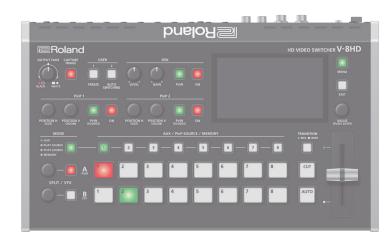


# ND VIDEO SWITCHER

### Startup Guide



#### Checking the Included Items

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

- UV-8HD unit
- □ AC adaptor
- Power cord
- □ Startup Guide (this document)
- Leaflet "USING THE UNIT SAFELY"

#### PDF Manual (download from the Web)

Details on operations and menu lists 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.

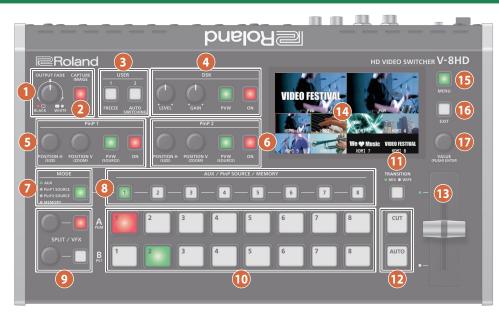
Before using the unit, ensure that its system program is at the most recent version. For information on available upgrades for the system program, see the Roland website (https://proav.roland.com/).

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

Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (leaflet "USING THE UNIT SAFELY" and Startup Guide (p. 11)). After reading, keep the document(s) where it will be available for immediate reference.

# Panel Descriptions

# Top Panel / Side Panel



Nan	ne	Explanation	
1	[OUTPUT FADE] knob	The program output video and audio fade in/out.Turning the knob toward the left fades the output to black, and turning the knob toward the right fades the output to white.LitFade-out completedBlinkFading in/outUnlitNormal output	
2	[CAPTURE IMAGE] button	Captures a still image from the input/output video.	

Name	Explana	ition	
5 PinP 1	`		
[POSITION H] knob		During PinP 1 compositing, this adjusts the horizontal display position of the inset screen.	
[POSITION V] knob	5	During PinP 1 compositing, this adjusts the vertical display position of the inset screen.	
[PVW] button		When this is on (lit), it makes the PinP 1 compositing results the preview output.	
	This switc	This switches PinP 1 composition on or off.	
	Lit	PinP 1 composition on	
[ON] button	Blink	Currently switching video	
	Unlit	PinP 1 composition off	

3 USER				
[1], [2] button	Execute the functions that are assigned by the menu settings. With the factory settings, the following functions are assigned.			
	[1]	FREEZE: Stops (freezes) input video.		
	[2]	AUTO SWITCHING: Automatically switches the input video.		

4 DSK			
[LEVEL] knob		During DSK compositing, this adjusts the amount of keying (transparency).	
[GAIN] knob		During DSK compositing, this adjusts the degree of edge blur (the semi-transmissive region) for keying.	
[PVW] button		When this is on (lit), it makes the DSK compositing results the preview output.	
	This switches DSK composition on or off.		
	Lit DSK com	position on	
[ON] button	Blink Currently	switching video	
	Unlit DSK com	position off	

6 PinP 2			
[POSITION H] knob	During PinP 2 compositing, this adjusts the horizontal display position of the inset screen.		
[POSITION V] knob	During PinP 2 compositing, this adjusts the vertical display position of the inset screen.		
[PVW] button	When this is on (lit), it makes the PinP 2 compositing results the preview output.		
	This switches PinP 2 composition on or off.		
	Lit	PinP 2 composition on	
[ON] button	Blink	Currently switching video	
	Unlit	PinP 2 composition off	

7 MODE			
	This switches the functioning of the AUX / PinP SOURCE / MEMORY [1]–[8] buttons. The lit color of the button indicates the function that is selected.		
[MODE] button	Green	AUX	
	Yellow	PinP1 SOURCE	
	Magenta	PinP2 SOURCE	
	Blue	MEMORY	

\_\_\_\_\_

### Panel Descriptions

Name	Explanatio	on	
8 AUX / PinP SOURCE / MEMORY			
[1]-[8] buttons	Select the object of operation according to the function selected by the [MODE] button. The selected button lights up in red. The respective buttons also function as indicators showing the input status of the video.		
	Lit white	Valid video is being input.	
	Blink white	Video whose format differs from the system format setting is input.	
	Unlit	No video is input.	

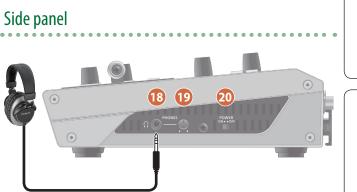
[MODE] button	Explanation
AUX	The buttons function as AUX-bus selection buttons. They select the video (channel 1–8) to send to the AUX bus.
PinP1 SOURCE	The buttons function as source screen select buttons for PinP 1.
PHIPT SOURCE	The buttons select the video (channels 1–8) that is shown in the inset screen of PinP 1.
	The buttons function as source screen select buttons for PinP 2.
PinP2 SOURCE	The buttons select the video (channels 1–8) that is shown in the inset screen of PinP 2.
MEMORY	The buttons function as preset-memory selection buttons. These save video and audio settings, the state of the operation panel, and other current settings, and call up settings saved in memory.
	Press this button to recall settings; long-press this button to save settings.

9 SPLIT / VFX A, SPLIT / VFX B			
SPLIT/VFX [A] knob	Adjust the depth of the effect when split/visual effect A is on.		
SPLIT/VFX [B] knob	Adjust the depth of the effect when split/visual effect B is on.		
* By holding down the [SPLIT/VFX] button and turning the [SPLIT/VFX] knob, you can change the type of split/visual effect.			
SPLIT/VFX [A] button	If this is on (lit), the effect of split/visual effect A is applied to the video selected by the Cross-point A [1]–[8] buttons.		
SPLIT/VFX [B] button	If this is on (lit), the effect of split/visual effect B is applied to the video selected by the Cross-point B[1]-[8] buttons.		

\* If the SPLIT/VFX type is set to split, it is not possible to turn both A and B on.

10 A/PGM, B/PST			
	Selects the video to input to bus A of the video mixer.		
Cross-point A [1]–[8] buttons	The selected button lights up in red.		
buttons	When the SPLIT/VFX [A] button is on, the split/ visual effect A effect is applied to the video.		
	Selects the video to input to bus B of the video mixer.		
	The selected button lights up in green.		
Cross-point B [1]–[8] buttons	* While compositing of the video is in progress it lit red.		
	When the SPLIT/VFX [B] button is on, the split/ visual effect B effect is applied to the video.		

Nam	ne	Explanat	ion	
			Selects the video transition effects.	
1	[TRANSITION] button	MIX	The two pictures are blended together as the video is switched.	
		WIPE	The original video is broken into by the next video.	
		These make the preset video (the video to outpu next) the final output.		
	[CUT] button	[CUT]	The picture switches instantly.	
[AUTO] button	[AUTO] button	[AUTO]	The picture switches with a transition effect applied.	
B	Video fader	Manually switch between the videos being input to bus A and B, and send them to the program output.		
	Transition indicators	The indicat up.	or for the final-output bus end lights	
14	Monitor	Shows the input/output video, a still image, or a menu screen.		
15	[MENU] button	Switches between displaying or hiding the menu. The menu appears on the built-in monitor and the display connected to the OUTPUT 3 connector.		
16	[EXIT] button	Returns you	u to the menu one level higher.	
		Turning	Selects a menu item or changes a setting value.	
1	[VALUE] knob	Pressing	Accepts the selected menu item or applies changes to a setting. It also executes operations.	

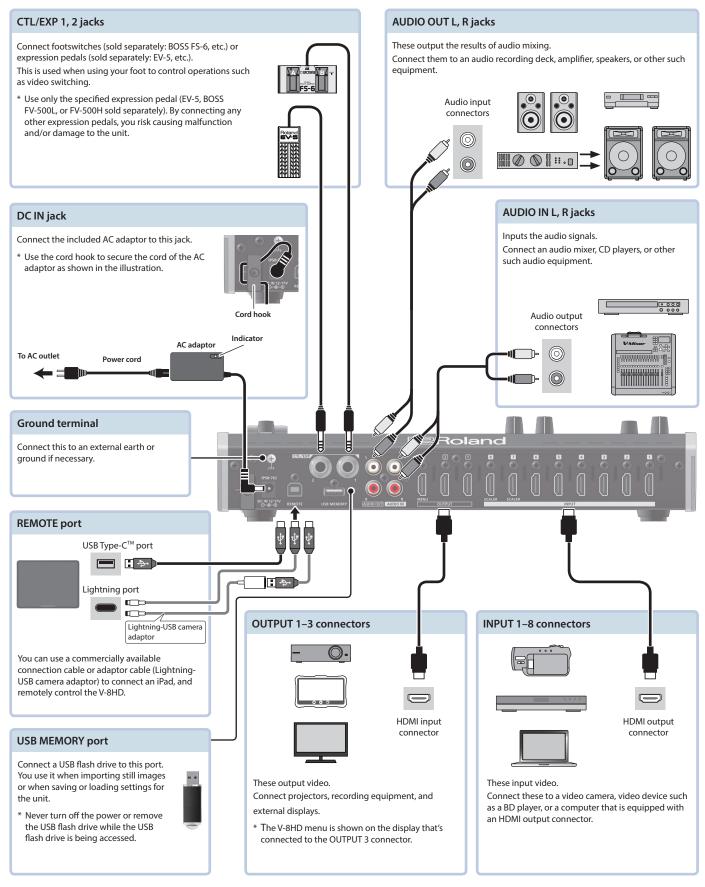


Name		Explanation	
18	PHONES jack (Stereo miniature type)	Connect headphones.	Esp
19	[PHONES] knob	Adjusts the volume of the headphones.	Españo
20	[POWER] switch	Turns the power on/off.	

English

# Rear Panel (Connecting Your Equipment)

- \* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
- \* Be sure to use cables and adaptor plugs with the proper connectors matching those of the other devices you are using.



# 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 all devices are turned off.

Turn on the [POWER] switch on the V-8HD to turn on the power.



#### 3. Turn on the power to the source devices.

Turn on the power to video cameras or other source equipment connected to input connectors on the V-8HD.

#### 4. Turn on the power to the output devices.

Turn on the power to projectors or other devices connected to output connectors on the V-8HD.

### Turning the power off

- **1.** Turn off the power in the sequence of first the output equipment, and then the sources.
- 2. Turn off the [POWER] switch on the V-8HD to turn off the power.

#### About the Auto Off function

The power to the V-8HD turns off automatically when all of the following states persist for 240 minutes (Auto Off function).

- No operation performed on the V-8HD
- No audio or video input
- No equipment is connected to the OUTPUT connectors

If you do not want the power to be turned off automatically, disengage the Auto Off function. Press the [MENU] button → "SYSTEM" → set "AUTO OFF" to "OFF."

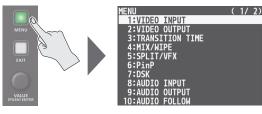
- \* Unsaved data is lost when the power turns off. Before turning the power off, save the data that you want to keep.
- \* To restore power, turn the power on again.

### Using the Menus

This explains how to display menus and make settings for video and for the V-8HD itself.

\* The menu is also appears on the display connected to the OUTPUT 3 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.

press the [VALUE] knob to confirm. The cursor moves to the setting value.

item you're setting to its default value.

The cursor returns to the menu item.

setting.

value more greatly.

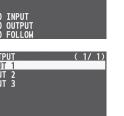
3. Turn the [VALUE] knob to select a menu item, then

• If the menu item is located at a deeper level, repeat step 3. • Pressing the [EXIT] button moves you back one level higher.

4. Turn the [VALUE] knob to change the value of the

• By turning the [VALUE] knob while pressing it, you can change the

• Pressing and holding the [VALUE] knob returns the current menu



English

盟本

Deutsch

Italiano

Español

5. Press the [VALUE] knob to apply the setting.

6. Press the [MENU] button to quit the menu.

5

# Using Mix/Wipe to Switch the Video

Here's how to switch between input video while applying an effect, and final output.

### About the operation mode for video transitions

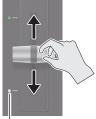
There are two operation modes for switching the video on the PGM/A bus and PST/B bus: the "PGM/PST mode" and the "A/B mode." \* With the factory settings, the operation mode is set to A/B mode.

Mode	Explanation	
A/B	When the video fader is operated, the video at the bus position toward which the video fader is flipped always becomes the final output.	
A/D	When the [CUT] or [AUTO] button is operated, the video on the A bus and the video on the B bus become the final output in alternation.	
PGM/PST	The video on the PGM bus is always the final output. The video on the PST bus is preset video (the video to be output next).	
PGM/PS1	Operating the video fader or the [CUT] or [AUTO] button makes the final video output and the preset video change places.	

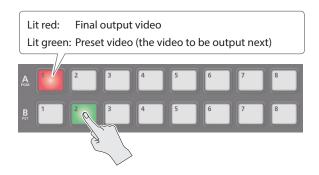
### Switching in the A/B Mode

The video at the end to which the video fader is flipped is always the final output.

- 1. Flip the video fader all the way upward or downward.
- 2. Press a Cross-point [1]–[8] button at the end to which the video fader is not flipped to select the preset video (the video to output next).



Transition indicator



The preset video appears in the PVW section of the monitor.

#### 3. Press the [TRANSITION] button to select the transition effect.



	Mode	Explanation
The two videos are mixed as the transition occ		The two videos are mixed as the transition occurs.
	MIX	A ► B
WIPE video.		
		A ► A ► B

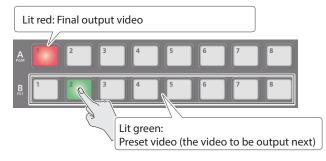
 Move the video fader in the direction opposite to the direction in step 1. The video changes.

Switching in the PGM/PST Mode

- 1. Press the [MENU] button → "SYSTEM" → select "PANEL OPERATION," and press the [VALUE] knob.
- 2. Turn the [VALUE] knob to select "PGM/PST," then press the [VALUE] knob.

SYSTEM	(1/4)
HDCP	0FF
FRAME RATE	59.94Hz
SYSTEM FORMAT	1080p
CUT SW ASSIGN	
AUTO SW ASSIGN	
PANEL OPERATION	PGM/PST
PANEL LOCK	ENTER
AUX LINKED PGM	0FF

- 3. Press the [MENU] button to quit the menu.
- 4. Flip the video fader all the way upward or downward.
- 5. Press the [TRANSITION] button to select the transition effect.
- 6. Press a Cross-point B [1]–[8] button to select the preset video (the video to be output next).



# 7. Move the video fader in the direction opposite to the direction in step 4.

The video changes.

When the video has switched completely, the illuminated state of the A [1]–[8] buttons and B [1]–[8] buttons is exchanged.

#### MEMO

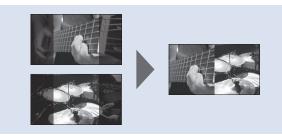
You can change the transition pattern used for a mix or wipe. For details, please refer to "Reference Manual" (PDF).

The MIX or WIPE indicator is lit.

# Compositing Video with Split (SPLIT)

This composites two video streams in a split screen.

The final output video is displayed above or on the left, and the preset video (the video to be output next) is displayed below or on the right.



### Specifying a SPLIT Composition Pattern

This makes the settings for the split composition pattern to match the video you want to composite.

1. Press the [MENU] button → "SPLIT/VFX" → select "SPLIT/VFX A" or "SPLIT/VFX B," and press the [VALUE] knob.

SPLIT/VFX A	(1/1)
SPLIT/VFX	0FF
SPLIT/VFX TYPE	PART MOSAIC
POSITION H	0.0%
POSITION V	0.0%
AREA SIZE	40.0%
-CORRECTION H	100.0%
-CORRECTION V	100.0%
BLOCK SIZE	64x64
MIX LEVEL	255

#### 2. Turn the [VALUE] knob to select "SPLIT/VFX TYPE," then press the [VALUE] knob.

SPLIT/VFX A	(1/1)
SPLIT/VFX	ON
SPLIT/VFX TYPE	SPLIT V
A-CENTER	0.0%
B-CENTER	0.0%
CENTER POSITION	0.0%
BORDER COLOR	WHITE
BORDER WIDTH	4

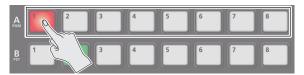
3. Turn the [VALUE] knob to select the SPLIT type, then press the [VALUE] knob.

You can select "SPLIT H" or "SPLIT V."

- \* For more about the SPLIT types and effects, refer to "Reference Manual" (PDF).
- 4. Press the [MENU] button to quit the menu.

### **Compositing Using SPLIT**

1. Press a Cross-point A [1]–[8] button to select the video you want to display above or on the left.



2. Press a Cross-point B [1]–[8] button to select the video you want to display below or on the right.



**3.** Press the SPLIT/VFX [A] or [B] button to turn on SPLIT (lighted).





The video you selected in steps 1 and 2 is composited.

4. Turn the SPLIT/VFX [A] or [B] knob to adjust the display position of the video.





#### MEMO

By turning the knob while pressing it, you can adjust the position of the dividing line between the two videos.

**5.** To turn off SPLIT, press the SPLIT/VFX [A] or [B] button once again.

7

Português

# Using a Visual Effect (VFX)

Here's how you can apply an effect to the entire video, such as varying the video's color or shape. You can apply a visual effect (VFX) to the A/PGM bus and B/PST bus respectively.

### Selecting a Visual Effect

1. Press the [MENU] button → "SPLIT/VFX" → select "SPLIT/VFX A" or "SPLIT/VFX B," and press the [VALUE] knob.

SPLIT/VFX A	(1/1)
SPLIT/VFX	0FF
SPLIT/VFX TYPE	PART MOSAIC
POSITION H	0.0%
POSITION V	0.0%
AREA SIZE	40.0%
-CORRECTION H	100.0%
-CORRECTION V	100.0%
BLOCK SIZE	64x64
MIX LEVEL	255

#### 2. Turn the [VALUE] knob to select "SPLIT/VFX TYPE," then press the [VALUE] knob.

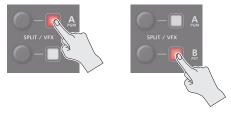
SPLIT/VFX A (1/	1)
SPLIT/VFX	ON
SPLIT/VFX TYPE PART MOS	AIC
POSITION H 0	.0%
POSITION V 0	.0%
AREA SIZE 40	.0%
-CORRECTION H 100	.0%
-CORRECTION V 100	.0%
BLOCK SIZE 64	x64
MIX LEVEL	255

# **Applying Visual Effects**

**1.** Press a cross-point A or B [1]–[8] button to output the video to which you want to apply the effect.



2. Press the SPLIT/VFX [A] or [B] button to turn on the visual effect (making the button light up).



The visual effect is applied to the output video.

**3.** Turn the SPLIT/VFX [A] or [B] knob to adjust the degree of effect applied.



Туре	Explanation
PART MOSAIC	Applies a mosaic to the selected region.
BACKGROUND	Applies a mosaic to the portion outside the
MOSAIC	selected region.
FULL MOSAIC	Applies a mosaic to the entire screen.
WAVE	Makes the video wavy.
RGB REPLACE	Exchanges the colors.
COLORPASS	Turns the video black and white while
COLORPASS	preserving a specific color.
NEGATIVE	Inverts the brightness and colors.
COLORIZE	Adds color to the video.
POSTERIZE	Changes the gradations in brightness.
	Separates the video into light and dark areas,
SILHOUETTE	and makes the dark areas black and adds a
	different color to the light areas.
EMBOSS	Adds a bas-relief effect to the video.
FIND EDGES	Extracts contours.
MONOCOLOR	Turns the video monochrome.
HUE OFFSET	Changes the visual character by controlling the
HUE OFFSET	hue.
SATURATION	Changes the visual character by controlling the
OFFSET	saturation.
VALUE OFFSET	Changes the visual character by controlling the
VALUE OFFSET	brightness.

#### 4. Press the [MENU] button to quit the menu.





#### MEMO

• For "PART MOSAIC" and "BACKGROUND MOSAIC," you can adjust the following settings.

Knob operation	Explanation
	Adjusts the horizontal position of the selected area.
Turning	While pressing an A or B [1]–[8] button:
	Adjusts the size of the selected area.
	Adjusts the vertical position of the selected area.
Turn while pressing	While pressing an A or B [1]–[8] button: Specifies the fineness (block size) of the mosaic.

- Settings for the effect that is controlled by the SPLIT/VFX [A] or [B] knobs can be checked in the VFX menu.
- By holding down the SPLIT/VFX [A] ([B]) button and turning the SPLIT/VFX [A] ([B]) knob, you can change the type of visual effect.
- 4. To turn off a visual effect, press the SPLIT/VFX [A] or [B] button once again.

# Compositing Video with Picture-in-Picture (PinP)

Here's how to composite an inset screen (a small separate screen) onto the background video.

You can use PinP 1 and PinP 2 simultaneously to composite two inset screens.

Here we explain the procedure for compositing video using "PinP

1." You can also composite video using the same procedure using

1. Press a Cross-point A or B [1]–[8] button to select the video you want to make the background video.

Press the [MODE] button to select "PinP1 SOURCE."

3. Press a PinP SOURCE [1]–[8] button to select the video you want to make the inset screen.

4. Press the PinP 1 [PVW] button to preview-output

The PinP 1 [PVW] button lights up in green and the inset screen

At this stage, the final output has not yet been changed.

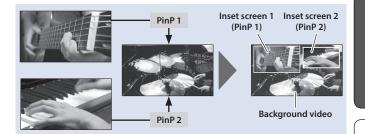
appears in the PVW section of the monitor, allowing you to check

the video of the inset screen.

the inset screen's location and size.

.....

"PinP 2."



5. Use the PinP 1 [POSITION H] and [POSITION V] knobs to adjust the display position of the inset screen.



Knob	Explanation
[POSITION H]	Adjusts the inset screen's display position horizontally.
	Turn while pressing: Adjusts the size of the inset screen.
[POSITION V]	Adjusts the inset screen's display position vertically.
	Turn while pressing: Adjusts the zoom of the video shown in the inset screen.

# 6. Press the PinP 1 [ON] button to turn on PinP compositing (lit).



The PinP 1 [ON] button lights up in red, and the inset screen is composited onto the background video and the result is sent to final output.

# 7. To turn off PinP compositing, press the PinP 1 [ON] button once again.

#### MEMO

• By long-pressing the PinP 1 (2) [PVW] button, you can access the mode for selecting the inset screen without having to press the [MODE] button and then select "PinP1 SOURCE" or "PinP2 SOURCE."

While pressing the PinP 1 (2) [PVW] button, press a PinP SOURCE [1]–[8] button to select the video that you want to use as the inset screen.

- The fade time over which the inset screen appears or disappears when you press the [ON] button is specified by the setting of the TRANSITION TIME menu item "PinP 1 TIME" or "PinP 2 TIME."
- Detailed settings for size, shape, and border width etc. can be made for the PinP 1 and PinP 2 child screens respectively. For details, refer to "Reference Manual" (PDF).

Englisł

### Compositing Video with Downstream Keyer (DSK)

You can turn a portion of the video transparent and composite it with the background video. You can use luminance key with either a black or a white background, or a chroma key with either a blue or green background.

You can additionally composite a variety of text and images with video that was composited using PinP or another method.

#### Luminance key

This cuts out text or an image by turning the black or white portion transparent, and composites it onto the background video.



#### **1.** Input the logo or image.

By factory default, the settings are such that text and image input on channel 8 are used in DSK composition.

When you want to use text or image on another channel, use the [MENU] button  $\rightarrow$  "DSK"  $\rightarrow$  "DSK SOURCE" to change the channel. When you want to composite a still image saved in the unit, set this to "STILL 1–8."

#### 2. Output the background video.

At the PVW section of the monitor, check the video to be made the background.

# 3. Press the DSK [PVW] button to turn on the preview output (lit).



The DSK [PVW] button lights up in green, and a preview of the composition results is displayed in the PVW section of the monitor.

At this stage, the final output has not yet been changed.

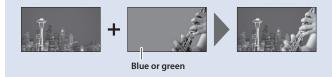
#### 4. Turn the DSK [LEVEL] and [GAIN] knob to adjust the degree of effect applied.



Knob	Explanation	
[LEVEL]	Adjusts the degree of extraction (transparency) for the key.	
[GAIN] Adjusts the degree of edge blur (semi-transmissive region) for the key.		

#### Chroma key

This cuts out a video by turning the blue or green portion transparent, and composites it onto the background video. Using this, you can composite only a subject that you are photographing against a blue screen or green screen.



#### 5. Modifying the logo or image.

When using key compositing, you can fill-in the superimposed logo or image, or add an edge to it. Make these settings in the following DSK menu.

Menu item	Explanation
FILL TYPE	If this is set to "MATTE," the superimposed logo or image is filled-in with the specified color.
MATTE COLOR	MATTE COLOR The fill-in color is specified by "MATTE COLOR."
EDGE TYPE	Specifies the type of edge.
EDGE COLOR	Specifies the color of the edge.
EDGE WIDTH	Specifies the width of the edge.

# 6. Press the DSK [ON] button to turn on DSK composition (lit).



The DSK [ON] button lights up in red, and the composition results is sent to final output.

# 7. To turn off DSK compositing, press the DSK [ON] button once again.

#### MEMO

The fade time over which the logo/image appears or disappears when you press the DSK [ON] button is specified by the setting of the TRANSITION TIME menu item "DSK TIME."

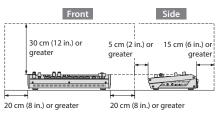
#### **MARNING**

#### 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.



#### **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.





#### 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.

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.

 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

Intellectual Property Right

- This product can be used to record or duplicate audio or visual material without being limited by certain technological copy-protection measures. This is due to the fact that this product is intended to be used for the purpose of producing original music or video material, and is therefore designed so that material that does not infringe copyrights belonging to others (for example, your own original works) can be recorded or duplicated freely.
- This product contains eParts integrated software platform of eSOL Co.,Ltd. eParts is a trademark of eSOL Co., Ltd. in Japan.
- Roland and BOSS are either registered trademarks or trademarks of Roland Corporation in the United States and/ or other countries.
- Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.

# IMPORTANT NOTES

#### Power Supply

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

#### 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.
- Never strike or apply strong pressure to the display
- Use only the specified expression pedal. By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.
- 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.

taliano

**Roland**