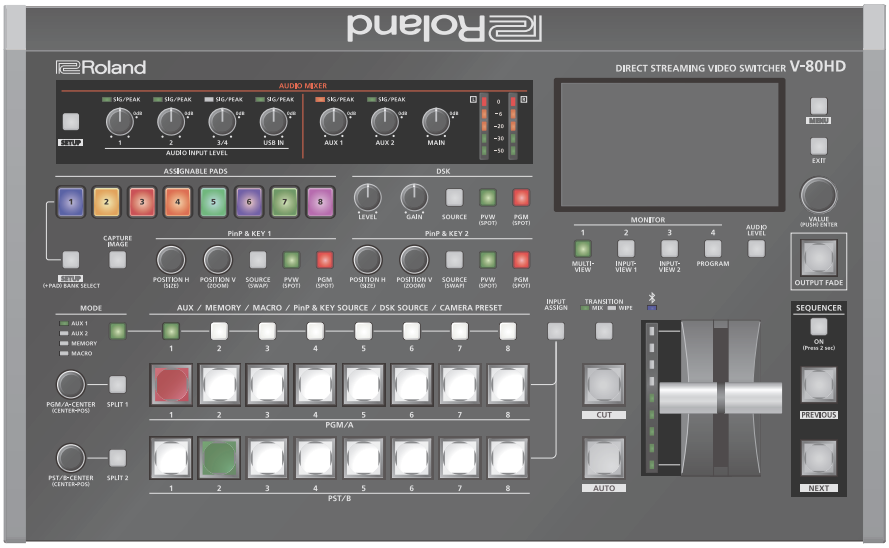
Reference Manual

DIRECT STREAMING VIDEO SWITCHER

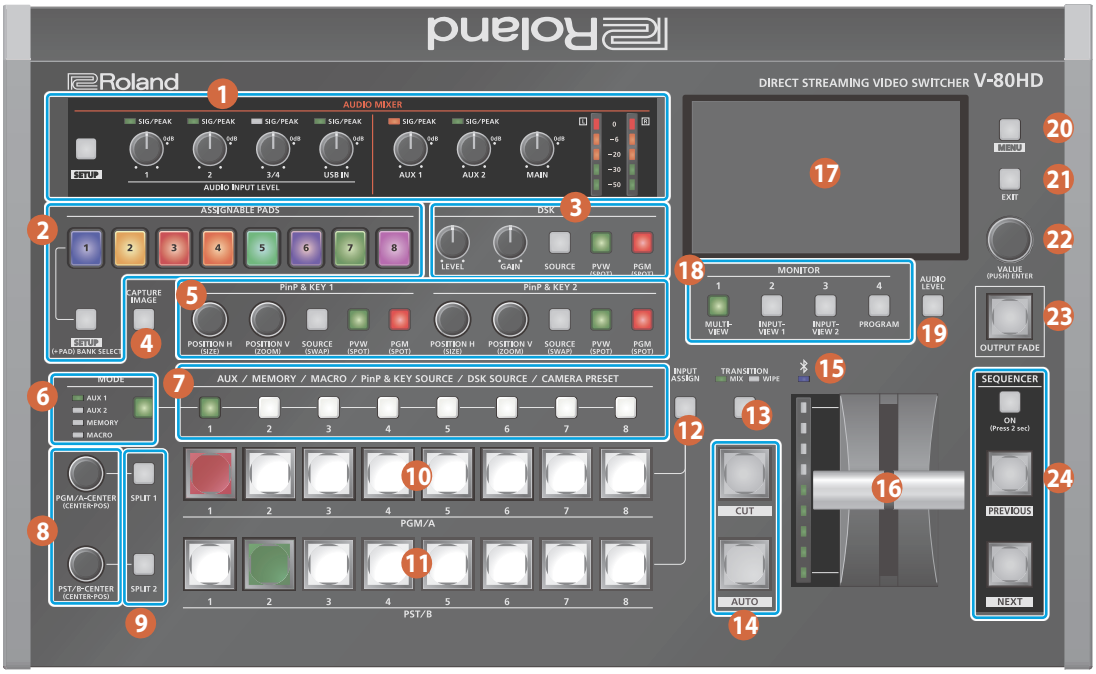
V-80HD



Contents

Panel descriptions

Top panel



1 AUDIO MIXER

[SETUP] button

Shows the setup screen in the display.

SIG/PEAK indicators (1, 2, 3/4, USB IN)

These indicators light up green when audio input is detected. If the input signal is excessive, the indicators light up red.

AUDIO INPUT LEVEL [1] [2] [3/4] [USB IN] knobs

Adjusts the volume of the AUDIO IN 1, 2, 3/4 and USB IN signals.

SIG/PEAK indicator (AUX 1, AUX 2)

These indicate the sound levels for the AUX 1 and AUX 2 buses.

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

[AUX 1] [AUX 2] knobs

These adjust the output volumes for the AUX 1 and AUX 2 buses.

[MAIN] knob

Adjusts the overall volume.

Level meters

Indicates the overall volume level.

MEMO

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

2 ASSIGNABLE PADS

Pads [1]–[8]

Press these pads to execute their assigned functions.

You can assign functions such as the audio player, audio effects and so on to the pads.

[SETUP] button

Shows the function assignment screen in the display.

MEMO

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

Press the pads [1]–[8] while holding down the [SETUP] button to switch between banks A–H.

With the factory settings, the audio player is assigned to pads [1]–[8] of bank A.

3 DSK

This uses the downstream keyer (DSK) to composite video.

[LEVEL] knob

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

[GAIN] knob

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

[SOURCE] button

When this is on (lit), you can select the DSK video source using the 7 DSK SOURCE [1]–[8] buttons.

[PVW] buttons

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

[PGM] buttons

This switches DSK composition on or off.

4 [CAPTURE IMAGE] button

Turns the still image capture mode on/off.

5 PinP & KEY 1, 2

This uses PinP & KEY 1, 2 layers to composite video using PinP (picture-in-picture).

[POSITION H] knob

Adjusts the horizontal position of the inset screen.

Press and rotate to adjust the size of the inset screen.

[POSITION V] knob

Adjusts the vertical position of the inset screen.

Press and rotate to adjust the zoom ratio of the inset screen video.

[SOURCE] button

When this is on (lit), you can select the video source for the inset screens using the 7 PinP & KEY SOURCE [1]–[8] buttons.

[PVW] buttons

Turns the inset screen preview output on/off.

[PGM] buttons

Turns PinP composition on/off.

6 [MODE] button

7 Toggles the function of the AUX/MEMORY/MACRO [1]–[8] buttons. The indicator to the left of the [MODE] button illuminates to indicate the current function.

7 AUX / MEMORY / MACRO / PinP & KEY SOURCE / DSK SOURCE / CAMERA PRESET [1]–[8] buttons

The functions of these buttons change as shown in the table below.

When button is lit	Functions for [1]–[8] buttons
[MODE]	**AUX** Selects the video that's sent to the AUX 1 and AUX 2 buses.
	MEMORY Recalls the preset memory (the video/audio and other data that is saved). Long-press a button to save the current settings to a preset memory.
	MACRO Executes a macro (a series of recorded operations).
PinP & KEY 1, 2 [SOURCE]	**PinP & KEY SOURCE** Selects the video source of the inset screen.
DSK [SOURCE]	**DSK SOURCE** Selects the DSK video source.
CAMERA CONTROL	**CAMERA PRESET** Recalls the registered preset (camera position, focus settings, etc.) from the connected camera. You can turn camera control mode on/off by using the assignable pads, a footswitch (CTL) or control signal input (GPI).

8 [PGM/A-CENTER] [PST/B-CENTER] knobs

These adjust the split compositing settings.

Knob	Explanation
[PGM/A-CENTER]	Adjusts the horizontal and vertical positions of the video placed on the left and top sides. **Turn while pressing:** Adjusts the position of the boundary.
[PST/B-CENTER]	Adjusts the horizontal and vertical positions of the video placed on the right and bottom sides. **Turn while pressing:** Adjusts the position of the boundary.

9 [SPLIT 1] [SPLIT 2] buttons

These switch split video composition on/off.

10 PGM/A cross-point [1]–[8] buttons

Selects the video to input to the PGM/A bus. The selected button is lit.

11 PST/B cross-point [1]–[8] buttons

Selects the video to input to the PST/B bus. The selected button is lit.

12 [INPUT ASSIGN] button

Press a cross-point button while holding down the [INPUT ASSIGN] button to change the video source for the buttons you pressed.

The video source changes in the following order each time you press the button.

- **[INPUT ASSIGN] + PGM/A cross-point buttons**

  STILL 32 → 1 → SDI 4 → 1 → HDMI 4 → 1 → V.PLAYER

- **[INPUT ASSIGN] + PST/B cross-point buttons**

  V.PLAYER → HDMI 1 → 4 → SDI 1 → 4 → STILL 1 → 32

13 [TRANSITION] button

Selects the video transition effects (mix, wipe).

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

14 [CUT] and [AUTO] buttons

These switch between the videos of the PGM/A bus and PST/B bus automatically for final output.

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

15 (Bluetooth®) indicator

Shows the Bluetooth connection status.

Lit	Connected	**Rapid blinking**	Now pairing
Dark	Bluetooth off	**Flashing**	Waiting for connection

You can input audio from an audio device that uses Bluetooth, or use dedicated software on your computer or iPad to remotely control the V-80HD.

16 Video fader

These switch between the video signals inputted to the PGM/A bus and PST/B bus manually for final output.

Transition indicator

The indicators light up to show the video fader position.

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

17 Monitor

Shows the input/output video, a loaded still image, a menu screen and so forth.

18 MONITOR [1]–[4] button

Switches between video signals to monitor on the built-in display (monitor).

Button	Explanation
MONITOR [1]	**MULTI-VIEW** The final output video, preview output video and the videos allocated to the cross-point [1]–[8] buttons are shown in sections of the display.
MONITOR [2]	**INPUT-VIEW 1** Shows the input videos or still images in 16 sections of the screen.
MONITOR [3]	**INPUT-VIEW 2** Shows the input videos or still images in 16 sections of the screen.
MONITOR [4]	**PROGRAM** This displays the final output video.

* The settings described above are the factory settings. You can also assign different video to each button.

19 [AUDIO LEVEL] button

Shows the audio level screen in the display.

20 [MENU] button

This switches between displaying or hiding the menu.

21 [EXIT] button

Returns you to the menu one level higher.

22 [VALUE] knob

This selects a menu item or changes a setting value.

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

23 [OUTPUT FADE] button

The final output video and audio fade in/out.

Lit	Fade-out completed
Flashing	Fading-in/out
Dark	Normal output

* The settings shown above are factory settings. You can also customize the function of the [OUTPUT FADE] button.

24 SEQUENCER

The sequencer function lets you record functions such as recalling macros or preset memories, and execute them in the order you specify.

[ON] button

Long-press to turn sequencer mode on/off.

[PREVIOUS] button

Returns to the previous operation.

[NEXT] button

Advances to the next operation. The button blinks while the function is executing.

Front panel

1 PHONES jack

Connect headphones to this jack.

2 [PHONES] knob

Adjusts the headphone volume.

3 USB HOST port

Connect USB storage such as a USB flash drive or an external SSD here, for backing up this unit's settings or importing materials from the storage device into this unit.

You can also connect a smartphone for tethering.

4 SDXC card slot

Insert an SD card here.

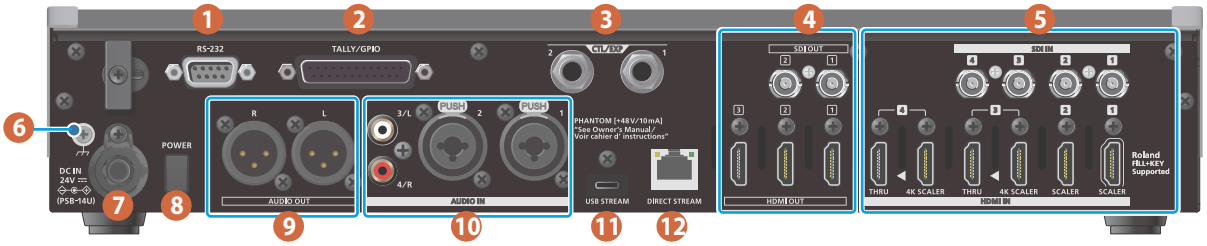
This lets you record video and audio, back up this unit's settings and import material that's saved on the storage media.

NOTE

- Never turn off the power or remove the USB flash drive or SD card while the USB flash drive or SD card is being accessed.
- Before disconnecting an SD card or a USB flash drive while the power is on, be sure to eject the media by using the eject operation (p. 13) on this unit.

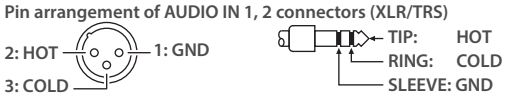
Rear panel

* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
* Do not block the 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.



Pin arrangement of AUDIO OUT connector (XLR)

Pin arrangement of AUDIO IN 1, 2 connectors (XLR/TRS)



1 RS-232 connector

You can connect this to a computer equipped with an RS-232 connector to remotely control the V-80HD.

2 TALLY/GPIO connector

Use this to connect to devices that have a tally indicator feature, or to connect to devices that have a control signal input/output function.

3 CTL/EXP 1, 2 jacks

You can connect a footswitch (such as a BOSS FS-6, sold separately) or expression pedal (such as the EV-5, sold separately) to these jacks. Use this when you want to switch between video signals and so forth with your foot.

* Use only the specified expression pedal (sold separately: EV-5, BOSS FV-500L, or FV-500H). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

4 HDMI OUT 1–3 and SDI OUT 1, 2 connectors

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

You can change the video bus assignment for each connector.

With the factory settings, the bus assignments are as follows.

Connector	Bus
SDI/HDMI OUT 1	PROGRAM (final output video)
SDI/HDMI OUT 2	PREVIEW (preview output video)
HDMI OUT 3	MULTI-VIEW (multi-view)

5 HDMI IN 1–4 connectors, SDI IN 1–4 connectors

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

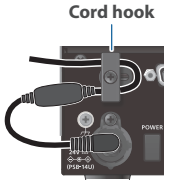
Connector	Explanation
SDI IN 1–4	Used for inputting SDI video.
HDMI IN 1 (SCALER)	Used for inputting HDMI video. This connector is compatible with connections from the "Roland Graphics Presenter" app (p. 48).
HDMI IN 2 (SCALER)	Used for inputting HDMI video.
HDMI IN 3, 4 (4K SCALER, THRU)	Used for inputting HDMI video. These connectors support up to 4K/60p video input. Video input signals are output as-is to the THRU connector. Connect an external display, recorder or similar device to the THRU connector. When inputting a video signal with a resolution greater than 1080p, the signal is downscaled internally on the V-80HD to 1080p.

6 Grounding terminal

Connect this to an external earth or ground if necessary.

7 DC IN jack

Connect the included AC adaptor to this jack.



* Use the cord hook to secure the cord of the AC adaptor as shown in the illustration.
If you have trouble running the cord through, loosen the screw a little on the cord hook.

8 [POWER] button

Turns the power on/off.

9 AUDIO OUT connectors (XLR)

These connectors output audio.

For each connector, you can change the audio bus (Main, AUX 1, AUX 2, Monitor) that is assigned for output.

10 AUDIO IN 1, 2, 3/L, 4/R connectors

Use these connectors for audio input. Use the connectors that are appropriate for the connected devices.

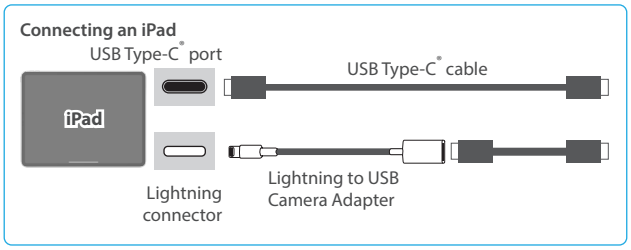
* **About phantom power**

Phantom power (+48 V) can be supplied from the AUDIO IN 1, 2 connectors (XLR). This should be switched on for condenser mics that require phantom power.

[MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2" → set "Phantom +48V" to "On".

11 USB STREAM port (USB Type-C®)

- Outputs the audio and video to your computer. This is also used to input audio played on your computer to the V-80HD.
- Use the dedicated software to remotely control the V-80HD from a computer or iPad that is connected.



* When outputting an HD video signal via USB, use a commercially available cable that supports USB 3.0, and connect the cable to the USB 3.0 port on your computer.

* If you connect via an extension cable or a USB hub, the computer might not recognize the V-80HD.

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

12 DIRECT STREAM port

- Connect this port to a network device for livestreaming.
- This port is used for inputting and outputting video/audio between an SRT-compatible device that's connected to your network and this unit.
- Lets you remotely control the V-80HD by using terminal software, etc.
- Use the dedicated software to remotely control the V-80HD from a computer or iPad that is connected.
- Use the V-80HD to remotely control a camera that is connected.
- Displays a tally on your iOS or Android device (this is the "smart tally" function).

Connecting Bluetooth® devices

Use the Bluetooth features of the V-80HD to connect it to your Bluetooth-compatible mobile device. This lets you do the following:

- Input the audio signals from your Bluetooth audio device.
- Use dedicated app "V-80HD Remote" to remotely control the V-80HD from an iPad (p. 110).

* For more on connecting (pairing) with a dedicated app, see the app's Owner's Manual.

Registering a Bluetooth audio device (pairing)

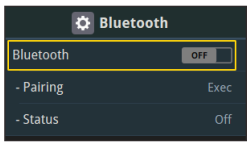
To connect a Bluetooth device to this unit, you must pair (register) the device with the unit.

Once you pair the device with this unit, there is no need to do it again.

* To connect a Bluetooth device that's already paired, refer to "Connecting an already-paired Bluetooth device" on this page.
* See the Owner's Manual for the Bluetooth device you want to pair for details on the necessary operations.

1. Place the Bluetooth device nearby the V-80HD.

2. Press the [MENU] button → "System" → select "Bluetooth".

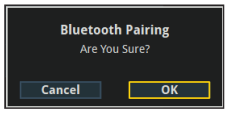


3. Press the [VALUE] knob to change the setting to "ON".

The V-80HD's Bluetooth function turns on.

4. Use the [VALUE] knob to select "Pairing", and press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

Pairing begins.

The following message is shown when the unit is pairing.

"Now Pairing..."

6. Turn on the Bluetooth function of the Bluetooth device.

7. Display the Bluetooth device screen on your Bluetooth device, and select "Roland V-80HD Audio".

Once pairing is successful, the message on the V-80HD changes to "Completed.".

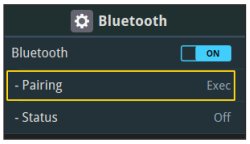
8. Press the [MENU] button to quit the menu.

Connecting an already-paired Bluetooth device

1. Turn on the Bluetooth function of the Bluetooth device.

2. Turn on the Bluetooth function of the V-80HD.

The onscreen Status display on the V-80HD changes to "Connected" when the connection is successful.



* If connection does not succeed, select "Roland V-80HD Audio" in the Bluetooth device screen on your Bluetooth device.

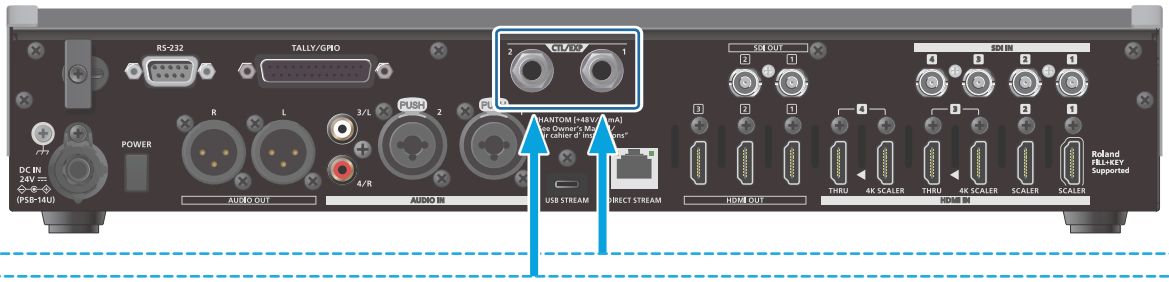
MEMO

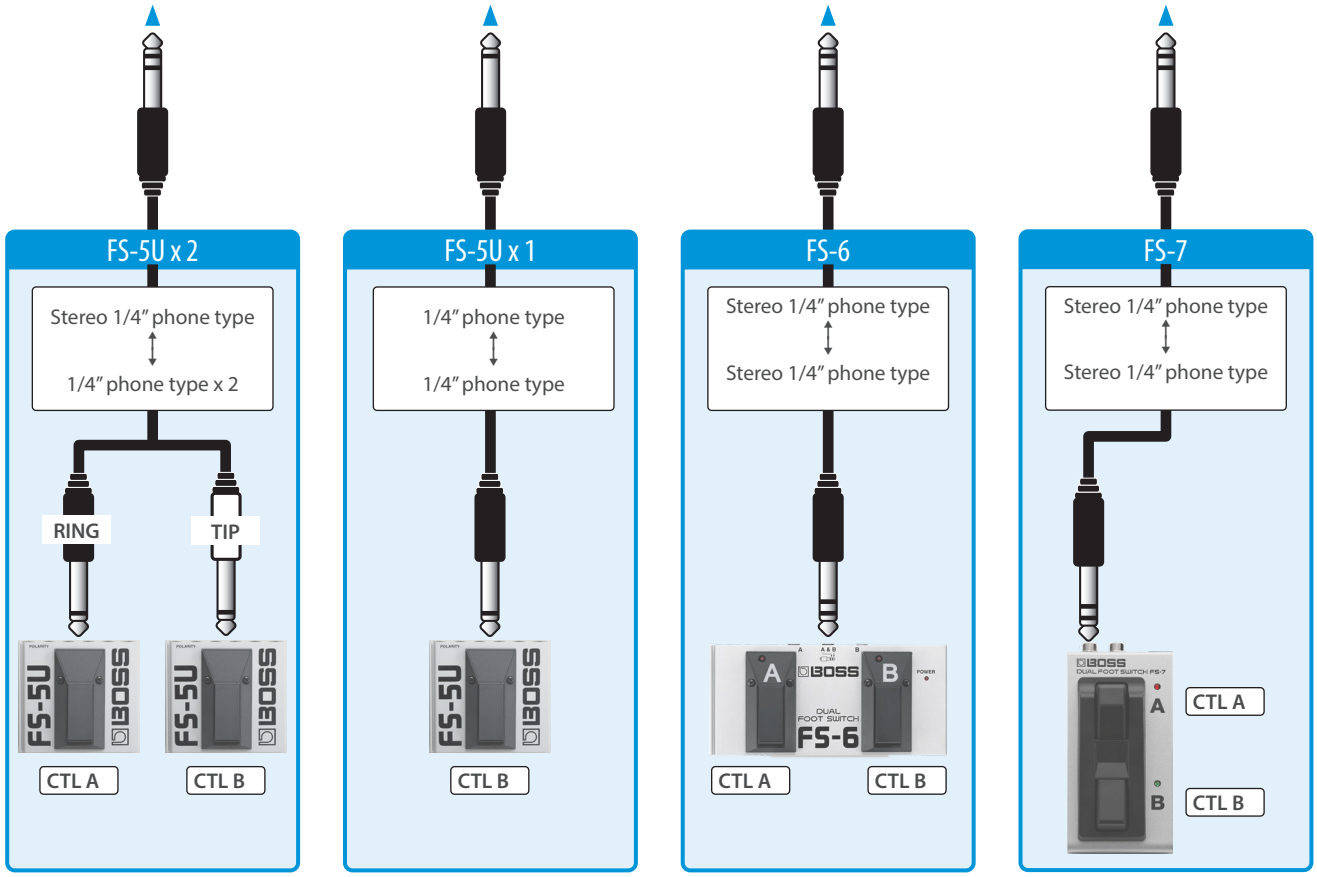
- You can also check the (Bluetooth) indicator for the connection status.

Lit	Connected	**Rapid blinking**	Now pairing
Dark	Bluetooth off	**Flashing**	Waiting for connection

- Pair again in the following cases:
- When the pairing data has been deleted from the Bluetooth device
- When the V-80HD has been reset to its factory-set state (p. 109)
- To remove the Bluetooth connection, deactivate Bluetooth on the V-80HD or on your Bluetooth device.
- You can assign functions to the assignable pads for switching Bluetooth on/off, or for pairing (p. 97).

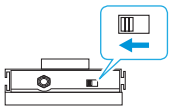
Connecting a footswitch



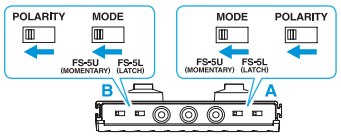


MODE/POLARITY switch

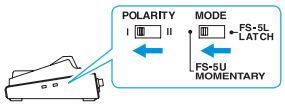
FS-5U



FS-6



FS-7



NOTE

The BOSS FS-6's A, B, and A&B jacks also act as the power switch. The power turns on when you insert a plug into the jack, and turns off when you remove the plug. To prevent the batteries from running down, remove the plugs from the jacks when you're not using the BOSS FS-6.

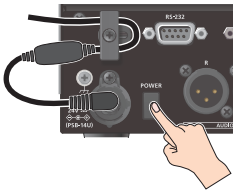
Turning the power on and off

* 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.
* Make sure to execute the shutdown operation when turning off the power.
* This unit is not designed for continuous operation over long periods of time (one month or longer). If you want to use this unit over long periods of time, cycle the power periodically.

Turning the power on

1. Make sure all devices are turned off.

2. Turn on the [POWER] switch of the V-80HD.



3. Turn on the power of the source devices.

Turn on the power of the source devices that are connected to the V-80HD's input connectors, such as video cameras.

4. Turn on the power of the output devices.

Turn on the power of the devices that are connected to the V-80HD's output connectors, such as projectors.

Turning the power off

1. Turn off the power of the output devices first, and then the source devices.

2. Turn off the [POWER] switch of the V-80HD.

The following message appears.

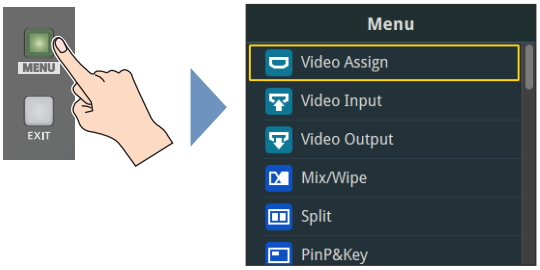
3. Press the [VALUE] knob to finish shutting down.

If you wish to cancel, press the [POWER] switch again.

Operating the menu

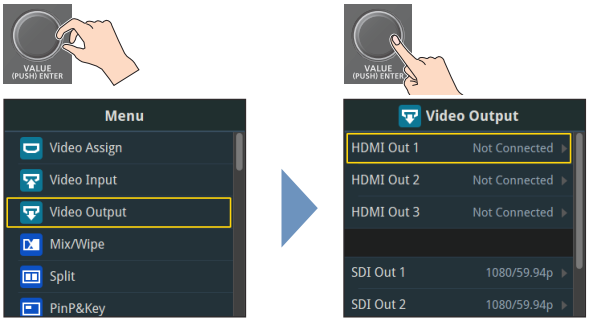
Here's how to access the menu, and make video/audio settings and settings for this unit.

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



The menu is organized into functions.

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



3. Repeat step 2 as needed.

Press the [EXIT] button to go back up one level.

4. Turn the [VALUE] knob to change the setting value, and then press the [VALUE] knob to confirm.

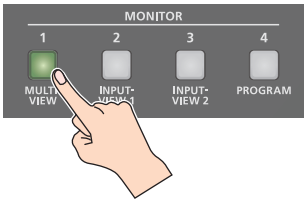
- By turning the [VALUE] knob while pressing it, you can change the value more greatly.
- Long-pressing the [VALUE] knob returns the current menu item you're setting to its default value.

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

Switching the monitor view

Aside from multi-view display, you can switch between videos to monitor such as the input video or a list of still images, according to your needs.

1. Press one of the MONITOR [1], [2], [3] or [4] buttons.



MONITOR [1] (MULTI-VIEW) button

The final output video, preview output video and the videos allocated to the cross-point [1]–[8] buttons are shown in sections of the display (multi-view).

1 PVW (preview) section

Displays the preview output video (the video to be output next).

* The fade-in/out effect (p. 36) is not reflected here.

2 PGM (program) section

This displays the final output video.

3 Videos for cross-point [1]–[8] buttons

This shows the video assigned to each cross-point button.

The final video output and preview output video are displayed with tally frames (red and green).

1 External Rec indicator

If a camera that supports the REC status function is connected, this is shown when the camera's REC button is pressed.

2 AUX/Source indicator

This displays as follows.

Yellow	PinP & KEY inset screen
Magenta	DSK video source
Green	AUX bus video source

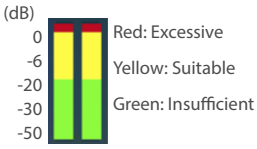
MONITOR [2] (INPUT-VIEW 1) button, MONITOR [3] (INPUT-VIEW 2) button

The input video from the HDMI IN connectors and the SDI IN connectors are shown as 16 separate sections on the screen.

MONITOR [4] (PROGRAM) button

This displays the final output video.

Audio level meter indication



- You can set the audio level meter to show or hide.

  Configure the settings of the following menu items from the [MENU] button → "System" → "Audio Level Meter" →.

Menu item	Explanation
Multi-View	Sets whether to show or hide the audio level meter.
Input-View 1	
Input-View 2	
Quad-View	

MEMO

- You can change the left-right videos that are shown in the upper part of the multi-view.

  Set this by pressing the [MENU] button -> "System" -> "Multi-View Layout" and select "Left" or "Right".
- You can change the videos that are shown when pressing the MONITOR [2] (INPUT-VIEW 1) and MONITOR [3] (INPUT-VIEW 2) buttons.

  Set this from the [MENU] button → "System" → "Input-View 1 Layout", "Input-View 2 Layout".
- You can change the monitoring videos assigned to the MONITOR [1]–[4] buttons.

  Set this from the [MENU] button → "System" → "Monitor Assign" → "Monitor 1"–"Monitor 4".
- **Items shown on the monitor**

  You can individually set whether items like the tally frame, label and so on are shown or hidden.

  Configure the settings of the following menu items from the [MENU] button → "System".

Menu item	Explanation
Tally Frame	Tally frame
AUX/Source Indicator	AUX/Source indicator
External Rec Indicator	External Rec indicator
Audio Level Meter	Audio level meter
Preview Label	Label

- You can change the label names that are shown in the monitor.

  Edit this from the [MENU] button → "System" → "Preview Label" → "Label Edit".
- For details on the cameras that support the REC status function, refer to the Roland website.

  https://proav.roland.com/

About SD card

Using an SD card lets you do the following.

- Record video or audio
- Load video or audio files
- Import/export still images or setting files

SD cards that can be used on the V-80HD

SDXC card can be used on the V-80HD.

Some SD card types or SD cards from some manufacturers may not properly record audio/video with this unit.
Refer to the support page on the Roland website for the latest information on compatibility.
https://roland.cm/v-80hd_om

NOTE

Before you can use a commercially available SD card with the V-80HD, you must format it as described in "Formatting an SD Card".

Inserting the SD card

1. Push the SD card all the way into the SDXC card slot until you hear a click.

NOTE

Ensure that the SD card is oriented correctly, and insert it all the way into the port. Do not forcibly push the card into place.

Formatting an SD card

1. Press the [MENU] button → "SD Card/USB Flash Drive" → "SD Card" → "Format" and press the [VALUE] knob.

A confirmation message appears.

2. Turn the [VALUE] knob to select "OK", and press the [VALUE] knob.

The SD card is now formatted.

NOTE

Formatting the SD card erases all data on the media (video and audio data).

Removing an SD card

1. Press the [MENU] button → "SD Card/USB Flash Drive" → "SD Card" → select "Eject" and press the [VALUE] knob.

2. Turn the [VALUE] knob to select "OK", and press the [VALUE] knob.

Once the message "The SD Card is safe to remove." is displayed on the screen, you can safely remove the card.

3. Push the SD card further into the slot.

4. Hold the SD card and pull it out towards you.

About USB flash drive

Using a USB flash drive lets you do the following.

- Load video or audio files
- Import/export still images or setting files

USB Flash Drives that can be used on the V-80HD

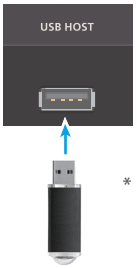
Use a commercially available USB flash drive.

NOTE

Before you can use a commercially available USB flash drive with the V-80HD, you must format it as described in "Formatting a USB Flash Drive".

Formatting a USB flash drive

1. Connect the USB flash drive to the USB HOST port.



Front panel

* Be careful to orient the USB flash drive correctly front and back and in the correct direction for insertion, and insert it firmly, as far as it will go. Never insert using undue force.

2. Press the [MENU] button → "SD Card/USB Flash Drive" → "USB Flash Drive" → "Format" and press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

3. Select "OK" and press the [VALUE] knob.

The USB flash drive is now formatted.

Removing a USB flash drive

1. Press the [MENU] button → "SD Card/USB Flash Drive" → "USB Flash Drive" → "Eject" and press the [VALUE] knob.

2. Select "OK" and press the [VALUE] knob.

Once the message "The USB Flash Drive is safe to remove." is displayed on the screen, you can safely remove the card.

3. Unplug the USB flash drive.

NOTE

- SD cards or USB flash drives that are formatted on a different device might not work normally on the V-80HD. Be sure to format the media on the V-80HD (SD card: exFAT format, USB flash drive: FAT32 format).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Formatting the media erases all data saved on the SD card or USB flash drive (such as recorded video, audio and still image data). If the storage media contains important data, back the data up to your computer before you format it.

Video input/output settings

Setting the video input/output format

Here's how to specify the input/output format as appropriate for the device that's connected.

Setting the system format

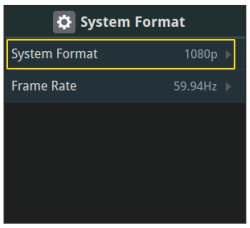
On the V-80HD, the input/output format is determined according to the system format. You set the input/output format to match the connected equipment.

System format	Input format (*1)	Output format	
	HDMI IN 1 and 4 connectors SDI IN 1–4 connectors	HDMI OUT 1–3 connectors SDI OUT 1 and 2 connectors	USB STREAM port DIRECT STREAM port
1080p	1080p, 1080i	1080p, 1080i	1080p, 720p
720p	720p	720p	720p

(*1) The HDMI IN 1–4 connectors are compatible with multiple formats (when using the factory settings). You can configure a different input format for each connector, regardless of the system format.

For details, refer to "Setting the input format for the HDMI IN 1–4 connectors" on this page.

1. Press the [MENU] button → "System" → "System Format" → select "System Format" and press the [VALUE] knob.



2. Use the [VALUE] knob to select "1080p", or "720p", and press the [VALUE] knob.

* A change in the setting is not applied until you press the [VALUE] knob to confirm.

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

Internal Processing

The V-80HD's internal processing is progressive. Interlaced input video is automatically converted to a progressive signal.

The video might appear jagged at this time, or the video in a PinP inset screen or on the multi-view might waver.

This is due to progressive conversion, and is not a malfunction.

About Frame Rates

Set the frame rate of the V-80HD from the [MENU] button → "System" → "System Format" → "Frame Rate".

* Set the frame rate for USB output from the [MENU] button → "System" → System Format "USB Out" → "Frame Rate".

* Set the frame rate for streaming and for video recording from the [MENU] button → "System" → System Format"Stream&Record" → "Frame Rate".

Setting the input format for the HDMI IN 1–4 connectors

Using the factory settings, the EDID assignment for the HDMI IN 1–4 connectors is "Internal" (so that EDID values of all formats that can be input are sent).

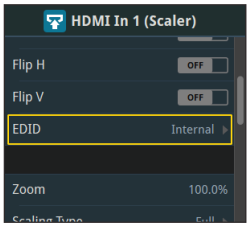
To specify an input format of your choice, change the setting of the EDID information being sent so that it matches the incoming video signal.

What is EDID?

EDID is data that is transmitted from the V-80HD to the source device when the V-80HD is connected to a source device. EDID contains data such as the formats that can be input to the V-80HD (resolution, color space, color depth) and audio information.

Based on the EDID information that the source device receives, it will output the most appropriate video format to the V-80HD.

1. Press the [MENU] button → "Video Input" → "HDMI In 1 (Scaler)"–"HDMI In 4 (4K Scaler)" → select "EDID" and press the [VALUE] knob.



2. Use the [VALUE] knob to set the input format (the EDID information to send), and press the [VALUE] knob.

* A change in the setting is not applied until you press the [VALUE] knob to confirm.

Value	
INTERNAL (EDID information for all input table formats is sent.)	
Internal-4K (*1)	SXGA (1280 x 1024/60Hz)
Internal-4K (4:2:0) (*1)	SXGA + (1400 x 1050/60Hz)
Internal-2K (*1)	UXGA (1600 x 1200/60Hz)
SVGA (800 x 600/60Hz)	WUXGA (1920 x 1200/60Hz)
XGA (1024 x 768/60Hz)	720/59.94p
WXGA (1280 x 800/60Hz)	1080/59.94i
FWXGA (1366 x 768/60Hz)	1080/59.94p

(*1) HDMI IN 3, 4 only

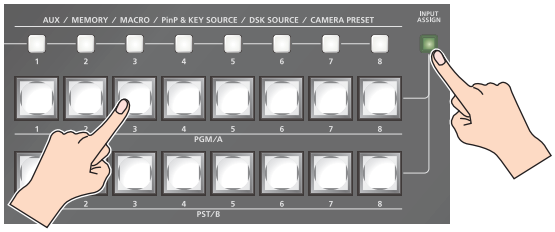
3. Press the [MENU] button to quit the menu.

Assigning video sources

Here's how to assign the video sources (input video, still images, video player, etc.) to the cross-point [1]–[8] buttons.

Using the buttons

1. Press a cross-point button while holding down the [INPUT ASSIGN] button to change the video source for that button.



The video source changes in the following order each time you press the button.

You can fast-forward by long-pressing the cross-point button.

- [INPUT ASSIGN] + PGM/A cross-point buttons

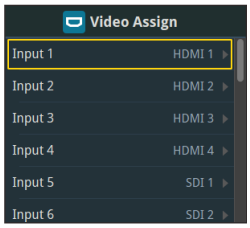
STILL 32 → 1 → SDI 4 → 1 → HDMI 4 → 1 → V.PLAYER

- [INPUT ASSIGN] + PST/B cross-point buttons

V.PLAYER → HDMI 1 → 4 → SDI 1 → 4 → STILL 1 → 32

Using the menu

1. Press the [MENU] button → "Video Assign" → select "Input 1"–"Input 8", and press the [VALUE] knob.



Video Source	Explanation
HDMI 1–4	Video for HDMI IN connectors 1–4
SDI 1–4	Video for SDI IN connectors 1–4
Still 1–32	Still images 1–32
V.Player (*1)	Video from video player
SRT In (*2)	SRT In video
Stream&Record Status 1, 2	Status display
Date&Time	Date and time (analog or digital clock) The analog/digital display changes in the "System → Date&Time → Clock Display Type" setting.
N/A	No video source

(*1) When Type (p. 135) = Video Player

(*2) When Type (p. 135) = SRT In

* You can't switch the video to a channel to which Stream&Record Status 1, 2, Date&Time or N/A is assigned. If you switch the assignment for one of the cross-point [1]–[8] buttons that are now outputting, the output video switches to a black screen.

2. Use the [VALUE] knob to select the video source, and press the [VALUE] knob.

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

MEMO

You can import still images by using the following methods.

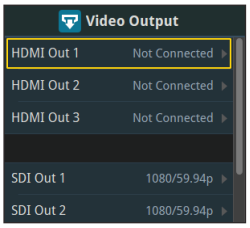
➡"Loading a still image from external storage" (p. 27)

➡"Capturing a still image from input/output video" (p. 28)

Adjusting output video

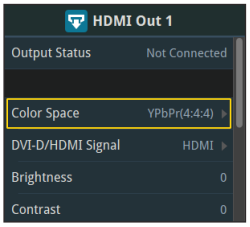
Here's how to adjust the output image appropriately for the device that's receiving the V-80HD's output.

1. Press the [MENU] button → "Video Output" → select "HDMI Out 1–3", "SDI Out 1, 2" or "USB Out", and press the [VALUE] knob.



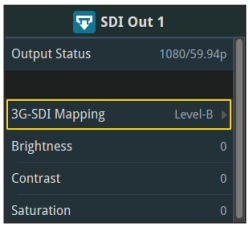
2. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.

HDMI Out 1–3



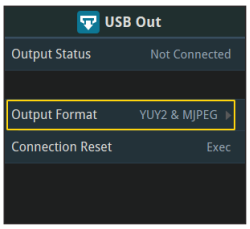
Menu item	Explanation
Output Status	Shows the connection status and whether or not an HDCP signal is present.
Color Space	Specifies the color space.
DVI-D/HDMI Signal	Specifies the type of output signal.
Brightness	Adjusts the brightness.
Contrast	Adjusts the contrast.
Saturation	Adjusts the saturation.
Red	Adjusts the red level.
Green	Adjusts the green level.
Blue	Adjusts the blue level.
External Rec Control	Turns the External Rec control on/off.

SDI Out 1, 2



Menu item	Explanation
Output Status	Shows the format and whether or not an HDCP signal is present.
3G-SDI Mapping	This sets the mapping structure for 3G-SDI output.
Brightness	Adjusts the brightness.
Contrast	Adjusts the contrast.
Saturation	Adjusts the saturation.

USB Out



Menu item	Explanation
Output Status	Shows the connection status and whether or not an HDCP signal is present.
Output Format	Sets the output destination formats that can be selected from the livestreaming app.
Connection Reset	Reconnects the computer and the V-80HD when the video is garbled or when operation is otherwise unstable.

3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

MEMO

You can output a test pattern, useful for adjusting the image quality of a display.

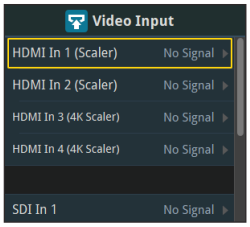
Use the [MENU] button → "System" → "Test Pattern" to specify the test pattern.

Adjusting input video

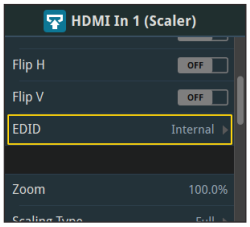
Here's how to adjust the quality of the input video signals.

For the HDMI IN 1–4 connectors, you can also adjust the scaling.

1. Press the [MENU] button → "Video Input" → select "HDMI In 1 (Scaler)–HDMI In 4 (4K Scaler)" or "SDI In 1–4" and press the [VALUE] knob.



2. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Input Status	Displays information about the incoming video.
Flip H	When this is "ON", the video is input with left and right flipped.
Flip V	When this is "ON", the video is input with top and bottom flipped.
Brightness	Adjusts the brightness.
Contrast	Adjusts the contrast.
Saturation	Adjusts the saturation.

* The following applies only for HDMI In 1 (Scaler)–HDMI In 4 (4K Scaler).

Test Pattern	Specifies the test pattern.
Color Space	Specifies the color space.
Flicker Filter	When this is "ON", flickering is reduced.
EDID	Specifies the input format (EDID) (p. 14).
Zoom	Adjusts the zoom ratio.
Scaling Type	This sets the scaling type.
Manual Size H	Adjusts the horizontal size when scaling type is set to "MANUAL".
Manual Size V	Adjusts the vertical size when scaling type is set to "MANUAL".
Position H	Adjusts the position in the horizontal direction.
Position V	Adjusts the position in the vertical direction.
Red	Adjusts the red level.
Green	Adjusts the green level.
Blue	Adjusts the blue level.

3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

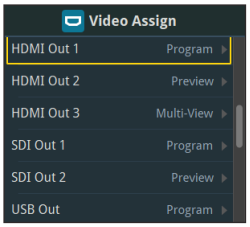
Assigning video buses to output connectors

TheV-80HD features ten types of video buses. You can assign the signals from each video output connector/port (HDMI OUT 1–3, SDI OUT 1, 2, USB STREAM, DIRECT STREAM) or the video shown on this unit's display to the desired video bus.

Video output connectors and ports	
HDMI Out 1–3	HDMI OUT 1–3 connectors
SDI Out 1, 2	SDI OUT 1 and 2 connectors
USB Out	USB STREAM port
Stream&Record	DIRECT STREAM port
LCD Monitor	This unit's display

Video bus	Explanation
Program	Final output video
Sub Program	Same video as the PROGRAM bus The SUB PROGRAM bus lets you set whether to display or hide the PinP & key layers and the DSK layers, separately from the PROGRAM bus. You can edit the layer settings to output a different video from that of the PROGRAM bus.
Preview	Preview output video (the video to be output next) * The fade-in/out effect (p. 36) is not reflected here.
AUX 1, 2	Video you choose that's sent to the AUX 1 and AUX 2 buses (p. 18) This lets you allocate a separate output that is independent of the final output, such as when you want a specific input video to be a fixed output.
DSK Source	Video you choose that's selected as the DSK video source (p. 41) This lets you allocate a separate output that is independent of the final output, such as when you want a specific input video to be a fixed output.
Multi-View	The final output video, preview output video and the videos allocated to the cross-point [1]–[8] buttons (multi-view) **MEMO** You can change the videos shown in the top part of the multi-view, both left and right. This can be set by pressing the [MENU] button → "System" → "Left" or "Right" in "Multi-View Layout".
Input-View 1, 2	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 16 separate sections on the screen) **MEMO** The videos to show can be set separately, by pressing the [MENU] button → "System" → "Input-View 1 Layout" or "Input-View 2 Layout".
Quad-View	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 4 separate sections on the screen) **MEMO** You can change the videos that are shown by pressing the [MENU] button → "System" → "Quad-View Layout".

1. Press the [MENU] button → "Video Assign" → select from "HDMI Out 1"–"LCD Monitor", and press the [VALUE] knob.



2. Use the [VALUE] knob to select the video bus to assign.

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

MEMO

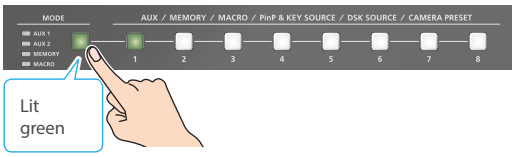
Assigning the video buses and audio outputs

You can also assign the desired audio buses (Main BUS, AUX 1 BUS, AUX 2 BUS, Monitor bus) for each jack, apart from the video bus (p. 63).

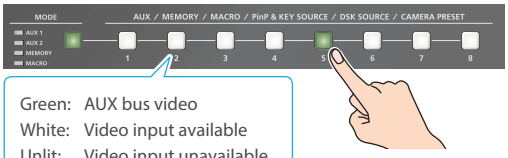
Selecting the video to send to the AUX 1 and AUX 2 buses

Here's how to send the video you want to the AUX 1 and AUX 2 buses. This lets you allocate a separate output that is independent of the final output, such as when you want a specific input video to be a fixed output.

1. Press the [MODE] button several times to select "AUX 1" or "AUX 2".



2. Press one of the AUX [1]–[8] buttons to select the video that is sent to the AUX 1 or AUX 2 bus.



The video is switched for the output connector to which the AUX 1 or AUX 2 bus is assigned.

* When selecting a video that's not assigned to Input 1–8, set this by pressing the [MENU] button → "Video Assign" → "AUX 1 Source" or "AUX 2 Source".

MEMO

- You can adjust how much audio is sent to the AUX bus.
  ➡"Sending audio to the AUX bus" (p. 63)
- **Sending the same video as the final output to the AUX bus (AUX link)**
  You can use the AUX link function to send the same video as the final output video to the AUX bus. The video sent to the AUX bus automatically switches in tandem with the video transitions.
  From the [MENU] button → "System", set the "AUX Linked PGM" to "Auto Link" or "Manual Link" (p. 155).

Inputting copyright-protected (HDCP) video

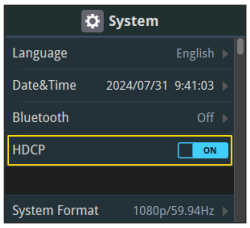
If you want to input HDCP-protected video from a BD player or other device, you can enable HDCP input.

* If you want to output copy-protected (HDCP) video or audio, connect a device that supports HDCP.

What's HDCP?

HDCP is copyright-protection technology that prevents unlawful copying of content by encoding the path when sending digital signals from a video playback device to a display monitor or other display equipment.

1. Press the [MENU] button → "System" → select "HDCP", and press the [VALUE] knob.



Value	Explanation
ON	Copyright-protected (HDCP) video can be input. HDCP is also added to the video that is output. * Video/audio from the SDI OUT connectors and the USB STREAM port are not outputted.
OFF	Copyright-protected (HDCP) video cannot be input.

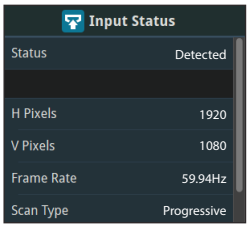
2. Press the [MENU] button to quit the menu.

Checking for HDCP-capable devices

Source devices

You can check the HDCP support status of the source device by pressing the [MENU] button → "Video Input" → "HDMI In 1 (Scaler)–HDMI In 4 (4K Scaler)" → "Input Status".

When inputting copy-protected (HDCP) video, "DETECT" is displayed.



Output devices

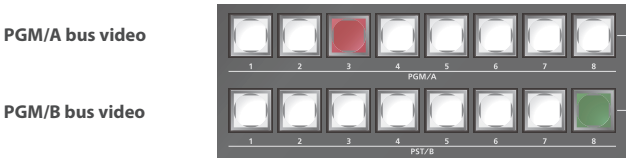
If a device that supports HDCP is connected, "HDCP" is displayed when you press the [MENU] button and select "Video Output" → "HDMI OUT 1–3" → "Output Status".

Switching the video

You can switch between the videos of the PGM/A bus and PST/B bus for the final output.

Setting the operation mode

There are four operation modes for switching the video: the "PGM/PST mode", "A/B mode", "Dissolve mode" and "PGM/PST(16) mode".



PGM/PST mode (factory settings)

The video on the PGM/A bus is always the final output. The video on the PST/B bus is the preview output video (the video to be output next).

Operating the video fader or the [CUT] or [AUTO] button makes the final video output and the preview output video change places.

A/B Mode

When the video fader is operated, the video at the bus position toward which the video fader is flipped becomes the final output. The video of the other bus becomes the preview output video (the video that is output next).

When you operate the [CUT] or [AUTO] button, the video on the PGM/A bus and the video on the PST/B bus alternately become the final output.

Dissolve mode

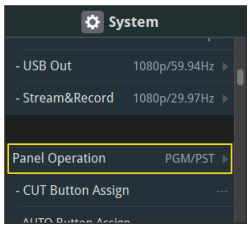
This mode selects the video to output and immediately outputs it to the PGM bus.

Press the [CUT] or [AUTO] button to select what happens when you switch between videos.

PGM/PST(16) mode

In this mode, all 16 buttons including the PGM/A [1]–[8] and PST/B [1]–[8] buttons are used as cross-point buttons for PST/B.

1. Press the [MENU] button → "System" → select "Panel Operation", and press the [VALUE] knob.



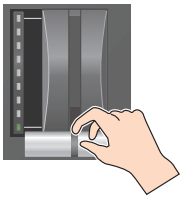
2. Use the [VALUE] knob to select the operating mode, then press the [VALUE] knob.

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

Switching using the PGM/PST mode

Here are the steps when selecting "PGM/PST mode" in the operation mode settings.

1. Flip the video fader all the way upward or downward.

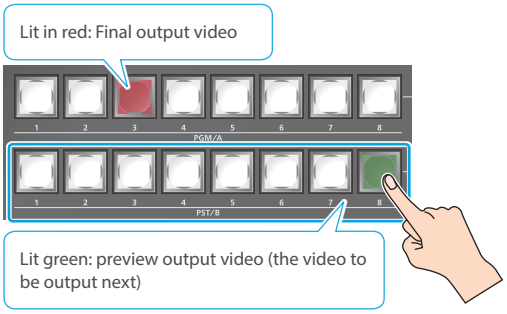


The video on the PGM/A bus is the final output.

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

2. Press one of the PST/B cross-point buttons [1]–[8] and select the preview output video (the video to be output next).

You can check the preview output video in the PVW section of the multi-view.



3. Press the [TRANSITION] button to select the transition effect (MIX, WIPE).

MIX

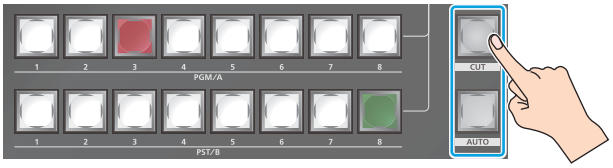
The two pictures are blended together as the video is switched.

WIPE

The original video is broken into by the next video.

Switching with the buttons

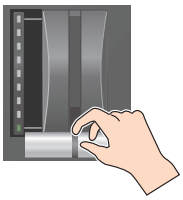
4. Press the [CUT] or [AUTO] button.



Button	Explanation
[CUT] button (Lit red)	The video switches instantly.
[AUTO] button (blink red)	A switch (transition) effect is applied, and the video switches automatically. Set the video transition time from the [MENU] button → "Mix/Wipe" → "Mix" → "Mix Time" or [MENU] button → "Mix/Wipe" → "Wipe" → "Wipe Time".

Switching with the fader

4. Move the video fader in the direction opposite to the direction in step 1.



The video switches according to the movement of the video fader.

MEMO

- You can change the transition pattern by which the mix/wipe occurs.

  ➡"Changing the mix/wipe pattern" (p. 22)

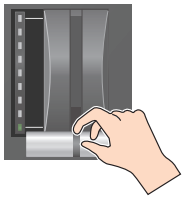
- When you use the [AUTO] or [CUT] buttons to switch video, the actual output might differ from the position of the video fader.

  Operating the video fader while in this state does not change the output until the position of the video fader matches the actual output.

Switching in the A/B mode

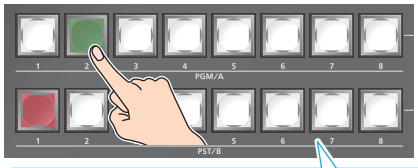
Here are the steps when selecting "A/B mode" (p. 19) in the operation mode settings.

1. Flip the video fader all the way upward or downward.



The video of the bus toward which you pull down the video fader becomes the final output.

2. Press one of the cross-point [1]–[8] buttons at the end where the video fader is not pulled down to select the preview output video (the video to output next).

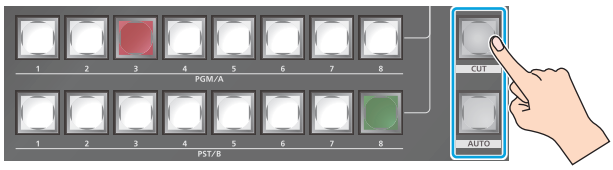


Lit in red: Final output video
Lit Green:

3. Press the [TRANSITION] button to select the transition effect (MIX, WIPE).

Switching with the buttons

4. Press the [CUT] or [AUTO] button.



Button	Explanation
[CUT] button (Lit red)	The video switches instantly.
[AUTO] button (blink red)	A switch (transition) effect is applied, and the video switches automatically. Set the video transition time from the [MENU] button → "Mix/Wipe" → "Mix" → "Mix Time" or [MENU] button → "Mix/Wipe" → "Wipe" → "Wipe Time".

Switching with the fader

4. Move the video fader in the direction opposite to the direction in step 1.

The video switches according to the movement of the video fader.

MEMO

- You can change the transition pattern by which the mix/wipe occurs.

  ➡"Changing the mix/wipe pattern" (p. 22)

- You can change what happens when you press the [CUT] and [AUTO] buttons.

  ➡"Changing the functions of the [CUT] and [AUTO] buttons" (p. 22)

- When you use the [CUT] or [AUTO] buttons to switch video, the actual output might differ from the position of the video fader.

  Operating the video fader while in this state does not change the output until the position of the video fader matches the actual output.

Switching in the Dissolve mode

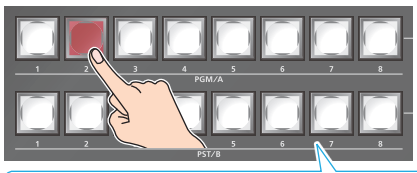
This explains what to do when selecting "Dissolve mode" (p. 19) in the operation mode settings.

1. Press the [TRANSITION] button to select the transition effect (MIX, WIPE).

2. Press the [CUT] or [AUTO] button.

Button	Explanation
[CUT] button (Lit red)	The video switches instantly.
[AUTO] button (blink red)	A switch (transition) effect is applied, and the video switches automatically. Set the video transition time from the [MENU] button → "Mix/Wipe" → "Mix" → "Mix Time" or [MENU] button → "Mix/Wipe" → "Wipe" → "Wipe Time".

3. Press the cross-point buttons to select the final output video.

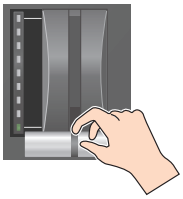


Lit in red: Final output video
Blinking red: when the transition effect is applied

Switching using the PGM/PST(16) mode

Here are the steps when selecting "PGM/PST(16) mode" (p. 19) in the operation mode settings.

1. Flip the video fader all the way upward or downward.



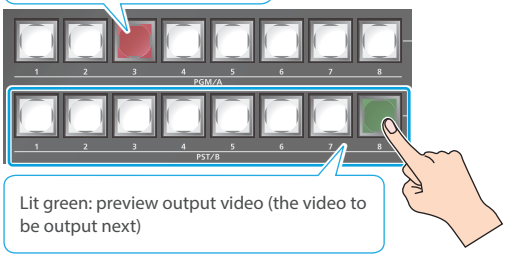
The video on the PGM/A bus is the final output.

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

2. Press the PST/A cross-point [1]–[8] and PST/B cross-point [1]–[8] buttons to select the preview output video (the video to be output next).

You can check the preview output video in the PVW section of the multi-view.

Lit in red: Final output video

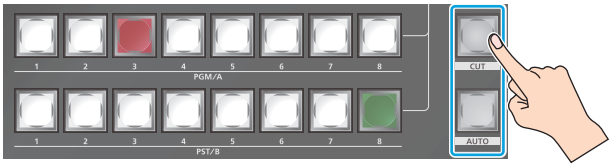


Lit green: preview output video (the video to be output next)

3. Press the [TRANSITION] button to select the transition effect (MIX, WIPE).

Switching with the buttons

4. Press the [CUT] or [AUTO] button.



Button	Explanation
[CUT] button (Lit red)	The video switches instantly.
[AUTO] button (blink red)	A switch (transition) effect is applied, and the video switches automatically. Set the video transition time from the [MENU] button → "Mix/Wipe" → "Mix" → "Mix Time" or [MENU] button → "Mix/Wipe" → "Wipe" → "Wipe Time".

Switching with the fader

4. Move the video fader in the direction opposite to the direction in step 1.

The video switches according to the movement of the video fader.

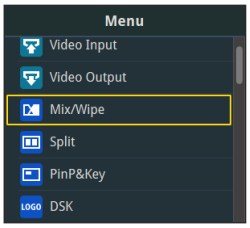
MEMO

- You can change the transition pattern by which the mix/wipe occurs.
  ➡"Changing the mix/wipe pattern" (p. 22)
- You can change what happens when you press the [CUT] and [AUTO] buttons.
  ➡"Changing the functions of the [CUT] and [AUTO] buttons" (p. 22)
- When you use the [CUT] or [AUTO] buttons to switch video, the actual output might differ from the position of the video fader.
  Operating the video fader while in this state does not change the output until the position of the video fader matches the actual output.

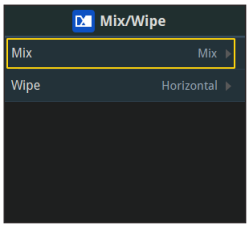
Changing the mix/wipe pattern

You can change the mix/wipe transition pattern, wipe direction and other properties.

1. Press the [MENU] button → select "Mix/Wipe", and press the [VALUE] knob.



2. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Mix	Specifies the transition pattern for mix and the video transition time.
Wipe	Specifies the transition pattern for wipe and the video transition time.

3. Use the [VALUE] knob to select a menu item, and press the [VALUE] knob.

4. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

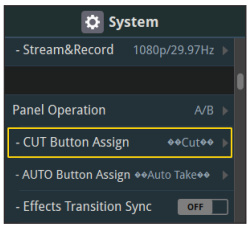
5. Press the [MENU] button to quit the menu.

Changing the functions of the [CUT] and [AUTO] buttons

You can change what happens when you press the [CUT] and [AUTO] buttons.

* In any mode except for A/B (p. 19), the functions of the [CUT] and [AUTO] buttons are fixed.

1. Press the [MENU] button → "System" → select "CUT Button Assign" or "AUTO Button Assign", and press the [VALUE] knob.



2. Use the [VALUE] knob to select the button function, and press the [VALUE] knob.

Value	Explanation
CUT Button Assign	
▲Auto Take	When the video of the PST/B bus is selected, this switches to the video of the PGM/A bus.
▲Auto Take▼	Switches between the PGM/A bus and PST/B bus videos.
▲Cut	When the video of the PST/B bus is selected, this switches to the video of the PGM/A bus as a cut.
▲Cut▼	Automatically switches between PGM/A bus and PST/B bus videos as a cut.
▲Transform	When the video of the PST/B bus is selected, this switches to the video of the PGM/A bus as a cut while you're holding down the button.
AUTO Button Assign	
Auto Take▼	When the video of the PGM/A bus is selected, this switches to the video of the PST/B bus.
▲Auto Take▼	Switches between the PGM/A bus and PST/B bus videos.
Cut▼	When the video of the PGM/A bus is selected, this switches to the video of the PST/B bus as a cut.
▲Cut▼	Automatically switches between PGM/A bus and PST/B bus videos as a cut.
Transform▼	When the video of the PGM/A bus is selected, this switches to the video of the PST/B bus as a cut while you're holding down the button.

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

Switching the video automatically (auto switching)

The video of Input 1–8 or of scene memories (p. 76) can be switched automatically (the auto switching function).

You can make operation easier by letting the video switch automatically.

About the operation mode

Auto switching provides six operation modes that you can select as appropriate for your situation: "input scan", "scene memory scan", "beat sync", "video follows audio", "PinP&Key scan" and "DSK scan".

Switching at a specified interval (input scan)

This automatically switches the Input 1–8 video when a specified length of time elapses. You can change the duration that each video is shown, and also switch randomly between videos.

This is convenient when you want to switch between video signals of multiple cameras, for example when live-streaming a singer-instrumentalist.

* If there is no video input, this is skipped.

Switching scene memories (scene memory scan)

This automatically recalls between scene memories 1–32. The video and audio are switched according to the settings that are saved in each scene memory.

* Scene memories in which no settings have been saved are skipped.

Switching in sync with the beat of the music (beat sync)

This detects the beat of the song, and automatically switches the video at intervals of the beat. This lets you create video transitions that are synchronized with the music, for example when live-streaming a DJ performance or a musical performance.

Switching according to the mic volume (video follows audio)

This detects the audio that is input from a mic, and automatically switches to the specified video according to the volume. For example, if you're streaming a talk show or a conversation, you can use this to switch between a close-up of the individual who is speaking and a wide shot of both people when neither person is speaking.

Switching between picture-in-picture (PinP) content (PinP&Key scan)

The inset screen video automatically changes after a specified length of time.

You can change the duration that each video is shown, and also switch randomly between videos.

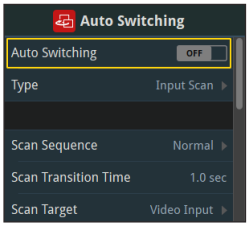
Switching between downstream keyer (DSK) content (DSK scan)

The caption video automatically changes after a specified length of time.

You can change the duration that each video is shown, and also switch randomly between videos.

Turning the auto switching function on/off

1. **Press the [MENU] button → "Auto Switching" → select "Auto Switching" and press the [VALUE] knob.**



2. **Use the [VALUE] knob to select "ON" or "OFF", and press the [VALUE] knob.**

3. **Press the [MENU] button to quit the menu.**

MEMO

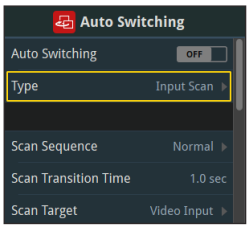
You can assign the function for turning auto switching on/off to the assignable pads (p. 97).

With the factory settings, the on/off function for auto-switching is assigned to pad [2] of bank B.

Setting the operation mode

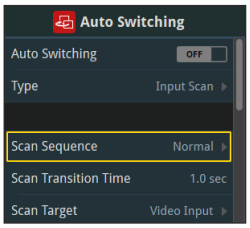
Input scan

1. Press the [MENU] button → "Auto Switching" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "Input Scan", and then press the [VALUE] knob.

3. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Scan Sequence	Specifies the order in which video signals are shown. **Normal:** Switches in the order of Input 1→8. **Reverse:** Switches in the order of Input 8→1. **Random:** Switches randomly.
Scan Transition Time	This sets the video transition time.
Scan Target	Sets the video to which auto switching is applied. **Video Input:** Final output video and preview video PinP&Key 1, 2: PinP and key layer (inset screen) video DSK: DSK layer (inset screen) video
Input 1–8 Time	Specifies the time that the video is shown. Turn this "OFF" to skip.

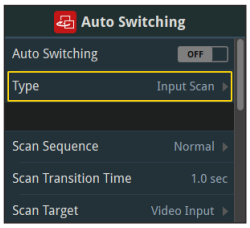
* For details on the parameter, refer to "22: Auto Switching" (p. 144).

4. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

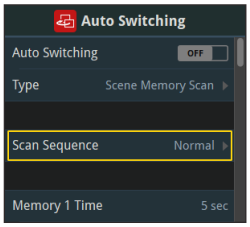
Scene memory scan

1. Press the [MENU] button → "Auto Switching" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "Scene Memory Scan", and press the [VALUE] knob.

3. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Scan Sequence	Specifies the order in which scene memories are switched. **Normal:** Switches in the order of scene memory 1→32. **Reverse:** Switches in the order of scene memory 32→1. **Random:** Switches randomly.
Memory 1–32 Time	Specifies the time it takes to switch to the next scene memory. Turn this "OFF" to skip.

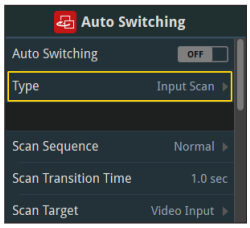
* For details on the parameter, refer to "22: Auto Switching" (p. 144).

4. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

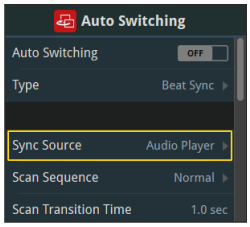
5. Press the [MENU] button to quit the menu.

Beat sync

1. Press the [MENU] button → "Auto Switching" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "Beat Sync", and then press the [VALUE] knob.
3. Press the [EXIT] button to return to the previous screen.
4. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Sync Source	Sets the input audio that's synchronized with the video.
Scan Sequence	Specifies the order in which video signals are shown. **Normal:** Switches in the order of Input 1→8. **Reverse:** Switches in the order of Input 8→1. **Random:** Switches randomly.
Scan Transition Time	This sets the video transition time.
Scan Cycle	Sets the beat number on which the video switches to the next one.
Scan Target	Sets the video to which auto switching is applied. **Video Input:** Final output video and preview video PinP&Key 1, 2: PinP and key layer (inset screen) video DSK: DSK layer (inset screen) video
Input 1–8	Sets the target for the video transition. Turn this "OFF" to skip.

* For details on the parameter, refer to "22: Auto Switching" (p. 144).

5. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
6. Press the [MENU] button to quit the menu.

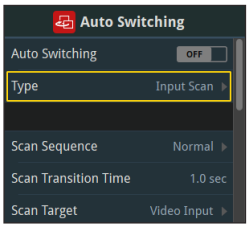
MEMO

You can assign the Beat Sync Tap function for auto switching to the assignable pads, which lets you set the timing of the beats and specify the BPM by tapping the button (p. 97).

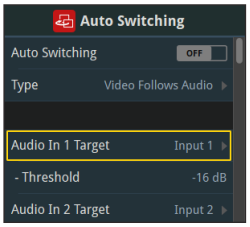
The assignable pads blink in time with the current BPM.

Video follows audio

1. Press the [MENU] button → "Auto Switching" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "Video Follows Audio", and press the [VALUE] knob.
3. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



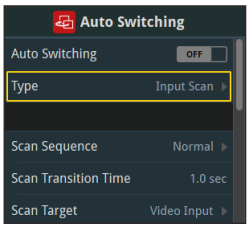
Menu item	Explanation
Audio In 1–3/4 Target, USB In Target, Bluetooth In Target, Audio Player Target, HDMI 1–4 Target, SDI 1–4 Target, Video Player/SRT In Target	Specifies the video that is output when audio is detected.
Threshold	Specifies the reference level at which the Video Follows Audio function operates. When audio that exceeds this threshold is detected, the video is switched.
Audio Mix Target	Specifies the video that is output when audio is detected in multiple mics. If this is "Off", video is switched in the order in which audio is detected.
Audio Silent Target	Specifies the video that is output when there is no audio input from any mic. If this is "Off", the last selected video continues to be output.
Audio Redetection Time	Specifies the time after the video has switched until audio detection resumes.
Scan Transition Time	Sets the video transition time.

* For details on the parameter, refer to "22: Auto Switching" (p. 144).

4. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
5. Press the [MENU] button to quit the menu.

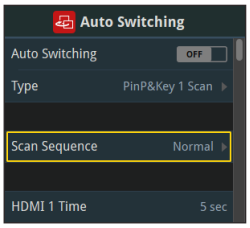
PinP&Key scan

1. Press the [MENU] button → "Auto Switching" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "PinP&Key 1, 2 Scan", and press the [VALUE] knob.

3. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Scan Sequence	Specifies the order in which video signals are shown. **Normal:** Switches sequentially between HDMI 1→4, SDI 1→4, Still 1→32, V.Player or SRT in. Reverse: Switches sequentially between V.Player or SRT In, Still 32→1, SDI 4→1 and HDMI 4→1. **Random:** Switches randomly.
HDMI 1–4 Time	Specifies the time that the video is shown.
SDI 1–4 Time	Specifies the time that the video is shown.
Still 1–32 Time	Specifies the time that the still image is shown.
V.Player Time (*1)	Specifies the time that the video is shown.
SRT In Time (*2)	Specifies the time that the SRT input video is shown.

(*1) When Type (p. 135) = Video Player

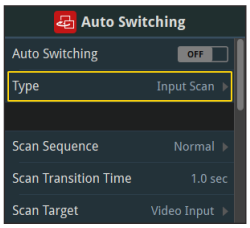
(*2) When Type (p. 135) = SRT In

4. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

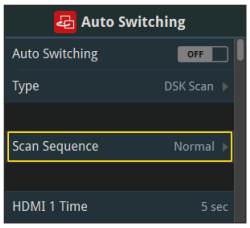
DSK scan

1. Press the [MENU] button → "Auto Switching" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "DSK Scan", and then press the [VALUE] knob.

3. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Scan Sequence	Specifies the order in which video signals are shown. **Normal:** Switches sequentially between HDMI 1→4, SDI 1→4, Still 1→32, V.Player or SRT in. Reverse: Switches sequentially between V.Player or SRT In, Still 32→1, SDI 4→1 and HDMI 4→1. **Random:** Switches randomly.
HDMI 1–4 Time	Specifies the time that the video is shown.
SDI 1–4 Time	Specifies the time that the video is shown.
Still 1–32 Time	Specifies the time that the still image is shown.
V.Player Time (*1)	Specifies the time that the video is shown.
SRT In Time (*2)	Specifies the time that the SRT input video is shown.

(*1) When Type (p. 135) = Video Player

(*2) When Type (p. 135) = SRT In

4. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

Importing a still image

You can load a still image, and output it in the same way as video (p. 28) or use it as a source for DSK compositing (p. 41). There are two ways to load a still image: you can load from external storage media (either an SD card or a USB flash drive), or you can capture the image from the input video.

You can save up to 32 still images on this unit.

* When still images are saved on this unit, the startup time takes longer according to the number of still images saved.

Loading a still image from external storage

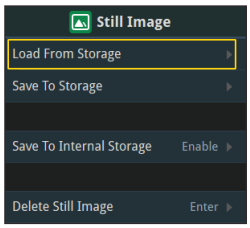
Here's how to load a still image from storage into the unit.

1. Save the still image in the root directory of the SD card or USB flash drive.

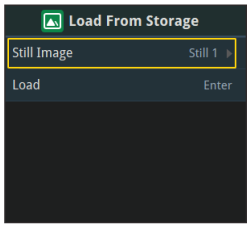
2. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

3. [MENU] button → "Still Image" → "Load From Storage" → select "Still Image", and press the [VALUE] knob.



4. Use the [VALUE] knob to select the loading destination for the still image (Still 1–32), and press the [VALUE] knob.

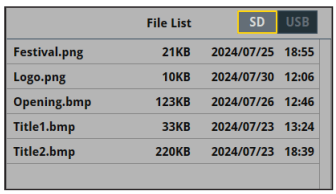


A "✱" symbol is displayed for memory where a still image is already saved.

5. Press the [EXIT] button to return to the previous screen.

6. Use the [VALUE] knob to select "Load", and press the [VALUE] knob.

A list of the still images in the storage is shown.

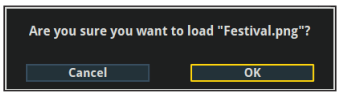


* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

7. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

8. Use the [VALUE] knob to select the still image file you want to load, and press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

9. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The still image is imported into the unit. When the operation is finished, the message "Completed." appears.

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

MEMO

You can set the method of saving still images to "temporarily save". When you turn off the power, the loaded still image is deleted.

From the [MENU] button → "Still Image", set "Save To Internal Storage" to "Disable", and then load the still image.

NOTE

- The still image is scaled to the output format size.
- When using an SD card or USB flash drive for the first time, you must format it using the V-80HD (p. 13, p. 13).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Depending on the SD card or USB flash drive, it may take some time to be recognized.

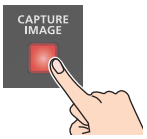
Formats supported for importing

Format	Bitmap file (.bmp), 24-bit color, uncompressed
	PNG file (.png), 24-bit color * Alpha channel supported
	JPEG file (.jpg, .jpeg), 24-bit color
Resolution	In conformity with system format (p. 14)
File name	No more than 64 single-byte alphanumeric characters The extension ".bmp", ".png", ".jpg", or ".jpeg" must be added.

Capturing a still image from input/output video

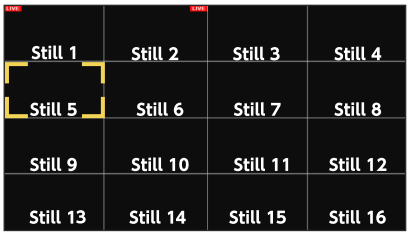
Here's how to capture a still image from the input/output video.

1. Press the [CAPTURE IMAGE] button to turn on (lit).



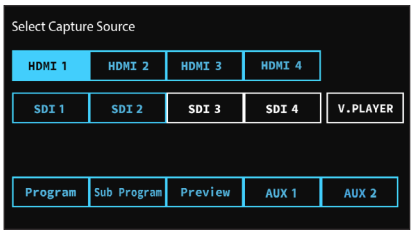
Capture Image screen appears.

2. Use the [VALUE] knob to select the save destination memory (Still 1–32) for the still image, and press the [VALUE] knob.



* If you decide to cancel, press the [EXIT] button.

3. Use the [VALUE] knob to select the input/output video to capture, and press the [VALUE] knob.



Capturing is carried out. When the operation is finished, the message "Completed." appears.

4. Press the [CAPTURE IMAGE] button to exit the operation.

MEMO

- You can set the method of saving still images to "temporarily save". When you turn off the power, the captured still image is deleted.

  From the [MENU] button → "Still Image", set "Save To Internal Storage" to "Disable", and then capture the image.

- If you capture when HDCP (p. 18) is on, the still image that is created is handled in the same way as HDCP-protected video. It cannot be used if HDCP is off.

Outputting a loaded still image

You can assign a still image to the cross-point buttons and output it in the same way as with video, or momentarily stop the final output to output the still image.

* When outputting a still image (.png) with an alpha channel, the alpha channel (transparency) data is ignored.

Assigning a still image to the cross-point buttons

You can assign the still images loaded into this unit to the cross-point buttons, and output them in the same way as with video.

1. Load a still image into this unit as described by the following procedures.

➡"Loading a still image from external storage" (p. 27)
➡"Capturing a still image from input/output video" (p. 28)

2. Follow the steps in "Assigning video sources" (p. 15) to assign a still image to the cross-point buttons.

3. Follow the steps in "Switching the Video" ("Switching the video" (p. 19)) to output the still image.

Inserting a still image in the final output

You can pause the final output, and output a still image of your choice as a cut.

Still images can be directly output without being assigned to the cross-point buttons.

* The same still image as the final output is also output to the preview.

Use the following methods to output still images.

Using the assignable pads

➡"Assigning functions to the assignable pads" (p. 97)

Using a footswitch

➡"Using a footswitch" (p. 101)

Using an expression pedal

➡"Using an expression pedal" (p. 102)

Inputting an external control signal (GPI)

➡"Inputting a control signal" (p. 103)

MEMO

Outputting a still image with a fade-in effect

You can use the [OUTPUT FADE] button to add a fade-in effect and output the still image.

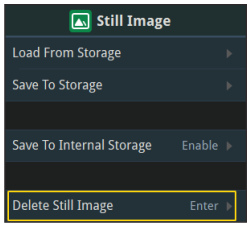
Assign the still image to the AUX 1 and AUX 2 buses (p. 18) and edit the function for the [OUTPUT FADE] button as shown below.

Press the [MENU] button → "System" → set Output Fade Assign "Video Fade" to "AUX 1" or "AUX 2".

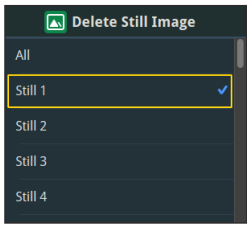
Deleting a still image

Here's how to delete the still image that's saved in the unit.

1. Press the [MENU] button → "Still Image" → select "Delete Still Image", and press the [VALUE] knob.

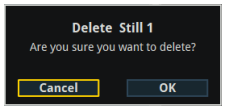


2. Use the [VALUE] knob to select the still image (All, Still 1–32) you want to delete, and press the [VALUE] knob.



A "✱" symbol is displayed for memory where a still image is already saved.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

3. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The still image is deleted. When the operation is finished, the message "Completed." appears.

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

Saving a still image to a SD card or USB flash drive

Here's how a still image captured from the input/output video (p. 28) can be saved to a storage (SD card or USB flash drive).

* The still image is saved to the "Roland/V-80HD/still" folder.
* You can't export still images that were created while HDCP (p. 18) was set to "ON".

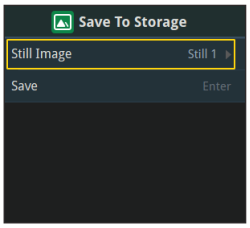
NOTE

- When using an SD card or USB flash drive for the first time, you must format it using the V-80HD (p. 13, p. 13).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Depending on the SD card or USB flash drive, it may take some time to be recognized.

1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "Still Image" → "Save To Storage" → select "Still Image", and press the [VALUE] knob.



A "✱" symbol is displayed for memory where a still image is already saved.

MEMO

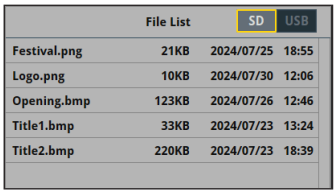
"(HDCP)" is indicated for still images that were created when HDCP was on.

3. Use the [VALUE] knob to select the still image (Still 1–32) you want to save, and press the [VALUE] knob.

4. Press the [EXIT] button to return to the previous screen.

5. Select "Save" and press the [VALUE] knob.

The still images on the storage media (in the "Still" folder) are shown as a list.



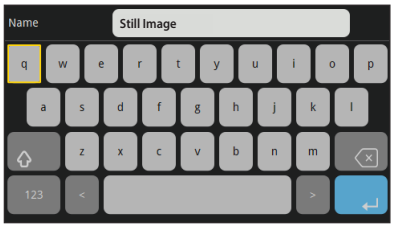
* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to write to.

6. Select "File Name" and press the [VALUE] knob.

This brings up the software keyboard for input.

7. Enter the file name.

* You can input up to 32 characters.



8. Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.

9. Select the file type.

① Use the [VALUE] knob to select "File Type", and press the [VALUE] knob.

② Use the [VALUE] knob to select "BITMAP", "PNG", or "JPEG", and press the [VALUE] knob.

10. Use the [VALUE] knob to select "Save", and then press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

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

MEMO

Overwriting a still image

When you select a filename for an existing still image on the screen in step 5, the filename in the filename list is used. You can overwrite the name.

Importing a video

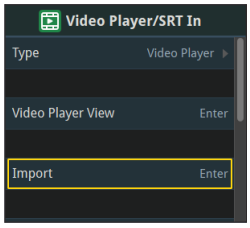
Here's how to load a video from your storage media into this unit. You can play back the videos that you've loaded, and output them in the same way as with regular video signals.

1. Save the video in the root directory of the SD card or USB flash drive.

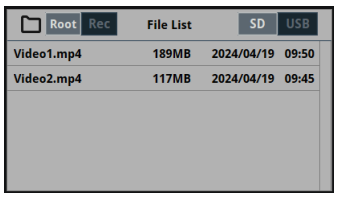
2. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

3. Press the [MENU] button → "Video Player/SRT In" → select "Import", and press the [VALUE] knob.



A list of the videos in the storage is shown.



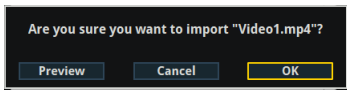
* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.
* Select "Root" or "Rec" in the upper left part of the screen to switch between folders from which the files are loaded (SD only).

4. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

5. Use the [VALUE] knob to select the video file you want to load, and press the [VALUE] knob.

A confirmation message appears.

* Select "Preview" and press the [VALUE] knob to play the video.



* If you decide to cancel, press the [EXIT] button.

6. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The video is imported into the unit. When the operation is finished, the message "Completed." appears.

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

NOTE

- The video is scaled to the output format size.
- When using an SD card or USB flash drive for the first time, you must format it using the V-80HD (p. 13, p. 13).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Depending on the SD card or USB flash drive, it may take some time to be recognized.

Formats supported for importing

Format	MP4 File (.mp4) H.264, AAC (48 kHz) Average bit rate of 20 Mbps or less
Resolution	Maximum 1920 x 1080 pixels
File name	Maximum of 64 single-byte alphanumeric characters, including the file extension

* Videos can only be imported from storage media. These videos are not saved to this unit.

Outputting a loaded video

You can assign videos to the cross-point buttons and output them in the same way as with video, or momentarily stop the final output to output the video.

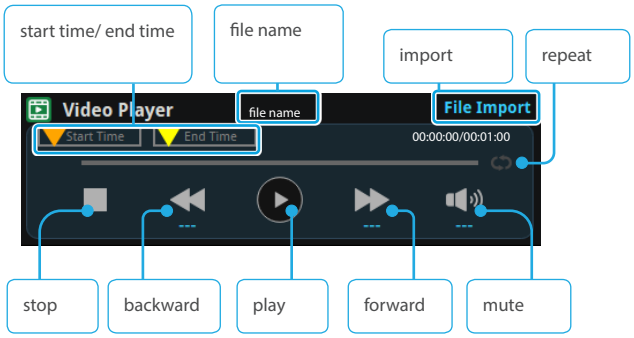
Playing back a video (with the video player)

Use the video player to play back the videos you've loaded.

* You can't input SRT video (p. 33) while using the video player.

1. **Press the [MENU] button → "Video Player/SRT In" → select "Type" and press the [VALUE] knob.**
2. **Select "Video Player" and press the [VALUE] knob.**
3. **Press the [EXIT] button to return to the previous screen.**
4. **Use the [VALUE] knob to select "Video Player View", and press the [VALUE] knob.**

   The Video Player screen appears.



5. **Use the [VALUE] knob to configure the video player.**

Menu item	Explanation
File Import	Loads the video.
File Name	Shows the filename of the video that was loaded.
Start Time	Sets the playback start point of the video.
End Time	Sets the playback end point of the video.
Skip Forward Time	Sets how much the video fast-forwards (the amount of time) when you press "▶▶".
Skip Backward Time	Sets how much the video fast-forwards (the amount of time) when you press "◀◀".
Level	Adjusts the playback volume of the video.
Repeat	Switches repeat playback on/off.

6. **Use the [VALUE] knob to select "▶", and then press the [VALUE] knob.**

   The video plays back according to the settings.

MEMO

You can also assign the video player function to the assignable pads to access the Video Player screen (p. 97).

With the factory settings, the video player is assigned to pad [6] of bank B.

Assigning a video to the cross-point buttons

Here's how to assign a video loaded into this unit to the cross-point buttons, and output the video in the same way as with still images.

1. **Follow the steps in "Importing a video" (p. 31) to load the video into this unit.**
2. **Follow the steps in "Assigning video sources" (p. 15) to assign the video to a cross-point button.**
3. **Follow the steps in "Switching the video" (p. 19) to output the video.**

Inserting a video into the final output

You can pause the final output, and output a video of your choice as a cut.

Video can be directly output without being assigned to the cross-point buttons.

* The same video as the final output is also output to the preview.

Use the following methods to output video.

Using the assignable pads

➡"Assigning functions to the assignable pads" (p. 97)

Using a footswitch

➡"Using a footswitch" (p. 101)

Using an expression pedal

➡"Using an expression pedal" (p. 102)

Inputting an external control signal (GPI)

➡"Inputting a control signal" (p. 103)

NOTE

- If either the streaming and recording format or the file played by the video player exceeds 1080/30p, the streaming, recording and video player functions cannot be used simultaneously.
- If the bitrate setting for Streaming and Recording and the bitrate of the file played on Video Player exceeds 20,000 kbps, Streaming and Recording and Video player cannot be used simultaneously.

Inputting SRT video

SRT video input is supported on the V-80HD. SRT video signals that are sent over a network can be input into the V-80HD and treated as video content.

This section describes how to make the necessary connections and input the SRT content, using an SRT video output device connected to your LAN as an example.

* You can't use the video player (p. 32) when SRT video is being input.

Network requirements

PTZ camera that supports SRT

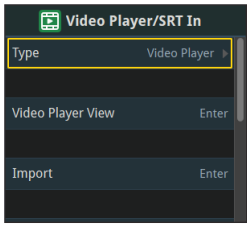
V-80HD

* To input video via a network, the IP address, subnet mask and default gateway must be configured.
These settings are usually retrieved from the DHCP server and assigned.

Assigning a SRT input video channel to a cross-point button

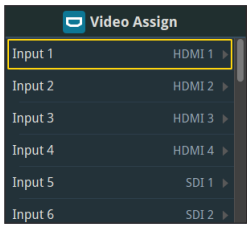
This shows how to assign the channel of the SRT video to a cross-point button before you input the SRT video.

1. Press the [MENU] button → "Video Player/SRT In" → select "Type" and press the [VALUE] knob.



2. Select "SRT In" and press the [VALUE] knob.

3. Press the [MENU] button → "Video Assign" → select "Input 1"–"Input 8", and press the [VALUE] knob.



4. Use the [VALUE] knob to select "SRT In", and then press the [VALUE] knob.

The selected cross-point button is assigned to the SRT video input.

Connecting an SRT-compatible device to input SRT video

The SRT video signal can be connected from either the transmitting or receiving device, regardless of the orientation of the video signal.

The device that's waiting for the connection is in "listener" mode, and the device that's initiating the connection is in "caller" mode. Depending on the device, one or both modes are supported.

The V-80HD supports both listener and caller modes.

Connecting in caller mode

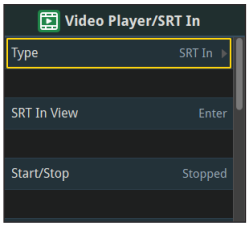
In caller mode, configure the receiving device (V-80HD) to match the configuration of the transmitting device.

Here's how to make an SRT connection from the V-80HD to the transmitting device and input the video to the V-80HD.

1. Set the SRT mode of the transmitting device to listener mode, and input the other settings.

* For details on the settings and method of operation, refer to the Owner's Manual for the transmitting device.

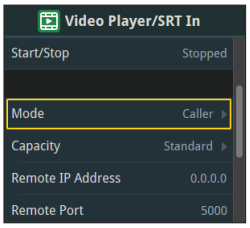
2. Press the [MENU] button → "Video Player/SRT In" → select "Type" and press the [VALUE] knob.



3. Select "SRT In" and press the [VALUE] knob.

4. Press the [EXIT] button to return to the previous screen.

5. Use the [VALUE] knob to select "Mode", and then press the [VALUE] knob.



6. Select "Caller" and press the [VALUE] knob.

7. Press the [EXIT] button to return to the previous screen.

8. Use the [VALUE] knob to change the setting as shown below.

Parameter	Explanation
Capacity	Sets the maximum bit rate at which a video signal can be received.
Remote IP Address	Sets the IP address of the SRT transmitting device.
Remote Port	Sets the port number of the SRT transmitting device.
Latency	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence. Set this if necessary.
Stream ID	If a stream ID is set for the transmitting device, set the stream ID to this same ID. * If the stream IDs on the sending and receiving devices do not match, the video cannot be transmitted or received.
Passphrase	If encryption is set on the transmitting device, set this to the same passphrase as the one used on the transmitting device. * If the passphrases of the transmitting and receiving devices don't match, the video cannot be transmitted or received.

MEMO

You can also configure this using the Web app.

The V-80HD must be connected to the Internet before you use the Web app.

1. Use the [VALUE] knob to select "Use Web Application", and press the [VALUE] knob.

A 2D barcode (URL) appears on this unit's display.

2. Open the displayed URL on your computer or smartphone.

3. Configure the parameters on your computer or smartphone, and press the [SUBMIT] button.

The settings are applied to the V-80HD.

9. Set the transmitting device to SRT listener mode.

10. Use the [VALUE] knob to select "Start/Stop", and then press the [VALUE] knob.

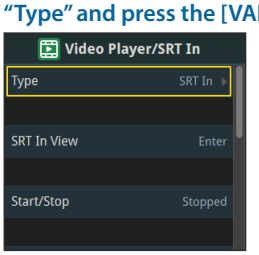
The video from the transmitting device is shown in the multi-view.

Connecting in listener mode

This shows how to configure the V-80HD in listener mode to listen for SRT connections.

This connects the transmitting device to the V-80HD via SRT and input the video to the V-80HD.

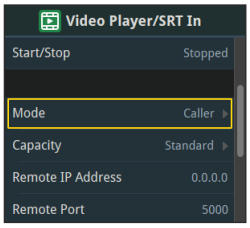
1. Press the [MENU] button → "Video Player/SRT In" → select "Type" and press the [VALUE] knob.



2. Select "SRT In" and press the [VALUE] knob.

3. Press the [EXIT] button to return to the previous screen.

4. Use the [VALUE] knob to select "Mode", and then press the [VALUE] knob.



5. Select "Listener" and press the [VALUE] knob.

6. Press the [EXIT] button to return to the previous screen.

7. Use the [VALUE] knob to change the setting as shown below.

Parameter	Explanation
Local Port	Sets the port number of the SRT transmitting device.
Latency	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence. Set this if necessary.
Passphrase	If encryption is set on the transmitting device, set this to the same passphrase as the one used on the transmitting device. * If the passphrases of the transmitting and receiving devices don't match, the video cannot be transmitted or received.

* In listener mode, you do not need to set the Stream ID.

MEMO

You can also configure this using the Web app.

The V-80HD must be connected to the Internet before you use the Web app.

1. Use the [VALUE] knob to select "Use Web Application", and press the [VALUE] knob.

A 2D barcode (URL) appears on this unit's display.

2. Open the displayed URL on your computer or smartphone.

3. Configure the parameters on your computer or smartphone, and press the [SUBMIT] button.

The settings are applied to the V-80HD.

8. Set the SRT mode of the transmitting device to caller mode.

* For details on the settings and method of operation, refer to the Owner's Manual for the transmitting device.

9. Set the caller mode of the transmitting device based on the settings in step 7.

* Press the [MENU] button → "Network" → "Network Information" to check the IP address that's set for the transmitting device.

10. Use the [VALUE] knob to select "Start/Stop", and then press the [VALUE] knob.

The unit enters SRT listening mode.

11. Perform the operations for connecting on the transmitting device.

The video from the transmitting device is shown in the multi-view.

Stopping the SRT connection

The SRT connection can be stopped from either the transmitting or receiving device.

Follow the steps on the V-80HD as shown below to stop the connection.

1. [MENU] button → "Video Player/SRT In" → select "Import", and press the [VALUE] knob.

* To stop the connection from the transmitting device, refer to the owner's manual of that device.

Freezing the input video (freeze)

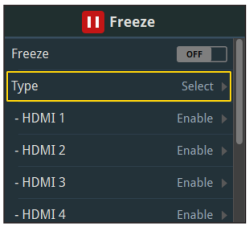
Here's how to temporarily freeze the input video (freeze function).

You can apply transition effects during a video freeze.

Setting the operation mode

There are two freeze modes: the "All mode" for freezing all input video, and the "Select mode" that freezes only the input video you specify. Set the mode that matches your needs.

1. Press the [MENU] button → "Freeze" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "All" or "Select", and press the [VALUE] knob.

Value	Explanation
All	Freezes all video that is being input.
Select	Freezes only the specified input video.

If "Select" is selected

3. Use the [VALUE] knob to select "HDMI 1"–"SDI 4", and then press the [VALUE] knob.

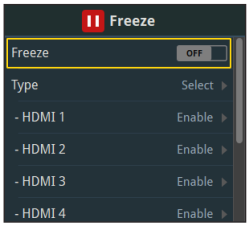
4. Use the [VALUE] knob to select "Enable" or "Disable", and press the [VALUE] knob.

Value	Explanation
Enable	The input video freezes.
Disable	The input video does not freeze.

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

Freezing the input video

1. Press the [MENU] button → "Freeze" → select "Freeze", and press the [VALUE] knob.



The freeze function turns on, and the input video freezes.

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

MEMO

You can assign the freeze function to an assignable pad to turn the video on/off (p. 97).

With the factory settings, the freeze function is assigned to pad [1] of bank B.

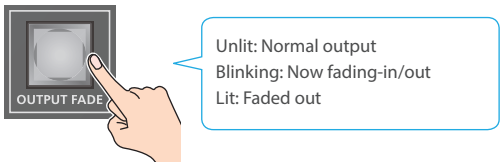
Fading-in/out the final output video

Here's how to perform a fade-out from the final output video to a black screen, or a fade-in from a black screen to the final output video.

A scene that you don't want to output as video can be changed to a black screen.

* The final output video and audio fades in/out together when using the factory settings.
* The fade-in/out effect is applied only to the final output.

1. Press the [OUTPUT FADE] button.



The final output video fades-out to a black screen.

When the fade-out is complete, the [OUTPUT FADE] button lights up.

2. To perform a fade-in, press the [OUTPUT FADE] button again.

The [OUTPUT FADE] button blinks, and final output begins.

When the fade-in is complete, the [OUTPUT FADE] button goes dark.

MEMO

- You can use a white screen or the video from the AUX bus to add a fade-in/out effect.

  To make this setting, press the [MENU] button → "System" → Output Fade Assign "Video Fade".
- To create a fade-in/out effect for the video without changing the volume, press the [MENU] button → "System" → set Output Fade Assign "Audio Fade" to "OFF".
- To specify the fade-in/out time, press the [MENU] button → "System" → "Output Fade Time".

Video composition operations

Compositing video with split

Here's how to composite two videos in dividing the screen into left/right or upper/lower.

Positioning a video

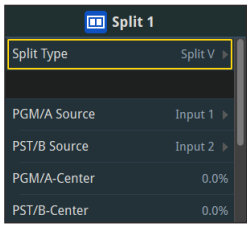
Left or upper: video on the PGM/A bus

Right or lower: video on the PST/B bus

Configuring the screen layout

You can configure the screen layout separately for the [SPLIT 1] and [SPLIT 2] buttons.

1. Press the [MENU] button → "Split" → "Split 1" or "Split 2" → select "Split Type", and press the [VALUE] knob.



2. Turn the [VALUE] knob to select "Split V" or "Split H", and press the [VALUE] knob.

Value	Explanation
Split V	This vertically crops the center section of the video (split left/right). 
Split H	This horizontally crops the center section of the video (split upper/lower). 

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

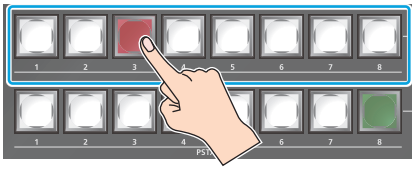
MEMO

You can change the color and width of the boundary.

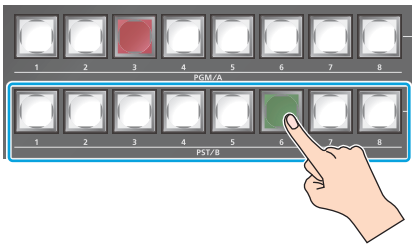
To make this setting, press the [MENU] button → "Split" → "Split 1" or "Split 2" → "Border Color", "Border Width".

Compositing using split

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

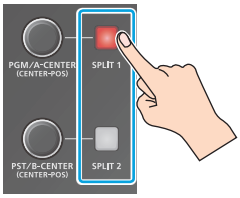


2. Press a PST/B cross-point [1]–[8] button to select the video you want to display below or on the right.

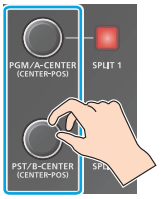


3. Press the [SPLIT 1] or [SPLIT 2] button to turn on split compositing (the button lights up).

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



4. Adjust the position of the video or border with the [PGM/A-CENTER] or [PST/B-CENTER] knob.

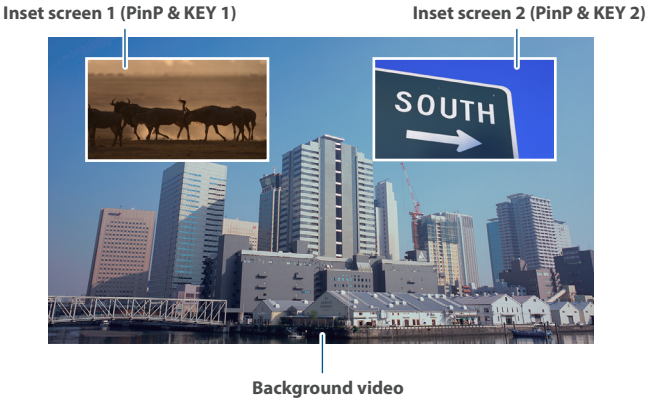


Knob	Explanation
[PGM/A-CENTER]	Adjusts the horizontal and vertical positions of the video placed on the left and top sides. **Turn while pressing: Adjusts the position of the border.**
[PST/B-CENTER]	Adjusts the horizontal and vertical positions of the video placed on the right and bottom sides. **Turn while pressing: Adjusts the position of the border.**

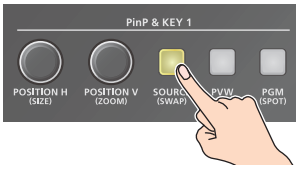
5. To turn off split compositing, press the [SPLIT 1] or [SPLIT 2] button again.

Compositing video with picture-in-picture (PinP)

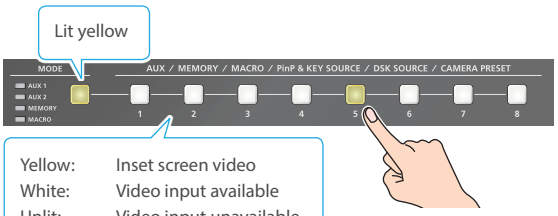
This composites video in an inset screen over a background video. You can use PinP & Key 1 or 2 at the same time to display two inset screens.
This example shows how to composite video using "PinP & Key 1". The operation is the same when using "PinP & Key 2".



1. Press the PinP & KEY 1 [SOURCE] button to turn it on (the button lights up).

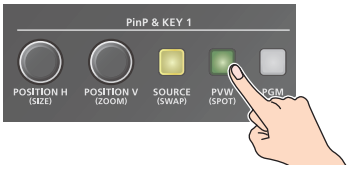


2. Press the PinP & KEY [1]–[8] buttons to select the video you want to use for the inset screen.



* When selecting a video not assigned to Input 1–8, set this from the [MENU] button → "PinP&Key" → "PinP&Key 1" → "Source".

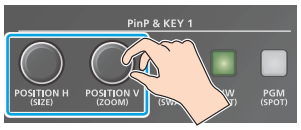
3. Press the PinP & KEY 1 [PVW] button to turn on the inset screen preview output (the button lights up).



The inset screen appears in the PVW section of the multi-view, allowing you to check the inset screen's location and size.

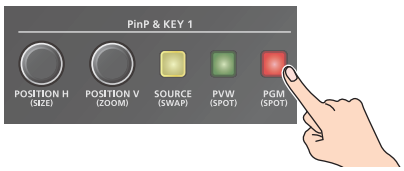
At this stage, the final output has not yet been changed.

4. Use the PinP & KEY 1 [POSITION H] [POSITION V] knobs to adjust the inset screen.



Knob	Explanation
[POSITION H]	Adjusts the horizontal position of the inset screen. **Press and rotate: Adjusts the size of the inset screen.**
[POSITION V]	Adjusts the vertical position of the inset screen. **Press and rotate: Adjusts the zoom ratio of the inset screen video.**

5. Press the PinP & KEY 1 [PGM] button to turn on PinP compositing (lit).



The inset screen is displayed on the final output.

6. To turn off PinP compositing, press the PinP & KEY 1 [PGM] button once again.

Turning PinP/DSK composition on/off in tandem with video transitions

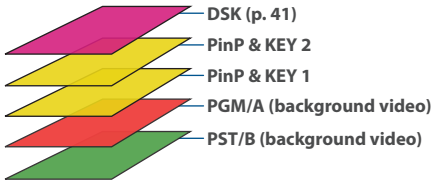
You can make PinP/DSK composition (p. 41) turn on/off in tandem with the video transitions.

From the [MENU] button → "System", set Panel Operation "Effects Transition Sync" to "ON".

After step 4, use the [AUTO] and [CUT] buttons or the video fader to switch the video. PinP composition turns on, and the composited result that is previewed is sent to final output.

MEMO

- The output video layers are structured as shown in the illustration below.



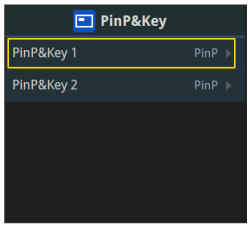
Long-pressing the [PVW] or [PGM] button for each layer shows only the layer that is targeted for the operation while the button is pressed (this is the spot function).

- Set the fade-in/out time for the inset screen from the [MENU] button → "PinP&Key" → "PinP&Key 1" or "PinP&Key 2" → "Time".

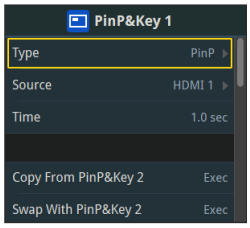
Making detailed settings for the inset screen

Detailed settings for size, shape, and border width etc. can be made for the inset screens.

1. Press the [MENU] button → "PinP&Key" → and select "PinP&Key 1" or "PinP&Key 2", and press the [VALUE] knob.



2. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.



Parameter	Explanation
Type	Specifies the type of PinP compositing.
Source	Specifies the video source of the inset screen.
Time	This sets the video transition time.
Window Settings	Adjusts the inset screen.
Position H	Adjusts the position in the horizontal direction.
Position V	Adjusts the position in the vertical direction.
Size	Adjusts the size (enlarge or reduce).
Cropping H	Adjusts the horizontal size.
Cropping V	Adjusts the vertical size.
Shape	Specifies the shape of the inset screen.
Border Color	This specifies the color of the border.
Border Width	Adjusts the width of the border.
View Settings	Adjusts the video that is shown in the inset screen.
Position H	Adjusts the position in the horizontal direction.
Position V	Adjusts the position in the vertical direction.
Zoom	Adjusts the zoom of the video.

3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

MEMO

Swapping the settings

You can change the stacking order of the inset screens by swapping the settings of the other PinP and key layers.

① **Hold down the PinP & KEY [SOURCE] button of the swap source layer to make it light up.**

② **Press the blinking PinP & KEY [SOURCE] button to select the swap destination layer.**
This swaps the layer settings.

Copying settings

You can copy settings from other PinP and key layers.

Select the copy source **from "Copy from PinP&Key 1" or "Copy from PinP&Key 2" in the PinP&Key 1 and 2 menus, and** press the [VALUE] knob to execute.

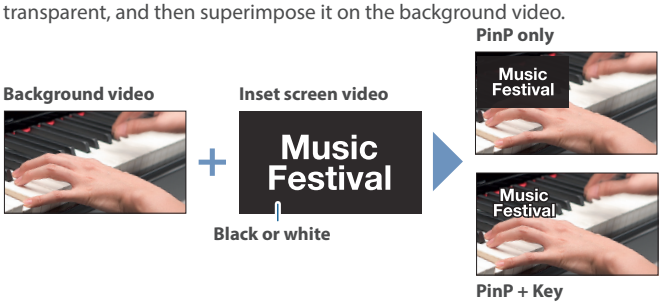
Key compositing the inset screen

This process makes part of the inset screen transparent, and composites the image 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.

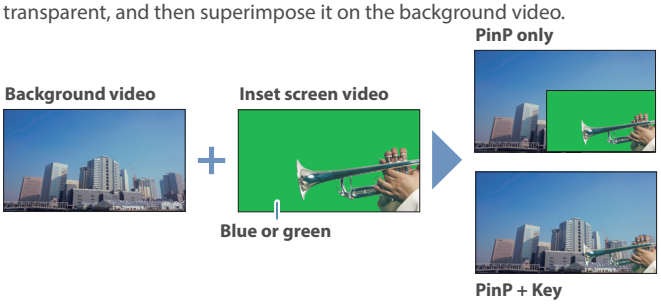
Luminance key

You can cut out text or an image by turning its black or white portion transparent, and then superimpose it on the background video.

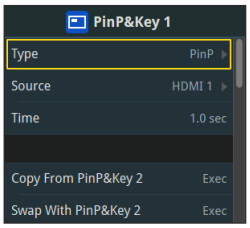


Chroma key

Here's how you can cut out a video by turning its blue or green portion transparent, and then superimpose it on the background video.



1. Press the [MENU] button → "PinP&Key" → "PinP&Key 1" or "PinP&Key 2" → select "Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to select the PinP composition type, and press the [VALUE] knob.

Value	Explanation
Luminance-White Key	A combination of PinP and luminance key (white). Makes the white portions of the inset screen transparent, and composites the image with the background.
Luminance-Black Key	A combination of PinP and luminance key (black). Makes the black portions of the inset screen transparent, and composites the image with the background.
Chroma Key	A combination of PinP and chroma key. Makes the blue or green portions of the inset screen transparent, and composites the image with the background.

3. Select the menu item and adjust the intensity of the effect.

* For details on the menu items, refer to "6: PinP&Key" (p. 116).

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

Compositing video with downstream keyer (DSK)

You can further composite titles, subtitles/captions and other video on video composited using split (p. 37) or PinP (p. 38).

There is one DSK on the V-80HD, and the DSK layer is shown in front of other layers (see the "Memo" on p. 38).

About DSK mode

There are three DSK composition modes, "Self key", "Alpha key" and "External key".

The following video compositing is available according to the DSK mode.

Self key

Luminance key (p. 42)

Here's how you can cut out text or image by turning its black or white portion transparent, and then superimpose it on the background video.

Chroma key (p. 44)

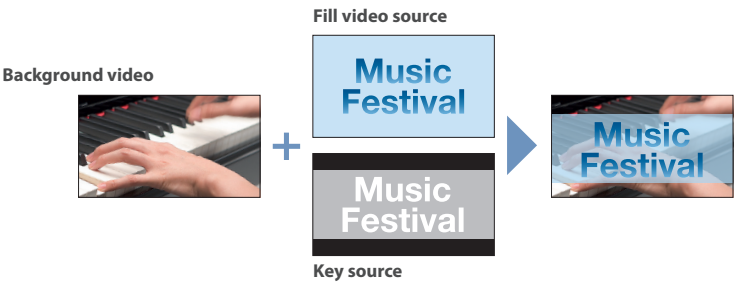
Here's how you can cut out a video by turning its blue or green portion transparent, and then superimpose it on the background video. You can select a color from the video material to set as the key color.

Alpha key (p. 46)

Uses alpha channels (areas which contain transparency data) to cut out still images and place them against different background video as a composite.

External key (p. 47)

This sets the key signal (the shape to be cut out) and the fill video (the video to be composited) separately. This uses the key signal to cut out the fill video and superimpose it on the background video to create the composite.

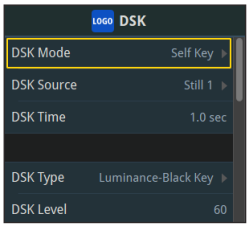


Compositing a caption or image (luminance key)

Here's how you can cut out text or image by turning its black or white portion transparent, and then superimpose it on the background video.

Setting the DSK mode and DSK type

1. Press the [MENU] button → "DSK" → "Dsk Mode" or "Dsk Type", and press the [VALUE] knob.



2. Use the [VALUE] knob to change the setting as shown below.

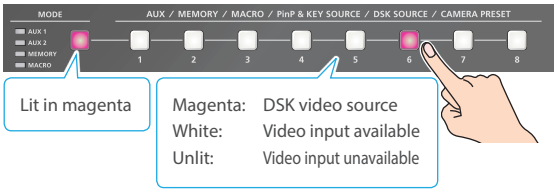
Parameter	Explanation
DSK Mode	Self Key
DSK Type	Luminance-White Key (Makes white portions transparent according to brightness.)
	Luminance-Black Key (Makes black portions transparent according to brightness.)

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

Compositing using DSK

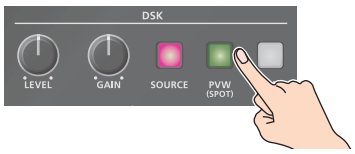
1. Press the DSK [SOURCE] button to turn on (lit).

2. Press a DSK SOURCE [1]–[8] button to select the DSK video source.



* When selecting a video that is not assigned to Input 1–8, set this by pressing the [MENU] button → "DSK" → "DSK Source".

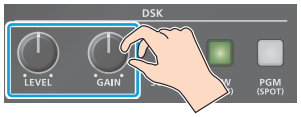
3. Press the DSK [PVW] button to turn on the preview output (lit).



A preview of the composition results is displayed in the PVW section of the multi-view.

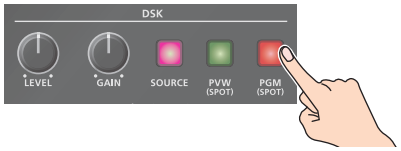
At this stage, the final output has not yet been changed.

4. Use the DSK [LEVEL] and [GAIN] knobs 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.

5. Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

6. To turn off DSK compositing, press the DSK [PGM] button once again.

MEMO

Set the fade-in/out time for the DSK video source from the [MENU] button → "DSK" → "DSK Time".

Turning DSK/PinP composition on/off in tandem with video transitions

You can make DSK/PinP composition turn on/off in tandem with the video transitions.

From the [MENU] button → "System", set Panel Operation "Effects Transition Sync" to "ON".

After step 4, use the [AUTO] and [CUT] buttons to switch the video. DSK composition turns on, and the composited result that is previewed is sent to final output.

Modifying the caption or image

You can fill-in the superimposed caption or image, or add an edge to it.

Configure the settings of the following menu items from the [MENU] button → "DSK".

Parameter	Explanation
Fill Type	If this is set to "Matte", the superimposed video is filled in with the color specified in "Matte Color".
Matte Color	
Edge Type	Specifies the type of edge.
Edge Color	This specifies the color of the border.
Edge Width	Specifies the width of the edge.

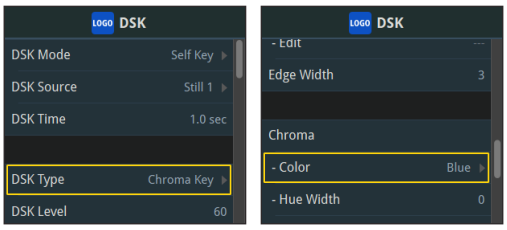
* This setting is in common with chroma key (p. 44).

Compositing a subject and background (chroma key)

Here's how you can cut out a video by turning its blue or green portion transparent, and then superimpose it on the background video. This lets you composite a subject that's photographed against a blue or green background.

Setting the DSK mode and DSK type

1. Press the [MENU] button → "DSK" → "Dsk Mode", "Dsk Type" or "Color", and press the [VALUE] knob.



2. Use the [VALUE] knob to change the setting as shown below.

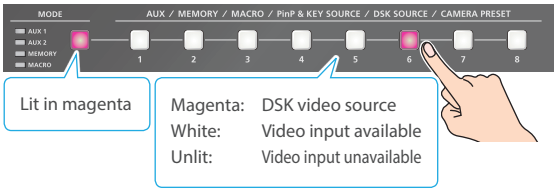
Parameter	Explanation
DSK Mode	Self Key
DSK Type	Chroma Key
Chroma Color	Specify either "GREEN" or "BLUE" as the key color. You can also specify a color you desire as the key color (p. 45).

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

Compositing using DSK

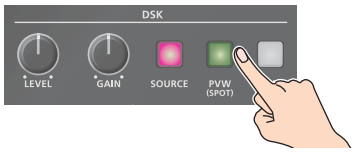
1. Press the DSK [SOURCE] button to turn on (lit).

2. Press a DSK SOURCE [1]–[8] button to select the DSK video source.



* When selecting a video that is not assigned to Input 1–8, set this by pressing the [MENU] button → "DSK" → "DSK Source".

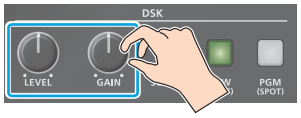
3. Press the DSK [PVW] button to turn on the preview output (lit).



A preview of the composition results is displayed in the PVW section of the multi-view.

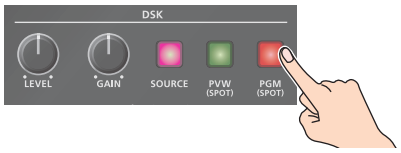
At this stage, the final output has not yet been changed.

4. Use the DSK [LEVEL] and [GAIN] knobs 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.

5. Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

6. To turn off DSK compositing, press the DSK 1 [PGM] button once again.

MEMO

Set the fade-in/out time for the DSK video source from the [MENU] button → "DSK" → "DSK Time".

Turning DSK/PinP composition on/off in tandem with video transitions

You can make DSK/PinP composition turn on/off in tandem with the video transitions.

From the [MENU] button → "System", set Panel Operation "Effects Transition Sync" to "ON".

After step 4, use the [AUTO] and [CUT] buttons or the video fader to switch the video. DSK composition turns on, and the composited result that is previewed is sent to final output.

Finely adjusting the key color

You can make fine adjustments to the key color.

Configure the settings of the following menu items from the [MENU] button → "DSK".

Parameter	Explanation
Chroma	
Hue Width	Adjusts the hue width.
Hue Fine	Adjusts the center position of the hue.
Saturation Width	Adjusts the saturation width.
Saturation Fine	Adjusts the center position of saturation.

* For details on the parameter, refer to "7: DSK" (p. 117).

Modifying the superimposed video

You can fill-in the superimposed video, or add an edge to it.

Configure the settings of the following menu items from the [MENU] button → "DSK".

Parameter	Explanation
Fill Type Matte Color	If this is set to "Matte", the superimposed video is filled in with the color specified in "Matte Color".
Edge Type	Specifies the type of edge.
Edge Color	This specifies the color of the border.
Edge Width	Specifies the width of the edge.

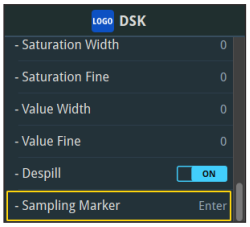
* This setting is in common with luminance key (p. 42).

Specifying a desired color as the key color (sampling marker)

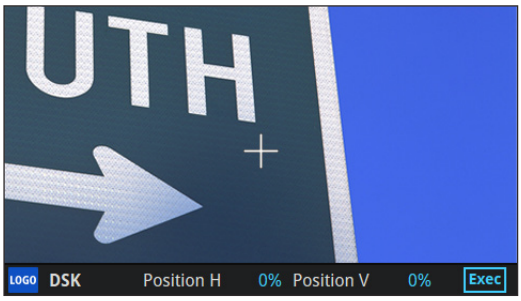
You can specify the key color that is made transparent by sampling (detecting) a color from the video (sampling marker function).

You can also specify a key color other than green or blue.

1. Press the [MENU] button → "DSK" → Chroma "Sampling Marker", and press the [VALUE] knob.



The sampling marker (+) used to sample (detect) the key color is shown on the monitor of this unit.



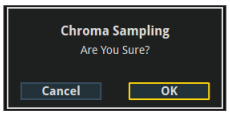
2. Use the [VALUE] knob to select "Position H" or "Position V", and press the [VALUE] knob.

3. Use the [VALUE] knob to adjust the position of the sampling marker

Parameter	Explanation
Position H	Adjusts the position in the horizontal direction.
Position V	Adjusts the position in the vertical direction.

4. Use the [VALUE] knob to select "Exec", then press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The key color is sampled.

The "Hue Width", "Hue Fine", "Saturation Width", and "Saturation Fine" settings are adjusted automatically.

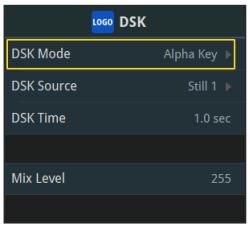
6. Press the [MENU] button to quit the menu.

Compositing a still image with alpha channel

Uses alpha channels (areas which contain transparency data) to cut out still images and place them against different background video as a composite.

Setting the DSK mode or a still image to composite

1. Press the [MENU] button → "DSK" → "Dsk Mode" or "Dsk Source", and press the [VALUE] knob.



2. Use the [VALUE] knob to change the setting as shown below.

Parameter	Explanation
DSK Mode	Alpha Key
DSK Source	Specifies the still image with alpha channel.

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

MEMO

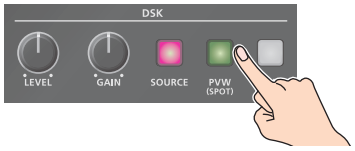
You can also select the still images assigned to Input 1–8 as a DSK video source with the buttons.

Press the DSK [SOURCE] button to turn it on (the button lights), and then select using the DSK SOURCE [1]–[8] buttons.

Compositing using DSK

1. Press the DSK [SOURCE] button to turn on (lit).

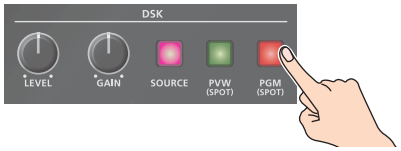
2. Press the DSK [PVW] button to turn on the preview output (lit).



A preview of the composition results is displayed in the PVW section of the multi-view.

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

3. Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

4. To turn off DSK compositing, press the DSK [PGM] button once again.

MEMO

Set the fade-in/out time for the still image from the [MENU] button → "DSK" → "DSK Time".

Turning DSK/PinP composition on/off in tandem with video transitions

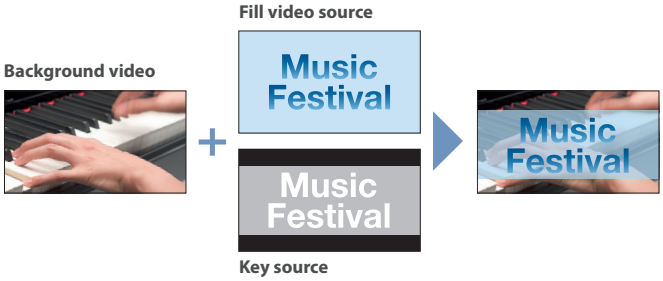
You can make DSK/PinP composition turn on/off in tandem with the video transitions.

From the [MENU] button → "System", set Panel Operation "Effects Transition Sync" to "ON".

After step 2, use the [AUTO] and [CUT] buttons and the video fader to switch the video. DSK composition turns on, and the composited result that is previewed is sent to final output.

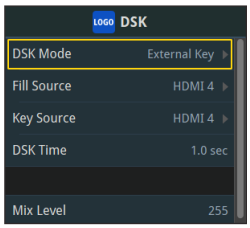
Using an external key

This sets the key signal (the shape to be cut out) and the fill video (the video to be composited) separately. This uses the key signal to cut out the fill video and superimpose it on the background video to create the composite.



Setting the DSK mode or key/fill video

1. Press the [MENU] button → "DSK" → "DSK Mode", "Fill Source" or "Key Source", and press the [VALUE] knob.



2. Use the [VALUE] knob to change the setting as shown below.

Parameter	Explanation
DSK Mode	External Key
Fill Source	Specifies the fill video source.
Key Source	Specifies the video to use as the key signal.

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

MEMO

You can also use the buttons to select the videos assigned to Input 1–8 as a fill video source.

Press the DSK [SOURCE] button to turn it on (the button lights), and then select using the DSK SOURCE [1]–[8] buttons.

Compositing using DSK

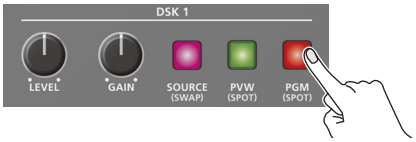
1. Press the DSK [SOURCE] button to turn on (lit).

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

A preview of the composition results is displayed in the PVW section of the multi-view.

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

3. Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

4. To turn off DSK compositing, press the DSK [PGM] button once again.

MEMO

Set the fade-in/out time for the DSK video source from the [MENU] button → "DSK" → "DSK Time".

Turning DSK/PinP composition on/off in tandem with video transitions

You can make DSK/PinP composition turn on/off in tandem with the video transitions.

From the [MENU] button → "System", set Panel Operation "Effects Transition Sync" to "ON".

After step 2, use the [AUTO] and [CUT] buttons and the video fader to switch the video. DSK composition turns on, and the composited result that is previewed is sent to final output.

Compositing content from Graphics Presenter (Roland Fill+Key mode)

You can use the dedicated Roland Graphics Presenter app to input and composite content (titles, images and videos) from your computer to the V-80HD using a single HDMI cable. No adjustments are required on this unit for key compositing.

Roland Graphics Presenter (hereafter "Graphics Presenter") is available for download from the Roland website.

https://proav.roland.com/

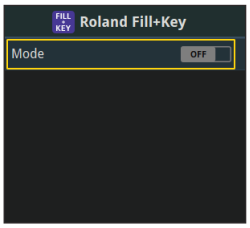
* Graphics Presenter is a dedicated application for Windows.
* For detailed operating instructions, refer to the "Graphics Presenter" owner's manual (Roland website).

Required items

- V-80HD unit
- A Windows PC with Graphics Presenter installed
- HDMI cable

Connection procedure

1. Press the [MENU] button to select "Roland Fill+Key", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "Mode", and then press the [VALUE] knob.

3. Press the [VALUE] knob to close the dialog box.

Set Roland Fill+Key mode to ON.

4. Connect your computer to the HDMI IN 1 connector on the V-80HD with an HDMI cable.

5. Launch the Graphics Presenter app on your computer.

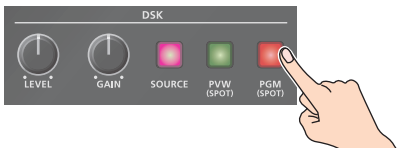
6. Click on the [ON AIR] button in Graphics Presenter.

The [ON AIR] button lights up red, and a black image is shown for HDMI In 1 on the V-80HD.

7. Follow the steps shown in Graphics Presenter to output the title video.

The contents outputted from Graphics Presenter are shown for HDMI In 1 on the V-80HD.

8. Press the DSK [PVW] or [PGM] button to activate it (the button lights up).



The Graphics Presenter video is composited with the output video of the V-80HD.

For details on outputting the title video, refer to the "Graphics Presenter" owner's manual (Roland website).

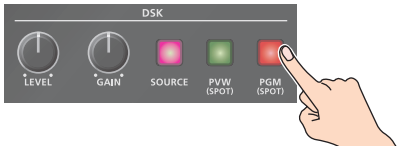
Turning Roland Fill+Key mode off

When you turn off Roland Fill+Key mode, be sure to do so as follows.

NOTE

If you do not follow these steps, the video may not output as expected.

1. Press the DSK [PVW] button or the [PGM] button to turn them off (the buttons go dark).



2. Press the [MENU] button to select "Roland Fill+Key", and press the [VALUE] knob.

3. Use the [VALUE] knob to select "Mode", and then press the [VALUE] knob.

This turns off Roland Fill+Key mode.

Assigning audio sources to audio channels

You can assign the mic audio or line input, video input (HDMI, SDI) and so on to each of the audio mixer knobs.

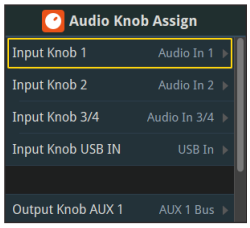
This example shows how to assign an audio source to the AUDIO INPUT LEVEL [1] knob.

1. Press the [SETUP] button.

The setup screen appears.

2. Use the [VALUE] knob to select "Input Knob 1", and then press the [VALUE] knob.

3. Use the [VALUE] knob to select the audio bus to assign to the knob.



Value	Explanation
Audio In 1, 2	Audio from AUDIO IN 1, 2 connectors
Audio In 3/4	Audio from AUDIO IN 3/4 jacks
USB In	Audio from USB STREAM port
Bluetooth In	Bluetooth In audio
Audio Player	Audio from an audio player
HDMI 1–4	Audio from HDMI IN 1–4 connectors
SDI 1–4	Audio from SDI IN 1–4 connectors
V.Player (*1)	Audio from a video player
SRT In (*2)	Audio from SRT in

(*1) When Type (p. 135) = Video Player

(*2) When Type (p. 135) = SRT In

4. Press the [SETUP] button to close the setup screen.

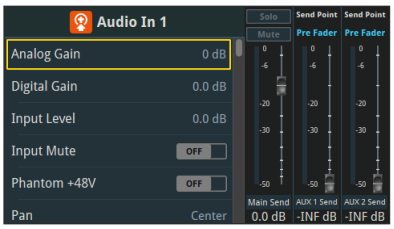
Adjusting the input gain (sensitivity)

Adjust the input gain of AUDIO IN 1 or 2 so that the audio input is at an appropriate level.

1. Set the AUDIO INPUT LEVEL [1] or [2] knob to around "0dB".

2. Move the [MAIN] knob to a position near "0dB".

3. [MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2" → select "Analog Gain", and press the [VALUE] knob.



4. Turn the [VALUE] knob fully counterclockwise, minimizing the input gain (to a setting of 0 dB).

5. While playing the actual input sound, slowly turn the [VALUE] knob clockwise to adjust the input gain.

Raise the input gain as high as possible without letting the SIG/PEAK indicator of AUDIO INPUT LEVEL 1 or 2 light up red when the loudest sound level occurs.

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

MEMO

Stereo link function

You can link the AUDIO IN 1 and 2 channels to operate them as a stereo channel.

[MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2" → set "Stereo Link" to "On".

* When stereo link is turned on, the settings of AUDIO IN 1 are applied to AUDIO IN 2.
* When Stereo Link is ON, the AUDIO INPUT LEVEL [2] knob has the same effect as the AUDIO INPUT LEVEL [1] knob.
* When phantom power is on and you switch the stereo link setting on/off, phantom power automatically turns off.

Adjusting the mic position (pan)

The left/right positioning of the sound is called "pan". If you're using two mics to stream a performance, panning the two mics to left and right will give the sound a more spacious feel.

Press the [MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2", and adjust the Pan.

SIG/PEAK indicator

Indicator	Status
Red	Volume is excessive (0 dB or higher)
Yellow	Volume is appropriate (-20 – -1 dB).
Green	Volume is insufficient (-50– -21 dB).

You can adjust the digital gain for all inputs.

Analog gain adjusts the analog sound, and digital gain adjusts the digital sound. When a high-level audio signal is input to the HDMI or SDI digital audio inputs, distortion may occur due to effect processing.

You can use digital gain to keep the input level down so that there is no impact on effect processing.

Using digital gain lets you lower the input level so that effect processing is not affected.

Adjusting the volume balance

Here's how to adjust the volume balance of each input and the overall volume.

1. Move the [MAIN] knob to a position near "0dB".

2. While monitoring the audio via speakers or headphones, adjust the volume balance for the respective inputs.

Raise the volume level of audio you want to make more prominent, for example, an emcee microphone, and lower the volume level for other audio.

When no audio is input, and for audio that is unused, lower the volume level to minimum (-INF dB).

① **Press the [MENU] button → "Audio Input" → "Audio In 1, 2", "Audio In 3/4", "USB In", "Bluetooth In", "HDMI In 1–4", "SDI In 1–4", "Audio Player" or "Video Player/SRT In", select Input Level and press the [VALUE] knob.**

② **Use the [VALUE] knob to adjust the volume, and press the [VALUE] knob.**

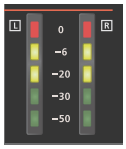
③ **Press the [MENU] button to quit the menu.**

MEMO

If you have assigned audio sources to the respective knobs on the audio mixer, you can adjust the volume with those knobs (p. 97).

3. Use the [MAIN] knob to adjust the output volume.

The level meter lights up yellow when the volume is appropriate.



Indicator	Status
Red	Volume is excessive (0 dB or higher)
Yellow	Volume is appropriate (-20 – -1 dB).
Green	Volume is insufficient (-50– -21 dB).

* The AUX 1 and AUX 2 SIG/peak indicators also light up.

MEMO

- With the factory settings, if you use the [OUTPUT FADE] button to fade in/out the final output video, the output audio also fades in/out simultaneously (p. 36).
- **Adjusting the USB output volume**

  The USB output volume can be adjusted individually.
  Press the [MENU] button → "Audio Output" → "USB Out" to fine-tune the USB output volume.
- You can output a test tone, which is useful for adjusting the level.

  Press the [MENU] button → "System" → "Test Tone" to specify the test tone to output.

Adjusting the volume balance from the mixer screen

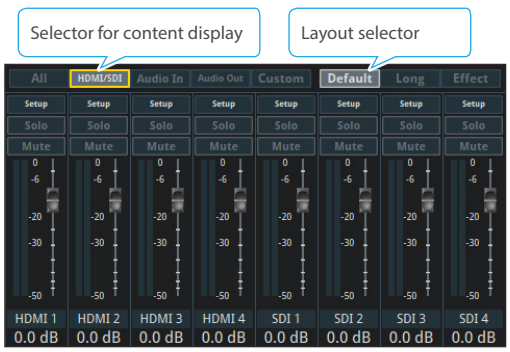
The mixer screen on this unit's display lets you adjust the various volumes while checking their values.

1. Press the [AUDIO LEVEL] button.

The Audio Level screen appears.

2. Use the [VALUE] knob to select the tab at the top of the screen, and press the [VALUE] knob.

You can switch between content displays and layout by using the tabs at the top of the screen.



Content displayed	Explanation
All	All inputs/outputs
HDMI/SDI	Audio from HDMI IN 1–4 connectors, SDI IN 1–4 connectors
Audio In	Audio from AUDIO IN 1–3/4 connectors, USB In, Bluetooth In, audio player, video player, SRT In
Audio Out	Output from Main Bus, AUX 1–2 Bus, USB Out, Stream&Record
Custom	Custom settings. This lets you freely assign the inputs and outputs.

Layout	Explanation
Default	The standard layout.
Long	Layout with longer fader travel.
Effect	Layout which shows other parameters such as effects.

3. Use the [VALUE] knob to select the onscreen faders, and press the [VALUE] knob.

4. Use the [VALUE] knob to edit the volume, and press the [VALUE] knob.

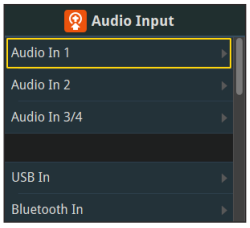
5. Press the [AUDIO LEVEL] button to close the screen.

Applying effects to input audio

You can apply effects to the input audio to adjust the character of the sound. The following table shows the effects that are available.

Input audio	High-pass filter	Echo canceller	Anti-feedback	Noise gate	De-esser	Compressor	Equalizer	Voice changer	Delay	Reverb
Audio In 1, 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Audio In 3/4	✓	—	—	✓	—	✓	✓	—	✓	✓
USB In	✓	—	—	✓	—	✓	✓	—	✓	✓
Bluetooth In	✓	—	—	✓	—	✓	✓	—	✓	✓
HDMI In, SDI In	✓	—	—	✓	—	✓	✓	—	✓	✓
Audio Player, Video Player/SRT In	✓	—	—	✓	—	✓	✓	—	✓	✓

1. Press the [MENU] button → "Audio Input" and select "Audio In 1"–"Video Player/SRT In", and press the [VALUE] knob.



2. Using the [VALUE] knob, select the menu item of the effect you want to use, and press the [VALUE] knob.

* For details on the menu items, refer to "9: Audio Input" (p. 119).

3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

●High-pass filter

This cuts off unneeded low-band audio.

●Echo canceller (p. 53)

Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.

●Anti-feedback (p. 54)

Suppresses audio feedback.

●Noise gate

Eliminates audio that is lower than the specified threshold level. This is effective when the noise that you want to remove is separate from the audio that you want to keep, and can be used to remove hiss or other noise that is heard during periods of silence.

●De-esser

Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).

●Compressor

Audio that exceeds the specified threshold level is compressed. This reduces the difference between the maximum volume and minimum volume, making the audio more comfortable for listening

●Equalizer

This is a four-band equalizer. It lets you adjust the volume by boosting or cutting four frequency regions.

●Voice changer (p. 54)

Transforms the pitch or character of the voice.

●Delay (p. 55)

This outputs audio with a delay.

●Reverb (p. 55)

Adds reverberation to the sound.

Using an effect preset

The V-80HD is equipped with effects that are adjusted for specific environments. These are called "effect presets".

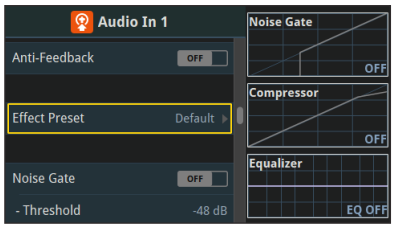
The effect presets are created using a combination of four effects (high-pass filter, compressor, equalizer, noise gate).

Simply by selecting an effect preset, you can easily apply an effect that's appropriate for your situation.

MEMO

- To make detailed adjustments to a preset, edit the high-pass filter, compressor, equalizer and noise gate settings from the Audio Input menu.
- You cannot overwrite the effect presets. Use the scene memories to save the settings for presets you've edited (p. 76).
- When you load an effect preset, each effect setting is restored to its preset default setting (factory settings).

1. Press the [MENU] button → "Audio Input" → "Audio In 1"–"Video Player/SRT In" and select "Effect Preset", and press the [VALUE] knob.



2. Use the [VALUE] knob to select an effect preset, and press the [VALUE] knob.

Value	Explanation
Default	For line input (default setting)
Meeting	For meetings
Interview	For interviews
Ambient Mic	For capturing ambient sound
Windy Field	For capturing ambient sound in a windy area

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

3. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The effect preset is loaded.

4. Configure the settings for each effect as necessary.

* For details on the parameter, refer to "9: Audio Input" (p. 119).

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

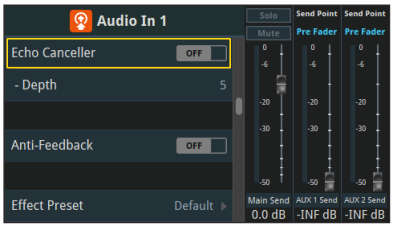
Suppressing echo in a web conference system (echo canceller)

In a conversation using the speaker and mic of a web conference system, an echo can occur when the other person's voice heard through the speaker is picked up by the mic and sent back to the other person.

When you use the echo canceller, the echo component is removed from the voice that is picked up by a mic connected to the V-80HD, so that only your own voice is sent to the other party.

* This only works on the input audio from the AUDIO IN 1, 2 connectors.

1. Press the [MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2" and select "Echo Canceller", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

This turns on the echo canceller.

3. Use the [VALUE] knob to select "Depth", then press the [VALUE] knob.

4. Adjust the strength of the echo canceller (1–10) with the [VALUE] knob, and then press the [VALUE] knob.

Set this to the value that provides the most echo reduction.

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

MEMO

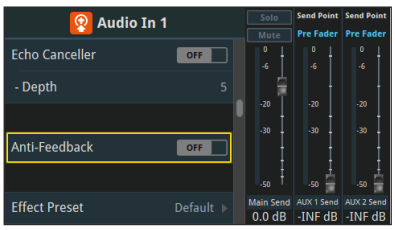
- The echo canceller supports rooms that are approximately 20 m^2 (215 sq ft).
- If your own voice returns to you as an echo, you'll need the other party to make echo canceller settings.
- The echo canceller works based on audio input from the USB IN port.

Reducing acoustic feedback (anti-feedback)

Here's how to reduce the acoustic feedback that can occur when a mic is brought near a speaker.

* This only works on the input audio from the AUDIO IN 1, 2 connectors.

1. Press the [MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2" and select "Anti-Feedback", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

This turns the anti-feedback on.

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

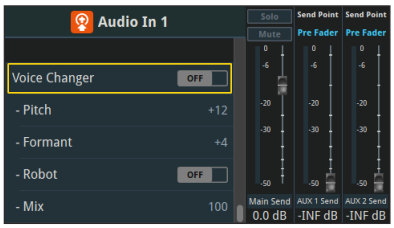
Changing the character of a voice (voice changer)

Here's how to modify the pitch or character of the voice that's input from a mic.

You can create transformations such as "from a female to a male voice", "from a male to a female voice", or "robot voice".

* This only works on the input audio from the AUDIO IN 1, 2 connectors.

1. Press the [MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2" and select "Voice Changer", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

This turns the voice changer on.

3. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.

Menu item	Explanation
Pitch	Adjusts the pitch of the voice in semitone steps. A setting of "0" is the original pitch.
Formant	Adjusts the character (formant) of the voice. Settings in the negative (–) direction produce a more masculine vocal character, and settings in the positive (+) direction produce a more feminine vocal character. A setting of "0" is the original voice.
Robot	If this is "ON", the voice is held at a fixed pitch, creating a mechanical robot-like impression.
Mix	Adjusts the balance between the unprocessed voice (0) and the voice processed by the effect (100).

4. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

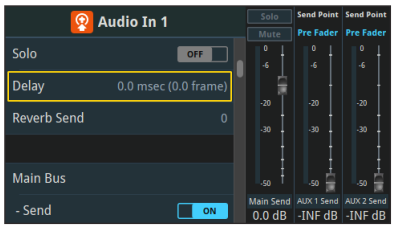
MEMO

You can assign the function to an assignable pad to switch the voice changer on/off (p. 97).

Correcting a time difference between video and audio (delay)

If there is a timing discrepancy between the video and audio, you can correct the output timing by delaying the input audio.

1. **Press the [MENU] button → "Audio Input" → "Audio In 1"–"Video Player/SRT In" and select "Delay", and press the [VALUE] knob.**



2. **Use the [VALUE] knob to adjust the latency (delay time) of the input audio, and press the [VALUE] knob.**

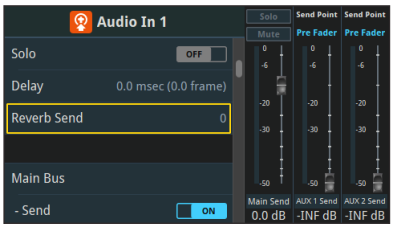
3. **Press the [MENU] button to quit the menu.**

Applying reverb

Adds reverberation to the sound.

Adjusting how much reverb to send

1. **Press the [MENU] button → "Audio Input" → "Audio In 1"–"Video Player/SRT In" → "Reverb Send", and press the [VALUE] knob.**

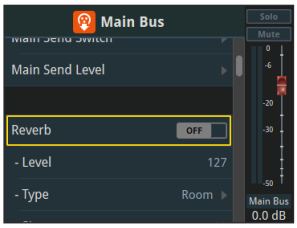


2. **Use the [VALUE] knob to adjust the amount of sound that is sent to reverb (reverb depth).**

3. **Press the [MENU] button to quit the menu.**

Adjusting how much reverb is returned

1. **Press the [MENU] button → "Audio Output" → "Main Bus" and select "Reverb", and press the [VALUE] knob.**



2. **Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.**

   Reverb turns on.

3. **Use the [VALUE] knob to select a menu item, and press the [VALUE] knob.**

Menu item	Explanation
Level	Specifies the amount of sound that is returned from the reverb (return level). This adjusts the depth of the overall reverb.
Type	Specifies the reverb type. **Room:** Produces the natural-sounding reverberation of a room. **Hall:** Produces the reverberation that is typical of performing in a concert hall.
Size	Specifies the size of the room. The larger the value, the longer the reverb time.
Return Level	Adjusts the amount of reverb sent back to each bus.

4. **Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.**

5. **Press the [MENU] button to quit the menu.**

> **MEMO**
>
> You can assign the reverb to an assignable pad to turn it on/off (p. 97).

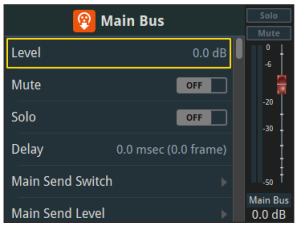
Applying effects to output audio

Here's how to modify the tonal character by applying effects.

The following table shows the effects that are available.

Audio bus	Reverb	Equalizer	Delay	Compressor/ Limiter	Graphic Equalizer	Adaptive NR	Loudness AGC
Main Bus	✓	✓	✓	✓	✓	✓	✓
AUX Bus 1 AUX Bus 2	✓	✓	✓	✓	✓	—	—

1. Press the [MENU] button → "Audio Output" → select "Main Bus", "AUX 1 Bus" or "AUX 2 Bus" and press the [VALUE] knob.



2. Using the [VALUE] knob, select the menu item of the effect you want to use, and press the [VALUE] knob.

* For details on the menu items, refer to "10: Audio Output" (p. 127).

3. Use the [VALUE] knob to adjust the value, and press the [VALUE] knob.

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

●Equalizer

This is a four-band equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.

●Delay

This outputs audio with a delay. Delaying the output lets you correct timing problems in the audio signal that is input to the output destination device.

●Compressor/Limiter

Compresses audio levels that exceed the threshold you set, or limits the output level so that it does not exceed the threshold.

●Graphic Equalizer

This lets you shape the character of the sound by boosting or cutting each of the 15 frequency regions into which the sound is divided.

●Adaptive Noise Reduction (p. 57)

By continuously monitoring the input audio to detect noise during periods of silence, this removes only the noise component.

●Loudness Auto Gain Control (p. 58)

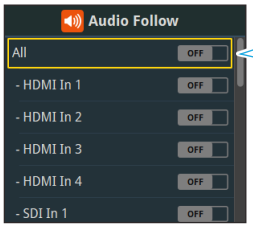
The long-term average loudness is measured, and the volume is adjusted so that it is appropriate overall.

Interlinking audio output to video switching (audio follow)

Here's how the audio output can be automatically switched in tandem with video switching (the audio follow function).

1. [MENU] button → select "Audio Follow", and press the [VALUE] knob.

2. Use the [VALUE] knob to select the input video that uses audio follow.



You can turn "All" on/off to change all settings at once.

3. Press the [VALUE] knob to turn it "ON".

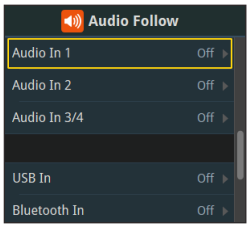
Value	Explanation
ON	The audio is output only when the video is selected. The audio is automatically muted if another video is selected.
OFF	The audio is always output regardless of the video selection.

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

Adding an object for audio follow

You can set Audio Follow to apply to the audio from the Audio In, USB In or Bluetooth In.

1. Press [MENU] button → "Audio Follow" and select the audio input that will be the object of Audio Follow.



2. Use the [VALUE] knob to select the input video that uses audio follow.

Value	Explanation
HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In, Input 1–16	For each audio source, these settings specify the input video that will use the audio follow function. Audio is output only when the specified input video is selected.
Off	The audio is always output regardless of the video selection.

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

MEMO

You can synchronize the audio with the on/off state of the PinP&Key or DSK (p. 132).

Removing noise from the audio (adaptive noise reduction/low frequency cut)

You can remove noise from the input audio. Two effects are provided: "adaptive noise reduction" and "low frequency cut.

●Adaptive noise reduction

By continuously monitoring the input audio to detect noise during periods of silence, this removes only the noise component. Unlike conventional noise reduction that removes sound of a specified frequency, this analyzes the frequency of the noise and removes it as appropriate for the environment, resulting in a more natural sound.

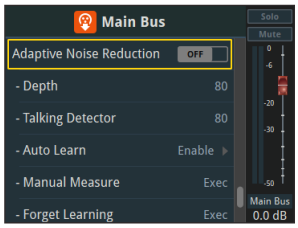
* The presence or absence of voice in the input signal is determined according to the "Talking Detector" settings.

●Low frequency cut

This divides the region below 200 Hz into four bands, and cuts unneeded low-frequency regions while continuously analyzing each band. Unlike conventional low cut, this does not weaken the sound of the low-frequency region.

Adaptive noise reduction

1. Press the [MENU] button → "Audio Output" → "Main Bus" and select "Adaptive Noise Reduction", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

3. Set Auto Learn to "Enable".

The noise is automatically detected, and the noise is reduced.

* If you want to detect noise manually, execute "Manual Measure". When you select "OK", the measurement starts automatically. When measurement finishes, the message "Completed." appears.

4. Execute "Depth" to set the depth (how aggressive the noise reduction is).

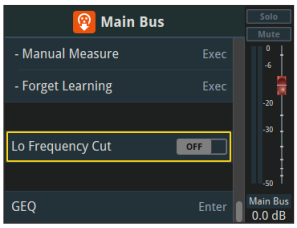
5. If the ambient noise level is high, adjust the sensitivity with "Talking Detector".

* Increasing the value raises the sensitivity of the talking detector, making detection easier even in noisy environments.

6. If you want to reset the noise-reduced result to its original state, execute "Forget Learning".

Low frequency cut

1. Press the [MENU] button → "Audio Output" → "Main Bus" and select "Lo Frequency Cut", and press the [VALUE] knob.



2. Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

Automatically setting a comfortable volume (auto mastering effect)

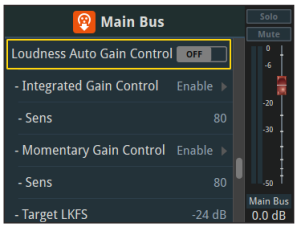
Based on "loudness" (an index of perceptual volume), this automatically adjusts the volume appropriately for broadcast. Loudness measurement can be either long-term or short-term; these differ in the interval of time to which volume adjustment applies.

●Loudness auto gain control (Loudness AGC)

The long-term average loudness is measured, and the volume is adjusted so that it is appropriate overall. Use this for audio whose dynamics you want to preserve, such as music.

Loudness Auto Gain Control

1. Press the [MENU] button → "Audio Output" → "Main Bus" → select "Loudness Auto Gain Control" and press the [VALUE] knob.



2. Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

3. Use Target LKFS to set the target level for the output audio.

4. Use Sens to adjust the speed at which the target level (Target LKFS) is approached.

5. To reset the adjusted value and return to the original state, execute "Forget Learning".

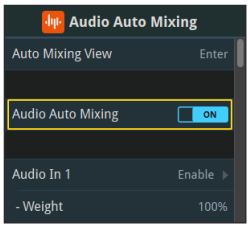
Controlling the volume automatically (auto mixing)

The volume adjustments that would normally be done by the operator can be controlled automatically (auto mixing function).

Since this lets you leave the volume adjustments up to the V-80HD, it can be used in situations where there is no dedicated operator. This is especially useful for meetings, discussions, debates, and other situations where multiple microphones are used.

1. Press the [MENU] button → "Audio Auto Mixing" → select "Audio Auto Mixing", and press the [VALUE] knob.

The Audio Auto Mixing menu is shown.



2. Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

Auto mixing function turns on.

3. Use the [VALUE] knob to select "Auto Mixing View", and press the [VALUE] knob.

The auto mixing setup screen appears.

4. Set whether to include or exclude auto mixing.

① Use the [VALUE] knob to select the sound you want to set, and then press the [VALUE] knob.

② Use the [VALUE] knob to set auto mixing as the target ("Enable") or not ("Disable"), and press the [VALUE] knob.

For audio that does not require auto mixing, such as background music, choose "Disable".

5. Set the priority for weighting the volume (in other words, specifying which audio signals take priority).

If there is audio that you want to make more prominent, such as when you want to raise the volume level of an emcee microphone, raise the weight level of that audio to emphasize it, and lower the weight level for other audio.

① Use the [VALUE] knob to select "Weight", then press the [VALUE] knob.

② Use the [VALUE] knob to set the volume weighting priority (0–100%), and press the [VALUE] knob.

When air-conditioner noise or the like is a concern, set the weight level to a low value.

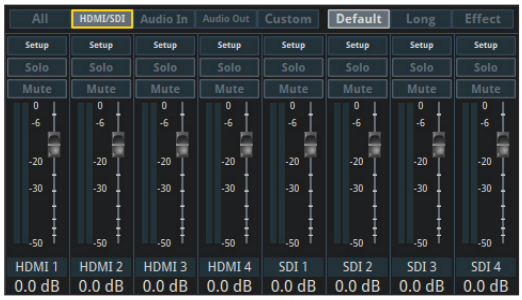
6. Press the [MENU] button to quit the menu.

Silencing only specific audio (mute)

Here's how you can temporarily mute specific audio (the mute function).

1. Press the [AUDIO LEVEL] button.

The Audio Level screen appears.



2. Use the [VALUE] knob to select the tab at the top of the screen, and press the [VALUE] knob.

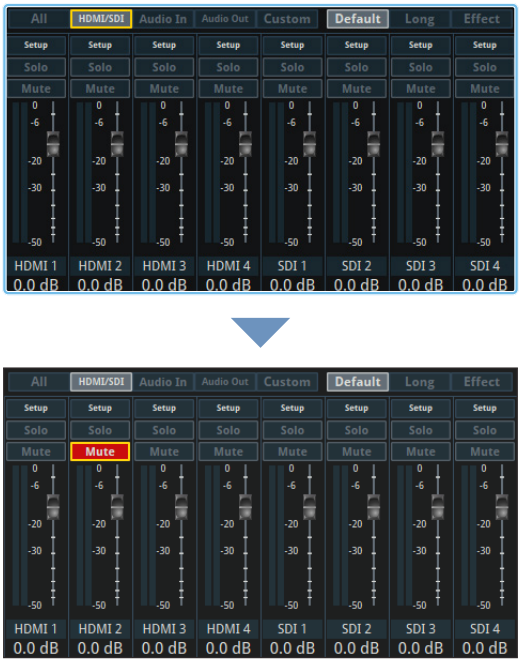
You can switch between content displays and layout by using the tabs at the top of the screen.

Content displayed	Explanation
All	All inputs/outputs
HDMI/SDI	Audio from HDMI IN 1–4 connectors, SDI IN 1–4 connectors
Audio In	Audio from AUDIO IN 1–3/4 connectors, USB In, Bluetooth In, audio player, video player, SRT In
Audio Out	Output from Main Bus, AUX 1–2 Bus, USB Out, Stream&Record
Custom	Custom settings. This lets you freely assign the inputs and outputs.

Layout	Explanation
Default	The standard layout.
Long	Layout with longer fader travel.
Effect	Layout which shows other parameters such as effects.

3. With the [VALUE] knob, select the mute icon ( ) or "Mute" for the channel you want to mute, and press the [VALUE] knob.

The mute function for the selected channel turns on.



MEMO

You can also mute from the menu screen of each channel.

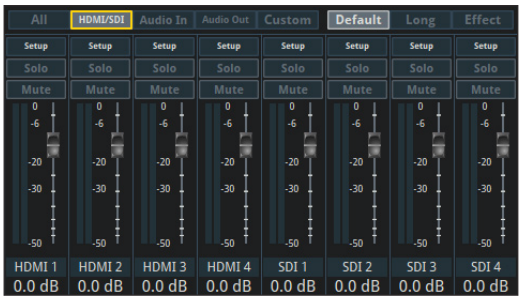
Checking a specific audio input (solo)

Here's how you can temporarily monitor a specific audio input via the headphones (solo function).

* The solo function is normally applied to the headphone output. If you want to enable the solo function with an output jack other than the headphone output, select "Monitor Bus" as the audio bus.

1. Press the [AUDIO LEVEL] button.

The Audio Level screen appears.



2. Use the [VALUE] knob to select the tab at the top of the screen, and press the [VALUE] knob.

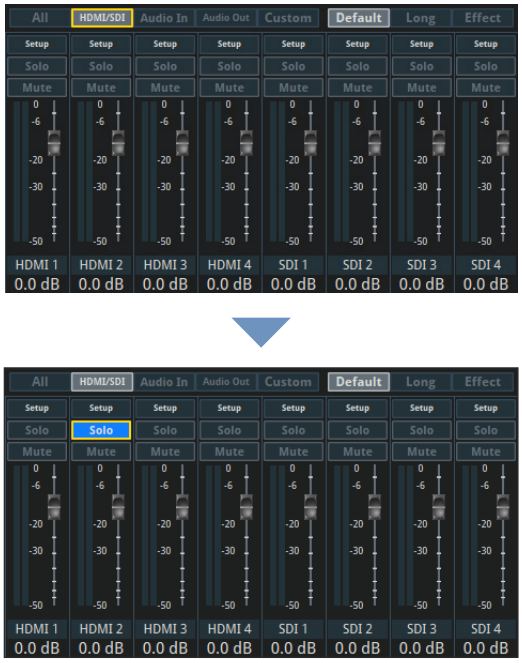
You can switch between content displays and layout by using the tabs at the top of the screen.

Content displayed	Explanation
All	All inputs/outputs
HDMI/SDI	Audio from HDMI IN 1–4 connectors, SDI IN 1–4 connectors
Audio In	Audio from AUDIO IN 1–3/4 connectors, USB In, Bluetooth In, audio player, video player, SRT In
Audio Out	Output from the Main bus, AUX 1 and 2 buses
Custom	Custom settings. This lets you freely assign the inputs and outputs.

Layout	Explanation
Default	The standard layout.
Long	Layout with longer fader travel.
Effect	Layout which shows other parameters such as effects.

3. With the [VALUE] knob, select the solo icon ( ) or "Solo" for the channel you want to solo, and press the [VALUE] knob.

The solo function for the selected channel turns on.



MEMO

You can also solo from the menu screen of each channel.

Playing back audio files (audio player)

Audio files that you created on your computer can be loaded (imported) into this unit as materials, and then played back by using the assignable pads.

You can save up to 64 audio files on this unit.

Assignable pad assignments

To use the audio player, the audio player functions must be assigned to the assignable pads. This lets you play back/stop video using the assigned buttons, and operate the video from the setup screen.

With the factory settings, the audio player is assigned to pads [1]–[8] of bank A.

1. **Follow the instructions in "Assigning functions to the assignable pads" (p. 97) to set the function of any pad to "Audio Player".**

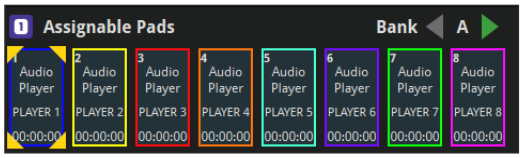
   Set Category to "Audio Player".

Importing an audio file

To begin, save the audio files that you created on your computer beforehand to the root directory of your SD card or USB flash drive.

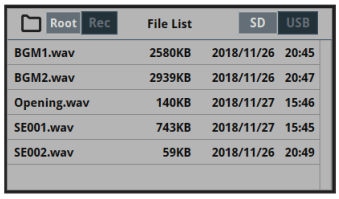
1. **Press the ASSIGNABLE PADS [SETUP] button.**
2. **Use the [VALUE] knob to select the assignable pads to which the audio player functions have been assigned, and press the [VALUE] knob.**

   The Audio Player setup screen appears.



3. **Use the [VALUE] knob to select "Setup", and then press the [VALUE] knob.**
4. **Use the [VALUE] knob to select "Import", then press the [VALUE] knob.**

   A list of audio files on your storage media is shown.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

* Select "Root" or "Rec" in the upper left part of the screen to switch between folders from which the files are loaded (SD only).

5. **Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.**
6. **Use the [VALUE] knob to select the audio file you want to load, and press the [VALUE] knob.**

* Select "Preview" and press the [VALUE] knob to play the audio file.

7. **When the confirmation dialog box appears, select "OK" and press the [VALUE] knob.**

   The file is imported, and the data is assigned to the assignable pads as an audio clip.

Supported files

Format	WAV (linear PCM, 48 kHz, 16-bit, stereo; 44.1 kHz, 16-bit, stereo)
File name	No more than 64 single-byte alphanumeric characters, including extension. * The extension ".wav" must be added.

Total length of audio files that can be saved to this unit

44.1 kHz/16bit	Approx. 17 hours
48 kHz/16bit	Approx. 15 hours

* Equivalent to approximately 10 GB file size in total.

Playing back audio clips

1. **Follow steps 1 and 2 in "Importing an audio file" (p. 61) to access the setup screen for the audio player.**
2. **Use the [VALUE] knob to select "Level", and then press the [VALUE] knob.**
3. **Use the [VALUE] knob to set Level to "0dB".**
4. **Press the assignable pad [1]–[8] where the audio clip you want to play back is located.**

This plays back the corresponding audio clips.

5. **While playing back the audio clips, use the [VALUE] knob to adjust the audio clip volume, and press the [VALUE] knob.**

   Adjust the input gain so that the SIG/PEAK indicator doesn't light up red when the volume is at its loudest.

* Audio clips of the same number in different banks cannot be played at the same time.
For example, if you try to play the audio clip on pad [1] of bank B while the audio clip on pad [1] of bank A is playing, the audio clip on pad [1] of bank A stops.

MEMO

- If you use the assignable pads to leave this information showing on the setup screen, you can play back the audio clips while checking their information (clip name, playback time, loop, etc.).
- You can adjust the volume of an audio clip by assigning the audio player's audio source to the AUDIO MIXER knobs (p. 49).

Setting an audio clip

1. **Follow steps 1 and 2 in "Importing an audio file" (p. 61) to access the setup screen for the audio player.**
2. **Use the [VALUE] knob to select "Setup", and then press the [VALUE] knob.**
3. **Use the [VALUE] knob to set the parameters.**

Parameter	Explanation
Import	Imports an audio file.
Name	Sets the name for an audio clip.
Duration	Shows the length of an audio clip.
Offset Time	Sets the playback start position of the audio clip.
Level	Sets the volume of the audio clip.
Fade In Time	Sets the fade-in time.
Fade Out Time	Sets the fade-out time.
Repeat	When this is set to "ON", the audio clip plays back in a loop.
Pad Mode	Sets what happens when the audio clip plays back.
Pad Color	Specifies the color of the corresponding pad when it lights up.
Playing Mode	Specifies how the audio clip plays back.

* For details on the parameter, refer to "19: Assignable Pads" (p. 141).

Inputting the name of an audio clip

You can give each audio clip a name.

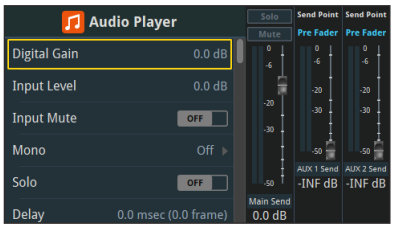
1. **Follow steps 1 and 2 in "Importing an audio file" (p. 61) to access the setup screen for the audio player.**
2. **Use the [VALUE] knob to select "Setup", and then press the [VALUE] knob.**
3. **Use the [VALUE] knob to select "Name", and then press the [VALUE] knob.**

   This brings up the software keyboard for input.
4. **Input the desired clip name.**
5. **Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.**

Mixer settings for the audio player

1. **Press the [MENU] button → "Audio Input" → select "Audio Player", and press the [VALUE] knob.**

   The Audio Player screen appears.



2. **Use the [VALUE] knob to adjust the volume and so forth, and press the [VALUE] knob.**

Outputting audio from the AUX bus

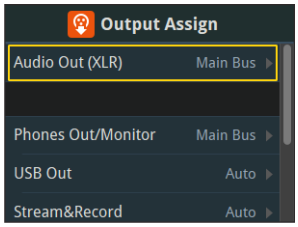
The V-80HD has four different audio buses: Main, AUX 1, AUX 2 and Monitor. You can assign a desired bus to each output connector or jack.

Audio bus	Explanation
Main bus	All input audio is mixed and output (main output).
AUX 1 bus AUX 2 bus	Only the input audio sent to the AUX bus is mixed and output. This allows you to output audio that is different than the main output. For example, in a live event, you might output a mix of all audio inputs, while separately outputting a mix of only specific audio inputs (the AUX bus) for recording or streaming.
Monitor bus	This outputs the same audio as what you hear in the headphones. Use "Monitor Level" to adjust the volume.

Assigning the AUX bus

1. Press the [MENU] button → "Audio Output" → "Output Assign", and press the [VALUE] knob.

The Output Assign screen appears.



2. Specify the audio bus to assign to each jack/connector.

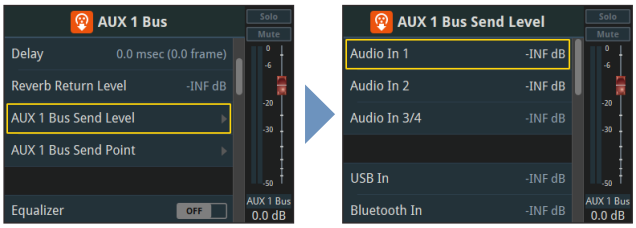
Connector	Buses you can choose from
Audio Out (XLR)	Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus
Phones Out/Monitor	Main Bus, AUX 1 Bus, AUX 2 Bus
USB Out Stream&Record Audio Record HDMI Out 1–3 SDI Out 1, 2	Auto, Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus

Sending audio to the AUX bus

1. Press the [MENU] button → "Audio Output" and select "AUX 1 Bus" or "AUX 2 Bus", and press the [VALUE] knob.

2. Use the [VALUE] knob to select "AUX 1, 2 Bus Send Level", and press the [VALUE] knob.

The AUX 1, 2 Bus Send Level menu is shown.



3. Use the [VALUE] knob to select the input audio, and press the [VALUE] knob.

* You can select HDMI In and SDI In by setting "Auto Send(Video)" to "Off".

When this is set to "On", the audio is automatically sent to the AUX 1 and AUX 2 buses in tandem with the AUX bus video selection.

4. Use the [VALUE] knob to adjust the amount of audio sent to the AUX 1 and AUX 2 buses, and press the [VALUE] knob.

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

MEMO

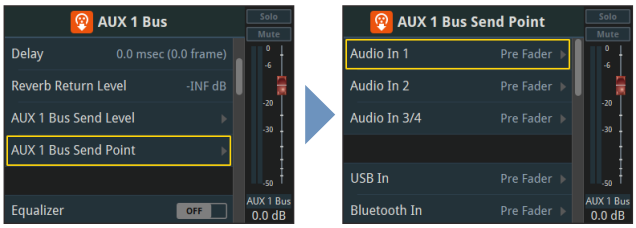
You can also adjust the AUX bus output volume by assigning the AUX bus to an AUDIO MIXER knob.

Configuring the audio that's sent to the AUX bus

You can select whether to send either the original audio or the audio processed with effects to the AUX bus.

1. **Press the [MENU] button → "Audio Output" and select "AUX 1 Bus" or "AUX 2 Bus", and press the [VALUE] knob.**
2. **Use the [VALUE] knob to select "AUX 1, 2 Bus Send Point", and press the [VALUE] knob.**

   The AUX 1, 2 Bus Send Point menu is shown.



3. **Use the [VALUE] knob to select the input audio, and press the [VALUE] knob.**
4. **Use the [VALUE] knob to select "Dry", "Pre Fader", or "Post Fader", and then press the [VALUE] knob.**

Value	Explanation
Dry	This sends the source audio with no effects applied.
Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).

5. **Press the [MENU] button to quit the menu.**

NOTE

If Audio Knob Mode is set to "Catch", the fader operations are ignored until the knob's position "catches up" to the current level (p. 154).

* The SIG/PEAK indicators for the [AUX 1] and [AUX 2] knobs blink while operations are being ignored.

Adding input audio to an HDMI or SDI video for output

The HDMI OUT and SDI OUT connectors support 8-channel embedded audio. You can add input audio (sound) to an HDMI or SDI video that is output.

Assigning HDMI/SDI embedded audio and sound

You can assign the input audio signal you like to channels 3–8 of HDMI or SDI embedded audio.

* These settings are common for the HDMI OUT 1–3 connectors and SDI OUT 1, 2 connectors.

Embedded-audio	Audio
Channel 1	Bus (L) assigned in Output Assign (p. 63)
Channel 2	Bus (R) assigned in Output Assign (p. 63)
Channel 3/4	Audio In 1, 2, Audio In 3/4 USB In, Bluetooth In, Audio Player HDMI 1–4, SDI 1–4, Video Player/SRT In
Channel 5/6	
Channel 7/8	

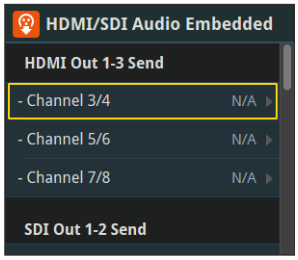
As a Backup for Visual or Sound Recording...

Digital audio is extracted from the HDMI or SDI embedded audio one channel at a time, so after visual recording or sound recording, you can edit the audio channel by channel.

For multilingual support...

Taking multilingual narration or other such audio, making it embedded audio and adding it to HDMI video or SDI video lets you later extract and use the digital audio for the required language.

1. [MENU] button → "Audio Output" → select "HDMI/SDI Audio Embedded", and press the [VALUE] knob.



Assigning the audio

2. Use the [VALUE] knob to select the HDMI or SDI embedded audio channel, and press the [VALUE] knob.

3. Use the [VALUE] knob to select the input audio you wish to assign to the channel, and press the [VALUE] knob.

Input audio	Explanation
Audio In 1/2, 3/4	Audio from AUDIO IN 1–3/4 connectors
USB In	Audio from USB STREAM port
Bluetooth In	Bluetooth In audio
Audio Player	Audio from an audio player
HDMI 1–4	Audio from HDMI IN 1–4 connectors
SDI 1–4	Audio from SDI IN 1–4 connectors
Video Player/SRT In	Audio from video player, SRT In

Configuring the input audio

4. Use the [VALUE] knob to select the input audio, and press the [VALUE] knob.

5. Use the [VALUE] knob to select "Dry", "Pre Fader", or "Post Fader", and then press the [VALUE] knob.

Value	Explanation
Off	No audio is sent.
Dry	This sends the source audio with no effects applied.
Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).

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

The audio including channel 3–8 embedded audio is output from the HDMI OUT 1–3 connectors or the SDI OUT 1, 2 connectors.

Outputting video/audio to a computer for streaming

Here's how the video and audio mixed by the V-80HD can be output to a connected computer. You can also input audio that's played back by the computer.

By using an internet-connected computer with streaming app, you can distribute content as a live internet stream.

To correctly view the audio and video from the V-80HD on your computer, an app that supports the USB video and USB audio class specifications must be installed on the computer.

* For the latest operating requirements, refer to the Roland website (**https://proav.roland.com/**).

Outputting video and audio to the computer

1. **Using a USB 3.0 cable, connect a USB 3.0 port on the computer to the USB STREAM port on the V-80HD.**
2. **Power-on the V-80HD.**
3. **Start the computer.**

   When communication with the computer has been established, the computer recognizes the V-80HD as a USB video device and USB audio device. The first time that the V-80HD is connected to the computer, the standard drivers of the operating system are installed automatically.
4. **Operate the V-80HD to prepare the video and audio that you want to output to the computer.**
5. **On your computer, verify the input from the V-80HD.**

   Start app that supports the USB video class and audio class, and verify the video and audio that are being input from the V-80HD.

MEMO

If the video is garbled or operation is otherwise unstable

Press the [MENU] button → "Video Output" → USB Out" → execute "Connection Reset" to try reconnecting the computer with the V-80HD.

Video formats

You can edit the USB output video format and compression method from the livestreaming app or other app used at the output destination.

The following video formats are supported.

USB OUT frame rate	Video formats		
59.94 Hz	1080/59.94p	720/59.94p	640×480/59.94p
60 Hz	1080/60p	720/60p	640x480/60p
29.97 Hz	1080/29.97p	720/29.97p	640×480/29.97p
30 Hz	1080/30p	720/30p	640×480/30p
50 Hz	1080/50p	720/50p	640×480/50p
25 Hz	1080/25p	720/25p	640×480/25p
23.98 Hz	1080/23.98p	720/23.98p	640×480/23.98p
24 Hz	1080/24p	720/24p	640×480/24p

* Uncompressed (YUY2) and compressed (Motion JPEG) video are supported.

Using the loopback function

Audio from the computer can be input to the V-80HD via USB, mixed with other audio, and returned to the computer (the loopback function).

You can add a narration to music that's played back from your computer and live-stream it, or record it using app on your computer.

Streaming video from a computer

Use the dedicated "Roland Live Streamer" app to stream the video and audio from the USB output of the V-80HD with your computer.

For details on operation, refer to the Owner's Manual of "Roland Live Streamer".

You can download "Roland Live Streamer" from the Roland website.

https://proav.roland.com/

* Compressed (Motion JPEG) video is not supported.

Capturing video on the computer

Using dedicated "Roland Live Recorder" app, the video and audio that are output from the V-80HD via USB can be recorded on your computer.

For details on operation, refer to the Owner's Manual of "Roland Live Recorder".

You can download "Roland Live Recorder" from the Roland website.

https://proav.roland.com/

* Compressed (Motion JPEG) video is not supported.

Streaming/capturing video directly

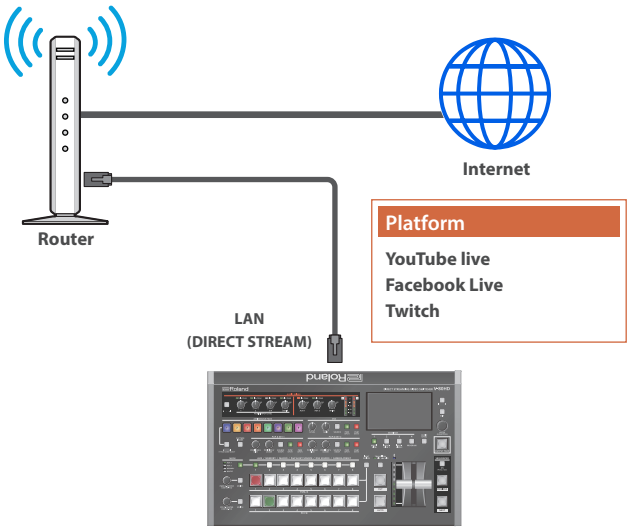
The V-80HD supports RTMP from the DIRECT STREAM port, RTMPS and SRT streaming, as well as recording video/audio to an SD card.

RTMP and RTMPS streaming lets you easily configure streaming to YouTube Live, Facebook Live and Twitch, and gives you custom settings for streaming to other platforms.

This unit is also compatible with the SRT video transmission standard, letting you transmit video to multiple remote SRT devices over the network.

* SRT video input is also supported on the V-80HD. Refer to ""Inputting SRT video" (p. 33)" for details.
* When using certain streaming services, there may be conditions on the accounts that can be used for streaming. See the website of the streaming service you wish to use for details.

Network requirements



Internet connection, including DNS server settings

- To access the Internet, the IP address, subnet mask and default gateway must be configured.
- To access the server hosting the streaming service, you must connect to the DNS (Domain Name System) server, which converts the server's domain name and IP address.

* The above settings are usually retrieved from the DHCP server and assigned.

Continuous TCP communications

To broadcast the livestream via the RTMP or RTMPS protocol over TCP, continuous communication without interruptions or restrictions between devices is required.

HTTPS connection to an Internet server

To configure the livestream for a Web app, you must have an HTTPS connection to an Internet server.

Points to be aware of when livestreaming

Set the appropriate Video Bitrate (p. 136) to match the speed of your Internet connection.

Press the [MENU] button → "Stream&Record" → "Target Bitrate" and select "Video".

The video bit rate is a target bit rate that's used when compressing (encoding) video.

For complex video sequences and the like, the video may be livestreamed at a bit rate of up to around 1.5 times the value that's set.

Before beginning the livestream, we recommend that you test the upload speed of your Internet connection to ensure that a bandwidth of around twice the Video Bitrate value is available.

Starting/stopping the livestream, audio or video recording

The livestream, audio recording and video recording on the V-80HD all start and stop at the same time, and cannot be started or stopped separately.

* You can separately set whether to livestream, record audio or video.

Turning livestreaming, audio and video recording on/off

MEMO

When the streaming/recording function is assigned to the assignable pads, you can configure this from the setup screen.

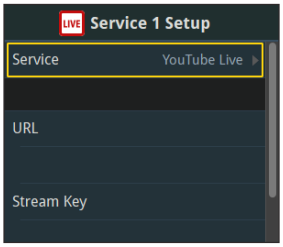
With the factory settings, the streaming/recording setup screen function is assigned to pad [5] of bank B.

NOTE

- If the formats for either streaming and recording or for the file played by the video player/SRT input exceed 1080/30p, the streaming and recording functions can't be used at the same time as the video player/SRT input functions.
- If the bit rate settings for streaming and recording and for the file played on the video player/SRT input exceed 20,000 kbps, the streaming and recording functions can't be used at the same time as the video player/SRT input functions.

Turning the livestream on/off

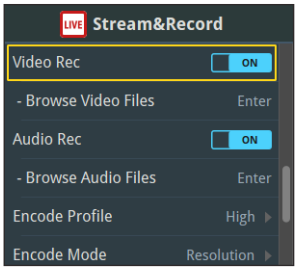
1. **Press the [MENU] button → "Stream/Record" and select "Type", and press the [VALUE] knob.**
2. **Select "RTMP" and press the [VALUE] knob.**
3. **Press the [EXIT] button to return to the previous screen.**
4. **Use the [VALUE] knob to select "Stream&Record" → "Service 1 Setup" or "Service 2 Setup", and press the [VALUE] knob.**
5. **Use the [VALUE] knob to select "Service", and then press the [VALUE] knob.**
6. **Use the [VALUE] knob to select the platform you wish to stream to, and press the [VALUE] knob.**



Select "Off" when you're not streaming.

Turning video and audio recording on/off

1. Press the [MENU] button → "Stream&Record" → "Video Rec" or "Audio Rec", and select ON/OFF.



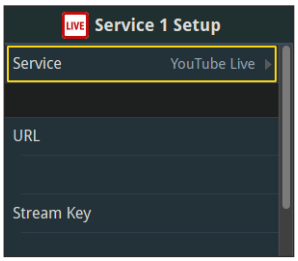
Livestreaming via YouTube Live

Getting ready

- Create a Google account beforehand.
- Make sure that the V-80HD is connected to the Internet for livestreaming.
- To record audio/video, set Audio Rec and Video Rec to "On" (p. 68).

Operating this unit

1. For the streaming platform, select "YouTube Live" (p. 67).



2. On the setup screen (p. 67) for the service, select "Use Web Application", and press the [VALUE] knob.

The shortened URL and QR code for the Web app are shown.

Operating your computer or smartphone

3. On the Web browser of your computer or smartphone, open the link that's shown.

4. Select your Google account.

5. Set the following parameters.

Item	Explanation	
Title	Input the title of the livestream.	
Description	Input the description to be shown on YouTube Live for your content.	
Select privacy scope	Selects the privacy settings (the scope of release) for the livestream.	
	Public	Anyone can search for and view the content.
	Unlisted	The content can be accessed only via the link.
	Private	The livestream is only visible to you.
Select latency Preference	Selects the latency setting.	
	Normal	Normal latency
	Low	Low latency
	UltraLow	Ultra-low latency

6. Click "CREATE BROADCAST AND GET STREAM KEY".

7. Click "SEND TO DEVICE".

When the data transmission is finished, the message "Success" appears.

The URL and stream key are applied to the V-80HD.

NOTE

Don't close the QR code screen until the "URL" and "Stream Key" have been applied.

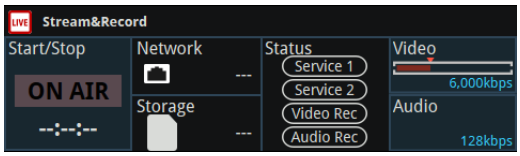
8. Click "OK".

9. Close the page.

Operating this unit

10. Press the [MENU] button → "Stream/Record" → select "Stream&Record View", and press the [VALUE] knob.

The parameters for stopping/starting the livestream, audio and video recording are shown onscreen.



11. Use the [VALUE] knob to select "ON AIR", and then press the [VALUE] knob.

The message "Are you sure you want to start streaming?" is shown.

12. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

13. To end the livestream, select "OK" again and press the [VALUE] knob.

The message "Are you sure you want to stop streaming?" is shown.

14. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The livestream ends.

NOTE

- Stream keys that are acquired have an expiration date, so they need to be acquired prior to livestreaming.
- When acquiring the stream key, you can select a livestream for which the schedule has already been set by using "SELECT YOUR BROADCAST".

MEMO

You can assign the streaming start/stop operations to the assignable pads (p. 97).

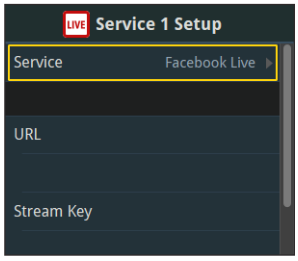
Livestreaming via Facebook Live

Getting ready

- Create a Facebook account beforehand.
- Make sure that the V-80HD is connected to the Internet for livestreaming.
- To record audio/video, set Audio Rec and Video Rec to "On" (p. 68).

Operating this unit

1. For the streaming platform, select "Facebook Live" (p. 67).



2. On the setup screen (p. 67) for the service, select "Use Web Application", and press the [VALUE] knob.

The shortened URL and QR code for the Web app are shown.

Operating your computer or smartphone

3. On the Web browser of your computer or smartphone, open the link that's shown.

4. Log in to your Facebook account.

5. Set the following parameters.

Item	Explanation	
Title	Input the title of the livestream.	
Description	Input the description to be shown on Facebook Live for your content.	
Select destination for live-streaming	Sets where to "post" the livestream (meaning who can view the content).	
	Timeline	The content is streamed to your personal timeline.
	Page	The content is streamed to a Facebook page.
Select privacy scope	Selects the privacy settings (the scope of release) for the livestream.	
	SELF	The livestream is only visible to you.
	ALL FRIENDS	Only friends can view the livestream.
	EVERYONE	Anyone can view the livestream.

6. Click "SUBMIT TO DEVICE!".

When the data transmission is finished, the message "Success" appears.

The URL and stream key are applied to the V-80HD.

NOTE

Don't close the QR code screen until the "URL" and "Stream Key" have been applied.

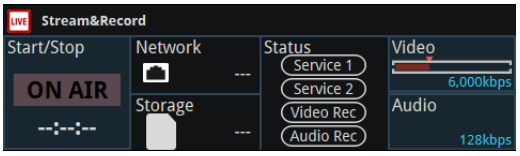
7. Click "OK".

8. Close the page.

Operating this unit

9. Press the [MENU] button → "Stream/Record" → select "Stream&Record View", and press the [VALUE] knob.

The parameters for stopping/starting the livestream, audio and video recording are shown onscreen.



10. Use the [VALUE] knob to select "ON AIR", and then press the [VALUE] knob.

The message "Are you sure you want to start streaming?" is shown.

11. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

12. To end the livestream, select "OK" again and press the [VALUE] knob.

The message "Are you sure you want to stop streaming?" is shown.

13. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The livestream ends.

NOTE

Facebook stream keys that are acquired have an expiration date, so they need to be acquired prior to livestreaming.

MEMO

You can assign the streaming start/stop operations to the assignable pads (p. 97).

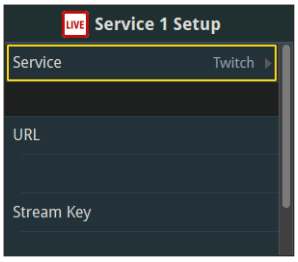
Livestreaming via Twitch

Getting ready

- Create a Twitch account beforehand.
- Make sure that the V-80HD is connected to the Internet for livestreaming.
- To record audio/video, set Audio Rec and Video Rec to "On" (p. 68).

Operating this unit

1. **Select "Twitch" as the streaming platform (p. 67).**



2. **On the setup screen (p. 67) for the service, select "Use Web Application", and press the [VALUE] knob.**

The shortened URL and QR code for the Web app are shown.

Operating your computer or smartphone

3. **On the Web browser of your computer or smartphone, open the link that's shown.**
4. **Log in to your Twitch account.**
5. **Select the server to connect to in "Select ingest server location".**

To stream your content in a more stable network environment, select a server in a region that's close to you.

* You can still livestream, regardless of which server you choose.

6. **Click "SUBMIT TO DEVICE!".**

When the data transmission is finished, the message "Success" appears.

The URL and stream key are applied to the V-80HD.

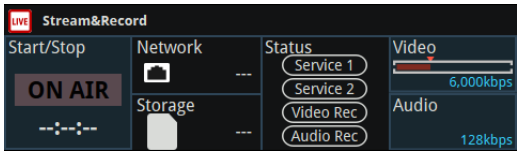
> **NOTE**
> Don't close the QR code screen until the "URL" and "Stream Key" have been applied.

7. **Click "OK".**
8. **Close the page.**

Operating this unit

9. **Press the [MENU] button → "Stream/Record" → select "Stream&Record View", and press the [VALUE] knob.**

The parameters for stopping/starting the livestream, audio and video recording are shown onscreen.



10. **Use the [VALUE] knob to select "ON AIR", and then press the [VALUE] knob.**

The message "Are you sure you want to start streaming?" is shown.

11. **Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.**

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

12. **To end the livestream, select "OK" again and press the [VALUE] knob.**

The message "Are you sure you want to stop streaming?" is shown.

13. **Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.**

The livestream ends.

> **MEMO**
> You can assign the streaming start/stop operations to the assignable pads (p. 97).

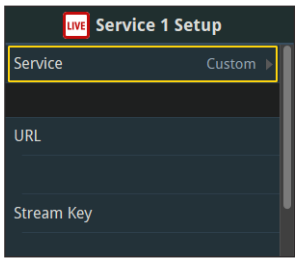
Streaming with custom settings

Getting ready

- Make sure that the V-80HD is connected to the Internet for livestreaming.
- To record audio/video, set Audio Rec and Video Rec to "On" (p. 68).

Operating this unit

1. **Select "Custom" as the streaming platform (p. 67).**



2. **On the setup screen (p. 67) for the service, select "Use Web Application", and press the [VALUE] knob.**

The shortened URL and QR code for the Web app are shown.

Operating your computer or smartphone

3. **On the Web browser of your computer or smartphone, open the link that's shown.**

4. **Input the "RTMP URL" and "Stream Key".**

> **MEMO**
> You can find the "RTMP URL" and "Stream Key" on the website or other resource of the streaming platform you are going to use.

5. **Click "SUBMIT!".**

When the data transmission is finished, the message "Success!" appears.

The URL and stream key are applied to the V-80HD.

> **NOTE**
> Don't close the QR code screen until the "URL" and "Stream Key" have been applied.

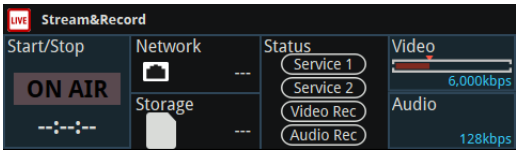
6. **Click "OK".**

7. **Close the page.**

Operating this unit

8. **Press the [MENU] button → "Stream/Record" → select "Stream&Record View", and press the [VALUE] knob.**

The parameters for stopping/starting the livestream, audio and video recording are shown onscreen.



9. **Use the [VALUE] knob to select "ON AIR", and then press the [VALUE] knob.**

The message "Are you sure you want to start streaming?" is shown.

10. **Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.**

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

11. **To end the livestream, select "OK" again and press the [VALUE] knob.**

The message "Are you sure you want to stop streaming?" is shown.

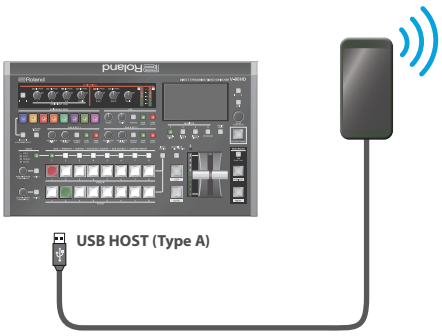
12. **Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.**

The livestream ends.

> **MEMO**
> You can assign the streaming start/stop operations to the assignable pads (p. 97).

Tethering

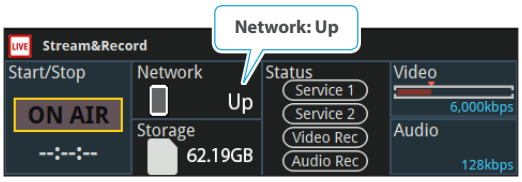
You can connect your smartphone to this unit and use it for tethering.



iPhone:

1. **Connect the USB HOST port of the V-80HD to your iPhone with a commercially available USB 2.0 cable.**
2. **On your iPhone, select "Settings" → "Personal Hotspot", and turn "Allow Other to Join" on.**
3. **When you see the message, "Trust this Computer?" , tap "Trust".**
4. **If you see the message "Enter Device Passcode to Trust This Computer", enter your passcode.**
5. **Press the [MENU] button → "Network" → "Priority", and press the [VALUE] knob.**
6. **Use the [VALUE] knob to select "Tethering", and press the [VALUE] knob.**
7. **Press the [EXIT] button to return to the previous screen.**
8. **Use the [VALUE] knob to select "Start Tethering", and then press the [VALUE] knob.**
9. **Press the [MENU] button → "Stream/Record" → select "Stream&Record View", and press the [VALUE] knob.**

   Once the Network display in the status area changes from "Network: ---" to "Network: Up", you can use the mobile connection of your iPhone.



10. **To stop tethering, select "Stop Tethering" in step 8 again, and press the [VALUE] knob.**

Android devices:

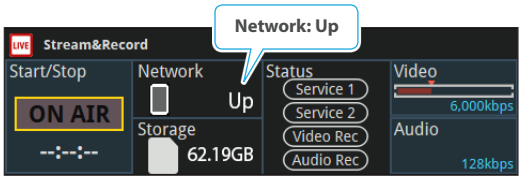
NOTE

The method of operation differs depending on the smartphone model. Check the owner's manual for your device for details.

1. **Connect the USB HOST port of the V-80HD to your smartphone with a USB cable.**

   A notification is shown at the top of your smartphone screen.
2. **On your smartphone, select "Settings" → "Network and Internet" → "Hotspot and tethering".**
3. **Activate "USB tethering".**
4. **Press the [MENU] button → "Network" → "Priority", and press the [VALUE] knob.**
5. **Use the [VALUE] knob to select "Tethering", and press the [VALUE] knob.**
6. **Press the [EXIT] button to return to the previous screen.**
7. **Use the [VALUE] knob to select "Start Tethering", and then press the [VALUE] knob.**
8. **Press the [MENU] button → "Stream/Record" → select "Stream&Record View", and press the [VALUE] knob.**

   Once the Network display in the status area changes from "Network: ---" to "Network: Up", you can use the mobile connection of your iPhone.



9. **To stop tethering, select "Stop Tethering" in step 7 again, and press the [VALUE] knob.**

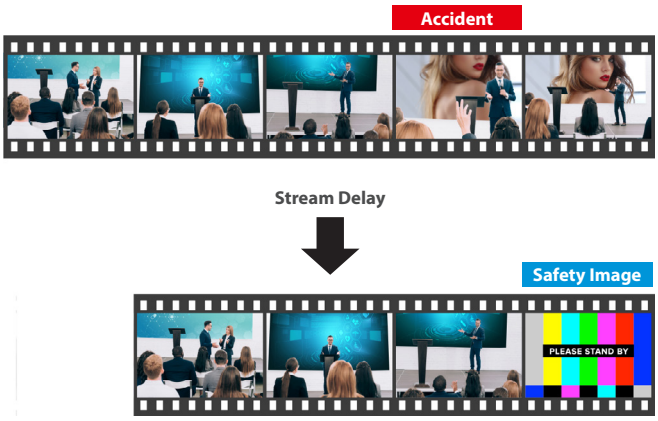
Avoiding sporadic issues when livestreaming (safety delay)

The V-80HD comes with a built-in "safety delay" function that helps you to avoid unexpected troubles during livestreaming.

You can set the video and audio buffer (streaming delay time: "Stream Delay") for the safety delay function.

If an accidental issue occurs within the streaming delay time, you can control the "switch to still image" and "mute audio" functions with the press of a button, which prevents undesirable content from being streamed.

The safety delay function thus helps you to feel more at ease when livestreaming content, especially in situations like live events where there is no script or guide.



- The streaming delay time can be set in five-second intervals, to a maximum of 60 seconds.
- This unit switches to the still image you imported as the "safety image".
- The unit switches to the safety image only during livestreaming. You can only check the switch to the safety image by looking at the livestreamed video. The image shown on this unit's display or the video outputted via the HDMI OUT connector doesn't switch to the safety image.
- You can use the functions for switching to the still image and for muting the audio by assigning them to the ASSIGNABLE PADS buttons.

Setting the Streaming Delay Time

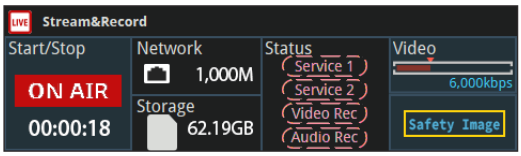
1. Press the [MENU] button → "Stream&Record" → select "Safety Delay", and press the [VALUE] knob.
2. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

Value
Off, 5 sec–60 sec (five-second intervals)

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

Using the safety delay function

1. Start the livestream.
2. Press the [MENU] button → "Stream/Record" → select "Stream&Record View", and press the [VALUE] knob.
3. Use the [VALUE] knob to select "Safety Image", and then press the [VALUE] knob.



The streaming video switches to a still image, and the streaming audio is muted.

MEMO

You can also assign the safety delay function to the assignable pads (p. 97).

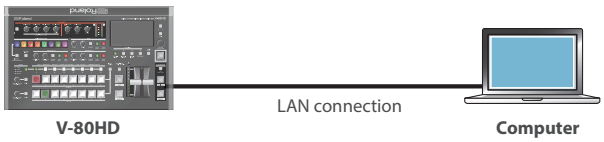
Outputting the SRT video

SRT video output is supported on the V-80HD. SRT video can be output to an SRT-compatible device that's connected to a network.

This section describes how to make the necessary connections and output the SRT content, using an SRT video input device connected to your LAN as an example.

* RTMP streaming (p. 67) is not available when outputting SRT video.

Network requirements



* To output video over a network, the IP address, subnet mask and default gateway must be configured.
These settings are usually retrieved from the DHCP server and assigned.

Connecting an SRT-compatible device to output SRT video

The SRT video signal can be connected from either the transmitting or receiving device, regardless of the orientation of the video signal.

The device that's waiting for the connection is in "listener" mode, and the device that's initiating the connection is in "caller" mode. Depending on the device, one or both modes are supported.

The V-80HD supports both listener and caller modes.

Connecting in caller mode

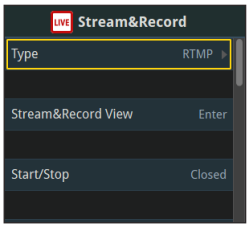
In caller mode, configure the transmitting device (V-80HD) to match the configuration of the receiving device.

Here's how to make an SRT connection from the V-80HD to the receiving device and output the video from the V-80HD.

1. Set the SRT mode of the receiving device to listener mode, and input the other settings.

* For details on the settings and method of operation, refer to the Owner's Manual for the receiving device.

2. Press the [MENU] button → "Stream/Record" and select "Type", and press the [VALUE] knob.

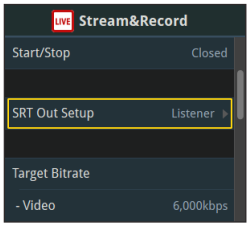


3. Select "SRT Out" and press the [VALUE] knob.

4. Press the [EXIT] button to return to the previous screen.

5. Use the [VALUE] knob to select "SRT Out Setup", and press the [VALUE] knob.

6. Use the [VALUE] knob to select "Mode", and then press the [VALUE] knob.



7. Select "Caller" and press the [VALUE] knob.

8. Press the [EXIT] button to return to the previous screen.

9. Use the [VALUE] knob to change the setting as shown below.

Parameter	Explanation
Remote IP Address	Sets the IP address of the SRT receiving device.
Remote Port	Sets the port number of the SRT receiving device.
Latency	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence. Set this if necessary.
Stream ID	If a stream ID is set for the receiving device, set the stream ID to this same ID. * If the stream IDs on the sending and receiving devices do not match, the video cannot be transmitted or received.
Encryption	If you want to encrypt the video, set the encryption method. Configure the same encryption method on the receiving device. * If the encryption methods of the transmitting and receiving devices don't match, the video cannot be transmitted or received.
Passphrase	When setting an encryption method, this sets the passphrase. Set the same passphrase for the receiving device. * If the passphrases of the transmitting and receiving devices don't match, the video cannot be transmitted or received.

MEMO

You can also configure this using the Web app.

The V-80HD must be connected to the Internet before you use the Web app.

1. Use the [VALUE] knob to select "Use Web Application", and press the [VALUE] knob.

A 2D barcode (URL) appears on this unit's display.

2. Open the displayed URL on your computer or smartphone.

3. Configure the parameters on your computer or smartphone, and press the [SUBMIT] button.

The settings are applied to the V-80HD.

10. Set the receiving device to SRT listener mode.

11. Use the [VALUE] knob to select "Start/Stop", and then press the [VALUE] knob.

The video is displayed on the receiving device.

You can check the connection status on the GUI screen.

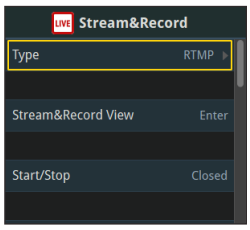
Connecting in listener mode

This shows how to configure the V-80HD in listener mode to listen for SRT connections.

These are the steps for connecting to the V-80HD from the receiving device via SRT and outputting the video from the V-80HD.

In listener mode on the V-80HD, you can send SRT video to up to three receiving devices.

1. Press the [MENU] button → "Stream/Record" and select "Type", and press the [VALUE] knob.



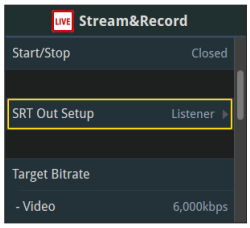
2. Select "SRT Out" and press the [VALUE] knob.

3. Press the [EXIT] button to return to the previous screen.

4. Use the [VALUE] knob to select "SRT Out Setup", and press the [VALUE] knob.

5. Use the [VALUE] knob to select "Mode", and then press the [VALUE] knob.

6. Select "Listener" and press the [VALUE] knob.



7. Press the [EXIT] button to return to the previous screen.

8. Use the [VALUE] knob to change the setting as shown below.

Parameter	Explanation
Local Port	Sets the port number used for listening for SRT connections.
Latency	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence. Set this if necessary.
Encryption	If you want to encrypt the video, set the encryption method. Configure the same encryption method on the receiving device. * If the encryption methods of the transmitting and receiving devices don't match, the video cannot be transmitted or received.
Passphrase	When setting an encryption method, this sets the passphrase. Set the same passphrase for the receiving device. * If the passphrases of the transmitting and receiving devices don't match, the video cannot be transmitted or received.

* In listener mode, you do not need to set the Stream ID.

MEMO

You can also configure this using the Web app.

The V-80HD must be connected to the Internet before you use the Web app.

1. Use the [VALUE] knob to select "Use Web Application", and press the [VALUE] knob.

A 2D barcode (URL) appears on this unit's display.

2. Open the displayed URL on your computer or smartphone.

3. Configure the parameters on your computer or smartphone, and press the [SUBMIT] button.

The settings are applied to the V-80HD.

9. Set the SRT mode of the receiving device to caller mode.

* For details on the settings and method of operation, refer to the Owner's Manual for the receiving device.

10. Set the caller mode of the receiving device based on the settings in step 8.

* Press the [MENU] button → "Network" → "Network Information" to check the IP address that's set for the receiving device.

11. Use the [VALUE] knob to select "Start/Stop", and then press the [VALUE] knob.

The unit enters SRT listening mode.

12. Perform the operations for connecting on the receiving device.

The video is displayed on the receiving device.

You can check the connection status and the number of connected devices on the GUI screen.

Stopping the SRT connection

The SRT connection can be stopped from either the transmitting or receiving device.

Follow the steps on the V-80HD as shown below to stop the connection.

1. [MENU] button → "Stream&Record" → select "Start/Stop", and press the [VALUE] knob.

* To stop the connection from the receiving device, refer to the owner's manual of that device.

Saving/recalling settings (scene memory)

You can save the current settings, including the video/audio settings and the state of the operating panel, in scene memory and recall those settings for use when necessary.

The V-80HD is provided with 32 scene memories.

* The demo data in this unit includes some scene memories by factory default.

About the Last Memory Function

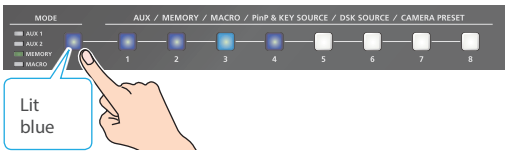
The V-80HD has a built-in Last Memory feature. Last Memory is a feature that saves the state of the unit that is in effect immediately before power-down, and automatically restores the state at the next startup. The Last Memory feature is enabled by default.

If you want the unit to recall a scene memory when it starts up, press the [MENU] button → "Scene Memory" → "Start Up" to specify the scene memory number.

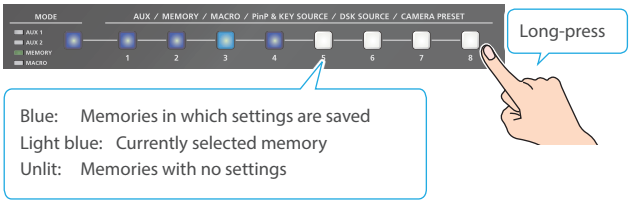
Saving to a scene memory

Scene memory 1–8

1. Press the [MODE] button several times to select "MEMORY".



2. Long-press the MEMORY button for the number where you want to save the settings.

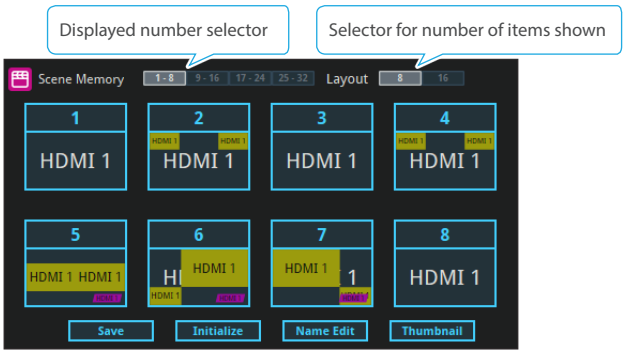


All of the MEMORY [1]–[8] buttons briefly light up light blue, and the current settings are saved in the selected preset memory.

Scene memory 1–32

1. Press the [MENU] button → "Scene Memory" → select "Save/Load", and press the [VALUE] knob.

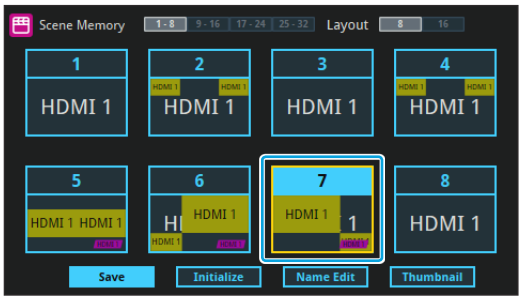
The Scene Memory setup screen appears.



2. Use the [VALUE] knob to select "Save", and then press the [VALUE] knob.

The "Save" text blinks.

3. Use the [VALUE] knob to select the save destination scene memory number, and press the [VALUE] knob.



A confirmation message appears.

4. Select "OK" and press the [VALUE] knob.

This saves the current settings to the selected scene memory.

MEMO

- **Using the cross-point buttons to save and recall scene memories**

  In addition to the MEMORY button, the cross-point buttons can also be used to save and recall scene memories.

  The PGM/A cross-point [1]–[8] buttons correspond to scene memories 9–16, and the PGM/B cross-point [1]–[8] buttons correspond to scene memories 17–24.

  Press the [MENU] button → "Scene Memory" → "Button Assign" → select "Number of MEMORY Button" and set it to "24".

- **Assigning scene memories to the buttons**

  You can assign scene memories as you like, to operate with the buttons.

  Press the [MENU] button → "Scene Memory" → "Button Assign" → [MEMORY 1]–[MEMORY 8] button or [MEMORY 24] button to set the scene memory that's recalled for each button.

- You can prohibit settings from being saved or initialized (p. 77) to protect the scene memories.

  Press the [MENU] button → "Scene Memory" → and set "Memory Protect" to "ON".

- Since settings related to the system, network and so on are common to the entire unit, they are not saved in a memory.

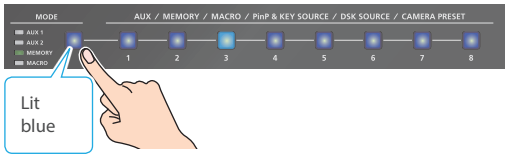
- **About the demo data**

  Once you perform a factory reset (p. 109), any demo data you have edited or deleted is restored to its factory settings.

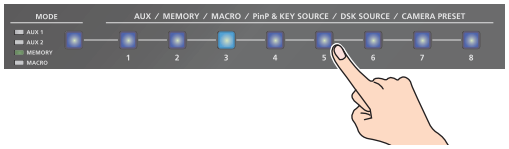
Recalling a scene memory

Scene memory 1–8

1. Press the [MODE] button several times to select "MEMORY".



2. Press the MEMORY button for the number whose setting you want to recall.



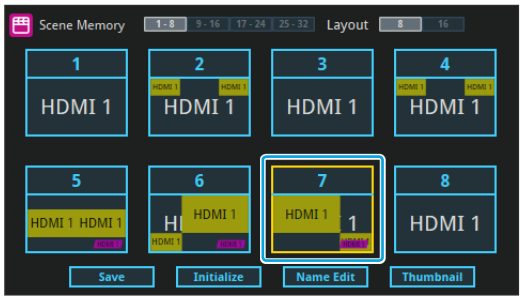
The settings are recalled.

Scene memory 1–32

1. Press the [MENU] button → "Scene Memory" → select "Save/Load", and press the [VALUE] knob.

The Scene Memory setup screen appears.

2. Use the [VALUE] knob to select the scene memory number you want to recall, and press the [VALUE] knob.



The scene memory is recalled.

MEMO

- You can choose not to recall a certain setting when recalling a scene memory.

  For each Load Parameters item selected using the [MENU] button → "Scene Memory" → "Load Parameters", you can set whether to recall that setting.

- You can apply video transition effects, make an inset screen fade in and so on when you recall a scene memory.

  Configure the settings of the following menu items from the [MENU] button → "Scene Memory".

Menu item	Explanation
Fade Time	Sets how long the transition to the next video takes when recalling a scene memory. * The time you set is used for the parameters below.
Mix/Wipe	When this is "ON", the transition effect is applied when the scene memory is recalled.
PinP&Key 1, 2	When this is "ON", the inset screen fades in when you recall a scene memory that includes a PinP composite.
DSK	When this is "ON", the superimposed caption and video fades in when you recall a scene memory that includes a DSK composite.

- You can assign the scene memories to the assignable pads for recall (p. 97).

Initializing a scene memory

Here's how you can initialize and erase the settings of a scene memory.

1. Press the [MENU] button → "Scene Memory" → select "Save/Load", and press the [VALUE] knob.

The Scene Memory setup screen appears.

2. Use the [VALUE] knob to select "Initialize", and then press the [VALUE] knob.

The "Initialize" text blinks.

3. Use the [VALUE] knob to select the scene memory that you want to initialize, and press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

4. Select "OK" and press the [VALUE] knob.

The scene memory is initialized.

Renaming a scene memory

Here's how to rename a preset memory.

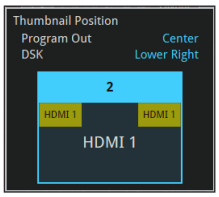
1. **Press the [MENU] button → "Scene Memory" → select "Save/Load", and press the [VALUE] knob.**
   The Scene Memory setup screen appears.
2. **Use the [VALUE] knob to select "Name Edit", and then press the [VALUE] knob.**
   The "Name Edit" text blinks.
3. **Use the [VALUE] knob to select the scene memory number whose name you wish to edit, then press the [VALUE] knob.**
   This brings up the software keyboard for input.
4. **Input the macro name.**
   * You can input up to 8 characters.
5. **Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.**

The "Name Edit" text goes back to being lit up.

Changing the thumbnail position

You can change the position of the thumbnail used for checking the video/image content, shown on the scene memory setup screen.

1. **Press the [MENU] button → "Scene Memory" → select "Save/Load", and press the [VALUE] knob.**
   The Scene Memory setup screen appears.
2. **Use the [VALUE] knob to select "Thumbnail", and press the [VALUE] knob.**
   The "Thumbnail" text blinks.
3. **Use the [VALUE] knob to select the scene memory number, and press the [VALUE] knob.**



This shows the thumbnail layout screen.

4. **Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.**
5. **Press the [EXIT] button.**

Saving scene memories to an SD card or USB flash drive

You can group together the scene memories (1–32) into a single file (.v80hdscene) and save the file to storage media (SD card, USB flash drive) connected to the V-80HD. You can access the saved scene memory file on the storage media and load it into the unit for use when needed.

* The scene memory file is saved to and recalled from the "Roland/V-80HD/scene_memory" folder.

NOTE

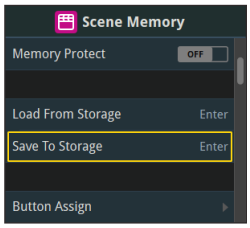
- When using a SD card or USB flash drive for the first time, you must format it using the V-80HD (p. 13, p. 13).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Depending on the SD card or USB flash drive, it may take some time to be recognized.

Saving a new settings file

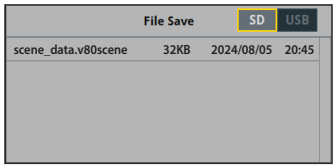
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "Scene Memory" → select "Save To Storage", and press the [VALUE] knob.



This shows a list of scene memory files on the storage media.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Select "File Name" and press the [VALUE] knob.

This brings up the software keyboard for input.

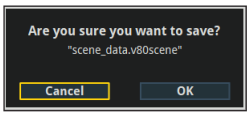
4. Enter the file name.

* You can input up to 32 characters.

5. Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.

6. When you finish entering the name, use the [VALUE] knob to select "Save", and then press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

7. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The scene memory file (.v80scene) is saved to the storage media. When the operation is finished, the message "Completed." appears.

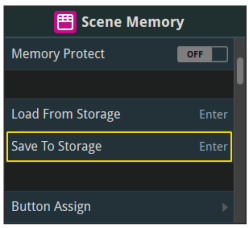
8. Press the [MENU] button to quit the menu.

Overwrite-saving a settings file

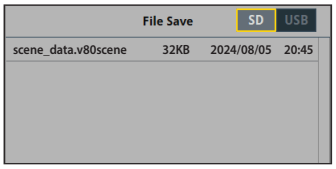
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "Scene Memory" → select "Save To Storage", and press the [VALUE] knob.



This shows a list of scene memory files on the storage media.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

4. Use the [VALUE] knob to select the scene memory file that you want to overwrite, and press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The scene memory file is overwritten. When the operation is finished, the message "Completed." appears.

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

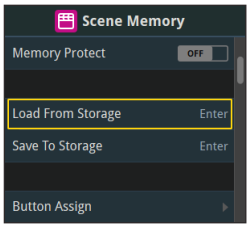
Recalling

Here's how to load the scene memory settings that are saved on storage media. When you load the settings, the current scene memory settings are overwritten.

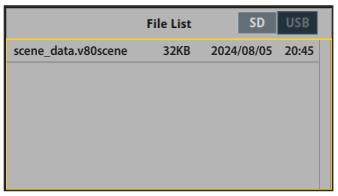
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "Scene Memory" → select "Load From Storage", and press the [VALUE] knob.



This shows a list of scene memory files on the storage media.

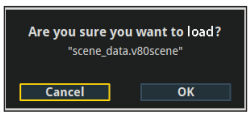


* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

4. Use the [VALUE] knob to select the scene memory file that you want to load, and press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The scene memory settings are recalled. When the operation is finished, the message "Completed." appears.

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

Recording multiple operations to automatically execute (macros)

This feature lets you record multiple operations and then automatically execute them (as a macro function). You only need to record the macro operation beforehand and then select the macro to perform the series of operations you recorded. This function is useful for executing exactly the same operations, even when a different operator is using the unit.

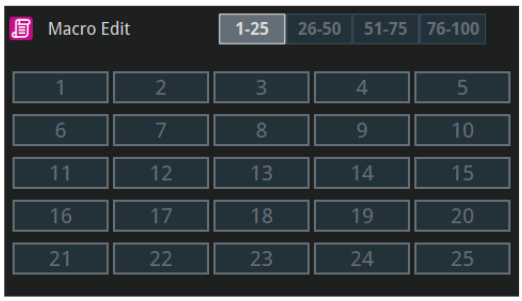
You can create up to 100 macros.

Recording a macro

A single macro can contain up to 10 different operations. You can include a macro within another macro, to make a single macro execute a more complicated set of functions.

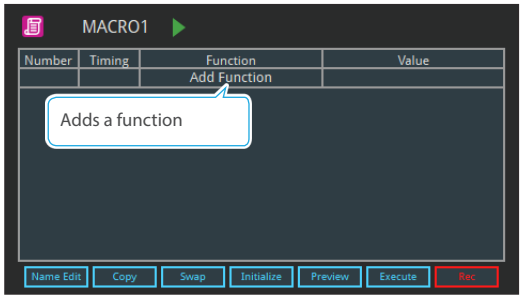
* The demo macro data in this unit that's available by factory default includes some recorded operations.

1. Press the [MENU] button → "Macro" → select "Edit", and press the [VALUE] knob.



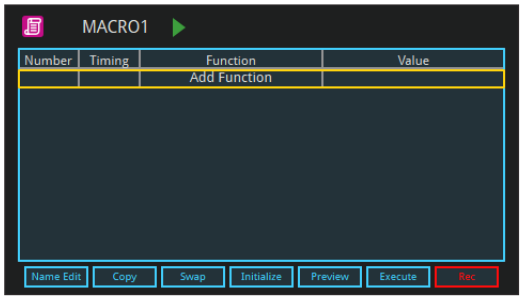
2. Use the [VALUE] knob to select the macro you want to edit, and press the [VALUE] knob.

The Macro edit screen appears.



3. Use the [VALUE] knob to select the operation list, and press the [VALUE] knob.

4. Use the [VALUE] knob to select "Add Function", and then press the [VALUE] knob.

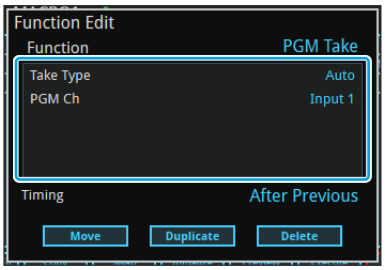


The function edit menu appears.

5. Select the operation to record to the macro using the [VALUE] knob, and then press the [VALUE] knob.

* See "Editing a macro" (p. 82) for details on which operations you can record to a macro.

6. Use the [VALUE] knob to set the related parameters.



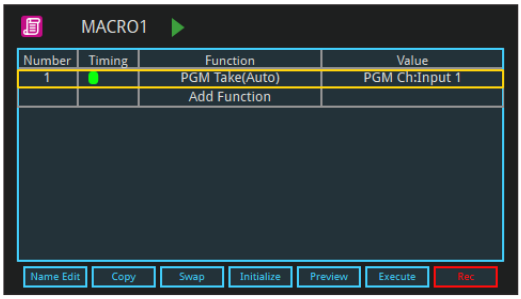
7. Use the [VALUE] knob to select "Timing", and press the [VALUE] knob.

8. Use the [VALUE] knob to set the timing at which the operation is executed, and then press the [VALUE] knob.

Value	Explanation
After Previous	The function is executed after the preceding one. The next sequential list number is used.
Same As Previous	Executes the operation at the same time as the preceding one. The same list number as the previous operation is used.

* If you place a function at the beginning of the macro, setting the timing has no effect.

9. Press the [EXIT] button to return to the previous screen.



10. Repeat steps 4–9 to finish making the macro.

11. Press the [EXIT] button to close the menu.

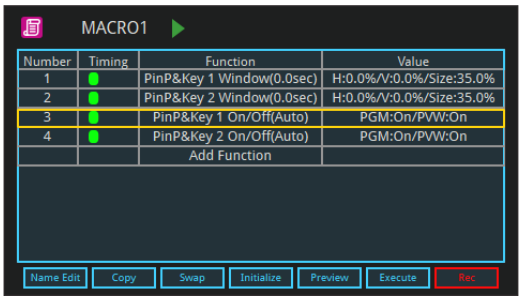
Editing a macro

You can edit the contents of a function, change the order in which it is executed, or copy/delete a function either while creating a macro or after the macro is finished.

Editing the contents of a function

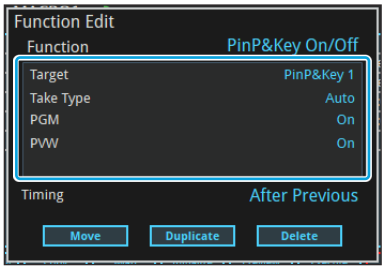
1. In step 3 of "Recording a macro" (p. 81), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.



Menu	Value		Explanation
Function	PGM Take PGM/PST Select AUX Select Input Assign Transition Time Transition Type PinP&Key On/Off PinP&Key Source PinP&Key Window PinP&Key Cropping PinP&Key View DSK On/Off DSK Source Split On/Off Split Type	Split Position Audio Input Level Audio Input Mute Audio Output Level Audio Output Mute Audio Player Control Video Player Control Scene Memory Memory Fade Time Memory Fade On/Off Macro Output Fade External Rec Control GPO One Shot GPO Alternate Camera Preset Recall Wait	Sets the operation to record to the macro. * The related menu is shown according to the operation you set. WAIT: Sets the waiting time before the next operation is executed.

2. Follow steps 4–9 in "Recording a macro" (p. 81) to edit the operation.



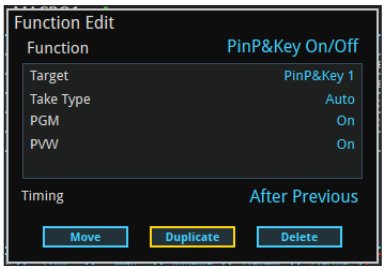
Copying a function

* Copying is disabled if the number of recorded functions have reached the limit (10).

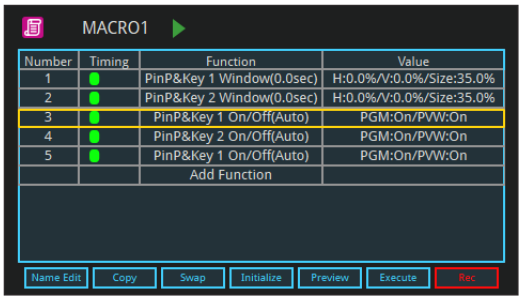
1. In step 3 of "Recording a macro" (p. 81), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.

2. Use the [VALUE] knob to select "Duplicate", and then press the [VALUE] knob.



The copied operation is added to the last line of the list.

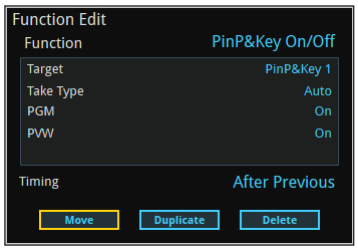


Moving a function

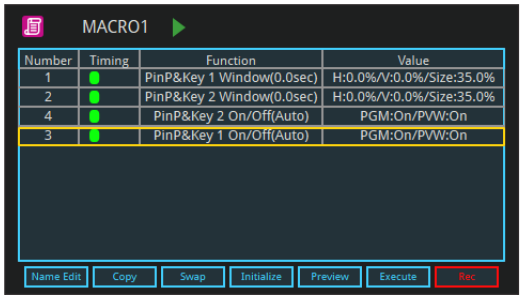
1. In step 3 of "Recording a macro" (p. 81), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.

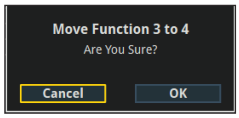
2. Use the [VALUE] knob to select "Move", and then press the [VALUE] knob.



3. Turn the [VALUE] knob to select the row that contains the operation you want to move, and press the [VALUE] knob.



A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

4. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

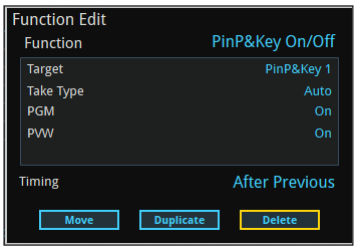
This moves the row.

Deleting a function

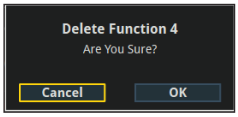
1. In step 3 of "Recording a macro" (p. 81), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.

2. Use the [VALUE] knob to select "Delete", and then press the [VALUE] knob.



A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

3. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

This deletes the operation line.

MEMO

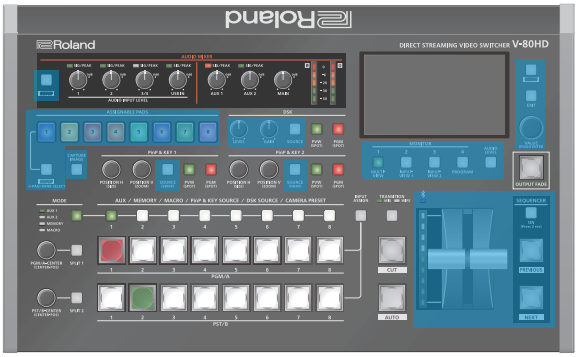
What's the difference between "Preview" and "Execute"?

The macro is executed when you touch "Preview" or "Execute" at the bottom of the edit screen. With "Preview", the action reverts to the previous state once it is executed; but with "Execute", the results are reflected and remain in Program Out.

Directly recording the panel operations to a macro

You can record the panel operations to a macro, just as you did them.

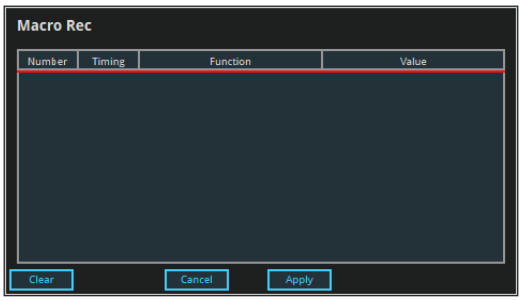
: Panel operations that can't be recorded to a macro



1. Select the macro you want to edit to access the macro editing screen (p. 81).

2. Use the [VALUE] knob to select "Rec", then press the [VALUE] knob.

The macro recording screen appears.



3. Operate the controls you want to record.

Each time you operate a control, the operation is added to the list.

When you execute "CLEAR", the contents of the recorded macro are erased, and the macro is initialized.

4. Use the [VALUE] knob to select "Apply", and press the [VALUE] knob.

This confirms the operations you've recorded.

MEMO

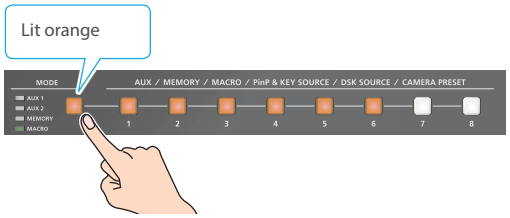
Pressing the MACRO button to record a macro

You can start recording a macro by long-pressing the MACRO button that corresponds to the number of the macro you want to record.

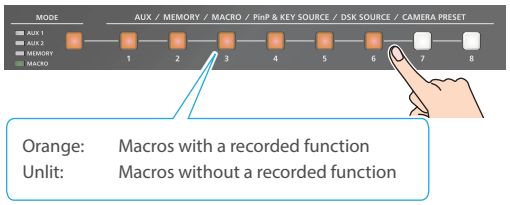
Executing a macro

Macro 1–8

1. Press the [MODE] button several times to select "MACRO".



2. Press the MACRO button corresponding to the number of the macro you wish to execute.



This executes the macro.

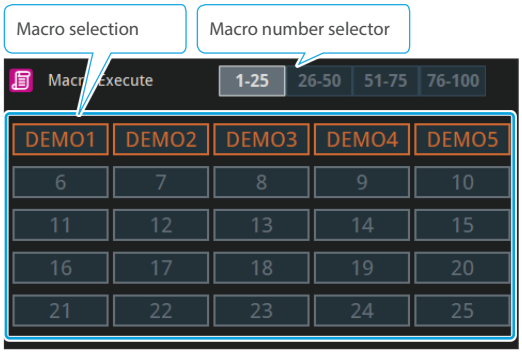
Macro 1–100

1. Press the [MENU] button → "Macro" → select "Execute", and press the [VALUE] knob.

This shows the macro execution screen.

This shows the macro execution screen.

2. Use the [VALUE] knob to select the macro (1–100) you want to execute, and press the [VALUE] knob.



This executes the macro.

MEMO

- **Using the cross-point buttons to execute a macro**

  In addition to the MACRO buttons, you can use the cross-point buttons to execute the macros.

  The PGM/A cross-point [1]–[8] buttons correspond to macros 9–16, and the PGM/B cross-point [1]–[8] buttons correspond to macros 17–24.

  Press the [MENU] button → "Macro" → "Button Assign" → select "Number of MACRO Button", and set it to "24".

- Changing the macros assigned to the buttons

  You can change the macros assigned to the buttons.

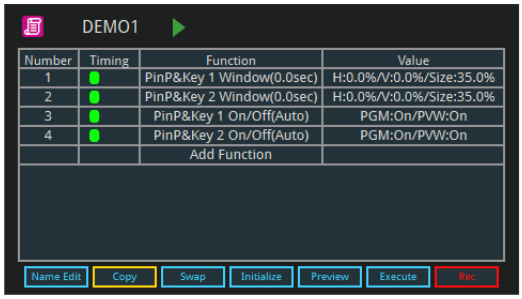
  Press the [MENU] button → "Macro" → "Button Assign" → "MACRO 1 Button"–"MACRO 8 Button" or "MACRO 24 Button" to set the macro (1–100) that's recalled for each button.

- You can assign macros to the assignable pads for recall (p. 97).

Copying macro settings

Here's how to copy the settings from one macro to another.

1. **Select the macro you want to edit to access the macro editing screen (p. 81).**
2. **Use the [VALUE] knob to select the copy source macro settings, and press the [VALUE] knob.**
3. **Use the [VALUE] knob to select "Copy", and press the [VALUE] knob.**



The copy source macro blinks.

4. **Use the [VALUE] knob to select the copy destination macro, and press the [VALUE] knob.**

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

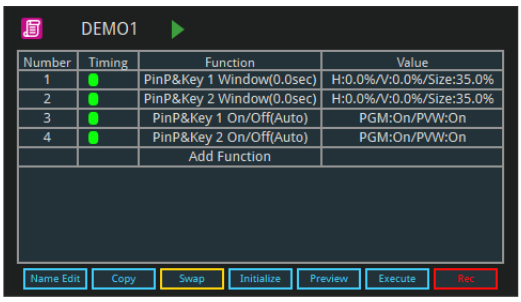
5. **Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.**

The macro settings are copied.

Swapping the macro settings

Here's how to swap settings between macros.

1. **Select the macro you want to edit to access the macro editing screen (p. 81).**
2. **Use the [VALUE] knob to select "Swap", and then press the [VALUE] knob.**



The swap source macro blinks.

3. **Use the [VALUE] knob to select the swap destination macro, and press the [VALUE] knob.**

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

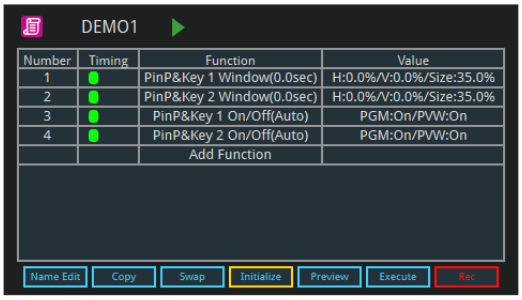
4. **Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.**

This swaps the settings of the macros.

Initializing a macro

You can initialize a macro and completely erase its settings.

1. **Select the macro you want to edit to access the macro editing screen (p. 81).**
2. **Use the [VALUE] knob to select "Initialize", and then press the [VALUE] knob.**



A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

3. **Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.**

The macros are initialized.

MEMO

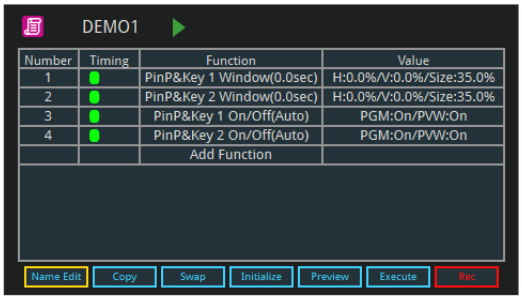
About the macro demo data

Once you perform a factory reset (p. 109), any demo data you have edited or deleted is restored to its factory settings.

Renaming a macro

Here's how to rename a macro.

1. **Select the macro you want to edit to access the macro editing screen (p. 81).**
2. **Use the [VALUE] knob to select "Name Edit", and then press the [VALUE] knob.**



This brings up the software keyboard for input.

3. **Input the macro name.**

* You can input up to 8 characters.

4. **Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.**

This changes the macro's name.

Saving/loading the macro settings

You can group together the macro settings (1–100) into a single file (.RMC) and save it to a storage (SD card, USB flash drive,) connected to the V-80HD. You can access the saved macro setting file on the storage and load it into the unit for use when needed.

* Macro setting files are stored in and recalled from the "Roland/V-80HD/macro" folder.

NOTE

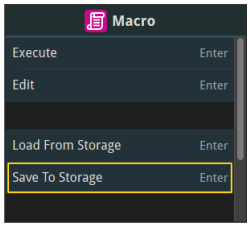
- When using an SD card or USB flash drive for the first time, you must format it using the V-80HD (p. 13, p. 13).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Depending on the SD card or USB flash drive, it may take some time to be recognized.

Saving a new settings file

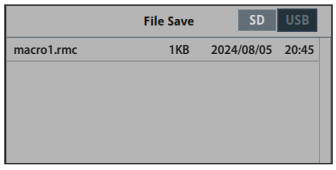
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. [MENU] button → "Macro" → select "Save To Storage", and press the [VALUE] knob.



The macro setting files in the storage are listed.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Select "File Name" and press the [VALUE] knob.

This brings up the software keyboard for input.

4. Enter the file name.

* You can input up to 32 characters.

5. Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.

6. When you finish entering the name, use the [VALUE] knob to select "Save", and then press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

7. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The macro settings file (.rmc) is saved to the storage media. When the operation is finished, the message "Completed." appears.

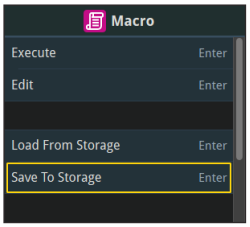
8. Press the [MENU] button to quit the menu.

Overwrite-saving a settings file

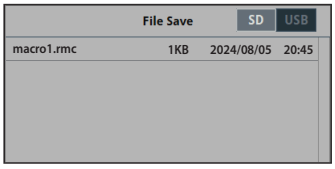
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. [MENU] button → "Macro" → select "Save To Storage", and press the [VALUE] knob.



The macro setting files in the storage are listed.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

4. Use the [VALUE] knob to select the macro settings file that you want to overwrite, and press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The macro settings file is overwritten. When the operation is finished, the message "Completed." appears.

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

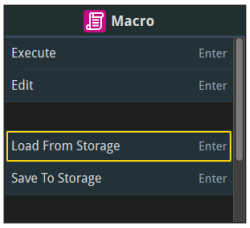
Recalling

Here's how to load the macro settings that are saved on a storage. Loading the settings overwrites the current settings for the macros (1–100).

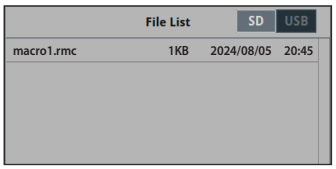
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. [MENU] button → "Macro" → select "Load From Storage", and press the [VALUE] knob.



The macro setting files in the storage are listed.

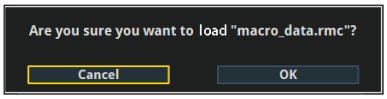


* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

4. Use the [VALUE] knob to select the macro settings file that you want to load, and press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

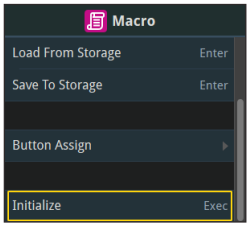
The macro settings are loaded. When the operation is finished, the message "Completed." appears.

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

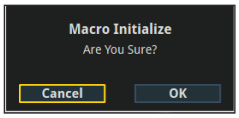
Initializing all macros

Here's how to initialize and erase all the macros.

1. [MENU] button → "Macro" → select "Initialize", and press the [VALUE] knob.



A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

2. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The macros are initialized.

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

Combining scene memories and macros for operations (sequencer)

The sequencer function lets you record functions such as recalling scene memories or macros, and then execute them in the order you specify.

This lets you recreate the desired functions like editing the screen layout or inserting a title, by preparing the functions in line with how the events progress and then simply pressing the [AUTO] button. This feature is useful for smoothly carrying out operations at the place where you're working.

Recording to the sequencer

Three types of functions can be recorded in the sequencer, including recalling a scene memory, executing a macro and switching between final output videos. Create a list of the functions you want to execute in order.

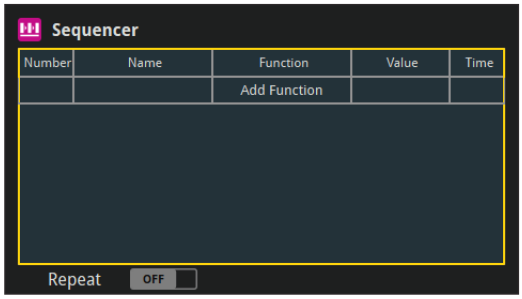
A list can contain up to 1,000 functions.

MEMO

- The demo data in this unit that's available by factory default includes a list of recorded functions. You can completely erase the contents of this list by initializing it (p. 94).
- You can assign the sequencer function to the assignable pads for recall (p. 97).

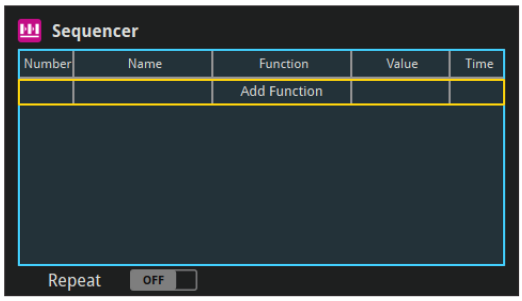
1. Press the [MENU] button → "Sequencer" → select "List Edit", and press the [VALUE] knob.

The list of operations recorded in the sequencer is shown.



2. Use the [VALUE] knob to select the operation list, and press the [VALUE] knob.

3. Use the [VALUE] knob to select "Add Function", and then press the [VALUE] knob.



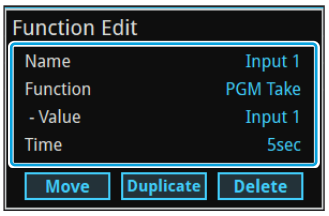
The function edit menu appears.

4. Use the [VALUE] knob to select "Function", and then press the [VALUE] knob.

5. Use the [VALUE] knob to select the operation to record to the sequencer, and then press the [VALUE] knob.

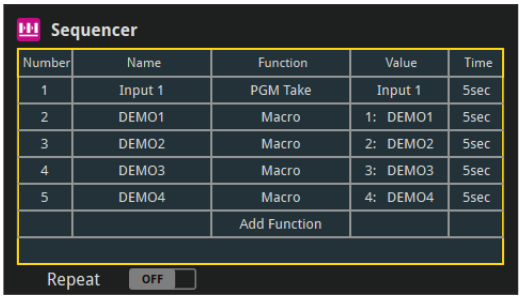
Value	Explanation
PGM Take	Switches the final output video.
Scene Memory	Recalls a scene memory.
Macro	Executes a macro.

6. Use the [VALUE] knob to set the related parameters.



7. Press the [EXIT] button to return to the previous screen.

8. Repeat steps 3–7 to finish making the list.



9. Press the [EXIT] button to close the menu.

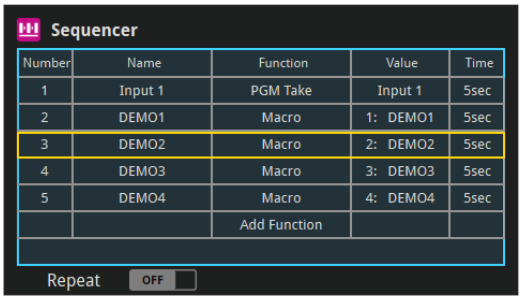
Editing a list

You can edit the contents of a function, change the order in which it is executed, or copy/delete a function while creating a list or after you've finished the list.

Editing the contents of a function

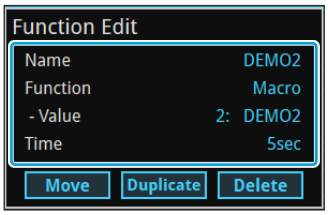
1. In step 3 of "Recording to the sequencer" (p. 89), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.



Menu	Value	Explanation
Name	—	Shows the name of the operation.
Function	Sets the operation to record to the sequencer. * The related menu is shown according to the operation you set.	
	PGM Take	Switches the final output video.
	Scene Memory	Recalls a scene memory.
	Macro	Executes a macro (a series of recorded operations).
Value	Sets the operation details according to the function.	
Time	Sets the operation when auto sequence is on.	
	Pause	Pauses the auto sequence.
	Auto	Executes the next operation in the sequence.
	1–120sec	Executes the next operation after delaying for a specified amount of time.

2. Follow steps 3–8 in "Recording to the sequencer" (p. 89) to edit the operation.

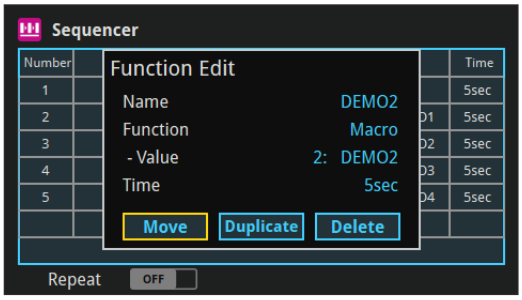


Moving a function

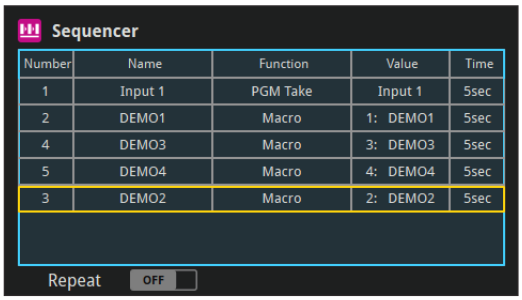
1. In step 3 of "Recording to the sequencer" (p. 89), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.

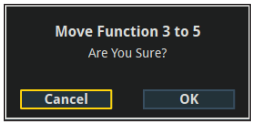
2. Use the [VALUE] knob to select "Move", and then press the [VALUE] knob.



3. Turn the [VALUE] knob to select the row that contains the operation you want to move, and press the [VALUE] knob.



A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

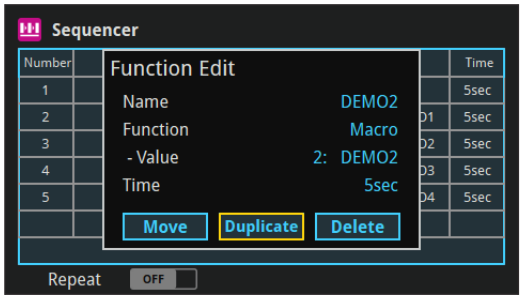
4. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

This moves the row.

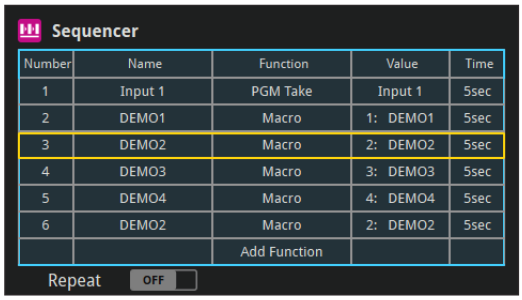
Copying a function

1. In step 3 of "Recording to the sequencer" (p. 89), select the operation you want to edit in the operation list, and press the [VALUE] knob.

2. Use the [VALUE] knob to select "Duplicate", and then press the [VALUE] knob.



The copied operation is added to the last line of the list.

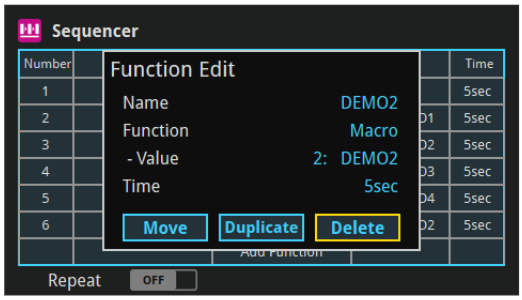


Deleting a function

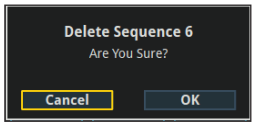
1. In step 3 of "Recording to the sequencer" (p. 89), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.

2. Use the [VALUE] knob to select "Delete", and then press the [VALUE] knob.



A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

3. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

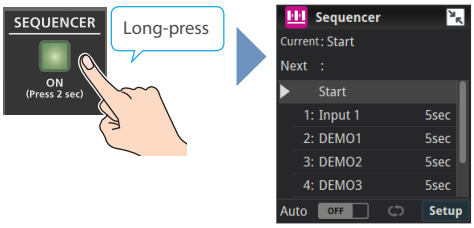
This deletes the operation line.

Running the sequencer

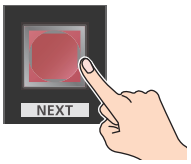
Press the button to make the functions recorded in the sequencer execute one at a time.

1. Long-press the SEQUENCER [ON] button to turn the sequencer function on (the button lights up).

The list of operations recorded in the sequencer is shown.



2. Press the [NEXT] button.



The first function in the list is executed.

The button blinks while the function is executing. When the function ends, the button remains lit.

3. Press the [NEXT] button at the timing when you want the next function to execute.

The function is executed.

[PREVIOUS] button

Press the [PREVIOUS] button if you want to return to the state at which the previous function was completed.

4. Repeat step 3.

5. Long-press the SEQUENCER [ON] button again to turn the sequencer function off.

MEMO

Repeatedly executing a function in the list

You can repeatedly execute functions that are in a list. Once the last operation is finished, press the [NEXT] button to execute the operation at the beginning of the list.

Press the [MENU] button → "Sequencer" → and set "Repeat Execute" to "ON".

Executing a function from the middle of the list

Use the [VALUE] knob to select an operation from the list, and then press the [VALUE] knob to set the selected operation to its completed state. Press the [NEXT] button to execute the next operation.

Making the sequencer run automatically (auto sequence)

Use the auto sequence feature when you want to make the functions recorded in the sequencer execute automatically.

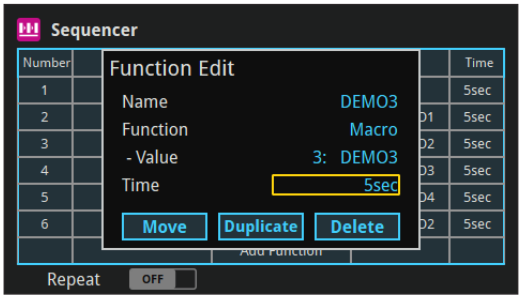
Configuring the auto sequence settings

Set the action or function that's executed when the sequencer advances to the next function. You can add some delay time before the next function is executed, or pause the execution of a function.

1. In step 3 of "Recording to the sequencer" (p. 89), select the operation you want to edit in the operation list, and press the [VALUE] knob.

The function edit menu appears.

2. Use the [VALUE] knob to select "Time", and then press the [VALUE] knob.



3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

Value	Explanation
Pause	Pauses the auto sequence.
Auto	Executes the next operation in the sequence.
1–120sec	Executes the next operation after delaying for a specified amount of time.

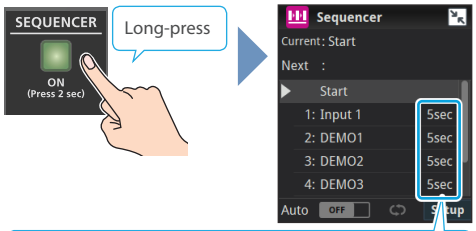
4. Press the [EXIT] button to return to the previous screen.

5. Repeat steps 1–4.

Running the auto sequence

1. Long-press the SEQUENCER [ON] button to turn the sequencer function on (the button lights up).

The list of operations recorded in the sequencer is shown.



This lets you check which action occurs when the sequencer moves to the next operation. When this is set to "PAUSE", "Pause" is shown.

2. Use the [VALUE] knob to select "Auto", and press the [VALUE] knob.

The functions in the list are executed, starting at the beginning. The [NEXT] button blinks while an operation is executing.

When the last function is finished, the sequence stops automatically.

When a function is set to "PAUSE"

The auto sequence pauses. Press the [NEXT] button to manually execute the next operation.

* When executing a function that's set to a value other than "PAUSE", the auto sequence is resumed.

3. To turn auto sequence off, use the [VALUE] knob to select "Auto" again, and press the [VALUE] knob.

4. Long-press the SEQUENCER [ON] button again to turn the sequencer function off.

MEMO

- You can repeatedly execute functions that are in a list. When the last function is finished, the sequencer returns to the beginning.
  Press the [MENU] button → "Sequencer" → and set "Repeat Execute" to "ON".
- You can assign the auto sequence on/off to the assignable pads (p. 97).

Saving/loading the sequencer settings

You can save the sequencer settings as a single file (.RSQ) to a storage (SD card, USB flash drive) connected to the V-80HD.

You can access the saved sequence file on the storage and load it into the unit for use when needed.

* The sequence file is saved to and recalled from the "Roland/V-80HD/sequencer" folder.

NOTE

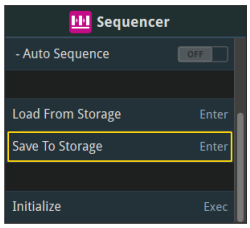
- When using an SD card or USB flash drive for the first time, you must format it using the V-80HD (p. 13, p. 13).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Depending on the SD card or USB flash drive, it may take some time to be recognized.

Saving a new settings file

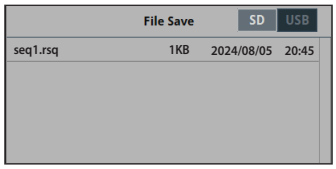
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "Sequencer" → select "Save To Storage", and press the [VALUE] knob.



The sequence files in the storage are listed.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Select "File Name" and press the [VALUE] knob.

This brings up the software keyboard for input.

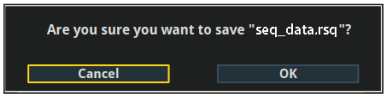
4. Enter the file name.

* You can input up to 32 characters.

5. Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.

6. When you finish entering the name, use the [VALUE] knob to select "Save", and then press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

7. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The sequence file (.rsq) is saved to the storage media. When the operation is finished, the message "Completed." appears.

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

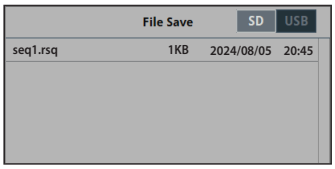
Overwrite-saving a settings file

1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "Sequencer" → select "Save To Storage", and press the [VALUE] knob.

The sequence files in the storage are listed.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

4. Use the [VALUE] knob to select the sequence file that you want to overwrite, and press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

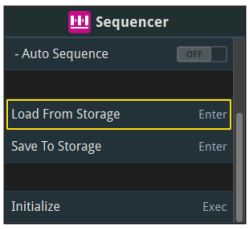
The sequence file is overwritten. When the operation is finished, the message "Completed." appears.

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

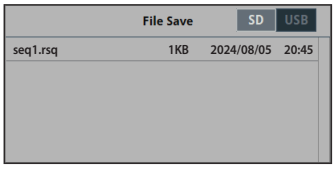
Recalling

Here's how to load the sequencer settings that are saved on a storage. When you load settings, the current sequencer settings are overwritten.

1. Press the [MENU] button → "Sequencer" → select "Load From Storage", and press the [VALUE] knob.



The sequencer setting files in the storage are listed.

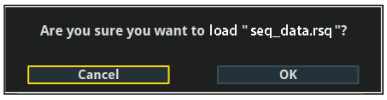


* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

2. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

3. Use the [VALUE] knob to select the sequence file that you want to recall, and press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

4. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

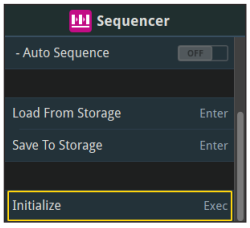
The sequencer settings are loaded. When the operation is finished, the message "Completed." appears.

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

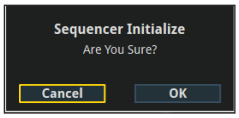
Initializing the sequencer

Here's how to initialize the sequencer and erase all the settings.

1. Press the [MENU] button → "Sequencer" → select "Initialize", and press the [VALUE] knob.



A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

2. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

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

MEMO

About the sequencer demo data

Once you perform a factory reset (p. 109), any demo data you have edited or deleted is restored to its factory settings.

Backing up and restoring the unit's settings

You can group together the unit's settings into a single file (.v80) and back up it to storage media (SD card, USB flash drive) connected to the V-80HD. You can access the backed up setting file on the storage and restore it into the unit for use when needed.

* Setting files are stored in and recalled from the "Roland/V-80HD/backup" folder.

NOTE

- When using an SD card or USB flash drive for the first time, you must format it using the V-80HD (p. 13, p. 13).
- Never turn off the power or remove the SD card or USB flash drive while the message "Processing..." is shown.
- Depending on the SD card or USB flash drive, it may take some time to be recognized.

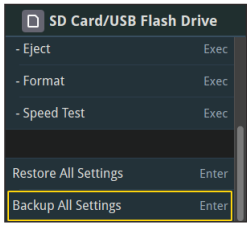
Backing up

Saving a new file

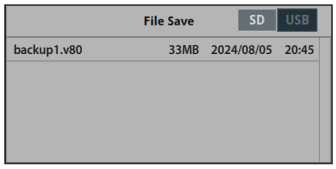
1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "SD Card/USB Flash Drive" → select "Backup All Settings", and press the [VALUE] knob.



The backup files in the storage are listed.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Select "File Name" and press the [VALUE] knob.

This brings up the software keyboard for input.

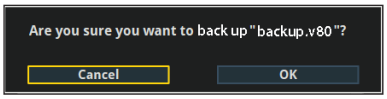
4. Enter the file name.

* You can input up to 32 characters.

5. Use the [VALUE] knob to select the Enter key on the software keyboard, and press the [VALUE] knob.

6. Use the [VALUE] knob to select "Save", and then press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

7. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The settings file (.v80) is backed up on the storage media. When the operation is finished, the message "Completed." appears.

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

MEMO

Some settings are not saved to the file, such as the "Test Pattern" and "Test Tone" settings in the System menu.

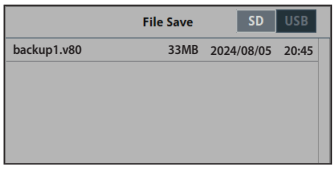
Overwrite-saving

1. Insert the SD card into the SDXC card slot.

* When using a USB flash drive, connect the USB flash drive to the USB HOST port.

2. Press the [MENU] button → "SD Card/USB Flash Drive" → select "Backup All Settings", and press the [VALUE] knob.

The backup files in the storage are listed.



* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

3. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

4. Use the [VALUE] knob to select the backup file that you want to overwrite, and press the [VALUE] knob.

A confirmation message appears.

* If you decide to cancel, press the [EXIT] button.

5. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The settings file is overwrite-saved. When the operation is finished, the message "Completed." appears.

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

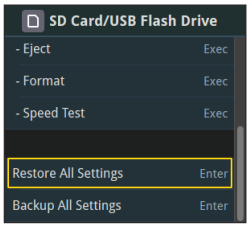
MEMO

Some settings are not saved to the file, such as the "Test Pattern" and "Test Tone" settings in the System menu.

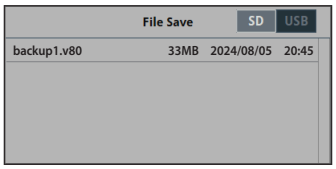
Restoring

Here's how to restore this unit's settings that you saved on a storage. When you restore settings, the current settings are overwritten.

1. Press the [MENU] button → "SD Card/USB Flash Drive" → select "Restore All Settings", and press the [VALUE] knob.



The backup files in the storage are listed.

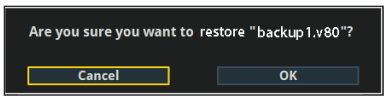


* Use the "SD" or "USB" selector at the top right-hand corner of the screen to switch between the storage media to load from.

2. Use the [VALUE] knob to select the entire list of files, and press the [VALUE] knob.

3. Use the [VALUE] knob to select the file you want to restore, and press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

4. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The settings are restored. When the operation is finished, the message "Completed." appears.

Using the assignable pads to execute functions

You can assign functions to the assignable pads (8 pads × 8 banks from A to H).
By doing this, the function you assigned to the assignable pad is executed when you press the pad.
With the factory settings, the audio player is assigned to pads [1]–[8] of bank A.

Assigning functions to the assignable pads

Here's how to assign functions to the assignable pads.

1. Press the ASSIGNABLE PADS [SETUP] button.

The Assignable Pads screen appears.

2. Use the [VALUE] knob to select the bank cursor "◀""▶", and press the [VALUE] knob to select banks A–H.

Press one of the pads [1]–[8] while holding down the [SETUP] button to switch between banks A–H.

3. Use the [VALUE] knob to select the pad to which you want to assign a function, and press the [VALUE] knob.

4. Use the [VALUE] knob to set the parameters.

Value	Explanation
Category	Selects the category of the function to assign.
Function	Selects a function from the selected category.
Value	Configures the parameters for the selected function.
Setup	Shows the setup screen for the selected function.

5. Press the [EXIT] button to return to the previous screen.

6. Repeat steps 3–5 to assign functions to each pad.

7. Press the ASSIGNABLE PADS [SETUP] button to close the Assignable Pads screen.

* For details on the parameter, refer to "19: Assignable Pads" (p. 141).

Executing the functions assigned to the assignable pads

This shows how to execute the functions assigned to the assignable pads.

1. Press one of the pads [1]–[8] while holding down the ASSIGNABLE PADS [SETUP] button to switch between banks A–H.

2. Press pads [1]–[8].

This executes the functions assigned to the pads.

MEMO

When you press the ASSIGNABLE PADS [SETUP] button, you can check which functions are assigned to the buttons of each bank by looking at the screen.

Swapping/copying the functions assigned to the assignable pads

You can copy or swap (exchange) the functions that are assigned to the assignable pads.

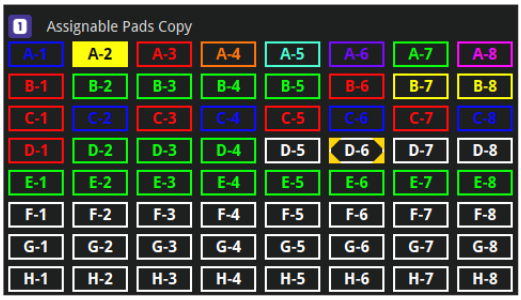
1. Press the ASSIGNABLE PADS [SETUP] button.

The Assignable Pads screen appears.

2. Use the [VALUE] knob to select the copy (or swap) source assignable pad, and press the [VALUE] knob.

3. Use the [VALUE] knob to select "Copy" or "Swap", and press the [VALUE] knob.

The Assignable Pads list screen opens.



4. Use the [VALUE] knob to select the copy (or swap) destination pad, and press the [VALUE] knob.

A confirmation message appears.

5. Select "OK" and press the [VALUE] knob.

Initializing the assignments to the assignable pads

Here's how to initialize the assignments to the assignable pads.

1. Press the ASSIGNABLE PADS [SETUP] button.

The Assignable Pads screen appears.

2. Use the [VALUE] knob to select the assignable pad you want to initialize, and press the [VALUE] knob.

3. Use the [VALUE] knob to select "Initialize", and then press the [VALUE] knob.

A confirmation message appears.

4. Select "OK" and press the [VALUE] knob.

This initializes the assignments of the assignable pads.

Controlling an external recorder's video record start/stop from the V-80HD

Connect a recorder that supports REC control functionality via HDMI to control rec start/stop on the recorder from the V-80HD (REC control function).

For more about recorders that support the REC control function, refer to the Roland website.

https://proav.roland.com/

Setting

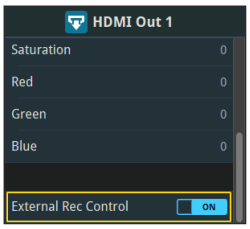
Assignable pad assignments

To use the external REC control function, you must assign the recorder's video recording start/stop functions to the assignable pads.

1. **Set "External Rec Control" for the assignable pad function of your choice by following the steps in "Assigning functions to the assignable pads" (p. 97).**

Turning REC control on/off

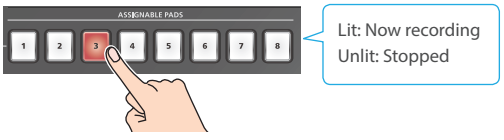
2. **Press the [MENU] button → "Video Output" → "HDMI Out 1–3" → and set "External Rec Control" to "ON".**



Operation

1. **Press the assignable pads to which the video recording start/stop functions are assigned.**

   Each time you press the button, the recorder switches between video record start/stop.



* In this example, the functions are assigned to the assignable pad [3] button.

NOTE

The lights of the assignable pads show the status of the V-80HD, and are not linked with the recorder's status.

For example, if the recorder stops recording for some reason while the assignable pads to which the external REC control is assigned are lit, the assignable pads do not go dark in tandem.

Remotely controlling a PTZ camera

You can connect up to eight cameras via the DIRECT STREAM port and remotely control them from the V-80HD.

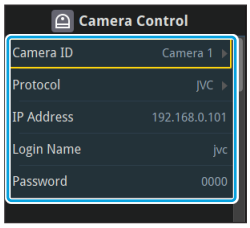
This allows you to control cameras made by JVC, Panasonic, Canon, PTZOptics, and Avonic, and cameras that support VISCA over IP (such as Sony).

* Refer also to the owner's manual of your camera.

Network settings on the camera

In order to control a camera from the V-80HD, you need to make network settings on the camera. You can register up to eight cameras.

1. Press the [MENU] button → "Camera Control" → select from the menu items below, and press the [VALUE] knob.



Menu item	Explanation
Camera ID	Selects the camera to be controlled.
Protocol	Specifies the camera's protocol.
IP Address	Input the camera's IP address.
Login Name	**When "Protocol" is "JVC"** This brings up the software keyboard. Enter the login name needed to connect with the camera.
Password	**When "Protocol" is "JVC"** This brings up the software keyboard. Enter the password needed to connect with the camera.

2. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

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

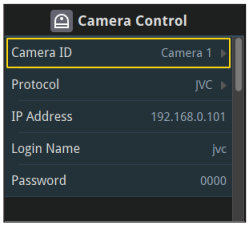
Registering camera settings in a preset

Up to 8 sets of settings such as camera position and focus can be registered as presets.

A registered preset can be recalled when needed.

* Presets are saved in the camera itself.

1. Press the [MENU] button → "Camera Control" → select "Camera ID", and press the [VALUE] knob.



2. Use the [VALUE] knob to select the camera to operate, and press the [VALUE] knob.

3. Press the [EXIT] button to return to the previous screen.

4. Use the [VALUE] knob to select a menu item shown below, and press the [VALUE] knob.

Menu item	Explanation
Pan	Adjusts the position in the horizontal direction. (*1)
Tilt	Adjusts the position in the vertical direction. (*1)
Pan/Tilt Speed	Adjusts the speed at which the camera changes direction.
Zoom	Adjusts the zoom position. (*1)
Focus	Adjusts the focal point. (*1)
Auto Focus	When this is "ON", the focal point is set automatically.
Exposure	Sets the exposure mode.
Tally Channel	Specifies the connector from which the camera video is input. When the camera video from the V-80HD is the final output, the camera's tally light is lit.

(*1) You can operate the camera while you hold the [VALUE] knob.

5. Use the [VALUE] knob to control the camera settings.

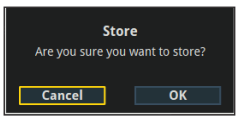
6. Use the [VALUE] knob to select "Camera Preset", and then press the [VALUE] knob.

7. Use the [VALUE] knob to select the preset number (Preset 1–8) for registration, and press the [VALUE] knob.

8. Press the [EXIT] button to return to the previous screen.

9. Use the [VALUE] knob to select "Store", and then press the [VALUE] knob.

A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

10. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

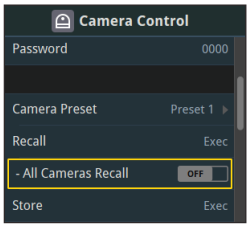
The camera settings are registered in the preset.

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

Recalling a preset

This shows you how to recall the presets registered in your camera. You can also recall presets from multiple cameras at the same time.

1. Press the [MENU] button → "Camera Control" → select from the menu items below, and press the [VALUE] knob.



Recalling presets from a single camera

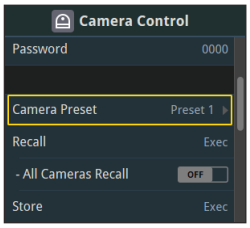
Menu item	Explanation
Camera ID	Select the camera from which you want to recall a preset.
All Cameras Recall	Choose "OFF".

Recalling from all cameras simultaneously

Menu item	Explanation
All Cameras Recall	Choose "ON".

2. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.

3. Use the [VALUE] knob to select "Camera Preset", and then press the [VALUE] knob.



4. Use the [VALUE] knob to select the preset number (Preset 1–8) to recall, and press the [VALUE] knob.

5. Press the [EXIT] button to return to the previous screen.

6. Use the [VALUE] knob to select "Recall", and press the [VALUE] knob.

The settings are recalled from the cameras. When the operation is finished, the message "Completed." appears.

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

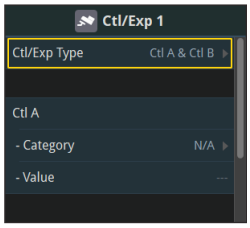
MEMO

By assigning the camera control functions to the assignable pads, you can control the camera or recall presets using the buttons (p. 97).

Using a footswitch

You can use a footswitch connected to the CTL/EXP 1 and 2 jacks to control the V-80HD with your foot. You can assign various functions to the footswitch.

1. [MENU] button → "Ctl/Exp" → "Ctl/Exp 1" Or "Ctl/Exp 2" → select "Ctl/Exp Type", and press the [VALUE] knob.



2. Set the connected device to "Ctl A & Ctl B" (the footswitch) using the [VALUE] knob, and press the [VALUE] knob.

3. Press the [EXIT] button to return to the previous screen.

4. Use the [VALUE] knob to select Ctl A Or Ctl B "Category" and "Value", and press the [VALUE] knob.

5. Use the [VALUE] knob to select the function that you want to assign to Ctl A or Ctl B of the footswitch, and press the [VALUE] knob.

●Category

Value	Explanation
N/A	No function is assigned.
PGM Channel Select	Switches the video sent to the PGM bus.
PST Channel Select	Switches the video sent to the PST bus.
AUX 1, 2 Channel Select	Switches the video sent to the AUX bus.
Input 1–16 Assign	Changes the video assigned to Input 1–16.
Still Output	Pauses the normal output, and previews or final outputs a cut of the still image. Press the footswitch again to return to normal output.
Video Player Output	Pauses the normal output, and cuts to the preview/final output of the video player image.
PinP&Key 1–2 Source	Switches the video source of the inset screen.
DSK Source	Switches the DSK video source.
Button Control	This works the same as when you press the button selected in "VALUE".
Audio Input Mute	Turns the mute function on/off for the input audio.
Audio Output Mute	Turns the mute function on/off for the output audio.
Audio Input Solo	Turns the solo function on/off for the input audio.
Audio Output Solo	Turns the solo function on/off for the output audio.
Voice Changer	Turns the voice changer function on/off.
Auto Mixing	Turns the auto mixing function on/off.
Reverb (Momentary)	Reverb turns on only while you press the footswitch.
Reverb (Alternate)	Turns reverb on/off.
Output Fade	The final output video fades in/out.
Load Memory	Recalls a scene memory.
Input Scan	Each time you press the footswitch, the Input 1–8 video changes in order.
Scene Memory Scan	Each time you press the footswitch, scene memories 1–32 are recalled in order.
PinP&Key 1–2 Scan	The PinP&Key 1–2 inset screen videos switch in order each time you press the footswitch.
DSK Scan	The DSK caption video changes in order each time you press the footswitch.
Macro Execute	Executes a macro (a series of recorded operations).
Sequencer	When the sequencer function is on, this works the same as when you press the button selected in "VALUE".
GPO (One Shot)	Outputs a control signal for 0.5 seconds.
GPO (Alternate)	The control signal output is switched on/off with each press of the footswitch.
Camera Control	Controls the camera.

●Value

Configures the detailed settings related to "Category".

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

MEMO

- See p. 10 for how to connect a footswitch to this unit.
- If a single-pedal type footswitch such as the BOSS FS-5U is connected using a phone cable (mono), the function assigned by "Ctl B" is enabled.

Using an expression pedal

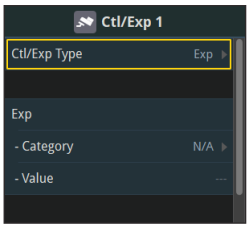
You can use an expression pedal connected to the CTL/EXP 1 and 2 jacks to control the V-80HD with your foot.

Adjusting the pedal (pedal calibration)

The first time you use an expression pedal, you must calibrate (adjust) the pedal so that it will operate optimally.

In some cases, an expression pedal might no longer operate optimally due to the passage of time or changes in the operating conditions. If you notice problems such as slight movements of the pedal causing a major change in volume, or if the video fails to switch when you press the pedal, you should execute calibration.

1. [MENU] button → "Ctl/Exp" → "Ctl/Exp 1" Or "Ctl/Exp 2" → select "Ctl/Exp Type", and press the [VALUE] knob.

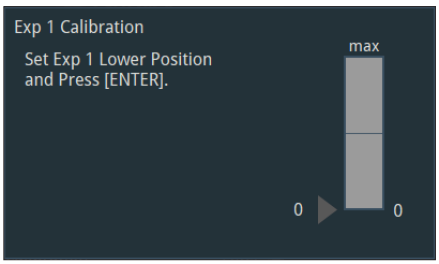


2. Set the connected device to "Exp" (the expression pedal) using the [VALUE] knob, and press the [VALUE] knob.

3. Press the [EXIT] button to return to the previous screen.

4. Use the [VALUE] knob to select "Exp Calibration", and press the [VALUE] knob.

The Exp Calibration screen appears.



5. As directed by the screen, step on the pedal in the fully heel-down position, and press the [VALUE] knob.

6. As directed by the screen, step on the pedal in the fully toe-down position, and press the [VALUE] knob.

When the message "Completed." appears, calibration is complete.

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

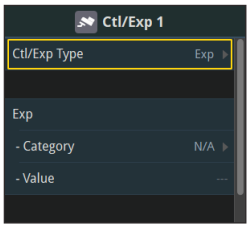
MEMO

You should normally use the EV-5 with its minimum volume knob left in the zero position. If you change the position of the minimum volume knob, you must execute pedal calibration.

Assigning a function to the pedal

You can assign various functions to the expression pedal.

1. [MENU] button → "Ctl/Exp" → "Ctl/Exp 1" Or "Ctl/Exp 2" → select "Ctl/Exp Type", and press the [VALUE] knob.



2. Set the connected device to "Exp" (the expression pedal) using the [VALUE] knob, and press the [VALUE] knob.

3. Use the [VALUE] knob to select Exp "Category" and "Value", and press the [VALUE] knob.

4. Use the [VALUE] knob to select the function that you want to assign to the expression pedal, and press the [VALUE] knob.

●Category

Value	Explanation
N/A	No function is assigned.
Video Fader	**Fade:** Operates the video fader.
	Cut: Cuts between the final output video and the preview video.
Still Output	Pauses the normal output, and previews or final outputs a cut of the still image.
Video Player Output	Pauses the normal output, and cuts to the preview/final output of the video player image.
Audio Input Level	Adjusts the input volume.
Audio Output Level	Adjusts the output volume.
Voice Changer	Adjusts the balance between the unprocessed voice (0) and the voice processed by the effect (100).
Reverb Level	Adjusts the amount of sound that is returned from the reverb (return level).

●Value

Configures the detailed settings related to "Category".

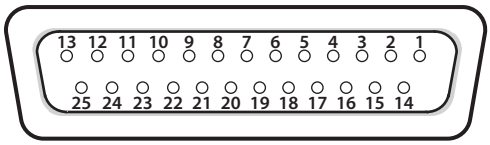
5. Press the [MENU] button to quit the menu.

Control using the TALLY/GPIO connector

You can use control signals inputted to the TALLY/GPIO connector via GPI to remotely control the V-80HD from an external device.
Also, you can output tally signals or GPO control signals from the TALLY/GPIO connector.

Specification of the TALLY/GPIO connector

Pin layout



DB-25 type (female)

Tally output

Trigger method	Open collector
Maximum input	12 V/120 mA

Control input

Trigger method	No-voltage contact (make-contact) triggering
Contact capacity	DC 24 V 0.1 A or higher
Input method	Photocoupler

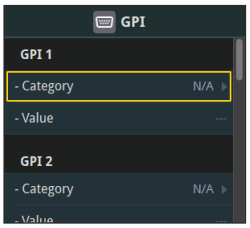
Pin assignments

Pin no.	Pin name	Function (default value)
1	TALLY/GPO 1	PGM HDMI 1
2	TALLY/GPO 2	PST HDMI 1
3	TALLY/GPO 3	PGM HDMI 2
4	TALLY/GPO 4	PST HDMI 2
5	TALLY/GPO 5	PGM HDMI 3
6	TALLY/GPO 6	PST HDMI 3
7	TALLY/GPO 7	PGM HDMI 4
8	TALLY/GPO 8	PST HDMI 4
9	TALLY/GPO 9	PGM SDI 1
10	TALLY/GPO 10	PST SDI 1
11	TALLY/GPO 11	PGM SDI 2
12	TALLY/GPO 12	PST SDI 2
13	TALLY/GPO 13	PGM SDI 3
14	TALLY/GPO 14	PST SDI 3
15	TALLY/GPO 15	PGM SDI 4
16	TALLY/GPO 16	PST SDI 4
17	GND	
18	GPI 1	Not assigned
19	GPI 2	Not assigned
20	GPI 3	Not assigned
21	GPI 4	Not assigned
22	GPI 5	Not assigned
23	GPI 6	Not assigned
24	GPI 7	Not assigned
25	GPI 8	Not assigned

Inputting a control signal

When an external control signal is input, the functions assigned to GPI 1–8 are executed.

1. **Press the [MENU] button → "RS-232/Tally/GPO/GPI/Keypad" → "GPI" → select GPI 1–8 "Category" or "Value", and press the [VALUE] knob.**
2. **Use the [VALUE] knob to select the functions assigned to GPI 1–8, and then press [VALUE].**



●Category

Value	Explanation
N/A	No function is assigned.
PGM Channel Select	Switches the video sent to the PGM bus.
PST Channel Select	Switches the video sent to the PST bus.
AUX 1, 2 Channel Select	Switches the video sent to the AUX bus.
Input 1–16 Assign	Changes the video assigned to Input 1–16.
Still Output	Pauses the normal output, and previews or final outputs a cut of the still image. Press the footswitch again to return to normal output.
Video Player Output	Pauses the normal output, and cuts to the preview/final output of the video player image.
PinP&Key 1–2 Source	Switches the video source of the inset screen.
DSK Source	Switches the DSK video source.
Button Control	This works the same as when you press the button selected in "VALUE".
Audio Input Mute	Turns the mute function on/off for the input audio.
Audio Output Mute	Turns the mute function on/off for the output audio.
Audio Input Solo	Turns the solo function on/off for the input audio.
Audio Output Solo	Turns the solo function on/off for the output audio.
Voice Changer	Turns the voice changer function on/off.
Auto Mixing	Turns the auto mixing function on/off.
Reverb (Momentary)	Reverb turns on only while you press the footswitch.
Reverb (Alternate)	Turns reverb on/off.
Output Fade	The final output video fades in/out.
Load Memory	Recalls a scene memory.
Input Scan	Each time a control signal is input, the Input 1–8 video changes in order.
Scene Memory Scan	Each time a control signal is input scene memories 1–32 are recalled in order.
PinP&Key 1–2 Scan	The PinP&Key 1–2 inset screen videos switch in order each time a control signal is input.
DSK Scan	The DSK caption video changes in order each time a control signal is input.
Macro Execute	Executes a macro (a series of recorded operations).

Value	Explanation
Sequencer	When the sequencer function is on, this works the same as when you press the button selected in "Value".
GPO (One Shot)	Outputs a control signal for 0.5 seconds.
GPO (Alternate)	The control signal output is switched on/off each time a control signal is input.
Camera Control	Controls the camera.

●Value

Configures the detailed settings related to "Category".

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

Outputting a tally signal

Pins 1–16 of the TALLY/GPIO connector can be used to output a tally. A tally signal is output from the connector pins whenever a cross-point button is selected.

1. Press the [MENU] button → "RS-232/Tally/GPO/GPI/Keypad" → "Tally/GPO" → select "Tally/GPO 1"–"Tally/GPO 16", and press the [VALUE] knob.

2. Use the [VALUE] knob to select the tally signal assigned to the connector pins and then press the [VALUE] knob.

Value	Explanation
PGM HDMI 1–4	Video for which the final output is HDMI IN 1–4.
PGM SDI 1–4	Video for which the final output is SDI IN 1–4.
PGM Still 1–32	Final output is still images 1–32.
PGM Video Player/ SRT In	Video for which the final output is from video player, SRT In
PGM Input 1–16	Use the cross-point buttons to select the final output video.
PST HDMI 1–4	Video for which the preview output is HDMI IN 1–4.
PST SDI 1–4	Video for which the preview output is SDI IN 1–4.
PST Still 1–32	The preview output is still images 1–32.
PST Video Player/SRT In	Video for which the preview output is from video player, SRT In
PST Input 1–16	Use the cross-point buttons to select the preview output video.

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

MEMO

- Use a settings template to change the assignments for the connector pins all at once.

  Select a template from "Template" in the Tally/GPO menu and then press the [VALUE] knob to apply the settings.

- You can reflect the PinP&Key, DSK, and AUX bus video output status in the tally information.

  When you set each "Tally Settings" item in the Tally/GPO menu to "Enable", the status of video output to the relevant bus is reflected in the tally information (p. 149).

Outputting a control signal

You can use connector pins 1–16 of the TALLY/GPIO connector as GPOs to output control signals.

Assigning the GPOs

You can assign pins 1–16 of the TALLY/GPIO connector to the GPOs (1–16) in order to output control signals.

1. **Press the [MENU] button → "RS-232/Tally/GPO/GPI/Keypad" → "Tally/GPO" → select "Tally/GPO 1"–"Tally/GPO 16", and press the [VALUE] knob.**

2. **Use the [VALUE] knob to select one of "GPO 1"–"GPO 16", and press the [VALUE] knob.**
3. **Press the [MENU] button to quit the menu.**

MEMO

Use a settings template to change the assignments for the connector pins all at once.

Select a template from "Template" in the Tally/GPO menu and then press the [VALUE] knob to apply the settings.

Outputting a control signal

Control signals are outputted when you operate an assignable pad, footswitch or other control to which a GPO output function has been assigned.

Using the assignable pads

The assignable pads light up while control signals are being output.

➡"Assigning functions to the assignable pads" (p. 97)

Using a footswitch

➡"Using a footswitch" (p. 101)

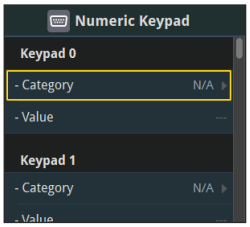
Inputting an external control signal (GPI)

➡"Inputting a control signal" (p. 103)

Control using a USB numeric keypad

You can connect a USB numeric keypad to the USB HOST port to control video transitions and perform other operations.
Pressing the keys on the USB numeric keypad executes the functions assigned to Keypad 0–Enter.

1. Press the [MENU] button → "RS-232/Tally/GPO/GPI/Keypad" → "Numeric Keypad" → select Keypad 0–Enter "Category" or "Value", and press the [VALUE] knob.



2. Use the [VALUE] knob to select the functions assigned to Keypad 0–Enter, and then press [VALUE].

●Category

Value	Explanation
N/A	No function is assigned.
PGM Channel Select	Switches the video sent to the PGM bus.
PST Channel Select	Switches the video sent to the PST bus.
AUX 1, 2 Channel Select	Switches the video sent to the AUX bus.
Input 1–16 Assign	Changes the video assigned to Input 1–16.
Still Output	Pauses the normal output, and previews or final outputs a cut of the still image. Press the footswitch again to return to normal output.
Video Player Output	Pauses the normal output, and cuts to the preview/final output of the video player image.
PinP&Key 1–2 Source	Switches the video source of the inset screen.
DSK Source	Switches the DSK video source.
Button Control	This works the same as when you press the button selected in "VALUE".
Audio Input Mute	Turns the mute function on/off for the input audio.
Audio Output Mute	Turns the mute function on/off for the output audio.
Audio Input Solo	Turns the solo function on/off for the input audio.
Audio Output Solo	Turns the solo function on/off for the output audio.
Voice Changer	Turns the voice changer function on/off.
Auto Mixing	Turns the auto mixing function on/off.
Reverb (Momentary)	Reverb turns on only while you press the footswitch.
Reverb (Alternate)	Turns reverb on/off.
Output Fade	The final output video fades in/out.
Load Memory	Recalls a scene memory.
Input Scan	Each time a control signal is input, the Input 1–8 video changes in order.
Scene Memory Scan	Each time a control signal is input scene memories 1–32 are recalled in order.
PinP&Key 1–2 Scan	The PinP&Key 1–2 inset screen videos switch in order each time a control signal is input.
DSK Scan	The DSK caption video changes in order each time a control signal is input.
Macro Execute	Executes a macro (a series of recorded operations).
Sequencer	When the sequencer function is on, this works the same as when you press the button selected in "Value".
GPO (One Shot)	Outputs a control signal for 0.5 seconds.
GPO (Alternate)	The control signal output is switched on/off each time a control signal is input.
Camera Control	Controls the camera.

●Value

Configures the detailed settings related to "Category".

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

Using Smart Tally

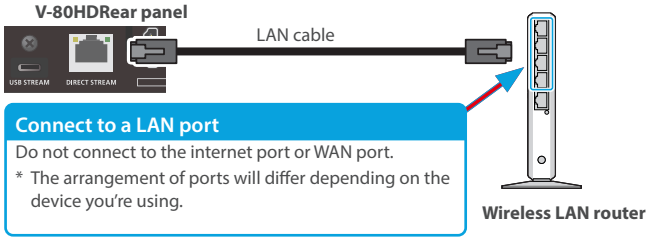
Roland's own Smart Tally system turns your smart device or computer that's connected to the V-80HD into a tally box. This lets you access your smart device or computer via a wireless LAN access point to display a tally on that device.

Connecting via a wireless LAN router

Connect your Wi-Fi enabled smart device or computer to the wireless LAN router via Wi-Fi.

* If you connect multiple smart devices or computers, operation might be slower.

1. Use a LAN cable to connect the LAN port on your wireless LAN master device to the DIRECT STREAM port on the V-80HD.



Connect to a LAN port

Do not connect to the internet port or WAN port.

* The arrangement of ports will differ depending on the device you're using.

2. Turn on the wireless LAN master device, and connect your smart device or computer via wireless LAN (Wi-Fi).

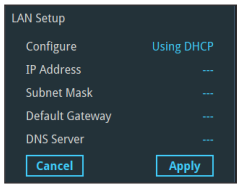
Enable the DHCP function of the wireless LAN router.

* For details on how to connect the wireless LAN (Wi-Fi), refer to the manual of the device that you're using.

3. Power-on the V-80HD.

4. Press the [MENU] button → "Network" → "LAN Setup" → set "Configure" to "Using DHCP", and press the [VALUE] knob.

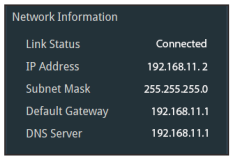
The IP address, subnet mask, and default gateway are obtained automatically.



5. Use the [VALUE] knob to select "Apply", and press the [VALUE] knob.

6. Use the [VALUE] knob to select "Network Information", and press the [VALUE] knob.

The Network Information screen appears.



When "Link Status" indicates "Connected", the connection settings are complete.

MEMO

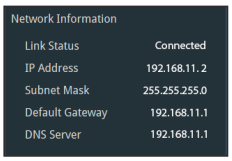
If you fix the IP address, you'll always be able to start Smart Tally with the same IP address.

For details on how to specify a fixed IP address, refer to the manual of the wireless LAN router that you're using.

Starting smart tally

1. From the V-80HD's [MENU] button, select "Network" → "Network Information", and press the [VALUE] knob.

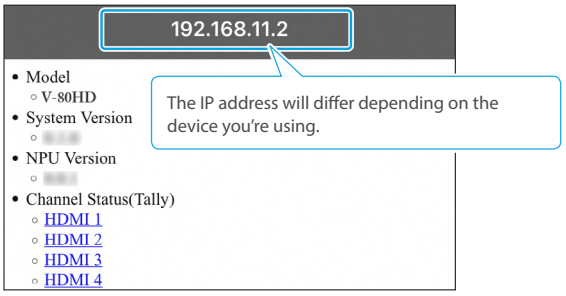
The Network Information screen appears.



2. Start a browser on your smart device or computer.

3. In the URL input field of your browser, enter the IP address that's shown in the Network Information screen to access the website.

The Smart Tally settings screen appears.



* You can also access the website by scanning a QR code. The QR code is shown when you press "2D Code for Smart Tally" on the screen in step 1.

4. In "Channel Status (Tally)", select the video source that you want to assign to the smart device or computer.

The device's display switches to the tally information screen.

This shows the tally information corresponding to the video source output from the V-80HD.

Red: PGM | **Green: PST** | **Gray: Not selected**

NOTE

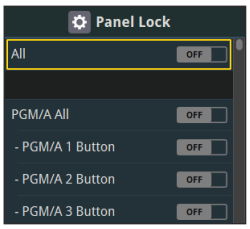
- Depending on the network conditions, the wireless LAN (Wi-Fi) communication speed or connection might be unstable, so that the tally indication is not displayed correctly. In this case, reload the page.
- Depending on the version of the browser that you're using, the tally indication might not be displayed correctly. Use the latest version of the browser whenever possible.

Preventing unintended operation (panel lock)

You can disable operation of the panel's buttons and knobs to prevent unintended operations (Panel Lock function).

1. Press the [MENU] button → "System" → select "Panel Lock", and press the [VALUE] knob.

The Panel Lock menu appears.



2. Use the [VALUE] knob to select a target for panel lock, and press the [VALUE] knob.

Menu item	Explanation
All	All controllers
PGM/A All	Buttons in PGM/A section
PGM/A 1–8 Button	PGM/A [1]–[8] buttons
PST/B All	Buttons in PST/B section
PST/B 1–8 Button	PST/B [1]–[8] buttons
TRANSITION Button	[TRANSITION] button
CUT Button	[CUT] button
AUTO Button	[AUTO] button
Video Fader	Fader
INPUT ASSIGN Button	[INPUT ASSIGN] button
MODE All	[MODE] button and the buttons that are enabled for each mode
MODE Button	[MODE] button
AUX 1 Button	[AUX 1] button, when MODE is AUX 1
AUX 2 Button	[AUX 2] button, when MODE is AUX 2
MEMORY Button	MEMORY [1]–[24] buttons
MACRO Button	MACRO [1]–[24] buttons
SPLIT All	Buttons and knobs in SPLIT section
SPLIT 1 Button	[SPLIT 1] button
SPLIT 2 Button	[SPLIT 2] button
PGM/A-CENTER	[PGM/A-CENTER] knob
PST/B-CENTER	[PST/B-CENTER] knob
PinP&Key 1 All	Buttons and knobs in PinP&Key 1 section
POSITION H Knob	[POSITION H] knob
POSITION V Knob	[POSITION V] knob
SOURCE Button	[SOURCE] button
PVW Button	[PVW] buttons
PGM Button	[PGM] buttons
PinP&Key 2 All	Buttons and knobs in PinP&Key 2 section
POSITION H Knob	[POSITION H] knob
POSITION V Knob	[POSITION V] knob
SOURCE Button	[SOURCE] button
PVW Button	[PVW] buttons
PGM Button	[PGM] buttons
DSK All	Buttons and knobs in DSK section
LEVEL Knob	[LEVEL] knob
GAIN Knob	[GAIN] knob
SOURCE Button	[SOURCE] button
PVW Button	[PVW] buttons
PGM Button	[PGM] buttons
ASSIGNABLE PADS All	Buttons in ASSIGNABLE PADS section
SETUP Button	[SETUP] button
ASSIGNABLE PAD 1–8	ASSIGNABLE PAD 1–8
AUDIO MIXER All	Buttons and knobs in AUDIO MIXER section
SETUP Button	[SETUP] button
Input Knob 1–3/4	AUDIO INPUT LEVEL [1]–[3/4] knobs
Input Knob USB IN	AUDIO INPUT LEVEL [USB IN] knob
Output Knob AUX 1–2	[AUX 1]–[AUX 2] knobs
Output Knob MAIN	[MAIN] knob
MONITOR All	Buttons in MONITOR section
MONITOR 1–4 Button	MONITOR [1]–[4] button
CAPTURE IMAGE Button	[CAPTURE IMAGE] button
AUDIO LEVEL Button	[AUDIO LEVEL] button
OUTPUT FADE Button	[OUTPUT FADE] button
SEQUENCER All	Buttons in SEQUENCER section
ON Button	[ON] button
PREVIOUS Button	[PREVIOUS] button
NEXT Button	[NEXT] button

3. Use the [VALUE] knob to specify whether panel lock is enable (ON) or disable (OFF), and press the [VALUE] knob.

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

MEMO

The [MENU] button blinks when you try to operate a locked button, knob or other control.

Returning to the factory settings (factory reset)

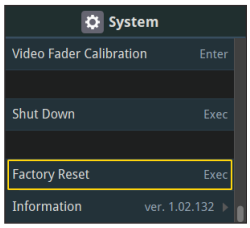
You can return the values of settings on the V-80HD to their factory defaults.

If operation that differs from what is described in the owner's manual occurs even when the steps described are followed correctly, try performing a factory reset.

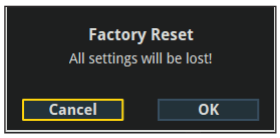
NOTE

- When you execute a factory reset, all the settings you've made as well as the data saved on the V-80HD (preset memory, macros, sequencer, and still images) is lost.
- Do not turn off the power while the message "Processing..." is shown.

1. Press the [MENU] button → "System" → select "Factory Reset", and press the [VALUE] knob.



A confirmation message appears.



* If you decide to cancel, press the [EXIT] button.

2. Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

A factory reset is executed. When the operation is finished, the message "Completed." appears.

Remotely controlling the V-80HD

To remotely control the V-80HD, you can use an external device to send control signals to the unit (p. 103), use a dedicated app, or use LAN/RS-232 commands.

Using the dedicated apps "V-80HD RCS" and "V-80HD Remote"

Dedicated apps are available for computers ("V-80HD RCS") and for the iPad ("V-80HD Remote").

These apps can be downloaded from the Roland website.

https://proav.roland.com/

* For operating details, refer to the "V-80HD RCS" (for computer) or "V-80HD Remote" (for iPad) connection guide.

V-80HD RCS (Windows/Mac)

Use the dedicated "V-80HD RCS" app to operate the V-80HD from your computer.

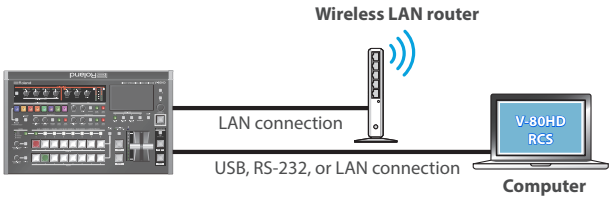
You can connect either wirelessly or via cable.

Wireless connection

- Connection via wireless LAN master device (Wi-Fi)

Wired connection (via cable)

- USB connection (USB Type-C cable)
- LAN connection (LAN cable)
- RS-232 connection (RS-232 cable)



V-80HD Remote

Use the dedicated "V-80HD Remote" app to operate the V-80HD from your iPad.

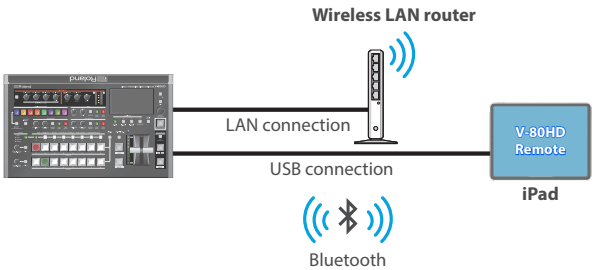
You can connect either wirelessly or via cable.

Wireless connection

- Connecting via Bluetooth wireless technology
- Connection via wireless LAN master device (Wi-Fi)

Wired connection

USB connection (USB Type-C cable, Lightning to USB camera adapter)



LAN/RS-232 command

The V-80HD support two types of remote-interface communication: LAN and RS-232.

Using the DIRECT STREAM port or RS-232 connector to send specific commands to the V-80HD from a controlling device lets you operate the V-80HD.

See "Remote Control Guide" (Roland website) for details on each interface and for a list of LAN/RS-232 commands.

https://roland.cm/v-80hd_om

MEMO

MIDI implementation

The V-80HD supports MIDI remote control.

See "MIDI Implementation" in the "Remote Control Guide" (Roland website) for details.

Menu list

1: Video Assign

Menu item	Value	Explanation
When Panel Operation is "A/B" or "PGM/PST"		
Input 1–8	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Stream&Record Status 1, 2, Date&Time(Analog/Digital) (*2), N/A The default values are as follows. Input 1: HDMI 1 Input 2: HDMI 2 Input 3: HDMI 3 Input 4: HDMI 4 Input 5: SDI 1 Input 6: SDI 2 Input 7: SDI 3 Input 8: SDI 4	Sets the video source (input video and still images) to assign to the cross-point [1]–[8] buttons.
When Panel Operation is "Dissolve" or "PGM/PST(16)"		
Input 1–16	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Stream&Record Status 1, 2, Date&Time(Analog/Digital) (*2), N/A The default values are as follows. Input 1: HDMI 1 INPUT 9: STILL 1 Input 2: HDMI 2 INPUT 10: STILL 2 Input 3: HDMI 3 INPUT 11: STILL 3 Input 4: HDMI 4 INPUT 12: STILL 4 Input 5: SDI 1 INPUT 13: STILL 5 Input 6: SDI 2 INPUT 14: STILL 6 Input 7: SDI 3 INPUT 15: STILL 7 Input 8: SDI 4 INPUT 16: STILL 8	Sets the video source (input video and still images) to assign to the PGM/A cross-point [1]–[8] and PST/B cross-point [1]–[8] buttons.
HDMI Out 1–3	Specifies the video bus that is assigned to the HDMI OUT 1–3 connectors.	
	Program	Final output video. This is the default setting for "HDMI Out 1".
	Sub Program	Sub Program bus video
	Preview	Preview output video. This is the default setting for "HDMI Out 2".
	AUX 1, AUX 2	Video for AUX 1, AUX 2 bus
	DSK Source	Video selected as the DSK video source
	Multi-View	Multi-view. This is the default setting for "HDMI Out 3".
	Input-View 1, Input-View 2	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 16 separate sections on the screen)
	Quad-View	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 4 separate sections on the screen)
SDI Out 1–2	Specifies the video bus that is assigned to the SDI OUT 1–3 connectors.	
	Program	Final output video. This is the default setting for "SDI Out 1".
	Sub Program	Sub Program bus video
	Preview	Preview output video. This is the default setting for "SDI Out 2".
	AUX 1, AUX 2	AUX bus video
	DSK Source	Video selected as the DSK video source
	Multi-View	Multi-view
	Input-View 1, Input-View 2	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 16 separate sections on the screen)
	Quad-View	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 4 separate sections on the screen)
USB Out	Specifies the video bus that is assigned to the USB STREAM port.	
	Program	Final output video
	Sub Program	Sub Program bus video
	Preview	Preview output video
	AUX 1, AUX 2	AUX bus video
	DSK Source	Video selected as the DSK video source
	Multi-View	Multi-view
	Input-View 1, Input-View 2	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 16 separate sections on the screen)
	Quad-View	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 4 separate sections on the screen)

Menu item	Value	Explanation
Stream& Record	Specifies the video bus that is assigned to the DIRECT STREAM port.	
	Program	Final output video
	Sub Program	Sub Program bus video
	Preview	Preview output video
	AUX 1, AUX 2	AUX bus video
	DSK Source	Video selected as the DSK video source
	Multi-View	Multi-view
	Input-View 1, Input-View 2	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 16 separate sections on the screen)
	Quad-View	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 4 separate sections on the screen)
LCD Monitor	Specifies the video bus to which this unit's display is assigned.	
	Program	Final output video
	Sub Program	Sub Program bus video
	Preview	Preview output video
	AUX 1, AUX 2	AUX bus video
	DSK Source	Video selected as the DSK video source
	Multi-View	Multi-view
	Input-View 1, Input-View 2	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 16 separate sections on the screen)
	Quad-View	The input video from the HDMI IN and SDI IN connectors and other sources (shown as 4 separate sections on the screen)
Program Layer	Enter	Displays the Program Layer menu.
	Menu item / **Value** / **Explanation**	
	PinP&Key 1–2	Disable, Enable — Sets whether each layer is displayed (Enable) or hidden (Disable) in the final output video.
	DSK	Disable, Enable
Sub Program Layer	Enter	Displays the Sub Program Layer menu.
	Menu item / **Value** / **Explanation**	
	PinP&Key 1–2	Disable, Enable — Sets whether each layer is displayed (Enable) or hidden (Disable) in the Sub Program bus video.
	DSK	Disable, Enable
AUX 1 Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Selects the video that is sent to the AUX 1 bus. When "AUX 1" is selected on the [MODE] button, you can use the cross-point [1]–[8] buttons to select the video that is sent to the AUX 1 bus. If this is set to "Input1–16", the source associated with Input Assign is selected.
AUX 1 Layer	Enter	Displays the AUX 1 Layer menu.
	Menu item / **Value** / **Explanation**	
	PinP&Key 1–2	Disable, Enable, Always On — Sets each layer to be always shown (Always On), shown (Enable) or hidden (Disable) for the AUX 1 bus video.
	DSK	Disable, Enable, Always On
AUX 2 Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Selects the video that is sent to the AUX 2 bus. When "AUX 2" is selected on the [MODE] button, you can use the cross-point [1]–[8] buttons to select the video that is sent to the AUX 2 bus. If this is set to "Input1–16", the source associated with Input Assign is selected.
AUX 2 Layer	Enter	Displays the AUX 2 Layer menu.
	Menu item / **Value** / **Explanation**	
	PinP&Key 1–2	Disable, Enable, Always On — Sets each layer to be always shown (Always On), shown (Enable) or hidden (Disable) for the AUX 2 bus video.
	DSK	Disable, Enable, Always On

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.
(*2) Either "Analog" or "Digital" is shown, depending on the "System → Date&Time → Clock Display Type" setting.

2: Video Input

Menu item	Value	Explanation
HDMI In 1–2(Scaler), HDMI In 3, 4(4K Scaler)	Adjusts the video that is input from the HDMI IN 1–4 connectors.	
Input Status	Enter	Displays information about the incoming video (format, size, etc.).
Test Pattern (*1, *2)	Off, Color Bars 75%, Color Bars100%, Ramp, Step, Hatch, Diamond, Circle, Color Bars 75%-SP, Color Bars100%-SP, Ramp-SP, Step-SP, Hatch-SP	Selects the test pattern to display.
Color Space (*1, *2)	Auto, RGB (0–255), RGB (16–235), YPbPr (SD), YPbPr (HD)	Specifies the color space.
Flicker Filter (*1, *2)	OFF, ON	When this is "ON", flickering is reduced.
Flip H (*1, *2)	OFF, ON	When this is "ON", the video is input with left and right flipped.
Flip V (*1, *2)	OFF, ON	When this is "ON", the video is input with top and bottom flipped.
EDID (*1, *2, *3)	Internal Internal-4K (*4) Internal-4K (4:2:0) (*4) Internal-2K (*4) SVGA (800 x 600) XGA (1024 x 768) WXGA (1280 x 800) FWXGA (1366 x 768) SXGA (1280 x 1024) SXGA+ (1400 x 1050) UXGA (1600 x 1200) WUXGA (1920 x 1200) 720p, 1080i, 1080p	Specifies the input format (EDID). If this is set to "Internal", EDID data for all formats that can be input to the V-80HD is transmitted. **What is EDID?** EDID is data that is transmitted from the V-80HD to the source device when the V-80HD is connected to a source device. EDID contains data such as the formats that can be input to the V-80HD (resolution, color space, color depth) and audio information. Based on the EDID information that the source device receives, it will output the most appropriate video format to the V-80HD.
Zoom (*1, *2)	10.0–1000% (*3)	Adjusts the zoom ratio.
Scaling Type (*1, *2)	This sets the scaling type.	
	Full	Always displays the picture expanded to full screen, irrespective of the aspect ratio of the input video.
	Letterbox	Enlarges or reduces the incoming video to a full-screen view while keeping the aspect ratio unchanged.
	Crop	Enlarges or reduces the incoming video so that the output picture has no blank margins while keeping the aspect ratio unchanged. Video extending beyond the borders is cut off.
	Dot By Dot	Performs no scaling.
	Manual	Scale according to the "Manual Size H" and "Manual Size V" settings below.
Manual Size H (*5)	-2000–2000 (*3)	Adjusts the horizontal size.
Manual Size V (*5)	-2000–2000 (*3)	Adjusts the vertical size.
Position H (*1, *2)	-1920–1920	Adjusts the position in the horizontal direction.
Position V (*1, *2)	-1200–1200	Adjusts the position in the vertical direction.
Brightness (*1, *2)	-32–31	Adjusts the brightness.
Contrast (*1, *2)	-32–31	Adjusts the contrast.
Saturation (*1, *2)	-32–31	Adjusts the saturation.
Red (*1, *2)	-64–63	Adjusts the red level.
Green (*1, *2)	-64–63	Adjusts the green level.
Blue (*1, *2)	-64–63	Adjusts the blue level.
SDI In 1–4	Adjusts the video that is input from the SDI IN 1–4 connectors.	
Input Status	Enter	Displays information about the incoming video (format, size, etc.).
Flip H (*1)	OFF, ON	When this is "ON", the video is input with left and right flipped.
Flip V (*1)	OFF, ON	When this is "ON", the video is input with top and bottom flipped.
Brightness (*1)	-32–31	Adjusts the brightness.
Contrast (*1)	-32–31	Adjusts the contrast.
Saturation (*1)	-32–31	Adjusts the saturation.
Video Player/SRT In	These settings adjust the video input from the video player or SRT protocol.	
Flip H (*1)	OFF, ON	When this is "ON", the video is input with left and right flipped.
Flip V (*1)	OFF, ON	When this is "ON", the video is input with top and bottom flipped.

(*1) When Mode of Roland Fill+Key is "ON", the setting is disabled (only for HDMI In 1).
(*2) When Test Pattern is set to a value besides "Off", the settings from Color Space through Blue are disabled.
(*3) A change in the setting is not applied until you press the [VALUE] knob to confirm.
(*4) This can be set in 4(4K Scaler) of HDMI In 3.
(*5) This can be set if "Scaling Type" Is "Manual".

3: Video Output

Menu item	Value	Explanation
HDMI Out 1–3	Adjusts the video that is output from the HDMI OUT 1–3 connectors.	
Output Status	––	Shows the connection status and whether or not an HDCP signal is present. If there is no connection, "Not Connected" is shown.
Color Space	YPbPr (4:4:4), YPbPr (4:2:2), RGB (0–255), RGB (16–235)	Specifies the color space.
DVI-D/HDMI Signal	HDMI, DVI-D	Specifies the type of output signal.
Brightness	-64–63	Adjusts the brightness.
Contrast	-64–63	Adjusts the contrast.
Saturation	-64–63	Adjusts the saturation.
Red	-64–63	Adjusts the red level.
Green	-64–63	Adjusts the green level.
Blue	-64–63	Adjusts the blue level.
External Rec Control	OFF, ON	Turns the External Rec control on/off. When this is "ON", REC START/STOP commands can be sent to a recorder that supports REC control functionality. To use the External REC control function, the REC START/STOP functions must be assigned to the assignable pads. In the Assignable Pads menu, set Pad A-1 through Pad H-8 → Category to "Control", and set Function to "External Rec Control".
SDI Out 1–2	Adjusts the video that is output from the SDI OUT 1–2 connectors.	
Output Status	––	Shows the format. * When "HDCP" in the SYSTEM menu is "On", "HDCP MASKED" is displayed, and video/audio is not outputted from the SDI OUT connectors.
3G-SDI Mapping	Level-A, Level-B	This sets the mapping structure for 3G-SDI output.
Brightness	-64–63	Adjusts the brightness.
Contrast	-64–63	Adjusts the contrast.
Saturation	-64–63	Adjusts the saturation.
USB Out	Adjusts the video that is output from the USB STREAM port. * You can edit the USB output video format and compression method from the livestreaming app or other app used at the output destination.	
Output Status	––	Indicates whether the connection uses USB 2.0 (HIGH SPEED) or USB 3.0 (SUPER SPEED). If not connected to a computer, this indicates "Not Connected". * When "HDCP" in the System menu is "On", "HDCP Masked" is displayed, and video/audio is not outputted from the USB STREAM port.
Output Format	Sets the output destination formats that can be selected from the livestreaming app.	
	YUY2 & MJPEG	YUY2 and Motion JPEG are selectable.
	YUY2	Only YUY2 is selectable.
Connection Reset	Exec	Reconnects the computer and the V-80HD when the video is garbled or when operation is otherwise unstable.

4: Mix/Wipe

Menu item	Value	Explanation
Mix	These are the detailed mix settings.	
Mix Type	Specifies the transition pattern for mix.	
	Mix	The two pictures are blended together as the video is switched.
	FAM	Video transitions are made with the luminance levels of the two video streams maintained unchanged. This is an abbreviation of "full additive mix".
	NAM	The two video streams are compared, and transitions are made with display during transition starting with levels of high luminance. This is an abbreviation of "non-additive mix".
Mix Time	0.0–4.0sec	This sets the video transition time.
Wipe	These are the detailed wipe settings.	
Wipe Type	Specifies the transition pattern for wipe.	
	Horizontal  Vertical  Upper Left  Upper Right  Lower Left  Lower Right  H-Center  V-Center 	
Wipe Time	0.0–4.0sec	This sets the video transition time.
Direction	Normal, Reverse, Round Trip	Specifies the direction of wipe.
Border Color	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom, Soft Edge	Specifies the color of the border added to the edge of the wipe area. When this is set to "Soft Edge", the wipe border is blurred.
Edit	Enter	Sets a custom color.
Border Width	0–14	Specifies the width of the border added to the edge of the wipe area.

5: Split

Menu item	Value	Explanation
Split 1, 2	These are the detailed settings for the split composite.	
Split Type	These parameters configure the split screen layout.	
	Split V	This vertically crops the center section of the video (split left/right). This is the default setting for "Split 1". 
	Split H	This horizontally crops the center section of the video (split upper/lower). This is the default setting for "Split 2". 
PGM/A Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Selects the video source to display on the left or upper side. This is linked with the PGM/A cross-point [1]–[8] button selections.
PST/B Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1, Input 2–16	Selects the video source to display on the right or lower side. This is linked with the PST/B cross-point [1]–[8] button selections.
PGM/A Center	-50.0–50.0%	**When at Split V** Adjusts the horizontal position of the video placed on the left. **When at Split H** Adjusts the horizontal position of the video placed above. * This positions the PGM/A bus video to the left or upper side.
PST/B Center	-50.0–50.0%	**When at Split V** Adjusts the horizontal position of the video placed on the right. **When at Split H** Adjusts the horizontal position of the video placed below. * This positions the PST/B bus video to the right or lower side.
Center Position	-50.0–50.0%	Adjusts the position of the boundary.
Border Color	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom	Specifies the color of the border.
Edit	Enter	Sets a custom color.
Border Width	0–14	Adjusts the width of the border.

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.

6: PinP&Key

Menu item	Value	Explanation
PinP&Key 1–2	These are the detailed settings for PinP and key composition for each PinP and key layer.	
Type	Specifies the type of PinP compositing.	
	PinP	This composites video in an inset screen over a background video.
	Luminance-White Key	A combination of PinP and luminance key (white). Makes the white portions of the inset screen transparent, and composites the image with the background.
	Luminance-Black Key	A combination of PinP and luminance key (black). Makes the black portions of the inset screen transparent, and composites the image with the background.
	Chroma Key	A combination of PinP and chroma key. Makes the specified key color portions of the inset screen transparent, and composites the image with the background.
Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Specifies the video source of the inset screen.
Time	0.0–4.0sec	This sets the video transition time.
Copy From PinP&Key 2/1	––	Copies the PinP & KEY 1 or 2 settings. Press the [VALUE] knob to copy the settings.
Swap With PinP&Key 2/1	––	Swaps the PinP & KEY 1 or 2 settings. Press the [VALUE] knob to swap the settings.
When Type = PinP		
Window	Adjusts the inset screen.	
Position H	-100.0–-40.0–100.0%	Adjusts the horizontal position of the inset screen.
Position V	-100.0–-40.0–100.0%	Adjusts the vertical position of the inset screen.
Size	0.0–100.0%	Adjusts the size of the inset screen.
Cropping H	0.0–100.0%	Adjusts the horizontal size of the inset screen.
Cropping V	0.0–100.0%	Adjusts the vertical size of the inset screen.
Shape	Rectangle, Circle, Diamond	Specifies the shape of the inset screen.
Border Color	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom, Soft Edge	Specifies the color of the border for the inset screen. When this is set to "Soft Edge", the edge of the inset screen is blurred.
Edit	Enter	Sets a custom color.
Border Width	0–14	Adjusts the width of the border for the inset screen.
View	Adjusts the video that is shown in the inset screen.	
Position H	-50.0–50.0%	Adjusts the horizontal position at which the inset screen is shown.
Position V	-50.0–50.0%	Adjusts the vertical position at which the inset screen is shown.
Zoom	100–400%	Adjusts the zoom of the video shown in the inset screen.
When Type = Luminance-White Key or Luminance-Black Key		
Window	Adjusts the inset screen.	
Position H	-100.0–100.0%	Adjusts the horizontal position of the inset screen.
Position V	-100.0–100.0%	Adjusts the vertical position of the inset screen.
Size	0.0–100.0%	Adjusts the size of the inset screen.
Cropping H	0.0–100.0%	Adjusts the horizontal size of the inset screen.
Cropping V	0.0–100.0%	Adjusts the vertical size of the inset screen.
View	Adjusts the video that is shown in the inset screen.	
Position H	-50.0–50.0%	Adjusts the horizontal position at which the inset screen is shown.
Position V	-50.0–50.0%	Adjusts the vertical position at which the inset screen is shown.
Zoom	100–400%	Adjusts the zoom of the video shown in the inset screen.
Key	Adjusts the key.	
Key Level	0–255	Adjusts the degree of extraction (transparency) for the key.
Key Gain	0–255	Adjusts the degree of edge blur (semi-transmissive region) for the key.
Mix Level	0–255	Adjusts the key's overall density (output level).

Menu item	Value	Explanation
When Type = Chroma Key		
Window	Adjusts the inset screen.	
Position H	-100.0–100.0%	Adjusts the horizontal position of the inset screen.
Position V	-100.0–100.0%	Adjusts the vertical position of the inset screen.
Size	0.0–100.0%	Adjusts the size of the inset screen.
Cropping H	0.0–100.0%	Adjusts the horizontal size of the inset screen.
Cropping V	0.0–100.0%	Adjusts the vertical size of the inset screen.
View	Adjusts the video that is shown in the inset screen.	
Position H	-50.0–50.0%	Adjusts the horizontal position at which the inset screen is shown.
Position V	-50.0–50.0%	Adjusts the vertical position at which the inset screen is shown.
Zoom	100–400%	Adjusts the zoom of the video shown in the inset screen.
Key	Adjusts the key.	
Key Level	0–255	Adjusts the degree of extraction (transparency) for the key.
Key Gain	0–255	Adjusts the degree of edge blur (semi-transmissive region) for the key.
Mix Level	0–255	Adjusts the key's overall density (output level).
Chroma	Make detailed settings for chroma key.	
Color	Green, Blue	Specifies green or blue as the key color (the color to be removed). If you want a color other than green or blue to turn transparent, use "Chroma Sampling Marker" to specify the key color.
Hue Width	-30–30	Adjusts the hue width for the key color.
Hue Fine	0–360	Adjusts the center position of the hue for the key color.
Saturation Width	-128–127	Adjusts the saturation width for the key color.
Saturation Fine	0–255	Adjusts the center position of saturation for the key color.
Value Width	-128–127	Adjusts the brightness (luminosity) width for the key color.
Value Fine	0–255	Adjusts the center position of brightness for the key color.
Despill	OFF, ON	When set to "ON", the blurring of the background color near the border with the transparent area is removed.
Chroma Sampling Marker	Enter	You can specify the key color that is made transparent by sampling (detecting) a color from the video (p. 45).

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.

7: DSK

Menu item	Value	Explanation
DSK	These settings configure the DSK composite details for each DSK layer.	
DSK Mode (*1)	Sets the DSK mode.	
	Self Key	Uses the luminance key (brightness) and chroma key (color) to cut out the video image and create a composite by overlaying the video on a background video.
	Alpha Key	Uses alpha channels (areas which contain transparency data) to cut out still images and place them against different background video as a composite.
	External Key	Sets the key signal (the shape to be cut out) and the fill video (the video to be composited) separately (external key). This uses the key signal to cut out the fill video and superimpose it on the background video to create the composite.
DSK Source (*2)	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*7), Input 1–16 * When DSK Mode = Self Key	Specifies the source of the caption or video that is overlaid.
	Still 1–32 * When DSK Mode = Alpha Key	
Key Source (*3)	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*7), Input 1–16	Sets the video to use as the key signal (the shape to be cut out). * Sets the default value to "HDMI 3–4" when you long-press the [VALUE] knob while DSK Mode = "External Key".
Fill Source (*3)	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*7), Input 1–16	Specifies the fill video (the video to be composited) source. * Sets the default value to "HDMI 3–4" when you long-press the [VALUE] knob while DSK Mode = "External Key".
DSK Time	0.0–4.0sec	This sets the video transition time.
DSK Type (*4)	Specifies the DSK type used during DSK composition.	
	Luminance-White Key	Composite using luminance key. Makes white portions transparent according to brightness.
	Luminance-Black Key	Composite using luminance key. Makes black portions transparent according to brightness.
	Chroma Key	Composite using chroma key. Makes the specified key color transparent according to hue.
DSK Level (*4)	0–255	Adjusts the degree of extraction (transparency) for the key.

Menu item	Value	Explanation
DSK Gain (*4)	0–255	Adjusts the degree of edge blur (semi-transmissive region) for the key.
Mix Level	0–255	Adjusts the key's overall density (output level).
Fill Type (*4)	Sets the fill material type (the video used for key compositing).	
	Bus	Uses the video specified in "DSK Source".
	Matte	Uses the internal color matte (a single-color image). The superimposed caption or video is filled in with the matte color. Specify the matte color using the "Matte Color" setting below.
Matte Color (*5)	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom	Specifies the matte color.
Edit	Enter	Sets a custom color.
Edge Type (*4)	Off, Border, Drop, Shadow, Outline	Specifies the type of edge applied to the superimposed caption or video.
Edge Color (*4)	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom	Specifies the color of the edge applied to the superimposed caption or video.
Edit	Enter	Sets a custom color.
Edge Width (*4)	0–14	Specifies the width of the edge applied to the superimposed caption or video.
Chroma (*4, *6)	Make detailed settings for chroma key.	
Color	Green, Blue	Specifies green or blue as the key color. If you want a color other than green or blue to turn transparent, use "Chroma Sampling Marker" to specify the key color.
Hue Width	-30–30	Adjusts the hue width for the key color.
Hue Fine	0–360	Adjusts the center position of the hue for the key color.
Saturation Width	-128–127	Adjusts the saturation width for the key color.
Saturation Fine	0–255	Adjusts the center position of saturation for the key color.
Value Width	-128–127	Adjusts the brightness (luminosity) width for the key color.
Value Fine	0–255	Adjusts the center position of brightness for the key color.
Despill	OFF, ON	When set to "ON", the blurring of the background color near the border with the transparent area is removed.
Chroma Sampling Marker	Enter	You can specify the key color that is made transparent by sampling (detecting) a color from the video (p. 45).

(*1) When the Mode for Roland Fill+Key is "ON", DSK Mode is set to "Roland Fill+Key".
(*2) This can be set if "DSK Mode" is set to "Self Key" or "Alpha Key".
(*3) This can be set if "DSK Mode" is "External Key".
(*4) This can be set if "DSK Mode" is "Self Key".
(*5) This can be set if "Fill Type" is "Matte".
(*6) This can be set if "DSK Type" is "Chroma Key".
(*7) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.

8: Audio Knob Assign

Menu item	Value	Explanation
Input Knob 1–3/4, Input Knob USB IN	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1) The default values are as follows. Input Knob 1: Audio In 1 Input Knob 2: Audio In 2 Input Knob 3/4: Audio In 3/4 Input Knob USB IN: USB In	Selects the audio input to assign to each knob.
Output Knob AUX 1–2, Output Knob MAIN	Main Bus, AUX 1 Bus, AUX 2 Bus, USB Out, Stream&Record The default values are as follows. Output Knob 1: AUX 1 Bus Output Knob 2: AUX 2 Bus Output Knob MAIN: Main Bus	Selects the audio output to assign to each knob.

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.

9: Audio Input

Menu item	Value	Explanation
Audio In 1, 2 **Audio In 1/2 (Linked)**	Adjusts the audio that is input from the AUDIO IN 1 and 2 connectors. "Audio In 1/2 (Linked)" is shown when "Stereo Link" is "ON".	
Analog Gain	0–68dB	Adjusts the input gain (sensitivity) in the analog domain.
Digital Gain	-42.0–42.0dB	Adjusts the input gain (sensitivity) in the digital domain (after conversion from analog to digital).
Input Level	-INF–10.0dB	Adjusts the input volume. This can also be adjusted with the AUDIO INPUT LEVEL [1] [2] knobs. (*1)
Input Mute	OFF, ON	Turns the mute function on/off. If this is "ON", the input audio is temporarily silenced.
Phantom +48V	OFF, ON	Turns the phantom power on/off. When this is "ON", phantom power is supplied via the AUDIO IN connectors (XLR). * Changing "Stereo Link" settings automatically turns "Phantom +48V" settings "OFF".
Pan (*2)	Left–Center–Right	Adjusts the stereo position (pan).
Stereo Link	OFF, ON	Turns the stereo link function on/off. When this is "ON", Audio In 1 and 2 are linked, and operate as a stereo channel. * When stereo link is turned on, the settings of Audio In 1 are applied to Audio In 2.
Solo	OFF, ON	Turns the solo function on/off. Only the audio for which this is "ON" is heard in the headphones. * The solo function applies to the headphone output. It does not affect output other than the headphones.
Delay	0.0–500.0msec (0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)	Adjusts the delay time of the audio. Effect This outputs audio with a delay.
Reverb Send	0–127	Adjusts the amount of audio sent to reverb.
Main Bus	This configures the Main bus.	
Send	OFF, ON	When this is "ON", audio is sent to the Main bus.
AUX 1 Bus	This configures the AUX 1 bus.	
Send Level	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
AUX 2 Bus	This configures the AUX 2 bus.	
Send Level	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
Echo Canceller	OFF, ON	Turns the echo canceller on/off. Effect Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.
Depth	1–10	Adjusts the depth of the echo canceller.
Anti Feedback	OFF, ON	Turns the anti-feedback on/off. Effect Suppresses audio feedback.
Effect Preset	Specifies an effect preset (high-pass filter, compressor, and equalizer). When you change an effect preset, the settings of each effect are overwritten.	
	Default	For line input (default setting)
	Meeting	For meetings
	Interview	For interviews
	Ambient Mic	For capturing ambient sound
	Windy Field	For capturing ambient sound in a windy area
Noise Gate	OFF, ON	Turns the noise gate on/off. Effect This mutes audio that is below a specified level. This is effective when the noise that you want to remove is separate from the audio that you want to keep, and can be used to remove hiss or other noise that is heard during periods of silence.
Threshold	-80–0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
Release	30–5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.

Menu item	Value	Explanation
De-Esser	OFF, ON	Turns the de-esser on/off. Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).
Sens	0–100	Adjusts the sensitivity with which sibilants are detected.
Depth	0–100	Adjusts the intensity of the effect.
Compressor	OFF, ON	This sets the compressor on or off. Effect Audio that exceeds the specified threshold level is compressed. This reduces the difference between the maximum volume and minimum volume, making the audio more comfortable for listening
Threshold	-50–0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.
Ratio	1.00:1, 1.12:1, 1.25:1, 1.40:1, 1.60:1, 1.80:1, 2.00:1, 2.50:1, 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	This species the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
Attack	0.0–100msec	Specifies the time until compression starts when audio exceeding the threshold is input.
Release	30–5000msec	Adjusts the length of time until compression ends after audio falls below the threshold.
Makeup Gain	-40–40dB	Adjusts the final output volume level after applying the compressor.
High Pass Filter	OFF, ON	Turns the high-pass filter on/off. Effect This cuts off unneeded low-band audio.
Frequency	20.0Hz–1.00kHz	Adjusts the cutoff frequency of the high-pass filter.
Equalizer	OFF, ON	Turns the equalizer on/off. Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Voice Changer	OFF, ON	Turns the voice changer function on/off. Effect Transforms the pitch or character of the voice.
Pitch	-12–+12	Adjusts the pitch of the voice in semitone steps. A setting of "0" is the original pitch.
Formant	-10–+10	Adjusts the character (formant) of the voice. Settings in the negative (–) direction produce a more masculine vocal character, and settings in the positive (+) direction produce a more feminine vocal character. A setting of "0" is the original voice.
Robot	OFF, ON	If this is "ON", the voice is held at a fixed pitch, creating a mechanical robot-like impression.
Mix	0–100	Adjusts the balance between the unprocessed voice (0) and the voice processed by the effect (100).

(*1) When Stereo Link is "ON", the AUDIO INPUT LEVEL [2] knob has the same effect as the AUDIO INPUT LEVEL [1] knob.
(*2) This can be set if "Stereo Link" is "OFF".

Menu item	Value	Explanation
Audio In 3/4 **USB In** **Bluetooth In** **Audio Player**	Adjusts the audio that is input from the AUDIO IN 3 and 4 connectors. Adjusts the audio that is input from the USB STREAM port. These parameters adjust the audio input via Bluetooth. These parameters adjust the audio input from the audio player.	
Digital Gain	-42.0–42.0dB	Adjusts the input gain (sensitivity) in the digital domain (after conversion from analog to digital).
Input Level	-INF–10.0dB	Adjusts the input volume. This can also be adjusted by the [3/4] knob. (*12)
Input Mute	OFF, ON	Turns the mute function on/off. If this is "ON", the input audio is temporarily silenced.
Mono	Converts the input audio from stereo to mono.	
	Off	Sends the stereo input audio without change.
	L Only	The audio of the L channel is sent to both L and R.
	R Only	The audio of the R channel is sent to both L and R.
	LR Mix	The audio of the L channel and R channel is mixed, and sent to both L and R.
Solo	OFF, ON	Turns the solo function on/off. Only the audio for which this is "ON" is heard in the headphones. * The solo function applies to the headphone output. It does not affect output other than the headphones.
Delay	0.0–500.0msec (0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)	Adjusts the delay time of the audio. Effect This outputs audio with a delay.
Reverb Send	0–127	Adjusts the amount of audio sent to reverb.
Main Bus	This configures the Main bus.	
Send	OFF, ON	When this is "ON", audio is sent to the Main bus.
AUX 1 Bus	This configures the AUX 1 bus.	
Send Level	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
AUX 2 Bus	This configures the AUX 2 bus.	
Send Level	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
Effect Preset	Specifies an effect preset (high-pass filter, compressor, and equalizer). When you change an effect preset, the settings of each effect are overwritten.	
	Default	For line input (default setting)
	Meeting	For meetings
	Interview	For interviews
	Ambient Mic	For capturing ambient sound
	Windy Field	For capturing ambient sound in a windy area
Noise Gate	OFF, ON	Turns the noise gate on/off. Effect This mutes audio that is below a specified level. This is effective when the noise that you want to remove is separate from the audio that you want to keep, and can be used to remove hiss or other noise that is heard during periods of silence.
Threshold	-80–0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
Release	30–5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.

Menu item	Value	Explanation
Compressor	OFF, ON	This sets the compressor on or off. Effect Audio that exceeds the specified threshold level is compressed. This reduces the difference between the maximum volume and minimum volume, making the audio more comfortable for listening
Threshold	-50–0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.
Ratio	1.00:1, 1.12:1, 1.25:1, 1.40:1, 1.60:1, 1.80:1, 2.00:1, 2.50:1, 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	This species the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
Attack	0.0–100msec	Specifies the time until compression starts when audio exceeding the threshold is input.
Release	30–5000msec	Adjusts the length of time until compression ends after audio falls below the threshold.
Makeup Gain	-40–40dB	Adjusts the final output volume level after applying the compressor.
High Pass Filter	OFF, ON	Turns the high-pass filter on/off. Effect This cuts off unneeded low-band audio.
Frequency	20.0Hz–1.00kHz	Adjusts the cutoff frequency of the high-pass filter.
Equalizer	OFF, ON	Turns the equalizer on/off. Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.

Menu item	Value	Explanation
HDMI In 1–4 **SDI In 1–4**	Adjusts the audio that is input from the HDMI IN 1–4 connectors. Adjusts the audio that is input from the SDI IN 1–4 connectors.	
Embedded Audio Channel	1/2, 3/4, 5/6, 7/8	Selects the channel used for embedded audio.
Digital Gain	-42.0–42.0dB	Adjusts the digital gain.
Input Level	-INF–10.0dB	Adjusts the input volume.
Input Mute	OFF, ON	Turns the mute function on/off. If this is "ON", the input audio is temporarily silenced.
Mono	Converts the input audio from stereo to mono.	
	Off	Sends the stereo input audio without change.
	L Only	The audio of the L channel is sent to both L and R.
	R Only	The audio of the R channel is sent to both L and R.
	LR Mix	The audio of the L channel and R channel is mixed, and sent to both L and R.
Solo	OFF, ON	Turns the solo function on/off. Only the audio for which this is "ON" is heard in the headphones. * The solo function applies to the headphone output. It does not affect output other than the headphones.
Delay	0.0–500.0msec (0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)	Adjusts the delay time of the audio. Effect This outputs audio with a delay.
Reverb Send	0–127	Adjusts the amount of audio sent to reverb.
Main Bus	This configures the Main bus.	
Send	OFF, ON	When this is "ON", audio is sent to the Main bus.
AUX 1 Bus	This configures the AUX 1 bus.	
Send Level (*1)	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
AUX 2 Bus	This configures the AUX 2 bus.	
Send Level (*2)	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
Effect Preset	Specifies an effect preset (high-pass filter, compressor, and equalizer). When you change an effect preset, the settings of each effect are overwritten.	
	Default	For line input (default setting)
	Meeting	For meetings
	Interview	For interviews
	Ambient Mic	For capturing ambient sound
	Windy Field	For capturing ambient sound in a windy area
Noise Gate	OFF, ON	Turns the noise gate on/off. Effect This mutes audio that is below a specified level. This is effective when the noise that you want to remove is separate from the audio that you want to keep, and can be used to remove hiss or other noise that is heard during periods of silence.
Threshold	-80–0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
Release	30–5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.
Compressor	OFF, ON	This sets the compressor on or off. Effect Audio that exceeds the specified threshold level is compressed. This reduces the difference between the maximum volume and minimum volume, making the audio more comfortable for listening
Threshold	-50–0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.
Ratio	1.00:1, 1.12:1, 1.25:1, 1.40:1, 1.60:1, 1.80:1, 2.00:1, 2.50:1, 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	This species the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
Attack	0.0–100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
Release	30–5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
Makeup Gain	-40–40dB	Adjusts the final output volume level after applying the compressor.

Menu item	Value	Explanation
High Pass Filter	OFF, ON	Turns the high-pass filter on/off. Effect This cuts off unneeded low-band audio.
Frequency	20.0Hz–1.00kHz	Adjusts the cutoff frequency of the high-pass filter.
Equalizer	OFF, ON	Turns the equalizer on/off. Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.

(*1) This can be set when Audio Output → AUX 1 Bus → AUX 1 Bus Send Level → Auto Send (Video) is "Off".
(*2) This can be set when Audio Output → AUX 2 Bus → AUX 2 Bus Send Level → Auto Send (Video) is "Off".

Menu item	Value	Explanation
Video Player/SRT In	These settings adjust the audio input from the video player or SRT protocol.	
Digital Gain	-42.0–42.0dB	Adjusts the digital gain.
Input Level	-INF–10.0dB	Adjusts the input volume.
Input Mute	OFF, ON	Turns the mute function on/off. If this is "ON", the input audio is temporarily silenced.
Mono	Converts the input audio from stereo to mono.	
	Off	Sends the stereo input audio without change.
	L Only	The audio of the L channel is sent to both L and R.
	R Only	The audio of the R channel is sent to both L and R.
	LR Mix	The audio of the L channel and R channel is mixed, and sent to both L and R.
Solo	OFF, ON	Turns the solo function on/off. Only the audio for which this is "ON" is heard in the headphones. * The solo function applies to the headphone output. It does not affect output other than the headphones.
Delay	0.0–500.0msec (0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)	Adjusts the delay time of the audio. Effect This outputs audio with a delay.
Reverb Send	0–127	Adjusts the amount of audio sent to reverb.
Main Bus	This configures the Main bus.	
Send	OFF, ON	When this is "ON", audio is sent to the Main bus.
AUX 1 Bus	This configures the AUX 1 bus.	
Send Level (*1)	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
AUX 2 Bus	This configures the AUX 2 bus.	
Send Level (*2)	-INF–10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
Send Point	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
Effect Preset	Specifies an effect preset (high-pass filter, compressor, and equalizer). When you change an effect preset, the settings of each effect are overwritten.	
	Default	For line input (default setting)
	Meeting	For meetings
	Interview	For interviews
	Ambient Mic	For capturing ambient sound
	Windy Field	For capturing ambient sound in a windy area
Noise Gate	OFF, ON	Turns the noise gate on/off. Effect This mutes audio that is below a specified level. This is effective when the noise that you want to remove is separate from the audio that you want to keep, and can be used to remove hiss or other noise that is heard during periods of silence.
Threshold	-80–0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
Release	30–5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.
Compressor	OFF, ON	This sets the compressor on or off. Effect Audio that exceeds the specified threshold level is compressed. This reduces the difference between the maximum volume and minimum volume, making the audio more comfortable for listening
Threshold	-50–0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.
Ratio	1.00:1, 1.12:1, 1.25:1, 1.40:1, 1.60:1, 1.80:1, 2.00:1, 2.50:1, 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	This species the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
Attack	0.0–100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
Release	30–5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
Makeup Gain	-40–40dB	Adjusts the final output volume level after applying the compressor.

Menu item	Value	Explanation
High Pass Filter	OFF, ON	Turns the high-pass filter on/off. Effect This cuts off unneeded low-band audio.
Frequency	20.0Hz–1.00kHz	Adjusts the cutoff frequency of the high-pass filter.
Equalizer	OFF, ON	Turns the equalizer on/off. Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.

(*1) This can be set when Audio Output → AUX 1 Bus → AUX 1 Bus Send Level → Auto Send (Video) is "Off".
(*2) This can be set when Audio Output → AUX 2 Bus → AUX 2 Bus Send Level → Auto Send (Video) is "Off".

10: Audio Output

<table>
<tr><th>Menu item</th><th>Value</th><th>Explanation</th></tr>
<tr><td>Output Assign</td><td colspan="2">Specifies the audio bus that is assigned to each connector.</td></tr>
<tr><td>Audio Out (XLR)</td><td>Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus</td><td rowspan="7">Main Bus:
All input audio is mixed and output (master output).
AUX 1 Bus, AUX 2 Bus:
Only the input audio sent to the AUX bus is mixed and output. This allows you to output audio that is different than the master output.
Monitor Bus:
This outputs the same audio as what you hear in the headphones.
Auto:
The audio bus automatically switches according to the video bus assignment.
<table><tr><th>Video bus</th><th>Audio bus</th></tr><tr><td>Except for AUX, DSK Source</td><td>Main Bus</td></tr><tr><td>AUX 1, 2</td><td>AUX 1, 2 Bus</td></tr><tr><td>DSK Source</td><td>DSK video source</td></tr></table></td></tr>
<tr><td>Phones Out/Monitor</td><td>Main Bus, AUX 1 Bus, AUX 2 Bus</td></tr>
<tr><td>USB Out</td><td>Auto, Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus</td></tr>
<tr><td>Stream&Record</td><td>Auto, Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus</td></tr>
<tr><td>Audio Record</td><td>Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus</td></tr>
<tr><td>HDMI Out 1–3</td><td>Auto, Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus</td></tr>
<tr><td>SDI Out 1, 2</td><td>Auto, Main Bus, AUX 1 Bus, AUX 2 Bus, Monitor Bus</td></tr>
<tr><td>Main Bus</td><td colspan="2">Adjusts the audio of the MAIN bus.</td></tr>
<tr><td>Level</td><td>-INF–10.0dB</td><td>Adjusts the output volume.
You can also adjust the output volume by assigning Main Bus to an AUDIO MIXER knob.</td></tr>
<tr><td>Mute</td><td>OFF, ON</td><td>Turns the mute function on/off. If this is “ON”, the output audio is temporarily silenced.</td></tr>
<tr><td>Solo</td><td>OFF, ON</td><td>Turns the solo function on/off. Only the audio for which this is “ON” is heard in the headphones.
* The solo function applies to the headphone output. It does not affect output other than the headphones.</td></tr>
<tr><td>Delay</td><td>0.0–500.0msec
(0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)</td><td>Adjusts the delay time of the audio.
Effect This outputs audio with a delay.</td></tr>
<tr><td>Main Send Switch</td><td colspan="2">This configures the Main bus.</td></tr>
<tr><td>Audio In 1–2, 3/4, USB In, Bluetooth In, Audio Player, HDMI In 1–4, SDI In 1–4, Video Player/SRT In</td><td>OFF, ON</td><td>When this is “ON”, audio is sent to the Main bus.</td></tr>
<tr><td>Main Send Level</td><td colspan="2">These parameters adjust the amount of audio sent to the Main bus.</td></tr>
<tr><td>Audio In 1–2, 3/4, USB In, Bluetooth In, Audio Player, HDMI In 1–4, SDI In 1–4, Video Player/SRT In</td><td>-INF–10.0dB</td><td>These parameters adjust the amount of audio sent to the Main bus.</td></tr>
<tr><td>Reverb</td><td>OFF, ON</td><td>Turns reverb on/off.
Effect Adds reverberation to the sound.</td></tr>
<tr><td>Level</td><td>0–127</td><td>This adjusts the depth of the overall reverb.</td></tr>
<tr><td rowspan="3">Type</td><td colspan="2">Specifies the reverb type.</td></tr>
<tr><td>Room</td><td>Produces the natural-sounding reverberation of a room.</td></tr>
<tr><td>Hall</td><td>Produces the reverberation that is typical of a performance in a concert hall.</td></tr>
<tr><td>Size</td><td>1–20</td><td>Specifies the size of the room. The larger the value, the longer the reverb time.</td></tr>
<tr><td>Return Level</td><td>-INF–10.0dB</td><td>Adjusts how much reverb is sent back to the main bus.</td></tr>
</table>

Menu item	Value	Explanation
Equalizer	OFF, ON	Turns the equalizer on/off. Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Compressor/Limiter	OFF, ON	Turns the compressor or limiter on/off.
Type	Selects the compressor or limiter.	
	Compressor	Effect Audio that exceeds the specified threshold level is compressed. This reduces the difference between the maximum volume and minimum volume, making the audio more comfortable for listening
	Limiter	Effect Compresses the audio so that the mixed audio does not exceed the specified threshold level. * Distortion will occur if audio that exceeds the allowable range of the limiter is input.
Compressor		
Threshold	-50–0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.
Ratio	1.00:1, 1.12:1, 1.25:1, 1.40:1, 1.60:1, 1.80:1, 2.00:1, 2.50:1, 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	This species the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
Attack	0.0–100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
Release	30–5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
Makeup Gain	-40–40dB	Adjusts the final output volume level after applying the compressor.
Limiter		
Threshold	-40–0dB	Adjusts the level that becomes the threshold at which the limiter is applied. Compression is applied to audio that exceeds the threshold. The volume level of audio that is output is limited so as to stay to below the threshold.
Loudness Auto Gain Control	OFF, ON	Turns loudness auto gain control on/off. Effect The long-term average loudness is measured, and the volume is adjusted so that it is appropriate overall.
Integrated Gain Control	Disable, Enable	Specifies whether the extended interval auto control is enabled (Enable) or disabled (Disable).
Sens	0–127	Adjusts the speed at which the target level (Target LKFS) is approached.
Momentary Gain Control	Disable, Enable	Specifies whether the momentary auto control is enabled (Enable) or disabled (Disable).
Sens	0–127	Adjusts the speed at which the target level (Target LKFS) is approached.
Target LKFS	-34–-10dB	Specifies the target loudness value.
Forget Learning	Exec	Resets the learned parameters. The loudness auto gain control value is targeted for reset.
Adaptive Noise Reduction	OFF, ON	Turns Adaptive Noise Reduction on/off. Effect By continuously monitoring the input audio to detect noise during periods of silence, this removes only the noise component.
Depth	0–127	Specifies the strength at which noise reduction is applied.
Talking Detector	0–127	Specifies the sensitivity of the talking detector. Higher values raise the sensitivity, so that it will be easier to detect the presence or absence of talking even in a noisy environment.
Auto Learn	Disable, Enable	Enables automatic noise detection.
Manual Measure	Exec	Performs noise detection manually.
Forget Learning	Exec	Resets the learned parameters. The adaptive noise reduction setup value is targeted for reset.
Lo Frequency Cut	OFF, ON	Turns Lo Frequency Cut on/off.

Menu item	Value	Explanation
GEQ	Enter	Shows the graphic equalizer screen.
GEQ	OFF, ON	These are the settings for the graphic equalizer. Effect This lets you shape the character of the sound by boosting or cutting each of the 15 frequency regions into which the sound is divided.
All Flat	Exec	Sets the equalizer settings to flat (0.0 dB).
25Hz	-15.0–+15.0dB	Boost/cut each frequency region.
40Hz		
63Hz		
100Hz		
160Hz		
250Hz		
400Hz		
630Hz		
1kHz		
1.6kHz		
2.5kHz		
4kHz		
6.3kHz		
10kHz		
16kHz		

Menu item	Value	Explanation
AUX 1 Bus **AUX 2 Bus**	Adjusts the audio of the AUX 1 bus. Adjusts the audio of the AUX 2 bus.	
Level	-INF–10.0dB	Adjusts the output volume. You can also adjust the output volume by assigning AUX 1, 2 Bus to an AUDIO MIXER knob.
Mute	OFF, ON	Turns the mute function on/off. If this is "ON", the output audio is temporarily silenced.
Solo	OFF, ON	Turns the solo function on/off. Only the audio for which this is "ON" is heard in the headphones. * The solo function applies to the headphone output. It does not affect output other than the headphones.
Delay	0.0–500.0msec (0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)	Adjusts the delay time of the audio. Effect This outputs audio with a delay.
Reverb Return Level	-INF–10.0dB	Adjusts how much reverb is sent back to the AUX 1, 2 buses.
AUX 1 Bus Send Level	Enter	* For AUX 2 Bus, this is AUX 2 Bus Send Level.
Audio In 1–2, Audio In 3/4, USB In, Bluetooth In, Audio Player,	-INF–10.0dB	Adjusts the amount of audio sent to the AUX 1, 2 buses.
Auto Send (Video)	This selects the setting method for sending audio to the AUX bus.	
	ON	Audio is automatically sent to the AUX bus in tandem with the AUX bus video selection.
	OFF	The amount of audio to send is adjusted manually.
HDMI In 1–4, SDI In 1–4, Video Player/SRT In	-INF–10.0dB	Adjusts the amount of audio sent to the AUX 1, 2 buses. * This can be set when Auto Send (Video) is "OFF".
AUX 1 Bus Send Point	Enter	* For AUX 2 Bus, this is AUX 2 Bus Send Point.
Audio In 1–2, Audio In 3/4, USB In, Bluetooth In, Audio Player, HDMI In 1–4, SDI In 1–4, Video Player/SRT In	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).
Equalizer	OFF, ON	Turns the equalizer on/off. Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.

Menu item	Value	Explanation
Compressor/Limiter	OFF, ON	Turns the compressor or limiter on/off.
Type	Selects the compressor or limiter.	
	Compressor	Effect: Audio that exceeds the specified threshold level is compressed. This reduces the difference between the maximum volume and minimum volume, making the audio more comfortable for listening
	Limiter	Effect: Compresses the audio so that the mixed audio does not exceed the specified threshold level. * Distortion will occur if audio that exceeds the allowable range of the limiter is input.
Compressor		
Threshold	-50–-8–0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.
Ratio	1.00:1, 1.12:1, 1.25:1, 1.40:1, 1.60:1, 1.80:1, 2.00:1, 2.50:1, 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	This species the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
Attack	0.0–100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
Release	30–5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
Makeup Gain	-40–40dB	Adjusts the final output volume level after applying the compressor.
Limiter		
Threshold	-40–0dB	Adjusts the level that becomes the threshold at which the limiter is applied. Compression is applied to audio that exceeds the threshold. The volume level of audio that is output is limited so as to stay to below the threshold.
GEQ	Enter	Shows the graphic equalizer screen.
GEQ	OFF, ON	These are the settings for the graphic equalizer. Effect: This lets you shape the character of the sound by boosting or cutting each of the 15 frequency regions into which the sound is divided.
All Flat	Exec	Sets the equalizer settings to flat (0.0 dB).
25Hz	-15.0–+15.0dB	Boost/cut each frequency region.
40Hz		
60Hz		
100Hz		
160Hz		
250Hz		
400Hz		
630Hz		
1kHz		
1.6kHz		
2.5kHz		
4kHz		
6.3kHz		
10kHz		
16kHz		
Monitor Bus	Adjusts the audio of the Monitor bus.	
Monitor Level	-INF–10.0dB	Adjust the monitor volume.
USB Out	Adjusts the audio that's output from the USB STREAM port.	
Level	-INF–10.0dB	Adjusts the output volume. This can also be adjusted by the [USB OUT] knob.
Mute	OFF, ON	Turns the mute function on/off. If this is "ON", the output audio is temporarily silenced.
Delay	0.0–500.0msec (0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)	Adjusts the delay time of the audio. Effect: This outputs audio with a delay.
Equalizer	OFF, ON	Turns the equalizer on/off. Effect: This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.

Menu item	Value	Explanation
Stream&Record	Adjusts the audio that's output from the DIRECT STREAM port.	
Level	-INF–10.0dB	Adjusts the output volume.
Mute	OFF, ON	Turns the mute function on/off. If this is "ON", the output audio is temporarily silenced.
Delay	0.0–500.0msec (0.0–11.9/12.0/12.5/14.9/15.0/25.0/29.9/30.0 frame)	Adjusts the delay time of the audio. Effect This outputs audio with a delay.
Equalizer	OFF, ON	Turns the equalizer on/off. Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Hi Gain	-12.0–12.0dB	This boosts or attenuates the high band.
Hi Freq	1.00–20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi-Mid Gain	-12.0–12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Lo-Mid Gain	-12.0–12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Freq	20.0Hz–20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid Q	0.5–16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Lo Gain	-12.0–12.0dB	This boosts or attenuates the low band.
Lo Freq	20.0Hz–2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
HDMI/SDI Audio Embedded	Settings related to embedded audio for the HDMI/SDI output.	
HDMI Out 1-3 Send	These parameters set the input audio to send to HDMI embedded audio channels 3–8.	
Channel 3/4 Channel 5/6 Channel 7/8	N/A, Audio In 1/2–Audio In 3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, Video Player/SRT In	When this is set to "N/A", no audio is sent. * The audio assigned for HDMI Out 1–3 in Output Assign (p. 127) is output to channels 1 and 2.
SDI Out 1-3 Send	These parameters set the input audio to send to SDI embedded audio channels 3–8.	
Channel 3/4 Channel 5/6 Channel 7/8	N/A, Audio In 1/2–Audio In 3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, Video Player/SRT In	When this is set to "N/A", no audio is sent. * The audio assigned for SDI Out 1–2 in Output Assign (p. 127) is output to channels 1 and 2.
Audio In 1/2–3/4 USB In Bluetooth In Audio Player HDMI In 1–4 SDI In 1–4 Video Player/SRT In	Sets whether to send audio with effects applied, from each input to the HDMI/SDI embedded audio channels (3–8).	
	Off	No audio is sent.
	Dry	This sends the source audio with no effects applied.
	Pre Fader	Sends the effect-applied audio. The send volume is constant, regardless of the volume (Input Level).
	Post Fader	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (Input Level).

11: Audio Follow

Menu item	Value	Explanation
All	OFF, ON	Turns on/off the audio follow function for HDMI 1–4, SDI 1–4 and Video Player/SRT In with a single action.
HDMI In 1–4 SDI In 1–4 Video Player/SRT In	Turns the audio follow function on/off. Audio follow is a function that automatically switches the audio output in tandem with video switching.	
	OFF	The audio is always output regardless of the video selection.
	ON	The audio is output only when the video is selected. The audio is automatically muted if another video is selected.
Audio In 1–3/4 USB In Bluetooth In Audio Player	Off, HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	For each audio source, these settings specify the input video (Input 1–8) that will use the audio follow function. Audio is output only when the specified video is selected. When this is "Off", the audio is always output regardless of the video selection.
PinP&Key 1Follow	OFF, ON	When PinP&Key 1 is "ON", this sets whether the sound associated with the source video is linked.
PinP&Key 2 Follow	OFF, ON	When PinP&Key 2 is "ON", this sets whether the sound associated with the source video is linked.
DSK Follow	OFF, ON	When DSK is "ON", this sets whether the sound associated with the source video is linked.

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.

12: Audio Auto Mixing

Menu item	Value	Explanation
Auto Mixing View	Enter	Jumps to the view screen.
Audio Auto Mixing	OFF, ON	Turns the auto mixing function on/off. Auto mixing is a function that automatically controls the volume adjustments.
Audio In 1–2	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.
Audio In 3/4	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.
USB In	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.
Bluetooth In	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.
Audio Player	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.
HDMI In 1–4	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.
SDI In 1–4	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.
Video Player/SRT In	Disable, Enable	Specifies whether Auto Mixing is applied (Enable) or not applied (Disable).
Weight	0–100%	Specifies the weight level (the priority of volume distribution). * Setting the weight level to "0" results in no audio output.

13: Still Image

Menu item	Value	Explanation
Load From Storage	This loads a still image from the storage media.	
Still Image	Still 1–32	Specifies where to save still images imported from storage to this unit's internal memory. * A "*" symbol is displayed for internal memory where a still image is already saved.
Load	Enter	Shows a list of still image files on the storage media. Select still images in the list to load them from the storage media. **Formats supported for loading** **Format**: Bitmap file (.bmp), 24-bit color, uncompressed **Format**: PNG file (.png), 24-bit color * Alpha channel supported **Format**: JPEG file (.jpg, .jpeg), 24-bit color **Resolution**: In conformity with system format **File name**: No more than 64 single-byte alphanumeric characters * The extension ".bmp", ".png", ".jpg", or ".jpeg" must be added.
Save To Storage	This exports a still image to storage media.	
Still Image	Still 1–32	Selects the still images to export to the USB flash drive. Press the [VALUE] knob to display a list of still images stored on the storage media (in the "Still" subdirectory). * A "*" symbol is displayed for internal memory where a still image is already saved. * The file formats of the still images that can be saved are the same as in "Formats supported for loading", above. * You can't export still images that were created while "HDCP" in the System menu was "ON". * When "HDCP" in the System menu is "ON", the text " (HDCP)" is shown for the captured still image.
Save	Enter	Shows a list of still image files on the storage media. Set a filename to save the files as new still image files. If you select a still image file, it is overwritten with the existing filename.
Save To Internal Storage	Enable, Disable	You can set the method of saving still images to "temporarily save". When you turn off the power while the status is "Disable", the captured still image is deleted. * Even if this is set to "Enable", still images may not be saved in the event that this unit could not be shut down properly.
Delete Still Image	Enter	Deletes the still image.
	All, Still 1–32	Selects the still images to delete. * A "*" symbol is displayed for internal memory where a still image is already saved.

14: Video Player/SRT In

Menu item	Value	Explanation
Type	This selects whether to use the video player or the SRT input as the video source.	
	Video Player	Loads and plays videos that are saved in storage.
	SRT In	Inputs SRT video.
When Type = Video Player		
Video Player View	Enter	Jumps to the view screen.
Import	Enter	Loads a video from the storage media.
Name	––	Shows the filename of the video that was loaded.
Duration	Display only	Shows the length of the video that was loaded.
Skip Forward Time	1, 10, 30, 60sec	Sets how much the video fast-forwards each time.
Skip Backward Time	1, 10, 30, 60sec	Sets how much the video rewinds each time.
Level	-INF–10.0dB	Adjusts the output volume.
Repeat	OFF, ON	When this is "ON", the video plays back repeatedly.
When Type = SRT In		
SRT In View	Enter	Jumps to the view screen.
Start/Stop	Stopped, Started	Starts/stops SRT input.
Mode	Sets the operation mode for SRT connection.	
	Caller	In this mode, SRT connections are made from this unit by specifying the IP address and port number of the SRT transmitting device (listener).
	Listener	This mode lets you listen for connections from SRT transmitting devices (caller) by changing the settings of those devices to match the settings of this unit.
When Mode = Caller		
Capacity	Sets the maximum bit rate at which a video signal can be received.	
	Standard	Video data can be received up to a bit rate of 10 Mbps.
	High	Video data can be received up to a bit rate of 20 Mbps. * This setting can't be used at the same time as streaming/recording or SRT output.
Remote IP Address	0.0.0.0	Sets the IP address of the SRT transmitting device (listener).
Remote Port	0–65535	Sets the port number of the SRT transmitting device (listener).
Latency	80–8000msec	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence.
Stream ID	––	Sets the stream ID to the same ID as that of the SRT transmitting device (listener).
Passphrase	––	Sets the passphrase to the same passphrase as that of the SRT transmitting device (listener).
Use Web Application	Enter	You can use the web app to configure the above settings for SRT.
When Mode = Listener		
Capacity	Sets the maximum bit rate at which a video signal can be received.	
	Standard	Video data can be received up to a bit rate of 10 Mbps.
	High	Video data can be received up to a bit rate of 20 Mbps. * This setting can't be used at the same time as streaming/recording or SRT output.
Local Port	0–65535	Sets the port number used for listening for SRT connections.
Latency	80–8000msec	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence.
Passphrase	––	Sets the passphrase to the same passphrase as that of the SRT transmitting device (caller).
Use Web Application	Enter	You can use the web app to configure the above settings for SRT.

15: Stream&Record

Menu item	Value	Explanation
Type	Specifies how video signals are transmitted.	
	RTMP	Streams via RTMP.
	SRT Out	Outputs SRT video.
Start/Stop	When Type = RTMP Stop, On Air	Starts (On Air) or stops (Stop) streaming/recording.
	When Type = SRT Out Stop, Streaming	Starts (On Air) or stops (Stop) SRT transmission.
When Type = RTMP		
Stream&Record View	Enter	Jumps to the view screen.
Service 1, 2 Setup	Sets which platform is used for livestreaming.	
	Off	Livestreaming is not used.
	Custom	Custom settings are used for streaming.
	YouTube Live	Uses YouTube Live for streaming.
	Facebook Live	Uses Facebook Live for streaming.
	Twitch	Uses Twitch for streaming.

Menu item	Value	Explanation
URL	--	Specifies the URL of the streaming server.
Stream Key		Specifies the stream key.
Use Web Application	Enter	Uses a Web app to set the streaming server URL and stream key.

Target Bitrate	Specifies the target bitrate of encoding.	
Video	1,000–20,000kbps	Specifies the target bitrate of video encoding.
Audio	32, 48, 64, 96, 128, 160, 192, 224, 256	Specifies the target bitrate of audio encoding.
Video Rec	OFF, ON	Sets whether to record an MP4 file (ON) or not (OFF).
Browse Video Files	Enter	Checks the recorded video files on this unit.
Audio Rec	OFF, ON	Sets whether to record a WAV file (ON) or not (OFF).
Browse Audio Files	Enter	Checks the recorded audio files on this unit.
Encode Profile	High, Main, Baseline	Sets the profile for encoding video.
Encode Mode	This sets the optimal encoding method for the video.	
	Resolution	Suitable for presentations and other video contents that don't have a lot of motion.
	Motion	Suitable for sports programs, gaming videos and the like that have a lot of motion.
Safety Delay	Off, 5–60sec	Sets the streaming delay time that's used by the safety delay function.
Import Still Image	Exec	Loads the still image used for safety delay.
File Name	Display only	Shows the filename used for the safety delay's still image.

Menu item	Value	Explanation
When Type = SRT Out		
SRT Out View	Enter	Jumps to the view screen.
SRT Out Setup	This configures the SRT output.	

Menu item	Value	Explanation
Mode	Sets the operation mode for SRT connection.	
	Caller	In this mode, SRT connections are made from this unit by specifying the IP address and port number of the SRT receiving device (listener).
	Listener	This mode lets you listen for connections from SRT receiving devices (caller) by changing the settings of those devices to match the settings of this unit.
When Mode = Caller		
Remote IP Address	0.0.0.0	Sets the IP address of the SRT receiving device (listener).
Remote Port	0–65535	Sets the port number of the SRT receiving device (listener).
Latency	80–8000msec	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence.
Stream ID	––	Sets the stream ID to the same ID as that of the SRT receiving device (listener).
Encryption	None, AES-128, AES-192, AES-256	Sets the encryption method for encrypting video. * The transmitting and receiving device must both use the same encryption method.
Passphrase (*1)	––	Sets the passphrase when Encryption is set to anything other than "None". * The transmitting and receiving device must both use the same passphrase.
Use Web Application	Enter	You can use the web app to configure the above settings for SRT.
When Mode = Listener		
Local Port	0–65535	Sets the port number used for listening for SRT connections.
Latency	80–8000msec	Sets the length (delay time) of the SRT retransmission buffer. Out of the latencies set for the receiving and transmitting devices, the one with the larger value takes precedence.
Encryption	None, AES-128, AES-192, AES-256	Sets the encryption method for encrypting video. * The transmitting and receiving device must both use the same encryption method.
Passphrase (*1)	––	Sets the passphrase when Encryption is set to anything other than "None". * The transmitting and receiving device must both use the same passphrase.
Use Web Application	Enter	You can use the web app to configure the above settings for SRT.

Menu item	Value	Explanation
Target Bitrate	Specifies the target bitrate of encoding.	
Video	1,000–20,000kbps	Specifies the target bitrate of video encoding.
Audio	32, 48, 64, 96, 128, 160, 192, 224, 256	Specifies the target bitrate of audio encoding.
Video Rec	OFF, ON	Sets whether to record an MP4 file (ON) or not (OFF).
Browse Video Files	Enter	Checks the recorded video files on this unit.
Audio Rec	OFF, ON	Sets whether to record a WAV file (ON) or not (OFF).
Browse Audio Files	Enter	Checks the recorded audio files on this unit.
Encode Profile	High, Main, Baseline	Sets the profile for encoding video.
Encode Mode	This sets the optimal encoding method for the video.	
	Resolution	Suitable for presentations and other video contents that don't have a lot of motion.
	Motion	Suitable for sports programs, gaming videos and the like that have a lot of motion.
Safety Delay	Off, 5–60sec	Sets the streaming delay time that's used by the safety delay function.
Import Still Image	Exec	Loads the still image used for safety delay.
File Name	Display only	Shows the filename used for the safety delay's still image.

(*1) This can be set when Encryption is "AES-128", "AES-192", or "AES-256".

16: Scene Memory

Menu item	Value	Explanation
Save/Load	Enter	Jumps to the setup screen.
Start Up	Specifies the settings loaded at startup.	
	Last Memory	Restores the state that was in effect immediately before the power was turned off (Last Memory feature). The current settings (Last Memory values) are saved every 4 seconds, and when you exit a menu.
	1: MEMORY 1– 32: MEMORY 32 (*1)	Recall the settings at the selected scene memory.
Priority	Memory, Panel	Sets whether to give the scene memory or the panel state priority.
Memory Protect	OFF, ON	When this is "ON", prohibits settings from being saved or initialized. This protects the scene memories. * Protected scene memories are erased if you perform a factory reset.
Load From Storage	Enter	Shows a list of scene memory setting files (.v80scene) on the storage media. You can select a scene memory setting file to recall a scene memory (1–32) on this unit.
Save To Storage	Enter	Shows a list of scene memory setting files (.v80scene) on the storage media. When the filename is set, this is saved as a new scene memory setting file. When the scene memory setting file is selected, it is overwritten with the existing filename.
Button Assign	Enter	This shows the Button Assign menu.
Number of MEMORY Button	8, 24	When "MEMORY" is selected on the [MODE] button, this sets how many buttons function as memory selection buttons.
MEMORY 1–8 Button (*2)	1: MEMORY1– 32: MEMORY32 (*1) The default values are as follows. 1: MEMORY1– 8: MEMORY8	Selects the scene memories that are assigned to the MEMORY buttons.
MEMORY 1–24 Button (*3)	1: MEMORY1– 32: MEMORY32 (*1) The default values are as follows. 1: MEMORY1– 24: MEMORY24	Selects the scene memories that are assigned to the MEMORY buttons.
Fade Time	0.0–4.0sec	Sets how long the transition to the next video takes when recalling a scene memory. * The time you set is used for the parameters below.
Mix/Wipe	OFF, ON	When this is "ON", the transition effect is applied when the scene memory is recalled.
PinP&Key 1, 2	OFF, ON	When this is "ON", the inset screen fades in when you recall a scene memory that includes a PinP composite.
DSK	OFF, ON	When this is "ON", the superimposed caption and video fades in when you recall a scene memory that includes a DSK composite.
Load Parameters	Specifies whether to recall the following items when recalling a scene memory. Items that are turned off are excluded from the preset memories that are recalled.	
Video Assign	OFF, ON	Video Assign menu
Video Input	OFF, ON	Video Input menu
Video Output	OFF, ON	Video Output menu transition settings
Transition	OFF, ON	Transition settings
Transition Type	OFF, ON	Transition menu
Mix	OFF, ON	Mix menu
Wipe	OFF, ON	Wipe menu
Split	OFF, ON	Split settings
Split 1	OFF, ON	Split 1 menu
Split 2	OFF, ON	Split 2 menu
PinP & Key 1	OFF, ON	PinP & Key 1 menu
PinP & Key 2	OFF, ON	PinP & Key 2 menu
DSK	OFF, ON	DSK menu
PGM/A, PST/B	OFF, ON	Status of PGM/A bus, PST/B bus and video switching
Video Fader	OFF, ON	Video switching status
AUX 1 Source	OFF, ON	Selects the AUX 1 bus video source
AUX 2 Source	OFF, ON	Selects the AUX 2 bus video source
Audio Knob Assign	OFF, ON	Audio Knob Assign menu
Audio Input	OFF, ON	Audio Input menu
Audio Output	OFF, ON	Audio Output menu

Menu item	Value	Explanation
Audio Follow	OFF, ON	Audio Follow menu
Audio Auto Mixing	OFF, ON	Audio Auto Mixing menu

(*1) If you edited a scene memory's name using "Name Edit" from the setup screen, the edited name is shown.
(*2) This can be set when "Number of MEMORY Button" is "8".
(*3) This can be set when "Number of MEMORY Button" is "24".

17: Macro

Menu item	Value	Explanation
Execute	Enter	Jumps to the execute screen.
Edit	Enter	Jumps to the edit screen.
Load From Storage	Enter	Shows a list of the macro setting files (.RMC) that are on the storage. You can select a macro setting file and load the macro (1–100) into the unit.
Save To Storage	Enter	Shows a list of the macro setting files (.RMC) that are on the storage. Set a filename to save the files as new macro setting files. If you select a macro setting file, it is overwritten with the existing filename.
Button Assign	Enter	This shows the Button Assign menu.
Number of MACRO Button	8, 24	When "MEMORY" is selected on the [MODE] button, this sets how many buttons function as macro selection buttons.
MACRO 1–8 Button (*2)	1: MACRO1– 100: MACRO100 (*1) The default values are as follows. 1: MACRO1– 8: MACRO8	Specifies the macro assigned to the MACRO buttons.
MACRO 1–24 Button (*3)	1: MACRO1– 100: MACRO100 (*1) The default values are as follows. 1: MACRO1– 24: MACRO24	Specifies the macro assigned to the MACRO buttons.
Initialize	Enter	Initializes the macro.

(*1) If you edited a macro's name using "Name Edit" from the setup screen, the edited name is shown.
(*2) This can be set when "Number of MACRO Button" is "8".
(*3) This can be set when "Number of MACRO Button" is "24".

18: Sequencer

Menu item	Value	Explanation
List Edit	Enter	Jumps to the edit screen.
	Name	––	Sets the name of the operation.
	Function		Sets the operation to record to the sequencer.
		PGM Take	Switches the final output video.
		Scene Memory	Recalls a preset memory.
		Macro	Executes a macro (a series of recorded operations).
	Value		Sets the operation details according to the function.
	Time		Sets the operation when auto sequence is on.
		Pause	Pauses the auto sequence.
		Auto	Executes the next operation in the sequence.
		1–120sec	Executes the next operation after delaying for a specified amount of time.
	Move	Enter	Moves the operation being edited and resorts the list.
	Duplicate	Enter	Copies the operation being edited into a position in the list you desire.
	Delete	Enter	Deletes the operation being edited.
Sequencer	OFF, ON	Turns the sequencer function on/off.
Repeat Execute	OFF, ON	When set to "ON", the set sequence of operations is executed to the end, after which the first operation is executed.
Auto Sequence	OFF, ON	When set to "ON", the operation is performed automatically at the set interval.
Load From Storage	Enter	Shows a list of the sequencer setting files (.RSQ) that are on the storage device. You can select a sequencer setting file to load the sequencer settings into this unit. The current sequencer settings are overwritten.
Save To Storage	Enter	Shows a list of the sequencer setting files (.RSQ) that are on the storage device. When the filename is set, this is saved as a new sequencer setting file. When a sequencer setting file is selected, it is overwritten with the existing filename.
Initialize	Exec	Initializes the sequencer.

19: Assignable Pads

Menu item	Value	Explanation
Bank	A–H	Selects a bank.
Pad A-1–H-8	Enter	Jumps to the setup screen.

Category	Function	Value	Explanation
N/A	N/A	––	No function is assigned.
Video	Freeze	––	Turns the freeze function on/off.
	Input Assign	Input 1–16	Each time you press a pad, this switches the video source assigned to the specified cross-point button.
	Still Output	Still 1–32	Pauses the normal output, and previews or final outputs a cut of the still image.
	Video Player Output	––	Pauses the normal output, and cuts to the preview/final output of the video player image.
	PinP&Key 1–2 Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the video source of the inset screen.
	DSK Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the DSK video source.
Audio	Input Mute	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the mute function on/off for the input audio.
	Output Mute	Main Bus AUX 1–2 Bus USB Out Stream&Record	Turns the mute function on/off for the output audio.
	Input Solo	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the solo function on/off for the input audio.
	Output Solo	Main Bus AUX 1–2 Bus	Turns the solo function on/off for the output audio.
	HPF On/Off	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the high pass filter function on/off.
	Echo Canceller	Audio In 1–2	Turns the echo canceller function on/off.
	Anti-Feedback	Audio In 1–2	Turns the anti-feedback function on/off.
	Noise Gate	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the noise gate function on/off.
	De-Esser	Audio In 1–2	Turns the de-esser function on/off.
	Input Compressor	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the compressor function for the input audio on/off.
	Input Equalizer	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the equalizer function on/off for the output audio.

Category	Function	Value	Explanation
Audio	Output Equalizer	Main Bus AUX 1–2 Bus USB Out Stream&Record	Turns the equalizer function on/off for the input audio.
	Output GEQ	Main Bus AUX 1–2 Bus	Turns the graphic equalizer function on/off.
	Voice Changer	Audio In 1–2	Turns the voice changer function on/off.
	Auto Mixing	Setup	Jumps to the auto mixing screen.
		Switch	Turns the auto mixing function on/off.
	Reverb (Momentary)	––	Reverb turns on only while the pad is pressed.
	Reverb (Alternate)	––	Turns reverb on/off.
	Output Comp/Limit	Main Bus AUX 1–2 Bus	Turns the compressor/limiter function for the output audio on/off.
	Loudness AGC	––	Turns Loudness AGC on/off.
	Adaptive NR	––	Turns Adaptive NR on/off.
Scene Memory	––	MEMORY 1–32	Recalls a scene memory. Long-press to save the current settings to a scene memory.
Macro	––	MACRO 1–100	Executes a macro (a series of recorded operations).
Sequencer	Sequencer	On/Off	Turns the sequencer function on/off.
		Auto Sequence	Turns the auto sequence function on/off.
Auto Switching	Auto Switching	––	Turns the auto switching function on/off.
	Beat Sync Tap	––	Use this for tap input when using the beat sync function. You can fine-tune the auto-detected beats or input the tempo manually.
	Input Scan	Normal	Each time you press a pad, the final output switches from Input 1 to 8 in sequential order.
		Reverse	Each time you press a pad, the final output switches from Input 8 to 1 in reverse order.
	Scene Memory Scan	Normal	Each time you press a pad, scene memories 1 to 32 are recalled in sequential order.
		Reverse	Each time you press a pad, scene memories 32 to 1 are recalled in reverse order.
	PinP&Key 1–2 Scan	Normal	Each time you press a pad, the PinP&Key 1–2 inset screen videos switch between HDMI 1→4, SDI 1→4, Still 1→32 and Video Player/SRT In, in sequential order.
		Reverse	Each time you press a pad, the PinP&Key 1–2 inset screen videos switch between Video Player/SRT In, Still 32→1, SDI 4→1 and HDMI 4→1 in reverse order.
	DSK Scan	Normal	Each time you press a pad, the DSK caption video switches between HDMI 1→4, SDI 1→4, Still 1→32 and Video Player/SRT In, in sequential order.
		Reverse	Each time you press a pad, the DSK caption video switches between Video Player/SRT In, Still 32→1, SDI 4→1 and HDMI 4→1 in reverse order.
Control	External Rec Control	––	Controls the recorder's video record start/stop if a recorder that supports REC control functionality is connected.
	GPO (One Shot)	GPO 1–16	Outputs a control signal for 0.5 seconds.
	GPO (Alternate)	GPO 1–16	Each time you press a pad toggles the control signal output on/off.
	Camera Control	Mode	Turns camera control mode on/off.
		Pan Left	Pans the camera to the left.
		Pan Right	Pans the camera to the right.
		Tilt Down	Tilts the camera down.
		Tilt Up	Tilts the camera up.
		Zoom Wide (Slow)	Zooms the camera out wide (slow).
		Zoom Wide (Fast)	Zooms the camera out wide (fast).
		Zoom Tele (Slow)	Telephoto zooms the camera in (slow).
		Zoom Tele (Fast)	Telephoto zooms the camera in (fast).
		Focus Near	Sets the focus near the camera.
		Focus Far	Sets the focus far from the camera.
		Auto Focus	Turns auto focus on/off for the camera.
		Auto Exposure	Turns auto-exposure on/off for the camera.
		Preset 1–8 Recall	Recalls presets 1 through 8.
		Camera 1–8 Select	Switches to the camera to be controlled.
Stream&Record	––	Setup	Shows the streaming/recording setup screen.
		Start/Stop	Starts/stops streaming or recording.
		Safety Image	Turns the display of the Safety Image on/off. This feature lets you switch the broadcast video to the safety image and mute the audio.

Category	Function	Value	Explanation
Video Player/SRT In	––	Setup	Shows the video player setup screen.
		Start/Pause/Stop	Starts/pauses video playback. Long-press the pad to stop playback.
System	Effects Transition Sync	––	Press a pad to toggle the Bluetooth and Effects Transition Sync function on/off.
	Bluetooth Control	––	Press a pad to toggle Bluetooth on/off. Long-press the pad to pair with a Bluetooth device.
	Panel Operation	A/B, PGM/PST, Dissolve, PGM/PST(16)	Press the pad to switch to the panel operation that's set.
Audio Player	Import	Enter	Imports the audio.
	Name	Enter	Sets the name for an audio clip.
	Duration	––	Shows the length of an audio clip.
	Offset Time	0.0– (length of audio clip)	Sets the playback start position of the audio clip.
	Level	-INF–10.0dB	Sets the volume of the audio clip.
	Fade In Time	0.0–10.0sec	Sets the fade-in time.
	Fade Out Time	0.0–10.0sec	Sets the fade-out time.
	Repeat	OFF, ON	When this is set to "ON", the audio clip plays back in a loop.
	Pad Mode	Latch	Toggles between playback and stop each time you press the pad. The audio plays back from the beginning.
		Pause	Toggles between playback and stop each time you press the pad. The audio plays back from where it last stopped.
		Replay	Plays back from the beginning when you press the pad.
		Momentary	Plays back audio while the pad is pressed.
	Pad Color	White, Red, Green, Blue, Yellow, Magenta, Cyan, Dark Orange, Turquoise Green, Purple	Specifies the color of the corresponding pad when it lights up.
	Playing Mode	BGM	Stops the BGM audio clip that's currently playing, and plays back the new BGM audio clip (only one BGM audio clip can play back at a time).
		SE	Plays back without stopping the other audio clips.
		Solo	Stops all audio clips, and plays back only the soloed audio clip.
Graphics Presenter	Graphics Presenter	Select Next Content, Select Content 1–124, Hide Front Contents, Hide Background Contents, ON AIR Switch	Sends commands for the Graphics Presenter dedicated Windows PC app.

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.

20: Roland Fill + Key

Menu item	Value	Explanation
Roland Fill + Key Mode	OFF, ON	Turns Roland Fill + Key Mode on/off.

21: Freeze

Menu item	Value	Explanation
Freeze	OFF, ON	Turns the freeze function on/off. When this is "ON", the input video is temporarily frozen.
Type	Specifies the operation mode for freezes.	
	All	Freezes all video that is being input.
	Select	Freezes only the specified input video.
HDMI 1–4 (*1)	Disable, Enable	For each input, specifies whether the freeze function is enabled (Enable) or disabled (Disable).
SDI 1–4 (*1)	Disable, Enable	

(*1) This can be set if "Type" is "Select".

22: Auto Switching

Menu item	Value	Explanation
Auto Switching	OFF, ON	Turns the auto switching function on/off. When this is "ON", the video or scene memory are switched automatically.
Type	Specifies the operation mode for auto switching.	
	Input Scan	Automatically switches to the video of Input 1–8 when the specified interval.
	Scene Memory Scan	Automatically recalls scene memories 1–32 at the specified interval. The video and audio are switched according to the settings that are saved in each scene memory.
	Beat Sync	The video switches in time with the beat of the song, which is detected from the input audio.
	Video Follows Audio	The video switches along with the audio from the mic.
	PinP&Key 1–2 Scan	Automatically switches the PinP&KEY video at the specified interval.
	DSK Scan	Automatically switches the DSK video at the specified interval.
When Type = Input Scan		
Scan Sequence	Specifies the order in which video signals are shown. * If there is no video input, this is skipped.	
	Normal	Switches in the order of Input 1 →8.
	Reverse	Switches in the order of Input 8 →1.
	Random	Switches randomly.
Scan Transition Time	0.0–4.0sec	This sets the video transition time.
Scan Target	Sets the video to which auto switching is applied.	
	Video Input	Final output video and preview video
	PinP&Key 1–2	PinP and key layer (inset screen) video
	DSK	DSK layer video
Input 1–8 Time	Off, 1–120sec	Specifies the time that the video is shown. Turn this "OFF" to skip.
When Type =Scene Memory Scan		
Scan Sequence	Specifies the order in which scene memories are switched. * Scene memories in which no settings have been saved are skipped.	
	Normal	Switches in the order of scene memory 1→32.
	Reverse	Switches in the order of scene memory 32 →1.
	Random	Switches randomly.
Memory 1–32 Time	Off, 1–120sec	Specifies the time it takes to switch to the next scene memory. Turn this "OFF" to skip.

Menu item	Value	Explanation
When Type =Beat Sync		
Sync Source	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Sets the input audio that's synchronized with the video.
Scan Sequence	Specifies the order in which video signals are shown. * If there is no video input, this is skipped.	
	Normal	Switches in the order of Input 1 →8.
	Reverse	Switches in the order of Input 8 →1.
	Random	Switches randomly.
Scan Transition Time	0.0–4.0sec	This sets the video transition time.
Scan Cycle	1–10	Sets the beat number on which the video switches to the next one.
Scan Target	Video Input, PinP&Key 1–2, DSK	Sets the video to which auto switching is applied.
Input 1–8	OFF, ON	Sets the target for the video transition. Turn this "OFF" to skip.
When Type = Video Follows Audio		
Audio In 1–3/4 Target, **USB In Target,** **Bluetooth In Target,** **Audio Player Target,** **HDMI 1–4 Target,** **SDI 1–4 Target,** **Video Player/SRT In Target**	Off, Input 1–16, Memory 1–32, Macro 1–100	Sets what happens when audio is detected. **Input 1–16** Switches the output video. **Memory 1–32** Recalls a scene memory. **Macro 1–100** Executes a macro (a series of recorded operations).
Threshold	-50–0dB	Specifies the reference level at which the Video Follows Audio function operates. When audio that exceeds this threshold is detected, the video is switched.
Audio Mix Target	Off, Input 1–16	Specifies the video that is output when audio is detected in multiple mics. If this is "Off", video is switched in the order in which audio is detected.
Audio Silent Target	Off, Input 1–16	Specifies the video that is output when there is no audio input from any mic. If this is "Off", the last selected video continues to be output.
Audio Redetection Time	0.0–30.0sec	Specifies the time after the video has switched until audio detection resumes.
Scan Transition Time	0.0–4.0sec	Sets the video transition time.
When Type = PinP&Key 1–2 Scan, DSK Scan		
Scan Sequence	Specifies the order in which video signals are shown.	
	Normal	Switches sequentially between HDMI 1→4, SDI 1→4, Still 1→32, V.Player or SRT in.
	Reverse	Switches sequentially between V.Player or SRT In, Still 32→1, SDI 4→1 and HDMI 4→1.
	Random	Switches randomly.
HDMI 1–4 Time	Off, 1–120sec	Specifies the time that the video is shown. Turn this "OFF" to skip.
SDI 1–4 Time	Off, 1–120sec	Specifies the time that the video is shown. Turn this "OFF" to skip.
Still 1–32 Time	Off, 1–120sec	Specifies the time that the still image is shown. Turn this "OFF" to skip.
V.Player/SRT In Time (*1)	Off, 1–120sec	Specifies the time that the video is shown. Turn this "OFF" to skip.

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.

23: Ctl/Exp

Menu item	Value	Explanation	
Ctl/Exp 1, 2	These settings for the footswitch or expression pedal connected to the CTL/EXP 1, 2 jacks.		
Ctl/Exp Type	Settings for the devices (footswitch or expression pedal) connected to the CTL/EXP 1, 2 jacks.		
	Off	Disables the CTL/EXP jack.	
	Ctl A & Ctl B	Choose this if a footswitch is connected.	
	Exp	Choose this if an expression pedal is connected.	
When Ctl/Exp Type = Ctl A & Ctl B			
Ctl A **Ctl B**	Specifies the functions that are assigned to Ctl A and Ctl B of the footswitch.		
	Category	**Value**	**Explanation**
	N/A	––	No function is assigned.
	PGM Channel Select	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the video sent to the PGM bus.
	PST Channel Select	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the video sent to the PST bus.
	AUX 1, 2 Channel Select	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the video sent to the AUX bus.
	Input 1–16 Assign	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Stream&Record Status 1–2, Date&Time(Analog/Digital) (*2), N/A	Changes the video assigned to Input 1–16.
	Still Output	Still 1–32	Pauses the normal output, and previews or final outputs a cut of the still image. Press the footswitch again to return to normal output.
	Video Player Output	––	Pauses the normal output, and cuts to the preview/final output of the video player image.
	PinP&Key 1–2 Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In, Input 1–16	Switches the video source of the inset screen.
	DSK Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In, Input 1–16	Switches the DSK video source.
	Button Control	CUT Button, AUTO Button TRANSITION Button SPLIT 1 Button SPLIT 2 Button PinP&KEY 1–2 PVW Button PinP&KEY 1–2 PGM Button DSK PVW Button DSK PGM Button Assignable Pad 1–8	This works the same as when you press the button selected in "VALUE".
	Audio Input Mute	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the mute function on/off for the input audio.
	Audio Output Mute	Main Bus, AUX 1 Bus, AUX 2 Bus, USB Out, Stream&Record	Turns the mute function on/off for the output audio.
	Audio Input Solo	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the solo function on/off for the input audio.
	Audio Output Solo	Main Bus, AUX 1 Bus, AUX 2 Bus	Turns the solo function on/off for the output audio.
	Voice Changer	Audio In 1, 2	Turns the voice changer function on/off.
	Auto Mixing	––	Turns the auto mixing function on/off.
	Reverb (Momentary)	––	Reverb turns on only while you press the footswitch.

Menu item	Value	Explanation	
Ctl A Ctl B	Reverb (Alternate)	––	Turns reverb on/off.
	Output Fade	––	The final output video fades in/out.
	Load Memory	Memory 1–32	Recalls a scene memory.
	Input Scan	Normal	Each time you press the footswitch, the final output switches from Input 1 to 8 in sequential order.
		Reverse	Each time you press the footswitch, the final output switches from Input 8 to 1 in reverse order.
	Scene Memory Scan	Normal	Each time you press the footswitch, scene memories 1–32 are recalled in sequential order.
		Reverse	Each time you press the footswitch, scene memories 32–1 are recalled in reverse order.
	PinP&Key 1–2 Scan	Normal	Each time you press the footswitch, the PinP&Key 1–2 inset screen videos switch between HDMI 1→4, SDI 1→4, Still 1→32 and Video Player/SRT In, in sequential order.
		Reverse	Each time you press the footswitch, the PinP&Key 1–2 inset screen videos switch between Video Player/SRT In, Still 32→1, SDI 4→1 and HDMI 4→1 in reverse order.
	DSK Scan	Normal	Each time you press the footswitch, the DSK caption video switches between HDMI 1→4, SDI 1→4, Still 1→32 and Video Player/SRT In, in sequential order.
		Reverse	Each time you press the footswitch, the DSK caption video switches between Video Player/SRT In, Still 32→1, SDI 4→1 and HDMI 4→1 in reverse order.
	Macro Execute	Macro 1–100	Executes a macro (a series of recorded operations).
	Sequencer	When the sequencer function is on, this works the same as when you press the button selected in "VALUE".	
		Mode On/Off	Each time the footswitch is pressed, the sequencer function turns on/off.
		Next	When the sequencer function is on, proceed to the next operation.
		Previous	When the sequencer function is on, it reverts to the completed state of the previous operation.
		Auto Sequence	When the sequencer is on, the auto sequence function turns on/off each time you press the footswitch.
	GPO (One Shot)	GPO 1–16	Outputs a control signal for 0.5 seconds.
	GPO (Alternate)	GPO 1–16	The control signal output is switched on/off with each press of the footswitch.
	Camera Control	Mode	Turns camera control mode on/off.
		Pan Left	Pans the camera to the left.
		Pan Right	Pans the camera to the right.
		Tilt Down	Tilts the camera down.
		Tilt Up	Tilts the camera up.
		Zoom Wide (Slow)	Zooms the camera out wide (slow).
		Zoom Wide (Fast)	Zooms the camera out wide (fast).
		Zoom Tele (Slow)	Telephoto zooms the camera in (slow).
		Zoom Tele (Fast)	Telephoto zooms the camera in (fast).
		Focus Near	Sets the focus near the camera.
		Focus Far	Sets the focus far from the camera.
		Auto Focus	Turns auto focus on/off for the camera.
		Auto Exposure	Turns auto-exposure on/off for the camera.
		Preset 1–8 Recall	Recalls presets 1 through 8.

Menu item	Value	Explanation	
When Ctl/Exp Type = Exp			
Exp	Specifies the function that is assigned to the expression pedal.		
	Category	**Value**	**Explanation**
	N/A	––	No function is assigned.
	Video Fader	Fade, Cut	**Fade:** Operates the video fader. **Cut:** Cuts between the final output video and the preview video.
	Still Output	Still 1–32	Pauses the normal output, and previews or final outputs a cut of the still image.
	Video Player Output	––	Pauses the normal output, and cuts to the preview/final output of the video player image.
	Audio Input Level	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/ SRT In (*1)	Adjusts the input volume.
	Audio Output Level	Main Bus, AUX 1 Bus, AUX 2 Bus, USB Out, Stream&Record	Adjusts the output volume.
	Voice Changer	Adjusts the voice changer.	
		Audio In 1–2 Pitch	Adjusts the pitch of the voice in semitone steps.
		Audio In 1–2 Formant	Adjusts the character (formant) of the voice.
		Audio In 1–2 Mix	Adjusts the balance between the unprocessed voice (0) and the voice processed by the effect (100).
	Reverb Level	––	Adjusts the amount of sound that is returned from the reverb (return level).
Exp Calibration	Enter	Shows the Exp Calibrate screen. Following the direction on the screen, calibrate (adjust) the expression pedal. The first time you use the expression pedal, be sure to execute calibration so that the pedal will operate optimally. In some cases, the expression pedal might no longer be operating optimally because of the passage of time or the conditions of use. In such cases you should also execute expression pedal calibration.	

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.
(*2) Either "Analog" or "Digital" is shown, depending on the "System → Date&Time → Clock Display Type" setting.

24: RS-232/Tally/GPO/GPI/Keypad

Menu item	Value	Explanation
RS-232	These are the settings for transmitting/receiving RS-232 commands.	
RS-232	OFF, ON	When this is "ON", RS-232 commands can be transmitted and received.
Baudrate	9600, 38400, 115200	Specifies the communication speed (bps) of the RS-232 connector.
Tally/GPO	These are settings for tally signals or control signals that are output from the TALLY/GPIO connector.	
Template	HDMI/SDI, HDMI/GPO, SDI/GPO, GPO	Selects a TALLY/GPO 1–16 settings template. Press the [VALUE] knob to apply the template settings to "TALLY/GPO 1–16".
TALLY/GPO 1–16	Assigns the tally signal to TALLY/GPIO connector pins 1–16.	
	PGM HDMI 1–4 PGM SDI 1–4	A tally signal is output when the video sent from the connector in question is the final output.
	PGM Still 1–32	A tally signal is output when the still image in question is the final output.
	PGM Video Player/SRT In	A tally signal is output when the video sent from the video player or SRT In in question is the final output.
	PGM Input 1–16	A tally signal is output when the final output video is selected using the cross-point button in question (the button lights up red).
	PST HDMI 1–4 PST SDI 1–4	A tally signal is output when the video sent from the connector in question is the preview output.
	PST Still 1–32	A tally signal is output when the still image in question is the preview output.
	PST Video Player/SRT In	A tally signal is output when the video sent from the video player in question is the preview output.
	PST Input 1–16	A tally signal is output when the preview output video is selected using the cross-point button in question (the button lights up green).
	Assigns the GPO to TALLY/GPIO connector pins 1–16.	
	GPO 1–16	A control signal is output when you press an assignable pad or the footswitch, or assign a GPO output function to GPI.
Tally Settings		
AUX 1–2(PGM) **PinP&Key 1–2 (PGM/PST)** **DSK(PGM/PST)**	Disable, Enable	When set to "Enable", the output status of the relevant video bus is reflected in the tally information.
GPI, Numeric Keypad	These settings assign the functions to the GPI and numeric keypad.	
GPI 1–8 **Keypad 0–9, +, -, *, /, ., Enter**	When an external control signal is input or a key is pressed, the assigned functions are executed.	

Category	Value	Explanation
N/A	––	No function is assigned.
PGM Channel Select	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the video sent to the PGM bus.
PST Channel Select	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the video sent to the PST bus.
AUX 1, 2 Channel Select	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Input 1–16	Switches the video sent to the AUX bus.
Input 1–16 Assign	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In (*1), Stream&Record Status 1–2, Date&Time(Analog/Digital(*2)), N/A	Changes the video assigned to Input 1–16.
Still Output	Still 1–32	Pauses the normal output, and previews or final outputs a cut of the still image. Press the footswitch again to return to normal output.
Video Player Output	––	Pauses the normal output, and cuts to the preview/final output of the video player image.
PinP&Key 1–2 Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In, Input 1–16	Switches the video source of the inset screen.
DSK Source	HDMI 1–4, SDI 1–4, Still 1–32, V.Player/SRT In, Input 1–16	Switches the DSK video source.
Button Control	CUT Button, AUTO Button TRANSITION Button SPLIT 1 Button SPLIT 2 Button PinP&KEY 1–2 PVW Button PinP&KEY 1–2 PGM Button DSK PVW Button DSK PGM Button Assignable Pad 1–8	This works the same as when you press the button selected in "VALUE".

Menu item	Value	Explanation	
GPI 1–8 **Keypad 0–9, +, -, *, /, ., Enter**	Audio Input Mute	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the mute function on/off for the input audio.
	Audio Output Mute	Main Bus, AUX 1 Bus, AUX 2 Bus, USB Out, Stream&Record	Turns the mute function on/off for the output audio.
	Audio Input Solo	Audio In 1–3/4, USB In, Bluetooth In, Audio Player, HDMI 1–4, SDI 1–4, V.Player/SRT In (*1)	Turns the solo function on/off for the input audio.
	Audio Output Solo	Main Bus, AUX 1 Bus, AUX 2 Bus	Turns the solo function on/off for the output audio.
	Voice Changer	Audio In 1, 2	Turns the voice changer function on/off.
	Auto Mixing	––	Turns the auto mixing function on/off.
	Reverb (Momentary)	––	Reverb turns on only while you press the footswitch.
	Reverb (Alternate)	––	Turns reverb on/off.
	Output Fade	––	The final output video fades in/out.
	Load Memory	Memory 1–32	Recalls a scene memory.
	Input Scan	Normal	Each time a control signal is input, the final output switches from Input 1 to 8 in sequential order.
		Reverse	Each time a control signal is input, the final output switches from Input 8 to 1 in reverse order.
	Scene Memory Scan	Normal	The scene memories 1 through 32 are recalled in order each time a control signal is input.
		Reverse	The scene memories are recalled in reverse order from 32 through 1 each time a control signal is input.
	PinP&Key 1–2 Scan	Normal	Each time a control signal is input, the PinP&Key 1–2 inset screen videos switch between HDMI 1→4, SDI 1→4, Still 1→32 and Video Player/SRT In, in sequential order.
		Reverse	Each time a control signal is input, the PinP&Key 1–2 inset screen videos switch between Video Player/SRT In, Still 32→1, SDI 4→1 and HDMI 4→1 in reverse order.
	DSK Scan	Normal	Each time a control signal is input, the DSK caption video switches between HDMI 1→4, SDI 1→4, Still 1→32 and Video Player/SRT In, in sequential order.
		Reverse	Each time a control signal is input, the DSK caption video switches between Video Player/SRT In, Still 32→1, SDI 4→1 and HDMI 4→1 in reverse order.
	Macro Execute	Macro 1–100	Executes a macro (a series of recorded operations).
	Sequencer	When the sequencer function is on, this works the same as when you press the button selected in "VALUE".	
		Mode On/Off	The sequencer function is switched on/off each time a control signal is input.
		Next	When the sequencer function is on, proceed to the next operation.
		Previous	When the sequencer function is on, it reverts to the completed state of the previous operation.
		Auto Sequence	When the sequencer function is on, the auto sequence function turns on/off each time a control signal is input.
	GPO (One Shot)	GPO 1–16	Outputs a control signal for 0.5 seconds.
	GPO (Alternate)	GPO 1–16	The control signal output is switched on/off each time a control signal is input.
	Camera Control	Mode	Turns camera control mode on/off.
		Pan Left	Pans the camera to the left.
		Pan Right	Pans the camera to the right.
		Tilt Down	Tilts the camera down.
		Tilt Up	Tilts the camera up.
		Zoom Wide (Slow)	Zooms the camera out wide (slow).
		Zoom Wide (Fast)	Zooms the camera out wide (fast).
		Zoom Tele (Slow)	Telephoto zooms the camera in (slow).
		Zoom Tele (Fast)	Telephoto zooms the camera in (fast).
		Focus Near	Sets the focus near the camera.
		Focus Far	Sets the focus far from the camera.
		Auto Focus	Turns auto focus on/off for the camera.
		Auto Exposure	Turns auto-exposure on/off for the camera.
		Preset 1–8 Recall	Recalls presets 1 through 8.

(*1) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.
(*2) Either "Analog" or "Digital" is shown, depending on the "System → Date&Time → Clock Display Type" setting.

25: Network

Menu item	Value	Explanation
Priority	LAN, Tethering	Sets whether to prioritize the LAN connection or your smartphone tethering when streaming.
LAN Setup	Enter	Accesses the LAN settings.
Configure	Selects how settings are made for the IP address, subnet mask, and default gateway.	
	Manual	This is to be configured manually.
	Using DHCP	The IP address and other information needed for connecting to the network is obtained automatically from the DHCP server of the LAN.
IP Address (*1)	---.---.---.---	Specifies the IP address as appropriate for the network to which the unit is connected.
Subnet Mask (*1)	---.---.---.---	Specifies the subnet mask as appropriate for the network to which the unit is connected.
Default Gateway (*1)	---.---.---.---	Specifies the default gateway as appropriate for the network to which the unit is connected.
DNS Server (*1)	---.---.---.---	Specifies the DNS server address as appropriate for the network to which the unit is connected.
Start Tethering **Stop Tethering**	Exec	Starts/stops tethering with your smartphone.
Network Information	Enter	Shows the Network Information screen.

Displays the following information.

Item	Explanation
Link Status	Connection status
IP Address	IP address
Subnet Mask	Subnet mask.
Default Gateway	Default gateway
DNS Server	DNS server

2D Code for Smart Tally	Enter	QR code for accessing the Smart Tally settings screen (Web) * Note that the QR code is not shown if the V-80HD is disconnected from the network.
User Name	Display only	* Shows the user name required to connect to the network.
Network Password	Enter	Shows the Network Password screen. Set the necessary password for network connection, using eight characters. **Show password** **Password not set** (blank) **Password set** ******** * Input the password that's set here when connecting a computer or other device on the same network to access the V-80HD.
MAC Address	--:--:--:--:--:--	Displays the MAC address of the V-80HD.

(*1) This can be set if "Configure" is "Manual".

26: Camera Control

Menu item	Value	Explanation
Camera ID	Camera 1–8	Selects the camera to be controlled.
Protocol	N/A, JVC, Panasonic, Canon PTZ, VISCA over IP, PTZOptics, Avonic	Specifies the camera's protocol.
IP Address	192.168.0.101	Input the camera's IP address.
Login Name	Enter	Shows the Login Name screen. Enter the log-in name needed to connect with the camera when "Protocol" is "JVC".
Password	Enter	Shows the Password screen. Enter the password needed to connect with the camera when "Protocol" is "JVC".
Camera Preset	Preset 1–8	Selects the preset used when recalling or registering the settings.
Recall	Exec	By pressing the [VALUE] knob you can recall a preset from the camera. By assigning the assignable pads to the camera control function, you can recall presets using the buttons (p. 97).
All Cameras Recall	OFF	Recall presets from the camera that is being controlled.
	ON	Simultaneously recall presets from all cameras (CAMERA 1–8).
Store	Exec	By pressing the [VALUE] knob you can register the camera settings to a preset. * Presets are saved in the camera itself.
Pan	This adjusts the horizontal position of the camera. You can control the camera when the cursor is on the setting value.	
	Left	While you hold the [VALUE] knob, the camera pans left.
	Right	While you hold the [VALUE] knob, the camera pans right.
Tilt	This adjusts the vertical position of the camera. You can control the camera when the cursor is on the setting value.	
	Down	While you hold the [VALUE] knob, the camera tilts down.
	Up	While you hold the [VALUE] knob, the camera tilts up.
Pan/Tilt Speed	1–24	Adjusts the speed at which the camera changes direction.
Zoom	Adjusts the camera's zoom position. You can control the camera when the cursor is on the setting value.	
	Wide (Fast)	While you hold the [VALUE] knob, the camera zooms out at high speed.
	Wide (Slow)	While you hold the [VALUE] knob, the camera zooms out at low speed.
	Tele (Slow)	While you hold the [VALUE] knob, the camera zooms in at low speed.
	Tele (Fast)	While you hold the [VALUE] knob, the camera zooms in at high speed.
Focus (*1)	Adjusts the focal point of the camera. You can control the camera when the cursor is on the setting value.	
	Near	While you hold the [VALUE] knob, the focus moves closer to the camera.
	Far	While you hold the [VALUE] knob, the focus moves further away from the camera.
Auto Focus	OFF, ON	When this is "ON", the focal point is set automatically.
Auto Exposure	OFF, ON	Sets the exposure mode.
Tally Channel	HDMI 1–4, SDI 1–4, SRT In	Specifies the connector from which the camera video is input. When the camera video from the V-80HD is the final output, the camera's tally light is lit.

(*1) This can be set if Auto Focus is "Off".

27: SD Card/USB Flash Drive

Menu item	Value	Explanation
SD Card	These are the SD card-related parameters.	
Eject	Exec	Safely ejects and allows you to remove the SD card.
Format	Exec	Formats the SD card.
Speed Test	Exec	Measures the data write speed to the SD card.
USB Flash Drive	These are the USB flash drive-related parameters.	
Eject	Exec	Safely ejects and allows you to remove the USB flash drive.
Format	Exec	Formats the USB flash drive.
Speed Test	Exec	Measures the data write speed to the USB flash drive.
Restore All Settings	Enter	Shows a list of the setting files (.V80HD) that are on the storage media. You can select a setting file and restore the settings into the unit. The current settings are overwritten.
Backup All Settings	Enter	Shows a list of the setting files (.V80HD) that are on the storage media. You can select the settings file used to back up the current settings to the USB flash drive. * Some settings are not saved to the file, such as the "Test Pattern" and "Test Tone" settings in the System menu.

28: System

Menu item	Value	Explanation
Language/言語/语言	English, 日本語, 简体中文	Changes the display language of the menu and setup screens.
Date&Time		

Menu item	Value	Explanation
Configure	Selects how the time is set.	
	Manual	The time is set manually.
	Using NTP	The time is set by retrieving the time from an NTP server.
Time Zone	––	Sets the time zone.
Date Format	Month/Day/Year Day/Month/Year Year/Month/Day	Sets the format used for displaying the date.
Clock Display Type	Analog, Digital	Sets the type of time display used.
NTP Server (*1)	––	Specifies the default NTP server.
Manual (*2)	Enter	The time is set manually.

Bluetooth

Menu item	Value	Explanation
Bluetooth	OFF, ON	Turns the Bluetooth function on/off.
Pairing	Exec	Begins pairing with a Bluetooth device.
Status	Displays the Bluetooth connection status.	
	Off	Bluetooth off
	Pairing Mode	Now pairing
	Not Connected	Waiting for connection
	Connected	Connected

HDCP	Specifies whether HDCP is enabled (ON) or disabled (OFF).	
	OFF	Copyright-protected (HDCP) video cannot be input.
	ON	Copyright-protected (HDCP) video can be input. HDCP is also added to the video that is output. * Video/audio from the SDI OUT connectors and the USB STREAM port are not outputted.
System Format	Enter	Jumps to the settings screen.
System Format (*3)	1080p, 720p	Specifies the system format.
Frame Rate (*3)	60, 59.94, 50, 30, 29.97, 25, 24, 23.98Hz	Specifies the frame rate.
HDMI Out 1–3	1080p, 1080i, 720p	Sets the output format for the HDMI OUT 1–3 connectors. * The value differs depending on the System Format and Frame Rate settings.
SDI Out 1–2	1080p, 1080i, 720p	Sets the output format for the SDI OUT 1–2 connectors. * The value differs depending on the System Format and Frame Rate settings.
USB Out	1080p, 720p	Specifies the output format of the USB STREAM port. * The value differs depending on the System Format and USB Out Frame Rate settings.
USB Out Frame Rate (*3)	30, 60Hz 29.97, 59.94Hz 25, 50Hz	Specifies the frame rate of the USB STREAM port. * The value differs depending on the "Frame Rate" setting.
Stream&Record	1080p, 720p	Specifies the output format of the DIRECT STREAM port. * The value differs depending on the System Format and Stream&Record Frame Rate settings.
Stream&Record Frame Rate (*3)	30, 60Hz 29.97, 59.94Hz 25, 50Hz	Specifies the frame rate of the DIRECT STREAM port. * The value differs depending on the "Frame Rate" setting.
Panel Operation	Specifies the operation mode for video transitions.	
	A/B	The video of the bus toward which the video fader is slid becomes the final output.
	PGM/PST	The video on the PGM/A bus is always the final output. Select the preview output video (the video to be output next) for the PST/B bus side.
	Dissolve	This mode selects the video to output and immediately outputs it to the PGM bus.
	PGM/PST(16)	In this mode, all 16 buttons including the PGM/A [1]–[8] and PST/B [1]–[8] buttons are used as cross-point buttons for PST/B.

Menu item	Value	Explanation
CUT Button Assign (*4)	Specifies the function of the [CUT] button.	
	▲Auto Take	When the video of the PST/B bus is selected, this switches to the video of the PGM/A bus. The transition time is specified by the Mix/Wipe menu item "Wipe/Mix Time".
	▲Auto Take▼	Switches between the PGM/A bus and PST/B bus videos. The transition time is specified by the Mix/Wipe menu item "Wipe/Mix Time".
	▲Cut	When the video of the PST/B bus is selected, this switches to the video of the PGM/A bus as a cut.
	▲Cut▼	Automatically switches between PGM/A bus and PST/B bus videos as a cut.
	▲Transform	When the video of the PST/B bus is selected, this switches to the video of the PGM/A bus as a cut while you're holding down the button.
AUTO Button Assign (*4)	Specifies the function of the [AUTO] button.	
	Auto Take▼	When the video of the PGM/A bus is selected, this switches to the video of the PST/B bus. The transition time is specified by the Mix/Wipe menu item "Wipe/Mix Time".
	▲Auto Take▼	Switches between the PGM/A bus and PST/B bus videos. The transition time is specified by the Mix/Wipe menu item "Wipe/Mix Time".
	Cut▼	When the video of the PGM/A bus is selected, this switches to the video of the PST/B bus as a cut.
	▲Cut▼	Automatically switches between PGM/A bus and PST/B bus videos as a cut.
	Transform▼	When the video of the PGM/A bus is selected, this switches to the video of the PST/B bus as a cut while you're holding down the button.
Effects Transition Sync (*5)	OFF, ON	Sets whether the PinP/DSK composites are switched on and off in tandem with the video transitions. When this is "ON", the PinP/DSK composition turn on/off in tandem with the video transitions. The composited result that is previewed is sent to final output when transitioning to a different video.
Effects Spot	OFF, ON	Specifies whether the spot function for the [PVW] and [PGM] buttons is enabled (Enable) or disabled (Disable). With the spot function, long-pressing the [PVW] or [PGM] button for each layer shows only the layer that is targeted for the operation while the button is pressed.
Audio Knob Mode	Catch	When a knob is operated, if the position of the fader or knob does not match the value of the parameter, the operation is ignored until the position matches the parameter's value. * The [SETUP] button or the SIG/PEAK indicators blink while operations are being ignored. The closer the knob position gets to the parameter's value, the faster the button blinks.
	Direct	The value of the parameter in question immediately changes to match the position of the knob when you operate it.

(*1) This can be set if Configure is "Using NTP".
(*2) This can be set if "Configure" is "Manual".
(*3) A change in the setting is not applied until you press the [VALUE] knob to confirm.
(*4) Enabled when Panel Operation is "A/B".
(*5) Enabled when Panel Operation is "Dissolve".

<table>
<tr><th>Menu item</th><th>Value</th><th>Explanation</th></tr>
<tr><td>Panel Lock</td><td colspan="2">Enable (ON) or disable (OFF) the panel lock.
<table>
<tr><th>Menu item</th><th>Explanation</th></tr>
<tr><td>All</td><td>All controllers</td></tr>
<tr><td>PGM/A All</td><td>Buttons in PGM/A section</td></tr>
<tr><td>PGM/A 1–8 Button</td><td>PGM/A [1]–[8] buttons</td></tr>
<tr><td>PST/B All</td><td>Buttons in PST/B section</td></tr>
<tr><td>PST/B 1–8 Button</td><td>PST/B [1]–[8] buttons</td></tr>
<tr><td>TRANSITION Button</td><td>[TRANSITION] button</td></tr>
<tr><td>CUT Button</td><td>[CUT] button</td></tr>
<tr><td>AUTO Button</td><td>[AUTO] button</td></tr>
<tr><td>Video Fader</td><td>Fader</td></tr>
<tr><td>INPUT ASSIGN Button</td><td>[INPUT ASSIGN] button</td></tr>
<tr><td>MODE All</td><td>[MODE] button and the buttons that are enabled for each mode</td></tr>
<tr><td>MODE Button</td><td>[MODE] button</td></tr>
<tr><td>AUX 1 Button</td><td>[AUX 1] button, when MODE is AUX 1</td></tr>
<tr><td>AUX 2 Button</td><td>[AUX 2] button, when MODE is AUX 2</td></tr>
<tr><td>MEMORY Button</td><td>MEMORY [1]–[24] buttons</td></tr>
<tr><td>MACRO Button</td><td>MACRO [1]–[24] buttons</td></tr>
<tr><td>SPLIT All</td><td>Buttons and knobs in SPLIT section</td></tr>
<tr><td>SPLIT 1 Button</td><td>[SPLIT 1] button</td></tr>
<tr><td>SPLIT 2 Button</td><td>[SPLIT 2] button</td></tr>
<tr><td>PGM/A-CENTER</td><td>[PGM/A-CENTER] knob</td></tr>
<tr><td>PST/B-CENTER</td><td>[PST/B-CENTER] knob</td></tr>
<tr><td>PinP&Key 1 All</td><td>Buttons and knobs in PinP&Key 1 section</td></tr>
<tr><td>POSITION H Knob</td><td>[POSITION H] knob</td></tr>
<tr><td>POSITION V Knob</td><td>[POSITION V] knob</td></tr>
<tr><td>SOURCE Button</td><td>[SOURCE] button</td></tr>
<tr><td>PVW Button</td><td>[PVW] buttons</td></tr>
<tr><td>PGM Button</td><td>[PGM] buttons</td></tr>
<tr><td>PinP&Key 2 All</td><td>Buttons and knobs in PinP&Key 2 section</td></tr>
<tr><td>POSITION H Knob</td><td>[POSITION H] knob</td></tr>
<tr><td>POSITION V Knob</td><td>[POSITION V] knob</td></tr>
<tr><td>SOURCE Button</td><td>[SOURCE] button</td></tr>
<tr><td>PVW Button</td><td>[PVW] buttons</td></tr>
<tr><td>PGM Button</td><td>[PGM] buttons</td></tr>
</table>
<table>
<tr><th>Menu item</th><th>Explanation</th></tr>
<tr><td>DSK All</td><td>Buttons and knobs in DSK section</td></tr>
<tr><td>LEVEL Knob</td><td>[LEVEL] knob</td></tr>
<tr><td>GAIN Knob</td><td>[GAIN] knob</td></tr>
<tr><td>SOURCE Button</td><td>[SOURCE] button</td></tr>
<tr><td>PVW Button</td><td>[PVW] buttons</td></tr>
<tr><td>PGM Button</td><td>[PGM] buttons</td></tr>
<tr><td>ASSIGNABLE PADS All</td><td>Buttons in ASSIGNABLE PADS section</td></tr>
<tr><td>SETUP Button</td><td>[SETUP] button</td></tr>
<tr><td>ASSIGNABLE PAD 1–8</td><td>ASSIGNABLE PAD 1–8</td></tr>
<tr><td>AUDIO MIXER All</td><td>Buttons and knobs in AUDIO MIXER section</td></tr>
<tr><td>SETUP Button</td><td>[SETUP] button</td></tr>
<tr><td>Input Knob 1–3/4</td><td>AUDIO INPUT LEVEL [1]–[3/4] knobs</td></tr>
<tr><td>Input Knob USB IN</td><td>AUDIO INPUT LEVEL [USB IN] knob</td></tr>
<tr><td>Output Knob AUX 1–2</td><td>[AUX 1]–[AUX 2] knobs</td></tr>
<tr><td>Output Knob MAIN</td><td>[MAIN] knob</td></tr>
<tr><td>MONITOR All</td><td>Buttons in MONITOR section</td></tr>
<tr><td>MONITOR 1–4 Button</td><td>MONITOR [1]–[4] button</td></tr>
<tr><td>CAPTURE IMAGE Button</td><td>[CAPTURE IMAGE] button</td></tr>
<tr><td>AUDIO LEVEL Button</td><td>[AUDIO LEVEL] button</td></tr>
<tr><td>OUTPUT FADE Button</td><td>[OUTPUT FADE] button</td></tr>
<tr><td>SEQUENCER All</td><td>Buttons in SEQUENCER section</td></tr>
<tr><td>ON Button</td><td>[ON] button</td></tr>
<tr><td>PREVIOUS Button</td><td>[PREVIOUS] button</td></tr>
<tr><td>NEXT Button</td><td>[NEXT] button</td></tr>
</table></td></tr>
<tr><td rowspan="4">AUX Linked PGM</td><td colspan="2">Specifies whether the same video as the final output is sent to the AUX bus (AUX link).</td></tr>
<tr><td>Off</td><td>Use the AUX [1]–[8] buttons to select the AUX bus video.
When selecting a video that's not assigned to Input 1–8, set this in "AUX 1 Source" or "AUX 2 Source" under the Video Assign menu.</td></tr>
<tr><td>Auto Link
Manual Link</td><td>AUX link is enabled, and the same video as the final output is sent to the AUX bus.
Temporarily disabling AUX link
Pressing one of the AUX [1]–[8] buttons enables the AUX [1]–[8] button selection (the buttons light up green). You can select the video you want to send to the AUX bus.
Re-enabling AUX link
<table>
<tr><td>Auto Link</td><td>When you operate the [AUTO] button etc. to switch the final output video, AUX link is automatically enabled.</td></tr>
<tr><td>Manual Link</td><td>When you press the AUX [1]–[8] button that is currently selected (lit green), AUX link is enabled.</td></tr>
</table></td></tr>
<tr><td>AUX 1</td><td>OFF, ON</td><td>When this is "ON", the AUX link for AUX 1 is enabled.</td></tr>
<tr><td>AUX 2</td><td>OFF, ON</td><td>When this is "ON", the AUX link for AUX 2 is enabled.</td></tr>
<tr><td>Output Fade Time</td><td>0.0–4.0sec</td><td>Sets the fade-in/out time.</td></tr>
</table>

<table>
<tr><th>Menu item</th><th>Value</th><th>Explanation</th></tr>
<tr><td>Output Fade Assign</td><td colspan="2">Specifies the function of the [OUTPUT FADE] button.</td></tr>
<tr><td>Video Fade</td><td>N/A, Black, White,
AUX 1–2 (*6)</td><td>The final output video is faded-in/out to the specified video.</td></tr>
<tr><td>Audio Fade</td><td>OFF, ON</td><td>When this is set to “ON”, the output audio also fades in/out along with the video.</td></tr>
<tr><td>Monitor Assign</td><td colspan="2">Specifies the function that is assigned to the MONITOR [1]–[4] button.</td></tr>
<tr><td>Monitor 1–4</td><td colspan="2"><table>
<tr><th>Value</th><th>Explanation</th></tr>
<tr><td>N/A</td><td>No video is assigned.</td></tr>
<tr><td>Multi-View</td><td>The final output video, preview output video and the videos allocated to the cross-point [1]–[8] buttons are shown in sections of the display (multi-view).</td></tr>
<tr><td>Input-View 1</td><td>The input video from the HDMI IN and SDI IN connectors and other sources are shown as 16 separate sections on the screen.</td></tr>
<tr><td>Input-View 2</td><td>The input video from the HDMI IN and SDI IN connectors and other sources are shown as 16 separate sections on the screen.</td></tr>
<tr><td>Quad View</td><td>The input video from the HDMI IN and SDI IN connectors and other sources are shown as 4 separate sections on the screen.</td></tr>
<tr><td>Program</td><td>This displays the final output video.</td></tr>
<tr><td>Sub Program</td><td>Shows the Sub Program bus video.</td></tr>
<tr><td>Preview</td><td>Shows the preview output video.</td></tr>
<tr><td>AUX 1</td><td>Shows the AUX 1 bus video.</td></tr>
<tr><td>AUX 2</td><td>Shows the AUX 2 bus video.</td></tr>
<tr><td>DSK Source</td><td>Shows the video selected as the DSK video source.</td></tr>
</table></td></tr>
<tr><td>LED Dimmer</td><td>1–8</td><td>Adjusts the brightness when the buttons or indicators are lit.</td></tr>
<tr><td>LCD Dimmer</td><td>1–8</td><td>Adjusts the brightness of this unit’s monitor.</td></tr>
<tr><td>LCD Menu</td><td>Left, Right</td><td>This sets where the menu is displayed.</td></tr>
<tr><td>Tally Frame</td><td colspan="2">Sets whether to display the tally frame or not in the monitor.</td></tr>
<tr><td>Multi-View</td><td>OFF, ON</td><td>Turns the tally frame on/off in the multi-view.</td></tr>
<tr><td>Input-View 1</td><td>OFF, ON</td><td>Turns the tally frame on/off in the Input-view 1.</td></tr>
<tr><td>Input-View 2</td><td>OFF, ON</td><td>Turns the tally frame on/off in the Input-view 2.</td></tr>
<tr><td>Quad-View</td><td>OFF, ON</td><td>Turns the tally frame on/off in the Quad-View.</td></tr>
<tr><td>AUX/Source Indicator</td><td colspan="2">Sets whether to display the AUX/Source indicators in the monitor.
 

<table>
<tr><th>Color</th><th>Explanation</th></tr>
<tr><td>Yellow</td><td>Shows that this has been selected as an inset screen for the PinP & KEY.</td></tr>
<tr><td>Magenta</td><td>Shows that this has been selected as a DSK video source.</td></tr>
<tr><td>Green</td><td>Shows that this has been selected as an AUX bus video source.</td></tr>
</table></td></tr>
<tr><td>Multi-View</td><td>OFF, ON</td><td>Turns the indicator on/off for multi-view.</td></tr>
<tr><td>Input-View 1</td><td>OFF, ON</td><td>Turns the indicator on/off for Input-view 1.</td></tr>
<tr><td>Input-View 2</td><td>OFF, ON</td><td>Turns the indicator on/off for Input-view 2.</td></tr>
<tr><td>Quad-View</td><td>OFF, ON</td><td>Turns the indicator on/off for Quad-View.</td></tr>
<tr><td>External Rec Indicator</td><td colspan="2">Sets whether to display the External Rec indicator in the monitor.
When this is “ON”, a REC indicator showing that the camera’s REC button has been pressed is displayed, if the unit is connected to a camera that supports the REC status function.</td></tr>
<tr><td>Multi-View</td><td>OFF, ON</td><td>Turns the indicator on/off for multi-view.</td></tr>
<tr><td>Input-View 1</td><td>OFF, ON</td><td>Turns the indicator on/off for Input-view 1.</td></tr>
<tr><td>Input-View 2</td><td>OFF, ON</td><td>Turns the indicator on/off for Input-view 2.</td></tr>
<tr><td>Quad-View</td><td>OFF, ON</td><td>Turns the indicator on/off for Quad-View.</td></tr>
</table>

(*6) Shows the AUX 1 Source or AUX 2 Source settings.

Menu item	Value	Explanation
Audio Level Meter	Specifies whether to display the audio level meter in the monitor.	
Multi-View	OFF, ON	Turns the level meter on/off for Multi-View.
Input-View 1	OFF, ON	Turns the level meter on/off for Input-View 1.
Input-View 2	OFF, ON	Turns the level meter on/off for Input-View 2.
Quad-View	OFF, ON	Turns the level meter on/off for Quad-View.
Level Meter Position		
HDMI In 1–4 **SDI In 1–4** **Video Player/SRT In** **Audio In 1–3/4** **USB In** **Bluetooth In** **Audio Player** **Main Bus** **AUX 1–2 Bus** **USB Out** **Stream&Record**	Pre Fader(PFL) Post Fader(AFL)	Sets the display position of the audio level meter.
Preview Label	Specifies whether to display the label in the monitor.	
Multi-View	OFF, ON	Turns the label view on/off in the multi-view.
Input-View 1	OFF, ON	Turns the label view on/off in the Input-view 1.
Input-View 2	OFF, ON	Turns the label view on/off in the Input-view 2.
Quad-View	OFF, ON	Turns the label view on/off in the Quad-View.
Label Edit		

Menu item	Value	Explanation
HDMI In 1–HDMI In 4	HDMI 1–HDMI 4	Edit the label name shown in the monitor. Press the [VALUE] knob to access the Label Edit screen.
SDI In 1–SDI In 4	SDI 1–SDI 4	
Still 1–Still 32	Still 1–Still 32	
Video Player	V.Player	
SRT In	SRT In	
Program	PGM	
Sub Program	SUB PGM	
Preview	PVW	
AUX 1	AUX 1	
AUX 2	AUX 2	
DSK Source	DSK	

Label Size	Small, Normal	Specifies the text size of the label shown in the monitor.
Multi-View Layout	Specifies the videos to be shown in the PVW section (Left) and PGM section (Right) in the multi-view.	
Left **Right**	Program	Final output video. This is the default setting for "Right".
	Sub Program	Sub Program bus video
	Preview	Preview output video (the video to be output next). This is the default setting for "Left".
	AUX 1	AUX 1 bus video
	AUX 2	AUX 2 bus video
	DSK Source	Video selected as the DSK video source
	Black	Black screen
Input-View 1–2 Layout	Configures the layout in Input-View 1–2.	
Input 1–16	N/A HDMI 1–4 SDI 1–4 Still 1–32 V.Player/SRT In (*6) Input 1–16 Stream&Record Status 1–2 Date&Time(Analog/Digital) (*7)	Sets the video to display for Input 1–16.

Menu item	Value	Explanation
Quad-View Layout	Configures the layout in Quad-View.	
Input 1–4	N/A HDMI 1–4 SDI 1–4 Still 1–32 V.Player/SRT In (*6) Input 1–16	Sets the video to display for Input 1–4.
Auto Input Detect	OFF, ON	Turns the auto input detect function on/off. When this is "ON", input is automatically detected, and the video is switched when input from the final output video is interrupted.
Auto Fan Control	OFF, ON	Turns the auto fan control function on/off. When this is "ON", this function controls the fan according to the internal temperature of this unit.
Test Pattern	Specifies the test pattern.	
Pattern	Off, Color Bars 75%, Color Bars100%, Ramp, Step, Hatch, Diamond, Circle, Color Bars 75%-SP, Color Bars100%-SP, Ramp-SP, Step-SP, Hatch-SP	Selects the test pattern to display.
Motion	Off, Slow, Fast	Specifies the scroll speed of the test pattern.
Test Tone	Specifies the test tone.	
Level	Off, -20, -10, 0dB	Adjusts the test tone volume.
Frequency L	500Hz, 1kHz, 2kHz	Specifies the frequency of the test tone for the L-channel.
Frequency R	500Hz, 1kHz, 2kHz	Specifies the frequency of the test tone for the R-channel.
Video Fader Calibration	Enter	Calibrates the video fader.
Shut Down	Exec	Shuts down this unit.
Factory Reset	Exec	Returns the unit to its factory defaults.
System Information	––	Displays the version of the system program.

(*7) Either "V.Player" or "SRT In" is shown, depending on the [MENU] button → Video Player/SRT In → Type setting.
(*8) Either "Analog" or "Digital" is shown, depending on the "System → Date&Time → Clock Display Type" setting.

Main specifications

■ Video

<table>
<tr><td>Video processing</td><td colspan="2">4:2:2 (Y/Pb/Pr), 8-bit</td></tr>
<tr><td>Number of video channels</td><td colspan="2">8 channels</td></tr>
<tr><td rowspan="2">Input connectors</td><td>HDMI IN 1–4</td><td>HDMI type A×4
* HDCP supported, Multi-format supported</td></tr>
<tr><td>SDI IN 1–4</td><td>BNC type ×4
* Conforms to SMPTE 424M (SMPTE 425M-AB), 292M</td></tr>
<tr><td rowspan="3">Output connectors</td><td>HDMI OUT 1–3</td><td>HDMI type A×3
* HDCP supported</td></tr>
<tr><td>HDMI IN 3–4 THRU</td><td>HDMI type A×2
* HDCP supported</td></tr>
<tr><td>SDI OUT 1–2</td><td>BNC type ×2
* Conforms to SMPTE 424M (SMPTE 425M-AB), 292M</td></tr>
<tr><td>USB STREAM</td><td>USB Type-C®</td></tr>
<tr><td rowspan="2">Video input formats</td><td>HDMI IN 1–4</td><td>
<table>
<tr><td>480/59.94i</td><td>480/59.94p</td><td>720/59.94p</td><td>1080/59.94i</td></tr>
<tr><td>1080/59.94p</td><td>1080/60p</td><td>1080/29.97p</td><td>1080/30p</td></tr>
<tr><td>576/50i</td><td>576/50p</td><td>720/50p</td><td>1080/50i</td></tr>
<tr><td>1080/50p</td><td>1080/25p</td><td>1080/23.98p</td><td>1080/24p</td></tr>
<tr><td>2160/59.94p (*1)</td><td>2160/60p (*1)</td><td>2160/29.97p (*1)</td><td>2160/30p (*1)</td></tr>
<tr><td>2160/50p (*1)</td><td>2160/25p (*1)</td><td>2160/23.98p (*1)</td><td>2160/24p (*1)</td></tr>
<tr><td colspan="2">VGA (640×480/60 Hz)</td><td colspan="2">SVGA (800×600/60 Hz)</td></tr>
<tr><td colspan="2">XGA (1024×768/60 Hz)</td><td colspan="2">WXGA (1280×800/60 Hz)</td></tr>
<tr><td colspan="2">SXGA (1280×1024/60 Hz)</td><td colspan="2">FWXGA (1366×768/60 Hz)</td></tr>
<tr><td colspan="2">SXGA+ (1400×1050/60 Hz)</td><td colspan="2">UXGA (1600×1200/60 Hz)</td></tr>
<tr><td colspan="2">WUXGA (1920×1200/60 Hz)</td><td colspan="2"></td></tr>
</table>
* The refresh rate is the maximum value of each resolution.
* Conforms to CEA-861-E,VESA DMT Version 1.0 Revision 11.
* 1920 x 1200/60 Hz: Reduced blanking
* The input interlaced video signal is converted to progressive video signal by internal processing.
* The input refresh rates of SVGA (800 x 600)–SXGA+ (1400 x 1050) are 75 Hz when the unit's frame rate setting is 50 Hz.
* HDMI IN 1 support Roland FILL+KEY signal
(*1) Only for HDMI IN 3, 4</td></tr>
<tr><td>SDI IN 1–4</td><td>
System format: 720p
<table>
<tr><th colspan="2">Frame rate</th></tr>
<tr><th>29.97 Hz, 30 Hz, 59.94 Hz, 60 Hz</th><th>25 Hz, 50 Hz</th></tr>
<tr><td>720/59.94p</td><td>720/50p</td></tr>
</table>
System format: 1080p
<table>
<tr><th colspan="3">Frame rate</th></tr>
<tr><th colspan="2">29.97 Hz, 30 Hz, 59.94 Hz, 60 Hz</th><th>25 Hz, 50 Hz</th></tr>
<tr><td>1080/59.94i</td><td>1080/59.94p</td><td>1080/50i</td></tr>
<tr><td colspan="2">1080/60p</td><td>1080/50p</td></tr>
<tr><td>1080/29.97p</td><td>1080/30p</td><td>1080/25p</td></tr>
<tr><td>1080/23.98p</td><td>1080/24p</td><td>1080/23.98p</td></tr>
<tr><td></td><td></td><td>1080/24p</td></tr>
</table>
* The input interlaced video signal is converted to progressive video signal by internal processing.</td></tr>
</table>

Video output formats

HDMI OUT 1–3
SDI OUT 1–2

System format	Frame rate			
	59.94 Hz	60 Hz	29.97 Hz	30 Hz
720p	720/59.94p	720/60p	–	–
1080p	1080/59.94i	1080/60i	–	–
	1080/59.94p	1080/60p	1080/29.97p	1080/30p

System format	Frame rate			
	50 Hz	25 Hz	23.98 Hz	24 Hz
720p	720/50p	–	–	–
1080p	1080/50i	–	–	–
	1080/50p	1080/25p	1080/23.98p	1080/24p

USB STREAM

Frame rate (USB OUT)			
59.94 Hz	60 Hz	29.97 Hz	30 Hz
1080/59.94p	1080/60p	1080/29.97p	1080/30p
720/59.94p	720/60p	720/29.97p	720/30p
640×480/59.94p	640×480/60p	640×480/29.97p	640×480/30p

Frame rate (USB OUT)			
50 Hz	25 Hz	23.98 Hz	24 Hz
1080/50p	1080/25p	1080/23.98p	1080/24p
720/50p	720/25p	720/23.98p	720/24p
640×480/50p	640×480/25p	640×480/23.98p	640×480/24p

* Uncompressed format (YUY2) and Compressed format (Motion JPEG) supported.

DIRECT STREAM

System format	Frame rate (Stream&Record)			
	59.94 Hz	60 Hz	29.97 Hz	30 Hz
720p	720/59.94p	720/60p	720/29.97p	720/30p
1080p	1080/59.94p	1080/60p	1080/29.97p	1080/30p

System format	Frame rate (Stream&Record)			
	50 Hz	25 Hz	23.98 Hz	24 Hz
720p	720/50p	720/25p	–	–
1080p	1080/50p	1080/25p	1080/23.98p	1080/24p

Stream and record formats

Audio video

- Protocols: RTMP, RTMPS, SRT (Caller, Listener)
- Container: FLV (RTMP, RTMPS), MPEG2-TS (SRT)
- Recording file format: MP4
- Codec: H.264, target bitrate up to 20,000 kbps
- AAC-LC, 16 bits, 48 kHz, stereo, target bitrate up to 256 kbps
- * When the format of either Stream & Record or Video Player/SRT In exceeds 1080/30p, the Stream & Record and Video Player/SRT In functions cannot be used simultaneously.
- * When the sum of the bitrate for Stream & Record and Video Player/SRT In exceeds 20,000 kbps, the Stream & Record and Video Player/SRT In functions cannot be used simultaneously.

Audio

- Recording file format: WAV
- Codec: Linear PCM, 16 bits, 48 kHz, stereo

Video player/SRT input

Video player

- File format: MP4
- Codec: H.264, Average bit rate of 20,000 kbps or less, up to 1080/60p
- AAC-LC, 16 bits, 48 kHz, stereo

SRT input

- Protocol: SRT (Caller, Listener)
- Container: MPEG2-TS
- Codec: H.264, Average bit rate of 20,000 kbps or less, up to 1080/60p
- AAC-LC, 16 bits, 48 kHz, stereo
- * When the format of either Stream & Record or Video Player/SRT In exceeds 1080/30p, the Stream & Record and Video Player/SRT In functions cannot be used simultaneously.
- * When the sum of the bitrate for Stream & Record and Video Player/SRT In exceeds 20,000 kbps, the Stream & Record and Video Player/SRT In functions cannot be used simultaneously.

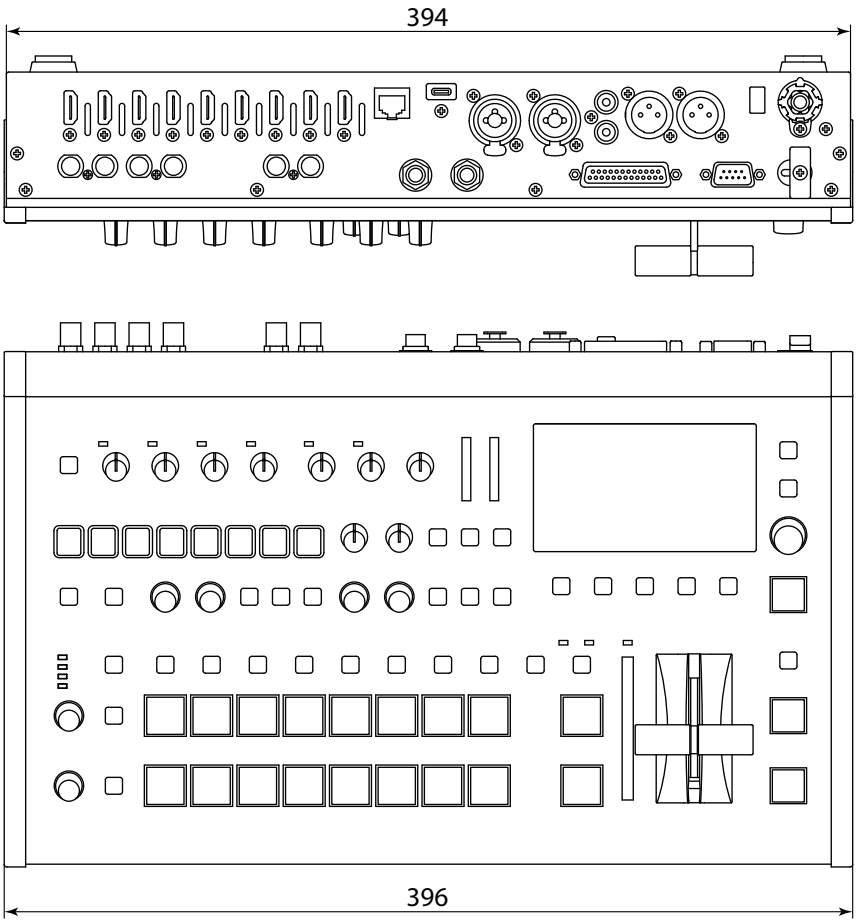
Still image	File Format	Bitmap File (.bmp) Maximum 1920 x 1080 pixels, 24-bit color, uncompressed. PNG File (.png) Maximum 1920 x 1080 pixels, 24-bit color JPEG File (.jpg, .jpeg) Maximum 1920 x 1080 pixels, 24-bit color * It can be stored up to 32 files in the internal memory. * It can be exported in the SD Card and USB flash drive. * PNG alpha channel supported.
Video effects	Transition	Cut, Mix (Dissolve/FAM/NAM), WIPE (8 types), SPLIT (2 types)
	Composition	PinP x 2 (Square, Circle, Diamond), Keyer x 2 (Luminance Key, Chroma Key), DSK (Luminance Key, Chroma Key, Alpha Key, External Key), Roland FILL+KEY Mode
	Others	Multi-View (4 types), Flip horizontal, Flip vertical, Still Image capture, Still Image playback, Output fade (Audio, Video: White or Black), Test pattern output, Stream delay

Audio			
Audio processing		Sample rate	24 bits, 48 kHz
Number of audio channels		28 channels	
Audio formats		USB STREAM (input/output)	Linear PCM, 24 bits, 48 kHz, 2 ch
		Bluetooth In (input)	Linear PCM, 24 bits, 48 kHz, 2 ch
		HDMI IN	Linear PCM, 24 bits, 48 kHz, 2 ch
		HDMI OUT	Linear PCM, 24 bits, 48 kHz, 8 ch
		SDI IN	Linear PCM, 24 bits, 48 kHz, 2 ch (Conforms to SMPTE 299M)
		SDI OUT	Linear PCM, 24 bits, 48 kHz, 8 ch (Conforms to SMPTE 299M)
Audio player		File format	WAV (Linear PCM, 16 bits, 48 kHz/44.1kHz, stereo) * It can be stored up to 64 tracks in the internal memory.
Audio effects		Channel effects	High pass filter, Echo canceller, Anti-feedback, Noise gate, De-esser, Compressor, 4-band equalizer, Voice changer, Delay, Auto mixing
		Master effects	Reverb, 4-band equalizer, Compressor/Limiter, Loudness auto gain control, Adaptive noise reduction, Low frequency cut, 15-band GEQ, Delay
		Others	Output fade, Test tone output
Input connectors	Analog	AUDIO IN 1, 2	Combo type (XLR, 1/4-inch TRS phone), phantom power DC 48 V (unloaded maximum), 10 mA (maximum load)
		AUDIO IN 3/L, 4/R	RCA phono type
	Digital	USB STREAM	USB Type-C®
		Bluetooth	
		HDMI IN 1–4	HDMI type A×4
		SDI IN 1–4	BNC type ×4
Output connectors	Analog	AUDIO OUT 1, 2	XLR type
		PHONES	Stereo 1/4-inch phone type
		USB STREAM	USB Type-C®
	Digital	HDMI OUT 1–3	HDMI type A×3
		HDMI IN 3–4 THRU	HDMI type A×2
		SDI OUT 1–2	BNC type ×2
Nominal input level		AUDIO IN 1, 2	-64--+4 dBu (Maximum: +24 dBu)
		AUDIO IN 3/L, 4/R	-10 dBu (Maximum: +10 dBu)
Input impedance		AUDIO IN 1, 2	8.4 kΩ
		AUDIO IN 3/L, 4/R	10 kΩ
Nominal output level		AUDIO OUT 1, 2	+4 dBu (Maximum: +24 dBu)
		PHONES	92 mW + 92 mW (32 Ω)
Output impedance		AUDIO OUT 1, 2	600 Ω
		PHONES	33 Ω

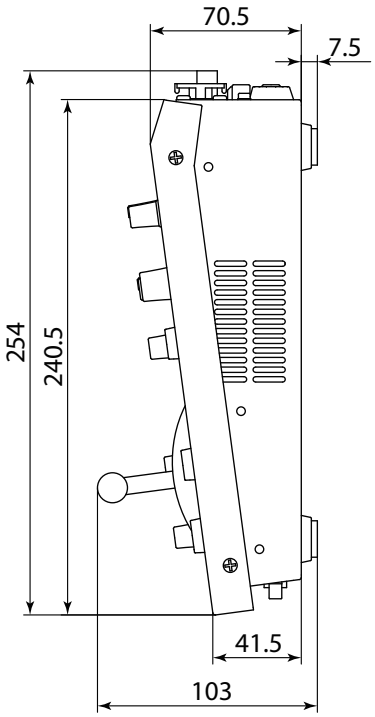
■ Others		
Recording media	SDHC/SDXC card (commercially available)	* SDXC card is required for video recording.
	USB flash drive (commercially available)	
Other connectors	USB HOST	USB A type (for USB flash drive, for remote control from USB numeric keypad)
	USB STREAM	USB Type-C® (for remote control from PC and iPad, Graphics Presenter)
	Bluetooth connection	for remote control from iPad
	CTL/EXP 1, 2	1/4-inch TRS phone type (for remote control from foot switch and expression pedal)
	TALLY/GPIO	DB-25 type (Female) (Tally/GPO: 16, GPI: 8)
	RS-232	DB-9 type (Male) (for remote control)
	DIRECT STREAM	RJ45, 1000BASE-T (for live streaming, SRT In/Out and remote control)
Other functions	Scene memory (32 types), Macro control (100 types), Sequencer control (1,000 steps), Panel lock function, EDID emulator, Auto switching, Auto input detect, Smart tally, Remote camera control (Up to 8 units), External rec control, Menu language (English, Japanese, Simplified Chinese)	
Bluetooth function	Ver 5.0	
	Profile support	A2DP (Audio), GATT (MIDI over Bluetooth Low Energy)
	Codec	SBC (Support to the content protection of the SCMS-T method)
Display	4.3 inches TFT color LCD: 480 x 272 dots	
Power supply	AC adaptor	
Current draw	2.1 A	
Power consumption	51 W	
Operation temperature	+0 to +40 degrees Celsius +32 to +104 degrees Fahrenheit	
Dimensions	396 (W) x 254 (D) x 103 (H) mm 15-5/8 (W) x 10 (D) x 4-1/16 (H) inches	
Weight	3.5 kg 7 lbs 12 oz (excluding AC adaptor)	
Accessories	Startup Guide, Leaflet "USING THE UNIT SAFELY", AC adaptor, Power cord	
Options	Footswitch: BOSS FS-5U, FS-6, FS-7 Expression Pedal: EV-5, EV-30, BOSS FV-500L, FV-500H	

* 0 dBu = 0.775 Vrms
* This product is a Class A digital device under FCC part 15.
* 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.

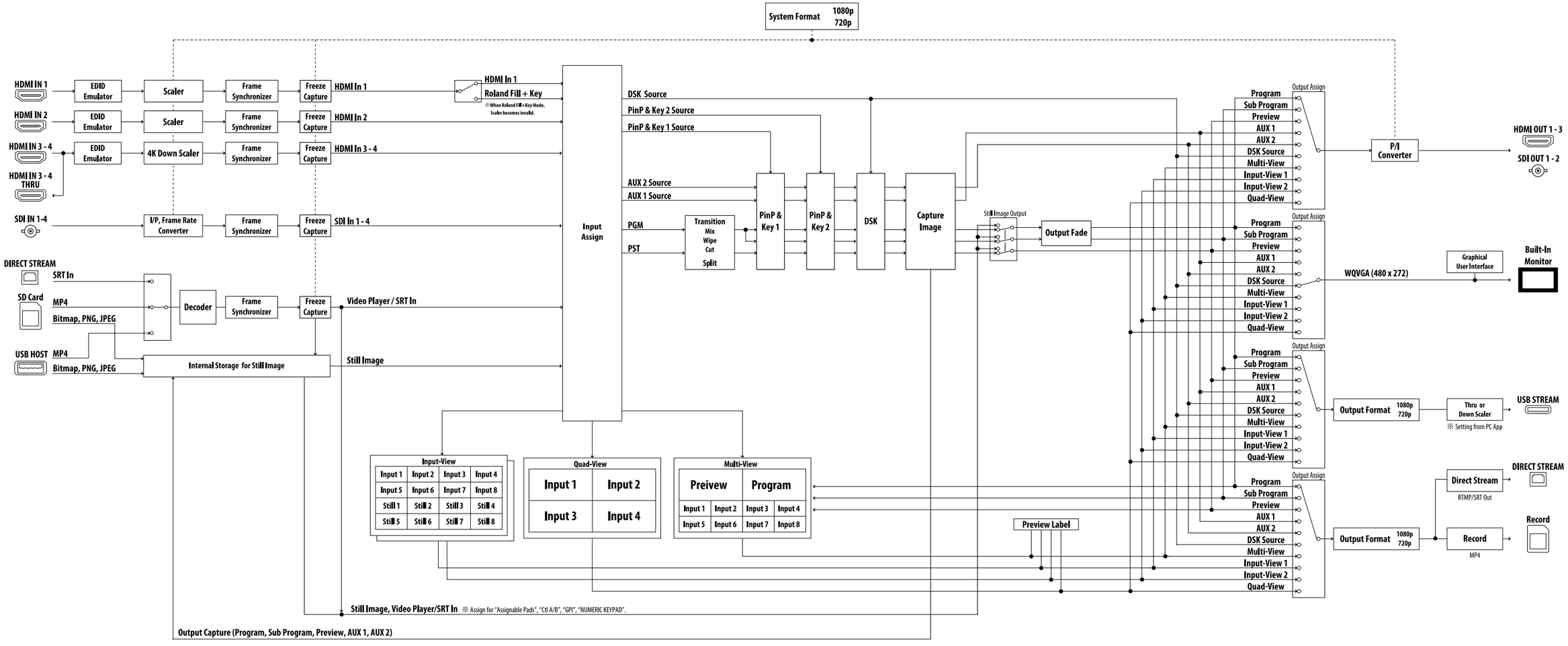
Dimensions



Unit: mm



Video block diagram



Audio block diagram