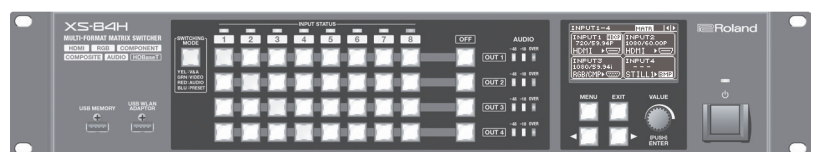
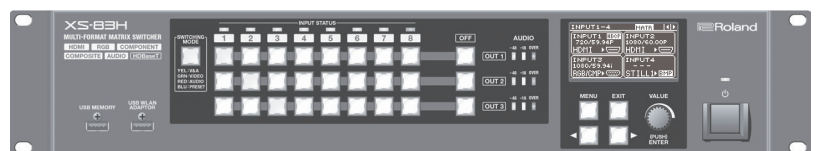
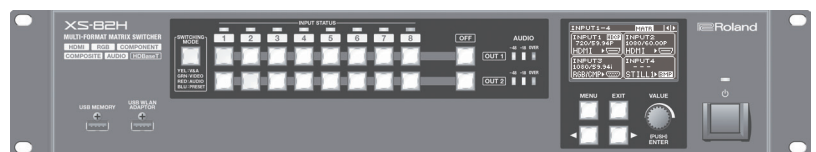


XS-82H XS-83H XS-84H

MULTI-FORMAT MATRIX SWITCHER



Reference Manual

Version 3.00 and later

Before using the XS-82H/XS-83H/XS-84H, ensure that its system program is at the most recent version. For information on available upgrades for the system program, see the Roland website (<http://proav.roland.com>).

You can check the version of the system program by selecting the [MENU] button → "SYSTEM" → "VERSION."

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Menu List

Pressing the [MENU] button displays the menu.

MEMO

- The default value is printed in bold characters.
- You can return the menu item you're setting to its factory-default value by holding down the [VALUE] dial and pressing the [EXIT] button.
- You can change the setting value in larger steps by holding down the [VALUE] dial as you turn it.

VIDEO INPUT

* The ranges of settings vary according to input/output format. Also, some changes to setting values do not alter the video picture.

Menu item		Value	Description
2nd level	3rd level		
INPUT-1 :	INPUT SELECT	HDMI , RGB/COMPONENT, COMPOSITE, YC, STILL1, STILL2, STILL3, STILL4, SHARE (*1)	This sets the type of video signal to input.
	INPUT-8		
	HDCP INPUT ENABLE (*2)	DISABLE, ENABLE	This sets whether input of copyright-protected (HDCP) video is permitted (p. 20).
	AUTO SAMPLING (*3) (*4)	(ENTER)	This executes automatic adjustment during RGB signal input.
	COLOR SPACE (*5)	AUTO , RGB (0-255), RGB (16-235), YCC (SD), YCC (HD)	This sets the color space for input video.
	FLICKER FILTER (*5)	OFF , ON	Setting this to "ON" reduces flicker in input video.
	ZOOM (*6)	10.0 %– 100.0 %–1000.0 %	This adjusts the zoom ratio of input video.
	TYPE	FULL , LETTERBOX, CROP, DOT BY DOT, MANUAL	This adjusts the aspect ratio of input video.
	MANUAL SIZE H	-2000– 0 –2000 (pixel)	This adjusts the horizontal size of input video.
	MANUAL SIZE V	-2000– 0 –2000 (pixel)	This adjusts the vertical size of input video.
	POSITION H	-1920– 0 –1920 (pixel)	This adjusts the horizontal position of input video.
	POSITION V	-1200– 0 –1200 (pixel)	This adjusts the vertical position of input video.
	FLIP VERTICAL (*7)	OFF , ON	Setting this to "ON" flips input video vertically.
	BRIGHTNESS	-64– 0 –63	This adjusts the brightness of input video.
	CONTRAST	-64– 0 –63	This adjusts the contrast of input video.
	SATURATION	-64– 0 –63	This adjusts the color saturation of input video.
	RED	-64– 0 –63	This adjusts the red level of input video.
	GREEN	-64– 0 –63	This adjusts the green level of input video.
	BLUE	-64– 0 –63	This adjusts the blue level of input video.
	FREQUENCY (*3)	-128– 0 –127	This adjusts the frequency.
	PHASE (*3)	-128– 0 –127	This adjusts the phase.

(*1): "SHARE" can be set using INPUT-2 through 8. This enables sharing of the video source on the channel previous to the set channel. For details, refer to the Owner's Manual, "Sharing a Video Source (SHARE)" (p. 19).

(*2): This can be set only when "INPUT SELECT" is set to "HDMI."

(*3): This can be set only when "INPUT SELECT" is set to "HDMI" or "RGB/COMPONENT." It has no effect during component signal input.

(*4): This can be executed only when the corresponding video input channel has been selected with cross point. It has no effect during component signal input.

(*5): This can be set only when "INPUT SELECT" is set to "RGB/COMPONENT."

(*6): When the settings described below are in effect, reducing to smaller than the input size is not possible.

- When the "MODE" setting is a value from "ROTATION-L1" to "ROTATION-L4" or from "ROTATION-R1" to "ROTATION-R4"
- When "INPUT SELECT" is set to a value from "STILL1" to "STILL4"

(*7): Vertical flipping is not possible when "INPUT SELECT" is set to a value from "STILL1" to "STILL4."

VIDEO OUTPUT

* The ranges of settings vary according to input/output format. Also, some changes to setting values do not alter the video picture.

Menu item		Value	Description
2nd level	3rd level		
OUTPUT-1 : OUTPUT-4 * This varies according to model.	OUTPUT SELECT	AUTO , HDMI, HDBaseT	This sets the OUTPUT connector for video output.
	RESOLUTION (*8)	<ul style="list-style-type: none"> When "FRAME RATE" under "SYSTEM" is set to "59.94 Hz" 480i 4: 3, 480i 16: 9, 480p 4: 3, 480p 16: 9, 720/59.94p, 1080/59.94i, 1080/59.94p, 640 x 480/60, 800 x 600/60, 1024 x 768/60, 1280 x 800/60, 1280 x 768/60, 1366 x 768/60, 1280 x 1024/60, 1600 x 1200/60, 1920 x 1200/60 When "FRAME RATE" under "SYSTEM" is set to "50 Hz" 576i 4: 3, 576i 16: 9, 576p 4: 3, 576p 16: 9, 720/50p, 1080/50i, 1080/50p, 640 x 480/75, 800 x 600/75, 1024 x 768/75, 1280 x 800/75, 1280 x 768/75, 1366 x 768/75, 1280 x 1024/75, 1600 x 1200/60, 1920 x 1200/60 	This sets the output resolution.
	HDCP OUTPUT ENABLE	DISABLE, ENABLE	This sets whether output of copyright-protected (HDCP) video is permitted (p. 20).
	COLOR SPACE	AUTO , RGB (0-255), RGB (16-235), YCC (444), YCC (422)	This sets the color space of output video.
	DVI-D/HDMI SIGNAL	DVI-D, HDMI	This sets the type of video signal to output from the OUTPUT connectors.
	FLIP HORIZONTAL	OFF , ON	Setting this to "ON" flips input video horizontally.
	ZOOM (*9) (*10)	10.0 %– 100.0 %–1000.0 %	This adjusts the zoom ratio of output video.
	MANUAL SIZE H (*9)	-4096– 0 –4096 (pixel)	This adjusts the horizontal size of output video.
	MANUAL SIZE V (*9)	-1200– 0 –1200 (pixel)	This adjusts the vertical size of output video.
	POSITION H (*9)	-4096– 0 –4096 (pixel)	This adjusts the horizontal position of output video.
	POSITION V (*9)	-1200– 0 –1200 (pixel)	This adjusts the vertical position of output video.
	CROPPING ORIENT (*9)	UPPER LEFT , UPPER RIGHT, LOWER LEFT, LOWER RIGHT, CENTER	This sets the reference point for cropping.
	CROPPING TYPE (*9)	FULL , 4: 3, 5: 4, 16: 9, MANUAL	This sets the type of cropping.
	CROPPING SIZE H (*9) (*11)	10– 128 –2000 (pixel)	This adjusts the horizontal cropping width.
	CROPPING SIZE V (*9) (*11)	10– 128 –2000 (pixel)	This adjusts the vertical cropping width.
	BRIGHTNESS	-128– 0 –127	This adjusts the brightness of output video.
	CONTRAST	-128– 0 –127	This adjusts the contrast of output video.
	SATURATION	-128– 0 –127	This adjusts the color saturation of output video.
	RED	-128– 0 –127	This adjusts the red level of output video.
	GREEN	-128– 0 –127	This adjusts the green level of output video.
	BLUE	-128– 0 –127	This adjusts the blue level of output video.

(*8): Depending on "MODE" (p. 9), OUTPUT-2–OUTPUT-4 settings are shared with the OUTPUT-1 settings. They cannot be changed individually.

MODE	OUTPUT-2	OUTPUT-3	OUTPUT-4
SPAN-2, PGM-PST	Shared with OUTPUT-1 setting	Can be set independently	Can be set independently
SPAN-3, 2 x PGM-PST	Shared with OUTPUT-1 setting	Shared with OUTPUT-1 setting	Can be set independently
SPAN-4, 4K-1, 4K-2, ROTATION-L1–4, ROTATION-R1–4, 3 x PGM-PST, DUAL DISSOLVE, DUAL PGM-PST	Shared with OUTPUT-1 setting	Shared with OUTPUT-1 setting	Shared with OUTPUT-1 setting
DISSOLVE-1	Can be set independently	Can be set independently	Shared with OUTPUT-1 setting

(*9): Depending on "MODE" (p. 9), OUTPUT-2–OUTPUT-4 settings are shared with other OUTPUT settings. They cannot be changed individually.

MODE	OUTPUT-2	OUTPUT-3	OUTPUT-4
MULTI-2, PGM-PST	Shared with OUTPUT-1 setting	Can be set independently	Can be set independently
MULTI-3, 2 x PGM-PST	Shared with OUTPUT-1 setting	Shared with OUTPUT-1 setting	Can be set independently
MULTI-4, 3 x PGM-PST	Shared with OUTPUT-1 setting	Shared with OUTPUT-1 setting	Shared with OUTPUT-1 setting
DISSOLVE-1	Can be set independently	Can be set independently	Shared with OUTPUT-1 setting
DUAL DISSOLVE	Can be set independently	Shared with OUTPUT-1 setting	Shared with OUTPUT-2 setting
DUAL PGM-PST	Shared with OUTPUT-1 setting	Can be set independently	Shared with OUTPUT-3 setting

(*10): When the settings described below are in effect, reducing to smaller than the input size is not possible.

- When the "MODE" setting is a value from "ROTATION-L1" to "ROTATION-L4" or from "ROTATION-R1" to "ROTATION-R4"
- When the "INPUT SELECT" setting under "VIDEO INPUT" is a value from "STILL1" to "STILL4"

(*11): Effective when "CROPPING TYPE" under "OUTPUT VIDEO" is set to "MANUAL."

VIDEO OUTPUT (continued)

Menu item		Value	Description
2nd level	3rd level		
OUTPUT-1 : OUTPUT-4 * This varies according to model.	GUIDE SW (*12)	OFF , OUTSIDE, INSIDE	This displays a guide on the output screen that indicates the effective range of the video. OUTSIDE: The guide is displayed outside the effective range. INSIDE: The guide is displayed inside the effective range.
	GUIDE COLOR (*12)	WHITE , YELLOW, CYAN, GREEN, MAZENDA, RED, BLUE, BLACK	This sets the guide's color.
	GUIDE SIZE (*12)	10– 90 –100	This sets the guide's size.
	GUIDE WIDTH (*12)	1– 2 –100	This sets the thickness of the guide's border lines.
	OUTPUT1 SYNC (*13)	OFF , ON	Setting this to "ON" eliminates interruption of the output video when the output mode is switched. * On output channels for which "OUTPUT1 SYNC" is set to "ON," the output resolution is the same as OUTPUT1. * When the output mode is set to the ROTATION mode, the output picture is not interrupted, but may experience momentary corruption.
	TEST PATTERN	OFF , 75%.COLOR.BAR, 100%.COLOR.BAR, RAMP, STEP, HATCH, 75%.COLORBAR-SP, 100%.COLORBAR-SP, RAMP-SP, STEP-SP, HATCH-SP, FRAME, CIRCLE, VER.STRIPE, HOR.STRIPE	This outputs a test pattern.

(*12): Depending on "MODE" (p. 9), the combinations with which guide settings can be made are as shown on the following chart.

MODE	OUTPUT-1	OUTPUT-2	OUTPUT-3	OUTPUT-4
MATRIX	settable	settable	settable	settable
MULTI-2, SPAN-2, 2 x PGM-PST	—	—	settable	settable
MULTI-3, SPAN-3, 3 x PGM-PST	—	—	—	settable
DISSOLVE-1	—	settable	settable	—
PGM-PST	—	settable	settable	settable
DUAL PGM-PST	—	settable	—	settable
MULTI-4, SPAN-4, ROTATION-L1-4, ROTATION-R1-4, 4K-1, 4K-2, DUAL DISSOLVE	—	—	—	—

* No guide is displayed during output of a still image.

(*13): "OUTPUT 1 SYNC" can be set using OUTPUT-2 through 4.

TRANSITION

Menu item		Value	Description
2nd level	3rd level		
TIME	—	0.0 sec– 1.0 sec –10.0 sec	This adjusts the video transition time/fade time.

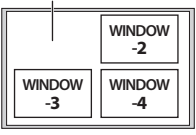

OFF SWITCH

Menu item		Value	Description
2nd level	3rd level		
OFF SWITCH MODE	—	OUTPUT FADE , OUTPUT FREEZE (*14)	This sets the functioning of the [OFF] button. OUTPUT FADE: This applies a fade to output video. OUTPUT FREEZE: This freezes output video.
RED	—	0 –255	This adjusts the red level of the monochrome picture during a fade.
GREEN	—	0 –255	This adjusts the green level of the monochrome picture during a fade.
BLUE	—	0 –255	This adjusts the blue level of the monochrome picture during a fade.
AUDIO FOLLOW	—	OFF, ON	This sets the Audio Follow feature on or off.

(*14): Depending on "MODE" (p. 9), the combinations with "OUTPUT FREEZE" can be used are as shown in the following chart.

MODE	OUTPUT-1	OUTPUT-2	OUTPUT-3	OUTPUT-4
MATRIX, SPAN-2-4, 4K-1, 4K-2, PGM-PST, 2 x PGM-PST, 3 x PGM-PST	Usable	Usable	Usable	Usable
MULTI-2	—	—	Usable	Usable
MULTI-3	—	—	—	Usable
DISSOLVE-1	Usable	Usable	Usable	—
DUAL DISSOLVE	Usable	Usable	—	—
MULTI-4, ROTATION-L1-4, ROTATION-R1-4	—	—	—	—

MULTI (*15)

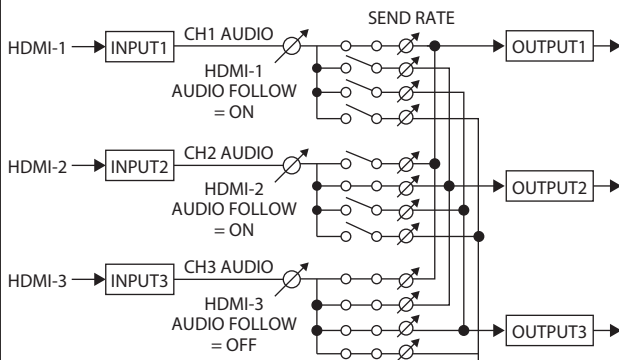
Menu item		Value	Description
2nd level	3rd level		
WINDOW-1 : WINDOW-4	SOURCE CH (*16)	CH1-CH8	<p>This sets the video input channels displayed in the respective windows during video compositing.</p> <div>  <p>* The layer positions are fixed and cannot be changed.</p>  </div>
	SIZE	10 %–100 %	This adjusts the size of the window.
	POSITION H	-100 %–100 %	This adjusts the horizontal position of the window.
	POSITION V	-100 %–100 %	This adjusts the vertical position of the window.
	CROPPING TYPE	ORIGINAL, 4: 3, 5: 4, 16: 9, MANUAL	This sets the type when cropping a window.
	MANUAL H (*17)	-2000-0-2000	This sets the horizontal cropping width.
	MANUAL V (*17)	-2000-0-2000	This sets the vertical cropping width.
	ZOOM	100 %–1000 %	This adjusts the enlargement factor of the picture.
	ZOOM POSITION H	-1920-0-1920	This adjusts the horizontal display position of the video.
	ZOOM POSITION V	-1920-0-1920	This adjusts the vertical display position of the video.
	OUTPUT1 SW : OUTPUT4 SW * This varies according to model.	OFF, ON	<p>This sets whether windows for each output channel are displayed (ON) or hidden (OFF).</p> <p>* Separately adjusting the size and position of the window for each output channel is not possible.</p>

(*15): Effective when "MODE" is set to a value from "MULTI-2" to "MULTI-4."

(*16): The "SOURCE CH" setting can be changed only for the windows in multi-view output. For example, when "MODE" is set to "MULTI-2," only WINDOW-1 and WINDOW-2 can be changed.

(*17): Effective when "CROPPING TYPE" under "MULTI" is set to "MANUAL."

AUDIO INPUT

Menu item		Value	Description
2nd level	3rd level		
HDMI-1 : HDMI-8 ANALOG-1 : ANALOG-8	INPUT LEVEL	0 (-INF dB)–100 (0.0 dB)–127 (+6.0 dB)	This adjusts the volume level of input audio.
	INPUT MUTE	OFF, ON	This sets the Mute feature on or off. Input audio for which this is set to "ON" is silenced.
	AUDIO FOLLOW	OFF, ON	<p>This sets the Audio Follow feature on or off.</p> <p>ON: Selected audio is sent to a single output channel.</p> <p>OFF: Audio on each output channel is sent to all channels. (*18)</p> <div>  </div>

(*18): Setting "AUDIO FOLLOW" to "OFF" during input or output of copyright-protected (HDCP) video might result in no audio output on other channels. For details, refer to "Important Notes When Working with Copyright-protected (HDCP) Video" (p. 20).

AUDIO INPUT (continued)

Menu item		Value	Description
2nd level	3rd level		
ANALOG-1 ANALOG-2	PHANTOM POWER	OFF, ON	This sets phantom power on or off (R channel only).
	INPUT GAIN	0 dB–64 dB	This adjusts the input sensitivity (R channel only).
ANALOG-1 : ANALOG-8	MONO INPUT	OFF, ON	Setting this to “ON” enables monaural input.
	HPF	OFF, ON	This sets the high-pass filter on or off. Setting this to “ON” attenuates the low band while passing the high band unchanged.
HDMI-1 : HDMI-8 ANALOG-1 : ANALOG-8	4BAND EQUALIZER	OFF, ON	This sets the equalizer on or off.
	HIGH GAIN	-15 dB–0 dB–15 dB	This boosts or attenuates the high band.
	HIGH FREQ	600 Hz–8.00 kHz–12.0 kHz	This adjusts the center frequency when changing the sound quality in the high band.
	HI-MID GAIN	-15 dB–0 dB–15 dB	This boosts or attenuates the high-midrange band.
	HI-MID FREQ	20.0 Hz–2.50 kHz–10.0 kHz	This adjusts the center frequency when changing the sound quality in the high-midrange band.
	HI-MID Q	0.50–1.00–16.0	This adjusts the bandwidth when boosting or attenuating the high-midrange band.
	LOW-MID GAIN	-15 dB–0 dB–15 dB	This boosts or attenuates the low-midrange band.
	LOW-MID FREQ	20.0 Hz–2.50 kHz–10.0 kHz	This adjusts the center frequency when changing the sound quality in the low-midrange band.
	LOW-MID Q	0.50–1.00–16.0	This adjusts the bandwidth when boosting or attenuating the low-midrange band.
	LOW GAIN	-15 dB–0 dB–15 dB	This boosts or attenuates the low band.
	LOW FREQ	50.0 Hz–112 Hz–800 Hz	This adjusts the center frequency when changing the sound quality in the low band.
	GATE	OFF, ON	This sets gate on or off.
	THRESHOLD	-50 dB– -48 dB–0 dB	This sets the level used as the threshold for removing audio. Audio that does not reach the threshold level is removed.
	RELEASE	30 ms–500 ms–5000 ms	This adjusts the length of time until the gate effect ends after audio falls below the threshold.
	COMPRESSOR/ DUCKING	OFF, COMPRESSOR, DUCKING	This sets the compressor or ducking on or off.
	THRESHOLD	-50 dB– -16 dB–0 dB	This sets the level used as the threshold when performing audio compression (compressor) or attenuation (ducking). Compressor: Compression is applied to audio that exceeds the threshold level. Ducking: Audio that exceeds the threshold level is attenuated.
	COMP-RATIO	1.0: 1, 1.2: 1, 1.5: 1, 2.0: 1, 2.8: 1, 4.0: 1, 8.0: 1, 16: 1, INF: 1	This specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as “1.”
	COMP-ATTACK	0.2 ms–50 ms–100 ms	This sets the time until the compression effect peaks after audio exceeding the threshold is input.
	COMP-KNEE	HARD, SOFT1–SOFT9	This adjusts the way in which the compressor is applied to the region near the threshold level within a range extending from steep (HARD) to gentle (SOFT9).
	COMP-RELEASE	30 ms–500 ms–5000 ms	This adjusts the length of time until compression ends after audio falls below the threshold.
	DUCK-KEY IN SELECT	HDMI INPUT1–8, ANALOG INPUT1–8 * Default values differ according to input channel.	This sets the channel to use as the key-in signal.
	DUCK-ATTACK	0.2 ms–50 ms–100 ms	This sets the time until the ducking effect peaks after audio exceeding the threshold is input.
	DUCK-RELEASE	30 ms–500 ms–5000 ms	This adjusts the time until the ducking effect disappears after the time set for “DUCK-HOLD” has passed.
	DUCK-HOLD	0 ms–250 ms–5000 ms	This adjusts the length of time until the ducking effect starts to end after audio falls below the threshold.
	OUT1 SEND RATE : OUT4 SEND RATE * This varies according to model.	0 %–100 %	This sets the audio send level for the respective output channel.

AUDIO OUTPUT

Menu item		Value	Description
2nd level	3rd level		
OUTPUT-1 : OUTPUT-4 * This varies according to model.	OUTPUT LEVEL	0 (-INF dB)– 100 (0.0 dB) –127 (+6.0 dB)	This adjusts the volume level of output audio.
	OUTPUT MUTE	OFF , ON	This sets the Mute feature on or off. Output audio for which this is set to “ON” is silenced.
	OUTPUT DELAY	0 ms– 60 ms –170 ms	This adjusts the delay time for output audio.
	HDMI AUDIO CH	2ch , 5.1ch, 7.1ch	This sets the number of audio channels output via the HDMI OUTPUT connector.
	DOWN MIX	OFF , STEREO > MONO, 5.1ch > STEREO, 5.1ch > MONO	This sets downmixing on or off. STEREO > MONO: This downmixes stereo audio and outputs it as monaural. 5.1ch > STEREO: This downmixes 5.1-channel audio and outputs it as stereo. 5.1ch > MONO: This downmixes 5.1-channel audio and outputs it as monaural.
	4BAND EQUALIZER	OFF , ON	This sets the equalizer on or off.
	HIGH GAIN	-15 dB– 0 dB –15 dB	This boosts or attenuates the high band.
	HIGH FREQ	600 Hz– 8.00 kHz –12.0 kHz	This adjusts the center frequency when changing the sound quality in the high band.
	HI-MID GAIN	-15 dB– 0 dB –15 dB	This boosts or attenuates the high-midrange band.
	HI-MID FREQ	20.0 Hz– 2.50 kHz –10.0 kHz+	This adjusts the center frequency when changing the sound quality in the high-midrange band.
	HI-MID Q	0.50– 1.00 –16.0	This adjusts the bandwidth when boosting or attenuating the high-midrange band.
	LOW-MID GAIN	-15 dB– 0 dB –15 dB	This boosts or attenuates the low-midrange band.
	LOW-MID FREQ	20.0 Hz– 2.50 kHz –10.0 kHz	This adjusts the center frequency when changing the sound quality in the low-midrange band.
	LOW-MID Q	0.50– 1.00 –16.0	This adjusts the bandwidth when boosting or attenuating the low-midrange band.
	LOW GAIN	-15 dB– 0 dB –15 dB	This boosts or attenuates the low band.
	LOW FREQ	50.0 Hz– 112 Hz –800 Hz	This adjusts the center frequency when changing the sound quality in the low band.
	GATE/COMPRESSOR	OFF , GATE, COMPRESSOR	This sets the gate or compressor on or off.
	GATE-THRESHOLD	-50 dB– -48 dB –0 dB	This sets the level used as the threshold for removing audio. Audio that does not reach the threshold level is removed.
	GATE-RELEASE	30 ms– 500 ms –5000 ms	This adjusts the length of time until the gate effect ends after audio falls below the threshold.
	COMP-THRESHOLD	-50 dB– -16 dB –0 dB	This sets the level used as the threshold when performing audio compression. Compression is applied to audio that exceeds the threshold level.
	COMP-RAITO	1.0: 1, 1.2: 1, 1.5: 1, 2.0: 1, 2.8: 1 , 4.0: 1, 8.0: 1, 16: 1, INF: 1	This specifies the degree of compression applied to the audio. The state in which no compression is applied is defined as “1.”
	COMP-ATTACK	0.2 ms– 50 ms –100 ms	This sets the time until the compression effect peaks after audio exceeding the threshold is input.
	COMP-KNEE	HARD , SOFT1–SOFT9	This adjusts the way in which the compressor is applied to the region near the threshold level within a range extending from steep (HARD) to gentle (SOFT9).
	COMP-RELEASE	30 ms– 500 ms –5000 ms	This adjusts the length of time until compression ends after audio falls below the threshold.
	TEST TONE	OFF , ON	Setting this to “ON” outputs a test tone. The frequency of the test tone is fixed at 1 kHz (+4 dBu).

AUDIO CONTROL

Menu item		Value	Description
2nd level	3rd level		
FADER 1	—	HDMI INPUT1–8, ANALOG INPUT1–8	These set the audio input channels assigned to audio faders 1 through 8 at the audio volume control screen.
FADER 2	—	HDMI INPUT1–HDMI INPUT2–8, ANALOG INPUT1–8	
FADER 3	—	HDMI INPUT1–HDMI INPUT3–8, ANALOG INPUT1–8	
FADER 4	—	HDMI INPUT1–HDMI INPUT4–8, ANALOG INPUT1–8	
FADER 5	—	HDMI INPUT1–HDMI INPUT5–8, ANALOG INPUT1–8	
FADER 6	—	HDMI INPUT1–HDMI INPUT6–8, ANALOG INPUT1–8	
FADER 7	—	HDMI INPUT1–HDMI INPUT7–8, ANALOG INPUT1–8	
FADER 8	—	HDMI INPUT1–HDMI INPUT8, ANALOG INPUT1–8	
OUTPUT FADER	—	ALL, OUTPUT1–4	This sets the audio output channel assigned to the output fader at the audio volume control screen. Setting this to “ALL” lets you adjust the audio on all audio output channels simultaneously.

MODE

Menu item		Value	Description
2nd level	3rd level		
MODE	—	MATRIX, MULTI-2, MULTI-3, MULTI-4, SPAN-2, SPAN-3 (*19), SPAN-4 (*20), ROTATION-L1, ROTATION-L2, ROTATION-L3 (*19), ROTATION-L4 (*20), ROTATION-R1, ROTATION-R2, ROTATION-R3 (*19), ROTATION-R4 (*20), 4K-1 (*20), 4K-2 (*20), DISSOLVE-1, PGM-PST, 2 x PGM-PST (*19), 3 x PGM-PST (*20), DUAL DISSOLVE, DUAL PGM-PST (*20)	<p>This sets the video output mode.</p> <p>* On output channels for which “OUTPUT1 SYNC” under “VIDEO OUTPUT” is set to “ON,” the output video is not interrupted during mode switching.</p> <p>* For more information on output modes, refer to the Owner’s Manual (p. 22) and “Functions Added in Ver. 2.0/Ver. 3.0.”</p>

(*19): XS-83H/XS-84H only

(*20): XS-84H only

PRESET MEMORY

Menu item		Value	Description																																				
2nd level	3rd level																																						
LOAD SETTING	—	1–32	This loads the settings at the specified preset number.																																				
RECALL SAFE	—	OFF, ON	Setting this to “ON” recalls only the specified settings from the preset. Setting this to “ON” and pressing the [VALUE] dial displays the “RECALL SAFE” popup. Specify whether the settings for the following items are individually recalled (OFF) or not individually recalled (ON).																																				
			<table><tr><th>Setting items</th><th>Value</th><th>Description</th></tr><tr><td>VIDEO INPUT</td><td>OFF, ON</td><td>Video input settings, input EDID assignment settings</td></tr><tr><td>VIDEO OUTPUT</td><td>OFF, ON</td><td>Video output settings</td></tr><tr><td>OUT RESOLUTION</td><td>OFF, ON</td><td>Output resolution setting</td></tr><tr><td>TRANSITION</td><td>OFF, ON</td><td>Video transition time/fade time setting</td></tr><tr><td>OFF SWITCH</td><td>OFF, ON</td><td>[OFF] button settings</td></tr><tr><td>MULTI</td><td>OFF, ON</td><td>Multi-view settings</td></tr><tr><td>AUDIO INPUT</td><td>OFF, ON</td><td>Audio input settings</td></tr><tr><td>AUDIO OUTPUT</td><td>OFF, ON</td><td>Audio output settings</td></tr><tr><td>AUDIO CONTROL</td><td>OFF, ON</td><td>Fader assignment settings at the audio volume control screen</td></tr><tr><td>MODE</td><td>OFF, ON</td><td>Output mode settings</td></tr><tr><td>CROSSPOINT</td><td>OFF, ON</td><td>Cross-point selection button settings</td></tr></table>	Setting items	Value	Description	VIDEO INPUT	OFF, ON	Video input settings, input EDID assignment settings	VIDEO OUTPUT	OFF, ON	Video output settings	OUT RESOLUTION	OFF, ON	Output resolution setting	TRANSITION	OFF, ON	Video transition time/fade time setting	OFF SWITCH	OFF, ON	[OFF] button settings	MULTI	OFF, ON	Multi-view settings	AUDIO INPUT	OFF, ON	Audio input settings	AUDIO OUTPUT	OFF, ON	Audio output settings	AUDIO CONTROL	OFF, ON	Fader assignment settings at the audio volume control screen	MODE	OFF, ON	Output mode settings	CROSSPOINT	OFF, ON	Cross-point selection button settings
			Setting items	Value	Description																																		
			VIDEO INPUT	OFF, ON	Video input settings, input EDID assignment settings																																		
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			TRANSITION	OFF, ON	Video transition time/fade time setting																																		
			OFF SWITCH	OFF, ON	[OFF] button settings																																		
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			AUDIO INPUT	OFF, ON	Audio input settings																																		
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			AUDIO CONTROL	OFF, ON	Fader assignment settings at the audio volume control screen																																		
			MODE	OFF, ON	Output mode settings																																		
CROSSPOINT	OFF, ON	Cross-point selection button settings																																					
SAVE SETTING	—	1–32	This saves the settings at the specified preset number.																																				
DELETE SETTING	—	1–32	This deletes the settings at the specified preset number.																																				

EDID

Menu item		Value	Description
2nd level	3rd level		
HDMI EDID IN-1 : HDMI EDID IN-8	—	<ul style="list-style-type: none">When “FRAME RATE” under “SYSTEM” is set to “59.94 Hz” INTERNAL, 640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 800, 1366 x 768, 1280 x 1024, 1400 x 1050, 1600 x 1200, 1920 x 1200, DATA1–8 (*21), 480i 4: 3, 480i 16: 9, 480p 4: 3, 480p 16: 9, 720p, 1080i, 1080pWhen “FRAME RATE” under “SYSTEM” is set to “50 Hz” INTERNAL, 640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 800, 1366 x 768, 1280 x 1024, 1400 x 1050, 1600 x 1200, 1920 x 1200, DATA1–8 (*21), 576i 4: 3, 576i 16: 9, 576p 4: 3, 576p 16: 9, 720p, 1080i, 1080p	These set the EDID values for HDMI INPUT. INTERNAL: Information on computer-use input resolution and video-use input resolution is sent. (Refer to the chart below.) DATA1–8: EDID values copied using “HDMI EDID COPY” are sent. (Refer to the chart below.) * Supported audio formats are shared by “INTERNAL” through “1920 x 1200.” For details, refer to the chart below. * Pressing the [VALUE] dial after changing settings displays a popup prompting you to confirm the changes. Pressing the [VALUE] dial applies the changes to the settings.
RGB EDID IN-1 : RGB EDID IN-8	—	INTERNAL , 640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 800, 1366 x 768, 1280 x 1024, 1400 x 1050, 1600 x 1200, 1920 x 1200	These set the EDID values for RGB INPUT. INTERNAL: Information on computer-use input resolution is sent. (Refer to the chart below.) * Pressing the [VALUE] dial after changing settings displays a popup prompting you to confirm the changes. Pressing the [VALUE] dial applies the changes to the settings.
EDID COPY OUTPUT	—	OUTPUT1–4 * This varies according to model.	This sets the HDMI OUTPUT connector for copying the EDID.
HDMI EDID COPY	—	DATA1–8	Specifying a copy destination (DATA1 through 8) and pressing the [VALUE] dial displays the “HDMI EDID COPY” popup. This copies the EDID of the display connected to the HDMI OUTPUT connector selected using “EDIT COPY OUTPUT.”

(*21): The “DATA1– 8” settings are not saved at individual presets. Only a single set is saved in the unit. After settings for menu items have been made, the new values are saved in the unit’s internal memory when you exit the menu.

Data Sent When Set to “INTERNAL”

●When frame rate is set to “59.94 Hz”

Computer-use input resolution			
640 x 480/60 Hz (VGA)	800 x 600/60 Hz (SVGA)	1024 x 768/60 Hz (XGA)	1280 x 800/60 Hz (WXGA)
1280 x 1024/60 Hz (SXGA)	1400 x 1050/60 Hz (SXGA+)	1600 x 1200/60 Hz (UXGA)	1920 x 1200/60Hz (Reduced Blanking) (WUXGA)
1280 x 768/60 Hz (WXGA)	1366 x 768/60 Hz (FWXGA)	1920 x 1080/59.94p, 60p	1920 x 1080/59.94i
Video-use input resolution			
1920 x 1080/59.94p, 60p (16:9) [Native]	1920 x 1080/50p (16:9)	1920 x 1080/59.94i, 60i (16:9)	1920 x 1080/50i (16:9)
1280 x 720/59.94p, 60p (16:9)	1280 x 720/50p (16:9)	720 x 480/59.94p, 60p (16:9)	720 x 480/59.94p, 60p (4:3)
720 x 576/50p (16:9)	720 x 576/50p (4:3)	720 x 480/59.94i (16:9)	720 x 480/59.94i (4:3)
720 x 576/50i (16:9)	720 x 576/50i (4:3)		

●When frame rate is set to “50 Hz”

Computer-use input resolution			
640 x 480/60 Hz (VGA)	640 x 480/75 Hz (VGA)	800 x 600/60 Hz (SVGA)	800 x 600/75 Hz (SVGA)
1024 x 768/60 Hz (XGA)	1024 x 768/75 Hz (XGA)	1280 x 800/60 Hz (WXGA)	1280 x 800/75 Hz (WXGA)
1280 x 1024/ 60Hz (SXGA)	1280 x 1024/75 Hz (SXGA)	1400 x 1050/60 Hz (SXGA+)	1400 x 1050/75 Hz (SXGA+)
1600 x 1200/60 Hz (UXGA)	1920 x 1200/60 Hz (Reduced Blanking) (WUXGA)	1280 x 768/60 Hz (WXGA)	1366 x 768/60 Hz (FWXGA)
1920 x 1080/59.94p, 60p	1920 x 1080/59.94i		
Video-use input resolution			
1920 x 1080/59.94p, 60p (16:9)	1920 x 1080/50p (16:9) [Native]	1920 x 1080/59.94i, 60i (16:9)	1920 x 1080/50i (16:9)
1280 x 720/59.94p, 60p (16:9)	1280 x 720/50p (16:9)	720 x 480/59.94p, 60p (16:9)	720 x 480/59.94p, 60p (4:3)
720 x 576/50p (16:9)	720 x 576/50p (4:3)	720 x 480/59.94i (16:9)	720 x 480/59.94i (4:3)
720 x 576/50i (16:9)	720 x 576/50i (4:3)		

●Supported audio format

Linear PCM/48 kHz/24 bits/8 channels

* Speaker configurations are as follows.

- Front Left/Front Right
- Front Center
- Rear Left/Rear Right
- Rear Left Center/Rear Right Center
- LFE

* The settings for the following menu items are not saved at individual presets. Only a single set is saved in the unit. After settings for menu items have been made, the new values are saved in the unit's internal memory when you exit the menu.

RS-232C

Menu item		Value	Description
2nd level	3rd level		
BAUD RATE	—	9600 , 38400	This sets the communication speed (bps) of the RS-232C connector.
FUNCTION	—	RECEIVER , HDBaseT1, HDBaseT2, HDBaseT3, HDBaseT4 * This varies according to model.	This specifies the functioning of the RS-232C connector. RECEIVER: The unit receives commands via the RS-232C interface and is operated remotely. HDBaseT1–4: Commands sent and received via RS-232C are sent and received unchanged via the specified HDBaseT connector. The unit is not under remote control.

LAN

Menu item		Value	Description
2nd level	3rd level		
CONFIGURE	—	USING DHCP , MANUALLY	This sets whether the IP address and subnet mask are obtained automatically (USING DHCP) or set manually (MANUALLY).
IP ADDRESS (*22)	—	192.168.2.254	This sets the IP address.
SUBNET MASK (*22)	—	255.255.255.0	This sets the subnet mask.
INFORMATION	—	(ENTER)	Pressing the [VALUE] dial displays the "LAN INFORMATION" popup. This displays the setting information for the LAN (p. 21).

(*22): Effective when "CONFIGURE" is set to "MANUALLY."

WIRELESS LAN

Menu item		Value	Description
2nd level	3rd level		
ACCESS POINT	—	(ENTER)	Pressing the [VALUE] dial displays the "ACCESS POINT" popup. From the list of wireless LAN access points, you select the Wi-Fi router to connect to.
WPS	—	(ENTER)	Pressing the [VALUE] dial displays the "WPS" popup. This establishes a WPS connection to the Wi-Fi router.
AD-HOC MODE	—	OFF , ON	This sets the ad-hoc mode on or off.
AD-HOC CH	—	1–11	This sets the channel of the ad-hoc mode.
WIRELESS ID	—	0–99	This sets the wireless ID. * The wireless ID is a setting shared by the wired LAN and the wireless LAN.
INFORMATION	—	(ENTER)	Pressing the [VALUE] dial displays the "WLAN INFORMATION" popup. This displays the Wi-Fi setting information (p. 19).

USB MEMORY

Menu item		Value	Description
2nd level	3rd level		
LOAD PRESET	—	(ENTER)	Pressing the [VALUE] dial displays the "LOAD PRESET" popup. This loads into the unit a settings file saved on a USB flash drive.
SAVE PRESET	—	(ENTER)	Pressing the [VALUE] dial displays the "SAVE PRESET" popup. Any settings file already saved on the USB flash drive is overwritten.
SAVE AS PRESET	—	(ENTER)	Pressing the [VALUE] dial displays the "SAVE AS PRESET" popup. This saves the settings file to the USB flash drive with a name assigned to it.
LOAD STILL IMAGE	—	1–4	Selecting a still-image save destination from 1 to 4 and pressing the [VALUE] dial displays the "LOAD STILL IMAGE" popup. At the popup, you select a file and load the still image into the unit.
FORMAT	—	(ENTER)	This formats a USB flash drive.

CAPTURE IMAGE (*23)

Menu item		Value	Description
2nd level	3rd level		
CAPTURE SOURCE	—	OUTPUT1-4 * This varies according to model.	This sets the output video to use for still-image capture.
TARGET STILL NO	—	STILL1, STILL2, STILL3, STILL4	This sets the destination for saving a captured still image.
CAPTURE EXECUTE	—	(ENTER)	Pressing the [VALUE] dial displays the "CAPTURE EXECUTE" popup. This executes the capture operation and saves the still image in the unit.

(*23): Depending on "MODE" (p. 9), the combinations with "CAPTURE IMAGE" can be used as shown in the following chart.

MODE	OUTPUT-1	OUTPUT-2	OUTPUT-3	OUTPUT-4
MATRIX, SPAN-2-4, 4K-1, 4K-2, PGM-PST, 2 x PGM-PST, 3 x PGM-PST	Usable	Usable	Usable	Usable
MULTI-2	—	—	Usable	Usable
MULTI-3	—	—	—	Usable
DISSOLVE-1	Usable	Usable	Usable	—
DUAL DISSOLVE	Usable	Usable	—	—
MULTI-4, ROTATION-L1-4, ROTATION-R1-4	—	—	—	—

PANEL OPERATION

Menu item		Value	Description
2nd level	3rd level		
TRANS OPERATION	—	SINGLE PRESS, DOUBLE PRESS (*24)	This sets the method of operation of the cross-point selection buttons SINGLE PRESS: Pressing a cross-point selection button once switches the video or audio. DOUBLE PRESS: Pressing a cross-point selection button puts the video or audio to output next on standby (flashing). Pressing any flashing button switches, in one operation, all video and audio currently on standby.
PGM-PST FLIP	—	OFF, ON	This sets the operation of the cross-point selection buttons when "MODE" is "PGM-PST," "2 x PGM-PST," "3 x PGM-PST," or "DUAL PGM-PST." When this is set to "ON," the lighted places in the PGM row and PST row change places when video/audio switching finishes (flip function).
OUT1 LINKED CH (*25)	—	OUTPUT1-OUTPUT4 * This varies according to model.	This sets the output-channel selection with which switching of OUTPUT1 is interlinked when the cross-point selection button is operated.
OUT2 LINKED CH (*25)	—	OUTPUT1-OUTPUT2-OUTPUT4 * This varies according to model.	This sets the output-channel selection with which switching of OUTPUT2 is interlinked when the cross-point selection button is operated.
OUT3 LINKED CH (*25) (*26)	—	OUTPUT1-OUTPUT3-OUTPUT4 * This varies according to model.	This sets the output-channel selection with which switching of OUTPUT3 is interlinked when the cross-point selection button is operated.
OUT4 LINKED CH (*25) (*27)	—	OUTPUT1-OUTPUT4	This sets the output-channel selection with which switching of OUTPUT4 is interlinked when the cross-point selection button is operated.
SYNC-TAKE DUAL-PGM (*27)	—	OFF, ON	This sets the operation of the [OFF] (TAKE) buttons when the "MODE" setting is "DUAL PGM-PST." When this is set to "ON," the two [OFF] (TAKE) buttons are interlinked.

(*24): Depending on "MODE" (p. 9), the combinations with "DOUBLE PRESS" can be used as shown in the following chart.

MODE	OUTPUT-1	OUTPUT-2	OUTPUT-3	OUTPUT-4
MATRIX, MULTI-2-4, SPAN-2-4, ROTATION-L1-4, ROTATION-R1-4, 4K-1, 4K-2, DISSOLVE-1, DUAL DISSOLVE	Usable	Usable	Usable	Usable
PGM-PST	—	—	Usable	Usable
2 x PGM-PST	—	—	—	Usable
3 x PGM-PST, DUAL PGM-PST	—	—	—	—

(*25): Depending on "MODE" (p. 9), the combinations with which "OUT1 LINKED CH"-"OUT4 LINKED CH" can be used are as shown in the following chart.

MODE	OUTPUT-1	OUTPUT-2	OUTPUT-3	OUTPUT-4
MATRIX, MULTI-2-4	Usable	Usable	Usable	Usable
SPAN-2, PGM-PST	—	—	Usable	Usable
SPAN-3, 2 x PGM-PST	—	—	—	Usable
DISSOLVE-1	—	Usable	Usable	—
SPAN-4, ROTATION-L1-4, ROTATION-R1-4, 4K-1, 4K-2, 3 x PGM-PST, DUAL DISSOLVE, DUAL PGM-PST	—	—	—	—

(*26): XS-83H/XS-84H only

(*27): XS-84H only

* The settings for the following menu items are not saved at individual presets. Only a single set is saved in the unit. After settings for menu items have been made, the new values are saved in the unit's internal memory when you exit the menu.

BEZEL COMP

Menu item			Value	Description
2nd level		3rd level		
OUT1-2 HORIZ PIX	(*28) (*29)	—	-1000-0-1000	This adjusts the horizontal distance of OUTPUT1 and 2.
OUT2-3 HORIZ PIX	(*28) (*30)	—	-1000-0-1000	This adjusts the horizontal distance of OUTPUT2 and 3.
OUT3-4 HORIZ PIX	(*28) (*31)	—	-1000-0-1000	This adjusts the horizontal distance of OUTPUT3 and 4.
OUT1-3/2-4 VER LINE	(*29) (*31)	—	-1000-0-1000	This adjusts the vertical distance of OUTPUT1 and 3 or OUTPUT2 and 4.

(*28): This is enabled when "MODE" is one of the following.

"SPAN-2"—"SPAN-4,""ROTATION-L1"—"ROTATION-L4,""ROTATION-R1"—"ROTATION-R4"

(*29): This is enabled when "MODE" is "4K-1" or "4K-2."

(*30): XS-83H/XS-84H only

(*31): XS-84H only

COMMAND

Menu item			Value	Description
2nd level		3rd level		
COMMAND-1 : COMMAND-32		TYPE	NONE , EPSON: Power ON, EPSON: Power OFF, EPSON: AV Mute ON, EPSON: AV Mute OFF, Panasonic: Power ON, Panasonic: Power OFF, Panasonic: Shutter ON, Panasonic: Shutter OFF, Panasonic: V-Mute ON, Panasonic: V-Mute OFF, Panasonic: A-Mute ON, Panasonic: A-Mute OFF, Sony: Power ON, Sony: Power OFF, Sony: V-Mute ON, Sony: V-Mute OFF, Sony: A-Mute ON, Sony: A-Mute OFF, Sony [NEW]: Power ON, Sony [NEW]: Power OFF, Sony [NEW]: V-Mute ON, Sony [NEW]: V-Mute OFF, Sony [NEW]: A-Mute ON, Sony [NEW]: A-Mute OFF	This specifies the command to output. * For more information on command, refer to the chart below.
		PORT	RS-232C , HDBaseT1, HDBaseT2, HDBaseT3, HDBaseT4	This sets the output destination for the command.
		BAUD RATE	9600 bps , 19200 bps, 38400 bps, 115200 bps	This sets the baud rate (bit rate). * When "PORT" is set to "RS-232C," the "RS-232C" menu "BAUD RATE" setting (p. 11) is applied.
		COMMAND TIMING	OFF , STARTUP, PRESET1-32	This sets the timing for outputting commands. STARTUP: This outputs commands at unit startup. PRESET1-32: This outputs commands when a preset is recalled.

"TYPE" Settings and Command Values

Value	Command value	Description
EPSON: Power ON	PWR ON[CR]	This is the standard Power ON command for Epson projectors.
EPSON: Power OFF	PWR OFF[CR]	This is the standard Power OFF command for Epson projectors.
EPSON: AV Mute ON	MUTE ON[CR]	This is the standard AV Mute ON command for Epson projectors.
EPSON: AV Mute OFF	MUTE OFF[CR]	This is the standard AV Mute OFF command for Epson projectors.
Panasonic: Power ON	[STX]PON[ETX]	This is the standard Power ON command for Panasonic projectors and monitors.
Panasonic: Power OFF	[STX]POF[ETX]	This is the standard Power OFF command for Panasonic projectors and monitors.
Panasonic: Shutter ON	[STX]OSH: 1[ETX]	This is the standard Shutter ON command for Panasonic projectors.
Panasonic: Shutter OFF	[STX]OSH: 0[ETX]	This is the standard Shutter OFF command for Panasonic projectors.
Panasonic: V-Mute ON	[STX]VMT: 1[ETX]	This is the standard Video Mute ON command for Panasonic monitors.
Panasonic: V-Mute OFF	[STX]VMT: 0[ETX]	This is the standard Video Mute OFF command for Panasonic monitors.
Panasonic: A-Mute ON	[STX]AMT: 1[ETX]	This is the standard Audio Mute ON command for Panasonic monitors.
Panasonic: A-Mute OFF	[STX]AMT: 0[ETX]	This is the standard Audio Mute OFF command for Panasonic monitors.
Sony: Power ON	A9h 01h 30h 00h 00h 01h 31h 9Ah	This is the standard Power ON command for Sony projectors.
Sony: Power OFF	A9h 01h 30h 00h 00h 00h 31h 9Ah	This is the standard Power OFF command for Sony projectors.
Sony: V-Mute ON	A9h 00h 30h 00h 00h 01h 31h 9Ah	This is the standard Video Mute ON command for Sony projectors.
Sony: V-Mute OFF	A9h 00h 30h 00h 00h 00h 30h 9Ah	This is the standard Video Mute OFF command for Sony projectors.
Sony: A-Mute ON	A9h 00h 31h 00h 00h 01h 31h 9Ah	This is the standard Audio Mute ON command for Sony projectors.
Sony: A-Mute OFF	A9h 00h 31h 00h 00h 00h 31h 9Ah	This is the standard Audio Mute OFF command for Sony projectors.

Menu List

Value	Command value	Description
Sony [NEW]: Power ON	power "on"[CR][LF]	This is the new-format Power ON command for Sony projectors.
Sony [NEW]: Power OFF	power "off"[CR][LF]	This is the new-format Power OFF command for Sony projectors.
Sony [NEW]: V-Mute ON	blank "on"[CR][LF]	This is the new-format Video Mute ON command for Sony projectors.
Sony [NEW]: V-Mute OFF	blank "off"[CR][LF]	This is the new-format Video Mute OFF command for Sony projectors.
Sony [NEW]: A-Mute ON	muting "on"[CR][LF]	This is the new-format Audio Mute ON command for Sony projectors.
Sony [NEW]: A-Mute OFF	muting "off"[CR][LF]	This is the new-format Audio Mute OFF command for Sony projector.

SYSTEM

* The settings for the following menu items are not saved at individual presets. Only a single set is saved in the unit. After settings for menu items have been made, the new values are saved in the unit's internal memory when you exit the menu.

Menu item		Value	Description																								
2nd level	3rd level																										
FRAME RATE	—	59.94 Hz, 50 Hz	This sets the system clock.																								
FIELD SYNC	—	OFF, ON	This sets field sync on or off.																								
KEY LOCK MODE	—	(ENTER)	Pressing the [VALUE] dial displays the “KEY LOCK MODE” popup. This sets whether key locking is activated (ON) or deactivated (OFF) for each of the following buttons.																								
			<table><tr><th>Setting items</th><th>Value</th><th>Description</th></tr><tr><td>CROSSPOINT</td><td>OFF, ON</td><td>Cross-point selection buttons</td></tr><tr><td>SWITCH MODE</td><td>OFF, ON</td><td>[SWITCHING MODE] button</td></tr><tr><td>MENU+EXIT</td><td>OFF, ON</td><td>[MENU] button, [EXIT] Button</td></tr><tr><td>CURSOR+VALUE</td><td>OFF, ON</td><td>Cursor buttons, [VALUE] button</td></tr><tr><td>CROSS-NOINPUT</td><td>OFF, ON</td><td>Cross-point selection buttons that have no signal input</td></tr><tr><td>CROSS-OFF</td><td>OFF, ON</td><td>[OFF] buttons</td></tr><tr><td>CROSS-OUTPUT1 : CROSS-OUTPUT4 * This varies according to model.</td><td>OFF, ON</td><td>Cross-point selection buttons for each respective OUTPUT row</td></tr></table>	Setting items	Value	Description	CROSSPOINT	OFF , ON	Cross-point selection buttons	SWITCH MODE	OFF , ON	[SWITCHING MODE] button	MENU+EXIT	OFF , ON	[MENU] button, [EXIT] Button	CURSOR+VALUE	OFF , ON	Cursor buttons, [VALUE] button	CROSS-NOINPUT	OFF , ON	Cross-point selection buttons that have no signal input	CROSS-OFF	OFF , ON	[OFF] buttons	CROSS-OUTPUT1 : CROSS-OUTPUT4 * This varies according to model.	OFF , ON	Cross-point selection buttons for each respective OUTPUT row
			Setting items	Value	Description																						
			CROSSPOINT	OFF , ON	Cross-point selection buttons																						
			SWITCH MODE	OFF , ON	[SWITCHING MODE] button																						
			MENU+EXIT	OFF , ON	[MENU] button, [EXIT] Button																						
			CURSOR+VALUE	OFF , ON	Cursor buttons, [VALUE] button																						
			CROSS-NOINPUT	OFF , ON	Cross-point selection buttons that have no signal input																						
			CROSS-OFF	OFF , ON	[OFF] buttons																						
			CROSS-OUTPUT1 : CROSS-OUTPUT4 * This varies according to model.	OFF , ON	Cross-point selection buttons for each respective OUTPUT row																						
Operation: Turns key lock mode on/off																											
1. For “KEY LOCK MODE,” set the parameter to “ON” for buttons whose operations you want to have no effect.																											
2. Hold down the [EXIT] button and press and hold the [MENU] button (for 3 seconds or longer).																											
The message “KEY LOCKED!!” is displayed and the key lock mode is turned on. The buttons you specified in step 1 are locked.																											
Again holding down the [EXIT] button and pressing and holding the [MENU] button (for 3 seconds or longer) makes the message “KEY RELEASED!!” appear and turns off the key lock mode.																											
MEMORY PROTECT	—	OFF , ON	Setting this to “ON” prohibits saving to presets.																								
RECALL LOCK	—	OFF , ON	Setting this to “ON” prohibits recalling presets.																								
BEEP	—	OFF, ON	This sets the audible beep on or off.																								
LCD BACKLIGHT	—	0–7	This adjusts the brightness of the display. * When this is set to “0,” the display’s backlight is completely dark.																								
DIMMER	—	0–7	This adjusts the brightness of the LEDs. * When this is set to “0,” the LEDs are completely dark.																								
TOP DISPLAY	—	IN/OUT STATUS, INPUT STATUS1, INPUT STATUS2, OUTPUT STATUS , AUDIO VOLUME	This sets the top screen displayed at startup.																								
START UP	—	LAST MEMORY , PRESET1–32	This sets the settings loaded at startup. LAST MEMORY: The last-saved settings are loaded. When “LAST MEMORY” has been selected, settings are saved in internal memory at the following times. <ul style="list-style-type: none">On displaying a menuOn exiting a menuWhen 10 seconds has elapsed since the last operation was performed																								
MONITOR STATUS	—	(ENTER)	Pressing the [VALUE] dial displays the “MONITOR STATUS” popup. This displays the status of equipment connected to the HDBaseT OUTPUT or HDMI OUTPUT connectors.																								

SYSTEM (continued)

Menu item		Value	Description
2nd level	3rd level		
INPUT STATUS	—	CH1–8	Selecting an input video channel and pressing the [VALUE] dial displays the “INPUT STATUS” popup. This displays format information for the input video.
DELETE STILL IMAGE		1–4	Selecting a still-image save destination from 1 to 4 and pressing the [VALUE] dial displays the “DELETE STILL” popup. Here you delete the still image at the save destination.
VERSION	—	—	This displays program version information for the system.
FACTORY RESET	—	(ENTER)	This returns the unit’s settings to their factory defaults.

Network Settings

Network Functions

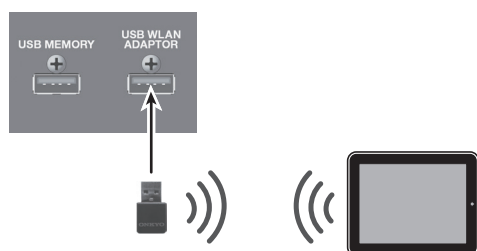
USB WLAN ADAPTOR Connector

Attaching an optional wireless USB adaptor to the USB WLAN ADAPTOR port lets you operate the unit remotely using the XS-80H Remote iPad application.

* For the wireless USB adaptor, use the ONKYO UWF-1 or Roland WNA1100-RL.

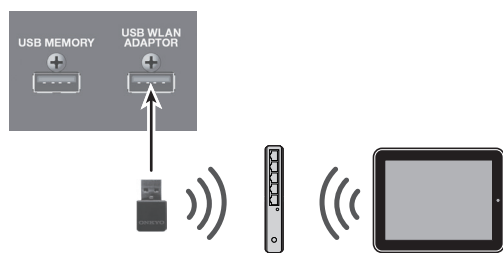
You can use either of the following two methods to make the Wi-Fi connection.

- ① Direct connection to the iPad (ad-hoc mode) → p. 17



- ② Connection through a Wi-Fi router

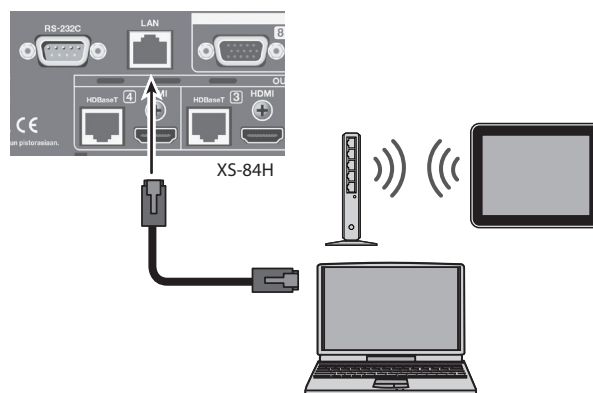
You make a wireless connection between the unit and a Wi-Fi router, and make a wireless connection to the iPad via the router.



→ Connecting to a Wi-Fi Router by WPS: p. 18

→ Selecting and Connecting to a Wi-Fi Router: p. 18

LAN Port



You can operate the unit remotely using TCP control commands from a computer, network device, or other such external equipment connected via the LAN port.

For details, refer to "Control Using the LAN Port" (p. 21).

You can also use the XS-80H Remote iPad application to operate the unit remotely via a Wi-Fi router connected to the LAN port.

For details, refer to "Making a Wired Connection to the Wi-Fi Router" (p. 19).

Connecting via Wi-Fi

Preparations

To make the connections over Wi-Fi, have the following equipment on hand.

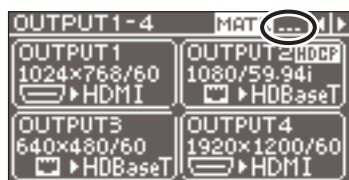
- Wireless USB adaptor
(ONKYO UWF-1 or Roland WNA1100-RL, sold separately)
- iPad
- Wi-Fi router (wireless LAN router, etc.) (*1) (*2)

(*1) Connection with all Wi-Fi routers is not assured.

(*2) This is not required when connecting in ad-hoc mode (p. 17).

Checking the Wi-Fi Connection Status

Wi-Fi connection status is shown by an icon at the top right of the display.



Icon	Description
	Connected to the Wi-Fi router. The signal strength (the strength of the radio waves from the Wi-Fi router) is indicated by three bars.
	A wireless USB adaptor is attached, but no connection to the Wi-Fi router is in effect.
	No wireless USB adaptor is attached.
	In ad-hoc mode.

Directly Connecting the Unit and the iPad (Ad-hoc Mode)

This makes a direct wireless connection between the unit and the iPad without using a Wi-Fi router (ad-hoc mode).

NOTE

The iPad connected in ad-hoc mode cannot connect to the Internet or communicate with other Wi-Fi devices.

1. Insert the optional wireless USB adaptor into the unit's USB WLAN ADAPTOR port.

For the wireless USB adaptor, use the ONKYO UWF-1 or Roland WNA1100-RL.

2. Use the [MENU] button to select "WIRELESS LAN," then set "AD-HOC MODE" to "ON."

This turns on ad-hoc mode.

3. From the WIRELESS LAN menu, select "INFORMATION," then press the [VALUE] dial.

The "WLAN INFORMATION" popup (p. 19) appears.

The following information is required when making the connection to the iPad.

Indication	Description
SSID	This displays the SSID.
AD-HOC KEY	This displays the ad-hoc key.

MEMO

When connecting multiple units of the same model, to distinguish between SSIDs, set the wireless ID on each device. For details, refer to "Setting the Wireless ID" (p. 19).

4. On the iPad, make the network settings.

1 On the iPad, tap "Settings" → "Wi-Fi" and make sure "Wi-Fi" is turned on, then for "Device," select the SSID displayed in the "WLAN INFORMATION" popup on the unit.

2 If a screen for entering a password appears, enter the ad-hoc key displayed in the "WLAN INFORMATION" popup on the unit.

MEMO

- If the connection cannot be made smoothly, changing the channel of the ad-hoc mode on the unit might help.
Use the [MENU] button to select "WIRELESS LAN" → "AD-HOC CH," and change the ad-hoc mode channel (1 through 11).
- When you're not making a connection in ad-hoc mode, return the iPad's "Settings" → "Wi-Fi" settings to their original values.

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

Connecting to a Wi-Fi Router by WPS

This connects the unit and Wi-Fi router by using WPS.
“WPS” is a feature that makes it easy to connect to a Wi-Fi router and make security-related settings.

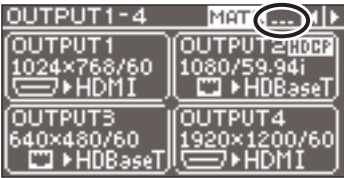
MEMO

- The Wi-Fi router you’re using must support WPS.
- When a WPS connection is made to a Wi-Fi router, the connection information is saved in memory, and thereafter the connection is established automatically.

1. Insert the optional wireless USB adaptor into the unit’s USB WLAN ADAPTOR port.

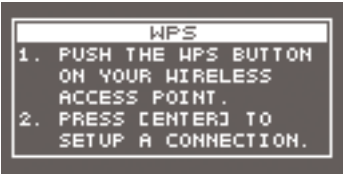
For the wireless USB adaptor, use the ONKYO UWF-1 or Roland WNA1100-RL.

2. Wait until the icon shown below appears at the upper right of the unit’s display.



3. Use the [MENU] button to select “WIRELESS LAN” → “WPS,” then press the [VALUE] dial.

The “WPS” popup appears.



4. Enable WPS on the Wi-Fi router (e.g., press the router’s WPS button).

* To enable WPS on the Wi-Fi router, refer to the documentation for the router.

5. Press the [VALUE] dial.

The WPS connection is established.
When connection is successful, the “WPS” popup disappears and the unit returns to the WIRELESS LAN menu.

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

7. Connect the iPad and the Wi-Fi router.

- 1** On the iPad, tap “Settings” → “Wi-Fi,” make sure Wi-Fi is turned on, then at “Choose a Network,” select the Wi-Fi router to which the unit is connected.

Selecting and Connecting to a Wi-Fi Router

From the list of Wi-Fi access points, select the Wi-Fi router where you want to connect the unit.

- * The 802.11g/n (2.4-GHz) wireless protocols and WPS and WPS2 authentication methods are supported.
- * For information on how to operate the Wi-Fi router, refer to the router’s documentation.

1. Insert the optional wireless USB adaptor into the unit’s USB WLAN ADAPTOR port.

For the wireless USB adaptor, use the ONKYO UWF-1 or Roland WNA1100-RL.

2. Use the [MENU] button to select “WIRELESS LAN” → “ACCESS POINT,” then press the [VALUE] dial.

The “ACCESS POINT” popup appears.

- The number of the currently selected Wi-Fi router is highlighted.
- Names that use other than single-byte alphanumeric characters are not displayed correctly.

3. Select the Wi-Fi router you want to connect to and press the [VALUE] dial.

- **When the Wi-Fi router is one you’re connecting to for the first time**

The “PASSPHRASE” popup appears. Go on to step 4.



- **When the Wi-Fi router is one that you’ve connected to in the past**

The connection is made as soon as you select the Wi-Fi router. When a successful connection is made, the unit returns to the WIRELESS LAN menu. Go on to step 7.

Entering Security Data

- * This procedure is necessary only when the Wi-Fi router is one you’re connecting to for the first time.

4. Enter the security data (passphrase) for the Wi-Fi router.

Pressing the [VALUE] dial lets you change the character at the cursor location. Turn the [VALUE] dial to change the character, then press the [VALUE] dial to apply the change.

Moving the cursor	Turn the [VALUE] dial. The cursor moves forward or backward.
Inserting a character	Press the [◀] button. The same character as the one just before the cursor location is inserted.
Deleting a character	Press the [▶] button. The character at the cursor location is deleted.

5. When you’ve finished entering the text, press the [EXIT] button.

6. Check the message and press the [VALUE] dial.

(If you want to quit, press the [EXIT] button.)
When a successful connection is made, the unit returns to the WIRELESS LAN menu.

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

8. Connect the iPad and the Wi-Fi router.

- 1** On the iPad, tap “Settings” → “Wi-Fi,” make sure Wi-Fi is turned on, then at “Choose a Network,” select the Wi-Fi router to which the unit is connected.

Setting the Wireless ID

Here you set the device name and SSID for the Wi-Fi-connected unit displayed in the XS-80H Remote iPad application.

When multiple units are on the network, you can change the device names and SSIDs by setting wireless IDs within a range of 1 to 99.

The XS-84H is used in the following example.

Wireless ID = 0: "XS-84H" (default)

Wireless ID = 1: "XS-84H-1"

:

Wireless ID = 99: "XS-84H-99"

* The wireless ID is a setting shared by the wired LAN and the wireless LAN.

1. Use the [MENU] button to select "WIRELESS LAN," then use "WIRELESS ID" to set the wireless ID.

The device name and SSID change automatically when you make the "WIRELESS ID" setting.

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

Checking the Wi-Fi Information

Here you check the Wi-Fi information for the unit.

1. Use the [MENU] button to select "WIRELESS LAN" → "INFORMATION," then press the [VALUE] dial.

The "WLAN INFORMATION" popup appears.

You can check and verify the following information.

Indication	Description
STATUS	This displays the connection status.
	CONNECTED: Connected to the Wi-Fi router.
	NOT CONNECTED: A wireless USB adaptor is attached, but no connection to the Wi-Fi router is in effect.
	NOT AVAILABLE: No wireless USB adaptor is attached.
	AD-HOC: In ad-hoc mode.
SSID	This displays the SSID.
IP ADDRESS	This displays the IP address.
SUBNET MASK	This displays the subnet mask.
MAC ADDRESS	This displays the MAC address.
AD-HOC KEY	This displays the ad-hoc key.

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

Making a Wired Connection to the Wi-Fi Router

Here you connect the unit to the Wi-Fi router using a LAN cable and make a wireless connection to the iPad via the router.

* For information on how to operate the Wi-Fi router, refer to the router's documentation.

1. Use a LAN cable to connect the LAN port on the unit to the Wi-Fi router.

2. Use the [MENU] button to select "LAN" and then make the following settings.

Menu item	Description
CONFIGURE	This sets whether the IP address and subnet mask are obtained automatically (USING DHCP) or set manually (MANUALLY).
IP ADDRESS	This sets the IP address when "CONFIGURE" is set to "MANUALLY." Set this in accordance with the connected network.
SUBNET MASK	This sets the subnet mask when "CONFIGURE" is set to "MANUALLY." Set this in accordance with the connected network.

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

4. Connect the iPad and the Wi-Fi router.

① On the iPad, tap "Settings" → "Wi-Fi," make sure Wi-Fi is turned on, then at "Choose a Network," select the Wi-Fi router to which the unit is connected.

Important Notes When Working with Copyright-protected (HDCP) Video

Setting "AUDIO FOLLOW" under "AUDIO INPUT" to "OFF" sends audio to all output channels. When "AUDIO FOLLOW" is set to "OFF," all output channels are affected. Give attention to processing when inputting HDCP-applied video.

When inputting or outputting copyright-protected (HDCP) video, if the following two conditions are both met, the HDCP signal is combined with the audio signals on other channels. This intermixing of the HDCP signal inhibits output of audio on the other channels.

(1) "AUDIO FOLLOW" is set to "OFF"

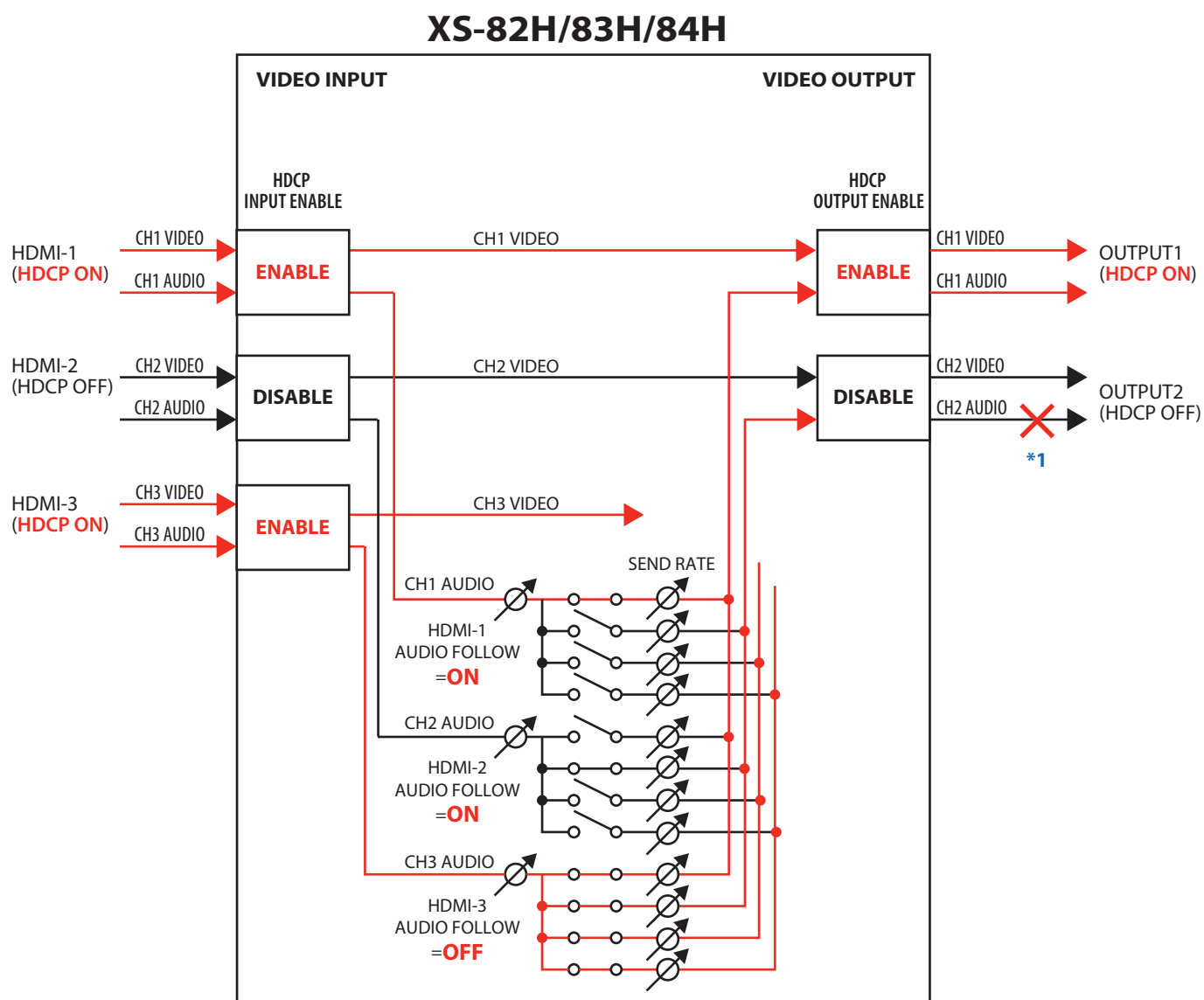
(2) The send level for audio sent to the output channel is set at 1% or higher.

* To set the send level for the audio for each output channel, at "AUDIO INPUT," select "HDMI-1" to "HDMI-4," then make the setting for "OUT1 SEND RATE" to "OUT4 SEND RATE" (Note: This varies according to the model.).

Example of Settings When No Audio Is Output (Shown in the figure below)

When HDMI-2 input video is output to OUTPUT2 with HDCP = "DISABLE"

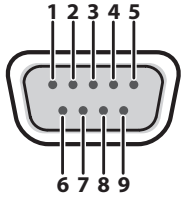
When "AUDIO FOLLOW" for HDCP-applied HDMI-3 is set to "OFF" and audio is sent to OUTPUT2 as well, the HDCP signal is combined with the HDMI-2 audio signal, and so the HDMI-2 audio is not output (shown by *1 in the figure below).



Command Reference

You can use the RS-232C connector and LAN port to operate the unit from an external device.

Specification of the RS-232C Connector



D-sub 9-pin (male)

Pin No.	Signal
1	N.C.
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	N.C.

Communication method	Synchronous (asynchronous), full-duplex
Communication speed	9600 bps / 38400 bps
Parity	none
Data length	8 bit
Stop bit	1 bit
Code set	ASCII
Flow control	XON/XOFF

MEMO

To operate the unit remotely by receiving commands from an external device via the RS-232C connector, press the [MENU] button and select "RS-232C," then set "FUNCTION" to "RECEIVER."

Overview of Commands

The format of commands is an ASCII code string composed of "3 letters (upper case)" plus ";" (semicolon) plus "CR" (0dH). If the command has an argument, a colon (":") is inserted between the command letters and the argument. When multiple arguments occur, they are separated by commas (",").

"."

This is the code to separate the command and its argument.

"," "CR"

This is the code that the unit recognizes as the end of a command.

- * When using RS-232C, no "CR" is required.
- * The codes of CR (0dH), Xon (11H)/ Xoff (13H) are the control codes.
- * When successively sending commands to the unit from an external device, after each command, be sure that "ACK;" is returned before sending the next command.

Control Using the LAN Port

You can use TCP control commands to operate the unit remotely from an external device.

Port	LAN port
Protocol	TCP
Port number	8023

Making the LAN Settings

1. Use the [MENU] button to select "LAN" and then make the following settings.

Menu item	Description
CONFIGURE	This sets whether the IP address and subnet mask are obtained automatically (USING DHCP) or set manually (MANUALLY).
IP ADDRESS	This sets the IP address when "CONFIGURE" is set to "MANUALLY." Set this in accordance with the connected network.
SUBNET MASK	This sets the subnet mask when "CONFIGURE" is set to "MANUALLY." Set this in accordance with the connected network.

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

Verifying the LAN Information

1. Use the [MENU] button to select "LAN" and then "INFORMATION," then press the [VALUE] dial.

The "LAN INFORMATION" popup appears.

You can check and verify the following information.

Indication	Description
STATUS	CONNECTED: A LAN cable is connected. NOT CONNECTED: No LAN cable is connected.
IP ADDRESS	This displays the IP address.
SUBNET MASK	This displays the subnet mask.
MAC ADDRESS	This displays the MAC address.

2. Press the [MENU] button to quit and close the "LAN INFORMATION" popup.

Received Commands

VIS This selects the type for a video input channel.

VIS:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Input type

0: HDMI, 1: RGB/COMPONENT, 2: COMPOSITE, 3: YC,
4: STILL1, 5: STILL2, 6: STILL3, 7: STILL4, 8: SHARE

VIC This selects the color space for a video input channel.

VIC:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Color space

0: Auto, 1: RGB (0–255), 2: RGB (16–235), 3: YCC (SD), 4: YCC (HD)

VIH This sets HDCP for a video input channel.

VIH:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: HDCP Input Enable 0: Disable, 1: Enable

VIA This sets the aspect ratio for a video input channel.

VIA:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Aspect ratio

0: Full, 1: Letterbox, 2: Crop, 3: Dot by Dot, 4: Manual

VOS This makes the OUTPUT SELECT setting for a video output channel.

VOS:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: OUTPUT SELECT 0: Auto, 1: HDMI, 2: HDBaseT

VOR This sets the video output resolution.

VOR:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: OUTPUT RESOLUTION

0: 480i 4:3/576i 4:3, 1: 480i 16:9/576i 16:9, 2: 480p 4:3/576p 4:3,
3: 480p 16:9/576p 16:9, 4: 720/59.94P, 5: 1080/59.94i, 6: 1080/59.94P,
7: 640 x 480, 8: 800 x 600, 9: 1024 x 768, 10: 1280 x 768, 11: 1280 x 800,
12: 1366 x 768, 13: 1280 x 1024, 15: 1600 x 1200, 16: 1920 x 1200

VOH This sets HDCP for a video output channel.

VOH:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: HDCP Output Enable 0: Disable, 1: Enable

VOC This selects the color space for a video output channel.

VOC:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Color space

0: Auto, 1: RGB (0–255), 2: RGB (16–235), 3: YCC (444), 4: YCC (422)

VOD This sets the signal type for a video output channel.

VOD:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: DVI-D/HDMI Signal 0: DVI-D, 1: HDMI

OAV This selects the input channel for video and audio sent to OUTPUT.

OAV:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Input channel number 0 (CH 1)–7 (CH 8)

OVS This selects the input channel for video sent to OUTPUT.

OVS:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Input channel number 0 (CH 1)–7 (CH 8)

OAS This selects the input channel for audio sent to OUTPUT.

OAS:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Input channel number 0 (CH 1)–7 (CH 8)

OFS This changes the state of the [OFF] button.

OFS:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: [OFF] button 0: Off, 1: On

IDL This sets the level of audio input via the HDMI INPUT connectors.

IDL:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Level 0–127

IAL This sets the level of audio input via the AUDIO INPUT connectors.

IAL:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Level 0–127

OAL This sets the output level for audio.

OAL:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Level 0–127

IDM This sets muting on or off of audio input via the HDMI INPUT connectors.

IDM:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Mute 0: Off, 1: On

IAM This sets muting on or off of audio input via the AUDIO INPUT connectors.

IAM:a,b;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Mute 0: Off, 1: On

OAM This sets muting on or off for output audio.

OAM:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Mute 0: Off, 1: On

ADT This sets the delay time for output audio.

ADT:a,b;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Level 0–170 (ms)

MOD This sets the video output mode.

MOD:a;

a: Mode type

0: MATRIX, 1: MULTI-2, 2: MULTI-3, 3: MULTI-4, 4: SPAN-2, 5: SPAN-3, 6: SPAN-4,
7: ROTATION-L1, 8: ROTATION-L2, 9: ROTATION-L3, 10: ROTATION-L4,
11: ROTATION-R1, 12: ROTATION-R2, 13: ROTATION-R3, 14: ROTATION-R4,
15: 4K-1, 16: 4K-2, 17: DISSOLVE-1, 18: PGM-PST, 19: 2 x PGM-PST,
20: 3 x PGM-PST, 21: DUAL DISSOLVE, 22: DUAL PGM-PST

PSE This calls up settings saved at a preset.

PSE:a;

a: Preset number 0 (1)–31 (32)

ITS This returns the state of INPUT.

ITS:a;

a: Input channel number 0 (CH 1)–7 (CH 8)

OTS This returns the state of OUTPUT.

OTS:a;

a: Output channel number 0 (CH 1)–3 (CH 4)

CTS This returns the state of the cross-point selection buttons.

CTS:a;

a: Output channel number 0 (CH 1)–3 (CH 4)

ATO This executes auto take when in the PGM-PST, 2 x PGM-PST, 3 x PGM-PST, or DUAL PGM-PST mode.

ATO:a,b;

- When in the PGM-PST mode

a: Output channel number 0 (CH 1)

b: TAKE SW1: AUTO TAKE

- When in the 2 x PGM-PST mode

a: Output channel number 0 (CH 1), 1 (CH 2)

b: TAKE SW1: AUTO TAKE

- When in the 3 x PGM-PST mode

a: Output channel number 0 (CH 1), 1 (CH 2), 2 (CH 3)

b: TAKE SW1: AUTO TAKE

- When in the DUAL PGM-PST mode

a: Output channel number 0 (CH 1), 2 (CH 3)

b: TAKE SW1: AUTO TAKE

ASA The sets the send level for audio sent to OUTPUT1.

ASA:a,b;

a: Input channel number

0 (HDMI-IN1)–7 (HDMI-IN8), 8 (ANALOG-IN1)–15 (ANALOG-IN8)

b: Send Rate 0–100 (%)

ASB The sets the send level for audio sent to OUTPUT2.

ASB:a,b;

a: Input channel number

0 (HDMI-IN1)–7 (HDMI-IN8), 8 (ANALOG-IN1)–15 (ANALOG-IN8)

b: Send Rate 0–100 (%)

ASC The sets the send level for audio sent to OUTPUT3.

ASC:a,b;

a: Input channel number

0 (HDMI-IN1)–7 (HDMI-IN8), 8 (ANALOG-IN1)–15 (ANALOG-IN8)

b: Send Rate 0–100 (%)

ASD The sets the send level for audio sent to OUTPUT4.

ASD:a,b;

a: Input channel number

0 (HDMI-IN1)–7 (HDMI-IN8), 8 (ANALOG-IN1)–15 (ANALOG-IN8)

b: Send Rate 0–100 (%)

AED This sets the EDID for RGB input.

AED:a,b;

a: Input channel number

0 (RGB-IN1)–7 (RGB-IN8)

b: RGB EDID In

0: INTERNAL, 1: 640 x 480, 2: 800 x 600, 3: 1024 x 768, 4: 1280 x 768,
5: 1280 x 800, 6: 1366 x 768, 7: 1280 x 1024, 8: 1400 x 1050, 9: 1600 x 1200,
10: 1920 x 1200

DED This sets the EDID for HDMI input.

DED:a,b;

a: Input channel number

0 (HDMI-IN1)–7 (HDMI-IN8)

b: HDMI EDID In

0: INTERNAL, 1: 640 x 480, 2: 800 x 600, 3: 1024 x 768, 4: 1280 x 768,
5: 1280 x 800, 6: 1366 x 768, 7: 1280 x 1024, 8: 1400 x 1050, 9: 1600 x 1200,
10: 1920 x 1200, 11: DATA1, 12: DATA2, 13: DATA3, 14: DATA4, 15: DATA5,
16: DATA6, 17: DATA7, 18: DATA8, 19: 480i 4:3/576i 4:3, 20: 480i 16:9/576i 16:9,
21: 480p 4:3/576p 4:3, 22: 480p 16: 9/576p 16: 9, 23: 720p, 24: 1080i, 25: 1080p

PLS This sets panel lock on or off.

PLS:a;

a: Panel Lock Sw 0: Off, 1: On

* When the parameters for “KEY LOCK MODE” under “SYSTEM” are all set to “OFF,” panel lock is not set on when “On” is sent.

KLM This sets the key lock mode.

KLM:a,b;

a: Key Lock Mode

0: CROSSPOINT, 1: SWITCHING MODE, 2: MENU+EXIT, 3: CURSOR+VALUE,
4: CROSS-NOINPUT, 5: CROSS-OFF, 6: CROSS-OUTPUT1, 7: CROSS-OUTPUT2,
8: CROSS-OUTPUT3, 9: CROSS-OUTPUT4

b: Key Lock Sw 0: Off, 1: On

KLS This returns the state of the key lock mode.

KLS;

VER This returns version information.

VER;

ACS This verifies the status of the unit. While in operation, “ACK;” is returned.

ACS;

XON This is flow control.

XON

XOFF This is flow control.

XOFF

Sent Commands

ACK This is sent when a transmitted command has been correctly received.

ACK;

ERR This is sent when a transmitted command has not been correctly received.

ERR;a;

a: 0 (syntax error): The received command contains an error.

4 (invalid value error): An argument of the received command is invalid.

5 (out of range error): An argument of the received command is out of range.

ITS This verifies the state of a video input channel.

ITS:a,b,c,d,e;

a: Input channel number 0 (CH 1)–7 (CH 8)

b: Input type

0: HDMI, 1: RGB/COMPONENT, 2: COMPOSITE, 3: YC, 4: STILL1, 5: STILL2, 6: STILL3, 7: STILL4, 8: SHARE

c: Color space

0: Auto, 1: RGB (0–255), 2: RGB (16–235), 3: YCC (SD), 4: YCC (HD)

d: HDCP Input Enable 0: Disable, 1: Enable

e: Aspect ratio

0: Full, 1: Letterbox, 2: Crop, 3: Dot by Dot, 4: Manual

OTS This verifies the state of a video output channel.

OTS:a,b,c,d,e,f;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: OUTPUT SELECT 0: Auto, 1: HDMI, 2: HDBaseT

c: OUTPUT RESOLUTION

0: 480i 4:3/576i 4:3, 1: 480i 16:9/576i 16:9, 2: 480p 4:3/576p 4:3, 3: 480p 16:9/576p 16:9, 4: 720/59.94P, 5: 1080/59.94i, 6: 1080/59.94P, 7: 640 x 480, 8: 800 x 600, 9: 1024 x 768, 10: 1280 x 768, 11: 1280 x 800, 12: 1366 x 768, 13: 1280 x 1024, 15: 1600 x 1200, 16: 1920 x 1200

d: HDCP Output Enable 0: Disable, 1: Enable

e: Color space

0: Auto, 1: RGB (0–255), 2: RGB (16–235), 3: YCC (444), 4: YCC (422)

f: DVI-D/HDMI Signal 0: DVI-D, 1: HDMI

CTS This verifies the state of the cross-point selection buttons.

CTS:a,b,c,d;

a: Output channel number 0 (CH 1)–3 (CH 4)

b: Video selection channel number 0 (CH 1)–7 (CH 8)

c: Audio selection channel number 0 (CH 1)–7 (CH 8)

d: OUTPUT [OFF] button status 0: Off, 1: On

KLS This verifies the state of the key lock mode.

KLS:a,b,c,d,e,f,g,h,i,j,k;

a: Lock Status 0: Off, 1: On

b: Cross Point 0: Off, 1: On

c: Switch Mode 0: Off, 1: On

d: Menu+Exit 0: Off, 1: On

e: Cursor+Value 0: Off, 1: On

f: Cross-Noinput 0: Off, 1: On

g: Cross-Off 0: Off, 1: On

h: Cross-Output1 0: Off, 1: On

i: Cross-Output2 0: Off, 1: On

j: Cross-Output3 0: Off, 1: On

k: Cross-Output4 0: Off, 1: On

VER This is sent when a VER command has been received.

VER:XS-8aH,b;

a: XS-82H=2, XS-83H=3, XS-84H=4

b: Version *The version info is ASCII text strings.

XON This is flow control.

XON

XOFF This is flow control.

XOFF