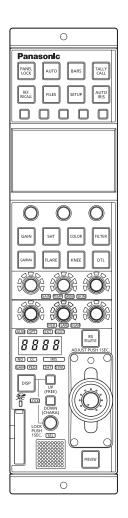
# **Operating Guide**

# Remote Operation Panel AK-HRP1015G

Model No.

Read this document when using the AK-HRP1015G Remote Operation Panel in conjunction with AW-UE70 Series 4K Integrated Cameras or AW-HE35/ AW-HE38/AW-HE40/AW-HE70 Series HD Integrated Cameras.



For details of operating Remote Operation Panel AK-HRP1015G, please visit the Panasonic website (https://pro-av.panasonic.net/manual/en/index. html), and refer to the Operating Instructions (HTML or PDF).

# Panasonic

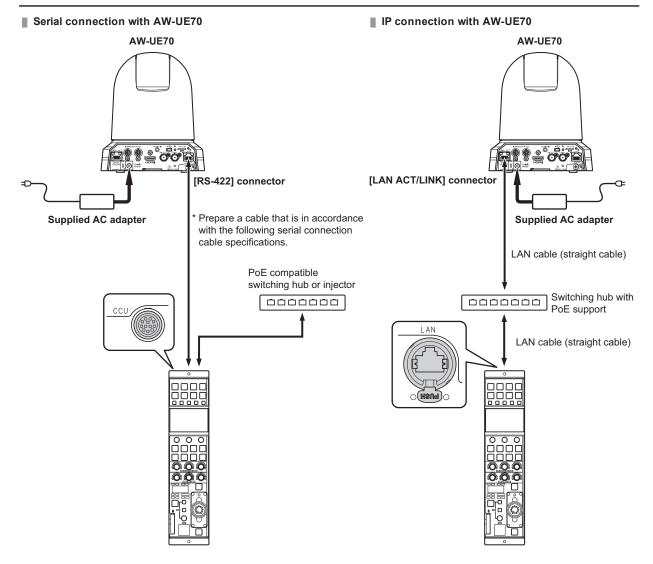


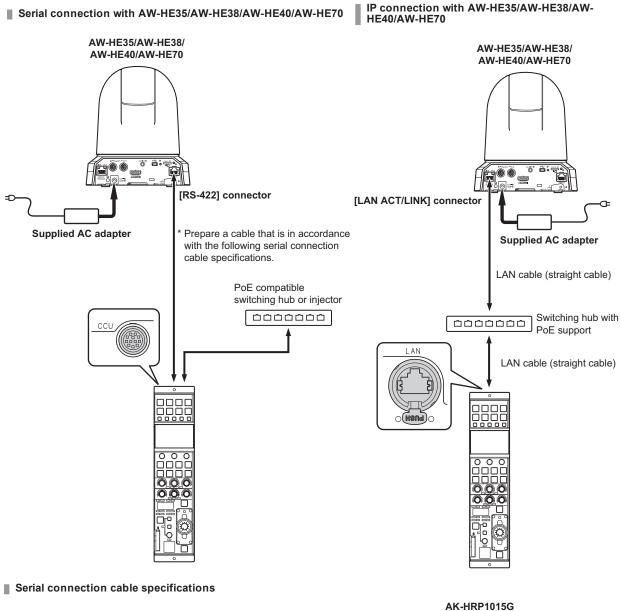
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### Connecting the Unit to AW-UE70/AW-HE35/AW-HE38/AW-HE40/AW-HE70 Series Cameras

#### **Connection examples**





AW-UE70/AW-HE35/AW-HE38/	[CCU] connector side				de
AW-HE40/AW-HE70		Pin No. Function Polarity Flow of signal			
[RS-422] connector side (RJ45)		• 1	CAM DATE(H)	+	CAM→ ROP
1 GRD •		• 2	COM DATE(L)	-	CAM→ ROP
2 TALLY		• 3	COM CONT(H)	+	$ROP \rightarrow CAM$
3 RXD-		• 4	COM CONT(L)	-	$ROP \rightarrow CAM$
4 TXD-		5	COM No. A		
5 TXD+		6	COM No. B		
6 RXD+ •		7	COM No. C		
7 –		8	COM No. D		
8 –		9	12 V		
L		• 10	GND		

Hirose: HR10A-10P-105(73)

#### Connections

• Set the connection setting to [Serial(AW3)] or [LAN(AW3)] in the [CONNECT SETTING] menu.

CONNECT S	ETTING	1 / 17
C	ONNECT MODE(push	u)
CAM1	<u></u> CAM2	CAM3
Serial (AW3)	LAN (AW3)	NON
C(	ONNECT MODE(push	n)
CAM4	<u>CAM5</u>	CAM6
NON	NON	NON

#### NOTE NOTE

- To connect with the AW-UE70/AW-HE35/AW-HE38/AW-HE40/AW-HE70, upgrade the system version of the unit to 2.00-00-0.00 or later.
- When connecting, observe the following points.

#### Serial connection

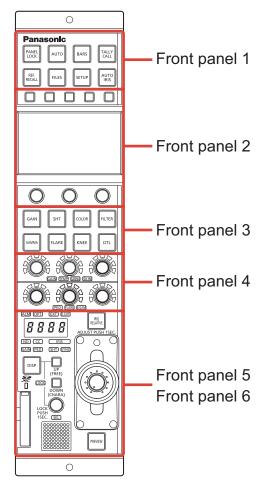
- Use a dedicated cable to connect the [CCU] connector of this unit to the [RS-422] connector of the AW-UE70/AW-HE35/AW-HE38/AW-HE40/AW-HE70.
- Use a PoE power supply for the power supply.

#### LAN connection

- Connect the [LAN] connector on this unit to the [LAN ACT/LINK] connector on the AW-UE70/AW-HE35/AW-HE38/AW-HE40/AW-HE70 using a LAN cable (sold separately).
- Configure the camera IP address and port number settings of the connection destinations in [CAMERA IP SETTING] as well.
- This unit can be powered using PoE. Use a switching hub with PoE support.
- Use a straight cable (category 5e or higher; up to 100 m (328.0 ft) in length) for the LAN cable (STP).
- For details on switching hubs and PoE injectors that have been verified to support PoE, consult with your dealer.

#### **Compatible Functions List**

When the unit is used in conjunction with an AW-UE70 Series 4K Integrated Camera or AW-HE35/AW-HE38/AW-HE40/AW-HE70 Series HD Integrated Camera, there will be functions that are limited or disabled for some of the unit's buttons, dials, and other controls. Be sure to refer to the following table.



Number	Part name	✓ : Enabled ×: Disabled	Remarks
	[PANEL LOCK] button	1	
	[AUTO] button	~	If auto setup has been assigned, this will not operate.
	[BARS] button	~	Only the ON/OFF for the color bar signal output will function.
Front panel 1	[TALLY/CALL] lamp/button	×	
	[REF. RECALL] button	×	
	[FILES] button	✓	This is always lit.
	[SETUP] button	✓	
	[AUTO IRIS] button	✓	
	Function buttons	1	
Front panel 2	LCD panel	1	
	Menu operation dials	$\checkmark$	

Number	Part name	✓ : Enabled	Remarks
		×: Disabled	
	[GAIN] button	1	When this button is pressed, the gain menu appears on the LCD panel. The button is lit during menu display.
	[SHT] button	1	When this button is pressed, the shutter menu appears on the LCD panel. The button is lit during menu display.
	[COLOR] button	J	The menus will switch with each press of the button. The button is lit during menu display. [CHROMA] > [COLOR CORRECTION] > Menu off (status screen)
Front panel 3	[FILTER] button	1	When this button is pressed, the filter menu appears on the LCD panel. The button is lit during menu display.
	[GAMMA] button	1	When this button is pressed, the gamma menu appears on the LCD panel. The button is lit during menu display.
	[FLARE] button	×	
	[KNEE] button	×	
	[DTL] button	1	The menus will switch with each press of the button. The button is lit during menu display. [DETAIL] > [DNR] > Menu off (status screen)
Front panel 4	[GAIN], [TEMP], [GAMMA], [SKIN] adjustment block	1	When [GAIN] is lit, [GAIN R] and [GAIN B] are adjusted using the red (R) and blue (B) adjustment dials respectively. When [TEMP] is lit, [COLOR TEMP] is adjusted using the green (G) adjustment dial. When [GAMMA] is lit, the master gamma is adjusted using the green (G) adjustment dial. [SKIN] adjustment is disabled.
	[PED], [FLARE], [B.GAM] adjustment block	J	When [PED] is lit, [M.PED] is adjusted using the green (G) adjustment dial. [FLARE] and [B.GAM] adjustment is disabled.

Number	Part name	<ul><li>✓ : Enabled</li><li>×: Disabled</li></ul>	Remarks
	[ALM] indicator	1	
	[OPT] indicator	×	
	[EXT] indicator	×	
	[D.EXT] indicator	1	
	Adjustment value display	<i>J</i>	A value is also not displayed when [SHUTTER] is [SYNC]. The display will be bar display. When the shutter speed value is "10000", "9999" is displayed.
	[ND] indicator	1	This is enabled only for the AW-UE70.
	[CC] indicator	1	This lights but does not function.
Front panel 5	[IRIS] indicator	1	The iris value is not displayed.
	[GAIN] indicator	1	
	[PED] indicator	1	
	[SHT] indicator	1	
	[SYNC] indicator	1	
	[DISP] button	1	
	[UP (FREE)] button	1	
	[DOWN (CHARA)] button	1	
	[LOCK] indicator	1	
	[SEL] dial	1	
	Memory card slot	1	
	Memory card access indicator	1	
	Camera number/tally display	1	
Front panel 6	[IRIS RELATIVE] button	1	
FIGHT Patiero	Torque adjustment screw	1	
	IRIS lever	1	
	Master pedestal dial	1	
	[PREVIEW] button	×	

### ROP Menu (when AW-UE70/AW-HE35/AW-HE38/AW-HE40/AW-HE70 is connected)

#### **ROP** menu list

When an AW-UE70 4K Integrated Camera or AW-HE35/AW-HE38/AW-HE40/AW-HE70 HD Integrated Camera is connected, the ROP menu will be as follows.

For details on menu operations, refer to the following sections in the Operating Instructions.

- "Displaying menus"
- "Basic menu operations"

	MANUAL1(push)	"MANUAL1(push)" (see page 13)
01 SCENE	MANUAL2(push)	"MANUAL2(push)" (see page 13)
01 SCEINE	MANUAL3(push)	"MANUAL3(push)" (see page 13)
	FULL AUTO(push)	➡ "FULL AUTO(push)" (see page 13)
	MODE	
02 SHUTTER SPEED	SPEED	
03 FILTER	ND	➡ "ND" (see page 15)
04 CHROMA	LEVEL	➡ "LEVEL" (see page 16)
05 GAIN	GAIN	
	AGC MAX GAIN	◆ "AGC MAX GAIN" (see page 17)
	MODE	
	COLOR TEMP	
06 WHITE BALANCE	GAINR	
	GAINB	
	TYPE	
07 GAMMA	LEVEL	➡ "LEVEL" (see page 19)
	DRS	➡ "DRS" (see page 19)
	DTL	"DTL" (see page 20)
08 DETAIL	LEVEL H	➡ "LEVEL H" (see page 20)
UO DE TAIL	LEVEL L	➡ "LEVEL L" (see page 20)
	FLESH TONE MD	➡ "FLESH TONE MD" (see page 20)

"TYPE" (see page 22)

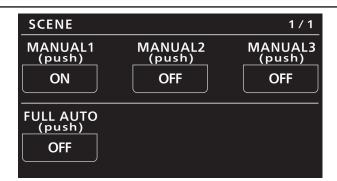
	COLOR CORRECT	"COLOR CORRECT" (see page 22)
	SAT	➡ "SAT" (see page 22)
	PHASE	
	SATB	→ "SAT B" (see page 22)
	PHASE B	
	SAT B_B_Mg	
	PHASE B_B_Mg	
	SAT B_Mg_Mg	➡ "SAT B_Mg_Mg" (see page 22)
	PHASE B_Mg_Mg	"PHASE B_Mg_Mg" (see page 22)
	SAT Mg	→ "SAT Mg" (see page 22)
	PHASE Mg	"PHASE Mg" (see page 22)
	SAT Mg_R	
	PHASE Mg_R	
	SATR	
	PHASE R	
	SATR R YI	→ "SATR R YI" (see page 23)
	PHASE R_R_YI	→ "PHASE R_R_YI" (see page 23)
09 COLOR CORRECTION		
	PHASE R_YI_YI	
	SATYI	
	PHASE YI	
	SAT YI_YI_G	→ "SAT YI_YI_G" (see page 23)
	PHASE YI_YI_G	"PHASE YI_YI_G" (see page 23)
	SAT YI_G_G	"SAT YI_G_G" (see page 23)
	PHASE YI_G_G	"PHASE YI_G_G" (see page 23)
	SATG	→ "SAT G" (see page 23)
	PHASE G	"PHASE G" (see page 23)
	SAT G_Cy	
	PHASE G_Cy	"PHASE G_Cy" (see page 23)
	SAT Cy	➡ "SAT Cy" (see page 23)
	PHASE Cy	➡ "PHASE Cy" (see page 23)
	SAT Cy_Cy_B	
	PHASE Cy_Cy_B	"PHASE Cy_Cy_B" (see page 23)
	SAT Cy_B_B	
	PHASE Cy_B_B	
10 DNR	DNR	➡ "DNR" (see page 24)
	CONTRAST MODE	
	CONTRASTLEVEL	
11 CONTRAST	FRAME MIX	➡ "FRAME MIX" (see page 25)
	A.F.MIX MAX GAIN	➡ "A.F.MIX MAX GAIN" (see page 25)
	DAY/NIGHT	"DAY/NIGHT" (see page 25)
	FOCUS MODE	➡ "FOCUS MODE" (see page 26)
	FOCUS SPEED	<ul> <li>         → "FOCUS SPEED" (see page 26)     </li> </ul>
	FOCUS	<ul> <li>→ "FOCUS" (see page 26)</li> </ul>
12 LENS CONTROL	ZOOM WIDE	
	ZOOM SPEED	<ul> <li>✓ ZOOM WIDE (see page 26)</li> <li>✓ "ZOOM SPEED" (see page 26)</li> </ul>
	ZOOMTELE	"ZOOM TELE" (see page 26)

TYPE

	SENSE	Defer to the following experience the Organities Instructions		
		Refer to the following section in the Operating Instructions. *29 IRIS RELATIVE"		
13 IRIS RELATIVE	COARSE			
	RELATIVE	* * * CODMAT <sup>®</sup> (		
	FORMAT	"FORMAT" (see page 28)		
	FREQUENCY	"FREQUENCY" (see page 28)		
	I.S.	➡ "I.S." (see page 28)		
	BARS TYPE	➡ "BARS TYPE" (see page 28)		
14 SYSTEM CAM	OSD STATUS	→ "OSD STATUS" (see page 28)		
	AUDIO			
	GENLOCK PHASE			
	HDR			
	BACK LIGHT CMP	"BACK LIGHT CMP" (see page 28)		
	HEAD PW(push)	"HEAD PW(push)" (see page 28)		
	MENU ON/OFF	"MENU ON/OFF" (see page 29)		
15 CAMERA MENU CONTROL	CURSOR/PARAMETER	"CURSOR/PARAMETER" (see page 29)		
	EXECUTE	➡ "EXECUTE" (see page 29)		
	IRIS LEV MOD	Refer to the following section in the Operating Instructions.		
	M.PED CONTROL			
	LOCK SELECT			
	AUTO BUTTON			
	G/M PED VOL			
	FREE+LOCK			
	CAMERA SELECT			
	DTL BUTTON			
	SKINVOL			
	LCD BRIGHT			
	PANEL BRIGHT			
	BUZZER			
	PERIOD			
	CYCLE			
16 ROP SETTING	STD POSITION M.PED			
	STD POSITION VAR			
	STD POSITION ND			
	STD POSITION CC			
	IRIS PRIORITY			
	ROP DATA SAVE			
	ROP DATA LOAD			
	INITIAL with NW			
	INITIAL			
	UPGRADE			
	IRIS CALIBRATION TOP			
	IRIS CALIBRATION BOTTOM			
	SYSTEMVERSION			
-	SOFT VERSION			
	FPGA VERSION			
	CONNECT MODE(push) CAM1	"CONNECT MODE(push) CAM1" (see page 31)		
17 CONNECT SETTING				
	CONNECT MODE(push) CAM2 to CAM99	"CONNECT MODE(push) CAM2 to CAM99" (see page 31)		

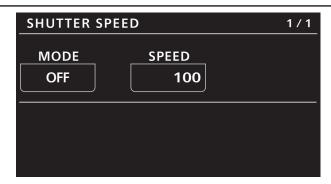
	ROP IP ADDRESS 1	Refer to the following section in the Operating Instructions.		
	ROP IP ADDRESS 2			
	ROP IP ADDRESS 3			
	ROP IP ADDRESS 4			
	PORT			
	UPLOAD			
	ROP SUBNET MASK 1			
	ROP SUBNET MASK 2			
18 ROP IP SETTING	ROP SUBNET MASK 3			
	ROP SUBNET MASK 4			
	UPLOAD			
	ROP DEFAULT GATEWAY 1			
	ROP DEFAULT GATEWAY 2			
	ROP DEFAULT GATEWAY 3			
	ROP DEFAULT GATEWAY 4			
	UPLOAD			
	MACADDRESS			
	CAM1 to CAM99 IP ADDRESS	Refer to the following section in the Operating Instructions.		
19 CAMERA IP SETTING	CAM1 to CAM99 PORT	◆ "40 CAMERA IP SETTING"		
	CAM1 to CAM99 UPLOAD			
	SWITCHER IP ADDRESS	Refer to the following section in the "Linking the Unit to the AV-		
	SWITCHER UDP PORT	HS6000".		
	INFO UPLOAD	47 SWICHERLINK		
20 SWITCHER LINK	SWITCHERLINK			
20 SWITCHER LINK	TALLY RECEIVE			
	PREVIEW			
	TALLY ACTION MATERIAL			
	TALLY ACTION CAM No.			
	RECEIVE PORT	Refer to the following section in the Operating Instructions.		
21 AW CONTROLLER LINK	INFO UPLOAD	◆ "47 AW CONTROLLER LINK"		
	AW CONT LINK			

#### 01 SCENE



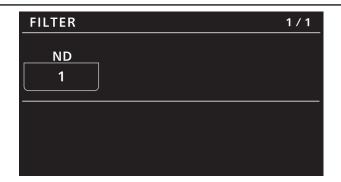
Item	Setting details
MANUAL1(push)	Selects a scene file.
MANUAL2(push)	• When a scene file is set to ON, the other scene files will be set to OFF.
MANUAL3(push)	
FULL AUTO(push)	

#### **02 SHUTTER SPEED**



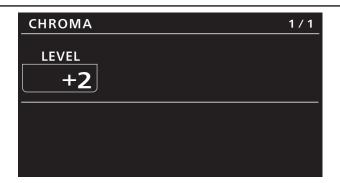
Item	Setting details	
MODE	Selects the operation mode of the shutter.	
SPEED	<ul> <li>Sets the shutter speed. The setting can be changed when [MODE] is [STEP].</li> <li>The shutter speed of [SYNC] is not displayed.</li> </ul>	

#### 03 FILTER



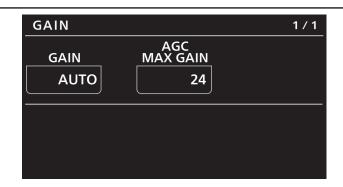
Item	Setting details
ND	Sets the ND filter position.

#### 04 CHROMA



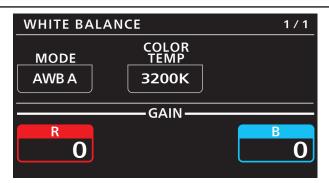
Item	Setting details	
LEVEL	Sets the color intensity of images.	

#### 05 GAIN



Item	Setting details	
GAIN	Adjusts the gain of images.	
AGC MAX GAIN	When [AUTO] is selected as the [GAIN] setting, the maximum gain-up amount can be set.	

#### **06 WHITE BALANCE**



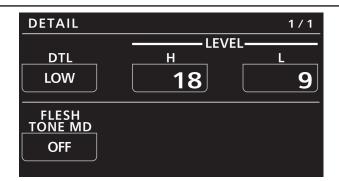
Item	Setting details	
MODE	Sets the white balance mode.	
COLOR TEMP	Sets color temperature settings.	
GAIN R	Adjusts the R gain.	
GAIN B	Adjusts the B gain.	

#### 07 GAMMA



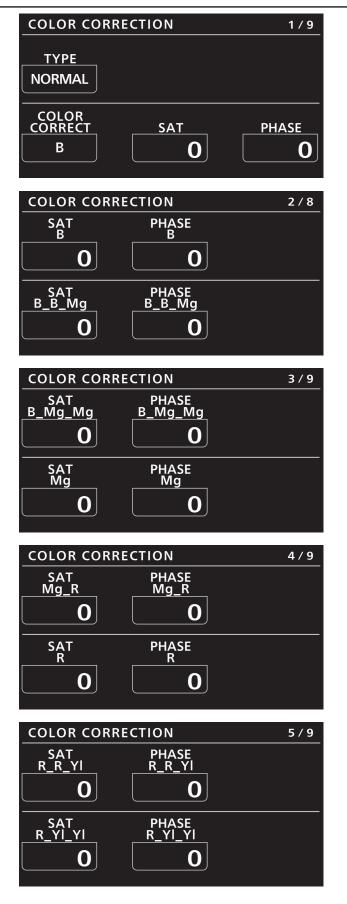
Item	Setting details
ТҮРЕ	Selects the type of gamma curve.
LEVEL	Adjusts the gamma correction level.
DRS	Sets the DRS function which performs correction when video with high light/dark contrast is displayed.

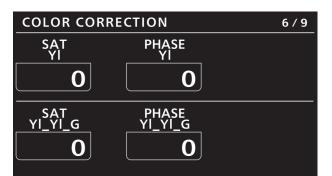
#### **08 DETAIL**

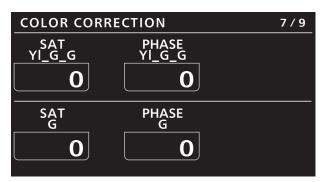


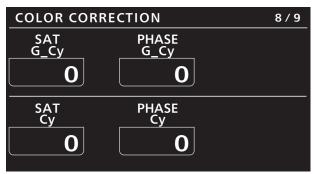
Item	Setting details	
DTL	Adjusts the image contour (i.e., image sharpness).	
LEVEL H	Adjusts the contour correction level when [DTL] is set to [HIGH].	
LEVEL L	Adjusts the contour correction level when [DTL] is set to [LOW].	
FLESH TONE MD	Sets flesh tone mode to make the skin of subjects appear smoother and more attractive.	

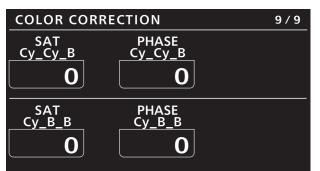
#### **09 COLOR CORRECTION**







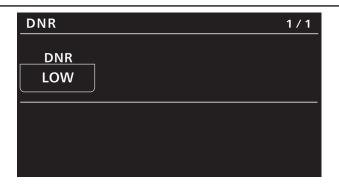




Item	Setting details
ТҮРЕ	Selects the type of color matrix.
COLOR CORRECT	Selects the color component in 12-axis matrix memory to adjust.
SAT	Adjusts the saturation of the color component selected in [COLOR CORRECT].
PHASE	Adjusts the hue of the color component selected in [COLOR CORRECT].
SAT B	Adjusts blue color saturation.
PHASE B	Adjusts blue hue.
SAT B_B_Mg	Adjusts the color saturation with a 3:1 blue and magenta.
PHASE B_B_Mg	Adjusts the hue (color phase) with a 3:1 blue and magenta.
SAT B_Mg_Mg	Adjusts the color saturation with a 1:3 blue and magenta.
PHASE B_Mg_Mg	Adjusts the hue (color phase) with a 1:3 blue and magenta.
SAT Mg	Adjusts magenta color saturation.
PHASE Mg	Adjusts magenta hue.

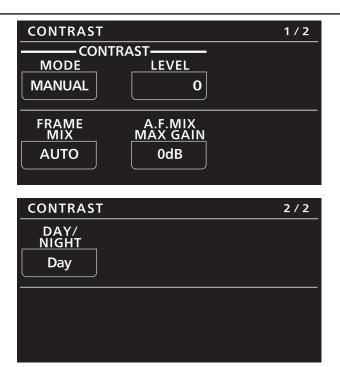
Item	Setting details
SAT Mg_R	Adjusts the color saturation between magenta and red.
PHASE Mg_R	Adjusts the hue between magenta and red.
SAT R	Adjusts red color saturation.
PHASE R	Adjusts red hue.
SAT R_R_YI	Adjusts the color saturation with a 3:1 red to yellow ratio.
PHASE R_R_YI	Adjusts the hue (color phase) with a 3:1 red to yellow ratio.
SAT R_YI_YI	Adjusts the color saturation with a 1:3 red to yellow ratio.
PHASE R_YI_YI	Adjusts the hue (color phase) with a 1:3 red to yellow ratio.
SAT YI	Adjusts yellow color saturation.
PHASE YI	Adjusts yellow hue.
SAT YI_YI_G	Adjusts the color saturation with a 3:1 yellow and green ratio.
PHASE YI_YI_G	Adjusts the hue (color phase) with a 3:1 yellow and green ratio.
SAT YI_G_G	Adjusts the color saturation with a 1:3 yellow and green ratio.
PHASE YI_G_G	Adjusts the hue (color phase) with a 1:3 yellow and green ratio.
SAT G	Adjusts green color saturation.
PHASE G	Adjusts green hue.
SAT G_Cy	Adjusts the color saturation between green and cyan.
PHASE G_Cy	Adjusts the hue between green and cyan.
SAT Cy	Adjusts cyan color saturation.
PHASE Cy	Adjusts cyan hue.
SAT Cy_Cy_B	Adjusts the color saturation with a 3:1 cyan and blue ratio.
PHASE Cy_Cy_B	Adjusts the hue (color phase) with a 3:1 cyan and blue ratio.
SAT Cy_B_B	Adjusts the color saturation with a 1:3 cyan and blue ratio.
PHASE Cy_B_B	Adjusts the hue (color phase) with a 1:3 cyan and blue ratio.

#### **10 DNR**



Item	Setting details	
DNR	Sets the level for the noise reduction.	

#### **11 CONTRAST**



Item	Setting details	
CONTRAST MODE	Selects auto/manual for image brightness (contrast) control.	
CONTRAST LEVEL	Sets the convergence level for adjusting image brightness.	
FRAME MIX	Selects for frame addition (gain-up using sensor storage) amount.	
A.F.MIX MAX GAIN	Sets the maximum amount of frame addition for when [AUTO] is selected in [CONTRAST MODE] or [AUTO] is selected in [FRAME MIX].	
DAY/NIGHT	Switches between standard shooting (day mode) and night-vision shooting (night mode: shooting with infrared light). [AUTO] cannot be selected from the unit.	

#### **12 LENS CONTROL**

LENS CONTR	OL	1/1
FOCUS MODE	FOCUS SPEED	FOCUS
MANUAL	25	(turn)
WIDE	ZOOM SPEED	TELE
(push)	25	(push)

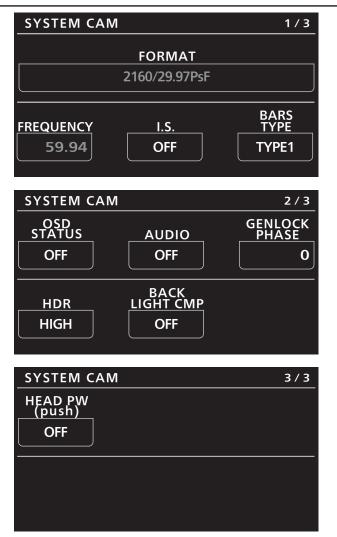
Item	Setting details
FOCUS MODE	Selects auto or manual mode for the focus adjustment function.
FOCUS SPEED	Adjusts the focus operation speed.
FOCUS	Adjusts the lens focus manually.
ZOOM WIDE	Adjusts the lens zoom to wide angle (Wide).
ZOOM SPEED	Adjusts the zoom operation speed.
ZOOM TELE	Adjusts the lens zoom to telephoto (Tele).

#### **13 IRIS RELATIVE**

For details on operations and settings, refer to the following sections in the Operating Instructions.

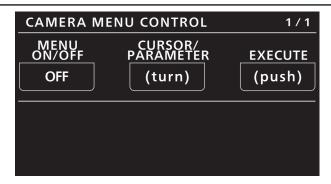
➡ "29 IRIS RELATIVE"

#### **14 SYSTEM CAM**



Item	Setting details
FORMAT	Displays the system format.
FREQUENCY	Displays the frame frequency.
I.S.	Select the image stabilization mode.
	<ul> <li>When connected with AW-HE35/AW-HE38/AW-HE40/AW-HE70 series cameras, both the [MODE1] and [MODE2] selection parameters are treated as [ON] on the camera side.</li> </ul>
BARS TYPE	Changes the type of color bar to display.
OSD STATUS	Enables/disables the status display during AWB.
AUDIO	Enables/disables audio input.
GENLOCK PHASE	This is used to adjust the horizontal phase during genlock.
HDR	Adjusts the effect of the high dynamic range mode.
BACK LIGHT CMP	Enables/disables the backlight correction function.
HEAD PW(push)	Tums ON/OFF (STANDBY) the camera power.

#### **15 CAMERA MENU CONTROL**



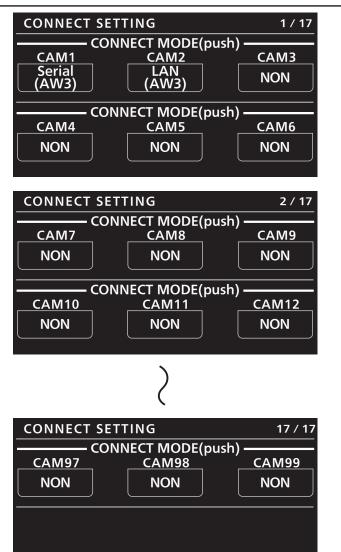
Item	Setting details
MENU ON/OFF	Tums the menu on or off.
CURSOR/PARAMETER	Moves the menu cursor or changes setting values.
EXECUTE	Executes the selected process.

#### **16 ROP SETTING**

For details on operations and settings, refer to the following sections in the Operating Instructions.

➡ "37 ROP SETTING"

#### **17 CONNECT SETTING**



Item	Setting details
CONNECT MODE(push) CAM1	Sets the connection method for camera 1. Changes to settings are applied by pressing the [MENU] dial. Select [LAN(AW3)] and [Serial(AW3)] when connecting with the AW-UE70 series and AW-HE35/AW- HE38/AW-HE40/AW-HE70 series. • [Serial(AW3)] cannot be set for multiple cameras.
CONNECT MODE(push) CAM2 to CAM99	Sets the connection method for cameras 2 to 99. Changes to settings are applied by pressing the [MENU] dial. Select [LAN(AW3)] and [Serial(AW3)] when connecting with the AW-UE70 series and AW-HE35/AW- HE38/AW-HE40/AW-HE70 series. • [Serial(AW3)] cannot be set for multiple cameras.

#### **18 ROP IP SETTING**

For details on operations and settings, refer to the following sections in the Operating Instructions.

➡ "39 ROP IP SETTING"

#### **19 CAMERA IP SETTING**

For details on operations and settings, refer to the following sections in the Operating Instructions.

➡ "40 CAMERA IP SETTING"

#### **20 SWITCHER LINK**

For details on operations and settings, refer to the following section in the "Linking the Unit to the AV-HS6000".

#### **21 AW CONTROLLER LINK**

For details on operations and settings, refer to the following section in the Operating Instructions.

➡ "47 AW CONTROLLER LINK"