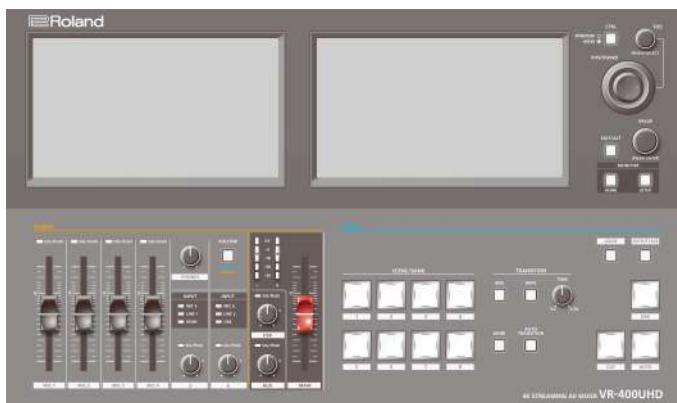


# 4K STREAMING AV MIXER VR-400UHD



## Checking the Included Items

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

- ☐ VR-400UHD unit
- ☐ Power cord
- ☐ Startup Guide (this document)

## PDF Manual (download from the Web)

### Reference Manual

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

### Remote Control Guide

Contains information regarding the LAN/RS-232 and a list of control commands.

### Downloading

1. Enter the following URL in your computer.  
<https://proav.roland.com/manuals/>
2. Choose "VR-400UHD" as the product name.



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 as follows: [SETUP] button → <System> tab in the Setup screen → <Version> → "System".

Before using this unit, carefully read "IMPORTANT SAFETY INSTRUCTIONS" (inside front cover), "USING THE UNIT SAFELY" (p. 2), and "IMPORTANT NOTES" (p. 4). After reading, keep the document(s) where it will be available for immediate reference.

# USING THE UNIT SAFELY

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

### About ⚠ WARNING and ⚠ CAUTION Notices

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

### About the Symbols

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

## ALWAYS OBSERVE THE FOLLOWING

### ⚠ WARNING

#### Make sure that the power cord is grounded

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



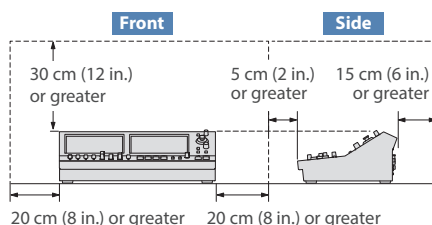
#### To completely turn off power to the unit, pull out the plug from the outlet

Even with the power switch turned off, this unit is not completely separated from its main source of power. When the power needs to be completely turned off, turn off the power switch on the unit, then pull out the plug from the outlet. For this reason, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach and readily accessible.



#### 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.



#### Do not disassemble or modify by yourself

Do not carry out anything unless you are instructed to do so in the owner's manual. Otherwise, you risk causing malfunction.



#### Do not repair or replace parts by yourself

Be sure to contact your dealer, a Roland service center, or an official Roland dealer.



For a list of Roland service centers and official Roland dealers, refer to the Roland website.

### ⚠ WARNING

#### Do not use or store in the following types of locations

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



#### Do not place in an unstable location

Otherwise, you risk injury as the result of the unit toppling over or dropping down.



#### Connect the power cord to an outlet of the correct voltage

The unit should be connected to a power supply only of the type described as marked on the side of unit.



#### 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.



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

Otherwise, fire or electric shock may result.



### ⚠ WARNING

#### Avoid extended use at high volume

Use of the unit at high volume for extended periods of time may cause hearing loss. If you ever experience any hearing loss or ringing in the ears, you should immediately stop using the unit and consult a specialized physician.



#### Do not allow foreign objects or liquids to enter unit; never place containers with liquid on unit

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



#### Turn off the unit if an abnormality or malfunction occurs

In the following cases, immediately turn off the power, remove the power cord from the outlet, and contact your dealer, a Roland service center, or an official Roland dealer for service.



- The power cord has been damaged; or
- If smoke or unusual odor occurs; or
- 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.

For a list of Roland service centers and official Roland dealers, refer to the Roland website.

## WARNING

### Be cautious to protect children from injury

Always make sure that an adult is on hand to provide supervision and guidance when using the unit in places where children are present, or when a child will be using the unit.



### Do not drop or subject to strong impact

Otherwise, you risk causing damage or malfunction.



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

Otherwise, you risk overheating or fire.



### Do not use overseas

Before using the unit in overseas, consult with your retailer, the nearest Roland service center, or an authorized Roland distributor.



For a list of Roland service centers and official Roland dealers, refer to the Roland website.

### Don't block ventilation openings

Don't allow the unit's ventilation openings to be blocked by a newspaper, tablecloth, curtains, or similar objects.



### Don't place burning objects on the unit

Don't place any burning object (such as a candle) on the unit.



### Be aware of weather conditions

Use the apparatus in moderate climates.



## CAUTION

### When disconnecting the power cord, grasp it by the plug

To prevent conductor damage, always grasp the power cord by its plug when disconnecting it.



### Periodically clean the power plug

An accumulation of dust or foreign objects between the power plug and the power outlet can lead to fire or electric shock.



At regular intervals, be sure to pull out the power plug, and using a dry cloth, wipe away any dust or foreign objects that may have accumulated.

### Disconnect the power plug whenever the unit will not be used for an extended period of time

Fire may result in the unlikely event that a breakdown occurs.



### Route all power cords and cables in such a way as to prevent them from getting entangled

Injury could result if someone were to trip on a cable and cause the unit to fall or topple.



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

Otherwise, you risk injury as the result of the unit toppling over or dropping down.



### Never connect/disconnect a power plug if your hands are wet

Otherwise, you could receive an electric shock.



### Disconnect all cords/cables before moving the unit

Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices.



### Before cleaning the unit, disconnect the power plug from the outlet

If the power plug is not removed from the outlet, you risk receiving an electric shock.



### Whenever there is a threat of lightning, disconnect the power plug from the outlet

If the power plug is not removed from the outlet, you risk causing malfunction or receiving an electric shock.



### 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 (p. 8)
  - Screw (p. 8)

## CAUTION

### 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, side, and rear may become hot, so take care to avoid burns.



### Precautions concerning use of phantom power supply

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

## 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 unit may interfere with radio and television reception. Do not use this unit 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.
- 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.
- Do not place containers or anything else containing liquid on top of this unit. Also, whenever any liquid has been spilled on the surface of this unit, be sure to promptly wipe it away using a soft, dry cloth.

## 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.

## Maintenance

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

## 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.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- When disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing others nearby, try to keep the unit's volume at reasonable levels.
- When disposing of the packing carton or cushioning material in which this unit was packed, you must observe the waste disposal regulations that apply to your locality.
- 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 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.
- 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.

## Intellectual Property Right

- It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform or broadcast it without the permission of the copyright owner.
- Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product.
- This product is using the open source license (GPL/LGPL) software. You have the right to acquire, modify and distribute the source code for this open source license software.

You can obtain the open source license source code used in this product by downloading it from the following website:  
**<https://proav.roland.com/global/support/>**
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# Video Output: Overview

With the VR-400UHD, you can freely arrange multiple input videos and combine them into a single screen.

The combined video image is called a **“scene”**. You can switch between output videos for each scene. The scene preview is shown on the built-in monitor, letting you check the preview while switching between scenes.

By preparing the scenes beforehand according to how the event proceeds, including the titles and captions as well as the screen layout, you can smoothly operate this unit and produce a video with a live-action feel.

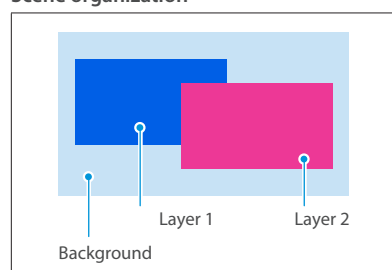
## How the scenes are organized

Each scene is composed of three layers: a background layer, layer 1 and layer 2.

On each layer, you can display the input video signal from the HDMI 4K IN connector and the still images imported into this unit. You can also use the crop function to cut out a certain part of the input video or still image.

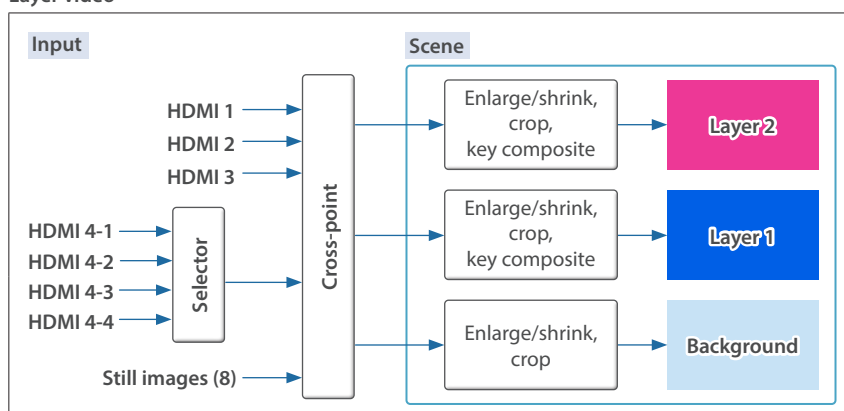
It's easy to create the screen layout you want just by enlarging or shrinking the layer window (display region) or by moving a window to the desired location. You can also use the luminance key or chroma key on layers 1 and 2 to create a key composite video.

### Scene organization



- The layer stacking order cannot be edited.
- You can choose whether to show or hide each layer.

### Layer video



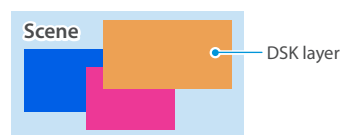
## Number of scenes that can be created

Each group of eight scenes is managed as a “bank”.

The VR-400UHD has eight banks, so you can create a total of 64 scenes (8 scenes × 8 banks).

## DSK layer

A DSK layer is positioned in front of the scenes. The DSK layer lets you use DSK composition to add video or text (titles, captions, etc.) to a scene.



- Video on the DSK layer cannot be magnified or reduced.
- In addition to the DSK layer, you can composite the still image from the logo layer, but only for video output from the 4K STREAMING port.

### What is a DSK (downstream keyer)?

DSK is a function that lets you composite more video and text on top of an already composited video.

This is called “downstream keyer” because the key is composited in the downstream process.

For DSK composition, you can use a luminance key, a chroma key or a still image (.png) with an alpha channel as the alpha key.

## Outputting separate scenes to different output destinations (Dual mode)

There are two methods of outputting a scene: PGM/PST mode (factory setting) and Dual mode.

For PGM/PST mode, only one scene is output. For Dual mode, two scenes can be output independently.

This lets you select the optimal scene to match output destinations for different purposes (example: for stage use and for streaming).

### MEMO

- You can use two video buses, PGM 1 and PGM 2 in Dual mode. You can also set the video bus assignment for each output connector. Scene switching is always performed as a freeze-frame cut.
- The output method for scenes is set in System mode. For details on System mode, refer to the Reference Manual (Roland website).

### Output images in Dual mode

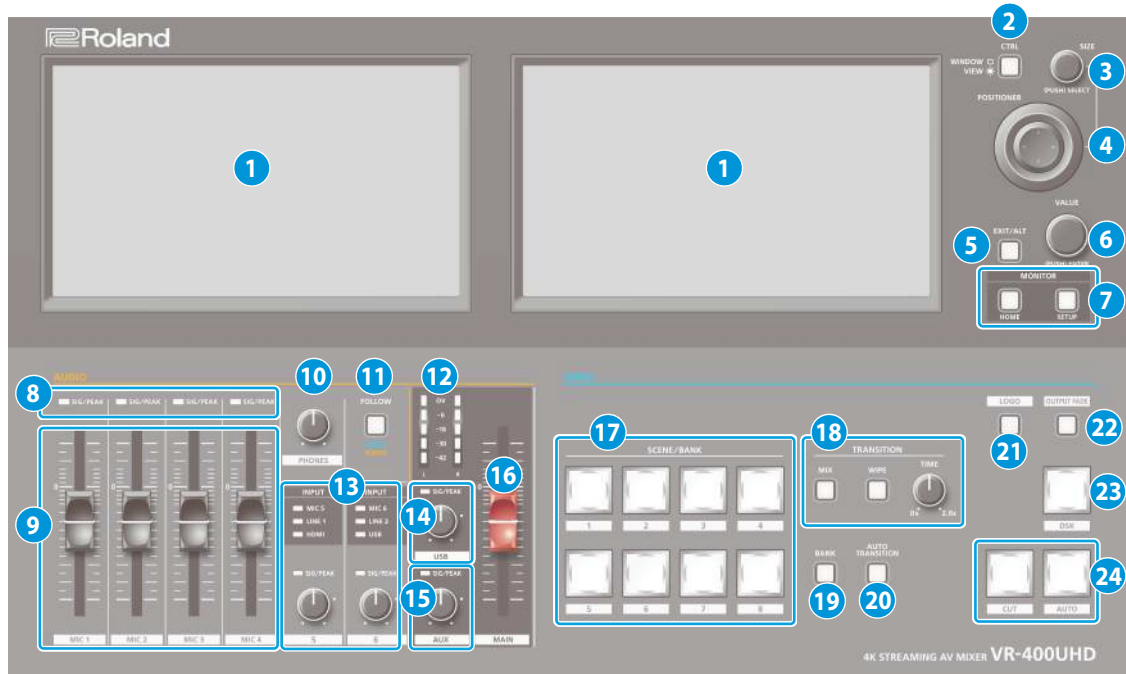
You can use the two built-in monitors on this unit to select the scene to send to each video bus (PGM 1, PGM 2).



# Panel Descriptions

## Top Panel

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



### 1 Monitor (touch panel)

This shows various information and settings screens, depending on the operation.

You can operate the VR-400UHD by directly touching the screen.

\* This device does not support multi-touch operations.

### 2 [CTRL] button

This selects what is controlled by the [SIZE] knob and the [POSITIONER] stick.

|       |                                            |
|-------|--------------------------------------------|
| Unlit | Window size/position                       |
| Lit   | Zoom ratio/position of video in the window |

### 3 [SIZE] knob

|          |                                                                                                                                    |
|----------|------------------------------------------------------------------------------------------------------------------------------------|
| Turning  | Adjusts the window size or the zoom ratio of the video inside the window.<br>* Use the [CTRL] button to select what is controlled. |
| Pressing | Switches the Positioner popup between visible and hidden.<br>Select the layer to be controlled in the Positioner popup.            |

### 4 [POSITIONER] stick

Adjusts the window position or the position of the video inside the window.

\* Use the [CTRL] button to select what is controlled.

### 5 [EXIT/ALT] button

Exits the settings screen that's currently displayed.

When on the multi-view screen, use this in combination with the touch operations on the display to recall a specific function.

### 6 [VALUE] knob

|          |                                                       |
|----------|-------------------------------------------------------|
| Turning  | Edits the values on each settings screen.             |
| Pressing | Closes the numerical value popups and other controls. |

### 7 MONITOR

#### [HOME] button

Shows the home screen on this unit's monitor.

The home screen changes according to the system mode.

| System mode | Left monitor       | Right monitor     |
|-------------|--------------------|-------------------|
| PGM/PST     | Audio mixer screen | Multi-view screen |
| Dual        | PGM 1 screen       | PGM 2 screen      |

#### [SETUP] button

Shows the Setup screen on this unit's monitor.

### 8 SIG/PEAK indicators (MIC 1–4)

Indicates the audio input levels for the MIC 1–4 jacks.

#### SIG/PEAK indicator

| Indicator color | Status                                |
|-----------------|---------------------------------------|
| Red             | Volume is excessive (0 dB or higher)  |
| Yellow          | Volume is suitable (-18 – -1 dB)      |
| Green           | Volume is insufficient (-42 – -19 dB) |

**9 [MIC 1]–[MIC 4] faders**

Adjusts the input level of the MIC 1–4 jacks.

**10 [PHONES] knob**

Adjusts the volume of the headphones.

**11 [FOLLOW] button**

Turns the “Video Follows Audio” function or the “Audio Follows Video” function on/off.

|            |                                                                                                                  |
|------------|------------------------------------------------------------------------------------------------------------------|
| Lit blue   | Turns the Video Follows Audio function on.<br>The scene automatically switches in tandem with the audio input.   |
| Lit orange | Turns the Audio Follows Video function on.<br>The audio output automatically switches in tandem with the scenes. |
| Unlit      | Off                                                                                                              |

**12 MAIN level meter**

Indicates the audio output level of the MAIN jacks.

| Indicator color | Status                      |
|-----------------|-----------------------------|
| Red             | Excessive (0 dB or higher)  |
| Yellow          | Suitable (-18 – -1 dB)      |
| Green           | Insufficient (-42 – -19 dB) |

**13 INPUT indicators (INPUT 5, 6)**

| Indicator | Explanation                                                        |
|-----------|--------------------------------------------------------------------|
| MIC 5     | Shows the audio source that's controlled by the [5] and [6] knobs. |
| LINE 1    |                                                                    |
| HDMI      |                                                                    |
| USB       |                                                                    |

**SIG/PEAK indicators (INPUT 5, 6)**

Indicates the input levels for the audio source that's currently selected (p. 6).

**INPUT [5] [6] knobs**

Adjusts the input level for the audio source that's currently selected.

**14 SIG/PEAK indicator (USB)**

Indicates the audio output level of the 4K STREAMING port (p. 6).

**[USB] knob**

Adjusts the audio output level of the 4K STREAMING port.

**15 SIG/PEAK indicator (AUX)**

Indicates the audio output level of the AUX jacks (p. 6).

**[AUX] knob**

Adjusts the audio output level of the AUX jacks.

**16 [MAIN] fader**

Adjusts the audio output level of the MAIN jacks.

**17 SCENE/BANK [1]–[8] buttons**

| [BANK] button | SCENE/BANK button function                                                                                                                                                                                                                                                    |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Off (unlit)   | These buttons select the scene to be output next (the preset video).<br>The color of the button indicates the output destination video bus.<br>Red: PGM bus<br>Green: PST bus<br>* This is how the unit works when the system mode is set to “PGM/PST” (the factory setting). |
| On (lit)      | Switches the scene bank. The selected button is lit blue.                                                                                                                                                                                                                     |

**18 TRANSITION****[MIX] [WIPE] button**

Select the video transition effects (MIX or WIPE). The selected button is lit.

**[TIME] knob**

Specifies the video transition time.

**19 [BANK] button**

When this is ON (lit), the SCENE/BANK [1]–[8] buttons function as bank select buttons for the scene.

**20 [AUTO TRANSITION] button**

Turns the auto transition function on/off.

When this is turned ON (lit), the operation for the [AUTO] button is automatically executed when you select the next scene to output (preset video).

\* This function is only enabled when the system mode is set to “PGM/PST”.

**21 [LOGO] button**

Turns the LOGO layer composite on/off for the scene (video) that's output from the 4K STREAMING port (USB).

\* Only still images saved in this unit can be used as sources for the LOGO layer.

\* The LOGO layer is composited regardless of the video bus you select for the USB output.

**22 [OUTPUT FADE] button**

Fades the audio and PGM bus video in/out.

The [OUTPUT FADE] button indicates the fade status.

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

\* The fade time is specified by the [TIME] knob setting.

**23 [DSK] button**

Turns DSK composition on/off for the PGM bus scene.

**24 [CUT] [AUTO] buttons**

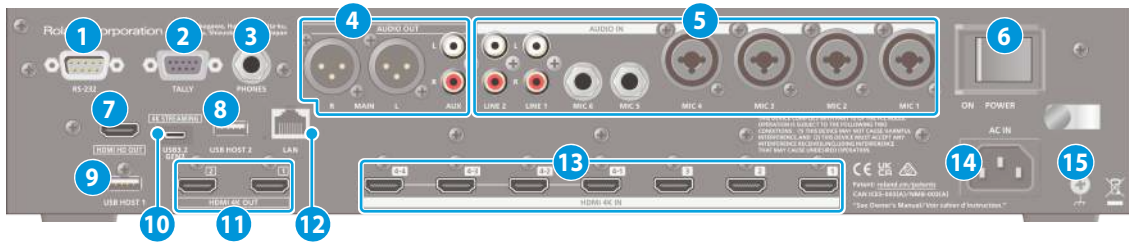
Use these buttons to automatically output the PST bus scene to the PGM bus.

|        |                                                      |
|--------|------------------------------------------------------|
| [CUT]  | The scene switches instantly.                        |
| [AUTO] | The scene switches with a transition effect applied. |

\* This is how the unit works when the system mode is set to “PGM/PST” (the factory setting).

## Rear Panel

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



| Pin assignment | MAIN jacks (XLR)           | MIC 1-4 jacks (XLR)        | MIC 1-6 jacks (TRS)                   |
|----------------|----------------------------|----------------------------|---------------------------------------|
|                | 1: GND — 2: HOT<br>3: COLD | 2: HOT — 1: GND<br>3: COLD | TIP: HOT<br>RING: COLD<br>SLEEVE: GND |

### 1 RS-232 connector

You can connect this to a computer equipped with an RS-232 connector, and remotely control the VR-400UHD.

### 2 TALLY connector

Use this to connect to devices that have a tally indicator feature.

### 3 PHONES jack (Stereo 1/4-inch phone type)

Connect headphones.

### 4 MAIN, AUX jacks

These jacks output audio. Choose the jacks that are appropriate for the connected devices.

You can configure what's assigned to the audio bus (MAIN, AUX) for each jack. With the factory settings, the bus assignments are as follows.

| MAIN jacks | MAIN bus | AUX jacks | AUX bus |
|------------|----------|-----------|---------|
|------------|----------|-----------|---------|

### 5 MIC 1-6, LINE 1, LINE 2 jacks

These jacks input audio. Choose the jacks that are appropriate for the connected devices.

#### About phantom power

You can supply phantom power (+48 V) from the MIC 1-4 jacks (XLR). Turn on phantom power when you're using a condenser microphone that requires phantom power.

Press the [HOME] button, access MIC 1-4 <EDIT> from the audio mixer screen and then set "+48V" on the Audio Input Setup screen to "Enable".

\* If you don't need phantom power, be sure to turn phantom power off. You risk causing damage if you mistakenly supply phantom power to dynamic microphones or other devices that don't require such power.

### 6 [POWER] switch

Turns the power on/off.

### 7 HDMI HD OUT connector

Outputs the same video as the built-in monitor. You can select which video to output (either the video shown on the left monitor or on the right). The same audio as the audio output from the MAIN connectors is outputted.

\* The output format is always HD (720/60p).

### 8 USB HOST 2 port

Connect a USB flash drive. Use this for backing up/restoring the internal settings, or for loading still images.

### 9 USB HOST 1 port

Connect a USB flash drive. This is used to update the system program.

### 10 4K STREAMING port (USB Type-C®)

Outputs video/audio to a computer that's connected to this unit. When the [LOGO] button on the top panel is on, you can overlay a still image (a logo or image) on top of the scene to output.

This is also used to input audio played on your computer to the VR-400UHD.

\* To output the video, connect this port to a computer that supports USB 3.0 or 3.2 Gen 2. USB 2.0 only supports audio.

| USB standard            | Limitations                                      |
|-------------------------|--------------------------------------------------|
| USB 2.0                 | Video cannot be output. Only audio is output.    |
| USB 3.0 (USB 3.2 GEN 1) | Video sizes greater than 1080p cannot be output. |
| USB 3.2 GEN 2           | None                                             |

\* If you connect via an extension cable or a USB hub, the computer might not recognize the VR-400UHD.

\* Do not use a USB cable that is designed only for charging a device. Charge-only cables cannot transmit data.

### 11 HDMI 4K OUT 1, 2 connectors

These connectors output video and audio.

The video output from each connector differs depending on the system mode and video bus settings. With the factory settings, the video bus assignments are as follows.

|                         |                         |
|-------------------------|-------------------------|
| HDMI 4K OUT 1 connector | PGM bus (program video) |
| HDMI 4K OUT 2 connector | PST bus (preview video) |

### 12 LAN port

Connect a controlling device and use a command-line app such as Terminal or the command prompt to remotely control the VR-400UHD over a network.

### 13 HDMI 4K IN 1-3, 4-1-4-4 connectors

These connectors input video and audio. Select one input of the HDMI 4K IN 4-1 through 4-4 connectors, which you can use as a scene or DSK source.

The input format is automatically recognized.

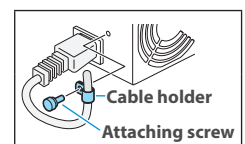
### 14 AC IN jack

Connect the included power cord.

You can fasten the power cord with the cable holder to keep it in place.

1 Loosen the attaching screw and remove the cable holder.

2 Reattach the cable holder with the power cord fastened underneath, and tighten the screw back in place.



### 15 Ground terminal

Connect this to an external earth or ground if necessary.

# Basic Operations

## Turning the Power On/Off

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

### Turning the Power On

1. Make sure that all devices are powered-off.
2. Turn on the [POWER] switch on the VR-400UHD to turn on the power.



3. Turn on the power in the order of source devices → output devices.

### Turning the Power Off

1. Turn off the power in the order of output devices → source devices.
2. Turn off the [POWER] switch on the VR-400UHD to turn off the power.

- \* If you need to turn off the power completely, first turn off the unit, then unplug the power cord from the power outlet.  
Refer to "To completely turn off power to the unit, pull out the plug from the outlet" (p. 2).

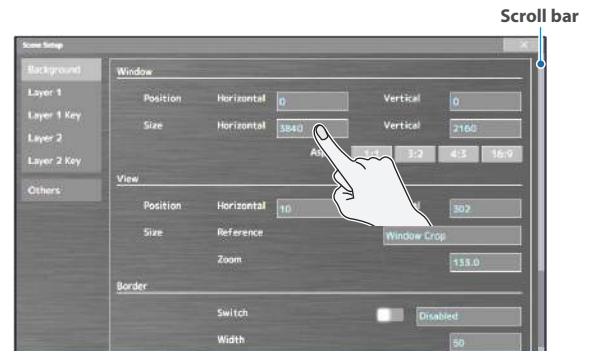
## Screen (Touch Panel) Operations

Here's how to configure the video/audio settings along with the settings for this unit by operating the screen.

1. Press the [HOME] button or [SETUP] button.

The home screen or SETUP screen appears.

2. Touch the screen to select the setting item that you want to edit.



- \* When the scroll bar is shown:  
Touch and drag up/down on the screen to scroll it.

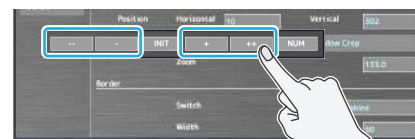
3. Repeat step 2 as needed.

Touching < X > on the screen or pressing the [EXIT/ALT] button returns you to the previous screen.

4. Touch the screen or turn the [VALUE] knob to change the setting value.



### Changing numerical values



|      |                                                                                                  |
|------|--------------------------------------------------------------------------------------------------|
| INIT | Returns the current setting item you're setting to its default value.                            |
| NUM  | Displays the numerical value popup. You can enter a numerical value by touching the number keys. |

### Saving your settings

The settings are saved to this unit if you don't operate the unit for four seconds, or if you press the [HOME] button to close the screen.

English

日本語

Deutsch

Français

Italiano

Español

Português

# Switching Between Scenes

This explains how to switch between scenes in PGM/PST mode (p. 5), which is the factory setting.

## 1. Press the [HOME] button.



The audio mixer screen is shown on the left monitor, and the multi-view screen is shown on the right monitor.

## 2. Press the [MIX] or [WIPE] button to select the transition effect.



### Mix

The two videos are mixed as the transition occurs.



### Wipe

The next video moves across to replace the original video.



## 3. Use the [TIME] knob to set the video transition time (0.0–2.0 sec).



## 4. Press the [AUTO TRANSITION] button to turn the auto-transition function on (the button lights up).



Auto-transition is a function that automatically switches between scenes when you select the scene (preset video) to be output next.

## 5. Touch the preset area in the multi-view screen.

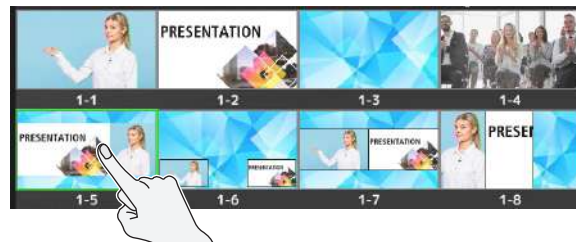
Green border



A green border appears around the preset area.

While the green border is shown, you can select the next scene (preset video) from scenes 1–8 to output.

## 6. Touch the scene to output on the multi-view screen.

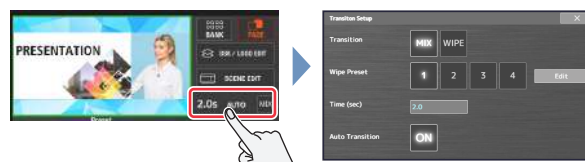


The program output scene changes.

\* You can also press the SCENE/BANK [1]–[8] buttons to switch between scenes.

### MEMO

- When you touch the transition effect area on the multi-view screen, the Transition Setup window appears, where you can edit the transition pattern for the wipe effect and so on.



- You can also use the [CUT] and [AUTO] buttons to manually switch between scenes without using the auto-transition function.

## Switching the Scene Bank

Each group of eight scenes is managed as a “bank”. The VR-400UHD features eight banks.

This explains how to switch between banks on the multi-view screen.

## 1. Touch <BANK> on the multi-view screen.



The Bank Select window appears.

## 2. Touch the bank you want to use.



This switches to the new bank.

## 3. Touch < X > to close the Bank Select window.

# Editing the Scenes

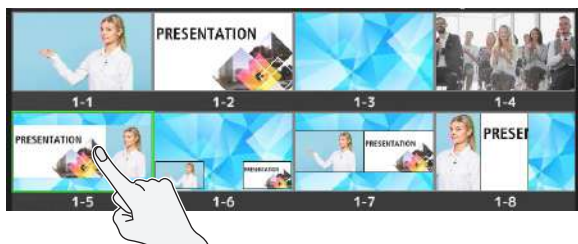
This section explains the basic methods of editing a scene.

## 1. Press the [HOME] button.



The audio mixer screen is shown on the left monitor, and the multi-view screen is shown on the right monitor.

## 2. Touch the scene to edit on the multi-view screen.



## 3. Touch <SCENE EDIT>.



The Scene Edit screen appears on the left and right monitors.

## 4. Edit the scene on the Scene Edit screen.

(Right-side screen)



### 1 Select the layer to edit (operation layer)

Touch the layer to edit.

Touch <ON> to show or hide the respective layer.

### 2 Select the input video (source)

Touch and select <VIDEO> to view the input video signals from the 3 HDMI 4K IN connectors. Touch the input video to select which video you want to assign to the layer.

Touch 4 <HDMI 4-1>—<HDMI 4-4> to switch between the HDMI 4 input video signals.

\* A black screen is shown when switching between video signals.

\* The input video for HDMI 4 uses the same settings as VR-400UHD. You can't configure the settings for each layer or scene.

(Left-side screen)



Square boxes (layer windows) are shown on the left-side screen to represent each layer's position and size.

The layer that's selected in the right-side screen in "Operation Layer" is targeted for editing.

### Layer window operations

|          |                                                                                                                                                                                                                                                                                                                                                                        |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Position | Drag a layer window to move it.                                                                                                                                                                                                                                                                                                                                        |
| Size     | <p>Drag the  symbol (size icon) at the bottom right corner of a layer window to enlarge or shrink the window.</p> <p><b>Moving only one side of a window</b></p> <p>When you touch one side of a layer window in a layer that's targeted for editing, an orange  symbol (edge icon) appears.</p> <p>Drag the  symbol to move only one side of the targeted window.</p> |

\* You can also change the position and size of layer windows that aren't targeted for editing. For the parts of windows that overlap, the layer targeted for editing is given priority.

### Video operations inside a layer window

A symbol (view icon) and a symbol (zoom icon) are shown in the windows of layers that are targeted for editing.

|          |                                                                                                  |
|----------|--------------------------------------------------------------------------------------------------|
| Position | Drag the  symbol to adjust the position of the video inside the layer window.                    |
| Size     | Drag the  symbol (zoom icon) up and down to enlarge or shrink the video inside the layer window. |

### MEMO

- Since the changes you make to a scene are automatically saved, you don't need to do anything to save them.
- When you touch <UNDO> on the right-hand screen before the Scene Edit screen closes, you can revert the scene to how it was before editing.

For EU Countries

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