# Roland

**MATRIX SWITCHER**
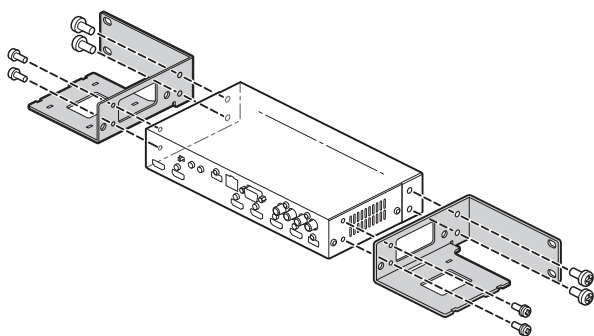# XS-42H

**VIDEO PROCESSOR**
# VP-42H

## Rack-Mounting

### Attaching the rack-mount angles

By attaching the included rack-mount angles to this unit, you can mount it in a rack.

**1.** **Remove the screws from the side panels. Using the screws that you removed, attach the rack-mount angles as shown in the illustration.**



### Important notes on rack mounting

- Install in a well-ventilated location.
- Do not block the cooling vents located on the unit's top panel and side panels.
- Avoid mounting the unit in a sealed-type rack. Warm air within the rack cannot escape and is sucked into the unit, making efficient cooling impossible.
- If the back of the rack cannot be opened, install an exhaust port or ventilation fan at the top back surface of the rack, where warm air collects.
- When using the unit while mounted in a movable case (portable rack), remove the front and rear rack covers so that the front and back of the unit are not obstructed.
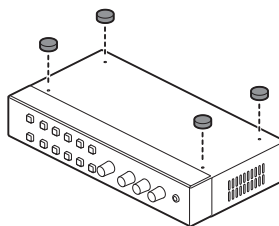- Take care not to pinch your fingers etc. while mounting the unit in a rack.

## Free-Standing Use

### Attaching the rubber feet

If you will be placing this unit on a desk or shelf for use, attach the included rubber feet (4 pcs.). This prevents the unit from slipping or from scratching the surface on which it is placed.

**1.** **Remove the rubber feet from the sheet.**

**2.** **Peel the double-sided tape off the rubber feet, and affix the feet so that they cover the four guide holes on the bottom of the unit.**



## PDF Manual (download from the Web)

Details on operations, menu lists, and a list of RS-232 commands are provided in "Reference Manual" (PDF).

### Downloading

**1.** **Access the Roland website.**
   **https://proav.roland.com/**

**2.** **Move to the product page → click "Support" → download the applicable PDF file.**

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 Long-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 Owner's Manual (p. 8)). After reading, keep the document(s) where it will be available for immediate reference.

# Panel Descriptions

## Front Panel

### LINE IN

**[LINE IN] knob**

Adjusts the volume of the line input. Adjust this so that the LINE indicator is sometimes lit yellow.

**LINE IN indicator**

Indicates the volume level of the line input.

| Lit red | Volume is excessive. |
| --- | --- |
| Lit yellow | Volume is appropriate. |
| Lit green | Volume is insufficient. |

### MASTER

**[MASTER] knob**

Adjusts the overall volume.

**MASTER indicator**

Indicates the overall volume level.

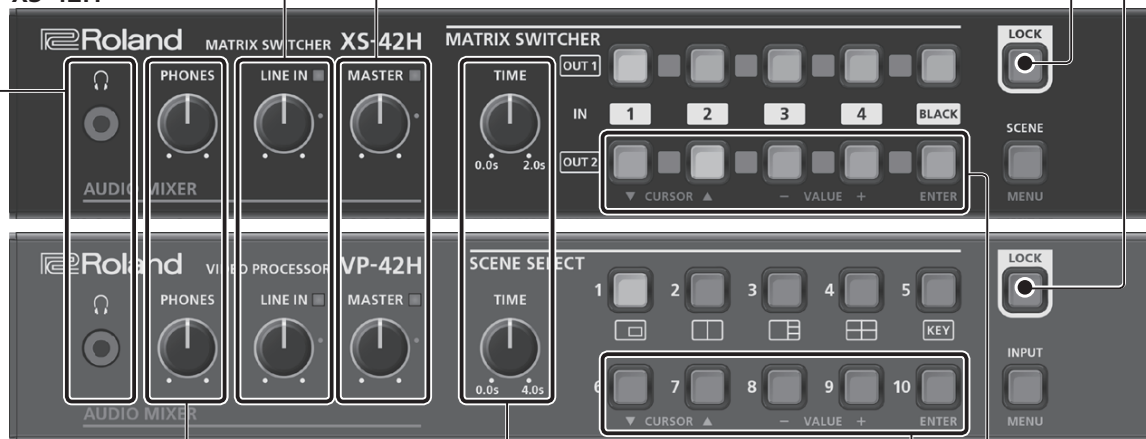| Lit red | Volume is excessive. |
| --- | --- |
| Lit yellow | Volume is appropriate. |
| Lit green | Volume is insufficient. |

### PHONES ( ) jack

Connect stereo mini-jack headphones here.

### [LOCK] button

Long-press this to turn on/off the panel lock function.

XS-42H

VP-42H

### [PHONES] knob

Adjusts the volume of the headphones.

### [TIME] knob

XS-42H

Specifies the transition time when switching between scenes (p. 7) or video.

VP-42H

Specifies the transition time when switching between scenes (p. 7).

### While a menu is displayed

While a menu is displayed, these function as the following buttons.

**CURSOR [▼] [▲] buttons**

These buttons select a menu category or item.

**VALUE [–] [+] buttons**

These buttons change the value of a menu item.

**[ENTER] button**

This button moves to a lower-level menu, or executes an operation.

### Cross-point [1]–[4] buttons

These buttons switch the cross-point of the video channel.

| Button | Status |
|---|---|
| Lit green | Valid video is being input. |
| Lit red | This is the selected video channel. |
| Dark | No video is input. |

### [BLACK] button

Fades-out the output video to a black screen.

If you press the cross-point button of a faded-out output, it fades-in.

| Button | Status |
|---|---|
| Lit red | Faded out |
| Lit green | Normal output |

* You can also fade-out the output video to a still image.

**XS-42H**

**VP-42H**

### [SCENE]/[MENU] button

**Scene function: Press the button (lit green)**

Turns on the scene function. Recalls a scene (registered video/audio settings) (p. 7).

* The cross-point buttons and the [BLACK] button function as scene select buttons 1–10.
* The video/audio settings are automatically registered to the currently selected scene.

**Menu display: Long-press the button (lit red)**

The menu is displayed on the monitor connected to the OUTPUT HDMI 2 connector (p. 5).

While the menu is displayed, each press of the button takes you back to the next higher level of the menu. If the highest menu level is already shown, the button closes the menu.

### [INPUT]/[MENU] button

**Video assignment function: Press the button (lit green)**

You can use video assignment shortcuts (p. 6). You can use the SCENE SELECT buttons to select the video assigned to each layer.

| SCENE SELECT buttons | Explanation |
|---|---|
| [1]–[4] buttons | Select layers 1–4 (when selected: lit yellow) |
| [6]–[10] buttons | Select video (when selected: lit red)<br>[6]–[9]: INPUT HDMI 1–4<br>[10]: Still image |

**Menu display: Long-press the button (lit red)**

The menu is displayed on the monitor connected to the OUTPUT HDMI 2 connector (p. 5).

While the menu is displayed, each press of the button takes you back to the next higher level of the menu. If the highest menu level is already shown, the button closes the menu.

### SCENE SELECT [1]–[10] buttons

Recall a scene (registered video/audio settings).

* The video/audio settings are automatically registered to the currently selected scene.

### Cooling vents (top panel, side panels)

These exhaust internal heat to prevent the interior of the unit from overheating.

**NOTE**

Do not block the cooling vents. If the cooling vents are blocked, the temperature inside the unit will rise, possibly causing malfunctions due to overheating.
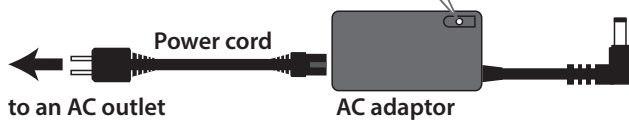
## Panel Descriptions

# Rear Panel

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

### DC IN jack

Connect the included AC adaptor to this jack.

Place the AC adaptor so the side with the indicator faces upwards and the side with textual information faces downwards. The indicator will light when you plug the AC adaptor into an AC outlet.

**Power cord**

**to an AC outlet**          **AC adaptor**

### USB port

You can connect a USB flash drive here. This is used to update the system program.

### [POWER] switch

This switch turns the power on/off.

### Ground terminal

Connect this to an external earth or ground. Connect this if necessary.

### LAN port

This is used to remotely control this unit from a web browser or terminal software.

### LINE OUT jacks

These output the result of mixing the input audio. Connect these to your audio recorder, amp, or speakers etc.

### LINE IN jacks

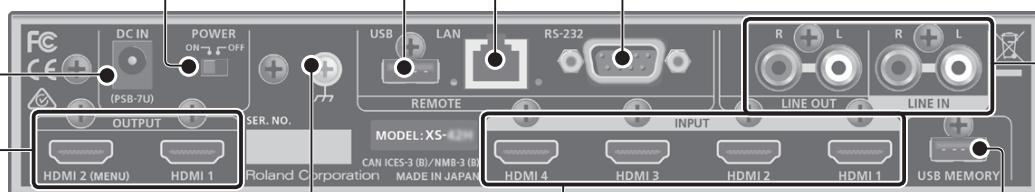These input audio. Connect these to your audio or video device such as an audio mixer or CD player.

### RS-232 connector

You can connect this to a computer equipped with an RS-232 connector, and remotely control this unit.

### USB MEMORY port

You can connect a USB flash drive here This is used to load still images or to update the system program.

### OUTPUT HDMI 1, 2 connectors

These output video and audio. Connect them to a projector, video recorder, or external display.

- The menu is shown on the monitor connected to the OUTPUT HDMI 2 connector.

- VP-42H

    The same video is output from the OUTPUT HDMI 1 and 2 connectors.

### INPUT HDMI 1–4 connectors

These input video and audio. Connect them to a video device such as a video camera or BD player, or to a computer.

- The input format is automatically recognized.
- In the Input menu, the "Input Status" shows the video format that is being input to each channel, and the presence or absence of an HDCP signal.
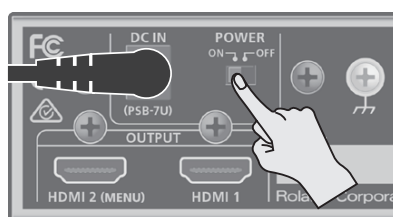
# Basic Operation

## 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. **To turn on the power, slide this unit's [POWER] switch to the ON position.**



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. **To turn off the power, slide this unit's [POWER] switch to the OFF position.**

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### About the Auto Off function

The power to the unit turns off automatically when all of the following states persist for 240 minutes (Auto Off function).

- No operation performed on the unit
- No audio or video input
- No equipment is connected to the OUTPUT HDMI connectors

If you do not want the power to be turned off automatically, disengage the Auto Off function.

Long-press the [MENU] button → "System" → set "Auto Power Off" to "Disabled."
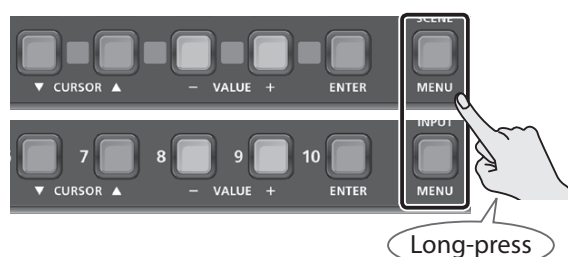
**NOTE**

- Unsaved data is lost when the power turns off. Before turning the power off, save the data that you want to keep.
- To restore power, turn the power on again.

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## Operating the Menu

Here's how to access the menu, and make video/audio settings and settings for this unit.

- The menu is shown only on the monitor that's connected to the OUTPUT HDMI 2 connector.
- The contents of the menu settings are saved in the unit when you close the menu.

1. **Long-press the [MENU] button to display the menu.**



Long-press

The [MENU] button is lit red, and the menu categories are displayed.



2. **Press the CURSOR [▼] [▲] buttons to select a category, then press the [ENTER] button to confirm the selection.**

   The menu items of the selected category are displayed.

3. **Press the CURSOR [▼] [▲] buttons to select a menu item.**

   - If the value area indicates "Enter," you can press the [ENTER] button to proceed to a lower level.
     Alternatively, pressing the [ENTER] button executes an operation.
   - Pressing the [MENU] button moves you back one level higher.

4. **Press the VALUE [–] [+] buttons to change the value of the setting.**

   - By holding down the [ENTER] button and long-pressing the VALUE [–] or [+] button you can change the value of the setting more greatly.
   - If you press the VALUE [–] and [+] buttons simultaneously, the selected menu item returns to its default setting.

5. **Press the [MENU] button several times to close the menu.**
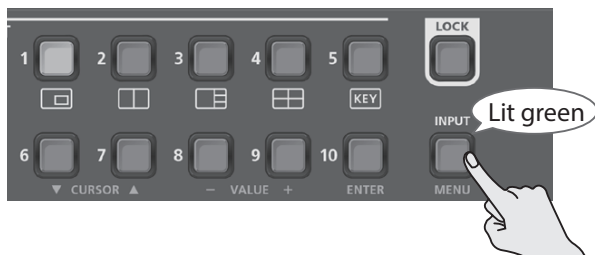
# Compositing Video

<span style="float:right">**VP-42H only**</span>

Up to four screens of the video inputs can be composited as layers and output.

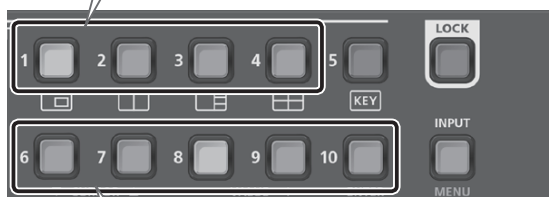**1.** **Press the [INPUT] button to make it light green.**



Lit green

Now you can use the SCENE SELECT buttons to select the video that's assigned to each layer.

- This is a shortcut for Composition menu → "Layer 1"–"Layer 4" → "Source."

**2.** **Use the SCENE SELECT buttons to select the video that's assigned to each layer.**

> **Select a layer 1–4.**
> The selected button is lit yellow.



> **Select video.**
> The selected button is lit red.
> [6]–[9] buttons:  INPUT HDMI 1–4
> [10] button:      Still image

- For details on how to load a still image, refer to "Reference Manual" (PDF).

**3.** **Long-press the [MENU] button → "Composition" → "Layer 1"–"Layer 4" → adjust each of the Window items.**

For each layer, adjust the position and size of the video.

## Hiding the layers

**1.** **Long-press the [MENU] button → "Composition" → "Layer 1"–"Layer 4" → set "Layer" to "Disabled."**

**MEMO**

- The order in which layers are overlaid is fixed.



Layer 1
Layer 2
Layer 3
Layer 4

- The video that's assigned to layer 1 can also be key-composited.
- The screen pattern setting is automatically registered in the currently-selected scene (p. 7).
- The same video is output from the OUTPUT HDMI 1 and 2 connectors.

# Switching the Video   XS-42H only

Use the cross-point buttons to switch the combination of four inputs and two outputs, and output the video. The internal frame synchronizer allows seamless video switching.

  * Video and audio are switched in tandem.

**1. Make sure that the [SCENE]/[MENU] button is unlit.**

**2. Use the [TIME] knob to specify the video transition time.**

**3. Press a cross-point button.**

The horizontal direction of the cross-point buttons is the input channel, and the vertical direction is the output channel.

The output video is switched.

**MEMO**

You can individually specify the scaling for each video output.

Long-press the [MENU] button → "Output" → "Output 1"–"Output 2" → adjust each of the Scaling items.

# Recalling Video/Audio Settings (Scenes)

Video/audio settings can be registered as "scenes" and recalled for use when necessary. This unit provides ten scenes.

### Registering to a scene

Video/audio settings are automatically registered in the currently selected scene. You don't need to perform any operation to register them.

The following settings are registered in a scene.

  * Output menu
    * Except for "Color Space" and "Signal Type"
  * Input menu
  * Composition menu (VP-42H)
  * Audio menu
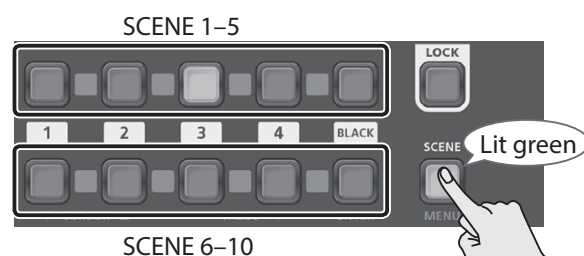  * Cross-point (XS-42H)

**VP-42H**

**1. Make sure that the [INPUT]/[MENU] button is unlit.**

**2. Press the SCENE SELECT button of the scene number that you want to recall.**

The settings are recalled. The currently selected button is lit yellow.

**XS-42H**

**1. Press the [SCENE] button to make it light green.**

SCENE 1–5

Lit green

SCENE 6–10

Now you can use the cross-point buttons and the [BLACK] button to select a scene. The currently selected button is lit yellow.

**2. Press the cross-point button or [BLACK] button of the scene number that you want to recall.**

The settings are recalled.

English | 日本語 | Deutsch | Français | Italiano | Español | Português
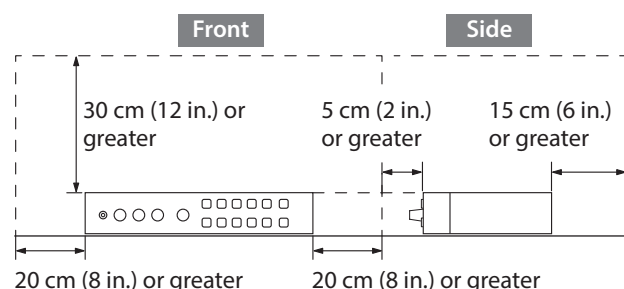
**7**

# USING THE UNIT SAFELY

## ⚠ WARNING

### Concerning the Auto Off function

The power to this unit will be turned off automatically after a predetermined amount of time has passed since it was last used for playing music, or its buttons or controls were operated (Auto Off function). If you do not want the power to be turned off automatically, disengage the Auto Off function (p. 5).

### 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.

| Front | | Side |
|---|---|---|
| 30 cm (12 in.) or greater | 5 cm (2 in.) or greater | 15 cm (6 in.) or greater |

20 cm (8 in.) or greater          20 cm (8 in.) or greater

### 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.

### Important notes on rack mounting

Take care not to pinch your fingers etc. while mounting this unit in a rack.

## ⚠ 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.
- Included Parts: Rubber feet
- Removable Parts: Screws

### 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

Depending on the conditions of use, this unit might become hot, so take care not to be burned.

# IMPORTANT NOTES

## 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, try to make a habit of creating regular backups of the data you've stored in the unit.
- 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.

## 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 contains eParts integrated software platform of eSOL Co.,Ltd. eParts is a trademark of eSOL Co., Ltd. in Japan.
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