

Panasonic

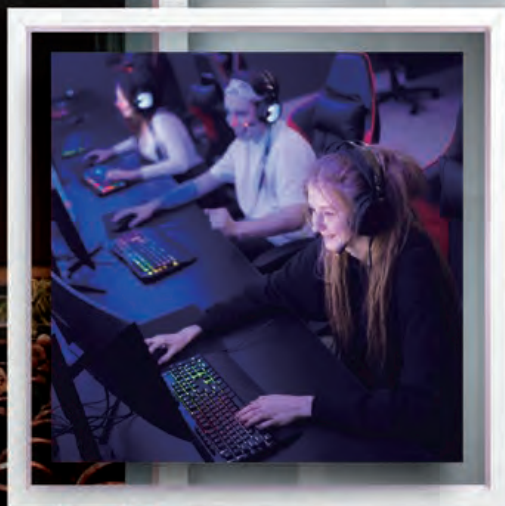
AW-UE100W [White Model]

AW-UE100K [Black Model]

4K Integrated Camera



4K 60p/50p NDI®&SRT supported PTZ Camera with a compact body and a wide range of features



12GSDI

SRTALLIANCE
SECURE RELIABLE TRANSPORT

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

High-quality 4K PTZ Camera compatible with a variety of video transmission systems to support next-generation video production

This 4K Integrated Camera is compatible with various IP transmission protocols, including NDI®*1, SRT*2, and FreeD*3, achieving flexible video production with high-quality 4K 60p/50p*4 video. 12G-SDI output is also supported in addition to 3G-SDI and HDMI, allowing the appropriate output to be selected for use in a wide range of situations, from live streaming of events to studio production.



AW-UE100W
4K Integrated Camera
[White Model]



AW-UE100K
4K Integrated Camera
[Black Model]

High-Quality 4K 60p/50p*4 Shooting

3840 x 2160 4K output and 59.94p/50p*4 shooting achieve extremely smooth video, even in live sports and other environments containing rapid movement.

Output format

4K (12G-SDI output/HDMI output)	2160/59.94p, 2160/50p, 2160/29.97p*5, 2160/25p*5, 2160/24p*5, 2160/23.98p*5
HD (3G-SDI output/HDMI output)	1080/59.94p, 1080/50p, 1080/29.97p*5, 1080/29.97PsF*6, 1080/25p*5, 1080/25PsF*6, 1080/23.98p*7, 1080/24p*5, 1080/23.98p*5, 1080/23.98PsF*6, 1080/59.94i, 1080/50i
	720/59.94p, 720/50p

1/2.5-type MOS sensor

The camera is equipped with a newly-developed 1/2.5-type 4K MOS sensor and achieves high-resolution video.

Shooting with 24x optical zoom and a 74.1° horizontal angle of view

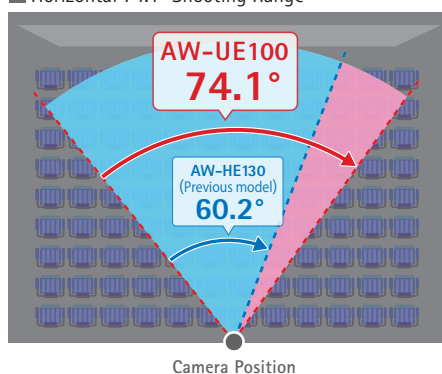
In addition to 24x optical zoom, the inclusion of i.Zoom enables super resolution zooming of up to 36x in HD Mode and 28x in 4K mode while maintaining high resolution. The 1.4x and 2x digital extender zoom also allows distant subjects to be captured clearly, while the 74.1° horizontal angle of view enables a wide area to be shot from a limited installation space.

Optical 24x Zoom Image Quality



* Images are simulated.

Horizontal 74.1° Shooting Range



Newly-developed high-precision Direct Drive motor

The inclusion of a Direct Drive motor for the rotating section improves operability, responsiveness and quietness during pan/tilt operations.

operability

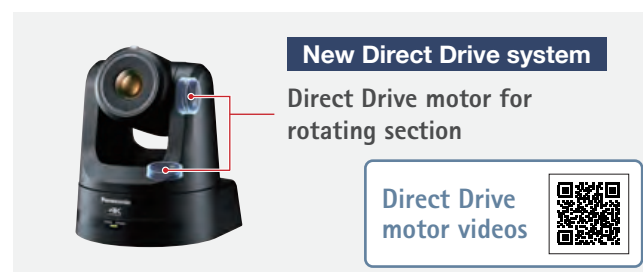
A wide range of speeds are supported, from slow movement of 0.08° per second to ultra-high speeds of 180° per second (Fast2 Mode).

responsiveness

Excellent responsiveness allows for accurate camera work, ensuring that the target area is captured.

quietness

A noise level of NC25 or less is ensured, enabling shooting in situations such as Concert hall and Studio where quietness is required.



* Images are simulated.

Electronic Image Stabilization (EIS) for roll direction

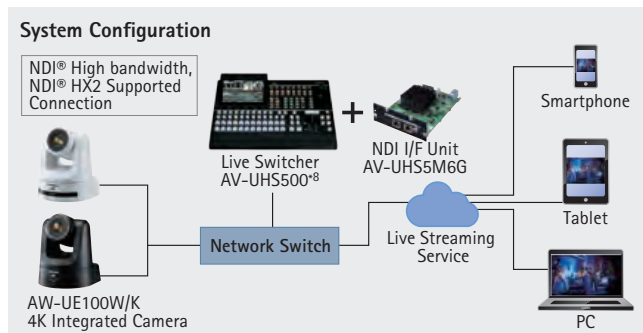
Electronic Image Stabilization (EIS) for the roll direction has been added in addition to Optical Image Stabilization (OIS). Stable images with reduced blurring can be shot even in locations where special equipment such as a rail systems or camera arms are used.



* Images are simulated.

High image quality and low latency with high bandwidth NDI® support

NDI® High bandwidth and NDI® HX2 which encode and transmit high-quality video in real time, are included. NDI® High bandwidth transmits 4K video at a maximum of 250 Mbps and full HD video at a maximum of 125 Mbps, enabling high-quality, low-latency live video transmission.



For more information on NDI®, please see < <https://pro-av.panasonic.net/en/products/NDITech/> >.

SRT*2 support for stable video transmission over public lines

SRT ALLIANCE
SECURE RELIABLE TRANSPORT

SRT, a next-generation video transmission protocol with strong security suitable for unstable network environments, is supported.

Secure

Strong security is ensured by encrypting video data before transmission.

Reliable

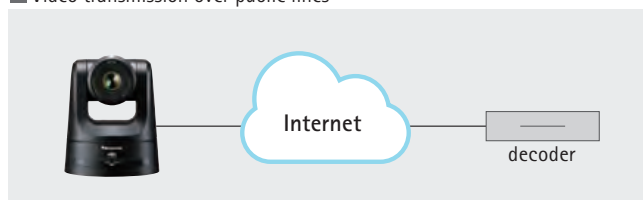
The packet loss recovery function automatically detects and retransmits packets lost during transmission, ensuring smooth, stable video transmission.



Transport

The flexible and adaptable buffer management system enables stable video transmission even in network environments with unstable bit rates. Long-distance video transmission over public lines is supported.

■ Video transmission over public lines



Direct Broadcast via RTMP/RTMPS*9

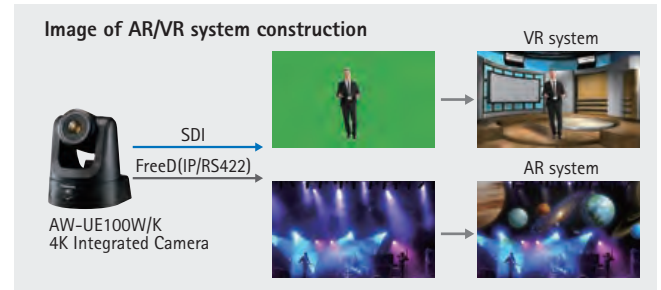
RTMP/RTMPS*9 is supported to enable direct upload of video to live-streaming services such as YouTube Live and Facebook Live. This means a live stream can be broadcast directly from the camera.



FreeD*3 Support for Construction of AR/VR*10 Systems

Integration with AR/VR systems is available via FreeD-compliant command output. Camera tracking information (pan/tilt/zoom/focus/iris) is output according to a synchronizing signal to facilitate configuration of virtual systems without an encoder.

FreeD
case study
videos



* Images are simulated.

Cropping (+Zoom) function

A cropped portion of the video can be created simultaneously during output of the full 4K video. Up to three crop areas can be specified, with easy operation using the AW-RP150 Remote Camera Controller and the web browser screen. The inclusion of cropping zoom also allows up to 5x zoom of cropped images.



FHD Cropping



Cropping Zoom*11

If you would like to know more about technology and history of Panasonic's PTZ cameras, please visit our Technology web.
< <https://pro-av.panasonic.net/en/technology/ptz/> >

* Images are simulated.

*1: NDI® is a video connectivity technology and is registered as a trademark by Vizrt NDI AB in the United States and other countries.

*2: SRT: Secure Reliable Transport.

*3: A protocol that outputs camera tracking data for AR/VR systems. Camera pan, tilt, zoom and focus information required for uses such as AR/VR composition is output by the AW-UE100W/K.

*4: Actual output format is UHD (3840 x 2160) 59.94p/50p.

*5: Native output.

*6: Cannot be output from HDMI.

*7: It denotes "1080/23.98p over 59.94i".

*8: •NDI® High bandwidth and NDI® HX2 transmission can be performed by adding the optional AV-UHS5M6G NDI I/F unit to Panasonic's AV-UHS500 Live Switcher.

•NDI® HX2 support is available when the firmware version is 1.56 or later. 4K image output is not supported in NDI® HX2 mode.

*9: RTMP: Real-Time Messaging Protocol. RTMPS: Real-Time Messaging Protocol Secure.

*10: AR: Augmented Reality. VR: Virtual Reality.

*11: Picture quality is lower with the cropping zoom.

Application Examples

See the website for other application examples.

https://pro-av.panasonic.net/en/solutions/?cid=f_r_prd_mebd-ue100-sol_220401

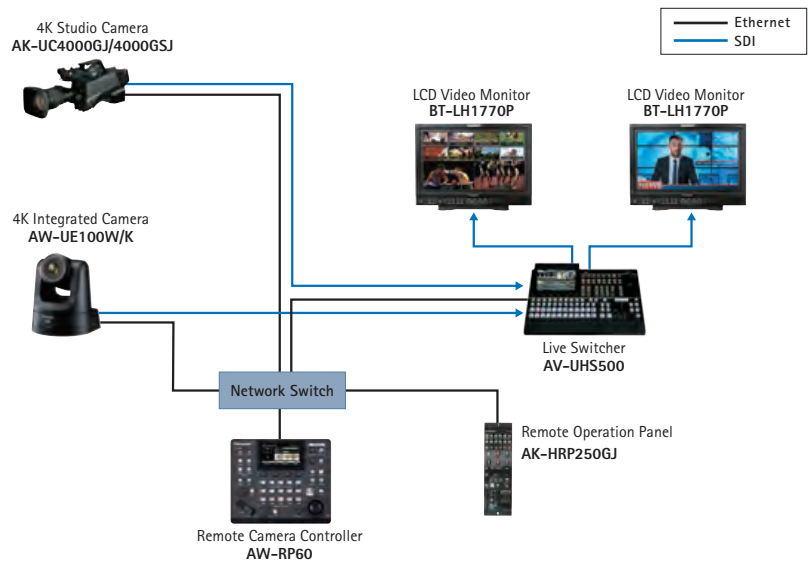


Application 01: 4K Studio

Studio shooting of smooth, high-quality 4K 60p/50p* images

The AW-UE100W/K is capable of 4K 60p/50p* output for high-quality remote shooting in studio operations where high image quality is required. A large tally lamp has been equipped to make on-air cameras easily identifiable, even from far away.

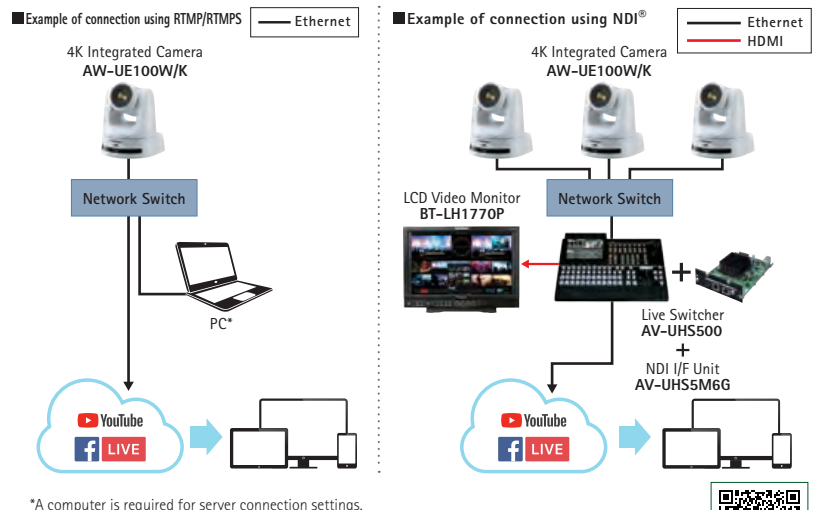
* Actual output format is UHD (3840 x 2160) 59.94p/50p.



Application 02: Live Streaming

Select the optimal streaming workflow for each situation with RTMP/RTMPS and NDI® support

When working with a single camera, video can be uploaded directly from AW-UE100W/K to live distribution services with RTMP/RTMPS. When multiple cameras are used, the optional AV-UHS5M6G unit, which supports NDI® transmission, is added to the AV-UHS500 Live Switcher in order to perform operation. With smooth control of multiple cameras, this enables high-quality, low latency live distribution.



*A computer is required for server connection settings.

AV-UHS500 website

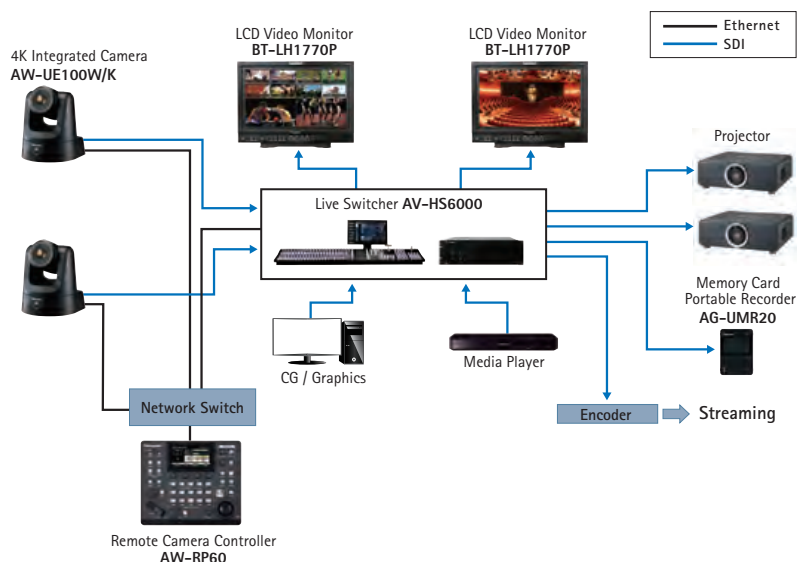
https://pro-av.panasonic.net/en/products/av-uhs500/?cid=f_r_prd_mebd-ue100-uhs500_220401



Application 03: Halls

High-magnification zoom and wide-angle shooting ensure targets are captured clearly in large venues

The large 1/2.5-type MOS sensor enables high-sensitivity shooting with little noise in halls and other dark locations. The optical 24x zoom further ensures that even far-away targets shot in large venues are captured clearly. 74.1° horizontal wide-angle shooting allows incredible flexibility in shooting location while still being able to capture the entire shot.

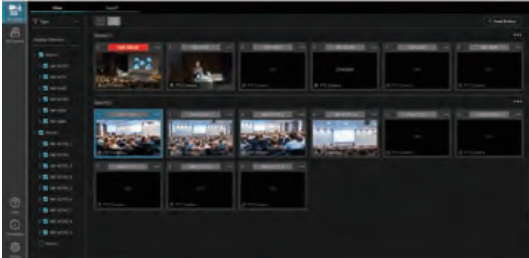




Basic Functions

Device View

Easy and efficient device setup and operation



PTZ Control

Easily manage and monitor multiple PTZ cameras via batch control from a PC



Plug-ins (Additional Fee)

Auto Tracking

90-day Free Trial

Accurate tracking technology using facial recognition and human body detection

Auto Tracking Software Key

AW-SF100 (License for one camera)

AW-SF200 / AW-SF202 / AW-SF203
(Basic license for multiple cameras) (2 additional licenses) (3 additional licenses)



Advanced Auto Framing

Scheduled for release in CY2025 second quarter

Automatically capture natural, high-quality, well-framed video with PTZ cameras

Advanced Auto Framing Software Key



Visual Preset

90-day Free Trial

Switches subject of multiple PTZ cameras with a single click

Visual Preset Software Key

AW-SF300



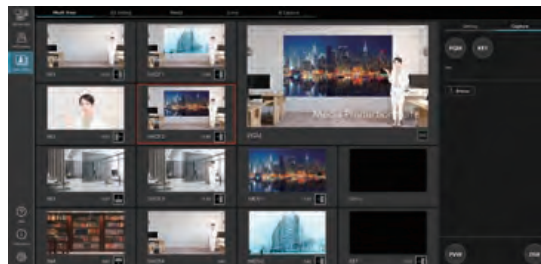
Video Mixer

30-day Free Trial

Subject keying regardless of the shooting location and easy composition of video materials

Video Mixer Software Key

AW-SF400



Software that converts PTZ camera on your network into Super Web cam

PTZ Virtual USB Driver Free software

Free software

Any Panasonic PTZ camera or professional camera recorder* on a LAN can be recognized and used as a USB camera, and remote cameras can be used as virtual USB cameras.

* For further information, please see < https://pro-av.panasonic.net/en/software/ptz_vud/ >.

Specifications

<GENERAL>

Power Requirements:	12 V DC (10.8 V to 13.2 V) (Supplied AC adaptor) 42 V to 57 V DC (PoE++ power supply)
PoE++:	IEEE802.3bt standard: DC 42 V to 57 V (Software authentication (LLDP) is supported)
Current Consumption:	3.0 A (Supplied AC adaptor) 1.0 A (PoE++ power supply)
Ambient Operating Temperature:	0 °C to 40 °C (32 °F to 104 °F)
Ambient Operating Humidity:	20 % to 90 % (no condensation)
Storage Temperature:	−20 °C to 50 °C (−4 °F to 122 °F)
Mass:	Approx. 2.2 kg (4.84 lb) (excluding cable cover, mount bracket) Approx. 2.3 kg (5.06 lb) (including cable cover, excluding mount bracket)
Dimensions (W x H x D):	169.2 mm x 204.6 mm x 170.6 mm (6-21/32 inches x 8-1/16 inches x 6-23/32 inches) (excluding protrusions, cable cover, mount bracket)
Finish:	AW-UE100WP/AW-UE100WPC/AW-UE100WE/AW-UE100WED: Pearl white AW-UE100KP/AW-UE100KPC/AW-UE100KE/AW-UE100KED: Black
Controller Supported:	AW-RP150, AW-RP60, AK-HRP1010GJ, AK-HRP1015GJ (Not available in some areas), AK-HRP250GJ

<Camera Unit>

Effective Pixels:	approx. 8.49 million pixels
Imaging Sensors:	1/2.5-type 4K MOS x 1
Lens:	Motorized Optical 24x zoom, F1.8 to F4.0 [f=4.12 mm (5/32 inches) to 98.9 mm (3-29/32 inches); 35 mm (1-3/8 inches) equivalent: 25.0 mm (31/32 inches) to 600.0 mm (23-5/8 inches)]
Zoom:	• Optical zoom : 24x • i.Zoom: UHD 28x, FHD 36x • Digital extender zoom: 1.4x, 2x
Conversion Lens:	Not supported
Angle of View Range:	Horizontal angle of view: 74.1°(wide) to 3.3°(tele) Vertical angle of view: 46.0°(wide) to 1.9°(tele) Diagonal angle of view: 81.8°(wide) to 3.8°(tele)
Optical Filter:	Through, 1/4, 1/16, 1/64, IR through (IR through is used as "Night mode")
Focus:	Switching between auto and manual
Focus Distance:	Entire zooming range: 1200 mm (3.9 ft) Wide end: 100 mm (0.33 ft)
Color Separation Optical System:	1MOS
Standard Sensitivity:	F4/2000 lx (When [Shooting Mode] is [Normal]) F5.6/2000 lx (When [Shooting Mode] is [High Sens.])
Minimum Illumination:	3 lx (conditions: F1.8, 59.94p, 50 IRE, 42 dB, without accumulation)
S/N:	60dB(typ) (When [Shooting Mode] is [Normal])
Horizontal Resolution:	1500 TV lines Typ (Center area)
Gain Selection:	Auto, 0 dB to 36 dB* • Super Gain function installed: 37 dB to 42 dB
Frame Mix*2:	Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB
Electronic Shutter Speed:	59.94p/59.94i 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 29.97p 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 23.98p/24p 1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 50p/50i 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 25p 1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Synchro Scan:	59.94p/59.94i 60.00 Hz to 7200 Hz 29.97p 30.00 Hz to 7200 Hz 23.98p/24p 24.00 Hz to 7200 Hz 50p/50i 50.00 Hz to 7200 Hz 25p 25.00 Hz to 7200 Hz
Gamma:	HD/FILMLIKE1/FILMLIKE2/FILMLIKE3
White Balance:	ATW, 3200K, 5600K AWB: AWB-A/AWB-B VAR (selectable between 2000K and 15000K by designating a value)
Chroma Amount Variability:	OFF, −99 % to 99 %
Scene File:	Scene1, Scene2, Scene3, Scene4
Output Format:	SDI Output 2160/59.94p, 2160/50p, 2160/29.97p*, 2160/25p*, 2160/24p*, 4K 2160/23.98p* SDI Output 1080/59.94p, 1080/50p, 1080/29.97p*, 1080/29.97PsF, 1080/25p*, 1080/25PsF, 1080/23.98p*, 1080/24p*, 1080/23.98p*, 1080/23.98p*, 1080/23.98PsF, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p

Output Format:	HDMI Output 2160/59.94p, 2160/50p, 2160/29.97p*, 2160/25p*, 2160/24p*, 4K 2160/23.98p* HDMI Output 1080/59.94p, 1080/50p, 1080/29.97p*, 1080/25p*, 1080/23.98p*, 1080/24p*, 1080/23.98p*, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p
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<Synchronization System>

Internal/External synchronization (BBS/Tri-level sync)
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<INPUT>

Input Connector:	DC IN 12 V
G/L IN	BBS (Black Burst Sync), tri-level sync supported 75 Ω terminal (BNCx1)
AUDIO IN	MIC/LINE input Compatible (SDI/HDMI/IP) AAC compatible (compatible with IP only) ø 3.5 mm stereo mini jack Input impedance: Approx. 10 kΩ (unbalanced) • During MIC input Input level: −40 dBV (0 dB=1 V/Pa, 1 kHz) Plug-in power compatible, supply voltage: 2.5 V ± 0.5 V • During LINE input Input level: −10 dBV • Input volume variable range: −36 dB to 12 dB (3 dB step) • Embedded audio output level: −12 dBFS • Sampling frequency: 48 kHz • Quantization bit rate: 24bit (SDI, HDMI), 16bit (IP)

<OUTPUT>

Video Output:	HDMI HDMI 2.0 connector 4:2:2/10bit • HDCP is not supported. • Viera Link is not supported.
12G-SDI OUT	SMPTÉ 2082-1, SMPTÉ424M/SMPTÉ292M / 75 Ω (BNC x 1) • Level-A/Level-B supported
3G-SDI OUT	SMPTÉ424M/SMPTÉ292M / 75 Ω (BNC x 1) • Level-A/Level-B supported

<INPUT/OUTPUT>

Input / Output Connector:	LAN RJ-45 LAN terminal for IP control and video transmission PoE++ power terminal (IEEE802.3bt compliant)
RS-422	CONTROL IN RS-422A (RJ-45)

<Pan-tilt Head Unit>

Camera/Pan-tilt Head Control:	IP connecting cable • When connecting through a PoE++ hub LAN cable* (category 5e or above, straight cable), max. 100 m (328 ft) • When a PoE++ hub is not used LAN cable* (category 5e or above, straight cable), max. 100 m (328 ft) AW protocol connecting cable LAN cable* (category 5e or above, straight cable), max. 1000 m (3280 ft)
Installation Method:	Stand-alone (Desktop) or suspended (Hanging)*
Pan/tilt Operation Speed:	Speed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s*, Fast2: 180°/s*
Panning Range:	±175°
Tilting range:	−30° to 210°**
Quietness:	NC25 or less

<Supported operating systems and web browsers>*9

Supported operating systems and web browsers:	Windows Microsoft® Windows® 10 Microsoft Edge Google Chrome
Mac	macOS 10.13/Safari 13 macOS 10.14/Safari 13 macOS 10.15/Safari 13 macOS 10.15/Google Chrome
iPhone / iPad	iOS Safari iPadOS
Android	Android OS Google Chrome

<IP Streaming>

Image Streaming Mode:	JPEG(MJPEG), H.264, H.265, NDI® High Bandwidth, NDI® HX2
Image Resolution:	3840x2160, 1920x1080, 1280x720, 640x360, 320x180
Image Transmission setting (JPEG):	Frame Rate: Maximum 30 fps Image quality (Fine / Normal)

Image Transmission Setting (H.264):	<ul style="list-style-type: none"> ■ Transmission Type: Unicast port (AUTO) Unicast port (MANUAL) Multicast port ■ Transmission Priority Constant bit rate Frame rate Best effort ■ Frame Rate [60Hz] 5fps/15fps/30fps/60fps (UHD: 30fps, 60fps) [50Hz] 5fps/12.5fps/25fps/50fps (UHD: 25fps, 50fps) ■ Max Bit Rate 512kbps/768kbps/1024kbps/1536kbps/2048kbps/3072kbps/4096kbps/ 6144kbps/8192kbps/10240kbps/12288kbps/14336kbps/16384kbps/ 20480kbps/24576kbps/32768kbps/40960kbps/51200kbps/76800kbps
Image Transmission Setting (H.265):	<ul style="list-style-type: none"> ■ Transmission Type: Unicast port (AUTO) Unicast port (MANUAL) Multicast port ■ Frame Rate [60Hz] 30fps [50Hz] 25fps ■ Max Bit Rate 8192kbps/12288kbps/25600kbps/51200kbps/76800kbps

Audio Compression Type: AAC-LC, 48 kHz / 16 bit / 2ch

Supported Protocol:

- IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, DNS, NTP, DHCPv6, RTP, MLD, ICMP, ARP, RTMP, SRT, SNMP, MPEG2-TS over UDP
- IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, DHCP, DNS, DDNS, NTP, IGMP, ICMP, ARP, RTMP, RTMPS, SRT, SNMP, MPEG2-TS over UDP

<Other Function>

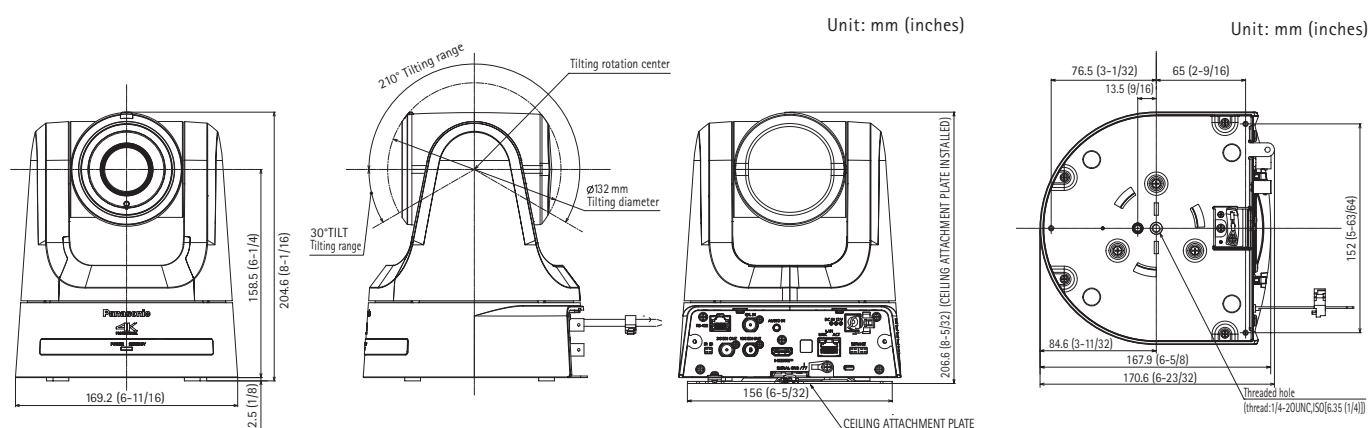
NDI® support: NDI® HX2: Included as standard
NDI® High Bandwidth: Included as standard

Tally LED display color: red / green

*1: 1 dB steps. *2: This cannot be configured when the format is 2160/29.97p, 2160/23.98p, 2160/24p, 2160/25p, 1080/29.97p, 1080/23.98p(59.94i), 1080/29.97PsF, 1080/23.98PsF, 1080/25p, 1080/25PsF. *3: Native output. *4: OVER 59.94i output (your monitor may recognize the signal as 59.94i). *5: Use of an STP (shielded twisted pair) cable is recommended. *6: To ensure safety, the unit must be secured using the mount bracket supplied. *7: Note that the operating noise may be loud in high speed. If the operating noise is disturbing, use the Normal mode. *8: Depending on the pan or tilt position, the camera may be reflected in the image. *9: Supported OS indicated are for browsers current as of August 2020. See "Service and Support / PASS" on the Panasonic website (<https://pro-av.panasonic.net/en/>) for the latest information on browser support. *10: It denotes "1080/23.98p over 59.94p"

Dimensions

Bottom View



Optional Products

*Use may require a software version update.

As of April, 2022

Remote Camera Controller AW-RP150

● A separate AC adaptor or PoE+ HUB is required for power supply.



Remote Camera Controller AW-RP60

● A separate AC adaptor or PoE HUB is required for power supply.



Live Switcher AV-UHS500



KAIROS
Incredible Productivity

IT/IP Platform
KAIROS



Remote Operation Panel (ROP) AK-HRP1010GJ AK-HRP250GJ

● A separate PoE HUB is required for power supply.



AK-HRP1010GJ AK-HRP250GJ

Infrared Wireless Remote Control AW-RM50AG



420 mm (16.5 inches) LCD Video Monitor BT-LH1770P US Only Model



For further information on optional products that can be used in connection with the AW-UE100W/K, please see the list of compatible controller models in the Panasonic website (<https://pro-av.panasonic.net/en/products/aw-ue100/>).

Rear View



Compatible Third-Party Equipment

NewTek, Inc.

TriCaster TC1 2RU
TC1

Operation-verified in June, 2020



TriCaster Mini 4K
TCM4KUHD

Operation-verified in June, 2020



Explorer Inc.

SRT compatible
H.265/HEVC 4K/2K decoder
EHU-3410D

Operation-verified in June, 2020



Haivision

SRT Set Top Box
**Haivision
Play Set-Top
Box 4000**

Operation-verified in June, 2020



Makito X4 Video Decoder
**Makito
X4 Video
Decoder**

Operation-verified in Jul, 2021



Matrox

4K/UHD/HD Decoder
Monarch EDGE*1

Operation-verified in Jul, 2021

*1: Currently, the Monarch EDGE supports only Listener and Rendezvous modes with the AW-UE100W/K.



GeoVision Inc.

Gigabit BT PoE++ Adapter
GV-PA902BT

Operation-verified in Aug, 2020



NETGEAR

8x1G Ultra90 PoE++ 802.3bt
720W 2x1G and 2xSFP+
Managed Switch
**M4250-
10G2XF-PoE**

Operation-verified in Mar, 2021



See the Panasonic website for information on compatible third-party equipment. <https://pro-av.panasonic.net/en/products/aw-ue100/accessories.html#thirdparty>

Third-Party Inquiries

- <NewTek, Inc.> <https://www.ndi.tv/> MAIL: ndi@newtek.com TEL: +1 210-370-8000
- <Explorer Inc.> MAIL: sales@explorer-inc.co.jp TEL: +81(138)47-7604
- <Haivision> <https://www.haivision.com/contact/>
- <Matrox Electronic Systems Ltd.>
(North America) TEL: 1-866-270-4642 MAIL: video.info@matrox.com
(Europe, Middle East & Africa) TEL: +44 (0)1895 827220 MAIL: video.info.emea@matrox.com
(Asia Pacific) MAIL: asia_pacific@matrox.com
- <GeoVision Inc.> MAIL: sales@geovision.com.tw TEL: +886-2-8797-8376
- <NETGEAR, Inc.> <http://www.netgear.com/home/contact-us/>

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* Android™ is a trademark of Google Inc.

* "YouTube" and the "YouTube logo" are registered trademarks of Google Inc.

* "Facebook" is a registered trademark of Meta Platforms, Inc.

* NDI® is a video connectivity technology and is registered as a trademark by Vizrt NDI AB in the United States and other countries.

* Specifications are subject to change without notice.

Panasonic®

Panasonic Entertainment & Communication Co., Ltd.
Imaging Solution Business Division
2-15 Matsuba-cho, Kadoma, Osaka 571-8503 Japan



For more information, please visit Panasonic web site
<https://pro-av.panasonic.net/en/qr/>



Broadcast and
Professional
AV Website



Contact Information



Facebook



Mobile App