



4K Remote Camera with NDI®*1 HX Support.

AW-UN70

Get streaming beautifully with the AW-UN70 Professional PTZ camera. Take advantage of 4K resolution to give your audience all the details. Everything you need to take your live production to the next level is in here!

Key Features

Built in Support for NDI®*1 via NDI®*1 HX

20x Optical Zoom (+30x iZoom and 12x Digital Zoom)

1/2.3-type MOS Sensor

PoE+ for Single Cable Power, Control, Streaming & Tally

1300 Horizontal Lines of Resolution (UHD)





AW-UN70

<https://eu.connect.panasonic.com/gb/en/broadcast-proav/aw-un70>

General -> Power Requirements	DC 12 V (Supplied AC adaptor), DC 42 V to 57 V (PoE+ power supply)
General -> Current Consumption	1.3 A (Supplied AC adaptor), 0.5 A (PoE+ power supply)
General -> Ambient Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
General -> Ambient Operating Humidity	20 % to 90 % (no condensation)
General -> Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
General -> Weight	Approx. 1.5 kg (3.30 lb)
General -> Dimensions	W 160 mm x H 186 mm x D 179 mm (6-5/16 inches x 7-41/128 inches x 7-3/64 inches) (excluding protrusions, direct ceiling mount bracket)
General -> Finish	AW-UN70W: Pearl white AW-UN70K: Metallic black
General -> Controller Supported	See the "Compatibility Chart for Operation Devices and Application Software" page
Camera Unit -> Imaging Sensor	1/2.3-type MOSx1
Camera Unit -> Zoom	• Optical zoom: 20x • i.Zoom UHD 22x, FHD 30x • Digital zoom: 12x
Camera Unit -> Lens	Optical 20x zoom, F1.8 to F3.6 [f=4.08 mm (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) equivalent: 29.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]
Camera Unit -> Optical Filter -> ND Filter	Auto ^{*4} , Through, 1/4, 1/16, 1/64
Camera Unit -> Focus	Switching between auto and manual
Camera Unit -> Focus Distance	Entire zooming range: 1.5 m (4.92 ft) Wide end: 10 cm (0.33 ft)
Camera Unit -> Color Separation	On-chip color filter system
Camera Unit -> Minimum Illumination -> 59.94Hz	0.7 lx (50 IRE, F1.8, 48 dB, 1/60 without accumulation) 0.35 lx (50 IRE, F1.8, 48 dB, 1/30 with accumulation [Frame Mix 6 dB])
Camera Unit -> Minimum Illumination -> 50Hz	0.7 lx (50 IRE, F1.8, 48 dB, 1/50 without accumulation) 0.35 lx (50 IRE, F1.8, 48 dB, 1/25 with accumulation [Frame Mix 6 dB])
Camera Unit -> Horizontal Resolution -> 4K	1300 TV lines Typ (Center area)
Camera Unit -> Horizontal Resolution -> HD	1000 TV lines Typ (Center area)
Camera Unit -> Gain Selection	Auto, 0 dB to 48 dB (3 dB step)
Camera Unit -> Frame Mix	Auto, Off, 6 dB, 12 dB, 18 dB, 24 dB
Camera Unit -> Electronic Shutter Speed -> FullAuto	1/60 to 1/2000 (Auto Slow Shutter: Off) [59.94Hz] 1/30 to 1/2000 (Auto Slow Shutter: On) [59.94Hz] 1/50 to 1/2000 (Auto Slow Shutter: Off) [50 Hz] 1/25 to 1/2000 (Auto Slow Shutter: On) [50 Hz]
Camera Unit -> Electronic Shutter Speed -> Auto	1/60 to 1/2000 [59.94 Hz] 1/50 to 1/2000 [50 Hz]
Camera Unit -> Electronic Shutter Speed -> Manual	1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [59.94Hz] 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [50 Hz]
Camera Unit -> Synchro Scan -> 59.94Hz	59.94 Hz to 660.09 Hz (255 steps)
Camera Unit -> Synchro Scan -> 50Hz	50.00 Hz to 570.12 Hz (255 steps)
Camera Unit -> Gamma	Off, Normal (Low, Mid, High), Cinema
Camera Unit -> White Balance	ATW, AWB A, AWB B, 3200K, 5600K, VAR (2400K to 9900K)
Camera Unit -> Chroma Amount Variability	±3 step
Camera Unit -> Scene File	Full Auto, Manual1, Manual2, Manual3
Synchronization System	Internal/External synchronization (BBS/Tri-level sync)
Image Stabilization	Optical (FHD, 4K) /4-axis hybrid image stabilizer (FHD) for stable
Input Connector -> DC IN	DC 12 V IN, PoE+ (IEEE802.3at standard)
Input Connector -> G/L IN	BBS (Black Burst Sync) signal and tri-level sync supported (BNC x 1)

Input Connector -> AUDIO INPUT -> Stereo Mini Jack	<p>Stereo mini-jack (ø3.5 mm)</p> <p>Input impedance: Approx. 2 kΩ (unbalanced)</p> <p>Mic input</p> <ul style="list-style-type: none"> • 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(0 dB=1 V/Pa,1 kHz) <p>Line input</p> <ul style="list-style-type: none"> • Input level: -10 dBV ± 3 dBV
Output Connector -> HDMI	<p>HDMI connector</p> <ul style="list-style-type: none"> • HDCP is not supported. • VIERA Link is not supported.
Output Connector -> 3G-SDI OUT	<p>Compliant with the SMPTE424/SMPTE292M standards/75 Ω (BNC x 1)</p>
Input/Output Connector -> LAN	<p>LAN connector for IP control (RJ-45)</p> <p>Equipped with straight/crossover cable auto detection function</p>
Input/Output Connector -> RS-232C	Mini DIN 8-pin (IN), Mini DIN 8-pin (OUT)
Input/Output Connector -> RS-422	CONTROL IN RS422A (RJ-45)
Input/Output Connector -> USB	Mini-B port
Input/Output Connector -> SD Card	microSD card slot
USB Connection -> Video Output	USB Video Class Ver1.0
USB Connection -> Video Compression Format	Motion JPEG
USB Connection -> Resolution	3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360
USB Connection -> Frame Rate	max 30 fps (59.94 Hz), max 25 fps (50 Hz)
USB Connection -> Audio Output	USB Audio Class Ver1.0
USB Connection -> Audio Compression Format	Linear PCM, 48 kHz, 16-bit, 2 channels
USB Connection -> Transfer Modes (JPEG)	<p>3840 x 2160</p> <p>59.94 Hz: 5fps, 50 Hz: 5fps</p> <p>1920 x 1080/1280 x 720/640 x 360</p> <p>59.94 Hz: 30fps/15fps/5fps</p> <p>50 Hz: 25fps/12.5fps/5fps</p>
USB Connection -> Supported Models	Devices standardly equipped with a USB 2.0 compatible port
Pan-tilt Head Unit -> IP connecting cable	<ul style="list-style-type: none"> • When connecting through a PoE+ hub: LAN cable ^{*8}(category 5e or above), max. 100 m (328 ft) • When a PoE+ hub is not used: LAN cable ^{*8}(category 5 or above) max.100 m (328 ft)
Pan-tilt Head Unit -> AW protocol connecting cable	LAN cable ^{*8} (category 5 or above, straight cable), max. 1000 m (3280 ft)
Pan-tilt Head Unit -> Standard Protocol Connecting Cable	Mini DIN 8-pin cable, male
Pan-tilt Head Unit -> Installation Method	Stand-alone (Desktop) or suspended (Hanging) ^{*6}
Pan-tilt Head Unit -> Pan/tilt Operation Speed	Maximum speed during preset: 300°/s, Maximum speed during manual: 90°/s
Pan-tilt Head Unit -> Panning Range	±175°
Pan-tilt Head Unit -> Tilting range	-30° to 90° ^{*7}
Pan-tilt Head Unit -> Quietness	During preset: NC40 or less, During manual: NC35 or less
SD Card Recording -> SD Card Recording	MPEG-4 AVC file standard compliant (.MP4)
SD Card Recording -> Video Compression Format	MPEG-4 AVC/H.264 High Profile
SD Card Recording -> Audio Compression Format	AAC-LC (48 kHz, 16 bit, 2 ch, 128 kbps)
SD Card Recording -> Recording Format -> 59.94Hz	<p>3840 x 2160/29.97p (Up to 72 Mbps),</p> <p>1920 x 1080/59.94p (Up to 28 Mbps),</p> <p>1920 x 1080/29.97p (Average 15 Mbps/Average 10 Mbps/Average 6 Mbps),</p> <p>1280 x 720/59.94p (Average 15 Mbps),</p> <p>1280 x 720/29.97p (Average 8 Mbps/Average 4 Mbps/Average 2 Mbps/Average 1 Mbps)</p>
SD Card Recording -> Recording Format -> 50Hz	<p>3840 x 2160/25p (Up to 72 Mbps),</p> <p>1920 x 1080/50p (Up to 28 Mbps),</p> <p>1920 x 1080/25p (Average 15 Mbps/Average 10 Mbps/Average 6 Mbps),</p> <p>1280 x 720/50p (Average 15 Mbps),</p> <p>1280 x 720/25p (Average 8 Mbps/Average 4 Mbps/Average 2 Mbps/Average 1 Mbps)</p>
Network -> Resolution -> JPEG	<p>1920 x 1080, 1280 x 720, 640 x 360, 320 x 180,</p> <p>59.94 Hz (30fps/15fps/5fps) ^{*9}, 50 Hz (25fps/12.5fps/5fps) ^{*9}</p>
Network -> Resolution -> H.264	<p>3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180,</p> <p>59.94 Hz (60fps ^{*10}/30fps/15fps/5fps) ^{*9}, 50 Hz (50fps ^{*10}/25fps/12.5fps/5fps) ^{*9}</p>
Network -> 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
Network -> Supported Protocol -> IPv6	TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, DHCPv6, DNS,NTP, ICMPv6(MLD), RTSPoverTCP, RTSPoverHTTP, SSL(TLS), MultiCast/UniCast

Footnote Description

It may be necessary to upgrade the version of the controller so that the controller will support the unit.

During Auto, 6 dB to 48 dB (6 dB step) are available for AGC Max Gain setting.

During Auto, 0 dB, 6 dB, 12 dB and 18dB are available for Auto F.Mix Max Gain setting.

"Auto" is available when "Scene" setting is "Full Auto".

This may vary depending on the operating environment.

To ensure safety, the unit must be secured using the mount bracket supplied.

Depending on the pan or tilt position, the camera may be reflected in the image.

Use of an STP (shielded twisted pair) cable is recommended.

The frame rate may be lower than the setting depending on the operating conditions.

When the image resolution is "3840x2160", "640x360" or "320x180", 60fps or 50fps cannot be selected for the frame rate.