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City of Madison Municipal Complex Council Chamber AV Upgrades

Huntsville, AL

12/11/2022

Contact: Garrett Gillott, garrett.gillott@madisonal.gov 256.772.5676

Item	Quantity	Description	Unit Price	Total
Front & Rear Full HD 16:9 Laser Projectors				
A1	2	Vivitek DU8090Z Laser Projector , Full HD 1920x1200 native resolution; 20,000 Hour Laser Light Source with sealed optical engine design, 8000 lumens, 100,000:1 Contrast Ratio, Power Zoom, Focus, and Lens Shift U/D/L/R. Full suite of display connectivity inputs and outputs including: HDMI v1.4a, DVI-D, VGA-In, VGA-Out, Network connectivity for remote projector management - control and status. Instant On/Off. 5 year warranty.	\$8,680.00	\$17,360.00
A2	2	Vivitek 3797744200-SVK Standard Throw Power Lens, 1.73-2.27:1 throw ratio.	\$1,358.00	\$2,716.00
A3	2	Chief CMA395 Angled Ceiling Mount Adapter	\$58.00	\$116.00
A4	2	Chief VCMU Universal Projector Mount	\$468.00	\$936.00
A5	2	Mounting Hardware , 5:1 Factor of Safety, as required.	\$136.00	\$272.00
Total:				\$21,400.00
Front & Rear Motorized Projection Screens 16:9 Format				
B1	1	Dalite Cosmopolitan Motorized Projection Screen , 16:9 format, 122.5" W x 69" H viewing area, 2" black border. White Case. <i>Front audience-facing screen.</i>	\$1,346.00	\$1,346.00
B2	1	Dalite Cosmopolitan Motorized Projection Screen , 16:9 format, 116" W x 65" H viewing area, 2" black border. White Case. <i>Front audience-facing screen.</i>	\$1,266.00	\$1,266.00
B3	2	Dalite Low-Voltage Control Interface	\$298.00	\$596.00
B4	2	Mounting Hardware , 5:1 Factor of Safety, as required.	\$94.00	\$188.00
B5	1	Freight/Shipping	\$372.00	\$372.00
Total:				\$3,768.00
4K PTZ Camera w/NDI IP Video & Camera Controller				
C1	1	Panasonic AW-UE80 4K60 SDI/HDMI/NDI PTZ Camera with 24x Optical Zoom (Black), 1/2.5" 4K MOS Sensor, Up to UHD 4K60 & HD Output, HDMI, SDI, NDI HX2 & IP Video Output, 24x Optical, 28x UHD & 36x HD iZoom, Wide 74.1° Horizontal Angle of View, PoE+ Support, IP, USB & RS-422 Control, Stream 1080p to Platforms via H.264/265, Stereo Mini-Jack Audio Mic/Line Input.	\$5,395.00	\$5,395.00
C2	1	Panasonic FEC-40 Wall Mount for AW-UE80 Camera (Black)	\$168.00	\$168.00
C3	1	Panasonic AWRP60GJ Remote Camera Controller, Control up to 100 Remote Cameras, Smooth Pan & Tilt Control with Joystick, Preset Position Memory Functions, Color Image Adjustment Function, Flexible System Design via IP, Built-in GUI menu screen.	\$2,275.00	\$2,275.00
Total:				\$7,838.00

Wireless Presentation Gateway				
D1	1	Extron ShareLink Pro 500 Wireless Presentation Gateway , WebShare shares content via a Web browser, Provides full screen mirroring for all devices, Supports Mac and Windows computers as well as Apple and Android tablets and smartphones, Extron ShareLink Pro macOS app	\$1,450.00	\$1,450.00
Total:			\$1,450.00	

Video Switching & Distribution				
E1	1	Extron IN1608 xi Eight Input HDCP-Compliant Scaling Presentation Switcher with DTP Extension, Integrates HDMI, analog video, and audio sources into presentation systems, DTP output is compatible with HDBaseT-enabled devices, Integrated DTP inputs and output support transmission of video, control, and analog audio up to 330 feet (100 meters) over a shielded CATx cable, RS-232 insertion from the Ethernet control ports	\$2,874.00	\$2,874.00
E2	1	Kiloview N40 UHD HDMI / NDI Bidirectional Converter , Low-Profile NDI Interface, HDMI Input and Loopthrough Output, Supports up to 4K60 fps, PoE and DC Power Options, Tally Communication. <i>Converter placed downstream of video switcher/scaler, allows for NDI video ingest of presentation or wireless gateway computer, with embedded audio.</i>	\$690.00	\$690.00
E3	1	Extron DTP HDMI 4K 230 Tx HDMI Twisted Pair Extender, Transmits HDMI plus control and analog audio up to 230 feet (70 meters) over a shielded CATx cable, Supports computer and video resolutions up to 4K, including 1080p/60 Deep Color. <i>HDMI over CAT5 transmitter for rear projector.</i>	\$398.00	\$398.00
Total:			\$3,962.00	

Press Audio Interface				
F1	2	Custom Audio Interfaces from existing audio system to streaming PC and presentation PC, with dedicated level/mix control.	\$146.00	\$292.00
Total:			\$292.00	

System Design, Installation, Programming, and Training				
G1	1	Design and Installation , all audio/video components, configuration as required. Remove existing projectors and screens, reinstall new screens, projectors, camera, etc.	\$4,875.00	\$4,875.00
G2	1	Hardware and Cabling , as required, <i>with full enterprise network remote control and monitoring via PC and/or iPad.</i>	\$375.00	\$375.00
G3	1	Programming of control system. as required.	\$650.00	\$650.00
G4	1	Training of staff regarding control system operation and configuration.	\$0.00	\$0.00
Total:			\$5,900.00	

All pricing good 90 days. Tax Exempt

Grand Total: \$44,610.00

Related work not included in proposal:

All 120VAC power conductors and conduits associated with power circuits to all equipment locations shall be furnished and installation coordinated by the client.

Requires a dedicated 120V/20A circuit installed at projector location, client to verify.



DU8090Z

LARGE VENUE LASER PROJECTOR WITH COMPLETE CONNECTIVITY, THAT'S 8000 ANSI LUMENS BRIGHT AND FULLY FEATURED

FEATURES

- Laser phosphor projection engine incorporates a laser design that's long lasting (20,000 hrs) and environmentally friendly
- 8,000 ANSI lumens, with a dynamic 10,000:1 contrast ratio, provide amazing image quality that's stable over time
- Built-in ACS (auto color sensor) for color and brightness consistency
- Built-in MPS (multi projector system) hardware for edge blending, flexible geometry and warping functionality
- Network connectivity for remote projector management - control and status. Ready for integration and system administration via RJ45
- Sealed optical engine and filter-less design improves performance with minimal service maintenance
- Choose the color to best fit your environment, with black and white cabinet colors available

LENS CHART

Model	D88-WF18501	D88-UWZ01	D88-WZ01	D88-ST001	D88-SMLZ01	D88-LOZ101	D88-LOZ201	D88-UST01
Part #	3797745100-SVK	3797804200-SVK	3797745200-SVK	3797744200-SVK	3797745000-SVK	3797745400-SVK	3797744900-SVK	3797855700-SVK
Lens Desc.	Wide Fixed, On Axis	Ultra-Wide Zoom Lens	Wide Zoom Lens	Regular Zoom Lens	Semi-Long Zoom Lens 1	Long Zoom Lens 1	Long Zoom Lens 2	Ultra-Short Throw Lens
Throw Ratio	0.78:1	0.75-0.93:1	1.25-1.8:1	1.73-2.27:1	2.22-3.67:1	3.58-5.38:1	5.31-8.26:1	0.38:1 On Axis
Image Size	40-500"	40-500"	40-500"	40-500"	40-500"	40-500"	40-500"	100-350"
Diagonal	(1.02-12.7 m)	(1.01-12.7 m)	(1.02-12.7 m)	(1.02-12.7 m)	(1.02-12.7 m)	(1.02-12.7 m)	(1.02-12.7 m)	(2.54-8.9 m)
Projection Distance	20-118"	24.4-376"	39.3-770"	58-276"	74.7-1583"	118-2318"	174-3597"	33.4-107.7"
	(0.62-10.36 m)	(0.62-10.4 m)	(1.0-19.6 m)	(1.45-24.85 m)	(1.9-40.3 m)	(3-59 m)	(4.42-91.5 m)	(0.85-2.74 m)

DU8090Z

The DU8090Z laser projector takes projection to the next level, with impressively vivid colors and a high brightness of 8,000 ANSI lumens. Built lamp-free, it provides a low cost of ownership, with minimal maintenance, and gives a stable, high-quality projection for up to 20,000 hours. Complete lens set together with a full feature set the DU8090Z offers the best performance and value in the next generation of advanced technology projection — laser. The DU8090Z offers the most immersive big-screen experience available in digital projection.

SPECIFICATIONS

Display Type	Single Chip 0.67" DLP™ Technology by TI
Brightness	8,000 ANSI Lumens
Native Resolution	WUXGA (1920 x 1200)
Maximum Resolution	WUXGA (1920 x 1200) at 60 Hz (Reduced Blanking)
Contrast Ratio	10,000:1
Light Engine Life and Type	Up to 20,000 Hours, Laser Phosphor Light Engine
Image Size (Diagonal)*	40" - 500", 1 - 12.7 m
Aspect Ratio	16:10
Offset	Motorized Lens Shift, Horizontal and Vertical
Keystone Correction	Horizontal ± 60°, Vertical ± 40°
Horizontal Frequency	15 - 108 Hz
Vertical Scan Rate	50 - 85 Hz
Edge Blending	Yes (Built-in)
Warping	Yes (Built-in)
3D Functionality	Yes; DLP® Link™, HDMI v1.4 (Blu-ray, Side by Side, Frame Packing, Top and Bottom)
Lens Shift Range**	Vertical: 0-50%, Horizontal: ±10%
Computer Compatibility	VGA, SVGA, XGA, WXGA, SXGA, SXGA+, UXGA, 1080P, WUXGA at 60 Hz, Max
Video Compatibility	SDTV (480i, 576i), EDTV (480p, 576p), HDTV (720p, 1080i/p) NTSC (M, 3.58/4.43 MHz), PAL (B, D, G, H, I, M, N), SECAM (B, D, G, K, K1, L), WUXGA at 60 Hz Max
I/O Connection Ports	HDMI v1.4a (x2) DVI-D, Component (5 BNC), VGA-In, 3G-SDI-In/Out, RS-232, VGA-Out, 3D-Sync In/Out, 12v Trigger, Wired Remote, HDBaseT™/LAN (Shared)
Projection Method	Flexible 360°; Image Correction for Table Top, Ceiling Mount
Security Solutions	Kensington® Security Slot, Security Bar, Keypad Lock, Anti-Theft Lens Screw
Dimensions (WxDxH)	19.7" x 22.8" x 8.1", 500 x 580 x 205 mm
Weight	28 kg (61.7 lbs)
Cabinet Colors	Black, White
Noise Level	40 dB (Normal Mode)
Power Supply	AC 100-240 V, 50/60 Hz
Power Consumption	Full Power: 990 Watts, Standby Power < 6W
Standard Accessories	Replacement Lamp, Interchangeable Lens (Five), AC Power Cord, Remote, Lens Cap, Anti-Theft Lens Screw, Documentation Kit
Optional Accessories	Interchangeable Lens Options (x8), NovoPRO
Warranty	5-Year Parts & Labor or 20,000 Hours (Whichever Comes First) and 3-Year Advanced Exchange Warranty



*Note: Regular Lens

**Note: Lens shift compatibility with all lenses except D88-WF18501 Wide Fixed Lens (3797745100-SVK) and D88-UST01 Ultra-Short Throw Lens (3797855700-SVK). Screen height or screen width/2 x % max.

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COSMOPOLITAN® ELECTROL®

4:3 VIDEO FORMAT DIMENSIONS

Viewing Area H x W		Nominal Diagonal		Overall Case Length	
in.	cm	in.	cm	in.	cm
43" x 57"	109 x 145	72"	183	68"	173
50" x 67"	127 x 170	84"	213	78"	198
57" x 77"	145 x 196	96"	244	92"	234
60" x 80"	152 x 203	100"	254	92"	234
69" x 92"	175 x 234	120"	305	104"	264
87" x 116"	221 x 295	150"	381	128"	325
105" x 140"	267 x 356	180"	457	152"	386

16:9 HDTV FORMAT DIMENSIONS

Viewing Area H x W		Nominal Diagonal		Overall Case Length	
in.	cm	in.	cm	in.	cm
45" x 80"	114 x 203	92"	234	92"	234
52" x 92"	132 x 234	106"	269	104"	264
54" x 96"	137 x 244	110"	279	108"	274
58" x 104"	147 x 264	119"	302	116"	295
65" x 116"	165 x 295	133"	338	128"	325
78" x 139"	198 x 353	159"	404	152"	386

16:10 WIDE FORMAT DIMENSIONS

Viewing Area H x W		Nominal Diagonal		Overall Case Length	
in.	cm	in.	cm	in.	cm
50" x 80"	127 x 203	94"	239	92"	234
57½" x 92"	146 x 234	109"	277	104"	264
60" x 96"	152 x 244	113"	287	108"	274
65" x 104"	165 x 264	123"	312	116"	295
69" x 110"	175 x 279	130"	330	122"	310
72½" x 116"	184 x 295	137"	348	128"	325
87" x 139"	221 x 353	164"	417	152"	386

SQUARE FORMAT DIMENSIONS

Size H x W		Overall Case Length	
in.	cm	in.	cm
50" x 50"	127 x 127	58"	147
60" x 60"	152 x 152	68"	172
70" x 70"	178 x 178	78"	198
84" x 84"	213 x 213	92"	234
6' x 8'	183 x 244	104"	264
8' x 8'	244 x 244	104"	264
7' x 9'	213 x 274	116"	295
9' x 9'	274 x 274	116"	295
8' x 10'	244 x 305	128"	325
10' x 10'	305 x 305	128"	325
9' x 12'	274 x 366	152"	386

Wall and Ceiling Mounted Electric Screen



- Ideal for applications where a recessed installation is not desired or feasible.
- Patented in-the-roller motor mounting system for quiet operation.
- Handsome white case blends with any decor.
- An optional choice of seven veneer finishes are also available for the screen case for a warm, elegant look.

Available Screen Surfaces: Matte White, High Contrast Matte White, Video Spectra 1.5, Silver Lite 2.5, High Power® and High Contrast High Power®.

See pages 6-10 for surface descriptions.

Optional floating mounting bracket allows screen to be mounted onto wall or ceiling studs and aligned left or right.



For Ceiling Trim Kit for Cosmopolitan® Electrol® sizes up to 9' x 12', see accessories on page 64.



See page 64 for veneer choices.



Built-in control options on page 44. Additional control options on pages 62-63.

Panasonic

BUSINESS

Preliminary

AW-UE50W AW-UE40W [White Model]
AW-UE50K AW-UE40K [Black Model]

4K Integrated Camera For Indoor Use



**Provides hybrid online-offline environment.
Standard models suitable for use in online classes
and online briefing sessions.**

Camera unit performance and functions that assure high-quality video streaming

Featuring 4K resolution, wide-angle coverage of up to 74.1° horizontal and max. 24x optical zoom, the UE50/40 maintains "the ambience of hall" intact in streaming videos.

The Auto Tracking Software and image stabilizer function contribute to stable video streaming.

Unit size, quietness and stability for anywhere use

The UE50/40 is lightweight and compact. The new direct-drive motor with an operating sound of NC25 or lower achieves high stopping position precision and enables accurate camerawork, so it can be installed and used at any video shooting sites. The UE50/40 supports NDI®|HX*1 and SRT*2 to assure stable and safe streaming of videos.

*1 In this instance, NDI® is used to indicate low latency with high bandwidth NDI®. NDI®|HX is used to indicate high efficiency low bandwidth NDI®|HX. In the NDI®|HX mode, 4K video signals cannot be output. AW-UE50/AW-UE40 supports NDI®|HX version 2 and Full HD output.

*2 Abbreviation for Secure Reliable Transport

Excellent system flexibility to achieve smart wiring and smooth operation

By using a Panasonic remote camera controller or linking with the software makes, the camera can be easily installed, managed and operated. The UE50/40 is suitable for replacing an existing camera or for expanding the present system.



Various features and functions to respond flexibly to any video shooting needs.

Support SRT¹ to ensure stable video streaming.



The UE50/40 supports SRT, a next-generation video transport protocol which works well even with an unstable network environment and which provides robust security.

¹ Abbreviation for Secure Reliable Transport

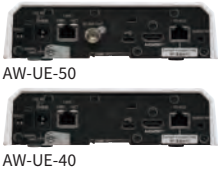
Use in Online Conferences as Web Camera.

The UE50/40 supports UVC* so the video and audio signals can be transmitted over USB. By using the PTZ Virtual USB Driver software and connecting with a LAN cable, it is possible to use the UE50/40 as a USB camera. Linkage with Panopto is also possible.

*UVC: USB video class
A standard for connecting video-handling devices such as webcams to a computer via USB.

Supports 4 kinds of Interfaces

The UE50/40 supports four kinds of output interfaces—3G-SDI*, HDMI, IP and USB—so it can be used together with a wide range of devices.



*3G-SDI is supported only by AW-UE50.

Accessories



**Remote Camera Controller
AW-RP150GJ**
High operability ensured through touch-panel GUI monitor and a new type of joystick.



**Remote Camera Controller
AW-RP60GJ**
Equipped with a GUI menu screen for clear visibility and a joystick for intuitive control.



**Auto Tracking Software Key
AW-SF100/AW-SF200**
Face Recognition and Human Body Detection for High Precision and Smooth Tracking Control for Natural-looking Video.



**Visual Preset Software Key
AW-SF300**
GUI screen that enables the subject of multiple PTZ Cameras to be switched with a single click of an icon.

Panasonic[®]

Panasonic Corporation
Connected Solutions Company
2-15 Matsuba-cho, Kadoma, Osaka 571-8503 Japan

SP-UE50/40PEWEB 202110SP

Supports NDI[®]|HX version 2

The UE50/40 realizes effective IP transmission of high-image-quality videos even with a limited bandwidth. Since the video source can be accessed from any devices on the same network, even devices with unknown IP addresses are automatically recognized.

*NDI[®] is a new IP protocol developed by NewTek, Inc. This protocol supports live video production workflows.
*NDI[®] is a registered trademark of NewTek, Inc. in the United States.

Single controller* can control up to 200 camera units.

By using the free software, PTZ Control Center, or connecting a Panasonic remote camera controller, multiple remote camera units can be controlled all at once from the single controller for easy management and control.

*This function can be used only with Panasonic PTZ camera controllers AW-RP150GJ and AW-RP60GJ.

Other Features

- Unit design makes the lens unnoticeable.
- Equipped with Privacy Mode which positions the lens toward the back when on standby.
- Equipped with Optical Image Stabilizer.(OIS)
- Operatable from Web GUI.

Specifications

Comprehensive			
Power Requirements	DC 12 V ± 10 % (10.8 V to 13.2 V) (Supplied AC adapter)		
PoE+	IEEE 802.3 at compliant : DC42-57 V (Camera Input)		
Current Consumption	1.8 A (AC adapter input) , 0.6 A (PoE+ power supply)		
Mass	Approx. 1.8 kg (3.97 lbs) (excluding ceiling mounting bracket)		
External dimensions	Width 160.0 mm × Height 192.1 mm × Depth 166.0 mm (6.299 inches × 7.563 inches × 6.535 inches) (Excluding protrusions, cable cover, ceiling mounting bracket)		
Camera part			
Image Sensors	1/2.5-type MOS×1		
Lens	Electric 24 x optical zoom F1.8 ~ F4.0 (f = 4.12 mm ~ 98.9 mm , 35 mm conversion : 25.0 ~ 600.0 mm)		
Zoom magnification	• Optical zoom: 24 x • i.Zoom UHD 28 x , FHD 36 x • Digital extender zoom: 1.4 x , 2 x		
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)		
Horizontal Resolution	UHD: 1,500 Typ (Center area) FHD: 1,000 Typ (Center area)		
Output Format	SDI	HD	1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 1080/29.97p(Native), 1080/25p(Native), 1080/23.98p(over59.94i), 1080/29.97psF, 1080/25psF, 1080/23.98psF, 1080/24p(Just), 1080/23.98p(Native), 720/59.94p, 720/50p
	HDMI	4K	2160 / 29.97p (Native), 2160 / 25p (Native), 2160 / 24p (Just), 2160 / 23.98p (Native)
		HD	1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 1080/29.97p(Native), 1080/25p(Native), 1080/23.98p(over59.94p), 1080/24p(Just), 1080/23.98p(Native), 720 / 59.94p, 720/50p
			1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 1080/29.97p(Native), 1080/25p(Native), 1080/24p(Just), 1080/23.98p(Native), 720 / 59.94p, 720/50p
Output			
Video Output	HDMI	HDMI 1.4 connector, 4:2:2 / 10 bit	
	3G-SDI OUT	SMPTE 292 M , 424 M / 75 Ω (BNC×1)	
Input/output			
Input/Output Connector	LAN	LAN terminal for IP control (RJ-45)	
	RS-422	CONTROL IN RS422A (RJ-45)	
	MIC/LINE input	AAC compatibility (compatible with IP only), Ø3.5 mm stereo mini jack	
	During MIC input	Input level: -40 dBV (0 dB = 1 V / Pa, 1 kHz), Supply voltage: 2.5 V ± 0.5 V (plug-in power compatible)	
	During LINE input	Input level: -10 dBV	
Rotating platform part			
Pan operating range	± 175°		
Tilt operating range	-30° ~ 90° *1		
IP Streaming			
Image Streaming Mode	JPEG (MJPEG), H.264 , H.265 , NDI® HX*2,3,4,5 version 2 (H.264)		
Image resolution	1920×1080, 1280×720, 640×360, 320×180		
Image Transmission Setting	H.264	Transmission Type: Unicast port (AUTO), Unicast port (MANUAL), Multicast port Frame rate: [At 60Hz] 5fps / 15fps / 30 fps / 60 fps , [At 50Hz] 5 fps / 12.5 fps / 25 fps / 50 fps Max Bit Rate: 512 kbps / 768 kbps / 1024 kbps / 1536 kbps / 2048 kbps / 3072 kbps / 4096 kbps / 6144 kbps / 8192 kbps / 10240 kbps / 12288 kbps / 14336 kbps / 16384 kbps / 20480 kbps / 24576 kbps /	
	H.265	Transmission Type: Unicast port(AUTO), Unicast port (MANUAL), Multicast port Frame rate: [At 60Hz] 30 fps / 60 fps , [At 50Hz] 25 fps / 50 fps Max Bit Rate: Same specifications as H.264	
	NDI® HX*5 version 2	Transmission Type: TCP / UDP , Unicast / Multicast	

^{*1} The main unit may appear in the video depending on the pan/tilt position.

^{*2} NDI[®] is a new protocol developed by NewTek, Inc. that supports IP video production workflow.

^{*3} NDI[®] is a registered trademark of NewTek, Inc. in the United States.

^{*4} In this instance, NDI[®] is used to indicate low latency with high bandwidth NDI[®].NDI[®]|HX is used to indicate high efficiency low bandwidth NDI[®]|HX. In the NDI[®]

HX mode, 4K video signals cannot be output. AW-UE50/AW-UE40 supports NDI[®]|HX version 2 and Full HD output.

^{*5} For details, please contact a sales representative of Panasonic. To use NDI[®]|HX, the driver must be installed and activated.

^{*}This specification is a part. Please see the website for details.



For more information, please visit
Panasonic web site

https://pro-av.panasonic.net/en/?cid=ad_qr-mz_prd_mebd-ue80_211012_all_s_g



**Broadcast and Professional
AV Website**



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Information**



Facebook



Mobile App



Factories of AVC Networks Company have received ISO14001:2004-the Environmental Management System certification. (Except for 3rd party's peripherals.)



Equipped with a GUI menu screen for clear visibility and a joystick for intuitive control.

Compact Remote Camera Controller with PoE*1 support for single cable connection.



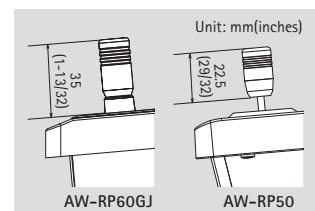
Equipped with a 3.5-type LCD screen

The AW-RP60GJ is equipped with a 3.5-type LCD screen to deliver a GUI menu where the information you need is provided at a glance for intuitive and quick camera control.



New Joystick with enhanced operability

The new joystick supports smooth pan and tilt operations and ensures accurate capture of your target image. The grip of joystick is approximately 1.5 times larger than previous model AW-RP50, realizing more stable operation.



Flexible customization features

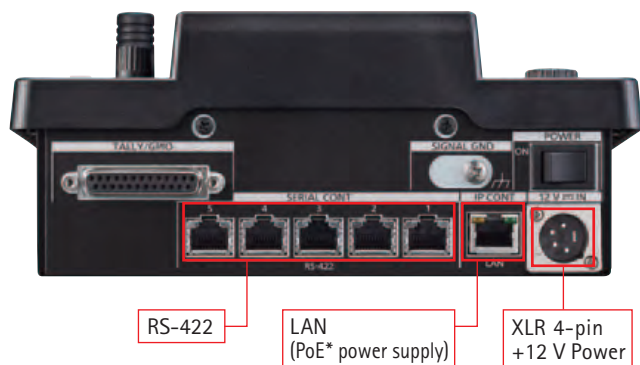
The controller is equipped with four user assignable buttons, to which up to eight functions*2 of your choice can be assigned. Each preset name can also be customized with a PC tool. These flexible features of the controller make it perfect for use in a wide range of environments, from lectures and corporate seminars to live streaming and broadcasting at amusement facilities.

PoE*1 support/Advanced camera adjustment

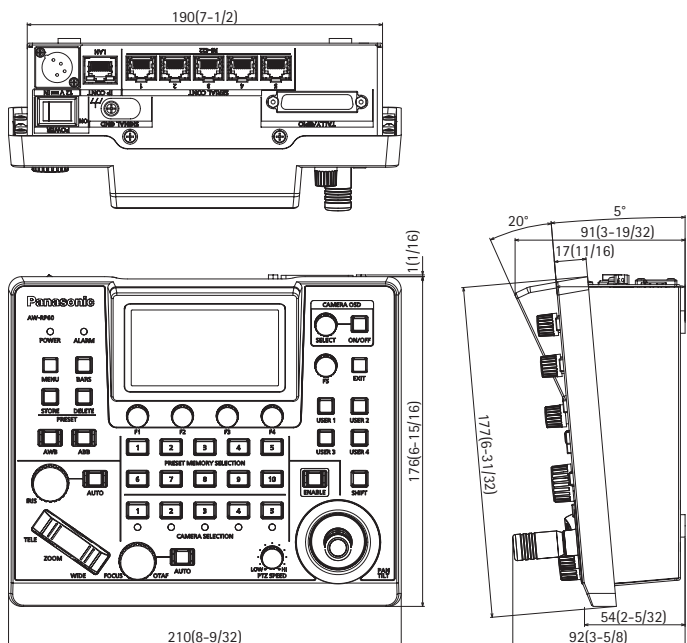
PoE*1 support enables power supply and camera control to be delivered via a single ethernet cable. In addition to camera control operation, gamma, white balance and other color adjustment functions can be performed, making advanced camera adjustments possible.

*1: PoE is the abbreviation for Power over Ethernet. *2: Enable user button 5 through 8 by pressing the shift button.

<Rear View>



<Dimensions>



Unit: mm(inches)

<Specifications>

Power Requirements	12 V DC (10.8 V to 13.2 V)
PoE*	IEEE802.3af standard: 42 V to 57 V DC (Camera Input)
Current Consumption	0.9 A (XLR connector input), 0.3 A (PoE power supply)
Mass	1.5 kg (3.31 lbs)
Dimensions	W 210 mm x H 92 mm x D 177 mm (8-9/32 inches x 3-5/8 inches x 6-31/32 inches) (excluding protrusions)
Display	3.5-type liquid crystal (QHD 960 x 540)
Connection Specifications	No. of Connectable Cameras 200 (IP), 5 (RS422) *Up to 100 for cameras other than the AW-UE150
	Remote Camera Selection 5 (6 to 200 controlled from the LCD)
	No. of Camera Groups 20 (10 units/group)
	No. of Memory Presets 100

*PoE is the abbreviation for Power over Ethernet.

- Power supply not included. An AC adaptor or PoE HUB is required.
- Specifications are subject to change without prior notice.

■ Optional Products



AC Adaptor
AW-PS551

Panasonic®

Panasonic Corporation
Connected Solutions Company

2-15 Matsuba-cho, Kadoma, Osaka 571-8503 Japan



Factories of AVC Networks Company have received ISO14001:2004-the Environmental Management System certification. (Except for 3rd party's peripherals.)



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



Broadcast and Professional
AV Website



Contact Information



Facebook



Mobile App

ShareLink Pro 500

WIRED AND WIRELESS PRESENTATION GATEWAY



macOS



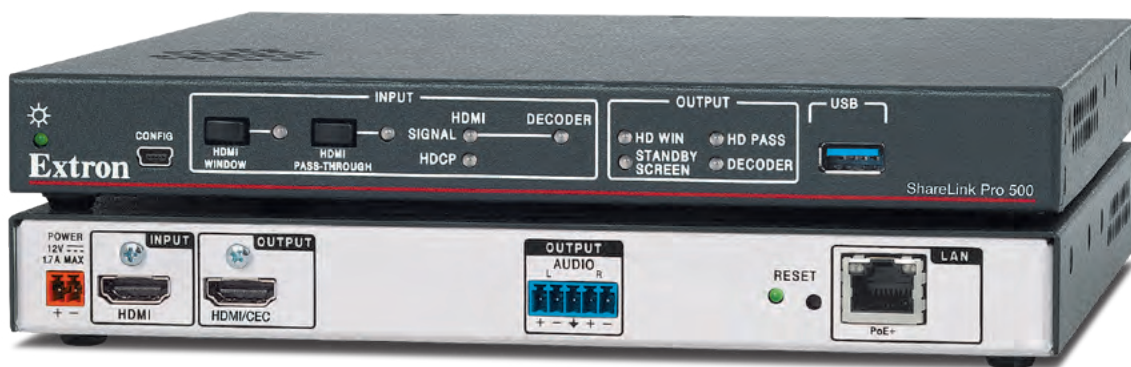
Powerful and Cost-Effective Wireless Collaboration

- ▶ Easily share content from any device
- ▶ Provides full screen mirroring for all devices
- ▶ Wireless and wired sources can collaborate simultaneously
- ▶ Supports Mac and Windows computers as well as Apple and Android tablets and smartphones
- ▶ Dedicated app provides consistent user experience across platforms
- ▶ View up to four pieces of content simultaneously from any connected user

Extron

ShareLink Pro 500

The Extron ShareLink Pro 500 is a Wired and Wireless Presentation Gateway that enables anyone to present content from computers, tablets, or smartphones onto a display for easy and cost-effective collaboration. It features advanced technology that supports simultaneous display of up to four devices, including an HDMI-connected device. The HDMI input supports wired devices, such as a signage player or other AV source. The ShareLink Pro 500 has collaboration and moderator modes that facilitate both open and controlled collaboration environments. When used with Extron GVE – GlobalViewer Enterprise software, multiple units can be managed across an enterprise or campus. The ShareLink Pro 500 offers professional capabilities that make it easy to integrate AV and mobile devices into huddle, meeting, and collaboration spaces.



ShareLink Pro 500 facilitates easy full-screen mirroring for all devices, from Mac and Windows computers to Android and Apple devices, displaying the entire screen for more fluid and easy collaboration sessions. Install the user-friendly software for screen mirroring, application window sharing, and access to advanced features such as moderated collaboration.



macOS



Easily Share Content

Users who want to share content without installing software can use Miracast™, Apple Mirroring, or WebShare™. Users with Windows 10 devices can use Miracast™ via the ShareLink Pro WFA 100, optional USB adapter. Users with Mac or iOS devices can use their built-in Apple Mirroring features to share content. Finally, WebShare enables sharing via a user's Chrome web browser, for quick content sharing.

FEATURES

Easily share content from any device

Users who want to share content without installing software can use Miracast™ with the WFA 100 adapter, WebShare™, or Apple Mirroring.

Provides full screen mirroring for all devices

Display the entire screen of your device through the wireless presentation system for more fluid and easy collaboration sessions.

Wireless and wired sources can collaborate simultaneously

HDMI input enables wired users or sources to collaborate simultaneously with wireless users in the same session.

Supports Mac and Windows computers as well as Apple and Android tablets and smartphones

Dedicated app provides consistent user experience across platforms

Similar interface for all platforms makes it easy for users to assist one another or move between devices regardless of how they connect and share content.



View up to four pieces of content simultaneously from any connected user

Fosters effective collaboration and discussion by comparing multiple sources concurrently and by reducing or eliminating the need to switch between sources.

Centralized Management

Monitor ShareLink Pro 500 usage, update firmware, and restore saved configurations to multiple units from one central location.

HDMI input supports computer and video resolutions up to 4K

Supports resolutions up to 4096x2160 with 4:4:4 chroma sampling at 8 bits of color in bypass mode.

Collaboration mode allows any attendee to display content and control the presentation

Enables content display from any connected device to enhance interactivity in brainstorming sessions, team meetings, and other collaborative environments.

Moderator mode ensures only approved users' content is displayed

Enables the moderator to select which users can access the display and how the content is displayed.

Display codes ensure content is delivered only to the selected display devices

Randomly generated or user-defined display authentication codes prevent unintentional sharing or display of content to an adjacent space.

WebView™ technology displays slide images on attendee's personal devices via a Web browser

The ShareLink Pro 500 can display content on a participant's mobile device. This is ideal for attendees who cannot easily view the main display.

Fully customizable welcome screen

Multiple configuration options to show, hide, or customize information on the welcome screen, so users can quickly connect and begin sharing their content.

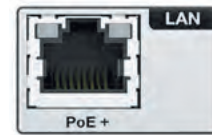
Connects to an existing wireless network

ShareLink Pro 500 leverages the existing wireless network infrastructure, providing easy wireless connection for a variety of mobile devices.

128-bit data encryption

A variety of security protocols ensure that all content transmitted between devices and the ShareLink Pro 500 is fully encrypted and secure.

Display control using CEC over HDMI connection



PoE+ delivers power and communication over a single Ethernet cable, eliminating the need for a local power supply - Power injector sold separately.

Includes user-friendly software for screen mirroring, sharing, and advanced control

Provides both an executable that does not require administrator access rights and a version that can be deployed by IT administrators.

Video screen saver

The ShareLink Pro 500 can be set to automatically mute video and sync output to the display device when no active connections are detected, automatically entering the display into standby mode to conserve energy, reducing costs and promoting panel life.

Easy setup and commissioning with Extron PCS – Product Configuration Software

Conveniently configure multiple products using a single software application.

Compatible with Extron mounting solutions

Easy mounting with Extron low-profile and under-desk mounts, under-table kits, and rack-shelf options.

1" (2.5 cm) high, half rack width metal enclosure

Compact, low profile enclosure allows discreet installation within a lectern or behind a flat panel display.

ShareLink Pro Key Feature Comparison

	ShareLink Pro 1000	ShareLink Pro 500
Max Output Resolution*	4K	1080p
Ethernet Ports	Dual	Single
Display Control Options	RS-232/CEC	CEC
TeamWork Show Me Support	•	
Contact/Tally Control	•	

*When sharing content via software app

ENTERPRISE FUNCTIONALITY

Customized Welcome Experience

The ShareLink Pro 500 features a fully-customizable welcome screen with multiple configuration options to assist users in quickly connecting their devices and sharing content. Custom welcome images such as organization-specific connection instructions can be uploaded and shown as the default Welcome Screen on the display. IP or Hostname information can be displayed or hidden, as desired. Multiple images can also be displayed to provide more detailed connection instructions, support information, or any other local information. A signage player can be connected to the HDMI input connection, so the ShareLink Pro 500 can act as a signage display when not in use for collaboration sessions, displaying updated organizational information from the signage player until the first wireless user connects, and returning to a signage display once all wireless users have disconnected.



Secure Collaboration

The ShareLink Pro 500 features a suite of security protocols to ensure a safe and protected collaboration environment. All content transmitted between devices running the ShareLink Pro software and the ShareLink Pro 500 is safeguarded with 128-bit encryption. Communications

between user devices and the ShareLink Pro 500 are protected with the HTTPS secure connection protocol. Control, monitoring, or management applications using an Extron control system communicate with the ShareLink Pro 500 using SSH for secure communication. For environments with multiple ShareLink Pro systems, entry of a four-digit code can be required on the Welcome Screen before users can share content to the display. This feature is particularly useful to ensure users only see their content in environments that may have multiple units in close proximity, such as huddle spaces, active learning environments, office buildings, or classroom buildings.

In addition to an administrative password, additional optional passwords can be setup for a moderator or for all users, providing another layer of protection for secure collaboration.

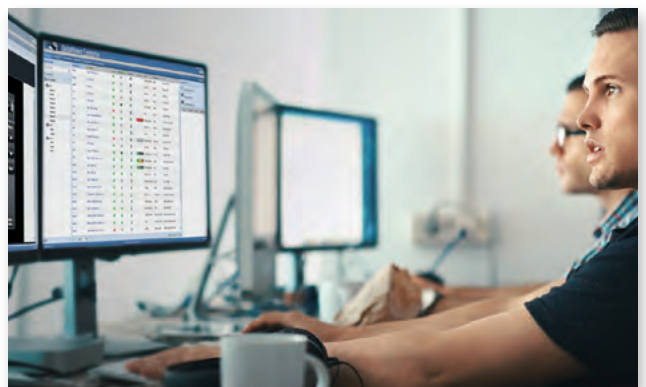
Centralized Management

With the ShareLink Pro 500, setting up or managing several ShareLink Pro systems is practically as easy as setting up or managing a single system. Extron's PCS – Product Configuration Software conveniently sets up and configures one or many units simultaneously. PCS can save configurations for future use when expanding ShareLink Pro systems, or when restoring a unit that has been replaced. PCS also allows multiple units to receive firmware updates concurrently, saving time and greatly improving efficiency. In addition, Extron's powerful and flexible GlobalViewer Enterprise software enables the management, monitoring, and control of ShareLink Pro systems over any standard Ethernet network.



Custom Welcome screen with preferred connection methods and company logo in upper right

Code: 1015



IN1608 xi

EIGHT INPUT SCALING
PRESENTATION SWITCHER
WITH DTP EXTENSION

DTP
SYSTEMS

Complete AV Switching and
Processing in One Box

- ▶ Integrates HDMI, analog video, and audio sources into presentation systems
- ▶ Four HDMI inputs, two DTP inputs and two universal analog video inputs
- ▶ Two HDMI outputs plus one DTP output with configurable HDBaseT compatibility
- ▶ Two mic/line mix inputs with 48 volt phantom power and ducking
- ▶ High performance scaling engine with 30-bit precision processing
- ▶ Available with integrated IPCP Pro control processor and optional stereo or mono Class D audio power amplifiers



Extron Electronics
INTERFACING, SWITCHING AND CONTROL

Introduction

The Extron **IN1608 xi** is an HDCP-compliant scaling presentation switcher with four HDMI inputs, two universal analog video inputs, and two Extron DTP inputs. It provides dual HDMI outputs and one DTP® output that is also configurable for HDBaseT compatibility. The DTP inputs and output work with DTP endpoints to extend video, audio, and bidirectional control signals over a single shielded CATx cable. The IN1608 xi provides the convenience of supporting local and remote sources and displays, with fast and reliable source switching, and a high performance scaling engine that converts all HDMI and analog sources to the optimal resolution. The two universal analog video inputs are configurable for RGB computer-video, HDTV, component video, S-video, or composite video. The IN1608 xi also includes a host of audio switching and processing features. Models are available with a built-in Class D audio power amplifier and an IP Link® Pro control processor for complete AV system control.

Integrated Digital Twisted Pair Extension

The two DTP twisted pair inputs can receive signals from remote DTP transmitters in areas such as a conference table, lectern, or wall for connecting a guest laptop. The DTP output can be used to transmit from an IN1608 xi in a rack to a DTP receiver behind a flat-panel display on a wall, above a ceiling-mounted projector, or any other remote location. Additionally, the IN1608 xi can send power to each of the DTP transmitters and receiver over the same shielded CATx cable, streamlining system design and installation. DTP transmitters and receivers are available in compact, low-profile enclosures, plus decorator-style wallplate and floorbox versions.

High Performance Video Processing

The IN1608 xi features an advanced scaling engine that can scale HDMI, RGB, component, and standard definition video signals to a common high resolution output. It provides high performance deinterlacing of all interlaced signals up to 1080i, and 4:4:4 Color

processing to deliver optimal image quality. The IN1608 xi accepts and outputs signals up to 1920x1200, including 1080p/60 and 2K.

Audio Integration Capabilities and Available Power Amplifier

In addition to video switching and processing, the IN1608 xi can serve as the central component for audio system integration. It includes eight-input audio switching, two mic/line inputs with phantom power, HDMI audio embedding and de-embedding, and several audio processing features for mixing, ducking, tone adjustments, and more.

IN1608 xi models are available with a choice of integrated power amplifiers. IN1608 xi SA models deliver stereo power amplification with 50 watts rms per channel into 4 ohms or 25 watts rms per channel into 8 ohms, while IN1608 xi MA models provide mono 70 volt amplification with 100 watts rms output.

Powerful Control System Integration



IN1608 xi IPCP models feature a built-in Extron IPCP Pro control processor, with advanced features, processing power, and breakthrough technologies. The IN1608 xi IPCP delivers high-speed processing and abundant control port capacity for complete, customizable control of an entire AV system. In addition, IN1608 xi IPCP models feature an integrated three-port AV LAN switch that allows AV devices to be isolated from the corporate network.

As with all Extron control systems, the IN1608 xi IPCP is very intuitive and easy to configure with Global Configurator software. The latest version includes powerful, advanced features such as conditional logic, local variables, and macros. Global Configurator Professional adds unprecedented scalability with Controller Groups, a unique feature that allows an IN1608 xi IPCP to be combined with additional IP Link Pro processors to create a large-scale control system.

Purchasing an Extron LinkLicense for User Interfaces with the IN1608 xi IPCP enables a tablet or laptop to serve as the primary interface for the AV system. This gives the ability to design interfaces for specific user roles in an organization, and to replicate an interface on multiple devices.



Features

Two DTP inputs, four HDMI inputs, and two universal analog video inputs

The IN1608 xi allows for switching between digital and analog video sources. Two universal analog inputs accept all standard analog video formats, including RGB, RGBcV, HD component video, S-video, and composite video signals.

Three simultaneous video outputs

One DTP twisted pair output, and two HDMI outputs are available for driving three displays.

Compatible with all DTP Series models and DTP-enabled products

Enables mixing and matching with desktop and wallplate transmitters and receivers, as well as other DTP-enabled products.

Integrated DTP inputs and output support transmission of video, control, and analog audio over a shielded CATx cable

The IN1608 xi supports a maximum transmission distance of 330 feet (100 meters).

DTP output is compatible with HDBaseT-enabled devices

The DTP output can be configured to send video and embedded audio, plus bidirectional RS-232 and IR signals to HDBaseT-enabled displays.

Compatible with CATx shielded twisted pair cable

Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance.

Bidirectional RS-232 and IR pass-through for AV device control

Available with integrated IPCP Pro control Processor

IN1608 xi IPCP models include a built-in IPCP Pro control processor for complete AV system control.

RS 232 insertion from the Ethernet control ports

System level device control to all remote locations via the switcher's Ethernet ports, providing comprehensive control of endpoints and attached devices without needing additional equipment.

Two mic/line inputs with 48 volt phantom power

Mic ducking

Automatically reduces program audio when a microphone signal is detected, replacing the need for a separate audio ducking processor.

Auto-switching between inputs

HDMI audio embedding

Analog input audio signals can be embedded onto the HDMI output signals.

HDMI audio de-embedding

Embedded HDMI two-channel PCM audio can be extracted to the analog outputs, or multi-channel bitstream formats can be passed to the HDMI outputs.

Selectable output rates

Available output rates include computer and video up to 1920x1200, including 1080p/60 and 2K.

Advanced scaling engine with 30-bit precision processing

Motion-adaptive deinterlacing for signals up to 1080i

HDCP compliant

This ensures display of content-protected media and interoperability with other HDCP-compliant devices.

User-selectable HDCP authorization

This allows individual inputs to appear HDCP compliant or non-HDCP compliant to the connected source, which is beneficial if the source automatically encrypts all content when connected to an HDCP-compliant device. Protected material is not passed in non-HDCP mode.

Supported HDMI specification features include data rates up to 6.75 Gbps, Deep Color, and HD lossless audio formats

Extron-exclusive digital video technologies

The IN1608 xi includes EDID Minder®, Key Minder®, and SpeedSwitch® to simplify integration of HDMI sources and displays, and to help ensure optimal system performance and dependability.

Aspect ratio control

The aspect ratio of the video output can be controlled by selecting a FILL mode, which provides a full screen output, or a FOLLOW mode, which preserves the original aspect ratio of the input signal.

HDCP Visual Confirmation

When processing HDCP-encrypted content, the IN1608 xi outputs a full-screen green signal on any video output connected to a non-HDCP compliant display for immediate visual confirmation that protected content cannot be viewed on the display.

HDMI to DVI Interface Format Correction

Auto-Image setup

When activated, the IN1608 xi automatically optimizes the image by analyzing and adjusting to the video input signal.

Auto Input Memory

When activated, the IN1608 xi automatically stores size, position, and picture settings based on the incoming signal.

Output muting control

Provides the capability to mute one or all outputs at any time.

Output Standby Mode

The unit can be set to automatically mute video and sync output to the display device when no active input signal is detected.

Power Save Mode

The IN1608 xi can be placed in a low power standby state to conserve energy when not in use.

Internal video test patterns and pink noise generator for calibration and setup

Ethernet, USB, and RS-232 control

DTP
SYSTEMS

IP LINK PRO

**EDID
MINDER**

SPEED SWITCH

**KEY
MINDER**