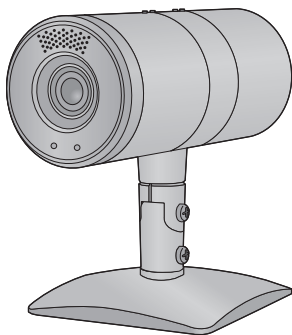


Panasonic®

Operating Instructions <Operations and Settings> HD Integrated Camera

Model No. **AW-HE2P**
AW-HE2E



Please read these instructions carefully before using this product, and save this manual for future use.

This manual describes the operations of the unit in detail.
For the assembly and basic operations of the unit, please refer to <Basics>.

HDMI

ENGLISH

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Read this first!

■ Starting the web setting screen (Live screen/Setup screen)

For the system requirements and the startup of the web setting screen, please refer to "Operating Instructions <Basics>".

■ Regarding photos and illustrations in this manual

Please note that product profile sketches, illustrations, menu screens, etc. in this manual differ slightly from the real thing.

■ References made in this manual

References made are as per below:

- Pages for reference are indicated by an arrow, for example: → 00
- AW-RP50N, AW-RP50E → [AW-RP50]
- Remote Camera Controller → [Controller]

■ Regarding personal computer screenshots

Descriptions are provided using screenshots from Windows 7.

■ Regarding operations using the controller (AW-RP50)

These operating instructions describe a portion of the operations using AW-RP50. Refer to the AW-RP50 operating instructions while reading this manual.

Controller

This unit can be operated using a controller (AW-RP50: optional).

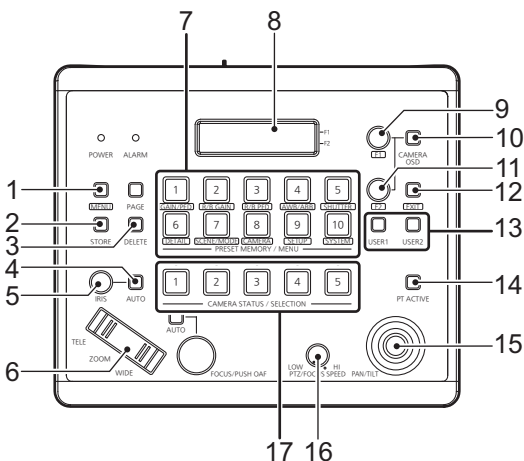
Operations available using the controller

The controller (AW-RP50) can perform the following operations.

- Switch between Power ON and Standby modes
 - Camera menu operations
 - Zoom operations
 - Pan/tilt operations
 - White Balance Setting
 - Brightness adjustment
 - Preset memory registration/retrieval/deletion
 - USER button operations (POWER OFF/AWB)
 - Display/hide the color bar
- For details on operating methods, refer to the description in each item.

Names and Functions of Main Parts

Buttons and dials used for operating this unit are described.



1 MENU button

Press this when using the PRESET MEMORY/MENU button to call up the controller menu.

2 STORE button (→ 27)

Press this to register the preset memory data.

3 DELETE button (→ 27)

Press this to delete the preset memory data.

4 IRIS-AUTO button (→ 20)

Switches brightness adjustment between auto mode and manual mode.

5 IRIS dial (→ 20)

Adjust the brightness manually.

6 ZOOM button (→ 14)

7 PRESET MEMORY/MENU buttons

Calls up the preset menu or controller menu.

8 LCD panel

9 F1 dial

Operates the camera menu or controller menu of the unit.

10 CAMERA OSD button (→ 10)

Displays the camera menu of the unit.

11 F2 dial

Operates the controller menu.

12 EXIT button

Operates the controller menu to return to the previous screen.

13 USER button (USER1/USER2) (→ 8, 18)

Used to register a portion of the functions of the controller menu.

14 PT ACTIVE button (→ 14)

Press this when operating the PAN/TILT lever.

15 PAN/TILT lever (→ 14)

16 PTZ/FOCUS SPEED dial (→ 14)

Changes the zoom, pan/tilt speed.

17 CAMERA STATUS/SELECTION buttons 1 to 5

Selects the camera to be operated.

Before Operating With the Controller

Press CAMERA STATUS/SELECTION button 1 to 5 to select the camera.

Display/Hide the Color Bar

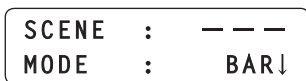
Switches the image displayed on the HDMI output monitor or web setting screen to the camera image/color bar.

1 Press the MENU button to light the button.

2 Press the PRESET MEMORY/MENU 7 button (SCENE/MODE) to light the button.

- The SCENE/MODE menu is displayed on the LCD panel.

3 Turn the F2 dial to select [CAM] (camera image) or [BAR] (color bars).



4 Press the F2 dial to set .

-
- You can also switch between camera image display and color bar display by pressing the MODE button on the wireless remote controller or with the web setting screen.
 - The color bar display varies depending on the system frequency setting.

Turning On the Unit / Setting the Unit to Standby Mode

You can turn on the unit or set it to standby mode on the web setting screen or by the wireless remote controller or the controller.

- When the AC adapter is connected, the unit is automatically set to standby mode and the status display lamp of the unit lights orange.
- When the unit is turned on, the status display lamp lights up green.
- Before turning on the unit, turn on all devices connected to the unit.
- After putting the unit into standby mode, turn off all devices connected to the unit.

Operating on the web setting screen

1 Start the web setting screen.

2 Click [Power ON] or [Standby].

Power ON:	Turns on the unit.
Standby:	Sets the unit to standby mode.

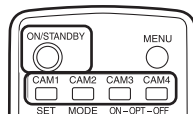


Operating with the wireless remote controller

1 Press one of the CAM1 to CAM4 buttons to select a camera.

2 Press and hold the ON/STANDBY button for 2 seconds.

- Every time you press the button for 2 seconds, you can switch the unit from on to standby mode or vice versa.
- When there is more than one camera, repeat steps 1 and 2.



Operating using the controller

■ Operate each unit

1 Hold down CAMERA STATUS/SELECTION button 1 to 5.

- The upper row of the LCD panel displays the camera name, and the lower row displays [POWER ON] or [POWER OFF].

2 Rotate the F2 dial while holding down CAMERA STATUS/SELECTION button 1 to 5 and select [ON] or [OFF], and press the F2 dial.

ON: Turn on the power of the selected camera.

OFF: Switch the selected camera to Standby mode.

■ Operate Multiple Cameras

1 Press the MENU button to light the button.

2 Press the PRESET MEMORY/MENU 8 button (CAMERA) to light the button.

- The CAMERA menu is displayed on the LCD panel.

[1]GROUP ▼

3 Turn the F1 dial to display the [POWER] menu, and press the F1 dial.

[2]POWER ◀▶

4 (when operating all cameras) Turn the F2 dial to select [ALL ON] or [ALL OFF], and press the F2 dial.

1. CAM POWER ▼
ALL ON↓

ALL ON: Turn on the power of all cameras.

ALL OFF: Switch all cameras to Standby mode.

(when operating selected groups)

Turn the F2 dial to select [GROUP ON] or [GROUP OFF], and press the F2 dial.



GROUP ON: Turn on the power of the camera in the selected group.

GROUP OFF: Switch the camera in the selected group to Standby mode.

■ Switch to Standby Mode With the USER Button

Registering [POWER OFF] to the USER buttons (USER1, USER2) and holding down the USER button will switch all connected cameras to Standby mode.

Register to the USER button

- 1) Press the MENU button to light the button.
- 2) Press the PRESET MEMORY/MENU 9 button (SETUP) to light the button.

• The SETUP menu is displayed on the LCD panel.



- 3) Press the F1 dial.
- 4) Turn the F1 dial to display [USER1] or [USER2].
- 5) Rotate the F2 dial to select [POWER OFF] and press the F2 dial.



-
- When the power is turned on, the zoom level, pan/tilt, and PinP display revert to their pre-standby settings. (POWER ON preset)
 - To turn off the power, hold down the power button until the status display lamp goes out. Press the power button to turn the power on. (The power cannot be turned on from the web setting screen, the wireless remote controller or the controller)

Using the Camera Menu

You can operate the camera menu of the unit with the wireless remote controller or the controller.

The menu screen is displayed on the HDMI output monitor.

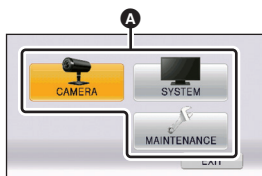
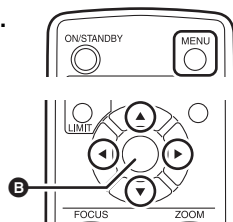
Operating using the wireless remote controller

1 Press one of the CAM1 to CAM4 buttons to select a camera.

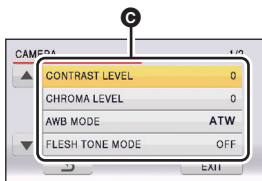
2 Press and hold the MENU button for 2 seconds.

- The camera menu is displayed.

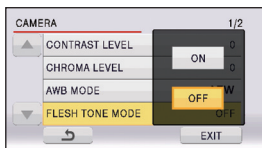
3 Press the ▲/▼/◀/▶ buttons and select the top menu **A**, and press the enter button **B**.



4 Press the ▲/▼ buttons and select the submenu **C**, and press the ▶ button or the enter button.



5 Press the ▲/▼/◀/▶ buttons to select an item and press the enter button to set.



6 Press the ▲/▼/◀/▶ buttons to select [EXIT] and press the enter button to complete the menu settings.

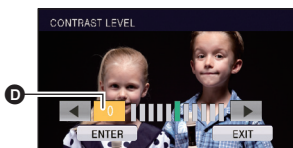
- The MENU button can also be pressed to complete the menu settings.

To get back to the previous screen

Select [↶] and then press the enter button.

To adjust the level

Select setting level 0 and press the ◀/▶ buttons.



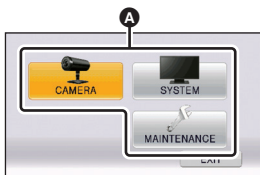
Operating using the controller

1 Press CAMERA STATUS/SELECTION button 1 to 5 and select the camera.

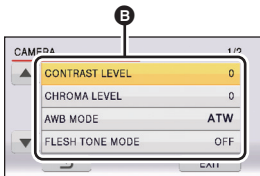
2 Press and hold the CAMERA OSD button for 2 seconds to light the button.

- The camera menu is displayed.

3 Rotate the F1 dial to select top menu **A** and press the F1 dial.



4 Rotate the F1 dial to select submenu **B** and press the F1 dial.




5 Rotate the F1 dial to select each item and press the F1 dial to set it.



6 Press and hold the CAMERA OSD button for 2 seconds to complete the menu settings.

- Turn the F1 dial and select [EXIT], and press the F1 dial to complete the menu settings. In this case, the CAMERA OSD button on/off and the camera menu display/non-display may not match.
-
- Switching the camera that is operated when the camera menu is displayed may result in the CAMERA OSD button on/off and the camera menu display/non-display not matching.

To get back to the previous screen

Select [] and then press the F1 dial.

To adjust the level

Rotate the F1 dial to adjust the contrast level.

- Press the F1 dial to set the level.



For detailed description of the respective camera menu items, refer to page 28.

Zoom, Pan/Tilt

■ About the zoom

- The i.Zoom can magnify up to approximately twice as large as the natural size while the digital zoom can magnify up to four times as large as the natural size.
(i.Zoom: This zoom function allows you to maintain high-definition picture quality.)
- For information on the enabling/disabling of the digital zoom, refer to page 36.

■ Pan/Tilt


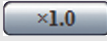

- Camera images can be moved horizontally, vertically, and diagonally.
- Pan/tilt cannot be performed when the zoom level is $\times 1$.

Operating on the Web setting screen

- Open the Live screen
- While the PinP is displayed, set the control mode to the Main screen. (→ 22)

Zoom operations

Zoom button

-  : Wide-angle recording (zoom out)
-  : Set the zoom level to $\times 1$
-  : Close-up recording (zoom in)

- The zoom speed is the same as the high-speed zoom of the wireless remote controller.
(The zoom speed cannot be changed)

Pan/tilt operations



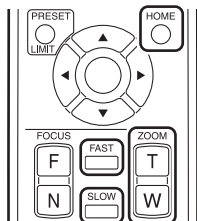
Control pad/button

- A Control button:**
Click to perform pan/tilt operations.
- B Control pad:**
Click or drag to perform pan/tilt operations.
The closer to the edge of the pad, the faster the panning/tilting speed is.

- Dragging and dropping from the control pad area to an area outside the control pad will mean pan/tilt operations cannot be stopped. In this case, click within the control pad area to stop operations.

Operating using the wireless remote controller

Zoom operations



ZOOM button

T button: Close-up recording (zoom in)

W button: Wide-angle recording (zoom out)

FAST button/SLOW button

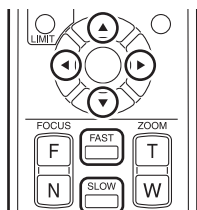
Press the FAST button to increase the zoom speed, and press the SLOW button to decrease the speed.

- If you turn off the unit, high-speed zoom is cancelled.

HOME button

If you press and hold this button for 2 seconds, the zoom level changes to $\times 1$.

Pan/tilt operations



▲/▼/◀/▶ button

Pan/tilt left, right, up and down.

- Press the ▲ or ▼ button and the ◀ or ▶ button simultaneously to move in a diagonal direction. (This is the same operation as the diagonal button of the control buttons in the web setting screen)

FAST button/SLOW button

To increase the pan/tilt speed, press the FAST button. To decrease the speed, press the SLOW button.

- If you turn off the unit, high-speed pan/tilt is cancelled.

Operating using the controller

Zoom operations

Press the ZOOM button.

TELE side: Close-up recording (zoom in)

WIDE side: Wide-angle recording (zoom out)

- The zooming speed changes depending on the extent to which the button is pressed.

Pan/tilt operations

- Hold down the PT ACTIVE button to light up the button.

Move PAN/TILT Lever Up/Down/Left/Right/Angle.

- The pan/tilt speed will change depending on the angle that the lever is moved.





-
- The PTZ/FOCUS SPEED dial can be used to change the zoom speed and pan/tilt speed.

Setting the White Balance

When coloration (white balance) is unnatural due to a light source or the like, set it manually.

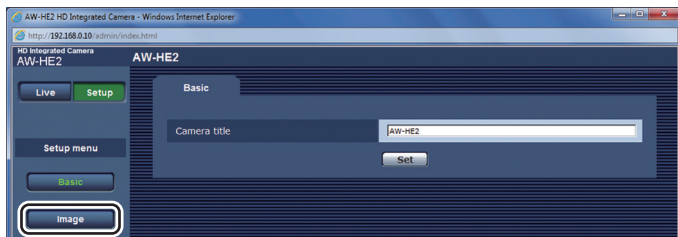
- This adjustment must be performed when using the unit for the first time or when the unit has not been used for a prolonged period.
- It must be performed when the lighting conditions or brightness has changed.

The following modes are available on the unit:

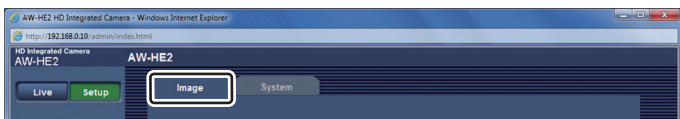
Icon	Mode/Recording conditions
ATW	Auto White Balance adjustment
	Sunny mode: Indoor applications with the same conditions as sunny, outdoor applications
	Cloudy mode: Indoor applications with the same conditions as cloudy, outdoor application
	Indoor mode 1: Incandescent light, video lights like in the studio, etc.
	Indoor mode 2: Color fluorescent lamps, sodium lamps in gymnasiums etc.
AWB A AWB B	Manual adjustment mode: Register a setting suited to a shooting location (White Balance Setting) and retrieve the setting. <ul style="list-style-type: none">• The White Balance Setting cannot be performed when color bars are displayed.

Setting using the Web setting screen

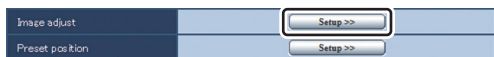
- 1 Open the Setup screen.
- 2 Click [Image].



3 Click the [Image] tab on the Image screen.



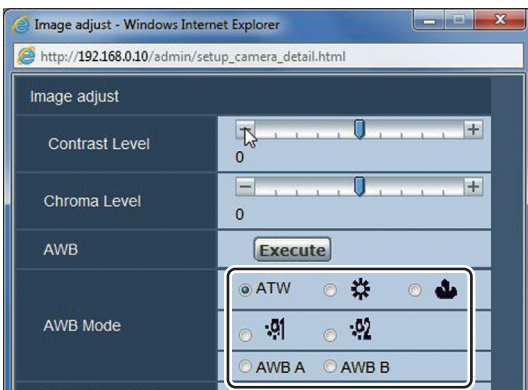
4 Click [Setup] (Image adjust).



- The Image adjust screen opens in a separate window.

5 Select your desired [AWB Mode].

- Select a suitable mode by looking at the coloration on the screen.
- When [AWB A] or [AWB B] is selected, the registered setting is retrieved.



■ Performing the White Balance Setting

1 Set the mode to either [AWB A] or [AWB B].

2 Fill the screen with a white subject.

- Do not shoot shiny or very bright objects.

3 Click [Execute] for [AWB].

- When [OSD Status] is set to [On], [AWB OK] is displayed on the screen and adjustment is completed.
- When the white balance cannot be set, the error message [AWB NG] is displayed on the screen. When this occurs, use another mode.

Operating using the wireless remote controller

Select the menu. (→ 9)

[CAMERA] → [AWB MODE] → desired setting

■ Performing the White Balance Setting

1 Set the mode to either [AWB A] or [AWB B].

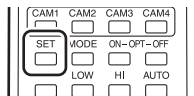
- After setting the mode, end the camera menu.

2 Fill the screen with a white subject.

- Do not shoot shiny or very bright objects.

3 Press and hold the SET button of the wireless remote controller for 2 seconds.

- When [OSD Status] is set to [On], [AWB OK] is displayed on the screen and adjustment is completed.
- When the white balance cannot be set, the error message [AWB NG] is displayed on the screen. When this occurs, use another mode.



Operating using the controller

1 Press the MENU button to light the button.

2 Press the PRESET MEMORY/MENU 4 button (AWB/ABB) to light the button.

- The AWB/ABB menu is displayed on the LCD panel.

AWB MOD :	ATW↓
SET :	AWB↓

3 Rotate the F1 dial to select the white balance mode.

- [ATW], [AWB A], [AWB B], [3200K] (equivalent to “Indoor mode 1”), and [5600K] (equivalent to “Sunny mode”) can be selected from the controller menu.

4 Press the F1 dial to set .

- When selecting modes other than those above, use the camera menu settings. (→ 9)

[CAMERA] → [AWB MODE] → desired setting

■ Set the white balance

- 1 Set the mode to either [AWB A] or [AWB B].
- 2 Fill the screen with a white subject.
 - Do not shoot shiny or very bright objects.
- 3 Turn the F2 dial to select [AWB], and press the F2 dial.
 - When [OSD Status] is set to [On], [AWB OK] is displayed on the screen and adjustment is completed.
 - When the white balance cannot be set, the error message [AWB NG] is displayed on the screen. When this occurs, use another mode.

■ Set the white balance with the USER button

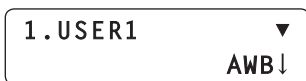
- 1 Set the mode to either [AWB A] or [AWB B].
- 2 Fill the screen with a white subject.
 - Do not shoot shiny or very bright objects.
- 3 Press the USER button registered with [AWB].
 - When [OSD Status] is set to [On], [AWB OK] is displayed on the screen and adjustment is completed.
 - When the white balance cannot be set, the error message [AWB NG] is displayed on the screen. When this occurs, use another mode.
 - Refer to the following for registering to the USER button.

Register to the USER button

- 1) Press the MENU button to light the button.
- 2) Press the PRESET MEMORY/MENU 9 button (SETUP) to light the button.
 - The SETUP menu is displayed on the LCD panel.



- 3) Press the F1 dial.
- 4) Turn the F1 dial to display [USER1] or [USER2].
- 5) Rotate the F2 dial to select [AWB] and press the F2 dial.



Adjust the Brightness

Adjust the brightness of the image.

This unit can be used by switching between auto mode and manual mode.

Auto mode:

Brightness is adjusted automatically to suit the area of shooting.

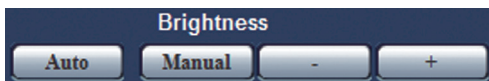
Manual mode:

Adjust the brightness when taking images in areas that are too bright (or too dark).

-
- [Contrast Level] and [Back Light COMP.] cannot be set in manual mode.

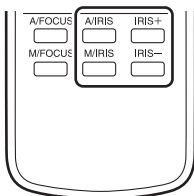
Setting using the Web setting screen

- Open the Live screen



- Auto** : Switches to auto mode.
- Manual** : Switches to manual mode.
- : Adjusts the image darker in manual mode.
- +** : Adjusts the image brighter in manual mode.

Operating using the wireless remote controller



A/IRIS button:

Switches to auto mode.

M/IRIS button:

Switches to manual mode.

IRIS+ button:

Adjusts the image brighter in manual mode.

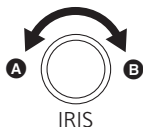
IRIS- button:

Adjusts the image darker in manual mode.

Operating using the controller

The unit switches between auto mode and manual mode each time the IRIS-AUTO button is pressed.

- Auto mode is on when the IRIS-AUTO button lights up, and manual mode is on when it turns off.



IRIS dial:

The image becomes darker when rotating the dial toward **A** in manual mode.

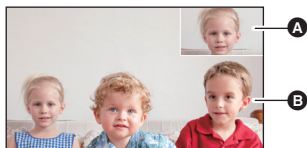
The image becomes brighter when rotating the dial toward **B** in manual mode.

- Holding down the IRIS dial in manual mode, adjusts the image to the darkest setting.

PinP (Picture in Picture) Function

You can cut a portion of a camera image and displays it on a small screen (PinP: Picture in Picture) in the main screen.

- You can change the PinP retrieval position, perform zoom operations for a PinP image, and change the PinP display position.



- A** PinP
- B** Main screen

Displaying PinP

Operating Using the Web setting screen

- 1 Open the Live screen.
- 2 Select [On] for [PinP Display].



Operating Using the Camera Menu

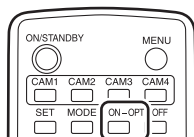
Select the menu. (→ 9)

[CAMERA] → [PinP DISPLAY] → [ON]

Operating using the wireless remote controller

Press the **OPT-ON** button.

- You can show/hide a PinP image by pressing the button.



- On a 1920×1080 pixel monitor, a PinP image is displayed in 640×360 pixels.
- When the PinP display is switched on, the movement of images on the monitor may no longer look smooth.

Switching the Control Mode

You can switch the control mode to main screen or PinP while a PinP image is displayed.

Main screen control mode:

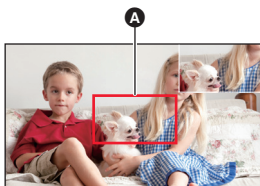
You can operate the main screen (zoom, pan/tilt).

PinP control mode:

You can change the PinP retrieval position, and perform zoom operations for a PinP image.

(→ 23, 24)

- When the control mode is set to PinP, the PinP retrieval frame **A** is displayed on the HDMI output monitor, and the zoom level of the main screen is set to $\times 1$.



Operating Using the Web setting screen

- 1 Open the Live screen.
- 2 Select [Main] or [PinP] of [Control].

Control

Main

PinP

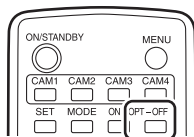
Main: Sets the control mode to the Main screen.

PinP: Sets the control mode to PinP.

Operating using the wireless remote controller

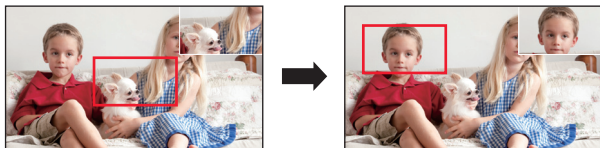
Press the OPT-OFF button.

- The control mode changes each time you press the button.



- If you change the control mode from PinP to the Main screen or hide the PinP display, the zoom magnification and pan/tilt position return to their original states.
- The PinP retrieval frame does not appear while the camera menu is displayed.

Changing the PinP Retrieval Position



- Set the control mode to PinP. (→ 22)

Operating Using the Web setting screen

1 Open the Live screen.

2 Click or drag the control pad/buttons.

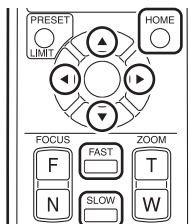
- The operation method is the same as the pan/tilt operations. (→ 12)
- The PinP retrieval frame moves and the retrieval position changes.
- When [Home] is selected for [Preset] and [Move] is clicked, the PinP retrieval position moves to the center of the screen, and the PinP display zoom level is set to $\times 1$.



Operating using the wireless remote controller

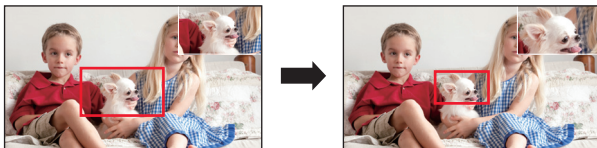
Press the ▲/▼/◀/▶ button.

- The operation method is the same as for pan/tilt operations. (→ 13)
- To increase the movement speed, press the FAST button. To decrease the movement speed, press the SLOW button.
- The PinP retrieval frame moves and the retrieval position changes.
- If you press and hold the HOME button for 2 seconds, the PinP retrieval position moves to the center of the screen and the PinP display zoom level changes to $\times 1$.



- The PinP retrieval position can be changed within a screen with an aspect ratio of 16:9 even when [Format] is set to [480p (576p)]*and [Down CONV. Mode] is set to [SideCut].
- * When [System Frequency] is [59.94Hz(NTSC)], you can select [480p], and when it is set to [50Hz(PAL)], you can select [576p].

Zooming in and out on a PinP image



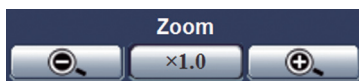
- Set the control mode to PinP. (→ 22)

Operating Using the Web setting screen

1 Open the Live screen.

2 Operate the zoom buttons.

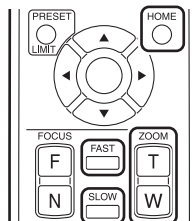
- The operations are the same as the main screen zoom operations. (→ 12)
- When [Home] is selected for [Preset] and [Move] is clicked, the PinP retrieval position moves to the center of the screen, and the PinP display zoom level is set to $\times 1$.



Operating using the wireless remote controller

Press the ZOOM button.

- The operations are the same as the Main screen zoom operations. (→ 13)
- To zoom faster, press the FAST button. To zoom slower, press the SLOW button.
- If you press and hold the HOME button for 2 seconds, the PinP retrieval position moves to the center of the screen and the PinP display zoom level changes to $\times 1$.



- The PinP retrieval frame becomes smaller to suit the zoom level.

Changing the PinP Display Position

You can change the PinP display position to the Upper Right , Lower Right , Upper Left , or Lower Left area of the main screen.

Operating Using the Web setting screen

- 1 Open the Live screen.
- 2 Pull down [PinP Position] and select your desired display position.

PinP Position

Upper Right ▼

Operating Using the Camera Menu

Select the menu. (→ 9)

[CAMERA] → [PinP POSITION] → Desired display position

Using the Preset Memory

You can save desired settings to the preset memory and call them when needed. (Up to 9)

• You can save the following settings:

- Zoom level
- Contrast
- PinP display/non-display
- PinP retrieval position
- PinP display zoom level
- PinP display position
- Pan/tilt positions
- White balance
- Control mode
- Digital zoom enablement/disablement
- Auto mode/manual mode for adjusting brightness
- Brightness adjustment value

Operating Using the Web setting screen

1 Open the Live screen.

2 Select one of the numbers [1] to [9] from the [Preset] pull-down menu.



3 Click [Set].

- The current settings are saved in the preset memory. (When the selected number is already taken, the current settings replace the old ones.)

To call the settings in the preset memory

Select one of the numbers [1] to [9], and then click [Move].

- If you select [Home] and then click [Move] while the control mode is set to the Main screen, the zoom level changes to $\times 1$.
- If you select [Home] and then click [Move] while the control mode is set to PinP, the PinP retrieval position moves to the center of the screen, and the zoom level changes to $\times 1$.

- You can also perform the operations from the Setup screen. (→ 33)

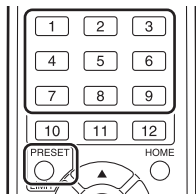
Operating using the wireless remote controller

Press one of the buttons 1 to 9 while pressing the PRESET button.

- The current settings are registered in the preset memory. (When a number for which settings are already registered is chosen, those settings are overwritten)

To call the settings in the preset memory

Press one of the buttons 1 to 9.



Operating using the controller

The preset memories of the unit are registered in preset numbers 1 to 9 of the controller (page number 1, internal page number 1 to 9).

- Press CAMERA STATUS/SELECTION button 1 to 5 and select the camera.

1 Press the STORE button to light the button.

2 Hold down the PRESET MEMORY/MENU button 1 to 9.

- The current settings are registered in the preset memory. (When a number for settings that have already been registered is selected, those settings are overwritten)
- The button registered with the preset memory lights up.

To call the settings in the preset memory

Press the PRESET MEMORY/MENU button 1 to 9.

- When the STORE button or DELETE button are lit up, the preset memory cannot be read. Press the button to turn off the button.
- Retrieving a preset memory will display the present number in the upper right side of the LCD panel.

To delete the preset memory

- 1) Press the DELETE button to light the button.
 - 2) Hold down the PRESET MEMORY/MENU button 1 to 9.
- The selected number preset memory will be deleted and the button will turn off.

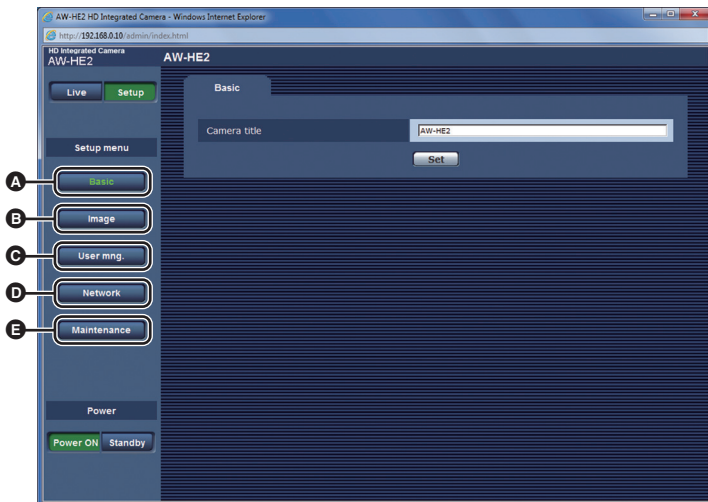
Using the Web setting screen/Camera Menu to Configure Settings

You can configure the unit's settings on web setting screen (the Setup screen)/camera menu.

This section mainly provides instructions for the web setting screen (the Setup screen), but some of the items can also be set from the camera menu.

- Refer to page 9 for basic operations of the camera menu.
- For those items that can only be set in the camera menu, refer to page 44.

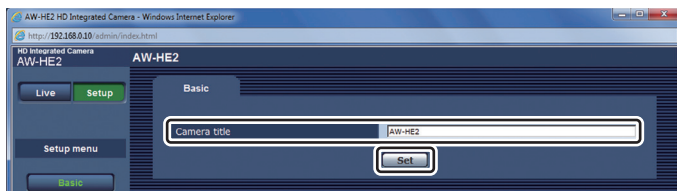
1 Open the Setup screen.



2 To open your desired screen, click one of the options **A** to **E**.

- A** Basic screen (Basic settings) (→ 29)
- B** Image screen (Picture quality settings, System settings) (→ 30)
- C** User mng. screen (User management settings) (→ 37)
- D** Network screen (Network settings) (→ 39)
- E** Maintenance screen (Maintenance settings) (→ 41)

Basic screen



[Camera title]

Enter the name of the unit, and click [Set].

- You can enter up to 20 single-byte characters.
- You can enter the following characters:

Single-byte numeric characters	0123456789
Single-byte alphabetical characters (upper and lower cases)	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz
Symbols	. @ _

- The entered name appears on the camera title part at the top of the web setting screen.

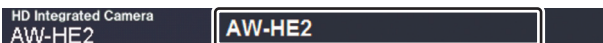
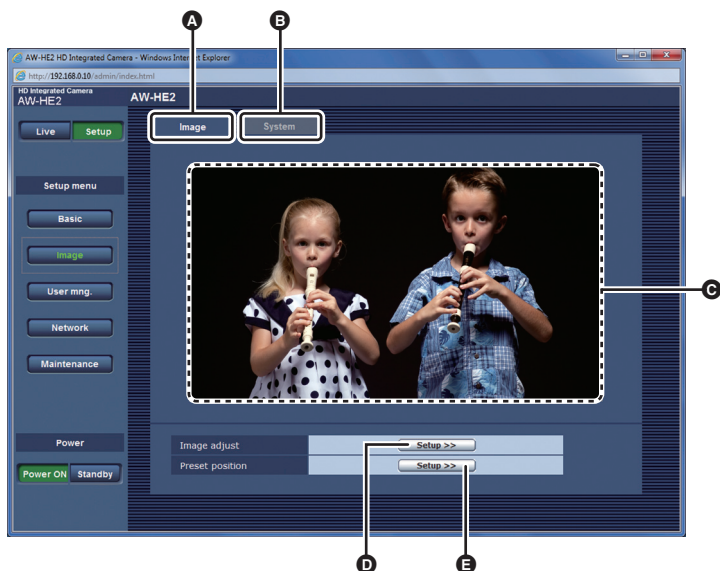


Image screen

You can adjust the picture quality, save preset memories, configure the system settings, etc..



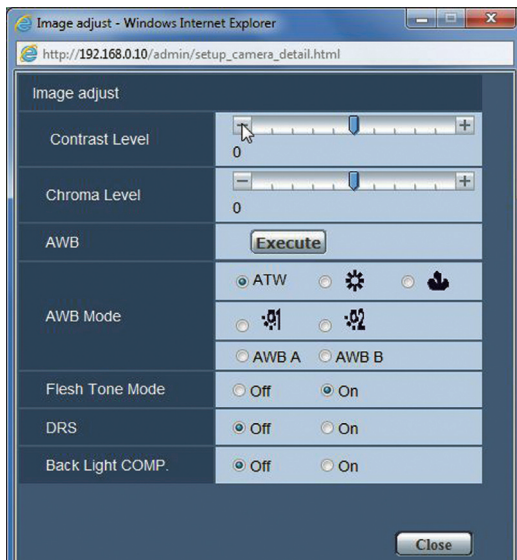
- A** [Image] tab
- B** [System] tab
- C** Camera image (when a tally light-up signal is received, a red frame is displayed over the camera image)
- D** [Setup] (Image adjust)
- E** [Setup] (Preset position)

Adjusting the picture quality on the Image adjust screen

1 Click the [Image] tab on the Image screen.

2 Click [Setup] (Image adjust).

- The Image adjust screen opens in a separate window.



[Contrast Level]

[-5] to [+5]

Adjust the contrast.

Click [+] and [-] to adjust the level.

■ Setting Using the Camera Menu

1 Select the menu.

[CAMERA] → [CONTRAST LEVEL]

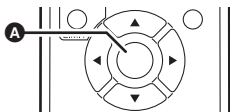
2 Adjust the contrast level. (→ 10, 11)

3 (When performing the operations using the wireless remote controller)

Press the enter button **A**.

(When performing the operations using the controller)

Press the F1 button.



[Chroma Level]

[-5] to [+5]

You can adjust the color depth.

Click [+] and [-] to adjust the level.

■ Setting Using the Camera Menu

- 1 Select the menu.

[CAMERA] → [CHROMA LEVEL]

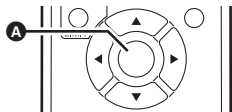
- 2 Adjust the level. (→ 10, 11)

- 3 (When performing the operations using the wireless remote controller)

Press the enter button **A**.

(When performing the operations using the controller)

Press the F1 button.

**[AWB/AWB Mode]**

Please refer to page 15.

[Flesh Tone Mode]

[Off]/[On]

This function enables human skin to appear smooth and more beautiful in images.

■ Setting Using the Camera Menu

[CAMERA] → [FLESH TONE MODE] → [ON]

[DRS]

[Off]/[On]

It is possible to expand the dynamic range by compressing the video signal level of the highly illuminated area that gets washed out with standard recording.

■ Setting Using the Camera Menu

[CAMERA] → [DRS] → [ON]

- If there are extremely dark or bright parts or the brightness is insufficient, the effect may not be clear.

This makes the image brighter to prevent darkening of a backlit subject.

■ Setting Using the Camera Menu

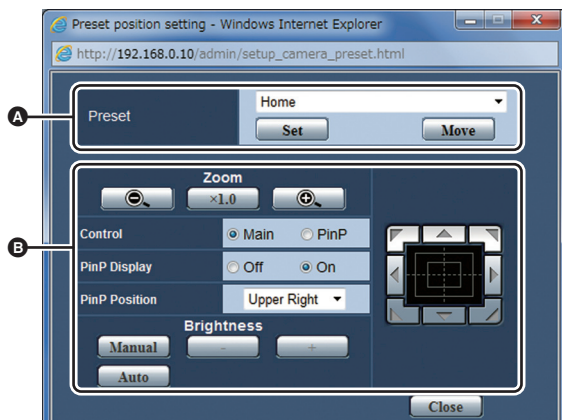
[CAMERA] → [BACKLIGHT COMPENS.] → [ON]

Using the preset memory on the Preset position screen

1 Click the **[Image]** tab on the Image screen.

2 Click **[Setup] (Preset position)**.

- The Preset position screen opens in a separate window.



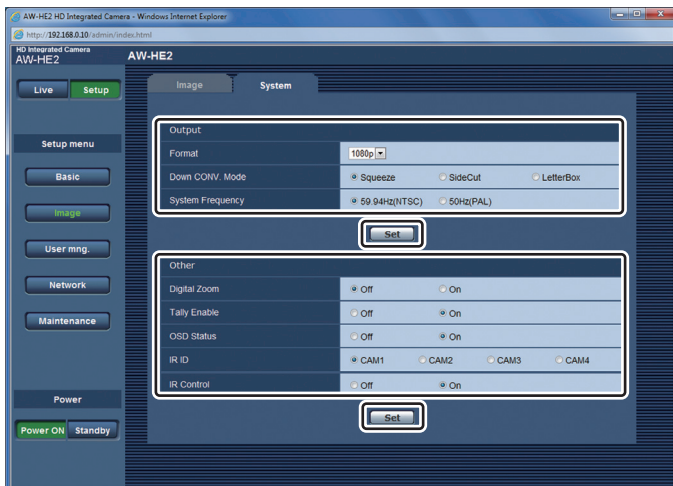
A Operations are the same as the preset memory operations for the Live screen. (→ 26)

B Operations are the same as the operations for the Live screen. (→ 12, 19, 21)

Configuring the System Settings on the System Screen

Click the [System] tab on the Image screen.

- The System screen opens.



- After changing settings, click [Set].

[Format] [1080p]/[1080i]/[720p]/[480p (576p)]*

You can change the resolution of the HDMI output.

* When [System Frequency] is [59.94Hz(NTSC)], you can select [480p], and when it is set to [50Hz(PAL)], you can select [576p].

■ Setting Using the Camera Menu

[SYSTEM] → [FORMAT] → desired setting

[Down CONV. Mode]**[Squeeze]/[SideCut]/[LetterBox]**

The down-conversion mode is selected here.

- Only enabled when [Format] is [480p (576p)]*.

* When [System Frequency] is [59.94Hz(NTSC)], you can select [480p], and when it is set to [50Hz(PAL)], you can select [576p].

[Squeeze]: Used when the aspect ratio of the monitor is 16:9. If the aspect ratio of the monitor is 4:3, the width of an image is squashed in and the image is elongated vertically.



[SideCut]: Used when the monitor aspect ratio is 4:3. Based on the vertical length, portions that extend off the sides of the screen are cut off, and the angle of view is adjusted.



[LetterBox]: Used when the monitor aspect ratio is 4:3. Based on the width, the top and bottom of the image are blackened, and the angle of view is adjusted.

**■ Setting Using the Camera Menu**

[SYSTEM] → [DOWN CONV. MODE] → desired setting

- When the camera menu is being displayed, [SideCut] display becomes [LetterBox] display.

[System Frequency]**[59.94Hz(NTSC)]/[50Hz(PAL)]**

You can change the system frequency.

- When you press [Set] after setting the option, a message confirming that you want to reboot the unit is displayed. Press [OK] to restart the unit.

■ Setting Using the Camera Menu

[SYSTEM] → [SYSTEM FREQ] → desired setting

- A message confirming whether you wish to restart the unit is displayed. Select [YES] to restart the unit.

[Digital Zoom]**[Off]/[On]**

You can enable/disable the digital zoom (zoom level maximum: ×4).

■ Setting Using the Camera Menu

[SYSTEM] → [D.ZOOM] → desired setting

- The larger the digital zoom magnification, the more the image quality is degraded.

[Tally Enable]**[Off]/[On]**

"Enable" or "Disable" is set here for the function which turns on/ turns off the tally lamp using the tally control signal.

■ Setting Using the Camera Menu

[SYSTEM] → [TALLY] → desired setting

[OSD Status]**[Off]/[On]**

You can select whether to show/hide messages such as [AWB OK], which is displayed when performing the white balance setting ([AWB A]/[AWB B]).

■ Setting Using the Camera Menu

[SYSTEM] → [OSD STATUS] → desired setting

[IR ID]**[CAM1]/[CAM2]/[CAM3]/[CAM4]**

You can set the camera's remote control ID.

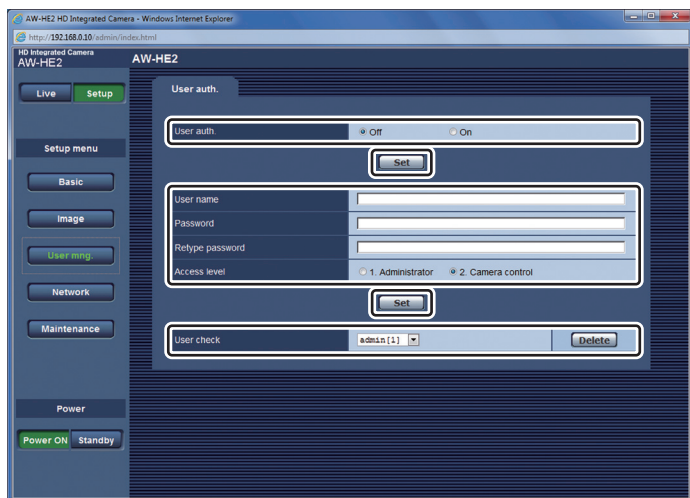
- This function's default setting is [CAM1].

[IR Control]**[Off]/[On]**

You can enable/disable the wireless remote controller.

User mng. screen

You can register users who can access the unit from a PC or AW-RP50.



- Enter and set all of [User name], [Password], [Retype password] and [Access level], and then click [Set].

[User auth.] [Off]/[On]

You can set whether to authenticate users when the web setting screen appears.

- Click [Set] to complete the setting.
- If [On] has been selected as the [User auth.] setting, control will no longer be exercised from the AW-RP50.

[User name]

You can register user names.

- You can register up to 9 users.
- You can enter single-byte alphanumeric characters and single-byte symbols.
- You can enter up to 32 characters.

[Password/Retype password]

You can set an authentication password that a user is asked to enter when the web setting screen or the Setup screen appears.

After entering a password in the [Password] field, re-enter the password in the [Retype password] field to prevent input errors.

- Single-byte alphanumeric characters and single-byte symbols can be entered.
- From 4 to 32 characters can be entered.

To protect security, create a password made up of alphanumeric characters and symbols, and change the password periodically.

[Access level]

[1. Administrator]/[2. Camera control]

You can set the access level of registered users.

[1. Administrator]: A user can perform all operations for the unit.

[2. Camera control]: A user can perform only the Live screen operations.

[User check]

Display registered user names and access levels.

E.g. In the case of admin [1]

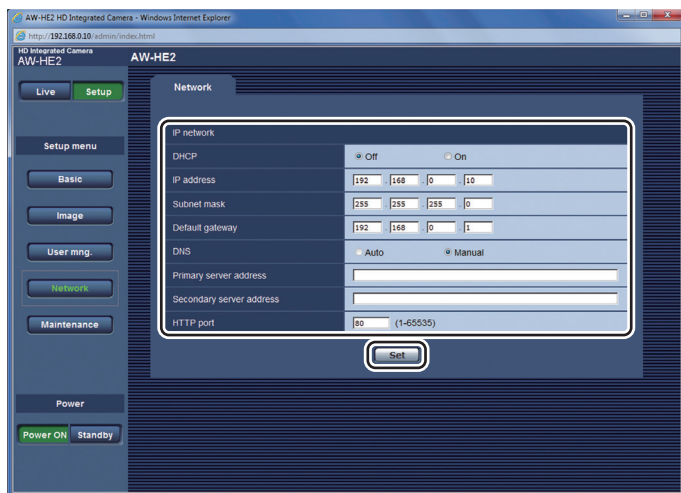
admin: User name

[1]: Access level

- Click [Delete] to delete displayed user registration items.

Network screen

You can configure the network settings for the unit.



- After changing settings, click [Set].

[DHCP] [Off]/[On]

You can set whether to use the DHCP function. To prevent computers that do not use DHCP function and other network cameras from using the same IP address, set the DHCP server. For details on the server settings, consult your network administrator.

[IP address]

Input the unit's IP address here when the DHCP function is not going to be used. Input an address that will not duplicate an existing IP address which has been set for a personal computer or another network camera.

- This function's default setting is [192.168.0.10].
- Multiple IP addresses cannot be used even when the DHCP function is used. For details on the DHCP server settings, consult your network administrator.

[Subnet mask]

Input the unit's subnet mask here if the DHCP function is not used.

- This function's default setting is [255.255.255.0].

[Default gateway]

Input the unit's default gateway here if the DHCP function is not used.

- This function's default setting is [192.168.0.1].
- Multiple IP addresses cannot be used for the default gateway even when the DHCP function is used.
For details on the DHCP server settings, consult your network administrator.

[DNS]

[Auto]/[Manual]

[Auto]: The DNS server address is to be acquired automatically.

[Manual]: The DNS server address is to be acquired manually.

- If [Manual] is selected, the DNS settings must be established.
- If [Auto] is selected when the DHCP function is going to be used, the DNS server address is acquired automatically. For further details, consult your system administrator.

[Primary server address/Secondary server address]

Input the IP address of the DNS server if the [Manual] setting has been selected for [DNS].
For details on the IP address of the DNS server, consult your system administrator.

[HTTP port]

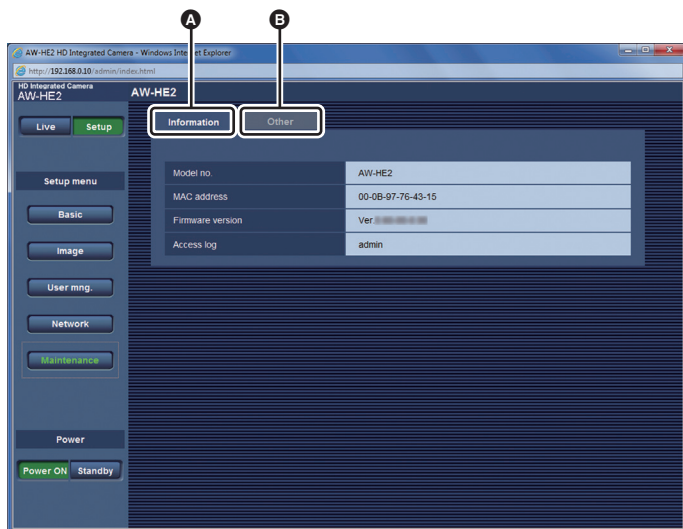
The port number is allocated here separately. (1 to 65535)

- The following port numbers are used by the unit therefore cannot be used.

20, 21, 23, 25, 42, 53, 67, 68, 69, 110, 123, 161, 162, 554, 995, 10669, 10670, 59000 to 59999, 60000 to 61000

Maintenance screen

You can perform such operations as displaying the unit information, restoring the unit's default settings.



- A [Information] tab
- B [Other] tab

To display the unit information on the Information screen

Click the [Information] tab on the Maintenance screen.

- The model number ([Model no.]), MAC address ([MAC address]), and firmware version ([Firmware version]) of the unit, and the user who last logged into the Setup screen ([Access log]) are displayed.

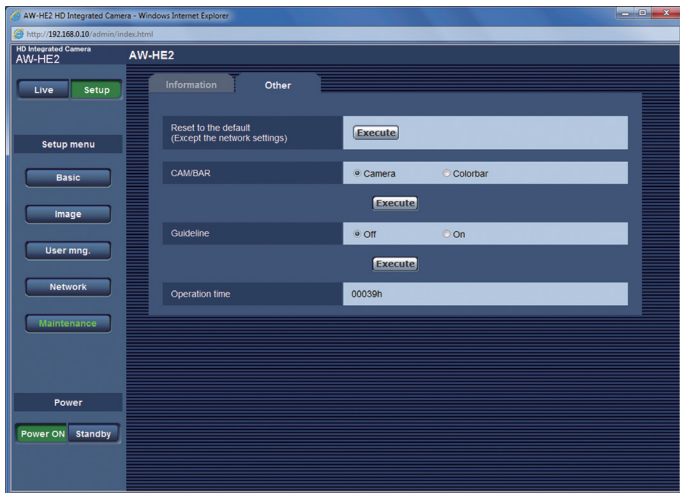
■ To check the firmware version on the camera menu

[MAINTENANCE] → [FIRMWARE VERSION]

To configure the settings on the Other Screen

Click the **[Other]** tab on the Maintenance screen.

- The Other screen opens.



[Reset to the default (Except the network settings)]

You can restore the unit's default settings. (The settings for the Network screen, the User mng. screen and the system frequency do not change)

Click **[Execute]**.

- A confirmation message is displayed. Click **[OK]**.

■ **Setting Using the Camera Menu**

[MAINTENANCE] → **[INITIAL SET]**

- A confirmation message is displayed. Select **[YES]**.

[CAM/BAR]

[Camera]/[Colorbar]

Change the image displayed on the HDMI output monitor or the web setting screen.

Select your desired item and click [Execute].

[Camera]: The camera image is displayed.

[Colorbar]: Color bars are displayed.

- You can also switch the display between the camera image and the color bars by pressing the MODE button on the wireless remote controller or the controller.
- The color bar type differs depending on the system frequency setting.

[Guideline]

[Off]/[On]

You can set whether to show/hide the guideline display.

Select your desired item and click [Execute].

■ Setting Using the Camera Menu

[MAINTENANCE] → [GUIDE LINES] → desired setting

[Operation time]

You can check the operation time of the unit.

■ Setting Using the Camera Menu

[MAINTENANCE] → [OPERATION TIME]

Setting Using the Camera Menu

- The following items can only be set from the camera menu:

[OSD OFF WITH TALLY] [ON]/[OFF]

You can set whether to show the menu screen and the status display of the White Balance Setting when the unit receives a tally light-up signal.

[SYSTEM] → [OSD OFF WITH TALLY] → desired setting

[ON]: Hides the display.

[OFF]: Shows the display.

[UPDATE]

You can update the firmware of the unit.

- **After contacting the store of purchase, save the latest firmware on to a microSD card (always check the precautions of the store of purchase before following any instructions).**

- 1 Insert a microSD card containing an update file into the card insertion portion.
- 2 Select the menu.

[MAINTENANCE] → [UPDATE]

- Follow the on-screen instructions to update.
- Do not turn off the unit while it is updating.
- Do not perform any operations while it is updating.

[IMAGE RESOLUTION] [640×360]/[320×180]

You can set the resolution of the camera image displayed on the web setting screen.

[SYSTEM] → [IMAGE RESOLUTION] → desired setting

- When displaying camera images of this unit in the web setting screen of other devices, camera images in the web setting screen of this unit will be displayed at 320×180/10fps.

Troubleshooting

■ It is not a malfunction in following cases

Object seems to be warped.	<ul style="list-style-type: none">● Object seems to be warped slightly when the object moves across the image very fast, but this is because the unit is using MOS for the image sensor. This is not a malfunction.
When the flash is fired during shooting, only the top or bottom of the screen becomes lighter.	<ul style="list-style-type: none">● With a MOS image sensor, the shooting timing differs slightly between the top left and bottom right of the screen. This means that when the flash is fired, the bottom of the screen will become lighter in the field concerned and the top will become lighter in the next field. This is normal and not indicative of any problem.

Power

Problem	Check points
This unit cannot be turned on.	<ul style="list-style-type: none">● When the status display lamp is off, power is not supplied or the unit is turned off.<ul style="list-style-type: none">– Correctly connect the AC adapter, the AC cable, and the USB cable.– Press the power button of the unit.● When using the wireless remote controller, select the unit by pressing one of the CAM1 to CAM4 buttons, and then press and hold the ON/STANDBY button for 2 seconds.● If you turn off the unit with the power button of the unit, the unit cannot be turned on by the web setting screen, the wireless remote controller or controller. Press the power button to turn on the unit.

Wireless remote controller

Problem	Check points
Cannot operate.	<ul style="list-style-type: none">● Check if the status display lamp is lit green and the unit is turned on.● Before operating, select the unit by pressing one of the CAM1 to CAM4 buttons.● When strong light from a fluorescent lamp, a plasma monitor, the sun, etc. is shining on the wireless remote control signal light-sensing area, the unit may not respond.● If the status display lamp does not blink even when you operate near the wireless remote control signal light-sensing area, the batteries of the wireless remote controller are depleted. Replace the batteries.● Set [IR Control] to [On] on the web setting screen. (→ 36)

Controller

Problem	Check points
Cannot operate.	<ul style="list-style-type: none">● Check whether the status display lamp lights up green and the unit is turned on.● Before operations, press CAMERA STATUS/ SELECTION button 1 to 5 to select the camera.● It may be necessary to upgrade the version of the controller so that the controller will support the unit. Consult with your dealer.

Web setting screen

Problem	Check points
The web setting screen cannot be accessed.	<ul style="list-style-type: none">● Check the system requirements of the web setting screen.● Use a category 5 or above LAN cable.● When the LAN lamp is not lit, the LAN is not connected correctly or the connected network is not operating correctly. Check for a loose contact of the LAN cable and check the wiring.

Web setting screen

Problem	Check points
<p>The web setting screen cannot be accessed.</p>	<ul style="list-style-type: none"> ● Turn on the unit or set it to Standby mode. ● Check if a valid IP address is set for the unit. ● After changing the IP address of the unit, enter [http:// Post-change IP address/] into the address bar of the web browser. ● Make sure that you do not access a wrong IP address. <ul style="list-style-type: none"> – [When using Windows] <p>Execute the Windows command prompt, ping [The IP address set for the unit]. If a reply comes back from the unit, there are no operational problems.</p> <p>If a reply does not come back, restart the unit and change the IP address using the Easy IP Setup Software.</p> – [When using Mac OS X] <p>Using the Mac OS X terminal, execute ping -c 10 [The IP address set for the unit]</p> <p>If a reply comes back from the unit, there are no operational problems.</p> <p>If a reply does not come back, perform the following steps.</p> <ol style="list-style-type: none"> 1) Press the INIT button to initialize the network settings of this unit. 2) Start the web setting screen to configure the network settings. – For information on how to start the web setting screen, please read the “Operating Instructions <Basics>.” ● Make sure that the HTTP port number is not set to 554. For information on the HTTP port numbers supported by the unit, refer to page 40. ● Check if the set IP address is not overlapping with that of another device, and the set address match the network/ subnet of the connection destination. <ul style="list-style-type: none"> – [When the personal computer is connected to the unit within the same subnet] <p>Set the IP addresses of this unit and the computer to a common subnet. Further, cancel the “Use proxy server” setting on the web browser. When accessing this unit in the same subnet, it is recommended that you set the address of this unit as a “Remove from proxy” address.</p> – [When the unit and personal computer are connected to different subnets] <p>Check if the default gateway value set for the unit is correct.</p>

Web setting screen

Problem	Check points
The settings on the web setting screen or the image on the camera is not updated or displayed properly.	<ul style="list-style-type: none">● The unit's ports may be filtered by the firewall or other function of the anti-virus software. Change the HTTP port number of the unit to a port number which will not be filtered. <p>[When using Windows]</p> <ul style="list-style-type: none">● Press the [F5] key on the personal computer keyboard and update the display.● Follow the steps below to delete the temporary Internet files.<ol style="list-style-type: none">1) In Internet Explorer, click [Tools] → [Internet Options].2) Click the [General] tab, and click the [Delete...] button in [Browsing history].3) In the [Delete Browsing History] dialog box, select [Temporary Internet files], and click the [Delete] button.4) Click the [OK] button.● If, in the Temporary Internet Files settings, the check [Every time I visit the webpage] setting is not selected for [Check for newer versions of stored pages], the web setting screen may not be displayed properly. Follow the steps below.<ol style="list-style-type: none">1) In Internet Explorer, click [Tools] → [Internet Options].2) Click the [General] tab, and click the [Settings] button in [Browsing history].3) In the [Temporary Internet Files and History settings] dialog box, turn [Every time I visit the webpage] of [Check for newer versions of stored pages] on.4) Click the [OK] button. <p>[When using Mac OS X]</p> <ul style="list-style-type: none">● Press the [Command] + [R] key on the personal computer keyboard and update the display.● Follow the steps below to delete the temporary Internet files.<ol style="list-style-type: none">1) In Safari, select [Safari] → [Empty Cache...].2) Click the [Empty] button in [Are you sure you want to empty the cache?] pop-up.

Video

Problem	Check points
No pictures are displayed or the pictures are disturbed.	<ul style="list-style-type: none"> ● Check if the unit is correctly connected with other devices. ● If your system is configured in such a way that a displayed image is automatically switched in conjunction with your camera selection, select the correct camera. ● Check if [Format], [Down CONV. Mode], and [System Frequency] are set correctly. (→ 34, 35)
The picture is flipped vertically.	<ul style="list-style-type: none"> ● Turn the middle ring portion by 180° so that the internal stereo microphones are facing up.
Multiple color bands (color bars) are displayed.	<ul style="list-style-type: none"> ● Switch to the camera picture. (→ 5, 43)
The menu screen is displayed.	<ul style="list-style-type: none"> ● To close the camera menu, press the MENU button of the wireless remote controller. ● Press and hold the CAMERA OSD button of the controller for 2 seconds to exit the camera menu.
Something is wrong with the coloring of the pictures.	<ul style="list-style-type: none"> ● Set the white balance to ATW (auto). If colors do not appear correct even in ATW mode, perform the White Balance Setting. (→ 15)
When fine lines or cyclical patterns are shot, flickering is seen or coloring is added to them.	<ul style="list-style-type: none"> ● This phenomenon occurs because the pixels are arranged systematically on each image sensor. It is noticeable when the spatial frequency of a subject and the pixel pitch are brought into proximity so change the camera angle or take other such action.

Precautions when using a computer

When using a computer, the symptoms described below may occur.
If any of them occurred, follow the instructions to solve each problem.
(The instructions describe solutions for administrators.)

- Descriptions in this document are based on operation check by Panasonic Corporation.
Possible symptoms may vary depending on platforms or operating system versions, etc.

When using Windows

Operating procedures and screen are described using Windows 7 and Internet Explorer 9.0.

■ When accessing the web browser, the Pop-up Blocker is displayed and you cannot log in.



- Follow procedures (A) and (B) below.

(A) Set the popup to [Always allow] using the information bar.

- 1) Click [Options for this site] on the information bar.

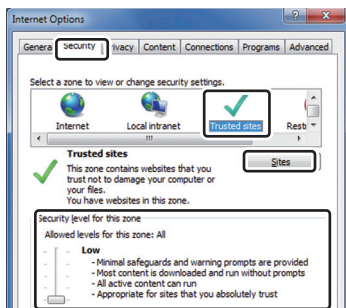


- 2) Click [Always allow].

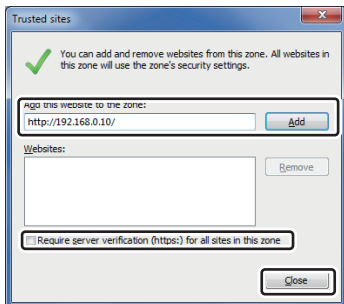
(B) Add the IP address of the camera to trusted sites, and perform the security setting.

- 1) In Internet Explorer, click [Tools] → [Internet Options].
 - 2) Click the [Security] tab, and select [Trusted sites].
 - 3) Select [Low] for [Security level for this zone].
- If the lower setting is selected, the security level of personal computer will go down.

- 4) Click [Sites].



- 5) Enter [http:// the IP address for the unit/] in [Add this website to the zone:], and click [Add].
- Make sure [Require server verification (https:) for all sites in this zone] is unchecked.
- 6) Click [Close].

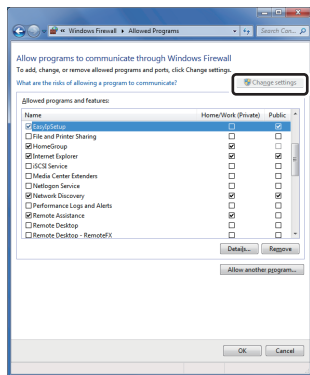
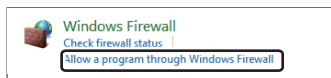


■ **An unnecessary status bar or scroll bar is displayed on the pop-up window**

- 1) In Internet Explorer, click [Tools] → [Internet Options].
- 2) Click the [Security] tab, and select the [Internet].
- 3) Click [Custom Level...].
- 4) Select [Enable] for [Allow script-initiated windows without size or position constraints] under [Miscellaneous].
- 5) Click [OK].
- 6) When the warning window is displayed, click [Yes].

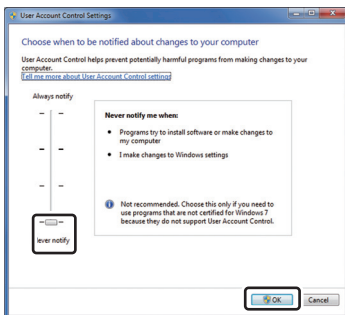
■ Easy IP Setup Software does not display the detected IP address. Check the firewall settings. If firewall is activated, set the web browser or Easy IP Setup Software to the [Allow a program through Windows Firewall] setting.

- 1) Open the control panel, and click [System and Security].
- 2) Click [Allow a program through Windows Firewall] of [Windows Firewall].
- 3) Select the [Internet Explorer] or [EasyIPSetup] line, and then click the [Change settings] button. Check [Internet Explorer] or [EasyIPSetup].
- 4) Click the [OK] button.

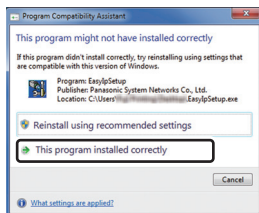


■ When starting the Easy IP Setup Software, a message is displayed to request the password of administrator. When exiting the Easy IP Setup Software, the message [This program may have not been installed correctly] is displayed. Turn off User Account Control from the control panel.

- 1) Open the control panel, and click [System and Security].
- 2) Click [Change User Account Control settings] on the [Action Center] window.
- 3) Slide the gauge of the slide bar to the [Never notify] position, and click the [OK] button.



- The [Program Compatibility Assistant] is displayed after exiting the Easy IP Setup Software.



This symptom happens only when the software has been used for the first time. Select [This program installed correctly].

Restrictions

- **On the setup pages for some products**

The display positions of setting items and setting values may not be correspondent.

- **When using Windows 7 with some products**

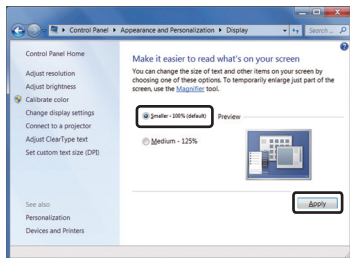
2 web browser windows may be displayed at the same time.

■ The screens of the browser are not displayed properly.



Check the character size of the screenshot by clicking [Display] of [Personalize].

- 1) Right-click on the desktop.
- 2) Click [Personalize].
- 3) Click [Display].
- 4) Select [Smaller-100% (default)] for the character size of the screenshot, click the [Apply] button, and reboot the personal computer.



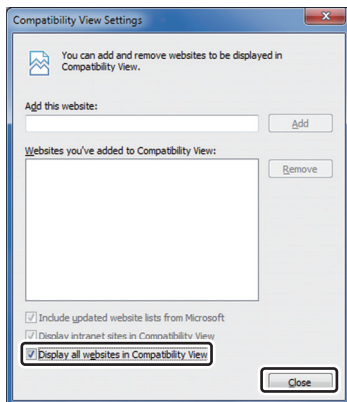
Restrictions

- When two browser windows are open and one is being displayed on another, the back window may come to the front when the mouse pointer is placed.
- When accessing the unit from the web browser, another window may open, and pop-up may be displayed.

- **Screen is deformed. Or when activating the compatibility view, part of the screen is not displayed or a pop-up window appears to say that the screen is not displayed again.**

Check [Display all websites in Compatibility View] on the [Compatibility View settings] screen.

- 1) In Internet Explorer, click [Tools].
- 2) Click [Compatibility View settings].
- 3) Check [Display all websites in Compatibility View], and click [Close].



- **Network disconnection occurs when the personal computer enters the sleep mode.**

After canceling the sleep mode, reload the screen as necessary.

When using Mac

The web setting screen does not appear as a pop-up even when the IP address is input from Safari and the unit is accessed.

In Safari, select [Safari] → [Block Pop-Up Windows], and then remove its check mark.

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Panasonic Corporation

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