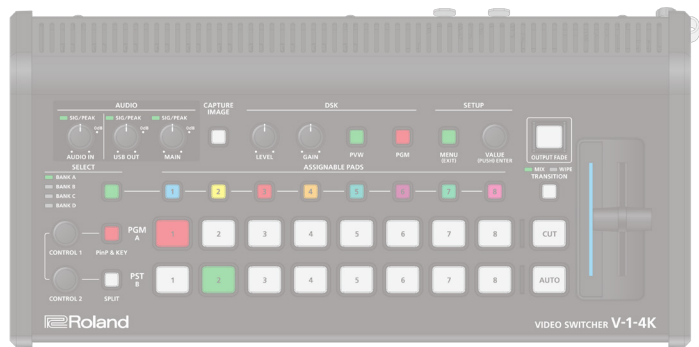


VIDEO SWITCHER V-1-4K



Checking the included items

Check that all of the included items are present. If any of the included items are missing, contact your dealer.

- | | |
|--------------------------------------|--|
| <input type="checkbox"/> V-1-4K unit | <input type="checkbox"/> Startup Guide (this document) |
| <input type="checkbox"/> AC adaptor | <input type="checkbox"/> Leaflet "USING THE UNIT SAFELY" |
| <input type="checkbox"/> Power cord | |

PDF manual (download from the Web)

● Reference Manual

Contains more detailed explanations on operating this unit, a list of menus and more.

Downloading

1. Enter the following URL in your computer.
https://roland.cm/v-1-4k_om



Before using the unit, ensure that its system program is at the most recent version.

For information on available upgrades for the system program, see the Roland website (<https://proav.roland.com/>).

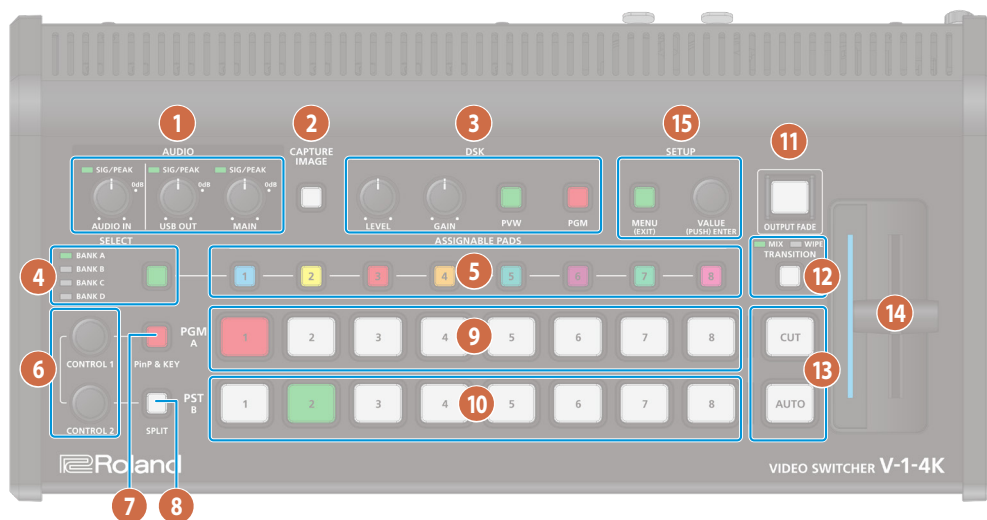
You can check the system program version by Pressing the [MENU] button → "SYSTEM" → "VERSION".

Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (the leaflet "USING THE UNIT SAFELY" and the Startup Guide (p. 7)). After reading, keep the document(s) where it will be available for immediate reference.

Panel descriptions

Top panel

* Do not block the intake and exhaust ports on the top panel. If the intake and exhaust ports are blocked, the internal temperatures may rise, causing malfunctions due to excessive heat.



1 AUDIO

SIG/PEAK indicator (AUDIO IN)

Shows the audio input level for the AUDIO IN connectors.

[AUDIO IN] knob

Adjusts the audio input level of the AUDIO IN connectors.

SIG/PEAK indicator (USB OUT)

Shows the audio output level for the USB STREAM port.

When the output level exceeds -50 dB, this lights up green. This lights up red when the output is excessive (0 dB or higher).

[USB OUT] knob

Adjusts the level of audio output from the USB STREAM port.

SIG/PEAK indicator (MAIN)

Shows the MAIN bus signal level.

When the output level exceeds -50 dB, this lights up green. This lights up red when the output is excessive (0 dB or higher).

[MAIN] knob

Adjusts the overall audio output level.

MEMO

You can change the audio bus that's adjusted by each of the AUDIO knobs, as well as the audio bus shown by the indicators.

2 [CAPTURE IMAGE] button

Turns the still image capture mode on/off.

3 DSK

This uses DSK layer to composite video using a downstream keyer.

[LEVEL] knob

Adjusts the degree of extraction (transparency) for the key.

[GAIN] knob

Adjusts the degree of edge blur (semi-transmissive region) for the key.

[PVW] button

Turns the preview output of the DSK compositing result on/off.

[PGM] button

This switches DSK composition on/off.

4 [SELECT] button

Switches the bank for the 5 ASSIGNABLE PADS [1]–[8].

The bank switches from A through D each time you press the button.

5 ASSIGNABLE PADS [1]–[8]

Press these pads to execute their assigned functions.

You can assign functions to the assignable pads (8 pads × 4 banks from A to D).

Use the menu to set the functions that are assigned to the pads.

6 [CONTROL 1] [CONTROL 2] knobs

These adjust the video compositing settings.

[PinP & KEY] button is lit

Knob	Explanation
[CONTROL 1]	Adjusts the horizontal position of the inset screen. Turn while pressing: Adjusts the size of the inset screen.
[CONTROL 2]	Adjusts the vertical position of the inset screen. Turn while pressing: Adjusts the zoom of the video shown in the inset screen.

[SPLIT] button is lit

Knob	Explanation
[CONTROL 1]	Adjusts the horizontal/vertical position of the video that's shown in the left or upper area. Turn while pressing: Adjusts the position of the boundary.
[CONTROL 2]	Adjusts the horizontal/vertical position of the video that's shown in the right or lower area. Turn while pressing: Adjusts the position of the boundary.

7 [PinP & KEY] button

Turns picture-in-picture (PinP) composition on/off.

8 [SPLIT] button

Turns on/off video compositing using split.

9 PGM/A cross-point [1]–[8] buttons

Selects the video to input to bus PGM/A. The selected button lights up red.

10 PST/B cross-point [1]–[8] buttons

Selects the video to input to bus PST/B. The selected button lights up green.

11 [OUTPUT FADE] button

Fades the final output video and audio in/out.

Lit	Fade-out completed
Blinking	Now fading-in/out
Unlit	Normal output

12 [TRANSITION] button

Selects the video transition effects (MIX, WIPE).

The MIX or WIPE indicator lights to show that it is selected.

13 [CUT] [AUTO] buttons

Automatically switch between the videos being input to bus PGM/A and PST/B, and send them to the final output.

Button	Explanation
[CUT]	The picture switches instantly.
[AUTO]	A transition effect is applied and the video is switched automatically.

14 Video fader

Manually switch between the videos being input to bus PGM/A and PST/B, and send them to the final output.

Transition indicator

The indicators light up to show the video fader position.

When the video fader is pushed all the way down, only the topmost or bottommost transition indicator lights.

15 SETUP

[MENU] button

Switches the menu between visible and hidden.

This functions as the [EXIT] button when submenus are shown, which lets you exit the menu hierarchy or cancel an operation.

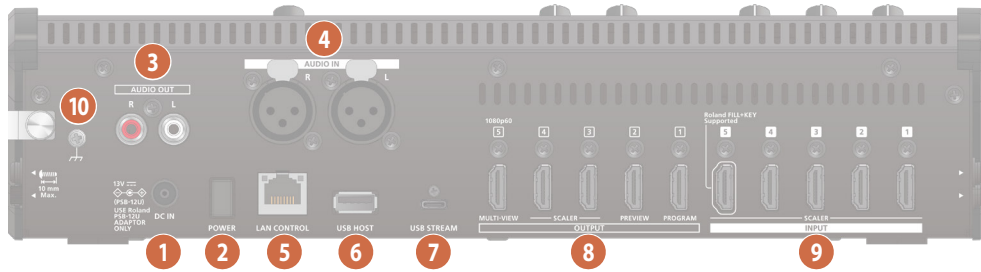
[VALUE] knob

Selects a menu item, or edits the value of a setting.

Press this knob to confirm the menu item you selected or the value that you edited.

Rear panel

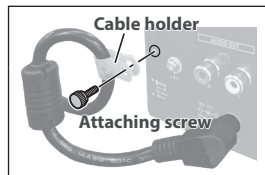
- * To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
- * Do not block the intake and exhaust ports on the rear panel. If the intake and exhaust ports are blocked, the internal temperatures may rise, causing malfunctions due to excessive heat.



1 DC IN jack

Connect the included AC adaptor to this jack.
You can use the cable holder to hold the AC adaptor cord in place.

- Loosen the attaching screw and remove the cable holder.
- Clamp the cable holder onto the AC adaptor cord, and use the attachment screw to hold it in place.



2 [POWER] button

Turns the power on/off.

3 AUDIO OUT L, R jacks

These jacks output audio.
Connect them to an audio recorder, amplifier, speakers, or other such equipment.

MEMO

For each jack, you can change the audio bus (MAIN bus, AUX 1 bus, AUX 2 bus) that is assigned for output from that jack.

4 AUDIO IN L, R connectors (XLR)

These jacks input audio.
Connect audio equipment such as an audio mixer here.

- * Pin assignment of AUDIO IN L, R connectors



5 LAN CONTROL port

- Use terminal software or other such applications to remotely control the V-1-4K from a computer that is connected here.
- Use the dedicated software to remotely control the V-1-4K from a computer or iPad that is connected here.
- This port lets you use the V-1-4K to remotely control the connected cameras.
- Displays a tally on your iOS or Android device (this is the “smart tally” function).

6 USB HOST port

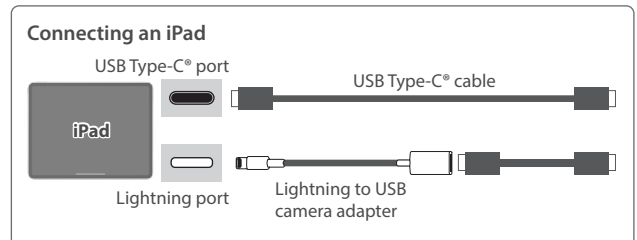
You can connect this port to USB storage for backing up the settings of this unit, or for loading still images from USB storage.

NOTE

Never turn off the power or remove the USB storage while the USB storage is being accessed.

7 USB STREAM port (USB Type-C®)

- Outputs the audio and video to your computer. This is also used to input audio played on your computer to the V-1-4K.
- Use the dedicated software to remotely control the V-1-4K from a computer or iPad that is connected here.



NOTE

- When outputting an HD or 4K video signal via USB, use a commercially available cable that supports USB 3.0, and connect the cable to the USB 3.0 port on your computer.
- If you connect via an extension cable or a USB hub, the computer might not recognize this unit.
- Do not use a USB cable that is designed only for charging a device. Charge-only cables cannot transmit data.

8 OUTPUT 1–5 connectors

These connectors output video. Choose the connectors that are appropriate for the connected devices.

Connector	Explanation
1	PROGRAM Final output video
2	PREVIEW Preview output video
3	SCALER Outputs one of the following videos. <ul style="list-style-type: none"> PROGRAM (final output video) PREVIEW (preview output video) Input video from the INPUT 1–5 connectors
4	
5	MULTI-VIEW Outputs the input/output videos (final output, preview output, input channels 1–5) and the menu as a multi-view video. * The output format is always 1080p60.

9 OUTPUT 1–5 connectors (SCALER)

These connectors input video. Choose the connectors that are appropriate for the connected devices.

You can specify individual input formats, regardless of the system format.

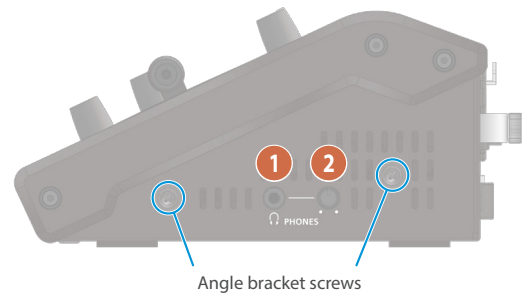
- * The INPUT 5 connector supports connections with the “Roland Graphics Presenter” app. For details, refer to the Reference Manual (Roland website).

10 Ground terminal

Connect this to an external earth or ground if necessary.

Side panel

- * Do not block the intake and exhaust ports on the side panels. If the intake and exhaust ports are blocked, the internal temperatures may rise, causing malfunctions due to excessive heat.

**1 PHONES jack**

Connect your headphones here.

2 [PHONES] knob

Adjusts the headphone volume.

Screws for mounting an angle bracket

You can use the angle bracket screws to mount angle brackets onto the side panels.

NOTE

- You can make the angle brackets yourself, according to your needs. When designing the angle brackets, refer to the numbers shown in “Dimensions”, found in the Reference Manual (Roland website).
- You can also use commercially available screws (M4 × 10 mm) to attach the angle brackets.
 - * Do not use screws that are longer than 10 mm. Doing so may damage the components inside the unit or cause a malfunction.
- When mounting the unit, take care not to pinch your fingers etc.

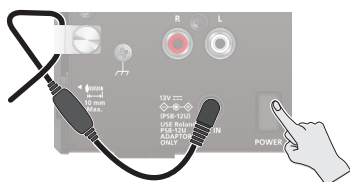
Basic operation

Turning the power on/off

- * Once everything is properly connected, be sure to follow the procedure below to turn on their power. If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.
- * 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.
- * This unit is not designed for continuous operation over long periods of time (one month or longer). If you want to use this unit over long periods of time, cycle the power periodically.

Turning the power on

1. Make sure that all devices are powered off.
2. Turn on the [POWER] button of the V-1-4K.



3. Turn on the power of the source devices.
Turn on the power of the source devices that are connected to the V-1-4K's input connectors, such as video cameras.
4. Turn on the power of the output devices.
Turn on the power of the devices that are connected to the V-1-4K's output connectors, such as projectors.

Turning the power off

1. Turn off the power of the output devices first, and then the source devices.
2. Turn off the [POWER] button of the V-1-4K.

NOTE

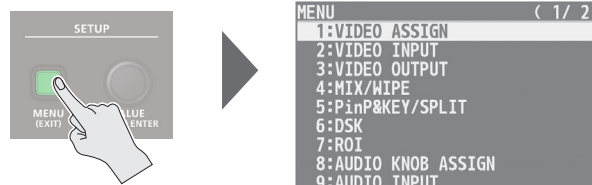
Never turn off the power while "PLEASE WAIT" or a similar message is shown in the menu display area of the multi-view. Doing so might cause your edited contents to fail to save.

Operating the menu

Here's how to access the menu to configure the video/audio settings and the settings for the V-1-4K.

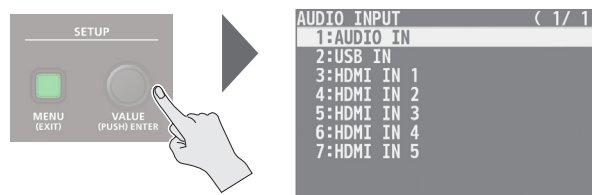
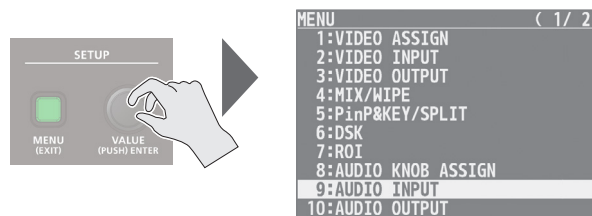
The menu is shown on the display that's connected to the OUTPUT 5 (MULTI-VIEW) connector.

1. Press the [MENU] button to display the menu.



The [MENU] button lights up, the menu categories are displayed.

2. Turn the [VALUE] knob to select a category, and press the [VALUE] knob to confirm.



The menu for the selected category is displayed.

3. Turn the [VALUE] knob to select a menu item, then press the [VALUE] knob to confirm.

The cursor moves to the setting value.

- If the menu item is located at a deeper level, repeat step 3.
 - Pressing the [VALUE] (EXIT) button moves you back one level higher.
4. Turn the [VALUE] knob to change the value of the setting.
 - By turning the [VALUE] knob while pressing it, you can change the value more greatly.
 - Pressing and holding the [VALUE] knob returns the current menu item you're setting to its default value.
 5. Press the [VALUE] knob to apply the setting.
The cursor returns to the menu item.
 6. Press the [MENU] button to quit the menu.

USING THE UNIT SAFELY

⚠ WARNING

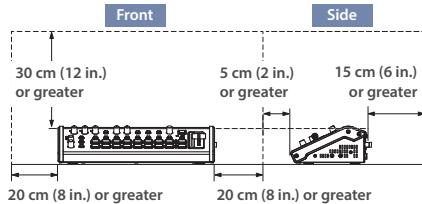
Make sure that the power cord is grounded

Connect mains plug of this model to a mains socket outlet with a protective earthing connection.



Secure a sufficient amount of space at the setup location

Since this unit normally emits a slight amount of heat, make sure to secure sufficient space around it, as shown below.



⚠ WARNING

Use only the supplied AC adaptor and the correct voltage

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 supplied power cord

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



⚠ CAUTION

Keep small items out of the reach of children

To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.



• Removable Parts

- Cable holder/attaching screw (p. 4)
- Angle bracket screws (p. 5)

Handle the ground terminal carefully

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



Take care not to get burned

The bottom of this unit may become hot, so take care to avoid burns.



IMPORTANT NOTES

Power Supply

- Place the AC adaptor so that the side with text is downward.

Placement

- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.

Repairs and Data

- Before sending the unit away for repairs, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information. Although we will do our utmost to preserve the data stored in your unit when we carry out repairs, in some cases, such as when the memory section is physically damaged, restoration of the stored content may be impossible. Roland assumes no liability concerning the restoration of any stored content that has been lost.

Additional Precautions

- Any data stored within the unit can be lost as the result of equipment failure, incorrect operation, etc. To protect yourself against the irretrievable loss of data, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information.
- Roland assumes no liability concerning the restoration of any stored content that has been lost.
- This unit allows you to switch images at high speed. For some people, viewing such images can cause headache, nausea, or other discomfort. Do not use this unit to create video that might cause these types of health problems. Roland Corporation will accept no responsibility for any such health problems that may occur in yourself or in viewers.
- Do not use connection cables that contain a built-in resistor.
- 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.

Using External Memories

- Please observe the following precautions when handling external memory devices. Also, make sure to carefully observe all the precautions that were supplied with the external memory device.
 - Do not remove the device while reading/writing is in progress.
 - To prevent damage from static electricity, discharge all static electricity from your person before handling the device.

Caution Regarding Radio Frequency Emissions

- This unit cannot be used to directly connect to a network operated by a telecommunications provider (such as a mobile or landline-based telecommunications company, an Internet provider or the likes), including a public wireless LAN. You must use a router or similar equipment when connecting this unit to the Internet.

Intellectual Property Right

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