



Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (p. 2; p. 4). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

USING THE UNIT SAFELY

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

About **MARNING** and **CAUTION** Notices

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

About the Symbols

The \(\triangle \) symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.

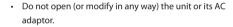
The Symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.

The symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

æ.

/ WARNING





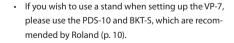
Do not attempt to repair the unit, or replace parts
within it (except when this manual provides specific
instructions directing you to do so). Refer all servicing
to your retailer, the nearest Roland Service Center,
or an authorized Roland distributor, as listed on the
"Information" page.



- Never install the unit in any of the following locations.
 - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are



- Damp (e.g., baths, washrooms, on wet floors); or are
- · Exposed to steam or smoke; or are
- · Subject to salt exposure; or are
- Humid; or are
- Exposed to rain; or are
- · Dusty or sandy; or are
- · Subject to high levels of vibration and shakiness.





When using the unit with a rack or stand recommended by Roland, the rack or stand must be carefully placed so it is level and sure to remain stable. If not using a rack or stand, you still need to make sure that any location you choose for placing the unit provides a level surface that will properly support the unit, and keep it from wobbling.



NWARNING

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



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



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



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



 Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.





WARNING

- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer. the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
 - · The AC adaptor, the power-supply cord, or the plug has been damaged; or
 - If smoke or unusual odor occurs
 - Objects have fallen into, or liquid has been spilled onto the unit; or
 - The unit has been exposed to rain (or otherwise has become wet); or
 - The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.



CAUTION

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



This (VP-7) for use only with Roland stand PDS-10 and BKT-S. Use with other stands is capable of resulting in instability causing possible injury.



Even though you've observed all the precautions listed in the owner's manual, the stand (PDS-10, BKT-S) could overturn depending on the way you perform. For this reason, you should address all issues concerning safety before using this product.



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



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



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



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



WARNING

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



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

.....



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



CAUTION

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



Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.



Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (p. 10).



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



Should you remove screw, keep them in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.



Always turn the phantom power off when connecting any device other than condenser microphones that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic microphones, audio playback devices, or other devices that don't require such power. Be sure to check the specifications of any microphone you intend to use by referring to the manual that came with it.



(This instrument's phantom power: 48 V DC, 10 mA Max)

IMPORTANT NOTES

Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that
 radiate heat, leave it inside an enclosed vehicle, or otherwise subject
 it to temperature extremes. Excessive heat can deform or discolor
 the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Depending on the material and temperature of the surface on which
 you place the unit, its rubber feet may discolor or mar the surface.
 You can place a piece of felt or cloth under the rubber feet to
 prevent this from happening. If you do so, please make sure that the
 unit will not slip or move accidentally.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one
 that has been slightly dampened with water. To remove stubborn
 dirt, use a cloth impregnated with a mild, non-abrasive detergent.
 Afterwards, be sure to wipe the unit thoroughly with a soft, dry
 cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit's memory once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors.
 Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Some connection cables contain resistors. Do not use cables that
 incorporate resistors for connecting to this unit. The use of such
 cables can cause the sound level to be extremely low, or impossible
 to hear. For information on cable specifications, contact the
 manufacturer of the cable.

- All product names mentioned in this document are trademarks or registered trademarks of their respective owners.
- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.

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Look What You Can Do with the VP-7





"Connecting a Microphone" (p. 13)

Keyboard



"Connecting a Keyboard" (p. 11)

Portable audio player

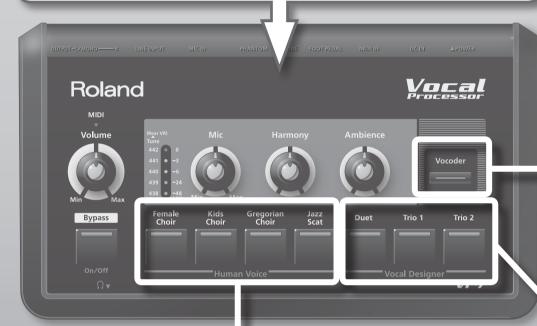


"Performing along with Your Portable Audio Player" (p. 28)

Foot pedal



"Connecting a Foot Pedal" (p. 14)



Human Voice

Perform realistic human vocals

You can perform realistic human vocals simply by playing a connected keyboard.

Choose from Female Choir, Kids Choir, Gregorian Choir, or Jazz Scat sounds (p. 18).





A superb choir at your side

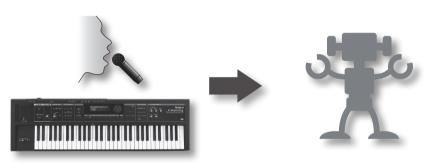
Easy setup, and simple operation.

Now it's easy for anyone to create the finest choral harmonies.

Vocoder Transform your voice to a robot voice

Sing into a microphone while playing a keyboard, and your voice will morph into a robot voice.

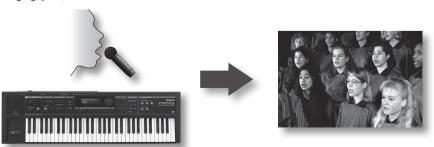
Press the [Vocoder] button, and use the keyboard to play sounds ranging from vintage vocoder sounds to the latest electro-styles (p. 20).



Vocal Designer Add harmony to your voice

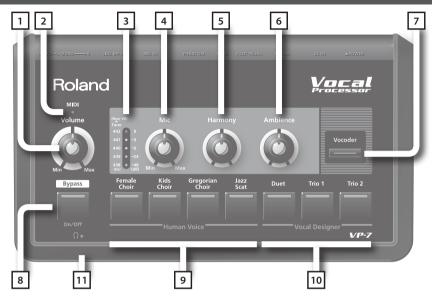
By singing into the microphone while you press chords on the keyboard, you can play harmonies using your voice.

You can perform richly expressive harmonies that reflect the dynamics of your voice and the lyrics you're singing (p. 19).



Names of Things and What They Do

Top Panel



1 [Volume] Knob (p. 16)

This adjusts the overall volume of the VP-7.

2 MIDI Indicator

This will light when messages are received from the MIDI IN connector.

3 Level (Tune) Indicator (p. 26)

This indicates the microphone input level (index markings at the right).

When you turn the [TUNE] knob on the rear panel, this will indicate the current tuning for several seconds (index markings at the left).

4 [Mic] Knob (p. 17)

This adjusts the microphone input level.

5 | [Harmony] Knob (p. 23)

This adjusts the balance between the unprocessed vocal from the microphone input (the direct sound) and the Human Voice/Vocal Designer/Vocoder sound.

6 [Ambience] Knob (p. 25)

This adjusts the depth of Ambience.

7 [Vocoder] Button (p. 20)

Press this to select Vocoder sounds.

By pressing the [Vocoder] button you can cycle through the vocoder sounds (three types).

While holding down the [Vocoder] button, you can press one of the Human Voice buttons or Vocal Designer buttons to select variations (seven types).

8 [Bypass] Button (p. 24)

This mutes (silences) the Human Voice/Vocal Designer/Vocoder sound, so that only the direct sound from the microphone will be output.

9 Human Voice Sound Buttons (p. 18)

Use these buttons to select a Human Voice.

10 Vocal Designer Sound Buttons (p. 19)

Use these buttons to select a Vocal Designer sound.

11 Headphone Jack (p. 12)

Connect headphones to this jack.

Rear Panel



12 [POWER] Switch (p. 15)

This turns the power of the VP-7 on/off.

13 DC IN Jack (p. 10)

Connect the AC adaptor here.

14 MIDI IN Connector (p. 11)

Connect your MIDI device here.

15 FOOT PEDAL Jack (p. 14, p. 24)

Connect a foot pedal here.

This lets you use a foot pedal to control the function of the [Bypass] button.

16 [TUNE] Knob (p. 26)

This knob adjusts the tuning.

You can adjust the tuning over a range of 438-442 Hz in 1 Hz steps.

17 [PHANTOM] Switch (p. 13)

Turn this on if you've connected a condenser microphone that requires phantom power.

- * Turn this off if you're using the included microphone (DR-HS5).
- Supplying phantom power to a dynamic microphone or audio playback device will cause malfunctions.

18 MIC IN Jack (both XLR and 1/4" phone) (p. 13)

Connect your microphone here.

The Mic input connector supports either XLR type or phone type plugs.

The XLR type connector supports 48V phantom power, allowing you to connect a condenser microphone that requires a phantom power supply.

19 LINE INPUT Jack (STEREO) (p. 28)

Here you can connect your portable audio player or the audio output of your MIDI-connected keyboard.

* The VP-7's [Volume] knob does not affect the LINE INPUT. Use the volume control of the connected keyboard to adjust the volume.

20 OUTPUT Jacks (p. 12)

These jacks output the VP-7's sound in stereo (L/R).

21 Ground Terminal

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

Unsuitable places for connection

- · Water pipes (may result in shock or electrocution)
- Gas pipes (may result in fire or explosion)
- Telephone-line ground or lightning rod (may be dangerous in the event of lightning)

22 Security Slot (♠)

· http://www.kensington.com/

Bottom Panel



23 USB FOR UPDATE Connector

This is used to update the VP-7's internal program.

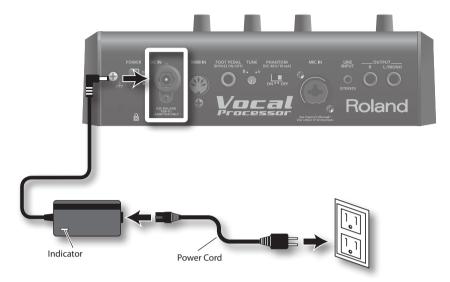
NOTE

For normal use, do not connect anything to this connector.

Getting Ready

Connecting the AC Adaptor

Connect the included AC adaptor to the DC IN connector on the rear panel of the VP-7.



NOTE

- Place the AC adaptor so the side with the indicator (see illustration) faces upwards and the side with textual information faces downwards.
 - The indicator will light when you plug the AC adaptor into an AC outlet.
- Securely insert the AC adaptor plug all the way into the connector.
- Use only the supplied AC adaptor.

Attaching the VP-7 to a stand

By using the separately sold PDS-10 and BKT-S, you can attach the VP-7 to a stand as shown in the illustration.

- * Use only the screws provided with the BKT-S. Other screws may damage the unit.
- * When using the PDS-10, extend the legs to their maximum spread. Do not allow the overall height including the VP-7 to exceed 1 meter.
- * When turning the unit upside-down, get a bunch of newspapers or magazines, and place them under the four corners or at both ends to prevent damage to the buttons and controls. Also, you should try to orient the unit so no buttons or controls get damaged.
- * When turning the unit upside-down, handle with care to avoid dropping it, or allowing it to fall or tip over.



Connecting a Keyboard

By using the VP-7 in conjunction with a keyboard, you'll be able to control your performance expression in greater detail. You can play the keyboard to specify the harmony notes or vocal pitches.



Keyboard

If you run a cable from the output of your keyboard (which you've connected to the MIDI IN connector) to the LINE IN jack, you'll be able to carry out performances that use Human Voice or Vocal Designer in combination with what you play on the keyboard.

* The VP-7's [Volume] knob does not affect the LINE INPUT. Use the volume control of the connected keyboard to adjust the volume.

MEMO

If a keyboard is not connected, the pitch from the microphone input will be detected, and the pitch of the sounds produced will be based on this detected pitch.

Changing the MIDI receive mode

At the factory settings, the VP-7 is set to MIDI channel 1.

If you want to receive multiple channels, you can change the MIDI reception mode so that all channels 1–16 will be received (OMNI).

If you set the VP-7's MIDI reception mode so that only channel 1 is received, you must also set the transmitting MIDI device to channel 1.

To check the current MIDI reception mode

The button illumination when the VP-7 is powered up will indicate the current MIDI reception mode.

Reception mode	Button illumination	
Ch1	When you turn on the power, the selected sound button will light.	
OMNI	When you turn on the power, all of the sound buttons will simultaneously blink twice, and then the selected sound button will light.	

To change the MIDI reception mode

While holding down the [Bypass] button, turn on the power. Each time you do this, the setting will alternate between Ch1/OMNI.

Reception mode	Explanation	
Ch1	Only the data of channel 1 will be received	
OMNI	All channels will be received	

When you change the MIDI reception mode, the setting is automatically stored in the unit; it will still be in effect the next time power is turned on.

* Even if you set the MIDI reception mode to OMNI, you still won't be able to use the unit as a multitimbral sound generator.

Connecting Headphones or Speakers

The VP-7 does not contain speakers. In order to hear sound, you'll need to connect it to an audio device, such as monitor speakers or a stereo system, or connect headphones.

NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

Connecting monitor speakers or a stereo system

Use cables to connect the VP-7's rear panel OUTPUT jacks to your monitor speaker or stores set.

- * In order to take full advantage of the VP-7's capabilities, we recommend that you use it in stereo.
- * To use it in mono, connect to the OUTPUT L/MONO jack.



Monitor speakers (with built-in amp)

Using headphones

Connect commercially available headphones to the Headphone jack.

* Sound will be output from the OUTPUT jacks even if headphones are connected.



Connecting a Microphone

A microphone is indispensable when performing with the VP-7.

The VP-7 models vocal sounds by using your voice that is input via the microphone.



* This instrument is equipped with balanced (XLR/TRS) type jacks. Wiring diagrams for these jacks are shown below. Make connections after first checking the wiring diagrams of other equipment you intend to connect.

- * Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:
 - 1. Changing the orientation of the microphone(s).
 - 2. Relocating microphone(s) at a greater distance from speakers.
 - 3. Lowering volume levels.
- * Note that if you don't have a MIDI keyboard connected, the Human Voice sound could continue sounding without end if the input from the microphone is at too high a level. Should you encounter this problem, turn the [Mic] knob counterclockwise to lower the level of the input.
- * For information on how to wear the microphone, refer to the owner's manual that came with the supplied microphone.

If using a phantom-powered microphone

The VP-7's MIC IN jack can provide phantom power.

- * Turn this off if you're using the included microphone.
- * You must turn the phantom power off unless you've connected a condenser microphone that requires phantom power.

Supplying phantom power to a dynamic microphone or audio playback device will cause malfunctions. For details on the specifications of your microphone, refer to the owner's manual that came with your microphone. (The VP-7's phantom power supply: DC 48 V, 10 mA Max)

1. Turn on the [PHANTOM] switch.

Phantom power will be supplied.



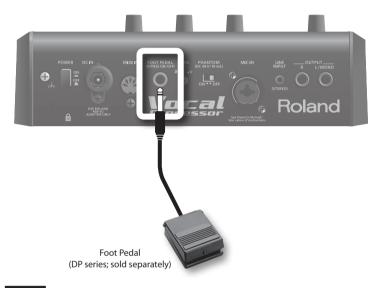
Connecting a Foot Pedal

The VP-7 allows you to connect a foot pedal (DP series; sold separately).

If you connect a foot pedal (DP series; sold separately) to the FOOT PEDAL jack on the rear panel, you'll be able to use your foot to operate the function of the [Bypass] button (p. 24).

When you press the foot pedal, the Human Voice/Vocal Designer/Vocoder sound will be muted (silenced), and only the direct sound from the microphone will be output.

When you press the foot pedal once again, muting will be cancelled, and you'll hear the sound again.



NOTE

Use only the specified foot pedal (DP series; sold separately). Connecting a product made by another manufacturer might cause the VP-7 to malfunction.

Turning the Power On/Off

Here's how to turn the VP-7's power on/off.

Turning the Power On



- * Once the connections have been completed (p. 10-p. 14), turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.
- 1. Before you turn on the power, check the following points.

Is the VP-7 correctly connected with your other equipment?

Have you minimized the volume settings of the VP-7 and of the connected audio equipment?

- 2. Turn on the [POWER] switch located on the VP-7's rear panel.
 - * Always make sure to have the volume level turned down before switching on power. Even with the volume all the way down, you may still hear some sound when the power is switched on, but this is normal, and does not indicate a malfunction.

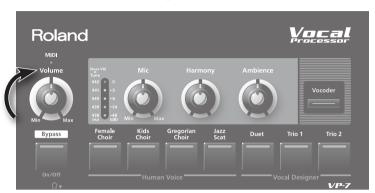
Turning the Power Off



- Before you turn off the power, minimize the volume settings of the VP-7 and of the connected audio equipment.
- 2. Turn off the [POWER] switch located on the VP-7's rear panel.

Adjusting the Volume

1. Turn the [Volume] knob to adjust the VP-7's overall volume.



MEMO

For best results, adjust the controls of your amp and speaker so that the volume is appropriate when the [Volume] knob is in the range between 12 o'clock and 2 o'clock, as shown in the illustration.

Turn the knob toward the right when you want to increase the sound further, or toward the left when you want to decrease the sound.



* The [Volume] knob does not affect the LINE INPUT. Use the controls of the connected device to adjust the volume.

Mic Input Level (Mic)

Here's how to adjust the level of the input from the microphone connected to the MIC IN jack on the rear panel.

Your voice will be distorted if the microphone input level is too high. Noise will be heard if the microphone input level is too low.

If your voice is distorted, or if there is too much noise, the VP-7 will have difficulty detecting the pitch, and it won't be possible to add harmonies cleanly.

To ensure that the harmonies are added as cleanly as possible, it's important to adjust the microphone input level until it is as high as you can get it without causing distortion to occur.

NOTE

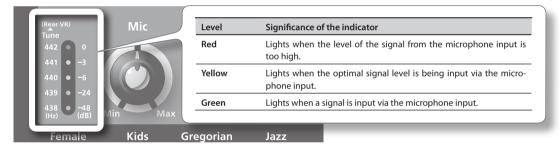
If the input from the microphone is at too high a level, acoustic feedback could be produced, or the sound might continue sounding endlessly. Adjust the level of the microphone's input by following the procedure below.

1. Vocalize into the microphone.



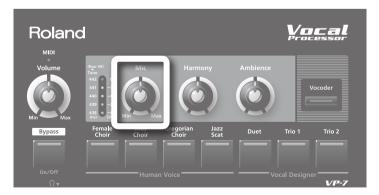
You should try to maintain a fixed distance between the microphone and your mouth.

2. Note how the level (Tune) indicator is illuminated.



3. Turn the [Mic] knob to adjust the input level.

Adjust the level so that the yellow indicator lights when you sing loudly.



(MEMO)

Once you've set the microphone input level, you should normally leave it untouched. Use the [Volume] knob to raise or lower the volume.

Performing with a Human Voice

The Human Voice section lets you perform with realistic choir sounds simply by playing the keyboard.

Selecting a Human Voice

Press one of the Human Voice buttons so it's lit (green); now you can play the Human Voice section. If one of the Human Voice sounds is selected, the indicator of that sound button will light green.

Roland

MIDI

Volume

Min Max

Female Kids Gregorian Jazz
Choir Choir Scat

Duet Trio 1 Trio 2

Try out the sound as you adjust the [Harmony] knob and [Ambience] knob (p. 23, p. 25).

Sound	Explanation	
Female Choir	This is the sound of a female choir. The tone will change according to your keyboard playing dynamics.	
Kids Choir	This is a children's choir with a beautiful transparent sound.	
Gregorian Choir	Gregorian Choir This is the sound of a large choir typical of singing in a church. It is suitable for majestic classical songs.	
Jazz Scat This sound samples a jazz scat vocalist. It is suitable for songs with rapid passages, or scat solos.		

NOTE

You can't use the Human Voice section and Vocal Designer section at the same time.

If you don't hear sound, check the following

- Is the VP-7 correctly connected to your amp, speaker, or headphones? (p. 12)
- Is the volume of the VP-7 raised? (p. 16)
- Is Bypass turned off ([Bypass] button unlit)? (p. 24)
- Is your microphone's switch turned on?
- Is your microphone connected correctly? (p. 13)
- Is the microphone input level raised? (p. 17)
- Is the [Harmony] knob set to the right of the center position? (p. 23)

Performing with Vocal Designer

By singing into the microphone while you press chords on the keyboard, you can add harmonies to the sound of your voice.

Selecting a Vocal Designer Sound

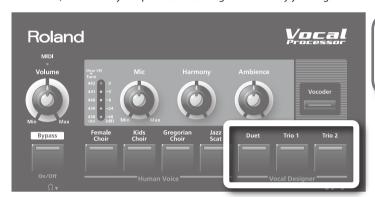
To play the Vocal Designer section, press one of the Vocal Designer sound buttons so its indicator is lit (red).

When a Vocal Designer sound is selected, that sound button's indicator will light red.

A backing chorus will automatically be added to your vocal.

Harmony is automatically produced according to the melody you sing (the pitch detected from the microphone) and the chord that is detected from the keyboard.

In addition, the harmony will proceed according to the melody you sing.



In order for the VP-7 to recognize the chord automatically, you must play at least three notes

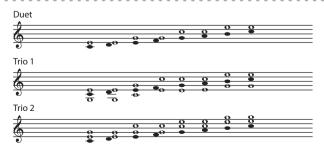
For example, to specify a C Major chord, play C, E, and G.

Try out the sound as you adjust the [Harmony] knob and [Ambience] knob (p. 23, p. 25).

Sound	Explanation		
Duet	This produces two-part harmony, as though two people were singing.		
	(When a keyboard is not connected via MIDI, pitches a fourth lower will be generated to create the harmony.)		
	This produces three-part harmony, as though three people were singing.		
Trio 1	One voice at a higher pitch and one voice at a lower pitch will be created, relative to the pitch of the direct sound from the microphone.		
	(When a keyboard is not connected via MIDI, pitches a fourth lower and an octave lower will be generated to create the harmony.)		
	This produces three-part harmony, as though three people were singing.		
Trio 2	Two voices at a higher pitch will be created, relative to the pitch of the direct sound from the microphone.		
	(When a keyboard is not connected via MIDI, pitches a fourth lower and a fifth higher will be generated to create the harmony.)		

If the higher-pitched harmony sounds are higher than a certain pitch, they will exceed the range that the VP-7 is able to produce; if this occurs, the sound will be produced in a lower range.

Example: C-Major scale



- The solid black note symbols indicate the pitches detected from the microphone (these notes will not be produced *1).
- The hollow note symbols indicate the generated harmony (Vocal Designer generates these notes).

*1

If the [Harmony] knob is turned to the right of center, the solid black notes in the example (the same pitch as your voice) will be overlaid onto the direct sound and output.

Performing with the Vocoder

By playing the keyboard while you sing into the microphone, you can perform a variety of vocoder sounds, ranging from vintage vocoders to the latest electro-types.

Selecting a Vocoder Sound

To play vocoder sounds, press the [Vocoder] button so its indicator is lit.

The vocoder sounds use the volume and rhythm of the sound from the microphone. The pitch is controlled by the notes you play on the connected keyboard.

If no keyboard is connected, the pitch will also be detected from the microphone input, meaning that all aspects of the vocoder sound will be controlled from the microphone.

There are three types of vocoder sound.

Each time you press the button, the [Vocoder] button's indicator will change color in the order of red \rightarrow green \rightarrow orange \rightarrow red ..., and the vocoder sound will be switched.



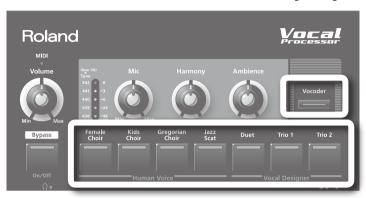
Try out the sound as you adjust the [Harmony] knob and [Ambience] knob (p. 23, p. 25).

Sound	Indicator	Explanation	
Vocoder 1	Lit red	This is a metallic talkbox-type sound. It is a more modern sound than "Vocoder 2," and is suitable for styles with a beat, such as R&B.	
Vocoder 2	Lit green	This is the sound of a vintage vocoder. It can be used broadly for songs with rapid pass such as the pop music of the 1980s. This is suitable for chordal playing.	
Vocoder 3	Lit orange	This is a newer type of sound than "Vocoder 1" or "Vocoder 2." It is suitable for electro or hip styles. (Since this is a mono sound, you won't be able to play chords.)	

Selecting a Variation Sound

You can choose from seven different variation sounds.

While holding down the [Vocoder] button, press one of the Human Voice or Vocal Designer buttons to select a variation sound. Like the vocoder sounds, the variation sounds will generate harmony based on the pitch of the notes you play on the keyboard. If a variation sound is selected, the sound button's indicator will light orange.



Try out the sound as you adjust the [Harmony] knob and [Ambience] knob (p. 23, p. 25).

1. If you hold down the [Vocoder] button when you press one of the Human Voice or Vocal Designer sound buttons, the unit will enter Variation mode.

The sound button will light in orange, indicating that you're in Variation mode.

Sound		Explanation	
Male & FemaleHuman Voicea[Female Choir] buttonra		A mixed choir with independent male and female parts. Sparse harmony will produce a three-dimensional sound that is thicker than "Classic." Female voices sing the high range, and male voices sing the low range. Female voices are heard at the right on the stereo field, and male voices are heard on the left.	
Kids Choir 2 Human Voice [Kids Choir] button		Unlike the mixed choir, the female part is sung by young boys whose voices have not yet changed. Compared to the mixed choir, this produces a more transparent sound. The high range is sung by young boys, and the low range is sung by youths.	
Classic Human Voice Gregorian Choir] button		This is a large chorus suitable for classical music. It also suits a wide range of choral songs, not limited to classical music. The sound is clear, making it suitable when you want the lyrics to be heard.	
Jazz Scat 2 Human Voice [Jazz Scat] button		This is a jazz scat sound. Since this is an expressive and crisp sound, it's suitable for songs with rapid passages, or for scat singing. By playing the keyboard strongly while you sing, you can switch to a "fall" note.	
Background Vocal Designer [Duet] button		This is the sound of a simple backing chorus. It produces a clear-sounding chorus of a small number of people, maintaining a sense of presence even in the background.	
Pop	Vocal Designer [Trio 1] button This is a small chorus that is broadly useful with popular music or with song ing rapid passages. The sound is clear, making it suitable for songs in which the lyrics to be heard.		
Gospel Vocal Designer This is a chorus with the distinctive performance techniques and irreging Characteristic of gospel music. It is suitable for jazz or gospel.		This is a chorus with the distinctive performance techniques and irregularities that are characteristic of gospel music. It is suitable for jazz or gospel.	

When you're in Variation mode, all you need to do to select another variation of the sound is to press the sound button.

2. To return to the normal mode, hold down the [Vocoder] button and press the sound button.

Sound buttons will light in green/red, and you'll be able to select from the Human Voice/Vocal Designer sounds.

Using Controllers

Performing with a Keyboard

If you connect a MIDI keyboard to the VP-7, you'll be able to play chords on the keyboard to specify the harmonies that will be produced.

1. Connect your keyboard.

For details on connections, refer to "Connecting a Keyboard" (p. 11).

2. Select a sound.



To make it easy to hear the result, turn the [Harmony] knob all the way to the right so that your voice will not be output.

Perform.

The performance method and the VP-7's operation will depend on the sound you select and on whether a keyboard is connected.

	Human Voice	Vocal Designer	Vocoder/Variation
When a keyboard is connected via MIDI	Play the keyboard. The Human Voice sound will be generated according to your playing.	Sing while playing a chord on the keyboard. The pitch you sing into the microphone input will be detected, and harmony will be generated according to the chord you play.	Sing while playing the keyboard. The vocal from the microphone input will be heard at the pitch you play on the keyboard.
When a Sing into the microphone. Keyboard is not connected via MIDI Sing into the microphone. The pitch of the microphone input will be detected, and the Human Voice sound will be generated according to the detected pitch.		Sing into the microphone. The pitch of the microphone input will be detected, and harmony will be generated.	Sing into the microphone. The pitch of the microphone input will be detected, and sound will be generated at the detected pitch.

Performing a Vocoder sound

- Connect your keyboard (p. 11), and select a Vocoder sound (or a Variation sound) (p. 20–p. 21).
- 2. Play the keyboard.
- **3.** While pressing notes on the keyboard, vocalize into the microphone.

The vocoder sound will be heard in proportion to the volume of your vocalizing.

 Even if you're vocalizing, there will be no vocoder sound unless you're pressing notes on the keyboard.

Play the keyboard to control the pitch of the sound.

Continue vocalizing ("wahhh...") while you play the keyboard. The pitch will change according to the pitch of the notes you play.

Use your voice to mark the rhythm.

Press a chord on the keyboard, and rhythmically modulate your voice ("wah, wah, wahhh..."). Vocal Designer will generate sound according to the chord you're pressing, in the rhythm of your vocalizing ("wah, wah, wahhh...").

This is a particularly useful way to perform phrases that contain rapid passages.

The volume is controlled by the loudness of your voice.

Unlike a typical synthesizer, the volume is controlled by the microphone. In other words, your voice defines the volume curve. It's effective to use your voice to add expression to an extent that you might otherwise consider excessive.

There are just two things you must remember in order to take maximum advantage of the vocoder.

- · Match the timing of the keyboard and your voice (use your voice to mark the rhythm)
- Use your voice to control the volume (expression)

Adjusting the Volume Balance (Harmony)

Here's how to adjust the volume balance between the direct sound from the microphone and the Human Voice/Vocal Designer/Vocader sound.

1. Press notes on the keyboard, and vocalize into the microphone.



2. Use the [Harmony] knob to adjust the volume balance.



If the [Harmony] knob is turned all the way to the left, your voice will be output directly from the VP-7.

If the [Harmony] knob is in the center position, the direct sound and the Vocal Designer sound will be at the same volume.

Now try singing a favorite song into the microphone. When doing so, choose one of the Vocal Designer sounds, and play the appropriate chord progression on the keyboard while you sing.

A backing chorus generated by Human Voice/Vocal Designer/Vocoder will be added to your voice according to the chords you play.

In the case of Vocal Designer, turning the [Harmony] knob toward the right of center will output a sound at the same pitch as your own voice, layered with the direct sound (p. 19).

NOTE

If you turn the [Harmony] knob all the way to the right, the direct sound from the microphone will no longer be heard.

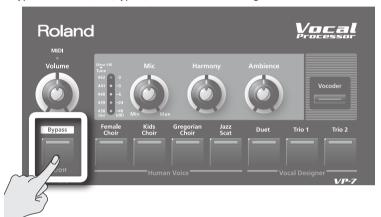
Outputting Only the Direct Sound from the Microphone (Bypass)

When you turn on the power, the VP-7 will start up with Human Voice/Vocal Designer/Vocoder turned on.

By pressing the [Bypass] button, you can mute the Human Voice/Vocal Designer/Vocoder sound. Only the direct sound from the microphone will be heard.

* The sound that's input via LINE INPUT will always be output, regardless of the on/off state of the [Bypass] button.

If Bypass is enabled, the [Bypass] button's indicator will light.



If the [Harmony] knob is turned all the way to the right, no sound will be output when Bypass is turned on.

To make the sound reappear, press the [Bypass] button once again.

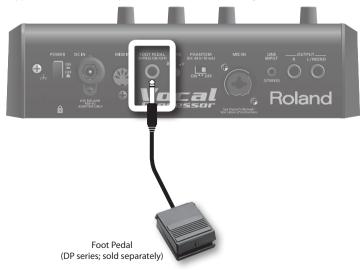
When you have a digital piano (such as one from the Roland HP series) connected via MIDI, you'll be able to control the on/off of Bypass using the piano's sostenuto pedal (the middle pedal; CC #66).

Using a foot pedal

If you connect a foot pedal (DP series; sold separately) to the FOOT PEDAL jack as shown in the illustration, you'll be able to use your foot to control the function of the [Bypass] button.

This allows hands-free operation, so that you can mute the Human Voice/Vocal Designer/Vocoder sound while playing the keyboard. For example, this lets you conveniently add harmonies while you're singing a melody (Bypass Off), then turn off the harmonies when they're not needed (Bypass On).

If Bypass is enabled, the [Bypass] button's indicator will light.



To make the sound reappear, press the foot pedal once again.

Adjusting the Dynamics (Dynamics)

The way in which the Vocal Designer/Vocoder dynamics will respond to changes in the microphone input volume can be adjusted over a range of seven levels. Changes you make in this value are stored in the unit.

Decreasing the dynamics effect means that the Vocal Designer/Vocoder will be able to produce a wide range of sounds from loud to soft, giving you more expressive range. However, this will require you to accurately control the volume of your voice as you sing into the microphone.

Increasing the dynamics effect means that the Vocal Designer/Vocoder sound will vary less in volume, but this will make it easier for you to sing, since a stable volume will be obtained even if your voice increases or decreases in volume.

1. Press and hold the [Bypass] button for two seconds.

The [Bypass] button will blink.

2. Press one of the sound buttons to select the desired dynamic level.

You can choose from seven levels for dynamics, which correspond to the following buttons.

Button name	Setting	
Female Choir	OFF	Dynamics will not be applied; it will be easy for you to produce expressive change.
Kids Choir	1	
Gregorian Choir	2	(When shipped from the factory)
Jazz Scat	3	
Duet	4	
Trio 1	5	
Trio 2	6	Dynamics will be maximized; the volume will be stable, making it easier for you to song.

3. Press the [Bypass] button.

The VP-7 will return to its normal state.

Applying Ambience (Ambience)

You can apply ambience (reverberation) to the direct sound from the microphone and to the Human Voice/Vocal Designer/Vocader sound, producing the impression of a performance in a concert hall.



The Ambience effect will increase as you turn the [Ambience] knob toward the right.

Reverb is applied in the left half of the knob's range. Turning the knob toward the right of center will add an echo in addition to the reverb.

Tuning (Tune)

When performing with an ensemble, you'll need to adjust the VP-7's pitch to match the other instruments.

To do this, turn the [TUNE] knob located on the VP-7's rear panel.



- Turning the knob toward the b position will adjust the pitch of the A4 note toward the 438 Hz or 439 Hz settings. Turning the knob toward the # position will adjust the pitch toward 441 Hz or 442 Hz. When the knob is in the center, the pitch is 440 Hz.
- Immediately after you change this setting, the Level (Tune) indicators on the top panel will indicate the value you specified.



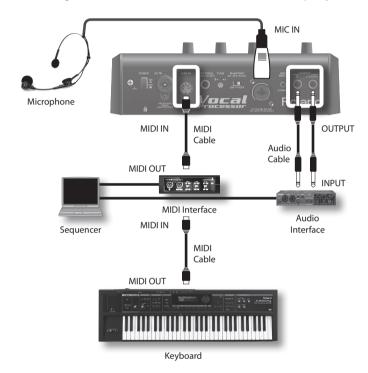
* When you turn on the power, the tuning is set to 440 Hz regardless of the position of the knob. You can adjust the tuning if necessary.

Using the VP-7 in Combination with a Sequencer

By connecting a sequencer, you can use the VP-7 to generate harmony within your studio project, allowing it to be used as a component in your song productions.

If you want, you can record sound produced by Human Voice/Vocal Designer/Vocoder on an audio track on your sequencer that is matched to your sequencer's playback.

MIDI messages from an SMF music file can be sent to the VP-7 to specify the chord progression used to generate the harmony.



- * When playing back SMF music file or other data, make sure that the VP-7's MIDI receive mode is set to channel 1 (p. 11). If the MIDI receive mode is set to OMNI, the VP-7 will receive the note messages for all parts, including the drum part.
- * Make sure that channel 1 is used only as the MIDI transmit channel of the track that contains the chord progressions used to specify the harmony. For details on using your sequencer, refer to your sequencer's manual.

- 1. Make connections as shown in the illustration.
- 2. Play your keyboard to record the chord progression on a MIDI track of your sequencer.
- **3.** Play back your sequencer, and vocalize into the microphone connected to the VP-7.

 As you sing along with the song that's playing back, the harmony will change according to the chord progression you recorded.
- 4. Record the VP-7's OUTPUT onto an audio track of your sequencer.

An example of advanced studio techniques

Record the backing chorus part on a MIDI track.

Input a vocal recorded on an audio track of your sequencer to the VP-7's MIC IN connector.

While listening to your monitor speakers, try out different settings on the VP-7 to audition different variations for your backing chorus.

You can also edit the recorded MIDI track to try out different harmonies.

Performing along with Your Portable Audio Player

You can perform along with sound from your portable audio player, CD player, sampler, or other external device.

For example, you could have an accompaniment be played by your portable audio player while you use a microphone or keyboard to perform using Human Voice or Vocal Designer.

Connecting your portable audio player

- 1. Connect your portable audio player or other device to the LINE INPUT jack located on the VP-7's rear panel.
 - * When connection cables with resistors are used, the volume level of equipment connected to the input (LINE INPUT) may be low. If this happens, use connection cables that do not contain resistors.
 - * To prevent damage to your speakers or other equipment, make sure to turn down the volume on all devices before you make any connections.



Portable audio player

Adjusting the volume

- 1. Switch off the power to your portable audio player and other devices, then raise the volume so it's at an appropriate level.
- 2. While playing the VP-7, adjust the volume of your portable audio player so it's at an appropriate level.

The sound from the portable audio player that's connected to the LINE INPUT jack will be output as is from both the OUTPUT jacks and the Headphone jack.

NOTE

- The input level of the LINE INPUT cannot be adjusted on the VP-7 itself.
- The [Bypass] button, [Harmony] knob, and [Ambience] knob do not affect the LINE INPUT.

Changing the Settings

Changing the Function of the Output L/R Jacks (Output Mode)

You can specify whether the output L/R jacks will output a conventional stereo signal, or whether the L-jack will output only the Human Voice/Vocal Designer/Vocoder sound while the R-jack outputs only the direct sound.

Normally, the VP-7 is set so that L/R will output a conventional stereo signal when it starts up.

Normal state



If LR Output Mode is selected



Changing the function of the output L/R jacks

1. While holding down the [Vocoder] button, turn on the power.

When the power turns on, all of the Level indicators will blink twice, and then the VP-7 will start up. In this state, the R-jack will output only the direct sound.

- * This mode setting is discarded when you turn off the power.
- * If you've selected the Output Mode, the [Ambience] knob will not function.
- * Use your external mixer or other device to adjust the volume balance between the direct sound and the Vocal Designer sound.
- * When a Vocal Designer sound is selected, you can use the [Harmony] knob to adjust the volume of the sound that's at the same pitch as the direct sound from the microphone.
- * When you turn Bypass on, only the Human Voice/Vocal Designer/Vocoder sound will disappear.

Changing the Pitch Bend Range (Bend Range)

The VP-7 allows you to apply pitch bend from a MIDI-connected keyboard.

You can change the pitch bend range (the maximum range of pitch change) over a range of seven steps: 1, 2, 4, 5, 7, 8, or 12 semitones. Changes you make in this value are stored in the unit.

Changing the pitch bend range

- Press the [Bypass] button and the [Vocoder] button.
 Both buttons will blink.
- Press one of the sound buttons to specify the desired pitch bend range.
- 3. Press the [Bypass] button or the [Vocoder] button.

The VP-7 will return to its normal state.

* Pitch bend will not be applied to the Vocal Designer sound that's at the same pitch as the direct sound from the microphone.

Button name	Setting	
Female Choir	1	
Kids Choir	2	(When shipped from the factory)
Gregorian Choir	4	
Jazz Scat	5	
Duet	7	
Trio 1	8	
Trio 2	12	

Reset to Default Factory Setting (Factory Reset)

The "factory reset" operation will return all settings stored in the VP-7 to their factory-set state.

The factory reset operation will initialize the following items.

Item	Default value		
The last-selected sound	Human Voice - Female Choir		
MIDI receive mode (p. 11)	Ch1		
Dynamics setting (p. 25)	2		
Pitch bend range (p. 29)	2		

- 1. Turn off the VP-7's power.
- 2. While holding down the [Bypass] button and the [Female Choir] button, turn on the power.

All indicators will light.

When the factory reset is completed, all indicators will go out, and the VP-7 will return to its normal state.

Sound List

The VP-7 allows you to switch its sounds from an external MIDI device, using program change messages.

The program numbers are determined according to the sound and the Bypass on/off state, as shown in the table below.

Bank Select: MSB=80, LSB=0

	Number	Sound name		
Bypass OFF	Bypass ON			
1	18	Female Choir		
2	19	Kids Choir		
3	20	Gregorian Choir		
4	21	Jazz Scat		
5	22	Duet		
6	23	Trio 1		
7	24	Trio 2		
8	25	Vocoder 1		
9	26	Vocoder 2		
10	27	Vocoder 3		
11	28	Male & Female		
12	29	Kids Choir 2		
13	30	Classic		
14	31	Jazz Scat 2		
15	32	Background		
16	33	Рор		
17	34	Gospel		
	OFF 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	OFF ON 1 18 2 19 3 20 4 21 5 22 6 23 7 24 8 25 9 26 10 27 11 28 12 29 13 30 14 31 15 32 16 33		

If a program number from 1 through 17 is received, Bypass will turn off, and the Human Voice/Vocal Designer/Vocoder sound will be heard.

If a program number from 18 through 34 is received, Bypass will turn on, and only the direct sound from the microphone will be heard.

If you want to turn bypass on/off via MIDI, use CC #66 to control it.

If you've connected a digital piano (e.g., Roland HP series), you can use the sostenuto pedal to control this.

You can also transmit program change messages to turn bypass on/off.

Troubleshooting

Problem	What to check	Page		
Power will not turn on	Is the AC adaptor connected correctly?			
	Are your amp, speakers, or headphones connected correctly?			
No sound	Is the VP-7's volume at a high enough level?			
	Could Bypass be on?	p. 24		
Sound Does Not Stop	If the input from the microphone is at too high a level, acoustic feedback could be produced, or the sound might continue sounding endlessly. Adjust the level of the microphone's input.			
No sound from Human Voice/Vocal Designer/ Vocoder	If a keyboard is connected and you've selected a Vocoder sound, vocalizing into the microphone will not produce sound unless you are also playing the keyboard.			
	If a keyboard is connected, there will be no sound unless the MIDI channels of the keyboard and the VP-7 match.			
	Check the VP-7's MIDI receive mode and your keyboard's MIDI transmit channel.			
	Could Bypass be on?			
	Is the microphone switched on?	-		
	Is the microphone connected correctly?			
	Is the microphone input level raised?			
	Is the volume balance (Harmony) set appropriately?			
	When set to LR Output Mode, only the direct sound from the microphone will be output from OUT-PUT (R). The sound from Human Voice/Vocal Designer/Vocoder will be output from OUTPUT (L). To revert to the normal stereo output, you'll need to switch the unit off, then back on again.	p. 29		
The volume level of the	Could you be using a connection cable that contains a resistor? Use a connection cable that does not contain a resistor.			
instrument connected to LINE INPUT is too low				
Pitch is wrong	Is the tuning set correctly?	p. 26		
When playing high notes on the VP-7, you might notice that the sound stops or the pitch fails to rise, or you might hear noise that changes depending on the keys you play (warbling, chirping, rustling, beeping, buzzing, etc.). This occurs mainly when you exceed the upper limit of pitches that the VP-7 is able to produce, and will be heard for notes that you will normally not use; it does not indicate a malfunction.		-		

MIDI Implementation Chart

Date : Jan. 05, 2010 Version : 1.00

	Function	Transmitted	Recognized	Remarks	
	Default Changed	X X	1, 1–16 1	Depend on mode	
Mode	Default Messages Altered	X X ********	Mode 1, 3 X	Storable in memory	
Note Number :	True Voice	X *******	O 0-127		
	Note ON Note OFF	X X	O X		
	Key's Channel's	X X	X X		
Pitch Bend		X	0		
Control Change	0, 32 1 10 11 64 65 66 72 73 76 77 78	X X X X X X X X X X	0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Bank Select Modulation Panpot Expression Hold 1 Portamento Bypass (Same function as the [Bypass] button.) Release time Attack time Vibrato rate Vibrato depth Vibrato delay	
Program Change	True Number	X *******	O 0-33	Program Number: 1–34	
System Exclusive		X	X		
	Position Select	X X X	X X X		
,	Clock Command	X X	X X		
Aux : Reset Mes- sages : All No : Active	ound Off t All Controllers ON/OFF ote Off e Sensing m Reset	X X X X X	O O X O (123–127) O X		
Notes		*1 Only with Human Voice sounds			

Mode 1 : OMNI ON, POLY Mode 3 : OMNI OFF, POLY

Model: VP-7

Mode 2 : OMNI ON, MONO Mode 4 : OMNI OFF, MONO O : Yes X : No

Specifications

VP-7: Vocal Processor

Tones

Human Voice

Female Choir, Kids Choir, Gregorian Choir, Jazz Scat

Vocal Designer

Duet, Trio 1, Trio 2

Vocoder

Vocoder 1, Vocoder 2, Vocoder 3

Variation

Male & Female, Kids Choir 2, Classic, Jazz Scat 2, Background, Pop. Gospel

Maximum Polyphony

64 voices (varies according to the sound generator load)

Master Tune

438 Hz to 442 Hz

Nominal Input Level

INPUT (MIC): -50 to -10 dBu

Controller

Harmony Knob

Ambience Knob

Tuning Knob

Connectors

Headphone Jack: Stereo miniature phone type

Output Jacks (L/MONO, R): 1/4 inch phone type

Line Input Jack: Stereo miniature phone type

Mic Jack: 1/4 inch phone type or XLR type (phantom power)

Foot Pedal Jack (Bypass on/off)

MIDI Connector (IN)

DC IN jack

Power Supply

DC 9 V: AC Adaptor

Current Draw

550 mA

Dimensions

240 (W) x 144 (D) x 64 (H) mm 9-1/2 (W) x 5-11/16 (D) x 2-9/16 (H) inches

Weight

0.8 kg / 1 lb 13 oz (excluding AC Adaptor)

Accessories

Owner's Manual

Hands-free Microphone DR-HS5

MIDI Cable

Tutorial DVD

Guidebook

AC Adaptor

Power Cord

Options

Pedal Switch: DP Series

Desktop stand and PDS-10 bracket: BKT-S

Pad Stand: PDS-10

(0 dBu = 0.775 V rms)

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

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MIDI IN CONNECTOR	
MIDI INDICATOR	
MONITOR SPEAKER	
0	
OUTPUT JACK	
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MEMO

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U.S.A.

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For EU Countries



- This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.
- Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit den Hausmüll entsorgt werden.
- Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.
- Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici.

 Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.
- Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como esté regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.
- Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.
- Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.
- Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.
- Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.
- Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.
- Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.
- Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.
- Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.
- Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.
- Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhadzovať spolu s domovým odpadom.
- See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.
- Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinti produktai neturi būti išmetami kartu su buitinėmis atliekomis.
- Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.
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- GR Το σύμβολο αυτό υποδηλώνει ότι στις χώφες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于2007年3月1日以后本公司所制造的产品。

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此标志适用于在中国国内销售的电子信息产品,表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内,产品中所含的有害物质不致引起环境污染,不会对人身、财产造成严重的不良影响。 环保使用期限仅在遵照产品使用说明书,正确使用产品的条件下才有效。 不当的使用,将会导致有害物质泄漏的危险。

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部件名称	有毒有害物质或元素					
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外壳 (壳体)	×	0	0	0	0	0
电子部件(印刷电路板等)	×	0	×	0	0	0
附件(电源线、交流适配器等)	×	0	0	0	0	0

- 〇:表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。
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This product complies with the requirements of EMC Directive 2004/108/EC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment. This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

-For C.A. US (Proposition 65)

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

For the U.K.-

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED. Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

Roland

