



**STAGE FRONT**  
a better plan for AV

## PROPOSAL FOR AUDIO-VISUAL SERVICES

### BEAZLEY ROOM UPGRADES

Tommy LaRue, Systems Consultant  
912.721.5760 direct | 770.596.8222 cell  
[tommy.larue@stagefront.net](mailto:tommy.larue@stagefront.net)





# STAGE FRONT

a better plan for AV

April 11, 2025

City of Augusta IT Department  
535 Telfair Street  
Bldg 2000  
Augusta, GA 30901  
706.821.1571  
[horne@augustaga.gov](mailto:horne@augustaga.gov)

**Attn: Reggie Horne, CGCIO**

**Ref: Beazley Room AV Upgrade**

Dear Reggie,

Attached please find our proposal for the above.

Please call if we can help with anything.

Best regards,

Tommy LaRue

## PART I - SCOPE

**Summary:** Stage Front has been asked for a proposal to upgrade the AV system in the Beazley Room with the purpose of stabilizing and improving performance. The original system has been in use since 2015, and some components have passed the timeframe for repair or service and should be replaced. Additional components and functionality will be added to meet the expanded needs of users of the space. The following will highlight the features of our proposed solution.

### VIDEO

- Replace (2) wall plate HDMI over CAT5 transmitters with dual HDMI input transmitters
  - These will fit in existing back box
  - Mic input connector will remain
- (2) new HDMI over CAT5 receiver wall plates for portable monitors
  - Owner to provide portable monitors
  - Plates to be installed at locations TBD
- (1) new HDMI over CAT5 receiver wall plate for Press Feed
  - This will be installed at the rear of the room by the storage room
- (1) new 4-output HDMI over CAT5 distribution amplifier to provide these new outputs
- (1) new 11,000 lumen laser projector & lens
  - WUXGA resolution
  - New mount & hardware
  - Existing HDMI over CAT5 receiver and cabling will remain
- existing motorized projection screen will remain

### AUDIO

- (1) new audio wall plate for Press Feed
  - This will be installed at the rear of the room by the storage room
  - Audio will also be embedded on the HDMI Press Feed connection
- All other audio components will remain. The system will be tested and re-aligned

### CONTROL

- (1) 7" LCD color touch panel for AV control
  - Will replace button panel
  - Will mount to existing 2-gang back box
- (1) new control switch
- (1) new control interface for existing motorized projection screen

### RACK

- Existing equipment rack will remain
- (1) new UPS

## PART I - SCOPE

## EQUIPMENT LIST

Qty	Item & Description
1	<b>Barco G62-W11</b>
	11,000 lumen 1-Chip DLP Laser Projector
1	<b>Barco R9832756</b>
	G LENS (WUXGA 1.52-2.92:1)
4	<b>C2G C2G10377</b>
	6ft HDMI Cable
1	<b>CHIEF VCMU</b>
	Projector Mount
1	<b>CyberPower OR1000LCDRM1U</b>
	Rack Mount UPS
2	<b>Extron 60-1365-63</b>
	Two Input DTP Transmitter Wall Plate for HDMI, White
1	<b>Extron 60-1437-01</b>
	Four Output DTP Twisted Pair Distribution Amplifier
3	<b>Extron 60-1531-13</b>
	DTP Receiver Wall Plate for HDMI, White
1	<b>Extron 60-1563-02</b>
	7" Touch Panel, Black or White
1	<b>Extron 60-1911-01</b>
	IPCP Pro 250 xi Control Processor
1	<b>Extron 70-971-01</b>
	Back Box for the TLP Pro
2	<b>Monoprice 24360</b>
	10ft CAT5 Patch Cable
8	<b>Platinum Tools PLT100023_XX</b>
	Shielded CAT5 Connector
1	<b>Radio Design Labs (RDL) D-XLR3F</b>
	Wall Plate w/ XLR Audio Connection
1	<b>RCI Custom 2-Gang</b>
	2-Gang Wall Plate
1	<b>TP-Link TL-SG105MPE</b>
	5-Port Gigabit Switch
200	<b>Windy City Wire 22-02SP-BLK</b>
	22 AWG Shielded Twisted Pair Audio & Control Cable
200	<b>Windy City Wire CAT6SP-BLK</b>
	23 AWG Shielded 4-Twisted Pair CAT6 Cable

## NOTES &amp; EXCEPTIONS

- We will require Facilities assistance for cutting into walls for new wall plate locations
- We may need assistance with cable pathways for new wall plate locations
- We will provide details on what is required

## PART II - PRICING &amp; ACCEPTANCE

Component	Price
<b>AV Upgrades</b>	\$40,357.00
* Sales Tax (owner is tax exempt)	\$0.00
<b>Total System Investment</b>	<b>\$40,357.00</b>
Optional Support: Annual Complete Maintenance Agreement Price To Be Provided and Integrated with Existing CMA Agreement for Other Spaces	

S U B M I T T E D   B Y :

\_\_\_\_\_  
Tommy LaRue, April 11, 2025

A C C E P T E D   B Y :

\_\_\_\_\_  
Name, Date

## TERMS OF SERVICE

Please Note: Pricing includes consulting, engineering, project management, equipment, shipping, delivery, installation, programming, commissioning, training, and one-year warranty. Necessary permits are not included and, if required, are the responsibility of the Owner. Sales tax is not included (owner is tax exempt).

This proposal is based on current manufacturer pricing and is good for 45 days. If, after acceptance of this proposal, Stage Front is notified of impending price increases we will arrange for early shipment of affected materials to a secured jobsite storage (by you) or to Stage Front warehouse, if you prefer. You will be responsible for secured storage at the jobsite of the materials unless you opt for storage at the Stage Front warehouse, in which case we will insure the materials until delivery. In either case, you will be invoiced for materials delivered. If storage at a bonded warehouse is required, you will bear that cost.

Delivery: Estimated at 8 – 10 weeks after receipt of order

FOB: Destination

Terms: 30% deposit, 40% upon receipt of equipment, 20% during installation, and 10% upon completion of training

Prime Contractor agrees that if the cost of supplies/equipment used for a particular Task Order increase by more than 3% as a result of a change in federal law, including but not limited to any new or increased Federal excise tax or duty, Prime Contractor will request a price adjustment from the Customer and will pass the price adjustment to the Subcontractor. Subcontractor will provide Prime Contractor will all necessary documentation to support the adjustment request to the Customer. If approved by the Customer, Subcontractor may increase the price of the applicable Task Order by the commensurate amount. If the request is rejected, Stage Front reserves the right to terminate the task order and invoice for labor and materials utilized through the termination.

### Supply Chain Notice

Unfortunately, the audiovisual and low-voltage industry is currently experiencing extensive supply chain issues as a result of the pandemic and its direct impact on materials, labor, and logistics. As a result, many key manufacturers have delayed shipping and are challenged in providing accurate and/or reliable information as it relates to product deliveries. Where there is a delay outside the control of the parties due to unavailability of goods, delay in delivery, or other unforeseen or remote contingencies, the parties agree that such a delay is not considered a breach of contract. The parties agree to use commercially reasonable efforts to perform the contract under the deadlines allowable by the market. Please contact your Systems Consultant or Project Manager for more information related to these circumstances.

### Payment Terms

The total project cost outlined in this proposal is subject to a 2-4% processing fee if payment is made via credit card. This fee is to cover the cost incurred by Stage Front for processing credit card payments. Alternatively, payment can be made via check or electronic bank transfer to avoid this fee.

## PART III - SERVICES

### INSTALLATION SERVICES:

- Order, receive and deliver equipment to jobsite.
- Furnish, install, and terminate all low-voltage wiring for equipment in this proposal, as well as clearly and permanently label field wiring.
- Energize the system, program the control equipment, and demonstrate the operational system to the Owner.
- Remove all trash and debris related with Stage Front work.
- Provide training on the operation and maintenance of the system.

### MANUAL:

Stage Front will supply electronic copies of instruction/maintenance manuals for the equipment.

### WARRANTY:

Stage Front warrants this installation to the original purchaser to be free from defects in material and workmanship under normal use during the warranty period.

- Materials: Products will be repaired or replaced, at Stage Front's option, without charge for a period of 365 days after first beneficial use or completion of installation, whichever comes first.
- Labor: Products will be repaired or replaced, at Stage Front's option, without charge for a period of 365 days after first beneficial use or completion of installation, whichever comes first.

### WORK REQUIRED BY OTHER TRADES:

- At designated locations, regulated clean 110VAC power with isolated ground
- All conduit, raceways, standard back boxes and line voltage wiring
- Any related phone and LAN systems and wiring



## PART III - SERVICES

### MANAGED SERVICES OFFERINGS

SUPPORT AGREEMENT FEATURE	STANDARD WARRANTY	PREVENTATIVE MAINTENANCE	COMPLETE MAINTENANCE
24/7 service & support	✓	✓	✓
Remote access support	✓	✓	✓
Manufacturer liaison services	✓	✓	✓
Guaranteed response time		✓	✓
Preferred service status		✓	✓
Scheduled preventative maintenance		✓	✓
User training		✓	✓
Priority access to loaner equipment		✓	✓
Unlimited service calls			✓
Unlimited telephone support			✓
Unlimited parts & labor			✓
Free control system upgrades			✓
Free labor on hardware upgrades			✓
Fixed annual pricing		✓	✓
Discounted materials		✓	
Discounted service rate		✓	





# OUR EXPERIENCE



For over four decades, Stage Front has been at the forefront of designing and installing technical systems aimed at enhancing education, communication, and entertainment.

Our track record reflects a robust foundation built on technical design, streamlined processes, and unwavering financial stability, consistently ensuring timely project deliveries within allocated budgets.

With specialized expertise across various domains, our focus areas encompass Corporate Workspaces, Higher Education, Dental + Medical Education, Auditoriums + Theaters, and Athletics.

Discover the distinctive impact of Stage Front's expertise and experience in transforming spaces through innovative technical solutions.

# OUR SERVICES



## DESIGN

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Consultation + Needs Analysis  
Program Development  
Design Development  
Construction Documentation  
Revit + BIM Modeling  
EASE Audio Modeling  
Acoustical Analysis + Design  
User Interface Design  
Bid Administration  
Construction Administration

## INTEGRATION

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Project Management  
Pre-Fabrication  
Programming  
In-House Testing  
Systems Delivery + Installation  
Alignment + Final Commissioning  
Proof of Performance  
User Training

## SUPPORT

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Warranty Support  
Preventative Maintenance  
Complete Maintenance  
On-Site Sustaining Technicians  
Remote Monitoring  
Systems Training  
Critical Inventory Management  
Documentation Control

# OUR PROCESS

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**1**

## **UNDERSTANDING THE CLIENT**

Conduct interviews, needs analysis, understand long-term client goals

**2**

## **PROGRAM DEVELOPMENT**

Define scope, budget, and timeline

**3**

## **ENGINEERING + CONSTRUCTION DOCS**

Develop published infrastructure and comprehensive design package

**4**

## **PREFABRICATION + PROGRAMMING**

Configure devices, program control systems, test in-house

**5**

## **SYSTEMS INTEGRATION**

Deliver systems, provide field services for integration

**6**

## **COMMISSIONING + QUALITY ASSURANCE**

Test and tune, system demonstration, client approval

**7**

## **SUSTAINING SUPPORT**

Parts and labor coverage, preventative maintenance, 24/7 support





### CAMP LEJEUNE MARINE SPECIAL OPERATIONS TRAINING COMPLEX, CAMP LEJEUNE, NC

PARTNER: NAVFAC ARCHITECTS



Stage Front designed and implemented AV systems for a three-story training center dedicated to deployment and expeditionary unit preparation. The facility encompasses a divisible classroom, two standalone classrooms, 12 collaboration spaces, one conference room, one training room, and one Sensitive Compartmented Information Facility (SCIF). The integrated systems cover video walls, presentations, secure and non-secure video conferencing, along with specialized features for the SCIF.

### KIAWAH ISLAND TOWN HALL, KIAWAH ISLAND, SC

PARTNER: LS3P ARCHITECTS



Stage Front spearheaded the design and installation of advanced audiovisual solutions for the expansive 18,000-square-foot municipal complex of the Town of Kiawah Island. The state-of-the-art Town Hall boasts council chambers for public meetings and court sessions, a spacious main lobby, offices, conference rooms, and additional facilities including a break room and a separate garage building, enhancing the town's infrastructure for efficient governance and community engagement.



# OUR PROJECTS

**STAGE FRONT**  
a better plan for AV

## CITY OF AUGUSTA COUNTY COMMISSION, AUGUSTA, GA

PARTNERS: HEERY ARCHITECTS



Stage Front delivered state-of-the-art design and installation services for the Augusta Commission Chamber, Beazley Community Room, and IT training rooms. Our design-build integration services aimed at creating a cutting-edge audiovisual and control system, establishing a versatile multimedia platform capable of presenting large-format digital and analog computer-based programs and content, including seamless integration with guest laptops.

## GEORGIA PORTS AUTHORITY SECURITY OPERATIONS CENTER, SAVANNAH, GA

PARTNER: LS3P ARCHITECTS



Stage Front designed state-of-the-art AV systems for the Georgia Port Authority's revamped Security Operations Center. The comprehensive solution encompassed a centralized command center, serving as the nerve center for housing and dispatching security services for the nation's fourth-largest cargo port and the largest container terminal in the Western Hemisphere. Our tailored system empowers the security team to seamlessly monitor and promptly respond to incidents across the entirety of the Port's extensive properties.

# G62-W11

11,000 lumens, WUXGA, DLP laser phosphor projector



- **Great image quality**
- **Optimal integration capabilities**
- **4K compatible and 3D-ready**
- **Guaranteed service and support**

The G62-W11 expand the single-chip offering with a quality WUXGA projector of 11.000 lumens. It opens up the possibilities to a wider range of applications while still relying on the valued Barco service and support.

The laser phosphor light source ensures great image quality, on the one hand, but also lower maintenance compared to most lamp-based projectors on the market. Thanks to Barco's Projector Toolset software, installing and managing your projector(s) can be done from the comfort of your own computer.

The G62 models enable HDMI™ 2.0 input capabilities and higher bandwidth than its predecessors, which makes them 4K compatible and 3D capable to visualize your high-quality content at its best.

The projectors are available in black and fully white chassis, allowing you to choose the perfect fit for your specific environment. Their uniform compact size, the compatibility with other Barco products and the wide lens shift range enlarge the projectors flexibility.



Product specifications

G62-W11

General specifications	
Projector type	Single chip DLP laser phosphor projector
Resolution	1,920 x 1,200 (WUXGA)
Brightness	10,000 ANSI lumens 10,600 center lumens 11,000 ISO lumens
Brightness uniformity	90%
Contrast ratio	1,200:1 sequential; 6,000:1 dynamic; Extreme black: 750,000:1
Light source	Laser phosphor
Light source lifetime	Up to 20,000hrs
Aspect ratio	16:10
Orientation	360° rotation, no restrictions
Sealed DLP™ core	Yes
Color correction	Yes
CLO (constant light output)	Yes
Image processing	Embedded warp & blend possible via Ptoolset
3D	Active stereoscopic 3D
Lens type	G-lenses -0.36:1 / 0.37-0.4:1 / 0.65-0.75:1 / 0.75-0.95:1 / 0.95-1.22:1 / 1.22-1.53:1 / 1.52-2.92:1 / 2.90-5.50:1
Optical lens shift	Vertical up to 100%, depending on lens Horizontal up to 30%, depending on lens Motorized zoom and focus Motorized lens shift
Inputs	2x HDMI™ In (version 2.0) (with locking screw) / 1x DVI-D (only support digital signal) / 1x HDBaseT / 1x 3D SYNC In / 1x 3G-SDI
Input resolutions	Up to 4K @60Hz Refresh rates: 24Hz to 60Hz for WUXGA and 4K/4KUHD (4096 x 2160 / 3840 x 2160) 4K input signals will be scaled to the projector's output resolution
Software tools	Projector Toolset and Insight Management Suite (IMS)
Control	IR, RS232, RJ45, 3,5mm phone jack for wired remote
Network connection	10/100 Ethernet, RJ45
Power requirements	100-240V / 50-60Hz
Power consumption	810W nominal, 970W maximum
Standby power	less than 0.5W
BTU per hour	2,747 BTU/h nominal; 2883 BTU/h maximum
Noise level (typical at 25°C/77°F)	35dB(A) -39dB(A) depending on the used mode
Operating temperature	0 ~ 40 °C (sea level)
Operating humidity	10 -85% RH, non-condensing
Storage temperature	-10 ~ 60 °C
Storage humidity	5 -90% RH, non-condensing
Dimensions (WxLxH)	without feet: 484 x 529 x 195 mm / 19.1 x 20.8 x 7.7 inch with feet: 484 x 529 x 206 mm / 19.1 x 20.8 x 8.1 inch
Weight	without lens: 22.7 kg / 50.1 lbs
Standard accessories	Power cord, wireless remote control
Certifications	CE, FCC Class A, cTUVUS, CCC, EAC, KCC, RCM, BIS, BSMI
Warranty	Limited 3 years parts and labor

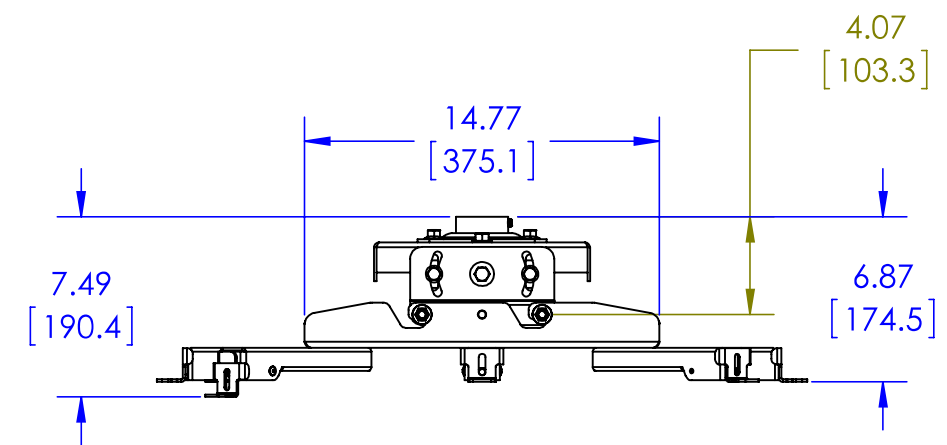
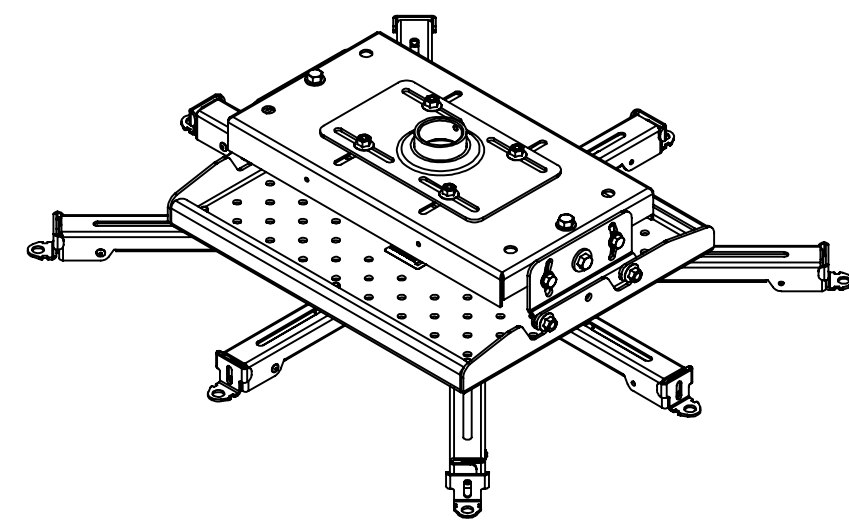
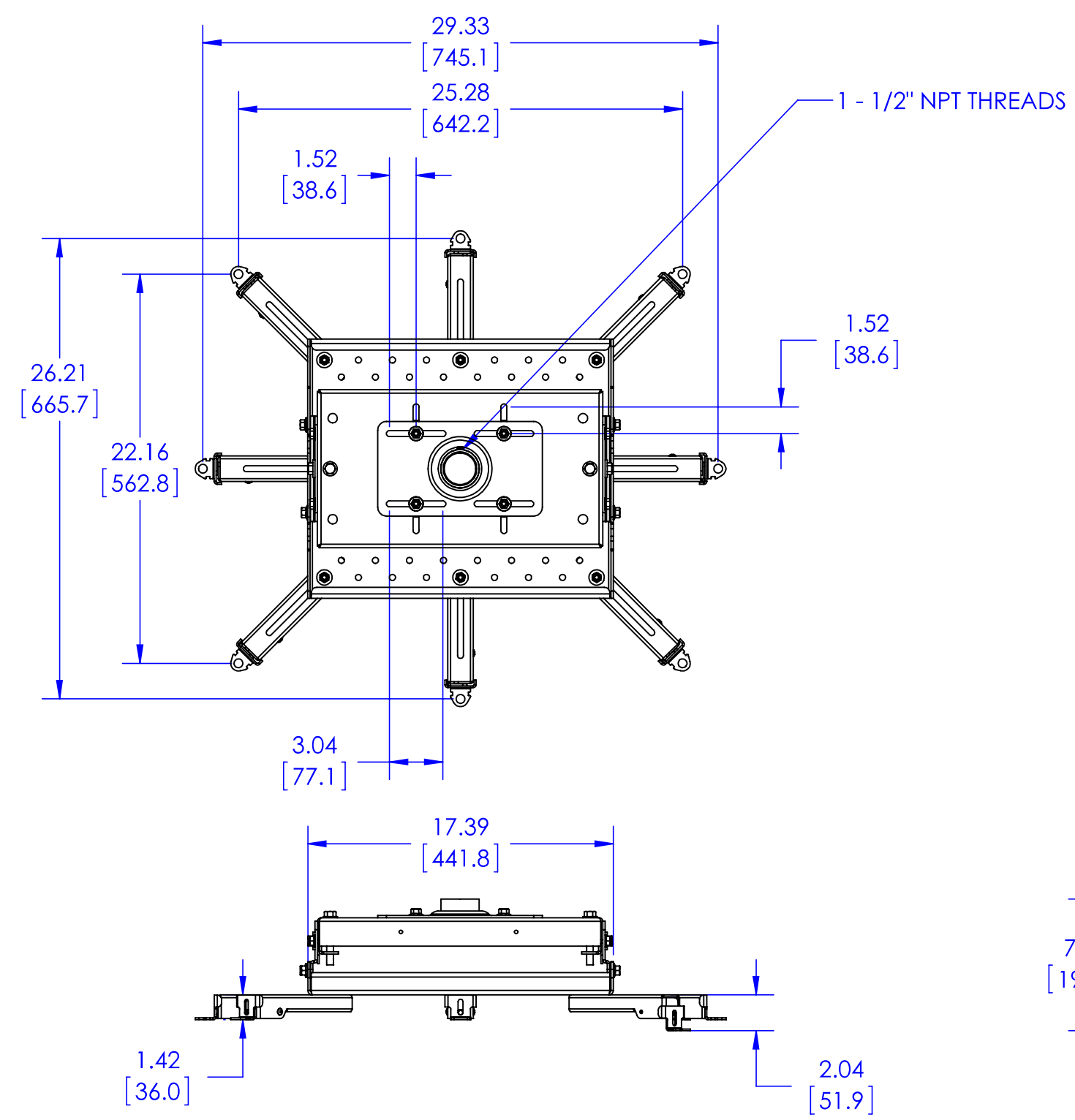
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# TLP Pro 725M

7" WALL MOUNT TOUCHLINK PRO TOUCHPANEL



The Extron TLP Pro 725M is a 7" wall mount TouchLink® Pro Touchpanel with many enhanced features. Extron redesigned this latest TouchLink Pro Touchpanel inside and out with a new, high-performance quad-core processor, eight times more memory, a higher resolution, 1024x600 edge-to-edge glass capacitive touchscreen built with scratch and smudge-resistant Corning® Gorilla Glass®. The TLP Pro 725M also features the convenience of PoE - Power over Ethernet, which allows it to receive power and communication over a single Ethernet cable.

- ▶ 7" capacitive touchscreen with 1024x600 resolution and 24-bit color depth
- ▶ Newly designed inside and out for the ideal balance of performance and style
- ▶ Gorilla Glass® screen is tough, scratch, and smudge-resistant
- ▶ Faster, quad-core processing and eight times more memory
- ▶ Compatible with all IP Link Pro control processors
- ▶ Power over Ethernet provides power and communication over a single Ethernet cable
- ▶ Light sensor adjusts screen brightness as the ambient room lighting changes

## Extron

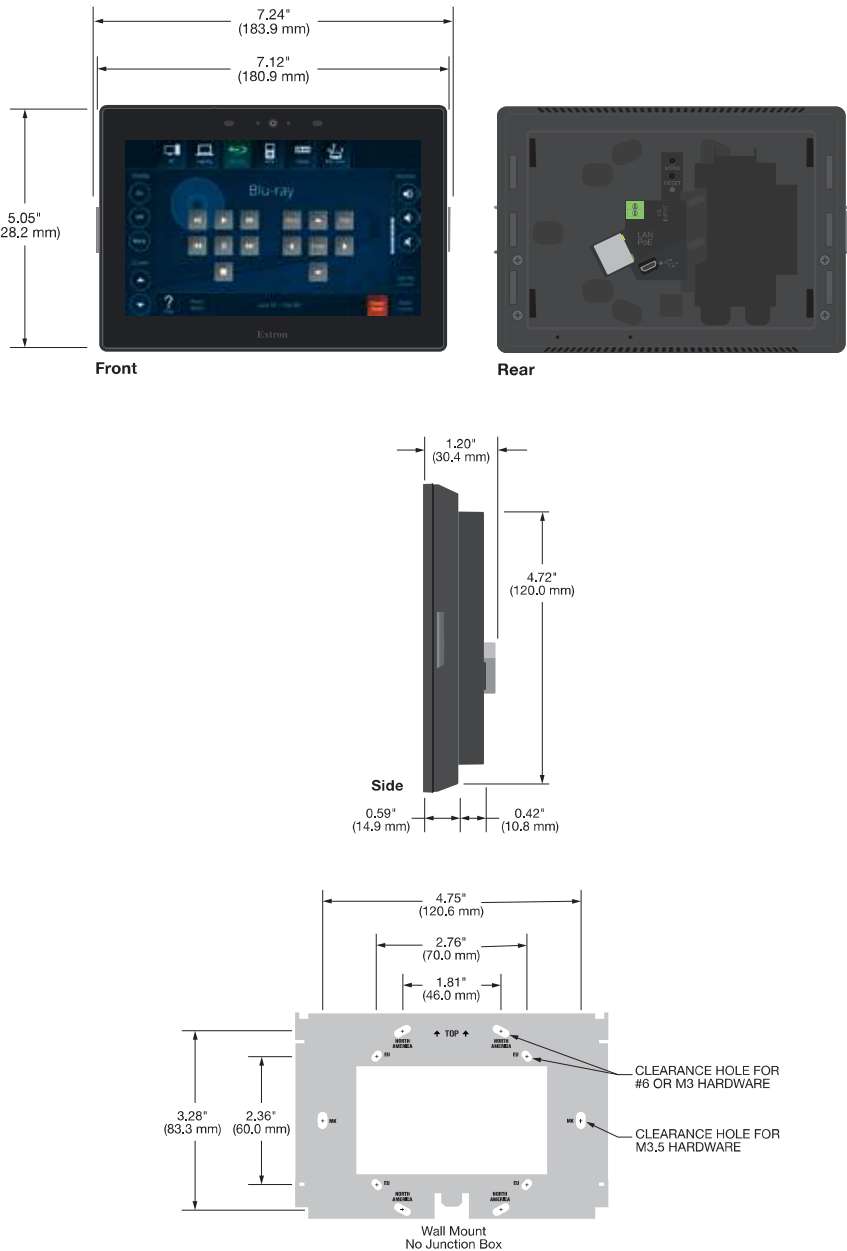
DESCRIPTION

The **TLP Pro 725M** is a 7" wall mount touchpanel that offers stellar performance and superior design. Inside, there's a powerful new quad-core processor and eight times more memory feeding the high resolution 1024 x 600 edge-to-edge glass capacitive touchscreen. The touchscreen, itself, is our most durable yet - built with scratch and smudge-resistant Corning Gorilla Glass. Outside you'll find a stylish, ergonomic enclosure that will complement any contemporary presentation environment.

A host of familiar features provides elegant, simple operation, while PoE, Power over Ethernet streamlines integration by allowing the touchpanel to receive power and communication over a single Ethernet cable.

All TouchLink Pro touchpanels can be customized using Extron GUI Designer software. This powerful interface design software offers ready-to-use templates for a wide variety of rooms and presentation environments.

PANEL DRAWINGS



SPECIFICATIONS

DISPLAY		
Screen type	TFT Active matrix color LCD display	
Size	7" (17.8 cm), measured diagonally	
Resolution	1024x600	
Aspect ratio	Widescreen	
Color depth	24 bit, 16.7 million colors	
Contrast	700:1	
MEMORY		
SDRAM	2 GB	
Flash	4 GB	
COMMUNICATION — ETHERNET INTERFACE		
Ethernet data rate	10/100/1000Base-T, half/full duplex with autodetect	
Ethernet protocol	DHCP, DNS, HTTP, HTTPS, ICMP, SFTP, SSH, TCP/IP, UDP/IP	
Software		
Configuration software	Global Configurator Plus and Professional, GUI Designer	
Programming software	Global Scripter	
Control apps	Extron Control, iGVE	
Resource management software	GlobalViewer Enterprise, iGVE	
Utilities	Toolbelt, Embedded web page	
CONTROL — USB		
Number/signal type	1 high-speed USB 2.0 device	
USB standards	USB 2.0, USB 1.1, USB 1.0 compatible	
AUDIO OUTPUT		
Speaker output	1 mono, 89 dB Max. SPL @ 0.1 m	
Playback format(s)		
Container format	WAV (Microsoft RIFF)	
Encoding	LPCM (uncompressed)	
Audio channels	mono or stereo	
GENERAL		
Power input requirements	Power over Ethernet (PoE 802.3af, class 3)	
Auxiliary power output		
USB	5 VDC, 275 mA	
Temperature/humidity	Storage: -4 to +158 °F (-20 to +70 °C) / 5% to 90%, noncondensing Operating: -4 to +158 °F (-20 to +70 °C) / 20% to 90%, noncondensing	
Mounting	Wall, furniture, or rack	
Enclosure dimensions	5.05" H x 7.24" W x 1.20" D (128 mm H x 184 mm W x 30 mm D)	
Regulatory compliance		
Safety	CE, c-UL, UL	
EMI/EMC	CE, C-tick,FCC Class B, ICES, VCCI	
Environmental	Complies with the appropriate requirements of RoHS and WEEE.	
Warranty	3 years parts and labor; touchpanel display and overlay components are covered for 1 year	
Model	Version Description	Part number
TLP Pro 725M	Black - Wall Mount	60-1563-02
TLP Pro 725M	White - Wall Mount	60-1563-03
Optional Accessories		
Model	Version Description	Part number
RM 5	Rack Mount Kit for TLP Pro 725M	70-1137-02
SMK 2	TLP Surface Mount Kit - Black	70-1140-22
SMK 2	TLP Surface Mount Kit - White	70-1140-23
RWM 2	TLP Recessed Wall Mount Kit	70-1141-23

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.

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[www.extron.com](http://www.extron.com)

# DTP T HWP 232 D

TWO INPUT DTP TRANSMITTER FOR  
HDMI WITH AUDIO EMBEDDING

**DTP**  
SYSTEMS

- ▶ Transmits HDMI, control, and analog audio up to 230 feet (70 meters) over a shielded CATx cable
- ▶ Two HDMI inputs
- ▶ Auto-switching between inputs
- ▶ Supports computer and video resolutions up to 1920x1200, including 1080p/60 and 2K
- ▶ Analog stereo audio embedding
- ▶ Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- ▶ Independent analog audio inputs
- ▶ Bidirectional RS-232 and unidirectional IR pass-through for AV device control
- ▶ Remote power capability
- ▶ Supported HDMI specification features include data rates up to 6.75 Gbps, 3D, and HD lossless audio formats
- ▶ EDID Minder®
- ▶ Compatible with all DTP® 230 Series receivers and DTP-enabled products
- ▶ Mounts in an included two-gang decorator-style wallplate
- ▶ Highly reliable, energy-efficient external universal power supply included



The Extron DTP T HWP 232 D is a decorator-style transmitter that provides signal extension for up to two HDMI sources, sending HDMI, audio, and control up to 230 feet (70 meters) over a shielded CATx cable to Extron DTP®-enabled products. The HDCP-compliant transmitter includes several integrator-friendly features in a convenient form factor that offers maximum placement flexibility.



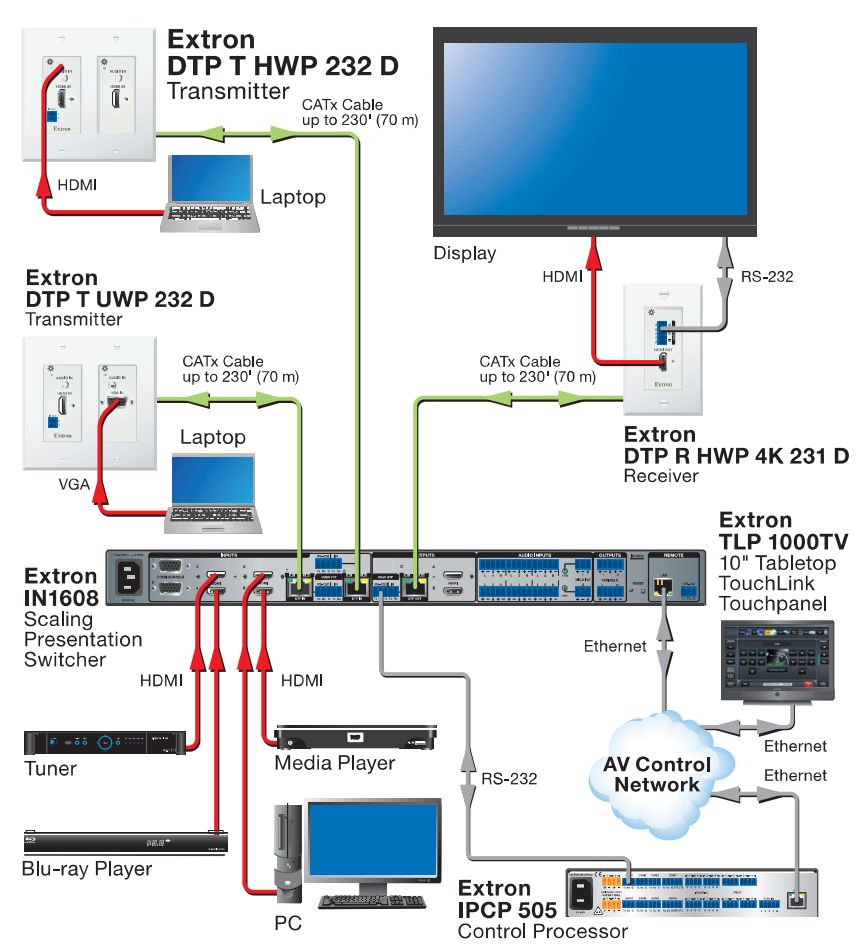
**Extron Electronics**  
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron **DTP T HWP 232 D** is a two input, decorator-style transmitter for sending HDMI, audio, and control up to 230 feet (70 meters) over a shielded CATx cable to Extron DTP-enabled products. It is HDCP compliant and provides two HDMI inputs, both with independent analog stereo audio connections. The DTP T HWP 232 D supports video signals at resolutions up to 1920x1200, including 1080p/60 and 2K. The transmitter also offers many integrator-friendly features such as analog stereo audio embedding, EDID Minder, auto-switching between inputs and RS-232 remote control for simplified input selection, remote power capability, and bidirectional RS-232 and unidirectional IR pass-through for remote AV device control. The wall-mountable design of the DTP T HWP 232 D provides the convenience of placing input connections precisely where they are needed.

For added installation flexibility, the transmitter can be remotely powered over the shielded twisted pair cable by a DTP-enabled product. The DTP T HWP 232 D can be integrated with an Extron DTP CrossPoint® Presentation Matrix Switcher, or other DTP-enabled products to support sources at remote locations.

APPLICATION DIAGRAM



SPECIFICATIONS

VIDEO		
Maximum data rate	6.75 Gbps (2.25 Gbps per color)	
Resolution range	Up to 1920x1200 or 1080p @ 60 Hz; 8 bit color depth 2048x1080p @ 60 Hz (2K)	
VIDEO INPUT		
Connectors	2 female HDMI type A	
INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER		
Signal type	1 DTP 230 output	
Connectors	1 female RJ-45 per unit for 1 cable connecting the transmitter and receiver	
DTP signal		
Signal transmission distance	Up to 230' (70 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable	
Cable requirements	Solid conductor, 24 AWG or better	
Cable recommendations	400 MHz bandwidth STP cable	
NOTE: Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance.		
AUDIO INPUT		
Number/signal type		
Analog audio (over DTP)	2 stereo, unbalanced	
Digital audio	2 embedded digital audio on DTP	
COMMUNICATIONS — TRANSMITTER		
Serial control port	RS-232 via (1) 3.5 mm, 5-pole captive screw connector for RS-232 control (±5 V) and contact closure input switching	
Contact closure remote control	(1) 3.5 mm, 5-pole captive screw connector (connector is shared with RS-232 control port)	
COMMUNICATIONS — EXTERNAL DEVICE (PASS-THROUGH)		
Serial control pass-through port	Bidirectional RS-232	
IR pass-through control port	TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 60 kHz	
GENERAL		
Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts	
Enclosure dimensions		
Device	Two (2.7" H x 3.5" W x 1.9" D [6.9 cm H x 8.9 cm W x 4.8 cm D])	
Regulatory compliance		
Safety	c-UL, UL	
EMI/EMC	AS/NZS, CE**, FCC Class A**, ICES, VCCI	
Environmental	Complies with the appropriate requirements of RoHS, WEEE	
NOTE: **CE and FCC testing is conducted with STP cable.		
Model	Version Description	Part number
DTP T HWP 232 D	Two Input Decorator-Style Tx, White - 230 feet (70 m)	60-1365-63

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.

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Letter - English - NP



# DTP HD DA 4K 230

FOUR AND EIGHT OUTPUT DTP DISTRIBUTION AMPLIFIERS



DTP HD DA4 4K 230



DTP HD DA8 4K 230

**DTP**  
SYSTEMS

**4K UHD**

The Extron DTP **HD DA4 4K 230** and **DTP HD DA8 4K 230** provide signal extension and distribution to four or eight Extron DTP™-enabled products, sending HDMI, audio, and control up to 230 feet (70 meters) over shielded CATx cable. Both HDCP-compliant DTP distribution amplifiers include several integrator-friendly features that streamline installation and enable the reliable distribution of an HDMI source signal to multiple destinations within DTP Systems.

- ▶ Distributes HDMI plus control and analog audio up to 230 feet (70 meters) over shielded CATx cable
- ▶ Supports computer and video resolutions up to 4K, including 1080p/60 Deep Color
- ▶ Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- ▶ DTP™ outputs are compatible with HDBaseT-enabled devices
- ▶ HDMI input loop-through
- ▶ Audio input with loop-through accepts additional analog stereo audio signals
- ▶ Remote powering of DTP receivers
- ▶ RS-232 insertion from the Ethernet control port

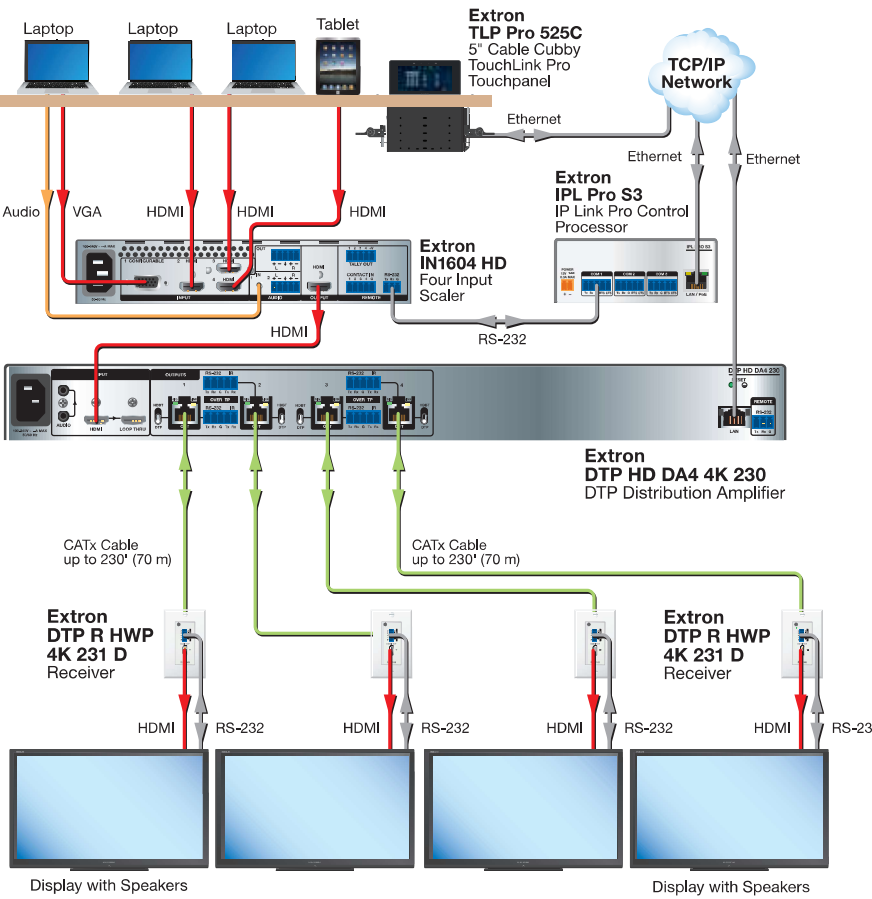
**Extron**

DESCRIPTION

The Extron **DTP HD DA4 4K 230** and **DTP HD DA8 4K 230** are distribution amplifiers that provide one HDMI input with loop-through, and either four or eight DTP outputs. Each twisted pair output sends HDMI, audio, and control up to 230 feet (70 meters) over shielded CATx cable to Extron DTP-enabled products. The DTP HD DA 4K 230 accepts analog stereo audio signals for simultaneous transmission over the same shielded CATx cable. It supports video signals at resolutions up to 4K, including 1080p/60 Deep Color. The DTP HD DA 4K 230 offers bidirectional RS-232 and IR pass-through at each DTP output, plus system level RS-232 control of AV devices via Ethernet insertion. It features remote powering of DTP receivers, EDID Minder, Key Minder, and selectable output muting.

To enhance and simplify integration, the DTP HD DA 4K 230 includes automatic input cable equalization and automatic color bit depth management. The DTP HD DA 4K 230 also features analog stereo audio loop-through for local audio system and monitoring needs. The DTP outputs can be muted independently via Ethernet or RS-232. Each twisted pair output also offers an HDBaseT output mode for compatibility with HDBaseT-enabled displays. The distribution amplifier is easily controlled via Ethernet, USB, or RS-232. The DTP HD DA 4K 230 can be integrated with Extron switchers, scalers, or other DTP-enabled products to provide multiple, simultaneous outputs for signage and presentation overflow room applications.

APPLICATION DIAGRAM



SPECIFICATIONS

TRUE 4K SPECIFICATION		
Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 30 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz	4:2:0	
Frame rate <sup>1</sup>		24, 25, 30, 50, or 60 fps
Chroma sampling <sup>1</sup>		4:4:4, 4:2:2, or 4:2:0
Color bit depth <sup>1</sup>		8 bits per color
Signal type		HDMI 1.4, HDCP 1.4
Max. video data rate		10.2 Gbps (3.4 Gbps per color)
NOTE: <sup>1</sup> Subject to the maximum data rate limit. Use our calculator at <a href="http://www.extron.com/8Kdata">www.extron.com/8Kdata</a> to determine video parameters supported by this data rate.		

VIDEO INPUT	
Connectors	1 female HDMI type A
VIDEO OUTPUT	
Number/signal type	1 single link HDMI (Local Output)
DTP HD DA4 4K 230	4 DTP 230
DTP HD DA8 4K 230	8 DTP 230
INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVERS	
Signal transmission distance	
DTP HD DA4/DA8 4K 230	Up to 230' (70 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable
1080p @ 60 Hz	Up to 130' (40 m) using STP cable or XTP DTP 24 cable
4K/UHD @ 30 and 60 Hz	Up to 130' (40 m) using STP cable or XTP DTP 24 cable
Cable requirements	Solid conductor, 24 AWG or better
Cable recommendations	400 MHz bandwidth STP cable
NOTE: Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance.	
NOTE:	
Output mode signaling:	
DTP: HDMI with embedded audio, analog audio, RS-232 and IR, and remote power	
HDBaseT: HDMI with embedded audio plus RS-232 and IR	
GENERAL	
Power supply	Internal Input: 100-240 VAC, 50-60 Hz
Enclosure dimensions	
DTP HD DA4 4K 230	1.75" H x 17.5" W x 10.6" D (1U high, full rack wide) (4.4 cm H x 44.4 cm W x 26.8 cm D, depth excludes connectors)
DTP HD DA8 4K 230	1.75" H x 17.5" W x 10.6" D (1U high, full rack wide) (4.4 cm H x 44.4 cm W x 26.8 cm D, depth excludes connectors)
Regulatory compliance	
Safety	CE, c-UL, UL
Everlast power supply warranty	7 years parts and labor

Model	Version Description	Part number
DTP HD DA4 4K 230	HDMI to Four Output DTP DA - 230 feet (70 m)	60-1437-01
DTP HD DA8 4K 230	HDMI to Eight Output DTP DA - 230 feet (70 m)	60-1438-01

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.



# DTP R HWP 4K 231 D

DTP RECEIVER FOR  
HDMI – DECORATOR-STYLE  
WALLPLATE

**DTP**  
SYSTEMS

**4K UHD**



- ▶ Receives 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
- ▶ HDCP 2.3 compliant
- ▶ Supported HDMI specification features include data rates up to 10.2 Gbps, Deep Color up to 12-bit, 3D, HD lossless audio formats, and CEC pass-through
- ▶ Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- ▶ Supports EDID and HDCP transmission
- ▶ Bidirectional RS-232 and IR pass-through for AV device control
- ▶ Remote power capability
- ▶ Compatible with all DTP® 230 Series transmitters and DTP-enabled products
- ▶ Highly reliable, energy-efficient external universal power supply included with Tx models

The Extron DTP R HWP 4K 231 D is a single-gang decorator-style receiver that works with Extron DTP®-enabled products to send HDMI, analog audio, and bidirectional control signals up to 230 feet (70 meters) over a shielded CATx cable. It is designed for efficient use at display locations in environments offering limited space. The HDCP-compliant receiver features a convenient one-gang form factor that offers maximum placement flexibility.



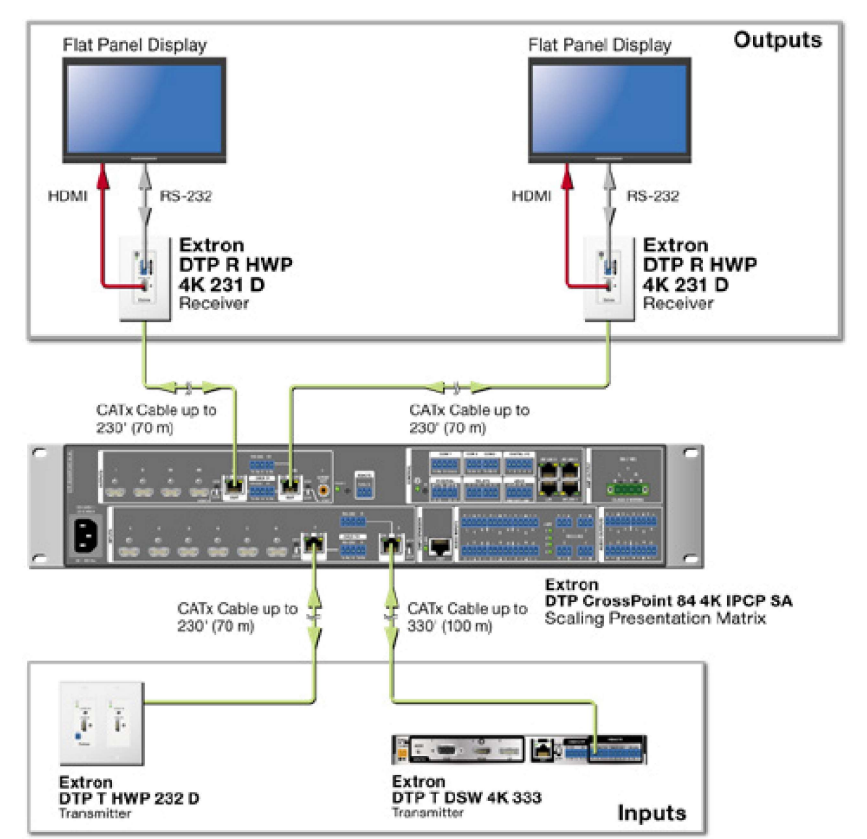
**Extron Electronics**  
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron **DTP R HWP 4K 231 D** is a single-gang decorator-style receiver that works with Extron DTP-enabled products to send HDMI, audio, and bidirectional RS-232 and IR signals up to 230 feet (70 meters) over a shielded CATx cable. The one-gang form factor provides maximum space efficiency in wall mount, floor box, and furniture mount applications. The DTP R HWP 4K 231 D supports video signals at resolutions up to 4K. It also accepts analog stereo audio signals from a DTP-enabled product over the same shielded twisted pair cable. The wall-mountable design and remote power capability of the DTP R HWP 4K 231 D provide the convenience of placing output connections precisely where they are needed.

The DTP R HWP 4K 231 D enables the reliable transmission of HDMI signals, supporting Deep Color up to 12-bit, CEC pass-through, and embedded HD lossless audio formats. DDC communication of EDID and HDCP is continuously maintained between a source and display, ensuring direct compatibility and optimal signal transmission between devices. For added installation flexibility, the receiver can be remotely powered over the shielded twisted pair cable by a DTP-enabled product. The DTP R HWP 4K 231 D can be integrated with an Extron DTP CrossPoint® Presentation Matrix Switcher, or other DTP-enabled products to support sources at remote locations.

APPLICATION DIAGRAM



SPECIFICATIONS

TRUE 4K SPECIFICATION		
Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 30 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz	4:2:0	8 bit
Frame rate <sup>1</sup>	24, 25, 30, 50, or 60 fps	
Chroma sampling <sup>1</sup>	4:4:4, 4:2:2, or 4:2:0	
Color bit depth <sup>1</sup>	8 bits per color	
Signal type	HDMI 1.4, HDCP 2.3	
Max. video data rate	10.2 Gbps (3.4 Gbps per color)	
NOTE: <sup>1</sup> Subject to the maximum data rate limit. Use our calculator at <a href="http://www.extron.com/4Kdata">www.extron.com/4Kdata</a> to determine video parameters supported by this data rate.		

VIDEO		
HDMI output		
Maximum pixel clock	300 MHz	
Resolution range	Up to 2560x1600* @ 60 Hz or 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz, 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling (*Reduced blanking)	
VIDEO OUTPUT		
Connectors	1 female HDMI, type A	
INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER		
Signal type	1 DTP 230 input	
Connectors	1 female RJ-45 jack	
DTP signal		
Signal transmission distance	Up to 230' (70 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable	
1080p @ 60 Hz	Up to 130' (40 m) using STP cable or XTP DTP 24 cable	
2560x1600 @ 60 Hz	Up to 130' (40 m) using STP cable or XTP DTP 24 cable	
4K/UHD @ 30 and 60 Hz	Up to 130' (40 m) using STP cable or XTP DTP 24 cable	
Cable requirements	Solid conductor, 24 AWG or better	
Cable recommendations	400 MHz bandwidth STP cable	
NOTE: Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance.		
AUDIO OUTPUT		
Number/signal type	1 stereo, balanced/unbalanced	
GENERAL		
Power supply	External (not included) Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts	
Enclosure dimensions		
Device	4.2" H x 1.7" W x 2.2" D (10.7 cm H x 4.3 cm W x 5.8 cm D)	
Regulatory compliance	c-UL, C-tick, CE**, FCC Class A**, ICES, UL, VCCI Complies with the appropriate requirements of RoHS, WEEE	
NOTE: **CE and FCC testing is conducted with STP cable.		
NOTE: Shipping dimensions and weights are available at <a href="http://www.extron.com">www.extron.com</a> .		
Model	Version Description	Part number
DTP R HWP 4K 231 D	HDMI Decorator-Style Rx, Black - 230 feet (70 m)	60-1531-12
DTP R HWP 4K 231 D	HDMI Decorator-Style Rx, White - 230 feet (70 m)	60-1531-13

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.

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## IPCP Pro 250 xi

### Unique Features

- Upgraded single core processor and two times more memory
- One bidirectional RS-232 serial port with software handshaking
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- One IR/Serial port for one-way control of external devices
- Four Digital I/O ports
- Two relays for controlling room functions
- Remote volume control port for the Extron MPA Series and select XTRA™ Series amplifiers
- eBUS port for connecting eBUS button panels and accessories



Model	Version Description	Part Number
IPCP Pro 250 xi	IPCP Pro xi Control Processor	60-1911-01
IPCP Pro 250 xi	IPCP Pro xi Control Proc., LL UI Upgrade	60-1911-01A

## IPCP Pro PCS1 xi

### Unique Features

- Upgraded single core processor and two times more memory
- Intelligent current sensing with alarm
- Outlet status retention during power loss
- One male AC input and one female AC output - both using IEC connections
- Easily-accessible, front panel circuit breaker adds over-current protection for remotely controlled connected devices
- One bidirectional RS-232 serial port with software handshaking
- One IR/Serial port for one-way control of external devices
- Three digital I/O ports
- Supports control system synchronization
- eBUS port for connecting eBUS button panels and accessories



Model	Version Description	Part Number
IPCP Pro PCS1 xi	IPCP Pro xi Control Processor	60-1910-01
IPCP Pro PCS1 xi	IPCP Pro xi Control Proc., LL UI Upgrade	60-1910-01A

## IPCP Pro S1 xi

### Unique Features

- Upgraded single core processor and two times more memory
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- Compact, 1U, quarter rack width metal enclosure
- External Extron Everlast™ power supply included

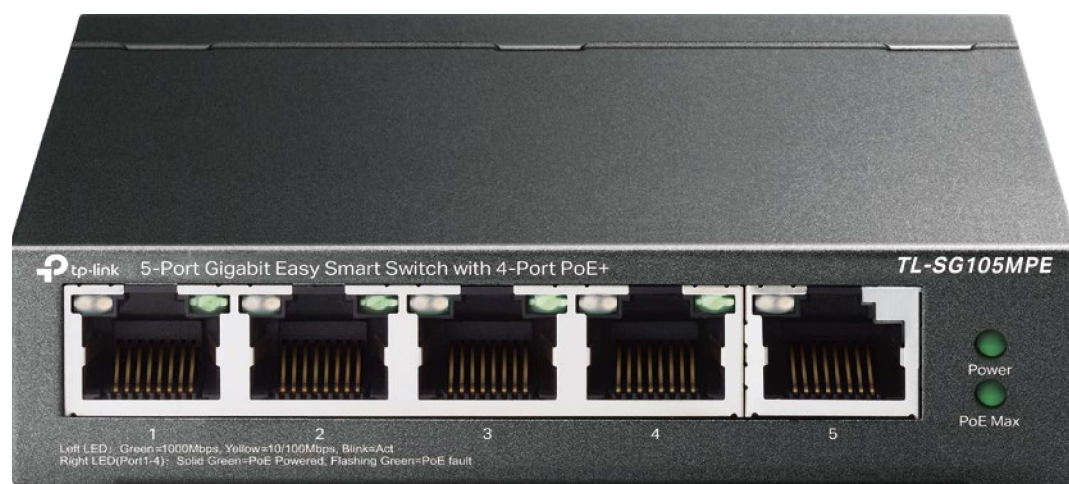


Model	Version Description	Part Number
IPCP Pro S1 xi	IPCP Pro xi Control Processor	60-1979-01
IPCP Pro S1 xi	IPCP Pro xi Control Proc., LL UI Upgrade	60-1979-01A



# 5-Port Gigabit Easy Smart Switch with 4-Port PoE+

MODEL: TL-SG105MPE Datasheet



## Overview


The TL-SG105MPE is a 5-port Gigabit Easy Smart Switch with 4 PoE+ ports, represents a powerful upgrade from an unmanaged switch. It is designed specially for small businesses that require simple network management and PoE function. The TL-SG105MPE can connect and power up to four PoE devices, such as wireless access points (APs), IP cameras, and IP phones. Through its web-based user interface and management utility, the TL-SG105MPE offers a variety of useful features, including network monitoring, traffic prioritization, PoE Auto Recovery and enhanced QoS. Additionally, with port-based, tag-based and MTU VLAN, TL-SG105MPE can improve security and meet more network segmentation requirements.

## Power Over Ethernet

4 of the 5 Auto-Negotiation RJ45 ports (port 1 to port 4) of the switch support Power over Ethernet (PoE) function. These PoE ports can automatically detect and supply power with those IEEE 802.3af/at compliant Powered Devices (PDs).



# Specifications

Hardware Features & Performance		
Product Picture		
Model		TL-SG105MPE
Physical Features	Interface	5 10/100/1000Mbps RJ45 Ports
	PoE Standard	802.3af/at
	PoE Ports	Port 1~ Port 4, up to 30 W per port
	PoE Power Budget	120 W
	External Power Supply	External Power Adapter (Output: 53.5 VDC/2.43 A)
	Max Power Consumption	4.34 W (220 V/50 Hz with no PD connected) 137.01 W (110 V/50 Hz with 120 W PD connected)
	Max Heat Dissipation	14.8 BTU/h (with no PD connected) 467.17 BTU/h (with 120 W PD connected)
	Fan Quantity	Fanless
	LED	Power, PoE Max, Speed/Link/Act, PoE Status (Port 1~Port 4)
	Certification	CE, FCC
	Dimensions	3.9 x 3.9 x 1.0 in (99.8 x 98 x 25 mm)
	Environment	Operating Temperature: 0 °C~40 °C (32 °F~104 °F) Storage Temperature: -40 °C~70 °C (-40 °F~158 °F) Operating Humidity: 10% ~ 90%RH, non-condensing Storage Humidity: 5%~95%RH, non-condensing
Performance	Switching Capacity	10 Gbps
	Forwarding Rate	7.44 Mpps
	MAC Address Table	2K
	Packet Buffer Memory	1 Mb
	Jumbo Frame	16 KB

Note: PoE budget calculations are based on laboratory testing. Actual PoE power budget is not guaranteed and will vary as a result of client limitations and environmental factors.



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DB-XLR3F



DS-XLR3F



D-XLR3F



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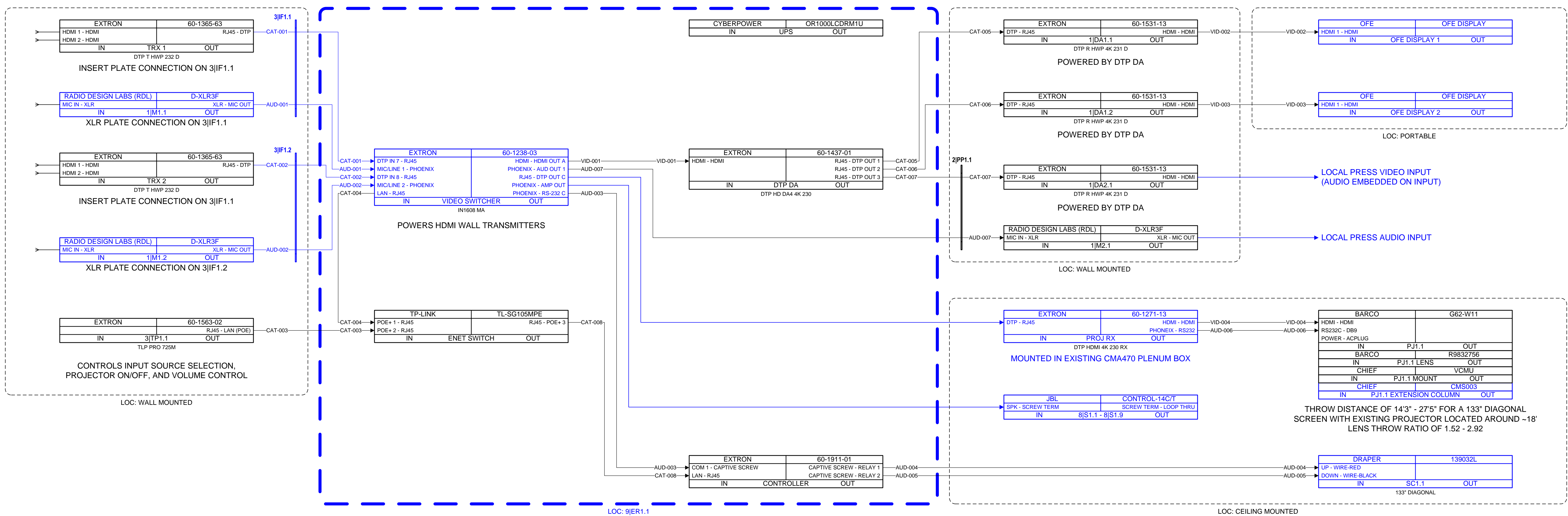
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Savannah, GA 31405-7418  
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(912) 233-5350

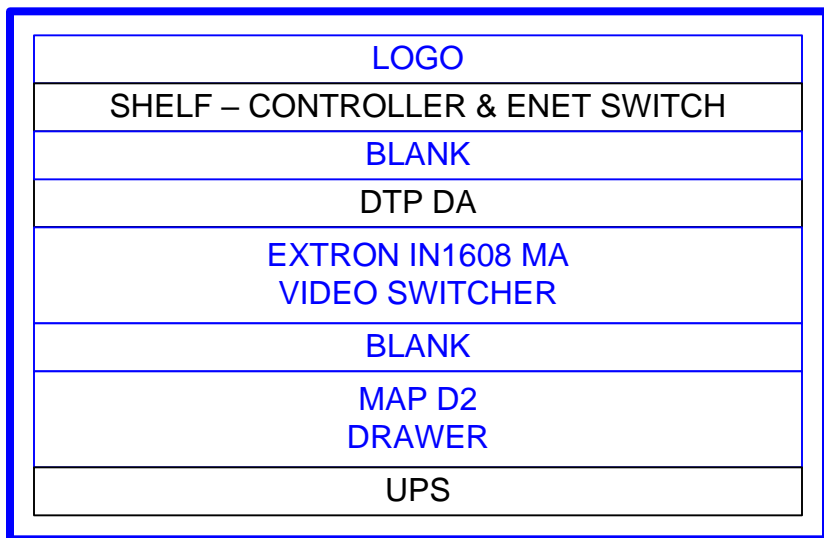
Base System – Upgrades to existing system

The video and control system will be upgraded while the audio system will remain as is except for an additional mic output plate and HDMI output plate for local press connectivity. The video system upgrade will include a new 10k lumen projector with a new lens and projector mount. The projector shall be mounted in the same location as the current one and will receive power from the local power source. The client's existing HDMI/VGA input plates have loose connectors so a replacement will be made for those with (2) HDMI input connections. Nothing was stated about the XLR inputs being messed up so those will remain unchanged. In addition, a DTP distribution amplifier has been added to the system for video distribution to a total (3) locations. Two locations are for portable displays provided by the client and the third location is designated for the local press to connect to for video content with embedded audio. I have also included an XLR output plate for the press as well. The control system upgrade includes a replacement of the existing Extron button panel with a 7" touch panel with the same functionality.

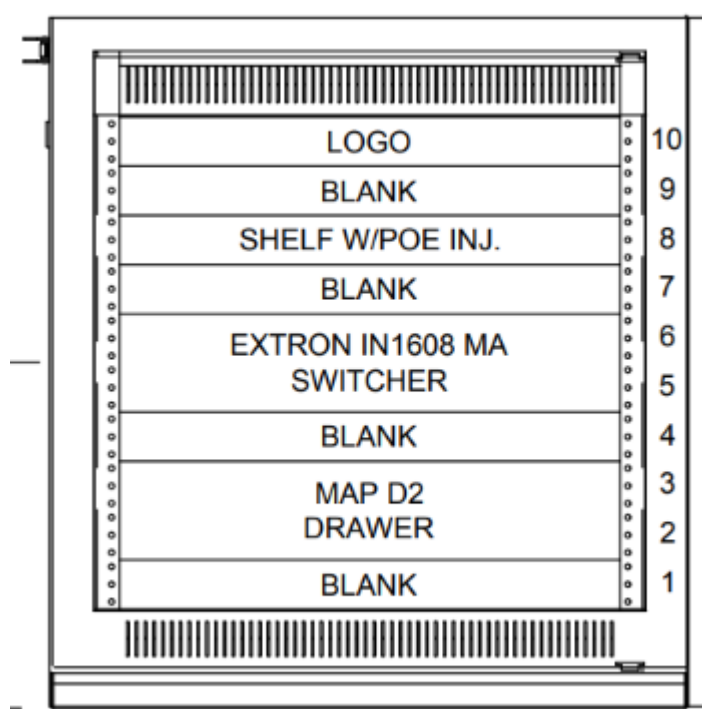
Owner Furnished / Existing Equipment



NEW POTENTIAL RACK LAYOUT:



EXISTING RACK LAYOUT:



Eng: GB

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Modified 4/8/2025  
Printed 4/8/2025

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Projector Upgrade  
Adrian McDaniel  
535 Telfair Street  
Augusta, GA 30901

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