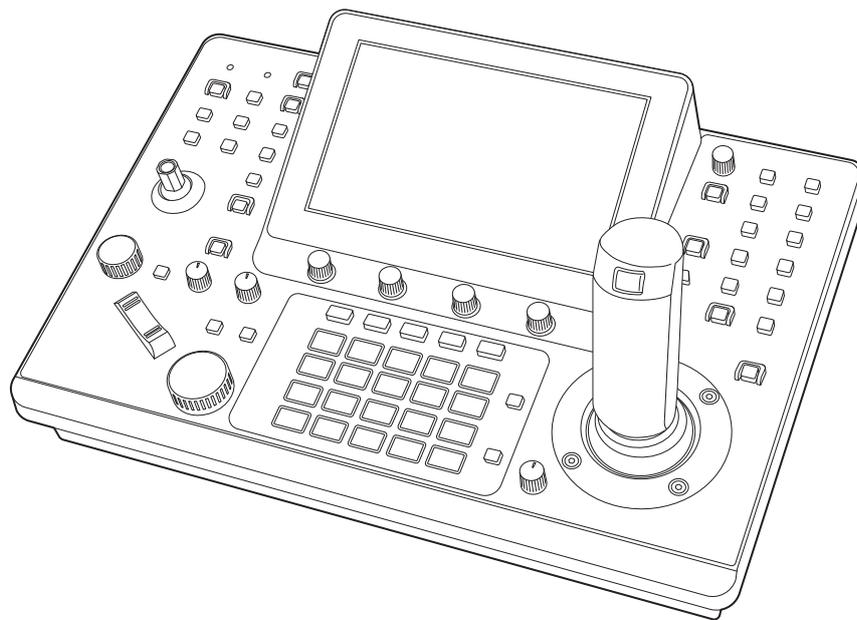


Panasonic®

Operating Instructions

Remote Camera Controller

Model No. **AW-RP200G**



HEVC Advance™
Covered by patents at patentlist.accessadvance.com

Before operating this product, please read the instructions carefully and save this manual for future use. Please carefully read the "Read this first!" (pages 3 to 5) of this Manual before use.

GJ

W0226SR0 -FJ
Issued in February 2026

ENGLISH

DPQP1748ZA

РУССКИЙ	Для получения дополнительной информации посетите веб-сайт Panasonic и обратитесь к инструкции по эксплуатации и инструкции по установке.	Magyar	A termékkel kapcsolatos biztonsági információkért és fontos értesítésekért látogasson el az alábbi weboldalra.
Български	Посетете следния уебсайт относно информация за безопасността и важни уведомления за продукта.	Latviešu	Lai iegūtu informāciju par drošību un skatītu svarīgus paziņojumus par šo produktu, apmeklējiet tālāk norādīto tīmekļa vietni.
Hrvatski	Za sigurnosne informacije i važne obavijesti o proizvodu posjetite sljedeću internetsku stranicu.	Lietuvių	Jei reikia saugos informacijos ir svarbių pranešimų apie gaminį, apsilankykite toliau nurodytoje svetainėje.
Čeština	Na následujícím webu najdete bezpečnostní informace a důležité poznámky k tomuto produktu.	Polski	Informacje o bezpieczeństwie i ważne informacje o produkcie znajdują się w poniższej witrynie internetowej.
Dansk	Besøg følgende webside for sikkerhedsinformation og vigtige bemærkninger vedrørende produktet.	Português	Consulte o seguinte website para as informações de segurança e importantes notificações sobre o produto.
Nederlands	Ga naar de volgende website voor veiligheidsinformatie en belangrijke meldingen over het product.	Română	Vizitați următoarea pagină web pentru informații de securitate și notificări importante cu privire la produs.
Eesti	Toodet puudutava ohutusteabe ja oluliste märkuste saamiseks külastage järgmist veebilehte.	Slovensky	Pre bezpečnostné informácie a dôležité oznámenia súvisiace s produktom navštívte túto webovú stránku.
Suomi	Käy seuraavalla verkkosivulla saadaksesi turvallisuustietoja ja tärkeitä tietoja liittyen laitteeseen.	Slovenščina	Za varnostne informacije in pomembna obvestila v zvezi z izdelkom obiščite naslednje spletno mesto.
Ελληνικά	Για πληροφορίες σχετικά με θέματα ασφάλειας και σημαντικές ειδοποιήσεις που αφορούν το προϊόν σας, επισκεφτείτε τον ιστότοπο που ακολουθεί.	Svenska	Besök följande webbplats för säkerhetsinformation och viktiga meddelanden om produkten.

<https://pro-av.panasonic.net/manual/en/index.html>

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Copyrights

It is expressly prohibited to distribute, copy, disassemble, reverse compile, reverse engineer, or export in violation of export laws the software provided with the unit.

Illustrations and display examples in this manual

- Illustrations and display examples may differ from the actual product.
- Screen stills are used according to the guidelines of Microsoft Corporation.

Abbreviations

The following abbreviations are used in this manual:

- In this manual, except in cases where specific devices are indicated, "4K Integrated Cameras" or "pan/tilt head camera combinations" are referred to as "remote cameras".

The device model numbers are indicated as below in this manual:

Model Numbers	Indications in this manual
AW-RP200G	AW-RP200
AW-UE150W, AW-UE150K	AW-UE150
AW-UE150AW, AW-UE150AK	AW-UE150A
AW-UE160W, AW-UE160K	AW-UE160

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:

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.

CAUTION:

In order to maintain adequate ventilation, do not install or place this unit in a bookcase, built-in cabinet or any other confined space. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation.

 indicates safety information.

FCC NOTICE (USA)

Supplier's Declaration of Conformity

Model Number: AW-RP200G
Trade Name: Panasonic
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 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.

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.

NOTIFICATION (Canada)

CAN ICES(A)/NMB(A)

 indicates safety information.

Turkey Only

AEEE Yönetmeliğine Uygundur.
AEEE Complies with Directive of Turkey.

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.



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 municipality, dealer or supplier.

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

Manufactured by:

Panasonic Entertainment & Communication Co., Ltd.
1-10-12, Yagumo-higashi-machi, Moriguchi City, Osaka, Japan

Importer:

Panasonic Connect Europe GmbH
Hagenauer Strasse 43, 65203 Wiesbaden, Germany

Authorized Representative in EU:

Panasonic Connect Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Germany

Importer for UK:

Panasonic Connect UK,
a branch of Panasonic Connect Europe GmbH,
Maxis 2, Western Road, Bracknell, Berkshire, RG12 1RT



Інформація для покупця

Виробник:	Panasonic Entertainment & Communication Co., Ltd.	Панасонік Ентертейнмент енд Коммюнікейшн Ко., Лтд.
Адреса виробника:	Moriguchi, Osaka, Japan	Морігучі Осака Японія
Країна походження:	Japan/China	Японія/Китай
Імпортер:	ТОВ "ПАНАСОНІК УКРАЇНА ЛТД"	
Адреса імпортера:	вул. Васильківська, буд. 30, м. Київ 03022, Україна	

Примітки:

Термін служби виробу	7 років
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Дата виготовлення може бути визначена за допомогою комбінації літер та цифр серійного номера, розташованого на продукті.

Приклад: X X XXXXXXX

Рік: остання цифра року (7 – 2017, 8 – 2018,...0 – 2020)
Місяць: А – Січень, В – Лютий... L – Грудень

Information for Users in India

Information on hazardous constituents as specified in the E-Waste (Management) Rules in electrical and electronic equipment. Declaration of Conformity with the requirements of the E-Waste (Management) Rules limits with respect to Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls, Polybrominated diphenyl ethers.

The content of hazardous substance with the exemption of the applications listed in the E-Waste (Management) Rules:

1. Lead (Pb) – not over 0.1% by weight.
2. Cadmium (Cd) – not over 0.01% by weight.
3. Mercury (Hg) – not over 0.1% by weight.
4. Hexavalent chromium (Cr6+) – not over 0.1% by weight.
5. Polybrominated biphenyls (PBBs) – not over 0.1% by weight.
6. Polybrominated diphenyl ethers (PBDEs) – not over 0.1% by weight.



For the purpose of recycling to facilitate effective utilization of resources, please return this product to a nearby authorized collection center, registered dismantler or recycler, or Panasonic service center when disposing of this product.
Customer care number (Toll free) : 1800 103 1333 , 1800 108 1333
Please see the Panasonic website for further information on collection centers, etc. or call the customer care toll-free number.
<https://www.panasonic.com/in/corporate/e-waste-management.html>

Do's & Don'ts		
No.	Do's	Don'ts
1	All electrical and electronic products are required to be handed over only to the Authorized recycler.	The product should not be opened by the user himself / herself, but only by authorized service personnel.
2	The product should be handed over only to authorized recycler for disposal.	The product is not meant for re-sale to any unauthorized agencies / scrap dealers / kabariwalas.
3	Keep the product in an isolated area, after it becomes non-functional / unrepairable so as to prevent its accidental breakage.	The product is not meant for mixing into household waste stream.
4	Refer to Operating Instructions for handling of end of life products.	Do not keep any replaced spare part(s) from the product in an exposed area.
5	Always dispose of products that have reached end of life at Panasonic Life Solutions India Authorized Service Centre.	Do not donate old electronic items to anybody. Do not dispose of your product in garbage bins along with municipal waste that ultimately reaches landfill.
6	Wherever possible or as instructed, separate the packaging material according to responsible waste disposal options and sorting for recycling.	Do not give e-waste to informal and unorganized sectors like Local Scrap Dealers / Rag Pickers.

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Introduction

■ Overview

This unit is a remote camera controller for controlling remote cameras (sold separately).
A maximum of 200 remote cameras can be connected via IP, and when connected via serial ports the maximum number that can be connected is 3.

■ Required computer environment

CPU	7th generation Intel® Core™ (Kaby Lake and later) recommended
Memory	For Windows 4 GB or more For Mac 4 GB or more
Network functionality	100BASE-T/TX or 1000BASE-T RJ-45 connector
Image display functionality	Resolution: 1920×1080 pixels or higher Color production: True Color 24 bit or higher
Compatible operating systems and web browsers	Windows Microsoft® Windows® 11 Microsoft® Windows® 10 Microsoft Edge (most recent version) Google Chrome Mac macOS15 macOS14 macOS13 Safari Google Chrome

■ Disclaimers

Panasonic accepts no responsibility for any of the following under any circumstances:

- (1)Accidental, special, or consequential damage that occurs directly or indirectly in relation with this product,
- (2)Failure or damage to the unit due to customer misuse or carelessness,
- (3)The product is disassembled, repaired, or remodeled by the customer,
- (4)Inconvenience or damage due to the inability to display images as a result of any reason or cause including malfunctions or failures of this product,
- (5)Failures due to use in a system combining third party devices, etc., and any inconvenience or damage resulting from such use,
- (6)Inconvenience or damage resulting from accidents caused by improper installation, etc., excluding failures of the product itself,
- (7)Data or content saved is lost for some reason,
- (8)Any damage, claims, etc. due to loss or leakage of image data and configuration data saved on the main unit, USB memory, etc., or personal computer.

■ Notice regarding networks

This unit also has functionality to connect to networks for use. It is conceivable that the following types of damage can occur if the product is connected to a network for use:

- (1)Data breaches or leaks via this unit,
- (2)Unauthorized operation of the product by a malicious third party,
- (3)Blocking or stopping of the product by a malicious third party.

In order to prevent these types of issues, the customer should take responsibility for the following measures, and also ensure that there have been sufficient network security measures implemented. Understand that Panasonic can accept no responsibility for the described types of damage.

- Use a firewall, etc., and ensure the unit is used in a network that is properly secured.
- When using in a system to which a computer is also connected, confirm that the computer is regularly checked for viruses and illegal programs, and that removal is performed when found.
- Set user names and passwords to protect from unauthorized attacks and limit the users that are able to log in.
- Be sure to close all web browsers after the administrator accesses the unit.
- Change the administrator password periodically.
- Set passwords with a length of 8 characters or more using at least three of capital letters, lower case letters, numbers, and symbols so that the passwords cannot be easily guessed by a third party.
- Implement measures such as limitations on access using user authentication so that the configuration data in the unit does not get leaked to the network.
- Do not install the unit where it or its cables, etc., can be easily damaged.
- Delete the user ID and password information when disposing of or transferring ownership of the unit.

User authentication

When connecting this product to a network, implement measures such as limiting access by enabling user authentication so that the configuration data in the unit does not get leaked to the network.

Limitations when using the product

It is recommended that the network environment of connected devices is the same segment as the network settings of this unit. When connections are made where the segment differs, there is a possibility of events occurring that depend on the configurations particular to the network devices, etc., so be sure to undertake proper testing before commencing operation.

■ Software for upgrading

You can obtain the software for upgrading from the Support and Download pages of the following website.
<https://pro-av.panasonic.net/en/>

Follow the instruction manual on the download site to upgrade.

Features

Compatible with both connection via IP and serial connection

Connection via IP

- You can connect a maximum of 200 remote cameras *1 via a network hub (switching hub).
 - The IP addresses for the remote cameras *1 can be automatically allocated using the automatic IP setting feature of this unit so the remote cameras can be controlled.
- *1: Refer to "Compatible remote cameras" (page 9).
- A single remote camera can be simultaneously controlled by up to 5 of these remote camera controllers.

Serial connection

- You can connect a maximum of 3 remote cameras.

Supports multiple operation modes

- The product is equipped with a variety of different operation modes, such as camera selection, preset memory control, and macro control, enabling you to select the most suitable mode for your operation.

Supports cropping

- When you connect this unit to a remote camera that has the Cropping feature, you can crop HD images from 4K images (Cropping feature).

Simple remote camera operation

- The product is equipped with dedicated joysticks, rockers, buttons, and dials, to control pan/tilt, zoom, and focus operations. There are also dials for each to adjust the speed of the operations. You can speedily and reliably adjust the camera angle.
- The product is equipped with an AWB button and an ABB button to execute automatic adjustments of the white balance and black balance. There are also shortcut buttons which you can quickly assign to the function dials that correspond to each of the WHITE BALANCE, GAIN, SHUTTER/ND, PED, DTL/DNR, ZOOM/OIS, PAN/TILT, and PMEM features. There are also manual operations available to easily adjust color tone.
- Rapid call up operations are available for shooting environments that frequently use preset memories. You can also save the speed to move remote cameras to preset memory positions (preset memory speed) in the preset memory numbers of this unit. Depending on your type of operation, you can have remote cameras move at different speeds according to the preset memory numbers, making a variety of image production techniques available.
- Built-in tracing memory that records a series of operations for individual remote cameras. You can reproduce the actions of a remote camera. There is also a built-in macro function that enables reproduction of multiple remote camera sequences, etc., with one press of a button. You can create the macro sequence with the web menus, then execute using the multi select switches, etc.
- The unit is equipped with PoE++ *2 making power supply installation works unnecessary. No power supply installation works are required for this unit if you connect it to a network device (IEEE802.3bt compliant)*3 that supports the PoE++ standard.

NOTE

- If you use a PoE++ power supply device that requires software authentication, it may take a few minutes between when the power supply starts and when operation is possible.
- If both an external DC power supply and a PoE++ power supply are connected, the external DC power supply is prioritized. If both are connected and you unplug the external DC power supply, the unit automatically restarts.
- For the cable used for PoE++ power supply, use a category 5e or better cable. The length of the cable between the device supplying the power and this device must be a maximum of 100 m (328.1 ft). Power supply performance may drop if you use a cable that is category 5 or less.
- When you have connected a computer compatible with gigabit Ethernet to a PoE++ injector with a straight LAN cable, in rare case the computer may not recognize the device. If this occurs, connect the computer and this unit with a cross LAN cable (or a cross connection).

*2: Abbreviation for Power over Ethernet Plus Plus. Hereunder it will appear as "PoE++".

*3: For PoE++ power supply devices for which operation has been confirmed, consult the dealer from which you purchased the unit.

Compatible remote cameras

● 4K Integrated Cameras

AW-UE150/AW-UE150A/AW-UE160

Refer to the following website for details.

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

Notes for use

Observe the following items, along with the content found in "Read this first!".

Handle the product with care

Do not drop, apply strong shocks or vibrations.

Also, do not try to carry the unit by holding the joysticks or dials. Doing so may cause malfunctions and accidents.

Use within the operating temperature range of 0 °C to 40 °C (32 °F to 104 °F)

Using in cold places where the temperature drops below 0 °C (32 °F) or hot places where the temperature exceeds 40 °C (104 °F) can lead to negative impacts on the internal parts.

Disconnect and connect cables after turning off the power

Be sure to turn off the power of the devices before disconnecting or connecting cables.

Locate in a place with low humidity and low levels of dust

Avoid places with high humidity and high levels of dust as these can damage the internal parts.

Maintenance

Turn the power off and wipe with a dry cloth. If the dirt is hard to remove, dampen a cloth with a weak solution of kitchen cleanser (neutral), wring well, then wipe gently. After wiping with another cloth dampened with plain water, wipe dry with a dry cloth.

NOTE

- Do not use benzene, thinner or other volatile substances.
- When using chemically treated cleaning cloths, be sure to read the cautions for those products.

Keep away from fire

Do not place naked flames of candles, etc., near the unit.

Do not splash water onto the product

Do not splash water directly onto the product. This may cause malfunction.

When disposing of the product

When you have finished using the product and are disposing of it, ask for a specialist to dispose of it to help preserve the environment.

About the liquid crystal panel

The liquid crystal panel is precisely managed so that at least 99.99% of the dots are effective pixels and 0.01% or less are invalid pixels and/or always lit. This is not a malfunction and it has no effect whatsoever on the images.

Depending on the images being displayed, there may be some uneven picture quality on the screen.

The surface of the panel may be scratched if you wipe the liquid crystal parts with a hard cloth or rub too firmly.

There is fluctuation of the response speed and brightness of the liquid crystals depending on the operating temperature.

If this unit is left in locations with high temperatures and high humidity, the characteristics of the liquid crystal panel will change, which can cause uneven picture quality.

Due to the characteristics of the liquid crystal panel, issues such as image retention, lower brightness, burn-in, striping, etc., can occur if bright still images, etc., are displayed continuously for long periods or if the unit is used continuously in conditions with high temperatures and high humidity. Some bright parts of the panel may appear as stained areas that remain permanently.

Furthermore, you should avoid using the unit continuously in the following types of conditions:

- Enclosed spaces that can become hot and humid
- In the vicinity of the outlets of air conditioners, etc.

Using the unit while showing the above types of images or in the above conditions over extended periods will accelerate the aging of the liquid crystal panel.

We recommend the following to prevent premature aging:

- Do not display bright still images, etc., continuously for long periods
- Lower brightness
- Turn off the power of the main unit when not in use

The image retention phenomena can be resolved over time by changing the display on the screen.

PoE++ power supply

This unit complies with IEEE802.3bt. (PD Type3, Class5, 40 W)

For PoE++ power supply, use a compatible Ethernet hub or PoE++ injector.

Software authentication (LLDP) complies with IEEE802.3bt, but it may be necessary to make settings on the network device.

For Ethernet hubs and PoE++ injectors for which operation has been confirmed, consult the dealer.

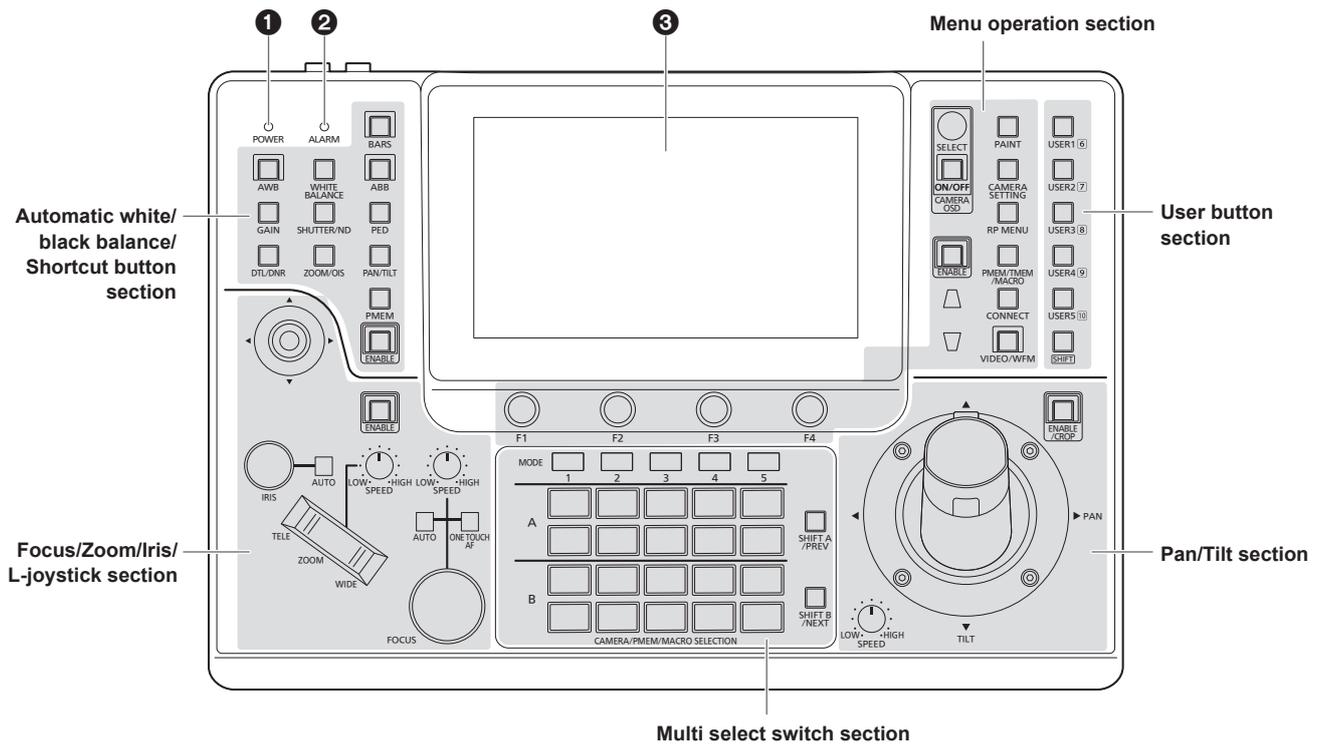
If you use a PoE++ power supply device that requires software authentication, it may take a few minutes between when the power supply starts and when operation is possible.

If both an external DC power supply and a PoE++ power supply are connected, the external DC power supply is prioritized. If both are connected and you unplug the external DC power supply, the unit automatically restarts, interrupting images and transmission.

For the cable used for PoE++ power supply, use a category 5e or better cable. The length of the cable between the device supplying the power and this device must be a maximum of 100 m (328.1 ft). Power supply performance may drop if you use a cable that is category 5 or less.

When you have connected a computer compatible with gigabit Ethernet to a PoE++ injector with a straight LAN cable, in rare case the computer may not recognize the device. If this occurs, connect the computer and this unit with a cross LAN cable (or a cross connection).

Control panel section



1 POWER lamp [POWER]

When power is input to the DC IN terminal (rear panel area 2) or there is power supplied from the LAN terminal (rear panel area 3), this illuminates when the POWER switch on the rear panel (rear panel area 1) is switched ON.

Illuminated amber:

Starting up

Illuminated green:

Starting calibration of the operating interface and during normal operation

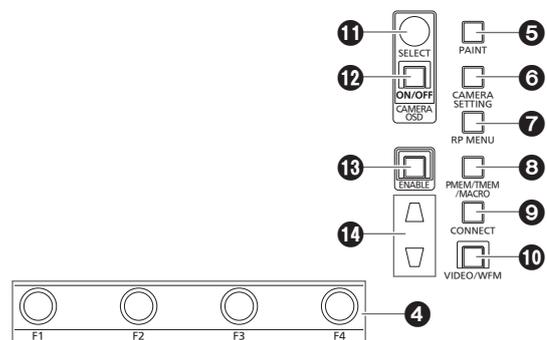
2 ALARM lamp [ALARM]

Illuminates when an alarm is received from a remote camera (cooling fan alarm, pan/tilt error, etc.) or when an alarm from this unit is received (cooling fan alarm, etc.).

3 Main LCD panel

Displays the current setting status.

Menu operation section



4 F1 dial [F1], F2 dial [F2], F3 dial [F3], F4 dial [F4] (function dials)

Use these dials to manipulate the items displayed on the LCD panel of the unit.

When the status screen is displayed, use them to manipulate the item values (function bar) displayed in the lower part of the LCD panel. When a menu screen is displayed, use them to manipulate the selected menu item values.

5 PAINT button [PAINT]

Displays the PAINT menu on the LCD panel.

6 CAMERA SETTING button [CAMERA SETTING]

Displays the CAMERA SETTING menu on the LCD panel.

7 RP MENU button [RP MENU]

Displays the RP MENU menu on the LCD panel.

③ PMEM/TMEM/MACRO button [PMEM/TMEM/MACRO]

Displays the PMEM/TMEM/MACRO menu on the LCD panel.

⑨ CONNECT button [CONNECT]

Displays the CONNECT menu on the LCD panel.

⑩ VIDEO/WFM button [VIDEO/WFM]

Displays images being input through the SDI input or via IP input to this unit on the LCD panel, or displays the waveform or vectorscope of images at that time on the LCD panel.

Use the up/down buttons (⑭) to change the status.

⑪ (Camera OSD menu operation)

CAMERA OSD SELECT dial [CAMERA OSD SELECT]

When the CAMERA OSD ON/OFF button is illuminated, turn the dial to select a menu, then press to confirm.

⑫ (Camera OSD menu operation)

CAMERA OSD ON/OFF button [CAMERA OSD ON/OFF]

Switches the OSD on the camera ON/OFF.

⑬ Menu operation ENABLE button [ENABLE]

Enables or disables operations with the menu operation section, camera OSD menu section, and LCD panel.

Hold down to turn the LCD panel off.

When on:

Operations with the menu operation section, camera OSD menu section, and LCD panel are enabled

When off:

Operations with the menu operation section, camera OSD menu section, and LCD panel are disabled

⑭ Up/Down buttons

While the menu screen is displayed:

Moves the cursor on the menu screen up or down one line.

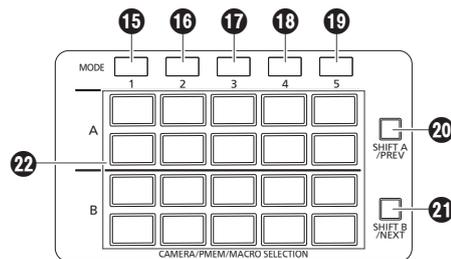
While the status screen is displayed:

Switches between camera selection, preset memory control, and macro control on the LCD panel.

When [VIDEO/WFM] is ON:

Transitions the waveform display and vectorscope screen.

Multi select switch section (operation mode section)



⑮ MODE 1 button [1]

Switches the multi select switches to camera selection x20.

⑯ MODE 2 button [2]

Switches the multi select switches to preset memory control x20.

⑰ MODE 3 button [3]

Switches the multi select switches to camera selection x10/preset memory control x10.

⑱ MODE 4 button [4]

Switches the multi select switches to macro control x20.

⑲ MODE 5 button [5]

Switches the multi select switches to camera selection x10/macro control x10.

⑳ SHIFT A/PREV button [SHIFT A/PREV]

MODE1/3/5:

Makes the indicators used for selecting camera groups that appear on the top rows of the multi select switch section (A) to be displayed on the multi select switches (22).

MODE2:

The preset memory data indicated on the multi select switch section (22) is changed (switches to the previous page).

MODE4:

The macro data indicated on the multi select switch section (22) is changed (switches to the previous page).

㉑ SHIFT B/NEXT button [SHIFT B/NEXT]

MODE1:

Makes the indicators used for selecting camera groups that appear on the bottom rows of the multi select switch section (B) to be displayed on the multi select switches (22).

MODE2:

The preset memory data indicated on the multi select switch section (22) is changed (switches to the next page).

MODE3:

Makes the indicators used for selecting preset memory groups that appear on the bottom rows of the multi select switch section (B) to be displayed on the multi select switches (22).

MODE4:

The macro data indicated on the multi select switch section (22) is changed (switches to the next page).

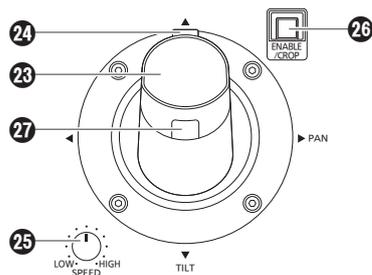
MODE5:

Makes the indicators used for selecting macro groups that appear on the bottom rows of the multi select switch section (B) to be displayed on the multi select switches (22).

㉒ Multi select switches [CAMERA/PMEM/MACRO SELECTION A, B]

Allocated to the function or display according to MODE 1 to 5.

Pan/Tilt section



23 R-joystick

Controls the facing of the remote camera currently selected. The speed of operation changes according to the angle the joystick is moved to.

Tilt left and right:

Moves left and right

Tilt forward and backward:

Moves up and down

While CROP is selected (the PAN/TILT ENABLE/CROP button (26) is illuminated green), the crop position of the camera is controlled.

NOTE

- When turning on the power, do not touch until the status screen is displayed on the LCD panel.

24 R-rocker

You can control functions such as focus or zoom by allocating this button.

NOTE

- When turning on the power, do not touch until the status screen is displayed on the LCD panel.

25 PAN/TILT SPEED dial [SPEED]

Adjusts the amount that speed changes when operating the R-joystick.

Turn clockwise:

Moves faster (HIGH)

Turn counterclockwise:

Moves slower (LOW)

26 PAN/TILT ENABLE/CROP button [ENABLE/CROP]

Enables the R-joystick (23) and R-rocker (24).

On (amber):

Operations with the R-joystick and R-rocker are enabled

Off (press and hold button):

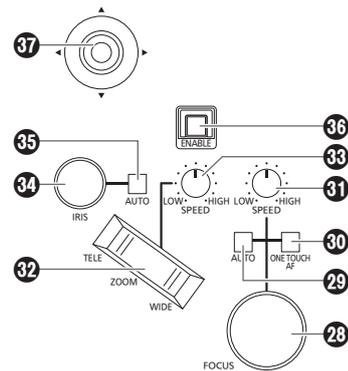
Operations with the R-joystick and R-rocker are disabled

- When you press this button to make it illuminate green, operation switches to crop frame.

27 R-joystick USER button

Recalls the function allocated to the R-joystick user button.

Focus/Zoom/Iris/L-joystick section



28 FOCUS dial [FOCUS]

Controls focus manually.

During auto focus (when the auto focus button (29) is illuminated), this operation is disabled.

Turn clockwise:

Focus moves towards the far side

Turn counterclockwise:

Focus moves towards the near side

29 Auto focus button [AUTO]

Sets focus control to "Auto (auto focus)".

During auto focus, operations with the FOCUS dial (28) and the one touch auto focus button (30) are disabled.

On : Auto focus

Off : Manual focus

30 One touch auto focus button [ONE TOUCH AF]

During manual focus (when the auto focus button (29) is off), press this and the button lights for a moment, auto focus works, and the subject is focused.

Apart from this button, at times when images are being displayed on the whole main LCD, one touch auto focus works when you touch the LCD. Refer to "Waveform display and vectorscope" (page 68) for details.

31 FOCUS SPEED dial [SPEED]

Adjusts the amount that operation changes when operating the FOCUS dial (28).

Turn clockwise:

Moves faster (HIGH)

Turn counterclockwise:

Moves slower (LOW)

- When the R-rocker has been allocated FOCUS, it operates with this setting.

32 L-rocker [ZOOM]

Adjusts the zoom of lens.

The speed of the zoom operation changes according to how much you press the button in.

Press TELE end:

Moves to the telephoto end

Press WIDE end:

Moves to the wide end

NOTE

- When turning on the power, do not touch until the status screen is displayed on the LCD panel.

33 L-rocker SPEED dial [SPEED]

Adjusts the amount that operation changes when operating the L-rocker (32).

Turn clockwise:

Moves faster (HIGH)

Turn counterclockwise:

Moves slower (LOW)

- When the R-rocker has been allocated ZOOM, it operates with this setting.

34 IRIS dial [IRIS]

During manual iris (while the auto iris button (35) is off), this manually controls the lens aperture.

During auto iris (while the auto iris button (35) is illuminated), you can adjust the amount the auto iris is open on the remote camera.

Turn clockwise:

Lens aperture opens more

Turn counterclockwise:

Lens aperture closes more

35 Auto iris button [AUTO]

Sets lens aperture control to "Auto (auto iris)".

On : Auto iris

Off : Manual iris

36 FOCUS/L-ROCKER/IRIS/L-JOYSTICK ENABLE button [ENABLE]

Enables or disables operations with the FOCUS dial (29), L-rocker (32), IRIS dial (34), and L-joystick (37).

On:

Operations with the FOCUS dial, L-rocker, IRIS dial, and L-joystick are enabled

Off:

Operations with the FOCUS dial, L-rocker, IRIS dial, and L-joystick are disabled

- Sets by menu whether the interfaces follow the ENABLE button settings. Refer to [RP MENU] > [CONTROL I/F] > [SYNC ENBL BTN] for details.

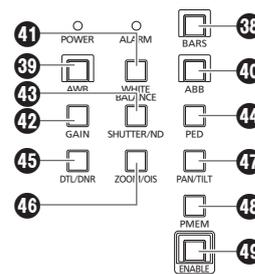
37 L-joystick

This can be assigned to operate the PAN/TILT for cameras other than those selected with the multi select switches or LCD panel, or to operate the menus, etc., on the LCD of the unit.

NOTE

- When turning on the power, do not touch until the status screen is displayed on the LCD panel.

Automatic white/black balance/Shortcut button section



38 BARS button [BARS]

Switches the image signals output from the remote camera.

Each time you press the button, the display switches between the image signals being recorded by the camera and the color bar signal.

Off:

The image signals being recorded by the camera are output

On:

The color bar signal is output

39 AWB button [AWB]

Executes automatic adjustment of the white balance and registers the adjustment results in the Memory A and Memory B of the remote camera.

The AWB button illuminates during the white balance adjustments, then it turns off when the adjustments have been completed normally. It blinks when adjustment was not possible.

- R GAIN and B GAIN values are ± 0 when automatic white balance adjustment finishes.
- When the color bar signal is being output by the remote camera (BARS button (38) illuminates) or when ATW is selected and you press the AWB button, the button blinks and no adjustment is performed.
- If adjustment was not possible, make changes to the light source, lens aperture, subject, etc., then do the adjustments again.

40 ABB button [ABB]

Executes automatic adjustment of the black balance.

Press the button to automatically close the iris and adjust the black balance.

The ABB button illuminates during the black balance adjustments, then it turns off when the adjustments have been completed normally. It blinks when adjustment was not possible and the black balance setting remains unchanged.

- If adjustment was not possible, check the connections of the cables to the cameras and lenses, then do the adjustments again.

41 WHITE BALANCE button [WHITE BALANCE]

As a shortcut button, this recalls functions related to white balance to the LCD (operated with the F1 to F4 dials).

42 GAIN button [GAIN]

As a shortcut button, this recalls functions related to gain to the LCD (operated with the F1 to F4 dials).

43 SHUTTER/ND button [SHUTTER/ND]

As a shortcut button, this recalls functions related to the shutter and ND filter to the LCD (operated with the F1 to F4 dials).

44 PED button [PED]

As a shortcut button, this recalls functions related to the pedestal to the LCD (operated with the F1 to F4 dials).

45 DTL/DNR button [DTL/DNR]

As a shortcut button, this recalls functions related to detail and digital noise reduction to the LCD (operated with the F1 to F4 dials).

46 ZOOM/OIS button [ZOOM/OIS]

As a shortcut button, this recalls functions related to zoom/OIS to the LCD (operated with the F1 to F4 dials).

47 PAN/TILT button [PAN/TILT]

As a shortcut button, this recalls functions related to the control settings used when operating PAN and TILT to the LCD (operated with the F1 to F4 dials).

48 PMEM button [PMEM]

As a shortcut button, this recalls functions related to the control settings used for preset memory to the LCD (operated with the F1 to F4 dials).

49 Automatic white/black balance/Shortcut button ENABLE button [ENABLE]

Enables and disables operations with the automatic white/black balance/Shortcut button section.

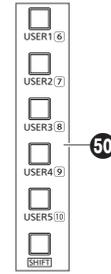
On:

Operations in the Automatic white/black balance/Shortcut button section are enabled

Off:

Operations in the Automatic white/black balance/Shortcut button section are disabled

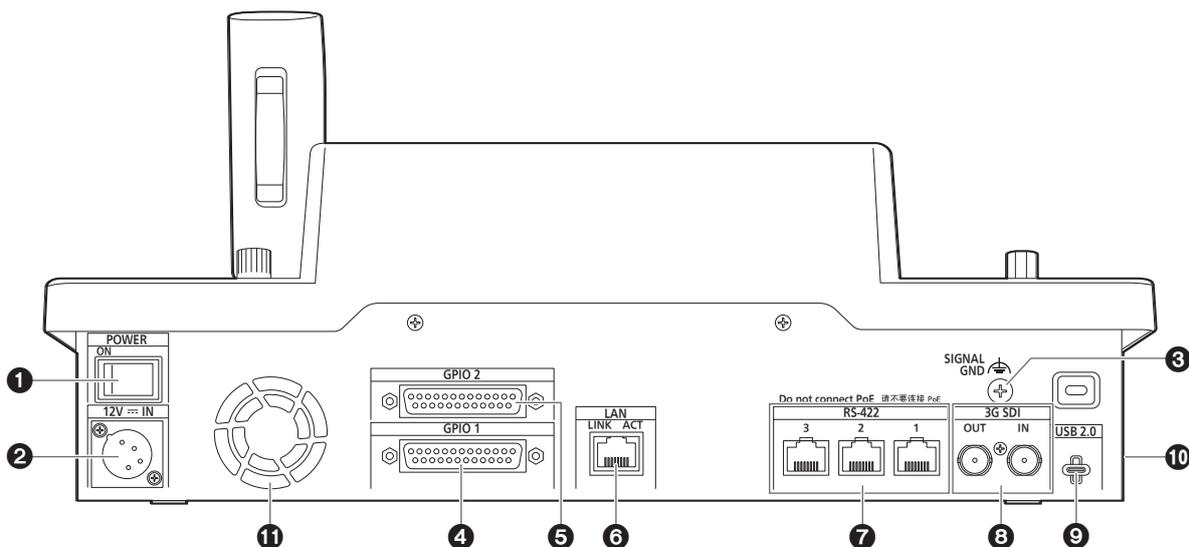
User button section



50 USER buttons [USER 1/[6]] to [USER 5/[10]], [SHIFT]

Recall the functions assigned to USER 1 to USER 10. The SHIFT button switches from USER 1 to 5 to USER 6 to 10.

Rear panel area



1 POWER switch [POWER]

When you switch the POWER switch ON, the POWER lamp (on the control panel section ①) illuminates amber, then it illuminates green, after which the status screen is displayed on the LCD and the unit can be operated.

2 DC IN terminal [12V IN] (12 V DC) (XLR connector)

Connect an external DC power supply.

- For the DC cord, use a cord that is a maximum of 2 m (6.6 ft) (when using an AWG16 cord).

External DC power supply

Connect after confirming that the output voltage of the external DC power supply complies with the rated voltage of this unit. Select so that the output current of the external DC power supply is more than enough to handle the total current of all connected devices.

You can calculate the total current of all connected devices with the following formula.

Total power consumption ÷ Voltage

There is a rush current that occurs when this unit is turned on. Malfunctions can occur if the power supply capability is not sufficient when the power is turned on.

- Check that the DC output terminal on the external DC power supply matches the pin arrangement in the DC IN terminal on this unit to ensure polarity is maintained correctly when connecting. Fire or malfunction can occur if the +12 V power supply is erroneously connected to the GND terminal.

12V IN	
1	GND
2	—
3	—
4	+12 V

XLR-4-32-F512, manufactured by ITT Cannon

3 Ground terminal [SIGNAL GND]

Connect to the ground for the system.

4 GPIO 1 terminal [GPIO 1]

Manufactured by JST: JBY-25S-1A3F(LF)(SN)

It is possible to handle tally information, select cameras, send camera selections, and play back preset memories, etc., by connecting an external device.

Use a shielded cable for the cable connected to the terminal.

5 GPIO 2 terminal [GPIO 2]

Manufactured by JST: JBY-25S-1A3F(LF)(SN)

It is possible to handle tally information, select cameras, send camera selections, and play back preset memories, etc., by connecting an external device.

Use a shielded cable for the cable connected to the terminal.

6 LAN terminal [LAN] (RJ-45) 1000BASE-T

Use a LAN cable (category 5e or better, STP (Shielded Twisted Pair), max. 100 m (328 ft)) to connect a remote camera that supports connection via IP, etc.

NOTE

- Connect the LAN cable for PoE++ power supply to this terminal.

7 RS-422 1 to 3 terminals [RS-422 1 to 3] (RJ-45)

Use LAN cables to connect remote cameras that support serial connection.

Connect with straight cables (category 5e or better, shielded cables).

NOTE

- Do not connect the cables for PoE++ power supply to these terminals.

8 3G SDI terminals [3G SDI]

Use to input and output SDI signals.

- Signals are not output from the OUT terminal when this unit is turned off.

⑨ USB terminal (Type-C connector) [USB2.0]

You can update the firmware by connecting this unit to a USB memory device.

It is also possible to download and upload configuration data, etc.

- USB2.0 HOST, has USB bus power functionality

⑩ USB terminal (Type-A connector) [USB2.0]

You can update the firmware by connecting this unit to a USB memory device.

It is also possible to download and upload configuration data, etc.

- USB2.0 HOST, has USB bus power functionality

⑪ Cooling fan

Blocking the vents of the cooling fan may cause a malfunction.

Leave sufficient space in the vicinity of the vents.

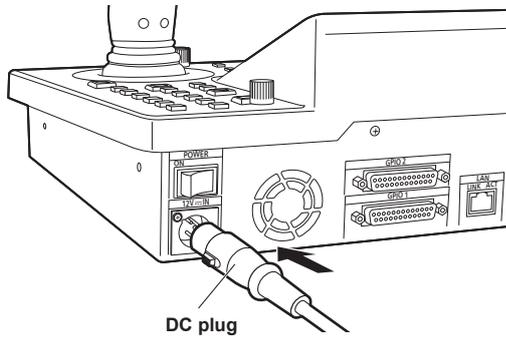
Precautions for installation

Observe the following items, along with the content found in "Read this first!".

Be sure to ask a dealer when installing the unit or performing connection works.

Power source connections

- Push the DC plug of the external DC power supply in until it locks into place.



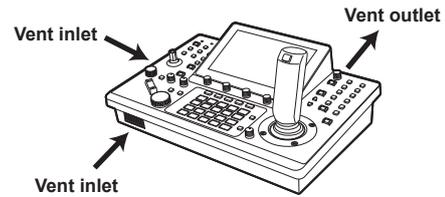
- To save power when the unit is not to be used for long periods, switch off the power switch and unplug the DC plug of the external DC power supply.

Do not put foreign objects into the unit.

- Foreign objects, such as water, metallic objects, food and drink, entering the unit may result in fire or electric shock.

Locations for installation

- The unit is for indoor use only.
- Install and use in a stable location.
- Leave spaces of 100 mm (3-15/16 inches) or more in the vicinity of the vents of the unit so that ventilation is not interrupted. In particular, ensure there is sufficient space for ventilation and wiring when the unit is to be built into a panel or table for use.
- Avoid installing in locations exposed to direct sunlight.
- Installing the unit in locations exposed to excessive humidity, dust, or vibration can result in malfunction.



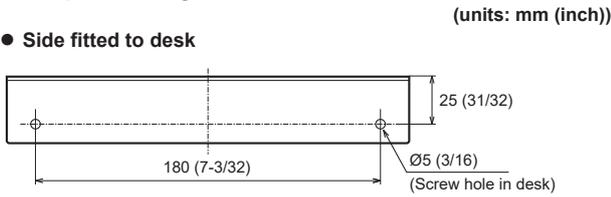
Example of installation in a desk

When the unit is to be built into a desk for use, use the following procedure for reference.

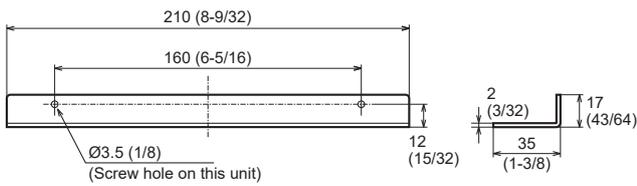
1. Manufacture mounting brackets suited to the installation location.

<Example mounting brackets>

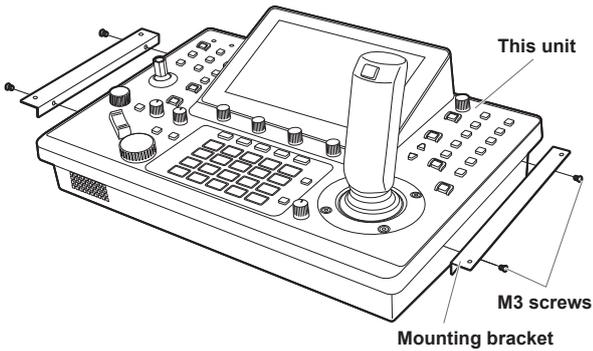
● Side fitted to desk



● Side fitted to this unit



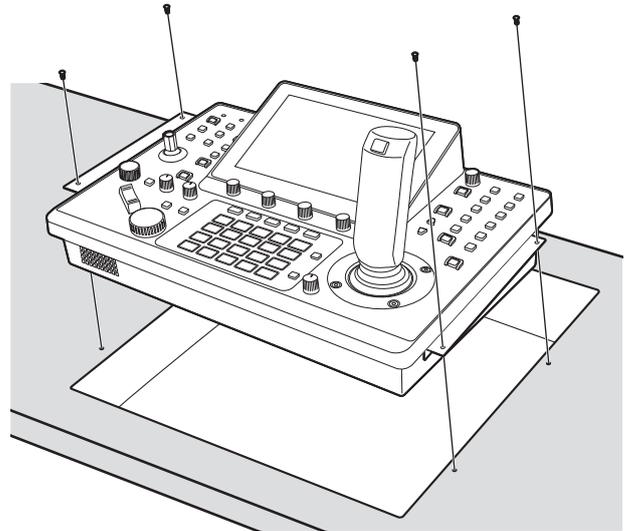
2. Attach the mounting brackets to the sides of the unit. (4 × M3 screws, 6 mm (15/64 inches) in length or less)



NOTE

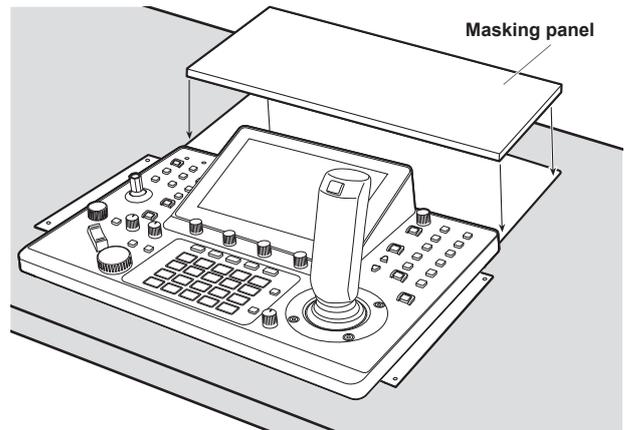
- Refer to "Diagrams of external dimensions" (page 142) for details about the dimension when attaching the mounting brackets to this unit.

3. Fit the unit into the opening in the desk and secure (4 × screws).



- Prepare screws that suit the size of the holes (e.g. Ø5 mm (3/16 inches)) in the desk.

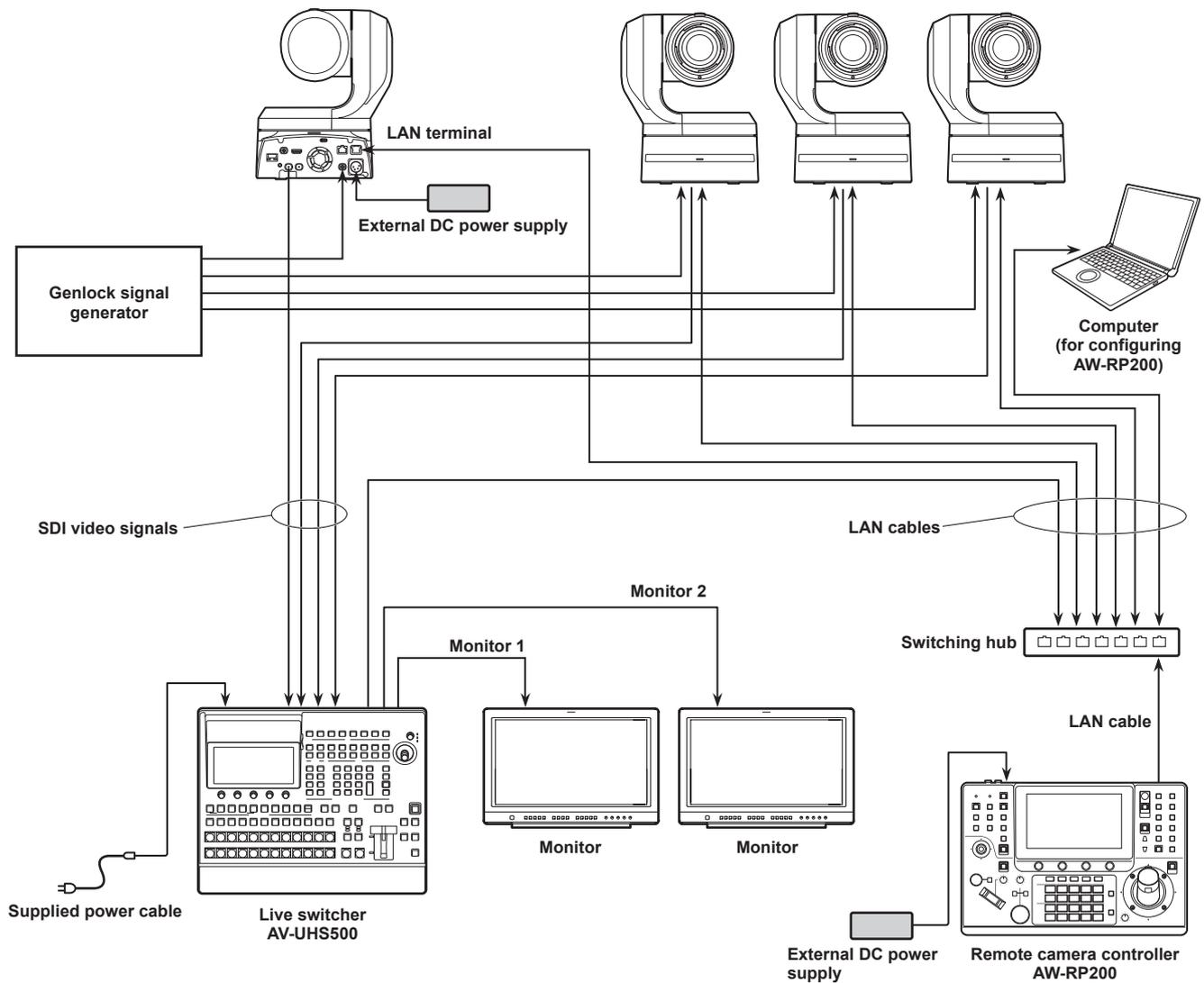
4. If necessary, manufacture a masking panel and fit it into the desk.



Connections

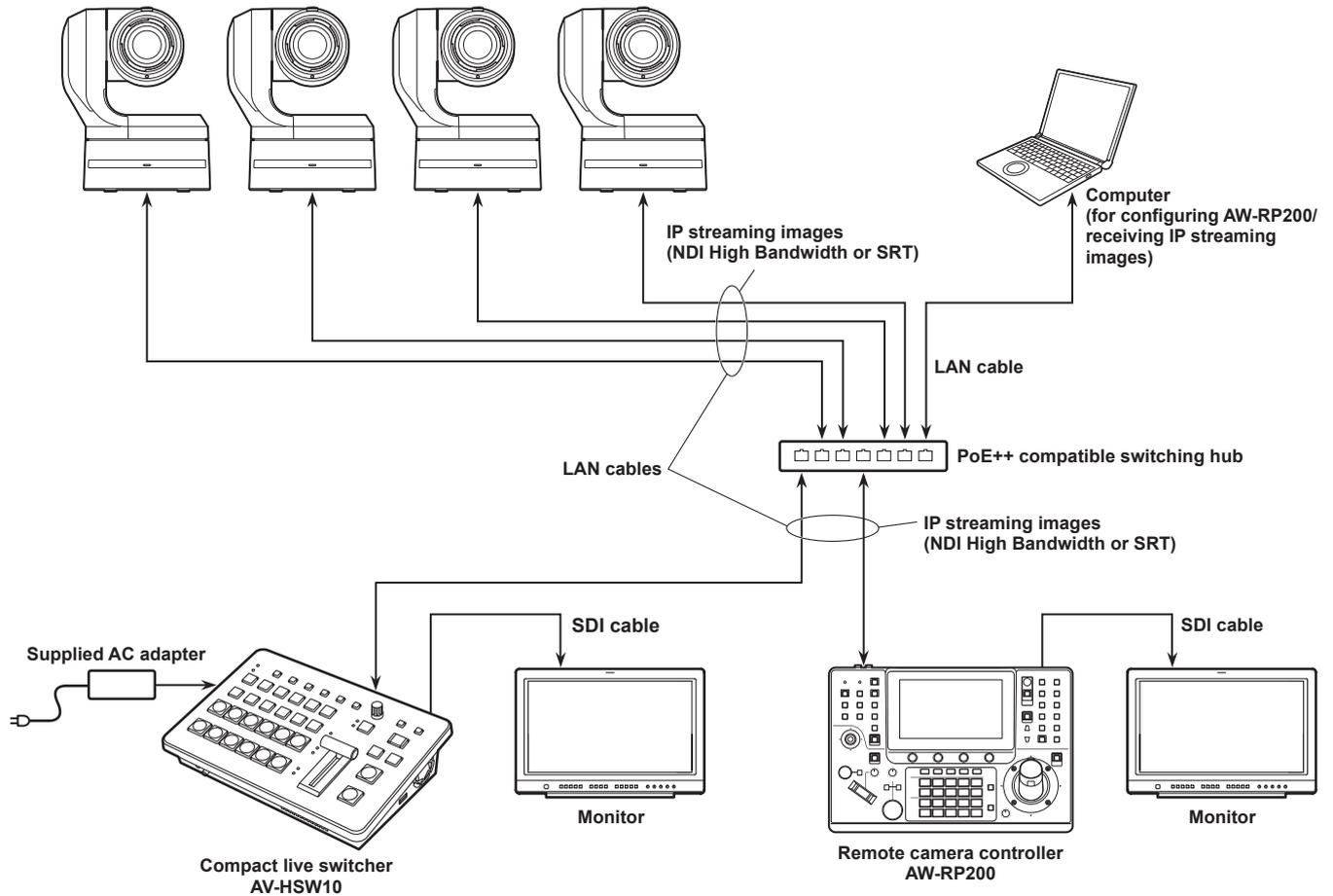
Example connection via IP

■ Connection via IP with remote cameras (for SDI image applications)



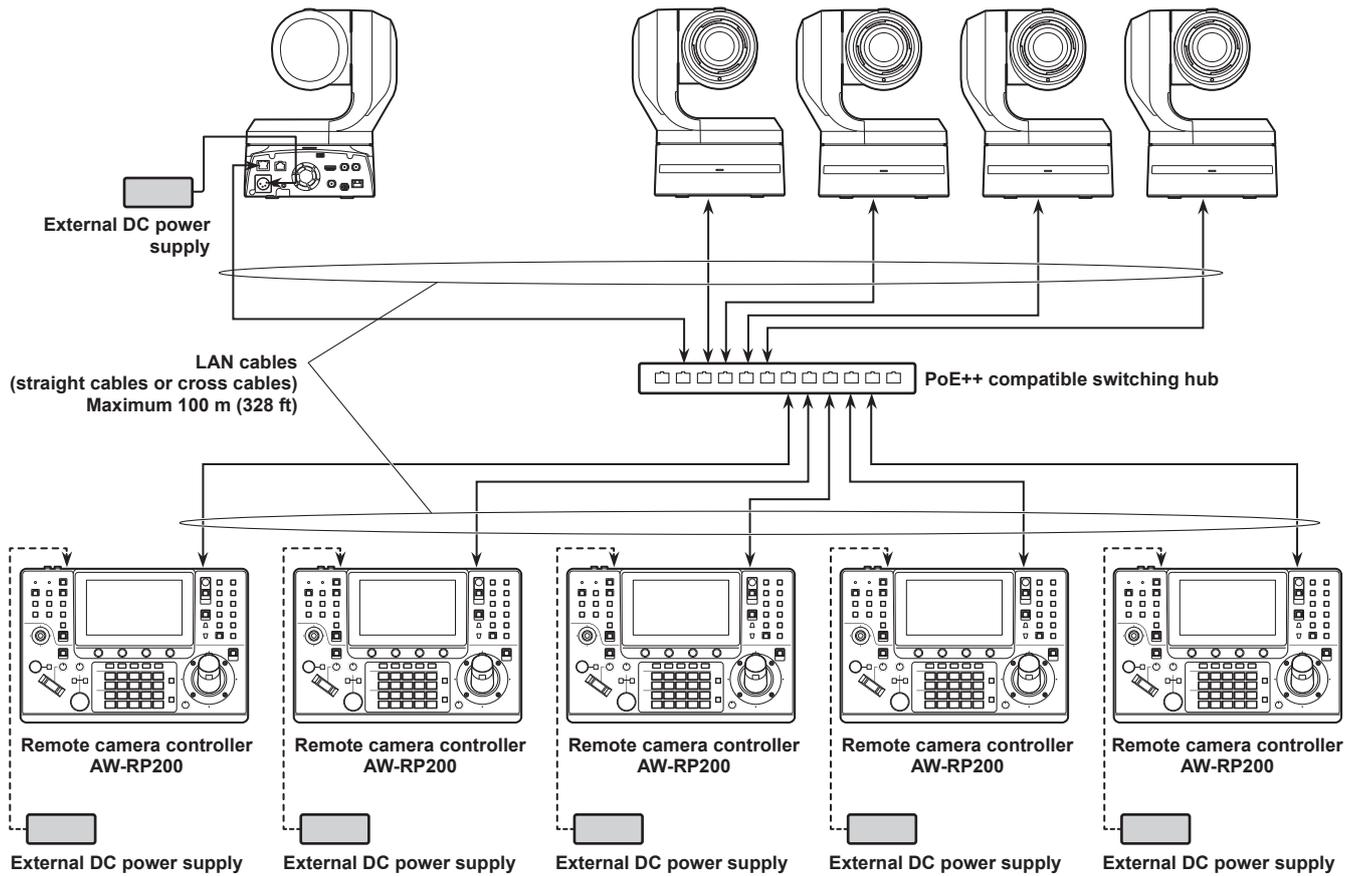
- For the LAN cables, use cables of category 5e or above.
- You can also mix remote cameras connected using serial connection.
- One controller (this unit) can be registered to be the controller for a maximum of 200 remote cameras connected via IP and serial connection.

■ Connection via IP with remote cameras (for IP image applications)



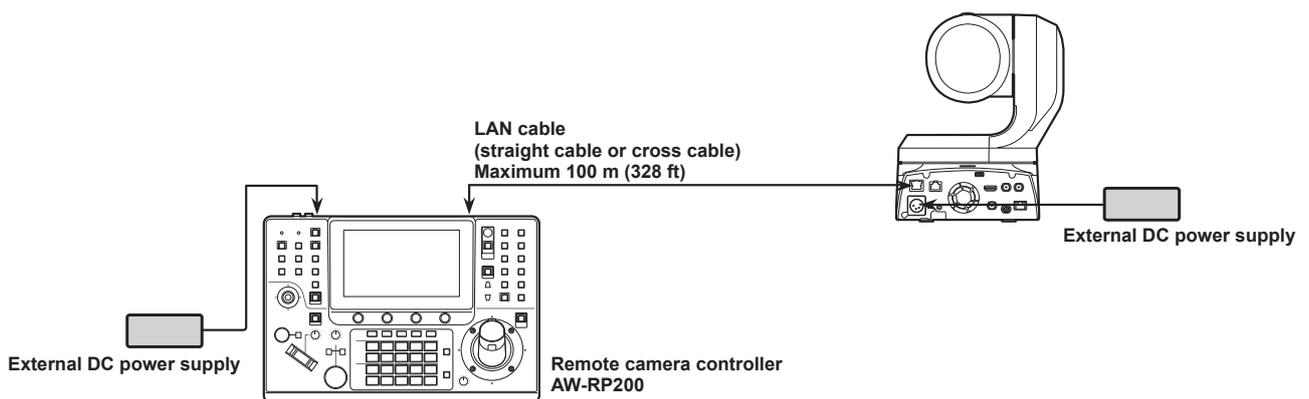
- Use a switching hub that supports GbE and that has the capacity to meet the power requirements of the entire system.
- For the LAN cables, use cables of category 5e or above.

■ Connection via IP between multiple controllers (this unit) and remote cameras



- For the LAN cables, use cables of category 5e or above.
- One remote camera can be controlled simultaneously by a maximum of 5 controllers. (When connected via IP)

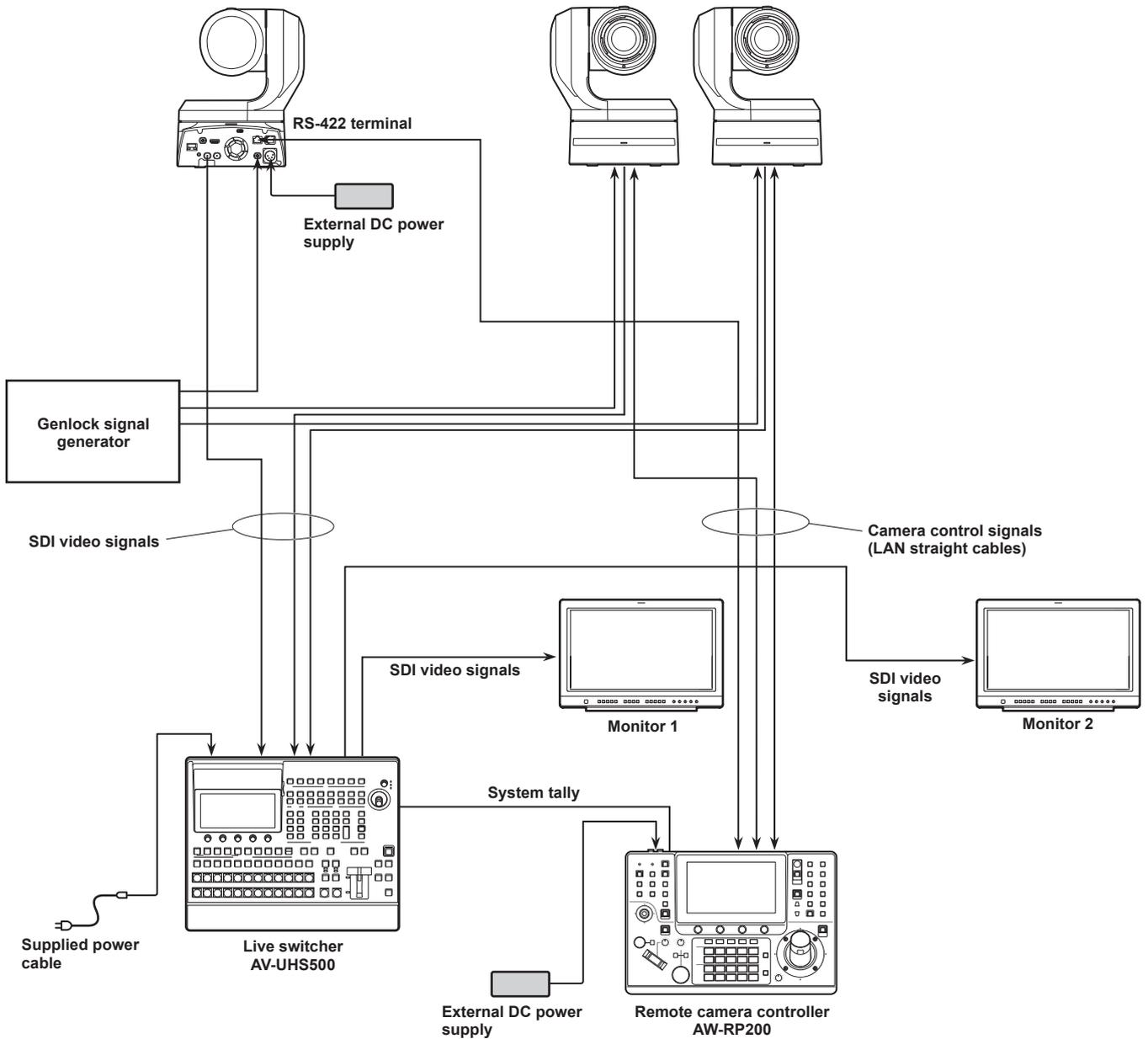
■ Connection via IP between 1 controller (this unit) and 1 remote camera



- For the LAN cable, use a straight or cross cable (category 5e or above).
- Also refer to the operating instructions for the corresponding camera.

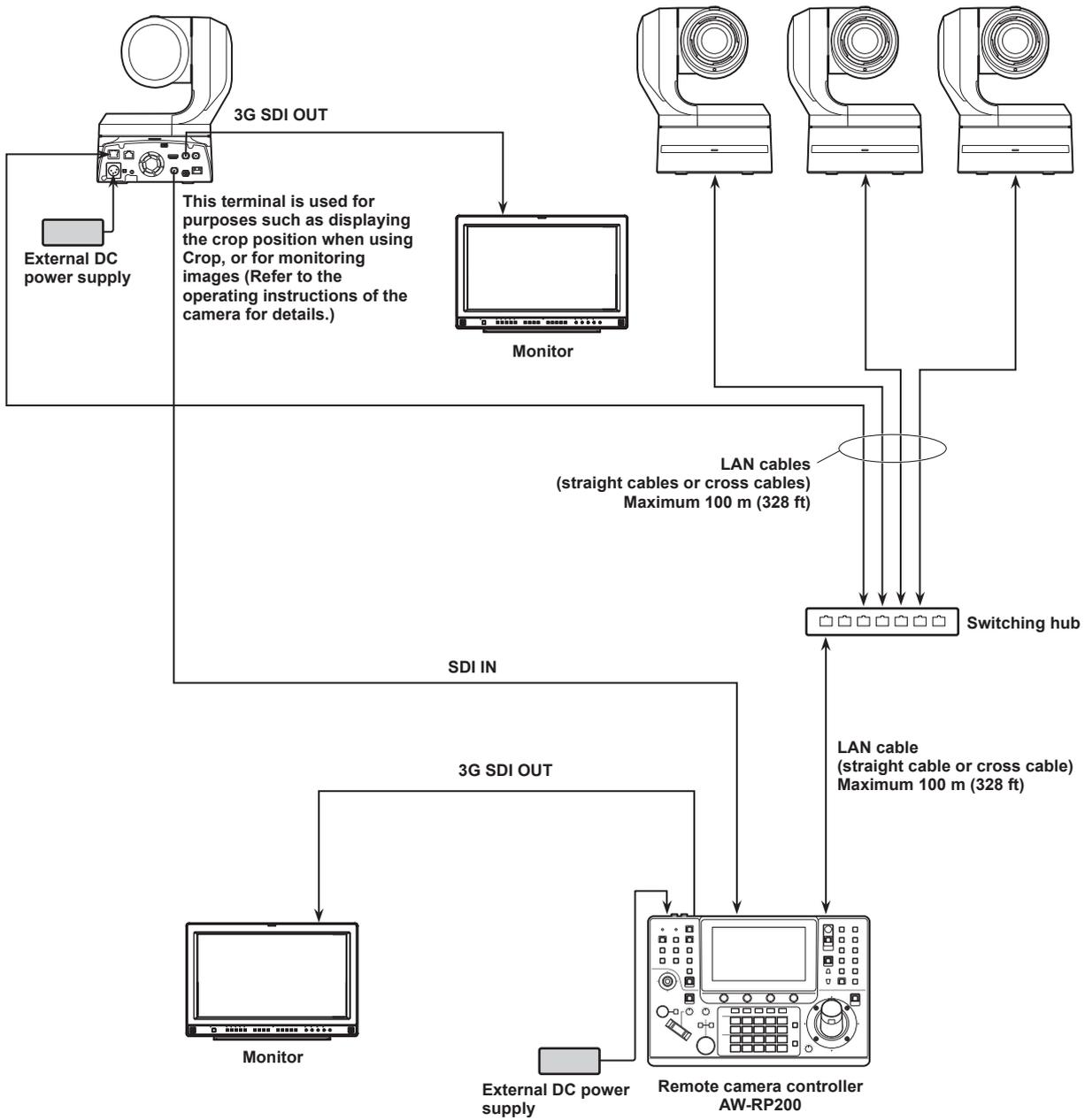
Example serial connection

Serial connection with remote cameras



- For the LAN cables, use straight cables (category 5e or above).
- When using serial connection, the maximum number of remote cameras you can connect to one controller (this unit) is 3.
- You can also mix remote cameras connected via IP.
- One controller (this unit) can be registered to be the controller for a maximum of 200 remote cameras connected via IP and serial connection.

■ Example connection for using the functionality to extract HD video from 4K video



● For the LAN cables, use cables of category 5e or above.

Before beginning actual operation

After purchase (or after initializing to the factory default settings), do the settings described below when you first turn on the power.

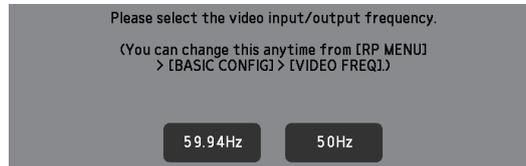
1. Turn on the unit.

Switch the POWER switch to ON. Power is supplied to the unit, the power lamp illuminates amber, then it illuminates green.

2. Select the frequency of the images to be input to the unit.

When started up for the first time, the main LCD displays the following:

Select either 59.94 Hz or 50 Hz as the frequency to match the format of the images input through the SDI input or via IP input to be used by this unit.

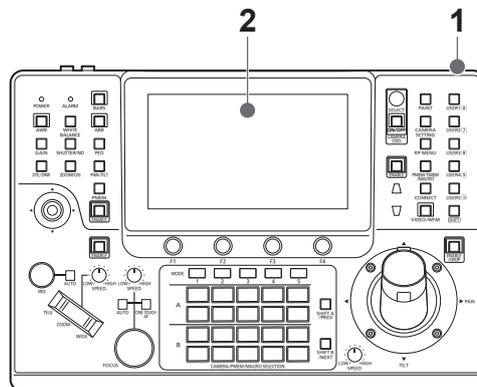


Refer to the following table to determine which to select.

Input images		Setting value	SDI OUT
SDI	1080/59.94p	59.94 Hz	1080/59.94p
	1080/59.94i		1080/59.94i
	1080/29.97p		1080/29.97p
	1080/23.98p		1080/23.98p
	1080/50p	50 Hz	1080/50p
	1080/50i		1080/50i
	1080/25p		1080/25p
NDI High Bandwidth	1080/60fps	59.94 Hz	1080/59.94p
	1080/30fps		1080/29.97p
	1080/24fps		1080/23.98p
	1080/50fps	50 Hz	1080/50p
	1080/25fps		1080/25p
SRT (H.264/H.265)	1080/60fps	59.94 Hz	1080/59.94p
	1080/30fps		1080/29.97p
	1080/24fps		1080/23.98p
	1080/50fps	50 Hz	1080/50p
	1080/25fps		1080/25p

NOTE

- If you make the wrong selection by mistake, the settings can be changed in the regular menus. Select the correct setting in [RP MENU] > [BASIC CONFIG] > [VIDEO FREQ].
- If the frequency of the input images and the frequency set on this unit do not match, or if an image format other than one indicated in the above table is input, an "[RP]VIDEO FMT" error is displayed on the main LCD. Be sure to use the correct settings.



Basic operations on this unit

1. Turn on the unit.

Switch the POWER switch to ON. Power is supplied to the unit, the power lamp illuminates amber, then it illuminates green.

NOTE

- When turning on the power, do not touch the unit until the status screen is displayed on the LCD panel.

2. Make settings for the remote cameras connected to the unit.

Make the connection settings for the remote cameras to be controlled by this unit.

Refer to "Making the connection settings for the remote camera" (page 40) for details.

NOTE

- When connecting the remote cameras to this unit via IP, make the network settings on this unit first. Refer to "Making network settings for this unit" (page 38) for details.

3. Select the optimum operation mode.

Select the optimum operation mode.

Refer to "Operation modes" (page 47) for details.

4. Select a remote camera.

Select the remote camera to be controlled with this unit using the multi select switch when using operation mode 1, 3, or 5.

Refer to "Operation modes" (page 47) for details.

5. Adjust the facing of the remote camera.

With the PAN/TILT ENABLE/CROP button [ENABLE/CROP] illuminated, use the R-joystick to adjust the facing of the remote camera.

NOTE

- When turning on the power, do not touch the unit until the status screen is displayed on the LCD panel.

6. Adjust the zoom.

With the FOCUS/L-ROCKER/IRIS/L-JOYSTICK ENABLE button [ENABLE] illuminated, use the L-rocker to adjust the zoom of the lens. The lens zooms to telephoto when you press the TELE end, and zooms out to wide when you press the WIDE end.

7. Adjust the lens aperture.

With the FOCUS/L-ROCKER/IRIS/L-JOYSTICK ENABLE button [ENABLE] illuminated, turn the IRIS dial to adjust the aperture of the lens.

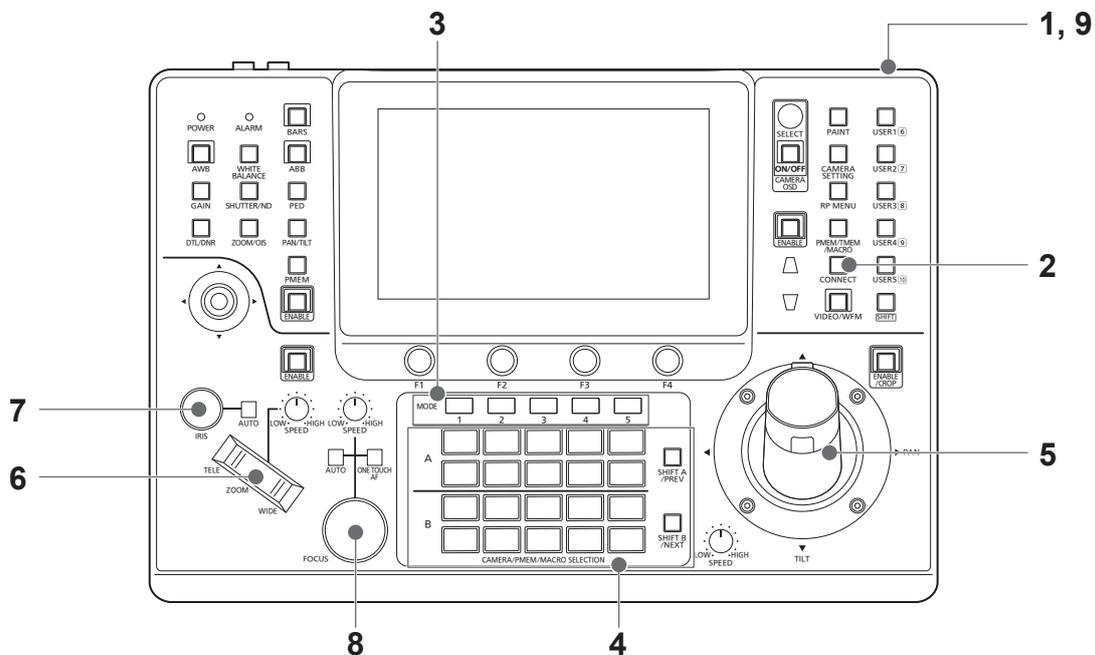
8. Adjust the focus.

With the FOCUS/L-ROCKER/IRIS/L-JOYSTICK ENABLE button [ENABLE] illuminated, turn the FOCUS dial to adjust the focus of the lens.

9. Turn off the unit.

Switch the POWER switch to OFF. The power of the unit turns off, and the POWER lamp goes out.

- Even when you turn OFF the power of this unit, the power of the connected remote cameras does not turn OFF.
- Refer to "Turning off remote cameras (transition to the standby state)" (page 70) when turning off the remote cameras.



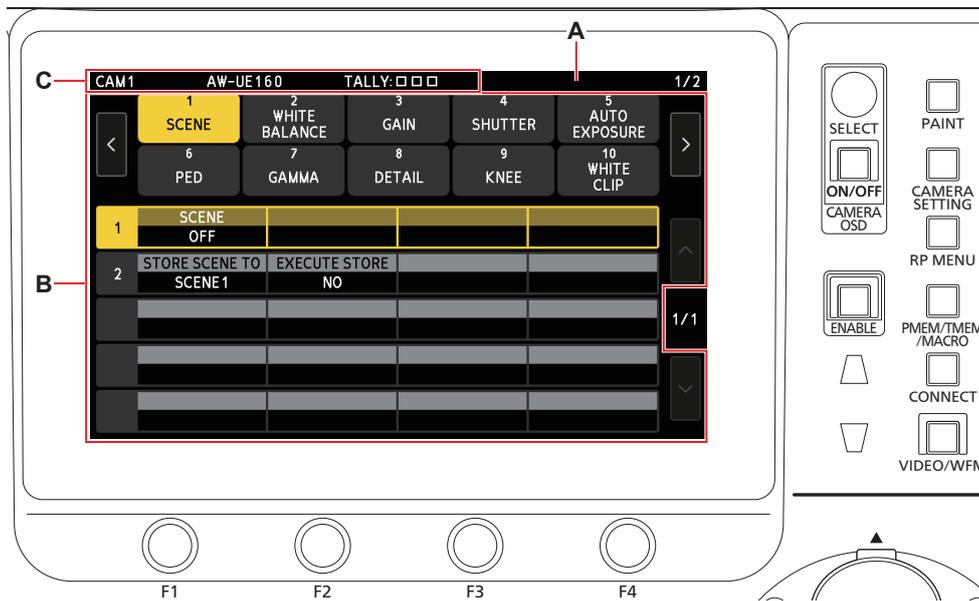
Basic menu operations

Displaying menus and menu composition

Use the menu buttons and LCD panel on the unit to operate the menus.

Display the menu using the steps below. The menus are displayed on the LCD panel of this unit (A).

- Section "B" is a touch panel.



A : Main LCD

B : Area where touch operations are available

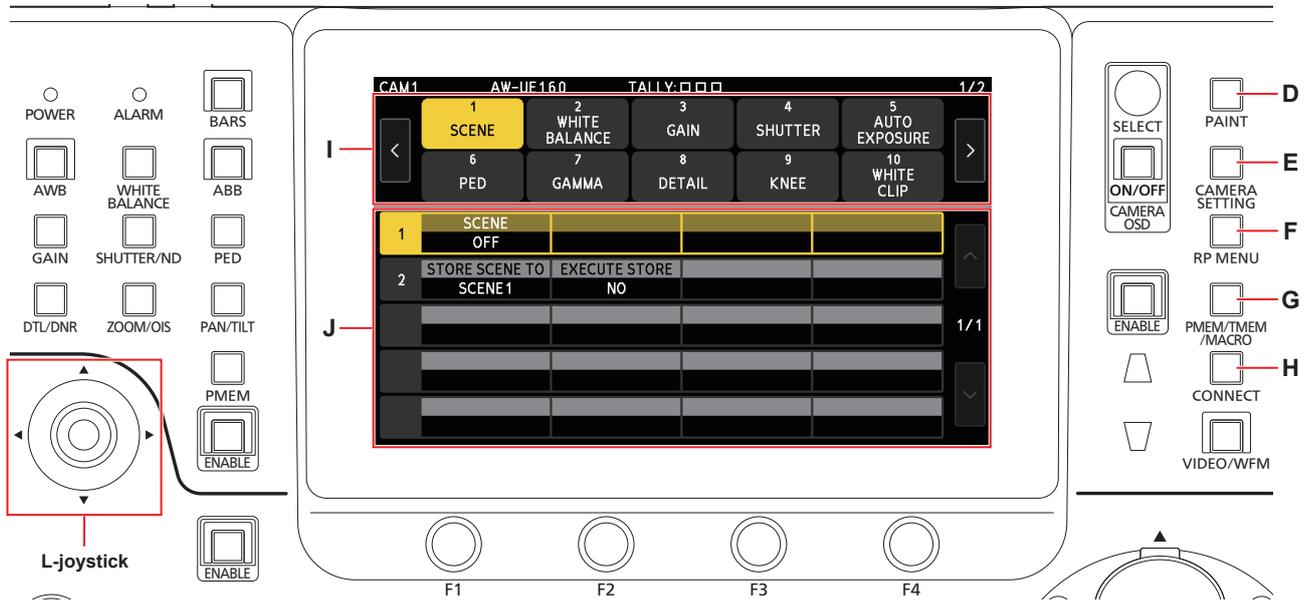
C : Displays number, name, and TALLY status of the currently selected camera.

Procedures

1. Press the PAINT button (D), CAMERA SETTING button (E), RP MENU button (F), PMEM/TMEM/MACRO button (G), or CONNECT button (H) to select the menu group.

Each group is displayed on the main LCD (A). (The [PAINT] group is used as an example here for explanation purposes.)

- When you press the selected button again, the menu display turns OFF, and the status screen is displayed.



- D : PAINT button
- E : CAMERA SETTING button
- F : RP MENU button
- G : PMEM/TMEM/MACRO button
- H : CONNECT button
- I : Top row of the screen

When you touch a menu, the items for the relevant menu are displayed on the middle row of the screen. (If menu operations have been assigned to the L-joystick, left and right movements can select the menus on the top row of the screen. Refer to “Customizing operations of the unit” (page 34) for details on how to assign.)

- J : Middle row of the screen

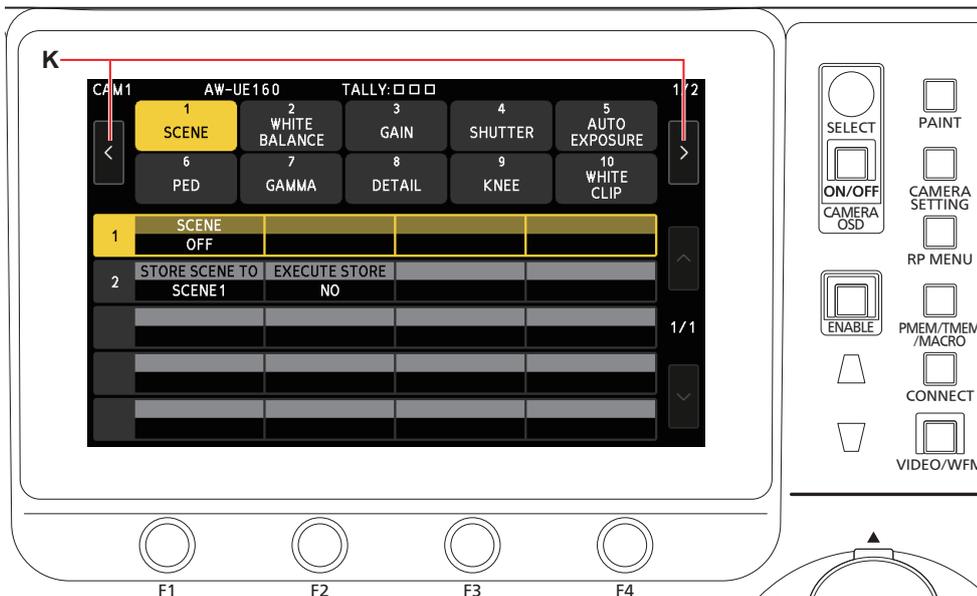
The setting items for the menu selected on the top row of the screen are displayed, and when you touch the menu item, the setting values in the relevant columns can be changed with the F1 to F4 dials.

2. Touch the screen to select the menu you want to set.

Select the menu you want in the top row of the screen. (“SCENE” is used as an example here for explanation purposes.)

The setting items are displayed on the middle row.

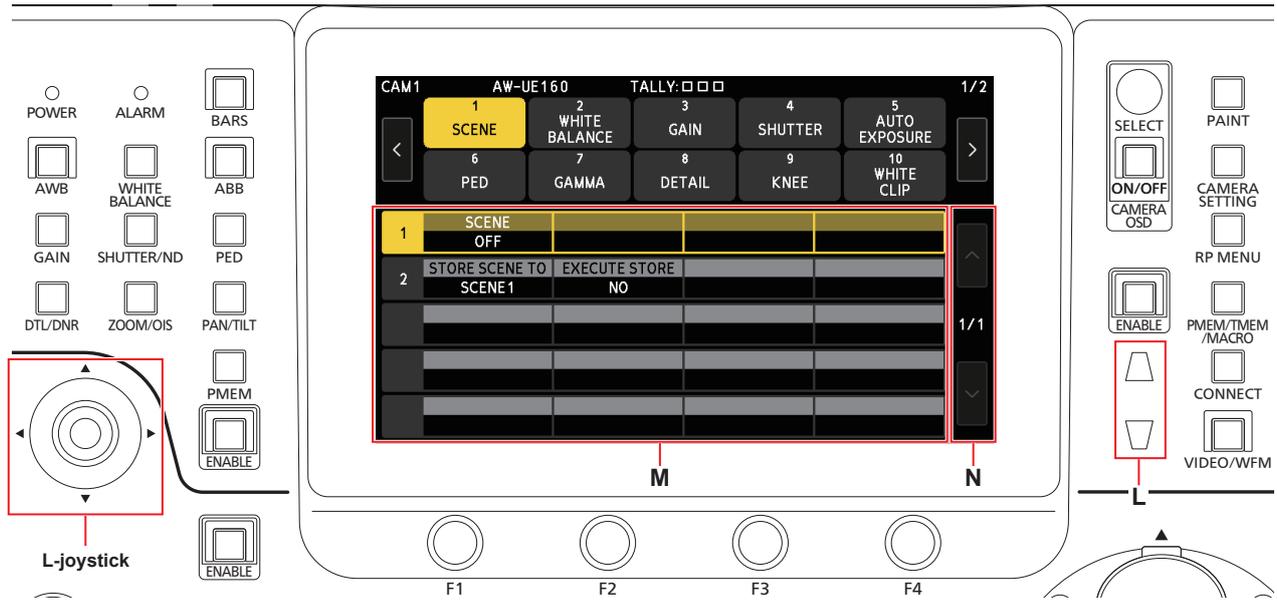
- You can change the pages of setting menus with the page changing buttons (left/right) (K) on the screen.



- K : Page changing buttons (left/right)

3. Use the Up/Down buttons (L) to select the line with the item you want to set in the middle row of the screen.

- You can also select the item by touching the item you want to set (M).
- You can change the pages of setting items with the page changing buttons (up/down) (N) on the screen. (Items with only one settings page, such as [SCENE], cannot be changed.)



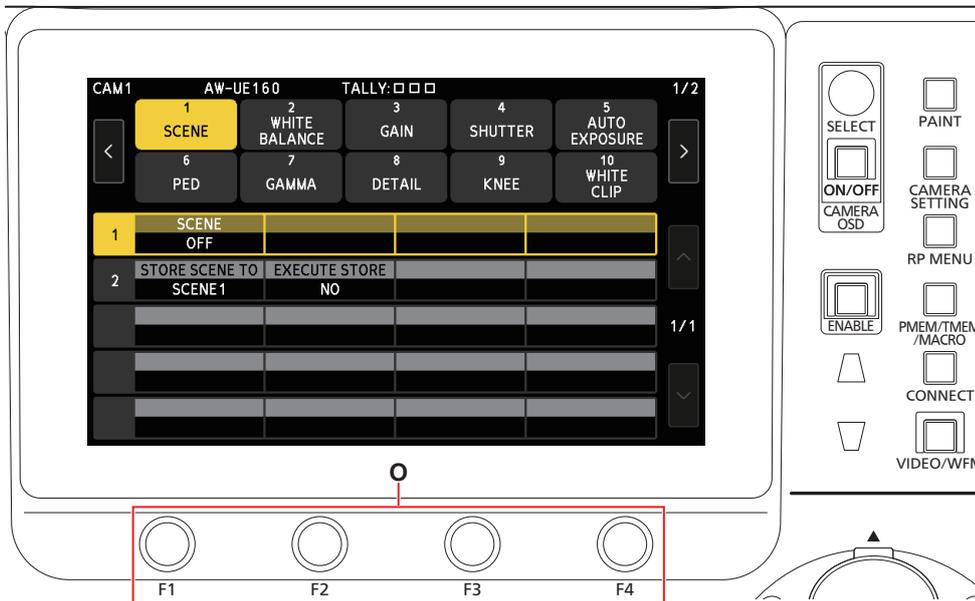
L : Up/Down buttons (If menu operations have been assigned to the L-joystick, up and down movements perform the same operations as the Up/Down buttons. Refer to “Customizing operations of the unit” (page 34) for details.)

M : Setting items

N : Page changing buttons (up/down)

4. Change the setting values with the function dials (O).

Turn the dial that is in the same column as the item on the screen.

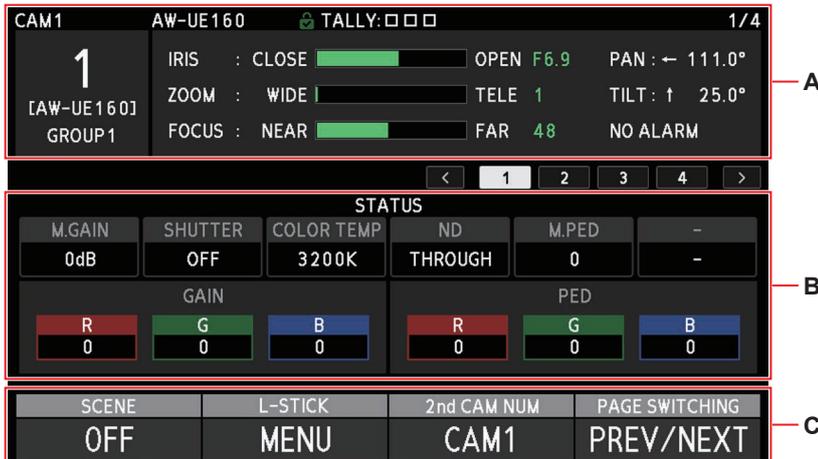


O : Function dials

Status screen

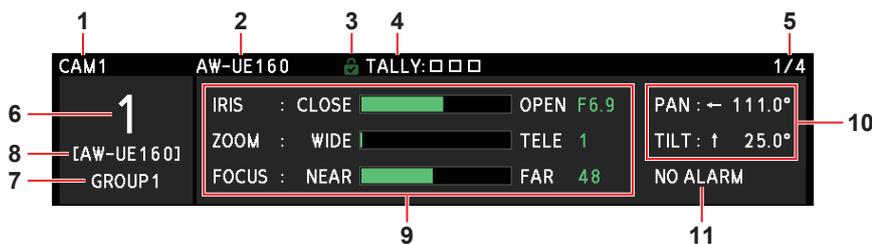
Status screen display

When this unit is turned on and it starts up, the status screen is displayed when the VIDEO/WFM button [VIDEO/WFM] is OFF.



- A : Lens related status screen for the selected camera
- B : Status screen for the selected camera for other than lens-related items, etc.
- C : Function bar

Top row of the screen (A)



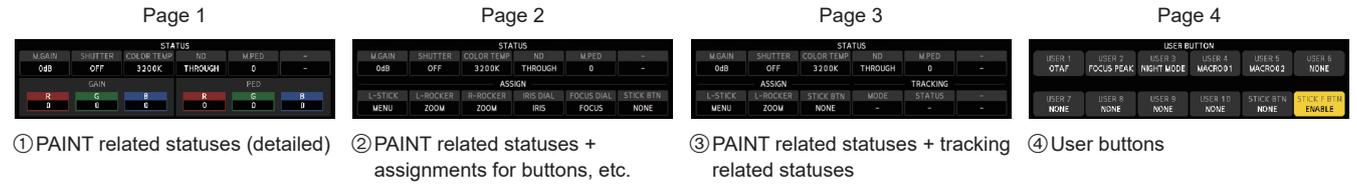
- 1 : Displays the selected camera number.
- 2 : Displays the Camera Name (name of the camera set by the user on the camera).
- 3 : Displays the Cam Lock status.
- 4 : Displays the illumination state of Tally. (The tally colors that can illuminate depend on the model.)
- 5 : Displays the page number. (Pages can be changed with the Up/Down buttons.)
- 6 : Displays the selected camera number and illumination state of Tally (refer to the table below). (Refer to [RP MENU] > [BASIC CONFIG] > [TALLY DISP].)



- 7 : Displays the camera group of the selected camera.
- 8 : Displays the model of the selected camera.
- 9 : Displays the status of IRIS/ZOOM/FOCUS. (IRIS also shows the F value. ZOOM/FOCUS also show values. ZOOM displays between 0 and 999, FOCUS between 0 and 99.)
- 10 : Displays the status of PAN/TILT. The directions (up, down, left, right) are indicated with arrows.
- 11 : Displays alarms from the selected camera or from this unit. Refer to "List of messages" (page 140) for details.

Middle row of the screen (B)

There are the following status screens in section "B".
 Select the screen you want to use that is the most applicable to the way you use the unit.

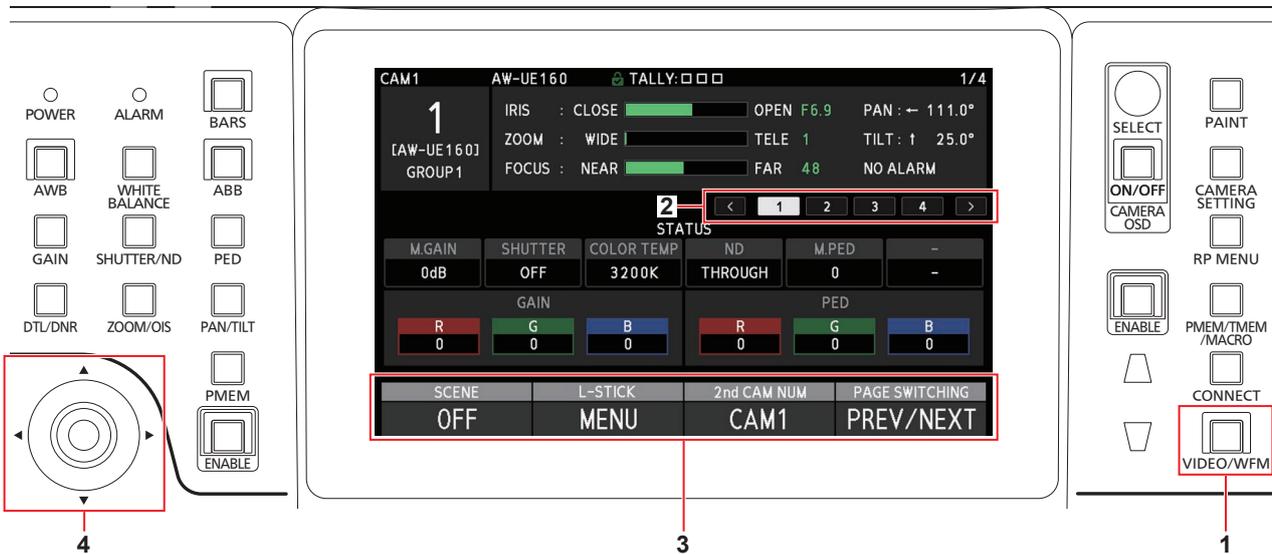


- ① **PAINT related statuses (detailed):**
 Displays gain, shutter speed, color temperature, ND, and master pedestal along with the R/G/B gain and R/G/B pedestal.
- ② **PAINT related statuses + assignments for buttons, etc.:**
 Displays gain, shutter speed, color temperature, ND, and master pedestal along with the menus related to the assignments to the various buttons on the unit.
- ③ **PAINT related statuses + tracking related statuses:**
 Displays gain, shutter speed, color temperature, ND, and master pedestal along with the menus related to automatic tracking.
 - When the automatic tracking on the camera is enabled with CAMERA SETTING button > [BUILT-IN AUTO TRACK] > [A-TRACK ACTIVE] set to [ENABLE], the following information is displayed:
 - [MODE]: [BUILT-IN AT]
 - [STATUS]: CAMERA SETTING button > [BUILT-IN AUTO TRACK] > setting value of [TRACK STATUS]
- ④ **User buttons:**
 Display information about functions assigned to the USER1 to 10 user buttons and the R-joystick user button. The assigned functions can be operated (ON/OFF, etc.) by touching these.

NOTE

- The button color turns yellow while executing user buttons (page 4).
- On pages 2 and 3, the letters turn yellow when executing a function assigned to the R-joystick user button.

Change the pages by touching one of the page buttons, using PAGE SWITCHING on the function bar, or tilting the L-joystick left or right.



- 1 VIDEO/WFM button:**
 Switches whether to output the images that are input to this unit to the main LCD. (When "VIDEO/WFM" is OFF, operations 2 to 4 are enabled)
- 2 Page buttons:**
 Touch to change to the desired page.
- 3 Function bar:**
 If PAGE SWITCHING is assigned, pages can be changed using the function dials. *1
- 4 L-joystick:**
 If menu operations are assigned, pages can be changed with left and right operations. *1

*1: Refer to "Customizing operations of the unit" (page 34) for details.

Bottom row of the screen (C)

SCENE	L-STICK	2nd CAM NUM	PAGE SWITCHING
OFF	MENU	CAM1	PREV/NEXT

Displays the functions and setting values assigned to either the function dials or the shortcut buttons. Refer to “Customizing operations of the unit” (page 34)/“Shortcut buttons” (page 64) for details.

Macro functionality

This unit supports functionality called macros which recall operation sequences of cameras with a single touch, enabling you to preset the commands and their timing to send to cameras (multiple units at a time). (You can register a maximum of 100 macros in this unit.) The following describes the procedure for setting and executing.

1. Select Web setting screen [Setup Menu] > [Macro] > [Macro Edit].
2. Select the camera number to be controlled.
3. Select the commands and parameters to send to each camera.
4. Set the interval until the next command is sent.
5. Repeat steps 2. to 4. until the sequence is completed (maximum 500 steps).
6. Save the created macro to this unit.
7. Execute the macro functions with the following:
 - Multi select switches (operation mode 4 or 5)
 - Function bar
 - User buttons
 - Main LCD

NOTE

- Refer to Web setting screen [Setup Menu] > [Macro] > [Macro Edit] for steps 1 to 6.
- Refer to "Customizing operations of the unit" (page 34), "Operation modes" (page 47), and "Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations" (page 58) for step 7.
- Depending on the command, one action may require multiple steps. In this case, the maximum number of steps may be limited to fewer than 500.

Apart from the above, the macro function is also capable of the following:

- It is possible to transmit commands that include sequences with one touch of a button, without deciding which cameras you are going to control beforehand, by selecting cameras to be the target using the multi select switches, etc.
- A command is able to recall other macros, including itself.
- It is possible to select whether to execute a registered sequence or skip it as it appears, using the main LCD, enabling the user to flexibly change the execution timing of sequences to suit applications. (A pop-up window such as the following is displayed.)



- For commands that are not supported in the [Macro Edit] screen of the web menus, support is enabled by loading files edited by the user after referring to the command specifications of the camera. Refer to Web setting screen [Setup Menu] > [Macro] > [Macro Edit] for how to create macros.
- It is possible to select and operate cameras even while macros are being executed.

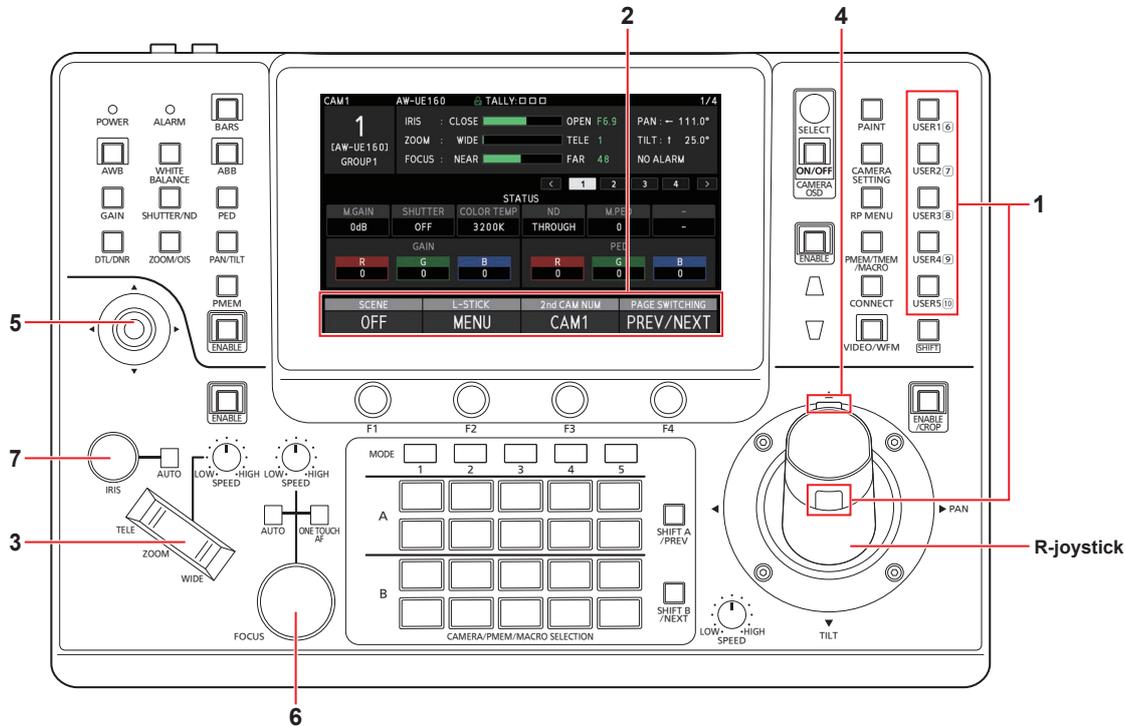
NOTE

- Note that if there is a duplication of cameras in the macro being played back and the cameras selected and operated with the multi select switches, etc., the action performed is the one that is commanded later.

Customizing operations of the unit

This unit enables you to customize the various buttons, rockers, joysticks, and dials.

- 1 : User buttons
- 2 : Function bar
- 3 : L-rocker
- 4 : R-rocker
- 5 : L-joystick
- 6 : Focus dial
- 7 : Iris dial



User buttons

You can assign the following functions to the user buttons (USER1 to 10 and the R-joystick user button). Refer to [RP MENU] > [USER ASSIGN] for how to assign.

Settings details	Description
SHOOTING MODE	Switches the shooting mode of the selected camera.
DIGITAL EXT x1.4	Switches the digital extender of the selected camera between OFF ⇔ x1.4.
DIGITAL EXT x2.0	Switches the digital extender of the selected camera between OFF ⇔ x2.0.
EXT PROMPTER	Switches the control of the prompter compatible with this unit ON/OFF.
i.ZOOM	Switches the i.Zoom function of the selected camera ON/OFF.
D.ZOOM	Switches the digital zoom function of the selected camera ON/OFF.
ONE TOUCH AF	Operates one touch auto focus on the selected camera.
CROP(1080)	Switches the CROP mode for the selected camera ON (1080 output)/OFF.
CROP(720)	Switches the CROP mode for the selected camera ON (720 output)/OFF.
CROP OUT YL	When images are output in CROP mode on the selected camera, the crop frame is made yellow.
CROP OUT G	When images are output in CROP mode on the selected camera, the crop frame is made green.
CROP OUT MG	When images are output in CROP mode on the selected camera, the crop frame is made magenta.
CROP ADJ YL	When the position is adjusted in CROP mode on the selected camera, the frame is made yellow.
CROP ADJ G	When the position is adjusted in CROP mode on the selected camera, the frame is made green.
CROP ADJ MG	When the position is adjusted in CROP mode on the selected camera, the frame is made magenta.
CROP MARKER YL	Displays the crop frame (yellow) when in CROP mode on the selected camera.
CROP MARKER G	Displays the crop frame (green) when in CROP mode on the selected camera.
CROP MARKER MG	Displays the crop frame (magenta) when in CROP mode on the selected camera.
[B.A.T.]ACTV	Switches the built-in automatic tracking mode of the selected camera ON/OFF.

Customizing operations of the unit (continued)

[B.A.T.]TRK S/S	Starts/stops the built-in automatic tracking mode of the selected camera.
[B.A.T.]FULL	Switches the angle of view for the selected camera's built-in automatic tracking between Full Body and the current angle of view.
[B.A.T.]U-BODY	Switches the angle of view for the selected camera's built-in automatic tracking between Upper Body and the current angle of view.
[B.A.T.]MARKER	Displays/hides the tracking frame of the camera's built-in automatic tracking.
CAM PWR ON/OFF	Switches the power of the selected camera ON/OFF (standby).
FREEZE ON PMEM	Switches ON/OFF the function that freezes images while playing back preset memories on the selected camera.
FAN	Switches the fan of the selected camera ON/OFF.
CAM CTRL LOCK	Switches whether to control the selected camera solely using this unit.
NIGHT MODE	Switches between night mode shooting/normal shooting on the selected camera.
MACRO01	Executes the macro assigned to MACRO01 on this unit.
MACRO02	Executes the macro assigned to MACRO02 on this unit.
MACRO03	Executes the macro assigned to MACRO03 on this unit.
MACRO04	Executes the macro assigned to MACRO04 on this unit.
MACRO05	Executes the macro assigned to MACRO05 on this unit.
MACRO06	Executes the macro assigned to MACRO06 on this unit.
MACRO07	Executes the macro assigned to MACRO07 on this unit.
MACRO08	Executes the macro assigned to MACRO08 on this unit.
MACRO09	Executes the macro assigned to MACRO09 on this unit.
MACRO10	Executes the macro assigned to MACRO10 on this unit.
FOCUS PEAK	Switches ON/OFF the peaking function that can be set with RP MENU button > [BASIC CONFIG] > [VIDEO MARKER].
NONE	Assign nothing.

NOTE

- Depending on the function, there are cameras that are not compatible. Refer to the operating instructions of the camera for details.

Refer to "Control panel section" (page 11) and "Status screen" (page 30) for how to execute user buttons.

Function bar

You can assign the following functions to the function dials (F1 to F4). The assigned function is displayed on the function bar. Refer to RP MENU button > [USER ASSIGN] for how to assign.

Settings details	Description
SCENE	Sets SCENE for the selected camera.
W. BAL MODE	Sets the white balance mode for the selected camera.
COLOR TEMP	Sets the color temperature for the selected camera according to the [WHITE BALANCE] setting.
MASTER GAIN	Sets the master gain for the selected camera.
AGC	Switches the AGC (Auto Gain Control) of the selected camera ON/OFF.
R GAIN	Sets the R gain for the selected camera.
G GAIN	Sets the G gain for the selected camera.
B GAIN	Sets the B gain for the selected camera.
SHUTTER SW	Sets ON/OFF for the shutter function of the selected camera.
SHUTTER MODE	Sets the shutter mode for the selected camera.
SHUTTER SPEED	Sets the shutter speed for the selected camera.
ND	Sets ND for the selected camera.
MASTER PED	Sets the master pedestal for the selected camera.
R PED	Sets the R pedestal for the selected camera.
G PED	Sets the G pedestal for the selected camera.
B PED	Sets the B pedestal for the selected camera.
DETAIL SW	Sets ON/OFF for the detail function of the selected camera.
MASTER DETAIL	Sets the master detail for the selected camera.
PEAK(DTL) FREQ	Sets the detail boost frequency for the selected camera.
DNR	Sets the digital noise reduction for the selected camera.
ZOOM MODE	Sets the zoom mode (maximum zoom magnification) for the selected camera.
DIGITAL EXT	Sets the digital extender function for the selected camera.
O.I.S.	Sets ON/OFF for the screen stabilization function of the selected camera.
O.I.S. MODE	Sets the mode for the screen stabilization function of the selected camera.
P/T SPEED MODE	Sets the speed mode for the pan/tilt operations of the selected camera.
P/T ACC SETTING	Sets advanced settings for pan/tilt operations on the selected camera, such as the rate of acceleration when starting and stopping.
SPEED w/ ZOOM	Sets whether to automatically adjust the speed of pan/tilt control in conjunction with the zoom magnification of the selected camera.
FOCUS ADJ w PTZ	Sets whether the focus is corrected automatically when pan/tilt/zoom is operating on the selected camera.
PMEM OP MODE	Sets the method of controlling preset memories with the multi select switches when the operation mode is 2 or 3. Refer to "Preset memory control" (page 48) in "Operation modes" for details.
PMEM SPEED SEL	Selects whether to use the speed setting for playing back preset memories that was set on the camera or to use the one set on this unit.
PMEM SPEED TBL	Sets the speed table for playing back preset memories.
PMEM SPD/TIME	Displays the speed or time taken to move to a preset memory position when playing back preset memories.
PMEM SMT COMP	Sets the mode for playing back when playing back preset memories.
RECALL MACRO	Executes the MACRO saved in this unit.
L-ROCKER	Sets the functionality to be assigned to the L-rocker.
R-ROCKER	Sets the functionality to be assigned to the R-rocker.
L-STICK	Sets the functionality to be assigned to the L-joystick.
2nd CAM NUM	Sets the camera number to be controlled with the L-joystick when the functionality for operation of a second camera has been assigned to the L-joystick.
PAGE SWITCHING	Sets the switching of the status screen. Refer to "Status screen" (page 30) for details.

NOTE

- Depending on the function, there are cameras that are not compatible. Refer to the operating instructions of the camera for details.

L/R-rockers, L-joystick, Focus dial, and Iris dial

You can assign the following functions.

Refer to RP MENU button > [CONTROL I/F] for how to assign.

	Assigned functions	Description
L-rocker	ZOOM	Operates the camera's zoom.
R-rocker	ZOOM	Operates the camera's zoom.
	FOCUS	Operates the camera's focus.
L-joystick	NONE	Nothing is assigned.
	2nd CAM PT	Controls a second camera (pan and tilt). When this setting is made, the L-rocker is assigned zoom control for the second camera.
	MENU	Operates menus.
	CROP	Controls the crop position during CROP.
Focus dial/Iris dial	FOCUS	Controls focus.
	IRIS	Controls iris.
		If you assign iris to the FOCUS dial and focus to the IRIS dial, the auto focus button and the auto iris button controls are also swapped. <ul style="list-style-type: none"> ● The one touch auto focus button is disabled. ● Operations with the FOCUS SPEED dial are disabled. ● The focus speed is fixed to the one set when changing the settings.

NOTE

- Depending on the function, there are cameras that are not compatible. Refer to the operating instructions of the camera for details.

Direction of operation

You can assign the following to the different directions. (You can select whether to set for 1 camera connected to the unit or for all cameras.)

Refer to RP MENU button > [CTRL DIRECTION] for how to assign.

	Pan	Tilt	Zoom	Focus	Iris
R-joystick	Can be set	Can be set	–	–	–
L-joystick	Can be set	Can be set	–	–	–
R-rocker	–	–	Can be set	Can be set	–
L-rocker	–	–	Can be set	–	–
Focus dial	–	–	–	Can be set	Can be set
Iris dial	–	–	–	Can be set	Can be set

Making network settings for this unit

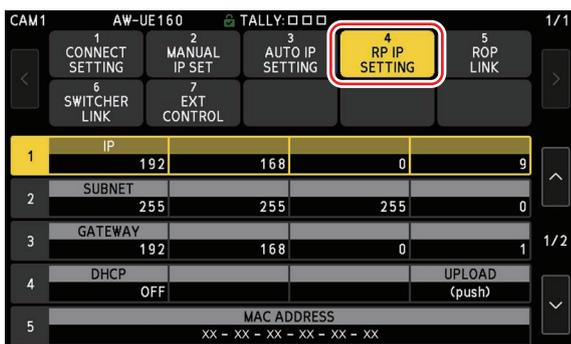
You need to set up the network for this unit in order to control IP connected remote cameras using this unit.

NOTE

- Operation will not be correct if there is an IP address on the same network that is the same. When IP address duplication is detected, such as at start up, the message [Duplicate IP address. Please change it.] may be displayed. Set IP addresses so there are no duplications.

IP address settings for this unit

1. Press the **CONNECT** button.
2. Touch **[RP IP SETTING]** to display the **[IP]** item.



- This is set to "192.168.0.9" as the factory default.

3. Use the function dials to set the IP address for this unit so it doesn't duplicate the IP address of any other device.

The input is divided into 4 octets.

The modified content is updated only if you execute [UPLOAD].

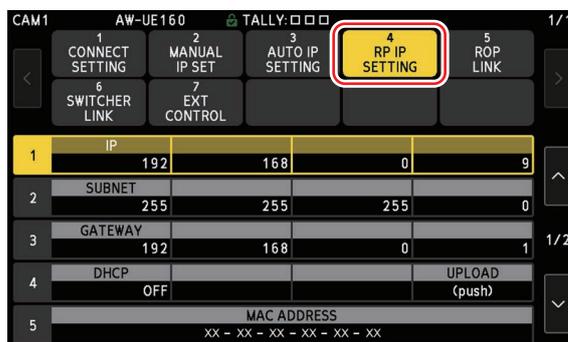
- The message [Duplicate IP address. Please change it.] is displayed if it duplicates the IP address of the connected remote camera and you will not be able to register this address. Refer to "Addresses that can be set" (page 39).

NOTE

- Restart is required for the settings to take effect. Turn off this unit and then turn the unit on again.
- Consult the network administrator when setting IP addresses.

Subnet mask settings

1. Press the **CONNECT** button.
2. Touch **[RP IP SETTING]** to display the **[SUBNET]** item.



- This is set to "255.255.255.0" as the factory default.

3. Press the **Up/Down** buttons to select **[SUBNET]**.
4. Use the function dials to set the subnet mask for this unit.

The input is divided into 4 octets.

The modified content is updated only if you execute [UPLOAD].

- [Invalid subnet mask.] is displayed if you entered a value that cannot be set.

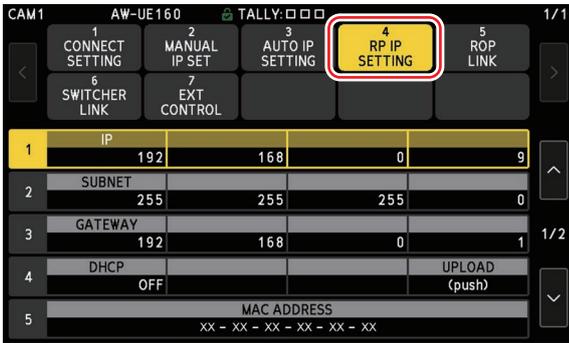
Refer to "Addresses that can be set" (page 39).

NOTE

- Restart is required for the settings to take effect. Turn off this unit and then turn the unit on again.

Default gateway settings

1. Press the **CONNECT** button.
2. Touch **[RP IP SETTING]** to display the **[GATEWAY]** item.



● This is set to "192.168.0.1" as the factory default.

3. Press the **Up/Down** buttons to select **[GATEWAY]**.
4. Use the function dials to set the default gateway for this unit.

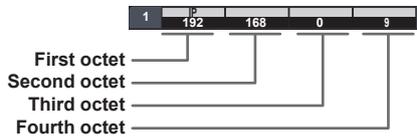
The input is divided into 4 octets.
The modified content is updated only if you execute **[UPLOAD]**.

NOTE

- Restart is required for the settings to take effect. Turn off this unit and then turn the unit on again.

Memo

Addresses that can be set



- IP addresses can be set within the following range of values:

First octet: 1 to 223	Second octet: 0 to 255
Third octet: 0 to 255	Fourth octet: 1 to 254

However, "127.0.0.1" cannot be set despite being within the range.

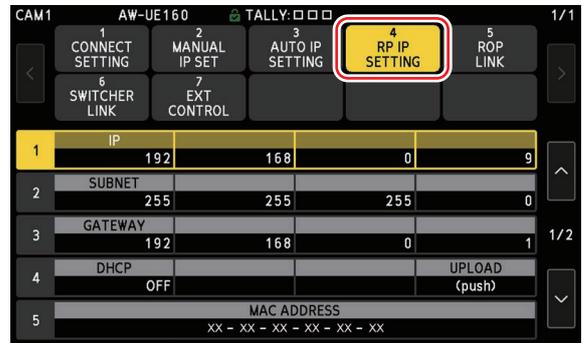
- Subnet masks can be set within the following range of values:

First octet: 0 to 255	Second octet: 0 to 255
Third octet: 0 to 255	Fourth octet: 0 to 255

However, "0.0.0.0" and "127.0.0.1" cannot be set despite being within the range.

MAC address display

1. Press the **CONNECT** button.
2. Touch **[RP IP SETTING]** to display the **[MAC ADDRESS]** item.



● The MAC address is for display only and cannot be changed.

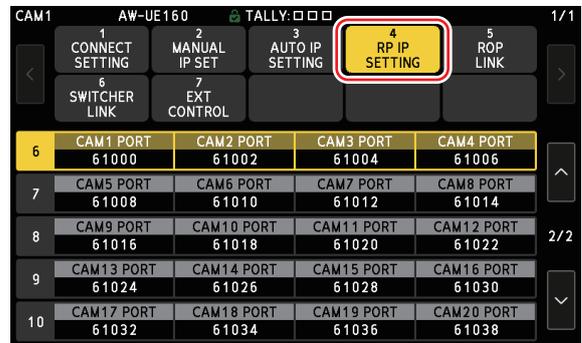
Receiving port number settings

Set the port number for this unit to receive the update notifications for camera information from remote cameras.

Change the setting if the remote cameras are connected via router.

- The update notifications are received from the remote cameras included in the currently selected camera group, so set 20 port numbers.

1. Press the **CONNECT** button.
2. Touch **[RP IP SETTING]** to display the **[CAM1 PORT]** to **[CAM20 PORT]** items.



3. Use the function dials to set the receiving port numbers for each camera number.

Input range:

1 to 65535

- [Duplicate port. Please change it.] is displayed if you entered a duplicate receiving port number.

Making the connection settings for the remote camera

Connection settings need to be made beforehand in order to enable control of remote cameras from this unit and to use link functions with this unit.

You can either make the connection settings on this unit or you can use the web screen.

The following describes the method for setting on this unit.

Refer to Web setting screen [Setup Menu] > [Connect Setting] for how to make settings with the web screen.

NOTE

- Remote cameras are all set with the same IP address as the factory default. For this reason, even if you try to use this unit to control multiple remote cameras in their factory default states via IP connection, the remote cameras will not work properly.
- When connecting other remote cameras in which the same IP addresses are set, such as when replacing remote cameras, connect after turning off this unit. The remote cameras may not work properly if you connect them without turning off this unit first.

Notes about setting links

This unit allows you to specify the remote camera to control by selecting a camera number from CAM1 to CAM200. If the remote camera you are trying to control is connected via IP, in order to use this procedure, set an IP address that does not duplicate other remote cameras so that a relationship is established between the IP addresses and the camera numbers on this unit.

Establishing this relationship is expressed as "**setting links**" in this manual.

Connection destination IP addresses

In this manual, the IP address that specifies the connection target of this unit (remote camera) is referred to as the "**connection destination IP address**".

One connection destination IP address is allocated for each of the remote cameras, from camera number CAM1 to CAM200, for a total of 200 addresses set in the unit.

The connection destination IP addresses for each of the camera numbers can be viewed in CONNECT button > [MANUAL IP SET] menu.

Overview of the menus and operations for setting links

CONNECT button > [CONNECT SETTING]

Sets the connection type (serial/IP/no connection, etc.) for each camera number for the remote cameras to be connected.

CONNECT button > [AUTO IP SETTING] > [AUTO SET]

Use this operation to automatically set the links with the remote cameras. (AUTO IP SETTING)

The following 2 operation modes are available:

RENEW	Sets links by having this unit update the IP addresses set for the remote cameras.
KEEP	Sets links by maintaining the IP addresses set for the remote cameras and updating the connection destination IP addresses set in this unit.

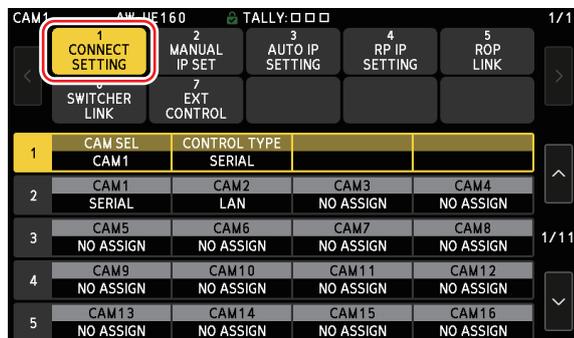
CONNECT button > [MANUAL IP SET]

Use this operation to view the connection destination IP addresses set for each of the camera numbers, or to make modifications manually.

Setting the connection type (serial/IP/no connection) to the remote cameras

1. Set the connection type for camera numbers CAM1 to CAM200.

Display the menu items with CONNECT button > [CONNECT SETTING].



In the first line, you can specify (F1 dial) the camera number and set the connection type (F2 dial).

In the second line and thereon, you can display the connection types for each of the camera numbers and set them.

The connection type blinks when you change the setting and it is confirmed when you press the dial.

SERIAL : Serial connection

LAN : Connection via IP

NO ASSIGN : No connection

- The serial connection RS-422 terminals [1] to [3] correspond to the camera numbers CAM1 to CAM3. Serial connection ([SERIAL]) cannot be set for camera numbers CAM4 to CAM200.

NOTE

- When executing "AUTO IP SETTING" (page 41 to 45), set the target camera numbers to [NO ASSIGN].

Automatically setting IP addresses (AUTO IP SETTING)

When "AUTO IP SETTING" is performed, the remote cameras connected within the same subnet as the unit automatically have links set.

The following describes separately the procedures for setting up for the first time (the remote cameras are in the factory default state) and when adding remote cameras to an environment that is already running.

Setting up for the first time

<Procedure overview>

By setting [RENEW] in the [AUTO SET] item of CONNECT button > [AUTO IP SETTING], and then executing [SETTING] with [EXECUTE], links are set.

When the [AUTO SET] item is [RENEW], the unit firstly searches within the same subnet. After this it allocates camera numbers to each remote camera in the order they are found.

At this time, the IP addresses of the remote cameras are overwritten with the connection destination IP addresses set by the unit for each camera number.

Example:

- ① IP addresses set in remote cameras A, B, and C (factory default state)

Remote camera A : 192.168.0.10

Remote camera B : 192.168.0.10

Remote camera C : 192.168.0.10

- ② Connection type set on this unit (CONNECT button > [CONNECT SETTING])

CAM1 : NO ASSIGN

CAM2 : NO ASSIGN

CAM3 : NO ASSIGN

- ③ Connection destination IP addresses set on this unit (CONNECT button > [MANUAL IP SET])

CAM1 : 192.168.0.10

CAM2 : 192.168.0.11

CAM3 : 192.168.0.12

In this state, by setting the [AUTO SET] item to [RENEW], the IP addresses for remote cameras A to C are overwritten with the following values, and these are each linked to camera numbers CAM1 to CAM3.

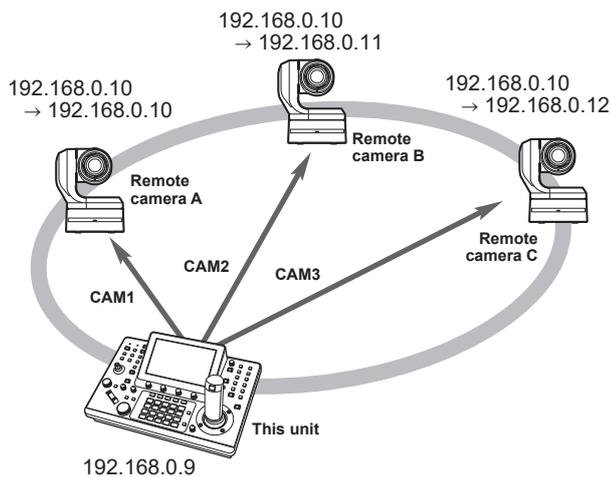
Remote camera A : 192.168.0.10

Remote camera B : 192.168.0.11

Remote camera C : 192.168.0.12

Memo

The IP addresses of the cameras to be assigned are assigned IP addresses after the IP address of this unit. If the IP address of this unit is 192.168.0.9, then assignment starts at 192.168.0.10.



- The connection type for the camera numbers where "AUTO IP SETTING" was executed changes to "LAN", and the next time "AUTO IP SETTING" is run, these are removed as targets for setting.

<Procedure>

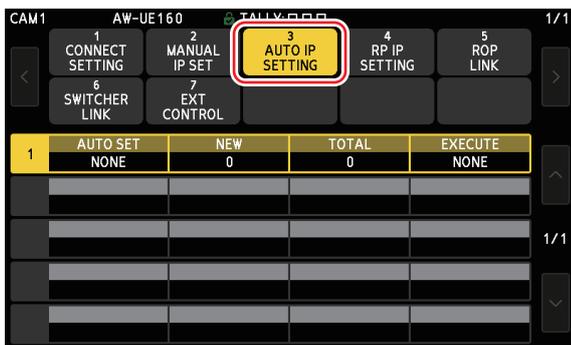
NOTE

- Confirm that the connection type for the remote camera is [NO ASSIGN] before setting.

Connection type setting

CONNECT button → CONNECT SETTING → items [CAM1] to [CAM200]

1. Connect the remote cameras and the unit to a network within the same subnet.
2. Press the **CONNECT** button, select **[AUTO IP SETTING]**, and then set the **[AUTO SET]** item to **[RENEW]**.



The number of cameras currently being managed by this unit (number of remote cameras newly found and the number of all remote cameras) are displayed in [NEW] and [TOTAL].

- NEW** : Number of newly found cameras
- TOTAL** : Number currently managed by this unit + the number newly found

3. Set [EXECUTE] to [SETTING].

"AUTO IP SETTING" starts.

The [Auto IP setting...] message is displayed while "AUTO IP SETTING" is under way.

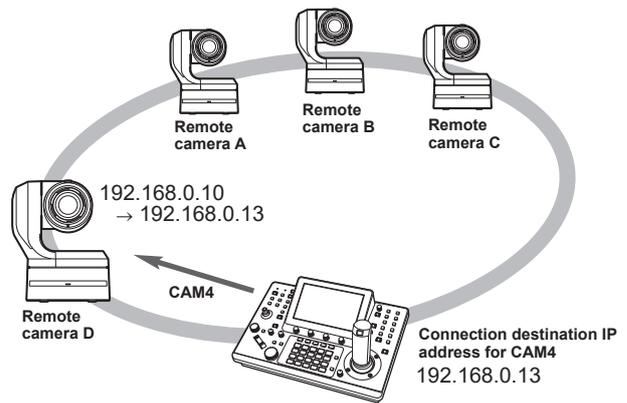
- The [Completed.] message is displayed when it completes successfully.
The remote cameras automatically reboot and restart with the newly configured IP addresses.
It is now possible to control the remote cameras from this unit.
- The [Auto IP setting failed.] message is displayed if IP address setting failed.
It is possible that a network issue is the cause.
Check the connection status of the hub and LAN cables, then try "AUTO IP SETTING" again.

When adding remote cameras to an environment that is already running

"AUTO IP SETTING" can also be used to perform the settings even if you are adding remote cameras to an environment that is already running with IP connections.

The following 2 methods are available:

1. Automatically update the IP addresses set in the devices to be added from this unit
2. Automatically updating the connection destination IP addresses set in this unit without changing the IP addresses set in devices being added



Automatically update the IP addresses set in the devices to be added from this unit

<Procedure overview>

By executing [RENEW] in the [AUTO SET] item of CONNECT button > [AUTO IP SETTING], links are set.

With [RENEW], the unit firstly searches within the same subnet. After this links are set for newly found remote cameras with the camera numbers which were set as [NO ASSIGN] as the connection type with this unit.

At this time, the IP addresses of the remote cameras are overwritten with the connection destination IP addresses set by the unit.

- When a remote camera that has had links set to this unit with automatic IP setting and then a computer, etc., is used to change the IP address, and then that remote camera is connected and [RENEW] is executed, that remote camera is reassigned the same IP address that it was assigned when automatic IP setting was first executed.

<Procedure>

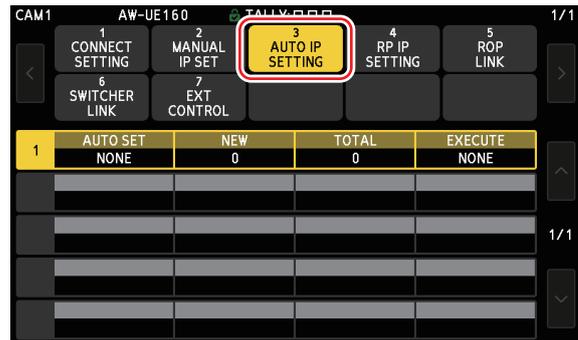
1. Connect the remote cameras to be added and the unit to a network within the same subnet.
2. Press the CONNECT button, select [AUTO IP SETTING], and then set the [AUTO SET] item to [RENEW].

Example:

- ① Three remote cameras A, B, and C are each linked to camera numbers CAM1, CAM2, and CAM3 for use in operations.
- ② A new remote camera D (IP address value as below) is added.
Remote camera D : 192.168.0.10
- ③ Connection type set on this unit (CONNECT button > [CONNECT SETTING])
CAM1 : LAN
CAM2 : LAN
CAM3 : LAN
CAM4 : NO ASSIGN
- ④ Connection destination IP address set on this unit (CONNECT button > [MANUAL IP SET])
CAM4 : 192.168.0.13

In this state, by executing [RENEW], the IP address for remote camera D is overwritten with the following value, and it is linked to camera number CAM4.

Remote camera D : 192.168.0.13



The number of cameras currently being managed by this unit (number of remote cameras newly found and the number of all remote cameras) are displayed in [NEW] and [TOTAL].

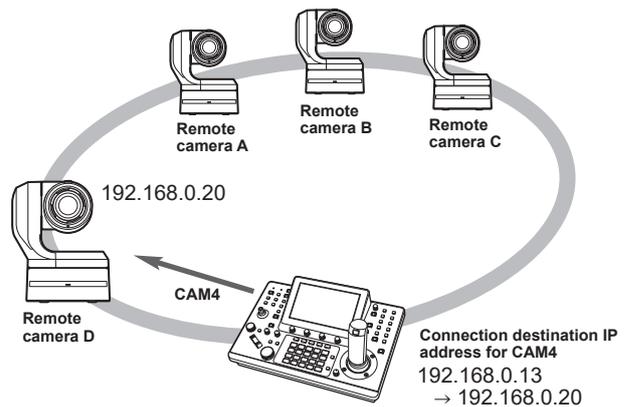
- NEW** : Number of newly found cameras
- TOTAL** : Number currently managed by this unit + the number newly found

3. Set [EXECUTE] to [SETTING].

"AUTO IP SETTING" starts.

The [Auto IP setting...] message is displayed while "AUTO IP SETTING" is under way.

- The [Completed.] message is displayed when it completes successfully.
The remote cameras automatically reboot and restart with the newly configured IP addresses.
It is now possible to control the remote cameras from this unit.
- The [Auto IP setting failed.] message is displayed if IP address setting failed.
It is possible that a network issue is the cause.
Check the connection status of the hub and LAN cables, then try "AUTO IP SETTING" again.



■ Automatically updating the connection destination IP addresses set in this unit without changing the IP addresses set in devices being added

<Procedure overview>

By executing [KEEP] in the [AUTO SET] item of CONNECT button > [AUTO IP SETTING], links are set.

With [KEEP], the unit firstly searches within the same subnet.

After this links are set for newly found remote cameras with the camera numbers which were set as [NO ASSIGN] as the connection type with this unit.

At this time, the IP addresses set for the remote cameras are kept as they are, and the connection destination IP addresses set in this unit are overwritten.

- Of the set camera numbers whose connection type is other than [SERIAL], if there is a set camera number with the same connection destination IP address as an IP address of a found remote camera, the connection destination IP address that is set in this unit is not updated. The connection destination IP address remains as is and the link is set between the relevant camera number and the remote camera.

NOTE

- Set the subnet mask for the unit and the remote cameras to the same value. You will be unable to control the cameras via the network if the subnet mask is different.

Example:

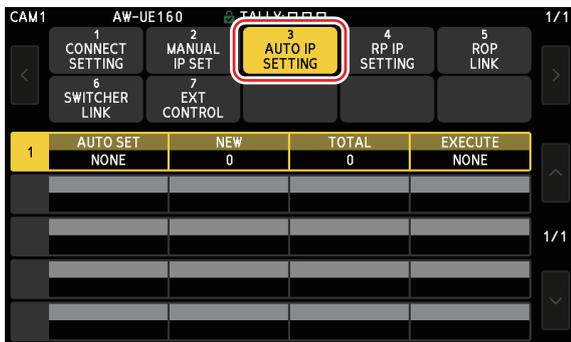
- ① Three remote cameras A, B, and C are each linked to camera numbers CAM1, CAM2, and CAM3 for use in operations.
- ② A new remote camera D (IP address value as below) is added.
Remote camera D : 192.168.0.20
- ③ Connection type set on this unit (CONNECT button > [CONNECT SETTING])
CAM1 : LAN
CAM2 : LAN
CAM3 : LAN
CAM4 : NO ASSIGN
- ④ Connection destination IP address set on this unit (CONNECT button > [MANUAL IP SET])
CAM4 : 192.168.0.13

When [KEEP] is executed in this state, the IP address of remote camera D remains unchanged, the connection destination IP address set in this unit is overwritten with the following value, and the link is set with remote camera D.

Connection destination IP address for CAM4:
192.168.0.20

<Procedure>

1. Connect the remote cameras to be added and the unit to a network within the same subnet.
2. Press the **CONNECT** button, select **[AUTO IP SETTING]**, and then set the **[AUTO SET]** item to **[RENEW]**.



The number of cameras currently being managed by this unit (number of remote cameras newly found and the number of all remote cameras) are displayed in **[NEW]** and **[TOTAL]**.

NEW : Number of newly found cameras
TOTAL : Number currently managed by this unit + the number newly found

3. Set **[EXECUTE]** to **[SETTING]**.

"AUTO IP SETTING" starts.
 The [Auto IP setting...] message is displayed while "AUTO IP SETTING" is under way.

- The [Completed.] message is displayed when it completes successfully.
 It is now possible to control the remote cameras from this unit.
- When there is IP address duplication with a device that is already running and a remote camera that is being added, the message [Duplicate IP address. Please change it.] is displayed and the link cannot be set.
 Check the IP address of the remote camera being added, then try "AUTO IP SETTING" again.
- The [Auto IP setting failed.] message is displayed if IP address setting failed.
 It is possible that a network issue is the cause.
 Check the connection status of the hub and LAN cables, then try "AUTO IP SETTING" again.

Memo

Notes on finding connected devices

- If the number of devices found with **[RENEW]** and **[KEEP]** exceeds the number that can be registered (200 remote cameras), the message [Detected cameras exceed system limit.] is displayed. It is still possible to proceed with auto IP setting in this case, but IP addresses can only be set for the number of devices that can be registered.
- In cases such as when multiple remote cameras are started simultaneously, it may happen that not all of the remote cameras can be found by this unit.
 Execute **[RETRY]** in the **[EXECUTE]** item if this happens.
- If the displayed number of newly found devices does not equal the number of devices you are trying to set due to factors such as the power of the remote cameras not being on, etc., remove the cause and then execute **[RETRY]** in the **[EXECUTE]** item.

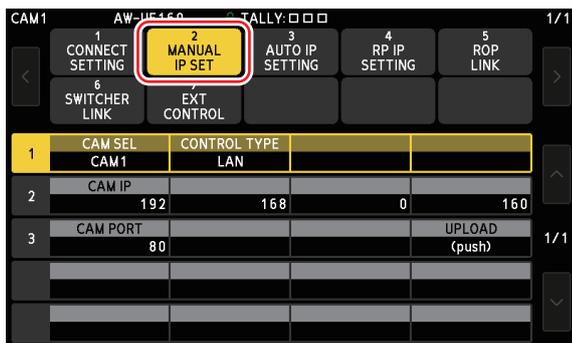
NOTE

- When adding another remote camera controller, connect after making sure to set so that there are no duplicate IP addresses in the same network.
- Execute "AUTO IP SETTING" in a state where devices that are not the target of auto IP setting (devices other than remote cameras) are not running. Connect these devices once auto IP setting has been executed after confirming that there are no IP address duplications within the same network.

Manually setting the connection destination IP addresses (remote cameras) and port numbers

Use this procedure when connecting remote cameras for which IP address setting with "AUTO IP SETTING" cannot be done (connecting via a router) or to manually set links between this unit and remote cameras.

1. Press the **CONNECT** button and select **[MANUAL IP SET]**, then set the camera number whose number is to be changed in the **[CAM SEL]** item.



NOTE

- The connection type of the selected camera number can also be changed. Set the **[CONTROL TYPE]**. Refer to "Setting the connection type (serial/IP/no connection) to the remote cameras" (page 41) for details.

2. Set the IP address (remote camera) and port number.

The second line and thereon displays the current IP address and port number for the relevant camera number.

In **[CAM IP]**, set the connection destination IP address.

There are four separate octets, and set with the F1 to F4 dials.

In **[CAM PORT]**, set the connection destination port number.

Execute **[UPLOAD]** after setting. The set IP address and port number are not reflected until **[UPLOAD]** is executed.

The settings can also be done for camera numbers when the connection type is **[NO ASSIGN]** or **[SERIAL]** in **CONNECT** button > **[CONNECT SETTING]**.

- The following values are set as the factory defaults:

CAM1 : 192.168.0.10

↓

CAM200 : 192.168.0.209

- A check is made for duplicate IP addresses set in other items when you change the IP address for the connection destination. The message **[Duplicate IP address. Please change it.]** is displayed if the IP address is a duplicate.

Port numbers that can be set

Port numbers can be set in the range of values between 1 and 65535.

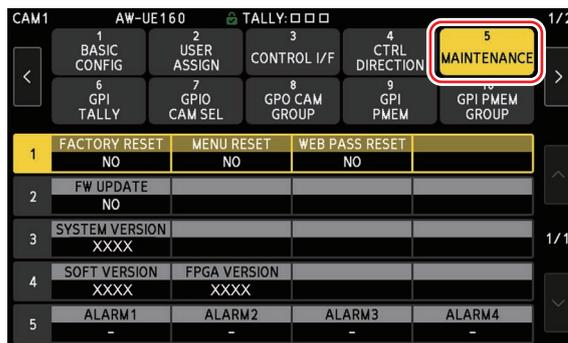
NOTE

- This procedure does not change the IP address set in the remote camera.

Initializing the connection destination IP address set in this unit

Use this to initialize the connection type and connection destination IP address set in this unit.

1. Press the **RP MENU** button, select **[MAINTENANCE]**, then select **[FACTORY RESET]**.



2. Select **YES** to initialize.

The connection settings with the remote cameras are initialized.

Memo

- Connection types are also initialized.
- If the IP address of this unit has been changed, the connection destination IP address is automatically changed.
 - The IP addresses starting after the one for this unit are set in ascending order to the camera numbers.
- Note also that all settings apart from the connection destination IP addresses managed by this unit are also returned to the factory defaults.

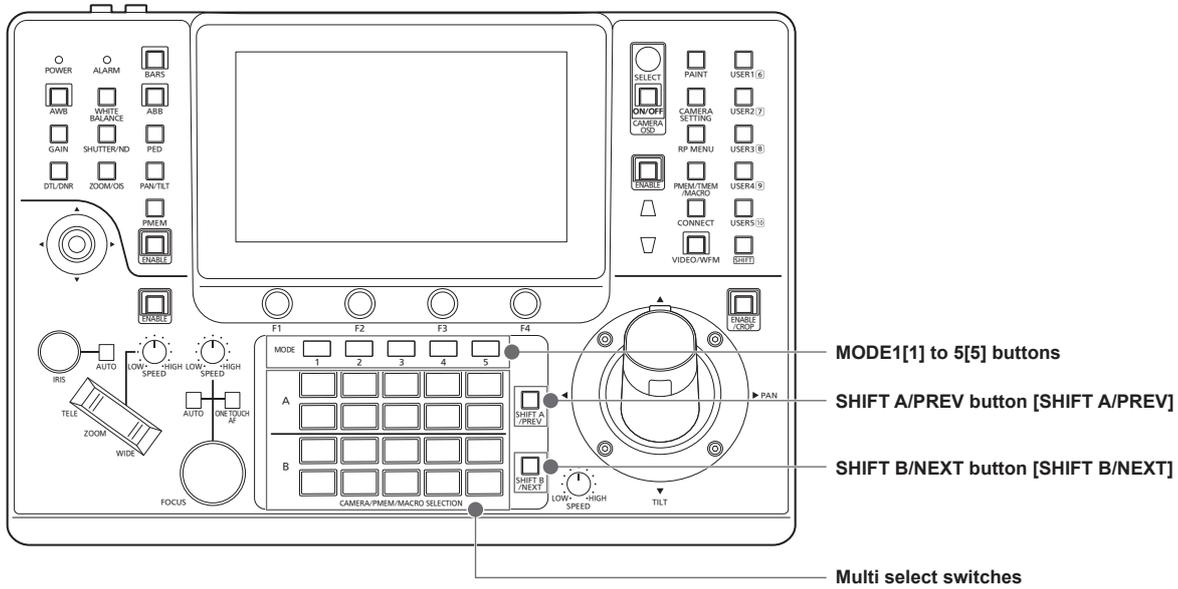
Operation modes

This unit is equipped with a variety of operation modes you can choose to suit the application.

The content you can control with the multi select switches depends on the operation mode. Select the mode that the most applicable to the way you use the unit.

The operation modes can be switched with buttons MODE1[1] to MODE5[5]. (The MODE button for the currently selected operation mode turns amber.)

- Operation mode 1: Select 20 cameras
- Operation mode 2: Control 20 preset memories
- Operation mode 3: Select 10 cameras and control 10 preset memories
- Operation mode 4: Control 20 macros
- Operation mode 5: Select 10 cameras and control 10 macros



Camera selection

This unit allows you to register a maximum of 200 remote cameras as control targets by making the connection settings for each of the camera numbers CAM1 to CAM200. To select a remote camera to control from amongst these, you must first select the camera group to which the remote camera belongs:

Camera group	G1	G2	G3	G4	G5
Camera number	C1 to C10	C11 to C20	C21 to C30	C31 to C40	C41 to C50
Camera group	G6	G7	G8	G9	G10
Camera number	C51 to C60	C61 to C70	C71 to C80	C81 to C90	C91 to C100
Camera group	G11	G12	G13	G14	G15
Camera number	C101 to C110	C111 to C120	C121 to C130	C131 to C140	C141 to C150
Camera group	G16	G17	G18	G19	G20
Camera number	C151 to C160	C161 to C170	C171 to C180	C181 to C190	C191 to C200

When operation mode 1, 3, or 5 is selected, you can select the remote cameras to be controlled using the multi select switches. When you press the relevant multi select switch, the switch you press illuminates amber and the remote camera is selected. Also, the illuminated status of each switch shows you the status of the remote camera allocated to the multi select switch.

Illuminated status of switch	Status of remote camera
	Not connected
	Connected remote camera is in standby state
	Connected remote camera is unselected
	Connected remote camera is selected (when in the selected state, if there is an overlap of R TALLY, G TALLY, and Y TALLY, the vicinity of the switch is surrounded with the relevant color)
	R TALLY ON (connected remote camera is unselected)
	G TALLY ON (connected remote camera is unselected)
	Y TALLY ON (connected remote camera is unselected)

NOTE

- Cameras set to the connection type [NO ASSIGN] cannot be selected when you press the CONNECT button and select [CONNECT SETTING].
- When there is an overlap of R/G/Y TALLY, only the color illuminated on the LED of the remote camera itself is indicated. (The tally status of selected camera is indicated completely on the status screen of the main LCD.)

Preset memory control

You can operate up to a maximum of 100 preset memories for each remote camera from this unit. You can register the following settings that you have previously adjusted in your preset memories.

- Pan/tilt position
- Zoom position
- Focus position
- Iris position
- Gain
- White balance

NOTE

- The number of preset memories that can be registered depends on the remote camera. For details, refer to the operating instructions for the relevant model.

Operation modes (continued)

To select a preset memory of a camera that has been stored, you must first select one of the following to which the preset memory belongs:

- Preset memory page (for Operation mode 2)
- Preset memory group (for Operation mode 3)

Preset memory page	1	2	3	4	5
Preset memory number	P1 to P20	P21 to P40	P41 to P60	P61 to P80	P81 to P100

Preset memory group	G1	G2	G3	G4	G5
Preset memory number	P1 to P10	P11 to P20	P21 to P30	P31 to P40	P41 to P50
Preset memory group	G6	G7	G8	G9	G10
Preset memory number	P51 to P60	P61 to P70	P71 to P80	P81 to P90	P91 to P100

When operation mode 2 or 3 is selected, you can select the preset memory number to be controlled using the multi select switches. When you press the relevant multi select switch, the switch you press illuminates yellow and the preset memory is executed. Also, the illuminated status of each switch shows you the status of the preset memory allocated to the multi select switch.

Illuminated status of switch	Preset memory status
	Unregistered
	Registered but not selected
	Selected/Playback state (even after the preset memory has been played back, this status is maintained until another preset memory is selected)

For storing and deleting the preset memories, apart from the operations available on the cameras, you can also use the following operations on this unit.

● How to register

- Press the [PMEM] shortcut button to display [OPERATION MODE] on the function bar.
- Use the function dials to select [STORE].
- Operate the camera to put it in the state you want to register in the preset memory, then press the multi select switch to which the preset memory is assigned.
- The relevant preset memory number is registered.

● How to delete

- Press the [PMEM] shortcut button to display [OPERATION MODE] on the function bar.
- Use the function dials to select [DELETE].
- Press the multi select switch to which the preset memory to be deleted is assigned.
- The relevant preset memory number is deleted (it returns to the unregistered state).

NOTE

- Refer to "Shortcut buttons" (page 64) for how to use shortcut buttons.
- The content selected with [OPERATION MODE] ([STORE]/[DELETE]/[RECALL]) is only enabled while the [PMEM] button is enabled. When the [PMEM] button is not enabled, the multi select switches to which preset memories are allocated always behave as [RECALL].
- Apart from the [PMEM] button shortcut button, it is also possible to register and delete in a similar way by assigning [PMEM OP MODE] to the function bar. Refer to "Customizing operations of the unit" (page 34) for details.
- You can also make it impossible to accidentally overwrite preset memories you have already registered by using the no overwrite mode in advance. Refer to PMEM/TMEM/MACRO button > [PMEM SETTING] > [STORE MODE] for details.

Macro control

A maximum of 100 macros registered on this unit can be controlled. Refer to “Macro functionality” (page 33) for information about the macro function. To select a macro that has been stored, you must first select one of the following to which the macro belongs:

- Macro page (for Operation mode 4)
- Macro group (for Operation mode 5)

Macro page	1	2	3	4	5
Macro number	M1 to M20	M21 to M40	M41 to M60	M61 to M80	M81 to M100

Macro group	G1	G2	G3	G4	G5
Macro number	M1 to M10	M11 to M20	M21 to M30	M31 to M40	M41 to M50
Macro group	G6	G7	G8	G9	G10
Macro number	M51 to M60	M61 to M70	M71 to M80	M81 to M90	M91 to M100

When operation mode 4 or 5 is selected, you can select the macro number to be controlled using the multi select switches.

When you press the relevant multi select switch, the switch you press illuminates yellow and the macro is executed. If you press the switch again during execution, the macro is canceled.

Also, the illuminated status of each switch shows you the status of the macro allocated to the multi select switch.

Illuminated status of switch	Macro status
	Unregistered
	Registered but not selected
	Selected/playing back (returns to "Registered but not selected" after play back of the macro finishes)

Refer to Web setting screen [Setup Menu] > [Macro] > [Macro Edit] for how to assign macros.

Operation mode 1

This mode enables selection of a maximum of 20 cameras from the cameras connected to the unit.

■ Procedures up to camera selection

1. Firstly select the MODE1[1] button.

2. Select the camera group you want to control.

You can set camera groups that you want to control in each of [A] and [B].

- Press the [SHIFT A/PREV] button to control the [A] group.
- Press the [SHIFT B/NEXT] button to control the [B] group.

While pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons are switched to act as "Camera group selection" buttons.

3. Select the desired camera group with the [G1] to [G20] buttons, and when you release the [SHIFT A/PREV] or [SHIFT B/NEXT] button, the camera group is selected.

Releasing the [SHIFT A/PREV] button or [SHIFT B/NEXT] button being pressed down switches the 20 [CAMERA/PMEM/MACRO SELECTION] buttons to "Camera selection" buttons and the camera group switches to the camera group displayed in [A] or [B], whichever end was pressed in step 2.

4. Press the button for the camera you want to control to select the camera.

NOTE

- You can smoothly make camera selections even across different groups by switching to the next camera group you want to control in advance when that camera group is not in the section where the currently selected camera is indicated.
- You can control the cameras previously selected even while the "Camera group selection" buttons are displayed.

Example:

When [A] = C1 to C10 (G1) and [B] = C11 to C20 (G2) are set initially (Figure 1) and you then want to switch the [B] end to C21 to C30 (G3)

1. Press the [SHIFT B/NEXT] button.

While pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons are switched to act as "Camera group selection" buttons.

2. Select the G3 camera group with the [G3] button, and when you release the [SHIFT B/NEXT] button, the camera group is selected. (Figure 2)

When you release the [SHIFT B/NEXT] button being pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons switch to "Camera selection" buttons and the cameras indicated in [B] switch to C21 to C30 (G3). (Figure 3)

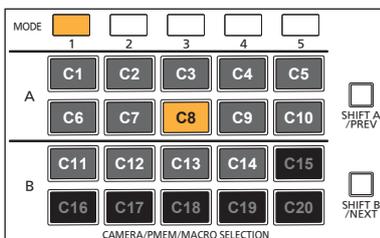


Figure 1

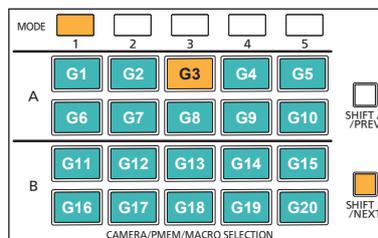


Figure 2

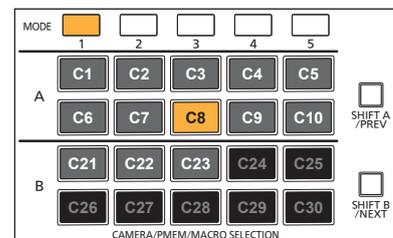


Figure 3

Operation mode 2

This mode enables control of a maximum of 20 preset memories for the selected cameras.
For camera selection set with operation mode 1, 3, or 5, or the main LCD.

NOTE

- Refer to “Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations” (page 58) for how to select cameras on the main LCD.

■ Procedures up to preset memory control

1. Firstly select the **MODE2[2]** button.
2. Select the preset memory page you want to control.
 - Press the [SHIFT A/PREV] button to return to the previous page
 - Press the [SHIFT B/NEXT] button to proceed to the next page
3. Press the button for the preset memory you want to control to execute the preset memory.

Example:

When P1 to P20 (page 1) are set initially (Figure 1) and you then want to switch to P21 to P40 (page 2)

1. Press the [SHIFT B/NEXT] button. (Figure 2)
2. When you release the [SHIFT B/NEXT] button, the preset memory page is confirmed and the 20 [CAMERA/PMEM/MACRO SELECTION] buttons switch to P21 to P40. (Figure 3)

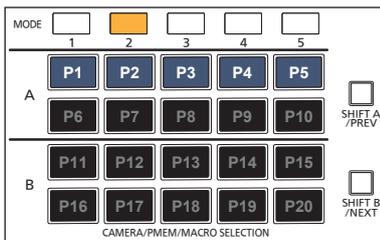


Figure 1

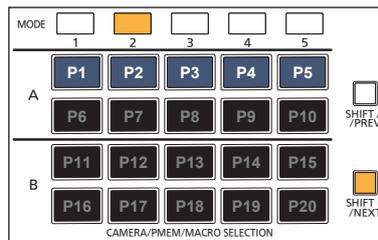


Figure 2

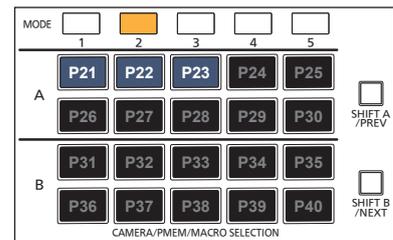


Figure 3

Operation mode 3

This mode enables control of a maximum of 10 preset memories for a maximum of 10 selected cameras from the cameras connected to the unit.

■ Procedures up to camera selection and preset memory control

1. Firstly select the MODE3[3] button.

[A]: Switches to the section for camera selection.

[B]: Switches to the section for preset memory control.

2. Select the camera group you want to control.

Press the [SHIFT A/PREV] button.

While pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons are switched to act as "Camera group selection" buttons.

3. Select the desired camera group with the [G1] to [G20] buttons, and when you release the [SHIFT A/PREV] button, the camera group is selected.

When you release the [SHIFT A/PREV] button being pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons switch to "Camera selection" buttons and "Preset memory control" buttons.

4. Select the preset memory group you want to control.

Press the [SHIFT B/NEXT] button.

While pressed down, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons are switched to act as "Preset memory group selection" buttons.

5. Select the desired preset memory group with the [G1] to [G10] buttons, and when you release the [SHIFT B/NEXT] button, the preset memory group is selected.

When you release the [SHIFT B/NEXT] button being pressed down, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons switch to "Preset memory control" buttons.

6. When you press the camera button to control at [A], the camera is selected and the preset memory selected at [B] is executed on that selected camera.

Example:

When camera selections C1 to C10 (G1) and preset memory control P1 to P10 (G1) are set initially (Figure 1) and you then want to switch camera selection to C11 to C20 (G2) and preset memory control to P11 to P20 (G2).

1. Press the [SHIFT A/PREV] button.

While pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons are switched to act as "Camera group selection" buttons.

2. Select the G2 camera group with the [G2] button, and when you release the [SHIFT A/PREV] button, the camera group is selected. (Figure 2)

When you release the [SHIFT A/PREV] button being pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons switch to "Camera selection" buttons and "Preset memory control" buttons, and the cameras indicated in [A] switch to C11 to C20 (G2). (Figure 3)

3. Press the [SHIFT B/NEXT] button.

While pressed down, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons are switched to act as "Preset memory group selection" buttons.

4. Select the G2 preset memory group with the [G2] button, and when you release the [SHIFT B/NEXT] button, the preset memory group is selected. (Figure 4)

When you release the [SHIFT B/NEXT] button being pressed down, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons switch to "Preset memory control" buttons and the preset memories indicated in [B] switch to P11 to P20 (G2). (Figure 5)

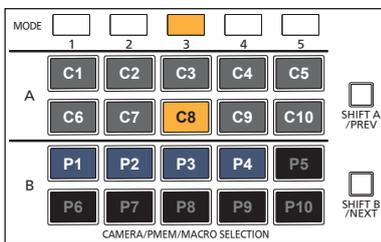


Figure 1

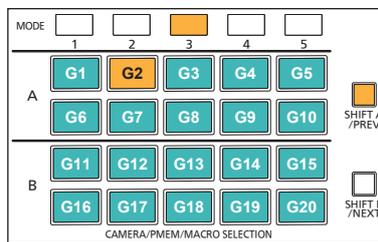


Figure 2

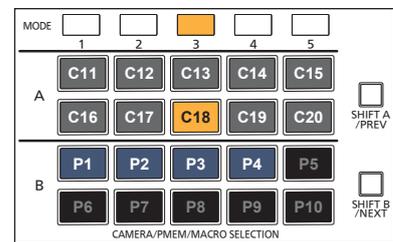


Figure 3

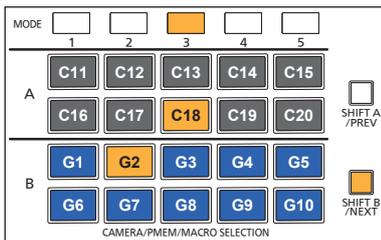


Figure 4

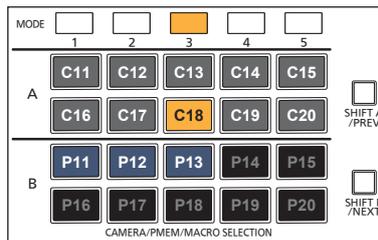


Figure 5

Operation mode 4

This mode enables control of a maximum of 20 macros.
For camera selection set with operation mode 1, 3, or 5, or the main LCD.

NOTE

- Refer to “Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations” (page 58) for how to select cameras on the main LCD.

■ Procedures up to macro control

1. Firstly select the **MODE4[4]** button.
2. Select the macro page you want to control.
 - Press the [SHIFT A/PREV] button to return to the previous page.
 - Press the [SHIFT B/NEXT] button to proceed to the next page.
3. Press the button for the macro you want to control to execute the macro.

Example:

When M1 to M20 (page 1) are set initially (Figure 1) and you then want to switch to M21 to M40 (page 2)

1. Press the [SHIFT B/NEXT] button. (Figure 2)
2. When you release the [SHIFT B/NEXT] button, the macro page is confirmed and the 20 [CAMERA/PMEM/MACRO SELECTION] buttons switch to M21 to M40. (Figure 3)

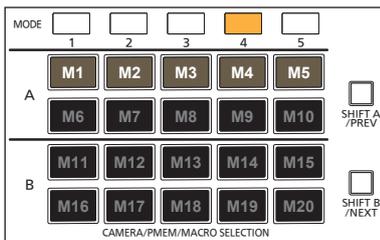


Figure 1

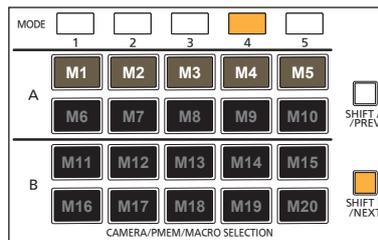


Figure 2

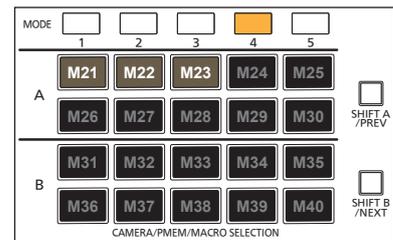


Figure 3

Operation mode 5

This mode enables control of a maximum of 10 macros for a maximum of 10 selected cameras from the cameras connected to the unit.

■ Procedures up to camera selection and macro control

1. Firstly select the MODE5[5] button.

[A]: Switches to the section for camera selection.

[B]: Switches to the section for macro control.

2. Select the camera group you want to control.

Press the [SHIFT A/PREV] button.

While pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons are switched to act as "Camera group selection" buttons.

3. Select the desired camera group with the [G1] to [G20] buttons, and when you release the [SHIFT A/PREV] button, the camera group is selected.

When you release the [SHIFT A/PREV] button being pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons switch to "Camera selection" buttons and "Macro control" buttons.

4. Select the macro group you want to control.

Press the [SHIFT B/NEXT] button.

While pressed down, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons are switched to act as "Macro group selection" buttons.

5. Select the desired macro group with the [G1] to [G10] buttons, and when you release the [SHIFT B/NEXT] button, the macro group is selected.

When you release the [SHIFT B/NEXT] button, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons switch to "Macro control" buttons.

6. With [A], press the button for the camera you want to control to select the camera. Alternatively, execute the selected macro with [B].

Example:

When camera selections C1 to C10 (G1) and macro control M1 to M10 (G1) are set initially (Figure 1) and you then want to switch camera selection to C11 to C20 (G2) and macro control to M11 to M20 (G2)

1. Press the [SHIFT A/PREV] button.

While pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons are switched to act as "Camera group selection" buttons.

2. Select the G2 camera group with the [G2] button, and when you release the [SHIFT A/PREV] button, the camera group is selected. (Figure 2)

When you release the [SHIFT A/PREV] button being pressed down, the 20 [CAMERA/PMEM/MACRO SELECTION] buttons switch to "Camera selection" buttons and "Macro control" buttons, and the cameras indicated in [A] switch to C11 to C20 (G2). (Figure 3)

3. Press the [SHIFT B/NEXT] button.

While pressed down, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons are switched to act as "Macro group selection" buttons.

4. Select the G2 macro group with the [G2] button, and when you release the [SHIFT B/NEXT] button, the macro group is selected. (Figure 4)

When you release the [SHIFT B/NEXT] button being pressed down, the 10 [CAMERA/PMEM/MACRO SELECTION] [B] buttons switch to "Macro control" buttons and the macros indicated in [B] switch to M11 to M20 (G2). (Figure 5)

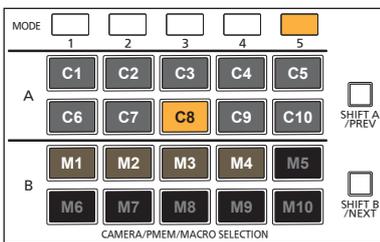


Figure 1

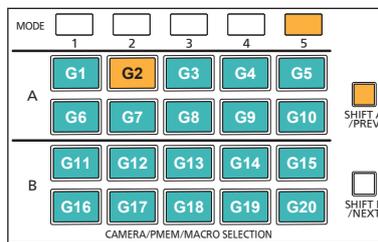


Figure 2

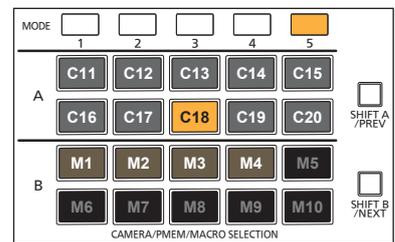


Figure 3

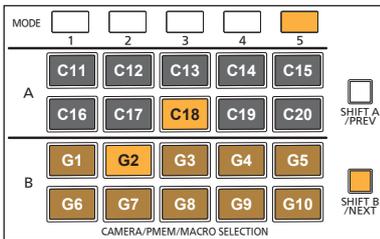


Figure 4

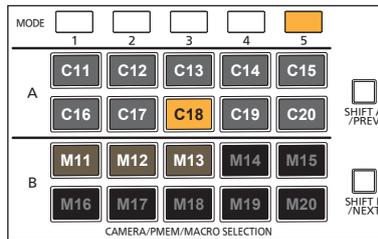
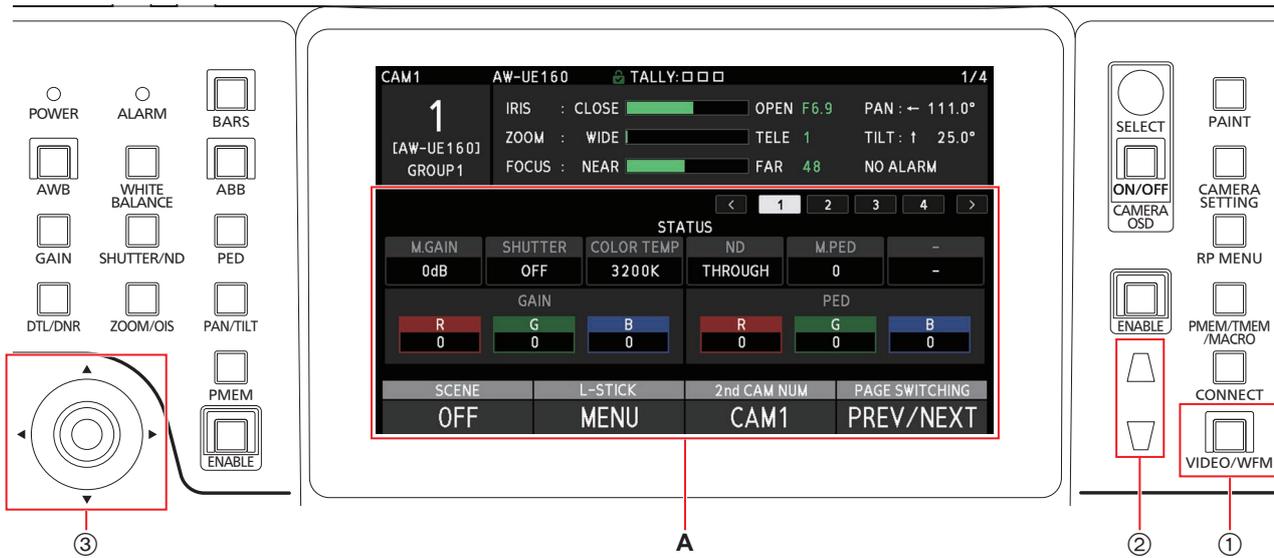


Figure 5

Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations

On this unit, apart from using the multi select switches for camera selection, preset memory control, and macro control in each operation mode, camera selection, preset memory control, and macro control are also supported on the main LCD.

When the [VIDEO/WFM] button is OFF, you can switch the "A" part of the screen between Camera selection, Preset memory control, and Macro control using the Up/Down buttons or up/down movements of the L-joystick (when menu operations are assigned).



A: Section displaying Camera selection, Preset memory control, and Macro control

① VIDEO/WFM button [VIDEO/WFM]

② Up/Down buttons

③ L-joystick

NOTE

- Refer to "Customizing operations of the unit" (page 34) for how to assign menu operations to the L-joystick.

Screen transitions of part "A"

● Camera selection



● Preset memory control



● Macro control



Camera selection

Camera selection (CAM1 to CAM200) is possible by touching the main LCD (section ①).

The display format can be switched between displaying 20 cameras and 50 cameras at once using the 20/50 camera layout switching buttons (②). To move to another page, either touch a page button (③) or turn the F4 dial (④).

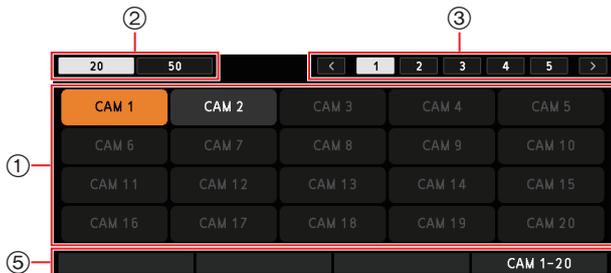
Also, the illuminated status of each switch shows you the status of camera selection.

Illuminated status of switch	Camera selection status
	Connection setting with the camera is NO ASSIGN
	Connection setting with the camera is other than NO ASSIGN
	Selected status

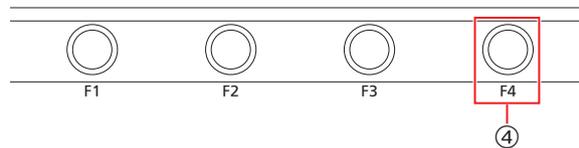
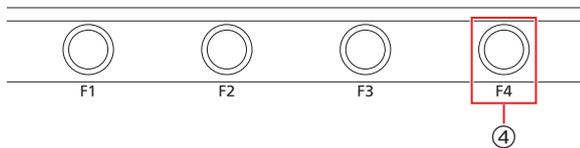
NOTE

- Refer to CONNECT button > [CONNECT SETTING] > [CONTROL TYPE] for detailed connection settings with the camera.

● 20 camera layout



● 50 camera layout



- ① Camera selection buttons
- ② 20/50 display switching buttons
- ③ Page buttons
- ④ F4 dial
- ⑤ Camera selection function bar

■ Description of the camera selection function bar

Item	Setting values	Settings details
Displayed camera numbers	CAM [*1] - [*2]	Changes the pages of camera selection buttons. (The camera numbers currently displayed in section ① are displayed.)

*1: Smallest number displayed

*2: Largest number displayed

NOTE

- You can expand the operability of camera selection, preset memory control, and macro control by using at the same time as operation modes 2 and 4.
- If selection is made outside of the camera groups connected to this unit (the two camera groups selected in operation mode 1), it may take some time until you are able to operate the cameras.
- If camera selection was made with the main LCD in operation mode 1, 3, or 5, the section ([A] or [B]) where there is a camera currently being selected with a multi select switch then switches to the camera group selected on the main LCD. (For example, before camera selection with the main LCD, if camera group 1 is displayed in section [A] and camera group 2 is displayed in section [B] and CAM2 was selected in operation mode 1, and after this CAM25 (camera group 3) was selected on the main LCD, section [A] changes from camera group 1 to camera group 3.)
- Refer to "Operation modes" (page 47) for details about operation modes.
- The camera selection function bar differs from the normal function bar in that the displayed items are fixed.

Preset memory control

Preset memory control (maximum 100) is possible by touching the main LCD (section ①).

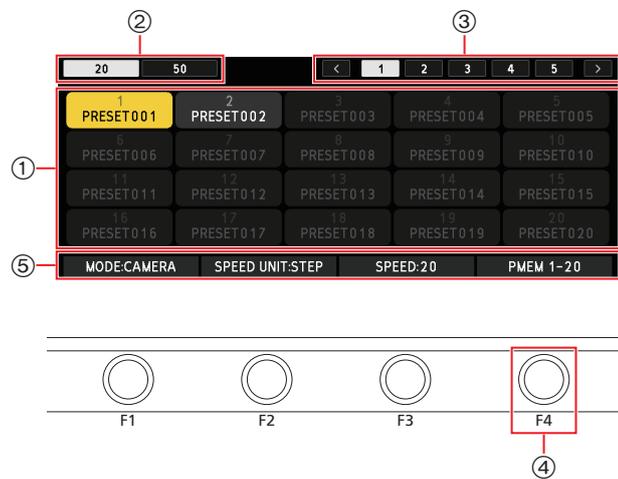
The display format can be switched between displaying 20 preset memories and 50 preset memories at once using the 20/50 display switching buttons (②).

To move to another page, either touch a page button (③) or turn the F4 dial (④).

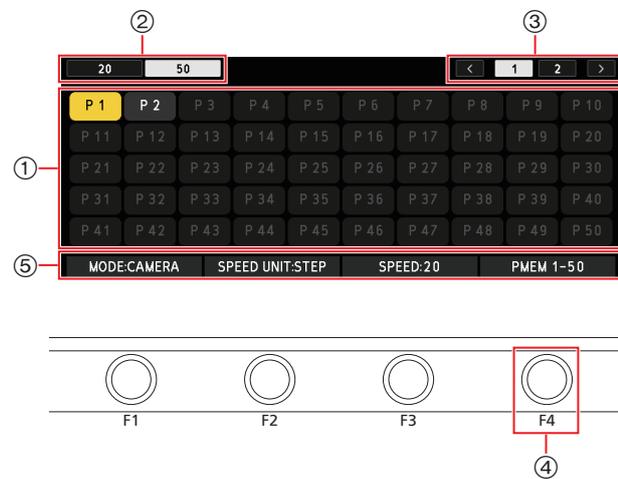
Also, the illuminated status of each switch shows you the status of the preset memory.

Illuminated status of switch	Preset memory status
	Unregistered
	Registered but not selected
	Selected/Playback state (even after the preset memory has been played back, this status is maintained until another preset memory is selected)

● 20 memory layout



● 50 memory layout



- ① Preset memory control buttons
- ② 20/50 display switching buttons
- ③ Page buttons
- ④ F4 dial
- ⑤ Preset memory control function bar

■ Description of the preset memory control function bar

___ indicates the factory default settings.

Item	Setting values	Settings details
MODE	CAMERA RP	Sets the preset memory speed playback mode for playing back preset memories. CAMERA: The speed preset in the remote camera is used when playing back preset memories. RP: The speed preset on the unit when storing the preset memory is used when playing back.
SPEED UNIT	STEP TIME	Displays the speed mode for playing back preset memories. (This is enabled when [CAMERA] is selected in [MODE].) STEP: Moves to the preset memory position at the specified speed. TIME: Moves to the preset memory position taking the specified time.
SPEED	–	Displays the speed or time taken for moving to the preset memory position. Displays the speed of movement to the preset memory position when [SPEED UNIT] is [STEP]. Displays the time it takes for movement to the preset memory position when it is [TIME].
Displayed preset memory numbers	PMEM [*1] - [*2]	Changes the pages of preset memory control buttons. (The preset memory numbers currently displayed in section ① are displayed.)

*1: Smallest number displayed

*2: Largest number displayed

NOTE

- You can expand the operability of camera selection, preset memory control, and macro control by using at the same time as operation modes 1, 3, and 5.
- Refer to “Operation modes” (page 47) for details about operation modes.
- The preset memory control function bar differs from the normal function bar in that the displayed items are fixed.
- You can also register and delete preset memories in this screen. (Refer to “PMEM/TMEM/MACRO” (page 102) for details.)
 - Registering preset memories: Touch a preset memory number while pressing the F1 dial.
 - Deleting preset memories: Touch the preset memory number while pressing the F4 dial.

Macro control

Macro control (maximum 100) is possible by touching the main LCD (section ①).

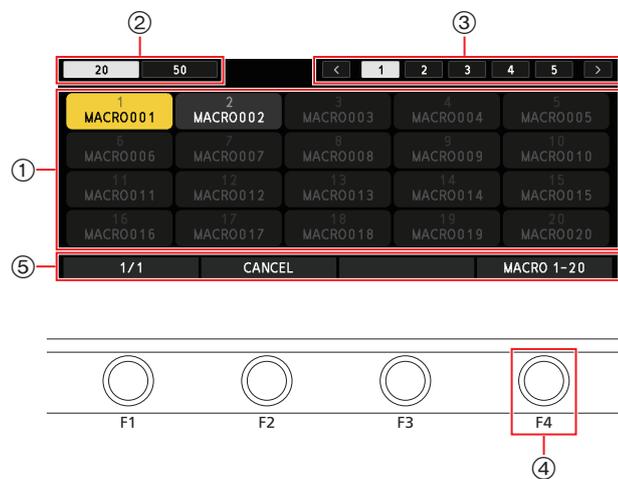
The display format can be switched between displaying 20 macros and 50 macros at once using the 20/50 display switching buttons (②).

To move to another page, either touch a page button (③) or turn the F4 dial (④).

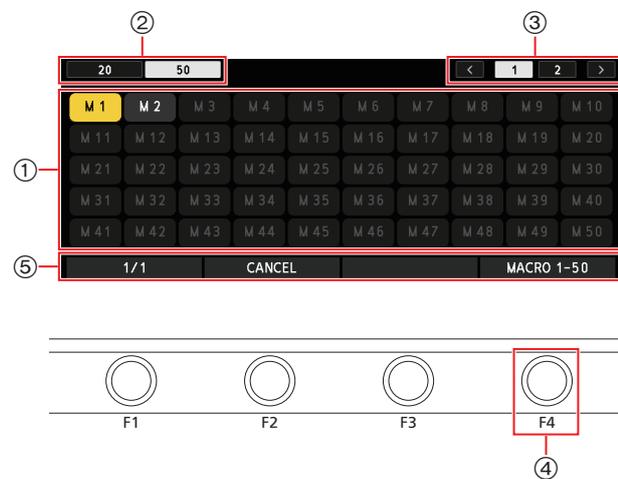
Also, the illuminated status of each switch shows you the status of the macro.

Illuminated status of switch	Macro status
	Unregistered
	Registered but not selected
	Selected/playing back (returns to "Registered but not selected" after the macro finishes)

● 20 macro layout



● 50 macro layout



- ① Macro control buttons
- ② 20/50 display switching buttons
- ③ Page buttons
- ④ F4 dial
- ⑤ Macro control function bar

■ Description of the macro control function bar

Item	Setting values	Settings details
Macro playback progress	—	Displays the executed steps against the total number of steps (the progress) for the macro currently playing back.
CANCEL	—	Forcibly ends the macro currently executing.
Displayed macro numbers	MACRO [*1] - [*2]	Changes the pages of macro control buttons. (The macro numbers currently displayed in section ① are displayed.)

*1: Smallest number displayed

*2: Largest number displayed

NOTE

- You can expand the operability of camera selection, preset memory control, and macro control by using at the same time as operation modes 1, 3, and 5.
- Refer to "Operation modes" (page 47) for details about operation modes.
- The macro control function bar differs from the normal function bar in that the displayed items are fixed.

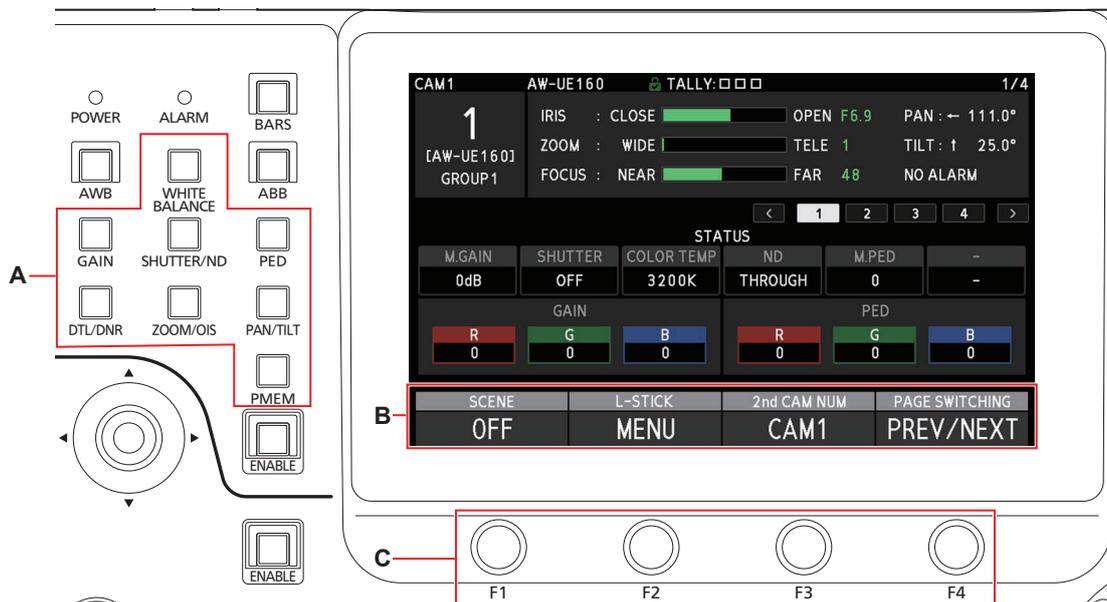
Shortcut buttons

This unit is equipped with shortcut key functionality that enables you to recall necessary functions with one press of a button while viewing the status screen.

When you press the switches in the "A" part of the panel (the switches turn amber when selected), the items displayed in the function bar (B) switch and menu operations can be performed with the function dials (C).

The function bar returns to the default when you press the selected switch again.

Refer to "Customizing operations of the unit" (page 34) to change the items in the default function bar.



Shortcut buttons	Items displayed in the function bar	Settings details
WHITE BALANCE	W. BAL MODE	Sets the white balance mode for the selected camera.
	COLOR TEMP	Sets or displays the color temperature for the selected camera according to the [W. BAL. MODE] setting.
GAIN	MASTER GAIN	Sets the master gain for the selected camera.
	R GAIN	Sets the R gain for the selected camera.
	G GAIN	Sets the G gain for the selected camera.
	B GAIN	Sets the B gain for the selected camera.
SHUTTER/ND	SHUTTER SW	Sets ON/OFF for the shutter function of the selected camera.
	SHUTTER MODE	Sets the shutter mode for the selected camera.
	SHUTTER SPEED	Sets the shutter speed for the selected camera.
	ND	Sets ND for the selected camera.
PED	MASTER PED	Sets the master pedestal for the selected camera.
	R PED	Sets the R pedestal for the selected camera.
	G PED	Sets the G pedestal for the selected camera.
	B PED	Sets the B pedestal for the selected camera.
DTL/DNR	DETAIL SW	Sets ON/OFF for the detail function of the selected camera.
	MASTER DETAIL	Sets the master detail for the selected camera.
	PEAK(DTL) FREQ	Sets the detail boost frequency for the selected camera.
	DNR	Sets the digital noise reduction for the selected camera.
ZOOM/OIS	ZOOM MODE	Sets the zoom mode (maximum zoom magnification) for the selected camera.
	DIGITAL EXT	Sets the digital extender function for the selected camera.
	O.I.S. SW	Sets ON/OFF for the screen stabilization function of the selected camera.
	O.I.S. MODE	Sets the mode for the screen stabilization function of the selected camera.

Shortcut buttons (continued)

PAN/TILT	P/T SPEED MODE	Sets the speed for the pan/tilt operations of the selected camera.
	SPEED w/ ZOOM	Sets whether to automatically adjust the speed of pan/tilt control in conjunction with the zoom magnification of the selected camera.
	FOCUS ADJ w PTZ	Sets whether the focus is corrected automatically when pan/tilt/zoom is operating on the selected camera.
PMEM	OPERATION MODE	<p>Sets the method of controlling preset memories with the multi select switches when the operation mode is 2 or 3.</p> <p>RECALL: Mode for playing back preset memories.</p> <p>STORE: Mode for saving preset memories with this unit.</p> <p>DELETE: Mode for deleting preset memories with this unit.</p> <p>Note that [STORE] and [DELETE] are available only when the [PMEM] button is enabled. Any other time, the multi select switches work as [RECALL]. Refer to "Operation modes" (page 47) for detailed usage instructions.</p>
	RECALL SPEED SEL	Sets the preset memory speed playback mode for playing back preset memories.
	SPEED TABLE	Sets the speed table for playing back preset memories.
	PMEM SPEED/TIME	Sets the speed or time taken to move to a preset memory position when playing back preset memories.

Image input and output on this unit and functions that use them

Image input and output

This unit can input images through SDI and receive images via IP, and it can output images through SDI OUT and display them on the main LCD. The following are the supported formats for input:

SDI IN		1080/59.94p
		1080/59.94i
		1080/29.97p
		1080/23.98p
		1080/50p
		1080/50i
		1080/25p
IP IN	NDI High Bandwidth	1080/60fps
		1080/30fps
		1080/24fps
		1080/50fps
	SRT (H.264/H.265)	1080/25fps
		1080/60fps
		1080/30fps
		1080/24fps
		1080/50fps
		1080/25fps

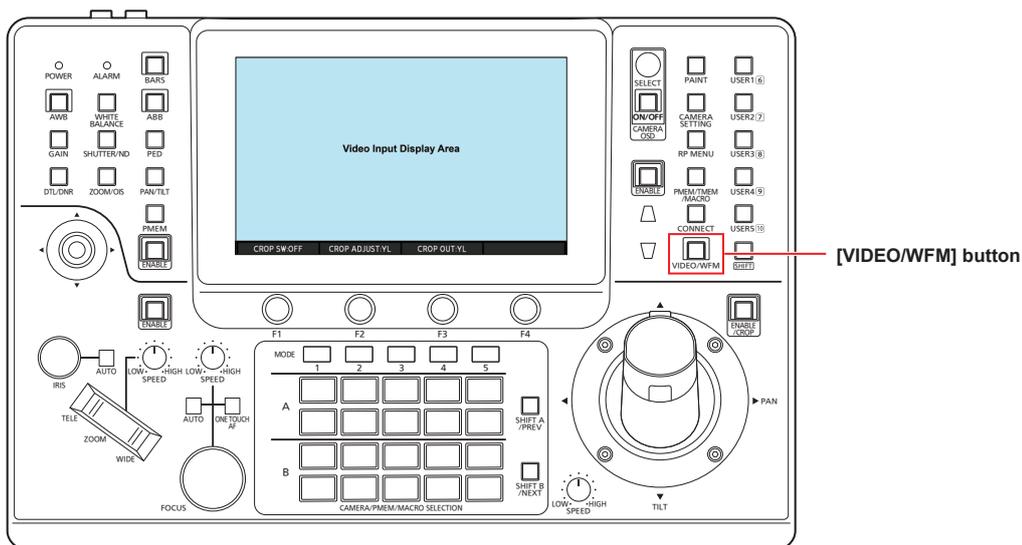
NOTE

- Set the SDI input or IP input images to the correct frequency on this unit with RP MENU button > [BASIC CONFIG] > [VIDEO FREQ]. Refer to "Before beginning actual operation" (page 25) for details.
- This unit supports embedded audio. SDI IN supports 16ch and IP IN supports 2ch, and these are output from the SDI OUT for each input.

Refer to RP MENU button > [BASIC CONFIG] > [VIDEO IN SELECT] for how to switch input images.

Also refer to Web setting screen [Setup Menu] > [Video Input over IP] for NDI High Bandwidth and SRT input settings.

Press the [VIDEO/WFM] button to display input images on the main LCD. (The button illuminates amber when it is enabled.)



Crop function

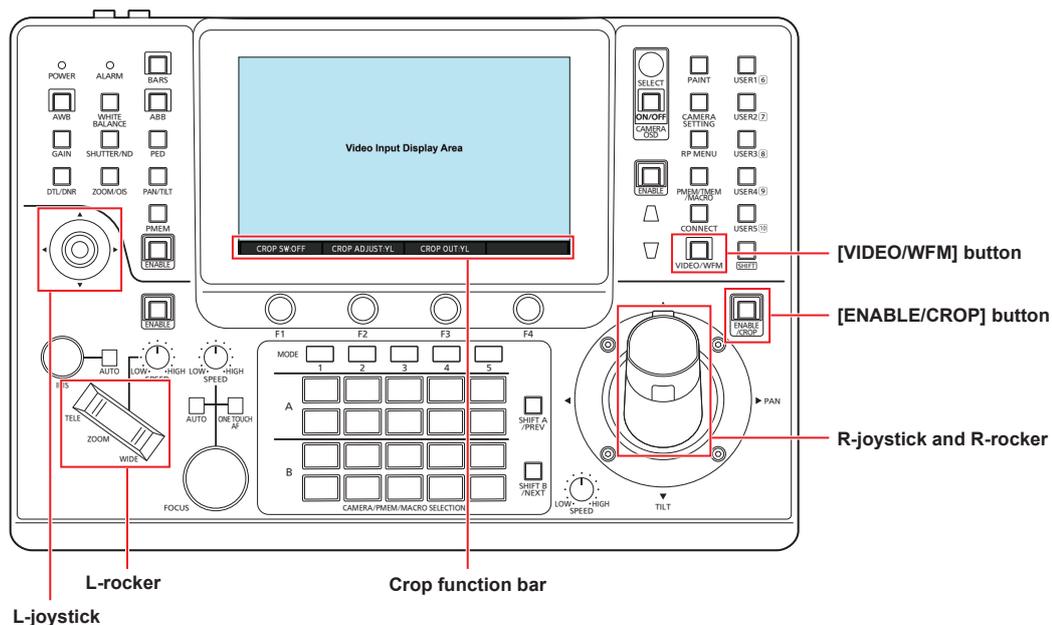
When you have connected a camera that supports the UHD crop function to this unit, you can control the various crop functions on the main LCD of this unit.

1. Turn ON the [VIDEO/WFM] button to display the images on the whole main LCD.
(Input to this unit the output from a camera that is capable of displaying the crop frame, downconverted from UHD to HD)
2. The crop function bar is displayed, so make the appropriate settings.

Item	Settings details
CROP SW	Set the CROP function which crops from UHD (3840 × 2160) images. OFF: Disables the CROP function. ON (1080): Crops the designated area from UHD (3840 × 2160) images and outputs the result as 1920 × 1080. ON (720): Crops the designated area from UHD (3840 × 2160) images and outputs the result as 1280 × 720.
CROP ADJUST	Make selections for the crop frame to adjust positioning.
CROP OUT	Select the crop frame used for the images of the terminal outputting the cropped images of the remote camera.

3. Follow either of the steps below to move or zoom the crop frame set in step 2.

- Press the [ENABLE/CROP] button to turn it green, then use the R-joystick and R-rocker.
- Assign the L-joystick to [CROP], then use the L-joystick and L-rocker.



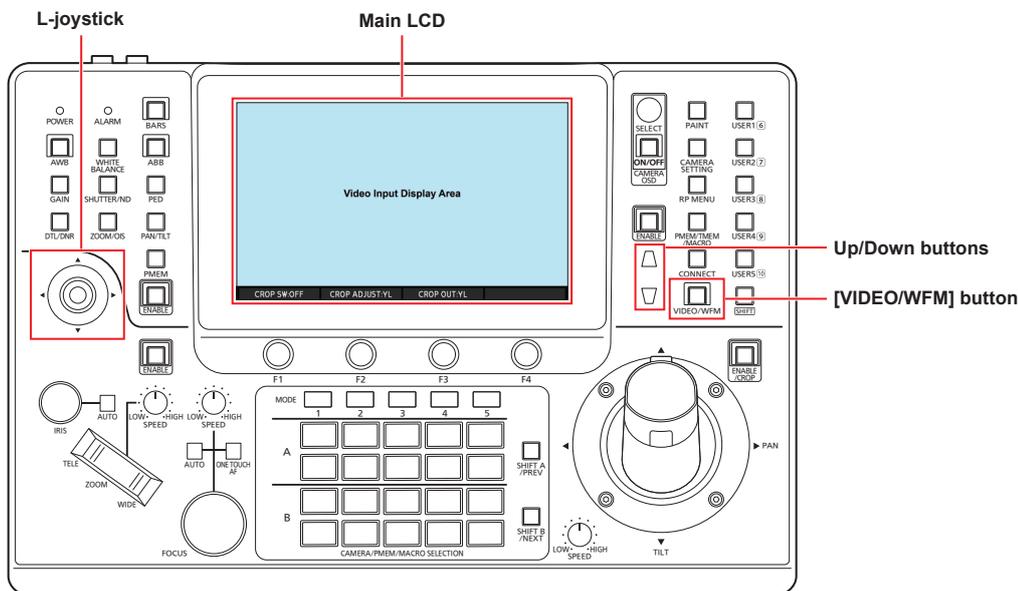
NOTE

- Refer to [CAMERA SETTING] > [CROP] for settings with the menu of the crop function.
- Refer to "Customizing operations of the unit" (page 34) for how to assign L-joystick functions.

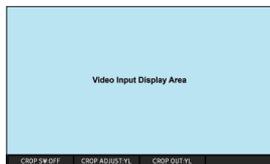
Waveform display and vectorscope

This unit can display the waveform and the vectorscope of input images.

When the [VIDEO/WFM] button is ON, you can switch to the following selections on the screen of the main LCD using the Up/Down buttons or up/down movements of the L-joystick (when menu operations are assigned).



Page 1



① Full screen images

Page 2



② Lens related status + images + waveform display

Page 3



③ Lens related status + waveform display

Page 4



④ Lens related status + images + vectorscope display

① Full screen images:

The input images are displayed full screen on the main LCD. The crop function bar is also displayed. When focus is manual, one touch auto focus works on a part of the screen when you touch it.

② Lens related status + images + waveform display:

Displays the lens related status and input images, along with the waveform of the input images and the function bar.

③ Lens related status + waveform display:

Displays the lens related status, the enlarged waveform of the input images, and the function bar.

④ Lens related status + images + vectorscope display:

Displays the lens related status and input images, along with the vectorscope of the input images and the function bar.

NOTE

- You can select either RGB notation or YCbCr notation for the waveform display. Touch "A" on the screen to switch between them.
- Refer to "Status screen" (page 30) for lens-related statuses.
- Refer to "Customizing operations of the unit" (page 34) for information about the function bar.

Turning remote cameras on and off

Turning on remote cameras

You can use this unit to turn on remote cameras that are in the standby state.

There are the following ways to do this.

- Turning on the power one camera at a time
- Turning on the power in conjunction with the power of this unit (ON)
- Turning on multiple remote cameras
 - ◇ Turning on the power for all remote cameras connected to this unit
 - ◇ Turning on the power for the selected cameras

The following describes the procedures for each.

Turning on the power one camera at a time

1. Select a remote camera.

When you press and hold one of the "Camera selection" buttons (3 seconds or more) in operation mode 1, 3, or 5, the remote camera's name (name of the camera set by the user on the camera) is displayed on the main LCD along with [ON] and [OFF] buttons.

NOTE

- This operation is enabled while the status screen is being displayed.
- Refer to "Operation modes" (page 47) for information about operation modes.

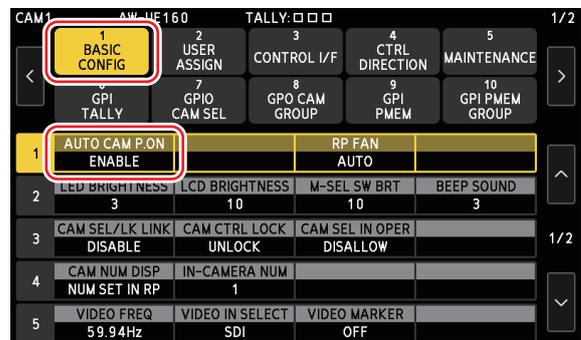
2. While pressing the "Camera selection" button, touch the [ON] button on the main LCD.



Turning on the power in conjunction with the power of this unit (ON)

1. Press the RP MENU button.

2. Touch [BASIC CONFIG] at the top of the main LCD to display the [AUTO CAM P.ON] item.



3. Select [ENABLE].

Remote cameras set to either [SERIAL] or [LAN] in the CONNECT button > [CONNECT SETTING] > [CONTROL TYPE] item turn on when this unit is turned on.

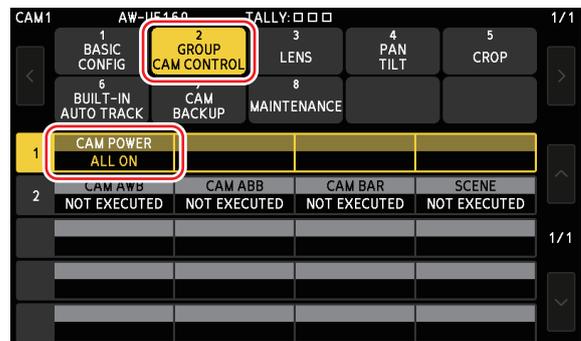
NOTE

- Depending on the number of cameras connected, it may take some time until operations on this unit are enabled.

Turning on multiple remote cameras

1. Press the CAMERA SETTING button.

2. Touch [GROUP CAM CONTROL] at the top of the LCD panel to display the [CAM POWER] item.



■ Turning on the power for all remote cameras connected to this unit

Select [ALL ON] in [CAM POWER].

■ Turning on the power for the selected cameras

Select [GROUP ON] in [CAM POWER].

Turning off remote cameras (transition to the standby state)

You can turn off remote cameras (transition to the standby state) from this unit.

There are the following ways to do this.

- Turning off one camera at a time
- Turning off multiple remote cameras
 - ◇ Turning off the power for all remote cameras connected to this unit
 - ◇ Turning off the power for the selected cameras

The following describes the procedures for each.

Turning off one camera at a time

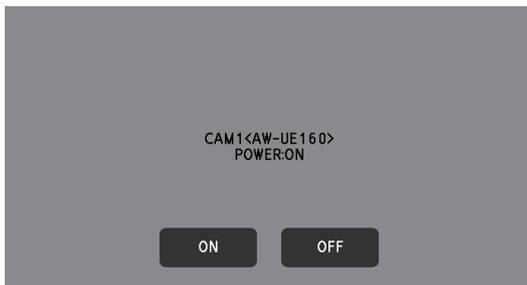
1. Select a remote camera.

When you press and hold one of the "Camera selection" buttons (3 seconds or more) in operation mode 1, 3, or 5, the remote camera's name (name of the camera set by the user on the camera) is displayed on the main LCD along with [ON] and [OFF] buttons.

NOTE

- This operation is enabled while the status screen is being displayed.
- Refer to "Operation modes" (page 47) for information about operation modes.

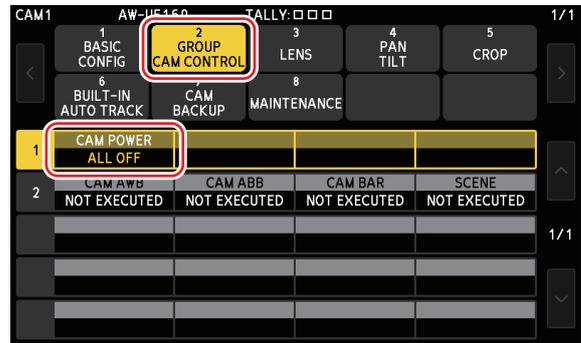
2. While pressing the "Camera selection" button, touch the [OFF] button on the main LCD.



Turning off multiple remote cameras

1. Press the CAMERA SETTING button.

2. Touch [GROUP CAM CONTROL] at the top of the LCD panel to display the [CAM POWER] item.



■ Turning off the power for all remote cameras connected to this unit

Select [ALL OFF] in [CAM POWER].

■ Turning off the power for the selected cameras

Select [GROUP OFF] in [CAM POWER].

Types of data backup

It is possible with this unit to backup and upload the following types of data via a USB memory device or the web menus.

- Data saved on the selected cameras ([SCENE], [CAMERA ALL]): USB memory device only
- Data saved on this unit ([ALL], [RP SETTING], [TMEM], [MACRO], [CONN SETTING], [CAM CTRL INFO]): USB memory device or web menus

NOTE

- Refer to Web setting screen [Setup Menu] > [Maintenance] > [RP Backup] for backing up and uploading data using the web menus.
- Connect USB memory devices directly to the unit rather than using a USB hub, etc.
- NTFS format USB memory devices are not supported by this unit.

■ CAMERA SETTING button > [CAM BACKUP]

Backup target		Backup type	
		CAMERA ALL	SCENE
PAINT	PAINT settings saved by the camera	✓	✓
CAMERA SETTING	Settings other than PAINT saved by the camera	✓	X
Other menu settings on this unit	Settings not saved by the camera	X	X

■ RP MENU button > [RP BACKUP]

Backup target		Backup type						
		ALL	RP SETTING	TMEM	MACRO	CONN SETTING	CAM CTRL INFO	
PAINT	PAINT settings saved by the camera	X	X	X	X	X	X	
CAMERA SETTING	Settings other than PAINT saved by the camera							
RP MENU	BASIC CONFIG	✓	✓	X	X	X	X	
	USER ASSIGN						*1	
	CONTROL I/F						✓	
	CTRL DIRECTION						✓	
	GPIO menus						X	
PMEM/TMEM/MACRO	PMEM	X	X	X	X	X	X	
	TMEM	✓		✓				
	MACRO	*2	*2	✓	*3			
	PMEM SETTING							
	VIEW COLOR	PMEM	✓	✓	X		X	✓
		MACRO						X
	NAME EDIT	PMEM	✓	✓	X		X	✓
		MACRO						X
EXT CTRL PMEM	X	X						
CONNECT	CONNECT SETTING	✓	X	X	X	X	✓	
	MANUAL IP SET							
	AUTO IP SETTING							
	RP IP SETTING		*4					
	ROP LINK							
	SWITCHER LINK							
	EXT CONTROL							

Types of data backup (continued)

Control panel data (Statuses of the main LCD, multi select switches, and buttons)	Operation modes	✓	✓	X	X	X	X
	Camera group selection						
	Camera selection						
	Preset memories and macro pages for operation modes 2 to 5						
	Display statuses on the main LCD (excluding menu displays)	X	X	X	X		
	Statuses of the [ENABLE] buttons						
	[SHIFT] statuses for USER buttons						
	Show/hide for menus and open pages	X	X				
	ON/OFF statuses for shortcut buttons						
Network settings (data that can be set and viewed in the web menus)	User authentication (Web login information for this unit)	X	X	X	X	X	X
	User authentication (ID and password of the camera)					✓	
	Various settings for receiving IP images	✓	✓				
	Event log	X					
	Error log					X	
	Clock settings		X				
	[Title] of this unit	✓					
HTTP port and Easy IP settings for this unit							

*1: Setting values for MANU IRIS LIMIT and IRIS values when set

*2: Only setting values set on this unit

*3: [SPEED UNIT], [SPEED TABLE], and [SPEED] when preset memory is registered

*4: Excluding IP address and port number

Data saved on the cameras ([SCENE], [CAMERA ALL])

■ Formatting a USB memory device

You can format a USB memory device using the following procedure.

(The same operations are also available by pressing the RP MENU button and selecting [RP BACKUP])

1. Press the **CAMERA SETTING** button and select **[CAM BACKUP]**.
2. Select **[MODE]** and set it to **[FORMAT]**.
3. Of the USB memory devices connected to this unit (Type-A or Type-C), select the device name of the USB memory device you want to use with **[USB DEVICE SELECT]**.
 - If alphanumerics and some symbols that are not supported by this unit are used, they are replaced with “ _ ” for display.
 - [NONE] is displayed if there is no USB memory device connected.
4. Select **[EXECUTE]** and set it to **[YES]**.
5. **[Completed]** is displayed when formatting is finished.

NOTE

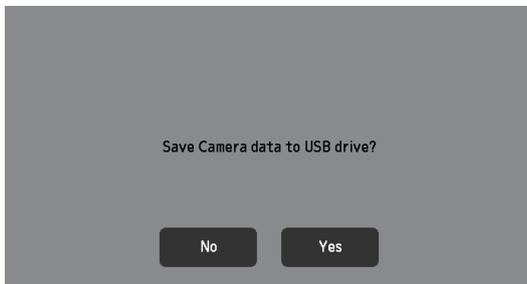
- [Format failed.] is displayed if formatting failed. Try again.
- Connect USB memory devices directly to the unit rather than using a USB hub, etc.
- NTFS format USB memory devices are not supported by this unit.

■ File back up

You can use the following procedure to back up information from the camera to a USB memory device.

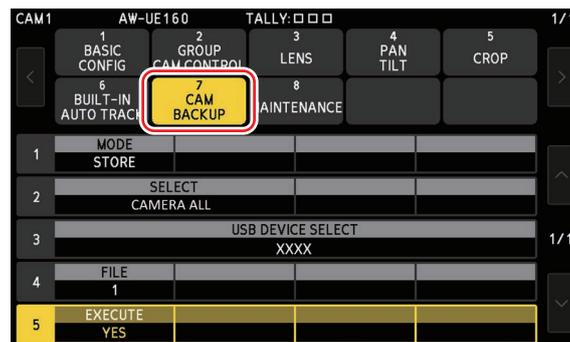
1. Press the **CAMERA SETTING** button and select **[CAM BACKUP]**.
2. Select **[MODE]** and set it to **[STORE]**.
3. Select the data to handle (**[CAMERA ALL]**, **[SCENE1]**, **[SCENE2]**...) with **[SELECT]** (for example, if you select **[SCENE2]**, the files for **[SCENE2]** are backed up).
4. Of the USB memory devices connected to this unit (Type-A or Type-C), select the device name of the USB memory device you want to use with **[USB DEVICE SELECT]**.
 - If alphanumeric and some symbols that are not supported by this unit are used, they are replaced with “_” for display.
 - **[NONE]** is displayed if there is no USB memory device connected.
5. When **[SELECT]** is set to **[CAMERA ALL]**, you can select the save destination from **[FILE]** (1 to 20) for the data to be saved.

You can save using different file names by selecting a file number.
There is no equivalent item to **[FILE]** when **[SELECT]** is set to **[SCENE]**.
6. Select **[EXECUTE]** and set it to **[YES]**.
7. A dialog such as the following is displayed, and file back up starts when you select **[Yes]**. **[Completed]** is displayed when backing up is finished.



NOTE

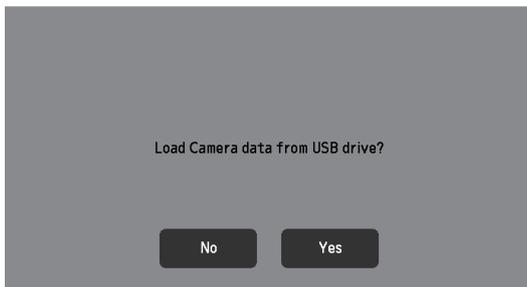
- Files that are backed up are saved in the \\RP200\CAMDATA folder of the USB memory device.
- **[Save failed]** is displayed if the back up failed. Try again.
- Connect USB memory devices directly to the unit rather than using a USB hub, etc.



■ File upload

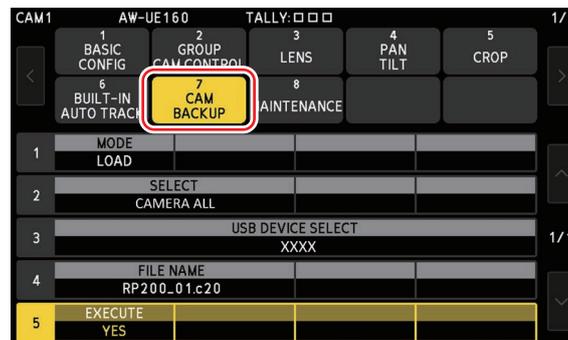
You can use the following procedure to upload information backed up to a USB memory device to a camera.

1. Press the **CAMERA SETTING** button and select **[CAM BACKUP]**.
2. Select **[MODE]** and set it to **[LOAD]**.
3. Select the data to handle (**[CAMERA ALL]**, **[SCENE1]**, **[SCENE2]**...) with **[SELECT]** (for example, if you select **SCENE2**, the files are uploaded to **SCENE2**).
4. Of the USB memory devices connected to this unit (Type-A or Type-C), select the device name of the USB memory device you want to use with **[USB DEVICE SELECT]**.
 - If alphanumerics and some symbols that are not supported by this unit are used, they are replaced with “_” for display.
 - **[NONE]** is displayed if there is no USB memory device connected.
5. With **[FILE NAME]**, select the file you want to upload from the USB memory device selected in step 4.
Turn the function dials to select the required file.
6. Select **[EXECUTE]** and set it to **[YES]**.
7. A dialog such as the following is displayed, and file upload starts when you select **[Yes]**. **[Completed]** is displayed when uploading is finished.



NOTE

- Files in the \\RP200\CAMDATA folder of the USB memory device are uploaded.
- [Load failed.] is displayed if uploading failed. Try again.
- Connect USB memory devices directly to the unit rather than using a USB hub, etc.



Data saved on this unit ([ALL], [RP SETTING], [TMEM], [MACRO], [CONN SETTING], [CAM CTRL INFO])

■ **Formatting a USB memory device**

You can format a USB memory device using the following procedure.

(The same operations are also available by pressing the CAMERA SETTING button and selecting [CAM BACKUP])

1. Press the RP MENU button and select [RP BACKUP].
2. Select [MODE] and set it to [FORMAT].
3. Of the USB memory devices connected to this unit (Type-A or Type-C), select the device name of the USB memory device you want to use with [USB DEVICE SELECT].
 - If alphanumerics and some symbols that are not supported by this unit are used, they are replaced with “ _ ” for display.
 - [NONE] is displayed if there is no USB memory device connected.
4. Select [EXECUTE] and set it to [YES].
5. [Completed] is displayed when formatting is finished.

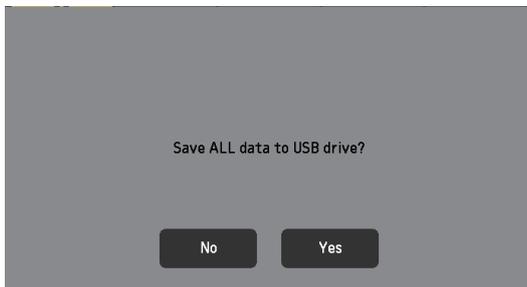
NOTE

- [Format failed.] is displayed if formatting failed. Try again.
- Connect USB memory devices directly to the unit rather than using a USB hub, etc.
- NTFS format USB memory devices are not supported by this unit.

■ File back up

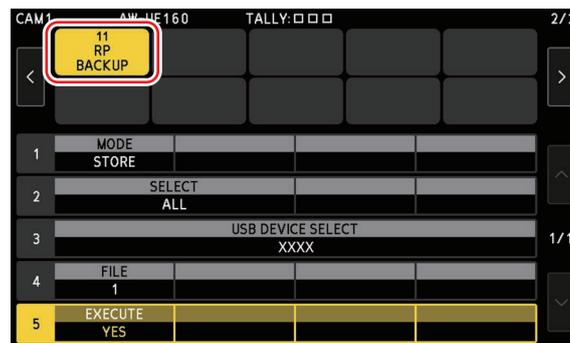
You can use the following procedure to back up information from this unit to a USB memory device.

1. Press the RP MENU button and select [RP BACKUP].
2. Select [MODE] and set it to [STORE].
3. Select the data to handle ([ALL], [RP SETTING], [TMEM], [MACRO], [CONN SETTING], and [CAM CTRL INFO]) with [SELECT].
4. Of the USB memory devices connected to this unit (Type-A or Type-C), select the device name of the USB memory device you want to use with [USB DEVICE SELECT].
 - If alphanumerics and some symbols that are not supported by this unit are used, they are replaced with “_” for display.
 - [NONE] is displayed if there is no USB memory device connected.
5. You can select the save destination from [FILE] (1 to 20) for the data to be saved.
You can save using different file names by selecting a file number, even for the same types of files.
6. Select [EXECUTE] and set it to [YES].
7. A dialog such as the following is displayed, and file back up starts when you select [Yes]. [Completed] is displayed when backing up is finished.



NOTE

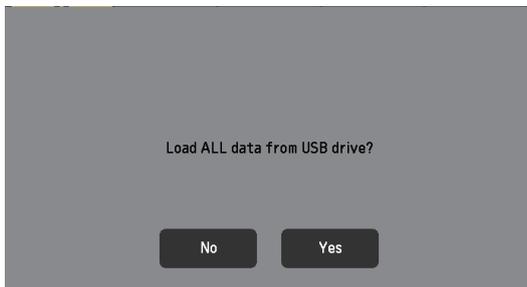
- Files that are backed up are saved in the \\RP200\DATA folder of the USB memory device.
- [Save failed] is displayed if the back up failed. Try again.
- Connect USB memory devices directly to the unit rather than using a USB hub, etc.
- A warning dialog is displayed if a file with the same file number already exists on the USB memory device in step 7.



■ File upload

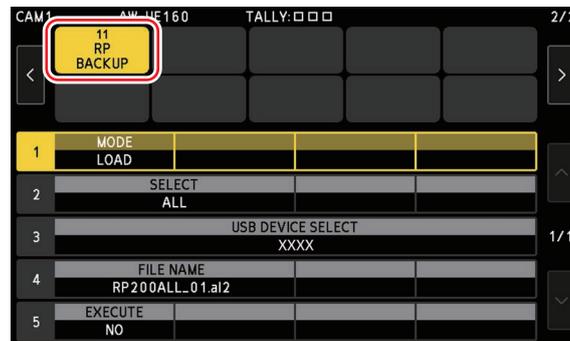
You can use the following procedure to upload information backed up to a USB memory device to this unit.

1. Press the **RP MENU** button and select **[RP BACKUP]**.
2. Select **[MODE]** and set it to **[LOAD]**.
3. Select the data to handle (**[ALL]**, **[RP SETTING]**, **[TMEM]**, **[MACRO]**, **[CONN SETTING]**, and **[CAM CTRL INFO]**) with **[SELECT]**.
4. Of the USB memory devices connected to this unit (Type-A or Type-C), select the device name of the USB memory device you want to use with **[USB DEVICE SELECT]**.
 - If alphanumerics and some symbols that are not supported by this unit are used, they are replaced with “_” for display.
 - **[NONE]** is displayed if there is no USB memory device connected.
5. With **[FILE NAME]**, select the file you want to upload from the USB memory device selected in step 4.
Turn the function dials to select the required file.
6. Select **[EXECUTE]** and set it to **[YES]**.
7. A dialog such as the following is displayed, and file upload starts when you select **[Yes]**. **[Completed]** is displayed when uploading is finished.



NOTE

- Files in the \\RP200\\DATA folder of the USB memory device are uploaded.
- [Load failed.] is displayed if uploading failed. Try again.
- Connect USB memory devices directly to the unit rather than using a USB hub, etc.



Linking functions

This unit has functionality to link with cameras and other units in the following ways:

- Functionality linking the camera selection on this unit with camera selection on an ROP
- Functionality linking camera selection from this unit and output bus switching specified on a switcher
- Functionality for using this unit to control external devices, such as dollies and totems, from other manufacturers

Functionality linking the camera selection on this unit with camera selection on a Panasonic ROP

You can automatically change the camera selection on an ROP by linking with the camera selection on this unit.

1. Make the following settings on this unit with CONNECT button > [ROP LINK].

- (A) Set [ROP LINK MODE] to [ON].
- (B) Set the IP address and port number of the ROP being used in [ROP IP] and [ROP PORT].
- (C) When (A) and (B) settings are finished, select [YES] in [UPLOAD].

NOTE

- This function is not enabled until you select [YES] with [UPLOAD].

- (D) In [LINKED ROP CAM], set the camera number of the ROP you want to link with camera selection [RP CAM SEL] on this unit.

2. On the ROP, make the [AW CONTROLLER LINK] linking functionality settings.

Refer to the operating instructions for ROP for details.

Functionality linking camera selection from this unit and output bus switching specified on a switcher

By automatically switching the images of AUX output on a Panasonic switcher, etc., according to the camera selection on this unit, you can use it for monitoring images when controlling cameras with this unit. You can also switch the images of AUX output, etc., to normal camera images and multiview. Furthermore, it is also possible to link switchers and this unit with tally signals.

1. Make the following settings on this unit with CONNECT button > [SWITCHER LINK].

- (A) Set [LINK MODE] to [ON].
- (B) Set the IP address and port number of the switcher being used in [SWITCHER IP] and [SWITCHER PORT].
- (C) Set the port number on this unit to receive notifications from the switcher in [RP PORT].
- (D) Select [YES] in [UPLOAD].

NOTE

- This function is not enabled until you select [YES] with [UPLOAD].

- (E) Set [BUS CTRL] to [ON] to enable the functionality linking camera selection from this unit and output bus switching specified on a switcher.
- (F) In [BUS SEL(MAIN)], set which output on the switcher to link with camera selection on this unit.
- (G) Set 1 set of switcher input [SW INPUT] at a time to link with the camera numbers [CAM NUM] on this unit.
(For example: set switcher input 1 to CAM1, switcher input 2 to CAM2, etc.)

You can also do the following:

- Switch between multiview and the images of the currently selected camera by controlling the AUX bus of the switcher
- Receive tally from the switcher

Refer to CONNECT button > [SWITCHER LINK] for details.

2. Make the linking functionality settings on the switcher.

Refer to the operating instructions for the switcher ([External Control] if using a Panasonic switcher) for details.

Functionality for using this unit to control external devices, such as dollies and totems, from other manufacturers

While you are selecting and controlling cameras on this unit, it is also possible to control the external devices from other manufacturers, such as dollies and totems*1.

*1: Contact your dealer before using this function.

1. Make the following settings on this unit with CONNECT button > [EXT CONTROL].

- (A) Set [EXT CTRL MODE] to [ENABLE].
- (B) For the R-rocker and L-joystick, set in [R-ROCKER CTRL] and [L-STICK CTRL] the directions for each to control the external devices.
- (C) Set the control number of the external device in [EXT CTRL NUM] (Up to 10 sets of external devices and cameras can be controlled at the same time. Start setting from number 1 if there are no specific constraints.)
- (D) Set the IP address in [IP(EXT-HOR)] and the port in [PORT(EXT-HOR)] for external devices to be controlled horizontally.
- (E) Set the IP address in [IP(EXT-VER)] and the port in [PORT(EXT-VER)] for external devices to be controlled vertically.
- (F) Set the reception port on this unit used for this function in [RSV PORT(RP)].
- (G) Set the camera number to be controlled at the same time as the external device in [LINKED CAM].
Refer to "Making the connection settings for the remote camera" (page 40) for how to number cameras.
- (H) Set the method for controlling preset memories in [PMEM CTRL].
- (I) When settings up to (H) are finished, select [YES] in [UPLOAD].
Settings are not updated until you select [YES].

2. Make the linking functionality settings to this unit on the external device.

Refer to the operating instructions for the external device for details.

Menus

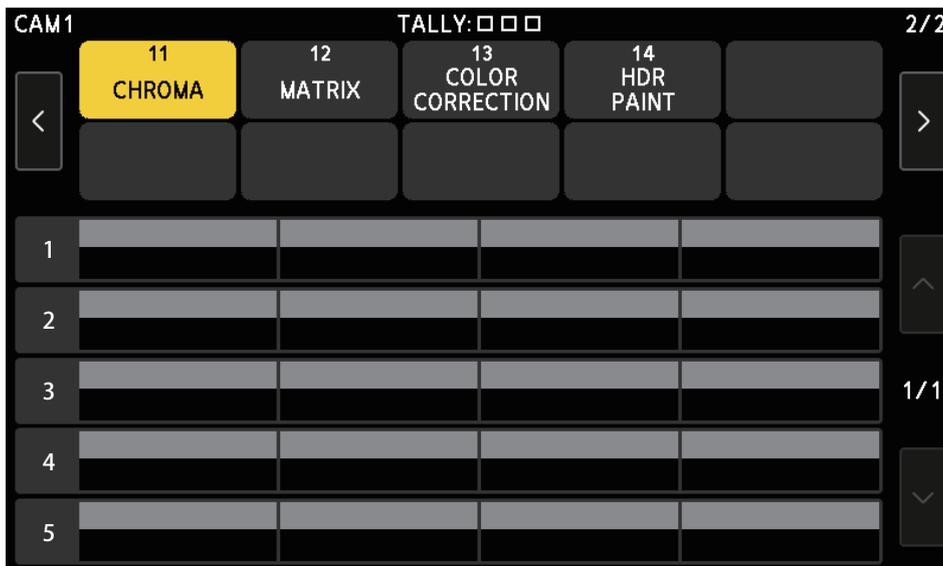
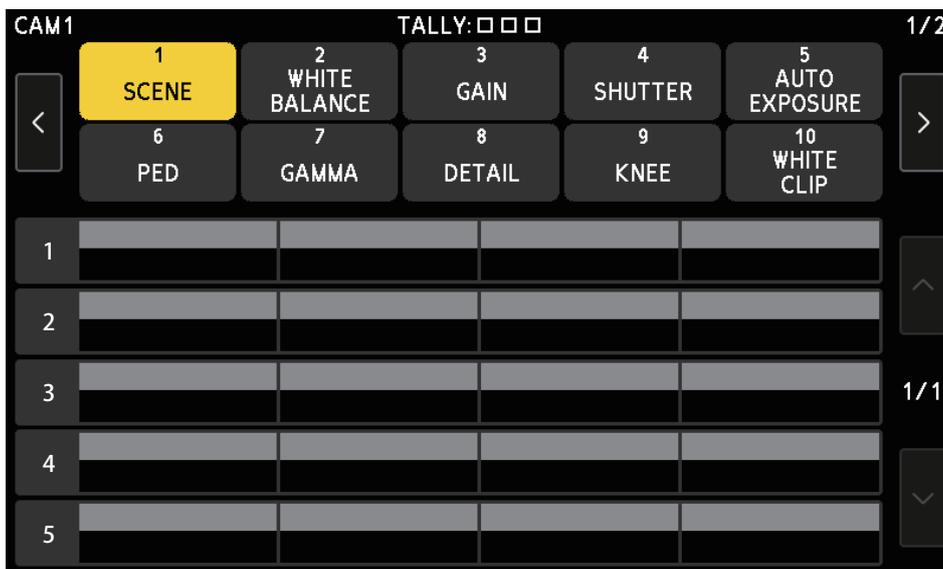
Menu groups

PAINT (Settings related to the PAINT menus on cameras)	SCENE	⇒ "SCENE" (page 82)
	WHITE BALANCE	⇒ "WHITE BALANCE" (page 82)
	GAIN	⇒ "GAIN" (page 83)
	SHUTTER	⇒ "SHUTTER" (page 83)
	AUTO EXPOSURE	⇒ "AUTO EXPOSURE" (page 83)
	PED	⇒ "PED" (page 83)
	GAMMA	⇒ "GAMMA" (page 83)
	DETAIL	⇒ "DETAIL" (page 84)
	KNEE	⇒ "KNEE" (page 84)
	WHITE CLIP	⇒ "WHITE CLIP" (page 84)
	CHROMA	⇒ "CHROMA" (page 84)
	MATRIX	⇒ "MATRIX" (page 84)
	COLOR CORRECTION	⇒ "COLOR CORRECTION" (page 85)
	HDR PAINT	⇒ "HDR PAINT" (page 86)
CAMERA SETTING (Settings related to the menus other than PAINT on cameras)	BASIC CONFIG	⇒ "BASIC CONFIG" (page 87)
	GROUP CAM CONTROL	⇒ "GROUP CAM CONTROL" (page 87)
	LENS	⇒ "LENS" (page 88)
	PAN/TILT	⇒ "PAN TILT" (page 88)
	CROP	⇒ "CROP" (page 89)
	BUILT-IN AUTO TRACK	⇒ "BUILT-IN AUTO TRACK" (page 89)
	CAM BACKUP	⇒ "CAM BACKUP" (page 90)
	MAINTENANCE	⇒ "MAINTENANCE" (page 90)
	RP MENU (Settings related to control of this unit)	BASIC CONFIG
USER ASSIGN		⇒ "USER ASSIGN" (page 93)
CONTROL I/F		⇒ "CONTROL I/F" (page 93)
CTRL DIRECTION		⇒ "CTRL DIRECTION" (page 94)
MAINTENANCE		⇒ "MAINTENANCE" (page 95)
GPI TALLY		⇒ "GPI TALLY" (page 96)
GPIO CAM SEL		⇒ "GPIO CAM SEL" (page 97)
GPO CAM GROUP		⇒ "GPO CAM GROUP" (page 98)
GPI PMEM		⇒ "GPI PMEM" (page 99)
GPI PMEM GROUP		⇒ "GPI PMEM GROUP" (page 99)
RP BACKUP		⇒ "RP BACKUP" (page 101)
PMEM/TMEM/MACRO (Settings related to the camera's preset memories, tracing memories, and macros)	PMEM	⇒ "PMEM" (page 103)
	TMEM	⇒ "TMEM" (page 104)
	MACRO	⇒ "MACRO" (page 105)
	PMEM SETTING	⇒ "PMEM SETTING" (page 105)
	VIEW COLOR	⇒ "VIEW COLOR" (page 107)
	NAME EDIT	⇒ "NAME EDIT" (page 107)
	EXT CTRL PMEM	⇒ "EXT CTRL PMEM" (page 108)
CONNECT (Settings related to connection settings and the linking functionality on this unit and the cameras, etc.)	CONNECT SETTING	⇒ "CONNECT SETTING" (page 109)
	MANUAL IP SET	⇒ "MANUAL IP SET" (page 109)
	AUTO IP SETTING	⇒ "AUTO IP SETTING" (page 110)
	RP IP SETTING	⇒ "RP IP SETTING" (page 110)
	ROP LINK	⇒ "ROP LINK" (page 111)
	SWITCHER LINK	⇒ "SWITCHER LINK" (page 111)
	EXT CONTROL	⇒ "EXT CONTROL" (page 113)

PAINT

Make settings related to the PAINT menu of cameras connected to this unit.

- The setting values depend on the connected camera.



■ SCENE

Item	Settings details
SCENE	Switches the shooting mode to suit the recording conditions.
STORE SCENE TO	Selects the SCENE number in which to store the shooting mode for the current camera.
EXECUTE STORE	Stores the SCENE number specifying the shooting mode for the current camera.

■ WHITE BALANCE

Item	Settings details
W. BAL MODE	Sets the white balance mode. Set this when the coloring is unnatural due to factors such as the light source. By enabling recognition of the white which is the standard, it is possible to record natural colors.
COLOR TEMP	Sets or displays the color temperature for the selected camera according to the [WHITE BALANCE] > [W. BAL MODE] setting.
ATW SPEED	Sets the control speed of the ATW function.
ATW TARGET R	Make fine adjustments to the Rch output when converging with the auto tracking white balance operation.
ATW TARGET B	Make fine adjustments to the Bch output when converging with the auto tracking white balance operation.
SHCKLSS WB SW	Sets the control that either transitions instantly or transitions gradually when [W. BAL MODE] is switched.
SHCKLSS WB SPD	When switching [W. BAL MODE], set the speed until it transitions.

■ GAIN

Item	Settings details
MASTER GAIN	Make adjustments to the gain of images. In dark scenes, increase the gain, and in bright scenes, reduce the gain.
AGC SW	Selects ON/OFF for auto gain control.
SUPER GAIN	Selects ON/OFF for super gain (increased sensitivity).
AGC MAX	Sets the maximum amount of gain increase when auto gain control is ON.
FRAME MIX	Sets the frame addition (gain increase using sensor storage) amount.
R GAIN	Adjust the gain of the R channel.
G GAIN	Adjust the gain of the G channel.
B GAIN	Adjust the gain of the B channel.
GAIN OFFSET	When auto white balance is performed by setting [W. BAL MODE] to [AWB A] or [AWB B], set the values for Rch gain and Bch gain. OFF: Makes the [R GAIN] and [B GAIN] values [0]. ON: Leaves the values set in [R GAIN] and [B GAIN] as they are.

■ SHUTTER

Item	Settings details
SHUTTER SW	Sets ON/OFF for the shutter function of the camera.
SHUTTER MODE	Selects the shutter mode for the camera.
SHUTTER SPEED	Selects the shutter speed for the camera.
AUTO SHUT LIMIT	Sets the maximum shutter value for automatic shutter mode ([ELC(AUTO)]).

■ AUTO EXPOSURE

Item	Settings details
PICTURE LEVEL	Sets the target picture level for automatic exposure compensation.

■ PED

Item	Settings details
MASTER PED	Make adjustments to the black level (pedestal adjustment).
R PED	Adjust the pedestal of the R channel.
G PED	Adjust the pedestal of the G channel.
B PED	Adjust the pedestal of the B channel.
OFFSET	Sets the pedestal level of the Rch, Gch, and Bch when the auto black balance has been adjusted. OFF: Makes the [R PED], [G PED], and [B PED] values [0]. ON: Leaves the values set in [R PED], [G PED], and [B PED] as they are.

■ GAMMA

Item	Settings details
GAMMA MODE	Selects the gamma curve mode.
MASTER GAMMA	Adjust the master gamma correction level.
R GAMMA	Adjust the gamma correction level for the Rch.
B GAMMA	Adjust the gamma correction level for the Bch.
F-REC D. LEVEL	When [FILM REC] is selected in [GAMMA MODE], you can set the dynamic range.
F-REC B. STRCH	When [FILM REC] is selected in [GAMMA MODE], you can set the black stretch.
V-REC KNEE SLP	When [VIDEO REC] is selected in [GAMMA MODE], you can set the knee slope.
V-REC KNEE PT	When [VIDEO REC] is selected in [GAMMA MODE], you can set the knee point.
INITIAL GAMMA	When [HD] is selected in [GAMMA MODE], you can set the rising slope for the gamma curve.

■ **DETAIL**

Item	Settings details
DETAIL SW	Sets ON/OFF for image contour (image sharpness) adjustments.
MASTER DETAIL	Make adjustments to the contour correction level (master).
PEAK(DTL) FREQ	Sets the boost frequency of detail.
DETAIL GAIN(+)	Sets the detail level of the plus direction (direction to be made brighter).
DETAIL GAIN(-)	Sets the detail level of the minus direction (direction to be made darker).
KNEE APERT LVL	Sets the detail level of very bright parts.
LVL DEP SW	Sets ON/OFF for the level of reduction in detail in dark parts.
LVL DEPENDENT	When the detail of bright signals are emphasized, the detail of dark parts are compressed. The larger the value, the more detail of bright parts is compressed.

■ **KNEE**

Item	Settings details
KNEE MODE	Sets the operating mode for gradation compression (knee).
AUTO KNEE RESP	Sets the speed of the auto knee response. The smaller the setting value the faster the response speed.
K. MASTER POINT	Make positional settings for the compression level (knee point) of very bright image signals.
K. MASTER SLOPE	Sets the incline of knee.
KNEE R POINT	Make positional settings for the compression level (knee point) of the Rch against the [K. MASTER POINT].
KNEE R SLOPE	Sets the incline of the Rch against the [K. MASTER SLOPE].
KNEE B POINT	Make positional settings for the compression level (knee point) of the Bch against the [K. MASTER POINT].
KNEE B SLOPE	Sets the incline of the Bch against the [K. MASTER SLOPE].

■ **WHITE CLIP**

Item	Settings details
WHITE CLIP SW	Sets ON/OFF for the white clip function.
M. W. CLIP LEVEL	Sets the master white clip level.
R W. CLIP LEVEL	Sets the white clip level of the Rch against the [M. W. CLIP LEVEL].
B W. CLIP LEVEL	Sets the white clip level of the Bch against the [M. W. CLIP LEVEL].
HI-COLOR SW	Sets ON/OFF for the function to expand the dynamic range of colors.
HI-COLOR LEVEL	Sets the level of the function to expand the dynamic range of colors.

■ **CHROMA**

Item	Settings details
CHROMA LVL SW	Sets ON/OFF for the color intensity and phase settings for images.
CHROMA LEVEL	Sets the color intensity for images.
CHROMA PHASE	Make fine adjustments to the hue of the colors in the images.

■ **MATRIX**

Item	Settings details
MATRIX SW	Sets ON/OFF for the matrix (linear matrix/color correction).
PRESET MATRIX	Selects the type of matrix.
LINEAR MTX SW	Sets ON/OFF for the linear matrix function.
LINEAR TABLE	Selects the table for the linear matrix.
R-G N, R-G P, R-B N, R-B P, G-R N, G-R P, G-B N, G-B P, B-R N, B-R P, B-G N, B-G P	Adjust the linear matrix.

■ COLOR CORRECTION

Item	Settings details
MATRIX SW	Sets ON/OFF for the matrix (linear matrix/color correction).
PRESET MATRIX	Selects the type of matrix.
COLOR CORR SW	Sets ON/OFF for the color correction function.
C. CORR TABLE	Selects the table for color correction.
CORR AXIS	Selects the axis for performing adjustments to saturation and phase.
SAT CORR	Adjust the color saturation selected with [CORR AXIS].
PHASE CORR	Adjust the color phase selected with [CORR AXIS].
SAT B_MG	Adjust the saturation of the color between blue and magenta.
PHASE B_MG	Adjust the hue of the color between blue and magenta.
SAT MG	Adjust the saturation of magenta.
PHASE MG	Adjust the hue of magenta.
SAT MG_R	Adjust the saturation of the color between magenta and red.
PHASE MG_R	Adjust the hue of the color between magenta and red.
SAT MG_R_R	Adjust the saturation of the color with a ratio of 1:3 magenta and red.
PHASE MG_R_R	Adjust the hue of the color with a ratio of 1:3 magenta and red.
SAT R	Adjust the saturation of red.
PHASE R	Adjust the hue of red.
SAT R_R_YL	Adjust the saturation of the color with a ratio of 3:1 red and yellow.
PHASE R_R_YL	Adjust the hue of the color with a ratio of 3:1 red and yellow.
SAT R_YL	Adjust the saturation of the color between red and yellow.
PHASE R_YL	Adjust the hue of the color between red and yellow.
SAT_R_YL_YL	Adjust the saturation of the color with a ratio of 1:3 red and yellow.
PHASE R_YL_YL	Adjust the hue of the color with a ratio of 1:3 red and yellow.
SAT YL	Adjust the saturation of yellow.
PHASE YL	Adjust the hue of yellow.
SAT YL_YL_G	Adjust the saturation of the color with a ratio of 3:1 yellow and green.
PHASE YL_YL_G	Adjust the hue of the color with a ratio of 3:1 yellow and green.
SAT YL_G	Adjust the saturation of the color between yellow and green.
PHASE YL_G	Adjust the hue of the color between yellow and green.
SAT G	Adjust the saturation of green.
PHASE G	Adjust the hue of green.
SAT G_CY	Adjust the saturation of the color between green and cyan.
PHASE G_CY	Adjust the hue of the color between green and cyan.
SAT CY	Adjust the saturation of cyan.
PHASE CY	Adjust the hue of cyan.
SAT CY_B	Adjust the saturation of the color between cyan and blue.
PHASE CY_B	Adjust the hue of the color between cyan and blue.
SAT B	Adjust the saturation of blue.
PHASE B	Adjust the hue of blue.

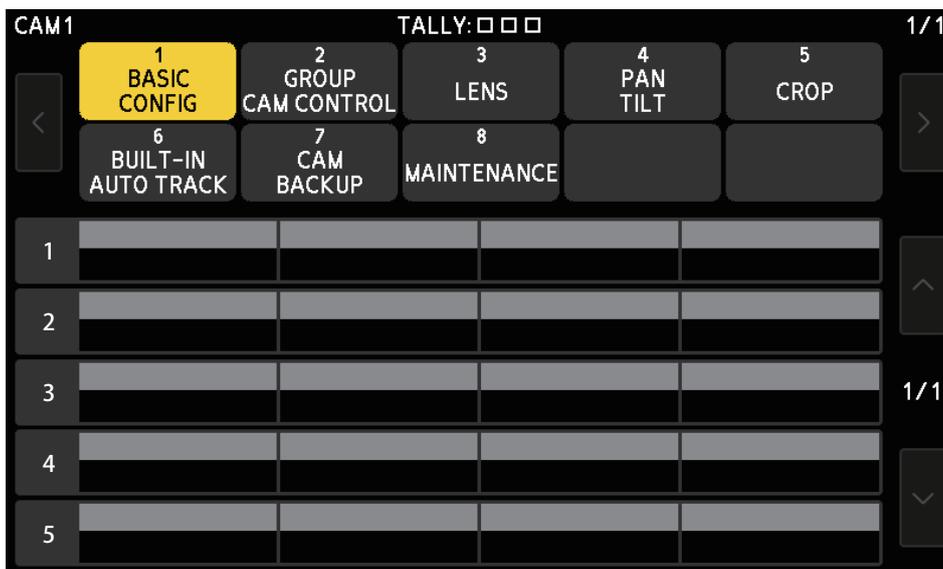
■ HDR PAINT

Item	Settings details
HDR SW	Sets ON/OFF (SDR) for the HDR mode.
HLG MODE	Selects the HLG setting mode.
KNEE SW	Sets ON/OFF for knee.
KNEE POINT	Sets the knee point position.
KNEE SLOPE	Sets the incline of knee.
B. GAMMA SW	Sets ON/OFF for black gamma.
MASTER BLK GAM	Adjust the master black gamma correction level.
R BLK GAMMA	Adjust the black gamma correction level for the Rch.
B BLK GAMMA	Adjust the black gamma correction level for the Bch.
SDR CONV MODE	Selects the mode for converting to SDR.
SDR GAIN	Sets the gain of SDR images.
SDR POINT	Sets the image level to start SDR image compression.
SDR SLOPE	Sets the incline for compression to SDR images.
SDR BLK OFFSET	Adjust the black level offset of SDR images.

CAMERA SETTING

Make settings related to the menus other than PAINT of cameras connected to this unit.

- The setting values depend on the connected camera.



■ BASIC CONFIG

Item	Settings details
SHOOTING MODE	Selects the shooting mode (normal shooting or high sensitivity/low light shooting) to suit the shooting environment.
GAMUT	Sets the color gamut.
DAY/NIGHT	Switches between normal shooting and night mode shooting (shooting in the dark using infrared rays).
BAR ID	Selects ON/OFF for the ID display on the color bar.
CAM FAN1	Sets the operation of cooling fan 1.
CAM FAN2	Sets the operation of cooling fan 2.

■ GROUP CAM CONTROL

Item	Settings details
CAM POWER	<p>Instructs the connected remote cameras to turn ON/OFF (standby).</p> <p>NOT EXECUTED: Does not instruct to turn ON/OFF.</p> <p>GROUP OFF: Instructs the remote cameras belonging to the selected camera group to turn OFF (standby).</p> <p>GROUP ON: Instructs the remote cameras belonging to the selected camera group to turn ON.</p> <p>ALL OFF: Instructs all the remote cameras set in this unit to turn OFF (standby).</p> <p>ALL ON: Instructs all the remote cameras set in this unit to turn ON.</p> <p>● Depending on the number of remote cameras connected, it may take some time until operations on this unit are enabled.</p>
CAM AWB	<p>Makes settings all at once from this unit for automatic white balance to cameras in the same group or to all cameras that have had connection settings made.</p> <p>NOT EXECUTED: No settings made all at once.</p> <p>ALL AWB: Settings made all at once to all cameras that have had connection settings made.</p> <p>GROUP AWB: Settings made all at once to cameras in the selected group.</p>
CAM ABB	<p>Makes settings all at once from this unit for automatic black balance to cameras in the same group or to all cameras that have had connection settings made.</p> <p>NOT EXECUTED: No settings made all at once.</p> <p>ALL ABB: Settings made all at once to all cameras that have had connection settings made.</p> <p>GROUP ABB: Settings made all at once to cameras in the selected group.</p>

Menus (continued)

Item	Settings details
CAM BAR	Turns ON/OFF color bar output all at once from this unit to cameras in the same group or to all cameras that have had connection settings made. NOT EXECUTED: No settings made all at once. ALL ON, ALL OFF: Settings made all at once to all cameras that have had connection settings made. GROUP ON, GROUP OFF: Settings made all at once to cameras in the same group.
SCENE	Sets the target for scene switching. NOT EXECUTED: Target for scene switching not specified. ALL SCENE1 to ALL SCENE4: Switches all cameras for which connection settings have been made to SCENE1 to SCENE4. GROUP SCENE1 to GROUP SCENE4: Switches cameras which are in the same group as the selected camera to SCENE1 to SCENE4.

■ LENS

Item	Settings details
O.I.S. SW	Selects ON/OFF for screen stabilization.
O.I.S. MODE	Selects the screen stabilization mode.
ZOOM MODE	Switches the zoom mode (maximum zoom rate).
MAX D. ZOOM	Sets the upper limit for the digital zoom rate.
DIGITAL EXT	Selects the digital extender function.
AUTO IRIS SPEED	Sets the control speed of the auto iris function.
A.IRIS WINDOW	Selects the auto iris detection window.
A. IRIS PEAK R.	For iris control when using auto iris, sets the ratio for whether to give weight to the peak value or the average value of the metering.
AF SENSITIVITY	Sets the tracking mode for auto focusing function.
FOCUS ADJ w PTZ	Sets ON/OFF for the function that corrects focus automatically when pan/tilt/zoom is operating on the camera.

■ PAN TILT

Item	Settings details
P/T SPEED MODE	Sets the speed mode for pan/tilt operations.
SPEED w/ ZOOM	Sets ON/OFF for the function that adjusts pan/tilt speed in conjunction with zoom magnification. When [ON] is set, the panning and tilting operations will become slower in the zoom status.
LIMIT (UP)	You can set the limiter for the remote camera in the upward direction from this unit.
LIMIT (DOWN)	You can set the limiter for the remote camera in the downward direction from this unit.
LIMIT (LEFT)	You can set the limiter for the remote camera to the left from this unit.
LIMIT (RIGHT)	You can set the limiter for the remote camera to the right from this unit.
P/T ACC SETTING	Sets whether to make advanced settings for items such as acceleration and deceleration when manually operating pan/tilt.
RISE S-CURVE	Sets the S curve for the acceleration of pan/tilt. (The S becomes stronger as the number increases.) During manual control of pan/tilt operation, if acceleration is required in order to reach the specified speed, this setting makes the acceleration process happen according to the S curve specified with this setting.
FALL S-CURVE	Sets the S curve for the deceleration of pan/tilt. (The S becomes stronger as the number increases.) During manual control of pan/tilt operation, if deceleration is required in order to reach the specified speed, this setting makes the deceleration process happen according to the S curve specified with this setting.
RISE ACC	Sets the acceleration rate for the acceleration of pan/tilt. (The acceleration rate increases as the number increases.) During manual control of pan/tilt operation, if acceleration is required in order to reach the specified speed, this setting makes the acceleration process happen according to the acceleration rate specified with this setting.
FALL ACC	Sets the deceleration rate for the deceleration of pan/tilt. (The deceleration rate increases as the number increases.) During manual control of pan/tilt operation, if deceleration is required in order to reach the specified speed, this setting makes the deceleration process happen according to the deceleration rate specified with this setting.

■ CROP

Item	Settings details
CROP MODE	Sets the CROP function which crops from UHD (3840 × 2160) images. OFF: Disables the CROP function. ON (1080): Crops the designated area from UHD (3840 × 2160) images and outputs the result as 1920 × 1080. ON (720): Crops the designated area from UHD (3840 × 2160) images and outputs the result as 1280 × 720.
CROP ADJUST	Make selections for the crop frame to adjust positioning.
H POS	Make settings for the position in the horizontal direction for the crop frame specified in [CROP ADJUST]. 0 is the left edge.
V POS	Make settings for the position in the vertical direction for the crop frame specified in [CROP ADJUST]. 0 is the upper edge.
CROP OUT SEL	Selects the crop frame used for the images of the terminal outputting the cropped images of the remote camera.
CROP MARKER	Make settings for the display of the CROP frame that is displayed on images output from terminals other than the one used for outputting the cropped images of the remote camera.
CROP AF	Selects ON/OFF for the focus adjustment function for the images within the CROP frame specified in [CROP OUT SEL].
CROP ZOOM	Sets whether to use CROP that applies digital zoom when cropping from UHD (3840 × 2160) images.
SDI OUT	Make FULL/CROP settings for images output from the 3G SDI OUT terminal of the remote camera.
NDI OUT	Make FULL/CROP settings for images output from NDI High Bandwidth of the remote camera.
IP OUT1	Make FULL/CROP settings for images streamed from each CH1 of IP streaming.
IP OUT2	Make FULL/CROP settings for images streamed from each CH2 and CH3 of IP streaming.

NOTE

- Refer to “Crop function” (page 67) for crop operations on the main LCD.
- Also refer to the operating instructions of the camera.

■ BUILT-IN AUTO TRACK

Item	Settings details
A-TRACK ACTIVE	Sets the camera's built-in automatic tracking mode. Detection of people starts when you set [ENABLE]. You can display the tracking frame and start or stop tracking using the below menu items. Also refer to the operating instructions of the camera for details. This can be assigned to the RP MENU button > [USER ASSIGN] user buttons. "[B.A.T.]ACTV" is the name used to assign.
TRACK S/S	Starts or stops the camera's built-in automatic tracking. This can be assigned to the RP MENU button > [USER ASSIGN] user buttons. "[B.A.T.]TRK S/S" is the name used to assign.
TRACK STATUS	Displays the tracking status of the built in automatic tracking.
ANGLE	Sets the angle of view during built in auto tracking. This can be assigned to the RP MENU button > [USER ASSIGN] user buttons. "[B.A.T.]FULL" and "[B.A.T.]U-BODY" are the names used to assign.
MARKER	Sets whether to show the tracking frame. The tracking frame is shown when [ON] is set. This can be assigned to the RP MENU button > [USER ASSIGN] user buttons. "[B.A.T.]MARKER" is the name used to assign.
HOME POSITION	Sets the behavior when the tracking target is lost.
TRACK A. START	Sets whether to start automatic tracking immediately after startup, etc. [ENABLE] starts automatic tracking immediately after startup, etc.

NOTE

- [A-TRACK ACTIVE] and [TRACK STATUS] can be viewed on page 3 of the status screen. Refer to “Status screen” (page 30) for details.

■ CAM BACKUP

Item	Settings details
MODE	Selects whether to save setting data of the connected camera to a USB memory device (STORE) or load from a USB memory device (LOAD). To format a memory device, select [FORMAT]. When [MODE] is [LOAD] or [STORE] → [SELECT]: CAMERA ALL, SCENE1, SCENE2, SCENE3, SCENE4... When [MODE] is [FORMAT] → [SELECT]:---
SELECT	Selects either [CAMERA ALL] (camera settings) or [SCENE] (SCENE data).
USB DEVICE SELECT	Select the USB memory device to operate.
FILE	When [MODE] is [STORE], select the file number of the data to be saved. This is enabled only when you have selected [SELECT] and set it to [CAMERA ALL].
FILE NAME	When [MODE] is [LOAD], select the file name to be loaded.
EXECUTE	When [MODE] is [LOAD], the file is read when you select [YES]. When [MODE] is [STORE], the file is saved when you select [YES]. When [MODE] is [FORMAT], the USB memory device is initialized when you select [YES].

NOTE

- Refer to "Types of data backup" (page 71) for details.

■ MAINTENANCE

Item	Settings details
ALARM1 to ALARM5	Displays a list of alarms notified from the selected camera. The alarm information is displayed ranked by importance [ALARM1] to [ALARM5], with the most important first. The display is "—" when there are no notifications. Refer to "List of messages" (page 140) for details.

RP MENU

- Make settings related to control of this unit.
- The setting values depend on the connected camera.

CAM1 TALLY: □□□ 1/2

<	1 BASIC CONFIG	2 USER ASSIGN	3 CONTROL I/F	4 CTRL DIRECTION	5 MAINTENANCE	>
	6 GPI TALLY	7 GPIO CAM SEL	8 GPO CAM GROUP	9 GPI PMEM	10 GPI PMEM GROUP	
1						^
2						
3						1/2
4						v
5						

CAM1 TALLY: □□□ 2/2

<	11 RP BACKUP					>
1						^
2						
3						1/1
4						v
5						

■ BASIC CONFIG

___ indicates the factory default settings.

Item	Setting values	Settings details
AUTO CAM P.ON	DISABLE ENABLE	The remote cameras connected to this unit turn on in conjunction with this unit turning on (ON). ● Depending on the number of remote cameras connected, it may take some time until operations on this unit are enabled.
RP FAN	AUTO SILENT	Sets the operation of the cooling fan on this unit.
LED LEVEL	1 to <u>3</u> to 20	Sets the brightness of the buttons on the operating panel.
LCD LEVEL	1 to <u>10</u> to 31	Sets the brightness of the LCD.
MULTI-SEL LEVEL	1 to <u>10</u> to 31	Sets the brightness of the multi select switches.
BEEP SOUND	0 to <u>2</u> to 3	Sets the volume of the buzzer when buttons or the multi select switches are used.
CAM LOCK MODE	<u>NORMAL</u> AUTO	NORMAL: Automatic LOCK/UNLOCK of CAM CTRL LOCK is not performed when switching camera selection. AUTO: Automatic LOCK/UNLOCK of CAM CTRL LOCK is performed when switching camera selection.
CAM CTRL LOCK	<u>UNLOCK</u> LOCK	When you select [LOCK], it becomes impossible for this unit and the currently selected remote camera to be controlled from another remote camera controller. While LOCK is on, it is only possible to control the currently selected remote camera from the remote camera controller that executed the LOCK. When you switch to another remote camera while the LOCK is on, the LOCK on the remote camera before that selection is maintained, but the LOCK is not applied to the remote camera after that selection. A lock symbol is displayed next to the camera name indication at the TOP of the main LCD while the LOCK is on. (Refer to "Status screen" (page 30) for details.) The LOCK is released when you select [UNLOCK] and the lock symbol disappears. Green lock symbol: Indicates that LOCK was executed on this unit. Red lock symbol: Indicates that LOCK was applied on another remote camera controller. Operation is not possible in this case.
CAM SEL IN OPER	<u>DISALLOW</u> ALLOW	Sets the operation while pan/tilt, zoom, and focus are working. DISALLOW: Camera selection is not allowed during operation. ALLOW: Camera selection is allowed even during operation. NOTE ● Be aware that when [ALLOW] is selected, if you switch the camera that is working, then you will be unable to instruct the camera previously selected to stop, etc.
CAM NUM DISP	<u>NUM SET IN RP</u> NUM SET IN CAM	NUM SET IN RP: The camera numbers with connection settings made by this unit are displayed as the camera numbers on this unit. NUM SET IN CAM: The camera numbers managed by the cameras are displayed as the camera numbers on this unit.
IN-CAMERA NUM	1 to 99	Changes the setting values of camera numbers managed on cameras. This is enabled when you have selected [CAM NUM DISP] and set it to [NUM SET IN CAM].
VIDEO FREQ	<u>59.94Hz</u> 50Hz	Select the frequency of images input from external sources. Refer to "Before beginning actual operation" (page 25) for details.
VIDEO IN SELECT	<u>SDI</u> NDI SRT	Selects the input source for external input images output to the main LCD and SDI OUT.
VIDEO MARKER	<u>OFF</u> FOCUS PEAK	Selects ON/OFF for the peaking function.
TALLY DISP	<u>TOP ONLY</u> TOP/CAM NUM	TOP ONLY: Tally color indications on the status screen of the main LCD are shown only in "TALLY" at the upper part of the screen. TOP/CAM NUM: Tally color indications on the status screen of the main LCD are shown both in "TALLY" at the upper part of the screen and in the place where the camera number is shown. Refer to "Status screen" (page 30) for details.
SER BAUD RATE	<u>9600</u> 38400 115200	Set the baud rate for the RS-422 terminal.

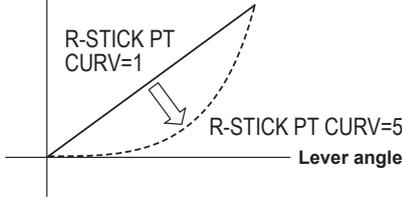
■ USER ASSIGN

___ indicates the factory default settings.

Item	Setting values	Settings details
USER1	ONE TOUCH AF	You can assign a variety of functions to the user buttons USER1 to 10 and the R-joystick user button. Refer to "Customizing operations of the unit" (page 34) for details.
USER2	FOCUS PEAK	
USER3	NIGHT MODE	
USER4	MACRO1	
USER5	MACRO2	
USER6	NONE	
USER7	NONE	
USER8	NONE	
USER9	NONE	
USER10	NONE	
R-STICK BUTTON	NONE	
F1	SCENE	You can assign a variety of functions to the function dials (F1 to F4). Refer to "Customizing operations of the unit" (page 34) for details.
F2	L-STICK	
F3	2nd CAM NUM	
F4	PAGE SWITCHING	

■ CONTROL I/F

___ indicates the factory default settings.

Item	Setting values	Settings details
L-ROCKER	ZOOM	Sets the functions assigned to the L-rocker, R-rocker, focus dial, and iris dial. Refer to "Customizing operations of the unit" (page 34) for details.
R-ROCKER	ZOOM	
FOCUS DIAL	FOCUS	
IRIS DIAL	IRIS	
ZOOM CTRL CALIB	OFF 1 to 8	Calibrates the amount of zoom control transmitted from this unit so lens zoom starts smoothly when the ZOOM button is pressed in slowly. Press the ZOOM button in slowly and watch the images on the monitor to make sure the lens zoom starts smoothly. [1] is the least amount of calibration and [8] is the most. Select [OFF] for no calibration.
MANU IRIS LIMIT	OFF ON	Sets a limiter in the close direction for manual iris operation of the selected camera. When you set to [ON] at the target iris position, you will be unable to move the iris any more in the close direction. Set to [OFF] to cancel.
SYNC ENBL BTN	ALL CTRL I/F IRIS ONLY L-STICK ONLY	You can set the scope for enabling/disabling operations of the FOCUS dial, L-rocker, IRIS dial, and L-joystick using the FOCUS/L-ROCKER/IRIS/L-JOYSTICK ENABLE button [ENABLE]. ALL CTRL I/F: FOCUS dial, L-rocker, IRIS dial, and L-joystick operations are enabled/disabled according to the enable/disable setting of the ENABLE button. IRIS ONLY: Only IRIS dial operations are enabled/disabled according to the enable/disable setting of the ENABLE button. (FOCUS dial, L-rocker, and L-joystick operations remain enabled irrespective of the state of the ENABLE button.) L-STICK ONLY: Only L-joystick operations are enabled/disabled according to the enable/disable setting of the ENABLE button. (FOCUS dial, L-rocker, and IRIS dial operations remain enabled irrespective of the state of the ENABLE button.)
R-STICK PT CURV	1 to 5	You can adjust the relationship between the angle the R-joystick is tilted and the speed of operation. Operation speed 

Menus (continued)

Item	Setting values	Settings details
AF BUTTON CTRL	SHORT PRESS LONG PRESS	Sets the ON/OFF operation of the auto focus button. SHORT PRESS: Auto focus can be switched ON/OFF with a short press. LONG PRESS: Auto focus can be switched ON/OFF with a long press.
L-STICK	MENU	Sets the functionality to be assigned to the L-joystick. Refer to "Customizing operations of the unit" (page 34) for details.
2nd CAM NUM	CAM1 to CAM200	Selects the camera numbers to be controlled by the L-joystick.
L-STICK SPEED	1 to 3 to 6	Selects the control speed of the L-joystick. ● This is a menu equivalent to the PAN/TILT SPEED dial on the control panel.

■ CTRL DIRECTION

___ indicates the factory default settings.

Item	Setting values	Settings details
CTRL MODE	ALL CAM INDIVIDUAL	Select which cameras to apply the various settings for control directions detailed below. ALL CAM: Apply to all cameras connected to this unit INDIVIDUAL: Apply to cameras set in [CAM SEL] below
CAM SEL	CAM1 to CAM200	Make the various settings below for the selected camera numbers.
R-STICK PAN	NORMAL REVERSE	Sets the operating direction of the remote camera when doing PAN operations with the R-joystick. NORMAL: When the R-joystick is tilted to the left, the remote camera moves to the left, and when tilted to the right, it moves to the right. REVERSE: The remote camera moves in the opposite direction to NORMAL.
R-STICK TILT	NORMAL REVERSE	Sets the operating direction of the remote camera when doing TILT operations with the R-joystick. NORMAL: When the R-joystick is tilted to the rear, the remote camera moves upward, and when tilted to the front, it moves downward. REVERSE: The remote camera moves in the opposite direction to NORMAL.
L-STICK PAN	NORMAL REVERSE	Sets the operating direction of the remote camera when doing PAN operations with the L-joystick. NORMAL: When the L-joystick is tilted to the left, the remote camera moves to the left, and when tilted to the right, it moves to the right. REVERSE: The remote camera moves in the opposite direction to NORMAL.
L-STICK TILT	NORMAL REVERSE	Sets the operating direction of the remote camera when doing TILT operations with the L-joystick. NORMAL: When the L-joystick is tilted to the rear, the remote camera moves upward, and when tilted to the front, it moves downward. REVERSE: The remote camera moves in the opposite direction to NORMAL.
R-ROCKER ZOOM	NORMAL REVERSE	Sets the operating direction of the remote camera when doing ZOOM operations with the R-rocker. NORMAL: When the lower part of the rocker is pressed, zoom moves towards the telephoto end and when the upper part is pressed, zoom moves towards the wide end. REVERSE: The remote camera moves in the opposite direction to NORMAL.
R-ROCKER FOCUS	NORMAL REVERSE	Sets the operating direction of the remote camera when doing FOCUS operations with the R-rocker. NORMAL: When the upper part of the rocker is pressed, focus moves towards the far side and when the lower part is pressed, focus moves towards the near side. REVERSE: The remote camera moves in the opposite direction to NORMAL.
L-ROCKER ZOOM	NORMAL REVERSE	Sets the operating direction of the remote camera when doing ZOOM operations with the L-rocker. NORMAL: When the TELE end of the ZOOM button is pressed, zoom moves towards the telephoto end and when the WIDE end is pressed, zoom moves towards the wide end. REVERSE: The remote camera moves in the opposite direction to NORMAL.

Menus (continued)

Item	Setting values	Settings details
F-DIAL FOCUS	<u>NORMAL</u> REVERSE	Sets the operating direction of the remote camera when doing FOCUS operations with the FOCUS dial. NORMAL: Focus moves towards the far side when turned clockwise and moves towards the near side when turned counterclockwise. REVERSE: The remote camera moves in the opposite direction to NORMAL.
F-DIAL IRIS	<u>NORMAL</u> REVERSE	Sets the operating direction of the remote camera when doing IRIS operations with the FOCUS dial. NORMAL: Lens aperture opens more when turned clockwise and closes more when turned counterclockwise. REVERSE: The remote camera moves in the opposite direction to NORMAL.
I-DIAL FOCUS	<u>NORMAL</u> REVERSE	Sets the operating direction of the remote camera when doing FOCUS operations with the IRIS dial. NORMAL: Focus moves towards the far side when turned clockwise and moves towards the near side when turned counterclockwise. REVERSE: The remote camera moves in the opposite direction to NORMAL.
I-DIAL IRIS	<u>NORMAL</u> REVERSE	Sets the operating direction of the remote camera when doing IRIS operations with the IRIS dial. NORMAL: Lens aperture opens more when turned clockwise and closes more when turned counterclockwise. REVERSE: The remote camera moves in the opposite direction to NORMAL.

NOTE

- Also refer to "Customizing operations of the unit" (page 34).

■ MAINTENANCE

___ indicates the factory default settings.

Item	Setting values	Settings details
FACTORY RESET	<u>NO</u> YES	All the settings managed by this unit, including network settings, are returned to the factory default state.
MENU RESET	<u>NO</u> YES	All the menu settings managed by this unit, excluding network settings, are returned to the factory default state.
WEB PASS RESET	<u>NO</u> YES	Account information settings for logging into the web screen are returned to the factory default state. Also refer to "Web screen display" (page 114).
FW UPDATE	<u>NO</u> YES	Updates the software for this unit. ● Do not turn the unit off or disconnect the USB memory device until this process is complete.
SYSTEM VERSION	—	Displays the system version for the unit.
SOFT VERSION	—	Displays the software version.
FPGA VERSION	—	Displays the FPGA version.
ALARM1	—	Displays a list of alarms on the unit.
ALARM2	—	The alarm information is displayed ranked by importance [ALARM1] to [ALARM4], with the most important first. The display is "—" when there are no notifications. Refer to "List of messages" (page 140) for details.
ALARM3	—	
ALARM4	—	

■ GPI TALLY

___ indicates the factory default settings.

Item	Setting values	Settings details
GPIO MODE	MODE1 MODE2 MODE3	You can select the DSUB1 and DSUB2 control. Refer to "GPIO1/GPIO2" (page 144) for details.
TALLY OUT	OFF ON	Sets whether to send TALLY notification to the camera when there is TALLY input to the port for the GPIO 1 terminal. ON : Notify OFF : Do not notify
TALLY1	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN1 port or G_TALLY_IN1 port of the GPIO 1 terminal.
TALLY2	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN2 port or G_TALLY_IN2 port of the GPIO 1 terminal.
TALLY3	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN3 port or G_TALLY_IN3 port of the GPIO 1 terminal.
TALLY4	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN4 port or G_TALLY_IN4 port of the GPIO 1 terminal.
TALLY5	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN5 port or G_TALLY_IN5 port of the GPIO 1 terminal.
TALLY6	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN6 port or G_TALLY_IN6 port of the GPIO 1 terminal.
TALLY7	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN7 port or G_TALLY_IN7 port of the GPIO 1 terminal.
TALLY8	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN8 port or G_TALLY_IN8 port of the GPIO 1 terminal.
TALLY9	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN9 port or G_TALLY_IN9 port of the GPIO 1 terminal.
TALLY10	CAM1 ⋮ CAM200	Selects the camera to notify with TALLY when there is input to the R_TALLY_IN10 port or G_TALLY_IN10 port of the GPIO 1 terminal.

NOTE

- TALLY notifications are only transmitted when the relevant cameras are in the currently selected camera group. Even if there is a TALLY input for camera groups that are not currently selected, the cameras are not notified.

■ GPIO CAM SEL

___ indicates the factory default settings.

Item	Setting values	Settings details
GPIO MODE	MODE1 MODE2 MODE3	You can select the DSUB1 and DSUB2 control. Refer to "GPIO1/GPIO2" (page 144) for details.
IN1	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN1 port of the GPIO 2 terminal.
IN2	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN2 port of the GPIO 2 terminal.
IN3	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN3 port of the GPIO 2 terminal.
IN4	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN4 port of the GPIO 2 terminal.
IN5	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN5 port of the GPIO 2 terminal.
IN6	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN6 port of the GPIO 2 terminal.
IN7	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN7 port of the GPIO 2 terminal.
IN8	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN8 port of the GPIO 2 terminal.
IN9	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN9 port of the GPIO 2 terminal.
IN10	CAM1 ⋮ CAM200	Selects the camera to switch when there is input to the CAMERA_SELECT_IN10 port of the GPIO 2 terminal.
OUT1	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT1 of the port of the GPIO 2 terminal when the set camera is selected.
OUT2	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT2 of the port of the GPIO 2 terminal when the set camera is selected.
OUT3	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT3 of the port of the GPIO 2 terminal when the set camera is selected.
OUT4	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT4 of the port of the GPIO 2 terminal when the set camera is selected.
OUT5	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT5 of the port of the GPIO 2 terminal when the set camera is selected.
OUT6	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT6 of the port of the GPIO 2 terminal when the set camera is selected.
OUT7	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT7 of the port of the GPIO 2 terminal when the set camera is selected.
OUT8	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT8 of the port of the GPIO 2 terminal when the set camera is selected.
OUT9	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT9 of the port of the GPIO 2 terminal when the set camera is selected.
OUT10	CAM1 ⋮ CAM200	Notification is sent to CAMERA_SELECT_OUT10 of the port of the GPIO 2 terminal when the set camera is selected.

NOTE

- When there is a CAMERA_SELECT_IN signal at a port of the GPIO 2 terminal, if the camera number specified comes from a camera group that is not currently specified, there will be a switch of the camera group. Camera selection takes time in this case.
- When there is a CAMERA_SELECT_OUT signal at a port of the GPIO 2 terminal, the actions taken will be on relevant camera numbers in the currently selected camera group.

■ GPO CAM GROUP

___ indicates the factory default settings.

Item	Setting values	Settings details
GPIO MODE	MODE1 MODE2 MODE3	You can select the DSUB1 and DSUB2 control. Refer to "GPIO1/GPIO2" (page 144) for details.
OUT1	GROUP1 ⋮ GROUP20	On the GPIO 1 terminal, when a switch to the set camera group occurs, outputs to GROUP_SELECT_OUT_1.
OUT2	GROUP1 ⋮ GROUP20	On the GPIO 1 terminal, when a switch to the set camera group occurs, outputs to GROUP_SELECT_OUT_2.
OUT3	GROUP1 ⋮ GROUP20	On the GPIO 1 terminal, when a switch to the set camera group occurs, outputs to GROUP_SELECT_OUT_3.
OUT4	GROUP1 ⋮ GROUP20	On the GPIO 1 terminal, when a switch to the set camera group occurs, outputs to GROUP_SELECT_OUT_4.
OUT5	GROUP1 ⋮ GROUP20	On the GPIO 1 terminal, when a switch to the set camera group occurs, outputs to GROUP_SELECT_OUT_5.

■ GPI PMEM

___ indicates the factory default settings.

Item	Setting values	Settings details
GPI0 MODE	MODE1 MODE2 MODE3	You can select the DSUB1 and DSUB2 control. Refer to "GPIO1/GPIO2" (page 144) for details.
IN1	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN1 is input, the set preset memory number is recalled.
IN2	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN2 is input, the set preset memory number is recalled.
IN3	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN3 is input, the set preset memory number is recalled.
IN4	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN4 is input, the set preset memory number is recalled.
IN5	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN5 is input, the set preset memory number is recalled.
IN6	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN6 is input, the set preset memory number is recalled.
IN7	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN7 is input, the set preset memory number is recalled.
IN8	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN8 is input, the set preset memory number is recalled.
IN9	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN9 is input, the set preset memory number is recalled.
IN10	PMEM1 ⋮ PMEM100	On the GPIO 2 terminal, when PRESET_SELECT_IN10 is input, the set preset memory number is recalled.

■ GPI PMEM GROUP

___ indicates the factory default settings.

Item	Setting values	Settings details
GPI0 MODE	MODE1 MODE2 MODE3	You can select the DSUB1 and DSUB2 control. Refer to "GPIO1/GPIO2" (page 144) for details.
PMEM GRP IN SEL	IN1 ⋮ IN4	This makes it possible to instruct a maximum of 10 cameras to play back preset memories for each of the inputs PRESET_MEM_GROUP_IN1 to 4 of the GPIO 1 terminal.
PMEM MODE	OFF SEPARATE ALL	Sets the operating mode for each of the PRESET_MEM_GROUP_IN1 to 4 inputs of the GPIO 1 terminal. OFF: No preset memory play back even when there is input to PRESET_MEM_GROUP_IN1 to 4. SEPARATE: When there is input to PRESET_MEM_GROUP_IN1 to 4, instructions are made to play back preset memories according to the settings made in SEL1 to SEL10 below. ALL: When there is input to PRESET_MEM_GROUP_IN1, instructions are made to recall the preset memory number set in SEL1 PMEM for all the connected cameras.
SEL1 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL1 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL1 CAM. However, when [PMEM MODE] is [ALL], set the preset memory number that will instruct all connected cameras to play back.
SEL2 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL2 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL2 CAM.

Menus (continued)

Item	Setting values	Settings details
SEL3 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL3 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL3 CAM.
SEL4 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL4 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL4 CAM.
SEL5 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL5 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL5 CAM.
SEL6 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL6 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL6 CAM.
SEL7 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL7 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL7 CAM.
SEL8 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL8 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL8 CAM.
SEL9 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL9 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL9 CAM.
SEL10 CAM	CAM1 ⋮ CAM200	Select the camera number to recall.
SEL10 PMEM	PMEM1 ⋮ PMEM100	Assigns the preset memory recall number for the camera selected with SEL10 CAM.

■ RP BACKUP

Item	Settings details
MODE	Selects whether to save setting data of this unit to a USB memory device (STORE) or load from a USB memory device (LOAD). To format a memory device, select [FORMAT]. When [MODE] is [LOAD] or [STORE] → [SELECT]: ALL/RP SETTING/TMEM/MACRO/CONN SETTING/CAM CTRL INFO When [MODE] is [FORMAT] → [SELECT]: ---
SELECT	Select one of the following types of data: ALL: Nearly all the data of this unit RP SETTING: [ALL] data with the data from mainly CONNECT related menus removed TMEM: TMEM data stored in this unit MACRO: MACRO related data stored in this unit CONN SETTING: CONNECT SETTING data stored in this unit CAM CTRL INFO: Camera control related data stored in this unit
USB DEVICE SELECT	Select the USB memory device to operate.
FILE	When [MODE] is [STORE], select the file number of the data to be saved. This is enabled only when you have selected [SELECT] and set it to [ALL].
FILE NAME	When [MODE] is [LOAD], select the file name to be loaded.
EXECUTE	When [MODE] is [LOAD], the file is read when you select [YES]. When [MODE] is [STORE], the file is saved when you select [YES]. When [MODE] is [FORMAT], the USB memory device is initialized when you select [YES].

NOTE

- Refer to “Types of data backup” (page 71) for details.

PMEM/TMEM/MACRO

- Make settings related to the camera's preset memories, tracing memories, and macros.
- The setting values depend on the connected camera.



■ Operating preset memories (PMEM)

You can operate the preset memories of remote cameras from this unit.

You can register the following settings that you have previously adjusted in your preset memories.

- Pan/tilt position
- Zoom position
- Focus position
- Lens aperture (manual iris only)
- White balance settings
- Gain

NOTE

- The number of preset memories that can be registered depends on the remote camera. For details, refer to the operating instructions for the relevant model.
- Preset memories and tracing memories share the positions where they start operating with the preset memories 1 to 10 in the camera. Be aware that if you register preset memories first and then register tracing memories, the preset memories will be overwritten.

■ Operating tracing memories (TMEM)

This unit is equipped with tracing memory (TMEM) which records a series of operations performed by the connected remote cameras. This enables you to reproduce the actions of a remote camera.

<Tracing memory>

Recording targets	Camera numbers CAM1 to CAM10
Functions that can be recorded	Pan, tilt, zoom, focus, iris, white balance mode
Recording time	Maximum 5 minutes per camera
Available memory locations	Maximum 10 per camera

NOTE

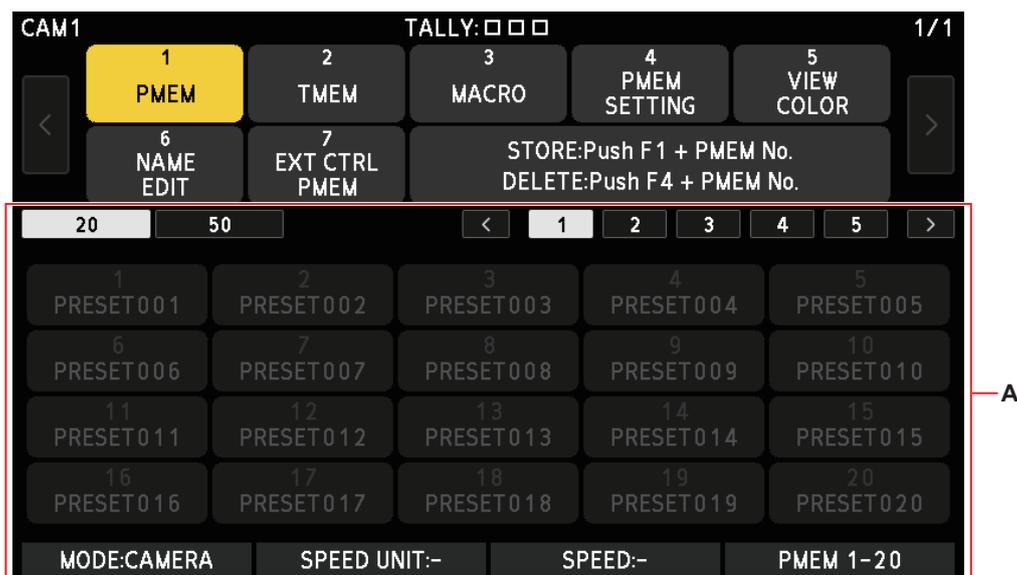
- The positions that tracing memories start operating are shared with the preset memories. This means that the starting positions for tracing memories 1 to 10 are recorded in the preset memories 1 to 10 in the camera. Be aware that if you register preset memories first and then register tracing memories, the preset memories will be overwritten. Note that if you register preset memories after registering tracing memories, the start positions of the tracing memories will be overwritten by the positions stored as preset memories.
- Due to differences in the behavior of remote cameras, the end point when playing back a tracing memory may not match the point made when recording. You can reduce this difference by paying attention to the following points:
 - Use the zoom of the lens at the WIDE end
 - Move pan/tilt, zoom and focus slowly
 - Make the recording time short
 Play back the tracing memory a few times to properly confirm the behavior of the remote camera before starting to use in actual applications.

■ PMEM

- You can view the preset memory registration status on the currently selected remote camera and also operate preset memories by selecting the preset memory numbers.
 - *Preset memory play back is also available from mode 2 or mode 3 of "Operation modes" (page 47), or from "Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations" (page 58).
- Refer to "Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations" (page 58) for the specifications of part "A".
- You can also register and delete preset memories in this screen.
 - Registering preset memories: Touch a preset memory number while pressing the F1 dial.
 - Deleting preset memories: Touch a preset memory number while pressing the F4 dial.

NOTE

- When [PMEM SETTING] > [STORE MODE] is [NO OVERWRITE], preset memories that are already stored cannot be overwritten.

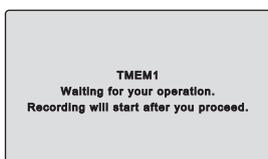


■ **TMEM**

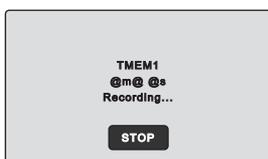
- You can view the tracing memory registration status on the currently selected remote camera and also operate tracing memories. _____ indicates the factory default settings.

Item	Setting values	Settings details
CTRL MODE	RECALL STORE RE-EDIT DELETE DELETE ALL	Selects the operation to perform with the tracing memory. RECALL: Plays back the tracing memory for the selected number. STORE: Registers the tracing memory to the selected number. RE-EDIT: If a tracing memory is saved in the selected number, the tracing memory can be reedited and registered. ① Play back a saved tracing memory ② If the user performs an operation, play back of the tracing memory is stopped, and from there on the operations of the user are recorded ③ The tracing memory interrupted in step ② and the user operations are saved again DELETE: Deletes the tracing memory for the selected number. DELETE ALL: Deletes all tracing memories.
EXECUTE	NO YES	Executes the operation specified with [CTRL MODE] on the tracing memory number selected in TMEM.
TMEM	1 to 10	Displays the currently selected tracing memory number.
REMAINING TIME	Displays the amount of recording time available	Displays the remaining time available for recording the tracing memory.
1 to 10	1 to 10	Registered tracing memory numbers are indicated in orange.
DURATION	Displays the recording time of the selected tracing memory	It is shown in gray. (It appears as 0m00s if none are registered)

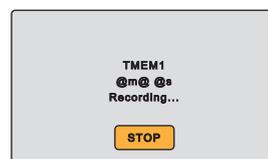
● **Procedure for registering**



Waits at this screen until there is a user operation



Transitions to this screen when there is a user operation
Seconds start counting from 0m00s



Recording stops when STOP is pressed
Returns to the original screen when storing finishes

● **Tracing memory start position**

The tracing memory start position overwrites the corresponding preset memory.

Example:

Play back No.1

→ The start point is the position of [PRESET001]

Store to No.1

→ If [PRESET001] is already stored → Overwrites the stored preset

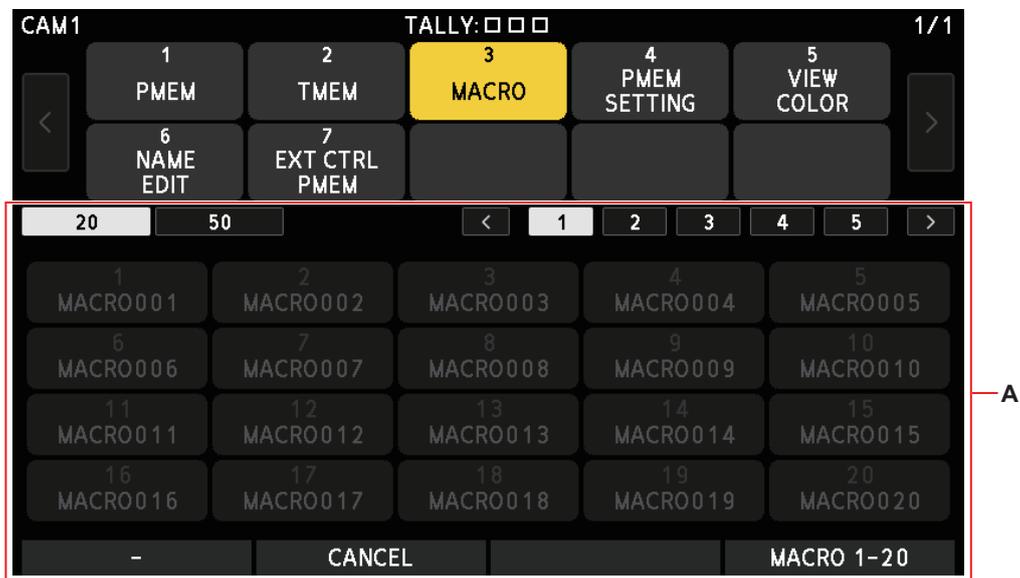
→ If [PRESET001] is not stored → Stored in [PRESET001]

NOTE

- When controlling tracing memories, do not try to control them from multiple remote camera controllers. The remote cameras will not behave correctly if you try to control tracing memories from multiple remote camera controllers.
- Even during tracing memory play back, you can use the L-joystick and L-rocker to control cameras that are not playing back tracing memories if they are assigned in [RP MENU] > [CONTROL I/F] > [L-STICK] = [2nd CAM PT].
- If you want to stop play back of a tracing memory while a tracing memory is playing back, select [STOP] on the pop up screen displayed on the main LCD.

■ **MACRO**

- You can view macro registration status and also operate macros by selecting macro numbers.
 * Macro play back is also available from mode 4 or mode 5 of “Operation modes” (page 47), or from “Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations” (page 58).
- Refer to “Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations” (page 58) for the specifications of part "A".
- Refer to “Macro functionality” (page 33) for information about the macro function.



■ **PMEM SETTING**

- Make basic settings related to preset memories.

___ indicates the factory default settings.

Item	Setting values	Settings details
PMEM SCOPE	*1	Specifies the target for play back for the items stored in the preset memory.
RECALL SPD SEL	CAMERA RP	Sets the preset memory speed playback mode for playing back preset memories. CAMERA: Play back is at the preset memory speed set in the remote camera. RP: Play back is at the preset memory speed registered when the preset memory was registered.
SMART COMP	*1	Sets the image transition method when playing back preset memories.
RETURN TO HOME	NO YES	Returns the selected camera to the home position.
SPEED UNIT	*1	Sets the speed mode for playing back preset memories.
SPEED TABLE	*1	Sets the speed mode when playing back preset memories.
SPEED		Displays the speed or time taken for moving to the preset memory position. Displays the speed of movement to the preset memory position when [SPEED UNIT] is [STEP]. Displays the time it takes for movement to the preset memory position when it is [TIME].
DIGITAL EXT	*1	Sets whether to include the Digital Extender ON/OFF setting when storing preset memories.
ZOOM OP MODE	*1	Selects the zoom operation when playing back preset memories.
CROP	*1	When playing back preset memories, set OFF/ON whether to reproduce the settings in the [CROP] menus.
IRIS	*1	When playing back preset memories, set OFF/ON whether to reproduce the settings in the [IRIS] related menus.
FREEZE IMAGE	*1	Sets OFF/ON for the function that freezes images during preset play back.
STORE MODE	NO OVERWRITE OVERWRITE	Selects the mode for storing preset memories. This setting is effective for both storing with the multi select switches and storing with the main LCD. NO OVERWRITE: Disables overwriting to preset memories that have already been stored OVERWRITE: Enables overwriting to preset memories that have already been stored
RECALL MODE	STORED ONLY ANY NUMBER	Selects the mode for playing back preset memories. STORED ONLY: Preset memory play back commands are sent from this unit to only stored preset memories. ANY NUMBER: Preset memory play back commands are sent from this unit irrespective of whether the preset memory is stored or not.

Menus (continued)

Item	Setting values	Settings details
PMEM G. RECALL	<u>GROUP1</u> ⋮ GROUP4	Executes the [PMEM GRP IN SEL] settings that were set in the RP MENU button > [GPI PMEM GROUP] menu. Execute by selecting the target group and pressing the F1 dial. GROUP1: IN1 of PMEM GRP IN SEL GROUP2: IN2 of PMEM GRP IN SEL GROUP3: IN3 of PMEM GRP IN SEL GROUP4: IN4 of PMEM GRP IN SEL
PMEM ACC	*1	Set whether to make advanced settings for items such as acceleration and deceleration when starting/ stopping play back of preset memories.
RISE S-CURVE	*1	Set the S curve for the acceleration of pan/tilt. (The S becomes stronger as the number increases.) During pan/tilt operation with play back of preset memories, when there is acceleration in order to operate at the specified speed or taking the specified time, this setting makes the acceleration process happen according to the S curve specified with this setting. This is enabled when [PMEM ACC] is [MANUAL].
FALL S-CURVE	*1	Set the S curve for the deceleration of pan/tilt. (The S becomes stronger as the number increases.) During pan/tilt operation with play back of preset memory, when there is deceleration in order to operate at the specified speed or taking the specified time, this setting makes the deceleration process happen according to the S curve specified with this setting. This is enabled when [PMEM ACC] is [MANUAL].
RISE ACC	*1	Set the acceleration rate for the acceleration of pan/tilt. (The acceleration rate increases as the number increases.) During pan/tilt operation with play back of preset memory, when there is acceleration in order to operate at the specified speed or taking the specified time, this setting makes the acceleration process happen according to the acceleration rate specified with this setting. This is enabled when [PMEM ACC] is [MANUAL] and when [SPEED UNIT] is [STEP].
FALL ACC	*1	Set the deceleration rate for the deceleration of pan/tilt. (The deceleration rate increases as the number increases.) During pan/tilt operation with play back of preset memory, when there is deceleration in order to operate at the specified speed or taking the specified time, this setting makes the deceleration process happen according to the deceleration rate specified with this setting. This is enabled when [PMEM ACC] is [MANUAL] and when [SPEED UNIT] is [STEP].
RISE RAMP TIME	*1	Sets the acceleration time for the time specified operation when playing back preset memories. This is enabled when [PMEM ACC] is [MANUAL] and when [SPEED UNIT] is [TIME].
FALL RAMP TIME	*1	Sets the deceleration time for the time specified operation when playing back preset memories. This is enabled when [PMEM ACC] is [MANUAL] and when [SPEED UNIT] is [TIME].
PMEM DELETE	<u>RANGE</u> ALL	Select the method for batch deleting preset memories. RANGE: Deletes preset memories in a specified range. ALL: Deletes all preset memories that have been registered.
START	1 to 100	Specify the first preset memory number in the range of preset memories to be deleted. This is enabled when [RANGE] is selected in [PMEM DELETE].
END	1 to 100	Specify the last preset memory number in the range of preset memories to be deleted. This is enabled when [RANGE] is selected in [PMEM DELETE].
EXECUTE	<u>NO</u> YES	Delete preset memories according to [PMEM DELETE].

*1: Refer to the operating instructions of the camera for details.

Menus (continued)

■ VIEW COLOR

- Set the colors used to indicate that preset memories, macros, and cameras are registered when preset memories, macros, and cameras are selected on the main LCD.

___ indicates the factory default settings.

Item	Setting values	Settings details
MODE	<u>CAM</u> PMEM MACRO	Selects the item for which the registered view color is to be changed. CAM: Changes the color of camera selection. PMEM: Changes the color of preset memory control. MACRO: Changes the color of macro control.
CAM NUMBER	Camera number	Selects the camera number for which color settings are to be made for registered preset memories. This is enabled only when [MODE] is [PMEM].
UPLOAD	(push)	Saves the set content to the unit. The edited content is not updated until it is saved.
1 to 100 (When [MODE] is [CAM], 1 to 200)	<u>STANDARD</u> RED ORANGE YELLOW GREEN BLUE INDIGO PURPLE	Select from 7 display colors (red, orange, yellow, green, blue, indigo, and purple). The standard color (dark gray) is used when you select [STANDARD].

■ NAME EDIT

- Edit the preset memory and macro names used to display preset memory control and macro control on the main LCD.

___ indicates the factory default settings.

Item	Setting values	Settings details
PMEM/MACRO	<u>PMEM</u> MACRO	Edits preset memory/macro names. PMEM: Edits the names of the preset memories on the selected camera. MACRO: Edits the macro names.
PMEM NAME GET	<u>NO</u> YES	Loads the names of the preset memories from the selected camera.
1 to 100		Edit the preset memory or macro name. Use the software keyboard to edit the names. Select the preset memory or macro on the main LCD to edit its name.

NOTE

- If the preset memory name has been read from a camera, depending on the type of characters used, it may not be displayed correctly on this unit.

■ EXT CTRL PMEM

- The following controls are performed on menus that are able to send preset memory instructions to the devices registered in CONNECT button > [EXT CONTROL].

___ indicates the factory default settings.

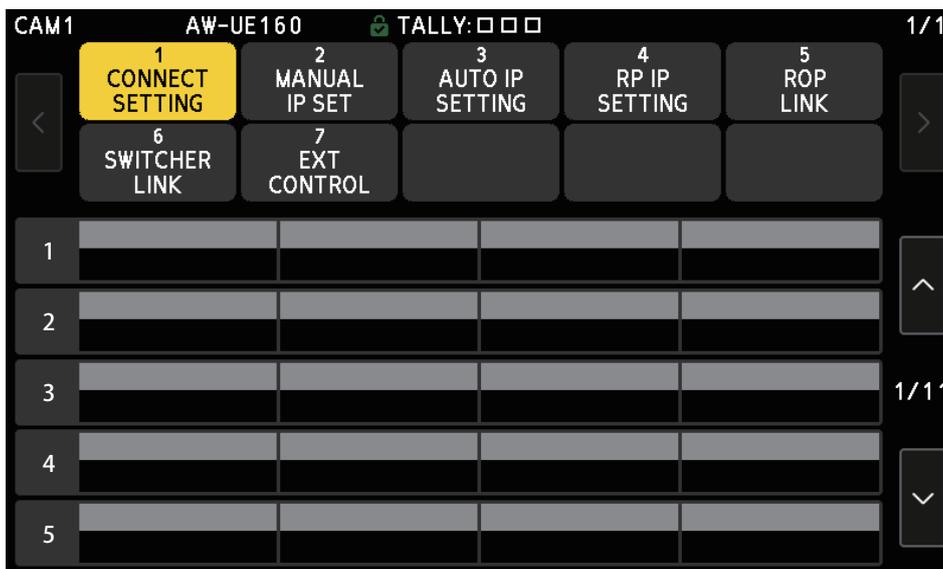
Item	Setting values	Settings details
A1 to A25 B1 to B25 C1 to C25 D1 to D25	START STOP CUT STATUS <u>NONE</u>	START: Start sequence STOP: Stop sequence CUT: Move to sequence start position STATUS: Get current status

NOTE

- 100 preset memory sequences can be controlled.
- They cannot be stored or deleted.
- They do not support regular refreshing of the status display.

CONNECT

- Make settings related to connection settings and the linking functionality on this unit and the cameras, etc.
- The setting values depend on the connected camera.



Settings for connections between this unit and cameras, etc.

- Make settings related to connections on this unit and the cameras.
- Refer to "Making the connection settings for the remote camera" (page 40) for details.

■ **CONNECT SETTING**

Item	Setting values	Settings details
CAM SEL	CAM1 to CAM200	Select the camera number for which the settings are to be changed. The network settings of the selected camera admin number are displayed on the screen as follows.
CONTROL TYPE	SERIAL LAN NO ASSIGN	Select the connection mode for the camera.
CAM1 to 200	SERIAL LAN NO ASSIGN	Displays the connection mode for camera 1 to camera 200. (SERIAL can be selected only for cameras 1 to 3)

■ **MANUAL IP SET**

___ indicates the factory default settings.

Item	Setting values	Settings details
CAM SEL	CAM1 to CAM200	Select the camera number for which the settings are to be changed. The network settings of the selected camera number are displayed on the screen as follows.
CONTROL TYPE	SERIAL LAN NO ASSIGN	Select the connection mode for the camera.
CAM IP		Set the IP address for the camera. (Factory default: CAM1 is 192.168.0.10 and then numbered in order)
CAM PORT	1 to 80 to 65535	Set the camera port number.
UPLOAD	(push)	Apply the settings for the IP address and port number of the camera to this unit. ● The changed settings are updated only if you execute [UPLOAD].

■ AUTO IP SETTING

___ indicates the factory default settings.

Item	Setting values	Settings details
AUTO SET	NONE RENEW KEEP	NONE: Does not search for remote cameras. RENEW: The unit firstly searches within the same subnet. After this it allocates camera numbers to each remote camera in the order they are found. At this time, the IP addresses of the remote cameras are overwritten with the connection destination IP addresses set by the unit for each camera number. KEEP: The unit firstly searches within the same subnet. After this links are set for newly found remote cameras with the camera numbers which were set as [NO ASSIGN] as the connection type with this unit. At this time, the IP addresses set for the remote cameras are kept as they are, and the connection destination IP addresses set in this unit are overwritten.
NEW		Displays the number of newly found cameras.
TOTAL		Displays the number currently managed by this unit + the number newly found.
EXECUTE	NONE RETRY SETTING	NONE: No IP address settings made. RETRY: Executes the [RENEW] or [KEEP] for [AUTO SET] process again. SETTING: Results of [RENEW] or [KEEP] for [AUTO SET] are reflected. If [RENEW] was used, the IP address on the camera is also changed at this time.

■ RP IP SETTING

___ indicates the factory default settings.

Item	Setting values	Settings details
IP	<u>192.168.0.9</u>	Sets the IP address for this unit. ● This is disabled if [DHCP] is set to [ON].
SUBNET	<u>255.255.255.0</u>	Sets the subnet mask for this unit.
GATEWAY	<u>192.168.0.1</u>	Sets the default gateway for this unit.
DHCP	OFF ON	Selects whether to acquire the IP address settings for this unit from the DHCP server.
UPLOAD	(push)	Press the function dial to set the IP address and port number for the camera. ● The changed settings are updated only if you execute [UPLOAD].
MAC ADDRESS		Displays the MAC address of this unit. (display only)
CAM1 to 20 PORT		You can allocate a port number for receiving update notifications for each of the camera selection buttons.

Settings for linking functions between this unit and cameras/other devices

- Set the linking functions between this unit and cameras and other devices.
- Refer to "Linking functions" (page 79) for details.

■ **ROP LINK**

___ indicates the factory default settings.

Item	Setting values	Settings details
ROP LINK MODE	OFF ON	Sets ON/OFF for the linking function. Camera selection is not linked when OFF.
ROP IP	192.168.0.130	Sets the IP address of the ROP to be connected.
ROP PORT	1 to 80 to 65535	Sets the port number of the ROP to be connected.
UPLOAD	(push)	Saves the [ROP IP] and [ROP PORT] settings to this unit.
RP CAM SEL	CAM1 to CAM200	Select the camera number set on this unit that you want to link with the ROP.
LINKED ROP CAM	NONE 1 to 99	Select the camera number on the ROP that corresponds to the camera number set in [RP CAM SEL]. Set NONE for camera numbers that are not to be assigned.

■ **SWITCHER LINK**

___ indicates the factory default settings.

Item	Setting values	Settings details
LINK MODE	OFF ON	Sets ON/OFF linking with the switcher.
SWITCHER IP	192.168.0.8	Sets the IP address of the switcher to be connected.
SWITCHER PORT	1 to 62000 to 65535	Sets the port number of the switcher to be connected.
RP PORT	1 to 60031 to 65535	Sets the port number on this unit for this function.
UPLOAD	(push)	Saves the settings.
BUS CTRL	OFF ON	Enable/disable switching of bus materials on the switcher from this unit.
BUS SEL(MAIN)	AUX1 to 16 ME1PVW ME1KEY1-F ME1KEY1-S ME1KEY2-F ME1KEY2-S ME1KEY3-F ME1KEY3-S ME1KEY4-F ME1KEY4-S ME2PVW ME2KEY1-F ME2KEY1-S ME2KEY2-F ME2KEY2-S ME2KEY3-F ME2KEY3-S ME2KEY4-F ME2KEY4-S DSK1-F DSK1-S DSK2-F DSK2-S DSK3-F DSK3-S DSK4-F DSK4-S	When [BUS CTRL] is ON, set the bus that will follow the camera selection normally controlled on this unit.

Menus (continued)

Item	Setting values	Settings details
BUS SEL(2nd)	AUX1 to 2 to 16 ME1PVW ME1KEY1-F ME1KEY1-S ME1KEY2-F ME1KEY2-S ME1KEY3-F ME1KEY3-S ME1KEY4-F ME1KEY4-S ME2PVW ME2KEY1-F ME2KEY1-S ME2KEY2-F ME2KEY2-S ME2KEY3-F ME2KEY3-S ME2KEY4-F ME2KEY4-S DSK1-F DSK1-S DSK2-F DSK2-S DSK3-F DSK3-S DSK4-F DSK4-S	When [BUS CTRL] is ON, set the bus that will follow the camera selection set in [RP MENU] > [CONTROL I/F] > [2nd CAM NUM] when [2nd CAM PT] is set in [RP MENU] > [CONTROL I/F] > [L-STICK] on this unit.
CAM NUM	1 to 200	Assign camera numbers you want to use.
SW INPUT	NO ASSIGN 1 to 34	Assign the bus numbers on the switcher corresponding to [CAM NUM].
FOCUS ASSIST	OFF ON	Switches between multiview and the images of the currently selected camera by controlling the AUX bus of the switcher. Multiviews 1 to 4 are output through the AUX set in [MV1] to [MV4]. By matching one of the AUX of [MV1] to [MV4] with the AUX of [BUS SEL(MAIN)], you can switch between multiview and camera images by switching [FOCUS ASSIST] OFF/ON.
MV1 to MV4	OFF AUX1 to 16	Assigns MV1 to MV4 and the AUX bus.
TALLY IP	OFF ON	Sets ON/OFF for tally reception from the switcher.

■ EXT CONTROL

___ indicates the factory default settings.

Item	Setting values	Settings details
EXT CTRL MODE	DISABLE ENABLE	Enables/disables the external control function.
R-ROCKER CTRL	NONE HORIZONTAL VERTICAL	Sets the robotics operations to be controlled by the R-rocker. NONE : No control HORIZONTAL : Control only horizontally VERTICAL : Control only vertically When set with this item, cameras other than those set in [LINKED CAM] will be controlled as selected in the items in RP MENU button > [CONTROL I/F] > [R-ROCKER].
L-STICK CTRL	NONE HORIZONTAL VERTICAL HOR&VER	Sets the robotics operations to be controlled by the L-joystick. NONE : No control HORIZONTAL : Control only horizontally VERTICAL : Control only vertically HOR&VER : Control horizontally and vertically When set with this item, cameras other than those set in [LINKED CAM] will be controlled as selected in the items in RP MENU button > [CONTROL I/F] > [L-STICK].
CTRL SPEED	1 to <u>3</u> to 6	Sets the speed for controlling [R-ROCKER CTRL] and [L-STICK CTRL].
Set the EXT device IP address on the next page		Set the IP address for the external device on the second page.
LEFT/RIGHT	(push)	Controls the external device in the horizontal direction (left/right). Press the function dials to control in the left/right directions.
SPEED	1 to 49	Sets the speed for left and right movement with [LEFT]/[RIGHT].
UP/DOWN	(push)	Controls the external device in the vertical direction (up/down). Press the function dials to control in the up/down directions.
SPEED	1 to 49	Sets the speed for up and down movement with [UP]/[DOWN].
EXT CTRL NUM	<u>1</u> to 20	Sets the control number of the external device.
IP(EXT-HOR)	<u>192.168.0.20</u>	Sets the IP addresses of external devices to be controlled in the horizontal direction.
IP(EXT-VER)	<u>192.168.0.20</u>	Sets the IP addresses of external devices to be controlled in the vertical direction.
PORT(EXT-HOR)	1 to <u>80</u> to 65535	Sets the port numbers of external devices to be controlled in the horizontal direction.
PORT(EXT-VER)	1 to <u>80</u> to 65535	Sets the port numbers of external devices to be controlled in the vertical direction.
RSV PORT(RP)	1 to <u>60501</u> to 65535	Sets the reception port on this unit used for this function.
LINKED CAM	<u>CAM1</u> to 200	Sets the camera number to be controlled at the same time as the external device.
PMEM CTRL	CAM ONLY CAM&E-PMEM CAM&EXT DEVICE	Sets whether to execute preset memory related settings for the external device on this unit. CAM ONLY: Only camera preset memories are controlled with this unit. CAM&E-PMEM: Camera preset memories and external device preset memories are controlled on this unit using only PMEM/TMEM/MACRO button > [EXT CTRL PMEM]. (There are devices that do not support this) CAM&EXT DEVICE: Camera preset memories and external device preset memories are controlled using operation modes 2 and 3 and on the main LCD on this unit. (PMEM/TMEM/MACRO button > [EXT CTRL PMEM] cannot be used) Refer to "Operation modes" (page 47) for details about operation modes. Refer to "Camera selection, Preset memory control, and Macro control using on the main LCD using touch operations" (page 58) for operations on the main LCD. (There are devices that do not support this)
UPLOAD	(push)	Settings for [EXT CTRL NUM] and below are reflected.

Web screen display

You can connect this unit and a personal computer and make a variety of settings.
Set an IP address within the private address range for the computer that is different from this unit. Set the same address for the subnet mask as this unit.

NOTE

- Be sure to consult the dealer when changing the IP address and subnet mask.

IP address and subnet mask for this unit (factory default)

IP address: 192.168.0.9
Subnet mask: 255.255.255.0

Refer to "Required computer environment" (page 8) for the requirements for the computer environment.

Web screen display on the computer

Screens from Windows (Microsoft Edge) are used as examples in this manual. There will be some differences in how the screen appears in other browsers, but the procedures will be the same.

1. Start the web browser on the computer.

Use the following web browsers according to the OS on the computer.

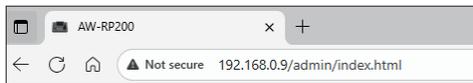
Compatible operating systems and web browsers	Windows Microsoft® Windows® 11 Microsoft® Windows® 10 Microsoft Edge (most recent version) Google Chrome
	Mac macOS15 macOS14 macOS13 Safari Google Chrome

2. Enter the IP address of this unit into the address bar of the web browser.

(The IP address for this unit can be set with CONNECT button > [RP IP SETTING], etc.)

Example IPv4 address input:

URL registered with http://IPv4 address
http://192.168.0.9/



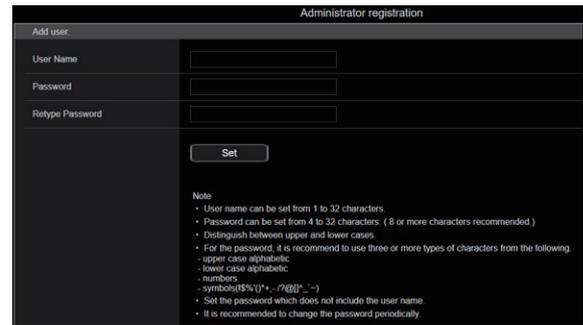
NOTE

- If the HTTP port number has been changed from "80", enter "http://IP address of this unit:port number" in the address bar.
Example: When the port number is set to 8080
http://192.168.0.9:8080
- If this unit is within a local network, make the settings for the proxy server from the web browser (menu bar "More tools" - "Internet Options") so that the proxy server is not used for the local address.

3. Set the initial account.

If the web screen is shown in the initial state, the initial account setting screen is displayed.

Set the user name and password.



NOTE

- Do not use a string of characters that can be easily guessed by a third party.
- Change your password regularly.
- Use at least 3 of the following 4 character types in a password of at least 8-characters in length.
Upper case alphabet
Lower case alphabet
Numbers
Symbols (! \$ % ' () * + , - . / ? @ [] ^ _ ` ~)
- If a password is set that does not follow the above policy, the user assumes responsibility for operation, with an adequate understanding of the security risks to the installation environment, etc.
- A warning message is displayed if you set a password that does not meet the recommended setting policy. To change the password, click the [Back] button and enter another password. To continue the settings after understanding the risk to security, click [Continue] and then complete the settings.

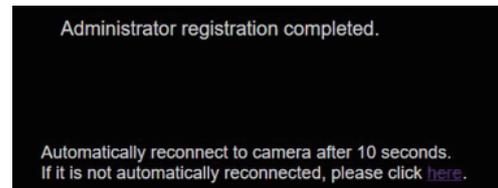


- If you have forgotten the account information you set, use RP MENU button > [MAINTENANCE] > [WEB PASS RESET], and reset the user information used for network connections.

4. Complete registration of the initial account.

The following screen indicating registration completion is displayed after registration of the initial account is complete.

This completes the procedures for registering the initial account.



Logging into the web screen

You will be required to enter a user name and password to log into the web menus of this unit.

NOTE

- The account input screen appears as a pop-up window in the web browser.
- Correctly enter the user name and password that were previously registered.
- It is recommended to regularly change the password.

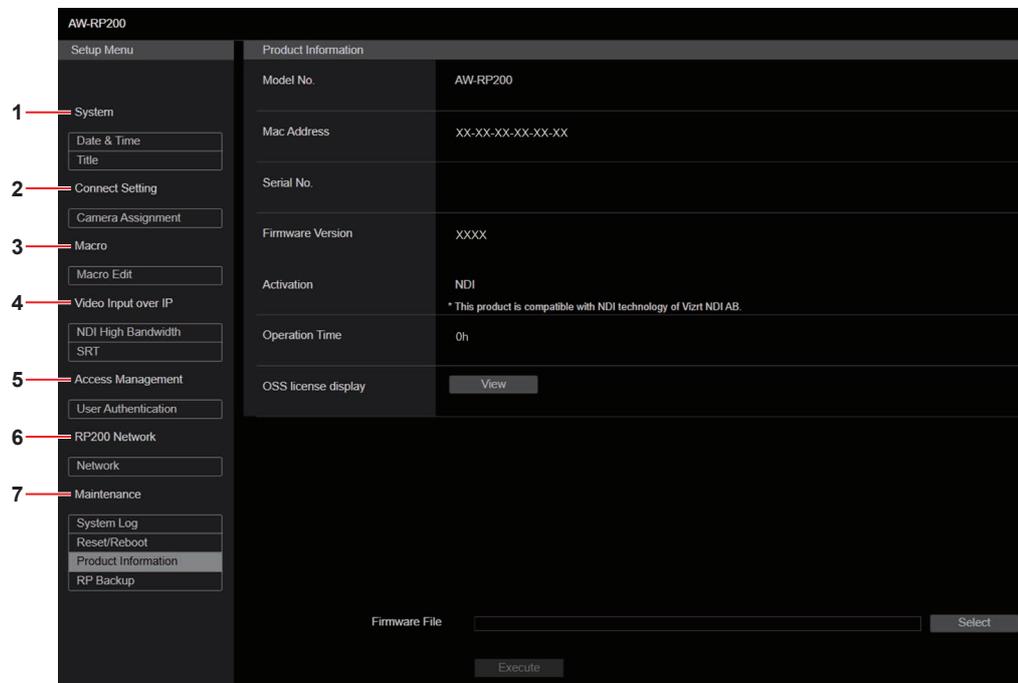
Setting from the web screen

Web setting screen [Setup Menu]

This screen enables you to make a variety of settings for this unit.

NOTE

- If setting values are changed from an OSD menu or another web browser while the settings menu is being displayed, there may be a mismatch between the setting values and the displayed values. If this occurs, refresh the screen displaying the settings menu in the web browser.



1 System

Clock settings button [Date&Time]

Click the button to display the clock settings screen [Date&Time].
⇒ "Clock settings screen [Date&Time]" (page 117)

Title edit button [Title]

Click the button to display the Title edit screen [Title].
⇒ "Title edit screen [Title]" (page 117)

2 Connect Setting

Camera connection assignment settings button [Camera Assignment]

Click the button to display the Camera Assignment settings screen.
⇒ "Camera Assignment" (page 118)

3 Macro

Macro edit button [Macro Edit]

Click the button to display the [Macro Edit] settings screen.
⇒ "Macro Edit" (page 127)

4 Video Input over IP

NDI High Bandwidth setting button [NDI High Bandwidth]

Click the button to display the NDI High Bandwidth settings screen.
⇒ "NDI High Bandwidth" (page 130)

SRT setting button [SRT]

Click the button to display the SRT settings screen.
⇒ "SRT" (page 131)

5 Access Management

Web authentication setting button [User Authentication]

Click the button to display the User Authentication settings screen.
⇒ "User Authentication" (page 133)

6 RP200 Network

Network setting button [Network]

Click the button to display the Network settings screen.
⇒ "Network" (page 133)

7 Maintenance

System Log button [System Log]

Click the button to display the System Log settings screen.
⇒ "System Log" (page 136)

Reset settings/restart unit button [Reset/Reboot]

Click the button to display the Reset/Reboot settings screen.
⇒ "Reset/Reboot" (page 137)

Product Information button [Product Information]

Click the button to display the Product Information settings screen.
⇒ "Product Information" (page 138)

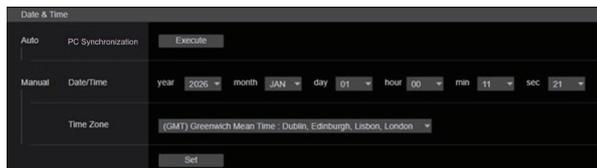
File backup button [RP Backup]

Click the button to display the RP Backup settings screen.
⇒ "RP Backup" (page 139)

System

■ Clock settings screen [Date&Time]

Set the clock.
Two methods are available to make the setting; [Auto] and [Manual].



● Auto PC Synchronization

When you press the [Execute] button, this unit synchronizes with the date and time information on the connected computer.

NOTE

- The time zone of the computer is not reflected on this unit. Set the time zone on this unit.

● Manual Date/Time

Set the "Month", "Day", "Year", "Hours", "Minutes", and "Seconds".

NOTE

- This is a 24-hour display clock.

Time Zone

Select the timezone according to the region where the camera is to be used.

Factory default settings:

(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

NOTE

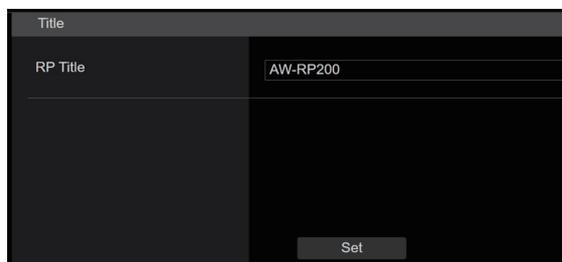
- The date and time you set are applied after you turn off the power and restart it.
- The clock settings of this unit are maintained only while the unit is on. Once the power is turned off, the date and time start from the point when the power was last turned off, so set again as required.

■ Title edit screen [Title]

Enter a title for this unit.
When you press the [Set] button, the title you entered is displayed in the RP title display section.

- The factory default setting is the model number of this unit.
- Enter between 0 and 20 characters.
- The available characters are as follows:

Numbers	123456789
Alphabet (uppercase/lowercase)	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz
Symbols	!#\$%&'()*+,-./:;<=>?@[^_`{ }~\



Connect Setting

■ Camera Assignment

Make settings related to camera connection and registration to this unit.

When cameras are unregistered (or after pressing [All Clear])

Up to 200 cameras can be displayed (C001 to C200) by scrolling down.

CAM No.	Control Type	IPv4 Address	Port	Model	Title	Type
C001	No Assign					
C002	No Assign					
C003	No Assign					
C004	No Assign					
C005	No Assign					
C006	No Assign					
C007	No Assign					
C008	No Assign					
C009	No Assign					
C010	No Assign					
C011	No Assign					
C012	No Assign					
C013	No Assign					
C014	No Assign					
C015	No Assign					
C016	No Assign					
C017	No Assign					
C018	No Assign					
C019	No Assign					
C020	No Assign					
C021	No Assign					
C022	No Assign					

There are 3 ways of making connection settings to this unit from the web menus according to the application.

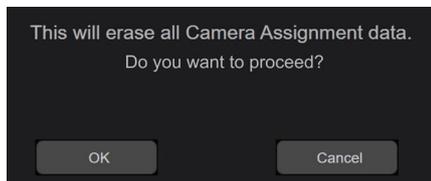
- (1) Configuration for small-scale operations (manual setting)
- (2) Configuration for large-scale operations (setting with cameras already on the network)
- (3) Configuration for large-scale operations (setting with this unit alone such as prior to beginning operations)

(1) Configuration for small-scale operations (manual setting)

Manual camera connection settings can be made easily with the following settings in screen "A" for each camera number [CAM No.].

- **Control Type:**
Select [LAN], [Serial], or [No Assign] from the pull-down menu for the connection type between the unit and the camera.
- **IPv4 Address:**
You can directly enter the address.
- **Port:**
You can directly enter the Port number.

When you execute [Save] after entering the information, a confirmation dialog is displayed. If the settings are all correct, select [OK]. You can also clear all connections settings with the camera by executing [All Clear]. A pop-up window such as the following is displayed when you execute [All Clear]. Select [OK] if it is okay to delete all the connection information.



NOTE

- Refer to "Setting the connection type (serial/IP/no connection) to the remote cameras" (page 41) for information about [Control Type].
- Refer to "Manually setting the connection destination IP addresses (remote cameras) and port numbers" (page 46) for information about [IPv4 address] and [Port].
- Setting [Control Type] to [LAN] and manually entering the values for [IPv4 Address] and [Port] alone will not cause the [Model] and [Title] information, etc., to be displayed. By executing [Save], the information is searched for on the network, and then the information is displayed.
- If a mistake was made with the settings, refresh the browser before [Save] and the screen returns to the initial condition when you first opened the web screen. Make the settings again.

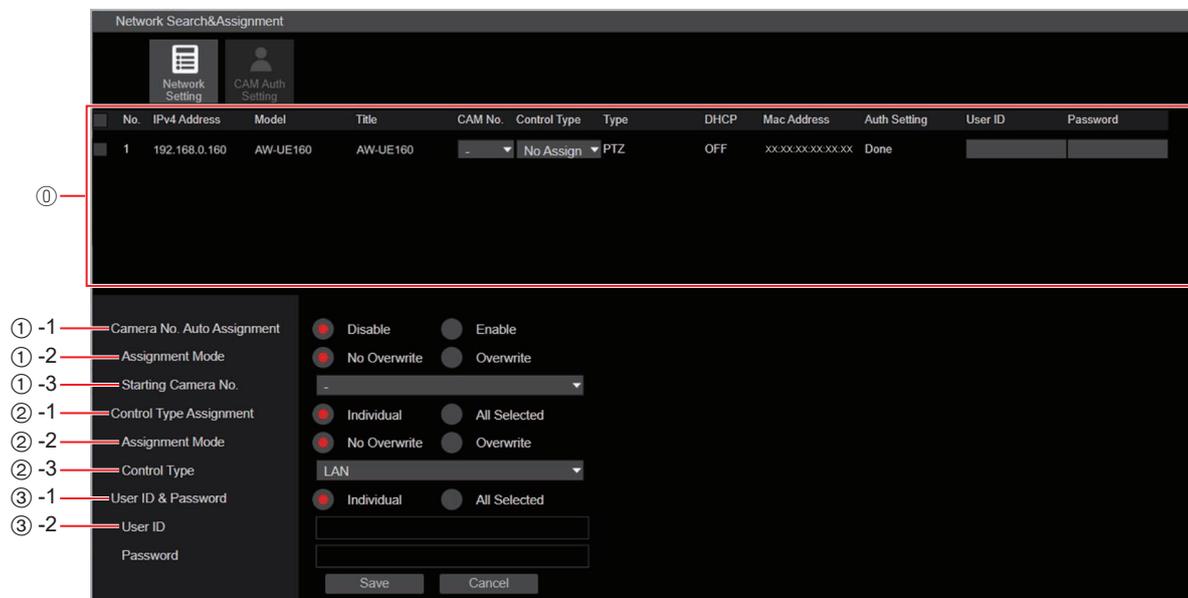
(2) Configuration for large-scale operations (setting with cameras already on the network)

When this unit and the cameras are already connected on a network, you can use the network search function to easily set connections for the cameras in a batch.

Firstly, select [NW Search & Assign] in screen "A", search for the devices on the network, and then use that information to complete the connection settings for the cameras.

NW Search & Assign

A pop up dialog displays the cameras and remote camera controllers on the same network as this unit when you press the [NW Search & Assign] button. (The part indicated with ①)



NOTE

- [CAM No.]/[Control Type]/[User ID]/[Password] can be set manually in the part marked ①. When you enter directly and click [Save], the settings on the network for the camera connecting to this unit can be registered.

● Batch setting procedure

The various registration settings are made to the unit for cameras displayed in the part marked ①.

Cameras that have check marks (✓) in the box (☐) on the left will be set.

The following items are displayed in real time:

① -1 Camera No. Auto Assignment

Disable:

Camera number auto assignment is not performed.

Enable:

Camera numbers are assigned to target cameras (according to ① -2 [Assignment Mode]) in order starting from the No. specified in ① -3 [Starting Camera No.].

① -2 Assignment Mode

No Overwrite:

CAM numbers that are already registered are left as they are and others are automatically assigned in order from ① -3 [Starting Camera No.].

Overwrite:

CAM numbers that are already registered are overwritten and assigned automatically along with others in order from ① -3 [Starting Camera No.].

① -3 Starting Camera No.

Specify the starting No. when camera numbers are to be automatically assigned.

② -1 Control Type Assignment

Individual:

Specify the connection type individually for each camera. Enter directly in the part indicated with ①.

All Selected:

Target cameras (according to ② -2 [Assignment Mode]) are batch processed according to the method specified in ② -3 [Control Type].

② -2 Assignment Mode

No Overwrite:

Already registered connection types are left as they are, and others are set according to the method specified in ② -3 [Control Type].

Overwrite:

Already registered connection types are overwritten and set along with others according to the method specified in ② -3 [Control Type].

② -3 Control Type

LAN:

The connection type for the target camera is made [LAN].

Serial:

The connection type for the target camera is made [Serial].

③ -1 User ID & Password

Individual:

Specify the User ID and Password individually for each camera. Enter directly in the part indicated with ①.

All Selected:

User ID and Password that were specified in ③ -2 [User ID] and [Password] are set in a batch.

③ -2 User ID:

User ID of the target camera

Password:

Password of the target camera

The above items are saved when [Save] is executed.

Example of the batch setting procedure

Example 1: Batch setting of 4 cameras starting from C002 in the [No Overwrite] mode in screen ①

1. Add checks to the 4 cameras at the top.

No.	IPv4 Address	Model	Title	CAM No.	Control Type	Type	DHCP	Mac Address	Auth Setting	User ID	Password
✓ 1	192.168.0.10	AW-UE150A	01-CENTER	C001	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 2	192.168.0.11	AW-UE160	04-UP	-	No Assign	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 3	192.168.0.12	AW-UE160	02-LEFT	-	No Assign	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 4	192.168.0.14	AW-UE160	05-RIGHT	C004	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
5	192.168.0.15	AW-UE150	03-DOWN	C003	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		

2. With ① -1 [Camera No. Auto Assignment] kept at [Disable], make the [Assignment Mode] for ① -2 and ② -2 both [No Overwrite], and set ② -1 and ③ -1 to [All Selected] for batch setting.

3. Set ① -3 [Starting Camera No.] to [C002], ② -3 [Control Type] to [LAN], and set the [User ID] and [Password] for ③ -2.

4. Finally, when you set ① -1 [Camera No. Auto Assignment] to [Enable], it results in the following (changes are indicated in yellow). The set content is saved to this unit when you press [Save].

(Already registered camera numbers (C001, C003, and C004) are overwrite protected, so the camera where [Title] is 02-LEFT becomes C005)

No.	IPv4 Address	Model	Title	CAM No.	Control Type	Type	DHCP	Mac Address	Auth Setting	User ID	Password
✓ 1	192.168.0.10	AW-UE150A	01-CENTER	C001	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 2	192.168.0.11	AW-UE160	04-UP	C002	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 3	192.168.0.12	AW-UE160	02-LEFT	C005	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 4	192.168.0.14	AW-UE160	05-RIGHT	C004	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
5	192.168.0.15	AW-UE150	03-DOWN	C003	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		

Example 2: Batch setting of 4 cameras starting from C002 in the [Overwrite] mode in screen ①

1. Add checks to the 4 cameras at the top.

No.	IPv4 Address	Model	Title	CAM No.	Control Type	Type	DHCP	Mac Address	Auth Setting	User ID	Password
✓ 1	192.168.0.10	AW-UE150A	01-CENTER	C001	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 2	192.168.0.11	AW-UE160	04-UP	-	No Assign	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 3	192.168.0.12	AW-UE160	02-LEFT	-	No Assign	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 4	192.168.0.14	AW-UE160	05-RIGHT	C004	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
5	192.168.0.15	AW-UE150	03-DOWN	C003	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		

2. With ① -1 [Camera No. Auto Assignment] kept at [Disable], make the [Assignment Mode] for ① -2 and ② -2 both [Overwrite], and set ② -1 and ③ -1 to [All Selected] for batch setting.

① -1 Camera No. Auto Assignment: Disable Enable

① -2 Assignment Mode: No Overwrite Overwrite

Starting Camera No.: -

② -1 Control Type Assignment: Individual All Selected

② -2 Assignment Mode: No Overwrite Overwrite

Control Type: LAN

③ -1 User ID & Password: Individual All Selected

User ID:

Password:

Save Cancel

3. Set ① -3 [Starting Camera No.] to [C002], ② -3 [Control Type] to [LAN], and set the [User ID] and [Password] for ③ -2.

Camera No. Auto Assignment: Disable Enable

Assignment Mode: No Overwrite Overwrite

① -3 Starting Camera No.: C002

Control Type Assignment: Individual All Selected

Assignment Mode: No Overwrite Overwrite

② -3 Control Type: LAN

User ID & Password: Individual All Selected

③ -2 User ID: admin

Password: *****

Save Cancel

4. Finally, when you set ① -1 [Camera No. Auto Assignment] to [Enable], it results in the following (changes are indicated in yellow). The set content is saved to this unit when you press [Save].

(C003 was originally the camera with the [Title] 03-DOWN, but the overwrite setting changed its title to 04-UP. The result of this is that camera 03-DOWN is changed to [No Assign].)

No.	IPv4 Address	Model	Title	CAM No.	Control Type	Type	DHCP	Mac Address	Auth Setting	User ID	Password
✓ 1	192.168.0.10	AW-UE150A	01-CENTER	C002	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 2	192.168.0.11	AW-UE160	04-UP	C003	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 3	192.168.0.12	AW-UE160	02-LEFT	C004	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
✓ 4	192.168.0.14	AW-UE160	05-RIGHT	C005	LAN	PTZ	OFF	xxxxxxxxxxxx	Done		
5	192.168.0.15	AW-UE150	03-DOWN	-	No Assign	PTZ	OFF	xxxxxxxxxxxx	Done		

NOTE

- If a mistake was made with the settings, press [Cancel] before [Save] and the settings will not be updated and you will return to the previous screen. Make the changes again if necessary.

When registering a camera on this unit, it is also possible to make the network settings for the camera if necessary. When making the network settings for the camera, you first need to make the [Auth Setting] for the camera.

CAM Auth Setting

If you want to make the [Auth Setting] for the camera, in screen ⑩, put a check mark next to the ones where [Auth Setting] is [None], then press the [CAM Auth Setting] button.

The following pop-up dialog is displayed, so enter the [User Name] and [Password].

Settings are updated by executing [Save].

Network Setting

If you want to change the network settings for cameras, in screen ⑩, put a check mark next to the relevant cameras and press the [Network Setting] button.

The following pop-up dialog is displayed, so enter the various settings such as the IPv4 address and subnet.

Settings are updated by executing [Save].

NOTE

- If [Auth Setting] is [None], [Network Setting] cannot be set. Make sure you do the settings for account information in [CAM Auth Setting].

(3) Configuration for large-scale operations (setting with this unit alone such as prior to beginning operations)

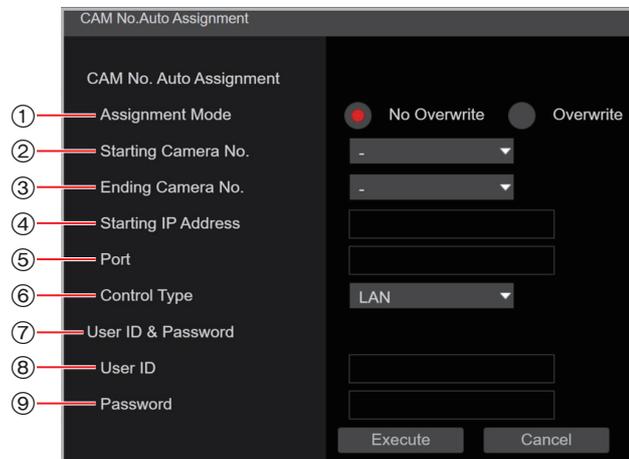
It is also possible to perform a batch operation to make the connection settings for the cameras solely with this unit as a preparatory step before actual operations when you are doing the setup procedures before operations begin.

Firstly, select [CAM No. Auto Assign] in screen "A" and make the connection settings for the camera.

CAM No. Auto Assign

Performs the connection procedures (links the camera numbers and IP addresses) all at once, even for cameras that are not yet connected on the network.

A pop-up window is displayed when you press the [CAM No. Auto Assign] button.



① Assignment Mode

No Overwrite:

The IP addresses for camera numbers that are already set are avoided and camera numbers are set in a series.

Overwrite:

Even the IP addresses for camera numbers that are already registered are overwritten and camera numbers are set in a series.

② Starting Camera No. ③ Ending Camera No.

Camera numbers are set from ② to ③.

* If [No Overwrite] is set in [Assignment Mode], settings are made so that camera numbers that have already been set are skipped.

④ Starting IP Address

IP addresses are set in ascending order starting with the IP address specified here.

* If [No Overwrite] is set in [Assignment Mode], settings are made so that IP addresses that have already been set are skipped.

⑤ Port

Enter the port number to be set.

⑥ Control Type

LAN:

The connection type for the target camera is made [LAN].

Serial:

The connection type for the target camera is made [Serial].

⑦ User ID & Password

Set the ⑧ [User ID] and ⑨ [Password] for the cameras.

* It is anticipated that all of the cameras ② through ③ will have the same User ID and Password.

The connection settings are made by executing [Execute].

NOTE

- If the IP address set in this unit is duplicated due to the relationship between [Starting IP Address], [Starting Camera No.], and [Ending Camera No.], that IP address is avoided when setting the numbers in a series.
- Continuous series of IP address numbers are only possible within the fourth octet. (For example: If you made the [Starting IP Address] 192.168.0.253, then the maximum continuous number of cameras you can set is 3 (192.168.0.255).)

Example of the batch setting procedure

In a case where screen "A" is in a condition such as the following:

Camera Assignment										
CAM No.	Control Type	IPv4 Address	Port	Model	Title	Type	DHCP	Mac Address	Auth Setting	
C001	LAN	192.168.0.10	80	AW-UE150A	01-CENTER	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C002	LAN	192.168.0.11	80	AW-UE160	04-UP	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C003	LAN	192.168.0.15	80	AW-UE150	03-DOWN	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C004	LAN	192.168.0.14	80	AW-UE160	05-RIGHT	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C005	LAN	192.168.0.12	80	AW-UE160	02-LEFT	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C006	No Assign									
C007	No Assign									
C008	No Assign									
C009	No Assign									
C010	No Assign									

Example 1: Batch setting of cameras C001 to C010 in the [No Overwrite] mode

1. Set [Assignment Mode] to [No Overwrite], [Starting Camera No.] to C001, [Ending Camera No.] to C010, and [Starting IP Address] to 192.168.0.10 (refer below for other settings)

CAM No. Auto Assignment

CAM No. Auto Assignment

Assignment Mode No Overwrite Overwrite

Starting Camera No.

Ending Camera No.

Starting IP Address

Port

Control Type

User ID & Password

User ID

Password

2. The "A" screen results in the following when you execute [Execute] and the set content is saved to this unit. (Changes are indicated in yellow)
(C001 to C005 have already been registered, so numbering starts from C006. The IP addresses used for C001 to C005 are avoided when making the settings.)

Camera Assignment										
CAM No.	Control Type	IPv4 Address	Port	Model	Title	Type	DHCP	Mac Address	Auth Setting	
C001	LAN	192.168.0.10	80	AW-UE150A	01-CENTER	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C002	LAN	192.168.0.11	80	AW-UE160	04-UP	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C003	LAN	192.168.0.15	80	AW-UE150	03-DOWN	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C004	LAN	192.168.0.14	80	AW-UE160	05-RIGHT	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C005	LAN	192.168.0.12	80	AW-UE160	02-LEFT	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C006	LAN	192.168.0.13	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C007	LAN	192.168.0.16	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C008	LAN	192.168.0.17	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C009	LAN	192.168.0.18	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	
C010	LAN	192.168.0.19	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done	

Setting from the web screen (continued)

Example 2: Batch setting of cameras C002 to C010 in the [Overwrite] mode

1. Set [Assignment Mode] to [Overwrite], [Starting Camera No.] to [C002], [Ending Camera No.] to [C010], and [Starting IP Address] to 192.168.0.10 (refer below for other settings)

CAM No. Auto Assignment

CAM No. Auto Assignment

Assignment Mode: No Overwrite Overwrite

Starting Camera No.: C002

Ending Camera No.: C010

Starting IP Address: 192.168.0.10

Port: 80

Control Type: LAN

User ID & Password

User ID: admin

Password: *****

Execute Cancel

2. The "A" screen results in the following when you execute [Execute] and the set content is saved to this unit. (Changes are indicated in yellow)
(IP addresses and camera numbers are set in order starting from C002. C001 was already registered, but 192.168.0.10 was overwritten by C002, so it becomes [No Assign].)

CAM No.	Control Type	IPv4 Address	Port	Model	Title	Type	DHCP	Mac Address	Auth Setting
C001	No Assign								
C002	LAN	192.168.0.10	80	AW-UE150A	01-CENTER	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C003	LAN	192.168.0.11	80	AW-UE160	04-UP	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C004	LAN	192.168.0.12	80	AW-UE160	02-LEFT	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C005	LAN	192.168.0.13	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C006	LAN	192.168.0.14	80	AW-UE160	05-RIGHT	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C007	LAN	192.168.0.15	80	AW-UE150	03-DOWN	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C008	LAN	192.168.0.16	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C009	LAN	192.168.0.17	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done
C010	LAN	192.168.0.18	80	AW-UE160	AW-UE160	PTZ	OFF	XX:XX:XX:XX:XX:XX	Done

Macro

■ Macro Edit

You can edit the macros that are executed on this unit.

Refer to "Macro functionality" (page 33) for an overview of the macro function.

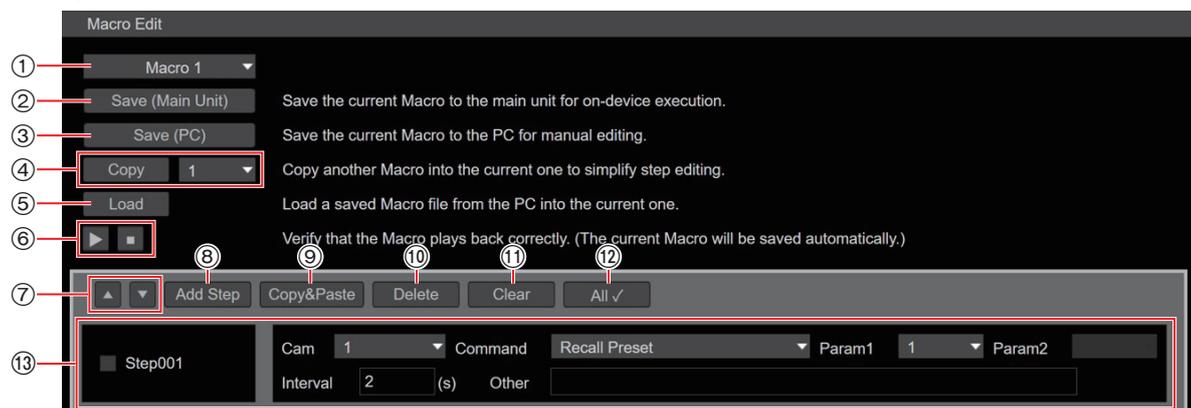
There are the following 2 ways of editing macros:

- (1) Edit with the [Macro Edit] web page of this unit.
- (2) User edits the file themselves.

The following describes method (1). For method (2), refer to the "RP200 Macro Specification" available on our website below:

<https://www.pass.panasonic.co.jp/pro-av/support/content/guide/EN/top.html>

● UI specifications



Setting related items

- ① **Macro number**
Select the macro number to configure from the pull-down menu.
The data from the unit is loaded when the number is changed.
* If the macro from before the macro number change has not been saved after editing, a pop-up dialog appears asking if it is alright to discard it.
- ② **Save (Main Unit)**
Saves the macro being configured to the relevant macro number on the unit. The macro cannot be executed from the unit if this procedure is not performed.
* A warning appears if there is a Step where required items have not been entered.
- ③ **Save (PC)**
Saves the macro being configured to the download folder of the computer. Use this when you want to edit the file directly yourself.
* A warning appears if there is a Step where required items have not been entered.
- ④ **Copy**
Select the macro number you want to copy with [Copy], then copy it to the macro number (①) currently being edited.
If the macro is already being edited, a pop-up dialog appears asking if it is alright to discard it.
- ⑤ **Load**
Loads the macro file from the computer to the macro number (①) currently being edited. (Files to be loaded are those saved either with this unit or another of these units in ③ above.)
- ⑥ **▶ (Macro playback), ■ (Macro stop)**
Plays back or stops the displayed macro. (To confirm macro behavior)
The macro being edited is automatically saved to this unit by playing back the macro.
- ⑦ **▲ (Up), ▼ (Down)**
Steps marked with "✓" are moved up or down.
You can move a group of consecutive steps.
- ⑧ **Add Step**
A new step is added above the step marked with "✓".
* If multiple steps are marked with check marks, the step is added above the topmost step.
If no steps are marked with "✓", the step is added to the very bottom.
* An error is displayed if the maximum number of steps has already been reached. (If the bottom step has no entries, this step is deleted and the new step is added to the specified location.)

Setting from the web screen (continued)

⑨ Copy & Paste

Steps marked with “✓” are copied and pasted to the next Step number.

You can also copy a continuous group of steps marked with “✓”, and they are pasted below the last step marked with a check mark.

* An error is displayed if the maximum number of steps will be exceeded after pasting.

⑩ Delete

All steps marked with “✓” are deleted and the Step numbers close up.

⑪ Clear

All the [Cam], [Command], [Param1], [Param2], [Interval], and [Other] in steps marked with “✓” are deleted.

⑫ All ✓

A check mark is added to all steps.

If even one step is marked with “✓”, all check marks are removed.

⑬ Step and sequence related items

● Cam

1 to 200:

Correspond to the camera numbers set in this unit.

SELECTED:

Transmitted to the camera selected when executed rather than to a fixed camera number.

● Command

Select with a pull-down menu. Refer to “Supported commands” for available options.

● Param

Select with a pull-down menu. Refer to “Supported commands” for available options.

Input is not available if the selected [Command] does not require parameters.

● Interval

Enter in seconds the amount of time to wait until the next step starts after sending a command.

The setting range is an integer between 0 and 36000 seconds

* Set to a value other than 0 when creating Steps continuously for the same camera (commands sent continuously).

● Other

User directly enters the command to send. (This is enabled only when [Other Commands] is selected in [Command].)

Enter the content to be sent, including the parameters, as is.

Refer to “RP200 Macro Specification” for details.

Supported commands

Command	[Param1] display value	[Param2] display value	Remarks
AWB	–	–	
Pan Speed Control	LEFT, STOP, RIGHT	1 to 49 (0 when STOP)	
Tilt Speed Control	UP, STOP, DOWN	1 to 49 (0 when STOP)	
Zoom Speed Control	TELE, STOP, WIDE	1 to 49 (0 when STOP)	
Recall Preset	1 to 100	–	
Preset Speed	1 to 30	–	
Preset Time	1s to 99s	–	
Preset Speed Table	SLOW, FAST	–	
Wait User Trigger	–	–	Use when you want to confirm on the main LCD whether to execute the next step or skip.
Recall Macro	1 to 100	–	Used when recalling other macros from within a macro, including itself (Only one macro can be recalled from within one macro)
Other Commands			

● How to use

1. The following are executed in step ⑬.

- Select the camera number to which to send the command
- Select the command you want to use
- Select the appropriate parameters for the command
- Set the interval to wait until the next step

If you only want to put together a sequence of commands without specifying a camera number at this time, select [SELECTED] in [Cam].

In this case, the series of sequences set in the macro are executed on the camera currently selected with the multi select switches, etc. Macros can also be assigned to user buttons, so this can be used to extend the functionality of the user buttons.

Refer to “Customizing operations of the unit” (page 34) for how to assign to user buttons.

Furthermore, when the order of the command transmissions are determined but the timing is not, you can determine the timing for sending the commands on the main LCD.

In this case, select [Wait User Trigger] in [Command]. Pop-up dialogs such as the following appear on the main LCD while you are executing the macros. You can choose when to send the commands whenever you want.



2. When the macro is finished, use [Save (Main Unit)] (②) to save to the main unit. This makes it possible to control the macro from the main unit.

Refer to “Macro functionality” (page 33) for how to execute macros. You can also preview the macro with ⑥.

Video Input over IP

■ NDI High Bandwidth

Make settings for NDI image reception.

● Status Information

Displays the following statuses for NDI image reception.

Status Information	
Source	
Device Name	
Source Name	
Stream	
Format	No Signal
Sampling Rate	0
Audio Channel	0
Frame Data	-
Status	Not Detect
Settings	
Protocol	RUDP
Group	Disable
Group Name	
Use Discovery Server	Disable
Discovery Server IP	

● Source

Device Name:

Displays the name of the input signal device.

Source Name:

Displays the name of the input signal source.

● Stream

Format	Displays the image format information for the NDI signal being input.
Sampling Rate	Displays the sampling rate information for the NDI signal being input.
Audio Channel	Displays the surround information for the NDI signal being input.
Frame Data	Displays the color information for the NDI signal being input.
Status	<p>Detect: An input signal format suited to the system format of this unit.</p> <p>Unsupported: An input signal format not suited to the system format of this unit.</p> <p>Not Detect: There is no video signal being input to the unit.</p>

- Refer to the following "Source Select Settings" for information about [Settings].

● Source Select

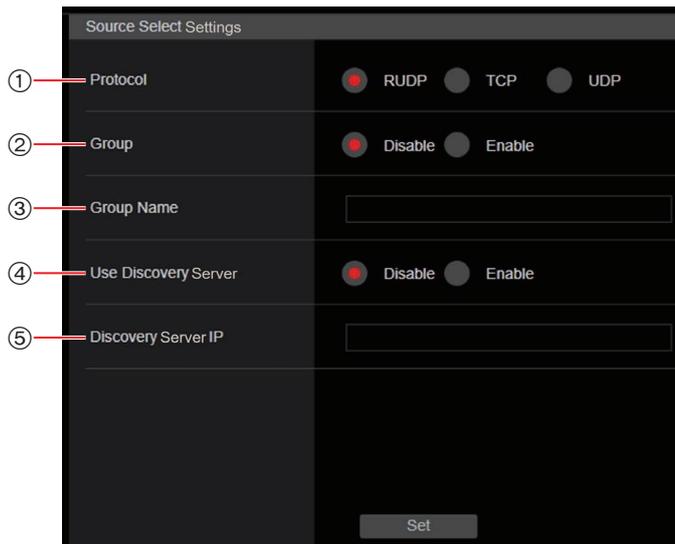
A list of sources is displayed when you execute [Scan]. Select the [Select] of the source you want to receive.

Source Select		
 Scan		
Device Name	IP Address	Status
none		Select
AV-HSW10 (NDI Device 1)	192.168.0.210:5961	Select

NOTE

- Refer to "Image input and output on this unit and functions that use them" (page 66) for other settings on this unit related to receiving images.

● Source Select Settings



① Protocol

Sets the NDI reception protocol.

- **RUDP:**
Sets RUDP as the protocol to use with the NDI transmitter.
- **TCP:**
Sets TCP as the protocol to use with the NDI transmitter.
- **UDP:**
Sets UDP as the protocol to use with the NDI transmitter.

② Group

By setting NDI senders and receivers in groups to which each belongs, you can specify the group to be searched when performing machine searches.

It is possible to specify multiple groups, separating them with commas.

- **Enable:**
Enables the group search function.
- **Disable:**
Disables the group search function.

③ Group Name

Enter a group name.

④ Use Discovery Server

It is possible to set the function for automatically searching for NDI sources to centrally register with an external server. Enabling this setting is effective when there is a large amount of NDI sources on the network and it is desirable to avoid an increase in traffic, or when multicast transmission is not possible or undesirable.

- **Enable:**
Enables external server settings.
- **Disable:**
Disables external server settings.

⑤ Discovery Server IP

Enter the IP address for the external server settings.

■ SRT

Make settings for SRT image reception.

● Status Information

Displays the following statuses for SRT image reception.

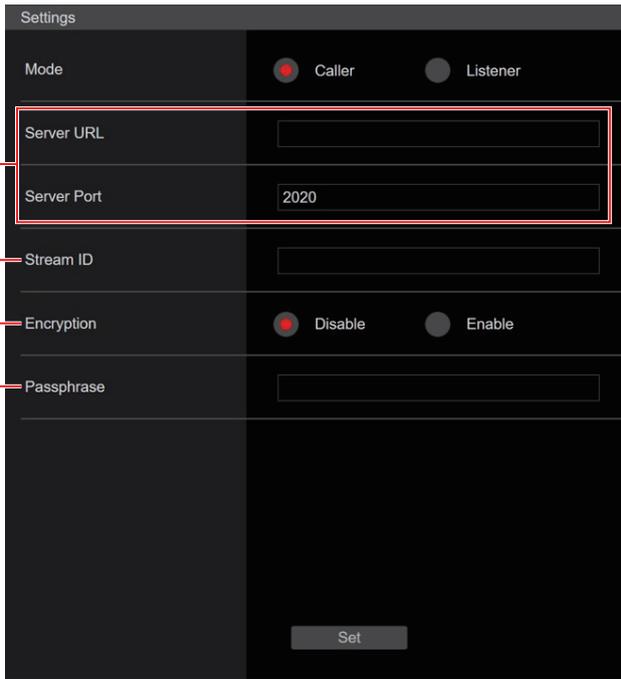
Status Information	
Stream	
Format	No Signal
Sampling Rate	0
Audio Channel	0
Codec	-
Level	-
Status	Not Detect
Settings	
Mode	Caller
Server URL	
Server Port	2020
Stream ID	
Encryption	Disable

● Stream

Format	Displays the image format information for the SRT signal being input.
Sampling Rate	Displays the sampling rate information for the SRT signal being input.
Audio Channel	Displays the surround information for the SRT signal being input.
Codec	Displays the compression format information for the SRT signal being input.
Level	Displays the levels that indicate the H.264/H.265 resolution and the upper limit of the frame rate.
Status	<p>Detect: An input signal format suited to the system format of this unit.</p> <p>Unsupported: An input signal format not suited to the system format of this unit.</p> <p>Not Detect: There is no video signal being input to the unit.</p>

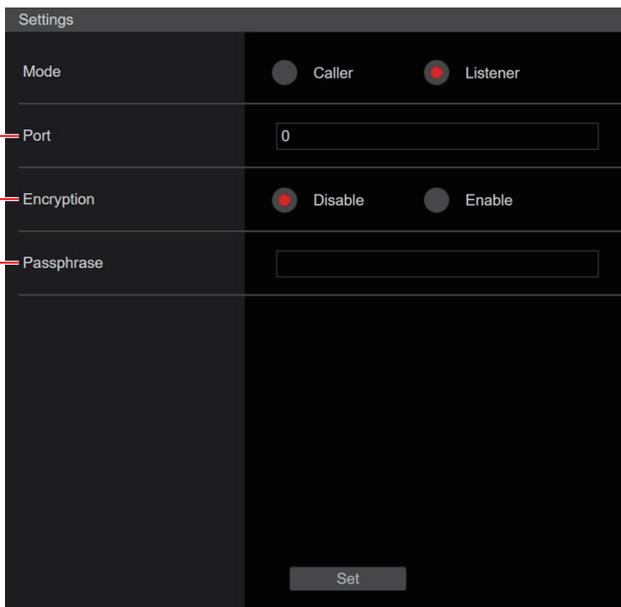
- Refer to the following "Settings" for information about [Settings].

● Settings



● When mode is [Caller]

- ① **Server URL, Server Port**
Sets the server URL and port number of the transmission source.
- ② **Stream ID**
Sets the Stream ID.
- ③ **Encryption**
Sets the encryption method for received images.
 - **Disable:**
Received images are not decoded. Unencrypted images can be handled.
 - **Enable:**
Received images are decoded.
- ④ **Passphrase**
Sets the phrase for decoding the received video.



● When mode is [Listener]

- ① **Port**
Sets the standby port on this unit.
- ② **Encryption**
Sets the encryption method for received images.
 - **Disable:**
Received images are not decoded. Unencrypted images can be handled.
 - **Enable:**
Received images are decoded.
- ③ **Passphrase**
Sets the phrase for decoding the received video.

NOTE

- Refer to "Image input and output on this unit and functions that use them" (page 66) for other settings on this unit related to receiving images.

Access Management

User Authentication

Make the authentication settings to restrict the users that can access the unit from a computer.

Change User

① User Name

② Password

Retype Password

Access Level: Administrator

Set

Note

- User name can be set from 1 to 32 characters.
- Password can be set from 4 to 32 characters. (8 or more characters recommended)
- Distinguish between upper and lower cases.
- For the password, it is recommend to use three or more types of characters from the following.
 - upper case alphabetic
 - lower case alphabetic
 - numbers
 - Symbols (! \$ % ' () * + , - . / ? @ [] ^ _ ` { | } ; : #)
- Set the password which does not include the user name.
- It is recommended to change the password periodically.

① User Name

(1 to 32 characters)

Enter a user name.

Confirm the settings with the [Set] button.

- The available characters are as follows:

Numbers	123456789
Alphabet (uppercase/lowercase)	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz
Symbols	!\$%'()*+,-./?@[^`~_={} ;:##

② Password

Retype Password

(4 to 32 characters)

Enter the password

Confirm the settings with the [Set] button.

RP200 Network

Network

Make network settings for this unit.

Setting Status

See information about the network settings (IPv4) enabled on the unit.

Setting Status	
LAN	
IPv4	
IP Address(IPv4)	192.168.0.9
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1

● LAN

Make network settings (IPv4) for this unit.

The screenshot shows a web interface for LAN IPv4 Network configuration. At the top, there's a title 'LAN' and a sub-title 'IPv4 Network'. Below this, there's a 'DHCP' section with two radio buttons: 'On' (unselected) and 'Off' (selected). Underneath, there are three input fields: 'IP Address(IPv4)' with the value '192.168.0.9', 'Subnet Mask' with '255.255.255.0', and 'Default Gateway' with '192.168.0.1'. At the bottom center, there is a 'Set' button.

The following information is required to make the network settings. Check with the network administrator or internet service provider.

- IP address
- Subnet mask
- Default gateway (when using a gateway server/router)
- HTTP port

IPv4 Network

DHCP [On, Off]

Select the method for setting the IP address.

Factory default setting: Off

IP Address(IPv4)

When not using the DHCP function, enter the unit's IP address. Enter so that the address does not duplicate the IP addresses of the personal computer or other network cameras.

Factory default setting: 192.168.0.9

NOTE

- Even when using the DHCP function, it is not possible to use multiple IP addresses. Consult the network administrator regarding the settings for the DHCP server.

Subnet Mask

When not using the DHCP function, enter the unit's subnet mask.

Factory default setting: 255.255.255.0

Default Gateway

When not using the DHCP function, enter the unit's default gateway.

Factory default setting: 192.168.0.1

NOTE

- Even when using the DHCP function, it is not possible to use multiple IP addresses with the default gateway. Consult the network administrator regarding the settings for the DHCP server.

● Common

Make network settings (settings related to HTTP Port and Easy IP) for this unit.

Common

Common

HTTP Port (1-65535)

Easy IP Setup Accommodate Period 20min Unlimited

Set

HTTP Port [1 - 65535]

Allocate the port numbers individually.

The following port numbers cannot be set because they are used by this unit:

20, 21, 23, 25, 42, 53, 67, 68, 69, 110, 123, 161, 162, 443, 546, 547, 554, 995, 5960 to 5985, 7960 to 8060, 10669, 10670, 11900, 59000 to 61000

Factory default setting: 80

Easy IP Setup Accommodate Period

[20min, Unlimited]

Sets the time allowed for network setting operations from the EasyIP function in Panasonic's integrated software package (Media Production Suite). You can set either [20min] from the time this unit is started or [Unlimited].

20min	Enables setting operations on the "EasyIP Setup Tool Plus" function in the "Media Production Suite" for just 20 minutes after start up of this unit.
Unlimited	Enables setting operations on the "EasyIP Setup Tool Plus" function in the "Media Production Suite" at any time.

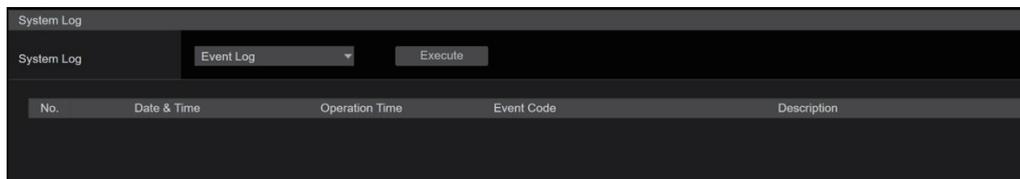
Factory default setting: 20min

Maintenance

■ System Log

The internal memory of this unit can save a maximum of 1000 event logs and 100 error logs.

When the maximum number of logs that can be saved is reached, the logs are overwritten, starting from the oldest. Logs are saved even if the unit is turned off.



Event log

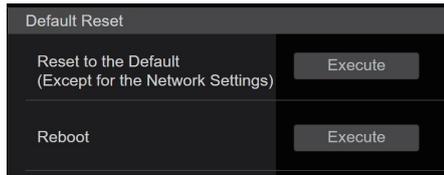
Event code	Description in the web display	Meaning
W0001	<Power> System start.	Displayed when this unit has started to start up.
W0005	<Power> PoE++ (Hardware) is working.	Displayed when the hardware PoE++ power supply is confirmed.
W0006	<Power> PoE++ (Software) is working.	Displayed when the software authentication for PoE++ power supply is complete.
W0007	<Power> PoE+ (Hardware) is working.	Displayed when the hardware PoE+ power supply is confirmed.
W0008	<Power> PoE+ (Software) is working.	Displayed when the software authentication for PoE+ power supply is complete.
W0100	<System> Reached the processing limit. [CPU No]	Displayed when the upper limit of CPU usage rate has been reached.
W1003	<Maintenance> Succeeded OSD Menu initialization.	Displayed when initializing of the menu was successful.
W1005	<Maintenance> Succeeded firmware update.	Displayed when updating of the firmware was successful.
W1006	<Maintenance> Backup firmware is working.	Displayed when updating of the firmware failed.
W1008	<Maintenance> Reboot.	Displayed when restarted.
W1009	<Maintenance> Succeeded configuration data upload.	Displayed when uploading of configuration data was successful.
W1203	<Date&time> Date&time exchanged.	Displayed when the date and time are set.
W1300	<Stream> NDI Start. [IP address]	Displayed when NDI reception is started.
W1301	<Stream> NDI Stop. [IP address]	Displayed when NDI reception is stopped.
W1302	<Stream> SRT Start. [IP address]	Displayed when SRT reception is started.
W1303	<Stream> SRT Stop. [IP address]	Displayed when SRT reception is stopped.

Error log

Error code	Description in the web display	Meaning
0x01	System crash(EVM)	Detected an error end to the process.
0x02	System crash(OPM)	Detected an error end to the process.
0x03	System crash(RSC)	Detected an error end to the process.
0x04	System crash(CGW)	Detected an error end to the process.
0x05	System crash(STM)	Detected an error end to the process.
0x06	System crash(VDC)	Detected an error end to the process.
0x07	System crash(SYS)	Detected an error end to the process.
0x08	System crash(MCR)	Detected an error end to the process.
0x09	System crash(Other)	Detected an error end to the process.
0x20	PoE++ Software auth. Error	Software authentication for PoE++ could not be completed.
0x25	Fan error	The fan may have failed.
0x26	High Temp	The temperature of the unit is high.
0x27	Low Temp	The unit may be frozen due to low temperatures.
0x30	Update Firmware Error	There may be a problem with the update file.
0x36	Video clock error at 148.35 MHz.	There may be a problem with the 59.94 Hz video clock.
0x37	Video clock error at 148.50 MHz.	There may be a problem with the 50 Hz video clock.

■ Reset/Reboot

This initializes the setting content of the unit and reboots it.



Reset to the Default (Except for the Network Settings)

Click the [Execute] button to return the setting content in this unit to the initial settings. When you perform the initialization procedure, the unit reboots, so you will be unable to operate it for approximately 1 minute.

NOTE

- Network-related setting items are not initialized.

Reboot

The unit restarts when you click the [Execute] button. After rebooting, as with when the unit is turned on, you will be unable to operate it for approximately 1 minute.

■ Product Information

You can view the version of the software for the unit. Information about the unit, such as the [Model No.], [MAC Address], [Serial No.], and [Firmware Version], is displayed.

Product Information	
Model No.	AW-RP200
MAC Address	00-80-45-2F-3C-58
Serial No.	
Firmware Version	V01.00-000-1
Activation	NDI <small>* This product is compatible with NDI technology of Vizrt NDI AB.</small>
Operation Time	711h
OSS license display	<input type="button" value="View"/>
Firmware File	<input type="text"/> <input type="button" value="Select"/>
<input type="button" value="Execute"/>	

Model No.

The model number of this unit is displayed.

MAC Address

The MAC address of this unit is displayed.

Serial No.

The serial number of this unit is displayed.

Firmware Version

The version of the overall system of this unit is displayed.

Activation

Information for activated functions is displayed.

Operation Time

The time the unit has been operating is displayed.

OSS license display

Press the [View] button to display the OSS license.

To close the screen displaying the OSS license, press the [Close] button.

Firmware File

Update the firmware.

Refer to the following for how to update the firmware.

How to update the firmware

1. Download the most recent version for the firmware to your computer.

NOTE

- Keep the total of the save directory name and name of the downloaded software to within 250 characters.
- You can obtain the software for upgrading from the Support and Download pages of the following website.
<https://pro-av.panasonic.net/en/>
Refer also to the instruction manual on the download site to upgrade.

2. Click the [Select] button and specify the software you downloaded.

3. Click the [Execute] button.

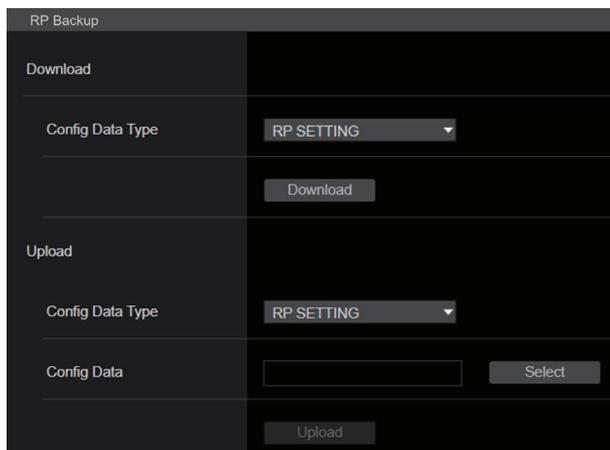
A screen confirming updating is displayed.

After updating, be sure to delete the temporary internet files.

■ RP Backup

You can save the settings of this unit to a computer and apply the settings saved to a computer to this unit.

Refer to "Types of data backup" (page 71) for the types of data.



Download

Config Data Type

Specify the setting data type when saving this unit's settings to a computer.

Download

Saves the settings of this unit to a computer.
Downloading starts when you press the [Download] button.

NOTE

- Download of the config file may not be possible, depending on the state of this unit.

Upload

Config Data Type

Specify the setting data type when applying setting data saved on a computer to this unit.

Upload

Uploads the configuration files for this unit that were saved to a computer with the download function.
Click the [Select] button, and in the displayed dialog box, specify the saved file.
Click the [Upload] button to display the dialog, then click [OK] to start the upload.

NOTE

- Use the files downloaded by this unit as data for uploading.
- Do not turn the power off during download/upload.
- During download/upload, do not perform any operations until download/upload is complete.
- For a camera config file, it takes approximately 1 second for the upload complete dialog to be displayed.

List of messages

■ Alarm indication

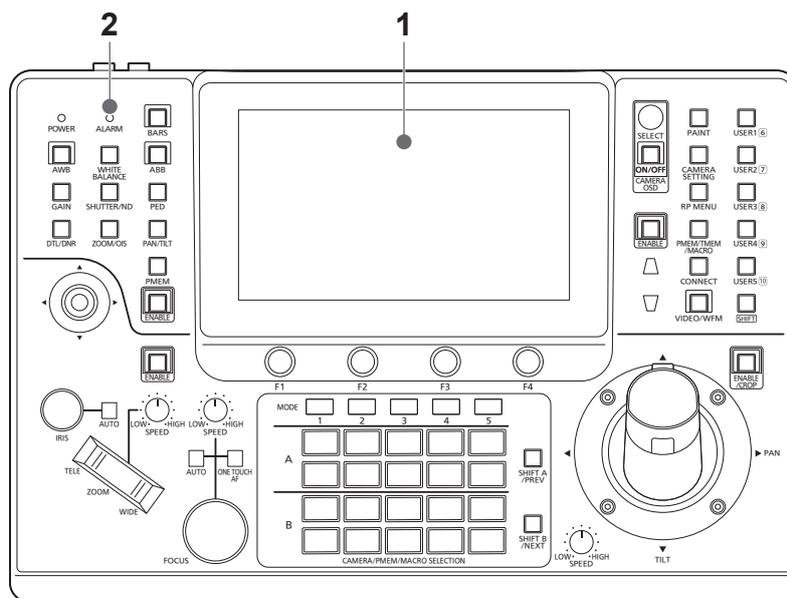
This unit can indicate the alarms of this unit and the connected cameras.

When alarms occur:

- Alarm is indicated in red letters on the main LCD (1) (refer also to "Status screen" (page 30)).
- If the alarm is occurring on this unit, details are displayed in [RP MENU] > [MAINTENANCE] > [ALARM1] to [ALARM4].
- If the alarm is occurring on a camera, details are displayed in [CAMERA SETTING] > [MAINTENANCE] > [ALARM1] to [ALARM5].
- ALARM lamp [ALARM] (2) illuminates red.

There is only 1 alarm indication on the main LCD. When more than 1 has occurred, a "+" is added to the end of the indication. Refer to the ALARM in the above menus for details.

	Indication on the main LCD	Display on the menu screen	Details
Alarm on this unit	[RP]PoE POWER	PoE POWER	Displayed when software authentication is used and power is supplied to this unit with PoE, and there is a power requirement of less than the rated value of this unit and 25 W or more from the switching hub, etc. Use PoE++ compatible products.
	[RP]FWUP FAIL	FWUP FAIL	Displayed after start up when an update ended in failure, such as when the power was interrupted while this unit was updating the firmware. Update the firmware again.
	[RP]FAN	FAN	Displayed when an error occurs with the fan on this unit. Contact your dealer.
	[RP]H.TEMP	HIGH TEMP	Displayed when this unit is in a high temperature state. Use in a cool environment.
	[RP]VIDEO FMT	VIDEO FORMAT	Displayed when either the image format being input is one that this unit does not support or the set frequency in [RP MENU] > [BASIC CONFIG] > [VIDEO FREQ] is different to that of the input images. Refer to "Before beginning actual operation" (page 25) for details.
Alarm on camera	[CAM]FAN	FAN	Displayed when an error occurs with the fan on the connected camera. Refer to the operating instructions of the camera for details.
	[CAM]H.TEMP	HIGH TEMP	Displayed when the connected camera is in a high temperature state. Refer to the operating instructions of the camera for details.
	[CAM]LENS	LENS	Displayed when an error occurs with the lens on the connected camera. Refer to the operating instructions of the camera for details.
	[CAM]PAN/TILT	PAN/TILT	Displayed when an error occurs with the pan/tilt drive section on the connected camera. Refer to the operating instructions of the camera for details.
	[CAM]TEMP SEN	TEMP SENSOR	Displayed when there is a possibility that the temperature sensor on the connected camera is broken. Refer to the operating instructions of the camera for details.

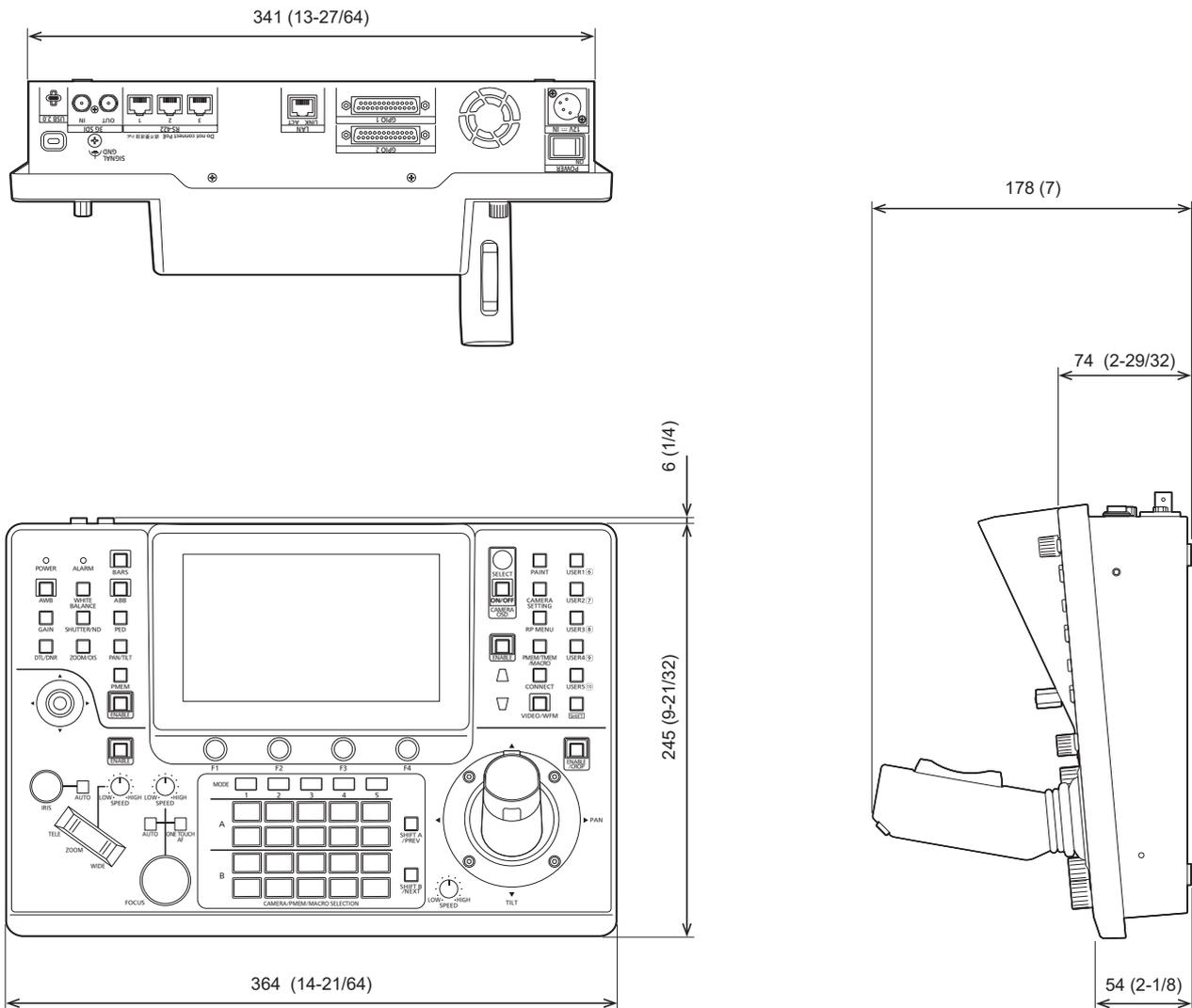


Troubleshooting

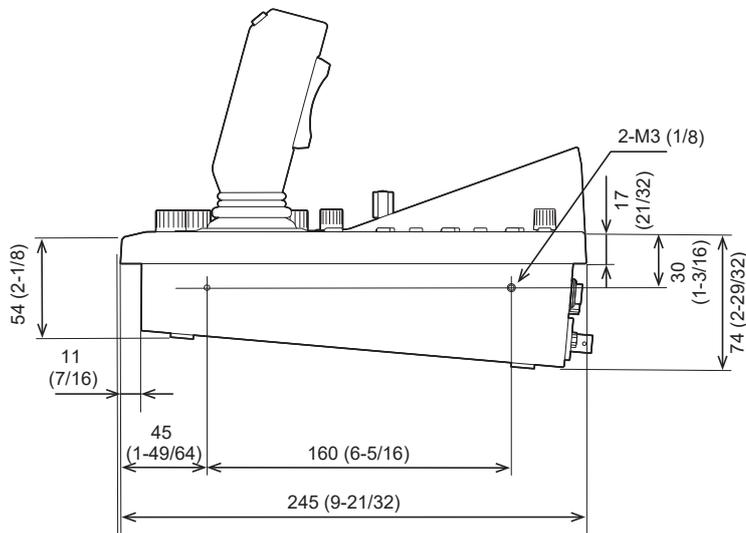
Symptom	Cause/Solution	Reference page
The unit will not turn on.	<ul style="list-style-type: none"> ● Is the external DC power supply working? 	–
	<ul style="list-style-type: none"> ● Is the DC plug of the external DC power supply properly connected to this unit? 	–
A pop up message appears when first turning on the power after purchase.	<ul style="list-style-type: none"> ● You first need to set the frequency of the images to be input to the unit. 	P. 25
The ALARM lamp illuminates red and an "[RP]PoE POWER" alarm is displayed on the main LCD.	<ul style="list-style-type: none"> ● Are you using a PoE++ compatible injector or Ethernet hub? 	P. 9 to P. 10 P. 140
The ALARM lamp illuminates red and nothing is displayed on the main LCD.	<ul style="list-style-type: none"> ● Are you using a PoE++ compatible injector or Ethernet hub? 	P. 9 to P. 10
Cannot operate the remote camera.	<ul style="list-style-type: none"> ● Has the power for the remote camera been connected properly? 	–
	<ul style="list-style-type: none"> ● Have the remote camera and this unit been connected to each other properly? 	P. 20 to P. 24
	<ul style="list-style-type: none"> ● Have connection settings been made correctly? 	P. 40 to P. 46
	<ul style="list-style-type: none"> ● Is the remote camera in standby state? → Turn on the power of the remote camera. 	P. 69
	<ul style="list-style-type: none"> ● Has the remote camera been selected properly? 	P. 48
	<ul style="list-style-type: none"> ● Is the ENABLE button illuminated? 	P. 11 to P. 15
	<ul style="list-style-type: none"> ● If user authentication has been set for the remote camera, were the user name and password for the remote camera set in this unit when it was connected to this unit? 	P. 118
The remote camera moves in the opposite direction when operating the R-joystick.	<ul style="list-style-type: none"> ● Have you made the settings for the way the remote camera is installed? → You need to make settings to suit the installation status (desktop, hanging). Refer to the operating instructions for the remote camera. 	–
	<ul style="list-style-type: none"> ● Have you set the operating direction correctly on this unit? 	P. 37
The remote camera moves in the opposite direction when operating the L-rocker or FOCUS dial.	<ul style="list-style-type: none"> ● Have you set the operating direction correctly on this unit? 	P. 37

Diagrams of external dimensions

Units: mm (inch)



● Locations for attaching the mounting brackets



Ratings

Power source voltage:

12 V DC (==) (10.8 V to 17.0 V)
42 V to 57 V DC (==) (PoE++ power supply)

Current consumption:

3 A (DC12 V power supply)
1 A (PoE++ power supply)

 indicates safety items.

■ General

Ambient operating temperature : 0 °C to 40 °C (32 °F to 104 °F)

Permissible humidity : 20% to 90% (with no condensation)

Weight : Approx. 3.5 kg (7.72 lb)

Dimensions (W × H × D) : 364 mm × 178 mm × 245 mm (14-21/64 inches × 7 inches × 9-21/32 inches)
(excluding protrusions)

■ Input/output terminals

DC 12 V IN (XLR 4 pin)

3G SDI IN/3G SDI OUT:

SMPTE424M/SMPTE292M/75Ω

3G SDI IN : Auto determination of Level-A or Level-B

3G SDI OUT : Level-A only supported

Supported formats:

1080/59.94p, 1080/59.94i, 1080/29.97p, 1080/23.98p, 1080/50p, 1080/50i, 1080/25p

LAN (RJ-45):

1000Base-T (LAN terminal for IP control and video reception)

PoE++ input

Connection cable: LAN cable, maximum 100 m (328 ft)

- When connecting via a switching hub:
Recommended cables are; straight or cross cable (category 5e cable), STP (Shielded Twisted Pair) cable
- When connecting directly to the device:
Recommended cables are; cross cable (category 5e cable), STP (Shielded Twisted Pair) cable

RS-422 (RJ-45):

RS-422 (control signal for remote camera)

Connection cable: Straight cable (category 5e or better, shielded cable), maximum 1000 m (3280 ft)

TALLY OUT : Open collector output (negative logic), maximum voltage resistance DC 24 V, Maximum current 50 mA

GPIO 1 (D-sub 25 pin, female, inch thread):

TALLY IN : Contact input (status operation)

GPIO IN : Contact input (trigger operation)

GPIO OUT : Open collector output (negative logic), maximum voltage resistance DC 24 V, Maximum current 50 mA

- Input/output switched with menu settings

GPIO 2 (D-sub 25 pin, female, inch thread):

TALLY IN : Contact input (status operation)

GPIO IN : Contact input (trigger operation)

GPIO OUT : Open collector output (negative logic), maximum voltage resistance DC 24 V, Maximum current 50 mA

- Input/output switched with menu settings

USB2.0 (HOST):

Used for updating firmware, backing up of various types of data, etc.

Type-A×1: Rated 5.0 V, 0.5 A

Type-C×1: Rated 5.0 V, 0.5 A

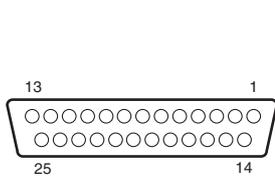
Symbols on this product indicate the following:

 DC (direct current)

Control interface for external devices

1. GPIO1/GPIO2 (Manufactured by JST: JBY-25S-1A3F(LF)(SN))

Refer to RP MENU button > [GPI TALLY]/[GPIO CAM SEL]/[GPO CAM GROUP]/[GPI PMEM] for how to switch MODE.

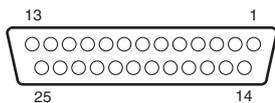


GPIO1

Pin number	Signal name	Signal details		
		MODE1	MODE2	MODE3
1	DSUB1_GPIO_1	R_TALLY_IN1	R_TALLY_IN1	R_TALLY_IN1
14	DSUB1_GPIO_2	R_TALLY_IN2	R_TALLY_IN2	R_TALLY_IN2
2	DSUB1_GPIO_3	R_TALLY_IN3	R_TALLY_IN3	R_TALLY_IN3
15	DSUB1_GPIO_4	R_TALLY_IN4	R_TALLY_IN4	R_TALLY_IN4
3	DSUB1_GPIO_5	R_TALLY_IN5	R_TALLY_IN5	R_TALLY_IN5
16	DSUB1_GPIO_6	R_TALLY_IN6	R_TALLY_IN6	R_TALLY_IN6
4	DSUB1_GPIO_7	R_TALLY_IN7	R_TALLY_IN7	R_TALLY_IN7
17	DSUB1_GPIO_8	R_TALLY_IN8	R_TALLY_IN8	R_TALLY_IN8
5	DSUB1_GPIO_9	R_TALLY_IN9	R_TALLY_IN9	R_TALLY_IN9
18	DSUB1_GPIO_10	R_TALLY_IN10	R_TALLY_IN10	R_TALLY_IN10
6	DSUB1_GPIO_11	-	-	-
19	DSUB1_GPIO_12	G_TALLY_IN1	PRESET_MEM_GROUP_IN_1	CAMERA_GROUP1_SELECT_IN
7	DSUB1_GPIO_13	G_TALLY_IN2	PRESET_MEM_GROUP_IN_2	CAMERA_GROUP2_SELECT_IN
20	DSUB1_GPIO_14	G_TALLY_IN3	PRESET_MEM_GROUP_IN_3	CAMERA_GROUP3_SELECT_IN
8	DSUB1_GPIO_15	G_TALLY_IN4	PRESET_MEM_GROUP_IN_4	CAMERA_GROUP4_SELECT_IN
21	DSUB1_GPIO_16	G_TALLY_IN5	MENU_ENABLE_BOTTOM	CAMERA_GROUP5_SELECT_IN
9	DSUB1_GPIO_17	G_TALLY_IN6		
22	DSUB1_GPIO_18		-	-
10	DSUB1_GPIO_19	G_TALLY_IN7	GROUP_SELECT_OUT_1	CAMERA_GROUP1_SELECT_OUT
23	DSUB1_GPIO_20	G_TALLY_IN8	GROUP_SELECT_OUT_2	CAMERA_GROUP2_SELECT_OUT
11	DSUB1_GPIO_21	G_TALLY_IN9	GROUP_SELECT_OUT_3	CAMERA_GROUP3_SELECT_OUT
24	DSUB1_GPIO_22	G_TALLY_IN10	GROUP_SELECT_OUT_4	CAMERA_GROUP4_SELECT_OUT
12	DSUB1_GPIO_23		GROUP_SELECT_OUT_5	CAMERA_GROUP5_SELECT_OUT
25	GND*1	GND*1	GND*1	GND*1
13	DSUB1_GPIO_24	ALARM	ALARM	ALARM

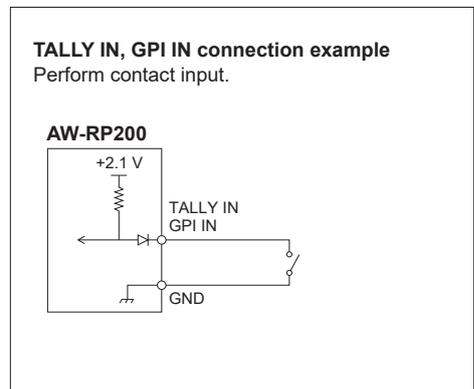
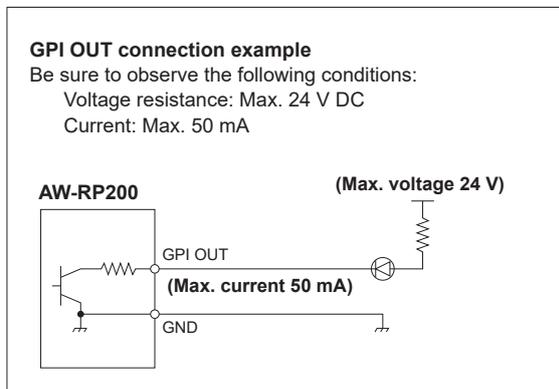
*1: The 25-pin GND must be connected to the system GND. (For GPIO1 on this unit, the only GND available is pin 25.)

GPIO2



Pin number	Signal name	Signal details		
		MODE1	MODE2	MODE3
1	DSUB2_GPIO_1	CAMERA_SELECT_IN_1	PRESET_SELECT_IN_1	CAMERA_SELECT_BUTTON1_IN
14	DSUB2_GPIO_2	CAMERA_SELECT_IN_2	PRESET_SELECT_IN_2	CAMERA_SELECT_BUTTON2_IN
2	DSUB2_GPIO_3	CAMERA_SELECT_IN_3	PRESET_SELECT_IN_3	CAMERA_SELECT_BUTTON3_IN
15	DSUB2_GPIO_4	CAMERA_SELECT_IN_4	PRESET_SELECT_IN_4	CAMERA_SELECT_BUTTON4_IN
3	DSUB2_GPIO_5	CAMERA_SELECT_IN_5	PRESET_SELECT_IN_5	CAMERA_SELECT_BUTTON5_IN
16	DSUB2_GPIO_6	CAMERA_SELECT_IN_6	PRESET_SELECT_IN_6	CAMERA_SELECT_BUTTON6_IN
4	DSUB2_GPIO_7	CAMERA_SELECT_IN_7	PRESET_SELECT_IN_7	CAMERA_SELECT_BUTTON7_IN
17	DSUB2_GPIO_8	CAMERA_SELECT_IN_8	PRESET_SELECT_IN_8	CAMERA_SELECT_BUTTON8_IN
5	DSUB2_GPIO_9	CAMERA_SELECT_IN_9	PRESET_SELECT_IN_9	CAMERA_SELECT_BUTTON9_IN
18	DSUB2_GPIO_10	CAMERA_SELECT_IN_10	PRESET_SELECT_IN_10	CAMERA_SELECT_BUTTON10_IN
6	DSUB2_GPIO_11	-	-	-
19	DSUB2_GPIO_12	CAMERA_SELECT_OUT_1	CAMERA_SELECT_IN_1	CAMERA_SELECT_BUTTON1_OUT
7	DSUB2_GPIO_13	CAMERA_SELECT_OUT_2	CAMERA_SELECT_IN_2	CAMERA_SELECT_BUTTON2_OUT
20	DSUB2_GPIO_14	CAMERA_SELECT_OUT_3	CAMERA_SELECT_IN_3	CAMERA_SELECT_BUTTON3_OUT
8	DSUB2_GPIO_15	CAMERA_SELECT_OUT_4	CAMERA_SELECT_IN_4	CAMERA_SELECT_BUTTON4_OUT
21	DSUB2_GPIO_16	CAMERA_SELECT_OUT_5	CAMERA_SELECT_IN_5	CAMERA_SELECT_BUTTON5_OUT
9	DSUB2_GPIO_17	CAMERA_SELECT_OUT_6	CAMERA_SELECT_IN_6	CAMERA_SELECT_BUTTON6_OUT
22	DSUB2_GPIO_18	CAMERA_SELECT_OUT_7	CAMERA_SELECT_IN_7	CAMERA_SELECT_BUTTON7_OUT
10	DSUB2_GPIO_19	CAMERA_SELECT_OUT_8	CAMERA_SELECT_IN_8	CAMERA_SELECT_BUTTON8_OUT
23	DSUB2_GPIO_20	CAMERA_SELECT_OUT_9	CAMERA_SELECT_IN_9	CAMERA_SELECT_BUTTON9_OUT
11	DSUB2_GPIO_21	CAMERA_SELECT_OUT_10	CAMERA_SELECT_IN_10	CAMERA_SELECT_BUTTON10_OUT
24	DSUB2_GPIO_22	-	-	-
12	DSUB2_GPIO_23	-	-	-
25	GND*1	GND*1	GND*1	GND*1
13	DSUB2_GPIO_24	-	-	-

*1: The 25-pin GND must be connected to the system GND. (For GPIO2 on this unit, the only GND available is pin 25.)



2. 3G SDI OUT

BNC 75 Ω

Outputs images input to SDI IN or the images received via IP.

- Signals are not output if this unit is off.

3. 3G SDI IN

BNC 75 Ω

The input images are displayed on the main LCD when the [VIDEO/WFM] button is illuminated. (When IP image reception is selected, those images are displayed on the main LCD)

4. RS-422 1 to 3 (RJ-45)

Use LAN cables to connect remote cameras that support serial connection.

Connect with straight cables (category 5e or better, shielded cables).

Pin number	Signal name	Signal details
1	GND	Frame ground
2	TALLY	Tally output (open collector)
3	TXD-	Transmitted data (-)
4	RXD-	Received data (-)
5	RXD+	Received data (+)
6	TXD+	Transmitted data (+)
7	NC	Not used
8	NC	Not used

- TALLY (pin number 2) specifications

Voltage resistance: Max. 24 V DC

Current: Max. 50 mA

5. LAN (RJ-45)

Conforms to 1000BASE-T.

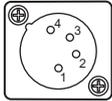
Can be connected to network devices that support the PoE++ standard (conforming to IEEE802.3bt).

6. 12V IN (12 V DC)

Manufactured by ITT Cannon: XLR-4-32-F512

A 12 V DC input terminal from an external DC power supply.

Input voltage range: 10.8 V to 17.0 V

	Pin number	Function
	1	GND
	2	NC
	3	NC
	4	+12 V

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