Panasonic
BUSINESS

AW-HE40SW/SK [SDI Model]
AW-HE40HW/HK [HDMI Model]
HD Integrated Camera

AW-HE40SW/AW-HE40HW
Suspended (Hanging) style

For indoor use

Features 30x optical zoom lens
and support for PoE+*
for outstanding operability
and installation flexibility

AW-HE40SK/AW-HE40HK
Stand-alone (Desktop) style

For indoor use

* Abbreviation of Power over Ethernet Plus.

Full HD camera with integrated pan-tilt for lectures, meetings and a wide variety of applications.

The AW-HE40 series of integrated full HD cameras performs in a wide variety of onsite shooting applications that require high-quality video, such as conferences, lecture capture and other events, thanks to its high-performance zoom, wide angle of view and outstanding color reproducibility.
In addition to IP video transmission, support for PoE+[1] enables power to be supplied via a LAN cable[2]. The result is installation flexibility. It also supports HD-IP video output, output of video and audio via USB, and SD card recording.

Developed 1/2.3-type MOS Sensor

Equipped with a developed 1/2.3-type MOS sensor and DSP (Digital Signal Processor) for high sensitivity and high resolution.

High Performance Optical 30x Zoom Lens/ Super Resolution 40x Zoom

In addition to a 30x optical zoom, the AW-HE40 series can zoom up to 40x while maintaining high resolution thanks to Super Resolution technology. It also features a 16x digital zoom[3] and a 1.4x digital extender, which enables the AW-HE40 series to shoot in large conference halls and classrooms.

x30
x40

Wide side (31.6 mm)
Telephoto side (962 mm)
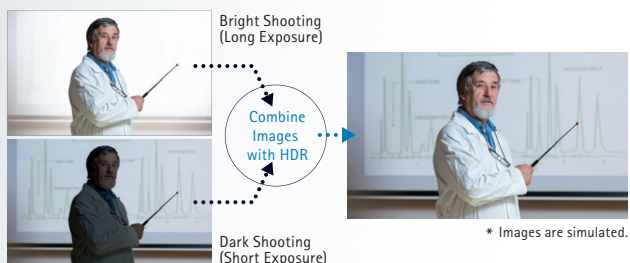Super Resolution (i.Zoom)
*Images are simulated.
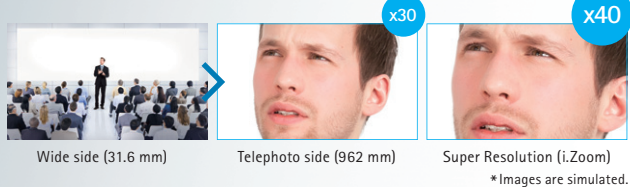
Night Mode (supports automatic switching)

Switching to Night Mode makes shooting possible even in low light conditions in which shooting is normally difficult, such as when observing wildlife[4].
The AW-HE40 series can also be set to switch to the mode automatically depending on surrounding light levels.

OFF   ON

* Images are simulated.

Equipped with High Dynamic Range (HDR) Mode

In addition to conventional Dynamic Range Stretch (DRS) and Digital Noise Reduction (DNR), the AW-HE40 series are newly equipped with High Dynamic Range (HDR) mode. When shooting and synthesizing two images with differing exposure times, the AW-HE40 series can create video with high visibility that corrects for halation and black defects even under backlit conditions.

Bright Shooting (Long Exposure)

Combine Images with HDR

Dark Shooting (Short Exposure)

* Images are simulated.

Outputs Still Image During Preset Movements; Supports One-Camera Operations

The new Freeze During Preset function enableds to freeze the video during preset playback. The immediately preceding still image is output during preset movements so that the swiveling movement is not displayed, making operations possible with one camera.

With Freeze During Preset function OFF and ON

OFF   * Images are simulated.

ON   Preset movement starts   Preset movement ends

Outputs the last frame of the camera image before it starts preset

Either SDI Model or HDMI Model Can Be Selected To Match Usage Needs

Supports 1080/59.94p (HDMI model only), 29.97p[5], 59.94i, 29,97PsF, 1080/50p (HDMI model only), 25p[5], 50i, 25PsF, 720/59.94p, and 50p video formats. Flexible operation in line with the application is made possible by a lineup that includes an SDI output model (AW-HE40SW/SK), optimal for video content production, and an HDMI output model (AW-HE40HW/HK), optimal for video streaming, both of which come in two body colors (white and black) that can be selected depending on the usage environment.

Video/Audio Output with USB

USB Video Class and USB Audio Class are supported. This enables video and audio output via USB so the cameras can be used as high-image-quality Web cameras for Web conferencing, distance learning, and other applications utilizing communication software.

Audio Input Function

The AW-HE40 series also supports audio input, embedding and encoding.
Audio output to IP is also supported. The ALC (Audio Automatic Level Control) in the original AW-HE40 series can be switched ON/OFF and an equalizer function can be used. By reducing low-frequency sound from air conditioners, projectors, and other devices, it is possible to emphasize and increase the clarity of the spoken words.

* 1: Abbreviation of Power over Ethernet Plus. * 2: The software for the AW-HE40 series may need to be updated depending on the existing software version. For details, see the Panasonic website (http://pro-av.panasonic.net/). * 3: Picture quality is lower with the digital zoom. * 4: Video output is monochrome. * 5: Native output.

microSD Card Recording Function

MicroSD card recording is supported. Camera video and audio can be recorded in MP4 format on microSD card (sold separately) inserted into the unit. In addition, using an IP network, it is possible to externally control recording start/stop and download the recorded files.

Full HD Video Output Via IP Transmission

In addition to HD-SDI and HDMI output, production quality full HD video output via IP transmission is supported. The camera delivers up to four channels of IP streaming video (H.264), with a maximum quality level of 1080/60p at 24 Mbps[1]. Simultaneous transmission to as many as 14 devices is also supported[2]. Flexible system setup is possible to meet various application needs.

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

List of Supported Multi-Streaming Outputs (When IP output priority is selected*)

Settings		H.264			JPEG
		CH1	CH2[3]	CH3[3]/CH4[4]	CH1/CH2/CH3
Resolution		1920×1080 1280×720[3] 640×360[5]	1280×720 640×360 320×180	1280×720 640×360 320×180	1920×1080[4] 1280×720[3] 640×360 320×180[3]
Frame rate	59.94 Hz	60 fps/30 fps/15 fps/5 fps	30 fps/15 fps/5 fps	30 fps/15 fps/5 fps	30 fps/15 fps/5 fps
	50 Hz	50 fps/25 fps/12.5 fps/5 fps	25 fps/12.5 fps/5 fps	25 fps/12.5 fps/5 fps	25 fps/12.5 fps/5 fps
Bit rate		Up to 24 Mbps			
Voice transmission		Yes (AAC48 kHz)			
PoE+		Yes			

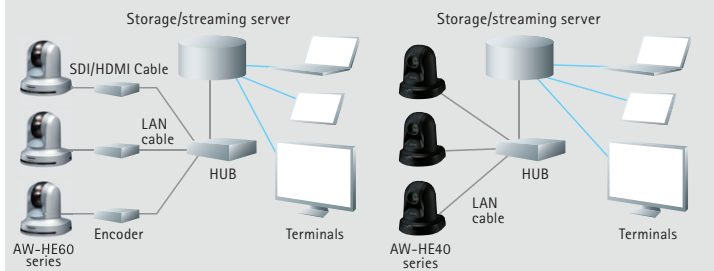*Depending on the output mode, certain restrictions apply.

Transmit IP Video Without a Separate Encoder Reduces Cost and Simplifies Installation

There is no need for the separate encoder normally required when streaming video and audio via IP. Systems can be built with exceptional cost/performance benefits.

Lecture Capture/Streaming System Example
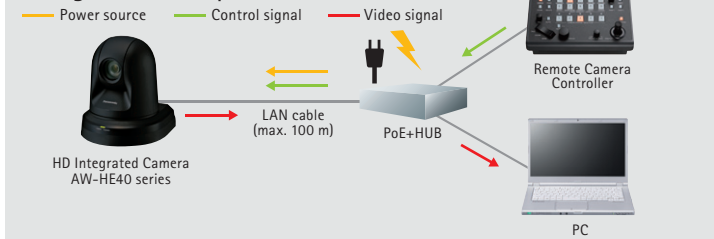● When used with cameras with only SDI/HDMI output
● When used with cameras capable of IP video output

Storage/streaming server
SDI/HDMI Cable
LAN cable
HUB
AW-HE60 series
Encoder
Terminals

Storage/streaming server
HUB
LAN cable
AW-HE40 series
Terminals

Supporting PoE+[6] for Lower Installation Costs

By connecting network devices that support the IEEE802.3at PoE+ standard, power can be supplied via LAN cable. Since it is not necessary to install a power supply or even a local AC outlet, installation costs can be significantly reduced.

Configuration Example
— Power source — Control signal — Video signal
HD Integrated Camera AW-HE40 series
LAN cable (max. 100 m)
PoE+HUB
Remote Camera Controller
PC

IP Control with Image Monitoring Using PC, Mac and Mobile Terminals

Using an IP browser, the camera can be controlled from a remote location, and IP video monitoring and remote camera control can be performed from a PC, Mac or mobile terminal such as an iPhone, iPad or Android device, enabling easy operations. IP video[7] can be transmitted to up to 14 terminals[1].

*For the latest information on supported OS/browsers, please refer to the "service and support" section on the Panasonic website (http://pro-av.panasonic.net/en/).
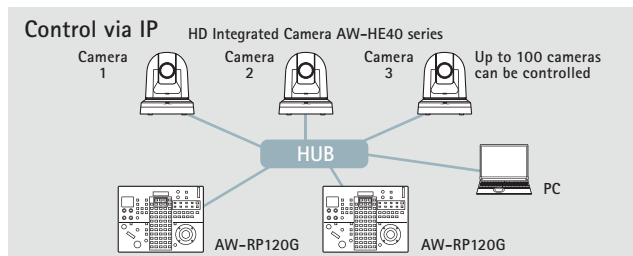
Camera Control Screen (PC)
Live Screen

Mobile Terminal Screen

## Flexible IP Control Architecture Simplifies System Design and Operation[8]

Up to 100 x AW-HE40 series cameras can be controlled via IP from a single AW-RP120G/RP50 or PC. An AW-HE40 series can also be simultaneously controlled by up to five AW-RP120G/RP50's via IP.

Control via IP
HD Integrated Camera AW-HE40 series
Camera 1
Camera 2
Camera 3
Up to 100 cameras can be controlled
HUB
PC
AW-RP120G
AW-RP120G

*1: 1920 x 1080 60 fps output is 1ch display only. For 2ch or more, display is max. 30 fps. Also, JPEG output is up to 3ch. *2: Depends on your network environment. *3: Settable when HDR is "Off".
*4: Settable when HDR is set to "Off" and the frame rate is other than 60fps (or 50fps). *5: Not settable when HDR is "Off". *6: Abbreviation of Power over Ethernet Plus.
*7: Supports only SD video output. *8: Controller upgrade required. For details, please refer to the "service and support" section on the Panasonic website (http://pro-av.panasonic.net).

Exceptional Pan–tilt Performance for Smooth Shooting Over a Wide Area*1

The pan range of ±175° and the tilt range of -30° to +90° cover a wide shooting area*1. Pan and tilt operate at a maximum speed of 90°/second and respond quickly to remote control operation. They operate quietly at a sound level of NC35 or lower.

As seen from above

R80

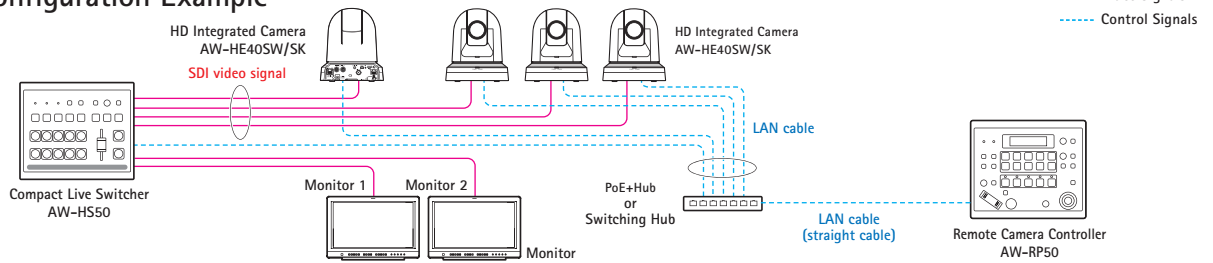175° 175°

As seen from the side

90°

30°
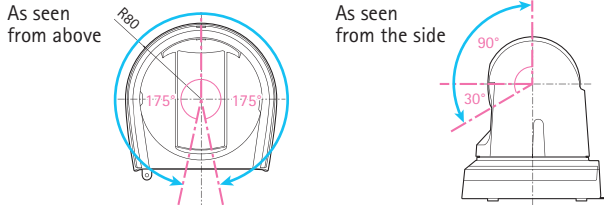
*1. Depending on the position of the pan and tilt, the unit itself may be reflected in the image.

Other Functions

● Preset memory up to 100 positions.
● Functions such as freeze during preset, digital extender zoom and color temperature settings can be assigned to the user buttons on Panasonic controllers.
● Equipped with RS422 remote terminal; up to five units can be controlled via serial control from a controller.
● Equipped with RS232C remote terminal (standard serial communication support). Up to seven units can be controlled via daisy chain connection.
● Up to four units can be operated with a wireless remote controller (AW-RM50G sold separately).
● Easy installation thanks to use of turn-lock mechanism.

System Configuration Example

—— Video Signals
----- Control Signals

HD Integrated Camera AW-HE40SW/SK
SDI video signal

HD Integrated Camera AW-HE40SW/SK

LAN cable

Compact Live Switcher AW-HS50

Monitor 1   Monitor 2

Monitor

PoE+Hub or Switching Hub

LAN cable (straight cable)

Remote Camera Controller AW-RP50

*The AC adaptor provided with the unit is not shown in the above figure.   *SDI output supported only by AW-HE40SW/SK.
*The camera unit automatically recognizes straight cables and cross cables connected to the LAN terminal.

## Supporting Lecture Capture with Auto Tracking function

Auto Tracking Software Key
AW-SF100G

(Main Features)
● "Motion detection" system using video streaming from camera achieves smooth auto tracking regardless of where the person facing
● A GUI screen designed for intuitive setup
● Using IP-based software to support installation/operation of camera in classroom in remote location.
● Selectable as a Web application for flexible installation and operation that also enables control from a tablet, smartphone, desktop PC, etc.
● When it is installed on a PC, it can be easily set up by connecting AW-HE40 series. Installation of sensors and other devices are not necessary.

*This refers to the standalone version. In case the Web application version is used, the Auto Tracking Software is installed on an HTTP server and used from there.
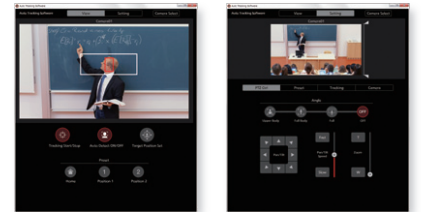
Camera View Screen   Settings-PTZ Ctrl Screen

*Depending on the usage conditions, there may be errors in detection of tracking subjects or proper tracking. Please use this software in an environment in which corrections can be made by an operator.

*There is a 30-day free trial available for Auto Tracking Software. Please purchase this "Auto Tracking Software Activation Key" after checking precautions and confirming that this will work in your environment during this free trial period. When purchasing optional software please refer to the Panasonic website <http://pro-av.panasonic.net/>" Software Download".

Easy Wireless Control Using an iPad*3 with a Control Assist Camera*4.

Control Assist Camera
**AW-HEA10W**

Control Assist Camera
AW-HEA10K

● Used in combination with an 4K/HD Integrated Camera*4.
● 95° wide-angle view from the Control Assist Camera is displayed on an iPad.
● Tapping the desired area of the wide-angle view displayed on the iPad*3 turns the field of view of the 4K/HD Integrated Camera*4 to the tapped position.
● 4K/HD Integrated Camera*4 pan, tilt, and zoom can be easily controlled from an iPad.
● Up to 9 preset positions can be registered.

*3: An iPad (sold separately) and a wireless AP (sold separately) are required. Please install the iPad application "PTZ Cntrl" (free). For details, please visit Panasonic AW-HEA10W/K website (http://pro-av.panasonic.net/en/sales_o/camera/aw-hea10/).

*4: AW-UE70W/K, AW-HE130W/K, AW-HE40 series, and AW-HE60 series only. When used with the AW-HE60 series, in some cases an AW-HE60 series software upgrade will be necessary.

■ Range of lens movement
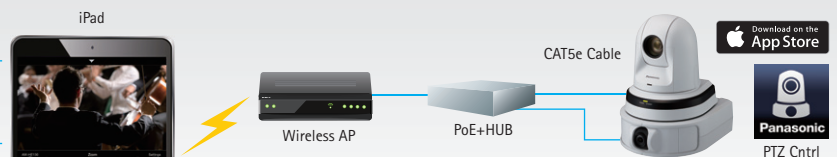This is adjustable 30° vertically and 45° horizontally.

Approx. 45°   Approx. 45°

Approx. 30°
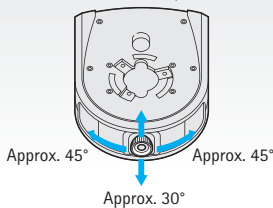
■ Usage example

iPad

4K/HD Integrated Camera video

Control Assist Camera video

Images simulated

Wireless AP   PoE+HUB

CAT5e Cable

Download on the App Store

PTZ Cntrl

Using the iPad application "PTZ Cntrl" on an iPad, it is possible to control pan, tilt, zoom, focus, iris and gain. For details, please visit the Panasonic AW-HEA10W/K product site (http://pro-av.panasonic.net/en/sales_o/camera/aw-hea10/). The iPad application "PTZ Cntrl" can be downloaded for free from the App Store.

Specifications

GENERAL	Power requirements	DC 12 V (Supplied AC adaptor) DC 42 V to 57 V (PoE+ power supply)	
	Current consumption	1.2 A (Supplied AC adaptor) 0.4 A (PoE+ power supply)	
	Ambient operating temperature	0 °C to 40 °C (32 °F to 104 °F)	
	Storage temperature	–20 °C to 50 °C (–4 °F to 122 °F)	
	Allowable humidity ranges	20 % to 90 % (no condensation)	
	Mass	Approx. 1.5 kg (3.30 lb)	
	Dimensions (W x H x D)	160 mm x 186 mm x 166 mm (6-5/16 inches x 7-41/128 inches x 6-17/32 inches) [excluding protrusions, direct ceiling mount bracket]	
	Finish	[AW-HE40HWPJ9], [AW-HE40SWPJ9], [AW-HE40HWEJ9], [AW-HE40SWEJ9] Pearl white [AW-HE40HKPJ9], [AW-HE40SKPJ9], [AW-HE40HKEJ9], [AW-HE40SKEJ9] Metallic black	
	Controller supported*1	AW-RP50, AW-RP120, AK-HRP200	
INPUT	Power	DC 12 V IN, PoE+ (IEEE802.3at standard)	
	Mic/line input	Stereo mini-jack (ø3.5 mm) Input impedance: Approx. 2 kΩ (unbalanced) [Mic input] Supported microphones: Stereo mic (plug-in power, on/off switching via menu) Supplied voltage: 2.5 V ± 0.5 V Mic input level: –60 dBV ± 3 dBV [Line input] Input level: –10 dBV ± 3 dBV	
OUTPUT	Video output	HDMI	[AW-HE40HW/HK] HDMI connector * HDCP is not supported. * VIERA Link is not supported.
		HD SDI OUT	[AW-HE40SW/SK] Compliant with the SMPTE292M standards/75 Ω(BNC x 1)
INPUT/ OUTPUT	Input/ Output connector	LAN	LAN connector for IP control (RJ-45) Equipped with straight/crossover cable auto detection function
		RS-232C	Mini DIN 8-pin (IN) Mini DIN 8-pin (OUT)
		RS-422	CONTROL IN RS422A (RJ-45)
		USB	Mini-B port
		SD card	microSD card slot
FUNCTIONS AND PERFORMANCE	[Camera unit]		
	Imaging sensors	1/2.3-type MOS	
	Lens	Motorized 30x zoom, F1.6 to F4.7 [f=4.3 mm (11/64 inches) to 129 mm(5-5/64 inches); 35 mm (1-3/8 inches) equivalent: 31.6 mm (1-31/128 inches)to 962.0 mm (37-7/8 inches)]	
	Focus	Switching between auto and manual	
	Focus distance	Entire zooming range:1.2 m (3.94 ft) Wide end: 10 cm (0.33 ft)	
	Color separation optical system	On-chip color filter system	
	Minimum illumination	59.94 Hz	0.7 lx (50 IRE, F1.6, 48 dB,1/60 without accumulation) 0.35 lx (50 IRE, F1.6, 48 dB,1/30 with accumulation[Frame Mix 6 dB])
		50 Hz	0.7 lx (50 IRE, F1.6, 48 dB,1/50 without accumulation) 0.35 lx (50 IRE, F1.6, 48 dB,1/25 with accumulation[Frame Mix 6 dB])
	Horizontal resolution	1000 TV lines Typ (Center area)	
	Gain selection*2	Auto, 0 dB to 48 dB (3 dB step)	
	Frame mix*3	Auto, Off, 6 dB, 12 dB, 18 dB, 24 dB	
	Electronic shutter speed	During Full Auto	1/30 to 1/2000 [59.94 Hz] 1/25 to 1/2000 [50 Hz]
		During Auto	1/60 to 1/2000 [59.94 Hz] 1/50 to 1/2000 [50 Hz]
		During Manual	1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [59.94 Hz] 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [50 Hz]
	Synchro scan	59.94 Hz : 59.94 Hz to 660.09 Hz 50 Hz : 50.00 Hz to 570.12 Hz	
	Gamma	Off, Normal (Low, Mid, High), Cinema	
	White balance	AWB A, AWB B, ATW, 3200K,5600K, VAR (2400K to 9900K)	

Chroma amount variability	±3 step	
Scene file	Full Auto, Manual1, Manual2, Manual3	
Output format	HD	1080:59.94p/50p*4 1080:59.94i/50i 1080:29.97p/25p 1080:29.97PsF/25PsF 720:59.94p/50p
Synchronization system	Internal synchronization	
[USB connection]	* This may vary depending on the operating environment.	
Video output	USB Video Class Ver1.0	
Video compression format	Motion JPEG	
Resolution	1920 x 1080, 1280 x 720, 640 x 360	
Frame rate	max 30 fps (System frequency 59.94 Hz) max 25 fps (System frequency 50 Hz)	
Audio output	USB Audio Class Ver1.0	
Audio compression format	Linear PCM, 48 kHz, 16-bit, 2 channels	
Supported models	Devices standardly equipped with a USB 2.0 compatible port	
[Pan-tilt head unit]		
Installation method	Stand-alone (Desktop) or suspended (Hanging)*5	
Pan/tilt operation speed	Maximum speed during preset: 300°/s Maximum speed during manual: 90°/s	
Panning range	±175°	
Tilting range	–30° to 90°*6	
Quietness	During preset: NC40 or less During manual: NC35 or less	
[Camera/pan-tilt head control]		
IP connecting cable	When connecting through a hub: LAN cable*7 (category 5 or above),max. 100 m (328 ft) When using a PoE+ hub: LAN cable*7 (category 5e or above),max. 100 m (328 ft) When a hub is not used: LAN cable*7 (category 5 or above),max. 100 m (328 ft)	
AW protocol connecting cable	LAN cable*7 (category 5 or above,straight cable), max. 1000 m (3280 ft)	
Standard protocol connecting cable	Mini DIN 8-pin cable, male	
[SD card recording]		
SD card type	micro SDHC (4 GB to 32 GB), micro SDXC (64 GB to 128 GB), Speed class 10 or higher	
System frequency	59.94 Hz/50 Hz	
Video compression format	MPEG-4 AVC/H.264 High Profile	
Audio compression format	AAC-LC (48 kHz, 16 bit, 2 ch, 128 kbps)	
SD card recording	MPEG-4 AVC file standard compliant (.MP4)	
Recording format	1920 x 1080/59.94p, 1920 x 1080/50p, 1920 x 1080/29.97p, 1920 x 1080/25p, 1280 x 720/59.94p, 1280 x 720/50p, 1280 x 720/29.97p, 1280 x 720/25p	
[Network]		
Resolution	JPEG	VGA (640 x 360), QVGA (320 x 180) max.30 fps 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 max.30 fps
	H.264	1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 max.60 fps
Supported protocol	IPv4	TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, DHCP, DNS, NTP, IGMP, UPnP, ICMP, ARP, RTSPoverTCP, RTSPoverHTTP, SSL(TLS), MultiCast/UniCast
	IPv6	TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, DHCPv6, DNS, NTP, ICMPv6(MLD), RTSPoverTCP, RTSPoverHTTP, SSL(TLS), MultiCast/UniCast
i-OS, Android support	JPEG image display	
ACCESSORIES	Mount bracket for installation surface (Hanging*8 / Desktop): 1 Drop-prevention wire (already attached to the unit): 1 Bracket mounting screws (bind-head) M4 x 10 mm: 4 Main unit mounting screw (with flat washer, spring washer) M3 x 6 mm: 1 Power cable (1.5 m [4.92 ft]): 1 AC adaptor: 1 CD-ROM: 1	

*1: It may be necessary to upgrade the version of the controller so that the controller will support the unit. *2: During Auto, 6 dB to 48 dB (6 dB step) are available for AGC Max Gain setting.
*3: During Auto, 0 dB, 6 dB, 12 dB and 18 dB are available for Auto F.Mix Max Gain setting. *4: AW-HE40HW/HK only *5: To ensure safety, the unit must be secured using the mount bracket supplied.
*6: Depending on the pan or tilt position, the camera may be reflected in the image. *7: Use of an STP (shielded twisted pair) cable is recommended.
*8: To ensure more safety, AW-HE40 series can be secured by using the direct ceiling mount bracket (WV-Q105A).

Required personal computer environment

CPU	When using 1080/60p [59.94 Hz] and 1080/50p [50 Hz] Intel® CoreTM i7 3.4 GHz or higher recommended Other than above Intel® CoreTM2 Duo 2.4 GHz or higher recommended	
Memory	For Windows	1 GB or higher (2 GB or higher for Microsoft® Windows® 8.1, Microsoft® Windows® 8, Microsoft® Windows® 7 64-bit edition)
	For Mac	2 GB or more
Network function	10BASE-T or 100BASE-TX port x 1	
Image display function	Resolution: 1024 x 768 pixels or more Color generation: True Color 24-bit or more	
Supported operating system and Web browser	Windows	Microsoft® Windows® 8.1 Pro 64-bit/32-bit*9 Windows® Internet Explorer® 11.0*9 Microsoft® Windows® 8 Pro 64-bit/32-bit*9 Windows® Internet Explorer® 10.0*9 Microsoft® Windows® 7 Professional SP1 64-bit/32-bit*10 Windows® Internet Explorer® 8.0 / 9.0 / 10.0 / 11.0*11
	Mac	OS X 10.8 Safari 6.2 / OS X 10.9 Safari 7.1 / OS X 10.10 Safari 8.0
	iPhone / iPad / iPod touch	iOS 8.3 Standard browser
	Android	Android OS 4.4 Standard browser
Other	CD-ROM drive (for using the Operating Instructions and various software) Adobe® Reader® (for viewing the Operating Instructions on the CD-ROM)	

* 9 : Use the desktop version of Internet Explorer. (Internet Explorer for Windows UI is not supported.) * 10: Windows® XP compatibility mode is not supported.
*11: The 64-bit version of Internet Explorer® is not supported.

For the latest information on supported OS/brower, please refer to the "service and support" on the Panasonic website (http://pro-av.panasonic/en/).

Rear View

AW–HE40SW/SK

AW–HE40HW/HK

Bottom View

Unit: mm(inches)

Through-hole for cable
ø 40 mm (ø 1-9/16 inches)
(reference)

130(5-1/8)
(Space foe the wires
from the rear panel)

Hole for mounting the
main unit mounting screws

Hook for mounting the
drop-prevention wire

Unit mounting area

Mount bracket

(∗)Holes for mounting the
mount bracket: ø 4.5 mm x 4

Hole for checking
the positioning

290(11-7/16) or more
(Space for the wires)

65(2-9/16)
77(3-1/32)
90(3-17/32)

(∗)46(1-13/16)

78(3-1/16)
80(3-5/32)

(∗)83.5(3-9/32)
156(6-1/8)
160(6-5/16)

Hole for installing the WV-Q105A
direct ceiling mount bracket
[ø 60 mm (ø 2-3/8 inches)]

The front panel of the unit on this side.

System Camera Options

Auto Tracking Software Key **AW–SF100G**	**Control Assist Camera** **AW–HEA10W**	**Control Assist Camera** **AW–HEA10K**
Remote Camera Controller **AW–RP50**	**Remote Camera Controller** **AW–RP120G** (AC adaptor (DC12 V) is required separately.)	**Remote Operation Panel** **AK-HRP200G** (AC adaptor (DC12 V) is required separately.)
Wireless Remote Control **AW–RM50G** ("AA", "R6" or "LR6" battery x 2 are not included.)	**Compact Live Switcher** **AW–HS50**	**Direct Ceiling Mount Blacket** **WV–Q105A**

Please refer to the latest information, etc. at the following Panasonic web site: 💻 **http://pro-av.panasonic.net/**

Panasonic®

[Countries and Regions]

Argentina	+54 11 4122 7200
Australia	+61 (0) 2 9491 7400
Bahrain	+973 252292
Brazil	+55 11 3889 4035
Canada	+1 905 624 5010
China	+86 10 6515 8828
Hong Kong	+852 2313 0888
Czech Republic:	+421 (0) 903 447 757
Denmark	+45 43 20 08 57
Egypt	+20 2 23938151
Finland, Latvia, Lithuania, Estonia	+358 (9) 521 52 53
France	+33 (0) 1 47 91 64 00
Germany, Austria, Switzerland	+49 (0) 6103 313887
Greece	+30 210 96 92 300
Hungary	+36 (1) 382 60 60
India	+91 1860 425 1860
Indonesia	+65 6277 7284
Iran (Vida)	+98 21 2271463
(Panasonic Office)	+98 2188791102
Italy	+39 02 6788 367
Jordan	+962 6 5859801
Kazakhstan	+7 727 298 0891
Korea	+82 2 2106 6641
Kuwait	+96 522431385

Lebanon	+96 11665557
Malaysia	+60 3 7809 7888
Mexico	+52 55 5488 1000
Mongolia	+976 70115577
Netherlands, Belgium	+31 73 640 2729
New Zealand	+64 9 272 0100
Norway	+47 67 91 78 00
Pakistan	+92 5370320 (SNT)
Palestine	+972 2 2988750
Panama	+507 229 2955
Philippines	+65 6277 7284
Poland	+48 (22) 338 1100
Portugal	+351 21 425 77 04
Romania, Albania, Bulgaria, Macedonia	+40 (0) 729 164 387
Russia & CIS	+7 495 9804206
Saudi Arabia	+96 626444072
Singapore	+65 6277 7284
Slovak Republic, Croatia, Serbia, Bosnia, Montenegro, Slovenia	+421 (0) 903 447 757
South Africa	+27 11 3131622
Spain	+34 (93) 425 93 00
Sweden	+46 (8) 680 26 41
Syria	+963 11 2318422/4
Taiwan	+886 2 2227 6214

Thailand	+662 731 8888
Turkey	+90 216 578 3700
U.A.E. (for All Middle East)	+971 4 8862142
Ukraine	+380 44 4903437
U.K.	+44(0)1344 70 69 13
U.S.A.	+1 877 803 8492
Vietnam	+65 6277 7284

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