

AW-UE160W [Pearl White]

AW-UE160K [Black]

4K Integrated Camera

For Indoor Use

## 4K PTZ Camera for an era of enhanced creativity and the pursuit of visual expression.

### Uncompromising shooting performance and operability.

In addition to the high sensitivity F14/2000 lx and the latest-generation image processing found in LUMIX, the AW-UE160 features an phase detection auto focus (PDAF). The new PTZ has a variety of functions that enable you to carry out high-precision video production.

### Realize next-generation video production with various shooting methods and functions.

The AW-UE160 supports return input and high-speed output, which is vital for building a combined camera system. This camera is the first to support the SMPTE ST2110 standard<sup>1</sup> and 5G mobile router (USB tethering compatible) - the standard for IP transmission in the broadcasting industry.

<sup>1</sup> Activation with the separately sold software key AW-SFU60 (released at the same time as AW-UE160) is required.

### Ease of use and versatility reduces stress of shooting on-site.

Support for a variety of I/Fs and protocols reduces the burden of introducing the camera into existing systems. Support for scene files, color matrix control and Panasonic's free software and Remote Operation Panel (ROP) for batch management of multiple cameras makes mixed operation with system cameras even easier.



<sup>1</sup> Separately sold software key AW-SFU60 (released at same time as AW-UE160) is required.

# The latest features for next-generation video production.

## High sensitivity F14/2000 lx<sup>1</sup>

Produce high-quality images - even in dark conditions - with system camera-level high sensitivity.

<sup>1</sup> F11/2000 lx under normal mode.  
<sup>2</sup> Minimum illumination 2 lx (conditions: f/2.8, 59.94 p, 50 IRE, +42 dB, no accumulation)

## Newly developed image processing engine

With the same processing engine used as LUMIX, improved S/N is realized processing of high pixel video data.

## New Image Phase Detection Auto Focus (PDAF)

The camera detects phase differences and focuses on moving subjects with high speed and precision.

## Compact body with impressive PTZ mechanisms

Silent operation<sup>1</sup> and high static accuracy add to your high-quality productions.

<sup>1</sup> NC25 or less at pan/tilt standstill

## 2x high-speed shooting

Smooth and beautiful slow-motion video can be captured to focus on key elements, such as sports and Esports moments.

## Other features

- Cropping (+ Zoom) function
- Moiré reduction (with optical low-pass filter)
- HDR/SDR (HLG/BT.2020 compatible, SDR/BT.709 compatible)
- Hybrid image stabilization with 2-axis O.I.S. and roll direction correction (E.I.S.)
- Updated scene file functions
- Renewed color matrix control
- Horizontal level gauge display function, waveform display function, etc.

## Improved scalability and convenience

Supports SMPTE ST2110 standard<sup>1</sup> and various I/Fs and protocols. Simultaneous output from multiple terminals (simultaneous operation).



<sup>1</sup> Separately sold software key AW-SFU60 (released at same time as AW-UE160) is required.

I/F: Fiber (SFP+), 12G-SDI, 2 x 3G-SDI, HDMI, 2 x XLR jacks, USB 3.0 (5G mobile router with USB tethering support), G/L IN  
Protocols: NDI\*<sup>1,2</sup>, NDI\*|HX<sup>1,2</sup>, SRT, FreeD, RTMP/RTMPS, etc.

<sup>1</sup> NDI\* is a new live video production workflow support protocol developed by NewTek, Inc.  
<sup>2</sup> NDI\* is a registered trademark of NewTek, Inc. in the United States and other countries.

## Tally lamps equipped on the front and rear

Quickly check the status of the camera from any direction.



## Return input function<sup>1</sup>

Use as a return video or prompter so performers can check the video/broadcast on the spot.

<sup>1</sup> Available only when operating SMPTE ST2110.

## Accessories

### SMPTE ST2110 Supported Optional Software Keys

#### NEW AW-SFU60

Remote camera controller

#### AW-RP150 / AW-RP60

Remote camera controller<sup>1</sup>

#### AK-HRP1010 / AK-HRP250G

<sup>1</sup> Only IP connection is available with AW-UE160W/K.

#### Software

#### AW-SF100/200 / AW-SF300

## AW-UE160W/K Specifications<sup>1</sup>

Comprehensive	
Power Requirements	12VDC±10% (10.8V to 13.2V)
PoE++	IEEE802.3bt standard: DC 42V to 57V (Camera Input) <sup>2</sup> (Software authentication (LLDP) is supported).
Current Consumption	5.0A (XLR Input), 1.5A (PoE++ power supply)
Mass	Approx. 4.6kg (10.14lbs) (excluding mount bracket)
Dimensions (W x H x D)	213.0 mm x 277.0 mm x 240.0 mm (8.39 inches x 10.91 inches x 9.45 inches) [excluding protrusions, ceiling mount bracket]
Camera Unit	
Image Sensors	1-type (1*) 4K MOS×1 (Effective type) Effective Pixels: Approx. 9,620,000 pixels
Lens	Motorized 20x optical zoom F2.8 to F4.5 f=8.8 mm (11/32 inches) to 176.0 mm (6-15/16 inches), 35 mm (1-3/8 inches) equivalent: 24.5 mm (31/32 inches) to 490.0 mm (19-9/32 inches) i.Zoom, D.Extender
Angle of View Range	Horizontal: 75.1°(wide) - 4.0°(tele) Vertical: 46.7°(wide) - 2.3°(tele) Diagonal: 82.8°(wide) - 4.6°(tele)
Horizontal Resolution	1,600 TV Typ (center area, UHD Mode, Wide)
Output Format (UHD/FHD SDI and HDMI, Fiber (video only), ST2110 <sup>3</sup> )	4K <sup>4</sup> 2160/59.94p, 2160/50p, 2160/29.97p (Native), 2160/25p (Native), 2160/24p (Native), 2160/23.98p (Native) HD 1080/119.88p (SDI and HDMI only) <sup>5</sup> , 1080/100p (SDI and HDMI only) <sup>5</sup> , 1080/60p, 1080/59.94p, 1080/50p, 1080/29.97p (Native), 1080/25p (Native), 1080/24p (Native), 1080/23.98p (Native), 1080/59.94i (SDI and Fiber, ST2110 only), 1080/50i (SDI and Fiber, ST2110 only), 720/59.94p, 720/50p
Input terminal	
G/L IN	BBS (Black Burst Sync) and 3-value synchronization compatible.
AUDIO INPUT1/2	XLR (2ch) or Mic/Line input compatible (SDI/HDMI/IP) AAC compatible (IP only)
Output	
12G SDI OUT <sup>6</sup>	SMPTE2082-1, SMPTE424M/SMPTE292M/75Ω(BNC×1)
3G SDI OUT1/2/PM <sup>6</sup>	SMPTE424M/SMPTE292M/75Ω(BNC×1)
SFP+	SFP+ compliant (Single Fiber) <sup>7</sup>
USB	USB3.0 HOST(5G mobile router (USB tethering support)) <sup>8</sup>
Input/output terminal	
LAN	LAN connector for IP control (RJ-45)
RS-422	CONTROL IN RS422A (RJ-45)
SFP+(ST2110 <sup>3</sup> )	Compatible protocol: -ST2110-10/-20/-21/-30, -PTP ST2059-2, -NMOS IS-04/IS-05 Number of outputs: Video x 3 (Main line, Crop, Monitor), audio x 2 Number of inputs: Video x 1 (RETURN) Video format: FHD <sup>9</sup>
JPEG (MJPEG), H.264, H.265	
Image resolution	3840x2160, 1920x1080, 1280x720, 640x360
Frame rate	60(50)fps, 30(25)fps, 24fps
Distribution settings	Unicast/Multicast
NDI HX Version 2, High Bandwidth NDI	
Image resolution	3840x2160 <sup>10</sup> , 1920x1080, 1280x720
Frame rate	60(50)fps, 30(25)fps, 24fps <sup>10</sup>
Distribution settings	RUDP/UDP/TCP, Unicast/Multicast

<sup>1</sup> These ratings are provisional and subject to change at the time of release. These ratings are only a partial list, please check our website for details.

<sup>2</sup> Limited functionality when using PoE. <sup>3</sup> Separately sold software key AW-SFU60C (released at same time as AW-UE160) is required.

<sup>4</sup> ST2110 does not output 4K. <sup>5</sup> 1080/119.88p and 1080/100p use two 3G/SDI OUTPUT1/2 systems. No output from 12G/SDI.

<sup>6</sup> Compatible with Level-A/Level-B. <sup>7</sup> Optical signal input not supported. <sup>8</sup> Limited power supply to 5G mobile router. <sup>9</sup> Follows the system format.

<sup>10</sup> High Bandwidth NDI only.



For more information, please visit  
Panasonic web site  
[https://pro-av.panasonic.net/en/products/ptz\\_camera\\_systems.html](https://pro-av.panasonic.net/en/products/ptz_camera_systems.html)

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Factories of Panasonic Connect Co., Ltd. have received ISO14001:2015-the Environmental Management System certification. (Except for 3rd party's peripherals.)