

Panel Descriptions

[VOLUME] knob

Adjusts the volume of the LINE OUT jacks and the PHONES jack.

[MIC SENS] knob

Adjusts the input sensitivity of the mic connected to the MIC IN jacks (front/rear).

[ROBOT] button

Transforms your voice into that of a robot, with a fixed pitch and an expressionless character.

[MEGAPHONE] button

Gives your voice a distorted character as if you were speaking through a megaphone.

PEAK indicator

Lights if the mic input level is excessive. Use the [MIC SENS] knob to adjust the sensitivity so that this indicator lights occasionally.

[KEY] knob

Specifies the key used when applying the effect of the [ROBOT] button or the [AUTO PITCH] knob (p. 5).

[BYPASS] button

Disables the effects (including reverb).

[MANUAL] button

Applies the current settings of the sliders and the [AUTO PITCH] knob to the sound.



Before using this unit, carefully read the leaflet "USING THE UNIT SAFELY" and "IMPORTANT NOTES." After reading, keep the document(s) where it will be available for immediate reference.

Panel Descriptions

[FORMANT] slider

Adjusts the formant.

Negative ("−") settings produce a masculine character; positive ("+") produce a feminine character.

[PITCH] slider

Adjusts the pitch of the voice.

You can adjust this in a range of 1 octave up or down.

[VOCODER] button

Transforms the sound into a vocoder voice.

[AUTO PITCH] knob

Corrects the pitch.

This lets you constrain your vocal to the key specified by the [KEY] knob, creating a warbling pitch change that is typical of dance music.

The amount of correction increases as you turn the knob toward the right.

If this is "OFF," correction is not applied.

Scene memory [1]–[4] buttons

Recall effect settings (scenes).

The button of the "recalled" scene memory is lit. You can store up to eight scenes.

➔ "Recalling Effect Settings (Scene Memories)" (p. 6)

[BALANCE] slider

Adjusts the balance between the unprocessed voice (NORMAL) and the effect-processed voice (EFFECT).

[REVERB] slider

Adjusts the amount of reverberation.

[HARMONY] button

Adds harmony to your voice.

[PHANTOM] switch

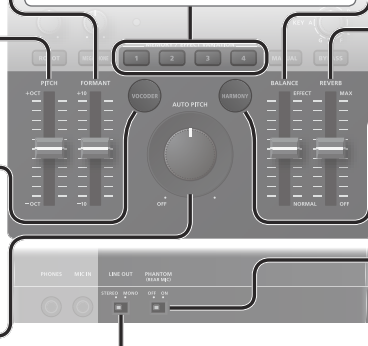
Turn this "ON" if you want phantom power to be supplied to the MIC IN jack (rear).

* Phantom power is not supplied to the TRS phone plug.

[LINE OUT] switch

Switches the audio that is output from the LINE OUT jacks.

STEREO	Stereo audio will be output.
MONO	The processed sound (L/MONO) and the unprocessed sound (R/BYPASS) will be output separately.



Connecting Your Equipment

PHONES jack

Connect headphones (sold separately) here.

Front panel



MIC IN jack (front)

Connect a mic that is compatible with plug-in power (sold separately).

- * This is only for use with a mic that is compatible with plug-in power.

[POWER] switch

Turning the Power On/Off

After you've made connections correctly, **turn on the power in the order of this unit → connected devices.**

When turning the power off, do so in the order of the connected devices → this unit.

MEMO

This unit can operate on USB bus power or on batteries.

If you want to use it on batteries, install batteries beforehand (p. 11).

Rear panel



MIDI IN connector

Connect a MIDI device.

You can use incoming MIDI note messages to play the robot voice, etc. (p. 5).

USB (≡) port

If this port is connected to your computer via a commercially available USB 2.0 cable, you can use the VT-4 as a USB audio interface.

- * If USB bus power is supplied, the unit operates on USB bus power.

LINE OUT jacks

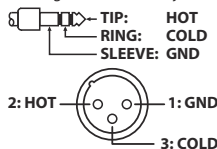
Connect these jacks to your amp or monitor speakers.

MIC IN jack (rear)

Connect a mic (sold separately) here.

If a condenser mic is connected to the XLR connector, phantom power can be supplied (p. 2).

- * Pin assignment of MIC IN jack (rear)



- * To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
- * Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Transforming Your Voice

Applying an Effect

1. **Connect your mic to the MIC IN jack (front or rear).**
 - * If you connect a condenser mic to the MIC IN jack (rear) via an XLR connector, turn the [PHANTOM] switch on.
2. **Turn the [BYPASS] button on.**
3. **While vocalizing into the mic, use the [MIC SENS] knob to adjust the input sensitivity.**

Adjust the sensitivity so that the PEAK indicator lights occasionally.

- * Adjust the input sensitivity accurately. If the mic input level is too low or too high, the effect won't work correctly.
4. **Press a scene memory button to recall a scene (p. 6).**
 5. **Turn the [BYPASS] button off.**
 6. **Vocalize into the mic.**

Your voice processed by the effect is output.

- * When inputting voice into the mic, input the voice of only one person. If multiple voices are input, the effect won't work correctly.
- * Take care that sound from the speaker does not enter the mic.

MEMO

If feedback occurs, set the noise gate (p. 7).

Editing the Effect

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

You can press a scene memory button to recall a saved effect, and then edit those effect settings (p. 6).

2. **Use the controllers (buttons, knobs, sliders) to edit the effect settings.**

Controller	Explanation
[ROBOT]*1	Produces an expressionless voice with a fixed pitch, evocative of a robot.
[MEGAPHONE]*1	Produces a distorted voice, as though you were using a megaphone.
[VOCODER]*1	Produces a vocoder voice.
[HARMONY]*1	Lets you add harmony to the sound.
[AUTO PITCH]	Pitch-corrects your voice.
[KEY]	Specifies the key that is used when applying an effect with the [ROBOT] button or the [AUTO PITCH] knob (p. 5).
[PITCH]	Adjusts the pitch of the voice.
[FORMANT]	Adjusts the formants of the sound.
[BALANCE]	Adjusts the balance between the normal voice (NORMAL) and the effect-processed voice (EFFECT).
[REVERB]*1	Adjusts the amount of reverb (reverberation).

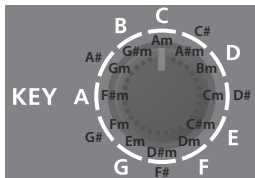
*1 To select an effect variation, hold down an effect button and press a scene memory button.

➡ "Effect Variation List" (p. 11)

3. **As necessary, save the effect settings in a scene memory button (p. 6).**

Using the [KEY] knob to specify the key

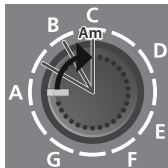
You can specify the key that is used when applying an effect with the [ROBOT] button or the [AUTO PITCH] knob.



MEMO

To specify a minor scale, turn the knob three clicks to the right from the desired key indication.

For example, if you want to set the key to "Am," turn the knob three clicks to the right from the "A" position, setting it to the "C" position.



Inputting Note Messages to the MIDI IN Connector

You can use note messages input via the MIDI IN connector to play the robot voice. You can also play the vocoder voice, or generate harmony notes.

1. Connect a MIDI keyboard or other MIDI device to the MIDI IN connector.
2. While inputting note messages from the MIDI device, vocalize into the mic.

The VT-4 switches to robot voice (the [ROBOT] button is lit), and the robot voice is sounded by the incoming note messages. (The robot voice turns on automatically.)

3. If you want to add harmony, turn the [HARMONY] button on, and input your voice.

Up to four notes of harmony are heard based on the note messages that are input (When you turn the [HARMONY] button on, polyphonic (POLY) mode is enabled).

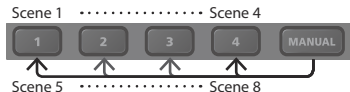
4. If you want to perform with a vocoder voice, turn the [VOCODER] button on, and input your voice.

- * To exit robot voice, press the [ROBOT] button (the [ROBOT] button goes dark).
- * The settings of the [KEY] knob and the [AUTO TUNE] knob are ignored if note messages are being input.

Recalling Effect Settings (Scene Memories)

Effect settings (scenes) that you've saved in the scene memory buttons can be recalled instantly.

You can save up to eight scenes.



MEMO

You can back up the scene memories to your computer (p. 10).

Recalling a Scene

1. Press the scene memory [1]–[4] button that you want to recall.

The scene memory button lights, and the effect settings (the scene) is recalled.

To recall scenes 5–8, hold down the [MANUAL] button and press a scene memory [1]–[4] button.

For example, to recall scene 5, hold down the [MANUAL] button and press the scene memory [1] button (the [MANUAL] button blinks slowly).

- * When you recall a scene, the current positions of the slider/[AUTO PITCH] knob/[KEY] knob will not match the actual sound.
- * When you adjust the effect after recalling a scene, the setting of the controller is applied to the sound. At this time, the scene memory button blinks.

Saving a Scene

Here's how to save the effect settings to a scene memory button.

1. Use the controllers to adjust the effect.
2. Hold down the scene memory [1]–[4] button in which you want to save the scene.

When the scene has been saved, all the scene memory buttons change from blinking → unlit.

For example, if you want to save the settings to scene 5, hold down the [MANUAL] button and hold down the scene memory [1] button.

Copying a Scene

Here's how to copy a scene to another number.

1. Press a scene memory [1]–[4] button to recall the scene that you want to copy.
2. Hold down the copy-destination scene memory [1]–[4] button.

When the scene has been copied, all the scene memory buttons change from blinking → unlit.

Convenient Functions

Suppressing Feedback (Noise Gate)

You can make noise gate settings to suppress feedback.

1. **Hold down the [MANUAL] button and press the [VOCODER] button (keep holding down the [MANUAL] button).**

The scene memory [1]–[4] buttons light.

2. **Continuing to hold down the [MANUAL] button, press one of the memory [1]–[4] buttons to set the noise gate.**

Higher-numbered scene memory [1]–[4] buttons apply the noise gate effect more strongly.

Preventing Unintended Sound (Low Cut Filter)

You can make low cut filter settings to prevent the VT-4 from unintentionally producing sound in response to low-frequency sounds nearby (such as the kick sound of a drum set).

1. **Hold down the [MANUAL] button and press the [HARMONY] button (keep holding down the [MANUAL] button).**

The scene memory [1]–[4] buttons light.

2. **Continuing to hold down the [MANUAL] button, press one of the scene memory [1]–[4] buttons to set the low cut filter.**

Higher-numbered scene memory [1]–[4] buttons specify a higher frequency below which the sound is cut.

Clarifying the Sound (Enhancer)

By applying the enhancer effect, you can improve the clarity of the high-frequency region.

1. **Hold down the [MANUAL] button and press the [MEGAPHONE] button (keep holding down the [MANUAL] button).**

The scene memory [1]–[4] buttons light.

2. **Continuing to hold down the [MANUAL] button, press one of the memory [1]–[4] buttons to set the enhancer.**

Higher-numbered scene memory [1]–[4] buttons apply the enhancer effect more strongly.

Convenient Functions

Using the VT-4 As a USB Audio Interface

By using a commercially available USB 2.0 cable to connect the VT-4 to your computer, you can use the VT-4 as a USB audio interface.

- * **You must install the USB driver before connecting the VT-4 to your computer.**

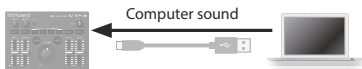
Download the USB driver from the Roland website.

For details, refer to Readme.htm which is included in the download.

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

Playback

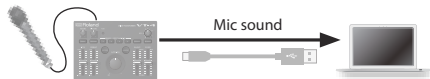
Sound played back by your computer can be output from the VT-4 via the following routes.



Route	Explanation
OUT (1-2)	Output from the LINE OUT jacks and PHONES jack (no effect is applied).
TO MIC IN (3-4)	Output from the VT-4 as sound that's input from the MIC IN jack.
TO CARRIER (5-6)	The sound of an external synthesizer that's input to "TO CARRIER" of the USB port can be used as the signal (tonality and pitch) that is the basis of the vocoder voice. Turn the external carrier setting (p. 9) "On" when using this.

Recording

The mic sound processed by the VT-4 can be recorded on your computer.



Sound	Explanation
MIX (1-2)	The sound of the LINE OUT jacks is input.
WET (3-4)	The effect-processed sound is input.
DRY (5-6)	The sound before being effect-processed is input.

Making Settings for Other Functions

1. Turn on the power while holding down the [ROBOT] button.

The [MANUAL] button blinks.

2. Turn the [KEY] knob to select the parameter that you want to set.

[KEY] knob	Parameter	Value	Explanation
C	MIDI channel	Omni (0), 1-16 Ch	Specifies the MIDI transmit/receive channel.
C#	Pitch & Formant Routing	Off, On	Specifies whether pitch and formants are always converted (on) or not (off).

[KEY] knob	Parameter	Value	Explanation
D	Saver time	Off (0), 1–20 min	Changes the time until the screen saver is applied.
D#	Mute Mode	Off, On	Specifies whether pressing the [BYPASS] button will mute (on) or turn the effect off (off).
E	External carrier	Off, On	Specifies whether the vocoder effect is applied (on) or is not applied (off) to the carrier signal being input via USB.
F	Formant depth	1–4	Specifies the range in which the formant changes.
G	Monitor mode	Off, On	Specifies whether the [VOLUME] knob affects the volume of only the PHONES jack (on). If this is on, the volume of the LINE OUT jacks is fixed.
A	Playback level	0–20	Adjusts the volume balance between the USB audio input and the mic input.
B	MIDI In Mode	Off, On	Specifies whether the robot voice is held when you stop inputting note messages (off) or is not held (on).

3. Edit the setting of the parameter that you selected.

Operation	Explanation	
On/off setting	On	Press the [HARMONY] button
	Off	Press the [VOCODER] button
Value setting	Increase by 1	Press the [HARMONY] button
	Decrease by 1	Press the [VOCODER] button
	Checking the volume The total value of the scene memory [1]–[4] buttons that are lit indicates the “ones” place. The [MEGAPHONE] button is lit if the value is 10–19, and the [ROBOT] button is also lit if the value is 20.	
	For example, if the value is “18,” scene memory [1], [3], and [4] buttons and the [MEGAPHONE] button are lit.	



4. When you have finished making settings, press the [MANUAL] button.

The setting is saved.

Backing Up or Restoring the Scene Memories

You can use your computer to back up scene memories and restore them from your computer.

Backing up

1. With the VT-4 powered-off, connect the VT-4 to your computer via a USB cable.
2. While holding down the [VOCODER] button, turn the power on.
The [ROBOT] button and the [BYPASS] button light, and the scene memory buttons through the [MANUAL] button blink while moving between left and right.
3. On your computer, open the "VT-4" drive.
4. From inside the BACKUP folder, copy the backup files to your computer.

Backup files
VT4_PATCH1.PRM (scene 1)–VT4_PATCH8.PRM (scene 8)

5. When copying is finished, perform the appropriate operation on your computer to disconnect the USB drive.
6. Turn the power off, and on again.

Restoring

1. As described in "Backing up" (p. 10), open the "VT-4" drive on your computer.
2. Copy the backup files from your computer into the RESTORE folder.

3. When copying is finished, perform the appropriate operation on your computer to disconnect the USB drive.
4. Press the [MANUAL] button.
5. When the blinking button goes dark, turn the power off and then on again.

Using Batteries Even When Connected to USB

If the VT-4 is connected to a USB port that does not support USB bus power, such as when using the VT-4 and the MX-1 (Mix Performer) with AIRA LINK, you can use the VT-4 in battery-powered mode.

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

The VT-4 is in battery-powered mode.

To return to the usual mode, turn the power off and on again.

Restoring the Factory Settings (Factory Reset)

Here's how to return the VT-4 to its factory-set state.

1. While holding down the [BYPASS] button, turn the power on.
The [MANUAL] button blinks.
If you decide to cancel factory reset, turn the power off.
2. Press the [MANUAL] button to execute factory reset.
3. When all buttons blink, turn the power off and on again.

Effect Variation List

Effect button (hold down) + scene memory button		Effect variation
[ROBOT]	[1]	NORMAL
	[2]	OCTAVE -1
	[3]	OCTAVE +1
	[4]	FEEDBACK
[MEGAPHONE]	[1]	MEGAPHONE
	[2]	RADIO
	[3]	BBD CHORUS
	[4]	STROBO
[VOCODER]	[1]	ADVANCED
	[2]	VP
	[3]	TALK BOX
	[4]	SPELL TOY
[HARMONY]	[1]	+5
	[2]	+3
	[3]	+3, -4
	[4]	+3, +5
[BYPASS] (reverb)	[1]	REVERB
	[2]	ECHO
	[3]	TEMPO DELAY
	[4]	DUB ECHO

MEMO

You can hold down an effect button to see the currently selected effect variation (the scene memory button blinks).

Installing Batteries

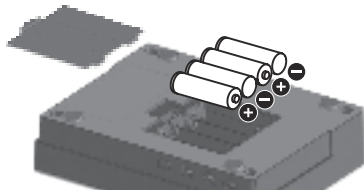
As an alternative to USB bus power, you can use commercially available AA nickel-metal hydride batteries or alkaline batteries to power the unit.

- * If USB bus power is being supplied, the unit uses USB bus power even if batteries are installed.

1. Remove the battery 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. Taking care to observe the correct orientation of the batteries, insert the batteries into the battery case.



3. Close the battery cover.

- * 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 the leaflet "USING THE UNIT SAFELY."

Battery replacement indicator (PEAK indicator)

When the batteries run low, the PEAK indicator blinks rapidly. When this occurs, install new batteries.

Main Specifications

Roland VT-4: Voice Transformer

Power Supply	Rechargeable Ni-MH Battery (AA, HR6), Alkaline (AA, LR6) x 4, or obtained via USB port (USB bus power)
Current Draw	500 mA
Expected battery life under continuous use	Rechargeable Ni-MH battery (AA, HR6): Approx. 7 hours (phantom power: Off) Approx. 5.5 hours (phantom power: On) Alkaline (AA, LR6): Approx. 6 hours (phantom power: Off) Approx. 4 hours (phantom power: On) * These can vary depending on the specifications of the batteries and the conditions of use.
Dimensions	174 (W) x 133 (D) x 58 (H) mm 6-7/8 (W) x 5-1/4 (D) x 2-5/16 (H) inches
Weight (including batteries)	554 g 1 lb 4 oz
Accessories	Owner's Manual, Leaflet "USING THE UNIT SAFELY," Alkaline battery (AA, LR6) x 4

- * 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.