock of the '70s. Add the overdrive (p. 24).

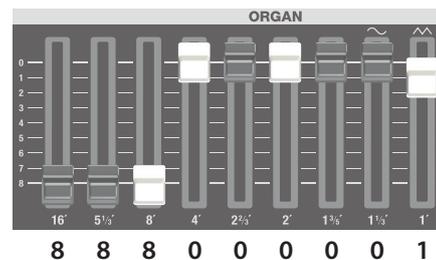
**Organ type:** Rock Organ  
**Percussion:** On



### Blues

Here's a standard blues sound. As desired, you can add a bit of 1' (the 1-foot bar).

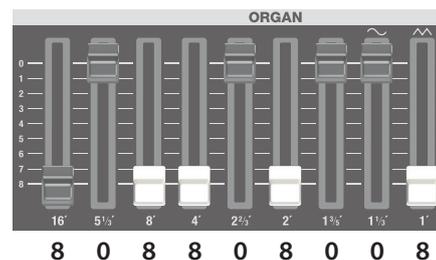
**Organ type:** Jazz Organ  
**Percussion:** Off



### Pipe organ

Here's a setting for a pipe organ sound. Add the reverb (p. 24).

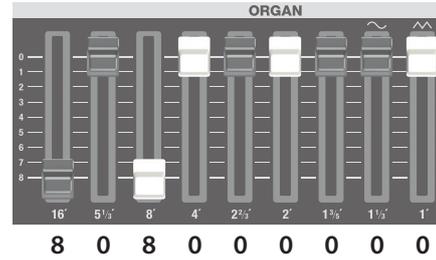
**Organ type:** Jazz Organ  
**Percussion:** Off



### Jazz (manual bass)

Here's a setting for a bass sound played in the left hand (manual bass).

**Organ type:** Jazz Organ  
**Percussion:** On



#### MEMO

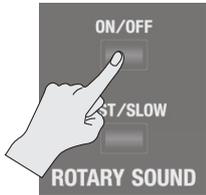
For more about manual bass, refer to "Playing the pedal sound with your left hand (manual bass)" (p. 30).

## Using the Rotary Effect

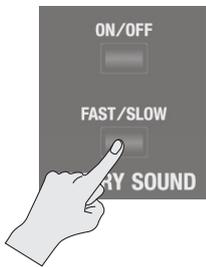
This effect adds modulation to the sound as if you were using a rotary speaker.

1. Press the ROTARY SOUND [ON/OFF] button to make it light.

The rotary effect will be added to the sound.



2. Press the ROTARY SOUND [FAST/SLOW] button to switch it between lit/unlit.



ROTARY SOUND [FAST/SLOW] button	Explanation
Lit (Fast)	Produces the effect of making the rotary speaker spin rapidly.
Unlit (Slow)	Produces the effect of making the rotary speaker spin slowly.

When you switch the rotary effect from "Fast" to "Slow," the modulation will gradually slow down. When you switch it from "Slow" to "Fast," the modulation will gradually speed up.

### MEMO

- You can make separate settings for the tweeter and the woofer to specify their rotation speeds at the fast and slow settings, as well as the time it will take for the tweeter and woofer to change their speed when you switch the rotary effect (ROTARY: p. 46).
- If you're playing only organ sounds, you can use the pitch bend/modulation lever to control the rotary effect. Move the lever away from yourself to turn the rotary effect on/off or apply the brake; move the lever to left or right to switch between fast/slow speeds. For more about the rotary effect controlled by the modulation lever, refer to "Changing the Pitch/Applying Vibrato (Pitch Bend/Modulation Lever)" (p. 26).
- You can also use a pedal switch (DP series; sold separately), an expression pedal (EV series; sold separately), the footswitch of a pedal keyboard (PK-9; sold separately), or the D-BEAM controller to switch between fast and slow (p. 25, p. 48, p. 50).

## Using Twin Rotary

By using the multi-effect "TWIN ROTARY" in conjunction with the rotary effect, you can obtain a more powerful and three-dimensional modulation effect as though you were using two rotary speaker units.

1. Press the MODE [ORGAN] button.
2. Use the CURSOR [▲] [▼] buttons to select "MFX."
3. Turn the [VALUE] dial to select "TWIN ROTARY."
4. Press the ROTARY SOUND [ON/OFF] button to make it light.
5. Turn the [MFX] knob to adjust the depth of the twin rotary effect.

As you turn the knob toward the right, the sound of the two rotary speakers will be mixed, producing a complex modulation effect.

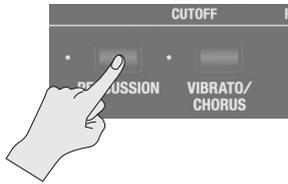
### MEMO

The rotational speed of the twin rotary effect will follow the setting of the ROTARY SOUND [FAST/SLOW] button.

## Using Percussion

This adds an attack to the beginning of each note, making the sound more crisp and percussive.

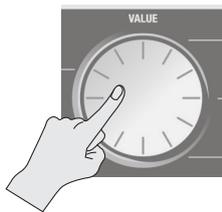
1. Press the [PERCUSSION] button to make it light.



The PERCUSSION screen appears.



2. Use the CURSOR [▲] [▼] buttons and the [VALUE] dial to select the desired effect.



Parameter	Value	Explanation
VOLUME (Vol)	SOFT	The percussion sound will be decreased, and the harmonic bars will be at their normal volume. 
	NORMAL	The percussion will be at its normal volume, and the sound of the harmonic bars will be decreased. 
HARMONIC (Harm)	2ND	Produces a percussion sound at the same pitch as the 4' harmonic bar.
	3RD	Produces a percussion sound at the same pitch as the 2 2/3' harmonic bar.

Parameter	Value	Explanation
DECAY (Decay)	FAST	The percussion sound will decay immediately, producing a sharper attack. 
	SLOW	The percussion sound will decay slowly, producing a softer attack. 

\* If you turn percussion on, the harmonic bar 1' sound will not be heard.

### MEMO

If you press the [TRANSCOPE] button while the PERCUSSION screen is shown, the PERCUSSION screen will be held. Press the [EXIT] button to return to the previous screen.



### Percussion on a tonewheel organ

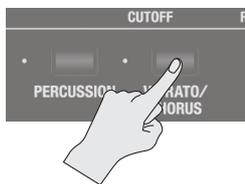
The percussion sound on a tonewheel organ does not apply to all the keys you play. Percussion will apply only to those keys that are simultaneously pressed from a state of no keys being pressed.

If you play legato, percussion will apply only to the first note you play. If you play staccato, percussion will apply to every note.

## Using Vibrato/Chorus

Here's how to apply vibrato (cyclic modulation of the pitch). You can also apply chorus, which mixes vibrato sound with unprocessed sound to produce greater depth and spaciousness.

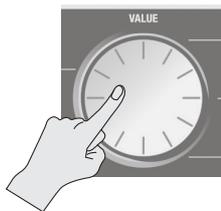
1. Press the [VIBRATO/CHORUS] button to make it light.



The VIBRATO/CHORUS screen appears.



2. Turn the [VALUE] dial to select the desired effect.



Value	Explanation
V-1	Applies a slight vibrato effect.
V-2	Applies a medium vibrato effect.
V-3	Applies a strong vibrato effect.
C-1	Applies a slight chorus effect.
C-2	Applies a medium chorus effect.
C-3	Applies a strong chorus effect.

### MEMO

If you press the [TRANSPOSE] button while the VIBRATO/CHORUS screen is shown, the VIBRATO/CHORUS screen will be held. Press the [EXIT] button to return to the previous screen.

# Modifying the Synthesizer Sound

This unit lets you use the top panel harmonic bars to modify the character of the synthesizer sound.

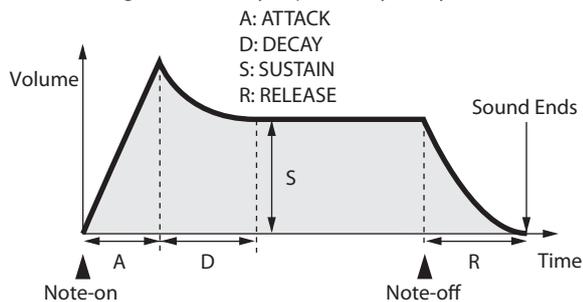
## MEMO

- If you're playing two sounds (split or dual) (p. 28), the settings will determine which sound is affected.
  - **If one of the sounds is an organ sound**  
The bars will operate as harmonic bars for the organ sound. The synthesizer sound will not change.
  - **If one of the sounds is a piano sound**  
The piano sound cannot be changed. The effect will apply only to the synthesizer sound.
  - **If two synthesizer sounds are combined**  
The bars will affect both synthesizer sounds.
- The effect can also be applied when playing a single piano sound.
- For some acoustic sounds (p. 53), DECAY, CUTOFF, and RESONANCE will have no effect.

## Changing the Volume Envelope (ATTACK, DECAY, RELEASE)

The shape that describes how an instrument's volume changes over time from the beginning to the end of the note is called the "envelope."

On a keyboard instrument, this specifies the way in which the volume changes from when you press a key until you release the key.



Parameter	Explanation
ATTACK	Time from when you press the key until the full volume is reached
DECAY	Time over which the volume reaches the SUSTAIN level following the attack
SUSTAIN	Volume at which the sound is sustained while you continue holding the key
RELEASE	Time over which the sound decays to silence after you release the key

On this unit you can use the three left-most harmonic bars to adjust the ATTACK, DECAY, and RELEASE times of the currently selected sound.

1. Select a sound from the synthesizer section (p. 14).
2. Move the bars to adjust the values of the corresponding parameters.

Bar	Value	Explanation
[ATTACK] bar	-64-63	Lowering the bar will shorten the attack time; raising the bar will lengthen the time.
[DECAY] bar	-64-63	Lowering the bar will shorten the time over which the level falls to the SUSTAIN level; raising the bar will lengthen the time.
[RELEASE] bar	-64-63	Lowering the bar will shorten the time over which the sound disappears; raising the bar will lengthen the time.

When you operate a bar, the current value is shown in the screen.



## MEMO

- While the value of a parameter is displayed, you can turn the [VALUE] dial to adjust the value.
- The value of each parameter is shown as an offset relative to the default value originally specified for each sound. At a value of "0" (the bar near the center "4" position), that parameter will be in its original state.
- If you press the [TRANPOSE] button while the adjustment screen is shown, the adjustment screen will be held. Press the [EXIT] button to return to the previous screen.

## Adjusting the Tonal Character (CUTOFF, RESONANCE)

The filter determines the tonal character of the sound.

You can use the filter to cut or boost different frequency regions of the sound, thus modifying its character.

Parameter	Explanation
CUTOFF	Frequency at which the filter takes effect (cutoff frequency)
RESONANCE	Amount by which the region near the filter's cutoff frequency is emphasized

On this unit you can use the two right-most harmonic bars to adjust the cutoff and resonance of the currently selected sound.

1. Select a sound from the synthesizer section (p. 14).
2. Move the bars to adjust the values of the corresponding parameters.

Bar	Value	Explanation
[CUTOFF] bar	-64-63	Specifies the cutoff frequency. Lowering the bar will make the sound darker (more mellow); raising the bar will make the sound brighter.
[RESONANCE] bar	-64-63	Boosts the sound in the region of the cutoff frequency, producing a distinctive tonal character. Lowering the bar will weaken this character, and raising the bar will strengthen it.

When you operate a bar, the current value is shown in the screen.



\* Some settings may produce noise or high-volume sound. Be careful of the volume of the connected mixer or amp.

## MEMO

- While the value of a parameter is displayed, you can turn the [VALUE] dial to adjust the value.
- The value of each parameter is shown as an offset relative to the default value originally specified for each sound. At a value of "0" (the bar near the center "4" position), that parameter will be in its original state.
- If you press the [TRANPOSE] button while the adjustment screen is shown, the adjustment screen will be held. Press the [EXIT] button to return to the previous screen.

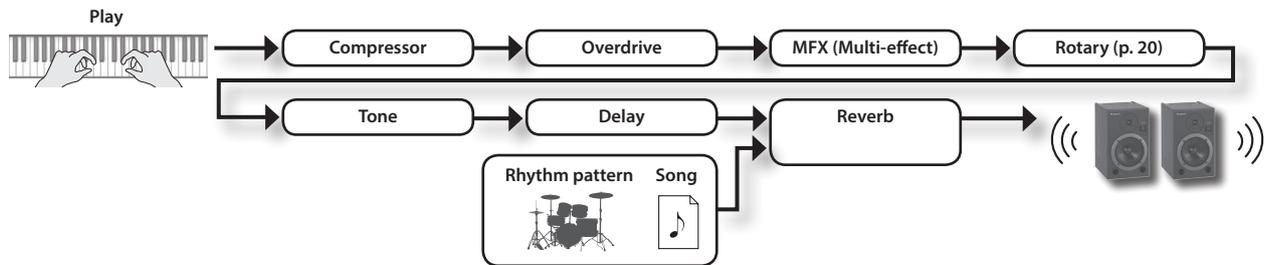
# Adding Effects to the Sound

## Applying Effects (EFX)

You can apply effects to the sounds you play. This unit contains 7 effect processors; each can be set independently. For the six effects other than rotary, you can use “global control” to conveniently apply each effect in an appropriate way.

### MEMO

- If you're playing two sounds (split or dual) (p. 28), the settings will determine which sound is affected.  
When using Dual: The same effects will apply to both sounds.  
When using Split: The effects will be applied only to the upper part (except for reverb). However if you've assigned organ sound to the lower part, the same effects will apply to all parts.
- The effects are connected in the order shown below.



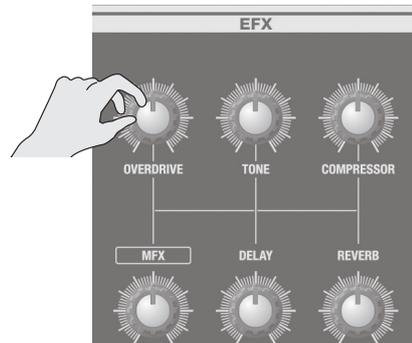
### 1. Select a sound (p. 13).

#### MEMO

Some sounds already have effects applied. The way in which effects are applied will differ depending on the sound.

### 2. Turn the knobs to adjust the depth of each effect.

- \* The effects may cause noise or loud sounds. To prevent malfunction and/or damage to speakers, adjust the volume of external mixers and amplifiers.



### What's the global control?

This is technology that optimizes multiple parameters of an effect so that they can be controlled by a single knob.

Knob	Explanation
[OVERDRIVE] knob	Produces a natural-sounding distortion as heard from a tube amp. If the knob is turned all the way to the left, no effect will be applied. Turning the knob toward the right will increase the depth of distortion.
[TONE] knob	Adjusts the tonal character of the low and high frequency ranges. If the knob is set to the center position, the response will be flat. Turning the knob toward the left will boost the mid-range, making the sound punchier. This is appropriate when playing in a band. Turning the knob toward the right will boost the low and high-frequency ranges, producing a more colorful sound. This is appropriate for solo performances.
[COMPRESSOR] knob	Compresses loud sounds and boosts the level of soft sounds. This narrows the dynamic range, helping to keep your playing audible within the performance of your band. If you turn the knob all the way to the left, no compressor effect will be applied. Turning the knob toward the right will smooth out the overall volume, making your sound more consistent.
[MFX] knob	This is a general-purpose multi-effect that can change the fundamental character of the sound, transforming it into something quite different. If you turn the knob all the way to the left, no effect will be applied. <b>MEMO</b> • The selected type of multi-effect is shown in the bottom line of the display. • To change the multi-effect type, move the cursor to the lower line of the display and turn the [VALUE] dial. • The multi-effect gives you a choice of 20 types. You can use the menu to change the multi-effect type (MFX Type: p. 47).
[DELAY] knob	Produces an echo-like effect by delaying the sound. By layering the delayed sound with the original sound, you can add depth and spaciousness to the sound. If you turn the knob all the way to the left, no delay effect will be applied. Turning the knob toward the right will lengthen the delay time (the time from the original sound until the left and right delay sounds are heard). <b>MEMO</b> You can choose from six types of delay. Use the menu to change the delay type (Delay Type: p. 47).
[REVERB] knob	Adds reverberation to the original sound, simulating a spacious room. If you turn the knob all the way to the left, no reverb effect will be applied. Turning the knob toward the right will make the reverb deeper. <b>MEMO</b> You can use the menu to change the reverb type and the wall type (surface material) (Reverb Type: p. 48, Wall Type: p. 48).

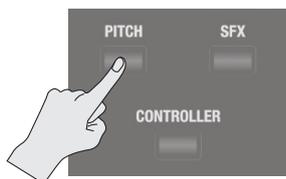
### MEMO

When you turn the [DELAY] knob or [REVERB] knob, the type will be displayed. You can turn the [VALUE] dial to change the type. If you press the [TRANPOSE] button while the adjustment screen is shown, the adjustment screen will be held. Press the [EXIT] button to return to the previous screen.

## Modifying the Sound / Producing Sound Effects (D-BEAM Controller)

By positioning your hand above the front panel's D-BEAM controller, you can modify the sound or produce sound effects. This is a great way to give your live performance more impact.

1. Press one of the D-BEAM [PITCH], [SFX], or [CONTROLLER] buttons to make it light.



Button	Explanation
[PITCH] button	The pitch will change according to the movement of your hand above the D-BEAM controller. * Pitch will not apply to organ sounds and drum sounds.
[SFX] button	A sound effect will be produced.
[CONTROLLER] button	The D-BEAM controller will operate the performance-related function you've assigned.

### MEMO

- You can assign the sound effect to the [SFX] button, and assign various performance-related functions to the [CONTROLLER] button.
- The volume of the sound effect is linked with the volume of the drum section. You can use the DRUM LEVEL [▲] [▼] buttons to adjust the volume of the sound effect (p. 33).
- If you're using Split (p. 29), the effect of the [PITCH] button and [CONTROLLER] button will apply only to the upper part.

2. While playing the keyboard to produce sound, position your hand above the D-BEAM controller and slowly move it up and down.

### MEMO

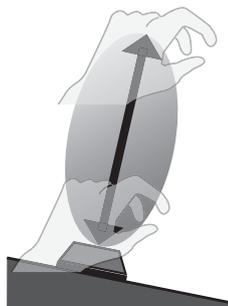
You can specify the amount of pitch bend that will occur (Pitch Bend Range: p. 49).

3. To turn off the D-BEAM controller, press the button you pressed in step 1 to make it go dark.

### Effective range of the D-BEAM controller

The illustration at right shows the effective range of the D-BEAM controller. Moving your hand outside this range will not produce any effect.

The effective range of the D-BEAM controller will be drastically decreased under strong direct sunlight. Please be aware of this when using the D-BEAM controller outdoors.



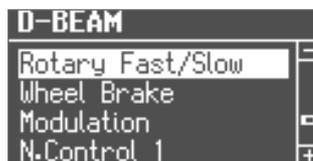
### MEMO

The sensitivity of the D-BEAM controller will vary according to the brightness of its surroundings. If it does not operate as you expect, you can readjust the sensitivity. Increasing the D-BEAM sensitivity value (p. 50) will make it more sensitive.

## D-BEAM Controller Settings

1. Press the D-BEAM [SFX] or [CONTROLLER] button to make it light.

The D-BEAM screen appears.



2. Turn the [VALUE] dial to select the sound effect or function that you want to control using the D-BEAM controller.

Value	Explanation
[SFX] button	

### REFERENCE

For details about the sound effects, refer to "Sound Effect List" in the "Data List" (PDF).

You can download the "Data List" (PDF) from the Roland website.

<http://www.roland.com/manuals/>

[CONTROLLER] button	
Rotary Fast/Slow	Switches the speed of the rotary speaker between "fast" and "slow."
Wheel Brake	Simulates the way in which the tonewheel rotation slows and stops when a tonewheel organ is powered-off (tonewheel brake). * This has no effect for sounds other than organ sounds.
Modulation	Applies a vibrato effect. * Some sounds will not be affected by vibrato. For details about the sounds, refer to "Sound List" in the "Data List" (PDF).
N.Control 1	Apply an effect to specific acoustic sounds (p. 53).
N.Control 2	

3. Press the [EXIT] button to finish the procedure.

### MEMO

While the settings screen is displayed, you can press the [TRANSPOSE] button to retain the settings screen. Press the [EXIT] button to return to the previous screen.

### What's the tonewheel brake?

This simulates the way in which the tonewheels stop rotating when you switch off the power on a tonewheel organ.

Since the amplifier of a tonewheel organ consisted of analog circuits using vacuum tubes, it would continue to produce sound for a short time even after the power was turned off. However, since the organ's tonewheels would start slowing down as soon as the power was turned off, this would make the pitch drop. The technique of stopping the tonewheels was sometimes used on tonewheel organs. A skilled performer could use this effect within their music.

## Changing the Pitch/Applying Vibrato (Pitch Bend/Modulation Lever)

While playing the keyboard, move the lever toward the left to lower the pitch, or toward the right to raise the pitch. This is called “pitch bend.”



Moving the lever away from yourself will apply vibrato. This is called “modulation.”



Moving the lever away from yourself while also moving it to left or right will apply both effects simultaneously.

### MEMO

- Pitch bend and modulation do not apply to organ sounds. If you’re playing only organ sounds, you can use the pitch bend/modulation lever to control the rotary effect. Move the lever away from yourself to turn the rotary effect on/off or apply the brake; move the lever to left or right to switch between fast/slow speeds.
- If you’re using Split (p. 29), pitch bend and modulation will apply only to the upper part.
- You can specify the amount of pitch bend that will occur (Pitch Bend Range: p. 49).
- You can make settings so that the modulation lever will not turn the rotary effect on/off or disable the brake (Modulation Lever: p. 50).
- For the following acoustic sounds, you can use the modulation lever to produce dynamics effects.
  - N.Trumpet
  - N.Alto Sax
  - N.Flute

## Making the Pitch Change Smoothly (Portamento)

Portamento is an effect that produces a smooth change in pitch between one note and the next.

Portamento can be applied to piano sounds and to synthesizer sounds.

### MEMO

- Some sounds already have portamento applied to them (default setting).
- When using split (p. 29), portamento will be applied only to the upper part.

1. Press the [MENU] button.
2. Turn the [VALUE] dial to select “Portamento.”
3. Press the [ENTER] button.
4. Use the CURSOR [▲] [▼] buttons to select “Portamento Switch.”
5. Turn the [VALUE] dial to change the setting.

Value	Explanation
OFF	Portamento is off.
ON	Portamento is on.
DEFAULT	The default setting.

6. Press the [EXIT] button several times to finish the procedure.

## Specifying the Time of Pitch Change

You can specify the time over which the portamento effect will produce the pitch change.

1. Press the [MENU] button.
2. Turn the [VALUE] dial to select “Portamento.”
3. Press the [ENTER] button.
4. Use the CURSOR [▲] [▼] buttons to select “Portamento Time.”
5. Turn the [VALUE] dial to change the setting.

Value	0 (short)–127 (long)
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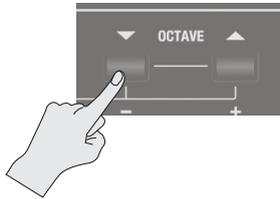
6. Press the [EXIT] button several times to finish the procedure.

# Changing the Key Range

## Raising or Lowering the Range in Octaves (Octave)

You can change the pitch of the keyboard in steps of one octave.

1. Press the OCTAVE [▲] or [▼] button.



Value	-3-0-3 (octave)
-------	-----------------

### MEMO

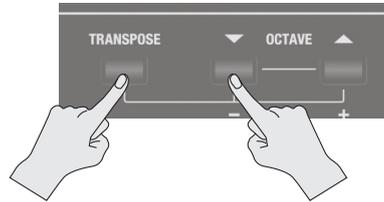
- If this setting is other than "0," the OCTAVE [DOWN] or [UP] button will light.
- By pressing the OCTAVE [DOWN] and [UP] buttons simultaneously, you can return the setting to "0."
- If you're playing two sounds together, move the cursor to select the sound whose octave range you want to change.

## Transposing the Key (Transpose)

You can transpose the pitch of the keyboard.

This setting specifies the pitch sounded by the middle C (C4) key.

1. Hold down the [TRANPOSE] button and press the [-] or [+] button.



The display will indicate the transpose setting.



Value	C0-C8 (semitone)
-------	------------------

### MEMO

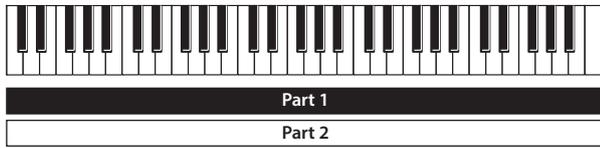
- If this setting is other than "C4," the [TRANPOSE] button will light.
- If you hold down the [TRANPOSE] button and continuously press the [-] or [+] button, the setting switches rapidly through its values, and temporarily stops at the C pitch of each octave.
- If you hold down the [TRANPOSE] button and press the [-] and [+] buttons simultaneously, the setting returns to "C4."
- While the transpose setting is displayed, you can also turn the [VALUE] dial to change the value.
- Transpose does not apply to drum kits.

# Combining Two Sounds

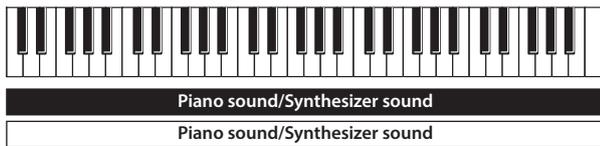
## Layering Two Sounds (Dual)

"Dual" refers to settings in which two sounds are layered.

\* You can't layer two organ sounds.



## Layering a Piano Sound and Synthesizer Sound



### 1. Simultaneously press two sound buttons from the piano section and synthesizer section.

The sound buttons you selected will light, and the DUAL screen appears.



Multi-effect type (p. 47)

#### MEMO

- You can also select dual by pressing the MODE [PIANO] button and MODE [SYNTH] button simultaneously.
- The sound of the button you press first will be assigned to part 1.

## Changing the sounds

Here's how to change the sounds.

You can also combine two sounds from within the same sound button.

### 2. Select a sound.

- Press the CURSOR [▲] [▼] buttons to select the sound that you want to change.
- Turn the [VALUE] dial to select a sound.

#### MEMO

By pressing a sound button that is lit, you can combine two sounds from within the same sound button.

### 3. Adjust the volume of each part.

Press the LEVEL [▲] [▼] buttons to adjust the volume (0–12).

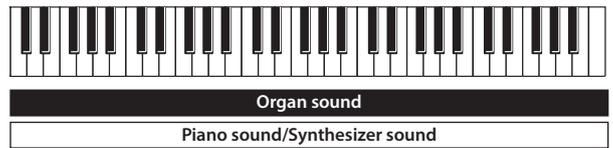
#### MEMO

If you've combined two sounds from the same section, the volume of the sound selected by the cursor will change.

### 4. Specify the octave of each part.

Use the CURSOR [▲] [▼] buttons to select the sound whose octave you want to specify, and use the OCTAVE [DOWN] [UP] buttons to specify the octave.

## Combining an Organ Sound with a Piano Sound or Synthesizer Sound



### 1. Simultaneously press the MODE [ORGAN] button and a sound button in the piano section or the synthesizer section.

The MODE [ORGAN] button and the sound button you selected will light, and the DUAL screen appears.



#### MEMO

- You can also select dual by pressing the MODE [ORGAN] button and the MODE [PIANO] button or MODE [SYNTH] button simultaneously.
- The sound of the button you press first will be assigned to part 1.

## Changing the sounds

Here's how to change the sounds.

### 2. Select a sound.

- Press the CURSOR [▲] [▼] buttons to select the part.
- Use the [VALUE] dial to select a sound.

### 3. Adjust the volume.

Button/Bar	Explanation
LEVEL [▲] [▼] button	Adjust the volume (0–12) of the piano sound or synthesizer sound.
[LEVEL] bar	Adjusts the volume (0–12) of the organ sound.

### 4. Specify the octave.

Use the OCTAVE [DOWN] [UP] buttons to specify the octave of the piano sound or synthesizer sound.

## Cancelling Dual

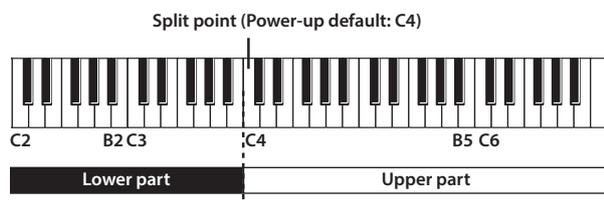
Here's how to cancel Dual.

Operation	Explanation
Press any one of the MODE buttons	You'll hear the sound that was assigned to the section whose button you pressed. If you had been combining two sounds from the same section, you'll hear the sound that had been assigned to part 1.
Press the [EXIT] button	The sound that had been assigned to part 1 will be heard across the entire range of the keyboard.
Press a sound button that is unlit	You'll hear the sound that you selected.

## Playing Different Sounds in the Left and Right Hands (Split)

“Split” refers to settings that let you play different sounds with your left and right hand.

The keyboard will be divided into two regions; the right is called the “upper part,” and the left is called the “lower part.” The point at which the keyboard is divided is called the “split point” (p. 32).



## Assigning the Dual Sounds to the Left and Right Regions

Here’s how two sounds you’ve layered can be split to the left and right keyboard regions.

1. Press the two sound buttons or MODE buttons simultaneously to select the dual setting (p. 28).

**MEMO**

The sound of the button you press first will be assigned to part 1.

2. Press the SYNTH [SPLIT] button to make it light.

The sound that had been assigned to part 1 of the dual setting will be assigned to the upper part, and the sound that had been assigned to part 2 will be assigned to the lower part.

**MEMO**

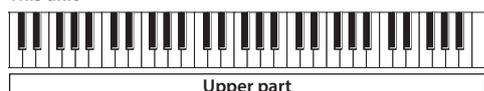
To specify dual settings with an organ sound, you can also use the ORGAN [SPLIT] button.



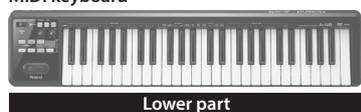
### Performing with two-manual setup

You can connect another MIDI keyboard (sold separately) to this unit’s MIDI IN connector, and perform using a two-manual setup.

This unit



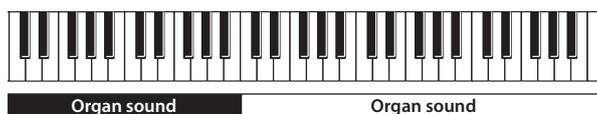
MIDI keyboard



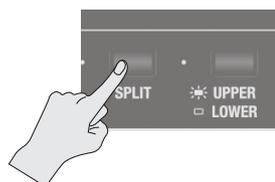
**REFERENCE**

For details, refer to “Performing with two-manual setup” (p. 54).

## Combining Two Organ Sounds

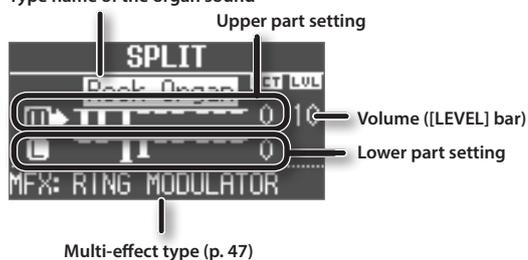


1. Select the desired organ sound (p. 13).
2. Press the ORGAN [SPLIT] button to make it light.

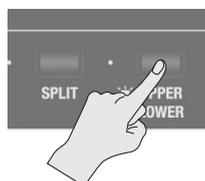


The SPLIT screen appears.

Type name of the organ sound



3. Press the [UPPER/LOWER] button to select the part whose sound you want to change.



[UPPER/LOWER] button	Selected part
Lit (Upper)	Upper part
Unlit (Lower)	Lower part

The cursor will move to the part you selected.



4. Slide the harmonic bars to create the desired organ sound.

The sound of the selected part will change as you move the harmonic bars on the panel.

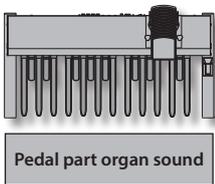
**MEMO**

- The [PERCUSSION] button is valid only for the organ sound of the upper part.
- When the organ type is Rock Organ or Jazz Organ, you can specify the part to which vibrato effect or chorus effect will be applied (Vibrato/Chorus Part: p. 45).  
When the organ type is transistor, the effects will apply to both the upper part and lower part regardless of this setting.
- Use the [LEVEL] bar to adjust the volume of the organ sound. The [LEVEL] bar affects all of the organ parts (upper, lower, and pedal parts)
- \* All parts will be the same organ type.

## Playing the pedalboard (pedal part)

You can connect a pedalboard (PK-9; sold separately) and use it to play the pedal part of the organ.

- \* The pedal part is available only when Rock Organ or Jazz Organ is selected as the organ type.



1. Connect a pedalboard (PK-9; sold separately) to the PK IN connector (p. 8).
2. Select an organ sound (p. 13).

## Creating the sound of the pedal part

3. Press the ORGAN [SPLIT] button.  
The DUAL/SPLIT screen appears.



4. Press the [UPPER/LOWER] button several times to move the cursor to the pedal part.
5. Slide the harmonic bars to shape the sound of the pedal part.

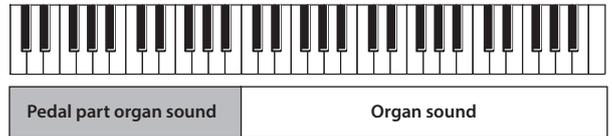


**MEMO**

The pedal sound can be shaped using the first (16') and third (8') harmonic bars from the left.

## Playing the pedal sound with your left hand (manual bass)

"Manual bass" refers to using your left hand to play the organ's pedal part (bass) that is typically played using the pedalboard. You can assign the pedal part organ sound to the lower part, and play it as manual bass.

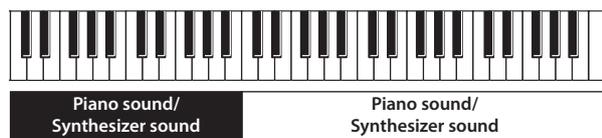


1. Select an organ sound (p. 13).
2. Hold down the ORGAN [SPLIT] button and press the [UPPER/LOWER] button.  
The sound of the pedal part will be assigned to the lower part.

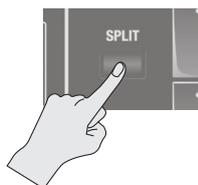


- \* In this case, you won't be able to play the lower part of the organ sound. Nor will playing the pedalboard produce any sounds.

## Combining a Piano Sound and Synthesizer Sound



1. Select a piano sound or a synthesizer sound (p. 14).
2. Press the SYNTH [SPLIT] button to make it light.



The SPLIT screen appears.



## Changing the sound of each part

The sound you selected in step 1 will be assigned to the upper part.

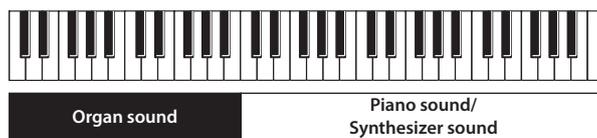
You can use the following procedure to change the sound of each part.

You can also combine two sounds within the same sound button.

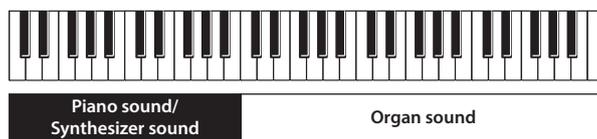
3. **Select the sound for each part.**
  1. Press the CURSOR [▲] [▼] buttons to select a part.
  2. Use the sound button and the [VALUE] dial to select the sound of each part.
  3. Press the [EXIT] button to return to the SPLIT screen.
4. **Adjust the volume of each part.**  
Press the LEVEL [▲] [▼] buttons to adjust the volume (0–12).
 

**MEMO**  
If you've combined two sounds from the same section, the volume of the sound selected by the cursor will change.
5. **Specify the octave of each part.**  
Use the CURSOR [▲] [▼] buttons to select a part, and use the OCTAVE [DOWN] [UP] buttons to specify the octave.

## Combining an Organ Sound with a Piano Sound or Synthesizer Sound



Or



1. **Make settings that combine two organ sounds, or that combine a piano sound with a synthesizer sound (p. 29, p. 31).**
2. **Select a part, and change its sound.**
  1. Press the CURSOR [▲] [▼] buttons or [UPPER/LOWER] button to select a part.
  2. Use the [TYPE] button, sound buttons, and the [VALUE] dial to select a sound.
  3. Press the [EXIT] button to return to SPLIT screen.
3. **Adjust the volume.**

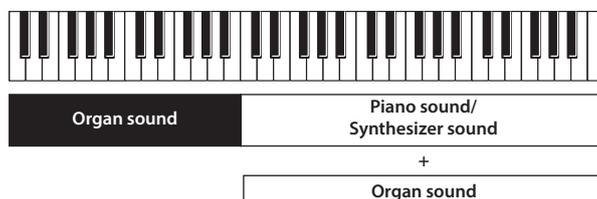
Button/Bar	Explanation
LEVEL [▲] [▼] buttons	Adjust the volume (0–12) of the piano sound or synthesizer sound.
[LEVEL] bar	Adjusts the volume (0–12) of the organ sound.

4. **Specify the octave.**  
Use the CURSOR [▲] [▼] buttons to select a part, and use the OCTAVE [DOWN] [UP] buttons to specify the octave.

**MEMO**

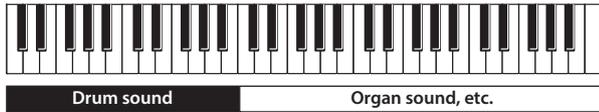
You can also add the organ sound by using the [UPPER/LOWER] button to select the part to which the organ sound is not assigned, and then lowering the harmonic bar.

Setting examples:



## Playing Drum Sounds in the Lower Part

You can play drum sounds in the lower part while playing a different sound in the upper part.

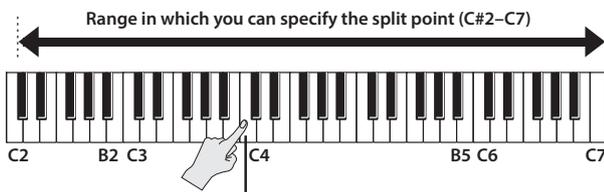


1. Make split settings (p. 29).
2. Press the [DRUM] button to make it light.  
The lower part will automatically switch to a drum sound.  
\* The sound setting for the upper part will not change.

## Changing the Split Point

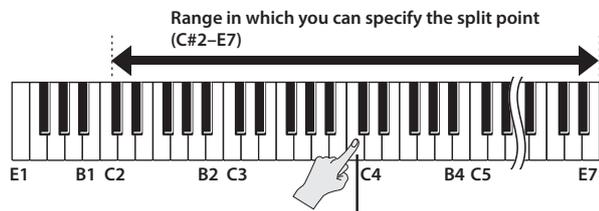
You can change the split point (the location at which the keyboard is divided).

### VR-09



Split point (Power-up: C4, included in left-hand zone)

### VR-730



Split point (Power-up: C4, included in left-hand zone)

1. Press the ORGAN [SPLIT] button or SYNTH [SPLIT] button to make it light.
2. While holding down the [SPLIT] button you pressed in step 1, press the key that you want to specify as the split point.

The key you pressed will become the split point. The split point will be the lowest key of the upper part.



### MEMO

- While the split point screen is displayed, you can also change the value by turning the [VALUE] dial.
- You can also specify the split point by using the [SPLIT] button of the organ section or the synthesizer section.
- The split point setting is shared, regardless of the sounds you're combining.

## Cancelling Split

1. Press the [EXIT] button or the lit [SPLIT] button to make it go dark.

Split will be cancelled.

The sound assigned to the upper part will now be heard across the entire keyboard.

### MEMO

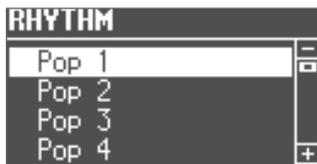
You can also press any one of the MODE buttons to cancel split.

# Performing with Rhythm Pattern

## Selecting/Playing Rhythm Pattern

This unit can sound a rhythm pattern while you perform.

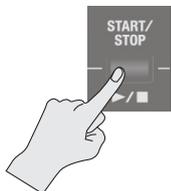
1. Press the [SONG/RHYTHM] button several times to access the RHYTHM screen.



2. Turn the [VALUE] dial to select a rhythm pattern.



3. Press the [▶/■] (START/STOP) button.



The rhythm pattern will begin playing.

4. Press the [▶/■] (START/STOP) button once again to stop the rhythm pattern.

### REFERENCE

For details on the rhythm patterns, refer to "Rhythm Pattern List" in the "Data List" (PDF).

You can download the "Data List" (PDF) from the Roland website.

<http://www.roland.com/manuals/>

### What is rhythm pattern?

"Rhythm pattern" refers to repeated phrases played by rhythm instruments such as drums and percussion.

This unit contains built-in rhythms of numerous styles.

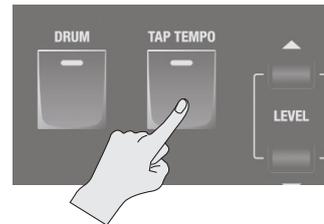
## Changing the Tempo of the Rhythm Pattern

You can set the tempo of the rhythm pattern.

This setting specifies the tempo of the following functions.

- Song (SMF format) recording and playback
- Tempo-synchronized effects (p. 47)

1. Press the [TAP TEMPO] button.



The TEMPO screen appears.



2. Press the [TAP TEMPO] button several times at intervals of the desired tempo.

The intervals at which you press the button will specify the tempo value.

Value	20-500
-------	--------

### MEMO

- While the TEMPO screen is displayed, you can also change the value by turning the [VALUE] dial.
- If you press the [TRANSPOSE] button while the TEMPO screen is shown, the TEMPO screen will be held. Press the [EXIT] button to return to the previous screen.
- The tempo setting can be stored as part of the registration (p. 16).

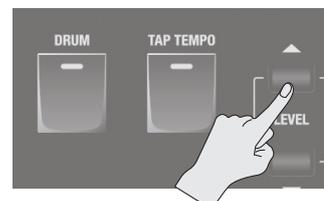
## Adjusting the Volume of the Rhythm Pattern

You can adjust the volume of the rhythm pattern.

This setting specifies the volume of the following functions.

- The volume of drum sounds and sound effects
- The volume of song (SMF, audio) playback
- The volume of sound effects played by the D-BEAM controller

1. Use the DRUM LEVEL [▲][▼] buttons.



# Recording Your Performance

This unit lets you record your performance.

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

This unit can record either SMF or audio.

- \* In order to use recording, you must connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
- \* Use USB Flash Memory sold by Roland. We cannot guarantee operation if other products are used.



## SMF and audio recording

File Type	Explanation
SMF recording	A collection of data describing everything that happened while the music was played will be recorded. Such data will include information about which keys (pitches) were played, for how long, what amount of force was applied, etc.
Audio recording	An audio file stores actual sound data. You can play these recordings (WAV files) on your computer.

\* 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.

## Starting/stopping recording

- Press the [▶/■] (START/STOP) button.



When recording starts, the [▶/■] (START/STOP) button will light, and the recording screen will appear.

The number of measures is shown during SMF recording, and the recording time is shown during audio recording.



### MEMO

If you're recording in SMF format, a 2 measure count will sound before recording begins. However, if you selected a rhythm pattern in step 2, a count does not sound.

- Press the [▶/■] (START/STOP) button.

Recording will stop, and the SAVE SONG screen appears.



## Saving your recorded performance

- Assign a name to the song.

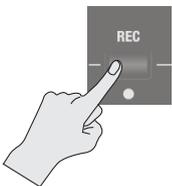
Button/Dial	Operation
CURSOR [▲] [▼] buttons	Select the character that you want to change.
[VALUE] dial	Changes the character.
MODE [ORGAN] (Del) button	Delete the character.
MODE [PIANO] (Space) button	Inserts a space.

If you don't want to save the song, press the [EXIT] button.

## Recording

### Preparations for recording

- Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
- As necessary, select the rhythm pattern (p. 33) that you want to play while recording, and make metronome (p. 51) settings.
- Press the [●] (REC) button.



The [●] (REC) button will light, the [▶/■] (START/STOP) button will blink, and this unit will be in the record-ready condition.



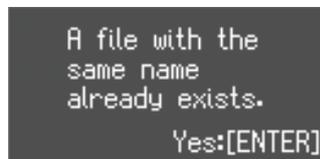
- Turn the [VALUE] dial to select the recording format.

Value	Explanation
SMF	SMF recording
Audio	Audio recording

### 8. Press the [ENTER] button or the MODE [SYNTH] (Save) button.

The song will be saved.

- \* If you recorded in audio format and an identically-named song exists on the USB flash drive, you won't be able to save. If the following screen appears, press the [ENTER] button and assign a different name.



#### NOTE

Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.

## Playing a Song

Here's how to play back a song that you've saved on a USB flash drive.

1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [SONG/RHYTHM] button several times to access the SONG screen.



### 3. Turn the [VALUE] dial to select the song.

#### MEMO

If you wish to select a song stored in a folder on a USB flash drive, you can navigate as follows.

- To move to a different folder: Use the [VALUE] dial to select the "📁" and then press the [ENTER] button or the [▶/■] (START/STOP) button.
- To select a song within the folder: Use the [VALUE] dial.
- To move out of a folder: Use the [VALUE] dial to select the "🏠" and then press the [ENTER] button or the [▶/■] (START/STOP) button.

### 4. Press the [▶/■] (START/STOP) button.

The song will start playing.

The measure number is displayed for SMF-format songs, and the playback time is displayed for audio-format songs.



### 5. Press the [▶/■] (START/STOP) button.

The song will stop playing.

#### MEMO

- You can change the playback tempo of SMF format songs (p. 33).
- You can use the DRUM LEVEL [▲] [▼] buttons to adjust the playback volume (p. 33).
- If the song was recorded on this unit as SMF data, you can use the LEVEL [▲] [▼] buttons of each section or the [LEVEL] bar to adjust the volume.

## Button operations

[◀◀/▶▶] button	Returns to the beginning of the song. If you press this at the beginning of a song, you'll move to the beginning of the preceding song. Hold down the button to rewind the song.
[▶/▶▶] button	Moves to the next song. Hold down the button to fast-forward the song.
[▶/■] (START/STOP) button	Play/stop the song.

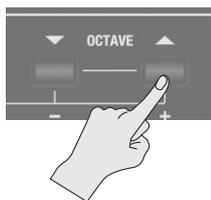
## Renaming a Song

Here's how to rename a song.

1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [SONG/RHYTHM] button several times to access the SONG screen.



3. Turn the [VALUE] dial to select the song.
4. Press the OCTAVE [UP] button.



The RENAME screen appears.



If you decide to cancel, press the [EXIT] button.

5. Assign a name to the song.

Button/Dial	Operation
CURSOR [▲] [▼] buttons	Select the character that you want to change.
[VALUE] dial	Changes the character.
MODE [ORGAN] (Del) button	Delete the character.
MODE [PIANO] (Space) button	Inserts a space.

6. Press the [ENTER] button or the MODE [SYNTH] (Save) button.

The song will be renamed.

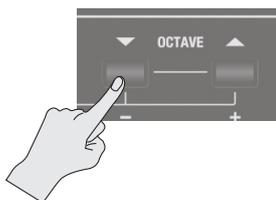
## Deleting a Song

Here's how to delete a song that you've saved on a USB flash drive.

1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [SONG/RHYTHM] button several times to access the SONG screen.



3. Turn the [VALUE] dial to select the song.
4. Press the OCTAVE [DOWN] button.



A confirmation message appears.



If you decide to cancel, press the [EXIT] button.

5. Press the [ENTER] button.

The song will be deleted.

### NOTE

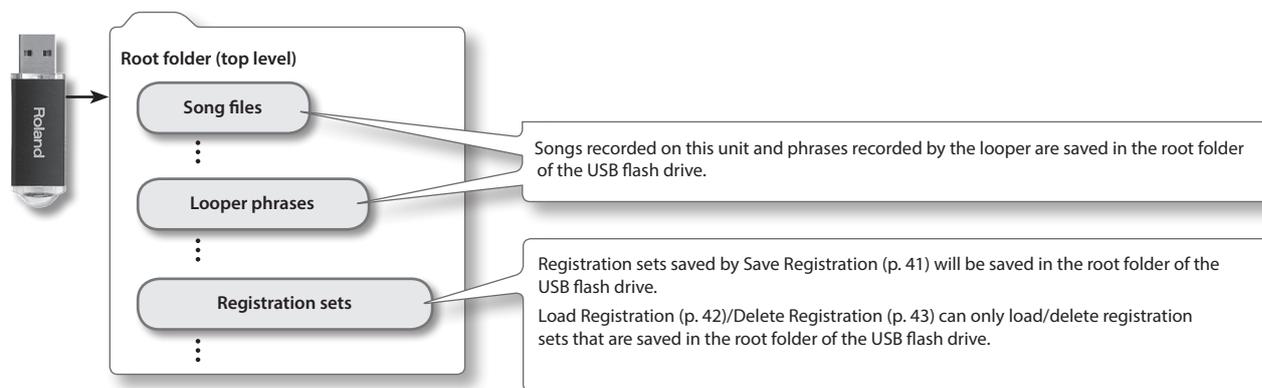
Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.



## Data saved on a USB flash drive

The following data can be saved on a USB flash drive.

- Songs recorded on this unit (p. 34)
- Phrases recorded by the looper (p. 38)
- Registration sets (p. 41)



## Playing SMF/audio files from a computer

You can copy audio files (WAV, MP3, AIFF) or SMF files from your computer to a USB flash drive, and play them on this unit.

You can copy the SMF/audio files to the root folder of your USB flash drive, or you can create a folder on the USB flash drive and copy the files into the folder.



### MEMO

- Use only single-byte alphanumeric characters in the file names and folder names.
- A maximum of 99 files can be detected in each folder.

## SMF/audio files that can be played

SMF	Format	0 or 1	
	File size	* For an SMF format 1 song that has more than 16 tracks, all of the tracks might not play back correctly in some cases.	
	System exclusive	Packet size must be 512 byte or less	
Audio	WAV/AIFF	Sampling frequency	44.1 kHz
		Bit rate	16-bit
	MP3	Format	MPEG-1 audio layer 3
		Bit rate	32/40/48/56/64/80/96/112/128/160/192/224/256/320 kbps, VBR (Variable Bit Rate)

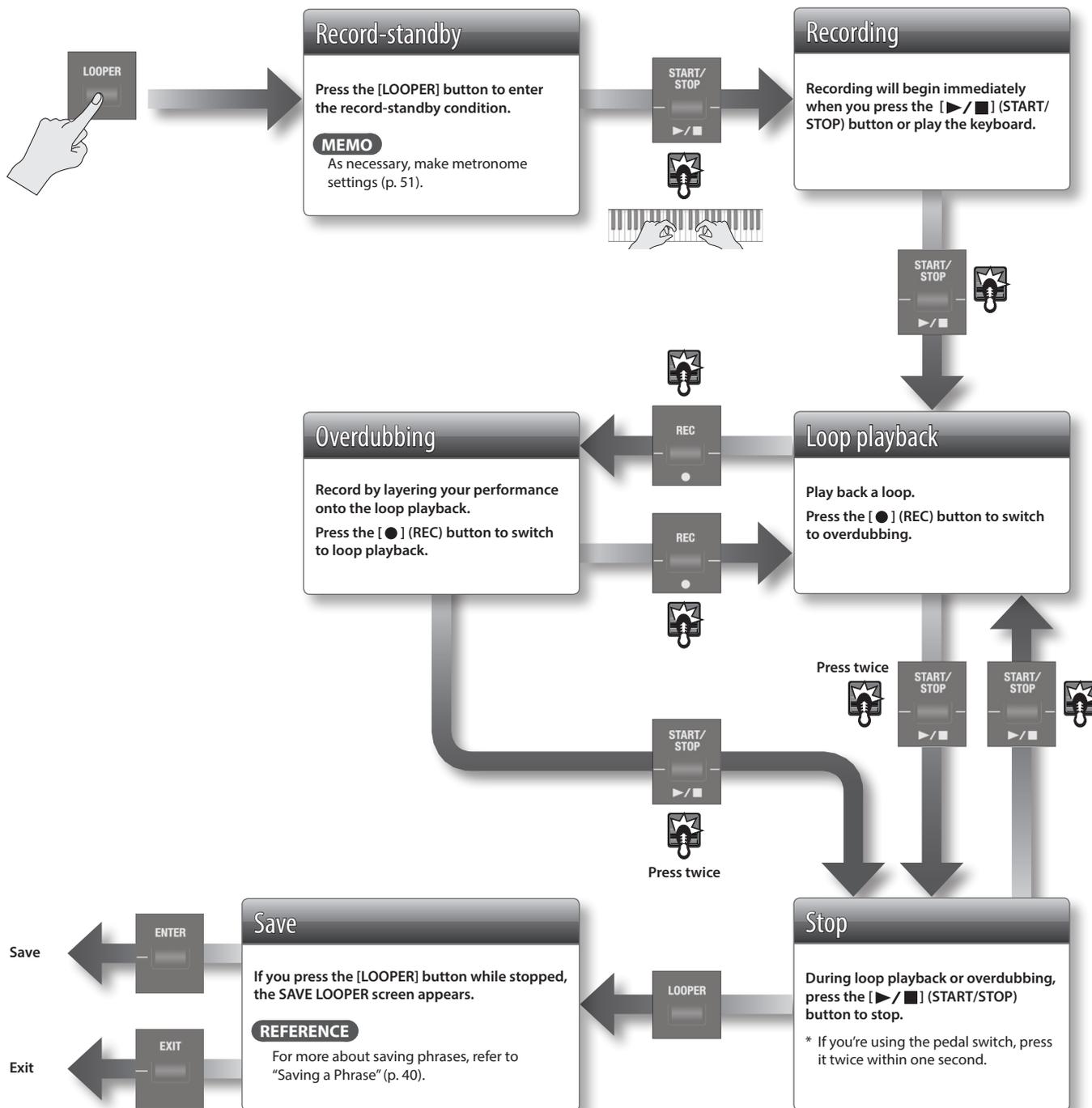
# Using the Looper

The looper is a function that lets you overdub while recording and playing back in real time.

You can take advantage of various performance possibilities, such as performing or adjusting the effects while playing back recorded phrases as a backing.

- \* The maximum recording time is approximately 20 seconds.
- \* In the looper, the Audio Rec Gain (p. 51) value is always 0 dB.

## Recording with the Looper



### MEMO

Steps indicated by  can also be performed using a pedal switch (DP-2; sold separately) connected to the DAMPER jack or EXPRESSION PEDAL jack.

If you want to use a pedal switch to operate the looper, set Damper Assign (p. 48) or Expression Assign (p. 49) to "LOOPER."

## Recording While a Rhythm Pattern Plays

1. Press the [SONG/RHYTHM] button several times to access the RHYTHM screen.
2. Turn the [VALUE] dial to select a rhythm pattern.
3. Record as described in “Recording with the Looper” (p. 38).  
When recording begins, the rhythm pattern will also start sounding. When you finish recording and stop loop playback, the rhythm pattern will also stop.  
\* The rhythm pattern will be recorded, but not overdubbed.

### MEMO

You can specify the tempo of the rhythm pattern before recording (p. 33).

### NOTE

If the looper contains previously-recorded data, the rhythm pattern is not recorded. Delete the phrase as described in step “Deleting the Phrase” (p. 39).

## Loading an Audio File for Playback or Recording

You can load an audio file from a USB flash drive into this instrument, and use the looper to play it back or record.

### MEMO

Audio file formats that can be loaded:  
WAV/AIFF, 44.1 kHz, 16-bit

1. Press the [SONG/RHYTHM] button several times to access the SONG screen.
2. Use the [VALUE] dial to select an audio file, and press the [LOOPER] button.  
A confirmation message appears.



If you decide to cancel, press the [EXIT] button.

### MEMO

If a previously-recorded phrase is stored in this instrument, the following screen appears.



When the audio file is loaded, the previously-recorded phrase is deleted.

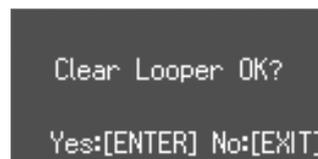
If you want to keep the phrase, press the [EXIT] button, and save the phrase to a USB flash drive as described in “Saving a Phrase” (p. 40).

3. Press the [ENTER] button.  
The audio file is loaded.
4. Play back or record as described in “Loop playback” or “Overdubbing” in “Recording with the Looper” (p. 38) and subsequent steps.

## Deleting the Phrase

Here's how to delete the phrase that's recorded in the looper.

1. In the LOOPER screen, press the [SONG/RHYTHM].  
A confirmation message appears.



If you decide to cancel, press the [EXIT] button.

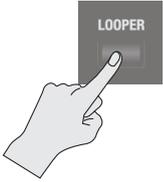
2. Press the [ENTER] button.  
The phrase is deleted, and the looper is in record-ready condition.

## Saving a Phrase

A phrase you record using the looper can be saved as audio data on your USB flash drive.

\* To save a phrase recorded using the looper, you must first connect your USB flash drive to the USB MEMORY port.

1. Stop loop playback (p. 38).
2. Press the [LOOPER] button.



The SAVE LOOPER screen appears in the display.



If you don't want to save the phrase to a USB flash drive, press the [EXIT] button to exit the SAVE LOOPER screen.

**MEMO**

Even if you exit the looper without saving, the phrase will remain in this unit's memory until you turn off the power.

3. Assign a name to the phrase.

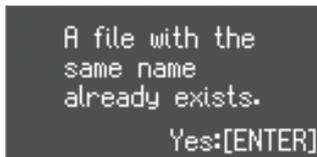
Button/Dial	Operation
CURSOR [▲][▼] buttons	Select the character that you want to change.
[VALUE] dial	Changes the character.
MODE [ORGAN] (Del) button	Delete the character.
MODE [PIANO] (Space) button	Inserts a space.

4. Press the [ENTER] button or the MODE [SYNTH] (Save) button.

The phrase will be saved.

\* An identically-named phrase exists on the USB flash drive, you won't be able to save.

If the following screen appears, press the [ENTER] button and assign a different name.



**NOTE**

Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.

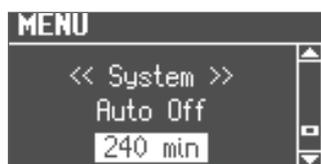
# Convenient Functions

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

With the factory settings, the unit's power will automatically be switched off a certain amount of time 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. Press the [MENU] button.
2. Turn the [VALUE] dial to select "System."
3. Press the [ENTER] button.
4. Use the CURSOR [▲] [▼] buttons to select "Auto Off."



5. Turn the [VALUE] dial to change the setting.

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

6. Press the [EXIT] button several times to finish the procedure.

## Adjusting the Brightness of the Display (LCD Contrast)

Use this setting to adjust the brightness of the screen.

1. Press the [MENU] button.
2. Turn the [VALUE] dial to select "System."
3. Press the [ENTER] button.
4. Use the CURSOR [▲] [▼] buttons to select "LCD Contrast."
5. Turn the [VALUE] dial to change the setting.

Value	0 (dark)–30 (bright)
-------	----------------------

6. Press the [EXIT] button several times to finish the procedure.

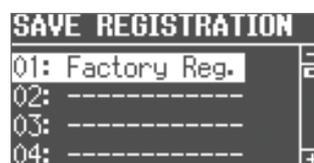
## Saving Registrations to a USB Flash Drive (Save Registration)

All registrations stored in this unit can be saved to your USB flash drive as a set (registration set).

1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [MENU] button.
3. Turn the [VALUE] dial to select "Media Utility."
4. Press the [ENTER] button.
5. Use the CURSOR [▲] [▼] buttons to select "Save Registration."

6. Press the [ENTER] button.

The SAVE REGISTRATION screen appears.



7. Turn the [VALUE] dial to select the save-destination number.

Numbers for which a registration set name is shown already contain a saved registration set.

If you select a previously-saved registration set as the save-destination, the previously-saved registration set will be overwritten. If you don't want to overwrite it, select a number for which "-----" is shown as the save-destination.

8. Press the [ENTER] button.

If you select a number in which a registration set is already saved, the display will ask "Overwrite Registration OK?"

If you are sure you want to overwrite it, press the [ENTER] button. If you decide to select a different number, press the [EXIT] button.

9. Assign a name to the registration set.

Button/Dial	Operation
CURSOR [▲] [▼] buttons	Select the character that you want to change.
[VALUE] dial	Changes the character.
MODE [ORGAN] (Del) button	Delete the character.
MODE [PIANO] (Space) button	Inserts a space.

10. Press the [ENTER] button or the MODE [SYNTH] (Save) button.

The registration set will be saved.

### NOTE

Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.

11. Press the [EXIT] button several times to finish the procedure.

## Loading Saved Registrations from a USB Flash Drive (Load Registration)

Here's how a registration set saved on a USB flash drive can be loaded into this unit.

**NOTE**

When you load a registration set, all registrations stored in this unit will be overwritten and lost. If you don't want to lose these registrations, save them to a USB flash drive (p. 41).

1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [MENU] button.
3. Turn the [VALUE] dial to select "Media Utility."
4. Press the [ENTER] button.
5. Use the CURSOR [▲] [▼] buttons to select "Load Registration."
6. Press the [ENTER] button.

The LOAD REGISTRATION screen appears.



7. Turn the [VALUE] dial to select the registration set you want to load.

If you decide to cancel, press the [EXIT] button.

8. Press the [ENTER] button.

The registration set will be loaded.

**NOTE**

Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.

9. Press the [EXIT] button several times to finish the procedure.

## Individually Loading Registrations from a USB Flash Drive (Load One Regist)

Registrations saved on a USB flash drive can now be loaded individually into this unit.

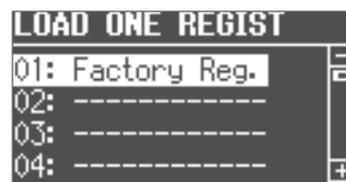
**NOTE**

When you load a registration, the loading-destination registration will be overwritten and lost. If you don't want to lose that registration, save it to a USB flash drive before you proceed. For details, refer to "Saving Registrations to a USB Flash Drive (Save Registration)" (p. 41).

1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [MENU] button.
3. Turn the [VALUE] dial to select "Media Utility."
4. Press the [ENTER] button.
5. Use the CURSOR [▲] [▼] buttons to select "Load One Regist."

6. Press the [ENTER] button.

The LOAD ONE REGIST screen appears.



7. Turn the [VALUE] to select the registration set containing the registration that you want to load.

8. Press the [ENTER] button.

9. Use the [VALUE] dial and the cursor buttons to select the loading-source and loading-destination registration number.



10. Press the [ENTER] button.

The registration will be loaded.

**NOTE**

Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.

11. Press the [EXIT] button several times to finish the procedure.

### You can download registrations

A wide variety of registrations can be downloaded from the Axial sound library site and used on this unit.

For details, refer to the Axial site.

<http://axial.roland.com/>



## Deleting Saved Registrations from a USB Flash Drive (Delete Registration)

Here's how a registration set saved on a USB flash drive can be deleted into this unit.

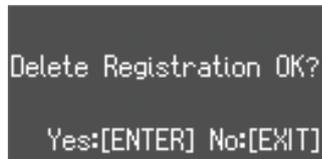
1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [MENU] button.
3. Turn the [VALUE] dial to select "Media Utility."
4. Press the [ENTER] button.
5. Use the CURSOR [▲] [▼] buttons to select "Delete Registration."
6. Press the [ENTER] button.

The DELETE REGISTRATION screen appears.



7. Turn the [VALUE] dial to select the registration set you want to delete.
8. Press the [ENTER] button.

A confirmation message appears.



If you decide to cancel, press the [EXIT] button.

9. Press the [ENTER] button.

The registration set will be deleted.

### NOTE

Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.

10. Press the [EXIT] button several times to finish the procedure.

## Formatting a USB Flash Drive (Format USB)

"Formatting" is the operation of preparing a USB flash drive for use with this unit.

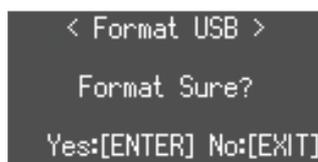
If the USB flash drive format does not match this unit's, you will not be able to use that USB flash drive with this unit.

### NOTE

Be aware that this operation will erase all data that has been saved on your USB flash drive.

1. Connect a USB flash drive (sold separately) to the USB MEMORY port (p. 6).
2. Press the [MENU] button.
3. Turn the [VALUE] dial to select "Media Utility."
4. Press the [ENTER] button.
5. Use the CURSOR [▲] [▼] buttons to select "Format USB."
6. Press the [ENTER] button.

A confirmation message appears.



If you decide to cancel, press the [EXIT] button.

7. Press the [ENTER] button.

The USB flash drive will be formatted.

### NOTE

Do NOT turn off the power or disconnect the USB flash drive while "Executing..." is displayed.

8. Press the [EXIT] button several times to finish the procedure.

### Initializing a Synthesizer Sound

When you load a sound library from Axial, or use the iPad editor to edit the sounds, the preset synthesizer sound parameters might be overwritten.

Here's how to initialize synthesizer sound parameters to their factory-set state.

1. Select the synthesizer sound that you want to initialize.
2. Hold down the [SYNTH] button and press the [EXIT] button.

The screen indicates "INITIALIZE," and the selected synthesizer sound is initialized.

#### MEMO

- Synthesizer sounds can be initialized one at a time.
- For details on Axial or the iPad editor, refer to the Roland website.  
<http://www.roland.com/>

### Restoring the Factory Settings (Factory Reset)

If desired, you can restore all of this unit's settings to their factory-set condition. This operation is called "factory reset."

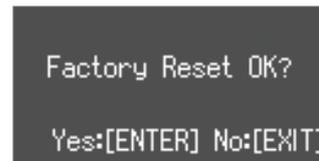
#### NOTE

When you execute the factory reset operation, all settings you've previously saved will be lost, and will return to their factory-set condition.

Registration settings will also return to their factory-set condition. If you don't want to lose your registrations, save them to a USB flash drive before you continue (p. 41).

1. Press the [MENU] button.
2. Turn the [VALUE] dial to select "System."
3. Press the [ENTER] button.
4. Use the CURSOR [▲] [▼] buttons to select "Factory Reset."
5. Press the [ENTER] button.

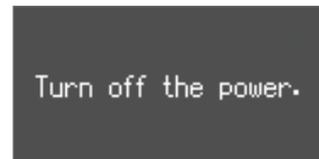
A confirmation message appears.



If you decide to cancel, press the [EXIT] button.

6. Press the [ENTER] button.

The display will indicate "Turn off the power."



7. Turn the power off, then on again (p. 11).

This unit's setting is reset to its factory values.

#### NOTE

Do NOT turn off the power while "Executing..." is displayed.

#### MEMO

You can also execute a factory reset by holding down the MODE [ORGAN] button and pressing the [POWER] switch to turn the power on.

# Detailed Settings for All Functions (Menu)

## Basic Menu Operations

The menu allows you to edit the performance and sound settings.

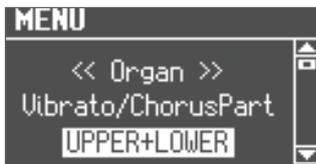
### 1. Press the [MENU] button.

The menu screen appears.



### 2. Turn the [VALUE] dial to select a category.

### 3. Press the [ENTER] button.



### 4. Use the CURSOR [▲] [▼] buttons to select the parameter that you want to edit.

#### MEMO

If you've selected a parameter for which the display indicates "Press the [ENTER]" press the [ENTER] button.

### 5. Turn the [VALUE] dial to change the setting.

### 6. Press the [EXIT] button several times to finish the procedure.

Category	Parameter	Value	Explanation
Organ	Vibrato/Chorus Part	<b>Selecting the Parts to Which Vibrato and Chorus Apply (Vibrato/Chorus Part)</b>	
		When Rock Organ or Jazz Organ is selected as the organ type, you can select the part(s) to which the vibrato effect and chorus effect (p. 22) will apply.	
		UPPER+LOWER	The effect will be applied to the upper part and the lower part.
		UPPER	The effect will be applied to the upper part.
		LOWER	The effect will be applied to the lower part.
	Leakage Level	<b>Specifying the Amount of Leakage Noise (Leakage Level)</b>	
	This specifies the amount of leakage noise (distinctive noise produced by a tonewheel organ).		
	0-31		
	On Click Level	<b>Specifying the Level of the Key-On Click (On Click Level)</b>	
	This specifies the level of the click sound heard when you press a key.		
	0-63		
	Off Click Level	<b>Specifying the Level of the Key-Off Click (Off Click Level)</b>	
This specifies the level of the click sound heard when you release a key.			
0-63			



#### What's the "click sound"?

This is the click noise heard when you press or release a key. On the earliest traditional tonewheel organs, a "click" noise occurred when you pressed or released a key. This was initially considered a problem, but blues and rock performers began to take advantage of it in their performances, and it is now considered a distinctive aspect of some jazz sounds



Category	Parameter	Value	Explanation
Organ	Organ Low Gain	<b>Specifying the Low-frequency Boost/Cut (Organ Low Gain)</b>	
		This specifies the amount of boost/cut for the low-frequency region. -12-12	
Organ	Organ High Gain	<b>Specifying the High-frequency Boost/Cut (Organ High Gain)</b>	
		This specifies the amount of boost/cut for the high-frequency region. -12-12	
Rotary	Rotary Type	<b>Selecting the Type of Rotary Effect (Rotary Type)</b>	
		This selects the type of rotary effect.	
		TYPE1	This effect provides a mild sense of rotation with an extended high range.
		TYPE2	This effect provides a dynamic sense of rotation with a powerful low range.
		TYPE3	This effect provides a strong sense of rotation, with even more powerful low and high ranges than TYPE2.
	Woofers Accel (*1)	<b>Specifying the Rotational Acceleration of the Woofer (Woofer Accel)</b>	
		This specifies the rate at which the woofer's rotation will change when you switch speeds. 1-16	
	Tweeters Accel (*1)	<b>Specifying the Rotational Acceleration of the Tweeter (Tweeter Accel)</b>	
		This specifies the rate at which the tweeter's rotation will change when you switch speeds. 1-16	
	Wf Rise Time (*2)	<b>Specifying the Time Over Which the Woofer Rotation (SLOW → FAST) Changes (Wf Rise Time)</b>	
	This specifies the time over which the woofer rotation changes from SLOW to FAST. 0-127		
Tw Rise Time (*2)	<b>Specifying the Time Over Which the Tweeter Rotation (SLOW → FAST) Changes (Tw Rise Time)</b>		
	This specifies the time over which the tweeter rotation changes from SLOW to FAST. 0-127		
Wf Fall Time (*2)	<b>Specifying the Time Over Which the Woofer Rotation (FAST → SLOW) Changes (Wf Fall Time)</b>		
	This specifies the time over which the woofer rotation changes from FAST to SLOW. 0-127		
Tw Fall Time (*2)	<b>Specifying the Time Over Which the Tweeter Rotation (FAST → SLOW) Changes (Tw Fall Time)</b>		
	This specifies the time over which the tweeter rotation changes from FAST to SLOW. 0-127		
Wf Slow Speed	<b>Specifying the Woofer's Slow Rotation Speed (Wf Slow Speed)</b>		
	This specifies the rotational speed of the woofer at slow speed. 0-127		
Tw Slow Speed	<b>Specifying the Tweeter's Slow Rotation Speed (Tw Slow Speed)</b>		
	This specifies the rotational speed of the tweeter at slow speed. 0-127		

\*1: Shown when Rotary Type is "TYPE1"

\*2: Shown when Rotary Type is "TYPE2" or "TYPE3"



For details about how to make menu settings, see p. 45.

Category	Parameter	Value	Explanation
Rotary	Wf Fast Speed	<b>Specifying the Woofer's Fast Rotation Speed (Wf Fast Speed)</b>	
		This specifies the rotational speed of the woofer at fast speed. 0-127	
Rotary	Tw Fast Speed	<b>Specifying the Tweeter's Fast Rotation Speed (Tw Fast Speed)</b>	
		This specifies the rotational speed of the tweeter at fast speed. 0-127	
EFX	MFX Type	<b>Selecting the Multi-Effect Type (MFX Type)</b>	
		Here you can select the MFX (multi-effect) type.	
		TWIN ROTARY	By using this in conjunction with the rotary effect (p. 20), you can obtain an effect as though two rotary speaker units were connected.
		SMALL PHASER 1	This simulates an analog phaser of the past. It is suitable for electric piano. SMALL PHASER 1 and SMALL PHASER 2 differ in the character of the modulation.
		SMALL PHASER 2	
		PHASER	This is a stereo phaser. It adds a phase-shifted and modulated sound to the original sound.
		STEP PHASER	This is a stereo phaser in which the phaser effect changes in step-wise fashion.
		TEMPO STEP PHASER	This is a step phaser that is synchronized to the tempo specified by the [TAP TEMPO] button.
		CHORUS	This is a stereo chorus.
		HEXA-CHORUS	This is a six-phase chorus (six chorus sounds of differing delay times are layered), giving depth and spaciousness to the sound.
		FLANGER	This is a stereo flanger (the LFO is the same phase for left and right). It produces a metallic effect reminiscent of a jet airplane taking off and landing.
		MODULATION D	This adds modulation to the delay sound.
		TREMOLO 1	This effect cyclically changes the volume. TREMOLO 1 and TREMOLO 2 have different characters.
		TREMOLO 2	
		T. WAH 1	This produces a wah effect by moving a filter according to the volume of sounds played from the keyboard. T.WAH 2 produces a stronger wah effect than T.WAH 1.
		T. WAH 2	
		RING MODULATOR	This applies amplitude modulation (AM) to the input signal, producing bell-like sounds.
		BIT CRASH	This intentionally degrades the audio quality.
		DISTORTION	This produces a more intense distortion than overdrive.
		SLICER	By rhythmically cutting the sound, this creates the impression of a backing phrase that marks the beat. It is specially effective when applied to sustained sounds.
TEMPO SLICER	This is a slicer that is synchronized to the tempo specified by the [TAP TEMPO] button.		
PITCH SHIFTER	This is a stereo pitch shifter.		
OD/Dry Mix Level	OD/Dry Mix Level	<b>Specifying the Volume of Direct Sound Mixed with Overdrive (OD/Dry Mix Level)</b>	
		This specifies the volume of the direct sound that is mixed with the overdrive. 0-12	
Delay Type	Delay Type	<b>Selecting the Type of Delay (Delay Type)</b>	
		Here you can select the type of delay.	
		DELAY	The sound will be repeated numerous times like an echo.
		TAPE ECHO	This is a virtual tape echo that produces a realistic tape delay sound. It simulates the tape echo section of a Roland RE-201 Space Echo.
		REVERSE DELAY	This is a reverse delay that reverses the input sound and adds it after a delay.
		3TAP PAN DELAY	This produces delayed sound from three directions: center, left, and right.
		TEMPO DELAY	This is a delay that is synchronized to the tempo specified by the [TAP TEMPO] button. <b>MEMO</b> Turning the [DELAY] knob toward the right will increase the feedback (the number of repeats).
TEMPO REVERSE DLY	This is a reverse delay that is synchronized to the tempo specified by the [TAP TEMPO] button. <b>MEMO</b> Turning the [DELAY] knob toward the right will increase the feedback (the number of repeats).		



Category	Parameter	Value	Explanation
EFX	Reverb Type	<b>Selecting the Type of Reverb (Reverb Type)</b>	
		Here you can select the type of reverb. By changing the reverb type you can experience the sensation of performing in a variety of locations.	
		ROOM	The reverberation of a room
		STAGE	The reverberation of a stage
		HALL	The reverberation of a hall
		CATHEDRAL	The reverberation of a cathedral
		PLATE	Bright and metallic reverberation
		SPRING	The reverberation of a spring reverb unit (a device that uses a spring to produce a reverb effect)
	Wall Type	<b>Changing the Wall Type (Wall Type)</b>	
		By changing the reverb type you can experience the feeling of performing in various different locations, and by changing the wall type (the material of the walls) you can make further adjustments to the way in which reverberation occurs. * When the Reverb Type is "SPRING," the wall type you've specified will be ignored.	
		DRAPERY	Pleated curtains
		CARPET	Carpet
		ACOUSTIC TILE	Acoustic tile
		WOOD	Wood
BRICK		Brick	
PLASTER		Plaster	
	CONCRETE BLOCK	Concrete block	
	MARBLE	Marble	
Portamento	You can apply portamento (an effect that makes the pitch change smoothly between one note and the next) to piano sounds and synthesizer sounds. <b>REFERENCE</b> For details, refer to "Making the Pitch Change Smoothly (Portamento)" (p. 26).		
Keyboard	Initial Touch	<b>Adjusting the Initial Touch Sensitivity (Initial Touch)</b>	
		This adjusts the initial touch (the keyboard velocity sensitivity).	
		OFF	Initial Touch is off. Volume remains constant regardless of how hard you play.
	1–10	Initial Touch is on. Striking the keys more forcefully will produce correspondingly louder sounds. The change in volume when the keys are played forcefully increases as the value is increased.	
	PedalBass Mode	<b>Specifying How the Pedal Part Will Be Sounded (PedalBass Mode)</b>	
		You can specify whether the pedal part will sound only single notes at a time (MONOPHONIC) or will be able to play multiple notes (POLYPHONIC).  MONOPHONIC, POLYPHONIC	
Solo Mode	<b>Changing How Part 2 Will Be Sounded (Solo Mode)</b>		
	You can change how part 2 will produce sound when Dual is selected. * This does not affect organ sounds.		
	OFF	All keys you play will produce sound.	
	ON	Only the highest key you play will produce sound.	
Controller	Damper Assign	<b>Changing the Function of the Pedal Switch (Damper Assign)</b>	
		You can select the function that's assigned to the pedal switch connected to the DAMPER jack.	
		DAMPER	Use as a damper pedal.
		REGISTRATION SHIFT	Switch consecutively through registrations.
		LOOPER	Control the looper function (p. 38).
		ROTARY FAST/SLOW	Switch the rotary speed between "FAST" and "SLOW."
	RHYTHM START/STOP	Start/stop the rhythm pattern (p. 33).	
	SONG START/STOP	Same function as the [▶/■] (START/STOP) button.	



For details about how to make menu settings, see p. 45.

Category	Parameter	Value	Explanation	
Controller	Damper Part	<b>Selecting the Part(s) Affected by the Damper Pedal (Damper Part)</b>		
		You can select the part(s) to which the damper pedal will apply. However, this does not apply to a drum kit.		
		to ALL	The effect will be applied to the upper part and the lower part.	
		to LOWER	The effect will be applied to the upper part.	
	Expression Assign	to UPPER	The effect will be applied to the lower part.	
		<b>Changing the Function of the Expression Pedal (Expression Assign)</b>		
		You can select the function that's assigned to the expression pedal or the pedal switch connected to the EXPRESSION PEDAL jack.		
		EXPRESSION	Use as a damper pedal.	
		REGISTRATION SHIFT	Switch consecutively through registrations.	
		LOOPER	Control the looper function (p. 38).	
		ROTARY FAST/SLOW	Switch the rotary speed between "FAST" and "SLOW."	
	RHYTHM START/STOP	Start/stop the rhythm pattern (p. 33).		
	SONG START/STOP	Same function as the [▶/■] (START/STOP) button.		
	Expression Part	<b>Selecting the Part(s) Affected by the Expression Pedal (Expression Part)</b>		
		You can select the part(s) that will be affected when you operate the expression pedal.		
to ALL		The effect will apply to all parts.		
to UPPER/DUAL1 (*1)		The effect will apply to the upper part if using Split, or to part 1 if using Dual.		
Expression Curve	<b>Adjusting the Depth of the Expression Pedal (Expression Curve)</b>			
	This specifies the response of the expression pedal.			
	1	<p>The expression pedal will not affect the rhythm pattern very much. This setting is useful when you don't want the volume of the rhythm pattern to change very much.</p>		
	2	<p>The expression pedal will have the same effect on the rhythm pattern as on your keyboard performance. Since the volume will change significantly as you vary the angle of the expression pedal, this setting is appropriate for songs with significant and clear-cut dynamics.</p>		
	3	<p>The expression pedal will affect the rhythm pattern and your keyboard performance in the same way. Since the degree of expression is more gentle than setting 2, this setting is appropriate for quieter songs that do not have intense dynamic variation.</p>		
	4	<p>The expression pedal will not affect the rhythm pattern at all. This setting is useful when you are performing with multiple instruments, such as in an ensemble.</p>		
	Pitch Bend Range	<b>Specifying the Pitch Bend Range (Pitch Bend Range)</b>		
		This specifies the pitch bend range (maximum amount of change) (semitone steps, 1 octave).		
			1-12	

\*1: Does not applied to a drum kit.



For details about how to make menu settings, see p. 45.

Category	Parameter	Value	Explanation
Controller	D-BEAM Sensitivity	<b>Adjusting the D-BEAM Sensitivity (D-BEAM Sensitivity)</b>	
		This adjusts the sensitivity of the D-BEAM controller. Higher values make the D-BEAM controller more responsive. 1-10	
	Modulation Lever	<b>Using the Modulation Lever to Switch the Rotary Effect (Modulation Lever)</b>	
		You can select the rotary effect that is controlled by the modulation lever. * This applies only when you're playing organ sounds.	
OFF		The modulation lever will not turn the rotary effect on/off.	
ROTARY ON/OFF	Moving the modulation lever away from yourself will turn the rotary effect on/off.		
ROTARY BRAKE	When Rotary Type (p. 46) is "TYPE2" or "TYPE3," moving the modulation lever away from yourself stops the rotation of the rotary effect. In contrast to simply turning the effect on/off, this preserves the cabinet resonance of the rotary speaker.		
PK Setting	Registration Shift	<b>Using a Footswitch to Change Registrations (Registration Shift)</b>	
		You can assign the footswitch of the pedalboard (PK-9; sold separately) to switch consecutively through registrations.	
		OFF	The function assigned to the footswitch (L Foot Switch and R Foot Switch settings) will be available.
		RIGHT	The right footswitch will be dedicated to switching registrations. * The function assigned to the right footswitch (R Foot Switch setting) will be unavailable.
	LEFT	The left footswitch will be dedicated to switching registrations. * The function assigned to the left footswitch (L Foot Switch setting) will be unavailable.	
	L Foot Switch, R Foot Switch	<b>Changing the Function of the Footswitches (L Foot Switch, R Foot Switch)</b>	
		You can select the functions that are assigned to the footswitches of the pedalboard (PK-9; sold separately).	
		ROTARY FAST/SLOW	Switch the rotary speed between "FAST" and "SLOW."
		RHYTHM START/STOP	Start/stop the rhythm pattern.
		SONG START/STOP	Same function as the [▶/■] (START/STOP) button.
		DAMPER OF UPPER	Notes played in the upper part will be sustained while you continue holding the footswitch.
		DAMPER OF LOWER	Notes played in the lower part will be sustained while you continue holding the footswitch.
		N. CONTROL1	You can produce richer and more realistic performance expressions by applying various effects to acoustic sounds.
N. CONTROL2	For details on these effects and on the acoustic sounds to which they can be applied, refer to "Applying effects to specific acoustic sounds" (p. 53).		
OFF	Turn off the footswitch function.		
N.Control	<b>Selecting the Part(s) Affected by the Acoustic Sound Effect (N.Control)</b>		
	You can select the part(s) that will be affected when you use the footswitches of a pedalboard (PK-9; sold separately) to activate an effect for acoustic sounds (p. 53).		
	to ALL	The effect will be applied to the upper part and the lower part.	
	to LOWER	The effect will be applied to the lower part.	
to UPPER	The effect will be applied to the upper part.		
Media Utility	Save Registration	All registrations stored in this unit can be saved to your USB flash drive. <b>REFERENCE</b> For details, refer to "Saving Registrations to a USB Flash Drive (Save Registration)" (p. 41).	
	Load Registration	Load a registration set saved on a USB flash drive into this unit. <b>REFERENCE</b> For details, refer to "Loading Saved Registrations from a USB Flash Drive (Load Registration)" (p. 42).	
	Load One Regist	Loads a single registration saved on a USB flash drive into this unit. <b>REFERENCE</b> For details, refer to "Individually Loading Registrations from a USB Flash Drive (Load One Regist)" (p. 42).	
	Delete Registration	Delete a registration set saved on a USB flash drive. <b>REFERENCE</b> For details, refer to "Deleting Saved Registrations from a USB Flash Drive (Delete Registration)" (p. 43).	
	Format USB	This formats (initializes) a USB flash drive for use with this unit. <b>REFERENCE</b> For details, refer to "Formatting a USB Flash Drive (Format USB)" (p. 43).	



For details about how to make menu settings, see p. 45.

Category	Parameter	Value	Explanation
Rhythm	Auto Std Tempo	<b>Preventing the Rhythm Pattern Tempo from Changing Automatically (Auto Std Tempo)</b>	
		This lets you prevent the tempo setting from changing automatically when you switch rhythm patterns.	
		OFF	When the rhythm pattern is stopped, the tempo settings are not changed automatically when the rhythm patterns are changed.
		ON	Switching the rhythm pattern while the rhythm pattern is stopped automatically changes the tempo settings to those in the new rhythm pattern.
	Playback Transpose	<b>Transposing the Song Playback (Playback Transpose)</b>	
		This lets you play back an SMF format song at a different pitch.	
		-6-0-5 (semitone steps)	
Rhythm	Audio Rec Gain	<b>Adjusting the Audio Recording Volume (Audio Rec Gain)</b>	
		This adjusts the volume for audio recording.	
		-24-6 dB	
Metronome	Switch	<b>Specifying the Metronome Setting (Switch)</b>	
		This specifies the metronome setting.	
		OFF	The metronome is off.
	REC	The metronome sounds while in the record-ready state and during recording.	
		ON	The metronome sounds at all times.
	Volume	<b>Adjusting the Metronome Volume (Volume)</b>	
		This adjusts the volume of the metronome.	
		1-10	
Wireless	By connecting a wireless USB adaptor (sold separately: WNA1100-RL or equivalent) to the USB MEMORY port of this unit, you can use wireless-compatible applications. <b>REFERENCE</b> For details, refer to "About the Wireless LAN Function" (p. 55).		
MIDI		<b>Selecting the MIDI Transmit Channel (TxMIDI Channel)</b>	
		You can use this unit's MIDI OUT connector to send performance data to an external device. Here you can specify the MIDI channel on which the musical data that you play on each part will be transmitted.	
	TxMIDI Channel Upper	1-16	
	TxMIDI Channel Lower	1-16	
	TxMIDI Channel Pedal	1-16	
	TxMIDI Channel Drum	1-16	
	TxMIDI Channel Control	1-16	
	MIDI IN Mode	<b>Specifying the MIDI IN Mode (MIDI IN Mode)</b>	
		This unit contains two sound generators: one for SMF playback and another for the keyboard. By changing the MIDI IN Mode, you can choose what is controlled from the MIDI IN connector.	
		MODE 1	The sound generator will be controlled as the SMF playback sound generator (GM2 sound generator).
		MODE 2	Channels 5 through 10 and channels 12, 14, and 15 will be sent to the SMF playback sound generator (GM2 sound generator); the other channels will be sent to the keyboard sound generator.
	KEYBOARD	You can connect another MIDI keyboard (sold separately) and perform using both keyboards (p. 54).	
Send PC Switch	<b>Enabling PC Number Transmission (Send PC Switch)</b>		
	This specifies whether program change numbers are transmitted from the MIDI OUT connector when you select a registration.		
	OFF	PC numbers will not be transmitted.	
	ON	PC numbers will be transmitted.	



For details about how to make menu settings, see p. 45.

Category	Parameter	Value	Explanation
MIDI		<b>Specifying PC Numbers (PC Number)</b>	
		You can specify the program change numbers that are transmitted from the MIDI OUT connector when you select a registration.	
	PC Number BankMSB	0-127	
	PC Number BankLSB	0-127	
	PC Number PC Num	1-128	
Visual Control		<b>Controlling Video Devices (Visual Control)</b>	
		You can use this unit to control images on another MIDI-connected device that supports MIDI Visual Control or V-LINK. If you have enabled Visual Control, images will be controlled in synchronization with your performance when you play the keyboard of this unit. * The MIDI transmit channel for sending Visual Control messages is fixed at channel 16.	
	OFF	The Visual Control function is switched off.	
	MIDI VISUAL CONTROL 1	Enables the control of MIDI Visual Control devices. When a Registration button is pressed, "Bank Select" and "Program Change Number" messages are transmitted from the MIDI Out connector as video control messages. At this time, the Control MIDI transmit channel setting is disregarded, and the messages are transmitted via Channel 16.	
	MIDI VISUAL CONTROL 2	Enables the control of MIDI Visual Control devices. In addition to the functions of "MIDI VISUAL CONTROL 1," MIDI VISUAL CONTROL 2 also sets the device to transmit "Note messages" as video control messages from the MIDI Out connector when one of the twelve right most keys in the Lower keyboard is pressed. In this case, the Lower and Solo MIDI transmit channel settings are disregarded, and the messages are transmitted via Channel 16.	
	V-LINK 1	Enables the control of V-LINK devices. When a Registration button is pressed, "Bank Select" and "Program Change Number" messages are transmitted from the MIDI Out connector as video control messages. At this time, the Control MIDI transmit channel setting is disregarded, and the messages are transmitted via Channel 16.	
	V-LINK 2	Enables the control of V-LINK devices. In addition to the functions of "V-LINK 1," V-LINK 2 also sets the device to transmit "Note messages" as video control messages from the MIDI Out connector when one of the twelve right most keys in the Lower keyboard is pressed. In this case, the Lower and Solo MIDI transmit channel settings are disregarded, and the messages are transmitted via Channel 16.	
System	Visual Control	<div style="border: 1px solid black; padding: 10px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p><b>What is MIDI Visual Control?</b></p> <p>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.</p> </div> <div style="text-align: right;">  </div> </div> <div style="margin-top: 10px;"> <p><b>What is V-LINK?</b></p> <p>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 via their MIDI ports, making it easy to enjoy a variety of visual effects that are linked with the performance.</p> </div> <div style="margin-top: 10px;"> <p><b>Connection examples</b></p> <p>Connect a MIDI cable from this unit's MIDI Out connector to the MIDI In connector of your Visual Control or V-LINK compatible device.</p> <p>* You'll need a MIDI cable (sold separately) in order to connect this unit to a device that supports Visual Control.</p> </div> <div style="text-align: center; margin-top: 10px;">  </div> </div>	
	Master Tune	<p><b>Matching the Pitch with Other Instruments (Master Tune)</b></p> <p>When playing in an ensemble with other instruments, you can adjust this unit reference pitch to match other instruments. The reference pitch usually refers to the pitch of the middle "A" note. When performing with other instruments as an ensemble, you should make sure that all instruments are set to the same reference pitch.</p> <p>415.3-440.0-466.2 Hz</p>	



For details about how to make menu settings, see p. 45.

Category	Parameter	Value	Explanation	
System	LCD Contrast		Here's how to adjust the brightness of this unit's display <b>REFERENCE</b> For details, refer to "Adjusting the Brightness of the Display (LCD Contrast)" (p. 41).	
	Auto Off		With the factory settings, the unit's power will automatically be switched off a certain amount of time 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" <b>REFERENCE</b> For details, refer to "Making the Power Automatically Turn Off After a Time (Auto Off)" (p. 41).	
	ATELIER Mode	<b>Performing in Atelier Mode (ATELIER Mode)</b>		
		This setting makes this unit behave similarly to the Roland Music Atelier (Atelier Mode). For example, this lets you apply an effect only to the organ sound, or to play the rhythm simply by pressing the [▶/■] (START/STOP) button.		
		OFF	Atelier mode will be off.	
ON	Atelier mode will be on.			
Factory Reset			The settings saved in this unit can be returned to their factory settings. <b>REFERENCE</b> For details, refer to "Restoring the Factory Settings (Factory Reset)" (p. 44).	



### Applying effects to specific acoustic sounds

You can produce richer and more realistic performance expressions by using the D-BEAM controller or a footswitch of a pedalboard (PK-9; sold separately) to apply various effects to specific acoustic sounds.

**If using the D-BEAM controller:** Assign "N.Control 1" or "N.Control 2" as the function of the [CONTROLLER] button (p. 25).

**If using a footswitch:** Assign "N. CONTROL1" or "N. CONTROL2" as the function of the footswitch (L Foot Switch, R Foot Switch) (p. 50).

This unit lets you apply effects to the following acoustic sounds.

Sound name	Explanation	Effect	
		N. CONTROL1	N. CONTROL2
N.Trumpet (BRASS)	It is especially effective to utilize the fall technique in which the trumpet's pitch descends through the overtone series.	Glissando	Fall
N.Alto Sax (BRASS)	This is notable for its beautifully supple tone and its growl playing technique.	Glissando	Growl
N.Flute (OTHERS)	This is a realistic flute voice that includes the sound of the air that escapes when the instrument is blown.	Staccato	Growl
N.AcousticBs (BASS)	This is a realistic sound that includes the sound of the string being plucked and striking the fingerboard. Pitches will be smoothly connected when you play legato.	Portamento	Harmonics

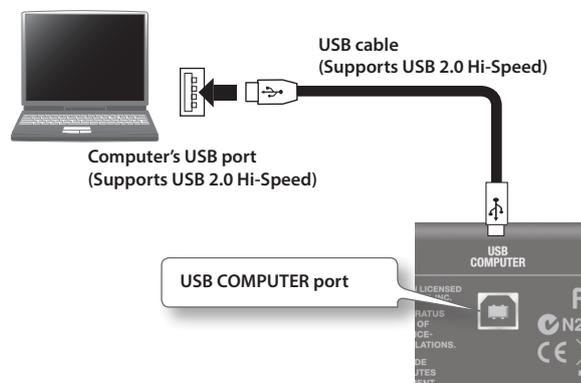
### Effect list

Effect	Explanation
Portamento, Glissando	These performance techniques connect one note with the next. Depending on the construction of the instrument, the pitch transition can be smooth or stepwise.
Fall	This is the technique of rapidly lowering the pitch of a wind instrument while simultaneously producing a decrescendo.
Growl	This technique produces a powerful sound by simultaneously breathing and growling into a wind instrument.
Harmonics	This is a technique in which a string of the guitar is fingered lightly to sound an overtone. A pitch one octave higher than the keyboard note will be heard.

# Connections with Other Equipment

## Connecting a Computer

If you use a commercially available USB cable to connect the USB COMPUTER port on this unit's rear panel to your computer's USB connector, MIDI data played by your MIDI software (DAW software) can be sounded by this unit.



For details on operating requirements, refer to the Roland website. <http://www.roland.com/>

### NOTE

- For some models of computer, the system might not operate correctly. Refer to the Roland website for the operating systems that are supported.
- A USB cable is not included. To purchase one, please contact the dealer where you purchased this unit.
- Use a USB cable that supports USB 2.0 Hi-Speed.
- Use a computer with a USB port that supports USB 2.0 Hi-Speed.
- Switch on this unit's power before you start up the DAW software on your computer. Do not switch this unit on/off while your DAW software is running.

## USB MIDI

If this unit is connected via USB to your computer, your DAW software can record this unit's performance data (MIDI data), and performance data (MIDI data) played back by your DAW software can play this unit's sound generator section.

## Connecting MIDI Devices

By connecting an external MIDI device so that performance data can be exchanged, you'll be able to control each device's performance. For example, you can play this unit's keyboard to produce sound or switch sounds on an external MIDI device.



### What's MIDI?

MIDI, short for "Musical Instrument Digital Interface," was developed as a standard for the exchange of performance data between electronic instruments and computers.

## About MIDI connectors

### MIDI Out Connector

Connect the external MIDI device to the MIDI IN connector with an optional MIDI cable.

The notes played on the keyboard, movements of the Damper pedal, Expression data, data indicating that a REGISTRATION button, etc., was pressed will be transmitted to the external MIDI connector.



### MIDI In Connector

Connect the external MIDI device to the MIDI out connector with an optional MIDI cable. Performance messages from an external MIDI device are received here.

These incoming messages may instruct the receiving MIDI instrument to play sounds or switch sounds.

This unit contains two sound generators: one sound generator for its own keyboards and the SMF playback sound generator (GM2 sound generator). If MIDI IN Mode (p. 51) is set to "MODE 1," performance data sent from an external device to the MIDI IN connector is sent to the SMF playback sound generator (GM2 sound generator). If it is set to "MODE 2," the unit's own sound generator can be controlled.

### REFERENCE

For details on MIDI settings, refer to the "MIDI" menu (p. 51).

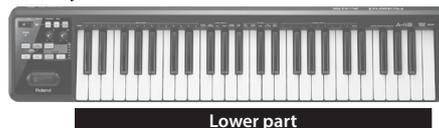
## Performing with two-manual setup

You can connect another MIDI keyboard (sold separately) to this unit's MIDI IN connector, and perform using a two-manual setup.

This unit



MIDI keyboard

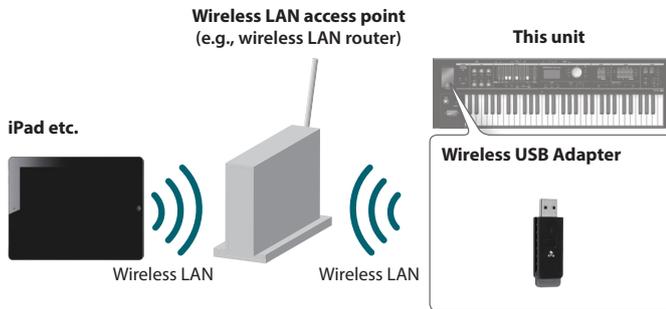


1. Use a MIDI cable (sold separately) to connect the MIDI OUT connector of your MIDI keyboard (sold separately) to this unit's MIDI IN connector.
2. Set the MIDI IN Mode setting to "KEYBOARD" (p. 51).
3. Make split settings (p. 29).

The lower part will automatically be assigned to the MIDI keyboard. This unit's keyboard will play the sound of the upper part across its entire range. In this case, the split point you've specified will be ignored.

## What is Wireless LAN Function?

By connecting a wireless USB adaptor (sold separately: WNA1100-RL or equivalent) to the USB MEMORY port of this unit, you can use wireless-compatible applications.



### Items required to use the wireless LAN function

- Wireless USB Adapter
- Wireless LAN access point (e.g., wireless LAN router) \*1 \*2
- iPad or iPhone etc.

\* The wireless LAN access point you use must support WPS. If you're unable to connect to the wireless LAN access point, then connect using Ad-Hoc mode (p. 57).

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

## Basic Connection Method (Connect by WPS)

The first time you connect this 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 into this unit's USB MEMORY port.
2. Press the [MENU] button of this unit.
3. Use the [VALUE] dial to select "Wireless."
4. Press the [ENTER] button of this unit.  
The wireless menu screen (p. 56) appears.

5. Use the CURSOR [▲] [▼] buttons to select "WPS."  
The WPS screen appears.



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 [ENTER] button of this unit.

When the connection is successful, the screen will indicate "CONNECTED."

\* It may take one or two minutes for the connection to succeed.

8. Press the [EXIT] button several times to return to the previous screen.

You can use the wireless connection from an iPad app etc. Choose "VR-09" in the instrument select screen of your iPad app.

#### 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.

### Icons in the display

The wireless LAN status is shown in the upper part of the display.



Icon	Explanation
	Currently connected to the wireless LAN access point. Three bars are used to indicate the signal level (the strength of the connected wireless LAN access point's radio signal).
	The wireless USB adapter is inserted, but not connected with a wireless LAN access point.
	The wireless USB adapter is not inserted (nothing is displayed).
	Ad-Hoc mode (p. 57).

## Wireless LAN Function Settings

You can view or edit the wireless settings.

### Wireless Menu (Wireless)

1. Press the [MENU] button.
2. Use the [VALUE] dial to select "Wireless."
3. Press the [ENTER] button.

The wireless menu screen appears.



4. Use the CURSOR [▲] [▼] buttons to select the menu that you want to edit.

Menu	Explanation
WPS	Connect using WPS (p. 55).
Options	Make settings for Wireless ID or Ad-Hoc mode (Ad-Hoc Mode) (p. 56).

5. Press the [ENTER] button.

### Status indication

The wireless LAN status is shown at the beginning of the wireless menu screen.



Display	Explanation
CONNECTED	Currently connected to the wireless LAN access point. The identifier (name) of the connected wireless LAN access point is shown.
NOW CONNECTING	A connection with the wireless LAN access point is being established.
NOT CONNECTED	The wireless USB adapter is inserted, but not connected to a wireless LAN access point.
NOT AVAILABLE	The wireless USB adapter is not inserted.
AdHoc	Ad-Hoc mode (p. 57). The Ad-Hoc SSID and Ad-Hoc Key are shown. For details, refer to "Connecting in Ad-Hoc mode (Ad-Hoc Mode)" (p. 57).

### Other Settings (Options)

Make settings for Wireless ID or Ad-Hoc mode (Ad-Hoc Mode).

1. Select the "Options" from the wireless menu, and press the [ENTER] button (p. 56).

The Options screen appears.



Parameter	Explanation
Wireless ID	Specifies the final digits of this unit's device name and Ad-Hoc SSID (VR-09) 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, "VR-09" (default value) If Wireless ID=1, "VR-09_1" : If Wireless ID=99, "VR-09_99"
Ad-Hoc Mode	Turns Ad-Hoc mode on/off.
Ad-Hoc Channel	Specifies the channel (1–11) for Ad-Hoc mode.

\* The Options settings are confirmed and saved when exiting from the Options screen.

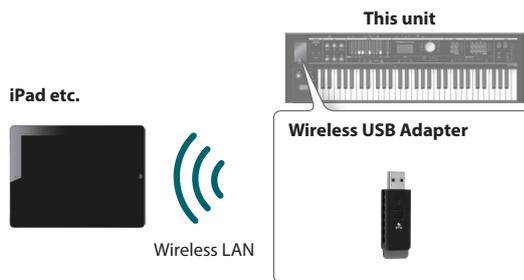
\* If you change the Wireless ID or the Ad-Hoc Channel, it may take one or two minutes for the connection to succeed.

## Connecting in Ad-Hoc mode (Ad-Hoc Mode)

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

### What is Ad-Hoc mode?

Ad-Hoc mode lets you connect this unit directly to an iPad or other wireless device without using a wireless LAN access point. This is a convenient way to use this 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.



### 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 the "Options" from the wireless menu (p. 56).

The Options screen appears.

### 2. Press the CURSOR [▲] [▼] buttons to select "Ad-Hoc Mode."

### 3. Use the [VALUE] dial to turn Ad-Hoc Mode "ON."

You can use Channel to specify a 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.

### 4. Press the [EXIT] button to return to the wireless menu screen, and use the CURSOR [▲] buttons to view the status.



The Ad-Hoc SSID (VR-09) and the Ad-Hoc Key (a five-character text string) will be displayed.

### MEMO

The Ad-Hoc SSID (VR-09) will be the value that you specified in the Options screen "Wireless ID" setting.

### 5. 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 (VR-09). A password entry screen appears; 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.

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

\* The Ad-Hoc Mode ON → OFF setting will take effect after you've turned the unit off, then back on again.

## Checking the MAC address

The MAC address shows the bottom of the wireless USB adapter.



# Troubleshooting

If you suspect a malfunction, please read this section first.

## Power does not turn on

Problem	Cause	Action	Page
When you press the [POWER] switch, the power doesn't come on	AC adaptor is not connected correctly.	Connect the AC adaptor is correctly.	p. 8
	The batteries are exhausted.	Recharge the batteries.	p. 9

## No sound is heard

Problem	Cause	Action	Page
The device connected to the EXT INPUT jack is not loud enough	Could you be using a connection cable that contains a resistor?	When connection cables with resistors are used, the volume level of equipment connected to the EXT INPUT jack may be low. If this happens, use connection cables that do not contain resistors.	p. 8
	The [VOLUME] knob is set too low.	Turn the [VOLUME] knob toward "Max."	—
No sound is heard	Headphones or speakers are not connected.	This unit does not have built-in speakers. Connect headphones or speakers.	p. 8
	The [LEVEL] bar or the LEVEL [▲] [▼] button volume of each section is set to "0."	Use the [LEVEL] bar or the LEVEL [▲] [▼] buttons of each section to adjust the volume.	—
	The volume is set too low on the Expression Pedal.	Advance the expression pedal.	—
	All of the harmonic bars are raised.	If all of the harmonic bars are raised, you won't hear any organ sound. Adjust the harmonic bars.	p. 17
	Transistor Organ is selected and the [~] bar and [^] bar at the right edge are both raised.	If either the [~] bar and the [^] bar are raised, you won't hear any Transistor Organ sound.	p. 18
	You've assigned the keyboard to play drum sounds or sound effects, and are playing keys to which no drum sound or sound effect is assigned.	Turn the drum sounds or sound effects off or play keys to which drums sounds are assigned.	p. 16
No sound is heard (when external devices are connected)	The power of the connected external devices is not turned on.	Use the correct procedure to turn on the power of the connected external devices.	p. 8 p. 11
There is no sound from the twelve keys at the right of the keyboard	The Visual Control function is set "MIDI VISUAL CONTROL 2" or "V-LINK 2."	When Visual Control setting is "MIDI VISUAL CONTROL 2" or "V-LINK 2," the group of twelve keys starting at the very right of the keyboard are used for controlling video images. Therefore, no sounds are played even when you press these keys. Turn Visual Control function "OFF" or "MIDI VISUAL CONTROL 1," or "V-LINK 1."	p. 52
Can't hear the 1' harmonic bar	[PERCUSSION] button is turned on.	If [PERCUSSION] button is on, the sound of the 1' harmonic bar will not be heard. This is not a malfunction.	p. 21

## Problems with the sound

Problem	Cause	Action	Page
Playing dynamics do not change the sound	Some sounds always play at a fixed volume, regardless of how strongly you play the keyboard.	This is not a malfunction.	—
	The setting of Initial Touch is turned "OFF."	Adjust the Initial Touch setting.	p. 48
	The compressor effect is applied.	Turn the [COMPRESSOR] knob all the way to the left.	p. 24
Can't split	MIDI IN Mode is set to "KEYBOARD."	Unless you've connected a MIDI keyboard and are using a two-manual setup, set the MIDI IN mode to either "MODE 1" or "MODE 2."	p. 51 p. 54
	There are some sounds to which effects will not apply.	This is not a malfunction.	—
Effect won't apply	If you've switched registrations, the physical position of the effect knobs may no longer match the actual values of the settings.	Operate the effect knob to make sure that the setting is not at the minimum value.	p. 24
	When used in conjunction with the rotary effect, the "TWIN ROTARY" multi-effect produces the sensation that two rotary speaker units are being used.	Use the ROTARY SOUND [ON/OFF] button to turn on the rotary effect.	p. 20

Problem	Cause	Action	Page
Modulation is applied even when the rotary effect is off	"TWIN ROTARY" is selected as the multi-effect type.	Either turn the [MFX] knob to minimize the effect, or change the multi-effect type.	p. 24
Pitch is off	Transpose is in effect.	Hold down the [TRANPOSE] button and press the [-] and [+] buttons to cancel the transpose setting (the [TRANPOSE] button will go dark).	p. 27
	The tuning is incorrect.	Adjust the MASTER TUNE "440.0 Hz."	p. 52
	While set for an octave, you are playing keys beyond the recommended range. This does not indicate a malfunction.	Adjust the octave setting.	p. 27
Sound is distorted / cracked	The volume of each part is too high.	Use the [LEVEL] bar or the LEVEL [▲] [▼] buttons of each section to lower the volume.	—
	The reverb volume has been raised while the volume of each part is raised.		—
	The [VOLUME] knob has been used to raise the overall volume excessively.	Use the [VOLUME] knob to lower the overall volume.	—
	The overdrive effect is applied.	Turn the [OVERDRIVE] knob all the way to the left.	p. 24
Some keys (of certain keyboard parts) sound strange	You are playing notes outside the recommended range of the sound.	This is not a malfunction.	—
The pedal part sound is heard even though you're not playing the pedalboard	Manual bass is selected.	If manual bass is selected, the lower part will produce the sound of the pedal part. Pressing the pedalboard will not produce sound. Turn off the manual bass setting.	p. 30
No sound from the pedalboard			
Noise is heard when you press or release a key while playing an organ sound	This reproduces the click noise that is heard when you press or release a key on a tonewheel organ.	This is not a malfunction.	p. 45
Organ sounds are heard twice	This unit reproduces the behavior of vintage organ keyboards. This means that if you release a key suddenly, it may rebound and trigger the note a second time (quick-firing keyboard).	This is not a malfunction.	p. 13

## Problems when recording

Problem	Cause	Action	Page
Recording is not possible	No USB flash drive is connected.	In order to record, a USB flash drive must be connected to the USB MEMORY port.	p. 6
Sounds you're not playing are recorded	A rhythm pattern is selected.	Press the [SONG/RHYTHM] button several times to make it go dark before you record.	—
Sound is distorted or cracked during audio recording	The Audio Rec Gain setting is too high.	Lower the Audio Rec Gain setting.	p. 51

## Problems with playback functions

Problem	Cause	Action	Page
Damper Pedal does not operate	The damper pedal applies only to the specified part(s).	Check the Damper Part setting.	p. 49
Can't use the function assigned to the footswitch	Registration Shift is set to "RIGHT" or "LEFT."	If Registration Shift is set to "RIGHT" or "LEFT," the footswitch will be used only to switch registrations. Turn Registration Shift "OFF."	p. 50
No effect is applied when you move the Pitch bend/Modulation lever	Only sounds from the organ section are selected.	You can't use the pitch bend / modulation lever to apply pitch bend or modulation effects to sounds of the organ section. Use sounds of the piano section or synthesizer section.	p. 13

## Problems with the audio files

Problem	Cause	Action	Page
Can't play an audio file	You're attempting to play back an audio file that this unit does not support.	Check the audio file formats that can be played.	p. 37

## Other problems

Problem	Cause	Action	Page
Can't read/write USB flash drive	Are you using Roland USB Flash Memory (sold separately)?	We cannot guarantee operation if any other USB flash drive is used.	—

## Problems when connecting to a wireless LAN

\* **For problems related to communication, refer also to the owner's manual of your wireless LAN access point.**

\* For details on operating your wireless LAN access point, refer to its owner's manual.

Problem	Cause/Action	Page
Cannot connect to wireless LAN	<ul style="list-style-type: none"> <li>• Check that your wireless LAN access point supports the WPS standard. If your wireless LAN access point does not support WPS, connect using the procedure described in "Connecting in Ad-Hoc mode (Ad-Hoc Mode)" (p. 57).</li> <li>• This unit does not support the 802.11a and 802.11b wireless standards. Please use 802.11g or 802.11n (both at 2.4 GHz).</li> <li>• WEP authentication is not supported. Please use WPA or WPA2 authentication.</li> <li>• Be sure that your wireless LAN access point is set to use DHCP.</li> <li>• If this unit cannot connect to a wireless LAN access point that it previously could connect to, make sure the "Connecting in Ad-Hoc mode (Ad-Hoc Mode)" (p. 57) setting is set to "OFF"</li> <li>• You may not be able to connect to the wireless network depending on the condition of the wireless signal. In this case, refer to the procedure described in "Basic Connection Method (Connect by WPS)" (p. 55) and try selecting and connecting to the wireless LAN access point again.</li> <li>• This unit remembers a limited amount of information about network connections. Once the limit is reached, data from new connections may overwrite older data. All connection data will be erased if you perform a factory reset. If network connection information is erased, repeat the connection procedure and connect again.</li> </ul>	p. 55–p. 57
"AP Not Supported" appears on the display and this unit cannot connect to the wireless LAN access point	The access point is not supported. Please use WPA or WPA2 authentication.	
Connection is unstable	<p>Wireless communications may be unstable if the condition of the wireless signal is poor. If the wireless communications are unstable, responsiveness may deteriorate and audio drop-outs may occur.</p> <p>The following may solve the trouble.</p> <ul style="list-style-type: none"> <li>• Move this unit and the wireless LAN access point closer to each other.</li> <li>• Change the channel setting on the wireless LAN access point.</li> </ul>	
This unit does not appear among the instruments connected to your application	<ul style="list-style-type: none"> <li>• Is this unit turned on?</li> <li>• Is a wireless USB adapter (WNA1100-RL or equivalent) connected to this unit's USB MEMORY port?</li> <li>• Is this unit connected to the wireless LAN?</li> <li>• Are this unit and the iPad connected to the same network (i.e., the same wireless LAN access point)?</li> <li>• Is the wireless LAN access point set to allow communication among the devices connected to it? Refer to the wireless LAN's documentation for information about the relevant settings.</li> </ul>	
The iPad cannot connect to the Internet	<ul style="list-style-type: none"> <li>• Is the wireless LAN access point connected to the Internet?</li> <li>• Could you be connected in Ad-Hoc mode?</li> </ul> <p>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.</p>	

# Error Messages

If an incorrect operation is performed, or if processing could not be performed as you specified, an error message appears. Refer to the explanation for the error message that appears, and take the appropriate action.

Message	Meaning	Action
<b>Battery Low!</b>	The battery has run down.	Recharge the batteries, or use an AC adaptor.
<b>Can't Read</b>	Failed to load data from USB flash drive.	Make sure that the USB flash drive is inserted correctly (p. 6). Also make sure that you're using a USB Flash Memory sold by Roland.
	It may be that the file is damaged.	Do not use this file.
	This file cannot be loaded since its format is incorrect.	
	This is a file that this unit is unable to play.	
<b>Charge Battery</b>	The battery has run low.	Recharge the batteries, or use an AC adaptor.
<b>Communication Error</b>	The MIDI IN connection was broken.	Check that there is no problem with the MIDI cable connected to this unit's MIDI IN, and that the MIDI cable was not disconnected.
<b>Copy Protected. Can't Save</b>	The song data is copy-protected, and therefore cannot be saved.	This song data can only be played.
<b>Damaged Media</b>	It may be that the USB flash drive is damaged.	Format the USB flash drive again (p. 43). Alternatively, use a different USB flash drive.
<b>Media Full</b>	Data cannot be written because the USB flash drive has no more free space.	Delete unneeded files from the USB flash drive. Alternatively, use a different USB flash drive device, one that has more free space available.
<b>Memory Error</b>	It is possible that the contents of system memory have been damaged.	Please execute a Factory Reset (p. 44). If this does not resolve the problem, contact your dealer or a nearby Roland service center.
<b>MIDI Buffer Full!</b>	An unusually large amount of MIDI data was received, and could not be processed.	Reduce the amount of MIDI messages that are being transmitted.
<b>No storage media is inserted.</b>	USB flash drive is not connected, or is inserted incompletely.	Turn the power off, insert the USB flash drive firmly, and then turn the power on again (p. 11).
<b>Unsupported Media!</b>	A USB flash drive that is not supported by this unit is connected.	Use USB Flash Memory sold by Roland. We cannot guarantee operation if other products are used.
<b>Write Error!</b>	Failed to write data to USB flash drive.	Make sure that the USB flash drive is inserted correctly (p. 6). Also make sure that you're using a USB Flash Memory sold by Roland.
<b>Write-Protected.</b>	The file itself is write protected.	Make sure that the file is not write protected.

# Stored Settings

## Settings That Are Stored After the Power Is Turned Off

Setting	Explanation	Page
Registration Shift	Registration shift	p. 50
Damper Assign	Damper pedal function	p. 48
Expression Assign	Expression pedal function	p. 49
Expression Curve	Expression curve	p. 49
D-BEAM Sensitivity	D-BEAM sensitivity	p. 50
Modulation Lever	Using the modulation lever to switch the rotary effect	p. 50
Auto Std Tempo	Auto standard tempo	p. 51
Switch (Metronome)	Metronome setting	p. 51
Volume (Metronome)	Volume setting	p. 51

Setting	Explanation	Page
MIDI IN Mode	MIDI IN mode	p. 51
Send PC Switch	PC number transmission on/off	p. 51
Master Tune	Master tuning	p. 52
LCD Contrast	LCD contrast	p. 41
Auto Off	Auto-off	p. 41
Wireless	Wireless settings	p. 55
ATELIER Mode	ATELIER mode	p. 53

## Settings That Are Stored in the Registrations

Setting	Explanation	Page
—	Sound variation	p. 13
—	Registration name	p. 16
—	[TRANSCOPE] button setting (keyboard transpose setting)	p. 27
—	ROTARY [FAST/SLOW] button on/off status	p. 20
—	ROTARY SOUND [ON/OFF] button on/off status	p. 20
—	Percussion setting	p. 21
—	Vibrato effect / chorus effect settings	p. 22
—	Dual/split setting	p. 28
—	Split point setting	p. 32
—	Harmonic bar settings	p. 17
—	Synthesizer sound settings	p. 23
—	LEVEL [▲] [▼] button and [LEVEL] bar settings (volume of each section)	—
—	Octave settings of each part	p. 27
—	Effect settings	p. 24
—	Rhythm pattern type	p. 33
—	Tempo setting	p. 33
—	Rhythm pattern volume	p. 33
—	D-BEAM controller button setting	p. 25
Vibrato/Chorus Part	Parts affected by vibrato and chorus effects	p. 45
Leakage Level	Leakage noise amount	p. 45
On Click Level	Key-on click volume	p. 45
Off Click Level	Key-off click volume	p. 45
Organ Low Gain	Amount of low-frequency boost/cut	p. 46
Organ High Gain	Amount of high-frequency boost/cut	p. 46
Rotary Type	Rotary effect type	p. 46
Woofer Accel	Woofer rotation speed change	p. 46
Tweeter Accel	Tweeter rotation speed change	p. 46
Wf Rise Time	Speed at which the woofer rotation (SLOW → FAST) changes	p. 46
Tw Rise Time	Speed at which the tweeter rotation (SLOW → FAST) changes	p. 46
Wf Fall Time	Speed at which the woofer rotation (FAST → SLOW) changes	p. 46
Tw Fall Time	Speed at which the tweeter rotation (FAST → SLOW) changes	p. 46
Wf Slow Speed	Woofer rotation low speed	p. 46
Tw Slow Speed	Tweeter rotation low speed	p. 46
Wf Fast Speed	Woofer rotation high speed	p. 47
Tw Fast Speed	Tweeter rotation high speed	p. 47

Setting	Explanation	Page
MFX Type	Multi-effect type	p. 47
OD/Dry Mix Level	Volume of direct sound mixed with overdrive	p. 47
Delay Type	Delay type	p. 47
Reverb Type	Reverb type	p. 48
Wall Type	Wall type	p. 48
Portamento	Portamento setting	p. 26
Initial Touch	Initial touch sensitivity	p. 48
PedalBass Mode	Pedal bass mode	p. 48
Solo Mode	Solo mode	p. 48
Expression Part	Part(s) affected by the expression pedal	p. 49
Registration Shift (*1)	Registration shift	p. 50
L Foot Switch	Function of the left footswitch	p. 50
R Foot Switch	Function of the right footswitch	p. 50
N.Control	Parts enabled for effects applied to an acoustic sound	p. 50
Damper Part	Parts enabled for the damper pedal	p. 49
Expression Curve (*1)	Expression curve	p. 49
Pitch Bend Range	Pitch bend ranges	p. 49
TxMIDI Channel Upper	MIDI transmit channel	p. 51
TxMIDI Channel Lower		
TxMIDI Channel Pedal		
TxMIDI Channel Drum		
TxMIDI Channel Control		
PC Number BankMSB	PC number	p. 52
PC Number BankLSB		
PC Number PC Num		

\*1: Stored not for each individual registration, but for each registration set.

# Main Specifications

## Roland V-Combo VR-09, VR-730: Keyboard

	VR-09	VR-730
<b>Keyboard</b>		
Keyboard	61 keys (with velocity)	73 keys (semi-weighted waterfall keyboard with velocity)
Keyboard Modes	Whole Dual (volume balance adjustable) Split (split point, volume balance adjustable) 2-manual/3-manual mode (when using sold separately MIDI keyboard)	
<b>Sound Generator Section</b>		
Sound Generator	Virtual Tone Wheel Organ, SuperNATURAL Synth, PCM Synth * GM2 compatible sounds are included.	
Maximum Polyphony	128 voices	
Parts	Organ (3 parts), Piano (2 parts), Synthesizer (2 parts), Drum (1 part), GM2 (16 parts)	
Sounds	245 sounds	268 sounds
Registrations	100 (4 x 25 bank)	
Effects (7 systems always on / global control)	Overdrive Tone Compressor Multi-effects: 20 types Delay: 6 types Reverb: 6 types Rotary: 3 types	
<b>SMF/Audio File Player Section</b>		
Playable File Format	SMF File: Format 0, 1 Audio File: WAV, AIFF, MP3	<b>REFERENCE</b> For details on the types of file that can be played, refer to "Playing SMF/audio files from a computer" (p. 37).
Recording File Format	SMF File: Format 0 Audio File: WAV (44.1 kHz, 16-bit linear, stereo)	
<b>Looper Section</b>		
Recording Time	20 seconds (stereo)	
Recording/Loadable File Format	Audio File: WAV (44.1 kHz, 16-bit linear, stereo)	
<b>Others</b>		
Rhythm Patterns	52	
Controller	Virtual tone wheel organ: Harmonic bar x 10 Synthesizer controller: Slider x 5 D-BEAM controller Pitch bend/Modulation lever Effects knob x 6 (global control)	
Display	Graphic LCD 128 x 64 dots	
External Memory	USB Flash Memory	
Connectors	Output (L/MONO, R) jacks: 1/4-inch phone type PHONES jack: Stereo 1/4-inch phone type EXT INPUT jack: Stereo miniature phone type DAMPER jack: TRS 1/4-inch phone type EXPRESSION PEDAL jack: TRS 1/4-inch phone type	MIDI (IN, OUT) connectors PK IN connector: 8-pin DIN type USB COMPUTER port: USB Type B (supports USB MIDI) USB MEMORY port: USB Type A DC IN jack
Power Supply	AC adaptor, Rechargeable Ni-MH battery (AA, HR6) x 8	
Current Draw	600 mA Expected battery life under continuous use: Rechargeable Ni-MH battery: Approx. 5 hours (approx. 3 hours if USB flash drive is connected) These figures will vary depending on the specifications of the batteries and the actual conditions of use. * Carbon-zinc batteries and alkaline batteries cannot be used	
Dimensions	1,008 (W) x 300 (D) x 106 (H) mm 39-11/16 (W) x 11-13/16 (D) x 4-3/16 (H) inches	1,215 (W) x 366 (D) x 124 (H) mm 47-7/8 (W) x 14-7/16 (D) x 4-7/8 (H) inches
Weight (excluding AC adaptor)	5.5 kg 12 lbs 3 oz	9.9 kg 21 lbs 14 oz
Accessories	Owner's Manual Leaflet "USING THE UNIT SAFELY" AC adaptor Power cord USB memory protector	Owner's Manual Leaflet "USING THE UNIT SAFELY" AC adaptor Power cord Ferrite core
Options (sold separately)	Keyboard stand: KS-18Z, KS-12 Damper pedal: DP series Expression pedal: EV series Pedalboard: PK-9 USB Flash Memory * Use a commercially available USB flash drive or a USB flash drive sold by Roland. However, we cannot guarantee that all commercially available USB flash drives will work with this unit.	

\* This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

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