

#### **DIRECT STREAMING AV MIXER**

# **VR-6HD**





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# **Panel Descriptions**

# **Top Panel**



#### **1** AUDIO PLAYER

This section lets you assign sound sources such as background music, sound effects and so on to the pads and then play them back.

\* You can use an audio file (WAV format) stored on a USB flash drive or an SD card as the source.

#### [LEVEL] knob

Adjusts the playback volume of the sound source.

#### **SIG/PEAK indicators**

These indicators light up when audio output is detected.

Lit red Volume is excessive (0 dB or higher)	
Lit yellow Appropriate volume (-20 to -1 dB)	
Lit green	Insufficient volume (–50 to -21 dB)

#### [SETUP] button

Shows the setup screen in the display.

#### Pads [1]-[6]

Press a pad to play back the assigned sound source.

#### 2 AUDIO OUT

#### [AUX 1], [AUX 2] knobs

Adjusts the volume of the AUX bus output.

#### [USB STREAM] knob

Adjusts the volume of the USB output.

#### [STREAM/RECORD] knob

Adjusts the volume of streaming/recording.

#### **SIG/PEAK indicators**

These indicators light up when audio output is detected.

Lit red	Volume is excessive (0 dB or higher)
Lit yellow	Appropriate volume (-20 to -1 dB)
Lit green	Insufficient volume (–50 to -21 dB)

#### 3 AUDIO EFFECT

#### [1]-[3] buttons

Press to turn the audio effects on/off. You can also assign different functions to each button.

#### [SETUP] button

Shows the setup screen in the display.

#### **AUDIO MIXER**

#### 4 [SETUP] button

Shows the setup screen in the display.

#### 5 [SOLO] buttons

Press these buttons to allow only the audio of the selected input channels to be output. When this is turned on (the button lights up) for a channel, you can monitor the pre-fader audio for that channel through headphones.

#### 6 [MUTE] buttons

Press these buttons to mute (silence) the audio of the selected input channels.

#### 7 Level meters

Shows the main output level.

### 8 [SETUP] button, [MUTE] button

These buttons are for the main output.

#### 9 [1]-[7/8] faders

These adjust the input volume for each channel.

#### 10 [MAIN] fader

Adjusts the output volume.

#### 11 Display (Touch Panel)

Shows the status of the input/output video and of streaming/recording, as well as the parameters and menus.

12 [MENU] button

Switches the menu screen between visible and hidden.

13 [EXIT] button

Exits a menu level or cancels an operation.

14 [VALUE] knob

Turn	Selects a menu item, or edits the value of a setting.
	Confirms the menu item you selected or the value that you edited.

15 PinP & KEY 1-2

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

[PVW] buttons

Turns the inset screen preview output on/off.

[PGM] buttons

Turns PinP composition on/off.

[POSITION H] knob

Adjusts the horizontal position of the inset screen. Turn while pressing to adjust the size of the inset screen.

[POSITION V] knob

Adjusts the vertical position of the inset screen. Turn while pressing to adjust the zoom ratio of the inset screen video.

16 [MONITOR] button

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

Function	Explanation	
MULTI-VIEW	The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display.	
PROGRAM	Shows the final output video.	
AUDIO LEVEL	Shows the audio level screen.	
STILL-VIEW	Shows the loaded still images in 16 separate sections on the screen.	

\* The settings described above are the factory settings. You can also assign different functions to the buttons.

#### 17 [OUTPUT FADE] button

The final output video and audio fade in/out.

Lit Fade-out completed		
Blinking	Blinking Fading-in/out	
Unlit Normal output		

\* The settings described above are the factory settings. You can assign different functions to the [OUTPUT FADE] button.

18 DSK

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

#### [PVW] buttons

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

#### [PGM] buttons

Turns DSK composition on/off.

19 PANEL

#### [SETUP] button

Shows the setup screen in the display.

20 MODE

The functions of the VIDEO SWITCHER [1]–[6] buttons change according to the mode you select when pressing the buttons.

#### [INPUT SELECT] button

Use the VIDEO SWITCHER [1]–[6] buttons to select the video source to send to the PGM bus or the PVW bus.

#### [AUX] button

Use the VIDEO SWITCHER [1]–[6] buttons to select the video signal to send to the AUX bus.

#### [SCENE MEMORY] button

Use the VIDEO SWITCHER [1]–[6] buttons to recall the scene memories (which contains the registered settings for video, audio and so on). Long-press the VIDEO SWITCHER [1]–[6] buttons to register the current settings in a scene memory.

#### [MACRO] button

This switches the function of the VIDEO SWITCHER [1]–[6] buttons to execute macros (a series of recorded operations).

**21) TRANSITION** 

Selects the video transition effects.

#### [MIX] button

The two videos are mixed as the transition occurs.

#### [WIPE] button

The next video moves across to replace the original video.

#### [SPLIT] button

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

**22** VIDEO SWITCHER [1]–[6] buttons

The buttons change functions depending on the mode that's selected.

23 [CUT] button, [AUTO] button

These buttons determine what happens when switching between videos or else they switch between videos, depending on the operation mode.

There are two operation modes for switching between videos: "DISSOLVE" and "PGM/PST".

Operation mode	Explanation	
	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 (the buttons light up green when pressed).	
	Button to operate	Action taken when pressed
DISSOLVE		When [CUT] button is lit up green
(factory		The video switches instantly.
setting)	VIDEO SWITCHER	When [AUTO] button is lit up green
	[1]–[6] buttons	A switch (transition) effect is applied, and the video switches automatically.
		n effect, the selected VIDEO SWITCHER and then remains lit up red when the hes.

Operation mode	Explanation	
	In this mode, the PST video is displayed in the PVW bus, and you can check the video before outputting it to the PGM bus.  Press the VIDEO SWITCHER [1]–[6] buttons to select a PST video (the buttons light up green). The content is shown in the PVW bus.	
DCM/DCT	Button to operate	
PGM/PST	[CUT] button The video switches instantly.	
	[AUTO] button A switch (transition) effect is applied, and the video switches automatically.	
	*The [AUTO] button blinks red during transition effects, and goes dark when the video has fully transitioned.	

# **Front Panel**



- 1 PHONES jack
  - Connect your headphones here.
- 2 [PHONES] knob

Adjusts the headphone volume.

3 USB HOST port

Connect USB storage(USB flash drive/ External SSD), USB numeric keypad or smartphone here.

USB storage	Use this to back up this unit's settings or importing materials from the storage device into this unit.	
USB numeric keypad	Use this when you want to control video transitions or other operations from a numeric keypad.	
Smartphone	Use this 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 materials from storage media to 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.



#### 1 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.



#### 2 [POWER] switch

Turns the power on/off.

#### 3 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.

#### 4 USB STREAM connector (USB Type-C°)

- Outputs the audio and video to your computer. This is also used to input audio played on your computer to the VR-6HD.
- Use the dedicated software to remotely control the VR-6HD from a computer or iPad that is connected.
- \* If you are outputting HD video via USB, connect this to a USB 3.0 port of your computer.
- \* Do not use a USB cable that is designed only for charging a device. Charge-only cables cannot transmit data.
- \* If you connect via an extension cable or a USB hub, the computer might not recognize the VR-6HD.

#### 5 DIRECT STREAM port

- Connect this port to a network device for livestreaming.
- Lets you remotely control the VR-6HD by using terminal software, etc.
- Use the dedicated software to remotely control the VR-6HD from a computer or iPad that is connected.
- Use the VR-6HD to remotely control a camera that is connected.
- Displays a tally on your iOS or Android device connected to the network (this is the "smart tally" function).

#### NOTE

As this port supports GbE, use a LAN cable with a CAT5e specification or better.

#### 6 VIDEO OUT 1-3 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
VIDEO OUT 1	PROGRAM (final output video)
VIDEO OUT 2	PREVIEW (preview output video)
VIDEO OUT 3	MULTI-VIEW

#### 7 VIDEO IN 1-6 connectors

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

The input format is detected automatically.

#### 8 RS-232 connector

You can connect this to a computer equipped with an RS-232 connector to remotely control the VR-6HD.

#### 9 Ground terminal

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

#### 10 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 this jack. Use this when you want to switch between video using your foot.

\* Use only the specified expression pedal (Roland EV-5, EV-30, BOSS FV-500L/FV-500H; sold separately). Connecting expression pedals made by third-party manufacturers may cause this unit to malfunction.

#### 11 AUDIO OUT (XLR, RCA) jacks

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

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

#### 12 AUDIO IN 1-6 (XLR/TRS) jacks

Use this connector for audio input. Connect mic or line-level analog audio equipment here.

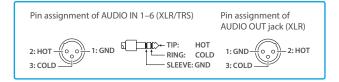
#### \* About phantom power

You can supply phantom power (+48 V) from the AUDIO IN 1–6 jacks (XLR). This should be switched on for condenser mics that require phantom power.

[MENU] button  $\rightarrow$  "AUDIO"  $\rightarrow$  "INPUT"  $\rightarrow$  "AUDIO IN 1" – "AUDIO IN 6", and set "PHANTOM +48V" to "ON".

#### AUDIO IN 7/L, 8/R (LINE IN) jacks

Use this connector for audio input. Connect analog audio equipment such as an audio mixer here.



## Connecting Bluetooth® Devices

Use the Bluetooth features of the VR-6HD to connect it to your Bluetooth-compatible mobile device. This lets you do the following:

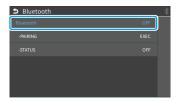
- Input the audio signals from your Bluetooth audio device.
- Use dedicated app "VR-6HD Remote" to remotely control the VR-6HD from an iPad (p. 96).
  - \* For more on connecting (pairing) with a dedicated app, see the app's Owner's Manual.
  - \* VR-6HD Remote is planned to be updated for compatibility with this unit.

### 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 VR-6HD.
- [MENU] button → "SYSTEM" → "Bluetooth" → select "Bluetooth", and press the [VALUE] knob.



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

The VR-6HD's Bluetooth function turns on.

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.
- 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.
- Display the Bluetooth device screen on your Bluetooth device, and select "Roland VR-6HD Audio".

Once pairing is successful, the message on the VR-6HD changes to "COMPLETED".

8. Press the [MENU] button to close 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 VR-6HD.

The onscreen STATUS display on the VR-6HD changes to "CONNECTED" when the connection is successful.



\* If connection does not succeed, select "Roland VR-6HD Audio" in the Bluetooth device screen on your Bluetooth device.

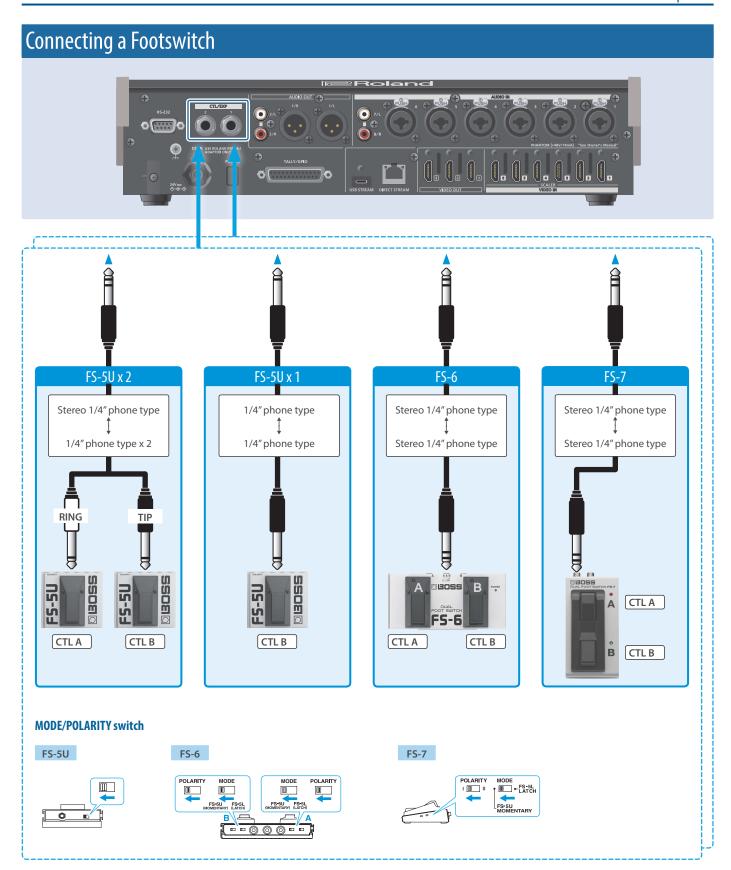
#### MEMO

 You can also check the connection status by looking at the (Bluetooth) indicator on the MENU screen and on the Bluetooth settings screen.



Lit	Connected	Rapid blinking	Now pairing
Unlit	Bluetooth off	Blinking	Waiting for connection

- Pair again in the following cases:
  - When the pairing data has been deleted from the Bluetooth device
  - When the VR-6HD has been reset to its factory-set state (p. 95)
- To remove the Bluetooth connection, deactivate Bluetooth on the VR-6HD or on your Bluetooth device.
- You can assign a function to the dashboard for switching Bluetooth on/off or for pairing (p. 84).



#### 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/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.
- \* 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.
- \* This unit is not designed for continuous operation over long periods of time (one month or longer). If you want to use this unit over long periods of time, cycle the power periodically.

### Turning the Power On

- 1. Make sure that all devices are powered-off.
- 2. Turn on the [POWER] switch of the VR-6HD.



3. Turn on the power of the source devices.

Turn on the power of the source devices that are connected to the VR-6HD'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 VR-6HD's output connectors, such as projectors.

### Turning the power off

- Turn off the power of the output devices first, and then the source devices.
- 2. Turn off the [POWER] switch of the VR-6HD.

The following message appears.



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

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

#### About the auto-off function

The power to this unit will be turned off automatically after a predetermined amount of time has passed (Auto Off function). If you do not want the power to be turned off automatically,

If you do not want the power to be turned off automatically, disengage the Auto Off function (p. 144).

- Note that any unsaved data is lost when the power turns off.
   You must save any data in advance that you want to keep.
- To restore power, turn the power on again.

# Operating the Menu

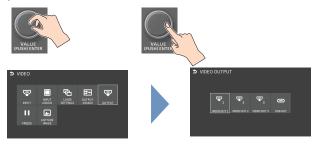
Here's how to access the menu, and make video/audio settings and settings for this unit.

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



The menu is organized into functions.

2. Turn the [VALUE] knob to select the menu item to edit, and press the [VALUE] knob to confirm.



3. Repeat step 2 as needed.

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

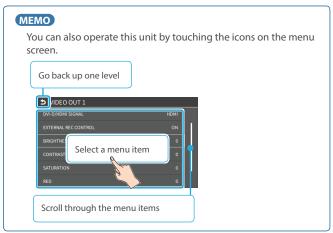
 Turn the [VALUE] knob to select a parameter, and press the [VALUE] knob.

When the cursor is shown as a white border, you can select a parameter with the [VALUE] knob. When you select a parameter and press the [VALUE] knob, the cursor changes to a blue border and you can now edit the parameter's value.

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

The cursor changes back to a white border, and you can now select a different parameter.

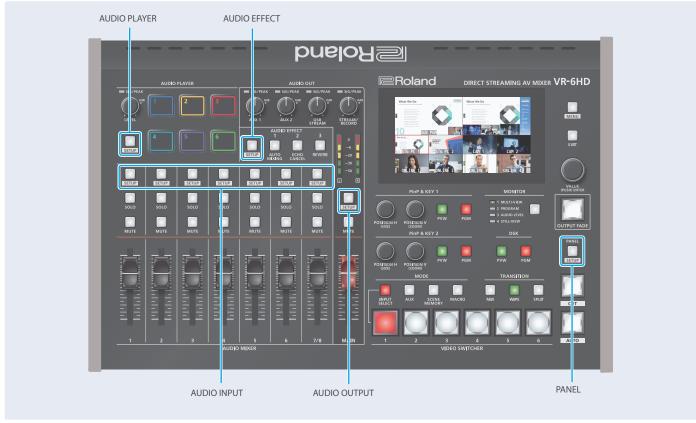
- By turning the [VALUE] knob while pressing it, you can make larger changes to the value.
- Long-pressing the [VALUE] knob returns the current menu item you're setting to its default value.
- 6. Repeat steps 4-5 as needed.
- 7. Press the [MENU] button to close the menu.



# Operating the Setup Screen

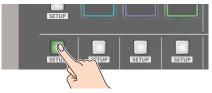
The VR-6HD features a [SETUP] button for each section. Press the respective [SETUP] button to view the setup screen for that section, and use the touch panel to easily make important settings.

Use the menu when you want to access the detailed settings. (p. 10)



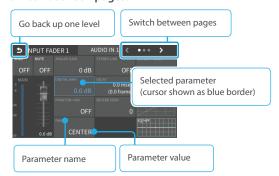
This explains how to operate the setup screens, with the channel 1 setup screen as an example.

1. Press the [SETUP] button for channel 1.



The setup screen for channel 1 appears.

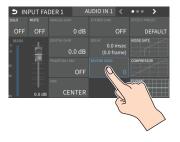
2. Touch the screen to change the parameter values and to switch between pages.



- When you switch between pages, different parameters are shown.
- When you press the [SETUP] button for a different channel, the setup screen for the channel you pressed appears.

Touching a parameter on the screen changes the cursor to a blue border, after which you can edit the parameter's value with the [VALUE] knob.

Touching a different parameter makes the cursor (blue border) move there. Repeat this operation to edit the parameters.



Press the channel 1 [SETUP] button to close the setup screen.

#### MEMO

You can use the [MENU] button, [VALUE] knob and [EXIT] button to make the settings without using the touch panel.

As with menu operations, turn the [VALUE] knob when the cursor is a white border, select a parameter, and then press the [VALUE] knob to change the cursor to a blue border. (This lets you edit the value.) After turning the [VALUE] knob to edit the value, press the [VALUE] knob again to change the cursor back to a white border. (You can now select the parameters.)

# 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 the [MONITOR] button.



The monitor view switches each time you press the button.

#### **MONITOR 1 (MULTI-VIEW)**

The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] 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. 32) is not reflected here.
- \* You can change the settings to swap the PGM section and view position. (p. 144)

#### 2 PGM (program) section

Shows the final output video.

\* You can change the settings to swap the PVW section and view position. (p. 144)

#### 3 VIDEO SWITCHER [1]–[6] button video

Displays the video assigned to each VIDEO SWITCHER button.

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



#### 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 VR-6HD.

#### AUX/SOURCE indicator

This displays as follows.

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

#### **MONITOR 2 (PROGRAM)**

Shows the final output video.

#### **MONITOR 3 (AUDIO LEVEL)**

Indicates the audio level for each channel.

#### **MONITOR 4 (STILL-VIEW)**

Shows the loaded still images in 16 separate sections on the screen.



#### Audio level meter indication



 You can set the audio level meter to show or hide. You can also individually set where each audio level meter in the multi-view is displayed.

Set the following menu parameters from the [MENU] button  $\rightarrow$  "SYSTEM"  $\rightarrow$  "MULTI-VIEW SETTINGS".

Menu item	Explanation
AUDIO LEVEL METER	Sets whether to show or hide the audio
MULTI-VIEW	levermeter.

#### MEMO

 You can change the monitoring videos that you use the MONITOR button to switch between.

Set this from the [MENU] button  $\rightarrow$  "SYSTEM"  $\rightarrow$  "MONITOR SELECT ASSIGN"  $\rightarrow$  "1"-"4".

#### • Items shown on the monitor

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

Set the following menu parameters from the [MENU] button  $\rightarrow$  "SYSTEM"  $\rightarrow$  "MULTI-VIEW SETTINGS".

Menu item	Explanation
TALLY FRAME	Tally frame
AUX/SOURCE INDICATOR	AUX/SOURCE indicator
EXTERNAL REC INDICATOR	Rec indicator for externally connected video
AUDIO LEVEL METER	Audio level meter
MULTI-VIEW LAYOUT	Multi-view layout
LABEL EDIT	Multi-view label
LABEL SIZE	Label size

- You can change the label names that are shown in the monitor.
   Edit this from the [MENU] button → "SYSTEM" → "MULTI-VIEW SETTINGS" → "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 VR-6HD



SDXC card can be used on the VR-6HD.

Some SD card types or SD cards from some manufacturers may not properly record audio/video with the VR-6HD.

Refer to the support page on the Roland website for the latest information on compatibility.

https://roland.cm/vr-6hd\_om



#### NOTE

Before you can use a commercially available SD card with the VR-6HD, you must format it as described in "Formatting an SD Card".

### Inserting the SD Card

 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

- [MENU] button → "SD CARD/USB MEMORY" → "SD CARD" → select "FORMAT", and press the [VALUE] knob.
   A confirmation message appears.
- 2. Select "OK" and press the [VALUE] knob.

The SD card is now formatted.

### Removing an SD Card

- [MENU] button → "SD CARD/USB MEMORY" → "SD CARD" → select "EJECT", and press the [VALUE] knob.
- Select "OK" and press the [VALUE] knob.

Once the message "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 VR-6HD

Use a commercially available USB flash drive.

#### NOTE

Before you can use a commercially available USB flash drive with the VR-6HD, 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.



- \* Ensure that the USB flash drive is oriented correctly, and insert it all the way into the port. Do not use excessive force.
- [MENU] button → "SD CARD/USB MEMORY" → "USB MEMORY" → select "FORMAT", and press the [VALUE] knob.

A confirmation message appears.

- $^{\ast}\,$  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

- [MENU] button → "SD CARD/USB MEMORY" → "USB MEMORY" → select "EJECT", and press the [VALUE] knob.
- 2. Select "OK" and press the [VALUE] knob.

Once the message "SAFE TO REMOVE" is displayed on the screen, you can safely remove the USB flash drive.

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 VR-6HD. Make sure to format the media on the VR-6HD (SD card: exFAT; USB flash drive: FAT32).
- 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 VR-6HD, the input/output format is determined according to the system format. You set the input/output format to match the connected equipment.

	Input format (*1)	Output format	
System format	VIDEO IN 1–6 connectors	VIDEO OUT 1–3 connectors	USB STREAM connector DIRECT STREAM port
1080p	1080p, 1080i	1080p, 1080i	1080p, 720p
720p	720p	720p	720p

- (\*1) The VIDEO IN 1–6 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. Refer to "Setting the input format for the VIDEO IN 1–6 connectors" on this page for details.
- [MENU] button → "SYSTEM" → select "SYSTEM FORMAT", and press the [VALUE] knob.



- 2. Use the [VALUE] knob to select "SYSTEM FORMAT", and then press the [VALUE] knob.
- 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.
- 4. Press the [MENU] button to close the menu.

#### Internal processing

The VR-6HD'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 rate

Set the frame rate of the VR-6HD from the [MENU] button  $\rightarrow$  "SYSTEM"  $\rightarrow$  "SYSTEM FORMAT"  $\rightarrow$  "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 VIDEO IN 1—6 Connectors

Using the factory settings, the EDID assignment for the VIDEO IN 1–6 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 VR-6HD to the source device when the VR-6HD is connected to a source device. EDID contains data such as the formats that can be input to the VR-6HD (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 VR-6HD.

 [MENU] button → "VIDEO" → "INPUT" → "VIDEO IN 1"-"VIDEO IN 6" → select "EDID" and press the [VALUE] knob.



- 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.

/alue
NTERNAL (EDID information for all input table formats is sent.)
VGA (800 x 600)
(GA (1024 x 768)
VXGA (1280 x 800)
WXGA (1366 x 768)
XGA (1280 x 1024)
XGA+ (1400 x 1050)
JXGA (1600 x 1200)
VUXGA (1920 x 1200)
720p
080i
080p

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

# **Assigning Video Sources**

Here's how to assign the video sources (input video, still images and video player) to the VIDEO SWITCHER [1]–[6] buttons.

- 1. Press the PANEL [SETUP] button.
- 2. Touch < MODE>.
- 3. Touch <INPUT SELECT>.

The setup screen appears.

4. Touch the screen to select the video source.



Video Source	Explanation
VIDEO 1-6	Video from VIDEO IN 1–6 connectors
STILL 1–16	Still images 1–16
V. PLAYER	Video from video player
N/A	No video source

\* You can't switch the video to a channel to which "N/A" is assigned. If you switch the assignment to "N/A" for one of the VIDEO SWITCHER [1]–[6] buttons that are now outputting, the output video switches to a black screen.

#### MEMO

You can import still images by using the following methods.

- → "Loading a Still Image from a Storage" (p. 25)
- → "Capturing a Still Image from Input/Output Video" (p. 26)

# Adjusting Output Video

Here's how to adjust the output image appropriately for the device that's receiving the VR-6HD's output.

 [MENU] button → "VIDEO" → "OUTPUT" → select "VIDEO OUT 1-3", or "USB OUT" and press the [VALUE] knob.



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

#### VIDEO OUT 1-3



Menu item	Explanation
OUTPUT STATUS	Shows the format and an HDCP signal presence.
COLOR SPACE	Specifies the color space.
DVI-D/HDMI SIGNAL	Specifies the type of output signal.
EXTERNAL REC CONTROL	Sets the control of an externally connected recording device.
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.

#### **USB OUT**



Menu item	Explanation
OUTPUT STATUS	Shows the connection status.
OUTPUT FORMAT	Sets the output destination formats that can be selected from the livestreaming app.
CONNECTION RESET	Reconnects the computer and the VR-6HD 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 close 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 VIDEO IN 1–6 connectors, you can also adjust the scaling.

1. [MENU] button → "VIDEO" → "INPUT" → select "VIDEO IN 1-6", and press the [VALUE] knob.



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



Parameter	Explanation
INPUT STATUS	Displays information about the incoming video.
COLOR SPACE	Specifies the color space.
FLICKER FILTER	When this is "ON", flickering is reduced.
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.
EDID	Specifies the input format (EDID).
ZOOM	Adjusts the zoom ratio.
SCALING TYPE	Specifies 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.
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.
* Only the following parameters are available for VIDEO PLAYER	
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

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

and bottom flipped.

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

FLIP V

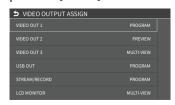
# **Assigning Video Buses to Output Connectors**

The VR-6HD features seven types of video buses. You can assign the signals from each video output connector/port (VIDEO OUT 1–3, USB STREAM, STREAM/RECORD) and the video shown on this unit's display to the desired video bus.

Video output connectors and ports	
VIDEO OUT 1–3	VIDEO OUT 1–3 connectors
USB OUT	USB STREAM connector
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. 32) is not reflected here.	
AUX	Video of your choice sent to the AUX bus (p. 17) 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 VIDEO SWITCHER [1]–[6] buttons (multi-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 SETTINGS" → [MULTI-VIEW LAYOUT] → select [LEFT] or [RIGHT].	
STILL-VIEW	Still images loaded into the unit (shown as 16 separate sections on the screen)	

- \* For more about the factory settings, refer to "VIDEO OUTPUT ASSIGN" (p. 98).
- [MENU] button → "VIDEO" → select "OUTPUT ASSIGN", and press the [VALUE] knob.



The OUTPUT ASSIGN screen appears.

- 2. Turn the [VALUE] knob to select the video output connector, and press the [VALUE] knob.
- 3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
- 4. Press the [MENU] button to close the menu.

#### MEMO

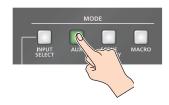
#### Assigning the video buses and audio outputs

You can also assign the desired audio buses (MAIN bus, AUX 1 bus, AUX 2 bus, MONITOR) for each jack, apart from the video bus (p. 55).

# Selecting the Video Sent to the AUX Bus

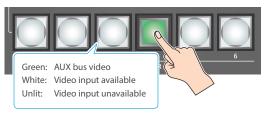
Here's how to send the video of your choice to the AUX bus. This lets you allocate a separate output that is independent of the final output, such as when you want a specific input video to be a fixed output.

1. Press the MODE [AUX] button.



#### Setting with the VIDEO SWITCHER buttons

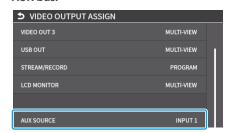
Press the VIDEO SWITCHER [1]–[6] buttons to select the video signal to send to the AUX bus.



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

#### Configuring on the setup screen

Touch the screen to select the video signal to send to the AUX bus.



#### **MEMO**

- You can adjust how much audio is sent to the AUX bus.
  - → "Sending Audio to the AUX Bus" (p. 55)
- 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. 142).

# Inputting Copy-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.

 [MENU] button → "SYSTEM" → select "HDCP", and press the [VALUE] knob.



Value	Explanation
ON	Copy-protected (HDCP) video can be input. HDCP is also added to the video that is output.  * Video/audio from the USB STREAM connector is not outputted.
OFF	Copy-protected (HDCP) video cannot be input.

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

### Checking for HDCP-capable devices

#### **Source devices**

Use the [MENU] button  $\rightarrow$  "VIDEO"  $\rightarrow$  "INPUT"  $\rightarrow$  "VIDEO IN 1–6"  $\rightarrow$  "INPUT STATUS" to check the HDCP capability status of the source device.

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



#### **Output devices**

If a device that supports HDCP is connected, "HDCP" is indicated in "OUTPUT STATUS" when you press the [MENU] button and select "VIDEO"
→ "OUTPUT" → "VIDEO OUT 1–3".



# **Video Operations**

## Switching the Video

You can switch between the videos of the PGM bus and PST bus to specify the final output.

### Setting the Operation Mode

There are two operation modes for switching between videos: "DISSOLVE" and "PGM/PST".

#### **DISSOLVE mode** (factory setting)

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. (The buttons light up green when pressed.)

#### **PGM/PST mode**

In this mode, the PST video is displayed in the PVW bus, and you can check the video before outputting it to the PGM bus.

Press the VIDEO SWITCHER [1]–[6] buttons to select a PST video (the buttons light up green). The content is shown in the PVW bus.

 [MENU] button → "SYSTEM" → select "PANEL OPERATION", and press the [VALUE] knob.



- 2. Use the [VALUE] knob to select "DISSOLVE", or "PGM/PST", and press the [VALUE] knob.
- 3. Press the [MENU] button to close the menu.

### Switching in the DISSOLVE Mode

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

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



#### MIX

The two videos are mixed as the transition occurs.



#### WIPE

The next video moves across to replace the original video.



- 2. Press the MODE [INPUT SELECT] button.
- 3. Press the [CUT] or [AUTO] button.



**4.** Press the VIDEO SWITCHER [1]–[6] buttons, and then select the video signal to output.



	Button to operate	Action taken when pressed
	VIDEO SWITCHER [1]–[6] buttons	When [CUT] button is lit up green
		The video switches instantly.
		When [AUTO] button is lit up green
		A switch (transition) effect is applied, and the video switches automatically.

\* During the transition effect, the selected VIDEO SWITCHER button blinks red, and then remains lit up red when the transition effect finishes.

#### MEMO

You can also directly touch the MULTI-VIEW or STILL-VIEW screens to select a video signal.

### Switching in the PGM/PST Mode

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

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



- 2. Press the MODE [INPUT SELECT] button.
- Press a VIDEO SWITCHER [1]-[6] button 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 Green: preview output video (the video to be output next)

#### MEMO

You can also directly touch the MULTI-VIEW or STILL-VIEW screens to select a video signal.

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



Button to operate	Action taken when pressed
[CUT] button (lit up 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 → "TRANSITION" → "MIX" → "MIX" or [MENU] button → "TRANSITION" → "WIPE" → "TIME".

#### MEMO

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

- → "Changing the Mix Pattern" (p. 20)
- → "Changing the Wipe Pattern" (p. 20)

### **Changing the Mix Pattern**

You can change the transition pattern used for a mix transition.

- While the [MIX] button is lit, select "MIX" from the [MENU] button → "TRANSITION" → and press the [VALUE] knob.
   The setup screen appears.
- 2. Touch the screen to access the settings.



Menu item	Explanation
TYPE	Specifies the transition pattern for mix.
TIME	Specifies how long the transition takes.

- \* For details on the parameter, refer to "3: TRANSITION" (p. 125).
- 3. Press the [MENU] button to close the screen.

### Changing the Wipe Pattern

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

- While the [MIX] button is lit, select "WIPE" from the [MENU] button → "TRANSITION" → and press the [VALUE] knob.
   The setup screen appears.
- 2. Touch the screen to access the settings.



Menu item	Explanation
TYPE	Specifies the transition pattern for wipe.
TIME	Specifies how long the transition takes.
DIRECTION	Specifies the direction of wipe.
BORDER COLOR	Specifies the color of the border added to the edge of the wipe area.
BORDER WIDTH	Specifies the width of the border added to the edge of the wipe area.

- \* For details on the parameter, refer to "3: TRANSITION" (p. 125).
- 3. Press the [MENU] button to close the screen.

# Splitting the Video

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 bus Right or lower: Video on the PST bus



### Configuring the Screen Layout

You can configure the screen layout as a split screen.

 While the [SPLIT] button is lit, select "SPLIT" from the [MENU] button → "TRANSITION", and press the [VALUE] knob.

The setup screen appears.

2. Touch the screen to access the settings.



Value	Explanation	
	SPLIT V	
	This vertically crops the center section of the video (split left/right).	
TYPE	A   +   B   ▶   A   B	
TIPE	SPLIT H	
	This horizontally crops the center section of the video (split upper/lower).	
	$A + B \rightarrow A $	
PGM SOURCE	Selects the video source to display on the left or upper side.	
PST SOURCE	Selects the video source to display on the right or lower side.	
PGM CENTER	Adjusts the position of the video that is shown in the left or upper side.	
PST CENTER	Adjusts the position of the video that is shown in the right or lower side.	
CENTER POS	Adjusts the position of the boundary.	
BORDER COLOR	Specifies the color of the border.	
BORDER WIDTH	Adjusts the width of the border.	

<sup>\*</sup> For details on the parameter, refer to "3: TRANSITION" (p. 125).

#### MEMO

When the split setup screen is shown, you can edit the parameters such as CENTER POS, PGM-CENTER and PST-CENTER by directly dragging on the screen.



3. Press the [MENU] button to close the screen.

### Displaying the Split

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

The SPLIT button lights up red.

2. Press a VIDEO SWITCHER [1]–[6] button to select the video you want to display upper or on the left.



The video on the PGM side is selected when the SPLIT button is lit up red.

#### MEMO

You can also directly touch the MULTI-VIEW or STILL-VIEW screens to select a video signal.

3. Press the [SPLIT] button again.

The SPLIT button lights up green.

- \* The button's lit color switches between red and green each time you press the SPLIT button.
- **4.** Press a VIDEO SWITCHER [1]–[6] button to select the video you want to display lower or on the right.



The video on the PST side is selected when the SPLIT button is lit up green.

#### MEMO

You can also directly touch the MULTI-VIEW or STILL-VIEW screens to select a video signal.

5. To turn off the split, press the [MIX] or [WIPE] button.

### Switching the Video Automatically (Auto Switching)

The video of INPUT 1-6 or of scene memories (p. 65) 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 1–6 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 PinP & KEY videos (PinP & KEY scan)

The PinP & KEY 1/2 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 DSK videos (DSK scan)

The DSK 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

 [MENU] button → select "AUTO SWITCHING", and press the [VALUE] knob.



The Auto Switching setup screen appears.

- Use the [VALUE] knob to select "AUTO SWITCHING", and press the [VALUE] knob.
- **3.** Use the [VALUE] knob to select "ON", and then press the [VALUE] knob.

The video automatically switches according to the operating mode.

- 4. To turn auto-switching off, select "OFF".
- 5. Press the [MENU] button to close the screen.

### Setting the Operation Mode

 [MENU] button → select "AUTO SWITCHING", and press the [VALUE] knob.

The Auto Switching setup screen appears.

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



Use the [VALUE] knob to select the operation mode, and press the [VALUE] knob.

The video automatically switches according to the operating mode.

#### Input scan

- Select "INPUT SCAN" for the operation mode. (p. 22)
   The setup screen changes accordingly.
- Use the [VALUE] knob to select a parameter shown below, and press the [VALUE] knob.

Parameter	Explanation
	Specifies the order in which video signals are shown.
SCAN SEQUENCE	NORMAL: Switches in the order of INPUT 1 → 6.
	REVERSE: Switches in the order of INPUT 6 → 1.
	RANDOM: Switches randomly.
SCAN TRANSITION TIME	Specifies the video transition time.
	Sets the video to which auto switching is applied.
	VIDEO INPUT:
	Final output video and preview video
SCAN TARGET	PinP & KEY 1–2:
	PinP & KEY layer (inset screen) video
	DSK:
	DSK layer (inset screen) video
INPUT 1-6 TIME	Specifies the time that the video is shown. Turn this "OFF" to skip.

- \* For details on the parameter, refer to "10: AUTO SWITCHING" (p. 133).
- Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
- 4. Press the [MENU] button to close the screen.

#### Scene memory scan

 Select "SCENE MEMORY SCAN" for the operation mode. (p. 22)

The setup screen changes accordingly.

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

Parameter	Explanation
	Specifies the order in which scene memories are switched.
CCAN SEQUENCE	NORMAL: Switches in the order of scene memory 1→32.
SCAN SEQUENCE	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.

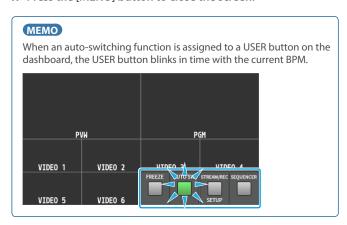
- $^{*}\,$  For details on the parameter, refer to "10: AUTO SWITCHING" (p. 133).
- 3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
- 4. Press the [MENU] button to close the screen.

#### Beat sync

- Select "BEAT SYNC" for the operation mode. (p. 22)
   The setup screen changes accordingly.
- 2. Use the [VALUE] knob to select a parameter shown below, and press the [VALUE] knob.

Parameter	Explanation
SYNC SOURCE	Sets the input audio that's synchronized with the video.
	Specifies the order in which video signals are shown.
SCAN SEQUENCE	NORMAL: Switches in the order of INPUT 1 → 6.
	REVERSE:
	Switches in the order of INPUT 6 $\rightarrow$ 1.
	RANDOM:
	Switches randomly.
SCANTRANSITION TIME	Specifies the video transition time.
SCAN CYCLE	Sets the beat number on which the video switches to the next one.
	Sets the video to which auto switching is applied.
	VIDEO INPUT:
SCAN TARGET	Final output video and preview video
	PinP & KEY 1–2:
	PinP & KEY layer (inset screen) video
	DSK:
	DSK layer (inset screen) video

- $^{\ast}~$  For details on the parameter, refer to "10: AUTO SWITCHING" (p. 133).
- Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
- 4. Press the [MENU] button to close the screen.



#### Video follows audio

 For the operation mode, select "VIDEO FOLLOWS AUDIO". (p. 22)

The setup screen changes accordingly.

Use the [VALUE] knob to select a parameter shown below, and press the [VALUE] knob.

Parameter	Explanation
AUDIO IN 1–7/8 TARGET, USB IN TARGET, Bluetooth IN TARGET, AUDIO PLAYER TARGET, VIDEO IN 1–6 TARGET, V.PLAYER 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.

<sup>\*</sup> For details on the parameter, refer to "10: AUTO SWITCHING" (p. 133).

- 3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
- 4. Press the [MENU] button to close the screen.

#### PinP & KEY scan

 For the operation mode, select "PinP & KEY 1 SCAN" or "PinP & KEY 2 SCAN". (p. 22)

The setup screen changes accordingly.

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

Parameter	Explanation
	Specifies the order in which video signals are shown.
SCAN SEQUENCE	NORMAL: Switches in order from INPUT 1→6 to STILL 1→16.  REVERSE:
	Switches in order from STILL 16→1 to INPUT 6→1.  RANDOM: Switches randomly.
VIDEO IN 1–6 TIME	Specifies the time that the video is shown.
STILL 1–16 TIME	Specifies the time that the still image is shown.
V.PLAYER TIME	Specifies the time that the video image is shown.

<sup>\*</sup> For details on the parameter, refer to "10: AUTO SWITCHING" (p. 133).

- 3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
- 4. Press the [MENU] button to close the screen.

#### DSK scan

Select "DSK SCAN" for the operation mode. (p. 22)
 The setup screen changes accordingly.

Use the [VALUE] knob to select a parameter shown below, and press the [VALUE] knob.

Parameter	Explanation
	Specifies the order in which video signals are shown.
	NORMAL: Switches in order from INPUT 1→6 to STILL 1→16.
SCAN SEQUENCE	REVERSE:
	Switches in order from STILL 16→1 to INPUT 6→1.
	RANDOM:
	Switches randomly.
VIDEO IN 1-6 TIME	Specifies the time that the video is shown.
STILL 1–16 TIME	Specifies the time that the still image is shown.
V.PLAYER TIME	Specifies the time that the video image is shown.

 $<sup>^{\</sup>ast}~$  For details on the parameter, refer to "10: AUTO SWITCHING" (p. 133).

- 3. Use the [VALUE] knob to edit the value of the setting, and press the [VALUE] knob.
- 4. Press the [MENU] button to close the screen.

# Loading a Still Image

You can load a still image, and output it in the same way as video (p. 26) or use it as a source for DSK compositing (p. 35). There are two ways to load a still image: you can load from storage media (either an SD card or a USB flash drive), or you can capture the image from the input video.

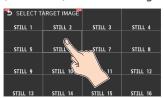
You can save up to sixteen still images in the unit.

\* When still images are saved in the unit, startup takes longer time according to image size and the number of still images saved.

### Loading a Still Image from a Storage

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

- 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.
- [MENU] button → "STILL IMAGE" → select "LOAD FROM STORAGE", and press the [VALUE] knob.
- Touch the screen to select the load destination memory (STILL 1–16) for the still image.



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



\* Use the "SD CARD" or "USB MEMORY" selector at the top of the screen to switch between the storage media to load from.



5. Touch the filename of the still image you want to load.

A confirmation message appears.



- \* If you decide to cancel, press the [EXIT] button.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The still image is loaded into the unit. When the operation is finished, the message "COMPLETED" appears.

7. Press the [MENU] button to close 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 a SD card or USB flash drive for the first time, you must format it using the VR-6HD (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)	
	No more than 64 single-byte alphanumeric characters	
File name	The extension ".bmp", ".png", ".jpg", or ".jpeg" must be	
	added.	

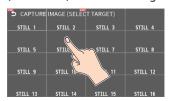
# Capturing a Still Image from Input/Output Video

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

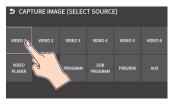
 [MENU] button → "VIDEO" → select "CAPTURE IMAGE", and press the [VALUE] knob.

The CAPTURE IMAGE screen appears.

Touch the screen to select the save destination memory (STILL 1–16) for the still image.



- \* If you decide to cancel, press the [EXIT] button.
- Touch the screen to select the input/output video to capture.



The capture is executed. When the operation is finished, the message "COMPLETED" appears.

Press the [MENU] 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 VIDEO SWITCHER [1]–[6] 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 VIDEO SWITCHER Buttons

A still image loaded into this unit can be assigned to the VIDEO SWITCHER [1]–[6] buttons, and output in the same way as video.

- Load a still image into this unit as described by the following procedures.
  - → "Loading a Still Image from a Storage" (p. 25)
  - → "Capturing a Still Image from Input/Output Video" (p. 26)
- 2. Assign the still image to a VIDEO SWITCHER button by following the steps in "Assigning Video Sources" ("Assigning Video Sources" (p. 15)).
- 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 VIDEO SWITCHER buttons.

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

Use the following methods to output still images.

#### Operating the USER buttons on the dashboard

→ "Using the dashboard" (p. 84)

#### Using a footswitch

→ "Using a Footswitch" (p. 88)

#### Using an expression pedal

→ "Using an Expression Pedal" (p. 89)

#### Inputting an external control signal (GPI)

→ "Inputting a Control Signal" (p. 90)

#### MEMO

#### Outputting a still image with a fade-in effect

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

Assign a still image to the AUX bus and edit the function for the [OUTPUT FADE] button as shown below. (p. 141)

From the [MENU] button  $\rightarrow$  "SYSTEM"  $\rightarrow$ , set "OUTPUT FADE ASSIGN VIDEO" to "AUX".

# Deleting a Still Image

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

 [MENU] button → "STILL IMAGE" → select "DELETE STILL IMAGE", and press the [VALUE] knob.



2. Touch the screen to select the still image to delete.



A confirmation message appears.



- \* If you decide to cancel, press the [EXIT] button.
- 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 close the menu.

### **Deleting All Still Images**

 [MENU] button → "STILL IMAGE" → select "DELETE ALL STILL IMAGE", and press the [VALUE] knob.

A confirmation message appears.



- \* If you decide to cancel, press the [EXIT] button.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

This deletes all of the still images. When the operation is finished, the message "COMPLETED" appears.

3. Press the [MENU] button to close 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. 26) can be saved to a storage (SD card or USB flash drive).

\* You can't export still images that were created while HDCP (p. 18) was set to "ON".

#### NOTE

- When using a SD card or USB flash drive for the first time, you must format it using the VR-6HD (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.
- Still images are saved to the "Roland/VR-6HD/still" folder.
- 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 → "STILL IMAGE" → select "SAVE TO STORAGE", and press the [VALUE] knob.



3. Touch the screen to select the still image to export.



A list of the still images on the storage media (in the still image folder) is shown.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- **4.** Select "FILE NAME" and press the [VALUE] knob. This brings up the software keyboard for input.
- 5. Input the backup file name.
  - \* You can input up to 32 characters.

6. Touch <Enter> in software keyboard.



- 7. Select the file type
  - ① Use the [VALUE] knob to select "SAVE FORMAT", and then press the [VALUE] knob.
  - ② Use the [VALUE] knob to select "BITMAP", "JPEG", or "PNG", and press the [VALUE] knob.
- **8.** 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.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The still image is written to the storage.

The still image is saved to the "Roland/VR-6HD/still" (still image) folder on the storage media.

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

#### MEMO

#### Overwriting a still image

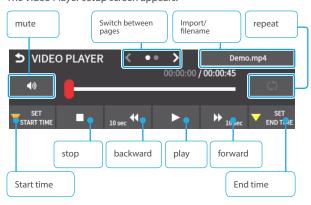
When you touch a filename for an existing still image on the screen in step 5, the filename in the filename list is used. You can overwrite the name.

# 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.

- 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. [MENU] button → select "VIDEO PLAYER", and press the [VALUE] knob.

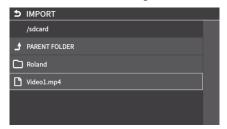
The Video Player setup screen appears.



Touch the filename in the top right-hand corner of the screen.



"Demo.mp4" comes preloaded with the factory settings.
 A list of the videos in the storage is shown.



- \* Touch a folder to move inside it.
- \* Touch < PARENT FOLDER> to move up one level in the folder hierarchy.
- \* Use the "SD CARD" or "USB MEMORY" selector at the top of the screen to switch between the storage media to load from.



5. Touch the filename of the video you want to load.

A confirmation message appears.



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

- 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.
  - \* If the file size of the video is large, it may take some time for the video
- 7. Press the [MENU] button to close the menu.

#### NOTE

- The video is scaled to the output format size.
- When using a SD card or USB flash drive for the first time, you must format it using the VR-6HD (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

## **Outputting a Loaded Video**

You can assign videos to the VIDEO SWITCHER [1]–[6] 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.

 [MENU] button → select "VIDEO PLAYER", and press the [VALUE] knob.

The Video Player setup screen appears.



2. Touch the screen to configure the video player.

Menu item	Explanation	
File name	Shows the filename of the video that was loaded.  Touch to load the video.	
START TIME	Sets the playback start point of the video.	
END TIME	Sets the playback end point of the video.	
REPEAT	Switches repeat playback on/off.	
page 2		
SKIP FORWARD TIME	Sets how much the video fast-forwards (the amount of time) when you touch <▶▶>.	
SKIP BACKWARD TIME	Sets how much the video fast-forwards (the amount of time) when you touch < ◀◀>.	
MIXER INPUT(ENTER)	Adjusts the playback volume of the video.	

#### **3.** Touch <▶>.

The video plays back according to the settings.

# Assigning Videos to the VIDEO SWITCHER Buttons

Here's how to assign a still image loaded into this unit to the VIDEO SWITCHER [1]–[6] buttons, and output the image in the same way as video.

- Follow the steps in "Importing a Video" (p. 29) to load the video into this unit.
- Assign the video to a VIDEO SWITCHER button by following the steps in "Assigning Video Sources" (p. 15).
- 3. Follow the steps in "Switching the Video" (p. 19) to output the video.

#### MEMO

You can also directly touch the MULTI-VIEW or STILL-VIEW screens to select a video signal.

### Inserting a Video in 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 VIDEO SWITCHER buttons.

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

Use the following methods to output video.

#### Operating the USER buttons on the dashboard

→ "Using the dashboard" (p. 84)

#### Using a footswitch

→ "Using a Footswitch" (p. 88)

#### Using an expression pedal

→ "Using an Expression Pedal" (p. 89)

#### Inputting an external control signal (GPI)

→ "Inputting a Control Signal" (p. 90)

#### NOTE

- If either the streaming and recording format or the file played by the video player exceeds 1080/30p, the streaming and 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.

# 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.

 [MENU] button → "VIDEO" → select "FREEZE", and press the [VALUE] knob.

The Freeze function setup screen appears.



- 2. Use the [VALUE] knob to select "TYPE", and then press the [VALUE] knob.
- Use the [VALUE] knob to select the operation mode, 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

4. Touch the screen to specify "VIDEO 1" through "VIDEO 6".

Value	Explanation
ENABLE	The input video freezes.
DISABLE	The input video does not freeze.

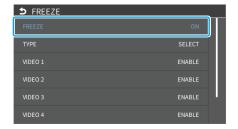
5. Press the [MENU] button to close the screen.

### Freezing the Input Video

 [MENU] button → "VIDEO" → select "FREEZE", and press the [VALUE] knob.

The Freeze function setup screen appears.

- 2. Use the [VALUE] knob to select "FREEZE", and then press the [VALUE] knob.
- 3. Use the [VALUE] knob to select "ON".



The input video freezes.

- To turn the freeze function off, operate the [VALUE] knob again and select "OFF".
- 5. Press the [MENU] button to close the screen.

#### MEMO

You can assign the freeze function to a USER button on the dashboard to turn the function on/off (p. 84).

# 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 fade-out is complete, the [OUTPUT FADE] button is lit.

#### 2. To fade-in, press the [OUTPUT FADE] button once again.

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

Set this from the [MENU] button  $\rightarrow$  "SYSTEM"  $\rightarrow$  "OUTPUT FADE ASSIGN VIDEO".

- To create a fade-in/out effect for only the video without changing the volume, set "OUTPUT FADE ASSIGN AUDIO" to "DISABLE" from the [MENU] button → "SYSTEM".
- To specify fade-in/out time, use the [MENU] button → "SYSTEM" → "OUTPUT FADE ASSIGN TIME".

# **Video Composition Operations**

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

Composites the inset screen on top of the background video. You can use PinP & KEY 1-2 at the same time to display two inset screens.

This example shows you how to composite video using "PinP & KEY 1". The operation is the same when using "PinP & KEY 2".

Inset screen 1 (PinP & KEY 1)

Inset screen 2 (PinP & KEY 2)



**Background video** 

- 1. Press the PANEL [SETUP] button.
- 2. Touch <PinP & KEY 1>.

The PinP & KEY setup screen appears.



To EDIT on PREVIEW screen

3. Touch <SOURCE> to select the video you want to set as the inset screen.

<b>⊅</b> PinP&KE\	11< ••	>	COPY/SWAP	EDIT ON PREVIEW
SOURCE				SIZE
VIDE		PinP	1.0 sec	35.0 %
POSITION H	~~~			CROPPING V
-40.0 %	) b.	0 %	100.0 %	100.0 %
	(3)			

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



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.

Touch the setup screen to adjust the position of the inset screen.

Parameter	Explanation
POSITION H	Adjusts the horizontal position of the inset
	screen.
POSITION V	Adjusts the vertical position of the inset
	screen.
SIZE	Adjusts the size of the inset screen.

#### MEMO

#### Adjusting the inset screen via touch

You can directly drag on an inset screen to adjust its position, and you can pinch in/out to adjust its size.





#### Adjusting using the POSITION knob

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



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



The inset screen is displayed on the final output.

7. 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 turn on/off in tandem with the video transitions.

- After setting "PANEL OPERATION" to "PGM/PST" from the [MENU] button → "SYSTEM" →, set "EFFECTS TRANSITION SYNC" to "ON".
- After step 4, use the [AUTO] and [CUT] buttons 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: from the [MENU] button → "SYSTEM", set "EFFECTS SPOT" to "ENABLE").
- Set the fade-in/out time for the inset screen from the [MENU] button → "PinP & KEY" → "PinP & KEY 1–2" → "TIME".

### Making Detailed Settings for the Inset Screen

You can configure the detailed inset screen settings including size, shape, border width and more from the PinP setup screen.



Parameter	Explanation
SOURCE	Specifies the video source of the inset screen.
TYPE	Specifies the type of PinP compositing.
TIME	Specifies the video transition time.
Adjusts the inset scre	en.
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	Specifies the color of the edge.
BORDER WIDTH	Adjusts the width of the border.
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.

<sup>\*</sup> For details on the parameter, refer to "4: PinP/DSK" (p. 126).

### **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.

Background video

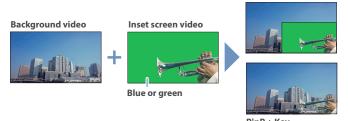
Inset screen video

Music
Festival
Black or white

PinP + Key

#### **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.



•

 On the PinP setup screen, touch "TYPE" to select the PinP composition type.



Value	Explanation
LUMINANCE WHITE KEY	A combination of PinP and Iuminance 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.

- \* For details on the parameter, refer to "4: PinP/DSK" (p. 126).
- **2.** Adjust the intensity of the effect according to the selected type.

# Compositing Video with Downstream Keyer (DSK)

You can further composite titles, subtitles/captions and other video on video composited using split (p. 21) or PinP (p. 33). DSK layer is shown in front of other layers ( memo on p. 33).

### **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. 36)

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. 37)

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.



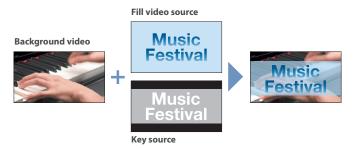
#### Alpha key (p. 39)

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. 40)

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.



### Compositing using DSK

- 1. Press the PANEL [SETUP] button.
- 2. Touch <DSK>.

The DSK setup screen appears.



3. Touch the setup screen to make the following settings.

Parameter	Explanation
MODE	SELF KEY
	LUMINANCE WHITE KEY
TYPE	(Makes white portions transparent according to brightness.)
TIPE	LUMINANCE BLACK KEY
	(Makes black portions transparent according to
	brightness.)

4. Touch <DSK SOURCE> to select a DSK video source.



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.

6. Touch the setup screen to adjust the intensity of the effect.

Parameter	Explanation
DSK	
LEVEL	Adjusts the degree of extraction (transparency) for the key.
GAIN	Adjusts the degree of edge blur (semi-transmissive region) for the key.
TIME	Adjusts the fade-in/out time for the DSK video source.

- \* For details on the parameter, refer to "4: PinP/DSK" (p. 126).
- 7. Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

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

# 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.

- After setting "PANEL OPERATION" to "PGM/PST" from the [MENU] button → "SYSTEM" →, set "EFFECTS TRANSITION SYNC" to "ON".
- 2. After step 5, 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 following parameters on the DSK setup screen.

Parameter	Explanation
FILL	
FILL TYPE	If this is set to "MATTE", the superimposed video is
MATTE COLOR	filled in with the color specified in "MATTE COLOR".
EDGE	
EDGE TYPE	Specifies the type of edge.
EDGE COLOR	Specifies the color of the edge.
EDGE WIDTH	Specifies the width of the edge.

<sup>\*</sup> This setting is in common with chroma key (p. 37).

## 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 background or green background.

# Background video DSK video source H Blue or green

## Compositing using DSK

- 1. Press the PANEL [SETUP] button.
- 2. Touch <DSK>.

The DSK setup screen appears.



3. Touch the setup screen to make the following settings.

Parameter	Explanation
MODE	SELF KEY
TYPE	CHROMA
CHROMA (page 2)	
COLOR	Specify either "GREEN" or "BLUE" as the key color.

4. Touch <DSK SOURCE> to select a DSK video source.



5. 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.

**6.** Touch the setup screen to adjust the intensity of the effect.

Parameter	Explanation	
DSK		
LEVEL	Adjusts the degree of extraction (transparency) for the key.	
GAIN	Adjusts the degree of edge blur (semi-transmissive region) for the key.	
TIME	Adjusts the fade-in/out time for the DSK video source.	

- \* For details on the parameter, refer to "4: PinP/DSK" (p. 126).
- 7. Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

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

# 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.

- After setting "PANEL OPERATION" to "PGM/PST" from the [MENU] button → "SYSTEM" →, set "EFFECTS TRANSITION SYNC" to "ON".
- After step 5, 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.

## Finely adjusting the key color

You can make fine adjustments to the key color.

Configure the following parameters on the DSK setup screen.

Parameter	Explanation
CHROMA (page 2)	
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.

<sup>\*</sup> For details on the parameter, refer to "4: PinP/DSK" (p. 126).

## Modifying the superimposed video

You can fill-in the superimposed video, or add an edge to it. Configure the following parameters on the DSK setup screen.

Parameter	Explanation	
FILL		
FILL TYPE	If this is set to "MATTE", the superimposed video is	
MATTE COLOR	filled in with the color specified in "MATTE COLOR".	
EDGE		
EDGE TYPE	Specifies the type of edge.	
EDGE COLOR	Specifies the color of the edge.	
EDGE WIDTH	Specifies the width of the edge.	

<sup>\*</sup> This setting is in common with luminance key (p. 36).

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

You can specify the key color to be 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.

## Touch <SAMPLING MARKER MODE> on page 3 of the setup screen.

Parameter	Explanation
MODE	SELF KEY
TYPE	CHROMA



The sampling marker  $(\P^{l_n})$  used to sample (detect) the key color is shown on the monitor of this unit.



2. Touch the screen to adjust the sampling marker position.

The sampling marker moves to the position you touch.

Parameter Explanation	
Н	Adjusts the horizontal position.
V	Adjusts the vertical position.

3. Touch <EXEC> on the screen.

A confirmation message appears.



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

## 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.

## Compositing using DSK

- 1. Press the PANEL [SETUP] button.
- 2. Touch <DSK>.

The DSK setup screen appears.



3. Touch the setup screen to make the following settings.

Parameter	Explanation	
MODE	ALPHA KEY	
DSK SOURCE	Specifies the still image with alpha channel.	

4. Touch <DSK SOURCE> to select a DSK video source.



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.



6. Touch the setup screen to adjust the intensity of the effect.

Parameter	Explanation	
MIX LEVEL	Adjusts the key's overall density (output level).	
TIME	Adjusts the fade-in/out time for the DSK video source.	

- \* For details on the parameter, refer to "4: PinP/DSK" (p. 126).
- 7. Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

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

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

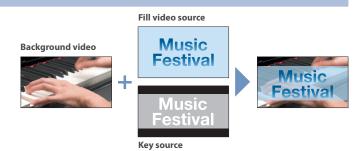
You can make DSK/PinP composition turn on/off in tandem with the video transitions.

- After setting "PANEL OPERATION" to "PGM/PST" from the [MENU] button → "SYSTEM" →, set "EFFECTS TRANSITION SYNC" to "ON".
- After step 5, 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.

## **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.



## Compositing using DSK

- 1. Press the PANEL [SETUP] button.
- 2. Touch <DSK>.

The DSK setup screen appears.



3. Touch the setup screen to make the following settings.

Parameter	Explanation	
MODE EXTERNAL KEY		
KEY SOURCE	Specifies the video to use as the key signal.	
FILL SOURCE	Specifies the fill video source.	

- 4. Touch <FILL SOURCE> to select a fill video source.
- Touch <KEY SOURCE> to select a video used as the key signal.
- **6.** 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.

7. Touch the setup screen to adjust the intensity of the effect.

Parameter	Explanation	
MIX LEVEL	Adjusts the key's overall density (output level).	
TIME	Adjusts the fade-in/out time for the DSK video source.	

- \* For details on the parameter, refer to "4: PinP/DSK" (p. 126).
- **8.** Press the DSK [PGM] button to turn on DSK compositing (lit).



The composition results is sent to final output.

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

# 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.

- After setting "PANEL OPERATION" to "PGM/PST" from the [MENU] button → "SYSTEM" →, set "EFFECTS TRANSITION SYNC" to "ON".
- After step 6, 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.

# **Audio Operations**

# **Assigning Audio Sources to Audio Channels**

You can assign mic audio, line input, video input and so on to channels 1-7/8.

This is an example of how to assign a sound source to channel 1.

 Press the [SETUP] button of the channel whose settings you want to change.



The setup screen for the channel you pressed appears.

Touch the channel assignment area to the right of the INPUT FADER 1 label, and select an audio source to assign to the channel.



Value	Explanation
AUDIO IN 1-6	Audio from AUDIO IN 1-6 jacks
AUDIO IN 7/8	Audio from AUDIO IN 7/8 jacks
USB IN	Audio from USB STREAM connector
Bluetooth IN	Bluetooth IN audio
AUDIO PLAYER	Audio from an audio player
VIDEO IN 1-6 (*1)	Audio from VIDEO IN 1-6 connectors
V.PLAYER	Audio from a video player

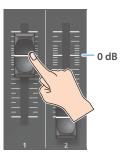
- (\*1) Select channels 1/2, channels 3/4, channels 5/6 or channels 7/8 from HDMI embedded audio.
- 3. Press the lit [SETUP] button to close the setup screen.

# Adjusting the Input Gain (Sensitivity)

Here's how to adjust the input gain so that the audio is at the appropriate level.

Here we explain using the channel 1 audio as an example.

1. Position the channel 1 audio fader near the "0 dB".



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



3. Press the [SETUP] button for channel 1.



The setup screen appears.

Touch <ANALOG GAIN> to set the input gain of channel 1 to minimum (0 dB).



5. Raise and adjust the input gain while outputting the actual audio to be input.

Raise the input gain as high as possible without allowing the SIG/ PEAK indicator of channel 1 to light red when the loudest sound level occurs.

#### NOTE

If the AUDIO FADER/KNOB MODE is set to "CATCH", the fader operations are ignored until the fader's position "catches up" to the current level. (p. 141)

\* The [SETUP] button for the respective channel blinks while the fader operations are being ignored.

#### MEMO

#### Stereo link function

You can link two channels to operate them as a stereo channel. This can be set for channels 1–6. Press the [SETUP] button for the channel whose settings you want to edit, and turn "STEREO LINK" ON.

- \* When stereo link is turned on, the settings of that channel are applied to the other channel in the stereo pair.
- \* When stereo link is on, the audio fader can't be used for the other channel in the stereo pair.
- \* 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.

This can be set for channels 1–6. Press the [SETUP] button of the channel whose setting you want to change, 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.

When a high-level audio signal is input to the HDMI 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.

# Adjusting the Volume Balance

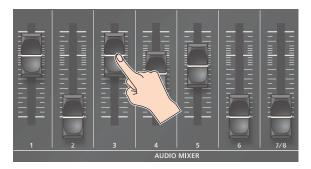
Here's how to adjust the volume balance of each input and the overall volume.

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



While monitoring the audio via speakers or headphones, use the audio faders to 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).



Use the [MAIN] fader to adjust the volume of the output.The MAIN level meter will light yellow at the appropriate volume.



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

## NOTE

If the AUDIO FADER/KNOB MODE is set to "CATCH", the fader operations are ignored until the fader's position "catches up" to the current level. (p. 141)

\* The [SETUP] button for the respective channel blinks while the fader operations are being ignored.

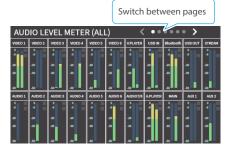
# Adjusting the Volume Balance from the Mixer Screen

The mixer screen on this unit's display lets you adjust the various volumes while checking their values.

 Press the [MONITOR] button a number of times to select AUDIO LEVEL.



The Audio Level screen appears.



- Touch the tabs at the top of the screen to switch to a page from ALL to CUSTOM.
- **3.** Drag the faders on the screen to adjust the volumes. (FADER / AUDIO IN / OTHERS / VIDEO IN / CUSTOM)



You can switch between content views by using the tabs at the top of the screen.

Content displayed	Explanation			
ALL	Audio levels for all input/output channels			
FADER	Sound sources assigned to faders			
AUDIO IN	Audio from AUDIO IN 1–7/8 jacks			
OTHERS	Audio from USB STREAM connector, Bluetooth In, audio player and video player			
VIDEO IN	Audio from VIDEO IN 1–6 connectors			
CUSTOM	Custom settings. This lets you freely assign the inputs and outputs.			

# **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	✓	/	1	<b>/</b>	<b>✓</b>	<b>✓</b>	✓	/	/	<b>✓</b>
AUDIO IN 3-6	✓	_	_	/	<b>✓</b>	✓	/	_	<b>✓</b>	<b>✓</b>
AUDIO IN 7/8	✓	_	_	/	_	✓	/	_	<b>✓</b>	<b>✓</b>
USB IN	✓	_	_	/	_	✓	/	_	<b>✓</b>	<b>✓</b>
Bluetooth IN	✓		_	/	_	✓	/	_	/	<b>✓</b>
VIDEO IN	✓	_	_	/	_	✓	/	_	/	<b>✓</b>
AUDIO PLAYER, VIDEO PLAYER	✓	_	_	✓	_	✓	✓	_	✓	1

 Press the [SETUP] button for the channel to which you wish to apply effects.



The setup screen for the channel you pressed appears.

2. Touch the screen to configure the effects.







- \* For details on the parameter, refer to "2: AUDIO" (p. 100).
- 3. Press the lit [SETUP] button to close the setup screen.

## High-pass filter

Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.

#### Echo canceller (p. 46)

Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.

#### Anti-feedback (p. 46)

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. 46)

Transforms the pitch or character of the voice.

#### Delay (p. 46)

Outputs audio with a delay.

## •Reverb (p. 46)

Adds reverberation to the sound.

## **Using an Effect Preset**

The VR-6HD 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 (highpass 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 on the channel setup screen.
- You cannot overwrite the effect presets. Use the scene memories to save the settings for presets you've edited (p. 65).
- When you load an effect preset, each preset setting is restored to its default setting (factory settings).
- 1. Touch <EFFECT PRESET> on the channel setup screen.



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

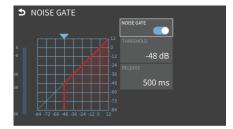
The effect preset is loaded.

## 4. Configure the settings for each effect as necessary.

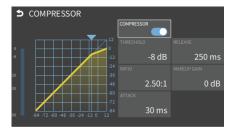
Touch the onscreen graphics to enlarge the settings for the effect. You can also directly drag a point on the graph onscreen to edit.



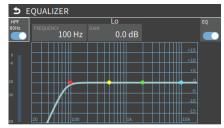
## Noise gate



#### • Compressor



## Equalizer, High-pass filter



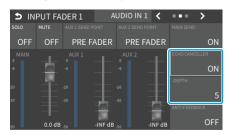
\* For details on the parameter, refer to "2: AUDIO" (p. 100).

# 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 VR-6HD, 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 jacks.



Parameter	Explanation
ECHO CANCELLER	Turns the echo canceller on/off.
DEPTH	Adjusts the effectiveness (1–10) of the echo canceller. Set this to the value at which echoes are reduced the most.

#### MEMO

- The echo canceller supports rooms that are approximately 20 m<sup>2</sup> (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 jacks.



Parameter	Explanation
ANTI-FEEDBACK	Turns the anti-feedback on/off.

# 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 jacks.



Parameter	Explanation
VOICE CHANGER	Turns the voice changer function on/off.
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).

## MEMO

You can assign the function to an AUDIO EFFECT button to switch the voice changer on/off (p. 84).

# 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.



Parameter	Explanation
DELAY	Adjusts the delay time of the audio.

# **Applying Reverb**

Adds reverberation to the sound.

## Adjusting how much reverb to send



Parameter	Explanation
REVERB SEND	Adjusts the amount of audio sent to reverb.

## Adjusting how much reverb is returned

- \* On the audio output setup screen, adjust how much reverb is returned.
- 1. [MENU] button → "AUDIO" → "OUTPUT" → select "MAIN BUS", and press the [VALUE] knob.

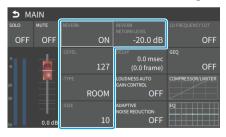
The setup screen appears.

2. Press the AUDIO EFFECT [REVERB] button to turn on (lit).



Reverb turns on.

3. Touch the screen to access the settings.



Parameter	Explanation			
LEVEL	Specifies the amount of sound that is returned from the reverb (return level). This adjusts the depth of the overall reverb.			
ТҮРЕ	Specifies the reverb type.  ROOM: Produces the natural-sounding reverberation of a room.  HALL: Produces the reverberation that is typical of a performance in a concert hall.			
SIZE	Specifies the size of the room. The larger the value, the longer the reverb time.			
REVERB RETURN LEVEL	Adjusts the return level of the reverb.			

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

# **Applying Effects to Output Audio**

Here's how to modify the tonal character by applying effects.

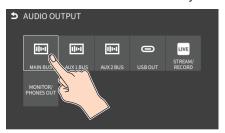
The following table shows the effects that are available.

Audio bus	Reverb	Equalizer	Delay	Compressor/ Limiter	Graphic Equalizer	Adaptive NR	Loudness AGC
MAIN BUS	1	1	1	<b>✓</b>	1	1	<b>√</b>
AUX BUS 1 AUX BUS 2	1	1	1	<b>✓</b>	1	_	_
USB OUT	_	<b>✓</b>	1	_	_	_	_
STREAM/ RECORD	_	1	1	_	_	_	_

1. Press the MAIN [SETUP] button.

The AUDIO OUTPUT screen appears.

2. Touch the <SETUP> icon of the bus you want to adjust.



The setup screen appears for the bus you selected.

- 3. Touch the screen to access the settings.
  - \* For details on the parameter, refer to "2: AUDIO" (p. 100).
- **4.** Press the lit [SETUP] button to close the setup screen.

## Equalizer

This is a four-band equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.

#### Delay

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

It 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. 49)

By continuously monitoring the input audio to detect noise during periods of silence, this removes only the noise component.

#### Loudness Auto Gain Control (p. 50)

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).

- [MENU] button → "AUDIO" → select "AUDIO FOLLOW", and press the [VALUE] knob.
- 2. Use the [VALUE] knob to select the input video that uses audio follow.



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 close the menu.

## Adding an Object for Audio Follow

You can set the audio from the AUDIO IN, USB IN or Bluetooth IN as the object for Audio Follow.

 From [MENU] button → "AUDIO" → select "AUDIO FOLLOW" to choose the input audio to be the object of Audio Follow.



2. Use the [VALUE] knob to select one of "INPUT 1"-"INPUT 6".

Val	lue	Explanation
	DEO 1-6 ILL 1-16	For each audio source, these settings specify the input video that will use the audio follow function.
	PLAYER PUT 1-6	Audio is output only when the specified input video is selected.
OF	F	The audio is always output regardless of the video selection.

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

#### MEMO

You can synchronize the audio with the on/off state of the PinP & KEY or DSK. (p. 141)

## 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.

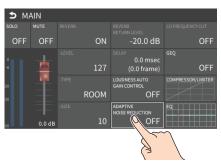
\* The presence or absence of voice in the input signal is determined according to the "talking detector" settings.

#### 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.

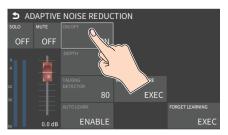
## **Adaptive Noise Reduction**

- Press the MAIN [SETUP] button.
   The AUDIO OUTPUT screen appears.
- Touch <MAIN BUS>.The MAIN bus setup screen appears.
- 3. Touch <ADAPTIVE NOISE REDUCTION>.



The adaptive noise reduction setup screen appears.

4. Touch <ON/OFF> to turn this "ON".



Adaptive noise reduction function turns on.

5. Touch <AUTO LEARN> to set it to "ENABLE".

The noise is automatically detected, and the noise is reduced.

- \* If you want to detect noise manually, touch <MANUAL MEASURE>. When you touch <MANUAL MEASURE>, measurement occurs automatically. When measurement finishes, the message "COMPLETED" appears.
- Touch <DEPTH> to set the depth (how aggressive the noise reduction is).
- If the ambient noise level is high, touch <TALKING DETECTOR> to adjust the sensitivity.
  - \* Increasing the value raises the sensitivity of the talking detector, making detection easier even in noisy environments.

- **8.** If you want to reset the noise-reduced result to its original state, touch <FORGET LEARNING>.
  - \* For details on the menu items, refer to "2: AUDIO" (p. 100).
- 9. Press the lit [SETUP] button to close the setup screen.

## Low Frequency Cut

You can set low frequency cut as well from the MAIN bus setup screen.

1. Touch <LO FREQUENCY CUT> to turn it "ON".

Low frequency cut turns on.



# 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 (LOUDNESS AGC)

1. Press the MAIN [SETUP] button.

The AUDIO OUTPUT screen appears.

2. Touch <MAIN BUS>.

The MAIN bus setup screen appears.

3. Touch <LOUDNESS AUTO GAIN CONTROL>.



The loudness auto gain control setup screen appears.

- Touch <TARGET LKFS> to set the target level for the output audio.
- 5. Touch <ON/OFF> to turn this "ON".



Loudness auto gain control function turns on.

- Touch <SENS> and then use the [VALUE] knob to adjust the sensitivity, adjusting the speed at which the target level (TARGET LKFS) is approached.
  - \* High settings make the loudness approach the target level rapidly, and low settings make the loudness approach the target level gradually.
- To reset the adjusted value and return to the original state, touch <FORGET LEARNING>.
  - \* For details on the menu items, refer to "2: AUDIO" (p. 100).
- 8. Press the lit [SETUP] button to close the setup screen.

# 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 VR-6HD, 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.

 [MENU] button → "AUDIO" → select "AUTO MIXING", and press the [VALUE] knob.

The setup screen appears.

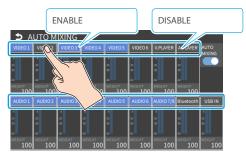


2. Press the AUDIO EFFECT [AUTO MIXING] button to turn on (lit).



Auto mixing function turns on.

Touch the screen to specify whether auto mixing is enabled or disabled for each audio source.



Auto mixing is applied to audio sources that are set to "ENABLE" (blue). For audio that does not require auto mixing such as background music, choose "DISABLE" (black).

Touch the screen to set the priority for volume distribution (WEIGHT).



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.

When air-conditioner noise or the like is a concern, specify the weight level to a low value.

- 5. Press the [MENU] button to close the menu.
- To turn off auto mixing function, press the AUDIO EFFECT [AUTO MIXING] button once again.

# Silencing Only Specific Audio (Mute)

Here's how you can temporarily mute specific audio (the mute function).

## **Muting Input Audio**

1. Press the [MUTE] button on the channels you wish to mute.



The button lights up, and the mute function turns on.

#### MEMO

You can also mute the channels by touching <MUTE> on the setup screen of the respective channel.

## Muting the Output Audio

This mutes the audio from the MAIN bus, USB OUT or the AUX 1/2 bus.

1. Press the MAIN [MUTE] button.



The button lights up, and the mute function turns on.

#### MEMO

You can also mute the buses by touching <MUTE> on the setup screen of the respective 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 applies to the headphone output. It does not affect output other than the headphones.

## Soloing the Input Audio

1. Press the [SOLO] button on the channels you wish to solo.



The button lights up, and the solo function turns on.

In the headphones, you hear only the audio of the channels that are set to solo.

## MEMO

You can also solo the channels by touching <SOLO> on the setup screen of the respective channel.

## Soloing the Output Audio

This solos the audio of the MAIN bus or AUX 1/2 bus.

On the setup screen for the respective bus, touch <SOLO>.



This turns the solo function on.

# 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 pads. You can save up to 12 audio files on this unit.

## Importing an Audio File

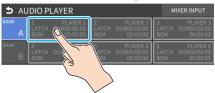
To begin, save the audio files that you created on your computer beforehand to the root directory of your SD card or USB flash drive. Here's an example of how to import an audio file into pad [1].

- Insert the SD card containing material files into the SDXC card slot.
  - \* When using a USB flash drive, connect the USB flash drive to the USB HOST port.
- 2. Press the AUDIO PLAYER [SETUP] button.



The Audio Player setup screen appears.

3. Touch <1> in the audio clip area.

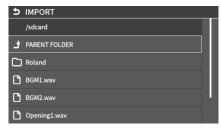


The menu screen appears.

4. Touch <IMPORT>.



A list of audio files on your storage media is shown.



\* Use the "SD CARD" or "USB MEMORY" selector at the top of the screen to switch between the storage media to load from.



5. Touch the filename of the audio file you want to load.

**6.** When the confirmation dialog box appears, select "OK" and press the [VALUE] knob.

The file is imported, and the data is placed in pad [1] (PLAYER 1) as an audio clip.

- \* Select "PREVIEW" to preview the audio file in headphones.
- 7. Press the lit [SETUP] button to close the setup screen.

## **Supported files**

Format WAV (Linear PCM, 48 kHz, 16 bit, stereo/ 44.1 kHz, 16 bit, stereo)	
File name	Must use single-byte alphanumeric characters, up to 64 characters long including the extension.  * The extension "wav" must be added.

## **Playing Back Audio Clips**

1. Set the AUDIO PLAYER [LEVEL] knob to "0dB".



## NOTE

If AUDIO FADER/KNOB MODE is set to "CATCH", the knob operations are ignored until the knob's position "catches up" to the current level. (p. 141)

Press a pad from [1]-[6] corresponding to the position of the audio clip you want to play back.



This plays back the corresponding audio clips.

3. While playing back the audio clips, use the AUDIO PLAYER [LEVEL] knob to adjust the overall volume for all audio clips. Adjust the input gain so that the SIG/PEAK indicator of the audio player doesn't light up red when the sound level is at its loudest.

#### MEMO

If you leave this information showing on the audio player setup screen, you can play back the audio clips while checking their information (clip name, playback time, loop, etc.).

## Setting an Audio Clip

Press the AUDIO PLAYER [SETUP] button.
 The Audio Player setup screen appears.

2. Touch the number you want to set in the audio clip area.



The menu screen appears.

3. Touch <EDIT>.



The setting screen appears.

4. Touch the screen to access the settings.

Parameter	Explanation	
	Sets the name for an audio clip.	
NAME	Touch here to bring up the software keyboard and enter a clip name.	
DURATION	Shows the length of an audio clip.	
OFFSETTIME	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.	
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.	

<sup>\*</sup> For details on the parameter, refer to "7: AUDIO PLAYER" (p. 129).

**5.** Press the lit [SETUP] button to close the setup screen.

## Swapping, copying and deleting clips

You can copy and swap clips, and you can also initialize and delete the audio clips you no longer need.

1. Press the AUDIO PLAYER [SETUP] button.

The Audio Player setup screen appears.

**2.** Touch the number you want to set in the audio clip area. The menu screen appears.

**3.** Touch <COPY>, <SWAP> or <INITIALIZE> to make the settings.

Function	Operation
COPY	Touch the area where you want to copy the audio clip.
SWAP	Touch the area of the audio clip you want to swap.
INITIALIZE	_

A confirmation message appears.

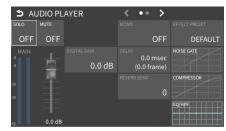
- 4. Select "OK" and press the [VALUE] knob.
- 5. Press the lit [SETUP] button to close the setup screen.

## Mixer Settings for the Audio Player

Press the AUDIO PLAYER [SETUP] button.
 The Audio Player setup screen appears.

2. Touch <MIXER INPUT>.

The Audio Player mixer screen appears.



- 3. Touch the screen to configure the send amount for each bus.
- 4. Press the lit [SETUP] button to close the setup screen.

# **Outputting AUX-bus Audio**

The VR-6HD has four different audio buses: the MAIN bus, AUX 1 bus, AUX 2 bus and MONITOR bus. You can assign a desired bus to each output connector or jack.

Audio bus Explanation		Explanation
	MAIN bus	All input audio is mixed and output (main output).
- 1	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.  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

 [MENU] button → "AUDIO" → select "OUTPUT ASSIGN", and press the [VALUE] knob.

The AUDIO OUTPUT ASSIGN screen appears.



Touch the screen to configure the bus to assign to each jack or connector.

connector	Selected bus
AUDIO OUT 1 (XLR)– AUDIO OUT 2 (RCA) VIDEO OUT 1–3	MAIN BUS, AUX 1 BUS, AUX 2 BUS, MONITOR BUS
PHONES OUT/MONITOR USB OUT STREAM/RECORD AUDIO RECORD	MAIN BUS, AUX 1 BUS, AUX 2 BUS,

## Sending Audio to the AUX Bus

\* Use the [AUX 1] and [AUX 2] knobs to adjust the volume of audio output from the AUX bus.

#### NOTE

If AUDIO FADER/KNOB MODE is set to "CATCH", the knob operations are ignored until the knob's position "catches up" to the current level. (p. 141)

 Press the [SETUP] button for the channel you wish to send to the AUX bus.

The setup screen for the channel you pressed appears.

Touch <AUX 1 SEND POINT> on page 2 to set the send amount.



- \* For the AUX 2 bus, touch < AUX 2 SEND POINT>.
- 3. Press the lit [SETUP] button to close the setup screen.

## Setting the character of the sound

You can select whether to send either the original audio or the audio processed with effects to the AUX bus.

 Press the [SETUP] button for the channel you wish to send to the AUX bus.

The setup screen for the channel you pressed appears.

2. Touch <AUX 1 SEND POINT> to make that setting.



	Value	Explanation	
	DRY	Sends the source audio with no effects applied.	
		Sends the effect-applied audio.	
	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).	
		Sends the effect-applied audio.	
1	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).	

3. Press the lit [SETUP] button to close the setup screen.



You can check the status of each channel from the [MENU] button  $\rightarrow$  "AUDIO"  $\rightarrow$  SEND SETTINGS screen and adjust the send amounts at once.



# Adding Input Audio to an HDMI Video for Output

The VIDEO OUT connectors support 6-channel embedded audio. You can add input audio (sound) to an HDMI video that is output.

## Assigning HDMI embedded audio and sound

You can assign the input audio signal you like to channels 3–8 of HDMI embedded audio.

Embedded-audio	Audio
CH 1	Bus (L) assigned in OUTPUT ASSIGN (p. 55)
CH 2	Bus (R) assigned in OUTPUT ASSIGN (p. 55)
CH 3/4	AUDIO IN 1/2, AUDIO IN 3/4
CH 5/6	AUDIO IN 5/6, AUDIO IN 7/8 USB IN, Bluetooth IN, AUDIO PLAYER
CH 7/8	VIDEO IN 1–6, VIDEO PLAYER

## As a backup for visual or sound recording...

Digital audio is extracted from the HDMI 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...

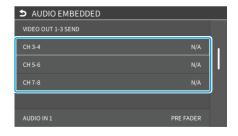
Taking multilingual narration or other such audio, making it embedded audio and adding it to HDMI video lets you later extract and use the digital audio for the required language.

 [MENU] button → "AUDIO" → select "AUDIO EMBEDDED", and press the [VALUE] knob.



## Assigning the audio

 Use the [VALUE] knob to select the embedded audio channel for VIDEO OUT 1–3 SEND, 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 1-7/8	Audio from AUDIO IN 1–7/8 jacks	
USB IN	Audio from USB STREAM connector	
Bluetooth IN	Bluetooth IN audio	
AUDIO PLAYER	Audio from an audio player	
VIDEO IN 1-6	Audio from VIDEO IN 1–6 connectors	
VIDEO PLAYER	Audio from a video player	

## Setting the character of the sound

 Use the [VALUE] knob to select the input audio, and press the [VALUE] knob.



Use the [VALUE] knob to select "DRY", "PRE FADER", or "POST FADER", and press the [VALUE] knob.

Value	Explanation
OFF	Audio is not sent.
DRY Sends the source audio with no effects applied.	
	Sends the effect-applied audio.
PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
POST	Sends the effect-applied audio.
FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).

**6.** Press the [MENU] button to close the menu.

The audio including channel 3–6 embedded audio is output from the VIDEO OUT 1–3 connectors.

# Live Streaming

# Outputting Video/Audio to a Computer for Streaming

Here's how the video and audio mixed by the VR-6HD 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.

In order for the audio and video from the VR-6HD to be correctly viewed on the computer, app that supports the USB video class and USB audio class 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**

- Using a USB 3.0 cable, connect a USB 3.0 port on the computer to the USB STREAM connector on the VR-6HD.
- Power-on the VR-6HD.
- 3. Start the computer.

When communication with the computer has been established, the computer recognizes the VR-6HD as a USB video device and USB audio device. The first time that the VR-6HD is connected to the computer, the standard drivers of the operating system are installed automatically.

- Operate the VR-6HD to prepare the video and audio that you want to output to the computer.
- 5. On your computer, verify the input from the VR-6HD.

Start app that supports the USB video class and audio class, and verify the video and audio that are being input from the VR-6HD.

#### MEMO

#### If the video is garbled or operation is otherwise unstable

Press the [MENU] button  $\rightarrow$  "VIDEO"  $\rightarrow$  "OUTPUT"  $\rightarrow$  "USB OUT"  $\rightarrow$  execute "CONNECTION RESET" to try reconnecting the computer with the VR-6HD.

#### **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

Uncompressed (YUY2) and compressed (Motion JPEG) video are supported.

## **Using the Loopback Function**

Audio from the computer can be input to the VR-6HD 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 VR-6HD 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 VR-6HD 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.

## What to do when an HD video (1920 x 1080) output via USB changes to SD video (640 x 480)

If you are using a USB cable that doesn't conform to USB 3.0 specs or later, the video output resolution is changed to SD ( $640 \times 480$ ). To output video for streaming to your computer in HD ( $1920 \times 1080$ ), be sure to use a cable that meets the USB 3.0 specs (or later).

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

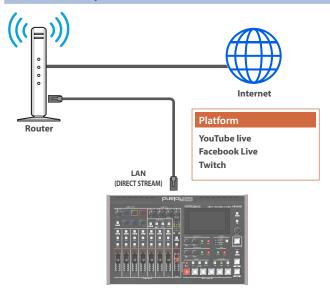
You can check the status of the connected USB cable by following these steps.

 [MENU] button → "VIDEO" → "OUTPUT" → select "USB OUT", and press the [VALUE] knob. The USB connection status is shown.

<b>೨</b> USB OUT			
OUTPUT STATUS	NOT CONNECTED		
OUTPUT FORMAT	YUY2 & MJPEG		
OUTPUT STATUS	Status		
CONNECTED (3.0)	Connected using USB 3.0.		
CONNECTED (2.0)	Connected using USB 2.0.		
NOT CONNECTED	No connection.		

# Streaming/Capturing Video Directly

## **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 V.BITRATE (p. 127) to match the speed of your Internet connection.

[MENU] button → "STREAM/RECORD" → "V.BITRATE"

 $\mbox{\sc V.BITRATE}$  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.

We recommend that you test the speed of your Internet connection to ensure that a bandwidth of around twice the V.BITRATE value is available before beginning the livestream.

# Starting/Stopping the Livestream, Audio or Video Recording

The livestream, audio recording and video recording on the VR-6HD start and stop all 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

## Turning the livestream on/off

 [MENU] button → select "STREAM/RECORD", and press the [VALUE] knob.

The streaming/recording screen appears.

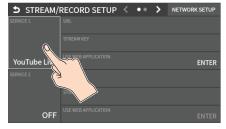


2. Touch <SETUP> at the top right-hand corner of the screen.



The Record/Stream setup screen appears.

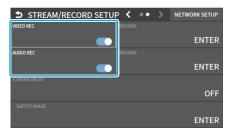
Touch either SERVICE 1 or SERVICE 2 to select the platform for streaming.



Select "OFF" when you're not streaming.

## Turning video and audio recording on/off

- 4. Touch the page tab in the top part of the screen to select page 2.
- 5. Touch "VIDEO REC" and "AUDIO REC" to turn them on/off.



## Livestreaming via YouTube Live

## **Getting ready**

- Create a Google account beforehand.
- Make sure that the VR-6HD is connected to the Internet for livestreaming.
- To record audio/video, set AUDIO REC and VIDEO REC to "ON" (p. 58).

## Operating this unit

 On the streaming/recording setup screen, touch either <SERVICE 1> or <SERVICE 2> and select "YouTube Live".



2. Touch <USE WEB APPLICATION>.

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" annears

The URL and STREAM KEY are applied to the VR-6HD.

#### 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. Select the streaming/video recording screen.

The parameters for stopping/starting the livestream, audio and video recording are shown in the status area.



11. Touch <ON AIR>.

The message "ARE YOU SURE YOU WANT TO START STREAMING?" is shown.

12. Touch <OK>.

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

13. Touch <ON AIR> once more to stop streaming.

The message "ARE YOU SURE YOU WANT TO STOP STREAMING?" is shown.

**14.** Touch < OK>.

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 also assign streaming start/stop to the USER buttons on the dashboard.



## Livestreaming via Facebook Live

## **Getting ready**

- Create a Facebook account beforehand.
- Make sure that the VR-6HD is connected to the Internet for livestreaming.
- To record audio/video, set AUDIO REC and VIDEO REC to "ON" (p. 58).

## Operating this unit

 On the streaming/recording setup screen, touch either <SERVICE 1> or <SERVICE 2> and select "Facebook Live".



2. Touch < USE WEB APPLICATION>.

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.	
	Group	The content is streamed to a group.	
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 VR-6HD.

#### 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. Select the streaming/video recording screen.

The parameters for stopping/starting the livestream, audio and video recording are shown in the status area.



10. Touch <ON AIR>.

The message "ARE YOU SURE YOU WANT TO START STREAMING?" is shown.

11. Touch < OK>.

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

12. Touch <ON AIR> once more to stop streaming.

The message "ARE YOU SURE YOU WANT TO STOP STREAMING?" is shown.

**13.** Touch < OK>.

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 also assign streaming start/stop to the USER buttons on the dashboard.



## Livestreaming via Twitch

## **Getting ready**

- Create a Twitch account beforehand.
- Make sure that the VR-6HD is connected to the Internet for livestreaming.
- To record audio/video, set AUDIO REC and VIDEO REC to "ON" (p. 58).

## Operating this unit

 On the streaming/recording setup screen, touch either <SERVICE 1> or <SERVICE 2> and select "Twitch".



2. Touch <USE WEB APPLICATION>.

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.
- 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 VR-6HD.

#### 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. Select the streaming/video recording screen.

The parameters for stopping/starting the livestream, audio and video recording are shown in the status area.



10. Touch <ON AIR>.

The message "ARE YOU SURE YOU WANT TO START STREAMING?" is shown.

11. Touch < OK>.

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

12. Touch <ON AIR> once more to stop streaming.

The message "ARE YOU SURE YOU WANT TO STOP STREAMING?" is shown.

13. Touch <OK>.

The livestream ends.

#### MEMO

You can also assign streaming start/stop to the USER buttons on the dashboard.



## **Streaming with Custom Settings**

## **Getting ready**

- Make sure that the VR-6HD is connected to the Internet for livestreaming.
- To record audio/video, set AUDIO REC and VIDEO REC to "ON" (p. 58).

## Operating this unit

 On the streaming/recording setup screen, touch either <SERVICE 1> or <SERVICE 2> and select "CUSTOM".



2. Touch <USE WEB APPLICATION>.

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 VR-6HD.

#### 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. Select the streaming/video recording screen.

The parameters for stopping/starting the livestream, audio and video recording are shown in the status area.



9. Touch <ON AIR>.

The message "ARE YOU SURE YOU WANT TO START STREAMING?" is shown.

10. Touch < OK>.

Livestreaming starts.

If audio/video recording is turned on, the audio/video starts at the same time as the livestream.

11. Touch <ON AIR> once more to stop streaming.

The message "ARE YOU SURE YOU WANT TO STOP STREAMING?" is shown.

**12.** Touch < OK>.

The livestream ends.

#### MEMO

You can also assign streaming start/stop to the USER buttons on the dashboard.



## **Tethering**

You can connect your smartphone to this unit and use it for tethering.



## iPhone:

- Use the Lightning to USB-A cable included with your iPhone to connect to the USB HOST port of the VR-6HD.
- 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.** Touch <NETWORK SETUP> at the top right-hand corner of the streaming/recording setup screen.



The NETWORK screen appears.

- 6. Touch <PRIORITY> and select "TETHERING"
- 7. Touch <START TETHERING>.
- **8.** Go back to the streaming/recording setup screen.

Once the NETWORK display in the status area changes from "TETHERING: ---" to "TETHERING: UP", you can use the mobile network connection of your iPhone.



9. To stop tethering, return to the NETWORK screen and touch <STOP TETHERING>.

## **Android devices:**

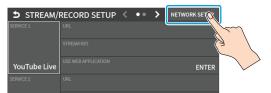
#### NOTE

The method of operation differs depending on the smartphone model. Check the owner's manual for your device for details.

 Connect the USB HOST port of the VR-6HD to your smartphone with a USB cable.

A notification is shown at the top of your smartphone screen.

- On your smartphone, select "Settings" → "Network and Internet" → "Hotspot and tethering".
- 3. Activate "USB tethering".
- Touch <NETWORK SETUP> at the top right-hand corner of the streaming/recording setup screen.



The NETWORK screen appears.

- 5. Touch <PRIORITY> and select "TETHERING"
- 6. Touch <START TETHERING>.
- 7. Go back to the streaming/recording setup screen.

Once the NETWORK display in the status area changes from "TETHERING: ---" to "TETHERING: UP", you can use the mobile network connection of your smartphone.



8. To stop tethering, return to the NETWORK screen and touch <STOP TETHERING>.

## MEMO

You can also make the tethering start/stop from the menu. [MENU] button  $\rightarrow$  "NETWORK"  $\rightarrow$  select "TETHERING", and press the [VALUE] knob.

## Avoiding Sporadic Issues When Livestreaming (Safety Delay)

The VR-6HD 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 quide.

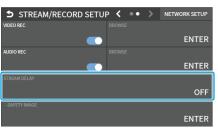




- The streaming delay time can be set in five-second intervals, to a maximum of 60 seconds.
- This unit switches to the still image you imported as the "safety image".
- The unit switches to the safety image only during livestreaming.
   You can only check the switch to the safety image by looking at the livestreamed video. The image shown on this unit's display or the video outputted via the VIDEO OUT connector doesn't switch to the safety image.
- Use this function by assigning the USER buttons on the dashboard to switch to the still image and to mute the audio.

## **Setting the Streaming Delay Time**

1. Select page 2 on the streaming/recording setup screen.



2. Touch <SAFETY DELAY> to configure the setting.



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

## Using the safety delay function

- 1. Select the streaming/recording setup screen.
- 2. Touch <ON AIR>.
- **3.** Touch < OK>. Livestreaming starts.
- Touch <SAFETY IMAGE> at the lower right corner of the screen.



The streaming video switches to a still image, and the streaming audio is muted.

## MEMO

You can also assign safety delay for streaming to the USER buttons on the dashboard



# **Other Functions**

# 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 VR-6HD 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 VR-6HD 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  $\rightarrow$  "MEMORY/MACRO/SEQ"  $\rightarrow$  "SCENE MEMORY"  $\rightarrow$  "SETUP"  $\rightarrow$  "START UP" to specify the scene memory number.

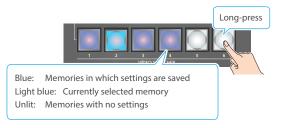
## Saving to a Scene Memory

## Only for scene memories 1–6

1. Press the [SCENE MEMORY] button.



Long-press the VIDEO SWITCHER button for the number where you want to save the settings.



All VIDEO SWITCHER buttons briefly light up blue, and the current settings are saved in the selected scene memory.

#### Scene memory 1–32

 [MENU] button → "MEMORY/MACRO/SEQ" → select "SCENE MEMORY", and press the [VALUE] knob.

The scene memory screen appears.

Long-press the area of the scene memory that you want to save.



A popup menu appears.

3. Touch <SAVE>.



A confirmation message appears.

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



This saves the current settings to the selected scene memory.

#### MEMO

• About scene memories 7-32

You can use the buttons to save or recall scene memories 7–32. Configure the memory to recall for each VIDEO SWITCHER button from the [MENU] button  $\rightarrow$  "MEMORY/MACRO/SEQ"  $\rightarrow$  "SCENE MEMORY"  $\rightarrow$  "SETUP"  $\rightarrow$  "BUTTON ASSIGN".

• You can prohibit settings from being saved or initialized (p. 66) to protect the scene memories.

Select "MEMORY PROTECT" from the [MENU] button → "MEMORY/ MACRO/SEQ" → "SCENE MEMORY" → "SETUP", and set it 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. 95), any demo data you have edited or deleted is restored to its factory settings.

## Recalling a Scene Memory

## Only for scene memories 1–6

1. Press the [SCENE MEMORY] button.



Press the VIDEO SWITCHER button for the number whose setting you want to recall.



The scene memory settings are recalled.

## Scene memory 1–32

- [MENU] button → "MEMORY/MACRO/SEQ" → select "SCENE MEMORY", and press the [VALUE] knob.
- 2. Touch <SETUP>.

The Scene Memory setup screen appears.

Touch the area of the scene memory number whose settings you wish to recall.



The scene memory settings are recalled.

## MEMO

• You can choose not to recall a certain setting when recalling a scene memory.

Select "LOAD PARAMETER" from the [MENU] button → "MEMORY/MACRO/SEQ" → "SCENE MEMORY" → "SETUP", and configure whether the settings are recalled per parameter for LOAD PARAMETER.

 You can apply video transition effects, make an inset screen fade in and so on when you recall a scene memory.

Set the following menu items from the [MENU] button → "MEMORY/MACRO/SEQ" → "SCENE MEMORY" → "SETUP".

Menu item	Explanation	
FADETIME	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.	

## **Initializing a Scene Memory**

Here's how to initialize the contents of a scene memory and erase it.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "SCENE MEMORY", and press the [VALUE] knob.

The scene memory screen appears.

Long-press the area of the scene memory that you want to initialize.

A popup menu appears.

3. Touch <INITIALIZE>.



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.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "SCENE MEMORY", and press the [VALUE] knob.

The scene memory screen appears.

2. Long-press the area of the scene memory whose name you want to change.

A popup menu appears.

3. Touch <NAME EDIT>.



This brings up the software keyboard for input.

- 4. Input the macro name.
- \* You can input up to 8 characters.
- 5. Touch <Enter> in software keyboard.



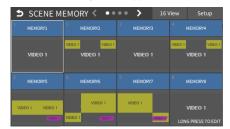
The name is changed.

## **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.

 [MENU] button → "MEMORY/MACRO/SEQ" → "SCENE MEMORY" → select "8VIEW", and press the [VALUE] knob.

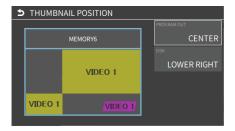
The scene memory screen appears.



Long-press the area of the scene memory whose thumbnail you want to change.

A popup menu appears.

3. Touch <THUMBNAIL>.



This shows the thumbnail layout screen.

- 4. Touch the screen to access the settings.
- 5. Press the [EXIT] button.

## Saving Scene Memories to a USB Flash Drive

You can save the scene memories (1–32) as a single file (.VR6SCENE) to a storage media (SD card or USB flash drive) that's connected to the VR-6HD. This lets you access saved scene memory files on the storage media and load them to use as needed.

#### NOTE

- When using a SD card or USB flash drive for the first time, you must format it using the VR-6HD (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.
- The scene memory file is saved to the "Roland/VR-6HD/scene\_ memory" folder.

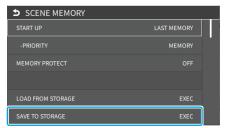
## Saving a new file

- 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.
- [MENU] button → "MEMORY/MACRO/SEQ" → select "SCENE MEMORY", and press the [VALUE] knob.

The scene memory screen appears.

Touch <SETUP>.

The setup screen appears.



Use the [VALUE] knob to select "SAVE TO STORAGE", and then press the [VALUE] knob.

This shows a list of scene memory files on the storage media.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- **5.** Select "FILE NAME" and press the [VALUE] knob.

This brings up the software keyboard for input.

- 6. Input the backup file name.
  - \* You can input up to 32 characters.
- 7. Touch <Enter> in software keyboard.
- When you have finished entering the file 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.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The scene memory file (.VR6SCENE) is saved to the storage media. When the operation is finished, the message "COMPLETED" appears.

10. Press the [MENU] button to close the 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.
- [MENU] button → "MEMORY/MACRO/SEQ" → select "SCENE MEMORY", and press the [VALUE] knob.

The scene memory screen appears.

3. Touch <SETUP>.

The setup screen appears.

4. Use the [VALUE] knob to select "SAVE TO STORAGE", and then press the [VALUE] knob.

This shows a list of scene memory files on the storage media.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- Touch the scene memory file that you want to overwrite.The filename shown in the list of filenames is used.
- 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.
- 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.

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

## Loading

Here's how to load the scene memory settings that are saved on storage media. When you recall 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.
- [MENU] button → "MEMORY/MACRO/SEQ" → select "SCENE MEMORY", and press the [VALUE] knob.

The scene memory screen appears.

3. Touch <SETUP>.

The setup screen appears.



Use the [VALUE] knob to select "LOAD FROM STORAGE", and press the [VALUE] knob.

This shows a list of scene memory files on the storage media.



\* Use the "SD CARD" or "USB MEMORY" selector at the top of the screen to switch between the storage media to load from.



5. Touch the scene memory file that you want to recall.

A confirmation message appears.



- \* If you decide to cancel, press the [EXIT] button.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The scene memory settings are loaded. When the operation is finished, the message "COMPLETED" appears.

7. Press the [MENU] button to close 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.
- [MENU] button → "MEMORY/MACRO/SEQ" → "MACRO" → select "8VIEW", and press the [VALUE] knob.

The macro screen appears.

Long-press the area of the macro number you want to record.



A popup menu appears.

3. Touch <EDIT>.



The Macro edit screen appears.

Touch the arrows in the macro number selection area to select the macro to edit.



This shows the list of operations recorded in the macro.

**5.** Touch <ADD FUNCTION>.



The EDIT FUNCTION menu appears.



- Touch the screen to select the operation to record to the macro.
  - \* See "Editing a macro" (p. 70) for details on which operations you can record to a macro.
- 7. Touch the screen to configure the related parameters.



**8.** Touch <TIMING> to set the timing used to execute the operation.

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 5–10 to finish making the macro.
- 11. Press the [EXIT] button to close the screen.

## **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

 Using step 4 in "Recording a Macro" (p. 69), touch the line you want to edit from the operation list.



A popup menu appears.

2. Touch <EDIT FUNCTION>.

The EDIT FUNCTION 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 TYPE	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.

Follow steps 5–9 in "Recording a Macro" (p. 69) to edit the operation.



## Copying a function

- Copying is disabled if the number of recorded functions have reached the limit (10).
- Using step 4 in "Recording a Macro" (p. 69), touch the line you want to copy from the operation list.

A popup menu appears.

2. Touch < DUPLICATE>.



The copied operation is added to the last line of the list.

## Moving a function

 Using step 4 in "Recording a Macro" (p. 69), touch the line you want to move from the operation list.

A popup menu appears.

- 2. Touch < MOVE>.
- A green cursor is shown to indicate the move destination.
   Use the [VALUE] knob to specify the move destination, and press the [VALUE] knob.

This moves the line.



## Deleting a function

 Using step 4 in "Recording a Macro" (p. 69), touch the line you want to delete from the operation list.

A popup menu appears.

2. Touch < DELETE>.

This deletes the operation line.



## MEMO

#### What's the difference between "PREVIEW" and "EXECUTE"?

When you touch <PREVIEW> or <EXECUTE> at the bottom of the edit screen, this executes the macro. 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



- In step 4 of "Recording a Macro" (p. 69), bring up the operation list.
- 2. Touch <REC>.



The macro recording screen appears.



Operate the controls you want to record.Each time you operate a control, the operation is added to the list.

- \* To stop recording, touch <CANCEL>.
- \* Touch <CLEAR> to erase all the recorded operations.
- **4.** Touch <APPLY> to close the screen. This confirms the operations you've recorded.

## **Executing a Macro**

## Only for macros 1-6

1. Press the [MACRO] button.



Press the VIDEO SWITCHER button corresponding to the number of the macro you wish to execute.



This executes the macro.

## Macro 1–100

 [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

Touch the arrows in the page switching area to select the page that contains the macro you want to execute.



3. Touch the area containing the macro you want to execute.



This executes the macro.

#### MEMO

#### Assigning macros to the VIDEO SWITCHER buttons

You can change which macros are assigned to each VIDEO SWITCHER button.

Set the macros (1–100) you want to assign for each VIDEO SWITCHER button from the [MENU] button  $\rightarrow$  "MEMORY/MACRO/SEQ"  $\rightarrow$  "MACRO"  $\rightarrow$  "SETUP"  $\rightarrow$  "BUTTON ASSIGN".

## **Copying Macro Settings**

Here's how to copy the settings from one macro to another.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

Long-press the area corresponding to the copy source macro number.



A popup menu appears.

3. Touch <COPY>.



A cursor appears, which is used to select the copy destination.

Use the [VALUE] knob to select the copy destination macro number, and 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 macro settings are copied.

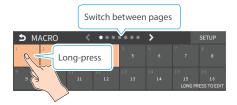
## **Swapping the Macro Settings**

Here's how to swap settings between macros.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

Long-press the area corresponding to the swap source macro number.



A popup menu appears.

3. Touch <SWAP>.



A cursor appears, which is used to select the swap destination.

Use the [VALUE] knob to select the copy destination macro number, and 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.

This swaps the settings of the macros.

## **Initializing a Macro**

You can initialize a macro and completely erase its settings.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

2. Long-press the area of the macro number you want to initialize.



A popup menu appears.

3. Touch <INITIALIZE>.



A confirmation message appears.

- \* If you decide to cancel, press the [EXIT] button.
- 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. 95), any demo data you have edited or deleted is restored to its factory settings.

## Renaming a Macro

Here's how to rename a macro.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

Long-press the area of the macro number you want to rename.



A popup menu appears.

3. Touch < NAME EDIT>.



This brings up the software keyboard for input.

- 4. Input the macro name.
  - \* You can input up to 8 characters.
- 5. Touch <Enter> in software keyboard.



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 VR-6HD. You can access the saved macro setting file on the storage and load it into the unit for use when needed.

### NOTE

- When using a SD card or USB flash drive for the first time, you must format it using the VR-6HD (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.
- Macro files are saved to the "Roland/VR-6HD/macro" folder.

### 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.
- [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

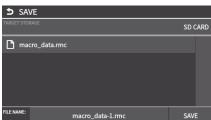
3. Touch <SETUP>.

The setup screen appears.



Use the [VALUE] knob to select "SAVE TO STORAGE", and then press the [VALUE] knob.

The macro setting files in the storage are listed.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- Select "FILE NAME" and press the [VALUE] knob.This brings up the software keyboard for input.
- 6. Input the backup file name.
  - \* You can input up to 32 characters.
- **7.** Touch <Enter> in software keyboard.

When you have finished entering the file 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.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The macro settings file (.RMC) is saved to the storage. When the operation is finished, the message "COMPLETED" appears.

10. Press the [MENU] button to close the 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. [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

3. Touch <SETUP>.

The setup screen appears.

Use the [VALUE] knob to select "SAVE TO STORAGE", and then press the [VALUE] knob.

The macro setting files in the storage are listed.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- Touch the macro settings file that you want to overwrite.The filename shown in the list of filenames is used.
- **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.
- 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.

### Loading

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 → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

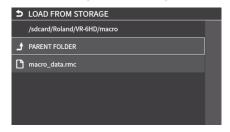
3. Touch <SETUP>.

The setup screen appears.



Use the [VALUE] knob to select "LOAD FROM STORAGE", and press the [VALUE] knob.

The macro setting files in the storage are listed.



\* Use the "SD CARD" or "USB MEMORY" selector at the top of the screen to switch between the storage media to load from.



5. Touch the macro settings file that you want to recall.

A confirmation message appears.



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

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

## **Initializing All Macros**

Here's how to initialize and erase all the macros.

1. [MENU] button → "MEMORY/MACRO/SEQ" → select "MACRO", and press the [VALUE] knob.

The macro screen appears.

2. Touch <SETUP>.

The setup screen appears.

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

The macros are initialized.

## 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. 81).

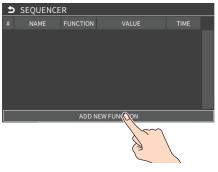
[MENU] button → "MEMORY/MACRO/SEQ" → "SEQUENCER"
 → select "LIST EDIT", and press the [VALUE] knob.

The list of operations recorded in the sequencer is shown.

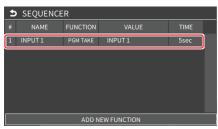
\* Demo sequences are registered by factory default.



2. Touch <ADD FUNCTION>.

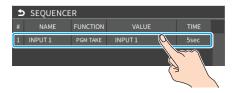


The operation is added to the last line of the list.



3. Touch the line that was added.

A popup menu appears.



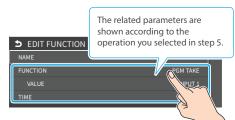
4. Touch <EDIT FUNCTION>.

The edit screen for the operation to record to the sequencer appears.

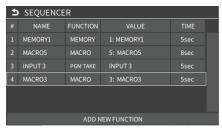
**5.** Touch <FUNCTION> to select the operation to record.

Value	Explanation
PGM TAKE	Switches the final output video.
MEMORY	Recalls a scene memory.
MACRO	Executes a macro.

6. Configure the related parameters.



7. Repeat steps 2–6 to finish making the list.



**8.** Press the [EXIT] button to close the screen.

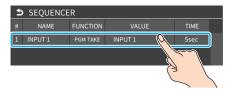
### **Editing a list**

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 1 of "Recording to the Sequencer" (p. 76), bring up the operation list.
- 2. Touch the line to edit.

A popup menu appears.



3. Touch <EDIT FUNCTION>.

The edit screen for the operation to record to the sequencer appears.

- 4. Touch <FUNCTION> to select the operation to record.
- 5. Configure the related parameters.

Menu	Value	Explanation
	Sets the operation to record to the sequencer.  * The related menu is shown according to the operation you set.	
FUNCTION	PGM TAKE	Switches the final output video.
	MEMORY	Recalls a scene memory.
	MACRO	Executes a macro (a series of recorded operations).
NAME	_	Shows the name of the operation.
	Sets the operation when auto sequence is on.	
	Pause	Pauses the auto sequence.
TIME	AUTO	Executes the next operation in the sequence.
	1–120sec	Executes the next operation after delaying for a specified amount of time.

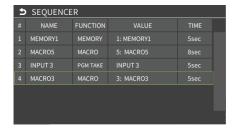
### Moving a function

- 1. In step 1 of "Recording to the Sequencer" (p. 76), bring up the operation list.
- 2. Touch the line to move.

A popup menu appears.

- 3. Touch <MOVE>.
- A green cursor is shown to indicate the move destination.
   Use the [VALUE] knob to specify the move destination, and press the [VALUE] knob.

This moves the line.

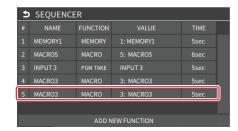


### Copying a function

- 1. In step 1 of "Recording to the Sequencer" (p. 76), bring up the operation list.
- 2. Touch the line to copy.

A popup menu appears.

3. Touch < DUPLICATE>.



The copied operation is added to the last line of the list.

#### Deleting a function

- In step 1 of "Recording to the Sequencer" (p. 76), bring up the operation list.
- 2. Touch the line to delete.

A popup menu appears.

3. Touch < DELETE>.

This deletes the operation line.

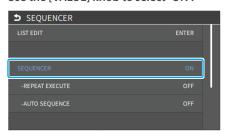
## Running the Sequencer

Press the button to make the functions recorded in the sequencer execute one at a time.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "SEQUENCER", and press the [VALUE] knob.

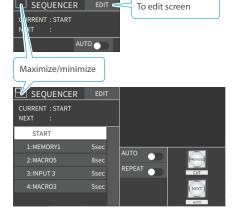
The setup screen appears.

- Use the [VALUE] knob to select "SEQUENCER", and then press the [VALUE] knob.
- 3. Use the [VALUE] knob to select "ON".



4. Press the [MENU] button to close the screen.

Shows the sequencer execution screen.



5. Press the [AUTO] (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.

Press the [AUTO] (NEXT) button at the timing when you want the next function to execute.

The function is executed.

#### [CUT] (PREVIOUS) button

Press the [CUT] button if you want to return to the state at which the previous function was completed.

### MEMO

You can also touch <NEXT> or <PREVIOUS> on the screen to operate the sequencer.

7. Repeat step 6.

Using the operations in steps 1–3 again, turn the sequencer function off by setting SEQUENCER to "OFF".

### **MEMO**

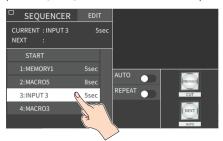
#### Repeatedly executing a function in the list

You can repeatedly execute functions that are in a list. Once the last function is finished, press the [AUTO] button to execute the function at the beginning of the list.

From the [MENU] button → "MEMORY/MACRO/SEQ" → "SEQUENCER" → set "REPEAT EXECUTE" to "ON".

### Executing a function from the middle of the list

When you directly touch a line corresponding to the desired operation in the list, the operation for that line switches to a completed state. You can press the [AUTO] button to execute the next operation afterwards.



## 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.

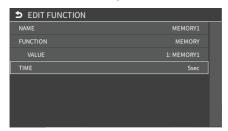
### Configuring the auto sequence settings

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 1 of "Recording to the Sequencer" (p. 76), bring up the operation list.
- 2. Touch the line to edit.

  A popup menu appears.
- 3. Touch <EDIT FUNCTION>.

The edit screen for the operation to record to the sequencer appears.



Touch <TIME> to select the action for moving to the next operation.

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.

- 5. Repeat steps 2-4.
- **6.** Press the [EXIT] button to close the screen.

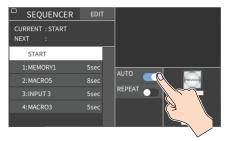
### Running the auto sequence

 Use the operations in steps 1–3 of "Running the Sequencer" (p. 78) to turn the sequencer "ON".

The list of operations recorded in the sequencer is shown.



2. Touch <AUTO> to turn the auto sequencer function on.



The functions in the list are executed, starting at the beginning. When the last function is finished, the sequence stops automatically.

#### When a function is set to "PAUSE"

When the function is finished, auto sequence is paused. You can press the [AUTO] (NEXT) button to manually execute the next function.

- \* When executing a function that's set to a value other than "PAUSE", the auto sequence is resumed.
- 3. Touch <AUTO> again to turn off the auto sequence.
- To turn the sequencer function off, using the operations in steps 1–3 of "Running the Sequencer" (p. 78) and set SEQUENCER to "OFF".

#### MEMO

You can repeatedly execute functions that are in a list. When the last function is finished, the sequencer returns to the beginning.

From the [MENU] button → "MEMORY/MACRO/SEQ" → "SEQUENCER" → set "REPEAT EXECUTE" to "ON".

## 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 VR-6HD.

You can access the saved sequence file on the storage and load it into the unit for use when needed.

### NOTE

- When using a SD card or USB flash drive for the first time, you must format it using the VR-6HD (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.
- Sequence files are saved to the "Roland/VR-6HD/sequencer" folder.

### 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.
- [MENU] button → "MEMORY/MACRO/SEQ" → select "SEQUENCER", and press the [VALUE] knob.

The setup screen appears.



3. Use the [VALUE] knob to select "SAVE TO STORAGE", and then press the [VALUE] knob.

The sequence files in the storage are listed.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- Select "FILE NAME" and press the [VALUE] knob.
   This brings up the software keyboard for input.
- 5. Input the backup file name.
  - \* You can input up to 32 characters.
- 6. Touch <Enter> in software keyboard.

 When you have finished entering the file 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.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The sequence file (.RSQ) is saved to the storage. When the operation is finished, the message "COMPLETED" appears.

9. Press the [MENU] button to close the 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.
- [MENU] button → "MEMORY/MACRO/SEQ" → select "SEQUENCER", and press the [VALUE] knob.

The setup screen appears.

3. Use the [VALUE] knob to select "SAVE TO STORAGE", and then press the [VALUE] knob.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- Touch the sequence file that you want to overwrite.
   The filename shown in the list of filenames is used.
- 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.
- 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.

### Loading

Here's how to load the sequencer settings that are saved on a storage. When you load settings, the current sequencer settings are overwritten.

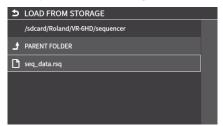
 [MENU] button → "MEMORY/MACRO/SEQ" → select "SEQUENCER", and press the [VALUE] knob.

The setup screen appears.



2. Use the [VALUE] knob to select "LOAD FROM STORAGE", and press the [VALUE] knob.

The sequence files in the storage are listed.



\* Use the "SD CARD" or "USB MEMORY" selector at the top of the screen to switch between the storage media to load from.



3. Touch the sequence file that you want to load.

A confirmation message appears.



- \* If you decide to cancel, press the [EXIT] button.
- 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 close the menu.

## Initializing the Sequencer

Here's how to initialize the sequencer and erase all the settings.

 [MENU] button → "MEMORY/MACRO/SEQ" → select "SEQUENCER", and press the [VALUE] knob.

The setup screen appears.

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.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.
- 4. Press the [MENU] button to close the menu.

### MEMO

### About the sequencer demo data

Once you perform a factory reset (p. 95), 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 (.VR6) and back up it to a storage (SD card, USB flash drive) connected to the VR-6HD. You can access the backed up setting file on the storage and restore it into the unit for use when needed.

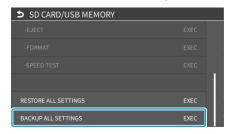
#### NOTE

- When using a SD card or USB flash drive for the first time, you must format it using the VR-6HD (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.
- Backup files are saved to the "Roland/VR-6HD/backup" folder.

## **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.
- [MENU] button → "SD CARD/USB MEMORY" → select "BACKUP ALL SETTINGS", and press the [VALUE] knob.



The backup files in the storage are listed.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- **3.** Select "FILE NAME" and press the [VALUE] knob. This brings up the software keyboard for input.
- 4. Input the backup file name.
  - \* You can input up to 32 characters.

- 5. Touch <Enter> in software keyboard.
- 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.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The settings file (.VR6) is backed up on the storage. When the operation is finished, the message "COMPLETED" appears.

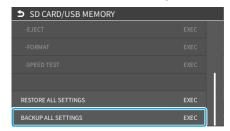
8. Press the [MENU] button to close the menu.

### 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.
- [MENU] button → "SD CARD/USB MEMORY" → select "BACKUP ALL SETTINGS", and press the [VALUE] knob.



The backup files in the storage are listed.



- \* You can use "TARGET STORAGE" onscreen to switch between the storage media used for export.
- **3.** Touch the backup file that you want to overwrite. The filename shown in the list of filenames is used.
- 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.
- 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 close the menu.

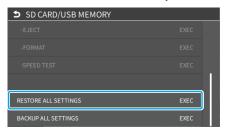
### MEMO

Some settings are not saved to the file, such as the "TEST PATTERN" and "TEST TONE" settings in the SYSTEM menu.

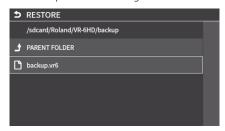
### Restoring

Here's how to restore this unit's settings that you saved on a storage. When you restore settings, the current settings are overwritten.

 [MENU] button → "SD CARD/USB MEMORY" → select "RESTORE ALL SETTINGS", and press the [VALUE] knob.



The backup files in the storage are listed.



\* Use the "SD CARD" or "USB MEMORY" selector at the top of the screen to switch between the storage media to load from.



2. Touch the settings file that you want to restore.

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 settings are restored. When the operation is finished, the message "COMPLETED" appears.

## Using the dashboard

On the VR-6HD, you can show the information you want in the multi-view, such as the clock, streaming status and so on. For the dashboard, you can show different content on the display of this unit and in the video sent to VIDEO OUT. You can also assign USER buttons to the display, which you can operate like a touch panel.

### Displaying Information on the Dashboard

### Shown on this unit's display

- [MENU] button → select "DASHBOARD", and press the [VALUE] knob.
- 2. Touch the arrows in the page switching area to show page 1.
- Use the [VALUE] knob to select "LCD ASSIGN A" or "LCD ASSIGN B", and press the [VALUE] knob.
- Use the [VALUE] knob to select the function that you want to assign, and press the [VALUE] knob.

The selected function is shown in the multi-view of this unit's display.

Value	Explanation
N/A	No function is assigned.
CLOCK	Shows the clock.
STREAM STATUS 1	Shows the streaming/video recording status. Touch this to start/stop streaming or video recording.
STREAM STATUS 2	Shows the streaming/video recording status.
USER BUTTON 1/2	Shows USER buttons 1/2, to which you can assign the functions you like.
USER BUTTON 3/4	Shows USER buttons 3/4, to which you can assign the functions you like.

### Shown in VIDEO OUT

- [MENU] button → select "DASHBOARD", and press the [VALUE] knob.
- 2. Touch the arrows in the page switching area to show page 2.
- 3. Use the [VALUE] knob to select "VIDEO OUT ASSIGN A" or "VIDEO OUT ASSIGN B", and press the [VALUE] knob.
- 4. Use the [VALUE] knob to select the function that you want to assign, and press the [VALUE] knob.

The selected function is shown in the multi-view of VIDEO OUT.

Value	Explanation
N/A	No function is assigned.
CLOCK	Shows the clock.
STREAM STATUS 1	Shows the streaming/video recording
	status.
STREAM STATUS 2	Shows the streaming/video recording
	status.

# Assigning Functions to the USER Buttons on the Dashboard

You can use the dashboard settings for this unit's display to assign USER buttons 1/2 or 3/4, and assign any function to the USER buttons that appear on the display.

This lets you execute the functions you assign when you press a USER button on this unit's display.

- Follow the steps in "Displaying Information on the Dashboard" (p. 84) to assign a USER button to the dashboard.
- 2. Select the function by touching the "CATEGORY" and "VALUE" of the USER button you want to reassign.



### **CATEGORY**

Value	Evaluation
	Explanation
N/A	No function is assigned.
FREEZE	Turns the freeze function on/off.
AUTO SWITCHING	Turns the auto switching function on/off.
INPUT ASSIGN	Each time you press a button, the video source assigned to the specified crosspoint button switches to the following sources in order:  VIDEO OUT 1 → 6 → STILL 1 → 16
STILL OUTPUT	Pauses the normal output, and previews or final outputs a cut of the still image.
VIDEO PLAYER OUTPUT	Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.
LOAD MEMORY	Recalls a scene memory.
INPUT SCAN	Each time you press a button, the INPUT 1–6 video changes in order.
MEMORY SCAN	Each time you press a button, scene memories 1–32 are recalled in order.
PinP & KEY 1–2 SCAN	Each time you press a button, the PinP & KEY 1–2 inset screen videos switch in order.
DSK SCAN	Each time you press the button, the DSK caption video switches in order.
EXTERNAL REC CONTROL	Controls the recorder's video record start/ stop if a recorder that supports REC control functionality is connected (p. 85).
MACRO EXECUTE	Executes a macro (a series of recorded operations).
SEQUENCER	Shows the sequencer execution screen.
STREAM/RECORD	Assigns a streaming-related function.
VIDEO PLAYER	Assigns a video player-related function.
GPO (ONE SHOT)	Outputs a control signal for 0.5 seconds.
GPO (ALTERNATE)	The control signal output is switched on/ off while the button is pressed.
CAMERA CONTROL	Turns the camera control function on/off.
SYSTEM	Assigns a system-related function.

#### **OVALUE**

Configures the detailed settings related to "CATEGORY".

## Controlling an External Recorder's Video Record Start/Stop from the VR-6HD

By connecting a recorder that supports REC control functionality, you can start/stop a recorder (external REC control functionality) from the VR-6HD.

For more about recorders that support the REC control function, refer to the Roland website.

https://proav.roland.com/

### Setting

#### Assigning a USER button

To use the external REC control function, you must assign the recorder's video recording start/stop functions to a USER button on the dashboard.

 Follow the steps in "Using the dashboard" (p. 84) to assign the "EXTERNAL REC CONTROL" function to a USER button on the dashboard.



### Turning REC control on/off

2. From the [MENU] button → "VIDEO" → "OUTPUT" → "VIDEO OUT 1–3", set "EXTERNAL REC CONTROL" to "ON".



### Operation

 Touch a USER button on the dashboard to which the recording start/stop function has been assigned.

Each time you touch the button, the recorder switches between video record start/stop.



\* This example shows the function assigned to USER button 1.

#### NOTE

The lights of the USER buttons on the dashboard show the status of the VR-6HD, and are not linked with the recorder's status.

For instance, if the recorder stops recording for some reason while the USER buttons are lit, these buttons do not automatically go dark in response.

## Remotely Controlling a PTZ Camera

You can connect up to six cameras via the DIRECT STREAM port and remotely control them from the VR-6HD.

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.

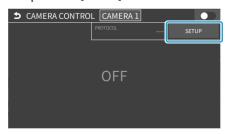
### **Network Settings on the Camera**

In order to control a camera from the VR-6HD, you need to make network settings on the camera. You can register up to six cameras.

 Follow the steps in "Using the dashboard" (p. 84) to assign the "CAMERA CONTROL" function to a USER button on the dashboard.

### Network settings for the camera

2. [MENU] button → "REMOTE" → select "CAMERA CONTROL", and press the [VALUE] knob.



This shows the camera control.

3. Touch <SETUP>.



The setup screen appears.

4. Touch the screen to configure the camera's network settings.

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"  Touch <login name=""> to bring up the software keyboard for input, and enter the login name needed to connect with the camera.</login>
PASSWORD	When "PROTOCOL" is "JVC"  Touch <password> to bring up the software keyboard for input, and enter the password needed to connect with the camera.</password>

5. Press the [EXIT] button to close the setup screen.

### Registering Camera Settings in a Preset

Up to 6 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.
- In step 2 of "Network Settings on the Camera" (p. 86), bring up the camera control screen.
- 2. Touch the screen to operate the camera settings.



Menu item	Explanation	
POSITIONER	Adjusts the horizontal/vertical position. Drag on the screen to operate the camera.	
SPEED	Adjusts the speed at which the c direction.	amera changes
PROTOCOL	Specifies the camera's protocol.	
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	Specifies the exposure mode.	
TALLY CH	Specifies the connector from which the camera video is input.  When the camera video from the VR-6HD is the final output, the camera's tally light is lit.	

(\*1) You can operate the camera while touching the screen.

- 3. Touch the arrows in the page switching area to show page 2.
- 4. Touch <STORE>.
- **5.** Touch the preset number (CAMERA PRESET 1–6) area where you want to register the settings.



A confirmation message appears.

- \* If you decide to cancel, press the [EXIT] button.
- **6.** Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The camera settings are registered in the preset.

## **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.

 In step 3 of "Registering Camera Settings in a Preset" (p. 86), bring up the camera control screen.

### Recalling presets from a single camera

Menu item	Explanation
CAMERA ID	Select the camera from which you want to recall a preset.
ALL CAMERAS LOAD	Choose "OFF".



### Recalling from all cameras simultaneously

Menu item	Explanation
ALL CAMERAS LOAD	Choose "ON".



Touch the preset number (CAMERA PRESET 1–6) area you want to recall.



- \* If you decide to cancel, press the [EXIT] button.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

The settings are recalled from the cameras.

**4.** Press the [MENU] button to close the menu.

### Recalling presets with the buttons

By assigning the camera control function to a USER button on the dashboard, you can recall presets using the buttons.

To use the camera control function, you must assign the camera control function to a USER button on the dashboard.

### Assigning a USER button

 Assign the "CAMERA CONTROL" function to a USER button by following the steps in "Using the dashboard" (p. 84).



### Recalling a preset

- On the camera control screen, set "ALL CAMERAS LOAD" to "ON" (all cameras) or "OFF" (a single camera).
- 3. Press the USER button to which you've assigned the camera control function to turn camera control on.



- $^{*}\,$  This example shows the function assigned to USER button 1.
- Use the [VALUE] knob to change the value to "CAMERA ID", and select the camera (1–6) from which to recall the presets.
- **5.** Press the VIDEO SWITCHER button for the preset number whose setting you want to recall.



The settings are recalled from the cameras.

To turn camera control off, press the USER button on the dashboard once more.

## Using a Footswitch

You can use a footswitch connected to the CTL/EXP 1 and 2 jacks to control the VR-6HD with your foot. You can assign various functions to the footswitch.

 [MENU] button → "REMOTE" → "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. Use the [VALUE] knob to select CTL A or CTL B "CATEGORY" and "VALUE", and press the [VALUE] knob.
- 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 CH SELECT	Switches the video sent to the PGM bus.
PST CH SELECT	Switches the video sent to the PST bus.
AUX CH SELECT	Switches the video sent to the AUX bus.
INPUT 1-6 ASSIGN	Changes the video assigned to INPUT 1-6.
STILL OUTPUT	Pauses the normal output, and previews or final outputs a cut of the still image.
VIDEO PLAYER OUTPUT	Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.
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 1–6 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.

Value	Explanation
DSK SCAN	The DSK caption video switches 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.

#### **OVALUE**

Configures the detailed settings related to "CATEGORY".

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

#### MEMO

- See "Connecting a Footswitch" (p. 9) 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 VR-6HD 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.

 [MENU] button → "REMOTE" → "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 CALIBRATION", and press the [VALUE] knob.

The EXP CALIBRATION screen appears.



- As directed by the screen, step on the pedal in the fully heeldown position, and press the [VALUE] knob.
- 5. As directed by the screen, step on the pedal in the fully toe-down position, and press the [VALUE] knob.

When the "COMPLETED" indication appears, calibration is completed.

6. Press the [MENU] button to close 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.

 [MENU] button → "REMOTE" → "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 press the [VALUE] knob.
- 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.
	FADE: Operates the video fader.
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	Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.
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

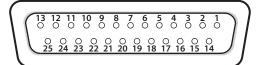
Configures the detailed settings related to "CATEGORY".

## Control Using the TALLY/GPIO Connector

You can use control signals inputted to the TALLY/GPIO connector via GPI to remotely control the VR-6HD 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 VIDEO IN 1
2	TALLY/GPO 2	PST VIDEO IN 1
3	TALLY/GPO 3	PGM VIDEO IN 2
4	TALLY/GPO 4	PST VIDEO IN 2
5	TALLY/GPO 5	PGM VIDEO IN 3
6	TALLY/GPO 6	PST VIDEO IN 3
7	TALLY/GPO 7	PGM VIDEO IN 4
8	TALLY/GPO 8	PST VIDEO IN 4
9	TALLY/GPO 9	PGM VIDEO IN 5
10	TALLY/GPO 10	PST VIDEO IN 5
11	TALLY/GPO 11	PGM VIDEO IN 6
12	TALLY/GPO 12	PST VIDEO IN 6
13	TALLY/GPO 13	GPO 1
14	TALLY/GPO 14	GPO 2
15	TALLY/GPO 15	GPO 3
16	TALLY/GPO 16	GPO 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.

- From the [MENU] button → "REMOTE" → "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 CH SELECT	Switches the video sent to the PGM bus.
PST CH SELECT	Switches the video sent to the PST bus.
AUX CH SELECT	Switches the video sent to the AUX bus.
INPUT 1-6 ASSIGN	Changes the video assigned to INPUT 1–6.
STILL OUTPUT	Pauses the normal output, and previews or final outputs a cut of the still image.
VIDEO PLAYER OUTPUT	Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.
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 a control signal is input.
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 1–6 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	Each time a control signal is input, the PinP & KEY 1–2 inset screen videos switch in order.
DSK SCAN	Each time a control signal is input, the DSK caption video changes in order.
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.

### **●VALUE**

Configures the detailed settings related to "CATEGORY".

## **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 VIDEO SWITCHER button is selected.

 [MENU] button → "REMOTE" → "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 VIDEO IN 1-6	Video for which the final output is VIDEO IN 1–6
PGM STILL 1–16	The final output is still images 1–16.
PGM VIDEO PLAYER	Video for which the final output is from the video player
PGM INPUT 1-6	Use the VIDEO SWITCHER [1]–[6] buttons to select the final output video.
PST VIDEO IN 1–6	Video for which the preview output is VIDEO IN 1–6.
PST STILL 1–16	The preview output is still images 1–16.
PST VIDEO PLAYER	Video for which the preview output is from the video player
PST INPUT 1–6	Use the VIDEO SWITCHER [1]–[6] buttons to select the preview output video.

3. Press the [MENU] button to close 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.

#### MEMO

The output status of video to PinP & KEY, DSK, and AUX bus can be applied in the tally indication.

If each item in "TALLY SETTINGS" in the TALLY/GPO menu is set to "ENABLE", the video output status to the corresponding bus is applied in the tally indication.

**→** (p. 135)

## **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.

 [MENU] button → "REMOTE" → "TALLY/GPO" → select "TALLY/GPO 1"-"TALLY/GPO 16", and press the [VALUE] knob.



- Use the [VALUE] knob to select one of "GPO 1"-"GPO 16", and press the [VALUE] knob.
- 3. Press the [MENU] button to close 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 a USER button, footswitch or other control to which a GPO output function has been assigned.

### Operating the USER buttons on the dashboard

The USER buttons light up while control signals are being output.

→ "Using the dashboard" (p. 84)

#### Using a footswitch

→ "Using a Footswitch" (p. 88)

### Inputting an external control signal (GPI)

→ "Inputting a Control Signal" (p. 90)

## Control Using the USB Numeric Keypad

You can connect a USB numeric keypad to the USB MEMORY port to control video transitions and perform other operations.

When you press a USB numeric keypad, the functions assigned to KEYPAD 0-ENTER are executed.

### NOTE

To control using a USB numeric keypad, make sure that Numlock is activated on the USB numeric keypad.

[MENU] button → "REMOTE" → "NUMERIC KEYPAD" →
select KEYPAD 0-ENTER "CATEGORY" and "VALUE," and
press the [VALUE] knob.

The NUMERIC KEYPAD screen appears.



2. Use the [VALUE] knob to select the functions assigned to KEYPAD 0–ENTER, and then press [VALUE].

### **OCATEGORY**

Value	Explanation
N/A	No function is assigned.
PGM CH SELECT	Switches the video sent to the PGM bus.
PST CH SELECT	Switches the video sent to the PST bus.
AUX CH SELECT	Switches the video sent to the AUX bus.
INPUT 1-6 ASSIGN	Changes the video assigned to INPUT 1–6.
STILL OUTPUT	Pauses the normal output, and previews or final outputs a cut of the still image.
VIDEO PLAYER OUTPUT	Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.
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 on/off.
AUTO MIXING	Turns the auto mixing function on/off.
REVERB (MOMENTARY)	Reverb turns on only while the key is pressed.
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 a key, the INPUT 1–6 video changes in order.
SCENE MEMORY SCAN	Each time you press a key, preset 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 key.
DSK SCAN	Each time a control signal is input, the DSK caption video changes in order.
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 while the key is pressed.

### **●VALUE**

Configures the detailed settings related to "CATEGORY."

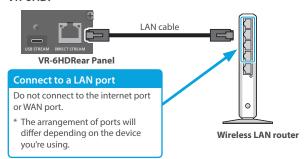
## **Using Smart Tally**

Roland's own Smart Tally system turns your smart device or computer that's connected to the VR-6HD 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.
- Use a LAN cable to connect the LAN port on your wireless LAN master device to the DIRECT STREAM port on the VR-6HD.



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 VR-6HD.
- From the [MENU] button → "NETWORK", set "CONFIGURE" to "USING DHCP" and press the [VALUE] knob.

The IP address, subnet mask, and default gateway are obtained automatically.



Use the [VALUE] knob to select "NETWORK INFORMATION", and press the [VALUE] knob.

The NETWORK INFORMATION screen appears.



When "CONNECTION" 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**

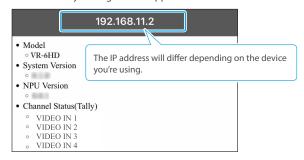
 From the VR-6HD's [MENU] button → "NETWORK" → select "NETWORK", and press the [VALUE] knob.

The NETWORK INFORMATION screen appears.



- 2. Start a browser on your smart device or computer.
- 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.
- 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 VR-6HD.



### NOTE

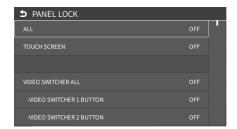
- Depending on the network conditions, the wireless LAN (Wi-Fi) communication speed or connection might be unstable, so that the tally indication is not displayed correctly. In this case, reload the page.
- Depending on the version of the browser that you're using, the tally indication might not be displayed 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).

 [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	The following settings are turned on/off together.
TOUCH SCREEN	Touch panel operation
VIDEO SWITCHER ALL	Buttons in VIDEO section
VIDEO SWITCHER 1–6 BUTTON	VIDEO SWITCHER [1]–[6] buttons
CUT BUTTON	[CUT] button
AUTO BUTTON	[AUTO] button
MODE ALL	Buttons in MODE section
INPUT SELECT BUTTON	[INPUT SELECT] button
AUX BUTTON	[AUX] button
SCENE MEMORY BUTTON	[SCENE MEMORY] button
MACRO BUTTON	[MACRO] button
TRANSITION ALL	Buttons in TRANSITION section
MIX BUTTON	[MIX] button
WIPE BUTTON	[WIPE] button
SPLIT BUTTON	[SPLIT] button
PinP & KEY 1–2 ALL	Buttons in PinP & KEY 1–2 section
PVW BUTTON	PinP & KEY 1–2 [PVW] button
PGM BUTTON	PinP & KEY 1–2 [PGM] button
POSITION H KNOB	[POSITION H] knob
POSITION V KNOB	[POSITION V] knob
DSK ALL	Buttons in DSK section
PVW BUTTON	DSK [PVW] button
PGM BUTTON	DSK [PGM] button
MONITOR BUTTON	[MONITOR] button
PANEL SETUP BUTTON	PANEL [SETUP] button
OUTPUT FADE BUTTON	[OUTPUT FADE] button
AUDIO MIXER 1-7/8 ALL	Buttons and knobs in AUDIO INPUT section
SETUP BUTTON	SETUP [1]–[7/8] buttons
SOLO BUTTON	SOLO [1]-[7/8] buttons
MUTE BUTTON	MUTE [1]–[7/8] buttons

Menu item	Explanation
MAIN ALL	Buttons and knobs in AUDIO OUTPUT section
SETUP BUTTON	MAIN [SETUP] button
MUTE BUTTON	MAIN [MUTE] button
LEVEL FADER	MAIN [LEVEL] fader
AUX 1 KNOB	[AUX 1] knob
AUX 2 KNOB	[AUX 2] knob
USB STREAM KNOB	[USB STREAM] knob
STREAM/RECORD KNOB	[STREAM/RECORD] knob
AUDIO EFFECT ALL	Buttons in AUDIO EFFECT section
SETUP BUTTON	AUDIO EFFECT [SETUP] button
AUDIO EFFECT 1–3 BUTTON	AUDIO EFFECT [1]–[3] button
AUDIO PLAYER ALL	Buttons in AUDIO PLAYER section
SETUP BUTTON	AUDIO PLAYER [SETUP] button
AUDIO PLAYER 1-6 PAD	AUDIO PLAYER [1]–[6] pads
AUDIO PLAYER LEVEL KNOB	AUDIO PLAYER [LEVEL] knob

- 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 close 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)

Here's how you can return the settings of the VR-6HD to their factory-set state.

If following the procedures described in this manual does not cause the result you expect, try executing a factory reset.

### NOTE

- When you execute a factory reset, all the settings you've made as well as the data saved on the VR-6HD (preset memory, macros, sequencer, and still images) is lost.
- Do not turn off the power while the message "PROCESSING..." is shown.
- [MENU] button → "SYSTEM" → select "FACTORY RESET", and press the [VALUE] knob.

A confirmation message appears.



- \* If you decide to cancel, press the [EXIT] button.
- Use the [VALUE] knob to select "OK", and then press the [VALUE] knob.

Factory reset is executed. When the operation is finished, the message "COMPLETED" appears.

## Remotely Controlling the VR-6HD

To remotely control the VR-6HD, you can use an external device to send control signals to the unit (p. 90), use a dedicated app, or use LAN/RS-232 commands.

# Using the dedicated apps "VR-6HD RCS" and "VR-6HD Remote"

Dedicated apps are available for computers ("VR-6HD RCS") and for the iPad ("VR-6HD Remote").

These apps can be downloaded from the Roland website.

### https://proav.roland.com/

\* For details on operation, refer to the Owner's Manual of "VR-6HD RCS" or "VR-6HD Remote".

#### VR-6HD RCS (Windows/Mac)

Use the dedicated "VR-6HD RCS" app to operate the VR-6HD from your computer.

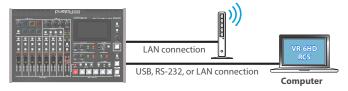
You can connect either wirelessly or via cable.

#### 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)



### **VR-6HD Remote**

Use the dedicated "VR-6HD Remote" app to operate the VR-6HD from your iPad.

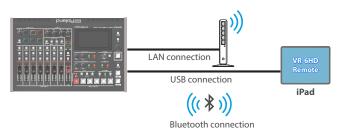
You can connect either wirelessly or via cable.

#### Wireless connection

- Bluetooth connection
- Connection via wireless LAN master device (Wi-Fi)

### Wired connection (via cable)

USB connection (USB Type-C cable, Lightning to USB camera adapter)



### LAN/RS-232 command

The VR-6HD 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 VR-6HD from a controlling device lets you operate the VR-6HD

See "Remote Control Guide" (PDF) for details on each interface and for a list of LAN/RS-232 commands.

https://proav.roland.com/manuals/

### MEMO

#### **MIDI** implementation

The VR-6HD supports MIDI remote control.

See "MIDI Implementation" in the "Remote Control Guide" (PDF) for details

# Menu List

## 1: VIDEO

### VIDEO INPUT

Menu item	Value (bold text: default value)	Explanation
VIDEO IN 1-6	Adjusts the video that is input from	n the VIDEO IN 1–6 connectors.
INPUT STATUS	Enter	Displays information about the incoming video (format, size, etc.).
COLOR SPACE	<b>AUTO</b> , RGB(0-255), RGB(16-235), YPbPr(SD), YPbPr(HD)	Specifies the color space.
FLICKER FILTER	OFF, ON	When this is "ON", flickering is reduced.
FLIP H	OFF, ON	When this is "ON", the video is input with left and right flipped.
FLIPV	OFF, ON	When this is "ON", the video is input with top and bottom flipped.
EDID (*1)	INTERNAL  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).  When this is "INTERNAL", EDID information for all formats that can be input to the VR-6HD will be transmitted.  What is EDID?  EDID is data that is transmitted from the VR-6HD to the source device when the VR-6HD is connected to a source device. EDID contains data such as the formats that can be input to the VR-6HD (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 VR-6HD.
ZOOM	10.0- <b>100.0</b> -1000.0% (*2)	Adjusts the zoom ratio.
SCALING TYPE	FULL  LETTERBOX  CROP  DOT BY DOT  MANUAL	Always displays the picture expanded to full screen, irrespective of the aspect ratio of the input video.  Enlarges or reduces the incoming video to a full-screen view while keeping the aspect ratio unchanged.  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.  Performs no scaling.  Scale according to the "MANUAL SIZE H" and "MANUAL SIZE V" settings below.
MANUAL SIZE H (*3)	-2000- <b>0</b> -2000 (*2)	Adjusts the horizontal size.
MANUAL SIZE V (*3)	-2000- <b>0</b> -2000 (*2)	Adjusts the vertical size.
POSITION H	-1920- <b>0</b> -1920	Adjusts the position in the horizontal direction.
POSITION V	-1200- <b>0</b> -1200	Adjusts the position in the vertical direction.
BRIGHTNESS	-32 <b>-0</b> -31	Adjusts the brightness.
CONTRAST	-32 <b>-0</b> -31	Adjusts the contrast.
SATURATION	-32 <b>-0</b> -31	Adjusts the saturation.
RED	-64 <b>-0</b> -63	Adjusts the red level.
GREEN	-64- <b>0</b> -63	Adjusts the green level.
BLUE	-64- <b>0</b> -63	Adjusts the blue level.
VIDEO PLAYER	Adjusts the video that is input from	
FLIP H	OFF, ON	When this is "ON", the video is input with left and right flipped.
FLIPV	OFF, ON	When this is "ON", the video is input with top and bottom flipped.

- (\*1) A change in the setting is not applied until you press the [VALUE] knob to confirm.
- $(^*2)\ The\ valid\ range\ of\ setting\ values\ depends\ on\ conditions\ such\ as\ the\ input/output\ format.$
- (\*3) This can be set if "SCALING TYPE" Is "MANUAL".

### **VIDEO INPUT ASSIGN**

Menu item	Value (bold text: default value)	Explanation
INPUT 1–6	VIDEO 1–6, STILL 1–16, V.PLAYER, N/A  The default values are as follows. INPUT 1: VIDEO 1 INPUT 2: VIDEO 2 INPUT 3: VIDEO 3 INPUT 4: VIDEO 4 INPUT 5: VIDEO 5 INPUT 6: VIDEO 6	Sets the video source (input video and still images) to assign to the VIDEO SWITCHER [1]–[6] buttons.

## LAYER SETTINGS

Menu item	Value (bold text: default value)	Explanation
PROGRAM		
PinP & KEY 1–2	DISABLE, <b>ENABLE</b>	Sets whether each layer is displayed (ENABLE) or hidden (DISABLE) in the final output
DSK	DISABLE, ENABLE	video.
SUB PROGRAM		
PinP & KEY 1–2	DISABLE, <b>ENABLE</b>	Sets whether each layer is displayed (ENABLE) or hidden (DISABLE) in the SUB PROGRAM
DSK	DISABLE, <b>ENABLE</b>	bus video.
AUX		
PinP & KEY 1–2	OFF, PGM SYNC, ON	Sets whether each layer in the AUX bus video is shown (ON), synced with PGM (PGM SYNC)
DSK	OFF, PGM SYNC, ON	or hidden (OFF).

## VIDEO OUTPUT ASSIGN

Menu item	Value (bold text: default value)	Explanation	
	Specifies the video bus that is assig	ned to the VIDEO OUT 1–3 connectors.	
	PROGRAM	Final output video. This is the default setting for "VIDEO OUT 1".	
	SUB PROGRAM	SUB PROGRAM bus video	
VIDEO OUT 1-3	PREVIEW	Preview output video. This is the default setting for "VIDEO OUT 2".	
	AUX	AUX bus video	
	MULTI-VIEW	Multi-view. This is the default setting for "VIDEO OUT 3".	
	STILL-VIEW	Still images loaded into the unit (shown as 16 separate sections on the screen)	
	Specifies the video bus that is assig	ned to the USB STREAM connector.	
	PROGRAM	Final output video.	
	SUB PROGRAM	SUB PROGRAM bus video	
USB OUT	PREVIEW	Preview output video.	
	AUX	AUX bus video	
	MULTI-VIEW	Multi-view.	
	STILL-VIEW	Still images loaded into the unit (shown as 16 separate sections on the screen)	
	Specifies the video bus that is assigned to the DIRECT STREAM port.		
	PROGRAM	Final output video.	
	SUB PROGRAM	SUB PROGRAM bus video	
STREAM/RECORD	PREVIEW	Preview output video.	
	AUX	AUX bus video	
	MULTI-VIEW	Multi-view.	
	STILL-VIEW	Still images loaded into the unit (shown as 16 separate sections on the screen)	
	Specifies the video bus to which this unit's display is assigned.		
	PROGRAM	Final output video.	
	SUB PROGRAM	SUB PROGRAM bus video	
LCD MONITOR	PREVIEW	Preview output video.	
LCD MONITOR	AUX	AUX bus video	
	MULTI-VIEW	Multi-view.	
	STILL-VIEW	Still images loaded into the unit (shown as 16 separate sections on the screen)	
	AUDIO LEVEL	Level meters for each channel	
		Selects the video that is sent to the AUX bus.	
AUX SOURCE	VIDEO 1–6, STILL 1–16, V.PLAYER,	When the mode is "AUX",	
AUX SOURCE	INPUT 1–16	you can also use the VIDEO SWITCHER [1]–[6] buttons to select the video signal that's sent to the AUX bus.	

	F(				

Menu item	Value (bold text: default value)	Explanation
VIDEO OUT 1-3	Adjusts the video that is output fro	m the VIDEO OUT 1–3 connectors.
OUTPUT STATUS	_	Shows the format and an HDCP signal presence. If there is no connection, "NOT CONNECTED" is shown.
COLOR SPACE	<b>YPbPr (4:4:4)</b> , 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.
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, you must assign the video recording start/stop functions to a USER button on the dashboard.
BRIGHTNESS	-64- <b>0</b> -63	Adjusts the brightness.
CONTRAST	-64- <b>0</b> -63	Adjusts the contrast.
SATURATION	-64 <b>-0</b> -63	Adjusts the saturation.
RED	-64 <b>-0</b> -63	Adjusts the red level.
GREEN	-64 <b>-0</b> -63	Adjusts the green level.
BLUE	-64- <b>0</b> -63	Adjusts the blue level.
USB OUT	Adjusts the video that is output fro * You can edit the USB output video for	m the USB STREAM connector. mat 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 connector.
	Sets the output destination format	s that can be selected from the livestreaming app.
OUTPUT FORMAT	YUY2 & MJPEG	YUY2 and Motion JPEG are selectable.
	YUY2	Only YUY2 is selectable.
CONNECTION RESET	EXEC	Reconnects the computer and the VR-6HD when the video is garbled or when operation is otherwise unstable.

## FREEZE

Menu item	Value (bold text: default value)	Explanation	
FREEZE	OFF, ON	Turns the freeze function on/off. When this is "ON", the input video is temporarily frozen.	
	Specifies the operation mode for freezes.		
TYPE	ALL	Freezes all video that is being input.	
	SELECT	Freezes only the specified input video.	
VIDEO 1-6 (*4)	DISABLE, <b>ENABLE</b>	For each input, specifies whether the freeze function is enabled (ENABLE) or disabled (DISABLE).	

### (\*4) This can be set if "TYPE" is "SELECT".

## CAPTURE IMAGE

Menu item	Value (bold text: default value)	Explanation
TARGET	OFF, ON	Select the save destination memory for the still image.
SOURCE	VIDEO 1–6 VIDEO PLAYER PROGRAM SUB PROGRAM PREVIEW AUX	Select the input/output video to capture.

## 2: AUDIO

## AUDIO INPUT

Menu item	Value (bold text: default value)	Explanation
AUDIO IN 1, 2	Adjusts the audio that is input from t	he AUDIO IN 1 and 2 jacks.
AUDIO IN 1/2 (LINKED)	"AUDIO IN 1/2 (LINKED)" is shown wh	en "STEREO LINK" is "ON".
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.
INPUT MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.
INPUT LEVEL	-INF-0.0-10.0dB	Adjusts the input volume. This can also be adjusted from the [1] [2] faders. (*1)
ANALOG GAIN	<b>0</b> –68dB	Adjusts the input gain (sensitivity) in the analog domain.
DIGITAL GAIN	-42.0 <b>-0.0</b> -42.0dB	Adjusts the input gain (sensitivity) in the digital domain (after conversion from analog to digital).
PHANTOM +48V	OFF, ON	Turns the phantom power on/off. When this is "ON", phantom power is supplied via the AUDIO IN jacks (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.
DELAY	<b>0.0</b> –500msec ( <b>0</b> –25.0/29.9/30.0frame)	Adjusts the delay time of the audio.  Effect Outputs audio with a delay.
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.
	Specifies an effect preset (high-pass t	filter, compressor, and equalizer). ne settings of each effect are overwritten.
	DEFAULT	For line input (default setting)
EFFECT PRESET	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.  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.
THRESHOLD	-80- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
RELEASE	30 <b>–500</b> –5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.
COMPRESSOR	OFF, ON	Turns the compressor on/off.
THRESHOLD	-50- <b>-8</b> -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, <b>2.50:1</b> , 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
ATTACK	0 <b>–30</b> –100msec	Specifies the time until compression starts when audio exceeding the threshold is input.
RELEASE	30 <b>–250</b> –5000msec	Adjusts the length of time until compression ends after audio falls below the threshold.
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.

Menu item	Value (bold text: default value)	Explanation
		Turns the equalizer on/off.
EQUALIZER	OFF, ON	This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5 <b>-1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00 <b>–10.0</b> –20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high band.
HIGH PASS FILTER 80Hz	OFF, ON	Turns the high-pass filter on/off.  Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.
AUX 1 BUS	This configures the AUX 1 bus.	
	DRY	Sends the source audio with no effects applied.
		Sends the effect-applied audio.
SEND POINT	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
		Sends the effect-applied audio.
	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
	DRY	Sends the source audio with no effects applied.
SEND POINT	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).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
MAIN BUS		These parameters adjust the amount of addio sent to the AOA 2 bus.
SEND	This configures the MAIN bus.	
JLIND	OFF ON	When this is "ON" and is sent to the MAIN bus
	OFF, ON	When this is "ON", audio is sent to the MAIN bus.
ECHO CANCELLER	OFF, ON	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that
		Turns the echo canceller on/off.
ECHO CANCELLER  DEPTH		Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that
DEPTH	<b>OFF</b> , ON 1- <b>5</b> -10	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.
	OFF, ON	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.  Adjusts the depth of the echo canceller.
DEPTH	<b>OFF</b> , ON 1- <b>5</b> -10	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.
DEPTH ANTI-FEEDBACK	<b>OFF</b> , ON  1- <b>5</b> -10 <b>OFF</b> , ON	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.  Effect Suppresses audio feedback.  Turns the de-esser on/off.  Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).
DEPTH ANTI-FEEDBACK DE-ESSER	OFF, ON  1-5-10  OFF, ON  OFF, ON	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.  Effect Suppresses audio feedback.  Turns the de-esser on/off.  Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).  Adjusts the sensitivity with which sibilants are detected.
DEPTH  ANTI-FEEDBACK  DE-ESSER  SENS DEPTH	OFF, ON  1-5-10  OFF, ON  OFF, ON  0-80-100 0-64-100	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.  Effect Suppresses audio feedback.  Turns the de-esser on/off.  Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).
DEPTH ANTI-FEEDBACK DE-ESSER SENS	OFF, ON  1-5-10  OFF, ON  OFF, ON  0-80-100	Turns the echo canceller on/off.  Suppresses the voice echo that can occur when using a web conferencing system that includes a speaker and mic.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.  Effect Suppresses audio feedback.  Turns the de-esser on/off.  Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).  Adjusts the sensitivity with which sibilants are detected.  Adjusts the intensity of the effect.
DEPTH  ANTI-FEEDBACK  DE-ESSER  SENS DEPTH	OFF, ON  1-5-10  OFF, ON  OFF, ON  0-80-100 0-64-100	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.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.  Effect Suppresses audio feedback.  Turns the de-esser on/off.  Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).  Adjusts the sensitivity with which sibilants are detected.  Adjusts the intensity of the effect.  Turns the voice changer function on/off.  Effect Transforms the pitch or character of the voice.
DEPTH  ANTI-FEEDBACK  DE-ESSER  SENS DEPTH  VOICE CHANGER	OFF, ON  1-5-10  OFF, ON  OFF, ON  0-80-100  0-64-100  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.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.  Effect Suppresses audio feedback.  Turns the de-esser on/off.  Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).  Adjusts the sensitivity with which sibilants are detected.  Adjusts the intensity of the effect.  Turns the voice changer function on/off.
DEPTH  ANTI-FEEDBACK  DE-ESSER  SENS DEPTH  VOICE CHANGER  PITCH	OFF, ON  1-5-10  OFF, ON  OFF, ON  0-80-100  0-64-100  OFF, ON  -12-+12	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.  Adjusts the depth of the echo canceller.  Turns the anti-feedback on/off.  Effect Suppresses audio feedback.  Turns the de-esser on/off.  Effect Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing sounds).  Adjusts the sensitivity with which sibilants are detected.  Adjusts the intensity of the effect.  Turns the voice changer function on/off.  Effect Transforms the pitch or character of the voice.  Adjusts the pitch of the voice in semitone steps. A setting of "0" is the original pitch.  Adjusts the character (formant) of the voice. Settings in the negative (-) direction produce a more masculine vocal character, and settings in the positive (+) direction

<sup>(\*1)</sup> The [2] fader is disabled when "STEREO LINK" is "ON". (\*2) This can be set if "STEREO LINK" is "OFF".

Menu item	Value (bold text: default value)	Explanation
AUDIO IN 3-6	Adjusts the audio that is input from t	he AUDIO IN 3 – 6 iacks.
AUDIO IN 3/4 (LINKED),		6 (LINKED)" is shown when "STEREO LINK" is "ON".
AUDIO IN 5/6 (LINKED)		Turns the solo function on/off. Only the audio for which this is "ON" is heard in the
SOLO	OFF ON	headphones.
3010	OFF, ON	* The solo function applies to the headphone output. It does not affect output other than the
INPUT MUTE	OFF ON	headphones.
INFOLMOLE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the input volume.
INPUT LEVEL	-INF-0.0-10.0dB	This can also be adjusted from the [3]–[6] faders. (*3)
ANALOG GAIN	<b>0</b> –68dB	Adjusts the input gain (sensitivity) in the analog domain.
DIGITAL GAIN	-42.0- <b>0.0</b> -42.0dB	Adjusts the input gain (sensitivity) in the digital domain (after conversion from analog to
DIGITAL GAIN	-42.0- <b>0.0</b> -42.0db	digital).
PHANTOM +48V	OFF ON	Turns the phantom power on/off. When this is "ON", phantom power is supplied via the
PHANTOWI +46V	OFF, ON	AUDIO IN jacks (XLR).  * Changing "STEREO LINK" settings automatically turns "PHANTOM +48V" settings "OFF".
PAN (*4)	LEFT-CENTER-RIGHT	Adjusts the stereo position (pan).
		Turns the stereo link function on/off. When this is "ON", AUDIO IN 3 and 4 (5 and 6) are
STEREO LINK	OFF, ON	linked, and operate as a stereo channel.
		* When stereo link is turned on, the settings of AUDIO IN 3 (5) are applied to AUDIO IN 4 (6).
DELAY	<b>0.0</b> –500msec	Adjusts the delay time of the audio.
	( <b>0</b> –25.0/29.9/30.0frame)	Effect Outputs audio with a delay.
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.
	Specifies an effect preset (high-pass f	
	, ,	ne settings of each effect are overwritten.
	DEFAULT	For line input (default setting)
EFFECT PRESET	MEETING	For meetings
	INTERVIEW	For interviews
	AMBIENT MIC	For capturing ambient sound
	WINDY FIELD	For capturing ambient sound in a windy area  Turns the noise gate on/off.
NOISE CATE		Eliminates audio that is lower than the specified threshold level. This is effective when the
NOISE GATE	OFF, ON	Effect 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- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
		Adjusts the length of time until the audio is fully attenuated after audio falls below the
RELEASE	30- <b>500</b> -5000msec	threshold.
		Turns the compressor on/off.
COMPRESSOR	OFF, ON	Audio that exceeds the specified threshold level is compressed. This reduces the difference
		Effect between the maximum volume and minimum volume, making the audio more comfortable for listening
TURECUCIO		Specifies the level used as the threshold at which the compressor is applied.
THRESHOLD	-50- <b>-8</b> -0dB	Compression is applied to audio that exceeds the threshold.
	1.00:1, 1.12:1, 1.25:1, 1.40:1,	
RATIO	1.60:1, 1.80:1, 2.00:1, <b>2.50:1</b> ,	Specifies the degree of compression applied to the audio. The state in which no
	3.20:1, 4.00:1, 5.60:1, 8.00:1,	compression is applied is defined as "1".
ATTACK	16.0:1, INF:1	Specifies the time until compression starts when audio exceeding the threehold is in aut
RELEASE	0 <b>–30</b> –100msec 30 <b>–250</b> –5000msec	Specifies the time until compression starts when audio exceeding the threshold is input.  Adjusts the length of time until compression ends after audio falls below the threshold.
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.
	TO V TOUD	rajusts the final output volume lever after applying the complessor.

Menu item	Value (bold text: default value)	Explanation
		Turns the equalizer on/off.
EQUALIZER	OFF, ON	Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00- <b>10.0</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high band.
HIGH PASS FILTER 80Hz	<b>255</b> 0M	Turns the high-pass filter on/off.
HIGH PASS FILLER 80HZ	OFF, ON	Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.
AUX 1 BUS	This configures the AUX 1 bus.	
	DRY	Sends the source audio with no effects applied.
	PRE FADER	Sends the effect-applied audio.
SEND POINT	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
	POST FADER	Sends the effect-applied audio.
	T OST TABLE	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
	DRY	Sends the source audio with no effects applied.
CENT DOWN	PRE FADER	Sends the effect-applied audio.
SEND POINT		The send volume is constant, regardless of the volume (INPUT LEVEL).
	POST FADER	Sends the effect-applied audio.
SEND LEVEL	-INF-10.0dB	The send volume can be changed by adjusting the volume (INPUT LEVEL).
MAIN BUS		These parameters adjust the amount of audio sent to the AUX 2 bus.
SEND	This configures the MAIN bus.	M/Is on their is #ON!! and is is south to the MAIN Is us
JLIND	OFF, ON	When this is "ON", audio is sent to the MAIN bus.  Turns the de-esser on/off.
DE-ESSER	OFF, ON	Reduces sibilant noise (the sounds you hear when pronouncing "s" words and other hissing
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	017,014	Effect sounds).
		1
SENS	0 <b>-80</b> -100	Adjusts the sensitivity with which sibilants are detected.

<sup>(\*3)</sup> When "STEREO LINK" is "ON", the [4]–[6] fader operations are disabled. (\*4) This can be set if "STEREO LINK" is "OFF".

Menu item	Value (bold text: default value)	Explanation
AUDIO IN 7/8	Adjusts the audio that is input from t	he AUDIO IN 7/8 jacks.
		Turns the solo function on/off. Only the audio for which this is "ON" is heard in the
SOLO	OFF, ON	headphones.  * The solo function applies to the headphone output. It does not affect output other than the
		headphones.
INPUT MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.
INPUT LEVEL	INE OO 100dP	Adjusts the input volume.
	-INF-0.0-10.0dB	You can also adjust this with the [7/8] fader. (*10)
DIGITAL GAIN	-42.0 <b>-0.0</b> -42.0dB	Adjusts the input gain (sensitivity) in the digital domain (after conversion from analog to digital).
	Converts the input audio from stereo	to mono.
	OFF	Sends the stereo input audio without change.
MONO	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.
DELAY	<b>0.0</b> –500msec	Adjusts the delay time of the audio.
DELA	( <b>0</b> –25.0/29.9/30.0frame)	Effect Outputs audio with a delay.
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.
	Specifies an effect preset (high-pass f	filter, compressor, and equalizer).
	When you change an effect preset, th	ne settings of each effect are overwritten.
	DEFAULT	For line input (default setting)
EFFECT PRESET	MEETING	For meetings
	INTERVIEW	For interviews
	AMBIENT MIC	For capturing ambient sound
	WINDY FIELD	For capturing ambient sound in a windy area
		Turns the noise gate on/off.
NOISE GATE	OFF, ON	Eliminates audio that is lower than the specified threshold level. This is effective when the
		Effect 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- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
		Adjusts the length of time until the audio is fully attenuated after audio falls below the
RELEASE	30 <b>–500</b> –5000msec	threshold.
		Turns the compressor on/off.
COMPRESSOR	OFF, ON	Audio that exceeds the specified threshold level is compressed. This reduces the difference
	ST, SI	Effect between the maximum volume and minimum volume, making the audio more comfortable for listening
THRESHOLD	-50- <b>-8</b> -0dB	Specifies the level used as the threshold at which the compressor is applied.  Compression is applied to audio that exceeds the threshold.
-	1.00:1, 1.12:1, 1.25:1, 1.40:1,	compression is applied to dad of the energy and the energy and
D.4.71.0	1.60:1, 1.80:1, 2.00:1, <b>2.50:1</b> ,	Specifies the degree of compression applied to the audio. The state in which no
RATIO	3.20:1, 4.00:1, 5.60:1, 8.00:1,	compression is applied is defined as "1".
	16.0:1, INF:1	
ATTACK	0 <b>–30</b> –100msec	Specifies the time until compression starts when audio exceeding the threshold is input.
RELEASE	30 <b>–250</b> –5000msec	Adjusts the length of time until compression ends after audio falls below the threshold.
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.
		Turns the equalizer on/off.
EQUALIZER	OFF, ON	This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00- <b>10.0</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high band.
7.1. <del>Q</del> 7.1.11		Turns the high-pass filter on/off.
HIGH PASS FILTER 80Hz	OFF, ON	Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.
		Enece Cats on uninceased low bank addio. The sation frequency is 60 ftz.

Menu item	Value (bold text: default value)	Explanation
AUX 1 BUS	This configures the AUX 1 bus.	
	DRY	Sends the source audio with no effects applied.
	DDF FADED	Sends the effect-applied audio.
SEND POINT	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
	DOCT FADED	Sends the effect-applied audio.
	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
	DRY	Sends the source audio with no effects applied.
	PRE FADER	Sends the effect-applied audio.
SEND POINT		The send volume is constant, regardless of the volume (INPUT LEVEL).
	POST FADER	Sends the effect-applied audio.
	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
MAIN BUS	This configures the MAIN bus.	
SEND	OFF, ON	When this is "ON", audio is sent to the MAIN bus.

Menu item	Value (bold text: default value)	Explanation
USB IN	Adjusts the audio that is input from	the USB STREAM connector.
		Turns the solo function on/off. Only the audio for which this is "ON" is heard in the
SOLO	OFF, ON	headphones.  * The solo function applies to the headphone output. It does not affect output other than the headphones.
INPUT MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.
INPUT LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the input volume.
DIGITAL GAIN	-42.0 <b>-0.0</b> -42.0dB	Adjusts the digital gain.
	Converts the input audio from stere	o to mono.
	OFF	Sends the stereo input audio without change.
MONO	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.
DELAY	<b>0.0</b> –500msec	Adjusts the delay time of the audio.
	( <b>0</b> –25.0/29.9/30.0frame)	Effect Outputs audio with a delay.
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.
	Specifies an effect preset (high-pass	
	, , , , , , , , , , , , , , , , , , , ,	he settings of each effect are overwritten.
FFFCT DDFCFT	DEFAULT	For line input (default setting)
EFFECT PRESET	MEETING	For meetings
	INTERVIEW	For interviews
	AMBIENT MIC	For capturing ambient sound
<u></u>	WINDY FIELD	For capturing ambient sound in a windy area  Turns the noise gate on/off.
NOISE GATE	OFF, ON	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.
THRESHOLD	-80- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
RELEASE	30 <b>–500</b> –5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.
		Turns the compressor on/off.
COMPRESSOR	OFF, ON	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- <b>-8</b> -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, <b>2.50:1</b> , 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
ATTACK	0.0 <b>–30</b> –100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
RELEASE	30- <b>250</b> -5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
MAKEUP GAIN	-40- <b>0</b> -40dB	Adjusts the final output volume level after applying the compressor.
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.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5 <b>-1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00- <b>10.0</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high band.
HIGH PASS FILTER 80Hz	OFF, ON	Turns the high-pass filter on/off.  Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.

Menu item	Value (bold text: default value)	Explanation
AUX 1 BUS	This configures the AUX 1 bus.	
SEND POINT	DRY	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).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
SEND POINT	DRY	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).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
MAIN BUS	This configures the MAIN bus.	
SEND	OFF, ON	When this is "ON", audio is sent to the MAIN bus.

Menu item	Value (bold text: default value)	Explanation
Bluetooth IN	These parameters adjust the audio i	nput via Bluetooth.
		Turns the solo function on/off. Only the audio for which this is "ON" is heard in the
SOLO	OFF, ON	headphones.  * The solo function applies to the headphone output. It does not affect output other than the headphones.
INPUT MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.
INPUT LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the input volume.
DIGITAL GAIN	-42.0- <b>0.0</b> -42.0dB	Adjusts the digital gain.
MONO	Converts the input audio from stere	o to mono.
	OFF	Sends the stereo input audio without change.
	LONLY	The audio of the L channel is sent to both L and R.
	RONLY	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.
DELAY	<b>0.0</b> –500msec	Adjusts the delay time of the audio.
	( <b>0</b> –25.0/29.9/30.0frame)	Effect Outputs audio with a delay.
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.
EFFECT PRESET	Specifies an effect preset (high-pass	
	, , , , , , , , , , , , , , , , , , , ,	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.  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.
THRESHOLD	-80- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
RELEASE	30- <b>500</b> -5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.
COMPRESSOR	OFF, ON	Turns the compressor on/off.  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- <b>-8</b> -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, <b>2.50:1</b> , 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
ATTACK	0.0- <b>30</b> -100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
RELEASE	30- <b>250</b> -5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
MAKEUP GAIN	-40- <b>0</b> -40dB	Adjusts the final output volume level after applying the compressor.
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.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5 <b>-1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00- <b>10.0</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high band.
HIGH PASS FILTER 80Hz	OFF, ON	Turns the high-pass filter on/off.  Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.

Menu item	Value (bold text: default value)	Explanation
AUX 1 BUS	This configures the AUX 1 bus.	
	DRY	Sends the source audio with no effects applied.
	205 54 252	Sends the effect-applied audio.
SEND POINT	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
	DOCT FADED	Sends the effect-applied audio.
	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	- <b>INF</b> -10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
	DRY	Sends the source audio with no effects applied.
	PRE FADER	Sends the effect-applied audio.
SEND POINT		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).
SEND LEVEL	<b>-INF</b> –10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
MAIN BUS	This configures the MAIN bus.	
SEND	OFF, ON	When this is "ON", audio is sent to the MAIN bus.

Menu item	Value (bold text: default value)	Explanation
AUDIO PLAYER IN	These parameters adjust the audio ir	iput from the audio player.
		Turns the solo function on/off. Only the audio for which this is "ON" is heard in the
SOLO	OFF, ON	headphones.  * The solo function applies to the headphone output. It does not affect output other than the headphones.
INPUT MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.
INPUT LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the input volume.
DIGITAL GAIN	-42.0- <b>0.0</b> -42.0dB	Adjusts the digital gain.
	Converts the input audio from sterec	to mono.
	OFF	Sends the stereo input audio without change.
MONO	L ONLY	The audio of the L channel is sent to both L and R.
	RONLY	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.
DELAY	<b>0.0</b> –500msec <b>(0</b> –25.0/29.9/30.0frame)	Adjusts the delay time of the audio.  Effect Outputs audio with a delay.
DEVEDD CEND		
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.
	Specifies an effect preset (high-pass	
	DEFAULT	ne settings of each effect are overwritten.  For line input (default setting)
EFFECT PRESET	MEETING	For meetings
LITECT FRESET	INTERVIEW	For interviews
	AMBIENT MIC	For capturing ambient sound
	WINDY FIELD	For capturing ambient sound in a windy area
	WINDTTILLD	Turns the noise gate on/off.
NOISE GATE	OFF, ON	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.
THRESHOLD	-80- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
RELEASE	30 <b>–500</b> –5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.
COMPRESSOR	OFF, ON	Turns the compressor on/off.  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 <b>8</b> -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, <b>2.50:1</b> , 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
ATTACK	0.0 <b>–30</b> –100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
RELEASE	30- <b>250</b> -5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
MAKEUP GAIN	-40- <b>0</b> -40dB	Adjusts the final output volume level after applying the compressor.
EQUALIZER	OFF, ON	Turns the equalizer on/off.  This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00 <b>–10.0</b> –20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high band.
HIGH PASS FILTER 80Hz	OFF, ON	Turns the high-pass filter on/off.  Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.

Menu item	Value (bold text: default value)	Explanation
AUX 1 BUS	This configures the AUX 1 bus.	
	DRY	Sends the source audio with no effects applied.
		Sends the effect-applied audio.
SEND POINT	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
	POST FADER	Sends the effect-applied audio.
	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	- <b>INF</b> -10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
	DRY	Sends the source audio with no effects applied.
	PRE FADER	Sends the effect-applied audio.
SEND POINT		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).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
MAIN BUS	This configures the MAIN bus.	
SEND	OFF, ON	When this is "ON", audio is sent to the MAIN bus.

Menu item	Value (bold text: default value)	Explanation		
VIDEO PLAYER Adjusts the audio input from the video player.				
		Turns the solo function on/off. Only the audio for which this is "ON" is heard in the		
SOLO	OFF, ON	headphones.		
		* The solo function applies to the headphone output. It does not affect output other than the headphones.		
INPUT MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.		
INPUT LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the input volume.		
DIGITAL GAIN	-42.0 <b>-0.0</b> -42.0dB	Adjusts the digital gain.		
	<u>'</u>	Converts the input audio from stereo to mono.		
	OFF	Sends the stereo input audio without change.		
MONO	LONLY	The audio of the L channel is sent to both L and R.		
	R ONLY LR Mix	The audio of the R channel is sent to both L and R.  The audio of the L channel and R channel is mixed, and sent to both L and R.		
		Adjusts the delay time of the audio.		
DELAY	<b>0.0</b> –500msec <b>(0</b> –25.0/29.9/30.0frame)	Effect Outputs audio with a delay.		
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.		
NEVERO SERO	Specifies an effect preset (high-pass f	,		
		ne settings of each effect are overwritten.		
	DEFAULT	For line input (default setting)		
EFFECT PRESET	MEETING	For meetings		
	INTERVIEW	For interviews		
	AMBIENT MIC	For capturing ambient sound		
	WINDY FIELD	For capturing ambient sound in a windy area		
		Turns the noise gate on/off.		
NOISE GATE	OFF, ON	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.		
THRESHOLD	-80- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set		
	30- <b>-43</b> -00B	here is removed.		
RELEASE	30 <b>–500</b> –5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.		
		Turns the compressor on/off.		
COMPRESSOR	OFF, ON	Audio that exceeds the specified threshold level is compressed. This reduces the difference		
COMPRESSOR		Effect between the maximum volume and minimum volume, making the audio more comfortable for listening		
		Specifies the level used as the threshold at which the compressor is applied.		
THRESHOLD	-50- <b>-8</b> -0dB	Compression is applied to audio that exceeds the threshold.		
	1.00:1, 1.12:1, 1.25:1, 1.40:1,			
RATIO	1.60:1, 1.80:1, 2.00:1, <b>2.50:1</b> ,	Specifies the degree of compression applied to the audio. The state in which no		
NATIO	3.20:1, 4.00:1, 5.60:1, 8.00:1,	compression is applied is defined as "1".		
	16.0:1, INF:1			
ATTACK	0.0 <b>–30</b> –100ms	Specifies the time until compression starts when audio exceeding the threshold is input.		
RELEASE	30 <b>–250</b> –5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.		
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.  Turns the equalizer on/off.		
EQUALIZER	OFF, ON	l '		
LQONLIZER	or, or	This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.		
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.		
Lo GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low band.		
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.		
Lo-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.		
Lo-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange		
		band.  Adjusts the center frequency when changing the tone quality in the high-midrange		
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	band.		
Hi-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.		
Hi-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange		
		band.		
Hi FREQUENCY	1.00 <b>–10.0</b> –20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.		
Hi GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high band.		
HIGH PASS FILTER 80Hz	OFF, ON	Turns the high-pass filter on/off.		
	1	Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.		

Menu item	Value (bold text: default value)	Explanation
AUX 1 BUS	This configures the AUX 1 bus.	
	DRY	Sends the source audio with no effects applied.
	DDF FADED	Sends the effect-applied audio.
SEND POINT	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
	DOCT FADED	Sends the effect-applied audio.
	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
	DRY	Sends the source audio with no effects applied.
	PRE FADER	Sends the effect-applied audio.
SEND POINT		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).
SEND LEVEL	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
MAIN BUS	This configures the MAIN bus.	
SEND	OFF, ON	When this is "ON", audio is sent to the MAIN bus.

Menu item	Value (bold text: default value)	Explanation
VIDEO IN 1-6	Adjusts the audio that is input from the	ne VIDEO IN 1–6 connectors.
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.
INPUT MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.
INPUT LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the input volume.
EMBEDDED AUDIO CHANNEL	1/2, 3/4, 5/6, 7/8	Selects the channel used for embedded audio.
DIGITAL GAIN	-42.0- <b>0.0</b> -42.0dB	Adjusts the digital gain.
	Converts the input audio from stereo	to mono.
	OFF	Sends the stereo input audio without change.
MONO	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.
DELAY	<b>0.0</b> –500msec	Adjusts the delay time of the audio.
DELAY	( <b>0</b> –25.0/29.9/30.0frame)	Effect Outputs audio with a delay.
REVERB SEND	<b>0</b> –127	Adjusts the amount of audio sent to reverb.
	Specifies an effect preset (high-pass f	ilter, compressor, and equalizer).
		e settings of each effect are overwritten.
	DEFAULT	For line input (default setting)
EFFECT PRESET	MEETING	For meetings
	INTERVIEW	For interviews
	AMBIENT MIC	For capturing ambient sound
	WINDY FIELD	For capturing ambient sound in a windy area
		Turns the noise gate on/off.
NOISE GATE	OFF, ON	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.
THRESHOLD	-80- <b>-48</b> -0dB	Specifies the level used as the threshold for removing audio. Audio below the level set here is removed.
RELEASE	30 <b>–500</b> –5000msec	Adjusts the length of time until the audio is fully attenuated after audio falls below the threshold.
		Turns the compressor on/off.
COMPRESSOR	OFF, ON	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 <b>8</b> -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, <b>2.50:1</b> , 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".
ATTACK	0.0- <b>30</b> -100ms	Specifies the time until compression starts when audio exceeding the threshold is input.
RELEASE	30 <b>–250</b> –5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.
WILLIAM OVIIV		Turns the equalizer on/off.
EQUALIZER	OFF, ON	Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz <b>–2.00kHz</b> –20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00 <b>–10.0</b> –20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high band.
HIGH PASS FILTER 80Hz	OFF, ON	Turns the high-pass filter on/off.  Effect Cuts off unneeded low-band audio. The cutoff frequency is 80 Hz.
	l.	I.

Menu item	Value (bold text: default value)	Explanation
AUX 1 BUS	This configures the AUX 1 bus.	
	DRY	Sends the source audio with no effects applied.
	205 54 252	Sends the effect-applied audio.
SEND POINT	PRE FADER	The send volume is constant, regardless of the volume (INPUT LEVEL).
	DOCT FADED	Sends the effect-applied audio.
	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL	- <b>INF</b> -10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.
AUX 2 BUS	This configures the AUX 2 bus.	
	DRY	Sends the source audio with no effects applied.
	PRE FADER	Sends the effect-applied audio.
SEND POINT		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).
SEND LEVEL	<b>-INF</b> –10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.
MAIN BUS	This configures the MAIN bus.	
SEND	OFF, ON	When this is "ON", audio is sent to the MAIN bus.

MAINIPLIC	This configures the MAIN bus	
Menu item	Value (bold text: default value)	Explanation
SEND SETTINGS		

Menu item	Value (bold text: default value)	Explanation
MAIN BUS	This configures the MAIN bus.	
SEND		
AUDIO IN 1–7/8 USB IN Bluetooth IN AUDIO PLAYER VIDEO PLAYER VIDEO IN 1–6	OFF, ON	When this is "ON", audio is sent to the MAIN bus.
INPUT LEVEL		
AUDIO IN 1–7/8 USB IN Bluetooth IN AUDIO PLAYER VIDEO PLAYER VIDEO IN 1–6	-INF- <b>0.0</b> -10.0dB	These parameters adjust the amount of audio sent to the MAIN bus.
AUX 1 BUS	This configures the AUX 1 bus.	
SEND POINT		
SEND POINT	DRY	Sends the source audio with no effects applied.
AUDIO IN 1–7/8 USB IN Bluetooth IN	PRE FADER	Sends the effect-applied audio. The send volume is constant, regardless of the volume (INPUT LEVEL).
AUDIO PLAYER VIDEO PLAYER VIDEO IN 1-6	POST FADER	Sends the effect-applied audio. The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL		
AUDIO IN 1–7/8 USB IN Bluetooth IN AUDIO PLAYER	- <b>INF</b> -10.0dB	These parameters adjust the amount of audio sent to the AUX 1 bus.

AUDIO PLAYER VIDEO PLAYER VIDEO IN 1–6	10.002	These parameters daylast the amount of additional to the Nox 1 sass
AUX 2 BUS	This configures the AUX 2 bus.	
SEND POINT		
AUDIO IN 1-7/8	DRY	Sends the source audio with no effects applied.
USB IN	PRE FADER	Sends the effect-applied audio.
Bluetooth IN AUDIO PLAYER		The send volume is constant, regardless of the volume (INPUT LEVEL).
VIDEO PLAYER	POST FADER	Sends the effect-applied audio.
VIDEO IN 1-6		The send volume can be changed by adjusting the volume (INPUT LEVEL).
SEND LEVEL		
AUDIO IN 1–7/8 USB IN Bluetooth IN AUDIO PLAYER VIDEO PLAYER VIDEO IN 1–6	-INF-10.0dB	These parameters adjust the amount of audio sent to the AUX 2 bus.

#### AUDIO OUTPUT ASSIGN

Menu item	Value (bold text: default value)	Explanation
AUDIO OUT 1 (XLR)	MAIN BUS, AUX 1 BUS, AUX 2 BUS, MONITOR BUS	
AUDIO OUT 2 (RCA)	MAIN BUS, AUX 1 BUS, AUX 2 BUS, MONITOR BUS	MAIN BUS:  All input audio is mixed and output (master output).
PHONES OUT/ MONITOR	MAIN BUS, AUX 1, AUX 2	AUX 1 BUS, AUX 2 BUS:  Only the input audio sent to the AUX bus is mixed and output. This allows you to output
USB OUT	MAIN BUS, AUX 1, AUX 2	audio that is different than the master output.  MONITOR BUS:
STREAM/RECORD	MAIN BUS, AUX 1, AUX 2	This outputs the same audio as what you hear in the headphones.
AUDIO RECORD	MAIN BUS, AUX 1, AUX 2	
VIDEO OUT 1–3	MAIN BUS, AUX 1 BUS, AUX 2 BUS, MONITOR BUS	

### AUDIO OUTPUT

Menu item	Value (bold text: default value)	Explanation
MAIN BUS Adjusts the audio of the MA		AIN BUS.
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.
MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the output audio is temporarily silenced.
LEVEL	-INF-0.0-10.0dB	Adjusts the output volume. This can also be adjusted by the [MAIN] fader.
REVERB	OFF, ON	Turns reverb on/off.  Effect Adds reverberation to the sound.
LEVEL	0-127	Specifies the amount of sound that is returned from the reverb (return level). This adjusts the depth of the overall reverb.
	Specifies the reverb type.	
TYPE	ROOM	Produces the natural-sounding reverberation of a room.
	HALL	Produces the reverberation that is typical of a performance in a concert hall.
SIZE	1- <b>10</b> -20	Specifies the size of the room. The larger the value, the longer the reverb time.
RETURN LEVEL	-INF <b>20.0</b> -10.0dB	Adjusts the return level of the reverb.
DELAY	<b>0.0</b> –500msec <b>(0</b> –25.0/29.9/30.0frame)	Adjusts the delay time of the audio.  Effect Outputs audio with a delay.
LOUDNESS AUTO GAIN CONTROL	OFF, ON	Turns loudness auto gain control on/off.  The long-term average loudness is measured, and the volume is adjusted so that it is appropriate overall.
INTEGRATED GAIN CONTROL	DISABLE, <b>ENABLE</b>	Specifies whether the extended interval auto control is enabled (ENABLE) or disabled (DISABLE).
SENS	0- <b>80</b> -127	Adjusts the speed at which the target level (TARGET LKFS) is approached.
MOMENTARY GAIN CONTROL	DISABLE, <b>ENABLE</b>	Specifies whether the momentary auto control is enabled (ENABLE) or disabled (DISABLE).
SENS	0-80-127	Adjusts the speed at which the target level (TARGET LKFS) is approached.
TARGET LKFS	-34- <b>-24</b> 10dB	Specifies the target loudness value.
FORGET LEARNING	EXEC	Resets the learned parameters.
ADAPTIVE NOISE REDUCTION	OFF, ON	Turns Adaptive Noise Reduction on/off.  By continuously monitoring the input audio to detect noise during periods of silence, this removes only the noise component.
DEPTH	0- <b>80</b> -127	Specifies the strength at which noise reduction is applied.
TALKING DETECTOR	0- <b>80</b> -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, <b>ENABLE</b>	Enables automatic noise detection.
MANUAL MEASURE	EXEC	Performs noise detection manually.
FORGET LEARNING	EXEC	Resets the learned parameters.
LO FREQUENCY CUT	OFF, ON	Turns Low Frequency Cut on/off.

Menu item	Value (bold text: default value)	Explanation	
GEQ	OFF, ON	These are the settings for the graphic equalizer.  It 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	ENTER	Sets the equalizer settings to flat (0.0 dB).	
25 Hz			
40Hz			
63 Hz			
100Hz			
160Hz			
250Hz			
400Hz			
630Hz	-15.0 <b>-0.0</b> -15.0dB	Boost/cut each frequency region.	
1kHz			
1.6kHz			
2.5kHz			
4kHz			
6.3kHz			
10kHz			
16kHz	OFF ON	Towards a second	
COMPRESSOR/LIMITER	OFF, ON	Turns the compressor or limiter on/off.	
	Selects the compressor or	limiter.	
ТҮРЕ	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	
	LIMITER	Effect Compresses the audio so that the mixed audio does not exceed the specified threshold level.	
COMPRESSOR		* Distortion will occur if audio that exceeds the allowable range of the limiter is input.	
THRESHOLD	-50- <b>-8</b> -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, <b>2.50:1</b> , 3.20:1, 4.00:1, 5.60:1, 8.00:1, 16.0:1, INF:1	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".	
ATTACK	0.0- <b>30</b> -100ms	Specifies the time until compression starts when audio exceeding the threshold is input.	
RELEASE	30 <b>–250</b> –5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.	
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.	
LIMITER		1173	
THRESHOLD	-40 <b>6</b> -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.	
EQUALIZER	OFF, ON	Turns the equalizer on/off.  This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.	
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.	
Lo GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low band.	
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.	
Lo-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.	
Lo-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.	
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.	
	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.	
Hi-Mid GAIN			
Hi-Mid GAIN Hi-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.	
	0.5 <b>–1.0</b> –16.0 1.00 <b>–10.0</b> –20.0kHz		

Menu item	Value (bold text: default value)	Explanation	
AUX 1 BUS	Adjusts the audio of the Al	UX 1 bus.	
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.	
MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the output audio is temporarily silenced.	
LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the output volume.	
DEVEDD DETUDNILEVEL		This can also be adjusted by the [AUX 1] knob.	
REVERB RETURN LEVEL	-INF-0.0-10.0dB	Adjusts the return level of the reverb.	
DELAY	<b>0.0</b> –500msec <b>(0</b> –25.0/29.9/30.0frame)	Adjusts the delay time of the audio.  Effect Outputs audio with a delay.	
GEQ	OFF, ON	These are the settings for the graphic equalizer.  Effect It 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	ENTER	Sets the equalizer settings to flat (0.0 dB).	
25 Hz			
40Hz			
63 Hz			
100Hz			
160Hz			
250Hz			
400Hz			
630Hz	-15.0- <b>0.0</b> -15.0dB	Boost/cut each frequency region.	
1kHz	1000		
1.6kHz			
2.5kHz			
4kHz			
6.3kHz			
10kHz			
16kHz	-		
COMPRESSOR/LIMITER	OFF, ON	Turns the compressor or limiter on/off.	
COMI RESSON/EINITER	· ·	·	
	Selects the compressor or l		
ТҮРЕ	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	
	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- <b>-8</b> -0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.	
	1.00:1, 1.12:1, 1.25:1, 1.40:1,		
RATIO	1.60:1, 1.80:1, 2.00:1, <b>2.50:1</b> ,	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".	
	3.20:1, 4.00:1, 5.60:1, 8.00:1,	то аррнеч то чениеч аз т .	
ATTAC'	16.0:1, INF:1		
ATTACK	0.0- <b>30</b> -100ms	Specifies the time until compression starts when audio exceeding the threshold is input.	
RELEASE	30 <b>–250</b> –5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.	
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.	
LIMITER			
THRESHOLD	-40- <b>-6</b> -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.	

#### Other Functions

Menu item	Value (bold text: default value)	Explanation
EQUALIZER	OFF, ON	Turns the equalizer on/off.  This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.
Lo GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low band.
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.
Lo-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.
Lo-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.
Hi-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.
Hi-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.
Hi FREQUENCY	1.00- <b>10.0</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.
Hi GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high band.

Menu item	Value (bold text: default value)	Explanation	
AUX 2 BUS	Adjusts the audio of the AL	JX 2 bus.	
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.	
MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the output audio is temporarily silenced.	
LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the output volume. This can also be adjusted by the [AUX 2] knob.	
REVERB RETURN LEVEL	-INF-0.0-10.0dB	Adjusts the return level of the reverb.	
DELAY	<b>0.0</b> –500msec ( <b>0</b> –25.0/29.9/30.0frame)	Adjusts the delay time of the audio.  Effect Outputs audio with a delay.	
GEQ	OFF, ON	These are the settings for the graphic equalizer.  It 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	ENTER	Sets the equalizer settings to flat (0.0 dB).	
25 Hz			
40Hz			
63 Hz			
100Hz			
160Hz			
250Hz			
400Hz			
630Hz	-15.0- <b>0.0</b> -15.0dB	Boost/cut each frequency region.	
1kHz	13.0 010 13.000	boost cut cut in equality region.	
1.6kHz	-		
2.5kHz			
4kHz	_		
6.3kHz	-		
10kHz			
16kHz COMPRESSOR/LIMITER	OFF ON	Time the second of limited on /eff	
COMPRESSOR/LIMITER	OFF, ON	Turns the compressor or limiter on/off.	
TYPE	Selects the compressor or I  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	
	LIMITED	Effect Compresses the audio so that the mixed audio does not exceed the specified threshold level.	
	LIMITER	* Distortion will occur if audio that exceeds the allowable range of the limiter is input.	
COMPRESSOR			
THRESHOLD	-50 <b>8</b> -0dB	Specifies the level used as the threshold at which the compressor is applied. Compression is applied to audio that exceeds the threshold.	
	1.00:1, 1.12:1, 1.25:1, 1.40:1,		
RATIO	1.60:1, 1.80:1, 2.00:1, <b>2.50:1</b> , 3.20:1, 4.00:1, 5.60:1,	Specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as "1".	
	8.00:1, 16.0:1, INF:1		
ATTACK	0.0 <b>–30</b> –100ms	Specifies the time until compression starts when audio exceeding the threshold is input.	
RELEASE	30 <b>–250</b> –5000ms	Adjusts the length of time until compression ends after audio falls below the threshold.	
MAKEUP GAIN	-40 <b>-0</b> -40dB	Adjusts the final output volume level after applying the compressor.	
LIMITER	.0 0 1000	. My and the man output volume level after applying the complessor.	
THRESHOLD	-40- <b>-6</b> -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.	

#### **Other Functions**

Me	nu item	Value (bold text: default value)	Explanation	
			Turns the equalizer on/off.	
EQ	<b>OFF</b> , ON		This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.	
	Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.	
	Lo GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low band.	
	Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.	
	Lo-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.	
	Lo-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.	
	Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.	
	Hi-Mid GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.	
	Hi-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.	
	Hi FREQUENCY	1.00- <b>10.0</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.	
	Hi GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high band.	

Menu item	Value (bold text: default value)	Explanation	
USB OUT	Adjusts the audio that's output from the USB STREAM connector.		
MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the output audio is temporarily silenced.	
LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the output volume.	
111 0.0 TO.00D		This can also be adjusted by the [USB STREAM] knob.	
DELAY	<b>0.0</b> –500msec	Adjusts the delay time of the audio.	
	( <b>0</b> –25.0/29.9/30.0frame)	Effect Outputs audio with a delay.	
FOUNTER	OFF ON	Turns the equalizer on/off.	
EQUALIZER	OFF, ON	Effect This is a 4-band parametric equalizer. It lets you shape the character of the sound by boosting or cutting four frequency regions.	
Lo FREQUENCY	20Hz- <b>100Hz</b> -2.00kHz	Adjusts the center frequency when changing the tone quality in the low band.	
Lo GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low band.	
Lo-Mid FREQUENCY	20Hz- <b>500Hz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the low-midrange band.	
Lo-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the low-midrange band.	
Lo-Mid Q	0.5- <b>1.0</b> -16.0	Adjusts the width of the frequency band when boosting or attenuating low-midrange band.	
Hi-Mid FREQUENCY	20Hz- <b>2.00kHz</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high-midrange band.	
Hi-Mid GAIN	-12.0 <b>-0.0</b> -12.0dB	Boosts or attenuates the high-midrange band.	
Hi-Mid Q	0.5 <b>–1.0</b> –16.0	Adjusts the width of the frequency band when boosting or attenuating high-midrange band.	
Hi FREQUENCY	1.00- <b>10.0</b> -20.0kHz	Adjusts the center frequency when changing the tone quality in the high band.	
Hi GAIN	-12.0- <b>0.0</b> -12.0dB	Boosts or attenuates the high band.	
STREAM/RECORD Adjusts the audio that's output from		tout from the DIRECT STREAM port	
STREAM/RECORD	Aujusts the audio that's our	pat nom the bitter of the fire port.	
MUTE	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.	
	OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced. Adjusts the output volume.	
MUTE	·	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume.  This can also be adjusted by the [STREAM/RECORD] knob.	
MUTE	OFF, ON -INF-0.0-10.0dB 0.0-500msec	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume.  This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.	
MUTE	<b>OFF</b> , ON -INF- <b>0.0</b> -10.0dB	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume.  This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.	
MUTE LEVEL DELAY	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume.  This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  Turns the equalizer on/off.	
MUTE	OFF, ON -INF-0.0-10.0dB 0.0-500msec	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume.  This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.	
MUTE LEVEL DELAY	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume.  This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  Turns the equalizer on/off.  This is a 4-band parametric equalizer. It lets you shape the character of the sound by	
MUTE LEVEL DELAY EQUALIZER	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.	
MUTE LEVEL DELAY EQUALIZER Lo FREQUENCY	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.	
MUTE LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Boosts or attenuates the low-midrange band.	
MUTE  LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB  20Hz-500Hz-20.0kHz	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.	
MUTE  LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY Lo-Mid GAIN	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB  20Hz-500Hz-20.0kHz -12.0-0.0-12.0dB	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.	
MUTE  LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY Lo-Mid GAIN Lo-Mid Q	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB  20Hz-500Hz-20.0kHz -12.0-0.0-12.0dB  0.5-1.0-16.0	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.  Boosts or attenuates the high-midrange band.	
MUTE LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY Lo-Mid GAIN Lo-Mid GAIN Lo-Mid Q Hi-Mid FREQUENCY	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB  20Hz-500Hz-20.0kHz -12.0-0.0-12.0dB  0.5-1.0-16.0  20Hz-2.00kHz-20.0kHz	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.	
MUTE  LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY Lo-Mid GAIN Lo-Mid Q Hi-Mid FREQUENCY Hi-Mid GAIN	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB  20Hz-500Hz-20.0kHz -12.0-0.0-12.0dB  0.5-1.0-16.0  20Hz-2.00kHz-20.0kHz -12.0-0.0-12.0dB	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.  Boosts or attenuates the high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the center frequency when changing the tone quality in the high band.	
MUTE  LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY Lo-Mid GAIN Lo-Mid Q Hi-Mid FREQUENCY Hi-Mid GAIN Hi-Mid GAIN	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB 20Hz-500Hz-20.0kHz -12.0-0.0-12.0dB 0.5-1.0-16.0  20Hz-2.00kHz-20.0kHz -12.0-0.0-12.0dB	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.	
MUTE  LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY Lo-Mid GAIN Lo-Mid Q Hi-Mid FREQUENCY Hi-Mid GAIN Hi-Mid GAIN Hi-Mid Q Hi FREQUENCY	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB  20Hz-500Hz-20.0kHz -12.0-0.0-12.0dB  0.5-1.0-16.0  20Hz-2.00kHz-20.0kHz -12.0-0.0-12.0dB  0.5-1.0-16.0	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.  Boosts or attenuates the high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the center frequency when changing the tone quality in the high band.	
MUTE  LEVEL  DELAY  EQUALIZER  Lo FREQUENCY Lo GAIN Lo-Mid FREQUENCY Lo-Mid GAIN Lo-Mid Q Hi-Mid FREQUENCY Hi-Mid GAIN Hi-Mid GAIN Hi-Mid Q Hi FREQUENCY Hi FREQUENCY	OFF, ON -INF-0.0-10.0dB  0.0-500msec (0-25.0/29.9/30.0frame)  OFF, ON  20Hz-100Hz-2.00kHz -12.0-0.0-12.0dB  20Hz-500Hz-20.0kHz -12.0-0.0-12.0dB  0.5-1.0-16.0  20Hz-2.00kHz-20.0kHz -12.0-0.0-12.0dB  0.5-1.0-16.0	Turns the mute function on/off. When this is "ON", the input audio is temporarily silenced.  Adjusts the output volume. This can also be adjusted by the [STREAM/RECORD] knob.  Adjusts the delay time of the audio.  Effect Outputs audio with a delay.  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.  Adjusts the center frequency when changing the tone quality in the low band.  Boosts or attenuates the low band.  Adjusts the center frequency when changing the tone quality in the low-midrange band.  Boosts or attenuates the low-midrange band.  Adjusts the width of the frequency band when boosting or attenuating low-midrange band.  Adjusts the center frequency when changing the tone quality in the high-midrange band.  Boosts or attenuates the high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the width of the frequency band when boosting or attenuating high-midrange band.  Adjusts the center frequency when changing the tone quality in the high band.  Boosts or attenuates the high band.	

FADER ASSIGN		
Menu item	Value (bold text: default value)	Explanation
INPUT FADER 1–7/8	AUDIO IN 1–7/8, USB IN, Bluetooth IN, AUDIO PLAYER, VIDEO 1–6, V. PLAYER The default values are as follows. INPUT FADER 1: AUDIO IN 1 INPUT FADER 2: AUDIO IN 2 INPUT FADER 3: AUDIO IN 3 INPUT FADER 4: AUDIO IN 4 INPUT FADER 5: AUDIO IN 5 INPUT FADER 6: AUDIO IN 6 INPUT FADER 7/8: AUDIO IN 7/8	Selects the audio input to assign to each fader.

AUDIO FOLLOW			
Menu item	m Value (bold text: default value)   Explanation		
ALL AUDIO FOLLOW	<b>OFF</b> , ON Turns on/off the audio follow function for VIDEO 1–6 in a single action.		
	Turns the audio follow function on/off.		
VIDEO 1-6	Audio follow is a function that automatically switches the audio output in tandem with video switching.		
V.PLAYER	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 1-7/8		For each audio source, these settings specify the input video that uses the audio follow function. Audio is output only when the specified input video is selected.	
USB IN	OFF, VIDEO 1–6, STILL 1–16, V.PLAYER, INPUT 1–6		
Bluetooth IN		When this is "OFF", the audio is always output regardless of the video selection.	
AUDIO PLAYER		when this is Off, the audio is always output regardless of the video selection.	

AUTO MIXING		
Menu item	Value (bold text: default value)	Explanation
AUDIO AUTO MIXING	OFF, ON	Turns the auto mixing function on/off. Auto mixing is a function that automatically controls the volume adjustments.
VIDEO IN 1-6	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.
V.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.
A.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.
AUDIO IN 1-6	DISABLE, <b>ENABLE</b>	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 7/8	DISABLE, <b>ENABLE</b> 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	<b>DISABLE</b> , 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.

AUDIO EMBEDDED		
Menu item	Value (bold text: default value)	Explanation
EMBEDDED AUDIO CH		Settings related to embedded audio channel for the HDMI input.
VIDEO IN 1-6	CH 1-2, CH 3-4, CH 5-6, CH 7-8	Selects the channel used for embedded audio.
VIDEO OUT 1–3 SEND		These parameters set the input audio to send to HDMI embedded audio channels 3–8.
CH 3-4	NA AUDIO IN 1/2 AUDIO IN	When this is set to "N/A", no audio is sent.
CH 5-6	N/A, AUDIO IN 1/2–AUDIO IN 7/8, USB IN, Bluetooth IN, AUDIO PLAYER, VIDEO IN 1–6, V.PLAYER	* The following audio buses are assigned for channels 1 and 2.
CH 7-8		Channel 1: MAIN BUS (L) or AUX 1 BUS (L)
Сп 7-6		Channel 2: MAIN BUS (R) or AUX 1 BUS (R)
Sets whether to send au	udio with effects applied, from each in	put to the HDMI embedded audio channels (3–8).
AUDIO IN 1-7/8	OFF	Audio is not sent.
USB IN	DRY	Sends the source audio with no effects applied.
Bluetooth IN	PRE FADER	Sends the effect-applied audio.
AUDIO PLAYER		The send volume is constant, regardless of the volume (INPUT LEVEL).
VIDEO IN 1-6	DOCT FADED	Sends the effect-applied audio.
V.PLAYER	POST FADER	The send volume can be changed by adjusting the volume (INPUT LEVEL).

# 3: TRANSITION

Menu item	Value (bold text: default value)	Explanation	
MIX	These are the detailed mix settings.		
	Specifies the transition pattern for mix.		
	MIX	The two videos are mixed as the transition occurs.	
		Video transitions are made with the luminance levels of the two video streams maintained	
MIX TYPE	FAM	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.	
	TV WY	This is an abbreviation of "non-additive mix".	
MIXTIME	0.0- <b>1.0</b> -4.0sec	Specifies the video transition time.	
WIPE	These are the detailed wipe settings.		
	Specifies the transition pattern for wi	ре.	
WIPETYPE	HORIZONTAL VERTICAL H-CE	NTER V-CENTER UPPER LEFT UPPER RIGHT LOWER LEFT LOWER RIGHT	
***************************************			
WIPETIME	0.0- <b>1.0</b> -4.0sec	Specifies the video transition time.	
DIRECTION	NORMAL, REVERSE, ROUND TRIP	Specifies the direction of wipe.	
	WHITE, YELLOW, CYAN, GREEN,	Specifies the color of the border added to the edge of the wipe area.	
BORDER COLOR	MAGENTA, RED, BLUE, BLACK, SOFT EDGE	When this is set to "SOFT EDGE", the wipe border is blurred.	
BORDER WIDTH	0- <b>3</b> -14	Specifies the width of the border added to the edge of the wipe area.	
SPLIT	These are the detailed settings for the		
	These parameters configure the split	· · · · · · · · · · · · · · · · · · ·	
		This vertically crops the center section of the video (split left/right).	
SPLIT TYPE	SPLIT V	A + B > A B	
		This horizontally crops the center section of the video (split upper/lower).	
	SPLIT H	A + B B	
PGM SOURCE	VIDEO 1–6, STILL 1–16, V.PLAYER INPUT 1–6	Selects the video source to display on the left or upper side.	
PST SOURCE	VIDEO 1–6, STILL 1–16, V.PLAYER INPUT 1– <b>2</b> –6	Selects the video source to display on the right or lower side.	
		When at SPLIT V	
	-50.0 <b>-0.0</b> -50.0%	Adjusts the horizontal position of the video placed on the left.	
PGM CENTER		When at SPLIT H	
		Adjusts the horizontal position of the video placed above.	
		* This positions the PGM bus video to the left or upper side.	
		When at SPLIT V	
	500.00.5000	Adjusts the horizontal position of the video placed on the right.  When at SPLIT H	
PST CENTER	-50.0 <b>-0.0</b> -50.0%	Adjusts the horizontal position of the video placed below.	
		* This positions the PST bus video to the right or lower side.	
CENTER POS	-50.0 <b>-0.0</b> -50.0%	Adjusts the position of the boundary.	
	WHITE, YELLOW, CYAN, GREEN,		
BORDER COLOR	MAGENTA, RED, BLUE, BLACK	Specifies the color of the border.	
BORDER WIDTH	0-3-14	Adjusts the width of the border.	

### 4: PinP/DSK

#### PinP & KEY 1–2

Menu item	Value (bold text: default value)	Explanation
SOURCE	VIDEO 1-6, STILL 1-16, V.PLAYER, INPUT 1-6	Specifies the video source of the inset screen.
	Specifies the type of PinP compositing.	
	PinP	Composites the inset screen on top of the background video.
		A combination of PinP and luminance key (white).
	LUMINANCE WHITE KEY	Makes the white portions of the inset screen transparent, and composites the
		image with the background.
TYPE		A combination of PinP and luminance key (black).
	LUMINANCE BLACK KEY	Makes the black portions of the inset screen transparent, and composites the
		image with the background.
	CLIDOMA KEV	A combination of PinP and chroma key.
	CHROMA KEY	Makes the specified key color portions of the inset screen transparent, and composites the image with the background.
TIME	0.0- <b>1.0</b> -4.0sec	Specifies the video transition time.
SIZE	0.0-35.0-100.0%	Adjusts the size of the inset screen.
WINDOW POSITION H	-50.0- <b>40.0</b> -50.0%	Adjusts the horizontal position of the inset screen.
WINDOW POSITION V	-50.0 <b>-40.0</b> -50.0%	Adjusts the vertical position 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.
When TYPE = PinP		,,
SHAPE	RECTANGLE, CIRCLE, DIAMOND	Specifies the shape of the inset screen.
	WHITE, YELLOW, CYAN, GREEN, MAGENTA, RED,	Specifies the color of the border for the inset screen.
BORDER COLOR	BLUE, BLACK, SOFT EDGE	When this is set to "SOFT EDGE", the edge of the inset screen is blurred.
BORDER WIDTH	0- <b>3</b> -14	Adjusts the width of the border for the inset screen.
ZOOM	100-400%	Adjusts the zoom of the video shown in the inset screen.
VIEW POSITION H	-50.0 <b>-0.0</b> -50.0%	Adjusts the horizontal position at which the inset screen is shown.
VIEW POSITION V	-50.0 <b>-0.0</b> -50.0%	Adjusts the vertical position at which the inset screen is shown.
When TYPE = LUMINANO	CE WHITE KEY or LUMINANCE BLACK KEY	
ZOOM	100-400%	Adjusts the zoom of the video shown in the inset screen.
VIEW POSITION H	-50.0 <b>-0.0</b> -50.0%	Adjusts the horizontal position at which the inset screen is shown.
VIEW POSITION V	-50.0 <b>-0.0</b> -50.0%	Adjusts the vertical position at which the inset screen is shown.
KEY LEVEL	0- <b>60</b> -255	Adjusts the degree of extraction (transparency) for the key.
KEY GAIN	<b>0</b> –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).
When TYPE = CHROMA I		riagasta the help a creatal actions, (carpacteres).
ZOOM	100-400%	Adjusts the zoom of the video shown in the inset screen.
VIEW POSITION H	-50.0 <b>-0.0</b> -50.0%	Adjusts the horizontal position at which the inset screen is shown.
VIEW POSITION V	-50.0 <b>-0.0</b> -50.0%	Adjusts the vertical position at which the inset screen is shown.
KEY LEVEL	0- <b>60</b> -255	Adjusts the degree of extraction (transparency) for the key.
KEY GAIN	<b>0</b> -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).
WIIX ELVEL	0-233	Specifies green or blue as the key color (the color to be removed). If you want
COLOR	GREEN, <b>BLUE</b>	a color other than green or blue to be transparent, use "SAMPLING MARKER
		MODE" in the PinP & KEY setup screen to specify the key color.
HUE WIDTH	-30 <b>-0</b> -30	Adjusts the hue width for the key color.
HUE FINE	0- <b>240</b> -360	Adjusts the center position of the hue for the key color.
SATURATION WIDTH	-128- <b>0</b> -127	Adjusts the saturation width for the key color.
SATURATION FINE	<b>0</b> –255	Adjusts the center position of saturation for the key color.
COPY/SWAP	ENTER	Shows the COPY/SWAP screen.
EDIT ON PREVIEW	ENTER	Shows the EDIT ON PREVIEW screen.

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Menu item	Value (bold text: default value)	Explanation
	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.
DSK MODE	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 (*1)	VIDEO 1–6, <b>STILL 1</b> –16, V.PLAYER, INPUT 1–6	Specifies the source of the caption or video that is overlaid.
KEY SOURCE (*2)	VIDEO 1– <b>5</b> –6, STILL 1–16, V.PLAYER, INPUT 1–6	Sets the video to use as the key signal (the shape to be cut out).
FILL SOURCE (*2)	VIDEO 1– <b>5</b> –6, STILL 1–16, V.PLAYER, INPUT 1–6	Specifies the fill video (the video to be composited) source.
TIME	0.0- <b>1.0</b> -4.0sec	Specifies the video transition time.
	Specifies the DSK type used during D	DSK composition.
	LUMINANCE WHITE KEY	Composite using luminance key.
	LOWINANCE WHITE KET	Makes white portions transparent according to brightness.
<b>TYPE</b> (*3)	LUMINANCE BLACK KEY	Composite using luminance key.
	EOMINANCE BEACK RET	Makes black portions transparent according to brightness.
	CHROMA	Composite using chroma key.
	C. III.O. IV.	Makes the specified key color transparent according to hue.
LEVEL (*3)	0 <b>-60</b> -255	Adjusts the degree of extraction (transparency) for the key.
<b>GAIN</b> (*3)	<b>0</b> –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).
	Sets the fill material type (the video u	used for key compositing).
	BUS	Uses the video specified in "DSK SOURCE".
FILL TYPE	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	WHITE, YELLOW, CYAN, GREEN, MAGENTA, <b>RED</b> , BLUE, BLACK	Specifies the matte color.
EDGETYPE	<b>OFF</b> , BORDER, DROP, SHADOW, OUTLINE	Specifies the type of edge applied to the superimposed caption or video.
EDGE COLOR	WHITE, YELLOW, CYAN, GREEN, MAGENTA, RED, BLUE, <b>BLACK</b>	Specifies the color of the edge applied to the superimposed caption or video.
EDGE WIDTH	0- <b>3</b> -7	Specifies the width of the edge applied to the superimposed caption or video.
CHROMA (*4)	Make detailed settings for chroma ke	<u>-</u> 2y.
COLOR	GREEN, <b>BLUE</b>	Specifies green or blue as the key color. If you want a color other than green or blue to be transparent, use "SAMPLING MARKER MODE" in the DSK setup screen to specify the key color.
HUE WIDTH	-30 <b>-0</b> -30	Adjusts the hue width for the key color.
HUE FINE	0- <b>240</b> -360	Adjusts the center position of the hue for the key color.
SATURATION WIDTH	-128 <b>-0</b> -127	Adjusts the saturation width for the key color.
SATURATION FINE	0-255	Adjusts the center position of saturation for the key color.

<sup>(\*1)</sup> This can be set if "DSK MODE" is "SELF KEY" or "ALPHA KEY".

<sup>(\*2)</sup> This can be set if "DSK MODE" is "EXTERNAL KEY".

<sup>(\*3)</sup> This can be set if "DSK MODE" is "SELF KEY".

<sup>(\*4)</sup> This can be set if "TYPE" is "CHROMA".

### 5: STREAM/RECORD

Menu item	Value (bold text: default value)	Explanation	
START/STOP	STOP, ON AIR	Starts (stops) streaming/rec	ording.
TARGET BITRATE	Specifies the target bitrate of en	coding.	
V.BITRATE	1–5, <b>6</b> , 7–20Mbps	Specifies the target bitrate of	of video encoding.
A.BITRATE	32, 48, 64, 96, <b>128</b> , 160, 192, 224, 256	Specifies the target bitrate of	of audio encoding.
STREAM/RECORD SETUP			
	Sets which platform is used for li	vestreaming.	
	OFF	Livestreaming is not used.	
	CUSTOM	Custom settings are used for str	reaming.
	YouTube Live	Uses YouTube Live for streaming	g
	Facebook Live	Uses Facebook Live for streamin	ng.
SERVICE 1, 2	Twitch	Uses Twitch for streaming.	
	Menu item	Value (bold text: default value)	Explanation
	URL URL	Value (bold text: default value)	Specifies the URL of the streaming server.
		Value (bold text: default value)	•
	URL STREAM KEY	- ENTER	Specifies the URL of the streaming server.
VIDEO REC	URL STREAM KEY	-	Specifies the URL of the streaming server.  Specifies the stream key.  Uses a Web app to set the streaming server URL and stream key.  MP4 file (ON) or not (OFF).
VIDEO REC BROWSE	URL STREAM KEY USE WEB APPLICATION	ENTER  Sets whether to record an N	Specifies the URL of the streaming server.  Specifies the stream key.  Uses a Web app to set the streaming server URL and stream key.  MP4 file (ON) or not (OFF).
	URL STREAM KEY USE WEB APPLICATION  OFF, ON	ENTER  Sets whether to record an N * SDXC card is required for vide	Specifies the URL of the streaming server.  Specifies the stream key.  Uses a Web app to set the streaming server URL and stream key.  MP4 file (ON) or not (OFF). o recording.
BROWSE	URL STREAM KEY USE WEB APPLICATION  OFF, ON ENTER	ENTER  Sets whether to record an M * SDXC card is required for vide Shows the BROWSE screen.	Specifies the URL of the streaming server.  Specifies the stream key.  Uses a Web app to set the streaming server URL and stream key.  MP4 file (ON) or not (OFF). o recording.
BROWSE AUDIO REC	URL STREAM KEY USE WEB APPLICATION  OFF, ON ENTER OFF, ON	ENTER  Sets whether to record an M * SDXC card is required for vide Shows the BROWSE screen. Sets whether to record a WA Shows the BROWSE screen.	Specifies the URL of the streaming server.  Specifies the stream key.  Uses a Web app to set the streaming server URL and stream key.  MP4 file (ON) or not (OFF). o recording.
BROWSE AUDIO REC BROWSE	URL STREAM KEY USE WEB APPLICATION  OFF, ON ENTER OFF, ON ENTER	ENTER  Sets whether to record an M * SDXC card is required for vide Shows the BROWSE screen. Sets whether to record a WA Shows the BROWSE screen.	Specifies the URL of the streaming server.  Specifies the stream key.  Uses a Web app to set the streaming server URL and stream key.  MP4 file (ON) or not (OFF). or recording.  AV file (ON) or not (OFF). In that's used by the safety delay function.
BROWSE AUDIO REC BROWSE STREAM DELAY	URL STREAM KEY USE WEB APPLICATION  OFF, ON ENTER OFF, ON ENTER OFF, 5-60sec	ENTER  Sets whether to record an M * SDXC card is required for vide Shows the BROWSE screen. Sets whether to record a W/ Shows the BROWSE screen. Sets the streaming delay tin Loads the still image used for	Specifies the URL of the streaming server.  Specifies the stream key.  Uses a Web app to set the streaming server URL and stream key.  MP4 file (ON) or not (OFF). or recording.  AV file (ON) or not (OFF). In that's used by the safety delay function.

# 6: VIDEO PLAYER

Menu item	Value (bold text: default value)	Explanation
FILE NAME	ENTER	Shows the filename of the video that was loaded.
FILE INAIVIE	ENTER	Touch to load the video.
SET/DELETE START TIME	00:00:00-Length of the video	Sets the playback start point of the video.
SET/DELETE END TIME	00:00:00-Length of the video	Sets the playback end point of the video.
MUTE	OFF, ON	When this is "ON", the mute function turns on.
STOP		Touch to stop the video.
SKIP BACKWARD		Touch to backward the video.
PLAY		Touch to play the video.
SKIP FORWARD		Touch to forward the video.
REPEAT	OFF, ON	When this is "ON", the video plays back repeatedly.
SKIP FORWARD TIME	1, <b>10</b> , 30, 60sec	Sets how much the video fast-forwards each time.
SKIP BACKWARD TIME	1, <b>10</b> , 30, 60sec	Sets how much the video rewinds each time.
LEVEL	-INF- <b>0.0</b> -10.0dB	Adjusts the output volume.
MIXER INPUT	ENTER	Shows the AUDIO INPUT screen.
VIDEO ASSIGN	ENTER	Shows the VIDEO INPUT ASSIGN screen.

# 7: AUDIO PLAYER

Menu item	Value (bold text: default value)	Explanation
AUDIO PLAYER BANK	BANK A, BANK B	Selects the audio player bank.
AUDIO PLAYER 1-6		
IMPORT	ENTER	Imports the audio.
EDIT	ENTER	Shows the EDIT screen.
NAME	ENTER	Sets the name for an audio clip.
DURATION	Display only	Shows the length of an audio clip.
OFFSETTIME	0.0-Length of the audio clip	Sets the playback start position of the audio clip.
LEVEL	-INF- <b>0.0</b> -10.0dB	Sets the volume of the audio clip.
FADE IN TIME	<b>0.0</b> –10.0sec	Sets the fade-in time.
FADE OUT TIME	<b>0.0</b> –10.0sec	Sets the fade-out time.
REPEAT	OFF, ON	When this is set to "ON", the audio clip plays back in a loop.
	LATCH	Toggles between playback and stop each time you press the pad. The audio plays back from the beginning.
PAD MODE	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.
	BGM	
PLAYING MODE	SE	Specifies how the audio clip plays back.
SOLO		
COPY	ENTER	Shows the COPY screen.
SWAP	ENTER	Shows the SWAP screen.
INITIALIZE	EXEC	Initializes the settings.
MIXER INPUT	ENTER	Shows the AUDIO INPUT screen.

### 8: MEMORY/MACRO/SEQ

#### SCENE MEMORY

Menu item	Value (bold text: default value)	Explanation	
	Specifies the settings loaded at startup.		
START UP	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 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 on the storage media. You can select a scene memory setting file to save a scene memory (1–32) to the storage media.	
BUTTON ASSIGN	ENTER	This shows the BUTTON ASSIGN menu.	
VIDEO SWITCHER BUTTON 1–6	1: MEMORY 1– 32: MEMORY 32 (*1) The default values are as follows. 1: MEMORY 1 2: MEMORY 2 3: MEMORY 3 4: MEMORY 4 5: MEMORY 5 6: MEMORY 6	Selects the scene memories that are assigned to the VIDEO SWITCHER buttons.	
FADE TIME	<b>0.0</b> –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.		
		re 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 ALL	OFF, ON	All TRANSITION settings	
TRANSITION TYPE	OFF, ON	TRANSITION menu	
MIX	OFF, ON	MIX menu	
WIPE	OFF, ON	WIPE menu	
SPLIT	OFF, ON	SPLIT menu	
PinP & KEY ALL	OFF, ON	All PinP & KEY settings	
PinP & KEY 1	OFF, ON	PinP & KEY 1 menu	
PinP & KEY 2	OFF, ON	PinP & KEY 2 menu	
DSK	OFF, ON	DSK menu	
VIDEO SWITCHER BUTTON	OFF, ON	VIDEO SWITCHER button state	
AUDIO FADER ASSIGN	OFF, ON	AUDIO FADER ASSIGN menu	
AUDIO INPUT	OFF, ON	AUDIO INPUT menu	
AUDIO OUTPUT	OFF, ON	AUDIO OUTPUT menu	
AUDIO FOLLOW	OFF, ON	AUDIO FOLLOW menu	
AUDIO AUTO MIXING	OFF, ON	AUDIO AUTO MIXING menu	

 $<sup>\</sup>label{eq:continuous} \mbox{(*1)} \ \ \mbox{If you edited a scene memory's name using "NAME EDIT", the edited name is shown.$ 

#### MACRO

Menu item	Value (bold text: default value)	Explanation
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.  You can select the macro settings file used to save the macro (1–100) to the storage.
BUTTON ASSIGN	ENTER	This shows the BUTTON ASSIGN menu.
VIDEO SWITCHER BUTTON 1–6	1: MACRO 1– 100: MACRO 100 (*2) The default values are as follows. 1: MACRO 1 2: MACRO 2 3: MACRO 3 4: MACRO 4 5: MACRO 5 6: MACRO 6	Selects the scene macro that are assigned to the VIDEO SWITCHER buttons.
INITIALIZE	EXEC	Initializes the macro.

<sup>(\*2)</sup> If you edited a macro's name using "NAME EDIT", the edited name is shown.

### SEQUENCER

Menu item	Value (bold text: default value)	Explanation
SEQUENCER	OFF, ON	Turns the sequencer function on/off.
REPEAT EXECUTE	OFF, ON	When this is "ON", the recorded operation is repeatedly executed.
AUTO SEQUENCE	OFF, ON	When this is "ON", the recorded operation is automatically executed.
LOAD FROM STORAGE	ENTER	Shows a list of the sequence files (.RSQ) that are on the USB flash drive. You can select a sequence file to load the sequencer settings into this unit. The current sequencer settings are overwritten.
SAVE TO STORAGE	ENTER	Shows a list of the sequence files (.RSQ) that are on the USB flash drive. You can select a sequence file to save the current sequencer settings to storage.
INITIALIZE	EXEC	Initializes the sequencer.

### 9: STILL IMAGE

Menu item	Value (bold text: default value)	Explanation	
LOAD FROM STORAGE	This loads a still image from the storage media.		
STILL IMAGE	<b>STILL 1</b> –16	Specifies where t	o save still images imported from a storage to this unit's internal memory.
			II image files on the storage media. s in the list to load them from the storage media. ted for loading
			Bitmap file (.bmp), 24-bit color, uncompressed
LOAD	ENTER	Format	PNG file (.png), 24-bit color  * Alpha channel supported
			JPEG file (.jpg), 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	<b>STILL 1</b> –16	Press the [VALUE subdirectory).  * The file formats of above.	nages to export to the USB flash drive. ] knob to display a list of still images stored on the storage media (in the "Still" f the still images that can be saved are the same as in "Formats supported for loading", still images that were created while "HDCP" in the SYSTEM menu was "ON".
SAVE	ENTER	Shows a list of still image files on the storage media.  Select still images in the list to export them to the storage media.	
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.	
DELETE STILL IMAGE	EXEC	Delete the select	ed still image.
DELETE ALL STILL IMAGE	EXEC	Delete all still ima	ages.

# 10: AUTO SWITCHING

Menu item	Value (bold text: default 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.		
	Specifies the operation mo	de for auto switching.		
	INPUT SCAN	Automatically switches to the video of INPUT 1–6 when the specified interval.		
TYPE	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.		
TTPE	BEAT SYNC	The video switches in time with the beat of the song.		
	VIDEO FOLLOWS AUDIO	The video switches along with the audio from the mic.		
	PinP & KEY 1–2 SCAN	The PinP & KEY 1/2 video automatically changes after a specified length of time.		
	DSK SCAN	The DSK video automatically changes after a specified length of time.		
When TYPE = INPUT SCAN				
	Specifies the order in which # If there is no video input, this			
CCAN CEOLIENCE	NORMAL	Switches in the order of INPUT 1 → 6.		
SCAN SEQUENCE	REVERSE	Switches in the order of INPUT 6 → 1.		
	RANDOM	Switches randomly.		
SCAN TRANSITION TIME	0.0- <b>1.0</b> -4.0sec	Specifies the video transition time.		
SCAN TRANSPITION TIME	Sets the video to which aut	l '		
	VIDEO INPUT			
SCAN TARGET	PinP & KEY 1–2	Final output video and preview video  PinP & KEY layer (inset screen) video		
	DSK	DSK layer (inset screen) video		
INPUT 1–6 TIME	OFF, 1– <b>5</b> –120sec	Specifies the time that the video is shown. Turn this "OFF" to skip.		
When TYPE = SCENE MEMORY S	<u>'</u>	Specifies the time that the video is shown, fulfithing of the skip.		
WHEN THE - SCENE MEMORY S	Specifies the order in which	n scene memories are switched. settings have been saved are skipped.		
SCAN SEQUENCE	NORMAL	Switches in the order of scene memory 1→32.		
JC/III JEQUEITCE	REVERSE	Switches in the order of scene memory 32 → 1.		
	RANDOM	Switches randomly.		
MEMORY 1–32 TIME	OFF, 1– <b>5</b> –120sec	Specifies the time it takes to switch to the next scene memory. Turn this "OFF" to skip.		
When TYPE = BEAT SYNC				
SYNC SOURCE	AUDIO IN 1–AUDIO IN 7/8, USB IN, Bluetooth IN, AUDIO PLAYER, VIDEO IN 1–6, VIDEO PLAYER	Sets the input audio that's synchronized with the video.		
	Specifies the order in which * If there is no video input, this			
SCAN SEQUENCE	· ·	Switches in the order of INPUT $1 \rightarrow 6$ .		
SCAN SEQUENCE	REVERSE	Switches in the order of INPUT 6 → 1.		
	RANDOM	Switches randomly.		
SCAN TRANSITION TIME	0.0- <b>1.0</b> -4.0sec	Specifies the video transition time.		
SCAN CYCLE	1-4-10	Sets the beat number on which the video switches to the next one.		
SCANTARGET	VIDEO INPUT, PinP & KEY 1–2, DSK	Sets the video to which auto switching is applied.		
When TYPE = VIDEO FOLLOWS A	When TYPE = VIDEO FOLLOWS AUDIO			
	Specifies the video that is o	output when audio is detected.		
AUDIO IN 1–7/8 TARGET,	OFF,	_		
USB IN TARGET, Bluetooth IN TARGET,	VIDEO IN 1–6	Switches output video.		
AUDIO PLAYER TARGET, VIDEO IN 1–6 TARGET,	SCENE 1–32	Recall the settings scene memory.		
VIDEO PLAYER TARGET	MACRO 1–100	Executes a macro.		

#### **Other Functions**

Menu item	Value (bold text: default value)	Explanation
THRESHOLD	-50 dB- <b>-16 dB</b> -0 dB	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	<b>OFF</b> , VIDEO 1–6, SCENE 1–32, MACRO 1–100	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	<b>OFF</b> , VIDEO 1–6, SCENE 1–32, MACRO 1–100	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 <b>-4.0</b> -30.0sec	Specifies the time after the video has switched until audio detection resumes.
When TYPE = PinP & KEY 1–2 SC	:AN	
	Specifies the order in which * If there is no video input, this	
SCAN SEQUENCE	NORMAL	Switches in the order of INPUT 1 $\rightarrow$ 6.
	REVERSE	Switches in the order of INPUT 6 $\rightarrow$ 1.
	RANDOM	Switches randomly.
VIDEO 1-6 TIME	OFF, 1– <b>5</b> –120sec	Specifies the time that the video is shown.
STILL 1–16 TIME	OFF, 1– <b>5</b> –120sec	Specifies the time that the still image is shown.
V.PLAYER TIME	OFF, 1– <b>5</b> –120sec	Specifies the time that the video player is shown.
When TYPE = DSK SCAN		
	Specifies the order in which * If there is no video input, this	3
SCAN SEQUENCE	NORMAL	Switches in the order of INPUT 1 $\rightarrow$ 6.
	REVERSE	Switches in the order of INPUT 6 $\rightarrow$ 1.
	RANDOM	Switches randomly.
VIDEO 1–6 TIME	OFF, 1– <b>5</b> –120sec	Specifies the time that the video is shown.
STILL 1–16 TIME	OFF, 1– <b>5</b> –120sec	Specifies the time that the still image is shown.
V.PLAYER TIME	OFF, 1– <b>5</b> –120sec	Specifies the time that the video player is shown.

# 11: REMOTE

#### RC232

Menu item	Value (bold text: default 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, <b>115200</b>	Specifies the communication speed (bps) of the RS-232 connector.

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TALLY/GPO							
Menu item	Value (bold text: default value)	Explanation					
TALLY/GPO	These are settings for tally	tally signals or control signals that are output from the TALLY/GPIO connector.					
TEMPLATE	TALLY, GPO, TALLY/GPO	Selects a TALLY/GPO 1–16 settings template.					
TEMPLATE	IALLI, GFO, IALLI/GFO	Press the [VALUE] knob to apply the template settings to "TALLY/GPO 1–16".					
	Assigns the tally signal to T	ALLY/GPIO connector pins 1–16.					
	PGM VIDEO IN 1–6	A tally signal is output when the video sent from the connector in question is the final output.					
	PGM STILL 1–16	A tally signal is output when the still image in question is the final output.					
	PGM VIDEO PLAYER	A tally signal is output when the video signal from the video player is the final output.					
	PGM INPUT 1–6	A tally signal is output when the final output video is selected using the VIDEO SWITCHER button in question (the button lights up red).					
TALLY/GPO 1–16	PST VIDEO IN 1–6	A tally signal is output when the video sent from the connector in question is the preview output.					
	PST STILL 1–16	A tally signal is output when the still image in question is the preview output.					
	PST VIDEO PLAYER	A tally signal is output when the video signal sent from the video player is the preview output.					
	PST INPUT 1–6	A tally signal is output when the preview output video is selected using the VIDEO SWITCHER buttor 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 the footswitch or assign a GPO output function to a GPI pin.					
TALLY SETTINGS							
AUX(PGM)	ENABLE, DISABLE						
PinP & KEY 1 (PGM/PST)	ENABLE, <b>DISABLE</b>	Specifies whether to output a tally signal when it is selected as AUX SOURCE.					
PinP & KEY 2 (PGM/PST)	ENABLE, <b>DISABLE</b>	ENABLE: Output a tally signal.  DISABLE: Does not output a tally signal.					
DSK (PGM/PST)	ENABLE, <b>DISABLE</b>						

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Menu item	Value (bold text: default value)	Explanation					
GPI NUMERIC KEYPAD	These settings assign the functions to the GPI and numeric keypad.						
	When an external control signal is input, the assigned functions are executed.						
	CATEGORY	VALUE	Explanation				
	N/A		No function is assigned.				
	PGM CH SELECT	INPUT 1–6	Switches the video sent to the PGM bus.				
	PST CH SELECT	INPUT 1–6	Switches the video sent to the PST bus.				
	AUX CH SELECT	VIDEO 1–6, STILL 1–16, V.PLAYER, INPUT 1–6	Switches the video sent to the AUX bus.				
	INPUT 1–6 ASSIGN	VIDEO IN 1-6, STILL 1-16, V.PLAYER, N/A	Changes the video assigned to INPUT 1–6.				
	STILL OUTPUT	STILL 1–16	Pauses the normal output, and previews or final outputs a cut of the still image.				
	VIDEO PLAYER OUTPUT		Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.				
	PinP & KEY 1–2 SOURCE		Switches the video source of the inset screen.				
	DSK SOURCE	VIDEO 1–6, STILL 1–16, V.PLAYER, INPUT 1–6	Switches the DSK video source.				
	BUTTON CONTROL	CUT BUTTON, AUTO BUTTON MIX BUTTON WIPE BUTTON SPLIT BUTTON PinP & KEY 1–2 PVW BUTTON PinP & KEY 1–2 PGM BUTTON DSK PVW BUTTON DSK PGM BUTTON AUDIO EFFECT 1–3 BUTTON AUDIO PLAYER 1–6 BUTTON	This works the same as when you press the button selected in "VALUE".				
	AUDIO INPUT MUTE	AUDIO IN 1–7/8, USB IN, Bluetooth IN, AUDIO PLAYER, VIDEO 1–6, V.PLAYER	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.				
GPI 1–8 KEYPAD 0 - 9	AUDIO INPUT SOLO	AUDIO IN 1–7/8, USB IN, Bluetooth IN, AUDIO PLAYER, VIDEO 1–6, V.PLAYER	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.				
Enter	VOICE CHANGER	AUDIO IN 1, 2	Turns the voice changer function on/off.				
	AUTO MIXING		Turns the auto switching function on/off.				
	REVERB(MOMENTARY)		Reverb turns on only while a control signal is input.				
	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 1–6 in sequential order.				
		REVERSE	Each time a control signal is input, the final output switches in reverse order from INPUT 6 through 1.  The scene memories 1 through 32 are recalled in order each				
		NORMAL	time a control signal is input.				
	SCENE MEMORY SCAN	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 you input a control signal, the PinP & KEY 1–2 inset screen videos switch between VIDEO IN 1–6 $\rightarrow$ STILL 1–16 in order.				
	THE GREET 23CM	REVERSE	Each time you input a control signal, the PinP & KEY 1–2 inset screen videos switch between STILL 16–1 → VIDEO IN 6–1 in order.				
	DSK SCAN	NORMAL	Each time you input a control signal, the DSK caption video switches between VIDEO IN 1–6 → STILL 1–16 in order.				
		REVERSE	Each time you input a control signal, the DSK caption videos switch between STILL 16–1 → VIDEO IN 6–1 in order.				
	MACRO EXECUTE	MACRO 1–100	Executes a macro (a series of recorded operations).				
	SEQUENCER	MODE ON/OFF, NEXT, PREVIOUS, AUTO SEQUENCE	When the sequencer function is on, this works the same as when you press the button selected in "VALUE".				
	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.				

CTL/EXP							
Menu item	Value (bold text: default value)	Explanation					
CTL/EXP 1, 2	These settings for the footswitch or expression pedal connected to the CTL/EXP 1, 2 jacks.						
	Settings for the devices (footswitch or expression pedal) connected to the CTL/EXP 1, 2 jacks.						
CTL/EXP TYPE	OFF	, , , , , , ,					
	CTL A & CTL B	Choose this if a footswitch is connected.					
	EXP Choose this if an expression pedal is connected.						
When CTL/EXP TYPE:							
ASSIGN	Specifies the functions that are assigned to CTL A and CTL B of the footswitch.						
	CATEGORY	VALUE	Explanation				
	N/A	INDUT 1 C	No function is assigned.				
	PGM CH SELECT PST CH SELECT	INPUT 1–6	Switches the video sent to the PGM bus.  Switches the video sent to the PST bus.				
	AUX CH SELECT	INPUT 1-6	Switches the video sent to the AUX bus.				
	INPUT 1–6 ASSIGN	VIDEO 1–6, STILL 1–16, V.PLAYER, INPUT 1–6	Changes the video assigned to INPUT 1–6.				
	STILL OUTPUT	STILL 1–16	Pauses the normal output, and previews or final outputs a cut of the still image.				
	VIDEO PLAYER OUTPUT		When a control signal is input again, the signal output returns to normal.  Temporarily pauses the normal output, and previews or final outputs a cut of the				
	VIDEOTEATEROOTTOT		video player's video signal.				
	PinP & KEY 1–2 SOURCE	VIDEO 1–6, STILL 1–16, V.PLAYER, INPUT 1–6	Switches the video source of the inset screen.				
	DSK SOURCE	VIDEO 1–6, STILL 1–16, V.PLAYER, INPUT 1–6	Switches the DSK video source.				
	BUTTON CONTROL	CUT BUTTON, AUTO BUTTON MIX BUTTON WIPE BUTTON SPLIT BUTTON PinP & KEY 1–2 PVW BUTTON PinP & KEY 1–2 PGM BUTTON DSK PVW BUTTON DSK PGM BUTTON AUDIO EFFECT 1–3 BUTTON AUDIO PLAYER 1–6 BUTTON	This works the same as when you press the button selected in "VALUE".				
	AUDIO INPUT MUTE	AUDIO IN 1–7/8, USB IN, Bluetooth IN, AUDIO PLAYER, VIDEO 1–6, V.PLAYER	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.				
CTL A	AUDIO INPUT SOLO	AUDIO IN 1–7/8, USB IN, Bluetooth IN, AUDIO PLAYER, VIDEO 1–6, V.PLAYER	Turns the solo function on/off for the input audio.				
CTL B	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 switching 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 you press the footswitch, the final output switches from INPUT 1–6 in sequential order.				
		REVERSE	Each time you press the footswitch, the final output switches in reverse order from INPUT 6 through 1.				
	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 are recalled in reverse order from 32 through 1.				
	PinP & KEY 1–2 SCAN	NORMAL	Each time you press the footswitch, the PinP & KEY 1–2 inset screen videos switch between VIDEO IN 1–6 → STILL 1–16 in order.				
		REVERSE	Each time you press the footswitch, the PinP & KEY 1–2 inset screen videos switch between STILL 16–1 → VIDEO IN 6–1 in order.  Each time you press the footswitch, the DSK caption video switches between				
	DSK SCAN	NORMAL	VIDEO IN 1–6 → STILL 1–16 in order.  Each time you press the footswitch, the DSK caption videos switch between STILL				
	MACRO EVECUTE	REVERSE MACRO 1 100	16–1 → VIDEO IN 6–1 in order.				
	MACRO EXECUTE	MACRO 1–100	Executes a macro (a series of recorded operations).				
	SEQUENCER	MODE ON/OFF, NEXT, PREVIOUS, AUTO SEQUENCE	When the sequencer function is on, this works the same as when you press the button selected in "VALUE".				
	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.				

Menu item	Value (bold text: default value)	Explanation					
When CTL/EXP TYPE=EXP							
ASSIGN	Specifies the function	nction 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 1–16	Pauses the normal output, and previews or final outputs a cut of the still image.				
	VIDEO PLAYER OUTPUT		Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.				
EXP	AUDIO INPUT LEVEL	AUDIO IN 1–7/8, USB IN, Bluetooth IN, AUDIO PLAYER VIDEO 1–6, V.PLAYER	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	AUDIO IN 1 PITCH AUDIO IN 1 FORMANT AUDIO IN 1 MIX AUDIO IN 2 PITCH AUDIO IN 2 FORMANT AUDIO IN 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).				
		The EXP CALIBRATION screen appear	ars.				
		Following the direction on the scre-	en, calibrate (adjust) the expression pedal.				
CALIBRATION	ENTER	The first time you use the expressio optimally.	n pedal, be sure to execute calibration so that the pedal will operate				
			I might no longer be operating optimally because of the passage of time ses you should also execute expression pedal calibration.				

#### Bluetooth

Menu item	Value (bold text: default value)	Explanation			
Bluetooth PAIRING	These are the Bluetooth-related s	settings.			
Bluetooth	OFF, ON	Turns the Bluetooth function on/off.			
PAIRING	EXEC	Begins pairing with a Bluetooth device.			
	Displays the Bluetooth connection status.				
	OFF	Bluetooth off			
STATUS	PAIRING MODE	Now pairing			
	NOT CONNECTED	Waiting for connection			
	CONNECTED	Connected			

### CAMERA CONTROL

Menu item	Value (bold text: default value)	Explanation			
CAMERA ID	CAMERA 1–6	Selects the camera to be controlled.			
PROTOCOL	<b>N/A</b> , 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	Displays the LOGIN NAME screen.			
LOGIN NAME	ENTER	Enter the login name needed to connect with the camera when "PROTOCOL" is "JVC".			
PASSWORD	ENTER	Displays the PASSWORD screen.			
PASSWORD	ENTER	Enter the password needed to connect with the camera when "PROTOCOL" is "JVC".			
CAMERA PRESET	PRESET 1–6	Selects the preset used when recalling or registering the settings.			
RECALL	EXEC	Touch the screen to recall the preset from a camera.			
ALL CAMEDAC DECALL	OFF	Recall presets from the camera that is being controlled.			
ALL CAMERAS RECALL	ON	Simultaneously recall presets from all cameras (CAMERA 1–6).			
STORE	EXEC	Touch the screen to register the settings from a camera as a preset.			
JIONE	LALC	* Presets are saved in the camera itself.			
TALLY CH VIDEO IN 1–6 Specifies the connector from which the camera video is input. WI the VR-6HD is the final output, the camera's tally light is lit.		Specifies the connector from which the camera video is input. When the camera video from the VR-6HD is the final output, the camera's tally light is lit.			

# 12: NETWORK

Menu item	Value (bold text: default value)	Explanation				
	ENTER	Displays the following information.				
	Item	Explanation	Explanation			
	CONNECTION	Connection status				
NETWORK INFORMATION	IP ADDRESS	IP address				
	SUBNET MASK	Subnet mask.				
	DEFAULT GATEWAY	Default gateway				
	DNS SERVER	DNS server				
PRIORITY	LAN, TETHERING	Sets whether to prioritize streaming.	ze the LAN connection or your smartphone tethering when			
	Selects how settings are made	for the IP address, subnet r	mask, and default gateway.			
CONFIGURE	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 ap	appropriate for the network to which the unit is connected.			
SUBNET MASK (*1)		Specifies the subnet mas	sk as appropriate for the network to which the unit is connected.			
<b>DEFAULT GATEWAY</b> (*1)			teway as appropriate for the network to which the unit is connected			
DNS SERVER (*1)	,	Specifies the DNS server connected.	r address as appropriate for the network to which the unit is			
TETHERING	START, STOP	Starts/stops tethering with	vith your smartphone.			
2D CODE FOR SMART TALLY	ENTER		he Smart Tally settings screen (Web) not shown if the VR-6HD is disconnected from the network.			
NETWORK PASSWORD ENTER		Displays the NETWORK PASSWORD screen.  Set the necessary password for network connection, using four characters.  Show password  Password not set  Password set ****				
		* Input the password that's set here when connecting a computer or other device on the same network to access the VR-6HD.				
MAC ADDRESS	::	Shows the MAC address of the VR-6HD.				

<sup>(\*1)</sup> This can be set if "CONFIGURE" is "MANUAL".

# 13: SD CARD/USB MEMORY

Menu item	Value (bold text: default 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 MEMORY	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	Shows a list of the setting files (.VR6) that are on the USB flash You can select a setting file and restore the settings into the u overwritten.			
BACKUP ALL SETTINGS	ENTER	Shows a list of the setting files (.VR6) that are on the USB flash drive.  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.		

### 14: DASHBOARD

Menu item	Value (bold text: default value)	Explanation					
LCD ASSIGN							
	N/A	Hidden	Hidden				
	CLOCK	Shows the analog/digital clo	ock.				
		Shows the streaming/video recording status.					
	STREAM/RECORD STATUS 1	CATEGORY	VALUE	Explanation			
			START/STOP	Starting/stopping the livestream or video recording			
	STREAM/RECORD STATUS 2	Shows the streaming/video	recording status.				
		Touch the screen to execute the set function.					
		CATEGORY	VALUE	Explanation			
		N/A		No function is assigned.			
		FREEZE		Turns the freeze function on/off.			
		AUTO SWITCHING		Turns the auto switching function on/off.			
		INPUT ASSIGN	INPUT 1–6	Each time you press a button, the video source assigned to the specified VIDEO SWITCHER button switches in order as follows: VIDEO IN 1-6 → STILL 1-16.			
		STILL OUTPUT	STILL 1–16	Pauses the normal output, and previews or final outputs a cut of the still image.			
		VIDEO PLAYER OUTPUT		Temporarily pauses the normal output, and previews or final outputs a cut of the video player's video signal.			
		LOAD MEMORY	MEMORY 1-32	Recalls a scene memory.			
		INPUT SCAN	NORMAL	Each time you press a button, the final output switches from INPUT 1–6 in sequential order.			
		INFOT SCAN	REVERSE	Each time you press a button, the final output switches in reverse order from INPUT 6 through 1.			
		MEMORY SCAN	NORMAL	Each time you press a button, scene memories 1–32 are recalled in sequential order.			
	USER BUTTON 1/2, USER BUTTON 3/4	WILMONT SCAN	REVERSE	Each time you press a button, scene memories are recalled in reverse order from 32 through 1.			
LCD ASSIGN A, B		PinP & KEY 1–2 SCAN	NORMAL	Each time you press a button, the PinP & KEY 1–2 inset screen videos switch between VIDEO IN 1–6 → STILL 1–16 in order.			
			REVERSE	Each time you press a button, the PinP & KEY 1–2 inset screen videos switch between STILL 16–1 → VIDEO IN 6–1 in order.			
		DOWOGANI	NORMAL	Each time you press a button, the DSK caption video switches between VIDEO IN 1–6 → STILL 1–16 in order.			
		DSK SCAN	REVERSE	Each time you press a button, the DSK caption video switches between STILL 16–1 → VIDEO IN 6–1 in order.			
		EXTERNAL REC CONTROL		Controls the recorder's video record start/ stop if a recorder that supports REC control functionality is connected.			
		MACRO EXECUTE	MACRO 1-100	Executes a macro (a series of recorded operations).			
		SEQUENCER		Shows the sequencer execution screen.			
		STREAM/RECORD	SETUP START/STOP SAFETY IMAGE	Shows the streaming/recording setup screen.  Starts/stops streaming or recording.  Turns the safety delay function on/off.			
		\#DF0.R/ ::/55	SETUP	Shows the video player setup screen.			
		VIDEO PLAYER	START/PAUSE/STOP	Starts/stops video playback.			
		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 while the button is pressed.			
		CAMERA CONTROL		Turns the camera control function on/off. When this is on, the VIDEO SWITCHER [1]–[6] buttons can be used to recall the presets.			
		SYSTEM	EFFECTS TRANSITION SYNC, Bluetooth CONTROL, PANEL OPERATION	Turn the Bluetooth function and EFFECTS TRANSITION SYNC function on/off, and switch the PANEL OPERATION. When Bluetooth CONTROL, long-press the button to begin pairing.			
VIDEO OUT ASSIGN							
	N/A	Hidden					
VIDEO OUT ACCION A D	CLOCK	Shows the analog/digita	ıl clock.				
VIDEO OUT ASSIGN A, B	STREAM/RECORD STATUS 1	Shows the streaming/video recording status.					
	STREAM/RECORD STATUS 2	Shows the streaming/vio					
140	•						

# 15: SYSTEM

Menu item	Value (bold text: value)	default	Explanation			
LANGUAGE	ENGLISH, JAPANESE		Specifies the display language.			
	Menu item		Value	Value Explanation		
	CONFIGURE		Selects ho	w the time is set.	The time is set manually.	
			USING NTP		The time is set by retrieving the time from an NTP server.	
	NTP SERVER		_		Specifies the default NTP server.	
DATE&TIME	DATE		_		Sets the date.	
DATECTIME	TIME		_		Sets the time.	
	TIME ZONE		-		Sets the time zone.	
	DATE FORMAT		Month/Da Day/Mont Year/Mont	:h/Year	Sets the format used for displaying the date.	
	CLOCKTYPE		ANALOG,	DIGITAL	Sets the type of time display used.	
	Menu item	Value		Explanation		
	Bluetooth	OFF, ON		•	oth function on/off.	
	PAIRING	EXEC			th a Bluetooth device.	
Bluetooth			ne Bluetooth	connection status.		
Bluetooth		OFF		Bluetooth off		
	STATUS	PAIRING M	ODE	Now pairing		
		NOT CONN		Waiting for conne	ection	
		CONNECT	ED	Connected		
	Specifies whethe	r HDCP is er	abled (ON) or disabled (OFF).			
HDCP (*1)	OFF		Copy-protected (HDCP) video cannot be input.			
	ON		Copy-protected (HDCP) video can be input. HDCP is also added to the video that is output.  * Video/audio from the USB STREAM connector is not outputted.			
SYSTEM FORMAT (*1)	<b>1080p</b> , 720p		-		e output format is the same as the system format.	
VIDEO OUT 1–3	<b>1080p</b> , 1080i, 72	0р			VIDEO OUT 1–3 connectors.	
USB OUT	<b>1080p</b> , 720p				the USB STREAM connector.	
STREAM/RECORD	<b>1080p</b> , 720p 60, <b>59.94</b> , 50, 30,	20.07.25	Specifies the	e output format of t	the DIRECT STREAM port.	
FRAME RATE (*1)	24, 23.98Hz	29.97, 23,	Specifies the	e frame rate.		
USB OUT (*1)	30, 60Hz 29.97, <b>59.94Hz</b>		Specifies the frame rate of the USB STREAM connector.			
030 001 (1)	25, 50Hz		* The value differs depending on the "FRAME RATE" setting.			
	30, 60Hz		Specifies the frame rate of the DIRECT STREAM port.  * The value differs depending on the "FRAME RATE" setting.			
STREAM/RECORD (*1)	<b>29.97</b> , 59.94Hz					
,	25, 50Hz					
	· ·	ration mode	e for video transitions.			
PANEL OPERATION	DISSOLVE		This mode selects the video to output and immediately outputs it to the PGM bus.			
	PGM/PST		In this mode, the PST video is displayed in the PVW bus, and you can check the video before outputting it to the PGM bus.			
EFFECTS TRANSITION SYNC	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 vic		of the following the country of the	
EFFECTS SPOT	DISABLE, <b>ENABL</b>	E	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 tha	at is targeted for the	e operation while the button is pressed.	
AUDIO FADER/KNOB MODE	САТСН		When a fader or 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 blinks while the fader operations are being ignored. The closer the fader or knob			
	DIRECT		position gets to the parameter's value, the faster the button blinks.  The value of the parameter in question immediately changes to match the position of the fader or knob when you operate them.			
				, <u> </u>		

Menu item Value (bold text: default value)	Explanation
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 $(*1) \ \ A \ change \ in \ the \ setting \ is \ not \ applied \ until \ you \ press \ the \ [VALUE] \ knob \ to \ confirm.$ 

	Enable (ON) or disable (OFF)	the panel lock.							
	Menu item	Explanation	Menu	u item	Explanation				
	ΔΙΙ	The following settings are	OUTP	PUT FADE BUTTON	[OUTPUT FADE] button				
		turned on/off together.	AUDI	IO MIXER 1–7/8 ALL	Buttons and knobs in AUDIO				
		Touch panel operation		TUD DUTTON	INPUT section				
		Buttons in VIDEO section		TUP BUTTON	SETUP [1]–[7/8] buttons				
		VIDEO SWITCHER [1]–[6] buttons		OLO BUTTON	SOLO [1]–[7/8] buttons				
		[CUT] button	_	UTE BUTTON	MUTE [1]–[7/8] buttons				
		[AUTO] button	LE	VEL FADER	LEVEL [1]–[7/8] faders				
		Buttons in MODE section	MAIN	N ALL	Buttons and knobs in AUDIO OUTPUT section				
	INPUT SELECT	Dattoris III WODE Section	SF.	TUP BUTTON	MAIN [SETUP] button				
	BUTTON	[INPUT SELECT] button		UTE BUTTON	MAIN [MUTE] button				
	AUX BUTTON	[AUX] button		VEL FADER	MAIN [LEVEL] fader				
	SCENE MEMORY			1 KNOB	[AUX 1] knob				
	BUTTON	[SCENE MEMORY] button		2 KNOB	[AUX 2] knob				
PANEL LOCK	MACRO BUTTON	[MACRO] button		STREAM KNOB					
		Buttons in TRANSITION sec		AM/RECORD KNOB	[USB STREAM] knob				
		[MIX] button	SINE	AWI/RECORD KNOB	Buttons in AUDIO EFFECT				
		[WIPE] button	AUDI	IO EFFECT ALL	section				
		[SPLIT] button	SF.	TUP BUTTON	AUDIO EFFECT [SETUP] button				
	PinP & KFY 1–2 Al I	Buttons in PinP & KEY 1–2 section	AU	JDIO EFFECT 1–3 JTTON	AUDIO EFFECT [1]–[3] button				
	PVW BUTTON	PinP & KEY 1–2 [PVW] butto	n	IO PLAYER ALL	Buttons in AUDIO PLAYER				
	PGM BUTTON	PinP & KEY 1–2 [PGM] butto			section				
	POSITION H KNOB	[POSITION H] knob		TUP BUTTON	AUDIO PLAYER [SETUP] button				
	POSITION V KNOB	[POSITION V] knob	— AU	JDIO PLAYER 1–6	AUDIO PLAYER [1]–[6] pads				
		Buttons in DSK section		JDIO PLAYER KNOB	AUDIO PLAYER [LEVEL] knob				
	PVW BUTTON	DSK [PVW] button	Α0	DDIO F LATER RIVOD	AODIO FEATER [EEVEE] RIIOD				
	PGM BUTTON	DSK [PGM] button							
	MONITOR BUTTON	[MONITOR] button							
	PANEL SETUP BUTTON	PANEL [SETUP] button							
	Specifies whether the same	video as the final output is	sent to the	AUX bus (AUX link).					
	Use the VIDEO SWITCHER [1]–[6] buttons to select the video of the AUX bus.								
	OFF	When selecting a video that is not assigned to INPUT 1–6, set this in "AUX SOURCE" under VIDEO ASSIGN menu.							
		AUX link is enabled, and	he same vio	deo as the final outpu	it is sent to the AUX bus.				
		Temporarily disabling AUX	nk						
UX LINKED PGM					ection of the VIDEO SWITCHER [1]–				
	41170 1 1511	1	[6] button is enabled (lit green). You can select the video you want to send to the AUX bus.						
	AUTO LINK	Re-enabling AUX link							
	MANUAL LINK	AIII() I INK	AUTO LINK  When you operate the [AUTO] button etc. to switch the final output						
				automatically enabled	-				
		When you press the VIDEO SWITCHER [1]–[6] button that is currently selected (lit green), AUX link is enabled.							
OUTPUT FADE ASSIGN	Specifies the function of the	[OUTPUT FADE] button.							
OUTPUT FADE TIME	0.0 <b>–1.0</b> –4.0sec	Sets the fade-in/out time							
OUTPUT FADE ASSIGN VIDEO		The final output video is	aded-in/ou	It to the specified vide	20.				
OUTPUT FADE ASSIGN	. , ,								
AUDIO	DISABLE, <b>ENABLE</b>	When this is set to "ENABLE", the output audio also fades in/out along with the video.							

Menu item	Value (bold text: default value)	Explanation					
	Specifies the function that is assigned to the AUDIO EFFECT [1]–[3] button.						
	AUDIO EFFECT 1–3						
	CATEGORY	VALUE	Explanation				
	N/A		No function is assigned.				
	AUDIO INPUT MUTE	(*)	Turns the mute function on/off for the input audio.				
		MAIN BUS					
	ALIDIO OLITRUT MUTE	AUX 1–2 BUS	Towards and for the control of the state of				
	AUDIO OUTPUT MUTE	USB OUT	Turns the mute function on/off for the output audio.				
		STREAM/RECORD					
	AUDIO INPUT SOLO	(*)	Turns the solo function on/off for the input audio.				
	AUDIO OUTPUT SOLO	MAIN BUS	Turns the solo function on/off for the output audio.				
		AUX 1–2 BUS	· ·				
	HPF 80Hz	(*)	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 DE-ESSER	(*) AUDIO IN 1–6	Turns the noise gate function on/off.  Turns the de-esser function on/off.				
AUDIO EFFECT ASSIGN	COMPRESSOR	(*)	Turns the compressor function on/off.				
	AUDIO IN EQ	(*)	Turns the equalizer function on/off for the output audio.				
	AODIO IN EQ	MAIN BUS	rams the equalizer function on on the output addio.				
		AUX 1–2 BUS					
	AUDIO OUT EQ	USB OUT	Turns the equalizer function on/off for the input audio.				
		STREAM/RECORD					
	ALIDIO OLIT CEO	MAIN BUS	Towards and beautiful and the second				
	AUDIO OUT GEQ	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		Turns the auto mixing function on/off.				
	REVERB(MOMENTARY)		Reverb turns on only while you press the button.				
	REVERB(ALTERNATE)		Turns reverb on/off.				
	AUDIO OUT COMP/LMT	MAIN BUS AUX 1–2 BUS	Turns the compressor/limiter function on/off.				
	LOUDNESS AGC		Turns loudness auto gain control on/off.				
	ADAPTIVE NR		Turns adaptive noise reduction on/off.				
	(*) AUDIO IN 1–7/8, USB IN	I, Bluetooth IN, AUDIO	Turns adaptive noise reduction on/off.  PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.				
	(*) AUDIO IN 1–7/8, USB IN These settings are for the	I, Bluetooth IN, AUDIO monitoring video assig	PLAYER, VIDEO 1–6, V.PLAYER ned to the MONITOR button.				
	(*) AUDIO IN 1–7/8, USB IN	I, Bluetooth IN, AUDIO	PLAYER, VIDEO 1–6, V.PLAYER need to the MONITOR button.  Explanation				
MONITOR SELECT ASSISTA	(*) AUDIO IN 1–7/8, USB IN These settings are for the	I, Bluetooth IN, AUDIO monitoring video assig Value	PLAYER, VIDEO 1–6, V.PLAYER ned to the MONITOR button.				
MONITOR SELECT ASSIGN	(*) AUDIO IN 1–7/8, USB IN These settings are for the	I, Bluetooth IN, AUDIO monitoring video assig Value N/A	PLAYER, VIDEO 1–6, V.PLAYER  Ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in				
MONITOR SELECT ASSIGN	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW	PLAYER, VIDEO 1–6, V.PLAYER  Ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).				
MONITOR SELECT ASSIGN	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the SUB PROGRAM bus video.				
MONITOR SELECT ASSIGN	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM  SUB PROGRAM  PREVIEW	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.				
MONITOR SELECT ASSIGN	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM PREVIEW AUX	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.				
MONITOR SELECT ASSIGN	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM SUB PROGRAM PREVIEW AUX AUDIO LEVEL	PLAYER, VIDEO 1–6, V.PLAYER Inted to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.				
DASHBOARD	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM PREVIEW AUX	PLAYER, VIDEO 1–6, V.PLAYER Inted to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.				
DASHBOARD LEVEL METER POSITION	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM SUB PROGRAM PREVIEW AUX AUDIO LEVEL	PLAYER, VIDEO 1–6, V.PLAYER Inted to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.				
DASHBOARD LEVEL METER POSITION VIDEO IN 1–6	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM SUB PROGRAM PREVIEW AUX AUDIO LEVEL	PLAYER, VIDEO 1–6, V.PLAYER Inted to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM SUB PROGRAM PREVIEW AUX AUDIO LEVEL	PLAYER, VIDEO 1–6, V.PLAYER Inted to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM SUB PROGRAM PREVIEW AUX AUDIO LEVEL	PLAYER, VIDEO 1–6, V.PLAYER Inted to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW  AUX  AUDIO LEVEL  Shows the dashbo	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.  ard screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER  Pre Fader(PFL)	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW  AUX  AUDIO LEVEL  Shows the dashbo	PLAYER, VIDEO 1–6, V.PLAYER Inted to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN  AUDIO PLAYER	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW  AUX  AUDIO LEVEL  Shows the dashbo	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.  ard screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN  AUDIO PLAYER  MAIN BUS	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER  Pre Fader(PFL)	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW  AUX  AUDIO LEVEL  Shows the dashbo	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.  ard screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN  AUDIO PLAYER  MAIN BUS  AUX BUS 1–2	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER  Pre Fader(PFL)	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW  AUX  AUDIO LEVEL  Shows the dashbo	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.  ard screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN  AUDIO PLAYER  MAIN BUS  AUX BUS 1–2  USB OUT	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER  Pre Fader(PFL)	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW  AUX  AUDIO LEVEL  Shows the dashbo	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.  ard screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN  AUDIO PLAYER  MAIN BUS  AUX BUS 1–2  USB OUT  STREAM/RECORD	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER Pre Fader(PFL) Post Fader(AFL)	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  STILL-VIEW  PROGRAM SUB PROGRAM PREVIEW  AUX  AUDIO LEVEL  Shows the dashbo	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.  Explanation  No video is assigned.  The final output video, preview output video and the videos allocated to the VIDEO SWITCHER [1]–[6] buttons are shown in sections of the display (multi-view).  Shows the loaded still images in 16 separate sections on the screen.  Shows the final output video.  Shows the SUB PROGRAM bus video.  Shows the preview output video.  Shows the AUX bus video.  Shows the audio level screen.  ard screen.				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN  AUDIO PLAYER  MAIN BUS  AUX BUS 1–2  USB OUT  STREAM/RECORD  MULTI-VIEW SETTINGS	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER Pre Fader(PFL) Post Fader(AFL)	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW AUX AUDIO LEVEL  Shows the dashbo  Set the display pos	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.    Explanation				
DASHBOARD  LEVEL METER POSITION  VIDEO IN 1–6  V.PLAYER  AUDIO IN 1–7/8  USB IN  Bluetooth IN  AUDIO PLAYER  MAIN BUS  AUX BUS 1–2  USB OUT  STREAM/RECORD	(*) AUDIO IN 1–7/8, USB IN These settings are for the Menu item  MONITOR SELECT 1–4  ENTER ENTER Pre Fader(PFL) Post Fader(AFL)	I, Bluetooth IN, AUDIO monitoring video assig  Value  N/A  MULTI-VIEW  PROGRAM SUB PROGRAM PREVIEW AUX AUDIO LEVEL  Shows the dashbo  Set the display pos	PLAYER, VIDEO 1–6, V.PLAYER ined to the MONITOR button.    Explanation				

Menu item	Value (bold text: default value)	Explanation						
STILL-VIEW	OFF, ON	Turns the tally frame on/off in the STILL-VIEW.						
	Sets whether to display the	e AUX indica	ator in the monitor.					
		C-1						
AUX/SOURCE INDICATOR		Color	Explanation  Shows that this has been selected as an inset					
	Y	Yellow	screen for the PinP & KEY.					
	HDMI 5	Magenta	Shows that this has been selected as a DSK video source.					
		Green	Shows that this has been selected as an AUX bus video source.					
MULTI-VIEW	OFF, ON	Turns th	e AUX indicator on/off for multi-view.					
STILL-VIEW	OFF, ON	Turns th	Turns the AUX indicator on/off for still-view.					
	Sets whether to display the	e REC indica	ator in the monitor.					
EXTERNAL REC INDICATOR	When this is "ON", a REC inconnected to a camera that		wing that the camera's REC button has been pressed is displayed, if the unit is the REC status function.					
MULTI-VIEW	OFF, ON	Turns th	e REC indicator on/off for multi-view.					
AUDIO LEVEL METER	Specifies whether to displa	y the audio	level meter in the monitor.					
MULTI-VIEW	OFF, ON	Turns th	e AUDIO LEVEL METER indicator on/off for multi-view.					
MULTI-VIEW LAYOUT	Specifies the videos to be	shown in th	e PVW section (LEFT) and PGM section (RIGHT) in the multi-view.					
	PROGRAM	Final ou	tput video. This is the default setting for "RIGHT".					
LEFT	SUB PROGRAM	SUB PRO	DGRAM bus video					
RIGHT	PREVIEW	Preview	output video (the video to be output next). This is the default setting for "LEFT".					
Morri	AUX	AUX bus	s video					
	BLACK	Black sc						
PREVIEW LABEL	Specifies whether to displa	y the label	in the monitor.					
MULTI-VIEW	OFF, ON		e label on/off for multi-view.					
STILL-VIEW	OFF, ON	Turns the label on/off for still-view.						
	ENTER		label name shown in the monitor.					
LABEL EDIT	Press the [VALUE] knob to access the LABEL EDIT screen.  VIDEO IN 1–6, STILL 1–16, VIDEO PLAYER, PGM, SUB PGM, PVW, AUX							
LABEL SIZE								
LABEL SIZE LED DIMMER	SMALL, <b>NORMAL</b> 1–8	Specifies the text size of the label shown in the monitor.  Adjusts the brightness when the buttons or indicators are lit.						
LCD DIMMER	1-8		Adjusts the brightness of this unit's monitor.					
LCD DIIVIIVIER	1-6		e auto input detect function on/off.					
AUTO INPUT DETECT	OFF, ON	When th	his is "ON", input is automatically detected, and the video is switched when input from loutput video is interrupted.					
AUTO FAN CONTROL	OFF, ON		e auto fan control function on/off. his is "ON", this function controls the fan according to the internal temperature of this					
		unit.	is to the internal temperature of this					
TEST PATTERN	Specifies the test pattern.	'						
	<b>OFF</b> , COLOR BARS 75%,							
	COLOR BARS100%, RAMP,							
	STEP, HATCH, DIAMOND,							
TEST PATTERN	CIRCLE, COLOR BARS 75%-SP,	Selects	the test pattern to display.					
	COLOR BARS100%-SP,							
	RAMP-SP, STEP-SP, HATCH- SP							
MOTION	<b>DISABLE</b> , SLOW, FAST	Specifie	s the scroll speed of the test pattern.					
TEST TONE	Specifies the test tone.							
TEST TONE	<b>OFF</b> , -20, -10, 0dB	Adjusts	the test tone volume.					
FREQUENCY L	500Hz, <b>1kHz</b> , 2kHz	Specifie	s the frequency of the test tone for the L-channel.					
FREQUENCY R	500Hz, <b>1kHz</b> , 2kHz	Specifie	s the frequency of the test tone for the R-channel.					
AUTO OFF (240min)	OFF, ON		ver turns off automatically after a predetermined amount of time has passed since the or controls were operated.					
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.					

# Appendix

# Main Specifications

Video										
Video Processing	4:2:2 (Y/Pb/Pr), 8-bit									
Number of Video Channels	6 channels									
Input Connectors	VIDEO IN 1–6  HDMI type A x 6  * HDCP Supported, Multi-format Supported									
Output Connectors	VIDEO OUT 1–3 HDMI type A x 3 * HDCP Supported									
	USB STREAM	USB Type-C <sup>®</sup>								
		Frame Rate								
		59.94 Hz, 60 Hz				50	Hz			
		480/59.94i	480/59.94p		576/50i	576/50i 576		)		
		720/59.94p			720/50p					
		1080/59.94i 1080/59.94p		1080/50i	1080/50i 1080/50p		Эр			
		1080/60p			1080/25p					
		1080/29.97p	1080/30p		1080/23.98p	80/23.98p 10		1p		
		1080/23.98p	1080/24p		VGA (640×480/6	60 Hz)				
		VGA (640×480/60 Hz)	)		SVGA (800×600)	SVGA (800×600/60 Hz)				
		SVGA (800×600/60 H	z)		XGA (1024×768	/60 Hz)				
Video Input Formats	VIDEO IN 1–6	XGA (1024×768/60 H	z)		WXGA (1280×80	00/60 Hz	2)			
		WXGA (1280×800/60	Hz)		SXGA (1280×10	24/60 Hz	z)			
		SXGA (1280×1024/60	Hz)		FWXGA (1366×7	FWXGA (1366×768/60 Hz)				
		FWXGA (1366×768/6	0 Hz)		SXGA+ (1400×1050/60 Hz)					
		SXGA+ (1400×1050/6	60 Hz)		UXGA (1600×1200/60 Hz)					
		UXGA (1600×1200/60	Hz)		WUXGA (1920×1200/60 Hz)					
		WUXGA (1920×1200/	(60 Hz)							
		* Conforms to CEA-861-E * 1920 x 1200/60 Hz: Red * The input interlaced vid	uced blanking				l processi	ng.		
	VIDEO OUT 1–3	Output Format	59.94 H	59.94 Hz			50 Hz			
		720p	720/59.94p		720/60p		720/50p			
		1080i	1080/59.94i	·		·		1080/50i		
		1080p					1080/50p			
			,							
		Output Format				Frame Rate				
			29.97 Hz	30 H		23.	98 Hz	24 Hz		
		1080p	1080/29.97p	1080/30	p 1080/25p	1080/2	23.98p	1080/24p		
Video Output Formats		Frame Rate (USB STREAM)								
video Output Formats		59.94 Hz	60 H	łz	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		640×4	640×480/30p		
	USB STREAM			rama Pat	(LCD CTDEAM)					
					(USB STREAM)					
		50 Hz		25 Hz		23.98 Hz		24 Hz		
		1080/50p	1080/25p			1080/23.98p		24p		
		720/50p 640×480/50p	720/25p		720/23.98p		720/24	•		
						640×480/23.98p 640×480/24p				
		* Uncompressed format (	YUY2) and Compre	ssed forma	t (Motion JPEG) supp	oorted.				

			Frame Rate (Stream/Record)							
		Output Format					2011			
				59.94 Hz	60 Hz	29.97 Hz	30 Hz			
		720p		/59.94p	720/60p	720/29.97p	720/30p			
	Stream and Record formats	1080p	1080	0/59.94p	1080/60p	1080/29.97p	1080/30p			
				Frame Rate (Stream/Record)						
Stream and Record		Output Format		50 Hz	25 Hz	23.98 Hz	24 Hz			
formats		720p	720/	/50p	720/25p					
		1080p	1080	0/50p	1080/25p	1080/23.98p	1080/24p			
	File Format	MP4		Codec: H.264, target bitrate up to 20,000 kbps  AAC LC, 16 bits, 48 kHz, stereo, target bitrate up to 384 kbps						
		WAV								
	* If either the streaming and recording format or the file played by the video player exceeds 1080/30p, the streaming and 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, Str and Video player cannot be used simultaneously						Streaming and Recording			
	File Format	MP4 (H.264, AAC), Average bit rate of 20,000 kbps or less, Maximum 1080/60p								
Video Player	* If either the streaming and recording format or the file played by the video player exceeds 1080/30p, the streaming and 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.									
		Bitmap File (.bmp):	Max	ximum 1920 x	1080 pixels, 24-bit	color, uncompressed	d.			
		PNG File (.png):	le (.png): Maximum 1920 x 1080 pixels, 24-bit color							
Caill Image	Eile Ferment	JPEG File (.jpg, .jpeg): Maximum 1920 x 1080 pixels, 24-bit color								
Still Image	File Format	* It can be stored up to 16 files in the internal memory.								
		* It can be exported in the SD Card and USB flash drive.								
		* PNG alpha channel supported.								
	Transition	Cut, Mix (Dissolve/F	am/N	am), WIPE (8 ty	ypes), SPLIT (2 type	s)				
Video Effects	Composition	PinP x 2 (Square, Cii DSK (Luminance Ke	,		•	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,				
	Others	Multi-View (3 types Output fade (Audio				,	e playback,			

Audio								
Audio Proce	ssing	Sample rate	24 bits, 48 kHz					
Number of A Channels	Audio	28 channels						
		USB STREAM (input/output):	Linear PCM, 24 bits, 48 kHz, 2 ch					
	Bluetooth In (input):	Linear PCM, 24 bits, 48 kHz, 2 ch						
Audio Formats		VIDEO IN	Linear PCM, 24 bits, 48 kHz, 2 ch					
		VIDEO OUT	Linear PCM, 24 bits, 48 kHz, 8 ch					
Audio Playe	r	File Format	WAV (Linear PCM, 16 bits, 48 kHz/44.1 kHz, stereo) It can be stored up to 16 tracks in the internal memory.					
		Channel Effects	High pass filter, Echo canceller, Anti-feedback, Noise gate, De-esser, Compressor, 4-Band equalizer, Voice changer, Delay, Auto mixing					
Audio Effect	:s	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					
	Analog	AUDIO IN 1–6	Combo type (XLR, 1/4-inch TRS phone), phantom power DC 48 V (unloaded maximum), 14 mA (maximum load)					
Input		AUDIO IN 7/L, 8/R	RCA phono type					
Connectors		USB STREAM	USB Type-C°					
	Digital	Bluetooth IN						
		VIDEO IN 1–6	HDMI type A x 6					
		AUDIO OUT 1/L, 2/R	XLR type					
	Analog	AUDIO OUT 3/L, 4/R	RCA phono type					
Output Connectors		PHONES	Stereo miniature phone type					
Connectors		USB STREAM	USB Type-C°					
	Digital	VIDEO OUT 1–3	HDMI type A x 3					
		AUDIO IN 1-6	-64-+4 dBu (Maximum: +24 dBu)					
Nominal Inp	out Level	AUDIO IN 7/L, 8/R	-10 dBu (Maximum: +10 dBu)					
		AUDIO IN 1-6	8.4 kΩ					
Input Impedance	AUDIO IN 7/L, 8/R	10kΩ						
Nominal Output Level	AUDIO OUT 1/L, 2/R (XLR)	+4 dBu (Maximum: +24 dBu)						
	AUDIO OUT 3/L, 4/R (RCA)	-10 dBu (Maximum: +10 dBu)						
		PHONES	92 mW + 92 mW (32 ohms)					
		AUDIO OUT 1/L, 2/R (XLR)	600Ω					
Output Impe	edance	AUDIO OUT 3/L, 4/R (RCA)	1kΩ					
		PHONES	33Ω					

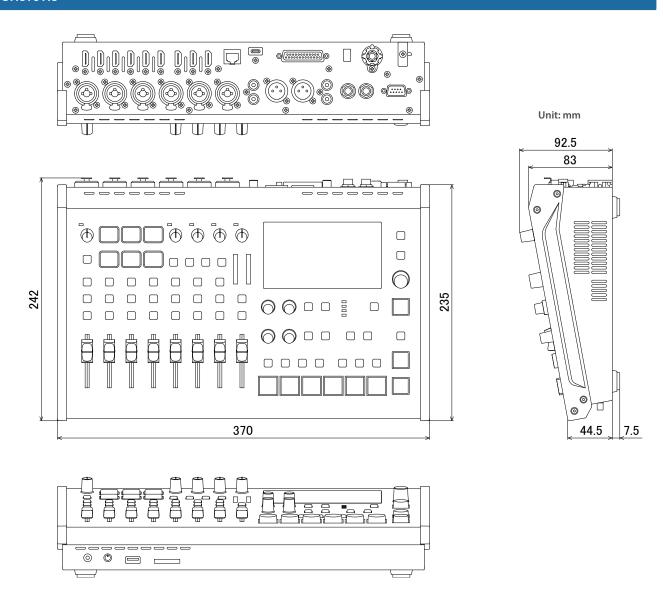
#### Appendix

Others							
Recording Media	SDHC/SDXC card (commercially available) USB flash drive	* SDXC card is required for video recording.					
	(commercially available)						
	USB HOST	USB A type (for USB flash drive)					
	USB STREAM	USB Type-C® (for remote control from PC and iPad)					
	Bluetooth connection	for remote control from iPad					
Other Connectors	CTL/EXP 1, 2	1/4-inch TRS phone type (for remote control from footswitch 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-TX (for Live Streaming and Remote Control)					
Other Functions	Scene Memory (32 types), Macro Control (100 types), Sequencer Control (1000 types)  Panel lock function, EDID Emulator, Auto Switching, Auto Input Detect  Smart Tally, Remote Camera Control (Up to 6 units), External Rec Control						
	Ver 5.0						
Bluetooth Function	Profile Support	A2DP (Audio), GATT (MIDI over Bluetooth Low Energy)					
	Codec SBC (Support to the content protection of the SCMS-T method)						
Display	Graphic Type, 4.3", Wide QVG	A (480 x 272 dots), backlite LCD (Color/Touch screen)					
Power Supply	AC adaptor						
Current Draw	2.3 A						
Power Consumption	55 W						
Operation	+0 to +40 degrees Celsius						
Temperature	+32 to +104 degrees Fahrenl						
Dimensions	14-5/8 (W) x 9-9/16 (D) x 3-15						
Weight	3.4 kg (excluding AC adaptor 7 lbs 8 oz (excluding AC adap						
Accessories	Startup Guide, Leaflet "USING	GTHE 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						

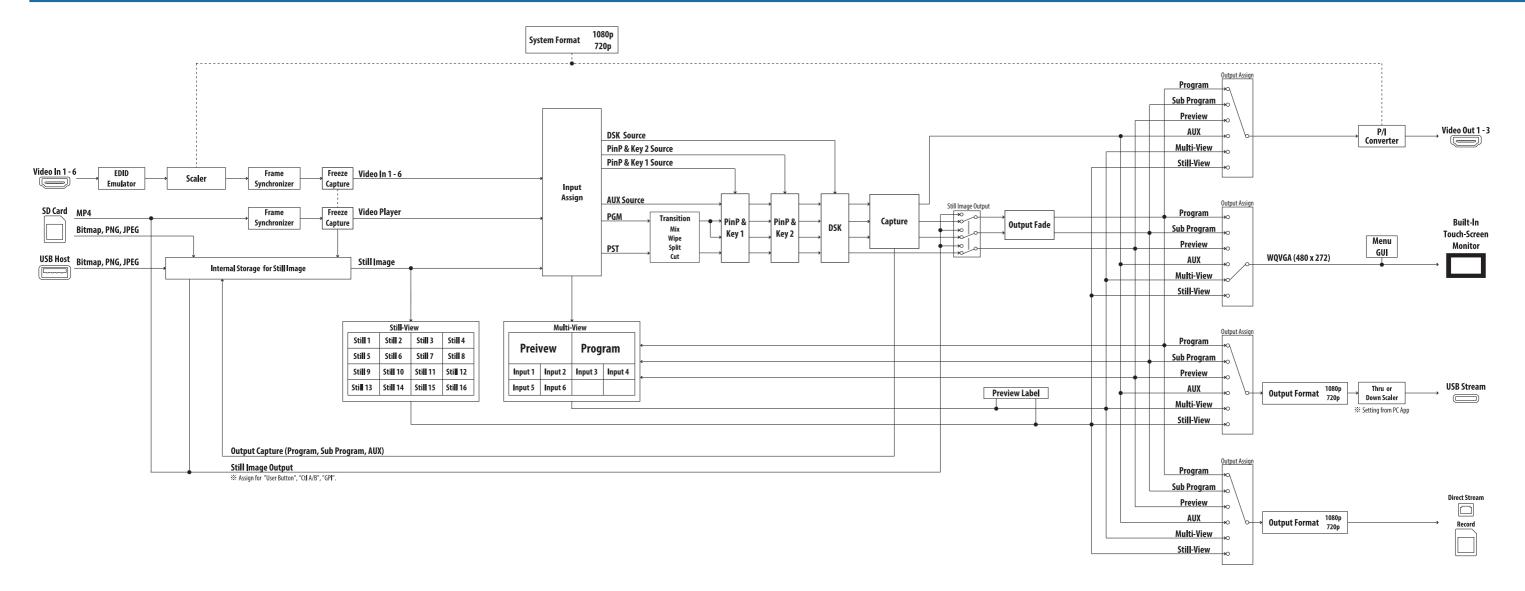
<sup>\* 0</sup>dBu = 0.775Vrms

<sup>\*</sup> 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



# Video Block Diagram



### Audio Block Diagram

