# Panasonic CONNECT



## 4K 25/30p PTZ Camera with 24x Optical Zoom and supporting NDI®\*1 HX version 2 and SRT

### **AW-UE50**

PTZ cameras enhance visual communication in a variety of applications ranging from online classes to online seminars. The AW-UE50/UE40 supports a compact design to blend in with the surroundings and operates very quietly to permit flexible use in any video shooting locations or conditions. The AW-UE50/UE40 offers high security and it is easy to install and operate for capturing stable images, so even people unfamiliar with video shooting or camera operation can utilize it. The excellent flexibility of the product

#### **Key Features**

4K 25/30p and 24x Optical Zoom

New Direct Drive System for improved responsiveness and quietness

Supports NDI®\*1 HX version 2 and SRT\*2 protocol

Excellent system flexibility to achieve smart wiring and smooth operation

Excellent system flexibility to achieve smart wiring and smooth operation















#### AW-UE50

https://latam.connect.panasonic.com/pa/en/products/broadcast-proav/aw-ue50

General -> Power Requirements	43 V DC (40 0 V to 43 3 V ) (Complicate Control Contro
General -> PoE	12 V DC (10.8 V to 13.2 V) (Supplied AC adapter) PoE+
General 10E	IEEE802.3at compliant : DC42 to 57 V
	(Software authentication (LLDP) is supported)
General -> Current Consumption	1.8 A (Supplied AC adaptor), 0.6 A (PoE+ power supply)
General -> Ambient Operating	0 °C to 40 °C (32 °F to 104 °F)
Temperature	
General -> Ambient Operating	20 🍫 to 90 💠 (no condensation)
Humidity General -> Storage Temperature	20 °C to E0 °C ( 4 °C to 122 °C)
General -> Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)  Approx. 1.8 kg (3.97 lbs) (excluding ceiling mounting bracket)
delierar-> weight	Approx. 2.05 kg (4.52 lbs) (including ceiling mounting bracket)
General -> Dimensions	W160.0 mm x H 192.1 mm x D 166.0 mm
	(6.299 inches x 7.563 inches x 6.535 inches)
	(Excluding protrusions, cable cover, ceiling mounting bracket)
General -> Finish	AW-UE50W: White
	AW-UE50K: 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 -> Effective Pixels Camera Unit -> Zoom	Approx. 8,490,000 pixels
Camera Unit -> 200M	Optical zoom: 24x  i.Zoom UHD 28x, FHD 36x
	• Digital extender zoom: 1.4x , 2x
Camera Unit -> 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)]
Camera Unit -> Conversion Lens	Not supported
Camera Unit -> 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)
Camera Unit -> Optical Filter -> ND	Diagonal angle of view: 81.8° (wide) to 3.8° (tele)  Not equipped
Filter	Not equipped
Camera Unit -> Focus	Switching between auto and manual
Camera Unit -> Focus Distance	Entire zooming range: 1200 mm (3.9 ft)
	Wide end: 100 mm (0.33 ft)
Camera Unit -> Color Separation	1MOS
Optical System	
	13 lx (F1.8, 59.94p, 50IRE, 42 dB, without accumulation)
Camera Unit -> Minimum Illumination Camera Unit -> Horizontal Resolution > 4K	· · · · · · · · · · · · · · · · · · ·
Camera Unit -> Horizontal Resolution	-1,500 Typ (Center area)
Camera Unit -> Horizontal Resolution > 4K Camera Unit -> Horizontal Resolution	-1,500 Typ (Center area)
Camera Unit -> Horizontal Resolution > 4K Camera Unit -> Horizontal Resolution > HD	-1,500 Typ (Center area) -1,000 Typ (Center area)
Camera Unit -> Horizontal Resolution > 4K Camera Unit -> Horizontal Resolution > HD Camera Unit -> Gain Selection Camera Unit -> Frame Mix Camera Unit -> Electronic Shutter	-1,500 Typ (Center area) -1,000 Typ (Center area)  Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB)
Camera Unit -> Horizontal Resolution > 4K Camera Unit -> Horizontal Resolution > HD Camera Unit -> Gain Selection Camera Unit -> Frame Mix Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i	-1,500 Typ (Center area) -1,000 Typ (Center area)  Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB)  Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Camera Unit -> Horizontal Resolution > 4K Camera Unit -> Horizontal Resolution > HD Camera Unit -> Gain Selection Camera Unit -> Frame Mix Camera Unit -> Electronic Shutter	-1,500 Typ (Center area) -1,000 Typ (Center area)  Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB)  Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2
Camera Unit -> Horizontal Resolution > 4K Camera Unit -> Horizontal Resolution > HD Camera Unit -> Gain Selection Camera Unit -> Frame Mix Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i Camera Unit -> Electronic Shutter	-1,500 Typ (Center area) -1,000 Typ (Center area)  Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB)  Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Camera Unit -> Horizontal Resolution > 4K Camera Unit -> Horizontal Resolution > HD Camera Unit -> Gain Selection Camera Unit -> Frame Mix Camera Unit -> Electronic Shutter Speed -> 59,94p/59,94i Camera Unit -> Electronic Shutter Speed -> 50p/50i Camera Unit -> Electronic Shutter Speed -> 29,97p Camera Unit -> Electronic Shutter	-1,500 Typ (Center area)  -1,000 Typ (Center area)  Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB)  Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter	-1,500 Typ (Center area)  -1,000 Typ (Center area)  Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB)  Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 23.98p/24p  Camera Unit -> Synchro Scan ->	-1,500 Typ (Center area) -1,000 Typ (Center area)  Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB)  Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped: 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 23.98p/24p  Camera Unit -> Synchro Scan -> 59.94p/59.94i	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25.9  Camera Unit -> Electronic Shutter Speed -> 25.9  Camera Unit -> Electronic Shutter Speed -> 23.98p/24p  Camera Unit -> Synchro Scan -> 59.94p/59.94i  Camera Unit -> Synchro Scan -> 50p/50i  Camera Unit -> Synchro Scan ->	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 23.98p/24p  Camera Unit -> Synchro Scan -> 59.94p/59.94i  Camera Unit -> Synchro Scan -> 50p/50i	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 23.98p/24p  Camera Unit -> Synchro Scan -> 59.94p/59.94i  Camera Unit -> Synchro Scan -> 50p/50i  Camera Unit -> Synchro Scan ->	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped: 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz  30.0 Hz to 7200 Hz
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59,94p/59,94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 23.98p/24p  Camera Unit -> Synchro Scan -> 50p/50i  Camera Unit -> Synchro Scan -> 29.97p  Camera Unit -> Synchro Scan ->	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped: 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz  30.0 Hz to 7200 Hz  25.0 Hz to 7200 Hz
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter Speed -> 50p/50i  Camera Unit -> Electronic Shutter Speed -> 29.97p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 25p  Camera Unit -> Electronic Shutter Speed -> 23.98p/24p  Camera Unit -> Synchro Scan -> 59.94p/59.94i  Camera Unit -> Synchro Scan -> 50p/50i  Camera Unit -> Synchro Scan -> 29.97p  Camera Unit -> Synchro Scan -> 29.97p  Camera Unit -> Synchro Scan ->	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped: 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz  30.0 Hz to 7200 Hz  25.0 Hz to 7200 Hz
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter  Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter  Speed -> 50p/50i  Camera Unit -> Electronic Shutter  Speed -> 29.97p  Camera Unit -> Electronic Shutter  Speed -> 25p  Camera Unit -> Electronic Shutter  Speed -> 25p  Camera Unit -> Electronic Shutter  Speed -> 23.98p/24p  Camera Unit -> Synchro Scan -> 59.94p/59.94i  Camera Unit -> Synchro Scan -> 50p/50i  Camera Unit -> Synchro Scan -> 29.97p  Camera Unit -> Synchro Scan -> 29.97p  Camera Unit -> Synchro Scan -> 25p  Camera Unit -> Synchro Scan -> 23.98p/24p	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped: 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz  30.0 Hz to 7200 Hz  25.0 Hz to 7200 Hz  24.0 Hz to 7200 Hz  HD / Normal / Cinema1 / Cinema2 / Still Like  ATW: 3200 K, 5600 K (ATW Speed 3-stage variables.)
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter  Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter  Speed -> 50p/50i  Camera Unit -> Electronic Shutter  Speed -> 25p  Camera Unit -> Electronic Shutter  Speed -> 23.98p/24p  Camera Unit -> Synchro Scan ->  50p/50i  Camera Unit -> Synchro Scan ->  29.97p  Camera Unit -> Synchro Scan ->  23.98p/24p  Camera Unit -> Gamma	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped : 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz  25.0 Hz to 7200 Hz  25.0 Hz to 7200 Hz  24.0 Hz to 7200 Hz  HD / Normal / Cinema1 / Cinema2 / Still Like  • ATW: 3200 K, 5600 K (ATW Speed 3-stage variables.) • AWB: AWB-A / AWB-B
Camera Unit -> Horizontal Resolution > 4K  Camera Unit -> Horizontal Resolution > HD  Camera Unit -> Gain Selection  Camera Unit -> Frame Mix  Camera Unit -> Electronic Shutter  Speed -> 59.94p/59.94i  Camera Unit -> Electronic Shutter  Speed -> 50p/50i  Camera Unit -> Electronic Shutter  Speed -> 25p  Camera Unit -> Electronic Shutter  Speed -> 23.98p/24p  Camera Unit -> Synchro Scan ->  50p/50i  Camera Unit -> Synchro Scan ->  29.97p  Camera Unit -> Synchro Scan ->  23.98p/24p  Camera Unit -> Gamma	-1,500 Typ (Center area) -1,000 Typ (Center area) Auto, 0 dB to 36 dB *1 (Super Gain function equipped: 37 dB to 42 dB) Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB *2 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000  60.0 Hz to 7200 Hz  30.0 Hz to 7200 Hz  25.0 Hz to 7200 Hz  24.0 Hz to 7200 Hz  HD / Normal / Cinema1 / Cinema2 / Still Like  ATW: 3200 K, 5600 K (ATW Speed 3-stage variables.)

Camera Unit -> Scene File	Full Auto, Scene1, Scene2, Scene3
Camera Unit -> Output Format (SDI) -> HD	>1080/59.94p, 50p, 1080/59.94i, 50i, 1080/29.97p (Native), 25p (Native), 23.98p (over59.94i), 1080/29.97psF, 25psF, 23.98psF, 1080/24p (Just), 23.98p (Native), 730/59.94p, 50p
Camera Unit -> Output Format (HDMI > 4K	23.98p (Native), 720/59.94p, 50p )2160/29.97p (Native), 2160/25p (Native), 2160/24p (Just), 2160/23.98p (Native)
Camera Unit -> Output Format (HDMI > HD	)1080/59.94p, 50p, 1080/59.94i, 50i, 1080/29.97p (Native), 25p (Native), 23.98p (over59.94i), 1080/24p (Just), 23.98p (Native), 720/59.94p, 50p
Image Stabilization	MENU switching: Select between Off/O.I.S.
Input Connector -> DC IN	DC 12 V IN
Output Connector -> HDMI	HDMI 1.4 connector
	4:2:2/10bit  • HDCP is not supported.
Output Course them to 25 SDI OUT	• Viera Link is not supported.
Output Connector -> 3G-SDI OUT	SMPTE292M, 424M/ 75 Ω (BNCx1) • Level-A/Level-B supported
Input/Output Connector -> LAN	LAN terminal for IP control (RJ-45) 100BASE-TX/1000BASE-T
Input/Output Connector -> RS-422 Input/Output Connector -> USB	CONTROL IN RS422A (RJ-45) USB2.0 DEVICE, Type C connector, no USB bus-powered function.
impubouqui connector -> 03B	Only compatible with UVC (USB Video Class)  * UVC 1.0, UAC 1.0
Input/Output Connector -> MIC/LINE	AAC compatibility (compatible with IP only)
Input	Φ3.5 mm stereo mini jack
	• During MIC input  Input level: 40 dBV (0 dB=1 V/Ba 1 kHz)
	Input level: -40 dBV (0 dB=1 V/Pa, 1 kHz) Supply voltage: 2.5 V±0.5 V (plug-in power compatible)
	• Input impedance: Approx. 2 k $\Omega$ (when plug-in power is turned ON)
	Approx. 20 $k\Omega$ (when plug-in power is turned OFF)
	During LINE input Input level: -10 dBV
	Input impedance: Approx. 3 kΩ
	• Input volume variable range: -36 dB to 12 dB (3 dB step)
	• Embedded audio output level: -12 dBFS
	• Sampling frequency: 48 kHz
Pan-tilt Head Unit -> IP connecting cable	• If you have a PoE+ ethernet hub LAN cable *3 (category 5e or above, straight cable) Max 100 m (328 ft)
Lable	• If you don't have a PoE+ ethernet hub
	LAN cable *3 (category 5e or above, straight cable) Max 100 m (328 ft)
Pan-tilt Head Unit -> AW protocol	•LAN cable *3 (category 5e or above, straight cable) Max 1000 m (3280 ft)
connecting cable	
Pan-tilt Head Unit -> Installation Method	Stand-alone (Desktop) or suspended (Hanging) *4
Pan-tilt Head Unit -> Speed range	Speed range: 0.08°/s to 60°/s (Normal mode) *5
Pan-tilt Head Unit -> Pan/tilt Operation	· · · · · ·
Speed	Normal: 60°/s, Fast1: 90°/s, Fast2: 180°/s
Pan-tilt Head Unit -> Panning Range	±175°
Pan-tilt Head Unit -> Tilting range	-30°to 90° *6 NC25 or less
Pan-tilt Head Unit -> Quietness Supported Operating Systems and	Windows 10
Web Browsers -> Windows *7	Windows® Internet Explorer® 11 (32 bit / 64 bit)
	Microsoft Edge
S Std Od	Google Chrome
Supported Operating Systems and Web Browsers -> Mac <sup>*7</sup>	Mac OS v11.0.1 / Safari 14.01 Mac OS v11.0.1 / Google Chrome
	Mac OS v10.15 / Google Chrome
	Mac OS v10.14 / Google Chrome
Supported Operating Systems and	iOS
Web Browsers -> iPhone/iPad	Safari iPadOS
Summarked Organistic Co.	Android OS
oupported Operating Systems and	
Web Browsers -> Android	Google Chrome
Web Browsers -> Android IP Streaming -> Image Streaming	Google Chrome  JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)
Web Browsers -> Android IP Streaming -> Image Streaming Mode	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264) 1920x1080, 1280x720, 640x360, 320x180
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264) 1920x1080, 1280x720, 640x360, 320x180
Web Browsers -> Android (P Streaming -> Image Streaming Mode (P Streaming -> Image Resolution (P Streaming -> Image Transmission Setting (JPEG)	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps  Image quality (Fine / Normal)
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps  Image quality (Fine / Normal)  Unicast port (AUTO)
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal)  Unicast port (AUTO) Unicast port (MANUAL) Multicast port
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal)  Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission Setting (H.264) -> Transmission mode IP Streaming -> Image Transmission mode IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal)  Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate Frame rate Best effort [60 Hz] 5fps / 15fps / 30fps / 60fps
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) 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 mode IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps  Image quality (Fine / Normal)  Unicast port (AUTO)  Unicast port (MANUAL)  Multicast port  Constant bit rate  Frame rate  Best effort  [60 Hz] 5fps / 15fps / 30fps / 60fps  [50 Hz] 5fps / 12.5fps / 25fps / 50fps
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) 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 mode IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal)  Unicast port (AUTO)  Unicast port (MANUAL)  Multicast port  Constant bit rate Frame rate  Best effort  [60 Hz] 5fps / 15fps / 30fps / 60fps  [50 Hz] 5fps / 12.5fps / 25fps / 50fps  512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps /
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) 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 mode IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal) Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate Frame rate Best effort [60 Hz] 5fps / 15fps / 30fps / 60fps [50 Hz] 5fps / 12.5fps / 25fps / 50fps 512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) 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 mode 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) -> Image Transmission Setting (H.264) -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal) Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate Frame rate Best effort [60 Hz] 5fps / 15fps / 30fps / 60fps [50 Hz] 5fps / 12.5fps / 25fps / 50fps  512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission mode IP Streaming -> Image Transmission mode 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 IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal) Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate Frame rate Best effort [60 Hz] 5fps / 15fps / 30fps / 60fps [50 Hz] 5fps / 12.5fps / 25fps / 50fps 512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps Unicastport (AUTO) Unicastport (MANUAL)
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission mode IP Streaming -> Image Transmission mode 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 IP Streaming -> Image Transmission Setting (H.265) -> Transmission Type	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal) Unicast port (AUTO) Unicast port (MANUAL) Multicast port  Constant bit rate Frame rate Best effort [60 Hz] 5fps / 15fps / 30fps / 60fps [50 Hz] 5fps / 12.5fps / 25fps / 50fps  512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps  Unicastport (AUTO) Unicastport (MANUAL) Multicastport
Setting (H.264) -> Max Bit Rate  IP Streaming -> Image Transmission Setting (H.265) -> Transmission Type  IP Streaming -> Image Transmission	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal) Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate Frame rate Best effort [60 Hz] 5fps / 15fps / 30fps / 60fps [50 Hz] 5fps / 12.5fps / 25fps / 50fps 512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps Unicastport (AUTO) Unicastport (MANUAL) Multicastport [60 Hz] 5fps / 15fps / 30fps / 60fps
Web Browsers -> Android IP Streaming -> Image Streaming Mode IP Streaming -> Image Resolution IP Streaming -> Image Transmission Setting (JPEG) IP Streaming -> Image Transmission Setting (H.264) -> Transmission Type IP Streaming -> Image Transmission mode IP Streaming -> Image Transmission mode 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 IP Streaming -> Image Transmission Setting (H.265) -> Transmission Type	JPEG (MJPEG), H.264, H.265, NDI® HX *8(H.264)  1920x1080, 1280x720, 640x360, 320x180  Frame rate: Maximum 30fps Image quality (Fine / Normal) Unicast port (AUTO) Unicast port (MANUAL) Multicast port Constant bit rate Frame rate Best effort [60 Hz] 5fps / 15fps / 30fps / 60fps [50 Hz] 5fps / 12.5fps / 25fps / 50fps 512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps Unicastport (AUTO) Unicastport (MANUAL) Multicastport

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
IP Streaming -> Supported Protocol -> IPv4	TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, DHCP, DNS, DDNS, NTP, IGMP, ICMP, ARP RTMP, RTMPS, SRT
NDI <sup>®</sup> Support -> NDI <sup>®</sup> Support	NDI® HX : Available to upgrade
NDI <sup>®</sup> Support -> Image Resolution (NDI <sup>®</sup> HX)	1920x1080, 1280x720
NDI <sup>®</sup> Support -> Image Streaming Setting (NDI <sup>®</sup> HX) -> Transmission Type	TCP/UDP Unicast/Multicast
NDI <sup>®</sup> Support -> Audio Compression Type (NDI <sup>®</sup> HX)	AAC-LC, 48 kHz, 16 bit, 2 ch
Other Function -> Tally LED Display Color	red / green
Footnote Description	<ul> <li>* NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries <ol> <li>Can be set in 1 dB step increments.</li> <li>Cannot be set 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.</li> <li>STP (Shielded Twisted Pair) is recommended.</li> <li>To ensure safety, the unit must be secured using the mount bracket supplied.</li> <li>Note that the operating noise may be loud in high speed. If the operating noise is disturbing, use the Normal mode.</li> <li>The main unit may appear in the video depending on the pan/tilt position.</li> <li>Supported OS indicated are for browsers current as of September 2021. See "Service and Support / PASS" for the latest information on browser support.</li> <li>For details, please contact a sales representative of Panasonic. To use NDI® HX, the driver must be installed and activated.</li> <li>Non-synchronous with SDI-OUT</li> </ol> </li> </ul>