



Dear Christian County Public Schools,

I want to personally thank you for inviting us to submit a proposal to Christian County Public Schools!

When my mother, Claudia Anderson, founded Audio Enhancement over 40 years ago, we never imagined the impact our services would have on education today. Through customer feedback, we have grown from offering classroom audio solutions to providing district-wide communication and safety technology. We have impacted over 4,000 districts, 39,000 schools, and over 1,200,000 classrooms across the world. We are excited for the opportunity to help you!

Our team focuses on hiring employees with a passion to make a difference in education. We look forward to developing a deeper partnership with Christian County Public Schools through building friendship and trust during the ongoing stages of your project.

It is our pleasure to submit this proposal to Christian County Public Schools. As with all proposals, revisions can be made at any time.

We look forward to your response and are available to answer any questions during the review process.

From all of us here at Audio Enhancement, thank you!

Sincerely yours,



Jeff Anderson
Audio Enhancement, CEO

Notice of Confidentiality: The contents of this proposal are intended solely for the use of the addressee and their organization and contains confidential and/or privileged information and may not be disclosed to any other party without written authorization from Audio Enhancement Inc.

## **Company History**



# Making a Difference in Education

For more than forty years, Audio Enhancement has served the schools throughout the United States, providing both classroom audio enhancement systems as well as integration services for classroom technology. Audio Enhancement is headquartered in Salt Lake City Utah and has facilities in Georgia and Florida.

Audio Enhancement was founded in 1978 by Claudia Anderson around the simple idea that "learning begins with hearing." Having two hearing impaired children; the first Audio Enhancement systems were designed specifically for the hearing impaired. Early in our history, technological advancements made it possible to also provide whole classroom sound systems, benefiting all students. Audio Enhancement has been the innovator and leader in this field.

By 2004, it was clear that classroom audio enhancement systems were a key part of the overall technology landscape in the classroom. Based on our high level of support, outstanding customer service, and training that was provided for the audio systems, several school districts came to us and requested that we expand our product offerings. Based on these requests, we undertook an initiative to increase our capabilities in order to provide a complete integrated technology package for the classroom. These offerings include display devices, control, video/audio playback devices and interactive technologies. By utilizing the principles developed over thirty years of providing classroom audio systems to the schools, we were able to provide both technical integration, teacher in-servicing, training, and professional development to help the schools ensure the success of their technology goals.

Moving the company forward, in 2008, Audio Enhancement was incorporated: Jeff Anderson, President and CEO, Jennifer Crum, CFO, Jeremy Anderson, CAO and Justin Anderson, COO. Today, the Audio Enhancement product line improves student achievement, decreases teacher vocal fatigue and absenteeism, and creates positive student behavior. Audio Enhancement systems also increase focus and attention and supports classroom management.



The Anderson Family



### **Selected Systems and Products**

Classroom System

QTY - 122

COMPATIBILITY



Allows to quote basic components without any system



#### INCLUDED COMPONENTS







Choose an option



35 foot Cat6, Plenum Rated, Purple



35' 3.5 Male to 3.5 Male Plenum Rated -



Installation of Wallplate



Wall Plate, WPA-702, Call Button, Emergency Button, Ambient Mic with Decora Plate

#### Full System Product Details

Installation of Audio System, Choose an option, 35 foot Cat6, Plenum Rated, Purple, 35' 3.5 Male to 3.5 Male Plenum Rated - Shielded, Installation of Wallplate, Wall Plate, WPA-702, Call Button, Emergency Button, Ambient Mic with Decora Plate,

#### MS-375 2-Way System

QTY - 06

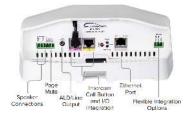












The MS-375 is a network interface used to expand the range of the XD microphones

non-paired SAFE Alert process. The entire unit is Powered over Ethernet (PoE). The unit

can be placed in areas of the campus that are not densely covered by other classroom

systems. The non-paired alert process allows any Audio Enhancement XD Teacher Microphone to activate a SAFE Alert from anywhere on the campus, even if they are out of range of their paired XD Receiver.

#### INCLUDED COMPONENTS



Intercom System



35 foot Cat6, Plenum Rated, Purple



35' 3.5 Male to 3.5 Male Plenum Rated -Shielded



MS-375 Network Interface for SAFE Alert Extender with Programming (Requires PoE+)



Installation of Wallplate



SAFE Alert Duress Transmitter



#### **Full System Product Details**







#### Everything you need in order for an EPIC System central head-end.

#### INCLUDED COMPONENTS



**EPIC Grandstream** Enterprise Phone with Programming



EPIC Kiosk with



EPIC Appliance 1U Rackmount with Programming



CLAUDIA, EPIC Front Office Media Player with Programming (Requires AC Power)



**EPIC System Platform** 



SAFE System License (Requires EP-0009)

#### **Full System Product Details**

EPIC Grandstream Enterprise Phone with Programming, EPIC Kiosk with Programming, EPIC Appliance 1U Rackmount with Programming, CLAUDIA, EPIC Front Office Media Player with Programming (Requires AC Power), EPIC System Platform License, SAFE System License (Requires EP-0009),

#### SAFE System Extender MS-375 with Programming

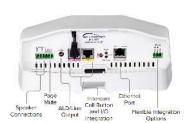
QTY - 01











The MS-375 is a network interface used to expand the range of the XD

non-paired SAFE Alert process. The entire unit is Powered over Ethernet (PoE). The unit

can be placed in areas of the campus that are not densely covered by other classroom

systems. The non-paired alert process allows any Audio Enhancement XD Teacher Microphone to activate a SAFE Alert from anywhere on the campus, even if they are out of range of their paired XD Receiver.

#### **INCLUDED COMPONENTS**



Installation of 2-Way



Outdoor Enclosure for



MS-375 Network Alert Extender with Programming (Requires PoE+)



SAFE Alert Duress

#### **Full System Product Details**

Installation of 2-Way Intercom System, Outdoor Enclosure for MS-375, MS-375 Network Interface for SAFE Alert Extender with Programming (Requires PoE+), SAFE Alert Duress Transmitter,



#### Allows to quote basic components without any system



#### INCLUDED COMPONENTS







Choose an option



EPIC Common Zone Amplifier with Network Interface 1 X 300W 70V, 1U with Programming

#### **Full System Product Details**

Installation of MS-300 for Common Zone Amplifier, Choose an option, EPIC Common Zone Amplifier with Network Interface 1 X 300W 70V, 1U with Programming,



### **Selected Systems and Products**

# CS-12 Ceiling Speaker, Circle Cut In, Plenum Rated, Set of 4

**QTY - 114** 



The Ceiling Speaker (CS-12) has a tuned ported enclosure that provides superior bass response while maintaining efficiency. Speaker grill comes preinstalled from factory. Metal speaker back meets UL 2043 criteria for plenum installation. Tile bridges included.

#### **EPIC Kiosk with Programming**

QTY - 04



The EPIC (Education Paging and Intercom Communication) System Touch Screen is a 22" (21.5" viewable) Full HD multi-touch display. With a SuperClear® IPS panel and 10-point projected capacitive touch technology, this display delivers stunning performance with a responsive and accurate touch experience. Featuring a 7H hardness touch screen and up to 10 simultaneous touch points, this durable display allows users to tap, swipe, pinch, and zoom with ease. Includes Programming.

#### 70V Ceiling Speaker, Circle Cut In

QTY - 332



The EPIC 70V Ceiling Speaker is a fully assembled speaker assembly, with back can and speaker grill. The speaker has a tuned ported enclosure that provides superior bass response while maintaining a very high sensitivity. The transformer tap selector is easily accessible on the side of the speaker. Metal speaker back meets UL 2043 criteria for plenum installation.

#### 25/70V Volume Control

QTY - 47



25 Watt 70V/100V/25V Rotary Volume Control white wall plate

#### 70V Wall Mount Speaker, White

QTY - 38



70V Wall Mount Speaker in white.

# CS-12 Ceiling Speaker, Circle Cut In, Plenum Rated, Set of 2

QTY - 01



The Ceiling Speaker (CS-12) has a tuned ported enclosure that provides superior bass response while maintaining efficiency. The speaker grill comes preinstalled from the factory. Metal speaker back meets UL 2043 criteria for plenum installation.



The Ceiling Speaker (CS-12) has a tuned ported enclosure that provides superior bass response while maintaining efficiency. The speaker grill comes preinstalled from the factory. Metal speaker back meets UL 2043 criteria for plenum installation. This is a single speaker.

# Viking E-30-IP VoIP Entry Phone with Programming

QTY - 03



The E-10-IP VoIP Entry Phone is designed to provide quick and reliable handsfree communication for SIP VoIP phone systems with PoE. The E-10-IP entry phone can be programmed from any touch tone phone, a PC on the same LAN, or remotely using a static IP address. The E-10-IP can dial up to 5 programmable numbers.

# Pendant Shroud Bundle, Set of 4 (Requires SP-0300)

**QTY - 07** 



Pendant shroud bundle for circle cut in 70V speakers. Bundle includes speaker wire and wire rope steel cable fasteners. Sold in a set of 4. Requires SP-0300, Circle Cut In 70V Loudspeaker

# 6.5" 70V Outdoor/Indoor Speaker 2-way

**QTY - 10** 



OUT6.5W70 6.5" 70V Outdoor Speaker, designed to deliver exceptional audio performance in outdoor environments. Built with durability and weather resistance in mind, this speaker is perfect for bringing high-quality sound to your outdoor spaces, such as patios, atriums, and outdoor learning areas.

Includes one (1) speaker

### **Pricing Proposal**

Pricing Valid for 90 Days - October 23, 2024



#### **Christian County Public Schools - KY Christian County Academy**

Audio Enhancement equipment, installation, \$777,091.05 programming and software

	Discount	Discount (\$97,038.01	
	Taxes	\$0.00	
	Shipping	\$16,975.48	
Christian County Public Schools Price		\$697,028.52	

By sending in a Purchase Order in response to this proposal, the customer is agreeing to the Audio Enhancement terms and conditions which can be viewed at Audioenhancement.com/terms.

Audio Enhancement will invoice equipment at the time of shipment with payment due within terms. Services completed by Audio Enhancement will be invoiced upon substantial completion with payment due within terms.

If there are any questions about this process, please reach out to our Receivables Team - receivables@audionhancement.com

# **Detailed Bill of Materials**



## BoM 1

Part#	Product Name	Qty
	Category : Classroom Equipment	
	System : Classroom System	
AC-0116	35 foot Cat6, Plenum Rated, Purple	122
AC-0202	35' 3.5 Male to 3.5 Male Plenum Rated - Shielded	122
WP-0002	Wall Plate, WPA-702, Call Button, Emergency Button, Ambient Mic with Decora Plate	122
AM-3250.P	MS-700 Network Amp with Integrated XD Receiver with Programming	122
ST-XD-9061	XD Teacher Box with Teacher Pendant and Student Handheld Microphone (2024)	122
	System : MS-375 2-Way System	
AC-0116	35 foot Cat6, Plenum Rated, Purple	6
AC-0202	35' 3.5 Male to 3.5 Male Plenum Rated - Shielded	6
AM-3245.P	MS-375 Network Interface for SAFE Alert Extender with Programming (Requires PoE+)	6
WP-0002	Wall Plate, WPA-702, Call Button, Emergency Button, Ambient Mic with Decora Plate	6
	System : SAFE System Extender MS-375 with Programming	
PA-0086	Outdoor Enclosure for MS-375	1
AM-3245.P	MS-375 Network Interface for SAFE Alert Extender with Programming (Requires PoE+)	1
	Miscellaneous	
ST-SP-0001	CS-12 Ceiling Speaker, Circle Cut In, Plenum Rated, Set of 4	114
ST-SP-9102	CS-12 Ceiling Speaker, Circle Cut In, Plenum Rated, Set of 2	1
SP-0001	Classroom Speaker, Ceiling, Circle Cut In, Plenum Rated	1
PA-1061.P	Viking E-30-IP VoIP Entry Phone with Programming	3
WP-0001	Wall Plate, WPA-701, Ambient Mic with Decora Plate	3
	Category : EPIC System School Equipment	
	System : MS-375 2-Way System	
XD-0775	SAFE Alert Duress Transmitter	6
	System : EPIC Head End System	
PA-0095.P	EPIC Grandstream Enterprise Phone with Programming	1
EP-0020.P	EPIC Kiosk with Programming	1
ST-EP-0001.P	EPIC Appliance 1U Rackmount with Programming	1
EP-0105.P	CLAUDIA, EPIC Front Office Media Player with Programming (Requires AC Power)	1
PA-0011	2U Vented Utility Shelf for EPIC Appliance	1
PA-0024	Smart-UPS 1000VA LCD 2U 120V Battery Backup For EPIC Appliance	1
PA-0045	UPS 425VA 6-Outlet 120V for use with EPIC Kiosk	1
	System : SAFE System Extender MS-375 with Programming	
XD-0775	SAFE Alert Duress Transmitter	1

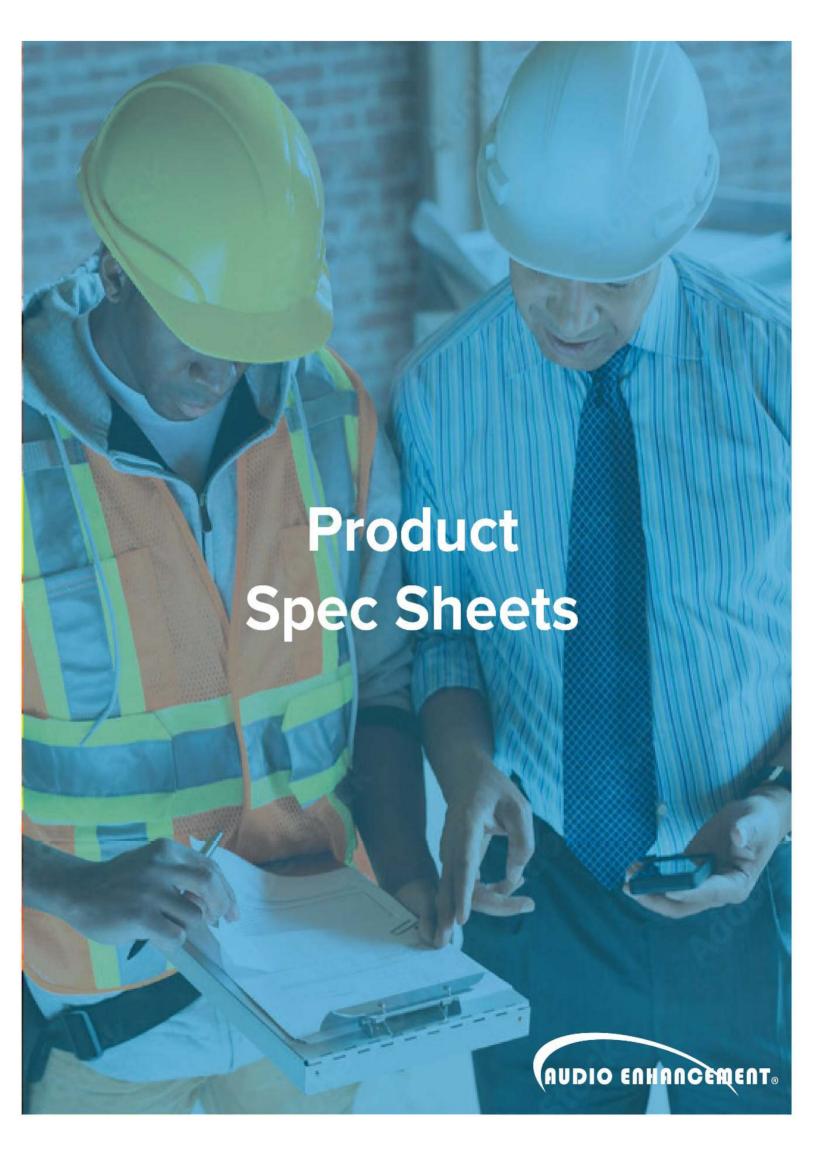
Part#	Product Name	Qty
	System : CZA1300 Zone	
ST-AM-1028.P	EPIC Common Zone Amplifier with Network Interface 1 X 300W 70V, 1U with Programming	21
EP-0020.P	EPIC Kiosk with Programming	4
SP-0300	70V Ceiling Speaker, Circle Cut In	332
PA-0191	25/70V Volume Control	47
SP-1022	70V Wall Mount Speaker, White	38
ST-SP-9351	Pendant Shroud Bundle , Set of 4 (Requires SP-0300)	7
SP-1097	6.5" 70V Outdoor/Indoor Speaker 2-way	10
PA-0045	UPS 425VA 6-Outlet 120V for use with EPIC Kiosk	4
AC-0004	18/2 Spooled Speaker Wire Plenum Rated Per Foot, White	14000
ST-AM-8003.P	MS-300 Network Interface with Programming (Requires PoE)	2
AC-0120	1000' Spool Cat6, Plenum Rated - Purple	1
XD-0775	SAFE Alert Duress Transmitter	8
	Category : InfoView Equipment	
	System : EPIC Head End System	
EP-0045	InfoView Desktop Announcer License (Requires InfoView Visual Messaging & Clock License)	1
	Category : Services	
	System : Classroom System	
SE-0035	Installation of Audio System	122
TX-0001	Choose an option	122
SE-0081	Installation of Wallplate	122
	System : MS-375 2-Way System	
SE-0037	Installation of 2-Way Intercom System	6
SE-0081	Installation of Wallplate	6
	System : EPIC Head End System	
SE-1002	EPIC Custom Map Development Services	1
SE-1043	EPIC System Third Party System Integration	1
SE-0080	Installation of Kiosk	1
	System : SAFE System Extender MS-375 with Programming	
SE-0037	Installation of 2-Way Intercom System	1
	System : CZA1300 Zone	
SE-0038	Installation of MS-300 for Common Zone Amplifier	21
TX-0001	Choose an option	21
SE-1043	EPIC System Third Party System Integration	2

Part#	Product Name	Qty
SE-0038	Installation of MS-300 for Common Zone Amplifier	2
SE-0067	Project Closeout	1
SE-0071	Construction - Design and Engineering Services	1
SE-0072	Construction - CAD Services	1
SE-0073	Project Management Services	153
SE-1068	Installation of 70V Equipment	427
SE-0080	Installation of Kiosk	4
SE-0081	Installation of Wallplate	3
	Category : Software Licensing	
	System : EPIC Head End System	
EP-0009	EPIC System Platform License	1
EP-0010	SAFE System License (Requires EP-0009)	1
EP-0022	EPIC System Intercom Paging & Bells License (Requires EP-0009)	1
EP-0034	EPIC Phone Integration License	1
	Category : Training	
	System : EPIC Head End System	
EP-0035	EPIC Administrator Training	1



## **Additional BOM Items**

Part#	Product Name	Qty
	Category : Classroom Equipment	
PA-0164	Black Surface Mount Box	3
	Category : EPIC System School Equipment	
AC-0004	18/2 Spooled Speaker Wire Plenum Rated Per Foot, White	28000
SE-0083.	Install Supply Kit	143
	Category : Services	
SE-0025	Travel Services	1
SE-0032	Inspection & Commissioning	151
	Category : Software Licensing	
EP-0032	InfoView Visual Messaging and Clock License (Requries EP-0009)	1







#### **Angled View**

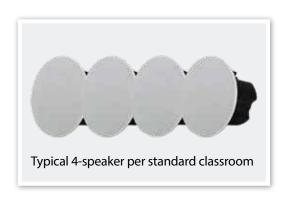


#### **Tile Bridge**



Included with each CS-12 speaker.

The **Celing Speaker** (CS-12) has a tuned ported enclosure that provides superior bass reponse while maintaining efficiency. Speaker grill comes preinstalled from factory. Spring-loaded mounting tabs make for easy and secure installation. Metal speaker back meets UL 2043 criteria for plenum installation. All metal, spring-loaded terminals provide easy and convenient attachment of speaker wires.





### **Speaker Specifications**

Frequency Response	70 Hz to 15 kHz (-10dB) 100 Hz to 14 kHz +/- 2 dB
Power Handling	50 W continuous pink noise
Sensitivity	88 dB 1 Watt / 1 meter
Impedance	8 Ohms nominal
Туре	Vented enclosure
Mounting	Spring-loaded mounting tabs
UL 2043	Speaker back can meets UL 2043 criteria for plenum installation
Weight	3.0 lbs. (1.36 kg)
Dimensions	Depth 5.8 in. (147.3 mm) Grill Diameter 8.5 in. (216.0 mm) Mounting hole 7.0 in. (178.0 mm)





# **EPIC KIOSK**

# **SPEC SHEET**



The **EPIC System Kiosk** is a compact computing device specifically designed to power the front-end interactions of EPIC (Education Paging and Intercom Communications) System®. The Kiosk features a 24" (23.6" viewable) full HD multi-touch display. The EPIC System Kiosk also includes a paging microphone that provides crystal-clear audio, ensuring important messages will be heard clearly by their intended recipients.



# **SPECIFICATIONS**

EPIC SYSTEM KIOSK	
CPU Processor Type	Rockchip® RK3288W Cortex-A17 Quad-Core
Ports	(1) 3.5 mm Audio In, (1) 3.5 mm Audio Out, (1) HDMI In, (1) HDMI Out, (1) RJ45-Ethernet, (4) USB 2.0, (1) DC Power (12V/4A)
Networking	RJ45 Ethernet / WIFI - 802.11a/b/g/n/ac
Memory	2GB DDR3
Storage	16GB EMMC
Size	Display - 24 in (609.60 mm) Viewable Area - 23.6 in (599.40 mm)
Panel Type	IPS
Resolution	1920x1080
Static Contrast Ratio	3000:1
Brightness	250 cd/m2
Response Time (Typical GTG)	16 ms
Panel Surface	Anti-glare, Hard coating 3H
Touch Technology	Capacitive
Internal Speakers	(2) 2.50 W
Power Consumption	(Typical): 16 W (Max): 40 W
Voltage	AC 100-240V (universal), 50-60 Hz
Viewing Angles	178° horizontal, 178° vertical
Capsule Type	Uni-Directional Cardioid Microphone / Electret condenser
Sensitivity	-42dB + 3dB (0 dB = 1 V/microbar, 1K Hz indicated by open circuit)
Regulations	cTUVus, FCC-B(including ICES003), FCC-ID, CA IC
Frequency response and output impedance	70Hz to 16K Hz / 600ohm + 30% (at 1K Hz) (RL=680 ohm)
Microphone Connector	(Male) 3.5 mm Stereo plug
Goosenect Length	19 in (482.60 mm)
VESA Compatible Mount	3.93 x 3.93 in (100 mm x 100 mm) / Screw Size: M4
Weight	Net 12.70 lbs. (203.20 oz) / Gross 16.70 lbs (267.20 oz)
Packaging Dimensions	25 (H) x 17.10 (W) x 4.90 (D) in (643 x 435 x 140 mm)
Kiosk Dimensions	22.60 (H) x 13.90 (W) x 1.90 (D) in (572.90 x 351.80 x 47 mm)

Audio Enhancement products are RoHS and UL compliant. Kiosk Specifications \*EPIC System Kiosk Paging Microphone is not UL Listed



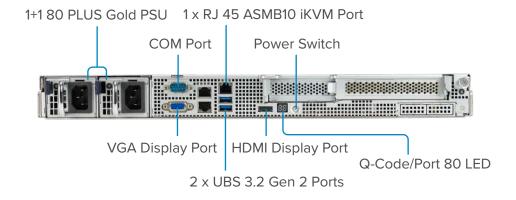
# EPIC HEAD END SERVER SPEC SHEET



EPIC System (Education Paging & Intercom Communications)® is a foundational solution built specifically for Education. EPIC System provides an inside look into campuses leveraging an interactive platform accessible via a web browser and mobile app. The EPIC Head End Server is a fully integrated device

specifically designed to keep all the functions of EPIC System running smoothly.





EPIC HEAD END SERVER	
Processor Support	1 x Socket LGA 1200 Intel® Xeon® E processors (up to 95W) Intel® Pentium™ processors
Core Logic	Intel® C252 PCH
	Total Slots
Memory	4 (2 channel) Capacity Maximum up to 128GB Memory Type DDR4 3200/2933/2666 ECC and non ECC UDIMM Memory Size 32GB, 16GB, 8GB, 4GB (UDIMM)
Expansion Slots	Total PCI/PCIX/PCI E/PIKE Slots (3) Slot Type  1 x PCI E x 16 (Gen4 x16 Link, switch to x8 link when slot B occupied), FH/HL 1 x PCI E x 8 (Gen4 x8 Link), HH/HL 1 x PCI E x 8 (Gen3 x4 Link), Proprietary R/A slot (optional for Intel X710 10G LAN card)
Disk Controller	SATA Controller Intel® C252 Chipset 6 x SATA3 6Gb/s ports Intel®VROC (For Linux/ Windows) (Support Software RAID 0/1/5/10  SAS Controller ASUS PIKE II 3008 8i 8 port SAS 12G RAID card ASUS PIKE II 3108 8i 8 port SAS 12G HW RAID card
Storage Bays	4 x 3.5"/2.5" Hot Swap HDD Bays, up to (2*SATA/SAS/ NVMe + 2*SATA/
Networking	2 x Intel® I210 AT + 1 x Mgmt LAN
Graphic	Aspeed AST2600 with 64MB VRAM
I/O Ports	Rear I/O Ports  2 x USB 3.2 Gen 2 ports  1 x VGA port *  1 x HDMI port from CPU  1 x COM port  2 x RJ 45 ports  1 x RJ 45 ports (One for  ASMB10 iKVM)(Optional)  Front I/O Ports  1 x VGA port*  2 x USB 3.2 Gen1 ports  *Must support by ASMB10
Power Supply	Single 350W 80 PLUS Gold PSU (RS300-E11-PS4) 1+1 450W 80 PLUS PLATINUM RPSU (RS300-E11-RS4)

EPIC HEAD END SERVER (CONTINUED)		
Switch/LED	Rear Switch/LED:  1 x Q-Code/Port 80 LED 1 x Power switch Front Switch/LED:  1 x Power switch/LED 1 x Location switch/LED 1 x Reset switch 1 x HDD Access LED 1 x Message LED LAN 1-2 LED	
Environment	Operation temperature: 10°C~ 35°C Non operation temperature: -40°C~ 70°C Non operation humidity: 20% ~ 90% (Non condensing)	
Weight	22.70 lbs. (363.32 oz)	
Dimensions	1.73 (H) x 17.3 (W) x 19.57 (D) in. (497 x 439.5 x 44 mm)	

#### CLAUDIA



Classroom Link Advanced Unit for Delivery of Instruction and Audio

### Specifications\*

#### Classroom CLAUDIA



Rear



#### Front Office CLAUDIA



Rear



#### **CLAUDIA** in your Classroom

**CLAUDIA** provides connectivity and control of the local sound system from an easy to use touchscreen interface right at the teacher's desk. The teacher can connect their computer through the integrated audio input. Additionally, it provides simple integration for use with teleconference services such as Zoom, Google Meets<sup>™</sup>, and other platforms used for remote learning. Optional features such as SAFE (Signal Alert For Education) System<sup>®</sup> alerts and VIEWpath<sup>®</sup> (Video Interactive Education Window) recordings can be activated directly from the 7" touchscreen interface.

#### **CLAUDIA** in your Front Office

**CLAUDIA** in your front office provides an easy interface for streaming music to designated parts of your campus through EPIC System. CLAUDIA will allow music to be played from a local device connected directly. CLAUDIA will also store 200+ songs directly on the device which can be played directly from the 7" touchscreen interface.



#### **Features**

- Wireless connectivity to your installed XD Classroom Audio System provides 2-way audio between CLAUDIA and the installed XD Classroom Audio System
- Audio sources such as the teacher's computer, large front of classroom display, or tablet device can be integrated wirelessly between CLAUDIA and the installed XD Classroom Audio System
- 7" Touchscreen display provides for an easy user interface to manage all functions of CLAUDIA
- Web Interface: Through the web interface, the broadcast name of the CLAUDIA system can be customized to more easily manage to which unit a teacher's device is connected
- Multiple Inputs/Outputs: CLAUDIA provides 2 line level inputs and outputs ensuring that both educational functions and assistive listening applications can be accommodated at the same time

### **CLAUDIA Specifications\***

Power Supply	USB-C Power Supply (Included) 5.1 Volt 3.5 Amp 5ft Power Cable (18 AWG) UL Listed
Touchscreen	7" Capacitive touch display Resolution: 800 x 480 Full Color Display Size:  • Physical Screen Size: 4.33 (H) x 7.63 (W) x 0.78 (D) in. (110 x 194 x 20 mm)  • Viewable Screen Size: 3.38 (H) x 6.10 (W) (86 x 155 mm)
System Specifications	
Processor	Broadcom BCM2711, quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
Memory	2GB
Connectivity	2.4 GHz and 5.0 GHz IEEE 802.11b/g/n/ac wireless Gigabit Ethernet 2 × USB 3.0 ports 2 × USB 2.0 ports
Environment	Operating temperature 32–120°F (0–50°C)
Audio Input	2 X 3.5mm Line Level Inputs with independent volume control
Audio Output	2 x 3.5mm Line Level Outputs with independent volume control
Wireless Transceiver	XD Technology 1.9 GHz DECT Based Wireless Transceiver (Classroom version only)
Temperature/Humidity	Storage: -40 to 158°F (-40 to +70°C) / 10-90% non-condensing Operating: -32-122°F (0 to +50°C) / 10-90%
Weight	1.5 lbs (0.68 kg)
Dimensions	5.50 (H) x 8.75 (W) x 4.125 (D) in. (Fully Upright) (139.7 x 222.25 x 104.78 mm)

<sup>\*</sup> All specifications subject to change.





## 2U Shelf, 15" Deep, Vented

UPC 716408537627 MODEL GRW-SHELFVNT2



COLOR Black
WEIGHT 2.5 lbs
HINGES WHEELS ATA ACCEPTED LOCKABLE NO
HANDLES LATCHES -

#### **Interior Dimensions**

Length 14.94" Width 17.44" Height 3.4"

#### **Exterior Dimensions**

Exterior Length 15"
Exterior Width 19"
Exterior Height 3.46"

#### **Shipping Dimensions**

Exterior Length: 23.8"

Exterior Width: 21.3"

Exterior Height: 16.9"

Weight: 9.0 lbs

#### **FEATURES**

- ► Cold Rolled 16 Gauge Steel Construction
- ▶ Black Powder Coated Finish
- Rear Flanged for Rigidity

WATER RESISTANCE

- ▶ Elongated Vent Holes for Optimum Air Circulation
- Max Weight Capacity: 66 lbs./30 kg

# EPIC 70V CEILING SPEAKER

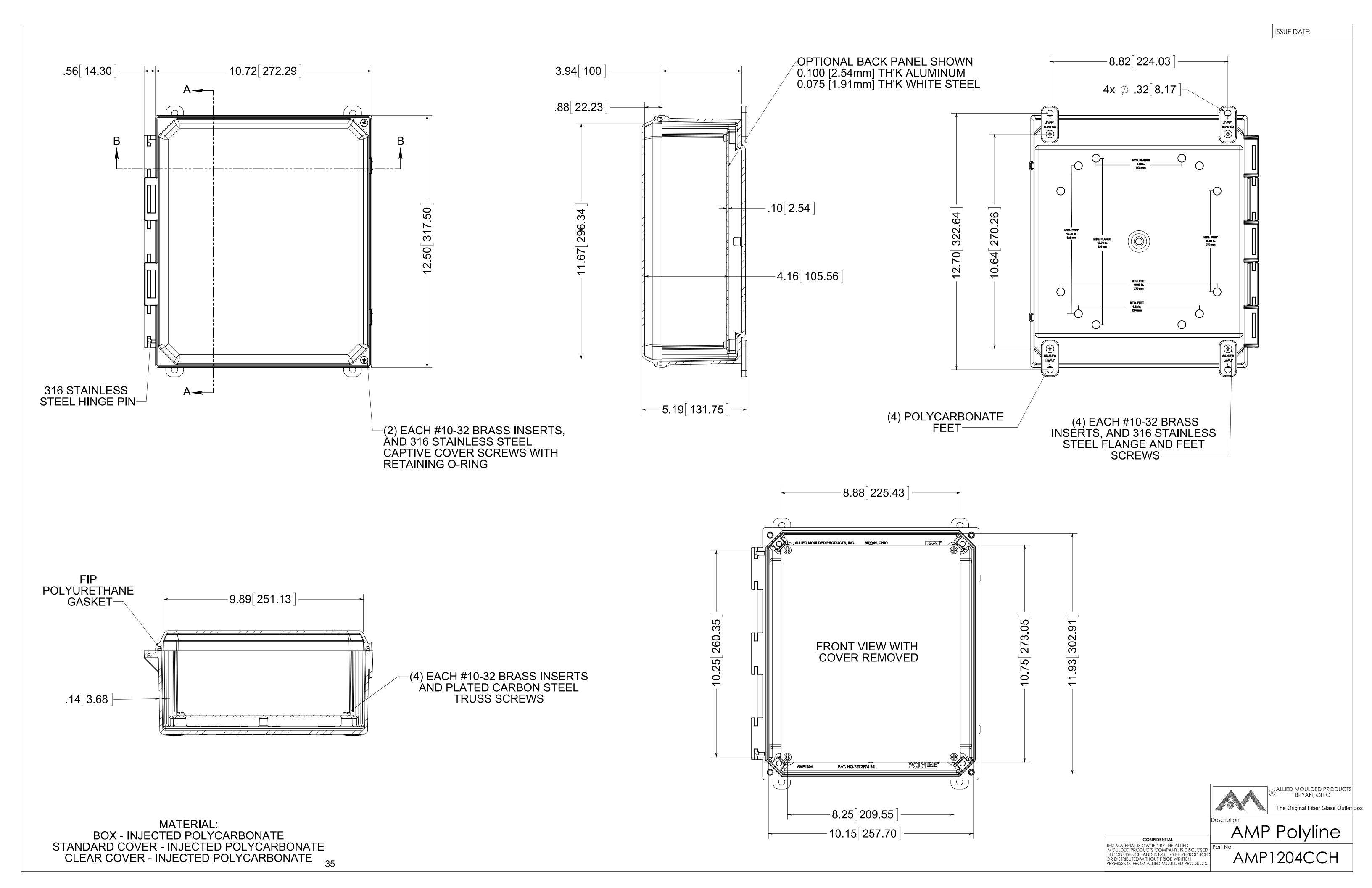


**SPEC SHEET** 

The **EPIC 70V Ceiling Speaker** is a fully assembled speaker, including the back can and speaker grill. The speaker has a tuned ported enclosure and transformer tap selector that is easily accessible on the side of the speaker's back can. Spring-loaded speaker terminals make connection to speaker wire runs simple and easy.



70V CEILING SPEAKER, CIRCLE CUT IN		
Frequency Response	85 Hz - 16 kHz	
Power Handling	50W continuous pink noise	
Sensitivity	96 dB (1W/1M)	
Transformer	8 Ohm - bypass 100V Taps (NC, 15W, 10W, 5W, 2.50W) 70V Taps (15V, 7.50W, 5W, 2.50W, 1.25W) 25V Taps (1.90W, 0.90W, 0.60W, 0.30W, NC)	
Mounting	(5) Spring-loaded mounting tabs	
Mounting Hole Diameter	11.50 in (292.10 mm)	
Plenum Rated Back Can	Speaker back can meets UL2043 criteria for plenum installation	
Speaker Wire Terminals	Spring loaded quick install terminals	
Tile Bridge Support	(1) Stainless steel tile bridge	
Weight	7.10 lbs (113.60 oz)	
Dimensions	13.50 (W) x 6.25 (D) in (342.90 mm x 158.75 mm)	



# 25/70V VOLUME CONTROL



**SPEC SHEET** 

The **25/70V Volume Control** is a versatile device that works well with 25V, 70V, and 100V Intercom, Paging & Bell Systems. It is specifically designed to fit into most high and low-voltage single-gang junction boxes. With the 25/70V Volume Control, you can easily adjust the volume from minimum to maximum by turning the knob clockwise through a range of 11 positions, without any sudden cuts or interruptions.





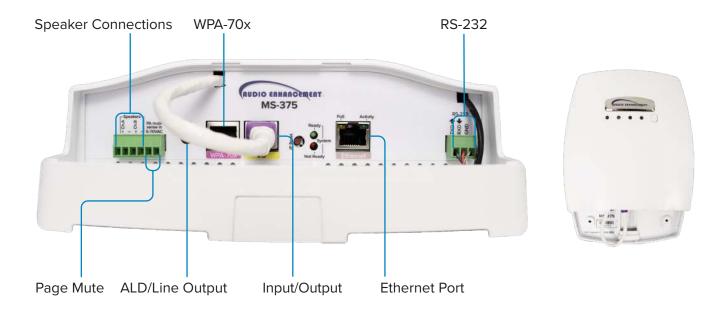
25/70V VOLUME CONTROL		
Power Rating	25 W RMS	
Frequency Response	20 Hz – 20 kHz, +/- 0.5 dB with typical 70V load	
Total Harmonic Distortion (THD)	<1%	
Wire Connector	Removable Euroblock screw terminals, up to 12-gauge wire	
Rotary Switch	11-Position rotary volume control attenuation with make-before break contacts	
Attenuation Levels	OFF, 2 steps @ 6 dB, 7 steps @ 3 dB, ON	
Mounting	Fits most standard electrical junction boxes	
Weight	0.60 lbs (9.60 oz)	
Dimensions	4.50 (H) x 2.80 (W) x 3.20 (D) in (114.30 x 71.12 x 81.28 mm)	

# MS-375 NETWORK INTERFACE



**SPEC SHEET** 

The MS-375 Network Interface is used to expand the range of the XD microphones non-paired SAFE Alert process. The unit can be placed in areas of the campus that are not densely covered by other classroom systems (e.g. in the physical fitness area of a large Middle School or High School) thanks to Powered over Ethernet (PoE) technology. The non-paired SAFE Alert process allows any Audio Enhancement XD Teacher Microphone to activate a SAFE Alert from anywhere on the campus, even if they are out of range of their paired XD Receiver.



# **SPECIFICATIONS**

Line Input	Internal Network Audio
Line Outputs	(1) Unbalanced (3.5 mm) output
Minimum Load Impedance	4 Ohms
Amplifier Type	92% Efficient Class D for network audio only
Continuous Power @ 1% THD	25W powered by PoE <sup>†</sup>
S/N	>89 dB @ 20 Hz to 20 kHz at maximum output
Protection Circuits	Thermal and short circuit protected
PA Connector	Connects to public address system and mutes amplifier during announcements Input Voltage: 4.0V RMS to 74V RMS
Control Port	RS-232, 3-pin screw terminal block header, RJ45 remote control port  RS-232 communication port  Intercom call, emergency alert, room microphone wall plate port (WPA-70x)  Input/output (I/O) aux port for sense, strobe, etc.
Power Supply	PoE+ 802.3af/at <sup>†</sup>
Temperature/Humidity	Storage: -40 - 158° F (-40 - +70° C) 10-90% non-condensing Operating: -32 - 122° F (0 - +50° C) / 10-90%
Enclosure Type	Plastic
Ethernet I/F	10/100 Mbps
Power Input (Network)	PoE 802.3af/at <sup>†</sup>
Operating Temperature	14 - 122° F (-10° - 50° C)
Protocols	SIP RFC 3261 compatible UDP Directed Broadcast Multi-cast and VoIP enabled
Lineout: Output Signal Amplitudes	2.0 VPP maximum
Output Level	+2 dBm nominal
Total Harmonic Distortion	0.5% maximum
Weight	1.3 lbs (20.80 oz)
Dimensions	1.13 (H) x 9.19 (W) x 3.56 (D) in (28.57 x 233.43 x 90.42 mm)
XD RECIEVER	
System Frequency	DECT 1.9 GHz
Coverage	Adjustable for optimal coverage from small calssrooms to cafes, gyms, and other large spaces
Microphone Type	Undirectional electret condenser microphone
Auxiliary Input	Line level 35 stereo mini jack (monarural mix)
Power Requirement	24V DC @ 130 mA
Temperature Range	32 - 104° F (0 - 40° C)

SAFE (Signal Alert For Education) System (patent pending) is on alert notication system not intended to be a life-saving device or prevent emergencies. Audio Enhancement, our agents, employees, subsidiaries, affliates and parent companies are exempt from liability for any loss, damage, injury, or other consequence arising directly or indirectly from the application of our equipment. In the event of misuse or malfunction of the SAFE System or any of its components, Audio Enhancement, our agents, employees, subsidiaries, affliates, and parent companies are exempt from liability for any loss, damage, injury, or other consequence arising directly or indirectly therefrom.



<sup>&</sup>lt;sup>†</sup> Dependent on PoE switch.

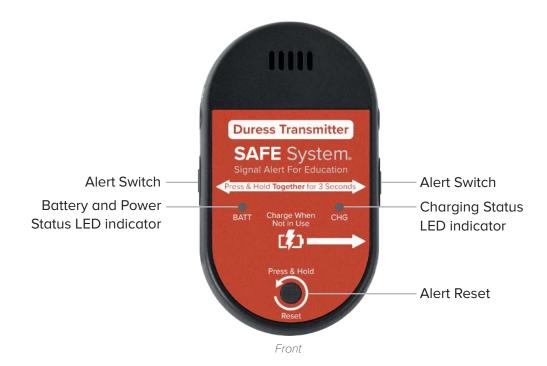
<sup>\*\*</sup>Third party SIP license required.

# SAFE DURESS TRANSMITTER



## **SPEC SHEET**

The **SAFE Alert Duress Transmitter** is an easy and convenient way to provide non-teaching faculty with the ability to call for help from anywhere on the campus. It provides a non-paired alert through any available XD Receiver, alerting the office to the need for some assistance, and using up to five XD Receivers to estimate the location of the individual that activated the SAFE Alert.





SAFE ALERT DURESS TRANSMITTER	
Duress Button Controls	Alert Reset Button Alert Switches - Emergency Security Function (SAFE System)
System Frequency	DECT Technology 1.9 GHz
Battery Type	Lithium-lon Battery (rechargeable)
Charge Time	~4 Hours (5V/500mA)
Charging Method	Micro USB charger (supplied)
Temperature Range	41° - 95° F (5° ~ +35° C) Maximum Temperature 95° F
Humidity Range	~90%
Weight	.11 lbs (1.80 oz)
Dimensions	3.31 (H) x 1.89 (W) x 0.63 (D) in (84 x 48 x 16 mm)

<sup>\*</sup>The SAFE System (patent pending) is an alert notification system not intended to be a life-saving device or prevent emergencies. Audio Enhancement, our agents, employees, subsidiaries, affiliates and parent companies are exempt from liability for any loss, damage, injury or other consequence arising directly or indirectly from the application of our equipment. In the event of misuse or malfunction of the SAFE System or any of its components, Audio Enhancement, our agents, employees, subsidiaries, affiliates and parent companies are exempt from liability for any loss, damage, injury or other consequence arising directly or indirectly therefrom.

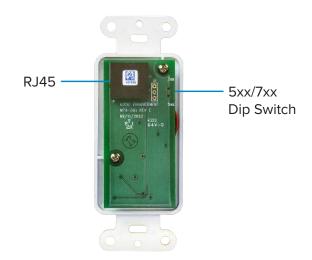


# WPA-702 SPEC SHEET



The WPA-702 Wall Plate has a built-in ambient microphone, a call button, and emergency button enabling communication between classrooms and the office through 2-way intercom calls and providing SAFE alerts. It also features a versatile 5xx/7xx dip switch allowing it to function with any 500, 600, and 700 device.



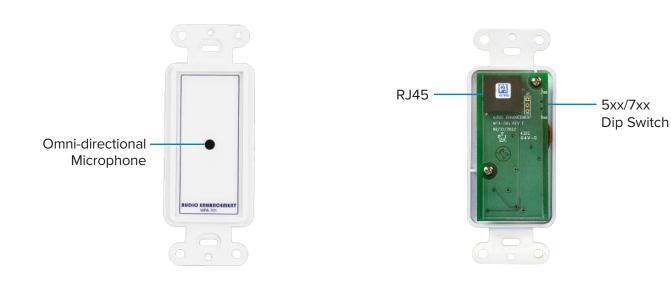


WPA-702, CALL BUTTON, EMERGENCY BUTTON, AMBIENT MIC WITH DECORA® PLATE		
Mounting	Standard single-gang Decora® wall plate included	
Color	White	
Microphone Type	Omni-directional electret	
Terminations	RJ45 (button contacts & 24V DC)	
Weight	.05 lbs (.08 oz)	
Dimensions	4.09 (H) x 1.26 (W) x 1.50 (D) in (103.89 x 32 x 38.10 mm)	

# WPA-701 SPEC SHEET



The WPA-701 Wall Plate has a built-in ambient microphone, enabling communication between the classrooms and the office through 2-way intercom calls. It also features a versatile 5xx/7xx dip switch allowing it to function with any 500, 600, and 700 device.



WPA-701, AMBIENT MIC WITH DECORA® PLATE		
Mounting	Standard single-gang Decora® wall plate included	
Color	White	
Microphone Type	Omni-directional electret	
Terminations	RJ45 (24V DC)	
Weight	.05 lbs (0.08 oz)	
Dimensions	4.09 (H) x 1.26 (W) x 1.5 (D) in (103.89 x 32 x 38.1 mm)	





#### **Angled View**

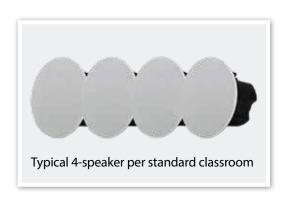


#### **Tile Bridge**



Included with each CS-12 speaker.

The **Celing Speaker** (CS-12) has a tuned ported enclosure that provides superior bass reponse while maintaining efficiency. Speaker grill comes preinstalled from factory. Spring-loaded mounting tabs make for easy and secure installation. Metal speaker back meets UL 2043 criteria for plenum installation. All metal, spring-loaded terminals provide easy and convenient attachment of speaker wires.





## **Speaker Specifications**

Frequency Response	70 Hz to 15 kHz (-10dB) 100 Hz to 14 kHz +/- 2 dB
Power Handling	50 W continuous pink noise
Sensitivity	88 dB 1 Watt / 1 meter
Impedance	8 Ohms nominal
Туре	Vented enclosure
Mounting	Spring-loaded mounting tabs
UL 2043	Speaker back can meets UL 2043 criteria for plenum installation
Weight	3.0 lbs. (1.36 kg)
Dimensions	Depth 5.8 in. (147.3 mm) Grill Diameter 8.5 in. (216.0 mm) Mounting hole 7.0 in. (178.0 mm)









#### **Angled View**

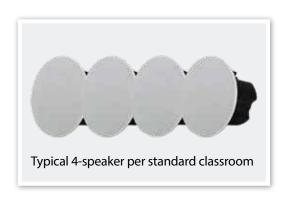


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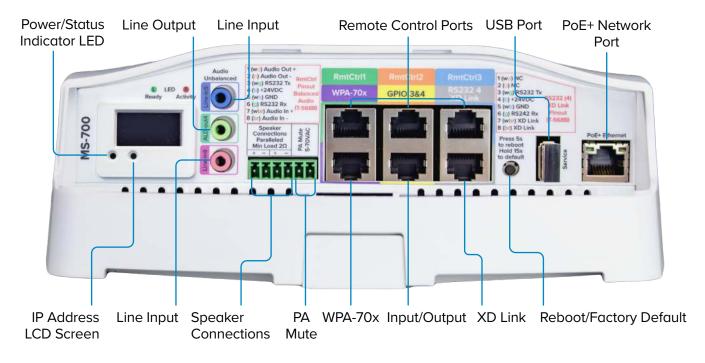


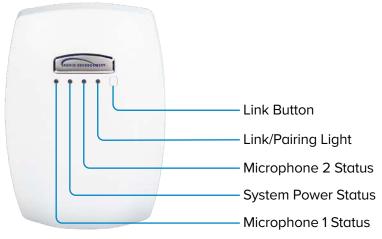
# MS-700 OPTIMUM AMPLIFIER



**SPEC SHEET** 

The MS-700 Optimum Amplifier is a fully integrated networked classroom amplifier and wireless microphone receiver. This amplifier has network-based intercom, paging and emergency notification, and provides full-duplex audio. It is easy-to-use, easy-to-install, and has simple user interface software. The entire unit utilizes Power over Ethernet (PoE+). Intercom and paging functionalities<sup>†</sup> are built-in. When used in conjunction with an Uninterruptable Power Supply (UPS), during emergencies, paging can still be heard, even when the power goes out. This unit can be installed as part of the SAFE System (Signal Alert For Education)<sup>®</sup>.





# **SPECIFICATIONS**

MS-700 OPTIMUM AMPL	IFIER WITH INTEGRATED XD RECEIVER
Line Inputs	For PC, DVD audio, MP3, auxiliary mic, or other multimedia sources  • (2) Line unbalanced stereo inputs (3.5 mm)  • (3) Remote control ports with audio in  • Internal Network Audio  • Integrated XD Microphone Receiver
Line Outputs	(1) Unbalanced (3.5 mm) output (3) Remote control ports with audio out (RJ45 connectors)
Equalizer	5-Band Equalizer
USB A Connector	Control and configuration via BLE App
Minimum Load Impedance	4 Ohms on each pair of terminals (2 Ohm load overall is nominal)
Amplifier Type	92% Efficient Class D
Continuous Power @ 1% THD	30W powered by PoE <sup>+</sup>
S/N	>89 dB @ 20 Hz to 20 kHz at maximum output
Protection Circuits	Thermal and short circuit protected
PA Connector	Connects to public address system and mutes amplifier during announcements Input Voltage: 4V RMS to 74V RMS
Control Ports	<ul> <li>(3) RJ45 remote control ports</li> <li>Integration with LCD wall plate control</li> <li>Input/output (I/O) aux port for sense, strobe, etc.</li> <li>(1) WPA-70 wall plate port for Intercom call, emergency alert, room microphone</li> <li>(1) Input/output port</li> </ul>
Power Supply	PoE + 802.3af/at <sup>-</sup>
Temperature/Humidity	Storage: -40 - 158° F (-40 - +70° C)/ 10-90% non-condensing Operating: -32 - 122° F (0 - +50° C) / 10-90%
Enclosure Type	ABS Plastic
Ethernet I/F	10/100 Mbps
Power Input (Network)	PoE 802.3af/at <sup>+</sup>
Protocols	SIP RFC 3261 compatible UDP Directed Broadcast Multi-cast and VoIP enabled
Lineout: Output Signal Amplitudes	2.0 VPP maximum
Output Level	+2 dBm nominal
Total Harmonic Distortion	0.5% maximum
Weight	2.15 lbs (40 oz)
Dimensions	12.20 (H) x 8.70 (W) x 3.00 (D) in (310 x 221 x 76 mm)

The SAFE System (patent pending) is an alert notification system not intended to be a life-saving device or prevent emergencies. Audio Enhancement, our agents, employees, subsidiaries, affiliates and parent companies are exempt from liability for any loss, damage, injury or other consequence arising directly or indirectly from the application of our equipment. In the event of misuse or malfunction of the SAFE System or any of its components, Audio Enhancement, our agents, employees, subsidiaries, affiliates and parent companies are exempt from liability for any loss, damage, injury or other consequence arising directly or indirectly therefrom.

<sup>&</sup>lt;sup>†</sup> Dependent on PoE switch.

<sup>\*</sup>Third party SIP License required.

## **Limited Warranty**



Audio Enhancement, Inc. is pleased to offer the following warranty.

A standard Five (5) year limited manufacturer's warranty ("Limited Warranty") against malfunction due to manufacturing defects in materials or workmanship on the IR and XD teacher and student microphone, XD receiver (K-SRC14), CA-30, CA-60, GL-300, Hydra II, XDSolo™, BEAM, BEAM Pro, Handheld Microphone Holder, and Ceiling and Wall speakers ("Audio Enhancement Products"). The Limited Warranty applies only if: (1) the Audio Enhancement Products are installed according to manufacturer's instruction provided to Customer and (2) the Audio Enhancement Products are not misused or abused, and there is no evidence of mishandling, neglect, modification, or repair without the approval of Audio Enhancement.

A standard three (3) year limited manufacturer's warranty ("Limited Warranty") against malfunction due to manufacturing defects in materials or workmanship on the Edu-Cam360, EduCam 360-A, EduCam360-B, EduCam360-C, EduCamPTZ, EduCamPTZ-B, MS-1000 Monitoring Station (MS-1000), AVConnect (HDBaseT), SAFE System, EPIC System Server, MS-300, MS-500, and CLAUDIA. The Limited Warranty applies only if (1) the Audio Enhancement product is installed according to manufacturer's instructions and by an Audio Enhancement certified installer and (2) the Audio Enhancement Products are not misused or abused, and there is no evidence of mishandling, neglect, modification, or repair without the approval of Audio Enhancement.

A standard one (1) year limited manufacturer's warranty ("Limited Warranty") against malfunction due to manufacturing defects in materials or workmanship on our General Electronics (including but not limited to: NVRs, Classroom Wall Box, MS-400, Hydra Adapter (SC-12-24VACDC), Wall Plate Accessories (WPA), Alert Notification Button, Mic360™, UPS (Uninterrupted Power Supply)), specialty cables and adapters. EPIC System Console Touchscreen, Server Drives, and EPIC System Console Paging Microphone. The Limited Warranty applies only if (1) the General Electronics is installed according to manufacturer's instructions and by an Audio Enhancement certified installer and (2) the General Electronics has not been misused or abused, and there is no evidence of mishandling, neglect, modification or repair without the approval of the manufacturer.

The EduCam390 camera SD card and 'AA' NiMH and lithium-ion batteries supplied by Audio Enhancement, Inc., carry a 90-day warranty from date of purchase.

The following is not included under this Limited Warranty: (1) Misuse or abuse by the Customer; (2) normal wear and tear; (3) physical damage to Audio Enhancement's Products because of unreasonable use and/or negligence; and (4) damage caused by service or repairs by the customer or a person who is not authorized for such service or repairs by Audio Enhancement.

This Limited Warranty is provided by Audio Enhancement, and it contains the only express warranty provided to Customer by Audio Enhancement. Audio Enhancement does not authorize any other person, including distributors, to give any other warranties on

Audio Enhancement's behalf. The repair or replacement as provided under the express limited warranty is the sole and exclusive remedy of the Customer and Audio Enhancement's sole and exclusive liability hereunder.

Audio Enhancement disclaims any express warranty not provided herein and any implied warranty, guarantee, or representation as to performance, quality and absence of hidden defects, and any remedy for breach of contract, which but for this provision, might arise by implication, operation of law, custom of trade or course of dealing, including implied warranties of merchantability and fitness for a particular purpose. In no event shall Audio Enhancement be liable, whether in contract, tort (including negligence) or otherwise, for damages more than the purchase price of the product giving rise to the damages, or for any direct, incidental, special, punitive, exemplary, or consequential damages of any kind. Audio Enhancement further disclaims any responsibility for losses, expenses, inconveniences, special, indirect, secondary, or consequential, incidental, and contingent damages whatsoever, including damages arising from ownership or use of Audio Enhancement's products.

Audio Enhancement shall bear no responsibility or obligation with respect to the manner of use of any equipment sold by Audio Enhancement.

Audio Enhancement specifically disclaims and negates any warranty of fitness for a particular purpose of such equipment including, without limitation, any warranty that the use of such equipment for any purpose will comply with applicable laws and regulations or overcome any specific hearing/auditory processing deficit. When returning units for service, use adequate packaging to prevent shipping damage. Shipping damage is not covered under warranty.



## **Technical Support**

Audio Enhancement Technical Support Representatives are available to assist by phone, chat, and email. With offices in West Jordan, Utah; Apopka, Florida; and Alpharetta, Georgia, we offer additional regional resources to ensure our local customers have all the support to meet their needs. Here is our companies technical support information and FAQ's.

#### **Contact Support:**

Hours: Monday-Friday 8:00am-7:00pm EST.

Phone: 800.932.3578

Email: Support@AudioEnhancement.com

Chat and RMA: www.AudioEnhancement.com/Support/

#### **Additional Support:**

**Training Website:** <a href="www.training.AudioEnhancement.com">www.training.AudioEnhancement.com</a> **YouTube Site:** <a href="www.youtube.com/user/AudioEnhancementInc">www.youtube.com/user/AudioEnhancementInc</a>

#### **Support Levels:**

**Level 1** Level 1 support is for basic audio systems. Tickets are created when a phone call is made, RMA is submitted, or an email is sent to support. Level 1 support services include troubleshooting with microphones, batteries, cabling, volume levels, information requests, and basic EPIC troubleshooting and setup.

**Level 2** When a higher level of support is required, tickets are escalated to Level 2 support. This type of support includes advanced audio troubleshooting. Enhanced EPIC support including device configuration, SIP integration, LDAP integration, and configuration of VIEWPath and VIEWPath Live.

**Level 3** Level 3 support is for final escalations and is handled by Audio Enhancement engineers and developers with 10+ years of experience.

### **Additional Support Personnel:**

Audio Enhancement headquarters is located in West Jordan, Utah with two satellite offices in Apopka, Florida and Alpharetta, Georgia. Between our three offices and field services reps across the country, Audio Enhancement can provide additional onsite support when needed.



# Statement of Features

**Project Summary \*** 



# **Project Information**

	KY, Christian County Public Schools, Christian County Academy
•	Request design team to design your school? *
•	Would you like Design to Review your project after it has been designed?
•	Will this project be using a Contract? * Yes, Kentucky Educational Development Corporation (KPC)
•	Will Audio Enhancement be Installing? * Yes
•	Does this project utilize Davis Bacon rates or Prevailing Wage? No
•	Site Status at Any Point During Implementation * New construction
•	Are there any drawings or specifications we are required to meet for this project? *No
•	Are we reusing existing intercom speakers? No
•	Will Audio Enhancement be Commissioning? Yes