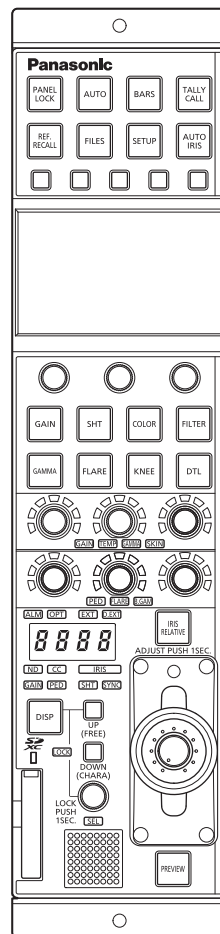


Operating Instructions

Remote Operation Panel

Model No. **AK-HRP1015G**



Please carefully read this manual, and save this manual for future use.
Before using this product, be sure to read "Read this first!" (pages 2 to 3).

Read this first!

WARNING:

- To reduce the risk of fire, do not expose this equipment to rain or moisture.
- To reduce the risk of fire, keep this equipment away from all liquids. Use and store only in locations which are not exposed to the risk of dripping or splashing liquids, and do not place any liquid containers on top of the equipment.

WARNING:

Always keep memory cards (optional accessory) out of the reach of babies and small children.

WARNING:

This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

CAUTION:

Do not remove panel covers by unscrewing. To reduce the risk of electric shock, do not remove the covers. No user serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION:

To reduce the risk of fire or electric shock and annoying interference, use the recommended accessories only.

 indicates safety information.

FCC NOTICE(USA)

Supplier's Declaration of Conformity

Trade Name: Panasonic

Model Number: AK-HRP1015G

Responsible Party: Panasonic Corporation of North America Two Riverfront Plaza, Newark, NJ 07102

Support contact: 1-800-524-1448

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Warning:

To assure continued FCC emission limit compliance, follow the attached installation instructions and the user must use only shielded interface cables when connecting to host computer or peripheral devices.

Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate this device.

FCC CAUTION:

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTIFICATION(Canada)

CAN ICES-3 (A)/NMB-3(A)

 indicates safety information.

EMC NOTICE FOR THE PURCHASER/USER OF THE APPARATUS**1. Pre-requisite conditions to achieving compliance with the above standards****<1> Peripheral equipment to be connected to the apparatus and special connecting cables**

- The purchaser/user is urged to use only equipment which has been recommended by us as peripheral equipment to be connected to the apparatus.
- The purchaser/user is urged to use only the connecting cables described below.

<2> For the connecting cables, use shielded cables which suit the intended purpose of the apparatus.

- Video signal connecting cables
Use double shielded coaxial cables, which are designed for 75-ohm type high-frequency applications, for SDI (Serial Digital Interface).
Coaxial cables, which are designed for 75-ohm type high-frequency applications, are recommended for analog video signals.
- Audio signal connecting cables
If your apparatus supports AES/EBU serial digital audio signals, use cables designed for AES/EBU.
Use shielded cables, which provide quality performance for high-frequency transmission applications, for analog audio signals.
- Other connecting cables (LAN, RS-422)
Use shielded cables, which provide quality performance for high-frequency applications, as connecting cables.
- When connecting to the DVI signal terminal, use a cable with a ferrite core.
- If your apparatus is supplied with ferrite core(s), they must be attached on cable(s) following instructions in this manual.

2. Performance level

The performance level of the apparatus is equivalent to or better than the performance level required by these standards. However, the apparatus may be adversely affected by interference if it is being used in an EMC environment, such as an area where strong electromagnetic fields are generated (by the presence of signal transmission towers, cellular phones, etc.). In order to minimize the adverse effects of the interference on the apparatus in cases like this, it is recommended that the following steps be taken with the apparatus being affected and with its operating environment:

1. Place the apparatus at a distance from the source of the interference.
2. Change the direction of the apparatus.
3. Change the connection method used for the apparatus.
4. Connect the apparatus to another power outlet where the power is not shared by any other appliances.

Turkey Only**AEEE Yönetmeliğine Uygundur.****AEEE Complies with Directive of Turkey.****Note:**

The rating plate (serial number plate) is on the bottom of the unit.

Manufactured by: Panasonic Corporation, Osaka, Japan

Importer's name and address of pursuant to EU rules:

Panasonic Marketing Europe GmbH

Panasonic Testing Centre

Winsbergring 15, 22525 Hamburg, Germany

**Disposal of Old Equipment****Only for European Union and countries with recycling systems**

This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment. For more information about collection and recycling, please contact your local authority, dealer or supplier.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

■ **The symbols on this product (including the accessories) represent the following. (Some symbols are not displayed on this unit.)**

I	ON
	Standby (OFF)
~	AC
==	DC
	Class II equipment (The construction of the product is double-insulated.)

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Introduction

How to View This Manual

About trademarks and registered trademarks

- Microsoft®, Windows® 10, Microsoft Edge and Internet Explorer® are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.
- Intel® Core™ is a trademark or registered trademark of Intel Corporation and its subsidiaries in the United States and/or other countries.
- SDXC logo is a trademark of SD-3C and LLC.
- Other names of companies or products in this manual are either registered trademarks or trademarks of their respective owners.

About copyright

Distributing, copying, disassembling, reverse compiling, reverse engineering and also exporting in violation of export laws of the software provided with this unit are expressly prohibited.

Illustrations and screen displays featured in the manual

- What is shown in the manual's illustrations and screen displays may differ from how it actually appears.
- The screenshots are used in accordance with the guidelines of Microsoft Corporation.

Abbreviations

The following abbreviations are used in this manual.

- The term memory card will be used below as a generic term for SD, SDHC, and SDXC memory cards. SD, SDHC, or SDXC will be used in descriptions that refer to only one of the card types.
- A studio handy camera is referred to as a camera in this manual.
- A camera control unit is referred to as a CCU in this manual.
- A remote operation panel is referred to as an ROP in this manual.

For the purposes of this manual, the model numbers of the units are given as listed in the table below.

Model number of unit	Model number given in manual
AK-UC3300G	AK-UC3300
AK-UC3300GS	
AK-UC4000G	AK-UC4000
AK-UC4000GS	
AK-HRP1015G	AK-HRP1015
AK-UCU600	AK-UCU600
AK-UCU600S	

Overview

This unit is a remote operation panel for controlling a studio handy camera (AK-UC3300/AK-UC4000; sold separately) and a camera control unit (AK-UCU600; sold separately).

Use a dedicated optical fiber multi cable to connect a studio handy camera to a camera control unit and use an ROP cable or IP connection to connect this unit to the camera control unit.

When IP connections are used, up to 99 camera control units can be controlled.

Notice

Personal computer requirements

For the software supplied with the unit, use a personal computer specified on the following website.

<https://pro-av.panasonic.net/>

Disclaimer of warranty

IN NO EVENT SHALL Panasonic Corporation BE LIABLE TO ANY PARTY OR ANY PERSON, EXCEPT FOR REPLACEMENT OR REASONABLE MAINTENANCE OF THE PRODUCT, FOR THE CASES, INCLUDING BUT NOT LIMITED TO BELOW:

- ANY DAMAGE AND LOSS, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THE PRODUCT;
- PERSONAL INJURY OR ANY DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER;
- UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER;
- INCONVENIENCE OR ANY LOSS ARISING WHEN IMAGES ARE NOT DISPLAYED, DUE TO ANY REASON OR CAUSE INCLUDING ANY FAILURE OR PROBLEM OF THE PRODUCT;
- ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY;
- ANY INCONVENIENCE, DAMAGES OR LOSSES RESULTING FROM ACCIDENTS CAUSED BY AN INADEQUATE INSTALLATION METHOD OR ANY FACTORS OTHER THAN A DEFECT IN THE PRODUCT ITSELF;
- LOSS OF REGISTERED DATA CAUSED BY ANY FAILURE;
- ANY DAMAGE OR CLAIMS DUE TO LOSS OR LEAKAGE OF IMAGE DATA OR SETTING DATA SAVED ON THIS UNIT OR ON A MEMORY CARD OR PERSONAL COMPUTER.

Network security

This unit also has functions which are used when it is connected to a network.

Using the unit when it is connected to a network may possibly give rise to the following.

- Leakage or disclosure of information transmitted via this unit
- Unauthorized use of this unit by a third person with malicious intent
- Interference or stoppage of this unit by a third person with malicious intent

It is your responsibility to take sufficient network security measures such as those described below to protect yourself against the above risks.

- Use this unit in a network secured by a firewall, etc.
- If this unit is used in a system with a personal computer connected, make sure that checks for and removal of computer viruses and malicious programs are implemented regularly.

Also observe the following points.

- Do not install the unit in a location where the unit, cables, and other parts may be easily damaged.

User authentication

In order to protect device settings from exposure on the network, when connecting to a network, please enable user authentication to restrict access as appropriate.

Restrictions on use

It is recommended that the remote operation panel and all devices to be used with the remote operation panel be connected to the same network segment.

Events related to settings of network devices may occur if devices are connected to different segments, so verify operation carefully before placing devices into service.

Memory cards

Memory cards used with the unit should conform to SD, SDHC or SDXC standards.

Be sure to use the unit to format memory cards.

Memory cards with the following capacity can be used with the unit.

SD:	2 GB
SDHC:	4 GB to 32 GB
SDXC:	64 GB

SDXC memory cards are not supported.

For the latest information not described in the Operating Instructions, refer to the following website.

<https://pro-av.panasonic.net/>

Observe the following points when using and storing this unit.

- Avoid high temperature and humidity.
- Avoid water droplets.
- Avoid static electricity.

Upgrade software

You can obtain the upgrade software from Service and Support on the following website.

<https://pro-av.panasonic.net/>

For the upgrade procedure, refer to the instructions included with the download file.

Software for peripheral equipment

Software updates will also become necessary for the peripheral equipment that is connected to this unit (cameras or CCUs).

For details, consult your dealer.

File types handled by the unit

Scene file	Data for creating the required image characteristics handled mainly by the video engineer. This is managed on the camera.
Reference file	Device setting data excluding operation data. This is managed on the camera.
User file	Device setting data retained by the camera. This is managed on the camera.
Factory file	Factory default device setting data retained by the camera.
Lens file	Data to correct the lens specific characteristics handled by the video engineer. This is managed on the camera.
ROP configuration file	Unit specific setting data.

NOTE

- For details on the data in the files (scene file, reference file, user file, factory file and lens file) managed on the camera, refer to operating instructions for the camera.

Features

- This unit is a remote operation panel for controlling a studio handy camera (AK-UC3300/AK-UC4000) and a camera control unit (AK-UCU600).
- Scene files, user files, and lens files can be saved to a memory card.
- The unit can be connected to one CCU (AK-UCU600) via a serial connection.
- Eliminate the need for individual ROP cables by connecting up to 99 CCUs via a network hub (100base-TX switching hub).
- The unit is equipped with PoE*¹, allowing connection to a network device that supports the PoE standard (IEEE802.3af compliant)*².
- ROP Setup Software can be used to set the camera connections.

*1: Power over Ethernet. Referred to as "PoE" in this manual.

*2: For details on PoE power supply devices for which operation has been verified, consult your dealer or Panasonic representative.

Precautions for Use

In addition to the safety precautions given in "Read this first!", also observe the following instructions.

■ Handle carefully

- Do not drop the unit or expose it to strong impacts or vibrations. Do not carry the unit by the IRIS lever. Doing so may cause a failure or accident.

■ Use the product in an ambient temperature of 0 °C to 40 °C (32 °F to 104 °F)

- Exposure to temperatures below 0 °C (32 °F) or above 40 °C (104 °F) could adversely affect Internal components.

■ Power off before connecting or disconnecting cables

- Connect and disconnect cables when the unit is turned off.

■ Avoid humidity and dust

- Avoid using the product in a very humid or dusty place because a lot of humidity and dust will cause damage to the internal components.

■ Cleaning

- Turn the power off and wipe the product with a dry cloth.
To remove stubborn dirt, dip a cloth into a diluted solution of kitchen detergent (neutral detergent), wring it out well, and wipe the product gently. Then, wipe the product with a cloth dampened with water. Finally, wipe the product with a dry cloth.



NOTE

- Avoid using benzene, paint thinners and other volatile fluids.
- If a chemical cleaning cloth is to be used, carefully read through the precautions for its use.

■ Avoid open flames

- Do not place candles and other sources open flame near the unit.

■ Avoid exposure to water

- Make sure that the unit is not directly exposed to water. Exposure to water could damage it.

■ Disposal of the unit

- When the unit has reached the end of its service life and is to be disposed of, ask a qualified contractor to dispose of the unit properly in order to protect the environment.

■ LCD panels

- The pixels of the LCD panel are controlled to obtain high precision with 99.99% of the effective pixels. This leaves less than 0.01% of pixels that may not light or may remain on all the time. This is normal and will have no effect on the images you shoot.
- There may be some unevenness on the screen depending on the image displayed.
- Wiping or rubbing the LCD screen with a rough cloth may damage it.
- LCD response time and brightness vary with operating temperature.
- When the unit is left in a high-temperature and high-humidity location for prolonged periods, the LCD panel characteristics may change and result in uneven image quality.
- Due to the characteristics of LCD panels, prolonged display of bright still images or prolonged operation in high-temperature or high-humidity environments may result in residual images, luminance reduction, burn-in, banding, or panel defects and degradation that result in areas of permanently changed brightness.

In addition, avoid prolonged continuous use in the following types of environments.

- Confined areas with high temperature and humidity
- Near the exhaust vent of air conditioning equipment, etc.

Prolonged use involving the images and environments described above will accelerate deterioration of the LCD panel over time. To prevent deterioration over time and its related phenomena, we recommend the following.

- Do not display bright still images for prolonged periods.
- Lower the brightness.
- Turn off the power of the unit (and the power of the CCU and hub) when the unit is not in use.

Residual images will gradually disappear as different images are displayed.

Precautions for Installation

In addition to the safety precautions given in “Read this first!”, also observe the following instructions.

Be sure to ask your dealer to perform the installation and connection work for the unit.

■ Cable connections

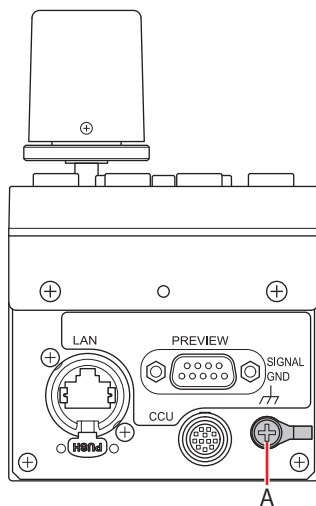
- Be sure to use dedicated ROP cables (Hirakawa Hewtech Corp. 20379-FG-SV-10 cables or equivalent).
- If the unit will not be used for an extended period of time, disconnect the ROP cables to save electricity.

■ Concerning PoE power supply

- The unit complies with the IEEE802.3af standard. Use a compatible Ethernet hub and PoE injector to use a PoE power supply. For details on Ethernet hubs and PoE injectors for which operations have been verified, consult your dealer.

■ Grounding

- Ground the system via the <SIGNAL GND> terminal on the unit.



A. <SIGNAL GND> terminal

■ Handle carefully

- Dropping the unit or subjecting it to a strong impact or vibration may cause a failure or accident.

■ Do not allow any foreign objects to enter inside the unit.

- Allowing water, metal items, food or drink, or other foreign objects to enter inside the unit may cause a fire or electric shock.

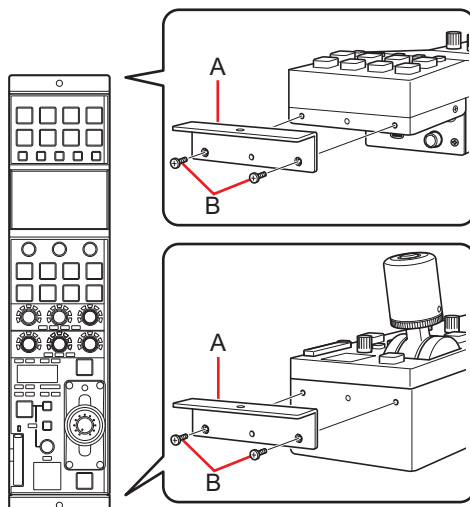
■ Installation location

- This unit is designed for indoor use only.
- Use the unit on a stable and horizontal surface that is sufficiently capable of supporting its weight.
- When the unit will be recessed into a panel or table, make sure that enough space is provided for ventilation and cables.
- Do not install the unit in a location where it and the cables can be easily damaged.
- Do not install the unit in a cold place where the temperature drops below 0 °C (32 °F) or in a hot place where the temperature rises above 40 °C (104 °F).
- Avoid installing the unit where it will be exposed to direct sunlight or near an outlet from which hot air is blown out.
- Installing the unit in a location with a lot of humidity, dust, or vibration may result in a failure.

Installing and removing rack mount brackets

The unit is shipped from the factory with the rack mount brackets installed.

The customer can remove the four screws that hold the rack mount brackets in place using a Phillips screwdriver.



A. Rack mount bracket

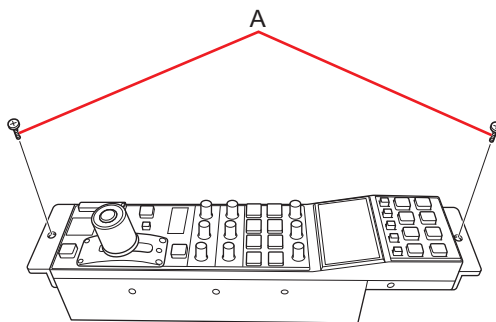
B. Securing screws

- After detaching, store the rack mount brackets and the screws in a location easily accessible when required.
- The next time you use the rack mount brackets to secure the unit, tighten the four screws to a torque of 50 N•cm or more.

Rack installation (rack mounting)

Secure the unit to the rack using two securing screws.

- The securing screws are not supplied with the unit. Purchase screws that will fit the $\varnothing 5$ mm (3/16 inch) in diameter holes before rack mounting.
- The temperature in the rack must be between 0 °C (32 °F) and 40 °C (104 °F).



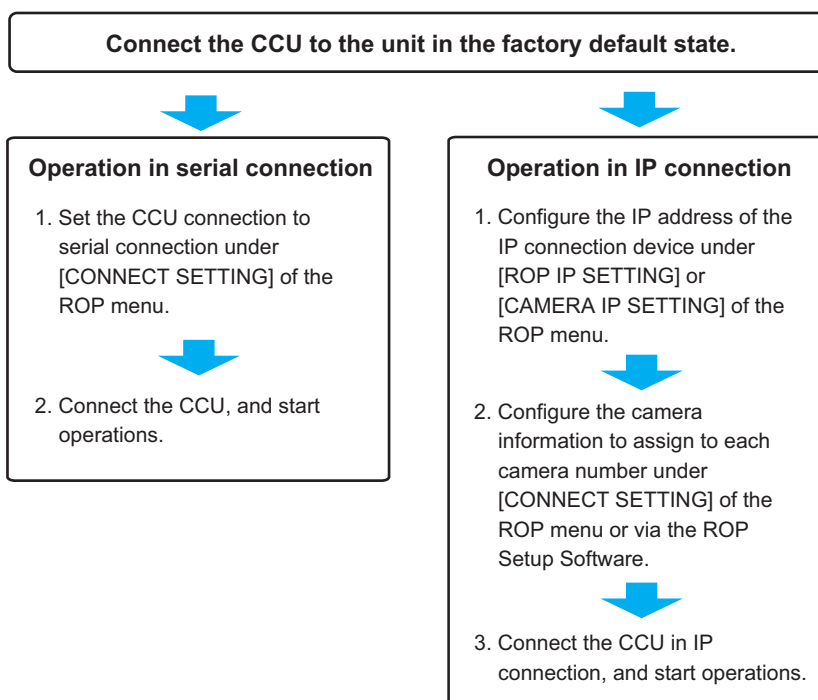
A. Securing screws (commercially available)

Connection

Operation Modes

Operation mode setting procedure

In the factory default state, connect the CCU to the unit and then set the operation mode.



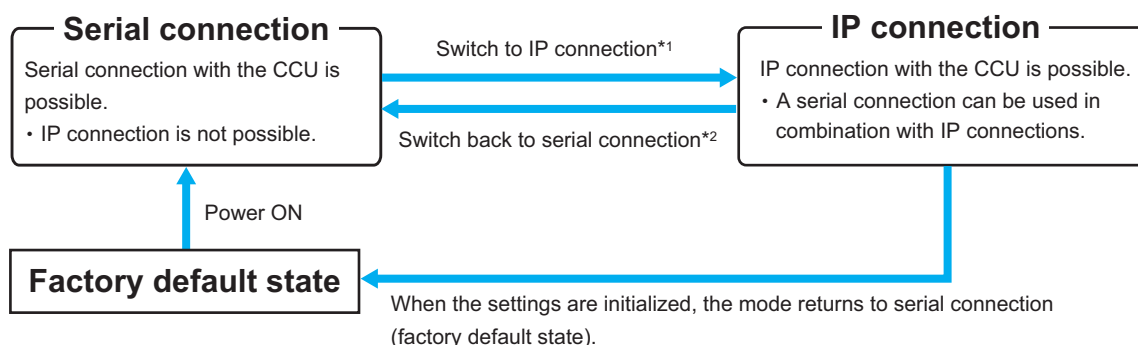
Switching between serial connection and IP connection

Switch between serial connection and IP connection via the [CONNECT SETTING] settings of the ROP menu or via the serial/LAN settings of the ROP Setup Software.

- ➔ “38 CONNECT SETTING” (see page 111)
- ➔ “ROP Setup Software” (see page 125)

When the settings are initialized, the operation mode returns to serial connection (factory default state).

- ➔ “INITIAL with NW” (see page 110)



*1: If an ROP configuration file that was saved to a memory card in IP connection is loaded in serial connection, the operation mode becomes IP connection.

*2: If an ROP configuration file that was saved to a memory card in serial connection is loaded in IP connection, the operation mode becomes serial connection.

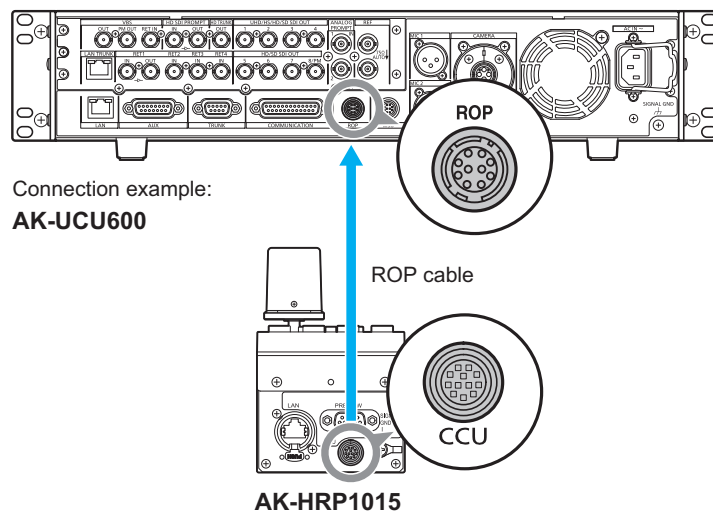
System Connection Configuration

The unit can be connected to a CCU via a serial connection or IP connection.

- Up to 99 CCUs can be controlled.
- Only one CCU can be connected via a serial connection.
- A configuration with one serial connection and 98 IP connections is possible.

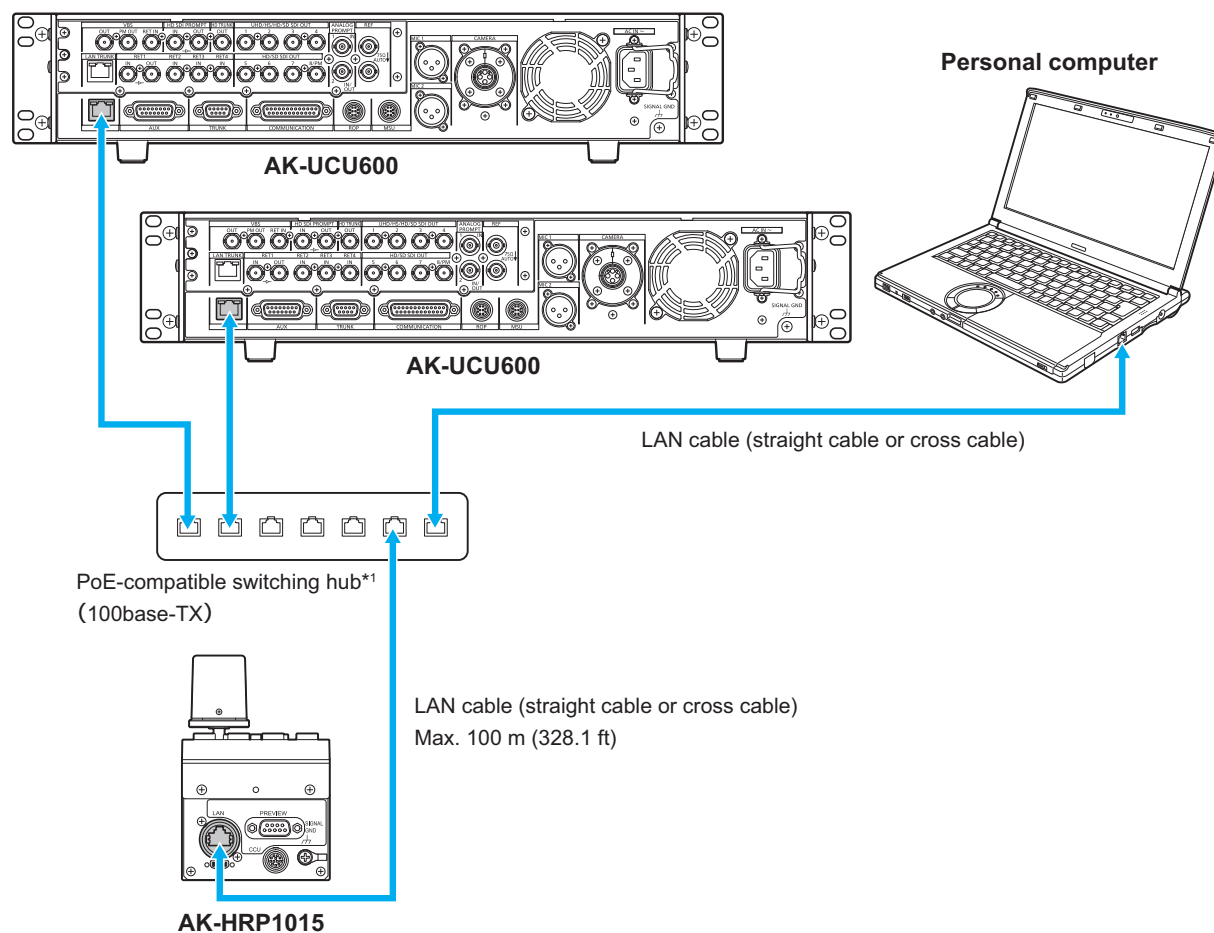
CCU connections

Serial connection



1. **Connect the <CCU> connector on this unit to the <ROP> connector on the CCU using a dedicated ROP cable (sold separately).**
2. **When you have finished connecting the equipment, turn on the main power of the CCU.**
 - If a camera is not connected, some of the control functions from the unit to the CCU will be limited.
 - Turn off the CCU before disconnecting the ROP cable.

IP connection



*1: The CCU does not support PoE.

1. Connect the <LAN> connector on this unit to the <LAN> connector on the CCU rear panel using a LAN cable (sold separately).

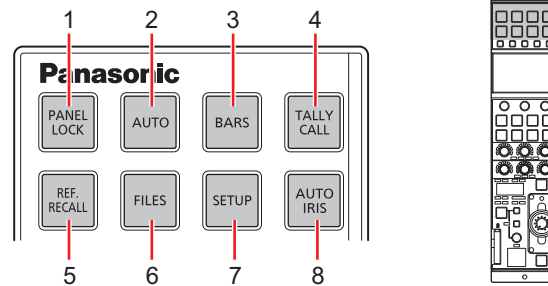
- The unit can be powered with PoE. Use a switching hub with PoE support.
 - Use a straight cable or cross cable (category 5e or higher) for the LAN cable*² (Max. 100 m (328.1 ft))
- *2: STP (shielded twisted pair)

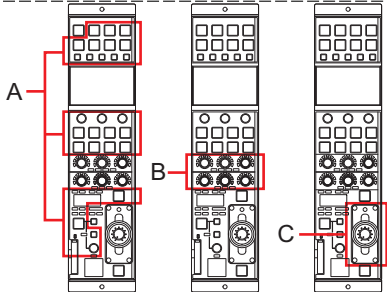
2. When you have finished connecting the equipment, turn on the power of the CCU.

- If a camera is not connected, some of the control functions from the unit to the CCU will be limited.
- Up to 99 CCUs (AK-UCU600) can be controlled from the unit.
- To operate CCUs via an IP connection, you need to configure the [CONNECT SETTING] settings of the ROP menu or the ROP Setup Software (supplied) settings. Before using ROP Setup Software, connect the unit to the personal computer with a LAN cable.
 - ➔ "38 CONNECT SETTING" (see page 111)
 - ➔ "ROP Setup Software" (see page 125)

Parts and their functions

Front panel 1

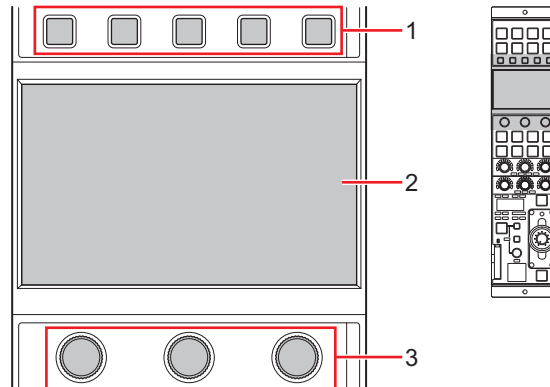


1	[PANEL LOCK] button	<p>Use this button to lock (disable) the panel operation. You can also use this button with the [UP (FREE)] button to perform partial lock. To lock/unlock the panel, press and hold the [PANEL LOCK] button. To perform partial lock/unlock, press and hold the [PANEL LOCK] and [UP (FREE)] buttons at the same time.</p> <ul style="list-style-type: none"> You can configure partial lock settings under [ROP SETTING] > [FREE+LOCK] in the ROP menu. <ul style="list-style-type: none"> ➔ "FREE+LOCK" (see page 109) <p>Status displays</p> <hr/> <p>On (red): Panel locked On (green): Panel unlocked Off: Partial lock</p> <p>[FREE+LOCK] settings items (partial lock range)</p> <hr/> <p>SETUP: Locks the A regions.</p> <p>PAINT: Locks the B region.</p> <p>IRIS LV: Locks the C region.</p> 
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2	[AUTO] button	<p>Use this button to perform auto white balance adjustment, auto black balance adjustment, or auto setup. Set the function to be adjusted under [ROP SETTING] > [AUTO BUTTON] in the ROP menu. ➔ "AUTO BUTTON" (see page 109)</p> <p>Status displays during auto white balance adjustment</p> <hr/> <p>On: Indicates that the auto white balance adjustment has started. Flashing: Warns that the automatic white balance adjustment ended without being completed. When highlights and lowlights are lost, white balance is returned to its previous value. When correct white balance cannot be obtained, adjustment stops at the last obtained value. Off: Indicates that the auto white balance has been adjusted correctly.</p> <ul style="list-style-type: none"> ■ Press and hold the [AUTO] button during white balance adjustment (lamp on) cancels adjustment and turns the lamp off. ("BREAK" appears on the picture monitor (PM) of the CCU.) Then the white balance value returns to the value it had prior to auto white balance adjustment. <p>Status displays during auto black balance adjustment</p> <hr/> <p>On: Indicates that the auto black balance adjustment has started. Flashing: Warns that the automatic black balance adjustment ended without being completed. Auto black balance returns to the value it had prior to adjustment. Off: Indicates that the auto black balance has been adjusted correctly.</p> <ul style="list-style-type: none"> ■ Press and hold the [AUTO] button during white balance adjustment (lamp on) cancels adjustment and turns the lamp off. ("BREAK" appears on the picture monitor (PM) of the CCU.) Then the black balance value returns to the value it had prior to auto black balance adjustment. <p>Status displays during auto setup</p> <hr/> <p>The setup status is output to the picture monitor (PM). ➔ "Auto Setup" (see page 31)</p>
3	[BARS] button	<p>Use this button to output the CCU color bar signal from the camera video output on the CCU rear panel. When the signal is a camera video signal or a color bar signal, press and hold the [BARS] button to switch to the TEST signal. To switch from TEST signal output to camera video output, press the [BARS] button. To select a CCU color bar type, select [SYSTEM CCU] > [BARS HD] or [BARS SD] in the ROP menu. ➔ "BARS HD" (see page 105) ➔ "BARS SD" (see page 105)</p> <p>Status displays</p> <hr/> <p>On: CCU color bar or On Flashing: TEST signal On Off: Camera video</p>
4	[TALLY/CALL] lamp/button	<p>Indicates the tally signal input. You can also press this button to call the camera operator.</p> <p>Tally lamp status displays</p> <hr/> <p>On (red): Indicates that a red tally or both a red tally and a green tally are being input to the CCU's <COMMUNICATION> connector. On (green): Indicates that a green tally is being input to the CCU's <COMMUNICATION> connector. Off: The lamp turns off when a call is received from the CCU or camera while the tally is lit.</p>
5	[REF. RECALL] button	<p>Press and hold this button to recall the reference setting information (reference file) of the camera. Assign the user file and factory file under [SYSTEM CAM] > [REF. RECALL] of the ROP menu. ➔ "REF.RECALL" (see page 102)</p> <p>Status displays</p> <hr/> <p>On: Recalling Off: When the settings have changed</p>

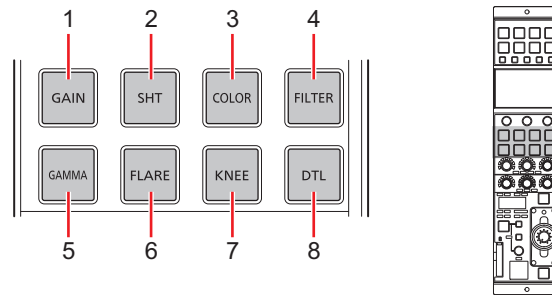
6	[FILES] button	<p>Recall the previously selected scene file. This also displays the scene file selection menu. Short press: Recall a scene file Long press: Display the menu ➔ "Scene file" (see page 32) You can change the button function to short press for displaying the menu and long press for recalling a scene file. ➔ "BUTTON SEL MODE" (see page 61)</p> <p>Status displays</p> <p>-----</p> <p>On: Scene file ON Off: Scene file OFF</p>
7	[SETUP] button	<p>Use this button to display the menu screen on the LCD panel.</p> <p>Status displays</p> <p>-----</p> <p>On: Menu screen is displayed Off: Menu screen is hidden (status screen is displayed)</p>
8	[AUTO IRIS] button	<p>Use this button to enable the auto iris function. For details on the auto iris function, see the following page. ➔ "Iris (IRIS)" (see page 38) Pressing and holding the button displays the [AUTO IRIS SETTING] menu. ➔ "44 AUTO IRIS SETTING" (see page 118)</p> <p>Status displays</p> <p>-----</p> <p>On: Enables the auto iris function. Off: Enables manual adjustment.</p>

Front panel 2



1	Function buttons	Use these buttons to execute the the functions that appear under each button. During status screen display, these buttons navigate pages or select the displayed items. ➔ "Status screen" (see page 42) During menu screen display, these buttons move the cursor or execute menu items. ➔ "ROP menu" (see page 46)
2	LCD panel	This panel displays the menu screen or status screen.
3	Menu operation dials	Use these dials to perform operations according to the menu items displayed on the LCD panel. ➔ "ROP menu" (see page 46)

Front panel 3



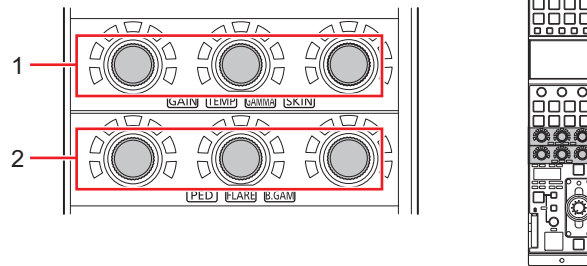
1	[GAIN] button	<p>Use this button to display the white balance menu. ➔ “09 RGB GAIN” (see page 68)</p> <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU.
2	[SHT] button	<p>Use this button to display the shutter menu. ➔ “03 SHUTTER SPEED” (see page 62)</p> <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU.

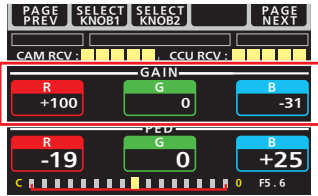
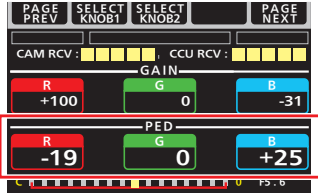
3	[COLOR] button	<p>Use this button to display the color menus. The menus will switch with each press of the button. [COLOR TEMP] → [UHD CHROMA] → [HD CHROMA] → [LINEAR MATRIX] → [COLOR CORRECTION] → [SKIN CORRECTION] → menu off (status screen)</p> <ul style="list-style-type: none"> ➡ “10 COLOR TEMP” (see page 69) ➡ “08 UHD CHROMA” (see page 67) ➡ “07 HD CHROMA” (see page 66) ➡ “25 LINEAR MATRIX” (see page 88) ➡ “26 COLOR CORRECTION” (see page 90) ➡ “27 SKIN CORRECTION” (see page 93) <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU. <ul style="list-style-type: none"> ● The [SAT] and [PHASE] values of [COLOR CORRECTION] are not compared with the reference file values.
4	[FILTER] button	<p>Use this button to display the filter menu. ➡ “04 FILTER” (see page 63)</p> <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU.

5	[GAMMA] button	<p>Use this button to display the gamma menus. The menus will switch with each press of the button. [GAMMA] → [BLACK GAMMA] → [HDR-PAINT] → menu off (status screen)</p> <ul style="list-style-type: none"> ➡ “15 GAMMA” (see page 74) ➡ “16 BLACK GAMMA” (see page 76) ➡ “45 HDR-PAINT” (see page 119) <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU. <ul style="list-style-type: none"> ● Values for the following menu items will not be compared with the reference file values when [HLG MODE] or [SDR CNVRT MD] of [HDR-PAINT] is set to “FIX” in the reference file. <p>Menu items when [HLG MODE] is set to “FIX”:</p> <ul style="list-style-type: none"> ● HLG BLACK GAMMA R, HLG BLACK GAMMA B, HLG BLACK GAMMA MASTER ● HLG B.GAMMA ● HLG KNEE POINT, HLG KNEE SLOPE ● HLG KNEE SW, HLG TYPE <p>Menu items when [SDR CNVRT MD] is set to “FIX”:</p> <ul style="list-style-type: none"> ● SDR CONVERT GAIN, SDR CONVERT CLIP, SDR CONVERT POINT, SDR CONVERT SLOPE
6	[FLARE] button	<p>Use this button to display the flare menu.</p> <ul style="list-style-type: none"> ➡ “14 FLARE” (see page 73) <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU.
7	[KNEE] button	<p>Use this button to display the knee menus. The menus will switch with each press of the button. [KNEE] → [WHITE CLIP] → menu off (status screen)</p> <ul style="list-style-type: none"> ➡ “17 KNEE” (see page 77) ➡ “18 WHITE CLIP” (see page 78) <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU.

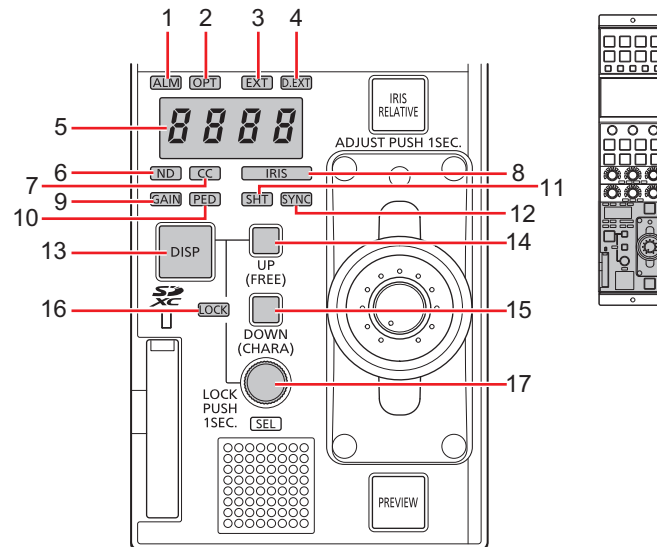
8	[DTL] button	<p>Use this button to display the HD detail and UHD detail menus. The button functions will switch with ROP menu setting.</p> <p>When the [ROP SETTING] > [DTL BUTTON] setting is “HD”: Use this button to display the HD detail menus. The menu will switch with each press of the button. [HD DETAIL] → [HD SKIN TONE DTL] → [DNR] → menu off (status screen)</p> <ul style="list-style-type: none"> ➡ “20 HD DETAIL” (see page 80) ➡ “23 HD SKIN TONE DTL” (see page 84) ➡ “28 DNR” (see page 94) <p>When the [ROP SETTING] > [DTL BUTTON] setting is “UHD”: Use this button to display the UHD detail menus. The menu will switch with each press of the button. [UHD DETAIL] → [UHD SKIN TONE DTL] → [DNR] → menu off (status screen)</p> <ul style="list-style-type: none"> ➡ “21 UHD DETAIL” (see page 82) ➡ “24 UHD SKIN TONE DTL” (see page 86) ➡ “28 DNR” (see page 94) <p>When the [ROP SETTING] > [DTL BUTTON] setting is “SD”: Use this button to display the SD detail menus. The menu will switch as follows with each press of the button. [SD DETAIL] → [DNR] → menu off (status screen)</p> <ul style="list-style-type: none"> ➡ “22 SD DETAIL” (see page 83) ➡ “28 DNR” (see page 94) <p>Status displays</p> <hr/> <p>Lit green: The current value matches that configured in the reference file. Lit red: The current value does not match that configured in the reference file. Off: Comparison with reference file values is not possible, as the reference file could not be loaded.</p> <p>To load a reference file: The following two methods are available.</p> <ul style="list-style-type: none"> ■ Use the [REF.RECALL] button to load a reference file. The reference file settings will be applied to the CCU settings. ■ Execute [REFERENCE] > [REF.DL EXEC] in the ROP menu. The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU.
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Front panel 4



1	<p>[GAIN], [TEMP], [GAMMA], [SKIN] adjustment block</p>	<p>Adjust the white balance, color temperature, gamma, and skin tone detail using the red (R), green (G), and blue (B) adjustment dials and level indicators. The setting values can be viewed in the following area of the LCD panel (status screen). [GAIN], [TEMP], [GAMMA], or [SKIN] will be displayed depending on the item being adjusted.</p>  <p>For the operating procedure, see the following page.</p> <p>➡ “White balance, color temperature, gamma, skin tone detail, pedestal, flare, black gamma” (see page 40)</p>
2	<p>[PED], [FLARE], [B.GAM] adjustment block</p>	<p>Adjust the pedestal, flare, and black gamma using the red (R), green (G), and blue (B) adjustment dials and level indicators. The setting values can be viewed in the following area of the LCD panel (status screen). [PED], [FLARE], or [B.GAM] will be displayed depending on the item being adjusted.</p>  <p>For the operating procedure, see the following page.</p> <p>➡ “White balance, color temperature, gamma, skin tone detail, pedestal, flare, black gamma” (see page 40)</p>

Front panel 5

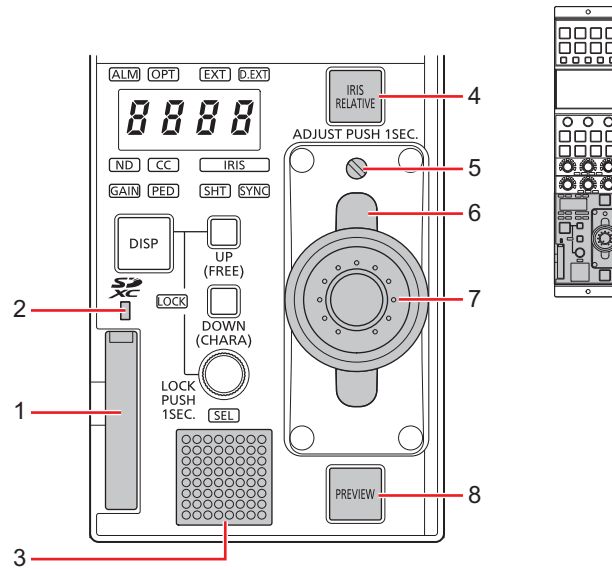


1	[ALM] indicator	This is the camera and CCU warning indicator lamp. Consult your dealer if a failure occurs. The indicator's color changes to indicate when the camera and CCU optical reception level is not strong enough, when a data error has occurred in the CCU optical transmission/reception section, and when a fan error or temperature error has been occurred on the camera or CCU.
2	[OPT] indicator	This is the camera cable warning indicator lamp. Status displays ----- Lit orange: Warns that an optical transmission error has occurred. Lit red: Indicates that the camera is not connected to the CCU. Off: The camera cable is connected normally.
3	[EXT] indicator	This indicator lights to warn that the lens extender is set to something other than 1x. Status displays ----- On: The lens extender is set to something other than 1x. Off: This indicates that the lens extender is not being used or that it is not available.
4	[D.EXT] indicator	This indicator lights to warn that the digital extender is set to something other than 1x. Status displays ----- On: The digital extender is set to something other than 1x. Off: This indicates that the digital extender is not being used or that it is not available.
5	Adjustment value display	Displays the ND filter, CC filter, iris, master gain, master pedestal, shutter, or sync shutter adjustment value based on the item selected with the [DISP] button.
6	[ND] indicator	Lights when the ND filter is selected with the [DISP] button. Status displays ----- Lit green: Standard position set in the ROP menu. Lit orange: Updated from the standard position set in the ROP menu. ■ The standard position of the ND filter can be set in [ROP SETTING] > [STD POSITION ND] in the ROP menu. ➡ "STD POSITION ND" (see page 110)
7	[CC] indicator	Lights when the CC filter is selected with the [DISP] button. Status displays ----- Lit green: Standard position set in the ROP menu. Lit orange: Updated from the standard position set in the ROP menu. ■ The standard position of the CC filter can be set in [ROP SETTING] > [STD POSITION CC] in the ROP menu. ➡ "STD POSITION CC" (see page 110)

8	[IRIS] indicator	<p>Lights when the iris is selected with the [DISP] button.</p> <p>Status displays</p> <hr/> <p>Off: IRIS and Master pedestal can be controlled.</p> <p>Flashing red: Due to iris adjustment from another device, the adjustment value and the IRIS lever position do not match.</p> <ul style="list-style-type: none"> If you adjust the IRIS lever to match the iris position of the camera while viewing the iris gauge that appears at the bottom of the LCD panel (status screen), the button will turn off and normal control will be possible.  <p>A. IRIS position of the camera B. IRIS lever position</p> <ul style="list-style-type: none"> This also flashes if the camera adjustment values and IRIS lever position are offset when the control target camera is switched. At the point in time when the IRIS lever is moved to the position that matches the camera adjustment values, the button turns off and normal control becomes possible.
9	[GAIN] indicator	<p>Lights when the master gain is selected with the [DISP] button.</p> <p>Status displays</p> <hr/> <p>Lit green: Standard position set in the ROP menu.</p> <p>Lit orange: Updated from the standard position set in the ROP menu.</p> <ul style="list-style-type: none"> The standard position of the master gain can be set in [ROP SETTING] > [STD POSITION M.GAIN] in the ROP menu. <p>➔ "STD POSITION M.GAIN" (see page 110)</p>
10	[PED] indicator	<p>Lights when the master pedestal is selected with the [DISP] button.</p> <p>Status displays</p> <hr/> <p>Lit green: Master pedestal can be controlled.</p> <p>Flashing red: The camera's adjustment value and the master pedestal dial's position do not match.</p> <p>When the master pedestal dial is moved to the position that matches the camera's adjustment values, the indicator turns off and normal control becomes possible.</p>
11	[SHT] indicator	Lights when the shutter is selected with the [DISP] button.
12	[SYNC] indicator	<p>Lights when the sync shutter is selected with the [DISP] button.</p> <p>➔ "03 SHUTTER SPEED" (see page 62)</p>
13	[DISP] button	Select from the ND filter, CC filter, iris, master gain, master pedestal, shutter, or sync shutter as the target item for adjustment.
14	[UP (FREE)] button	<p>When the button is lit, you can use it to adjust the function selected with the [DISP] button in the "plus" direction.</p> <p>When the [IRIS] indicator is lit, this locks or unlocks the iris lever.</p> <p>When the button is unlit, you use it with the [PANEL LOCK] button to perform partial lock.</p> <p>When the [UP (FREE)] button and [SEL] dial are pressed simultaneously, the camera is selected and the camera number appears in the adjustment value display.</p> <p>In this state, you can select the camera number using the [SEL] dial.</p> <p>Selection is possible while the button is flashing, and the selection is confirmed by pressing the [SEL] dial.</p>
15	[DOWN (CHARA)] button	<p>When the button is lit, you can use it to adjust the function selected with the [DISP] button in the "minus" direction.</p> <p>When the button is unlit, you can use it to turn the status screen on/off on the CCU's picture monitor (PM), or use it to go to the next page.</p>
16	[LOCK] indicator	Lights when a function is locked with the [SEL] dial.

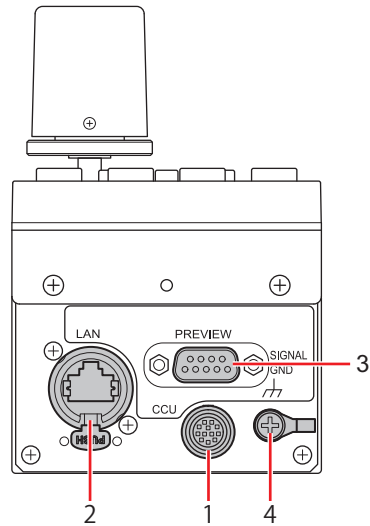
17	[SEL] dial	<p>Use this to adjust the item selected with the [DISP] button. When GAIN is selected, this adjusts the VAR value. This can also be used to lock the function configured under [ROP SETTING] > [LOCK SELECT] in the ROP menu.</p> <p>➡ "LOCK SELECT" (see page 109)</p> <p>[LOCK SETTING] settings</p> <hr/> <p>LOCK: Always locks the function selected for control with the [DISP] button. FREE: The function selected for control with the [DISP] button will not be locked even when you press and hold the [SEL] dial. (Control is always unlocked.) PUSH: The function selected for control with the [DISP] button will be locked when you press and hold the [SEL] dial. Press and hold the dial again to disable the lock. M.PED: Locks master pedestal operations.</p>
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Front panel 6



1	Memory card slot	Insert a memory card into this slot. You can save the settings of the unit and the scene files, user files, and other files to a memory card. ➔ “Memory cards” (see page 9)
2	Memory card access indicator	This indicator lights when data is read from or written to a memory card.
3	Camera number/tally display	This display shows the camera number information and tally information.
4	[IRIS RELATIVE] button	Use this button to switch the variable range of the iris lever. You can also use this to display the [IRIS RELATIVE] menu on the LCD panel. Status displays ----- On: RELATIVE Off: IRIS FULL
5	Torque adjustment screw	Use a flat-bladed screwdriver to adjust the torque of the iris lever.
6	IRIS lever	Use this lever to adjust the iris level. The iris can be adjusted manually. For details on adjusting the iris, see the following page. ➔ “Iris (IRIS)” (see page 38) Lever position ----- Forward: Adjusts in the CLOSE direction. Backward: Adjusts in the OPEN direction.
7	Master pedestal	Use this dial to adjust the master pedestal level. For details on adjusting the master pedestal, see the following page. ➔ “Master pedestal (M.PED)” (see page 37)
8	PREVIEW button	Use this button to output a preview signal from the preview connector. Status displays ----- On: Preview output is On Off: Preview output is Off

Connectors



1	<CCU> connector	This connector is for serial connections to the CCU.
2	<LAN> connector	Use a LAN cable to connect to a CCU or personal computer that supports IP connections.
3	<PREVIEW> connector	This connector outputs preview signals.
4	<SIGNAL GND> terminal	Connect this to the system ground.

Adjustment and settings

Auto Setup

Starting auto setup

Before starting auto setup

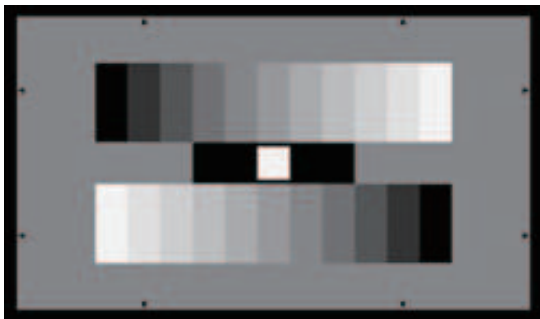
Choose [SYSTEM CAM] > [ASU MODE] in the ROP menu to select "FULL" or "EASY" mode.

➔ "ASU MODE" (see page 102)

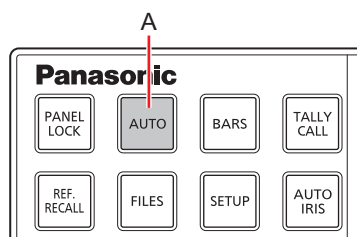
FULL	Standard setup based on an outdoor shooting chart
EASY	Easy setup based on an outdoor shooting chart

Align the position of the gray scale wedge with the angle of view in the vertical direction of the viewfinder. Be sure to correctly select the position from which you shoot the chart since some positions may not enable a satisfactory auto setup.

- Recommended gray scale



Starting auto setup



A. [AUTO] button

Operating procedure

1. Assign auto setup to the [AUTO] button under [ROP SETTING] > [AUTO BUTTON] in the ROP menu.

➔ "AUTO BUTTON" (see page 109)

2. Press the [AUTO] (A) button

The [AUTO] button flashes while the auto setup start preparation mode is established, and a square marker appears in the center of the camera viewfinder. Align the white at the center of the gray scale with this square marker. (To cancel setup, press and hold this button.)

3. Press the [AUTO] (A) button again.

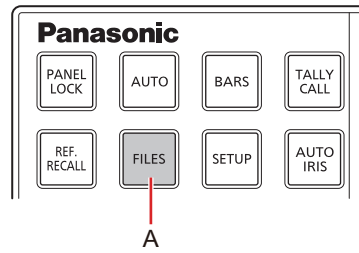
The [AUTO] button lights as auto setup starts. (Holding down the [AUTO] button during the auto setup operation will abort auto setup.)

The [AUTO] button goes off when auto setup ends successfully.

- If the [AUTO] button flashes at approximately 1-second intervals, auto setup has ended without being completed. During the auto setup operation, the picture monitor (PM) displays characters to indicate operation status.
- If auto setup is not completed, check the message on the picture monitor (PM) on the CCU.

Scene file

Opening a scene file



A. [FILES] (A) button

Operating procedure

1. Press the [FILES] button (A).

Recall the previously selected scene file.

When you press and hold the button, the scene file selection menu appears on the LCD panel.

➔ "SCENE" (see page 44)

NOTE

- You can also display the scene file selection menu on the LCD panel with a short press of the button.
➔ "BUTTON SEL MODE" (see page 61)

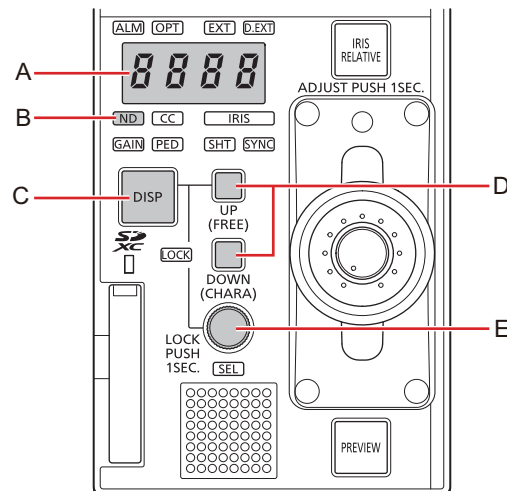
ND filter

Displaying and setting the ND filter

The ND filter adjustment value appears in the adjustment value display (A) when the ND filter is selected with the [DISP] button (C).

When the setting value is changed from the standard position set in the ROP menu, the [ND] indicator (B) is yellow lit. (The standard position remains set while the indicator is green lit.)

➔ “STD POSITION ND” (see page 110)



- A. Adjustment value display
- B. [ND] indicator
- C. [DISP] button
- D. [UP (FREE)], [DOWN (CHARA)] button
- E. [SEL] dial

Operating procedure

1. Press the [DISP] button (C) to light the [ND] indicator (B).

The [ND], [CC], [GAIN], [PED], [SHT], and [SYNC] indicators light in sequence with each press of the button.

2. Adjust the setting value using the [UP (FREE)] or [DOWN (CHARA)] button (D).

The set value appears in the adjustment value display (A).

You can also perform adjustments with the [SEL] dial (E).

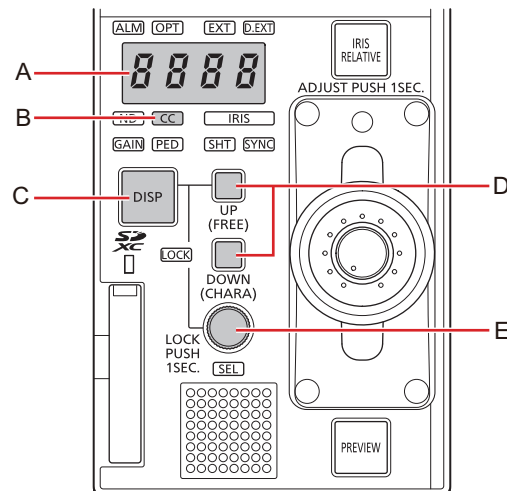
CC filter

Displaying and setting the CC filter

The CC filter adjustment value appears in the adjustment value display (A) when the CC filter is selected with the [DISP] button (C).

When the setting value is changed from the standard position set in the ROP menu, the [CC] indicator (B) is yellow lit. (The standard position remains set while the indicator is green lit.)

➔ “STD POSITION CC” (see page 110)



- A. Adjustment value display
- B. [CC] indicator
- C. [DISP] button
- D. [UP (FREE)], [DOWN (CHARA)] button
- E. [SEL] dial

Operating procedure

1. **Press the [DISP] button (C) to light the [CC] indicator (B).**
The [ND], [CC], [GAIN], [PED], [SHT], and [SYNC] indicators light in sequence with each press of the button.
2. **Adjust the setting value using the [UP (FREE)] or [DOWN (CHARA)] button (D).**
The set value appears in the adjustment value display (A).
You can also perform adjustments with the [SEL] dial (E).

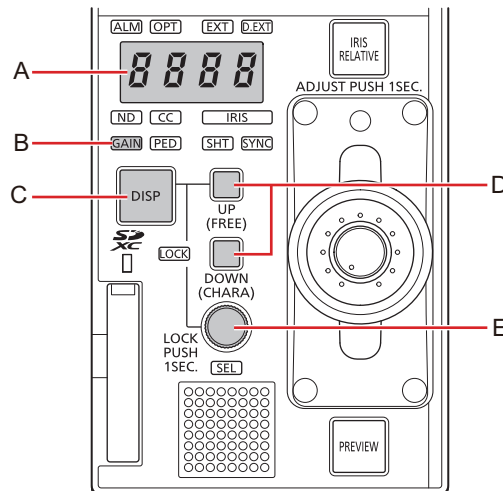
Master gain (GAIN)

Displaying and setting the master gain (GAIN)

The master gain (GAIN) adjustment value appears in the adjustment value display (A) when the master gain is selected with the [DISP] button (C).

When the setting value is changed from the standard position set in the ROP menu, the [GAIN] indicator (B) is yellow lit. (The standard position remains set while the indicator is green lit.)

➔ “STD POSITION M.GAIN” (see page 110)



- A. Adjustment value display
- B. [GAIN] indicator
- C. [DISP] button
- D. [UP (FREE)], [DOWN (CHARA)] button
- E. [SEL] dial

Operating procedure

1. **Press the [DISP] button (C) to light the [GAIN] indicator (B).**
The [ND], [CC], [GAIN], [PED], [SHT], and [SYNC] indicators light in sequence with each press of the button.
2. **Adjust the setting value using the [UP (FREE)] or [DOWN (CHARA)] button (D).**
The set value appears in the adjustment value display (A).
3. **Adjust the VAR value using the [SEL] dial (E).**
The value can be adjusted in steps. Adjustment is in 0.1 dB steps. (±2.9 range)

Shutter (SHT)

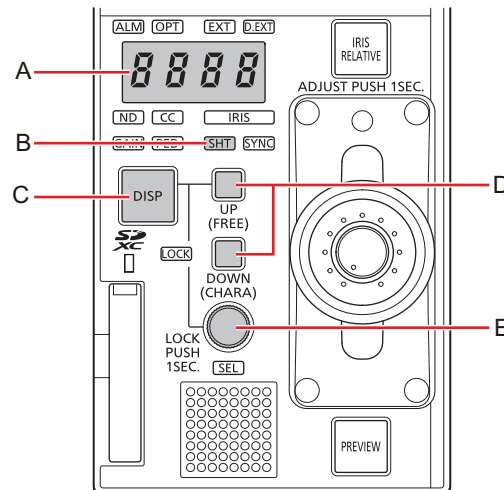
Displaying and setting the shutter (SHT)

The shutter adjustment value appears in the adjustment value display (A) when the shutter is selected with the [DISP] button (C).

When the setting value is changed from the standard position set in the ROP menu, the [SHT] indicator (B) is orange lit. (The standard position remains set while the indicator is green lit.)

The “SHUT” and “SYNC” shutter operation modes can be switched under [SHUTTER SPEED] > [SHUTTER MODE] in the ROP menu.

➔ “SHUTTER MODE” (see page 62)



- A. Adjustment value display
- B. [SHT] indicator
- C. [DISP] button
- D. [UP (FREE)], [DOWN (CHARA)] button
- E. [SEL] dial

Operating procedure

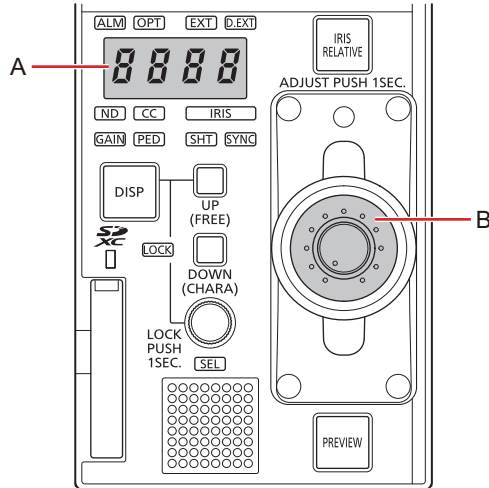
1. **Press the [DISP] button (C) to light the [SHT] indicator (B).**
The [ND], [CC], [GAIN], [PED], [SHT], and [SYNC] indicators light in sequence with each press of the button.
2. **Adjust the setting value using the [UP (FREE)] or [DOWN (CHARA)] button (D).**
The set value appears in the adjustment value display (A).
You can also perform adjustments with the [SEL] dial (E).

Master pedestal (M.PED)

Displaying and setting the master pedestal (M.PED)

The master pedestal (M.PED) setting value appears in the adjustment value display (A) when the master pedestal dial (B) is operated.

- Adjustment is possible when "IRIS" is selected under [ROP SETTING] > [M.PED CONT] in the ROP menu.
➔ "M.PED CONT" (see page 109)



- A. Adjustment value display
- B. Master pedestal dial

Operating procedure

1. Turn the master pedestal dial (B).

Change the master pedestal value.

- The master pedestal and the R, G, and B pedestal can be adjusted independently. Changing the master pedestal setting does not change the R, G, and B pedestal settings values.

Iris (IRIS)

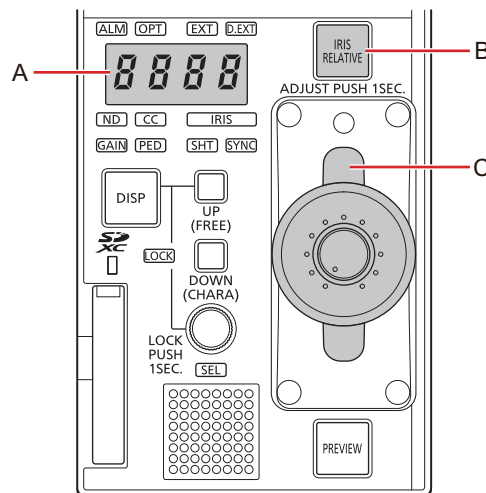
Displaying and setting the iris (IRIS)

Manual adjustment

When the auto iris is not on, the iris can be adjusted manually.

The iris value appears in the adjustment value display (A).

- Adjustment is possible when "IRIS" is selected under [ROP SETTING] > [M.PED CONT] in the ROP menu.
➔ "M.PED CONT" (see page 109)



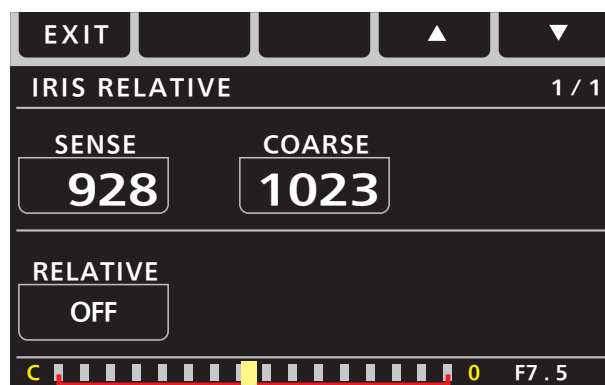
- A. Adjustment value display
- B. [IRIS RELATIVE] button
- C. IRIS lever

Operating procedure

1. Adjust the iris level with the IRIS lever (C).

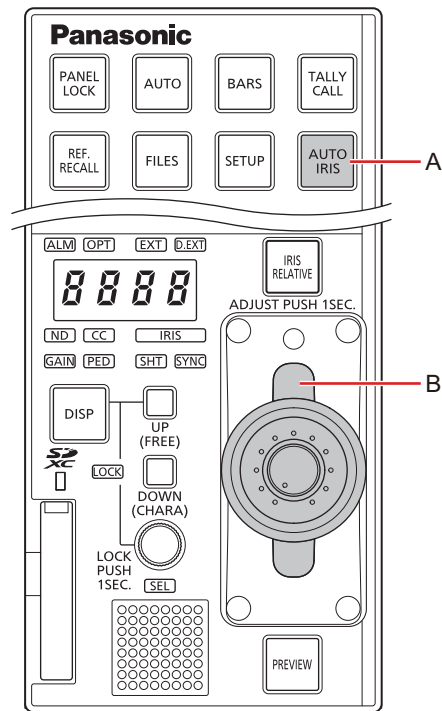
Moving it forward adjusts the level in the CLOSE direction and moving it backward adjusts the level in the OPEN direction.

- You can specify whether the variable range of the iris lever (C) is dependent on the [SENSE] and [COARSE] settings of [IRIS RELATIVE] in the ROP menu.
When you press and hold the [IRIS RELATIVE] button (B), the [IRIS RELATIVE] menu appears and the [SENSE] and [COARSE] settings can be configured.
When you press the [IRIS RELATIVE] button (B), the button lights and the iris lever will be dependent on the [SENSE] and [COARSE] settings of [IRIS RELATIVE] in the ROP menu.



Automatic adjustment

Adjust the iris automatically. (Auto iris)



A. [AUTO IRIS] button

B. IRIS lever

Operating procedure

1. Press the [AUTO IRIS] button (A) to turn on the button.

The auto iris turns on.

- When the auto iris is on, the convergence level of the iris can be adjusted with the IRIS lever (B). Moving it forward adjusts the level in the CLOSE direction and moving it backward adjusts the level in the OPEN direction.

White balance, color temperature, gamma, skin tone detail, pedestal, flare, black gamma

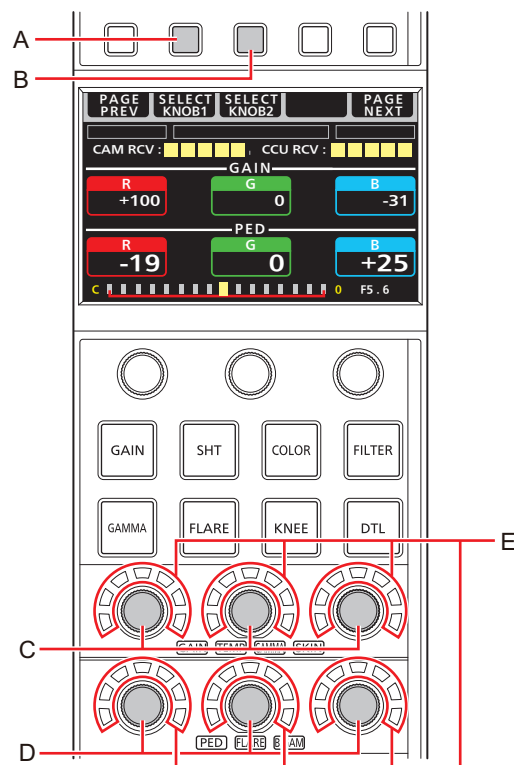
Performing adjustments

You can adjust the white balance, color temperature, gamma, skin tone detail, pedestal, flare, and black gamma. The adjustment levels are indicated by the level indicators (E).

Indicator	Function
GAIN	The white balance can be adjusted.
TEMP	The color temperature can be adjusted.
GAMMA	The gamma can be adjusted.
SKIN	The skin tone detail or [SKIN CORRECTION] can be adjusted. You can select which item is adjusted under [ROP SETTING] > [SKIN VOL] in the ROP menu.
PED	The pedestal can be adjusted.
FLARE	The flare can be adjusted.
B.GAM	Normal black gamma or Hybrid Log-Gamma black gamma can be adjusted. You can select which item is adjusted under [ROP SETTING] > [B.GAMMA VOL] in the ROP menu.

Select [GAIN], [TEMP], [GAMMA], and [SKIN] with the SELECT KNOB1 function button (A).

Select [PED], [FLARE], and [B.GAM] with the SELECT KNOB2 function button (B).



- A. SELECT KNOB1 function button
- B. SELECT KNOB2 function button
- C. [GAIN], [TEMP], [GAMMA], and [SKIN] adjustment dials
- D. [PED], [FLARE], and [B.GAM] adjustment dials
- E. Level indicator

Operating procedure

1. Select the function to adjust.

- To adjust the white balance, color temperature, gamma, skin tone detail, or [SKIN CORRECTION]:
Select using the SELECT KNOB1 function button (A).
The selected indicators (E) will light with each press of the button.

When [GAIN] is lit	The white balance (R, G, B) can be adjusted.
--------------------	--

When [TEMP] is lit	The color temperature ([GAIN R], [COLOR TEMP], [GAIN B]) of the [COLOR TEMP] menu can be adjusted.
When [GAMMA] is lit	The gamma ([GAMMA R], [GAMMA MASTER], [GAMMA B]) can be adjusted.
When [SKIN] is lit	<p>When [ROP SETTING] > [SKIN VOL] is set to “HD”, “UHD”, or “SD” in the ROP menu: The [I CENTER], [Q PHASE], and [SKIN TONE DETAIL] of the HD detail or UHD detail menu can be adjusted. Select which detail to adjust under [ROP SETTING] > [DTL BUTTON] in the ROP menu. ➔ “DTL BUTTON” (see page 109)</p> <p>When [ROP SETTING] > [SKIN VOL] is set to “S.CORR” in the ROP menu: The [SKIN AREA TABLE], [SKIN AREA HUE], and [SKIN AREA TONE] of the [SKIN CORRECTION] menu can be adjusted. ➔ “27 SKIN CORRECTION” (see page 93)</p>

- To adjust the pedestal, flare, or black gamma:
Select using the SELECT KNOB2 function button (B).
The selected indicators (E) will light with each press of the button.

When [PED] is lit	The master pedestal or [PED R], [PED G], and [PED B] can be adjusted. Select which item to adjust under [ROP SETTING] > [G/M PED VOL] in the ROP menu. ➔ “G/M PED VOL” (see page 109)
When [FLARE] is lit	The flare ([FLARE R], [FLARE G], [FLARE B]) can be adjusted.
When [B.GAM] is lit	<p>When [ROP SETTING] > [B.GAMMA VOL] is set to “SDR” in the ROP menu: [BLACK GAMMA R], [BLACK GAMMA MASTER], and [BLACK GAMMA B] in the [BLACK GAMMA] menu can be adjusted. ➔ “16 BLACK GAMMA” (see page 76)</p> <p>When [ROP SETTING] > [B.GAMMA VOL] is set to “HDR” in the ROP menu: [HLG BLACK GAMMA R], [HLG BLACK GAMMA MASTER], and [HLG BLACK GAMMA B] in the [HDR-PAINT] menu can be adjusted. ➔ “45 HDR-PAINT” (see page 119)</p>

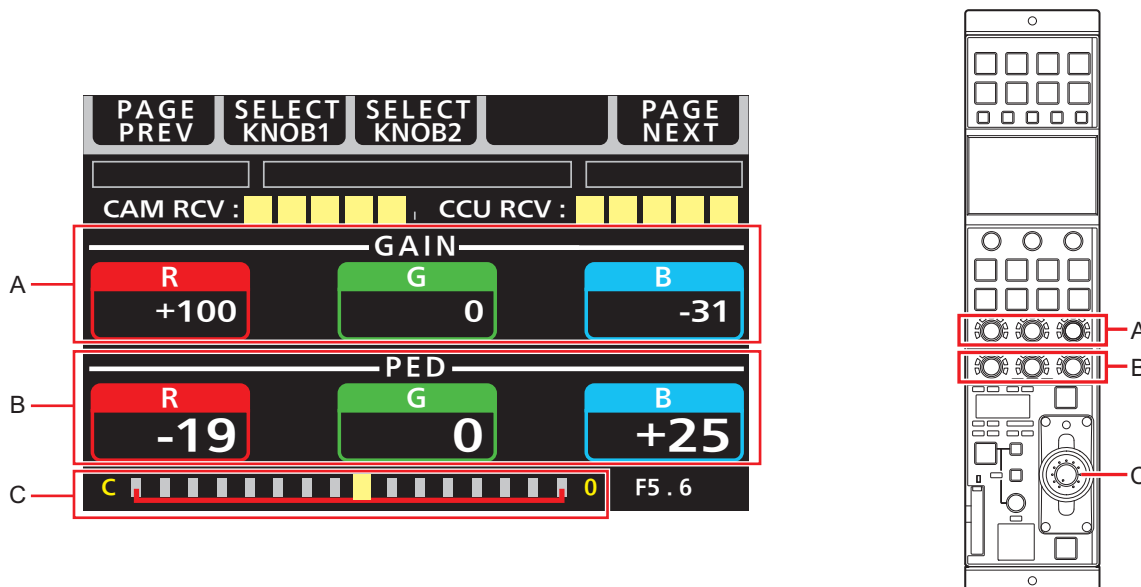
2. Use the dials (C or D) to perform adjustments.

The adjustment levels are indicated by the level indicators (E).

Status screen

Displaying and operating the status screen

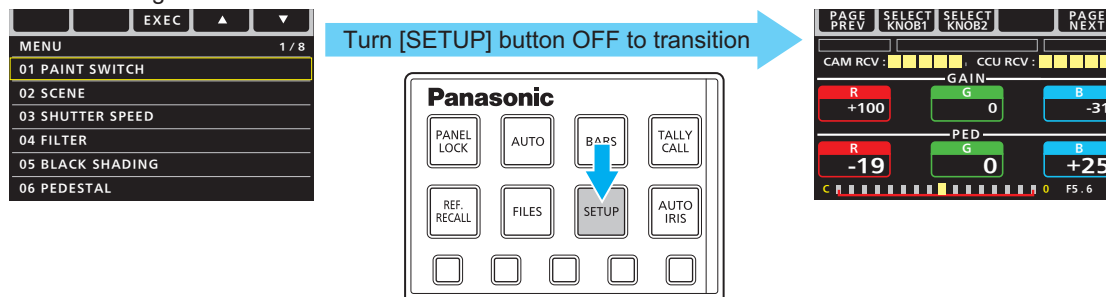
The status screen is displayed on the LCD panel of the unit when the ROP menu (REMOTE OPERATION MENU) is not being used (i.e., the menu is turned OFF).



- A, B:** Displays the adjustment value for each dial.
- C:** Displays the iris adjustment value as a scale. (The displayed position is only a reference.)

When the ROP menu is displayed, pressing the [SETUP] button closes the ROP menu and switches to the status screen.

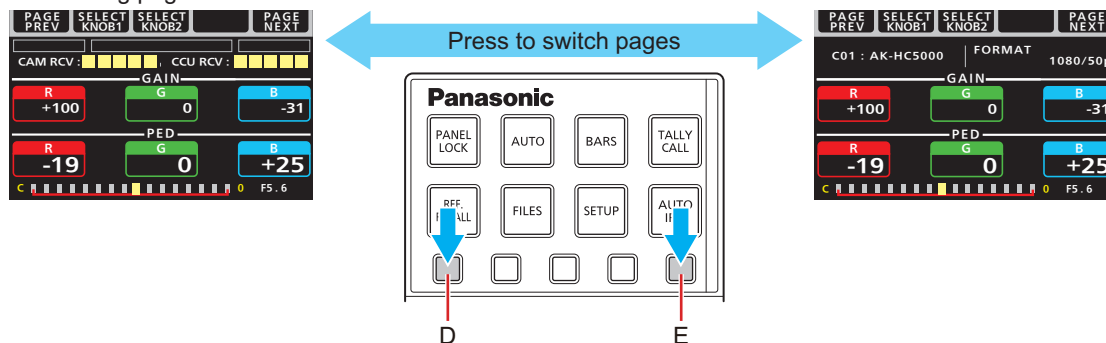
■ Transitioning from the MENU screen



When you press the PAGE NEXT function button (D) or PAGE PREV function button (E) while the status screen is displayed, the items displayed at the top of the status screen change.

- The items change in the order of [OPT LEVEL] → [CAM INFO] → [SCENE] → [ASSIGN] with each press of the PAGE NEXT function button (D).
- The items change in the order of [ASSIGN] → [SCENE] → [CAM INFO] → [OPT LEVEL] with each press of the PAGE PREV function button (E).

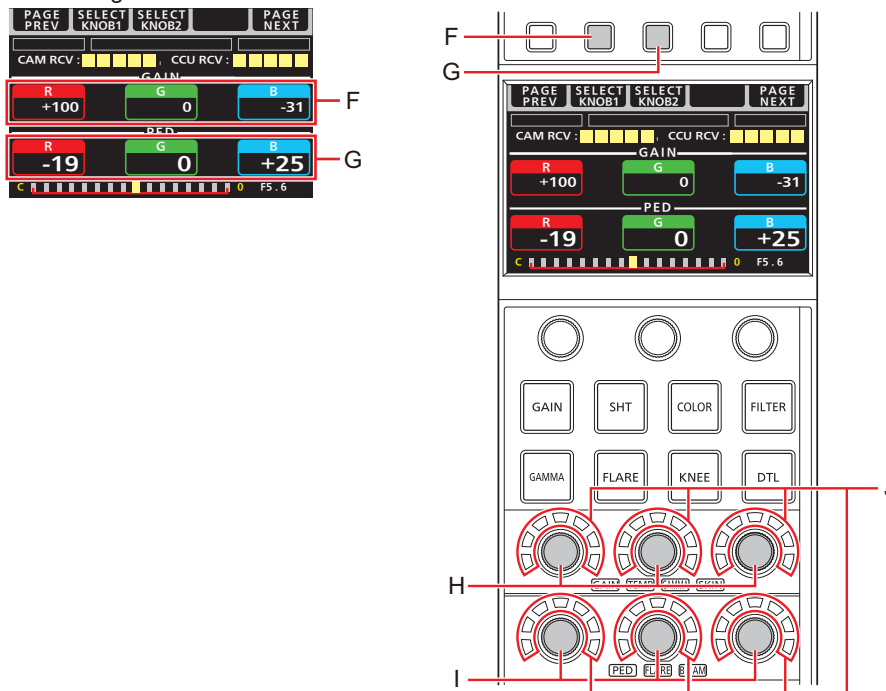
■ Switching pages in the status screen



When you press the SELECT KNOB1 function button (F) or SELECT KNOB2 function button (G) while the status screen is displayed, the items displayed in the middle and bottom sections of the status screen change.

- The items in the middle section of the screen change in the order of [GAIN] → [SKIN] → [TEMP] → [GAM] with each press of the SELECT KNOB1 function button (F).
- The items in the bottom section of the screen change in the order of [PED] → [FLARE] → [B.GAM] with each press of the SELECT KNOB2 function button (G).

■ Switching menu items in the status screen



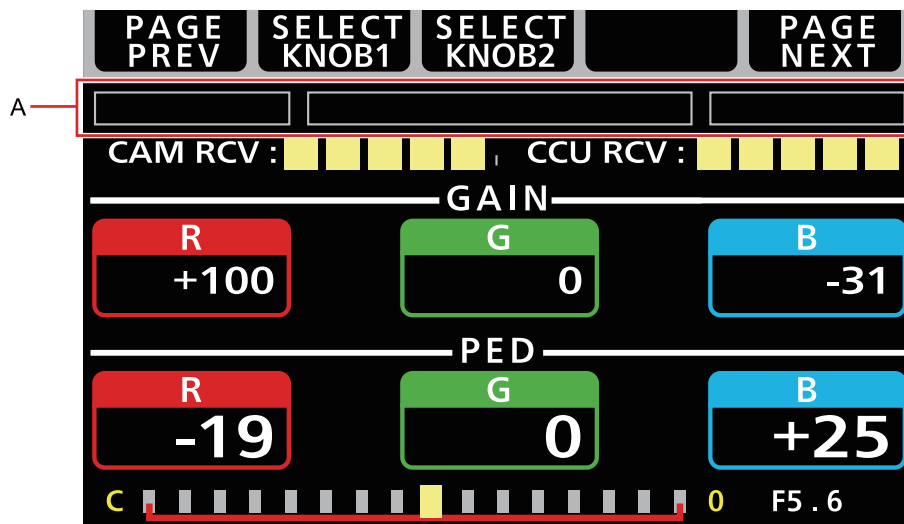
- F. SELECT KNOB1 function button
- G. SELECT KNOB2 function button
- H. [GAIN], [TEMP], [GAMMA], and [SKIN] adjustment dials
 - I. [PED], [FLARE], and [B.GAM] adjustment dials
- J. Level indicator

Items displayed on the status screen

OPT LEVEL

This displays the optical transmission strength.

- The top section of the screen is used as the tally display area. The tallies on the left and right are green, and the middle tally is red.

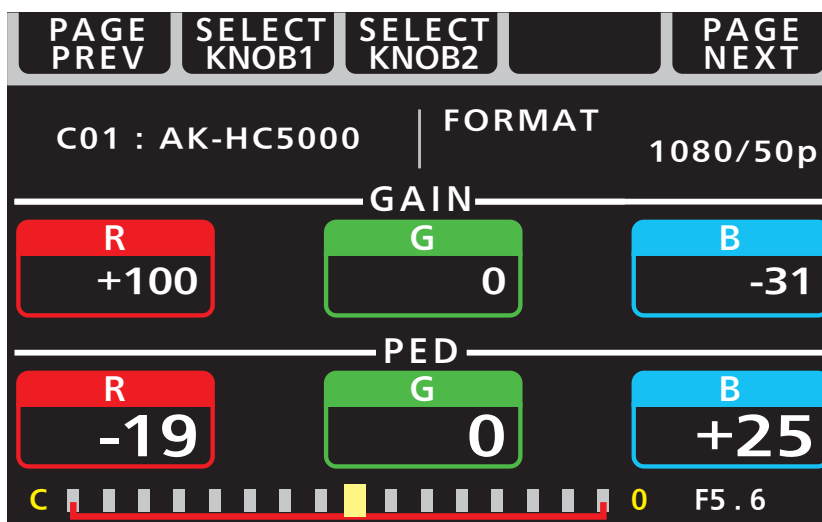


A. Tally display area

Display	Item
CAMRCV	Displays the optical transmission/reception strength on the camera side.
CCURCV	Displays the optical transmission/reception strength on the CCU side.

CAM INFO

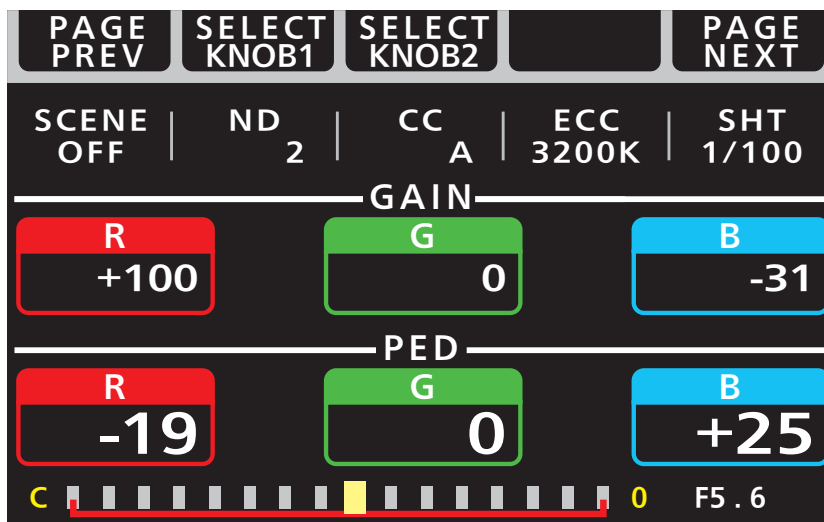
This displays the camera information.



Display	Item
C**	Displays the name of the currently selected camera.
FORMAT	Displays the currently selected system format. ➔ "FORMAT" (see page 105)

SCENE

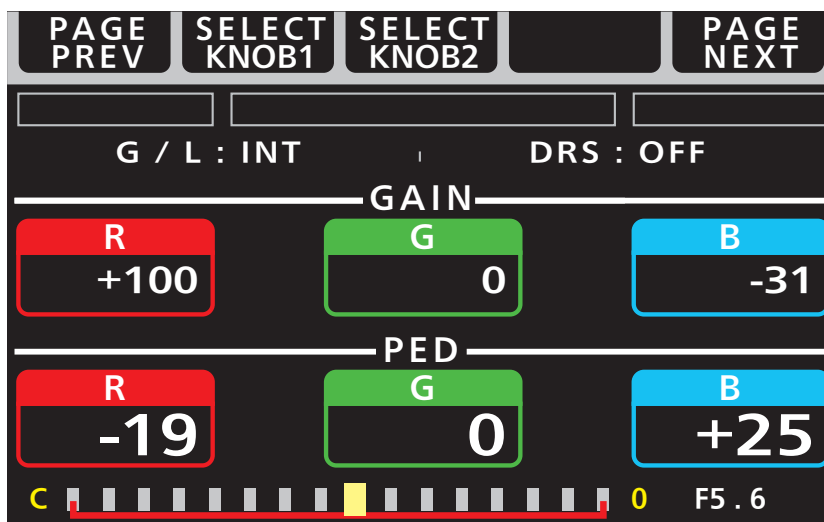
This displays the scene setting information.



Display	Item
SCENE	Displays the currently set scene number. ➔ "Scene file" (see page 32)
ND	Displays the ND filter name acquired from the CCU. ➔ "ND filter" (see page 33)
CC	Displays the CC filter name acquired from the CCU. ➔ "CC filter" (see page 34)
ECC	Displays the current information of [11 ECC] > [COLOR TEMP] in the ROP menu. ➔ "11 ECC" (see page 70)
SHT	Displays the currently set shutter value. ➔ "Shutter (SHT)" (see page 36)

ASSIGN

This displays the ASSIGN information.



Display	Item
G/L	The status of the GENLOCK is displayed here. NG: UNLOCK EXT: Externally synced INT: Internally synced
DRS	Displays the current information of [01 PAINT SWITCH] > [DRS] in the ROP menu. ➔ "DRS" (see page 60)

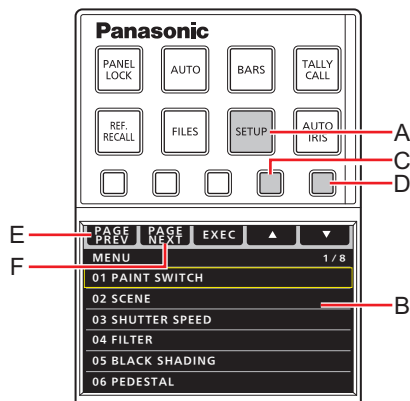
ROP menu

Displaying menus

The LCD panel of the unit can be used to operate the ROP menu (REMOTE OPERATION MENU).

ROP menu operation is a function that is enabled when the unit is connected to a camera or CCU.

Follow the procedure below to display the ROP menu. The ROP menu is displayed on the LCD panel (B) of the unit.



- A. [SETUP] button
- B. LCD panel
- C. Δ function button (move cursor up)
- D. ∇ function button (move cursor down)
- E. PAGE PREV (move to previous menu page)
- F. PAGE NEXT (move to next menu page)

Operating procedure

1. Press the [SETUP] button (A).

The ROP menu appears on the LCD panel (B).

- Pressing the button again returns you to the status screen.

2. Use the function buttons (C, D, E and F) to select menu items.

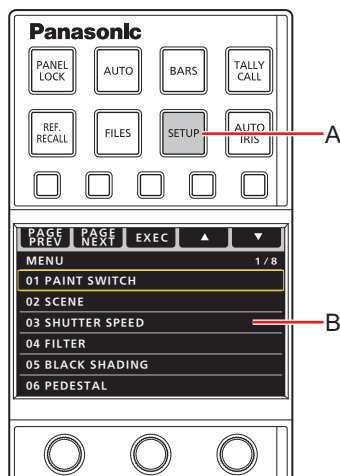
You can select from the following menu items.

- For the menu operating procedures, see the following page.
➔ “Basic menu operations” (see page 47)
- For details on menu setting items, see the following page.
➔ “ROP menu list” (see page 49)

Basic menu operations

1. Press the [SETUP] button (A).

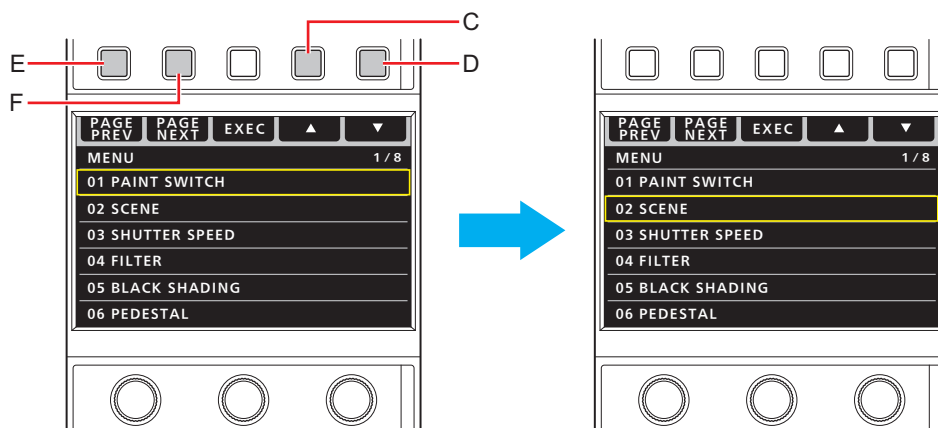
The menu appears on the LCD panel (B). (The cursor is on the first line.)



- A. [SETUP] button
- B. LCD panel

2. Press the ▲ function button (C) or ▼ function button (D) to move the cursor.

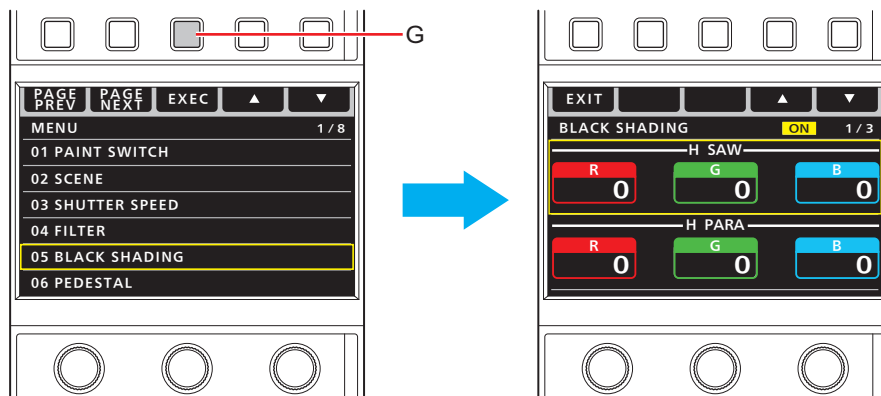
You can navigate the menu pages using the PAGE PREV function button (E) and PAGE NEXT function button (F). Moving the cursor at the top row or bottom row also switches the menu page.



- C. ▲ function button (move cursor up)
- D. ▼ function button (move cursor down)
- E. PAGE PREV function button (move to previous page)
- F. PAGE NEXT function button (move to next page)

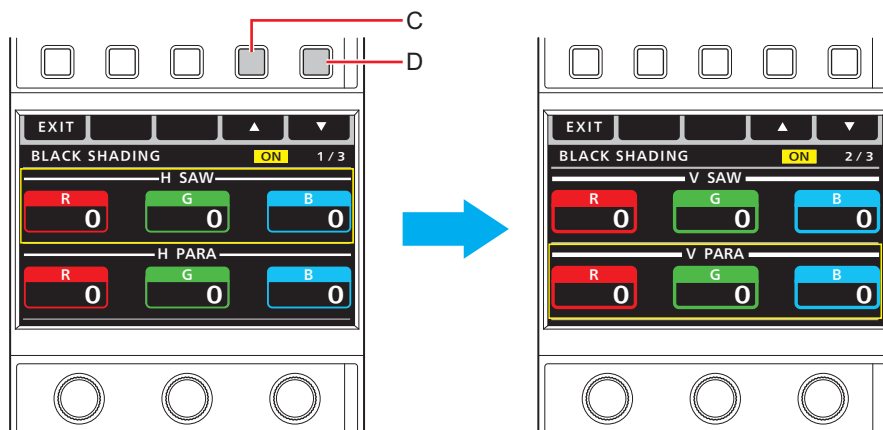
3. Press the EXEC function button (G) to display the menu.

(The following shows the example of [BLACK SHADING].)



- G. EXEC function button (select menu)

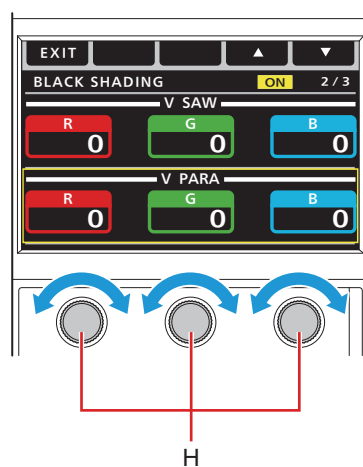
4. Press the ▲ function button (C) or ▼ function button (D) to move the cursor to the row containing the settings you want to configure.



- C. Δ function button (move cursor up)
- D. ∇ function button (move cursor down)

5. Turn the menu operation dials (H) to set the items.

Turn the dial at the same position as each item in the screen.

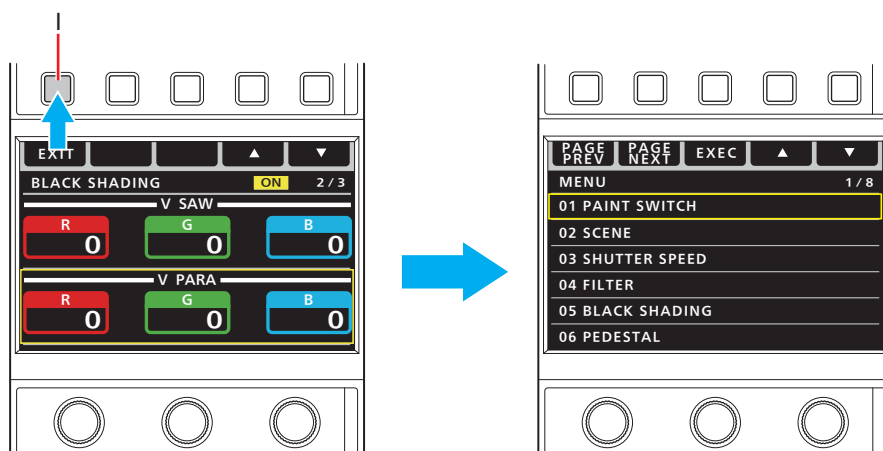


H. Menu operation dials

Other menu operations

Returning to the menu selection screen

1. Press the EXIT function button (I).



I. EXIT function button (return to menu selection screen)

ROP menu list

01 PAINT SWITCH	BLACK SHADING	➔ "BLACK SHADING" (see page 60)
	WHITE SHADING	➔ "WHITE SHADING" (see page 60)
	FLARE	➔ "FLARE" (see page 60)
	GAMMA	➔ "GAMMA" (see page 60)
	BLACK GAMMA	➔ "BLACK GAMMA" (see page 60)
	DRS	➔ "DRS" (see page 60)
	WHITE CLIP	➔ "WHITE CLIP" (see page 60)
	KNEE	➔ "KNEE" (see page 60)
	MATRIX	➔ "MATRIX" (see page 60)
	COLOR CORRECT	➔ "COLOR CORRECT" (see page 60)
	HD S.DTL	➔ "HD S.DTL" (see page 60)
	HD DTL	➔ "HD DTL" (see page 60)
	UHD S.DTL	➔ "UHD S.DTL" (see page 60)
	UHD DTL	➔ "UHD DTL" (see page 60)
	SD DTL	➔ "SD DTL" (see page 60)
	PRESET MATRIX	➔ "PRESET MATRIX" (see page 60)
LINEAR MATRIX	➔ "LINEAR MATRIX" (see page 60)	
02 SCENE	SCENE1	➔ "SCENE1" (see page 61)
	SCENE2	➔ "SCENE2" (see page 61)
	SCENE3	➔ "SCENE3" (see page 61)
	SCENE4	➔ "SCENE4" (see page 61)
	SCENE5	➔ "SCENE5" (see page 61)
	SCENE6	➔ "SCENE6" (see page 61)
	SCENE7	➔ "SCENE7" (see page 61)
	SCENE8	➔ "SCENE8" (see page 61)
	STORE SCENE	➔ "STORE SCENE" (see page 61)
	STORE EXECUTE	➔ "STORE EXECUTE" (see page 61)
	EXT1	➔ "EXT1" (see page 61)
	EXT2	➔ "EXT2" (see page 61)
	BUTTON SEL MODE	➔ "BUTTON SEL MODE" (see page 61)
03 SHUTTER SPEED	SHUTTER SPEED	➔ "SHUTTER SPEED" (see page 62)
	SHUTTER SYNCHRO	➔ "SHUTTER SYNCHRO" (see page 62)
	SHUTTER SW	➔ "SHUTTER SW" (see page 62)
	SHUTTER MODE	➔ "SHUTTER MODE" (see page 62)
04 FILTER	ND	➔ "ND" (see page 63)
	CC	➔ "CC" (see page 63)
	HEAD	➔ "HEAD" (see page 63)

05 BLACK SHADING	H SAW R	➔ "H SAW R" (see page 64)
	H SAW G	➔ "H SAW G" (see page 64)
	H SAW B	➔ "H SAW B" (see page 64)
	H PARA R	➔ "H PARA R" (see page 64)
	H PARA G	➔ "H PARA G" (see page 64)
	H PARA B	➔ "H PARA B" (see page 64)
	V SAW R	➔ "V SAW R" (see page 64)
	V SAW G	➔ "V SAW G" (see page 64)
	V SAW B	➔ "V SAW B" (see page 64)
	V PARA R	➔ "V PARA R" (see page 64)
	V PARA G	➔ "V PARA G" (see page 64)
	V PARA B	➔ "V PARA B" (see page 64)
	CORRECT	➔ "CORRECT" (see page 64)
06 PEDESTAL	PED R	➔ "PED R" (see page 65)
	PED G	➔ "PED G" (see page 65)
	PED B	➔ "PED B" (see page 65)
	M.PED	➔ "M.PED" (see page 65)
	M. PED ABS DISP SW	➔ "M. PED ABS DISP SW" (see page 65)
	PED OFFSET	➔ "PED OFFSET" (see page 65)
07 HD CHROMA	CHROMA LEVEL	➔ "CHROMA LEVEL" (see page 66)
	CHROMA LEVEL SW	➔ "CHROMA LEVEL SW" (see page 66)
08 UHD CHROMA	CHROMA LEVEL	➔ "CHROMA LEVEL" (see page 67)
	CHROMA LEVEL SW	➔ "CHROMA LEVEL SW" (see page 67)
09 RGB GAIN	GAIN AWB R	➔ "GAIN AWB R" (see page 68)
	GAIN AWB G	➔ "GAIN AWB G" (see page 68)
	GAIN AWB B	➔ "GAIN AWB B" (see page 68)
	GAIN OFFSET	➔ "GAIN OFFSET" (see page 68)
	GAIN ABS	➔ "GAIN ABS" (see page 68)
	G GAIN REL	➔ "G GAIN REL" (see page 68)
10 COLOR TEMP	COLOR TEMP	➔ "COLOR TEMP" (see page 69)
	GAIN R	➔ "GAIN R" (see page 69)
	AXIS G	➔ "AXIS G" (see page 69)
	GAIN B	➔ "GAIN B" (see page 69)
11 ECC	COLOR TEMP	➔ "COLOR TEMP" (see page 70)
	GAIN R	➔ "GAIN R" (see page 70)
	AXIS G	➔ "AXIS G" (see page 70)
	GAIN B	➔ "GAIN B" (see page 70)
	COLOR TEMP SW	➔ "COLOR TEMP SW" (see page 70)
12 CAM USER SW TEMP	COLOR TEMP	➔ "COLOR TEMP" (see page 71)
	GAIN R	➔ "GAIN R" (see page 71)
	AXIS G	➔ "AXIS G" (see page 71)
	GAIN B	➔ "GAIN B" (see page 71)

13 WHITE SHADING	H SAW R	➔ "H SAW R" (see page 72)
	H SAW G	➔ "H SAW G" (see page 72)
	H SAW B	➔ "H SAW B" (see page 72)
	H PARA R	➔ "H PARA R" (see page 72)
	H PARA G	➔ "H PARA G" (see page 72)
	H PARA B	➔ "H PARA B" (see page 72)
	V SAW R	➔ "V SAW R" (see page 72)
	V SAW G	➔ "V SAW G" (see page 72)
	V SAW B	➔ "V SAW B" (see page 72)
	V PARA R	➔ "V PARA R" (see page 72)
	V PARA G	➔ "V PARA G" (see page 72)
	V PARA B	➔ "V PARA B" (see page 72)
	CORRECT	➔ "CORRECT" (see page 72)
14 FLARE	FLARE R	➔ "FLARE R" (see page 73)
	FLARE G	➔ "FLARE G" (see page 73)
	FLARE B	➔ "FLARE B" (see page 73)
	M.FLARE	➔ "M.FLARE" (see page 73)
	FLARE	➔ "FLARE" (see page 73)
15 GAMMA	GAMMA R	➔ "GAMMA R" (see page 74)
	GAMMA MASTER	➔ "GAMMA MASTER" (see page 74)
	GAMMA B	➔ "GAMMA B" (see page 74)
	INITIAL GAMMA	➔ "INITIAL GAMMA" (see page 74)
	GAMMA MODE	➔ "GAMMA MODE" (see page 74)
	BLACK STRETCH	➔ "BLACK STRETCH" (see page 74)
	DYNAMIC LEVEL	➔ "DYNAMIC LEVEL" (see page 74)
	KNEE POINT	➔ "KNEE POINT" (see page 74)
	KNEE SLOPE	➔ "KNEE SLOPE" (see page 74)
	GAMMA	➔ "GAMMA" (see page 75)
	ABB	➔ "ABB" (see page 75)
	DRS EFFECT.D	➔ "DRS EFFECT.D" (see page 75)
DRS SW	➔ "DRS SW" (see page 75)	
16 BLACK GAMMA	BLACK GAMMA R	➔ "BLACK GAMMA R" (see page 76)
	BLACK GAMMA MASTER	➔ "BLACK GAMMA MASTER" (see page 76)
	BLACK GAMMA B	➔ "BLACK GAMMA B" (see page 76)
	B.GAMMA	➔ "B.GAMMA" (see page 76)
17 KNEE	POINT R	➔ "POINT R" (see page 77)
	POINT MASTER	➔ "POINT MASTER" (see page 77)
	POINT B	➔ "POINT B" (see page 77)
	SLOPE R	➔ "SLOPE R" (see page 77)
	SLOPE MASTER	➔ "SLOPE MASTER" (see page 77)
	SLOPE B	➔ "SLOPE B" (see page 77)
	KNEE	➔ "KNEE" (see page 77)
18 WHITE CLIP	WHITE CLIP LEVEL R	➔ "WHITE CLIP LEVEL R" (see page 78)
	WHITE CLIP LEVEL MASTER	➔ "WHITE CLIP LEVEL MASTER" (see page 78)
	WHITE CLIP LEVEL B	➔ "WHITE CLIP LEVEL B" (see page 78)
	HI-COLOR LEVEL	➔ "HI-COLOR LEVEL" (see page 78)
	WHITE CLIP	➔ "WHITE CLIP" (see page 78)
	HIGH COLOR	➔ "HIGH COLOR" (see page 78)

19 DRS	EFFECT DEPTH	➔ "EFFECT DEPTH" (see page 79)
	DRS	➔ "DRS" (see page 79)
20 HD DETAIL	MASTER DETAIL	➔ "MASTER DETAIL" (see page 80)
	DETAIL LV H	➔ "DETAIL LV H" (see page 80)
	DETAIL LV V	➔ "DETAIL LV V" (see page 80)
	PEAK FRQ	➔ "PEAK FRQ" (see page 80)
	V DETAIL FRQ	➔ "V DETAIL FRQ" (see page 80)
	CRISP	➔ "CRISP" (see page 80)
	LEVEL DEPENDENT	➔ "LEVEL DEPENDENT" (see page 80)
	DARK DETAIL	➔ "DARK DETAIL" (see page 80)
	DETAIL SOURCE	➔ "DETAIL SOURCE" (see page 80)
	DETAIL GAIN (+)	➔ "DETAIL GAIN (+)" (see page 81)
	DETAIL GAIN (-)	➔ "DETAIL GAIN (-)" (see page 81)
	DETAIL CLIP+	➔ "DETAIL CLIP+" (see page 81)
	DETAIL CLIP-	➔ "DETAIL CLIP-" (see page 81)
	KNEE APERTURE	➔ "KNEE APERTURE" (see page 81)
	DETAIL KNEE	➔ "DETAIL KNEE" (see page 81)
	DETAIL	➔ "DETAIL" (see page 81)
	LV DPN SW	➔ "LV DPN SW" (see page 81)
D. DTL SW	➔ "D. DTL SW" (see page 81)	
21 UHD DETAIL	MASTER DETAIL	➔ "MASTER DETAIL" (see page 82)
	DETAIL LV H	➔ "DETAIL LV H" (see page 82)
	DETAIL LV V	➔ "DETAIL LV V" (see page 82)
	PEAK FRQ	➔ "PEAK FRQ" (see page 82)
	CRISP	➔ "CRISP" (see page 82)
	DETAIL CLIP+	➔ "DETAIL CLIP+" (see page 82)
	DETAIL CLIP-	➔ "DETAIL CLIP-" (see page 82)
	KNEE APERTURE	➔ "KNEE APERTURE" (see page 82)
	DETAIL KNEE	➔ "DETAIL KNEE" (see page 82)
	LEVEL DEPENDENT	➔ "LEVEL DEPENDENT" (see page 82)
	DARK DETAIL	➔ "DARK DETAIL" (see page 82)
	DETAIL	➔ "DETAIL" (see page 82)
	LV DPN SW	➔ "LV DPN SW" (see page 82)
D. DTL SW	➔ "D. DTL SW" (see page 82)	
22 SD DETAIL	DETAIL LV H	➔ "DETAIL LV H" (see page 83)
	DETAIL LV V	➔ "DETAIL LV V" (see page 83)
	PEAK1 FRQ	➔ "PEAK1 FRQ" (see page 83)
	PEAK2 FRQ	➔ "PEAK2 FRQ" (see page 83)
	CRISP	➔ "CRISP" (see page 83)
	LEVEL DEPENDENT	➔ "LEVEL DEPENDENT" (see page 83)
	DARK DETAIL	➔ "DARK DETAIL" (see page 83)
DETAIL	➔ "DETAIL" (see page 83)	

23 HD SKIN TONE DTL	MEMORY SELECT	➔ "MEMORY SELECT" (see page 84)
	CURSOR	➔ "CURSOR" (see page 84)
	POS H	➔ "POS H" (see page 84)
	POS V	➔ "POS V" (see page 84)
	SKIN GET	➔ "SKIN GET" (see page 84)
	ZEBRA SWITCH	➔ "ZEBRA SWITCH" (see page 84)
	ZEBRA EFFECT	➔ "ZEBRA EFFECT" (see page 84)
	EFFECT MEMORY	➔ "EFFECT MEMORY" (see page 85)
	SKIN TONE CRISP	➔ "SKIN TONE CRISP" (see page 85)
	I CENTER	➔ "I CENTER" (see page 85)
	I WIDTH	➔ "I WIDTH" (see page 85)
	Q WIDTH	➔ "Q WIDTH" (see page 85)
	Q PHASE	➔ "Q PHASE" (see page 85)
	SKIN TONE DETAIL	➔ "SKIN TONE DETAIL" (see page 85)
24 UHD SKIN TONE DTL	MEMORY SELECT	➔ "MEMORY SELECT" (see page 86)
	CURSOR	➔ "CURSOR" (see page 86)
	POS H	➔ "POS H" (see page 86)
	POS V	➔ "POS V" (see page 86)
	SKIN GET	➔ "SKIN GET" (see page 86)
	ZEBRA SWITCH	➔ "ZEBRA SWITCH" (see page 86)
	ZEBRA EFFECT	➔ "ZEBRA EFFECT" (see page 86)
	EFFECT MEMORY	➔ "EFFECT MEMORY" (see page 87)
	SKIN TONE CRISP	➔ "SKIN TONE CRISP" (see page 87)
	I CENTER	➔ "I CENTER" (see page 87)
	I WIDTH	➔ "I WIDTH" (see page 87)
	Q WIDTH	➔ "Q WIDTH" (see page 87)
	Q PHASE	➔ "Q PHASE" (see page 87)
	SKIN TONE DETAIL	➔ "SKIN TONE DETAIL" (see page 87)
25 LINEAR MATRIX	PRESET MATRIX	➔ "PRESET MATRIX" (see page 88)
	LINEAR TABLE	➔ "LINEAR TABLE" (see page 88)
	COLOR CORRECT	➔ "COLOR CORRECT" (see page 88)
	MATRIX(R-G) P	➔ "MATRIX(R-G) P" (see page 88)
	MATRIX(R-G) N	➔ "MATRIX(R-G) N" (see page 88)
	MATRIX(R-B) P	➔ "MATRIX(R-B) P" (see page 88)
	MATRIX(R-B) N	➔ "MATRIX(R-B) N" (see page 88)
	MATRIX(G-R) P	➔ "MATRIX(G-R) P" (see page 88)
	MATRIX(G-R) N	➔ "MATRIX(G-R) N" (see page 88)
	MATRIX(G-B) P	➔ "MATRIX(G-B) P" (see page 89)
	MATRIX(G-B) N	➔ "MATRIX(G-B) N" (see page 89)
	MATRIX(B-R) P	➔ "MATRIX(B-R) P" (see page 89)
	MATRIX(B-R) N	➔ "MATRIX(B-R) N" (see page 89)
	MATRIX(B-G) P	➔ "MATRIX(B-G) P" (see page 89)
	MATRIX(B-G) N	➔ "MATRIX(B-G) N" (see page 89)
	MATRIX	➔ "MATRIX" (see page 89)
	COLOR CORRECT	➔ "COLOR CORRECT" (see page 89)
	LINEAR MATRIX	➔ "LINEAR MATRIX" (see page 89)

26 COLOR CORRECTION	PRESET MATRIX	➔ "PRESET MATRIX" (see page 91)
	LINEAR TABLE	➔ "LINEAR TABLE" (see page 91)
	CORRECT TABLE	➔ "CORRECT TABLE" (see page 91)
	COLOR CORRECT	➔ "COLOR CORRECT" (see page 91)
	SAT	➔ "SAT" (see page 91)
	PHASE	➔ "PHASE" (see page 91)
	SAT G	➔ "SAT G" (see page 92)
	SAT G_CY	➔ "SAT G_CY" (see page 92)
	SAT CY	➔ "SAT CY" (see page 92)
	SAT CY_B	➔ "SAT CY_B" (see page 92)
	SAT B	➔ "SAT B" (see page 92)
	SAT B_MG	➔ "SAT B_MG" (see page 92)
	SAT MG	➔ "SAT MG" (see page 92)
	SAT MG_R	➔ "SAT MG_R" (see page 92)
	SAT R	➔ "SAT R" (see page 92)
	SAT R_YE	➔ "SAT R_YE" (see page 92)
	SAT YE	➔ "SAT YE" (see page 92)
	SAT YE_G	➔ "SAT YE_G" (see page 92)
	PHASE G	➔ "PHASE G" (see page 92)
	PHASE G_CY	➔ "PHASE G_CY" (see page 92)
	PHASE CY	➔ "PHASE CY" (see page 92)
	PHASE CY_B	➔ "PHASE CY_B" (see page 92)
	PHASE B	➔ "PHASE B" (see page 92)
	PHASE B_MG	➔ "PHASE B_MG" (see page 92)
	PHASE MG	➔ "PHASE MG" (see page 92)
	PHASE MG_R	➔ "PHASE MG_R" (see page 92)
	PHASE R	➔ "PHASE R" (see page 92)
	PHASE R_YE	➔ "PHASE R_YE" (see page 92)
	PHASE YE	➔ "PHASE YE" (see page 92)
	PHASE YE_G	➔ "PHASE YE_G" (see page 92)
	CURSOR	➔ "CURSOR" (see page 92)
	POS H	➔ "POS H" (see page 92)
POS V	➔ "POS V" (see page 92)	
GET	➔ "GET" (see page 92)	
MATRIX	➔ "MATRIX" (see page 92)	
COLOR CORRECT	➔ "COLOR CORRECT" (see page 92)	
LINEAR MATRIX	➔ "LINEAR MATRIX" (see page 92)	
27 SKIN CORRECTION	SKIN AREA HUE	➔ "SKIN AREA HUE" (see page 93)
	SKIN AREA TONE	➔ "SKIN AREA TONE" (see page 93)
	SKIN AREA SW	➔ "SKIN AREA SW" (see page 93)
	SKIN AREA TABLE	➔ "SKIN AREA TABLE" (see page 93)
28 DNR	DNR LEVEL	➔ "DNR LEVEL" (see page 94)
	DNR SW	➔ "DNR SW" (see page 94)
29 IRIS RELATIVE	SENSE	➔ "SENSE" (see page 95)
	COARSE	➔ "COARSE" (see page 95)
	RELATIVE	➔ "RELATIVE" (see page 95)

30 SHUTTER SELECT	POSITION1	➡ "POSITION1" (see page 96)
	POSITION2	➡ "POSITION2" (see page 96)
	POSITION3	➡ "POSITION3" (see page 96)
	POSITION4	➡ "POSITION4" (see page 96)
	POSITION5	➡ "POSITION5" (see page 96)
	POSITION6	➡ "POSITION6" (see page 96)
	POSITION7	➡ "POSITION7" (see page 96)
	POSITION8	➡ "POSITION8" (see page 96)
	SHUTTER OFF	➡ "SHUTTER OFF" (see page 96)
31 LENS FILE/EDIT	LENS FILE SW	➡ "LENS FILE SW" (see page 98)
	FILE No.	➡ "FILE No." (see page 98)
	FILE NAME	➡ "FILE NAME" (see page 98)
	MODE	➡ "MODE" (see page 98)
	EXECUTE	➡ "EXECUTE" (see page 98)
	EXTENDER	➡ "EXTENDER" (see page 98)
	FILE No.	➡ "FILE No." (see page 98)
	FILE NAME	➡ "FILE NAME" (see page 98)
	FLARE R	➡ "FLARE R" (see page 98)
	FLARE G	➡ "FLARE G" (see page 98)
	FLARE B	➡ "FLARE B" (see page 98)
	GAIN R	➡ "GAIN R" (see page 98)
	GAIN B	➡ "GAIN B" (see page 98)
	W H SAW R	➡ "W H SAW R" (see page 99)
	W H SAW G	➡ "W H SAW G" (see page 99)
	W H SAW B	➡ "W H SAW B" (see page 99)
	W H PARA R	➡ "W H PARA R" (see page 99)
	W H PARA G	➡ "W H PARA G" (see page 99)
	W H PARA B	➡ "W H PARA B" (see page 99)
	W V SAW R	➡ "W V SAW R" (see page 99)
	W V SAW G	➡ "W V SAW G" (see page 99)
	W V SAW B	➡ "W V SAW B" (see page 99)
	W V PARA R	➡ "W V PARA R" (see page 99)
	W V PARA G	➡ "W V PARA G" (see page 99)
	W V PARA B	➡ "W V PARA B" (see page 99)
	STORE NUM	➡ "STORE NUM" (see page 99)
	STORE	➡ "STORE" (see page 99)
CANCEL	➡ "CANCEL" (see page 99)	
32 MONITOR	MONITOR R	➡ "MONITOR R" (see page 100)
	MONITOR G	➡ "MONITOR G" (see page 100)
	MONITOR B	➡ "MONITOR B" (see page 100)
	MONITOR SEQ	➡ "MONITOR SEQ" (see page 100)
	MONITOR ENC	➡ "MONITOR ENC" (see page 100)

33 SYSTEM CAM	FORMAT	➡ "FORMAT" (see page 102)
	TALK OFF INCOM1	➡ "TALK OFF INCOM1" (see page 102)
	TALK OFF INCOM2	➡ "TALK OFF INCOM2" (see page 102)
	MIC1 GAIN	➡ "MIC1 GAIN" (see page 102)
	MIC1 LINE LV	➡ "MIC1 LINE LV" (see page 102)
	MIC1 AMP	➡ "MIC1 AMP" (see page 102)
	MIC2 GAIN	➡ "MIC2 GAIN" (see page 102)
	MIC2 LINE LV	➡ "MIC2 LINE LV" (see page 102)
	MIC2 AMP	➡ "MIC2 AMP" (see page 102)
	SHOOTING MODE	➡ "SHOOTING MODE" (see page 102)
	CAM FAN	➡ "CAM FAN" (see page 102)
	HDR SW	➡ "HDR SW" (see page 102)
	TALLY GUARD	➡ "TALLY GUARD" (see page 102)
	ASU FILTER	➡ "ASU FILTER" (see page 102)
	ASU MODE	➡ "ASU MODE" (see page 102)
	ASU M. PED TARGET	➡ "ASU M. PED TARGET" (see page 102)
	REF.RECALL	➡ "REF.RECALL" (see page 102)
	CABLE CONNECT	➡ "CABLE CONNECT" (see page 102)
	HEAD PW	➡ "HEAD PW" (see page 102)
	VF PW	➡ "VF PW" (see page 102)
	CTRL ROTATION	➡ "CTRL ROTATION" (see page 102)
TALLY CONTROL	➡ "TALLY CONTROL" (see page 102)	
TALLY INPUT	➡ "TALLY INPUT" (see page 103)	
TALLY SIGNAL	➡ "TALLY SIGNAL" (see page 103)	
TALLY CONT MD	➡ "TALLY CONT MD" (see page 103)	
34 SYSTEM CCU	FORMAT	➡ "FORMAT" (see page 105)
	RETURN1 SELECT	➡ "RETURN1 SELECT" (see page 105)
	RETURN2 SELECT	➡ "RETURN2 SELECT" (see page 105)
	RETURN3 SELECT	➡ "RETURN3 SELECT" (see page 105)
	RETURN4 SELECT	➡ "RETURN4 SELECT" (see page 105)
	RETURN FS	➡ "RETURN FS" (see page 105)
	CAMERA NUMBER	➡ "CAMERA NUMBER" (see page 105)
	D/C MODE	➡ "D/C MODE" (see page 105)
	U/C MODE	➡ "U/C MODE" (see page 105)
	BARS HD	➡ "BARS HD" (see page 105)
	BARS SD	➡ "BARS SD" (see page 105)
	C/B SETUP	➡ "C/B SETUP" (see page 105)
	SDI8 OUT	➡ "SDI8 OUT" (see page 105)
	HD H COARSE	➡ "HD H COARSE" (see page 105)
	HD H FINE	➡ "HD H FINE" (see page 105)
	SD H COARSE	➡ "SD H COARSE" (see page 105)
	SD H FINE	➡ "SD H FINE" (see page 105)
	SD-HD V	➡ "SD-HD V" (see page 105)
	SCH	➡ "SCH" (see page 105)
	CABLE CONNECT	➡ "CABLE CONNECT" (see page 105)
FORMAT MODE(push)	➡ "FORMAT MODE(push)" (see page 105)	

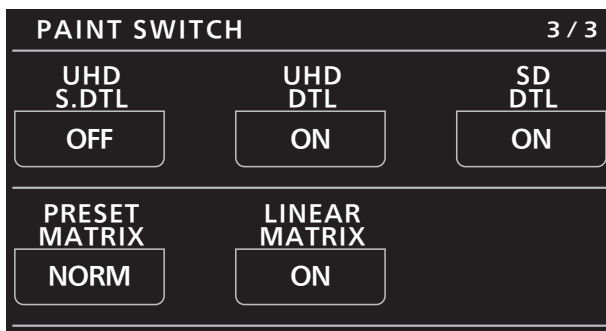
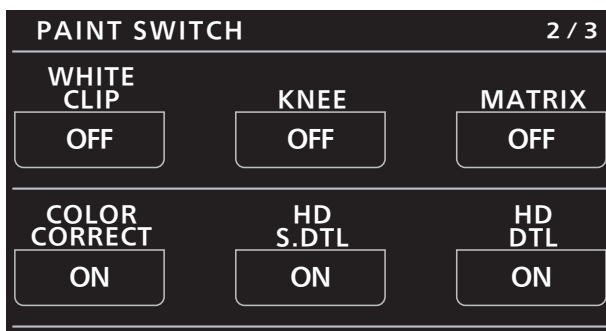
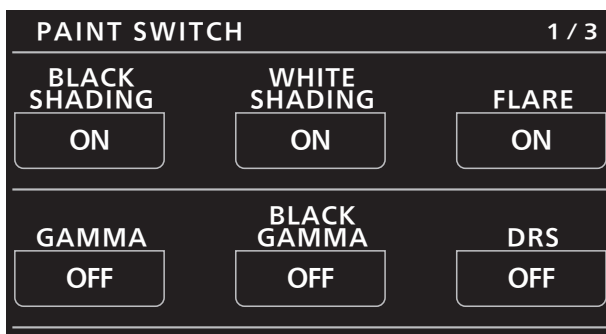
35 CAMERA MENU CONTROL	MENU ON/OFF	➔ "MENU ON/OFF" (see page 106)
	CURSOR/PARAMETER	➔ "CURSOR/PARAMETER" (see page 106)
	EXECUTE	➔ "EXECUTE" (see page 106)
36 CCU MENU CONTROL	MENU ON/OFF	➔ "MENU ON/OFF" (see page 107)
	CURSOR/PARAMETER	➔ "CURSOR/PARAMETER" (see page 107)
	EXECUTE	➔ "EXECUTE" (see page 107)
37 ROP SETTING	IRIS LEV MODE	➔ "IRIS LEV MODE" (see page 109)
	M.PED CONT	➔ "M.PED CONT" (see page 109)
	LOCK SELECT	➔ "LOCK SELECT" (see page 109)
	AUTO BUTTON	➔ "AUTO BUTTON" (see page 109)
	G/M PED VOL	➔ "G/M PED VOL" (see page 109)
	FREE+LOCK	➔ "FREE+LOCK" (see page 109)
	CAM SEL	➔ "CAM SEL" (see page 109)
	DTL BUTTON	➔ "DTL BUTTON" (see page 109)
	SKIN VOL	➔ "SKIN VOL" (see page 109)
	LCD BRIGHT	➔ "LCD BRIGHT" (see page 109)
	PANEL BRIGHT	➔ "PANEL BRIGHT" (see page 109)
	B.GAMMA VOL	➔ "B.GAMMA VOL" (see page 109)
	BUZZER	➔ "BUZZER" (see page 109)
	PERIOD	➔ "PERIOD" (see page 110)
	CYCLE	➔ "CYCLE" (see page 110)
	STD POSITION M.GAIN	➔ "STD POSITION M.GAIN" (see page 110)
	STD POSITION VAR	➔ "STD POSITION VAR" (see page 110)
	STD POSITION ND	➔ "STD POSITION ND" (see page 110)
	STD POSITION CC	➔ "STD POSITION CC" (see page 110)
	IRIS PRIORITY	➔ "IRIS PRIORITY" (see page 110)
	ROP DATA SAVE	➔ "ROP DATA SAVE" (see page 110)
	ROP DATA LOAD	➔ "ROP DATA LOAD" (see page 110)
	SD CARD FORMAT	➔ "SD CARD FORMAT" (see page 110)
	INITIAL with NW	➔ "INITIAL with NW" (see page 110)
	INITIAL	➔ "INITIAL" (see page 110)
	UPGRADE	➔ "UPGRADE" (see page 110)
	IRIS CALIBRATION TOP	➔ "IRIS CALIBRATION TOP" (see page 110)
	IRIS CALIBRATION BOTTOM	➔ "IRIS CALIBRATION BOTTOM" (see page 110)
	SYSTEM VERSION	➔ "SYSTEM VERSION" (see page 110)
	SOFT VERSION	➔ "SOFT VERSION" (see page 110)
FPGA VERSION	➔ "FPGA VERSION" (see page 110)	
38 CONNECT SETTING	CONNECT MODE CAM1	➔ "CONNECT MODE CAM1" (see page 111)
	CONNECT MODE CAM2 to CAM99	➔ "CONNECT MODE CAM2 to CAM99" (see page 111)

39 ROP IP SETTING	IP ADDRESS 1	➔ "IP ADDRESS 1" (see page 112)
	IP ADDRESS 2	➔ "IP ADDRESS 2" (see page 112)
	IP ADDRESS 3	➔ "IP ADDRESS 3" (see page 112)
	IP ADDRESS 4	➔ "IP ADDRESS 4" (see page 112)
	IP ADDRESS PORT	➔ "IP ADDRESS PORT" (see page 113)
	IP ADDRESS UPLOAD	➔ "IP ADDRESS UPLOAD" (see page 113)
	SUBNET MASK 1	➔ "SUBNET MASK 1" (see page 113)
	SUBNET MASK 2	➔ "SUBNET MASK 2" (see page 113)
	SUBNET MASK 3	➔ "SUBNET MASK 3" (see page 113)
	SUBNET MASK 4	➔ "SUBNET MASK 4" (see page 113)
	SUBNET MASK UPLOAD	➔ "SUBNET MASK UPLOAD" (see page 113)
	DEFAULT GATEWAY	➔ "DEFAULT GATEWAY" (see page 113)
	DEFAULT GATEWAY UPLOAD	➔ "DEFAULT GATEWAY UPLOAD" (see page 113)
	MAC ADDRESS	➔ "MAC ADDRESS" (see page 113)
40 CAMERA IP SETTING	CAM1 to CAM99 IP ADDRESS	➔ "CAM1 to CAM99 IP ADDRESS" (see page 114)
	CAM1 to CAM99 PORT	➔ "CAM1 to CAM99 PORT" (see page 114)
	CAM1 to CAM99 INF UPLOAD	➔ "CAM1 to CAM99 INF UPLOAD" (see page 114)
41 SD CARD STORE	MODE	➔ "MODE" (see page 115)
	FILE SELECT	➔ "FILE SELECT" (see page 115)
	FILE NUMBER	➔ "FILE NUMBER" (see page 115)
	EXECUTE	➔ "EXECUTE" (see page 115)
42 SD CARD LOAD	FILE SELECT	➔ "FILE SELECT" (see page 116)
	GET FILE	➔ "GET FILE" (see page 116)
	PUT FILE	➔ "PUT FILE" (see page 116)
	EXECUTE	➔ "EXECUTE" (see page 116)
43 REFERENCE	REF.CALL(push)	➔ "REF.CALL(push)" (see page 117)
	REF.DL EXEC	➔ "REF.DL EXEC" (see page 117)
	STORE REF	➔ "STORE REF" (see page 117)
	STORE EXECUTE	➔ "STORE EXECUTE" (see page 117)
44 AUTO IRIS SETTING	WINDOW SELECT	➔ "WINDOW SELECT" (see page 118)
	PEAK RATIO	➔ "PEAK RATIO" (see page 118)
	IRIS GAIN	➔ "IRIS GAIN" (see page 118)
	IRIS SPEED	➔ "IRIS SPEED" (see page 118)
	IRIS LEVEL	➔ "IRIS LEVEL" (see page 118)
	IRIS RANGE	➔ "IRIS RANGE" (see page 118)
	LENS EXT COMP SW	➔ "LENS EXT COMP SW" (see page 118)
	LENS EXT COMP LV	➔ "LENS EXT COMP LV" (see page 118)

45 HDR-PAINT	HLG BLACK GAMMA R	➡ "HLG BLACK GAMMA R" (see page 119)
	HLG BLACK GAMMA MASTER	➡ "HLG BLACK GAMMA MASTER" (see page 119)
	HLG BLACK GAMMA B	➡ "HLG BLACK GAMMA B" (see page 119)
	HLG B. GAMMA	➡ "HLG B. GAMMA" (see page 119)
	HLG KNEE POINT	➡ "HLG KNEE POINT" (see page 119)
	HLG KNEE SLOPE	➡ "HLG KNEE SLOPE" (see page 119)
	HLG KNEE SW	➡ "HLG KNEE SW" (see page 119)
	HLG TYPE	➡ "HLG TYPE" (see page 119)
	HLG MODE	➡ "HLG MODE" (see page 119)
	SDR CNVRT MD	➡ "SDR CNVRT MD" (see page 120)
	SHOOTING MODE	➡ "SHOOTING MODE" (see page 120)
	DNR LEVEL	➡ "DNR LEVEL" (see page 120)
	DNR SW	➡ "DNR SW" (see page 120)
	SDR CONVERT GAIN	➡ "SDR CONVERT GAIN" (see page 120)
	SDR CONVERT CLIP	➡ "SDR CONVERT CLIP" (see page 120)
	SDR CONVERT BLACK	➡ "SDR CONVERT BLACK" (see page 120)
	SDR CONVERT POINT	➡ "SDR CONVERT POINT" (see page 120)
	SDR CONVERT SLOPE	➡ "SDR CONVERT SLOPE" (see page 120)
46 LENS CONTROL	FOCUS	➡ "FOCUS" (see page 121)
	FOCUS SPEED	➡ "FOCUS SPEED" (see page 121)
	ZOOM	➡ "ZOOM" (see page 121)
	ZOOM SPEED	➡ "ZOOM SPEED" (see page 121)
	CONTROL SW	➡ "CONTROL SW" (see page 121)
47 AW CONTROLLER LINK	RECEIVE PORT	➡ "RECEIVE PORT" (see page 122)
	INFO UPLOAD	➡ "INFO UPLOAD" (see page 122)
	AW CONT LINK	➡ "AW CONT LINK" (see page 122)

01 PAINT SWITCH

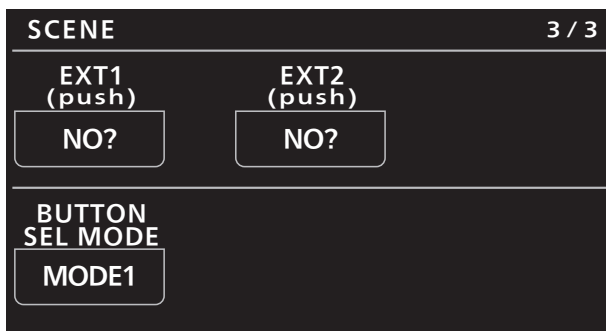
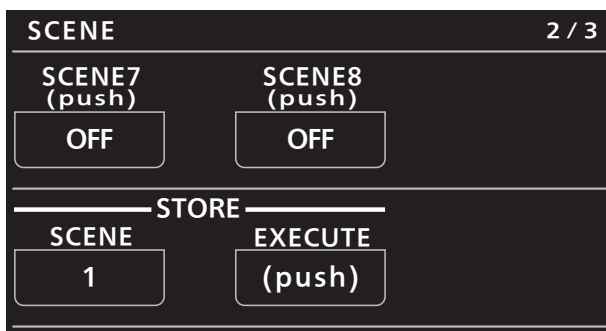
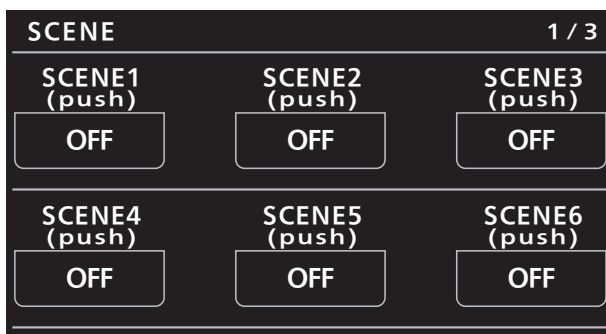
The setting values will vary depending on the connected camera.



Item	Setting details
BLACK SHADING	Enables or disables black shading (sawtooth waveform or parabolic waveform).
WHITE SHADING	Enables or disables white shading (sawtooth waveform or parabolic waveform).
FLARE	Enables or disables the flare.
GAMMA	Enables or disables the gamma.
BLACK GAMMA	Enables or disables the black gamma.
DRS	Enables or disables the dynamic range stretcher function. When this is enabled, contrast is adjusted automatically.
WHITE CLIP	Enables or disables the white clip function.
KNEE	Enables or disables the knee.
MATRIX	Enables or disables the matrix (linear matrix / 12-axis color correction).
COLOR CORRECT	Enables or disables 12-axis color correction.
HD S.DTL	Enables or disables the HD skin tone detail.
HD DTL	Enables or disables the HD detail.
UHD S.DTL	Enables or disables the UHD skin tone detail.
UHD DTL	Enables or disables the UHD detail.
SD DTL	Enables or disables the SD detail.
PRESET MATRIX	Sets the preset matrix.
LINEAR MATRIX	Enables or disables the linear matrix.

02 SCENE

The setting values will vary depending on the connected camera.

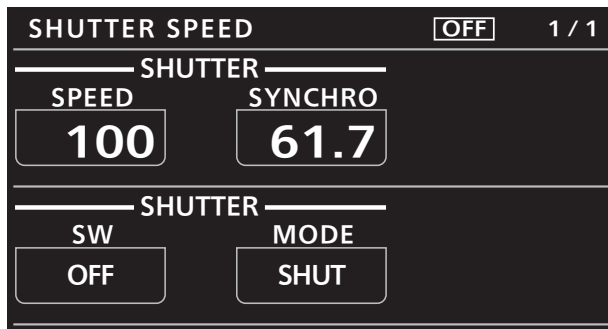


Item	Setting details
SCENE1	Set the scene file to ON or OFF. <ul style="list-style-type: none"> When a scene file is set to ON, the other scene files will be set to OFF. If you reselect a scene file that is set to ON, it will be set to SCENE OFF.
SCENE2	
SCENE3	
SCENE4	
SCENE5	
SCENE6	
SCENE7	
SCENE8	
STORE SCENE	Displays the number of the scene file you want to save.
STORE EXECUTE	Executes the scene file number displayed in [STORE SCENE].
EXT1	Applies the scene data loaded to "EXT1" with [SD CARD LOAD] to the camera and CCU. When this is performed, the scene file will be set to OFF.
EXT2	Applies the scene data loaded to "EXT2" with [SD CARD LOAD] to the camera and CCU. When this is performed, the scene file will be set to OFF.
BUTTON SEL MODE	Interchanges the function performed when the [FILES] button on the panel is pressed. MODE1 (default) Short press: Recall a scene file Long press: Display the menu MODE2 Short press: Display the menu Long press: Recall a scene file

03 SHUTTER SPEED

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

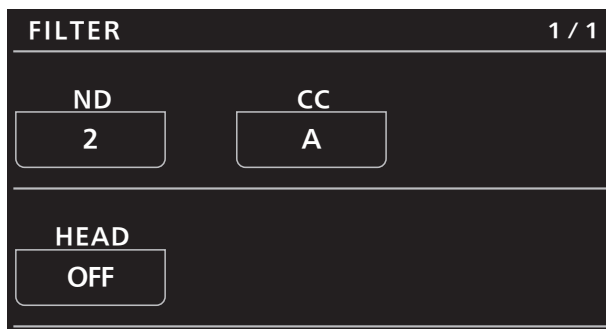


Item	Setting details
SHUTTER SPEED	Sets the shutter speed for when [SHUTTER MODE] is set to "SHUT".
SHUTTER SYNCHRO	Sets the shutter speed for when [SHUTTER MODE] is set to "SYNC".
SHUTTER SW	Enables or disables the shutter function.
SHUTTER MODE	Selects the shutter operation mode. SHUT The shutter speed set in [SHUTTER SPEED] is used. SYNC The shutter speed set in [SHUTTER SYNCHRO] is used.

04 FILTER

The setting values will vary depending on the connected camera.

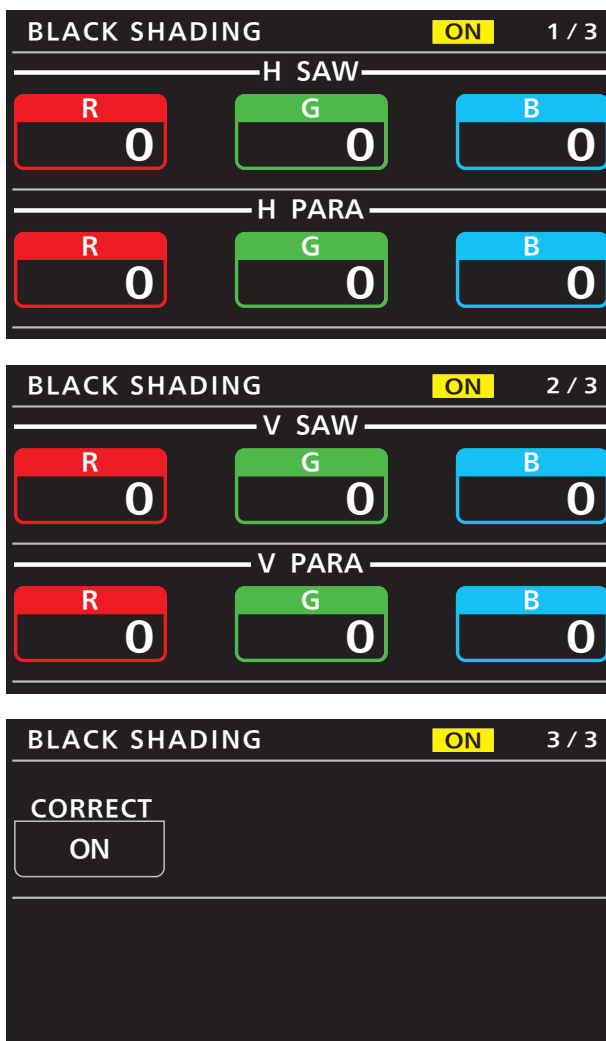
When a setting value differs from that of the reference file, it will be displayed in orange.



Item	Setting details
ND	Sets the ND filter position.
CC	Sets the CC filter position.
HEAD	When this is set to "ON", filter control on the camera side is enabled. This is also set to "ON" when you press the camera's [FILTER LOCAL] switch and light it.

05 BLACK SHADING

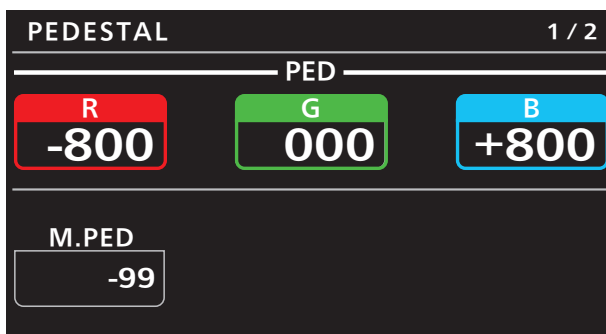
The setting values will vary depending on the connected camera.



Item	Setting details
H SAW R	Adjusts the black shading gain for R, G, and Bch in the horizontal direction using a sawtooth waveform.
H SAW G	
H SAW B	
H PARA R	Adjusts the black shading gain for R, G, and Bch in the horizontal direction using a parabolic waveform.
H PARA G	
H PARA B	
V SAW R	Adjusts the black shading gain for R, G, and Bch in the vertical direction using a sawtooth waveform.
V SAW G	
V SAW B	
V PARA R	Adjusts the black shading gain for R, G, and Bch in the vertical direction using a parabolic waveform.
V PARA G	
V PARA B	
CORRECT	Enables or disables black shading (sawtooth waveform or parabolic waveform) correction.

06 PEDESTAL

The setting values will vary depending on the connected camera.

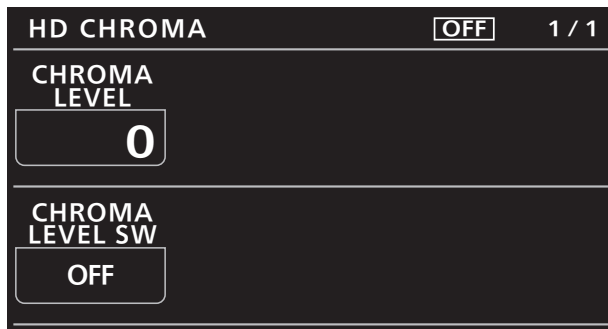


Item	Setting details
PED R	Sets the red correction level for the master pedestal.
PED G	Sets the green correction level for the master pedestal.
PED B	Sets the blue correction level for the master pedestal.
M.PED	Indicates set master pedestal value. (Settings cannot be made.)
M. PED ABS DISP SW	Sets the master pedestal display setting. ON Absolute values OFF Relative values
PED OFFSET	Sets whether to retain the Rch, Gch, and Bch pedestal levels when the auto black balance is adjusted. ON The values set in [PED R], [PED G], and [PED B] are retained. OFF The [PED R], [PED G], and [PED B] values are set to "0".

07 HD CHROMA

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

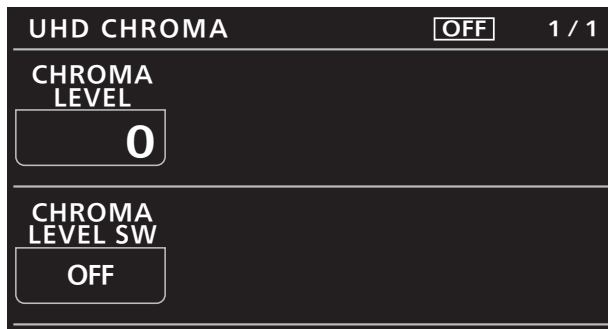


Item	Setting details
CHROMA LEVEL	Adjusts the chroma gain.
CHROMA LEVEL SW	Enables or disables the chroma gain adjustment.

08 UHD CHROMA

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

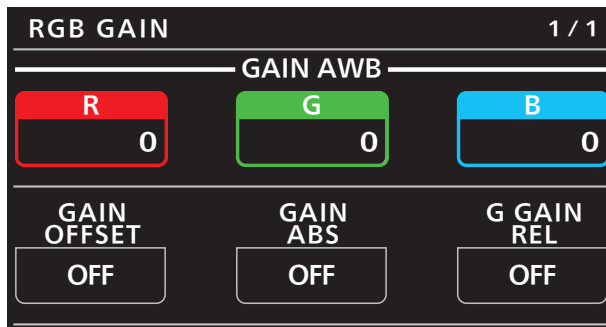


Item	Setting details
CHROMA LEVEL	Adjusts the chroma gain.
CHROMA LEVEL SW	Enables or disables the chroma gain adjustment.

09 RGB GAIN

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

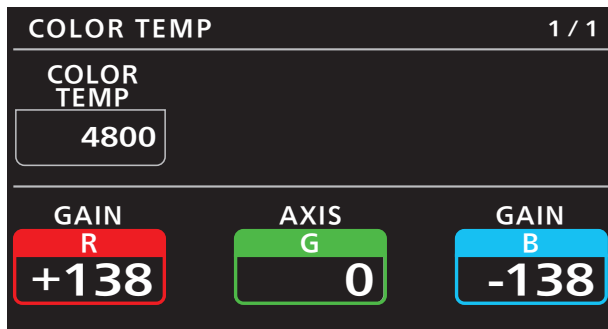


Item	Setting details
GAIN AWB R	Sets the red correction level for the gain.
GAIN AWB G	Sets the green correction level for the gain.
GAIN AWB B	Sets the blue correction level for the gain.
GAIN OFFSET	Sets whether to retain the Rch, Gch, and Bch gain levels when the auto white balance is adjusted. ON The values set in [GAIN AWB R], [GAIN AWB G], and [GAIN AWB B] are retained. OFF The [GAIN AWB R], [GAIN AWB G], and [GAIN AWB B] values are set to "0".
GAIN ABS	Sets whether to display the absolute value for the RGB gain. <ul style="list-style-type: none"> When this is set to "ON" and the [GAIN AWB R], [GAIN AWB G], [GAIN AWB B] values are changed, the [UNDO] button will be lit but its operation will be disabled.
G GAIN REL	Enables or disables relative value control for the Gch gain.

10 COLOR TEMP

The setting values will vary depending on the connected camera.

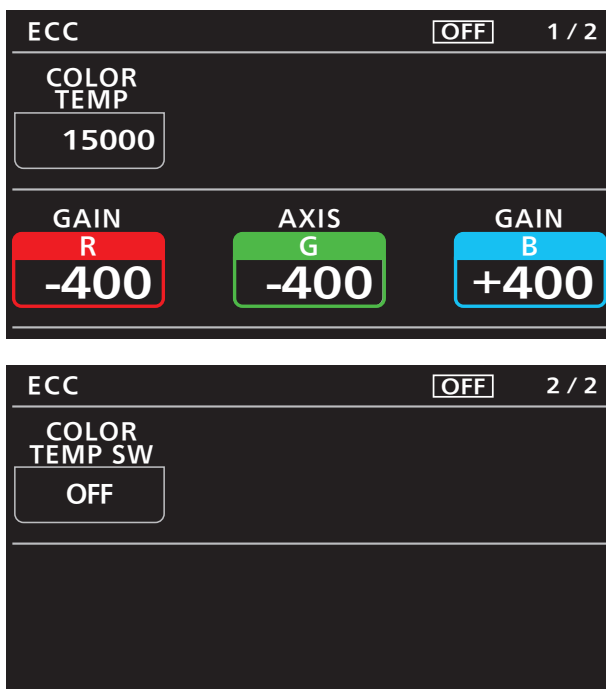
When a setting value differs from that of the reference file, it will be displayed in orange.



Item	Setting details
COLOR TEMP	Set color temperature settings.
GAIN R	Sets the red correction level for the color temperature.
AXIS G	Sets the green correction level for the color temperature.
GAIN B	Sets the blue correction level for the color temperature.

11 ECC

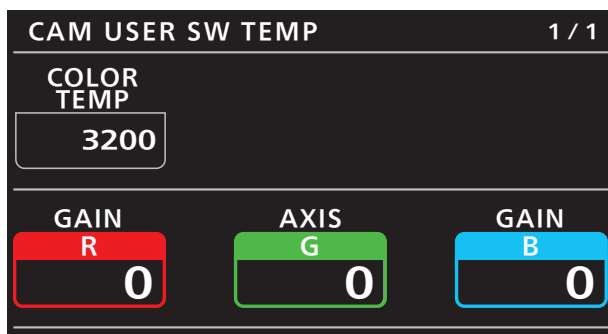
The setting values will vary depending on the connected camera.



Item	Setting details
COLOR TEMP	Sets the color temperature when [COLOR TEMP SW] is set to "ON". An arrow will appear on the right if the value is too high or low.
GAIN R	Sets the red correction level for the color temperature.
AXIS G	Sets the green correction level for the color temperature.
GAIN B	Sets the blue correction level for the color temperature.
COLOR TEMP SW	Turn this on when adjusting the color temperature manually.

12 CAM USER SW TEMP

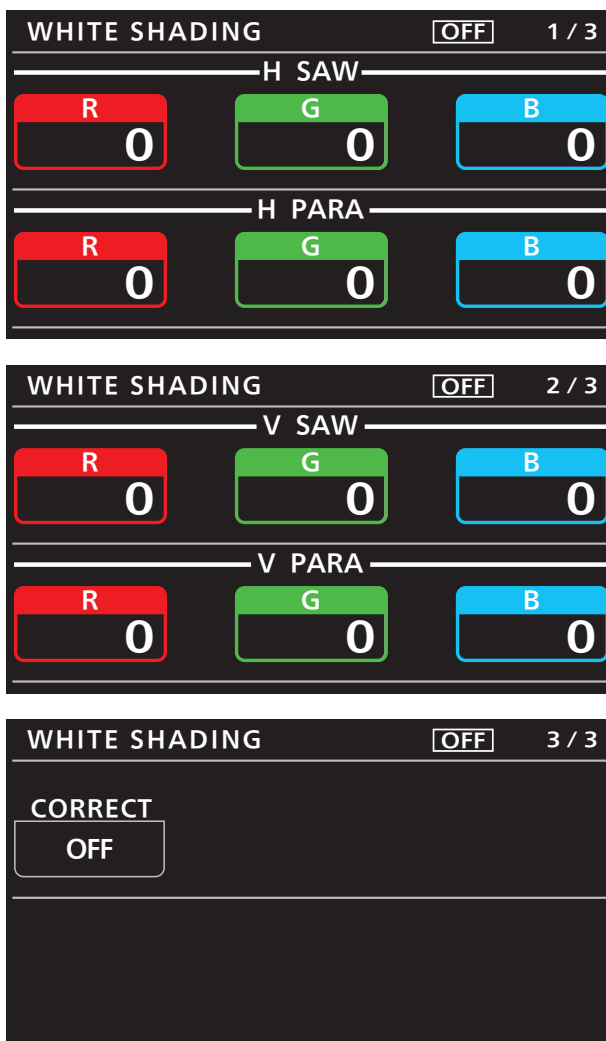
The setting values will vary depending on the connected camera.



Item	Setting details
COLOR TEMP	Sets the color temperature for when "C.TEMP" is assigned to the [USER 1], [USER 2], [USER 3], or [USER 4] button on the camera and the function is enabled.
GAIN R	Sets the red correction level for the color temperature.
AXIS G	Sets the green correction level for the color temperature.
GAIN B	Sets the blue correction level for the color temperature.

13 WHITE SHADING

The setting values will vary depending on the connected camera.

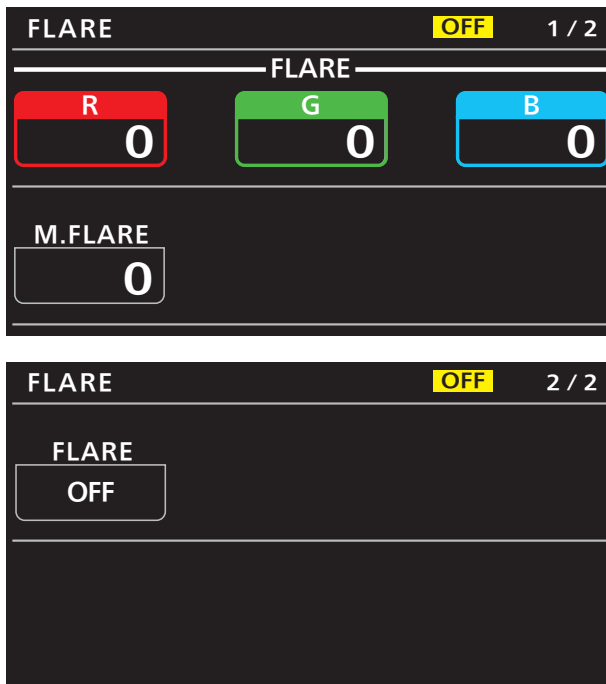


Item	Setting details
H SAW R	Adjusts the white shading gain for R, G, and Bch in the horizontal direction using a sawtooth waveform.
H SAW G	
H SAW B	
H PARA R	Adjusts the white shading gain for R, G, and Bch in the horizontal direction using a parabolic waveform.
H PARA G	
H PARA B	
V SAW R	Adjusts the white shading gain for R, G, and Bch in the vertical direction using a sawtooth waveform.
V SAW G	
V SAW B	
V PARA R	Adjusts the white shading gain for R, G, and Bch in the vertical direction using a parabolic waveform.
V PARA G	
V PARA B	
CORRECT	Enables or disables white shading (sawtooth waveform or parabolic waveform) correction.

14 FLARE

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

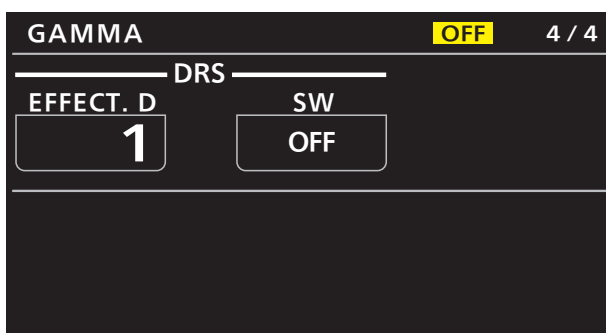
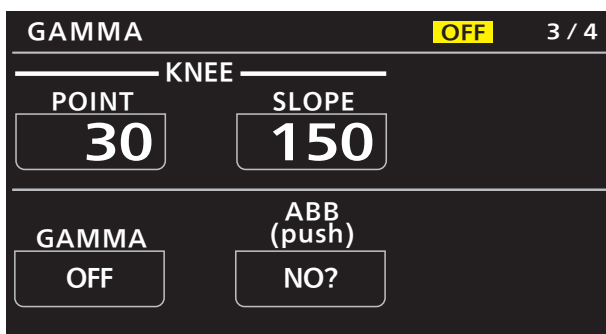
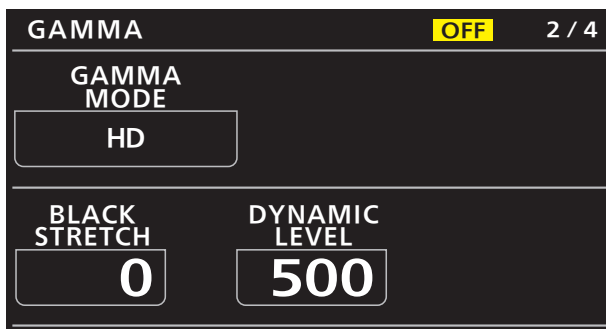
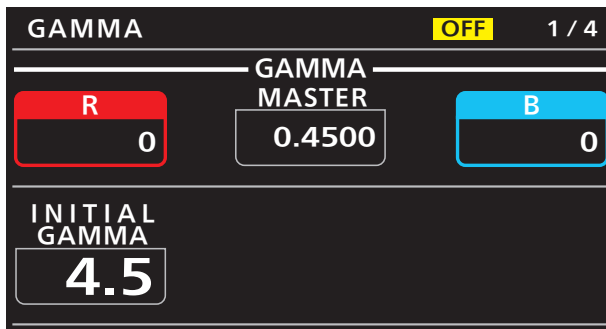


Item	Setting details
FLARE R	Adjusts the Rch flare.
FLARE G	Adjusts the Gch flare.
FLARE B	Adjusts the Bch flare.
M.FLARE	Adjusts the master flare.
FLARE	Enables or disables flare correction.

15 GAMMA

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.



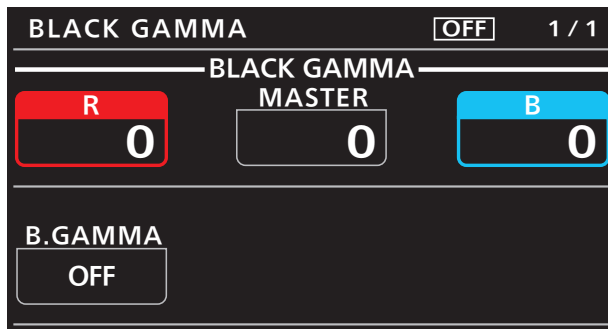
Item	Setting details
GAMMA R	Adjusts the red gamma characteristic for the master gamma.
GAMMA MASTER	Adjusts the gamma characteristic.
GAMMA B	Adjusts the blue gamma characteristic for the master gamma.
INITIAL GAMMA	Sets the rising slope for the gamma.
GAMMA MODE	Sets the gamma characteristic type.
BLACK STRETCH	Sets the gamma stretch position for when [GAMMA MODE] is set to "FILM REC".
DYNAMIC LEVEL	Sets the dynamic range for when [GAMMA MODE] is set to "FILM REC".
KNEE POINT	Sets the knee point for when [GAMMA MODE] is set to "VIDEO REC".
KNEE SLOPE	Sets the knee slope for when [GAMMA MODE] is set to "VIDEO REC".

Item	Setting details
GAMMA	Enables or disables gamma correction.
ABB	Select "YES?" to perform auto black balance adjustment. Press and hold the button during black balance adjustment (lamp on) to cancel adjustment. ("BREAK" appears on the picture monitor (PM) of the CCU.)
DRS EFFECT.D	Sets the compression level for high-brightness areas of the dynamic range stretcher function. Higher values increase the compression level for high-brightness areas.
DRS SW	Enables or disables the dynamic range stretcher function. When this is enabled, contrast is adjusted automatically.

16 BLACK GAMMA

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

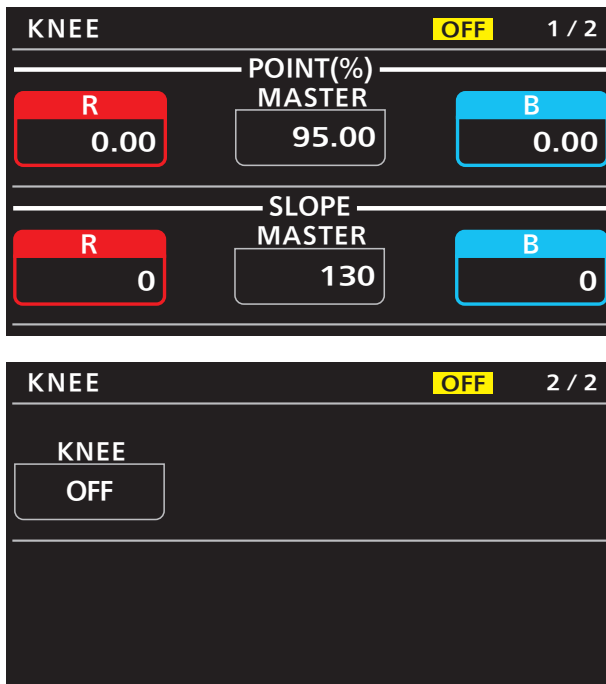


Item	Setting details
BLACK GAMMA R	Adjusts the red gamma characteristic near black for the master gamma.
BLACK GAMMA MASTER	Adjusts the gamma characteristic near black.
BLACK GAMMA B	Adjusts the blue gamma characteristic near black for the master gamma.
B.GAMMA	Enables or disables the black gamma. <ul style="list-style-type: none"> This setting is not available when [DRS] of [PAINT SWITCH] is set to "ON".

17 KNEE

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

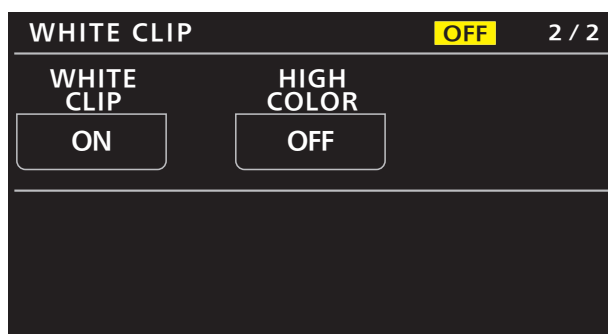
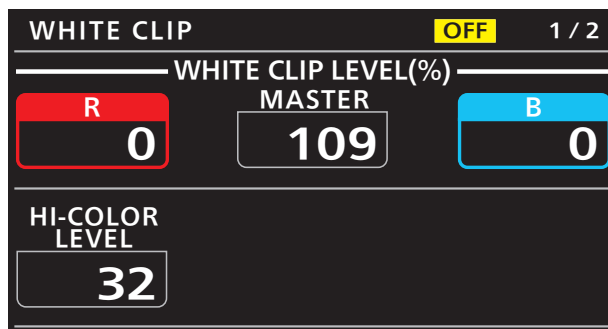


Item	Setting details
POINT R	Adjusts the red knee point for [POINT MASTER].
POINT MASTER	Sets the knee point position.
POINT B	Adjusts the blue knee point for [POINT MASTER].
SLOPE R	Adjusts the red knee slope for [SLOPE MASTER].
SLOPE MASTER	Set the knee slope.
SLOPE B	Adjusts the blue knee slope for [SLOPE MASTER].
KNEE	Enables or disables the knee function.

18 WHITE CLIP

The setting values will vary depending on the connected camera.

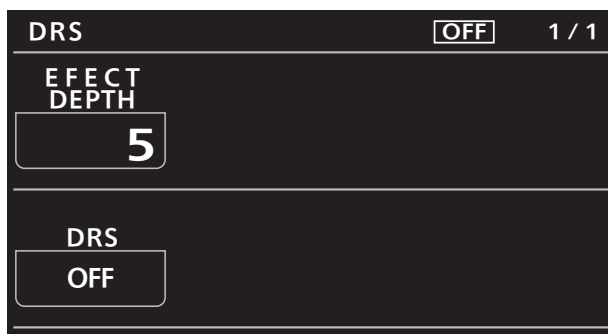
When a setting value differs from that of the reference file, it will be displayed in orange.



Item	Setting details
WHITE CLIP LEVEL R	Adjusts red for [WHITE CLIP LEVEL MASTER].
WHITE CLIP LEVEL MASTER	Set the white clip level.
WHITE CLIP LEVEL B	Adjusts blue for [WHITE CLIP LEVEL MASTER].
HI-COLOR LEVEL	Sets the level for the mode that expands dynamic range for colors.
WHITE CLIP	Enables or disables the white clip function.
HIGH COLOR	Sets whether to improve color reproducibility for high-brightness areas.

19 DRS

The setting values will vary depending on the connected camera.



Item	Setting details
EFFECT DEPTH	Sets the compression level for high-brightness areas of the dynamic range stretcher function. Higher values increase the compression level for high-brightness areas.
DRS	Enables or disables the dynamic range stretcher function. When this is enabled, contrast is adjusted automatically.

20 HD DETAIL

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

HD DETAIL OFF 1 / 4

MASTER DETAIL DETAIL LV

H V

PEAK FRQ V DETAIL FRQ CRISP

HD DETAIL OFF 2 / 4

LEVEL DEPENDENT DARK DETAIL

DETAIL SOURCE

HD DETAIL OFF 3 / 4

DETAIL

GAIN(+) GAIN(-)

DETAIL

CLIP+ CLIP-

HD DETAIL OFF 4 / 4

KNEE APERTURE DETAIL KNEE

DETAIL LV DPN SW D.DTL SW

Item	Setting details
MASTER DETAIL	Adjusts the level of master detail.
DETAIL LV H	Adjusts the level of horizontal detail.
DETAIL LV V	Adjusts the level of vertical detail.
PEAK FRQ	Sets the peak frequency for the horizontal detail.
V DETAIL FRQ	Set the V DETAIL frequency.
CRISP	Set the noise elimination level for the detail signals
LEVEL DEPENDENT	Set the level of dark detail removal.
DARK DETAIL	Set the level of dark detail enhancement.
DETAIL SOURCE	Selects the source signals for creating the detail components.

Item	Setting details
DETAIL GAIN (+)	Changes the detail gain level in the + (up) direction
DETAIL GAIN (-)	Changes the detail gain level in the - (down) direction
DETAIL CLIP+	Adjusts detail clipping to minimize scintillation resulting from excessive detail application.
DETAIL CLIP-	This limits the length of the undershoot portion of the detail edge component.
KNEE APERTURE	Adjusts the knee aperture level.
DETAIL KNEE	Adjusts the knee detail component.
DETAIL	Enables or disables the HD detail effect.
LV DPN SW	Removes dark details.
D. DTL SW	Enhances dark details.

21 UHD DETAIL

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

UHD DETAIL		OFF	1 / 3
MASTER DETAIL	DETAIL LV		
	H	V	
0	20	32	
PEAK FRQ	CRISP		
4	5		

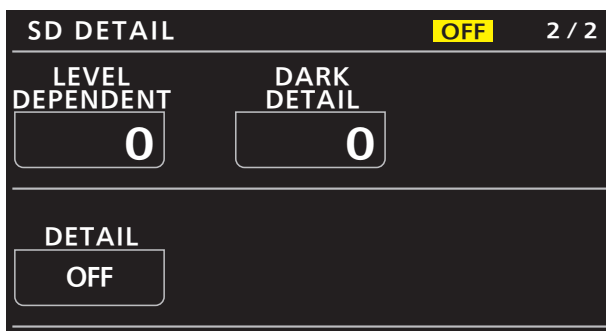
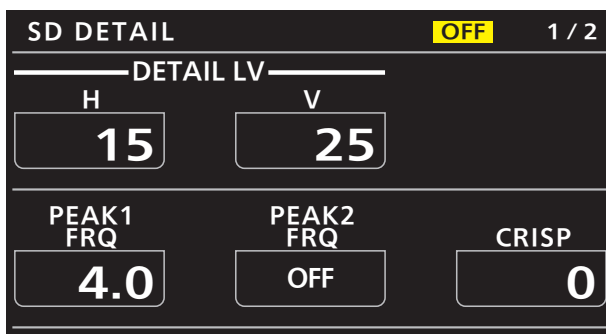
UHD DETAIL		OFF	2 / 3
DETAIL			
CLIP+	CLIP-		
0	0		
KNEE APERTURE	DETAIL KNEE		
5	0		

UHD DETAIL		OFF	3 / 3
LEVEL DEPENDENT	DARK DETAIL		
8	0		
DETAIL	LV DPN SW	D.DTL SW	
OFF	OFF	OFF	

Item	Setting details
MASTER DETAIL	Adjusts the level of master detail.
DETAIL LV H	Adjusts the level of horizontal detail.
DETAIL LV V	Adjusts the level of vertical detail.
PEAK FRQ	Selects the contour correction frequency band (boost frequency or peak frequency). Changes the contour width.
CRISP	Set the noise elimination level for the detail signals.
DETAIL CLIP+	Adjusts detail clipping to minimize scintillation resulting from excessive detail application.
DETAIL CLIP-	This limits the length of the undershoot portion of the detail edge component.
KNEE APERTURE	Adjusts the knee aperture level.
DETAIL KNEE	Adjusts the knee detail component.
LEVEL DEPENDENT	Removes dark details. <ul style="list-style-type: none"> Cannot be set simultaneously with [DARK DETAIL].
DARK DETAIL	Set the level of dark detail enhancement. <ul style="list-style-type: none"> Cannot be set simultaneously with [LEVEL DEPENDENT].
DETAIL	Enables or disables the UHD detail effect.
LV DPN SW	Removes dark details.
D. DTL SW	Enhances dark details.

22 SD DETAIL

The setting values will vary depending on the connected camera.

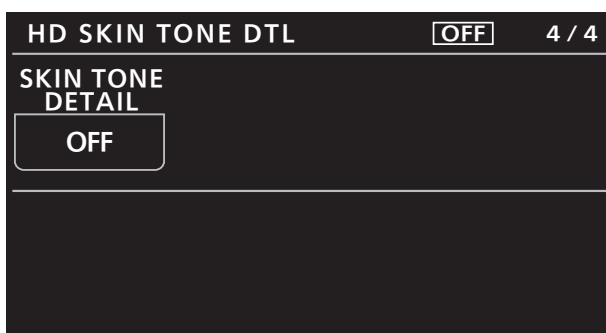
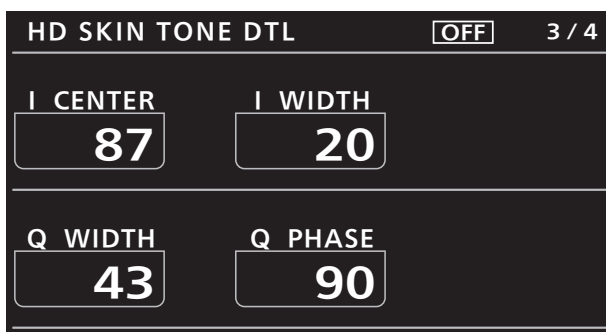
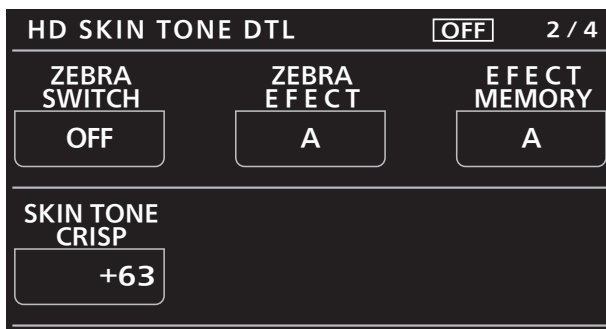
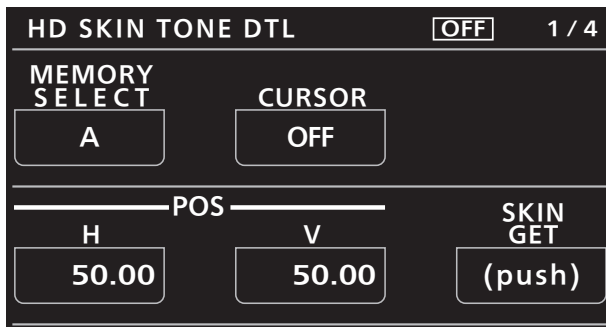


Item	Setting details
DETAIL LV H	Adjusts the level of horizontal detail.
DETAIL LV V	Adjusts the level of vertical detail.
PEAK1 FRQ	Selects the contour correction frequency band (boost frequency or peak frequency). Changes the contour width.
PEAK2 FRQ	Selects the contour correction frequency band (boost frequency or peak frequency). Changes the contour width.
CRISP	Set the noise elimination level for the detail signals.
LEVEL DEPENDENT	Set the level of dark detail removal.
DARK DETAIL	Set the level of dark detail enhancement.
DETAIL	Enables or disables the SD detail effect.

23 HD SKIN TONE DTL

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.



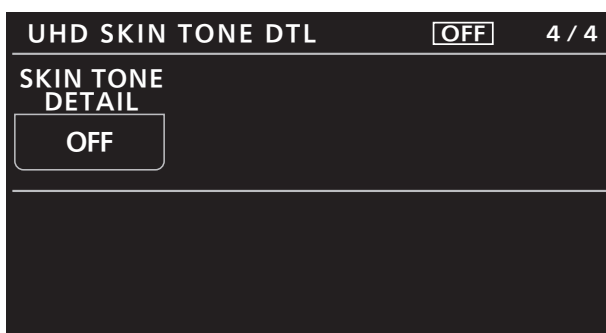
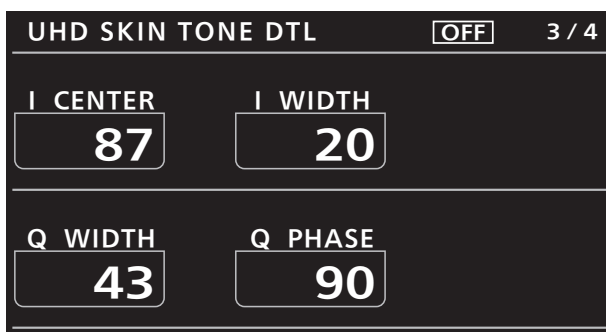
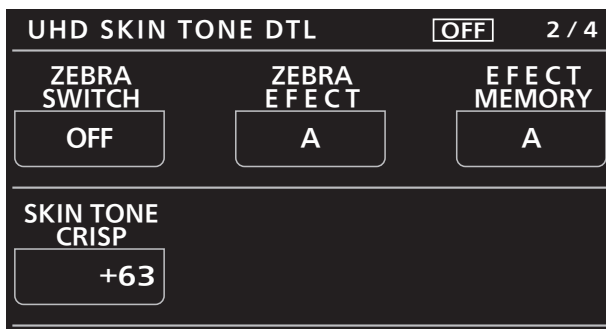
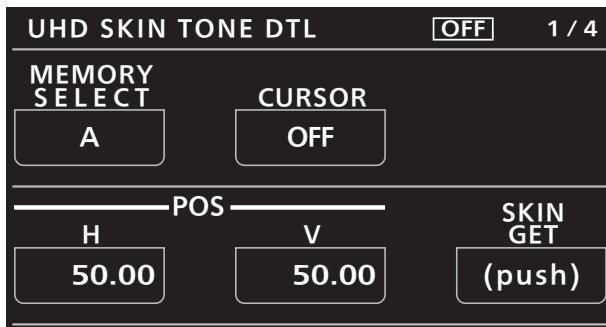
Item	Setting details
MEMORY SELECT	Changes memory for saving the skin tone detail setting values (CRISP, PHASE, WIDTH and SATURATION).
CURSOR	Enables or disables the position cursor that obtains the saturation and color phase information for controlling skin tone detail effects.
POS H	Sets horizontal cursor position.
POS V	Sets vertical cursor position.
SKIN GET	Automatically acquire saturation and hue information from the cursor position.
ZEBRA SWITCH	Sets whether to add a zebra pattern to the Y signals of the PM output to make areas subject to skin tone detail effects easily identifiable.
ZEBRA EFFECT	Selects the memory to which skin tone detail effects will be added.

Item	Setting details
EFFECT MEMORY	Selects the memory to which skin tone detail effects will be added.
SKIN TONE CRISP	Removes very faint noise components from detail components in skin tone areas.
I CENTER	Sets the center position (area to which skin tone is applied) on the I axis.
I WIDTH	Sets the width of the area to which skin tone is applied on the I axis using the [I CENTER] setting as the center.
Q WIDTH	Expands the width of skin tone areas in a range from 0 to 255.
Q PHASE	Changes the color phase of skin tone areas in a range from 0 to 359 on a vector display.
SKIN TONE DETAIL	Enables or disables the skin tone detail function.

24 UHD SKIN TONE DTL

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.



Item	Setting details
MEMORY SELECT	Changes memory for saving the skin tone detail setting values (CRISP, PHASE, WIDTH and SATURATION).
CURSOR	Enables or disables the position cursor that obtains the saturation and color phase information for controlling skin tone detail effects.
POS H	Sets horizontal cursor position.
POS V	Sets vertical cursor position.
SKIN GET	Automatically acquire saturation and hue information from the cursor position.
ZEBRA SWITCH	Sets whether to add a zebra pattern to the Y signals of the PM output to make areas subject to skin tone detail effects easily identifiable.
ZEBRA EFFECT	Selects the memory to which skin tone detail effects will be added.

Item	Setting details
EFFECT MEMORY	Selects the memory to which skin tone detail effects will be added.
SKIN TONE CRISP	Removes very faint noise components from detail components in skin tone areas.
I CENTER	Sets the center position (area to which skin tone is applied) on the I axis.
I WIDTH	Sets the width of the area to which skin tone is applied on the I axis using the [I CENTER] setting as the center.
Q WIDTH	Expands the width of skin tone areas in a range from 0 to 255.
Q PHASE	Changes the color phase of skin tone areas in a range from 0 to 359 on a vector display.
SKIN TONE DETAIL	Enables or disables the skin tone detail function.

25 LINEAR MATRIX

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

LINEAR MATRIX OFF 1 / 4

PRESET MATRIX	LINEAR TABLE	COLOR CORRECT
NORM	A	A

————— MATRIX(R-G) —————

P	N
0	0

LINEAR MATRIX OFF 2 / 4

————— MATRIX(R-B) —————

P	N
0	0

————— MATRIX(G-R) —————

P	N
0	0

LINEAR MATRIX OFF 3 / 4

————— MATRIX(G-B) —————

P	N
0	0

————— MATRIX(B-R) —————

P	N
0	0

LINEAR MATRIX OFF 4 / 4

————— MATRIX(B-G) —————

P	N
0	0

MATRIX	COLOR CORRECT	LINEAR MATRIX
OFF	OFF	OFF

Item	Setting details
PRESET MATRIX	Sets the preset matrix.
LINEAR TABLE	Selects the linear matrix table.
COLOR CORRECT	Selects the color correction table.
MATRIX(R-G) P	Adjusts the linear matrix between red and green.
MATRIX(R-G) N	Not available when [MATRIX] is set to "OFF".
MATRIX(R-B) P	Adjusts the linear matrix between red and blue.
MATRIX(R-B) N	Not available when [MATRIX] is set to "OFF".
MATRIX(G-R) P	Adjusts the linear matrix between green and red.
MATRIX(G-R) N	Not available when [MATRIX] is set to "OFF".

Item	Setting details
MATRIX(G-B) P	Adjusts the linear matrix between green and blue.
MATRIX(G-B) N	Not available when [MATRIX] is set to "OFF".
MATRIX(B-R) P	Adjusts the linear matrix between blue and red.
MATRIX(B-R) N	Not available when [MATRIX] is set to "OFF".
MATRIX(B-G) P	Adjusts the linear matrix between blue and green.
MATRIX(B-G) N	Not available when [MATRIX] is set to "OFF".
MATRIX	Enables or disables the matrix function.
COLOR CORRECT	Enables or disables the 12-axis color correction function.
LINEAR MATRIX	Enables or disables the linear matrix function.

26 COLOR CORRECTION

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

COLOR CORRECTION			OFF	1 / 9
PRESET MATRIX	LINEAR TABLE	CORRECT TABLE		
NORM	A	A		
COLOR CORRECT	SAT	PHASE		
G	0	0		

COLOR CORRECTION				OFF	2 / 9
SAT G	PHASE G				
0	0				
SAT G_CY	PHASE G_CY				
0	0				

COLOR CORRECTION				OFF	3 / 9
SAT CY	PHASE CY				
0	0				
SAT CY_B	PHASE CY_B				
0	0				

COLOR CORRECTION				OFF	4 / 9
SAT B	PHASE B				
0	0				
SAT B_MG	PHASE B_MG				
0	0				

COLOR CORRECTION				OFF	5 / 9
SAT MG	PHASE MG				
0	0				
SAT MG_R	PHASE MG_R				
0	0				

COLOR CORRECTION OFF 6 / 9

SAT R PHASE R

SAT R_YE PHASE R_YE

COLOR CORRECTION OFF 7 / 9

SAT YE PHASE YE

SAT YE_G PHASE YE_G

COLOR CORRECTION OFF 8 / 9

CURSOR

POS

H V GET

COLOR CORRECTION OFF 9 / 9

MATRIX COLOR CORRECT LINEAR MATRIX

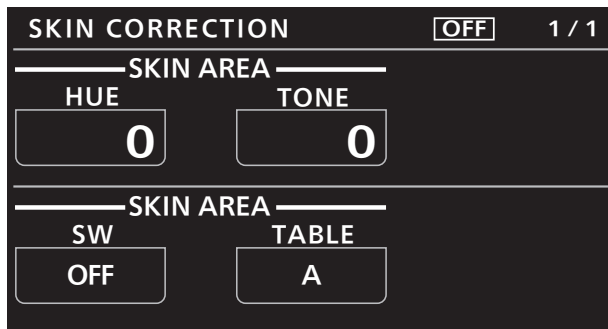
Item	Setting details
PRESET MATRIX	Enables or disables the linear matrix function.
LINEAR TABLE	Selects the linear matrix table.
CORRECT TABLE	Selects the color correction table.
COLOR CORRECT	Selects the color component in 12 AXIS matrix memory to adjust.
SAT	Adjusts the saturation of the color component selected in [COLOR CORRECT].
PHASE	Adjusts the hue of the color component selected in [COLOR CORRECT].

Item	Setting details
SAT G	Adjusts the color saturation of color components in 12 AXIS matrix memory.
SAT G_CY	<ul style="list-style-type: none"> When [COLOR CORRECT] is set to "OFF", the adjustment effects will not be applied.
SAT CY	
SAT CY_B	
SAT B	
SAT B_MG	
SAT MG	
SAT MG_R	
SAT R	
SAT R_YE	
SAT YE	
SAT YE_G	
PHASE G	Adjusts the color phase of color components in 12 AXIS matrix memory.
PHASE G_CY	<ul style="list-style-type: none"> When [COLOR CORRECT] is set to "OFF", the adjustment effects will not be applied.
PHASE CY	
PHASE CY_B	
PHASE B	
PHASE B_MG	
PHASE MG	
PHASE MG_R	
PHASE R	
PHASE R_YE	
PHASE YE	
PHASE YE_G	
CURSOR	Set whether to display the box cursor on the camera output image.
POS H	Adjusts the horizontal position of the cursor.
POS V	Adjusts the vertical position of the cursor.
GET	Automatically obtains color information from the cursor position, and applies the information of the axis for which you want to match colors to [COLOR CORRECT].
MATRIX	Enables or disables the matrix function.
COLOR CORRECT	Enables or disables the 12-axis color correction function.
LINEAR MATRIX	Enables or disables the linear matrix function.

27 SKIN CORRECTION

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

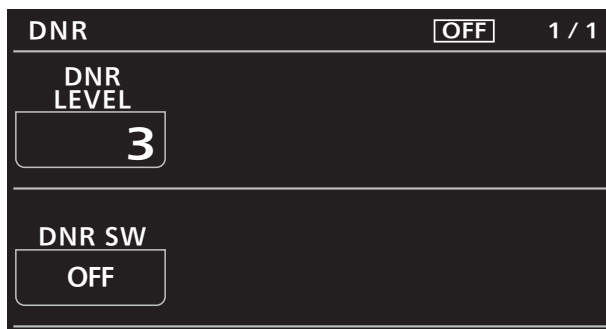


Item	Setting details
SKIN AREA HUE	Finely adjusts the hue of the skin area.
SKIN AREA TONE	Finely adjusts the tone of the skin area.
SKIN AREA SW	Enables or disables the fine adjustment function for near skin tone color.
SKIN AREA TABLE	Selects the skin area table.

28 DNR

The setting values will vary depending on the connected camera.

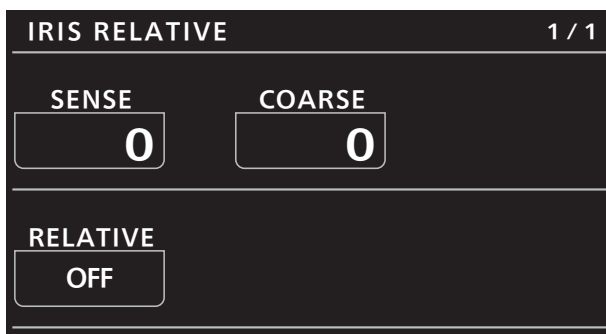
When a setting value differs from that of the reference file, it will be displayed in orange.



Item	Setting details
DNR LEVEL	Sets the level for the noise reduction.
DNR SW	Enables/disables the noise reduction function.

29 IRIS RELATIVE

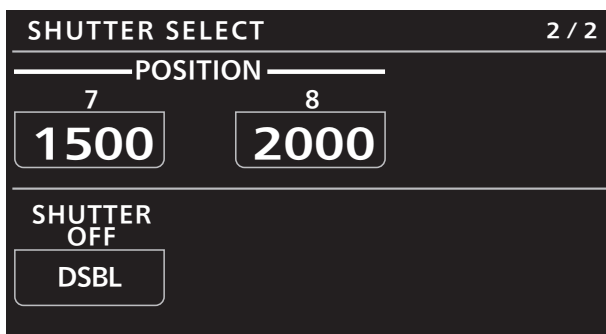
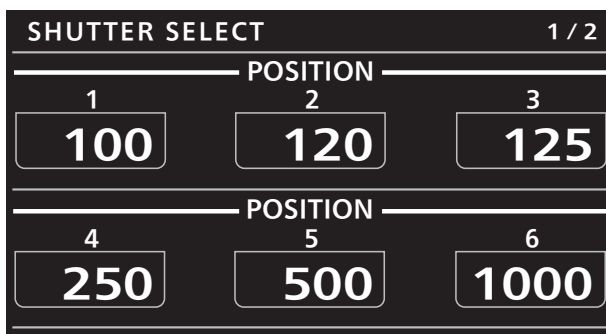
The setting values will vary depending on the connected camera.



Item	Setting details
SENSE	Adjusts the iris variable range for when the iris lever is moved from the center to the top and bottom ends. Press down the menu operation dial while turning to make larger changes to the value.
COARSE	Use this dial to adjust the iris value when the IRIS lever is moved to the center. Press down the menu operation dial while turning to make larger changes to the value.
RELATIVE	When this is set to "ON", the iris lever's variable range is not dependent on the [SENSE] and [COARSE] settings and will include the entire range between OPEN and CLOSE.

30 SHUTTER SELECT

The setting values will vary depending on the connected camera.



Item	Setting details
POSITION1	Sets the shutter speed for [POSITION1] to [POSITION8].
POSITION2	
POSITION3	
POSITION4	
POSITION5	
POSITION6	
POSITION7	
POSITION8	
SHUTTER OFF	Selects whether to include shutter OFF when switching the shutter position.

31 LENS FILE/EDIT

The setting values will vary depending on the connected camera.

LENS FILE/EDIT 1 / 7

LENS FILE SW FILE No.

FILE NAME -

LENS FILE/EDIT 2 / 7

MODE

EXECUTE

LENS FILE/EDIT 3 / 7

EXTENDER FILE No.

FILE NAME -

LENS FILE/EDIT 4 / 7

FLARE

R 0	G 0	B 0
---------------	---------------	---------------

GAIN

R 0	B 0
---------------	---------------

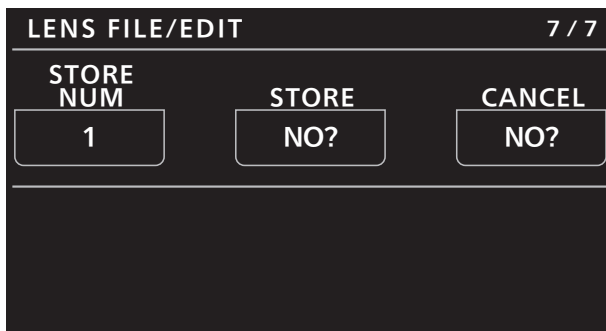
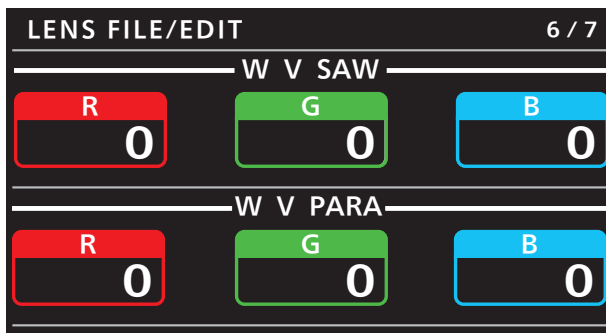
LENS FILE/EDIT 5 / 7

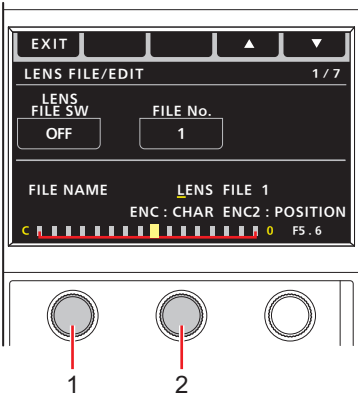
W H SAW

R 0	G 0	B 0
---------------	---------------	---------------

W H PARA

R 0	G 0	B 0
---------------	---------------	---------------

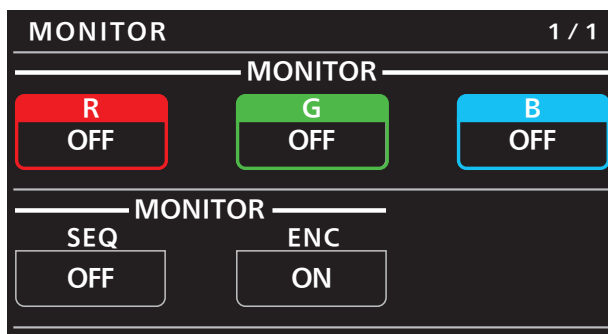


Item	Setting details
LENS FILE SW	Enables or disables the LENS file.
FILE No.	Selects the file.
FILE NAME	<p>Displays the file name of the file number specified in [FILE No.]. The file name can be changed when [MODE] is set to "STORE". Use menu operation dials 1 and 2 to change the file name.</p>  <p>Menu operation dial 1 (far left): Selects the character. Menu operation dial 2 (center): Selects the character position.</p>
MODE	Saves the current lens file in the camera (STORE) or loads a lens file stored in the camera (LOAD).
EXECUTE	<p>When [MODE] is set to "LOAD" Load the file.</p> <p>When [MODE] is set to "STORE" Save the file.</p>
EXTENDER	Sets the current magnification of the lens extender.
FILE No.	Displays the file name of the file number specified in [FILE No.].
FILE NAME	Displays the name of the lens file currently loaded.
FLARE R	Adjusts the R flare of the display data.
FLARE G	Adjusts the G flare of the display data.
FLARE B	Adjusts the B flare of the display data.
GAIN R	Adjusts the R gain of the display data.
GAIN B	Adjusts the B gain of the display data.

Item	Setting details
W H SAW R	Adjusts the R, G, and Bch white shading of the display data in the horizontal direction using a sawtooth waveform.
W H SAW G	
W H SAW B	
W H PARA R	Adjusts the R, G, and Bch white shading of the display data in the horizontal direction using a parabolic waveform.
W H PARA G	
W H PARA B	
W V SAW R	Adjusts the R, G, and Bch white shading of the display data in the vertical direction using a sawtooth waveform.
W V SAW G	
W V SAW B	
W V PARA R	Adjusts the R, G, and Bch white shading of the display data in the vertical direction using a parabolic waveform.
W V PARA G	
W V PARA B	
STORE NUM	Specifies the number of the LENS file to be registered.
STORE	Saves the [FLARE R/G/B], [GAIN R/B], [W H SAW R/G/B], [W H PARA R/G/B], [W V SAW R/G/B], and [W V PARA R/G/B] settings to the lens file specified in [FILE No.].
CANCEL	Discards changes to the [FLARE R/G/B], [GAIN R/B], [W H SAW R/G/B], [W H PARA R/G/B], [W V SAW R/G/B], and [W V PARA R/G/B] settings, and returns them to their previous states.

32 MONITOR

The setting values will vary depending on the connected CCU.



Item	Setting details
MONITOR R	Turns the R monitor on or off.
MONITOR G	Turns the G monitor on or off.
MONITOR B	Turns the B monitor on or off.
MONITOR SEQ	Turns the SEQ monitor on or off.
MONITOR ENC	Turns the ENC monitor on or off.

33 SYSTEM CAM

The setting values will vary depending on the connected camera.

SYSTEM CAM 1 / 6

FORMAT

1080/59.94p

TALK OFF

INCOM1 (push) INCOM2 (push)

SYSTEM CAM 2 / 6

MIC1

GAIN 60 LINE LV 0 AMP 0

MIC2

GAIN 60 LINE LV 0 AMP 0

SYSTEM CAM 3 / 6

SHOOTING MODE NORMAL CAM FAN NORMAL HDR SW OFF

TALLY GUARD OFF

SYSTEM CAM 4 / 6

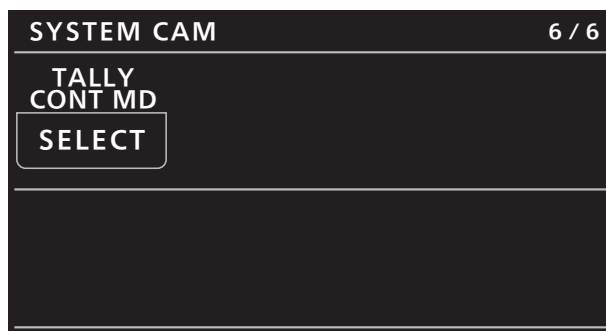
ASU FILTER CURR ASU MODE FULL ASU M.PED TARGET 3.0

ASU REF. FILE FCTRY REF. RECALL USER1 CABLE CONNECT HYBRID

SYSTEM CAM 5 / 6

HEAD PW (push) ON VF PW (push) ON CTRL ROTATION Mode1

CONTROL OFF TALLY INPUT CAM1 SIGNAL OFF



Item	Setting details
FORMAT	Set the camera format. When the unit is connected to a CCU, this item is only displayed and cannot be changed.
TALK OFF INCOM1	Sets TALK for INCOM1 to OFF.
TALK OFF INCOM2	Sets TALK for INCOM2 to OFF.
MIC1 GAIN	Makes coarse adjustments of the MIC1 gain.
MIC1 LINE LV	Adjusts the level for input to the camera's <MIC 1> connector.
MIC1 AMP	Makes fine adjustments of the MIC1 gain. (1 dB increments)
MIC2 GAIN	Makes coarse adjustments of the MIC2 gain.
MIC2 LINE LV	Adjusts the level for input to the camera's <MIC 2> connector.
MIC2 AMP	Makes fine adjustments of the MIC2 gain. (1 dB increments)
SHOOTING MODE	Sets the shooting mode.
CAM FAN	Sets the camera's cooling fan operation.
HDR SW	Sets the HDR mode to ON/OFF.
TALLY GUARD	When set to ON, this function disables automatic ASU, AWB, ABB operation while the tally is ON.
ASU FILTER	Sets the operation of the ND/CC filter when auto setup is started. REF The filter stored in the reference file is used when operation starts. CURRENT Auto setup starts at the filter position made prior to startup.
ASU MODE	Selects the auto setup mode setting.
ASU M. PED TARGET	Sets the position where the master pedestal is to be converged when auto setup is started.
REF.RECALL	Sets the reference file that is recalled when the [REF. RECALL] button is pressed.
CABLE CONNECT	Displays the CCU connection cable setting. You can change the setting via menu operations on the camera itself. HYBRID Indicates that the CCU is connected via an optical fiber multi cable. FIBER Indicates that the CCU is connected via an optical fiber cable.
HEAD PW	Use this button to control camera power remotely. However, control will not be possible unless the CCU and the camera are turned on. Each press of the button turns the power of the camera on or off.
VF PW	Use this button to control the viewfinder power remotely. When the camera is turned on by the unit, the viewfinder is also turned on. Each press of the button turns the power of the viewfinder on or off.
CTRL ROTATION	A mode that operates based on the numerical value and a mode that operates based on the effect are available. For details, refer to the operating instructions of the camera.
TALLY CONTROL	Sets whether or not to notify the camera when there is a tally input from the <PREVIEW> connector. When this set to "ON", notification is sent if there is a tally input when the camera set in [TALLY INPUT] is selected. <ul style="list-style-type: none"> This is enabled when other than "Serial", "LAN", "Serial(AK)", and "LAN(AK)" is set in [CONNECT SETTING] menu.

Item	Setting details
TALLY INPUT	<p>Sets the camera to be notified of a tally input when [TALLY CONTROL] is set to "ON".</p> <ul style="list-style-type: none"> This is enabled when other than "Serial", "LAN", "Serial(AK)", and "LAN(AK)" is set in [CONNECT SETTING] menu.
TALLY SIGNAL	<p>Displays the status of tally input to the unit. "ON" is displayed when there is input, and "OFF" when there is no input.</p>
TALLY CONT MD	<p>Sets the control method for when a tally is input to the unit. This setting is applied immediately after being changed.</p> <p>SELECT Sends tally notifications to the camera specified in [TALLY INPUT] (default value).</p> <p>DIRECT Ignores the setting of [TALLY INPUT] and sends tally notifications to the camera currently connected.</p> <ul style="list-style-type: none"> If this setting is changed while the tally of a camera is "ON", please note that the tally of the camera prior to the change will remain "ON".

34 SYSTEM CCU

The setting values will vary depending on the connected CCU.

SYSTEM CCU 1 / 5

FORMAT

2160/29.97PsF

RETURN1 SELECT
RET1

RETURN2 SELECT
RET2

RETURN3 SELECT
RET3

SYSTEM CCU 2 / 5

RETURN4 SELECT
RET4

RETURN FS
OFF

CAMERA NUMBER
1

D/C MODE
SC

U/C MODE
SC

SYSTEM CCU 3 / 5

BARS

HD ARIB

SD SMPTE

C/B SETUP
COMPST

SDI8 OUT
PM

SYSTEM CCU 4 / 5

HD H

COARSE -127

FINE -100

SD H

COARSE -30

FINE -100

SYSTEM CCU 5 / 5

SD-HD V
0H

SCH
180

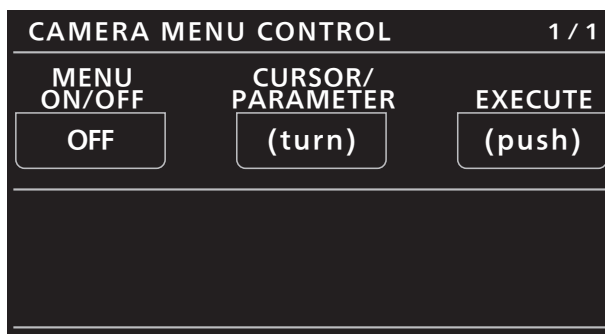
CABLE CONNECT
HYBRID

FORMAT MODE(pusu)
UHD(59.94)

Item	Setting details
FORMAT	Selects the format that is output from the CCU. The CCU specifies the format to the camera based on the format selected here.
RETURN1 SELECT	Sets the input allocations of return signal 1.
RETURN2 SELECT	Sets the input allocations of return signal 2.
RETURN3 SELECT	Sets the input allocations of return signal 3.
RETURN4 SELECT	Sets the input allocations of return signal 4.
RETURN FS	Set the delay mode for the HD return signals.
CAMERA NUMBER	Changes the camera number controlled by the CCU.
D/C MODE	Selects the down-conversion system for video output from SD SDI and VBS.
U/C MODE	Selects the video up-conversion system used for SD SDI and VBS return videos.
BARS HD	Specifies the HD color bar output by the CCU.
BARS SD	Specifies the SD color bar output by the CCU.
C/B SETUP	Set the SD signal output for use with color bar output. <ul style="list-style-type: none"> • The "SETUP7.5%" setting is not valid when "SD_SDI" is selected.
SDI8 OUT	Performs PM/NORMAL switching for SDI8 OUT.
HD H COARSE	Make the coarse setting of the H_FINE phase used with GL HD REF.
HD H FINE	Make the fine setting of the H_FINE phase used with GL HD REF.
SD H COARSE	Make the coarse setting of the H_FINE phase used with GL SD REF.
SD H FINE	Make the fine setting of the H_FINE phase used with GL SD REF.
SD-HD V	Set the vertical phase used with down-convert SD REF. <ul style="list-style-type: none"> • When the [24PsF GL MODE] setting for the CCU is "NORMAL", this is fixed to "0H". • When the [24PsF GL MODE] setting for the CCU is "ADVANCE", this is fixed to "0H_SD_DLAY". • With 1080/59.94i(24P), this is fixed to "0H".
SCH	Adjust the SCH phase of VBS output.
CABLE CONNECT	Displays the camera connection cable setting. You can change the setting via menu operations on the CCU itself. HYBRID Indicates that the camera is connected via an optical fiber multi cable. FIBER Indicates that the camera is connected via an optical fiber cable.
FORMAT MODE(push)	Selects the CCU format mode.

35 CAMERA MENU CONTROL

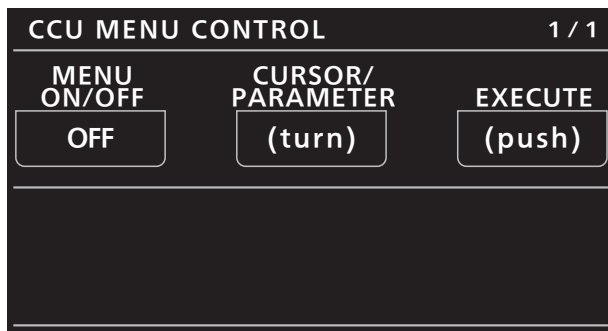
This menu can be operated when the setting value for the CCU picture monitor (PM) is 720p.



_____ indicates factory default settings.

Item	Setting value	Setting details
MENU ON/OFF	<u>OFF</u> ON	Turns the menu on or off.
CURSOR/PARAMETER	-	Moves the menu cursor or changes setting values.
EXECUTE	-	Executes the selected process.

36 CCU MENU CONTROL



_____ indicates factory default settings.

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

37 ROP SETTING

ROP SETTING 1 / 7

IRIS LEV MODE ABS	M.PED CONT IRIS	LOCK SELECT PUSH
AUTO BUTTON AWB	G/M PED VOL M . PED	FREE +LOCK SETUP

ROP SETTING 2 / 7

CAM SEL (push) CAM1	DTL BUTTON UHD	SKIN VOL UHD
LCD BRIGHT 10	PANEL BRIGHT 3	B.GAMMA VOL HDR

ROP SETTING 3 / 7

BUZZER ON	PERIOD 0	CYCLE 0.3
— STD POSITION —		
M. GAIN 0	VAR 0.0	

ROP SETTING 4 / 7

— STD POSITION —		IRIS PRIORITY
ND 2	CC A	NON
— ROP DATA —		SD CARD FORMAT
SAVE NO?	LOAD NO?	NO?

ROP SETTING 5 / 7

INITIAL with NW NO?	INITIAL NO?	
— IRIS CALIBRATION —		
UPGRADE NO?	TOP NO?	BOTTOM NO?

ROP SETTING		6 / 7
SYSTEM VERSION	2.00-00-0.06	
SOFT VERSION	2.00-00-0.06	

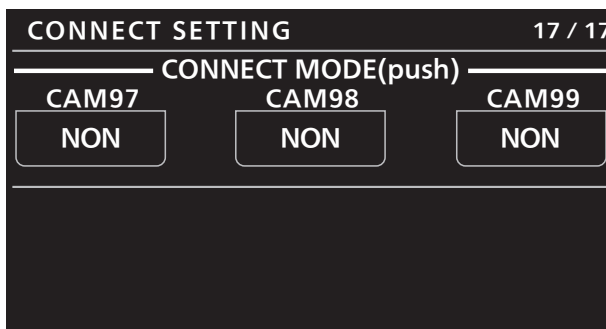
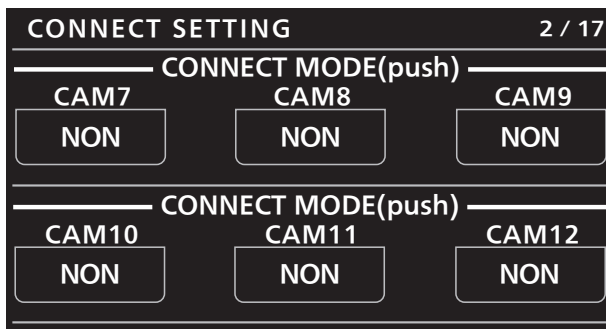
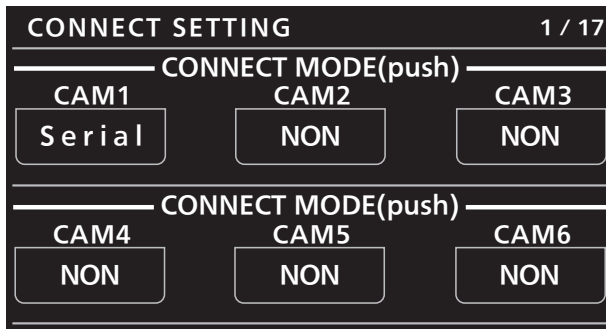
ROP SETTING		7 / 7
FPGA VERSION	1.00-00-0.00	

___ indicates factory default settings.

Item	Setting value	Setting details
IRIS LEV MODE	ABS RLTV	Selects between absolute values or relative values to be used for IRIS control operations. ABS: Absolute value control. RLTV: Relative value control.
M.PED CONT	IRIS DISP	Sets whether to enable master pedestal adjustment via the panel's master pedestal dial.
LOCK SELECT	LOCK FREE PUSH M.PED	Specifies the targets for which lock is applied when you press and hold the [SEL] dial.
AUTO BUTTON	AWB ABB AUTO SETUP	Specifies the function that is executed when the [AUTO] button is pressed.
G/M PED VOL	M.PED G.PED	Specifies the target items for adjustment when adjusting the pedestal in the [PED], [FLARE], and [B.GAM] adjustment block. "M.PED": Adjust the master pedestal. "G.PED": Adjust the [PED R], [PED G], and [PED B].
FREE+LOCK	SETUP IRIS LV PAINT	Specifies the targets for which partial lock is applied when you press and hold the [PANEL LOCK] and [UP (FREE)] buttons at the same time.
CAM SEL	CAM1 to CAM99	Switches between connected cameras.
DTL BUTTON	UHD HD SD	Selects the target of detail control operations on the panel. UHD: Control UHD detail. HD: Control HD detail. SD: Control SD detail.
SKIN VOL	UHD HD SD S.CORR	Selects the target of skin tone detail control operations on the panel. UHD: Control UHD skin tone detail. HD: Control HD skin tone detail. SD: Control SD skin tone detail. (Enabled when [CONNECT SETTING] is set to "Serial(AK)" or "LAN(AK)".) S.CORR: Control [HUE], [TONE], and [TABLE] for [SKIN CORRECTION].
LCD BRIGHT	1 to 20	Sets the brightness of the LCD panel.
PANEL BRIGHT	1 to 5	Set the brightness of the panel buttons.
B.GAMMA VOL	SDR HDR	Selects the target of black gamma control operations on the panel. SDR: Control the black gamma for the [BLACK GAMMA] menu. HDR: Control the black gamma for the [HDR-PAINT] menu.
BUZZER	OFF ON	Enable or disable the buzzer (beep/call tone).

Item	Setting value	Setting details
PERIOD	0 to 5	[PERIOD] and [CYCLE] will be the time from which [CALL] was released for [CAMERA CCU].
CYCLE	0.3 0.5 1.0	PERIOD: Flashing duration (sec). CYCLE: Flashing cycle (For 1.0: 500 msec off → 500 msec lit (repeatedly)).
STD POSITION M.GAIN	-6 to 0 to +36	Sets the standard position of the master gain (M.GAIN).
STD POSITION VAR	-2.9 to 0.0 to +2.9	Sets the standard position for master gain (M.GAIN) step values.
STD POSITION ND	1 to 2 to 5	Sets the standard position of the ND filter.
STD POSITION CC	A to E	Sets the standard position of the CC filter.
IRIS PRIORITY	NON Serial LAN	Sets whether to prioritize iris control. NON Does not prioritize iris control. If the camera's iris position does not match the ROP's [IRIS] lever position, match the ROP's [IRIS] lever position to the camera's iris position. Serial If the camera's iris position does not match the ROP's [IRIS] lever position, the ROP's [IRIS] lever position during serial connection will be the basis of operation. LAN If the camera's iris position does not match the ROP's [IRIS] lever position, the ROP's [IRIS] lever position during IP connection will be the basis of operation. <ul style="list-style-type: none"> When multiple ROPs are IP connected to a single camera and the [IRIS PRIORITY] setting for each ROP is set to "LAN", be aware that iris controls from all of the ROPs will be performed directly.
ROP DATA SAVE	NO? YES?	Save the unit's setting information. This applies to the following menus. [ROP SETTING][CONNECT SETTING][CAMERA IP SETTING][ROP IP SETTING] <ul style="list-style-type: none"> After starting this process, do not turn off the unit or remove SD cards until the process is complete.
ROP DATA LOAD	NO? YES?	Load the unit's setting information. This applies to the following menus. [ROP SETTING][CONNECT SETTING][CAMERA IP SETTING][ROP IP SETTING] <ul style="list-style-type: none"> After starting this process, do not turn off the unit or remove SD cards until the process is complete.
SD CARD FORMAT	NO? YES?	Format the SD card.
INITIAL with NW	NO? YES?	Return the unit's settings to the factory default values. This applies to the following menus. [ROP SETTING][CONNECT SETTING][CAMERA IP SETTING][ROP IP SETTING]
INITIAL	NO? YES?	Return the unit's settings to the default values. This applies to the following menus. [ROP SETTING]
UPGRADE	NO? YES?	Updates the software of the unit. <ul style="list-style-type: none"> After starting this process, do not turn off the unit or remove SD cards until the process is complete.
IRIS CALIBRATION TOP	-	IRIS CALIBRATION adjusts the operating range of the IRIS lever. [IRIS CALIBRATION TOP] is executed when the IRIS lever is moved to the OPEN end, and [IRIS CALIBRATION BOTTOM] is executed when it is moved to the CLOSE end.
IRIS CALIBRATION BOTTOM		
SYSTEM VERSION	(Version display)	Displays the system version.
SOFT VERSION	(Version display)	Displays the software version.
FPGA VERSION	(Version display)	Displays the FPGA version.

38 CONNECT SETTING



___ indicates factory default settings.

Item	Setting value	Setting details
CONNECT MODE CAM1	NON Serial LAN Serial(AK) LAN(AK) Serial(AW) LAN(AW)	Sets the connection method for camera 1. After configuring the settings, press the menu operation dial to apply the settings. Serial, LAN: Select when connecting with the AK-UC3300 series and AK-UC4000 series. Serial(AK), LAN(AK): Select these when connecting the AK-HC3500A series and AK-HC3800 series. Serial(AW), LAN(AW): Select these when connecting the AK-UB300 series. <ul style="list-style-type: none"> “Serial”, “Serial(AK)”, and “Serial(AW)” cannot be set for multiple cameras.
CONNECT MODE CAM2 to CAM99	NON Serial LAN Serial(AK) LAN(AK) Serial(AW) LAN(AW)	Sets the connection method for cameras 2 to 99. After configuring the settings, press the menu operation dial to apply the settings. Serial, LAN: Select when connecting with the AK-UC3300 series and AK-UC4000 series. Serial(AK), LAN(AK): Select these when connecting the AK-HC3500A series and AK-HC3800 series. Serial(AW), LAN(AW): Select these when connecting the AK-UB300 series. <ul style="list-style-type: none"> “Serial” cannot be set for multiple cameras.

NOTE

- The settings of “Serial(AK)”, “LAN(AK)”, “Serial(AW)”, and “LAN(AW)” are planned to be supported by updating the version of the unit in the future.

39 ROP IP SETTING

ROP IP SETTING 1 / 4

IP ADDRESS

1	2	3
192	168	0

IP ADDRESS

4	PORT	UPLOAD
100	65535	(push)

ROP IP SETTING 2 / 4

SUBNET MASK

1	2	3
255	255	255

SUBNET MASK

4	UPLOAD
0	(push)

ROP IP SETTING 3 / 4

DEFAULT GATEWAY

162	168	0
-----	-----	---

DEFAULT GATEWAY

1	UPLOAD
	(push)

ROP IP SETTING 4 / 4

MAC ADDRESS **_**_**_**_**_**

Item	Setting details
IP ADDRESS 1	Sets the IP address of the unit. The setting ranges are as follows. (Factory default: 192.168.0.130) <ul style="list-style-type: none"> • 1st octet: 1 to 223 • 2nd octet: 0 to 255 • 3rd octet: 0 to 255 • 4th octet: 1 to 254 However, the following addresses cannot be set. Check the setting values during configuration. <ul style="list-style-type: none"> • 0.***.***.0, ***.255, 127.0.0.1 • Class D address (224.0.0.0 to 239.255.255.255) • Class E address (240.0.0.0 to 255.255.255.255)
IP ADDRESS 2	
IP ADDRESS 3	
IP ADDRESS 4	

Item	Setting details
IP ADDRESS PORT	Sets the port of the unit. Values from 35200 to 35599 can be set. (Factory default: 35200)
IP ADDRESS UPLOAD	When you press the menu operation dial, the unit's IP address and port will be set.
SUBNET MASK 1	Sets the subnet mask of the unit. The follow values can be set. (Factory default: 255.255.255.0)
SUBNET MASK 2	<ul style="list-style-type: none"> ● 1st octet: 128, 192, 224, 240, 248, 252, 254, 255
SUBNET MASK 3	<ul style="list-style-type: none"> ● 2nd octet: 0, 128, 192, 224, 240, 248, 252, 254, 255
SUBNET MASK 4	<ul style="list-style-type: none"> ● 3rd octet: 0, 128, 192, 224, 240, 248, 252, 254, 255
SUBNET MASK 4	<ul style="list-style-type: none"> ● 4th octet: 0, 128, 192, 224, 240, 248, 252, 254, 255
SUBNET MASK UPLOAD	When you press the menu operation dial, the unit's subnet mask will be set.
DEFAULT GATEWAY	Sets the default gateway of the unit. The setting ranges are as follows. (Factory default: 192.168.0.1) <ul style="list-style-type: none"> ● 1st octet: 1 to 223 ● 2nd octet: 0 to 255 ● 3rd octet: 0 to 255 ● 4th octet: 1 to 254 However, the following addresses cannot be set. Check the setting values during configuration. <ul style="list-style-type: none"> ● 0.**, **.0, **.255, 127.0.0.1 ● Class D address (224.0.0.0 to 239.255.255.255) ● Class E address (240.0.0.0 to 255.255.255.255)
DEFAULT GATEWAY UPLOAD	When you press the menu operation dial, the unit's default gateway will be set.
MAC ADDRESS	Display the unit's MAC address. (Display only)

 **NOTE**

- Performing [UPLOAD] after changing the settings will store the setting value changes to the internal memory. Perform [UPLOAD] on each screen. The setting values stored to memory will be applied after the unit is restarted.

40 CAMERA IP SETTING

CAMERA IP SETTING 1 / 99

CAM1 IP ADDRESS

1 2 3

192 168 0

CAM1 IP ADDRESS

4 PORT UPLOAD

20 49152 (push)

CAMERA IP SETTING 2 / 99

CAM2 IP ADDRESS

1 2 3

192 168 0

CAM2 IP ADDRESS

4 PORT UPLOAD

21 49152 (push)



CAMERA IP SETTING 99 / 99

CAM99 IP ADDRESS

1 2 3

192 168 0

CAM99 IP ADDRESS

4 PORT UPLOAD

118 49152 (push)

Item	Setting details
CAM1 to CAM99 IP ADDRESS	<p>Sets the IP address of the camera. The setting ranges are as follows. (IP addresses are assigned in order starting with 192.168.0.20 for CAM1 under factory default conditions.)</p> <ul style="list-style-type: none"> • 1st octet: 1 to 223 • 2nd octet: 0 to 255 • 3rd octet: 0 to 255 • 4th octet: 1 to 254 <p>However, the following addresses cannot be set. Check the setting values during configuration.</p> <ul style="list-style-type: none"> • 0.**, **.*, *.*.255, 127.0.0.1 • Class D address (224.0.0.0 to 239.255.255.255) • Class E address (240.0.0.0 to 255.255.255.255)
CAM1 to CAM99 PORT	<p>Sets the port of the camera. Values from 1 to 65535 can be set. (Factory default: 49152)</p>
CAM1 to CAM99 INF UPLOAD	<p>When you press the menu operation dial, the camera's IP address and port will be set.</p>

NOTE

- Performing [UPLOAD] after changing the settings will apply the setting value changes. Perform [UPLOAD] on each screen. The settings will not be applied unless [UPLOAD] is performed.

41 SD CARD STORE

SD CARD STORE
1 / 1

MODE

STORE

FILE

SELECT

ALL

NUMBER

-

EXECUTE

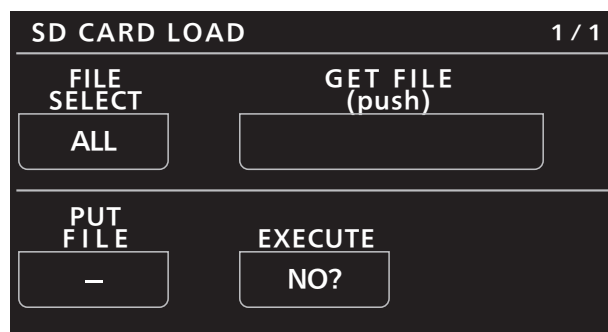
NO?

Item	Setting value	Setting details
MODE	FORMAT STORE	Selects the format, load, or store mode for the SD card.
FILE SELECT	ALL SCENE USER LENS REF	Selects the type of files to be saved. ALL Saves all scene files (SCENE1 to SCENE8), user files (USER1 to USER3), reference user files (REF1 to REF3), and lens files (LENS1 to LENS32). SCENE Saves scene files (SCENE1 to SCENE8). USER Saves user files (USER1 to USER3). LENS Saves lens files (LENS1 to LENS32). REF Saves reference user files (REF1 to REF3).
FILE NUMBER	SCENE: CURR, 1 to 8 USER: 1 to 3 LENS: 1 to 32 REF: 1 to 3	Selects the data based on the file type specified in [FILE SELECT]. This cannot be selected when [FILE SELECT] is set to "ALL". ● "CURR" represents CURRENT.
EXECUTE	NO? YES?	Select "YES?" to execute the operation.

NOTE

- As the unit is not equipped with a clock function, the date and time at which the file was saved on the camera will be used for the creation dates of saved files.
- After starting this process, do not turn off the unit or remove SD cards until the process is complete.

42 SD CARD LOAD

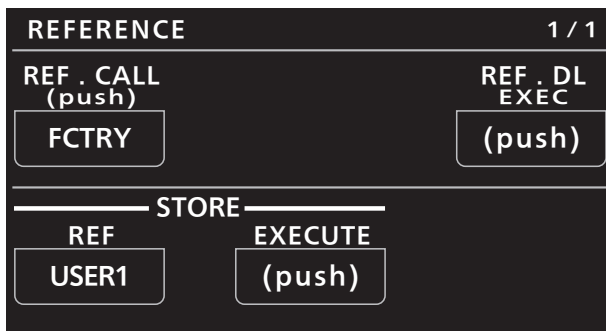


Item	Setting value	Setting details
FILE SELECT	ALL ALL SCENE SCENE ALL USER USER ALL LENS LENS ALL REF REF	Selects the type of files to be loaded. ALL Loads the data saved with "ALL". ALL SCENE Loads all scene file data (SCENE1 to SCENE8) saved with "ALL". SCENE Loads a single scene file. ALL USER Loads all user file data (USER1 to USER3) saved with "ALL". USER Loads data from a single user file. ALL LENS Loads all lens file data (LENS1 to LENS32) saved with "ALL". LENS Loads a single lens file. ALL REF Loads all reference user file data (REF1 to REF3) saved with "ALL". REF Loads data from a single reference user file.
GET FILE	-	When you press the menu operation dial, data of the type selected in [FILE SELECT] is loaded from the memory card, and a list of file names appears. When you select a file from the file list and press the menu operation dial, the previous screen appears again, and the file name of the selected data appears in [GET FILE].
PUT FILE	CURR SCENE1 to SCENE8 EXT1 EXT2 USER1 to USER3 LENS1 to LENS32 REF1 to REF3	Specify the LOAD destination type. <ul style="list-style-type: none"> • "CURR" represents CURRENT. • This cannot be specified when [FILE SELECT] is set to "ALL", "ALL SCENE", "ALL USER", "ALL REF" or "ALL LENS". • When [FILE SELECT] is set to "SCENE", "SCENE1" to "SCENE8" and "EXT1" and "EXT2" can be selected. The loaded data is saved to the unit, only when "EXT1" or "EXT2" is selected, and pressing the [EXT1] or [EXT2] button of the SCENE FILE applies the data to the camera and CCU. <ul style="list-style-type: none"> ➔ "Front panel 4" (see page 25) • When [FILE SELECT] is set to "USER", "USER1" to "USER3" can be selected. • When [FILE SELECT] is set to "LENS", "LENS1" to "LENS32" can be selected. • When [FILE SELECT] is set to "REF", "REF1" to "REF3" can be selected.
EXECUTE	NO? YES?	Select "YES?" to load the selected data.

NOTE

- As the unit is not equipped with a clock function, the date and time at which the file was saved on the camera will be used for the creation dates of saved files.
- After starting this process, do not turn off the unit or remove SD cards until the process is complete.

43 REFERENCE



Item	Setting value	Setting details
REF.CALL(push)	FCTRY USER1 to USER3 REF1 to REF3	Recall the reference setting information (reference file).
REF.DL EXEC	-	The reference file data will be loaded to the ROP. However, the reference file settings will not be applied for the camera and CCU.
STORE REF	USER1 to USER3 REF1 to REF3	Overwrite the current setting values to the selected file.
STORE EXECUTE	-	Execute saving of the reference file.

44 AUTO IRIS SETTING

1 / 2

WINDOW SELECT <input type="button" value="FULL"/>	PEAK RATIO <input type="text" value="50"/>	
GAIN <input type="button" value="LENS"/>	IRIS SPEED <input type="text" value="15"/>	LEVEL <input type="text" value="+50"/>

2 / 2

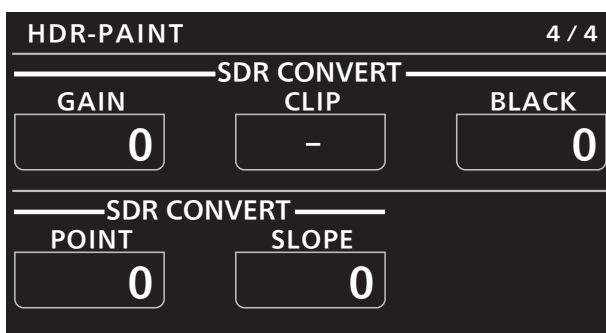
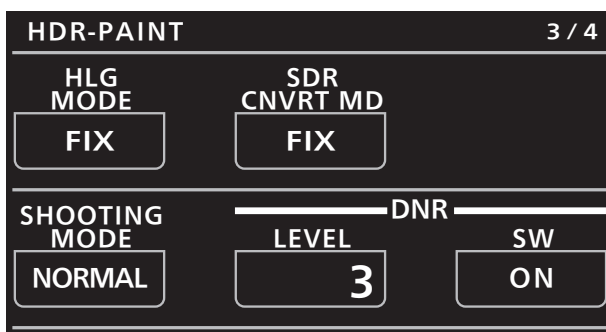
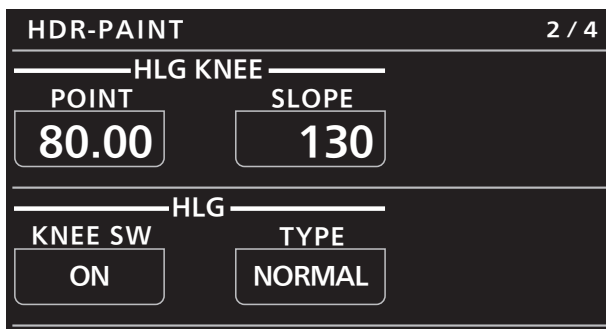
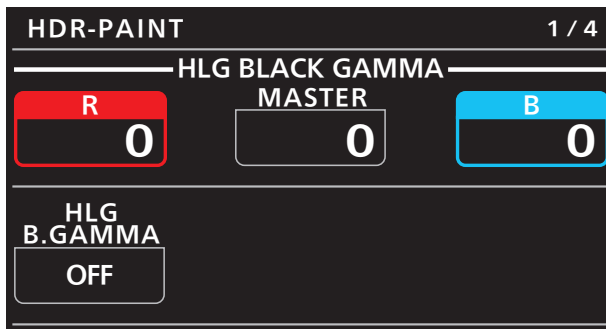
IRIS RANGE <input type="button" value="NORMAL"/>	LENS EXT COMP SW <input type="button" value="OFF"/>	LENS EXT COMP LV <input type="text" value="0"/>
--	---	---

Item	Setting details
WINDOW SELECT	Set the photometry range.
PEAK RATIO	Set the ratio between the peak value and average value for auto iris photometry.
IRIS GAIN	Switch between adjusting the auto iris photometry speed via the iris gain volume or via menu operations. Set this to [LENS] under normal circumstances, and adjust using the lens iris volume.
IRIS SPEED	Set the auto iris speed.
IRIS LEVEL	Adjusts the target value (brightness) of the auto iris.
IRIS RANGE	Set the auto iris level fine adjustment range for the IRIS lever.
LENS EXT COMP SW	Enable ALC correction when the lens extender is enabled.
LENS EXT COMP LV	Set the ALC correction level when the lens extender is enabled.

45 HDR-PAINT

The setting values will vary depending on the connected camera.

When a setting value differs from that of the reference file, it will be displayed in orange.

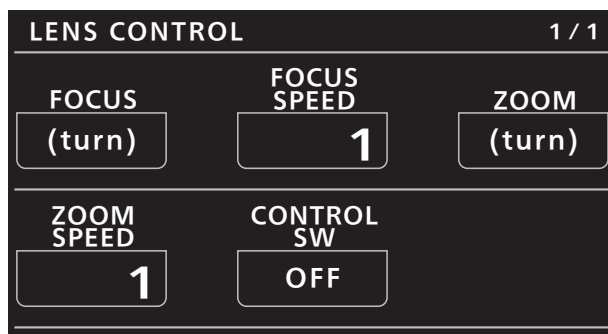


Item	Setting details
HLG BLACK GAMMA R	Adjusts the red gamma characteristic near black for the master gamma.
HLG BLACK GAMMA MASTER	Adjusts the gamma characteristic near black.
HLG BLACK GAMMA B	Adjusts the blue gamma characteristic near black for the master gamma.
HLG B.GAMMA	Enables or disables the black gamma.
HLG KNEE POINT	Sets the knee point for when [GAMMA MODE] is set to "VIDEO REC".
HLG KNEE SLOPE	Sets the knee slope for when [GAMMA MODE] is set to "VIDEO REC".
HLG KNEE SW	Enables or disables the knee function.
HLG TYPE	Sets the HLG type.
HLG MODE	Sets the HLG mode.

Item	Setting details
SDR CNVRT MD	Sets the SDR CONVER mode.
SHOOTING MODE	Sets the shooting mode.
DNR LEVEL	Sets the level for the noise reduction.
DNR SW	Enables/disables the noise reduction function.
SDR CONVERT GAIN	Sets the SDR gain.
SDR CONVERT CLIP	Sets the SDR clip. <ul style="list-style-type: none"> • When the unit is connected with a camera that does not support this function, "—" is displayed.
SDR CONVERT BLACK	Adjusts the black level offset of the SDR video. <ul style="list-style-type: none"> • When the unit is connected with a camera that does not support this function, "—" is displayed.
SDR CONVERT POINT	Sets the SDR point. <ul style="list-style-type: none"> • When the unit is connected with a camera that does not support this function, "—" is displayed.
SDR CONVERT SLOPE	Sets the SDR slope. <ul style="list-style-type: none"> • When the unit is connected with a camera that does not support this function, "—" is displayed.

46 LENS CONTROL

This is enabled with an AK-UC4000.



Item	Setting details
FOCUS	Adjusts the lens focus manually.
FOCUS SPEED	Adjusts the focus operation speed.
ZOOM	Adjusts the lens zoom manually.
ZOOM SPEED	Adjusts the zoom operation speed.
CONTROL SW	Enables or disables control of the lens from the unit. <ul style="list-style-type: none"> When this is set to "OFF", control the lens from the camera.

47 AW CONTROLLER LINK

The camera selection on this unit can be linked with the camera selection on the AW-RP150 and AW-RP60.

NOTE

- To enable this operation, you also need to set the setting on the AW-RP150/AW-RP60. The setting can be set from [ROP LINK] of the [SYSTEM] menu.

AW CONTROLLER LINK	
RECEIVE PORT	INFO UPLOAD
80	(push)
AW CONT LINK	
OFF	

Item	Setting details
RECEIVE PORT	Sets the port number of the unit that will receive notification of the camera selection on the AW-RP150/AW-RP60.
INFO UPLOAD	Saves the setting of [RECEIVE PORT]. The setting is not applied until you press this button to upload the information.
AW CONT LINK	Sets camera selection linking to ON/OFF. When this is set to "ON", camera selection is linked (default value: "OFF").

Software

IP connection

IP connection procedure

This section describes how to configure the unit and CCU using the software.

For the system configuration when using IP connections, see the following page.

➔ “System Connection Configuration” (see page 15)

Connection flow

1. Installing the software

Install “ROP Setup Software” supplied with the unit on a personal computer.

➔ “ROP Setup Software” (see page 125)

2. Equipment connections

Connect the unit to the CCU via a switching hub with PoE support (100base-TX) with LAN cables.

- Be sure to connect the devices via a switching hub because the personal computer for configuring the IP settings needs to be connected. Use a switching hub with PoE support because the unit can be powered by PoE.

➔ “IP connection” (see page 16)

3. Connecting and setting the personal computer

Connect the personal computer to the switching hub (100base-TX) using a LAN cable.

Configure the network settings of the personal computer.

- Configure the network settings of the personal computer so that it is in the same segment as the unit and CCUs.

➔ “Connecting and setting the personal computer” (see page 123)

4. Device IP address configuration

Configure the IP addresses by operating the menus of the devices to be connected.

- For details on the menu operation, refer to the operating instructions of the corresponding devices.

➔ “Setting the IP addresses of the devices” (see page 123)

5. Configuring various settings of the ROP

Use ROP Setup Software to configure various settings.

Various settings of an ROP connected with an IP connection can be configured.

- Create a list of the ROPs in the same system.
- Set the ROP system settings.
- Set the connection authentication.

6. Start operation

Connecting and setting the personal computer

Establish an IP connection for the personal computer on which ROP Setup Software is installed.

Configure the network settings of the personal computer.

Configure the network settings of the personal computer so that the same segment of the devices being connected is used.

The recommended settings are shown below.

IP address	192.168.0.200 • Change the IP address if it is already used by another device.
Subnet mask	255.255.255.0
Default gateway	192.168.0.1

Setting the IP addresses of the devices

Set the IP address of the unit (ROP) in [ROP IP SETTING] under the ROP menu.

➔ “39 ROP IP SETTING” (see page 112)

For the IP address of the CCU, refer to the operating instructions for the CCU.

Configuring various settings of the ROP

Use ROP Setup Software to configure various settings.

➔ “ROP Setup Software” (see page 125)

ROP Setup Software

ROP Setup Software (Setup Software) is software to configure the settings for connecting between the unit and CCUs from a personal computer. It allows you to configure the settings while checking each item in a list.

First, register this unit to ROP Setup Software from the [ROP List] tab screen.

Once the registration has been done, various settings can be configured on the [Configuration] tab, [Camera List] tab, and [UserAuth.] tab.

SETTING ITEM	DATA
RECEIVE PORT	35200
PANEL BRIGHTNESS	3
LCD BRIGHTNESS	20
BUZZER	<input checked="" type="radio"/> ON <input type="radio"/> OFF

When ROP Setup Software is started, the [Configuration] tab is displayed first. Click tabs to switch screens and make necessary registrations and configurations.

Installing the software

This section describes how to install Setup Software.

You can obtain the software from the support desk on the following website.

<https://pro-av.panasonic.net/>

1. **Download the zip file for Setup Software from the support desk on the website.**
2. **Double-click the downloaded zip file and extract the software.**
Be sure to read "Readme.txt" before installing the software.
3. **Double-click "HRP1015Tool.exe" in the "Setup Software" folder to start Setup Software.**

Configuring the settings of the personal computer

Before connecting with the unit, configure the following settings on the personal computer.

IP address: Set the IP address so that it does not duplicate that set for the unit or any device connected within the same subnet.

Subnet mask: Set the same subnet network as that set for the unit.

Default gateway: Set the same default gateway as that set for the unit.

Confirm the IP address, subnet mask, and default gateway set for the unit in the ROP IP SETTING menu.

➡ "39 ROP IP SETTING" (see page 112)

Notice about using ROP Setup Software

When configuring settings from a personal computer using ROP Setup Software, please pay attention to the following points.

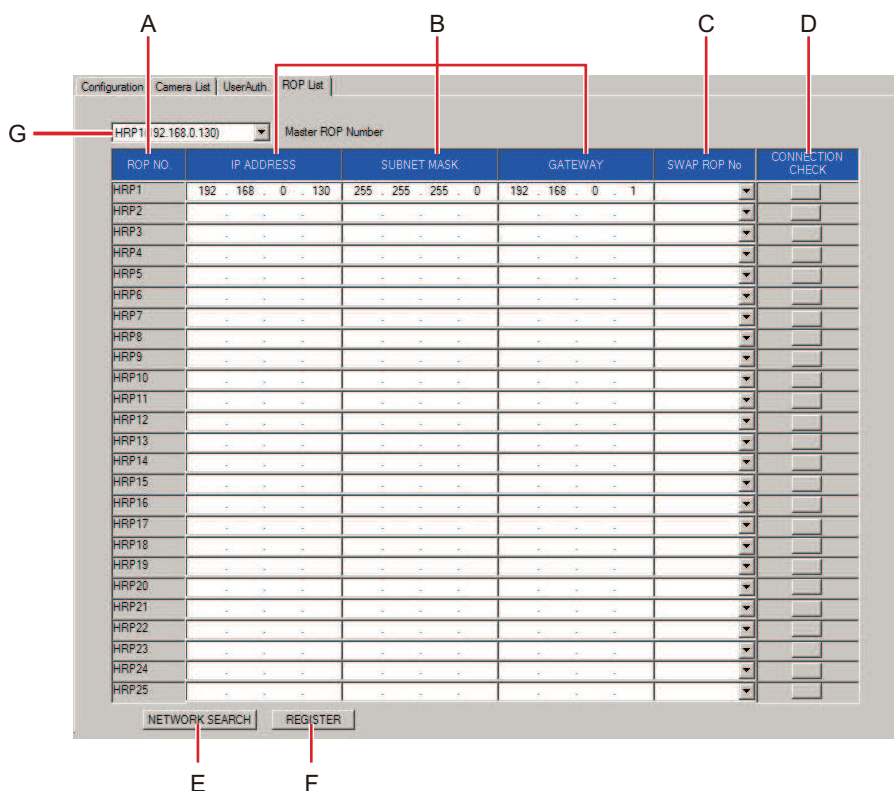
- Do not start up ROP Setup Software while the unit is in the setup mode.
- Do not start up ROP Setup Software on another personal computer on the same network.
- After using the setup software to configure connection settings, we recommend backing up the setting data.
➡ "ROP DATA SAVE" (see page 110)

Register the unit in ROP Setup Software [ROP List].

On the [ROP List] tab, register the IP address of the unit to be set from ROP Setup Software in [HRP1].

When connecting multiple ROPs to the network, register one of the units in [HRP1] and then register the other ROPs (AK-HRP1015) connected to the network.

ROPs registered here can be selected from the list box of the [Camera List] tab. Up to 25 units can be registered.



- A. ROP NO. column [ROP NO.]
- B. IP address column [IP ADDRESS] [SUBNET MASK] [GATEWAY]
- C. SWAP ROP No. column [SWAP ROP No]
- D. CONNECTION CHECK button [CONNECTION CHECK]
- E. NETWORK SEARCH button [NETWORK SEARCH]
- F. REGISTER button [REGISTER]
- G. Setting target selection list box [Master ROP Number]

Setting Procedure

1. Set IP addresses in [HRP1].

1. On the [HRP1] line under [ROP NO.] (A), enter the IP address of the unit to be registered
2. Click the [REGISTER] button (F) to confirm the [HRP1] setting.

2. Set the connections for multiple units.

Settings can be configured in the following two ways.

- Register IP addresses assigned to devices in the IP address column [IP ADDRESS] [SUBNET MASK] [GATEWAY] (B) in the same manner as with [HRP1].
- Click the [NETWORK SEARCH] button (E) to retrieve the information for the ROPs in the same segment.
A list is displayed in [HRP2] to [HRP25].

Click the [REGISTER] button (F) to confirm the [HRP1] setting. Registered ROPs are displayed in the [Master ROP Number] (G) list box.

- If you want to change the ROP numbers in the list, see the following page.
➔ “Changing the ROP numbers in the list” (see page 126)

3. Check the ROP connection on the network.

Click the [CONNECTION CHECK] button (D) in the row of the ROP NO. you need to check.

- If communication is performed correctly, the red tally of the tally display of the corresponding ROP flashes for approximately 3 seconds. If it does not flash, check the settings and connection.

Changing the ROP numbers in the list

If you want to change the list's ROP numbers in the step 2 above, swap the connect destination ROPs between the two ROP numbers.

1. Click ▼ in the [SWAP ROP No] column (C).

A list of ROP numbers [HRP2] to [HRP25] is displayed.

2. Select the ROP number with which you want to make the swap.

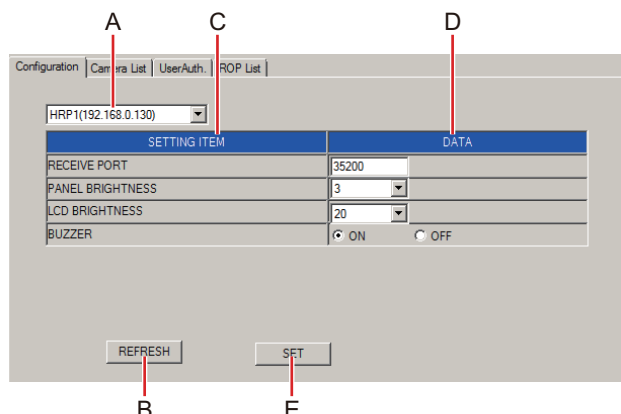
3. Click the [REGISTER] button (F) to confirm the change.

- The length of time required for setting after you click the [REGISTER] button (F) is proportional to the number of ROPs connected. When there are 25 ROPs connected, it takes up to about 10 minutes.

Configuring the Unit Settings [Configuration]

Configure the settings of the unit in the [Configuration] tab.

When you connect the personal computer to the unit for the first time, click the [REFRESH] button (B) to retrieve the values set on the unit.



- A. Setting target selection list box [Master ROP Number]
- B. REFRESH button [REFRESH]
- C. Setting item [SETTING ITEM]
- D. DATA column [DATA]
- E. SET button [SET]

Setting Procedure

1. Select the unit (ROP) to be set.

Click ▼ of [Master ROP Number] (A) to display a list of the IP addresses of ROP units that can be set. From the list, select the IP address of the ROP you want to set.

Any of the units registered on the [ROP List] tab can be selected.

2. Update the [Configuration] tab display.

Click the [REFRESH] button (B) to retrieve the connection information set on the unit to the personal computer and update the [Configuration] tab display.

3. Configure the unit settings.

[SETTING ITEM] (C) is displayed for setting items of the ROP selected in step 1.

Configure the settings for the required items in the [DATA] column (D).

RECEIVE PORT	Set the receive port.
PANEL BRIGHTNESS	Set the brightness of the panel LED display.
LCD BRIGHTNESS	Set the brightness of the LCD screen.
BUZZER	Enable or disable the buzzer (beep/call tone).

- The settings above can also be configured on the unit in setup mode.

4. Confirm the settings.

Confirm the settings. When the settings are complete, click the [SET] button (E) to confirm them.

When the [Do you agree to rebooting after data transfer?] message appears, click the [OK] button.

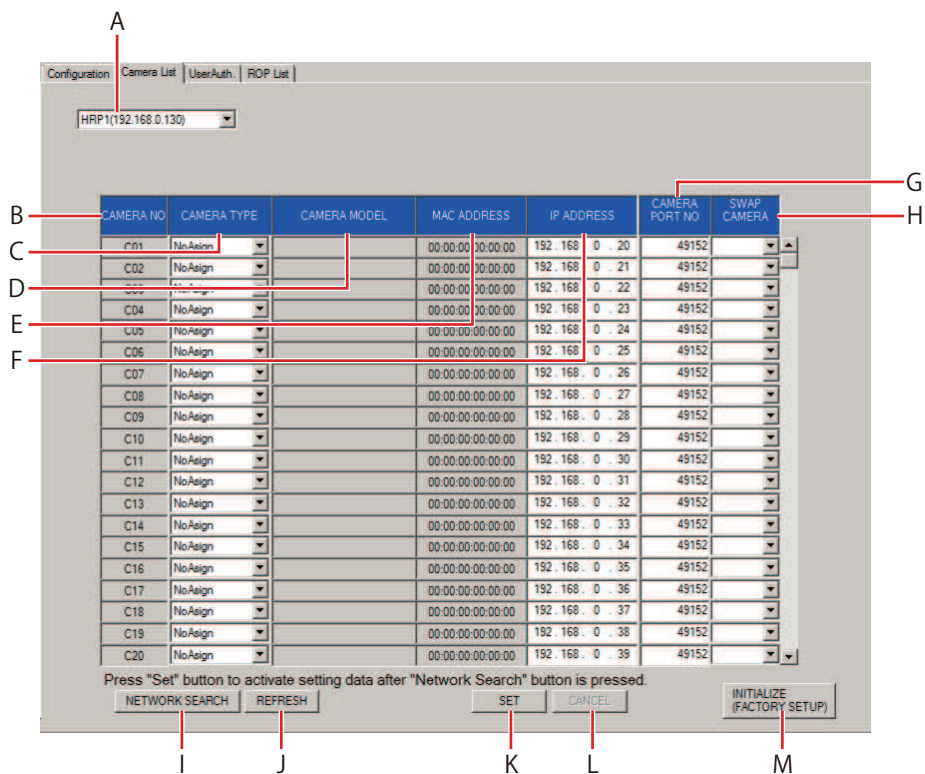
If you click [CANCEL], the settings are not reflected on the unit.

Configuring camera connection settings [Camera List]

On the [Camera List] tab, configure settings for connections between the ROP and the cameras.

When you connect the personal computer to the unit for the first time, first select the ROP to be set in [Master ROP Number] (A) and then click the [REFRESH] button (J). The values set on the ROP selected in [Master ROP Number] (A) are acquired.

Each of the [C01] to [C19] lines displays a list of the connection setting information for the corresponding camera number.



- A. Setting target selection list box [Master ROP Number]
- B. CAMERA NO column [CAMERA NO]
- C. CAMERA TYPE column [CAMERA TYPE]
- D. CAMERA MODEL column [CAMERA MODEL]
- E. MAC ADDRESS column [MAC ADDRESS]
- F. IP ADDRESS column [IP ADDRESS]
- G. CAMERA PORT NO column [CAMERA PORT NO]
- H. SWAP CAMERA column [SWAP CAMERA]
- I. NETWORK SEARCH button [NETWORK SEARCH]
- J. REFRESH button [REFRESH]
- K. SET button [SET]
- L. CANCEL button [CANCEL]
- M. INITIALIZE (FACTORY SETUP) button [INITIALIZE(FACTORY SETUP)]

Setting Procedure

1. **Select the ROP for which you want to configure the connection settings.**
Click ▼ of [Master ROP Number] (A) to display a list of the IP addresses of ROP units that can be set. From the list, select the ROP whose IP address you want to set.
Any of the units registered on the [ROP List] tab can be selected.
2. **Update the [Camera List] tab display.**
Click the [REFRESH] button (J) to retrieve the connection information for the ROP set in [Master ROP Number] (A) to the personal computer and update the [Camera List] tab display.
3. **Configure the connection settings.**
Connection setting information is displayed for the ROP selected in step 1.
Configure the settings for the required items.

Connection settings

Configuration: Camera List | UserAuth | ROP List

HRP1(192.168.0.130)

CAMERA NO	CAMERA TYPE	CAMERA MODEL	MAC ADDRESS	IP ADDRESS	CAMERA PORT NO	SWAP CAMERA
C01	NoAssign		00:00:00:00:00:00	192.168.0.20	49152	
C02	NoAssign		00:00:00:00:00:00	192.168.0.21	49152	
C03	NoAssign		00:00:00:00:00:00	192.168.0.22	49152	
C04	NoAssign		00:00:00:00:00:00	192.168.0.23	49152	
C05	NoAssign		00:00:00:00:00:00	192.168.0.24	49152	
C06	NoAssign		00:00:00:00:00:00	192.168.0.25	49152	
C07	NoAssign		00:00:00:00:00:00	192.168.0.26	49152	
C08	NoAssign		00:00:00:00:00:00	192.168.0.27	49152	
C09	NoAssign		00:00:00:00:00:00	192.168.0.28	49152	
C10	NoAssign		00:00:00:00:00:00	192.168.0.29	49152	
C11	NoAssign		00:00:00:00:00:00	192.168.0.30	49152	
C12	NoAssign		00:00:00:00:00:00	192.168.0.31	49152	
C13	NoAssign		00:00:00:00:00:00	192.168.0.32	49152	
C14	NoAssign		00:00:00:00:00:00	192.168.0.33	49152	
C15	NoAssign		00:00:00:00:00:00	192.168.0.34	49152	
C16	NoAssign		00:00:00:00:00:00	192.168.0.35	49152	
C17	NoAssign		00:00:00:00:00:00	192.168.0.36	49152	
C18	NoAssign		00:00:00:00:00:00	192.168.0.37	49152	
C19	NoAssign		00:00:00:00:00:00	192.168.0.38	49152	
C20	NoAssign		00:00:00:00:00:00	192.168.0.39	49152	

Press "Set" button to activate setting data after "Network Search" button is pressed.

NETWORK SEARCH REFRESH SET CANCEL INITIALIZE (FACTORY SETUP)

A B C D E F G H I J K L M

B	CAMERA NO column	Displays the camera numbers.
C	CAMERA TYPE column	<p>Click ▼ and select the connection type. The connection types are identical to those of [CONNECT SETTING] in the unit's ROP menu.</p> <p>“Serial”, “NetWork” Select these when connecting with the AK-UC4000 series or AK-UC3300 series (the AK-UC3000 series and AK-HC5000 planned to be supported by updating the version of this unit in the future). “Serial”: Serial connection, “NetWork”: IP connection</p> <p>“Serial(AK)”, “NetWork(AK)” Select these when connecting the AK-HC3500A series or AK-HC3800 series (planned to be supported by updating the version of this unit in the future). “Serial(AK)”: Serial connection, “NetWork(AK)”: IP connection</p> <p>“Serial(AW)”, “NetWork(AW)” Select these when connecting the AK-UB300 series (planned to be supported by updating the version of this unit in the future). “Serial(AW)”: Serial connection, “NetWork(AW)”: IP connection</p> <p>“NoAssign” Not specified (default setting).</p> <ul style="list-style-type: none"> “Serial”, “Serial(AK)”, and “Serial(AW)” cannot be specified for multiple cameras.
D	CAMERA MODEL column	<p>Displays the connected devices acquired with the [NETWORK SEARCH] button (I).</p> <ul style="list-style-type: none"> The CCUs connected via a serial connection are not displayed.
E	MAC ADDRESS column	<p>Displays the MAC addresses of cameras linked with camera numbers [CAMERA NO] (B) on the unit. MAC addresses of devices corresponding to camera numbers acquired by the [NETWORK SEARCH] button (I) are displayed.</p>
F	IP ADDRESS column	Set the IP addresses of the CCUs to be connected. After input, click the [SET] button (K) to reflect the changes.
G	CAMERA PORT NO column	<p>Set the port numbers of CCUs to be connected. After input, click the [SET] button (K) to reflect the changes.</p> <ul style="list-style-type: none"> Possible setting range 1 to 65535 However, the following values cannot be set even though they are within this range. 20, 21, 23, 25, 42, 53, 67, 68, 69, 110, 123, 161, 162, 995, 10669, 10670 Setting for normal operation For normal operation, configure the setting as follows. However, if the setting has been changed on the camera side, the setting must be matched to that setting. <ul style="list-style-type: none"> CCU IP: 49152

H	SWAP CAMERA column	Swap the camera connections set between two camera numbers. Click ▼ to display camera numbers "C01" to "C99". Select the camera number with which you want to make the swap from this list. After making a change, click the [SET] button (K) to reflect it.
I	NETWORK SEARCH button	Clicking this button to execute [NETWORK SEARCH] displays in yellow the cameras (CAMERA NO) corresponding to the newly detected link settings. If you click the [SET] button (K), the settings are confirmed and the connection destination IP addresses of the unit are updated. If you click the [CANCEL] button (L), the settings are not reflected. <ul style="list-style-type: none"> • If no camera was detected by executing [NETWORK SEARCH], click the [SET] button (K) once and then configure the settings manually. Then click the [SET] button (K) again to confirm the settings. • If a duplication error occurred during [NETWORK SEARCH], change the IP addresses on the screen. A duplication error is displayed if the IP addresses of two or more cameras displayed on the screen are same, or if the IP addresses of a camera displayed on the screen and a camera you are attempting to newly add to the network are same. Change the IP addresses for which the error was displayed, register the cameras to the unit, and then execute [NETWORK SEARCH].
J	REFRESH button	Retrieves the connection information set on the unit to the personal computer and updates the [Camera List] tab display.
K	SET button	Confirm the changes on the [Camera List] tab and update the settings on the unit. When the [Do you agree to rebooting after data transfer?] message appears, click the [OK] button. If you click [CANCEL] button (L), the settings are not reflected on the unit.
L	CANCEL button	Cancels changes that were made after executing [NETWORK SEARCH] button (I).
M	INITIALIZE (FACTORY SETUP) button	Click the [INITIALIZE(FACTORY SETUP)] button (M) to initialize the unit settings. The IP address is also initialized (factory default setting: 192.168.0.130).

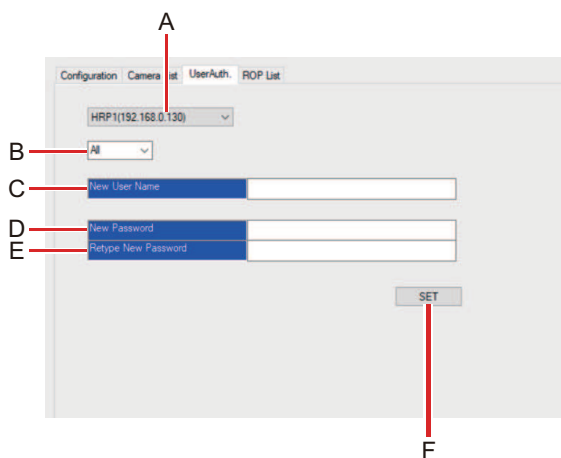
Caution when setting camera numbers

Be careful with regards to the following points when configuring the settings in [Camera List] for each AK-HRP1015.

- Decide the number of each camera beforehand, and set [Camera List] so that each camera number becomes the same as in the settings of all ROPs.
For example, when connecting CCU and ROP (two of each) with a serial connection and IP connection, set [CO1] to a serial connection and [CO2] to an IP connection for [Camera List] of HRP1. For [Camera List] of HRP2, use [SWAP CAMERA] to set [CO1] to an IP connection and [CO2] to a serial connection.
- When you perform a search with [NETWORK SEARCH], all of the cameras and CCUs (C01 and C02) in the same segment will be found, but change any camera that has already been set with a serial connection to "NoAssign".

Setting user authentication [UserAuth.]

To control CCUs that have the user authentication function enabled, you need to set the user name and password on the unit. Configure this setting on the [UserAuth.] tab of this software. The user authentication function is only enabled when the unit is controlling CCUs connected with an IP connection. Also refer to the operating instructions for the CCU.

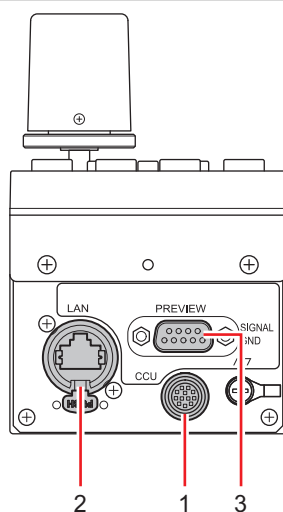


A	Setting target selection list box	Click ▼ to display a list of the IP addresses of the ROP units that can be set. Select the IP address of the ROP you want to set from the list. <ul style="list-style-type: none"> • Any of the units registered on the [ROP List] tab can be selected.
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B	Camera number box	Select the number of the camera for which you want to configure the user authentication settings. If you select "ALL", configure the settings for all cameras at once. If you select a camera number, configure the settings for the corresponding camera.
C	New User Name box	Enter the ID (user name) for connecting to the camera to be registered.
D	New Password box	Enter the password for connecting to the camera to be registered. The password is displayed as "*" .
E	Retype New Password box	Reenter the password that you entered in the [New Password] box (D) for password confirmation. The password is displayed as "*" .
F	SET button	Save the entered data. When you click this button, the user name and password are set on the ROP selected in the setting target selection list box (A). <ul style="list-style-type: none">• When cameras with the user authentication function enabled are controlled, the user name and password that were set here will be required. Enter the user ID and password configured on the connected device.

Reference

Connector pin assignment table



1 <CCU> connector

(Hirose Electric: HR10A-10R-10P (71))

Pin No.	Function	Polarity	Flow of signal
1	CAM DATA (H)	+	CAM→ROP
2	CAM DATA (L)	-	CAM→ROP
3	CAM CONT (H)	+	ROP→CAM
4	CAM CONT (L)	-	ROP→CAM
5	NC		
6	NC		
7	NC		
8	NC		
9	12 V		
10	GND		

2 <LAN> connector

Complies with 100base-TX.

Allowing connection to a network device that supports the PoE standard (IEEE802.3af compliant).

3 <PREVIEW> connector

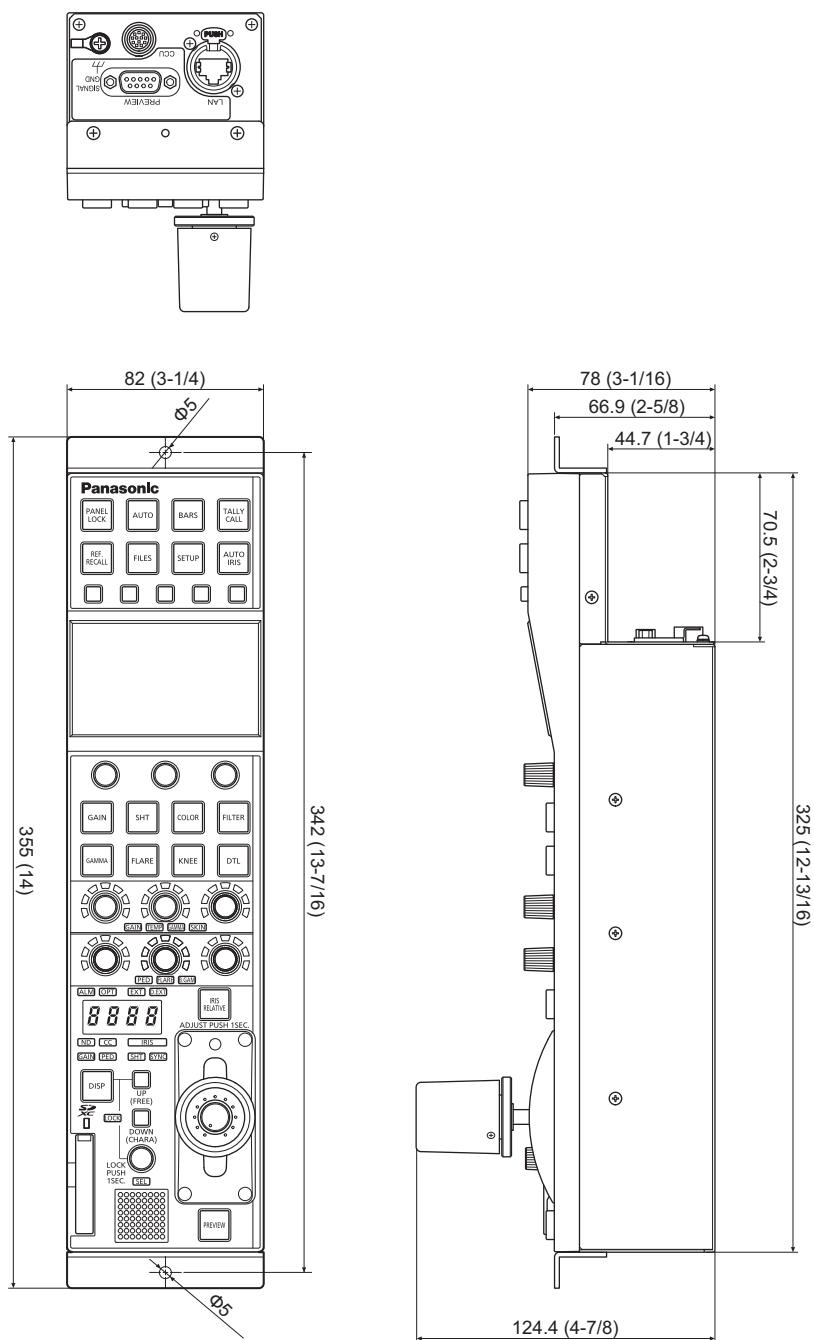
(J.S.T. Mfg. Co., Ltd.: JEY-9S-1A3F (LF))

Pins 1 and 2 are connectors for outputting the preview signal. Contact output is provided while the IRIS lever is pressed. This is a dry contact.

Pin No.	Function	Flow of signal	Remarks
1	P.VIEW COM	ROP→external control	Dry contact
2	P.VIEW1		
8	TALLY IN	TALLY→ROP	Dry contact
9	GND		

Appearance

Unit: mm (inch)



Specifications

General

Powersupply	12 V DC (≡) (Power supply from camera: 10 V - 16 V DC) 42 V - 57 V DC (≡) (PoE power supply)
Current consumption	0.44 A (Power supply from camera: 10 V - 16 V DC) 0.11 A (PoE power supply)

 indicates safety information.

Camera/CCU control	Control signals (camera, CCU control) Power supply 16 V DC (when CCU connected) *1, 12 V DC (when camera connected) *1
Maximum cable length	When camera connected: 20 m (65.7 ft) When CCU connected: 50 m (164 ft)
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Humidity	90% or less
Dimensions (Width×Height×Depth)	82 mm × 355 mm × 124.4 mm (3-1/4 inches × 14 inches × 4-7/8 inches)
Weight	Approx. 1.5 kg (3.3 lb)

*1: Can be provided from CCU

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