# AW-UE4 - Basic Operation Guide

This guide explains specifications, operations, and settings for AW-UE4 based on frequently asked questions. Please refer to this in conjunction with the instruction manual.

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# 1. Relationship between Power supply, Priority modes, and Output terminals

This unit can be powered in three ways: PoE, USB (PC power), or USB (AC adapter).

The selectable priority modes and video output terminals are different depending on the power supply method. Please check the required power supply method and any additional items needed according to use case.

Ex.) Use this unit as a USB camera and output video simultaneously from the HDMI terminal, supply power from a **PoE hub** (sold separately) and set the priority mode to **[HDMI/USB]**.

(Correspondence Table of Selectable Priority Modes and Output Terminals by Power Supply)

Power Supply	Priority Mode	Output terminal			
		HDMI	USB	LAN	
				RTSP/RTMP	Web(HTTP)
PoE	HDMI(4K)	0	×	×	0
	USB(4K)	×	0	×	0
	IP(4K)	×	×	0	0
	HDMI/USB	0	0	×	0
	IP	0	×	0	0
	USB(Zoom)	×	0	×	×
	USB(Teams)	×	0	×	×
USB (PC Power)	USB(4K)	×	0	×	0
	USB	×	0	×	0
	USB(Zoom)	×	0	×	×
	USB(Teams)	×	0	×	×
USB (AC adapter) 5 V/1 A or more	HDMI(4K)	0	×	×	0
	IP(4K)	×	×	0	0
	HDMI	0	×	×	0
	IP	0	×	0	0

<sup>\*[</sup>USB(Zoom)] and [USB(Teams)] modes, video is not displayed on the Web Live screen, but control is possible.

This unit comes with a dedicated USB cable with a lock screw (approx. 1.8m). (optional accessory)

•PoE hub (compliant with IEEE 802.3af standard)

•AC adapter: 5V/1A or more

·LAN cable: Category 5e or higher, within 100m

\*Connecting this unit directly to a PC: Cross cable is needed.

Connecting via a switching hub: Straight cable is needed.

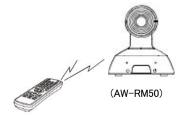
•HDMI cable: HIGH SPEED HDMI cable (compliant with HDMI standard)

# 2. How to operate the unit

AW-UE4 can mainly be controlled in the following three ways.

For details, please refer to the instruction manual for AW-UE4.

#### 1. Use the wireless remote control: AW-RM50 (optional accessory).



For details, please refer to the AW-UE4 instruction manual [Basic].

\*Batteries are not included with AW-RM50.

Up to 4 cameras can be controlled from AW-RM50.

When operating multiple cameras with a single remote control, it is necessary to set the [Wireless ID] for each camera individually to prevent interference.

The initial setting for AW-UE4's [Wireless ID] is [1].

In this case, press the [CAM1] button on AW-RM50, then you can operate zoom, etc.

The power ON/STANDBY button and MANU button operate by pressing and holding.

Setting [Wireless ID]

Camera menu: SYSTEM > Wireless ID → [1-4] \*Initial value [1]

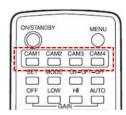
Web menu: Setup > Image/Audio > System tab > Wireless ID → [1-4]

\*Personal Computers are required to change settings in the web menu.

Behavior of the power status indicator when pressing remote control buttons:

- Blinks green twice: Received signal from remote with matching Wireless ID
- \*Blinks orange twice: Received signal from remote with non-matching Wireless ID

#### (Wireless Remote Control: AW-RM50)







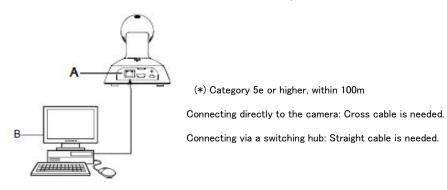
## 2. Use a Personal Computer.

You can check IP video (JPEG images only), operate, and change web menu settings from a Personal Computer(browser) connected to the camera via LAN cable.

(AW-UE4 Web Screen Image)



[Connect the LAN terminal (A) of this unit and the Personal Computer (B) with a LAN cable (\*)]



[Use the same segment between Personal Computer and camera]

The factory settings for IP address and subnet mask are as follows:

[IP address (192.168.0.10), subnet mask (255.255.255.0)]

The range of private addresses is (192.168.0.1) to (192.168.0.254).

Therefore, set the IP address for Personal Computer to one that does not overlap with the camera (e.g., 192.168.0.100).

\*Set the subnet mask to the same as the camera (255.255.255.0).

\*For required PC environment, please refer to the instruction manual [Basic].

[Display the web screen on the Personal Computer]

Launch the web browser on your Personal Computer,

Then input [http://camera's IP address] in the address bar, and press Enter.

If the initial state, the account setting screen is displayed when showing the web screen.

Set the username and password.

After setting, click the [Set] button to display the web screen.

\*For details on initial account settings, please refer to the instruction manual [Basic].

Note: If you forget the username or password, there is no function to reset to factory settings.

Please do not forget your username and password.





\*For web screen operation methods, please refer to the instruction manual [Operation/Settings].

## 3. Use the remote camera controller:(AW-RP60).

Using AW-RP60, you can control up to 200 cameras including AW-UE4 units.

- \*Excludes control of Slow Shutter, LDC, Priority Mode, Mirror, and Language settings.
- \*For details, please refer to the instruction manuals for AW-UE4 and AW-RP60.

## 3.1 Connect the LAN cable

Connect the AW-RP60 terminal [LAN] and AW-UE4 terminal [LAN LINK/ACT] with a LAN cable.

(AW-RP60 rear panel)



(AW-UE4 rear panel)



- \*Connecting AW-RP60 and AW-UE4 directly: Cross cable (category 5e or higher, within 100m) is needed.
- \*Connecting via a hub such as PoE: Straight cable (category 5e or higher, within 100m) is needed.

#### 3.2 Set up the connection

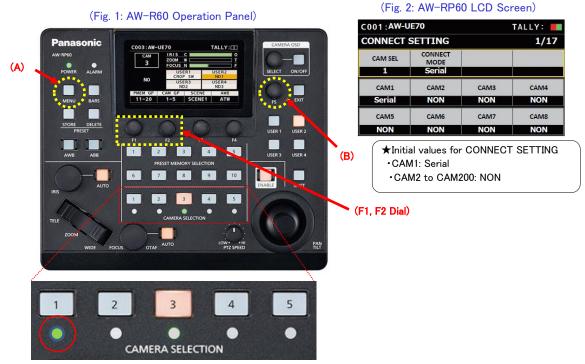
#### \*To operate single AW-UE4 with AW-RP60 (assign the camera to CAM1)

- ① Press the MENU button. (Fig. 1-A)
- ② Operate the F5 dial (Fig. 1-B) to display the menu at [5 SYSTEM] > [502 CONNECT SETTING]. (Fig. 2)

At this time, operate the F5 dial so that the yellow frame is on the first line (Fig. 2).

\*From the second line onward, you can see and change CONNECT MODE for each camera number.

- ③ Operate the F1 dial to select [CAM SEL]  $\rightarrow$  [1].
- ④ Operate the F2 dial to select [CONNECT MODE] → [LAN].



When the setting is executed correctly, the LED at section  $\,O\,$  lights up according to the camera status indicator lamp



## 3.3 To control multiple AW-UE4 units with AW-RP60

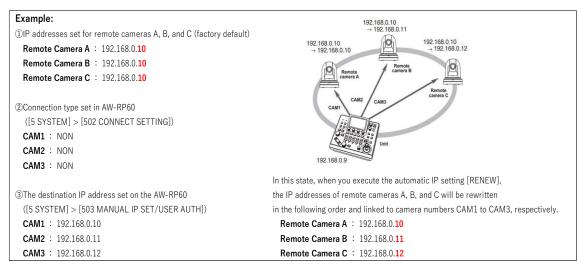
When connecting multiple cameras, use "Auto IP Setting [RENEW]" executed from AW-RP60.

AW-RP60 first detects cameras on the same subnet. Then, it associates detected cameras with

camera numbers set to [NON] connection type and assigns camera numbers sequentially. At this time, each camera's IP address is rewritten to the connection destination IP address set for each camera number.

Connection type setting: [5 SYSTEM] > [502 CONNECT SETTING] > [CAM1-200] ⇒ [NON] Connection destination IP address:

[5 SYSTEM] > [503 MANUAL IP SET/USER AUTH] > [CAM1-200] ⇒ [IP address]



- ① Press the MENU button. (Fig. 3-A)
- ② Operate the F5 dial (Fig. 3-B),

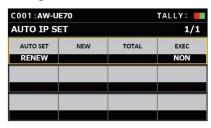
Display the [5 SYSTEM] > [504 AUTO IP SET] menu. - (Fig. 4)

- ③ Operate the F1 dial (Fig. 3-C) to select [AUTO SET] → [RENEW], then press the F1 dial. The number of detected cameras [NEW] and the number of currently detected/managed cameras [TOTAL] are displayed.
- ④ Operate the F4 dial (Fig. 3-D) to select [EXEC] → [SETTING], then press the F4 dial.
   \*When auto IP setting starts and completes successfully, "COMPLETE" is displayed on the LCD screen. If "SET UP ERR" is displayed, check the LAN cable connection.

(Fig. 3: AW-RP60 Operation Panel)



(Fig. 4: AW-RP60 LCD Screen)

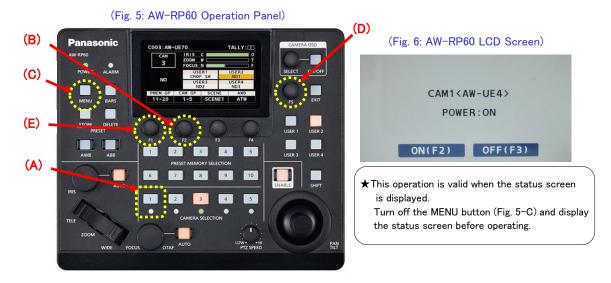


After setting up, the LEDs for CAMERA SELECTION 1 to 3 on the AW-RP60 operation panel will light up according to the camera's power status. If the camera is in standby mode, the LED lights orange.

In POWER ON mode, the LED lights green.

#### 3.4 Turn on the AW-UE4

- ① Press and hold the [1] button on [CAMERA SELECTION] (Fig. 5-A), and the camera name and [ON (F2)], [OFF (F3)] buttons are displayed on the LCD screen. (Fig. 6)
- While holding the [1] button, press the F2 dial (Fig. 5-B) to turn on the camera connected to CAM1.
   \*To switch the camera to standby mode from power ON, press the F3 button in the same way.

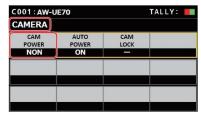


#### 3.4.1 Turn on multiple AW-UE4 units

- 1 Press the MENU button (Fig. 5-C).
- ② Operate the F5 dial (Fig. 5-D) to display the [5 SYSTEM] > [501 CAMERA] menu.
- ③ Operate the F1 dial (Fig. 5-E) to select [CAM POWER] → Select [ALL ON] and press the F1 dial to turn on all cameras set to [LAN] connection type.
- \*To switch to standby mode, execute [CAM POWER]

  → [ALL OFF].





3.4.2 Turn on the camera in conjunction with AW-RP60 power (ON)

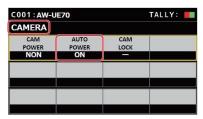
Operate up to the above [501 CAMERA] menu, then set [AUTO POWER] → [ON] with the F2 dial.

When AW-RP60 power is turned ON, cameras set to [LAN] connection

type will turn on from standby mode.

★There is no function to turn off the camera power in conjunction with AW-RP60 power (OFF).





# 3. Use as a USB Camera

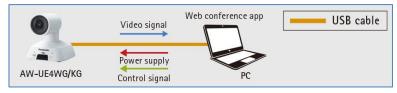
AW-UE4 can be used as a USB camera for conference application software in the following two ways.

AW-UE4 also complies with USB Video Class Ver1.1 and USB Audio Class Ver1.0.

For details, please check together with the instruction manual.

#### ■Use the camera with USB cable

(Ex. Use as a USB Camera)



Power can be supplied from the PC via USB cable. You can operate without connecting an AC adapter, and video transmission, control signals (\*1), and power supply (\*2) are achieved with a single cable.

- •(\*1) Controllable functions depend on the application used.
- •(\*2) A Personal Computer(PC) compatible with USB power supply standard is required.

#### 1-a. Set the camera's priority mode

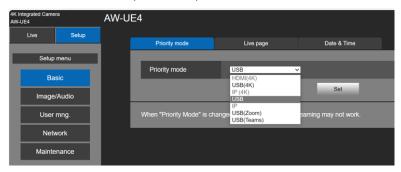
Set the priority mode to [USB(4K)]/[USB]/[USB(Zoom)]/[USB(Teams)] according to your usage.

- \* In [USB (Zoom)] and [USB (Teams)] modes, video output is not available from the Web Live screen or HDMI.
- \*Setting [Priority Mode]

Web menu: Setup > Basic > Priority Mode → pull-down menu

\*A PC connected via LAN is required to change settings in the web menu.

(Web Screen)



\*When powered by USB (PC), video is not output from the HDMI terminal.

To use as a USB camera and output simultaneously from HDMI, supply power from PoE (compliant with IEEE802.3af standard) and set priority mode to [HDMI/USB].

After setting up, select "AW-UE4" as the video and audio device in the application.

#### 1-b. When using PTZ Virtual USB Driver

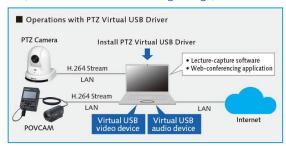
#### PTZ Virtual USB Driver is software that runs on Windows.

By running this software on a Windows PC, you can use a camera connected via LAN cable as a virtual USB camera recognized by Windows.

PTZ Virtual USB Driver can be downloaded from the following URL:

 $https://pro-av.panasonic.net/en/software/ptz\_vud/$ 

(PTZ Virtual USB Driver Usage Image)



## [Required settings for AW-UE4]

PTZ Virtual USB Driver receives and recognizes H.264 stream video and audio, so you need to change AW-UE4 settings to output H.264 stream.

- \*A PC connected via LAN is required to change settings in the web menu.
- \*Power supply should be from PoE or USB (AC adapter).

Set the priority mode to [IP] or [IP(4K)].

\*Setting Priority Mode

Web menu: Setup > Basic > Priority Mode → [IP], [IP(4K)]

- \*To use with simultaneous output from HDMI terminal, set to [IP].
- \*When in 4K format, simultaneous output from HDMI terminal and H.264 stream is not possible.
- \*Settings for H.264 stream output

Web menu: Setup > Image/Audio > Video over IP > H.264/H.265

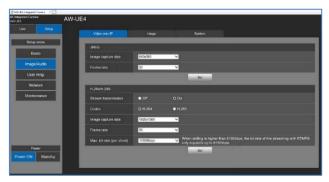
 $\rightarrow$  Streaming transmission: On

→ Codec: H.264

→ Image capture size: Select from 3840x2160/1920x1080/1280x720/640x360

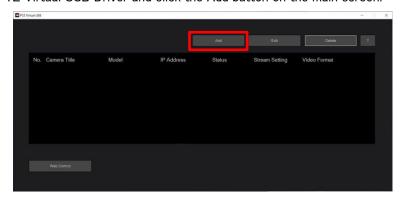
→ Frame rate: Select from 60fps/50fps/30fps/25fps/15fps/10fps/5fps

#### (Web Screen)



# [Register AW-UE4 in PTZ Virtual USB Driver]

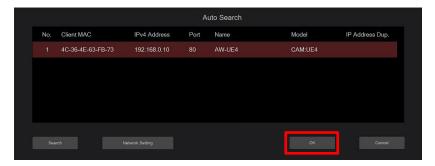
Start PTZ Virtual USB Driver and click the Add button on the main screen.



On the Add/Edit Camera screen, select "PTZ Camera" from the pull-down menu and click the "Auto Search" button.



The Auto Search screen will appear, and cameras on the network will be listed. Select a camera from the list and close the window with the OK button.



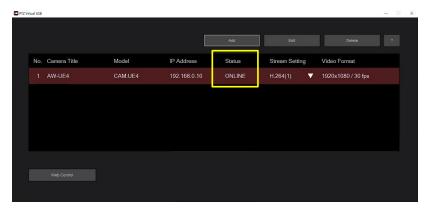
On the Add/Edit Camera screen, enter the account information (username, password) set for AW-UE4 in the Login and Password fields, and click OK.

Registration is complete.



Several seconds after adding the camera, the Status display on the main screen will change according to the camera status. Make sure the Status display is "ONLINE".

\*If the Status display is not "ONLINE", please refer to the PTZ Virtual USB Driver operation manual [About camera Status display].



After registration, a corresponding virtual USB camera device will be created on Windows for the registered camera.

The name of the created virtual USB camera device is as follows.

Select the corresponding virtual Video/Audio device in the application software you use.

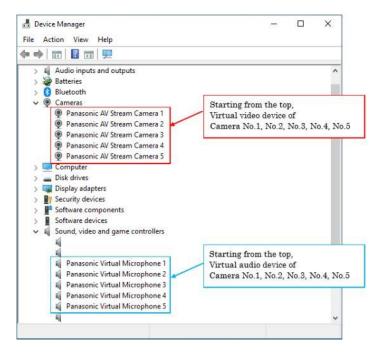
Virtual Video device: Panasonic AV Stream Camera \*

Virtual Audio device: Panasonic Virtual Microphone \*

\* The number corresponds to the camera No. in the main screen camera list.

If the virtual USB device is created correctly, the virtual Video device will appear under "Cameras" in Device Manager, and the virtual Audio device will appear under "Sound, video and game controllers".

Below is an example of Device Manager display when 5 cameras are registered.



# 4. Receive H.264/H.265 IP Streaming Video

AW-UE4 supports the standard RTSP/RTMP protocol. By sending an RTSP request from an RTSP-compatible application or device to AW-UE4, you can receive IP streaming video and audio.

**Note:** Audio is not output on the web screen, so if you want audio output, receive IP streaming video and audio via RTSP request.

H.264/H.265 streaming video is output from the LAN terminal (RTSP/RTMP).

To enable RTSP output from this unit, set the priority mode to [IP(4K)] or [IP] and supply power via PoE or USB (AC adapter).

The RTSP request URL is as follows.

\*Request according to the [Codec] setting in the web menu screen.

\*For how to set up the application or device, please check with the manufacturer.

(For H.264) rtsp://<IP address>:554/mediainput/h264/stream\_1

(For H.265) rtsp://<IP address>:554/mediainput/h265/stream\_1