Panasonic CONNECT



First 4K 60p/50p*1 PTZ Camera supporting NDI®*2 and SRT*3 in the world*4

AW-UE100

Supports high bandwidth NDI® for low latency transmission of highquality 4K 60p/50p*1 video, and SRT*3 for high-quality and stable transmission, and also compatible with 12G-SDI output for use in a wide range of situations, from live streaming of events to studio production.

Key Features

Supports a wide variety of IP transmission protocols, including NDI®*2, NDI®|HX*5, and SRT*3

Supports 4K 60p/50p*1 shooting and 12G-SDI output

Includes a wide-angle lens with a 74.1° field of view and 24x optical zoom

Supports FreeD*1 for building AR/VR*2 systems

Adopts new mechanical pan/tilt for improved responsiveness and quietness







AW-UE100

https://ap.connect.panasonic.com/m y/en/aw-ue100







upplied AC adaptor), 42 V to 57 V DC (PoE++ power supply)
2 V to 57 V
DP) is supported)
1.0 A (PoE++ power supply)
F)
tion
tion)
.°F)
luding cable cover, mount bracket)
uding cable cover, excluding mount bracket)
x D 170.6 mm
ches x 6-23/32 inches)
e cover, mount bracket)
PC/AW-UE100WE/AW-UE100WED: Pearl white
C/AW-UE100KE/AW-UE100KED: Black
t for Operation Devices and Application Software" page
n, F1.8 to F4.0
98.9 mm (3-29/32 inches);
alent: 25.0 mm (31/32 inches) to 600.0 mm (23-5/8 inches)]
(, , , , , , , , , , , , , , , , , , ,
.1° (wide) to 3.3° (tele)
(wide) to 1.9° (tele)
3° (wide) to 3.8° (tele)
through (IR through is used as "Night mode")
d manual
) mm (3.9 ft)
ode is selected)
ens mode is selected)
dB, without accumulation)
Mode] is [Normal])
rea)
ed : 37 dB to 42 dB
dB, 24 dB
1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
1230, 11300, 111000, 112000, 114000, 118000, 1110000
20, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
,
20, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
. ,,,,,,,,
/ FILMLIKE3
000K and 15000K by designating a value)
00

Variability	OFF, -99 % to 99 %
Camera Unit -> Scene File	Scene1, Scene2, Scene3, Scene4
Camera Unit -> Output Format (SDI) 4K	->2160/59.94p, 2160/50p, 2160/29.97p ^{*3} , 2160/25p ^{*3} , 2160/24p ^{*3} , 2160/23.98p ^{*3}
Camera Unit -> Output Format (SDI) HD	->1080/59.94p, 1080/50p, 1080/29.97p ^{*3} , 1080/29.97PsF, 1080/25p ^{*3} , 1080/25PsF, 1080/23.98p ^{*4} , 1080/24p ^{*3} , 1080/23.98p ^{*3} , 1080/23.98PsF,
Camera Unit -> Output Format (HDN	1080/59.94i, 1080/50i, 720/59.94p, 720/50p 11) 2160/59.94p, 2160/50p, 2160/29.97p ^{*3} , 2160/25p ^{*3} , 2160/24p ^{*3} , 2160/23.98p ^{*3}
-> 4K Camera Unit -> Output Format (HDN	II) 1080/59.94p, 1080/50p, 1080/29.97p ^{*3} , 1080/25p ^{*3} , 1080/23.98p,
-> HD	1080/24p ^{*3} , 1080/23.98p ^{*3 *10} , 1080/59.94i, 1080/50i, 720/59.94p, 720/50p
Synchronization System	Internal/External synchronization (BBS/Tri-level sync)
Input Connector -> DC IN	DC 12 V IN
Input Connector -> G/L IN	BBS (Black Burst Sync), tri-level sync supported 75 Ω terminal (BNCx1)
Input Connector -> AUDIO INPUT -> Stereo Mini Jack	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
	• During Mic input Input level: –40 dBV (0 dB=1 V/Pa, 1 kHz)
	Plug-in power compatible, supply voltage: $2.5 V \pm 0.5 V$
	• 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 froguency: 48 kHz
	 Sampling frequency: 48 kHz Quantization bit rate: 24bit (SDI, HDMI), 16bit (IP)
Output Connector -> HDMI	HDMI 2.0 connector
	4:2:2/10bit
	• HDCP is not supported.
	• Viera Link is not supported.
Output Connector -> 12G-SDI OUT	SMPTE 2082-1, SMPTE424M/SMPTE292M / 75 Ω (BNC x 1) • Level-A/Level-B supported
Output Connector -> 3G-SDI OUT	SMPTE424M/SMPTE292M / 75 Ω (BNC x 1) • Level-A/Level-B supported
Input/Output Connector -> LAN	LAN terminal for IP control and video transmission (RJ-45) 100BASE-TX/1000BASE-T
	PoE++ power terminal (IEEE802.3bt compliant)
Input/Output Connector -> RS-422	CONTROL IN RS-422A (RJ-45)
Pan-tilt Head Unit -> IP connecting	LAN cable ^{*5} :(category 5e or above, straight cable), max. 100 m (328 ft)
cable Pan-tilt Head Unit -> AW protocol	LAN cable ^{*5} :(category 5e or above, straight cable), max. 1000 m (3280 ft)
connecting cable Pan-tilt Head Unit -> Installation	Stand-alone (Desktop) or suspended (Hanging) ^{*6}
Pan-tilt Head Unit -> Installation Method	
Pan-tilt Head Unit -> Installation Method	 onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7}
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175°
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° –30° to 210° ^{*8}
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° -30° to 210° ^{*8} NC25 or less Microsoft® Windows® 10 Microsoft Edge
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows ^{*9}	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° -30° to 210° ^{*8} NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows ^{*9} Supported Operating Systems and	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° -30° to 210° ^{*8} NC25 or less Microsoft® Windows® 10 Microsoft Edge
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows ^{*9} Supported Operating Systems and Web Browsers -> Mac ^{*9} Supported Operating Systems and	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° -30° to 210° ^{*8} NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° -30° to 210° ^{*8} NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows ^{*9} Supported Operating Systems and Web Browsers -> Mac ^{*9} Supported Operating Systems and Web Browsers -> iPhone/iPad ^{*9} Supported Operating Systems and Web Browsers -> Android ^{*9}	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft@ Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> Android *9 IP Streaming -> Image Streaming	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft@ Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> Android *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows ^{*9} Supported Operating Systems and Web Browsers -> Mac ^{*9} Supported Operating Systems and Web Browsers -> iPhone/iPad ^{*9} Supported Operating Systems and Web Browsers -> iPhone/iPad ^{*9} IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 Frame Rate: Maximum 30 fps
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> Android *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG)	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 1 Frame Rate: Maximum 30 fps Image quality (Fine / Normal)
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> Android *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 1 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) 1 Unicast port (AUTO) 2 Unicast port (MANUAL)
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> Android *9 IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) Unicast port (MANUAL) Multicast port
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> Android *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) Unicast port (MITO) Unicast port (MATO) Unicast port (MANUAL) Multicast port Constant bit rate
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type	onSpeed range: 0.08% to 60% (Normal mode) • 3 speed modes installed Normal: 60%, Fast1: 90% *7, Fast2: 180% *7 ±175° -30° to 210° *8 NC25 or less Microsoft@ Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 1 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) 1 Unicast port (MANUAL) Multicast port 1 Constant bit rate le Frame rate Best effort
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Android *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission Setting (H.264) -> Transmission mod	onSpeed range: 0.08% to 60% (Normal mode) • 3 speed modes installed Normal: 60%, Fast1: 90% *7, Fast2: 180% *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.15/Google Chrome IOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 1 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) 1 Unicast port (AUTO) 2 Unicast port (MANUAL) Multicast port 1 Constant bit rate le Frame rate
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission Setting (H.264) -> Transmission mod	onSpeed range: 0.08% to 60% (Normal mode) • 3 speed modes installed Normal: 60%, Fast1: 90% *7, Fast2: 180% *7 ±175° -30° to 210° *8 NC25 or less Microsoft@Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 1 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) 1 Unicast port (MAUAL) Multicast port 1 Constant bit rate le Frame rate Best effort 1 [60Hz] 5fps / 30fps / 60fps (UHD: 30fps, 60fps)
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission Setting (H.264) -> Transmission mode IP Streaming -> Image Transmission Setting (H.264) -> Transmission Setting (H.264) -> Transmission	onSpeed range: 0.08% to 60% (Normal mode) • 3 speed modes installed Normal: 60%, Fast1: 90% *7, Fast2: 180% *7 ±175° -30° to 210° *8 NC25 or less Microsoft@ Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 1 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) 1 Unicast port (MANUAL) Multicast port 1 Constant bit rate le Frame rate Best effort 1 [60Hz] 5fps / 15fps / 30fps / 60fps (UHD: 30fps, 60fps) [50Hz] 5fps / 12.5fps / 25fps / 50fps (UHD: 25fps, 50fps)
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission Setting (H.264) -> Transmission mode IP Streaming -> Image Transmission Setting (H.264) -> Transmission Setting (H.264) -> Transmission	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s *7, Fast2: 180°/s *7 ±175° -30° to 210° *8 NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® HX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate Frame rate Best effort [G0Hz] 5fps / 15fps / 30fps / 60fps (UHD: 30fps, 60fps) [S0Hz] 5fps / 15fps / 30fps / 50fps (UHD: 30fps, 60fps) [S0Hz] 5fps / 12.5fps / 25fps / 50fps (UHD: 25fps, 50fps) 5 12kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps /
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Inage Systems and Web Browsers -> iPhone/iPad *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission mode IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate IP Streaming -> Image Transmission Setting (H.264) -> Max Bit Rate	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° -30° to 210° ^{*8} NC25 or less Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Unit and the set of the set o
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (H.264) -> Transmission mode IP Streaming -> Image Transmission Setting (H.264) -> Transmission Setting (H.264) -> Frame Rate IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate	onSpeed range: 0.08°/s to 60°/s (Normal mode) • 3 speed modes installed Normal: 60°/s, Fast1: 90°/s ^{*7} , Fast2: 180°/s ^{*7} ±175° -30° to 210° ^{*8} NC25 or less Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Windows@ 10 Microsoft@ Unit and the set of the set o
Pan-tilt Head Unit -> Installation Method Pan-tilt Head Unit -> Pan/tilt Operati Speed Pan-tilt Head Unit -> Panning Range Pan-tilt Head Unit -> Tilting range Pan-tilt Head Unit -> Quietness Supported Operating Systems and Web Browsers -> Windows *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> Mac *9 Supported Operating Systems and Web Browsers -> iPhone/iPad *9 Supported Operating Systems and Web Browsers -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate	onSpeed range: 0.08% to 60% (Normal mode) • 3 speed modes installed Normal: 60%, Fast1: 90% *7, Fast2: 180% *7 ±175° -30° to 210°*8 NC25 or less Microsoft® Windows® 10 Microsoft Edge Google Chrome MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.13/Safari 13, MacOS 10.14/Safari 13 MacOS 10.15/Safari 13, MacOS 10.15/Google Chrome iOS Safari iPadOS Android OS Google Chrome JPEG (MJPEG), H.264, H.265, NDI® JHX, High Bandwidth NDI® 3840x2160, 1920x1080, 1280x720, 640x360, 320x180 1 Frame Rate: Maximum 30 fps Image quality (Fine / Normal) 1 Unicast port (MANUAL) Multicast port 1 Constant bit rate le Frame rate Best effort 1 Gontant bit rate le Frame rate Best effort 1 GoH2] 5fps / 15fps / 30fps / 60fps (UHD: 30fps, 60fps) [50H2] 5fps / 12.5fps / 25fps / 50fps (UHD: 30fps, 50fps) 1 512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 1 Unicast port (MANUAL) MUlticast port (AUTO) Unicast port (AUTO) 1 Unicast port (AUTO) 1 GoH2] 5fps / 12.288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps / 32768kbps / 40960kbps / 51200kbps / 76800kbps

IP Streaming -> Image Transmission Setting (H.265) -> Max Bit Rate	8192kbps / 12288kbps / 25600kbps / 51200kbps / 76800kbps
IP Streaming -> Audio Compression Format	AAC-LC, 48 kHz / 16 bit / 2ch
IP Streaming -> Supported Protocol -> IPv6	TCP/IP, UDP/IP, HTTP, HTTPS, DNS, NTP, DHCPv6, RTP, MLD, ICMP, ARP, RTMP, SRT, SNMP, MPEG2-TS over UDP
IP Streaming -> Supported Protocol -> IPv4	TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP/RTCP, DHCP, DNS, DDNS, NTP, IGMP, ICMP, ARP, RTMP, RTMPS, SRT, SNMP, MPEG2-TS over UDP
NDI [®] Support-> NDI [®] Support	NDI® HX version 2 : Included as standard High Bandwidth NDI®: Included as standard
Other Function -> Tally LED Display Color	red / green
Footnote Description	 * NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries. 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

- Native output.
 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 $% \left({{{\rm{D}}_{{\rm{D}}}}_{{\rm{D}}}} \right)$ 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" for the latest information on browser support.

10. It denotes "1080/23.98p over 59.94p"