

IP-SDH

PoE+ INDOOR IP ENDPOINT WITH HORN SPEAKER AND LCD DISPLAY

TECHNICAL DATA SHEET



PRODUCT SUMMARY

AtlasIED IP-SDH is an indoor wall mount IP endpoint with high-output horn and LCD display. It complements the Unified Communication (VoIP communications) investment including on-premise and hosted infrastructure platforms so that information can be pushed to people and spaces beyond the world of desktop telephony communication, breaking traditional audio-path barriers.

APPLICATIONS

AtlasIED IP-SDH registers as a communication endpoint directly within Singlewire®, AtlasIED®, and Syn-Apps® notification applications, supporting audio and/or scrolling text alerts and visual signaling to enhance physical security while improving day-to-day communications through advanced alerting, bell schedules and pre-recorded & scheduled announcements, while leveraging the WAN or LAN network architecture.

When using Singlewire's InformaCast® or Syn-Apps Revolution® notification applications, the IP-SDH can have its LCD display background colors sync'd to InformaCast® text and audio notification profiles. Customers can now display default color styles set for normal, warning and emergency notifications sending clear communication during any event.

AtlasIED IP-SDH supports Call Manager publisher subscriber SIP Service call processing failover. This service provides remote location call-processing redundancy when access to the centralized Call Manager is interrupted because of a WAN outage. In a Cisco® UMC environment, IPX devices can register to either Cisco's basic or advanced 3rd party SIP device service for intercom or paging functionality. IPX must use Cisco's advanced 3rd party SIP device service when registering to a publisher subscriber configuration is required.

Where 3rd party notification applications are not required, the IP-SDH endpoint can register as a SIP device directly to a SIP server or VoIP Communications Manager for critical alerts and public address applications.

Under Title II of the Americans with Disabilities Act (ADA), all state and local governments are required to take steps and ensure effective communication to individuals with disabilities. The AtlasIED IP-SDH IP endpoint with horn high-output horn and LCD display, provides effective communication for all individuals.

KEY FEATURES

Network Features

- Dynamic or Static IP Address
- IEEE 802.3 10/100Base-T Ethernet
- IEEE 802.1q Tagging
- IEEE 802.3at Compliant

Audio Codec Support

- G.711 u-law / a-law (16 kbit/s)
- G.722 Wideband Audio (64 kbit/s)

Auto Registration

- SLP for Singlewire Applications
- DNS SRV for Singlewire Applications
- DHCP Option 72 for Syn-Apps' Applications
- IEDNet+ for AtlasIED Applications

Static Configuration

- HTTP GUI for Static Configuration

Audio Features

- Integrated Amplifier with Secondary 8Ω output
- Aux Audio Line-In Balanced (2.8Vpp 10K)
- Aux Audio Line-Out Balanced (2.8Vpp 10K)

Visual Features

- High Resolution Multi-Color LCD Display for Time/Date and Scrolling Text
- Can send 1 Static Multicast Stream (Line-in or Mic to Multicast Out)
- Can listen up to 10 Static Multicast Streams

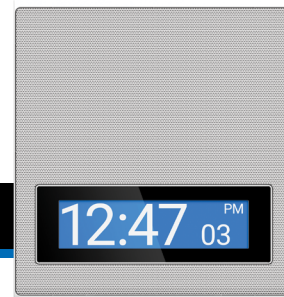
Additional Features

- 2 General Purpose Inputs
- 1 Relay Output (2A @ 30 VDC)
- Phone / Night Loud Ringer
- External Power Supply Option

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AUDIO SPECIFICATIONS / PERFORMANCE

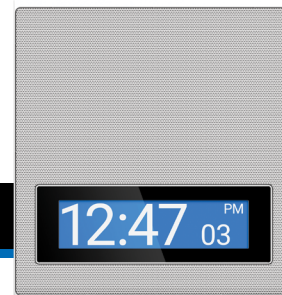
SYSTEM	
Type	PoE+ Indoor IP Endpoint with High-Output Horn Speaker and LCD Display
Operation Temp.	-20°C (-4°F) to 55°C (131°F)
Indicators	Network Status (On Back)
Operating Range (-10db)	600Hz - 14kHz
Frequency Response (+/- 5dB)	600 - 14,000 Hz (Nominal)
Vertical Coverage	95° (-6dB, 2000 Hz Octave Band)
Horizontal Coverage	95° (-6dB, 2000 Hz Octave Band)
Max SPL at 1m (Passive)	120dB at 15 Watts (Peak)
General Purpose Interface	Two Trigger Inputs / One Relay Output (2A @ 30 VDC)
TRANSDUCERS	
Transducer Qty and Size	3.8"
Voice Coil Size	1.25"
Cone Material	Double Entrant Compression Driver
AMPLIFICATION	
Type	Single-Channel Class D Topology with Primary and Secondary Outputs
AC Power Input	PoE+ and External 24VDC
Power Rating (RMS)	25-Watts Max (802.3AT)
THD	<0.2%
Cooling	Passive / Convection
Driver Protection	Built-In Limiter
AUDIO INPUTS AND OUTPUTS	
Input: Analog Audio Type(s)	One Balanced Line Level
Input: Analog Connectivity	Secured Screw Terminal Block
Input: Network Audio Type(s)	G.711 U-Law / A-Law and G.722 Capable
Input: Multicast Permanent Stream	Registered Subscriber/s for up to 10 Different Streams
Input: Network Connectivity	RJ-45 Female
Output: Analog Audio Type(s)	One Balanced Line Level
Output: Multicast Permanent Stream	One Broadcast Using Line-In or Integrated Microphone *** Note: Audio Does Not Play out of the Sending Device***
Output: Analog Connectivity	Secured Screw Terminal Block
Output: Digital Audio Type(s)	G.711 U-Law / A-Law and G.722 Capable (Multicast)
Output: Digital Connectivity	N/A
Output: Speaker Level	8Ω, 25-Watts (802.3AT)
Output: Speaker Connectivity	Primary and Slave Secured Screw Terminal Block
DISPLAY	
Display Type	High Resolution Back-Lit Color LCD Display
Display Color Range	16 Million Color Options for Both Backlit Display and Text
Surface Luminance	1900 cd/m ² Minimum, All White Pixels
Character Max Height	480 Pixels
Viewable Dimensions (H x W)	8.66" (221mm) x 2.23" (57mm)
Control	Time via NTP - Text Controlled via Software

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SPECIFICATIONS / PERFORMANCE (CONTINUED)

SOFTWARE	
AtlasIED GCK® Compatible Version	7.0+
InformaCast Advanced Compatible Version	4.0+
InformaCast Fusion Compatible Version	3.0+
SA-Announce Compatible Versions	9.0.18+
Intrado Revolution Compatible Versions	V2017.3.1+
NETWORK	
Ethernet	IEEE 802.3 10/100Base-T
PoE	IEEE 802.3 AT Compliant
VLAN	IEEE 802.1q Tagging
PROTOCOLS	
IP Addressing	DHCP / Static
LLDP-MED	PoE Power Negotiation
Auto-Registration	HTTP / Service Location Protocol / DNS SRV / IEDNet+ / DHCP Option 72 and Option 150
Time	NTP
Telephony	SIP
ENCLOSURE	
Color	White
Grille Material	Powder Coated Steel
Baffle Material	Plastic
Mounting / Rigging Provisions	4 x Screws
Safety Agency Ratings	ETL Listed to Comply with 62368-1, CSA C22.2 #62368-1, IEC 62368-1 CB Scheme and FCC
Ingress Protection	N/A
Logo	One Color Print
Product Dimensions (HxWxD)	14.37" x 12.87" x 4.18" (365mm x 327mm x 106mm)
Shipping Dimensions (HxWxD)	15.5" x 13.9" x 5.5" (394mm x 353mm x 140mm)
Net Weight - lbs	5.21lb (2.36kg)
Shipping Weight - lbs	6.66lb (3.02kg)
WARRANTY COVERAGE	
Warranty Period	5 Year

Note:

1. Sensitivity: Half space pink noise measurement at 6 ft (1.8 m) at 20% power; extrapolated to 1 meter and an input of 2.83 volts RMS.
2. Watts: All wattage figures are calculated using the rated nominal impedance.
3. Frequency response and sensitivity are half-space measurements.

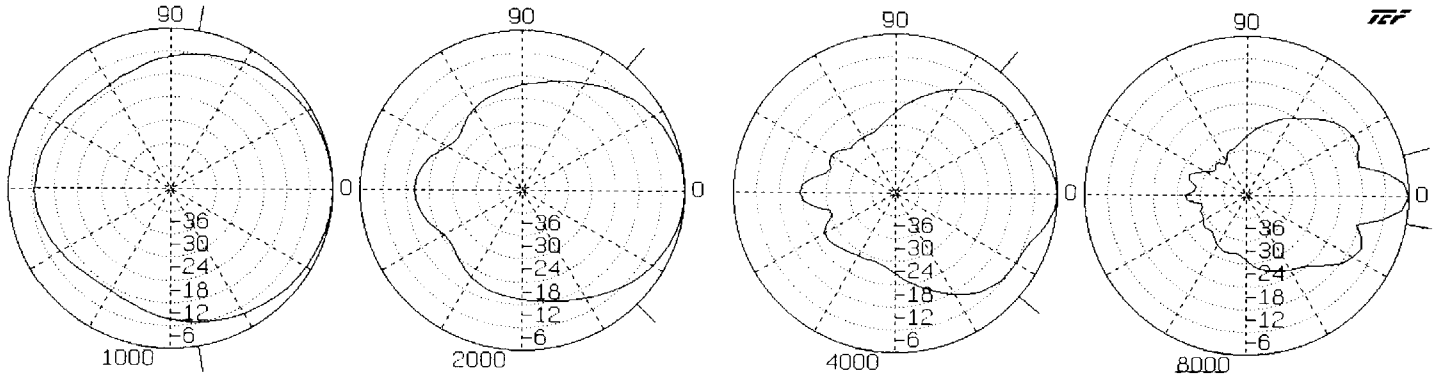
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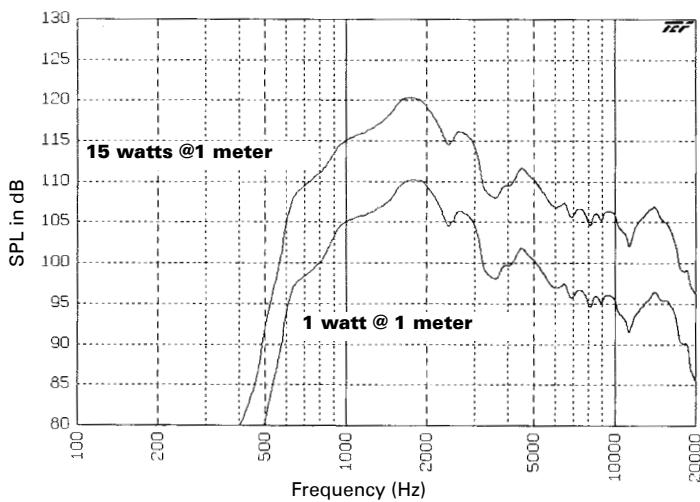
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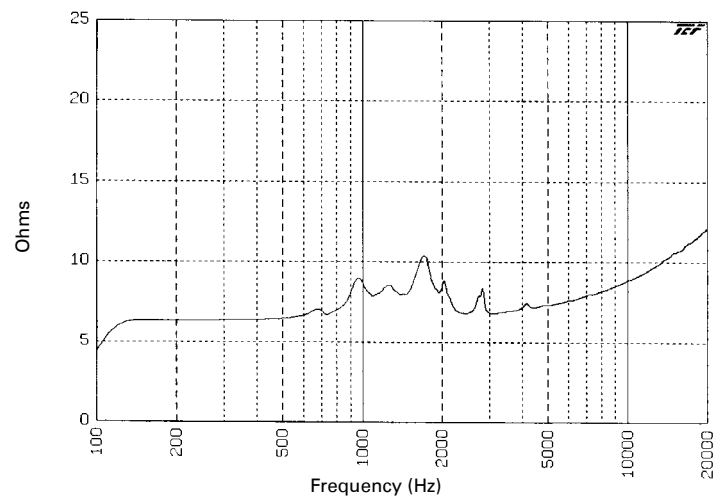
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Frequency Response



Impedance



IP-SDH

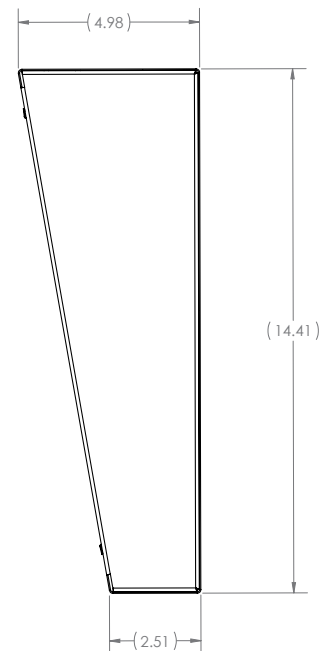
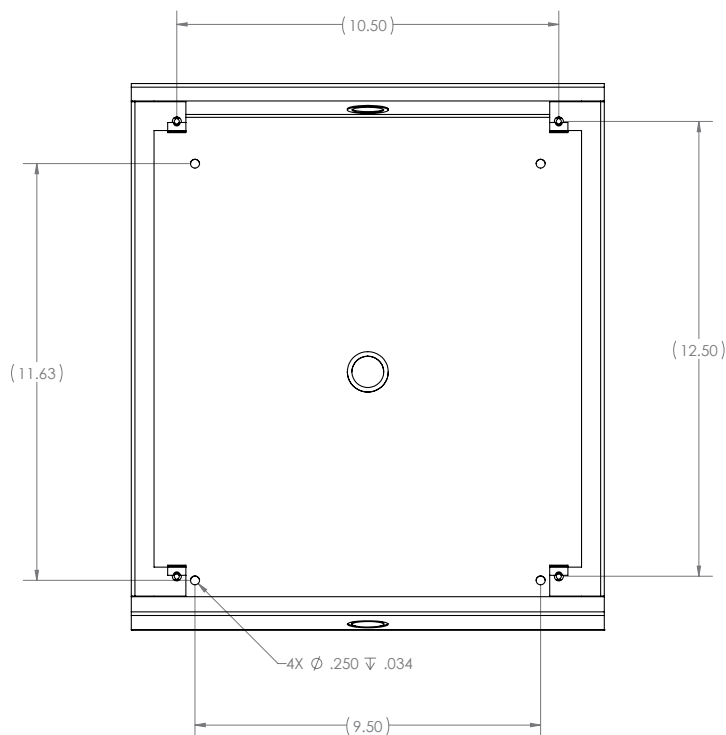
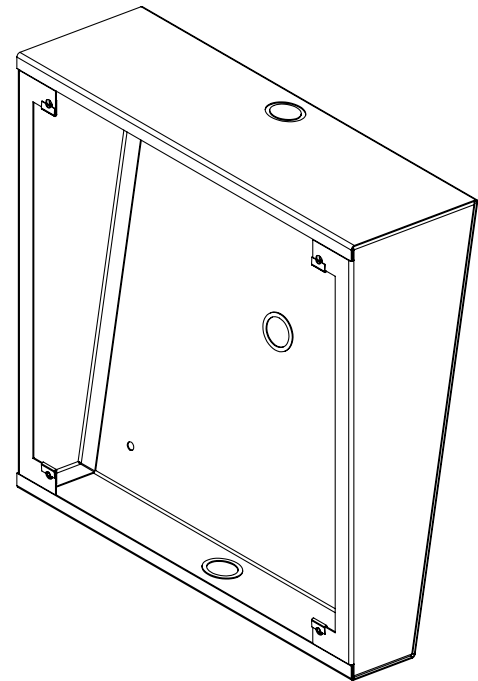
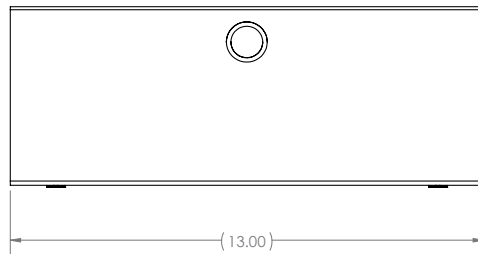
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DIMENSIONAL DRAWING

Accessories
IP-SEA-SD



IP-SDH

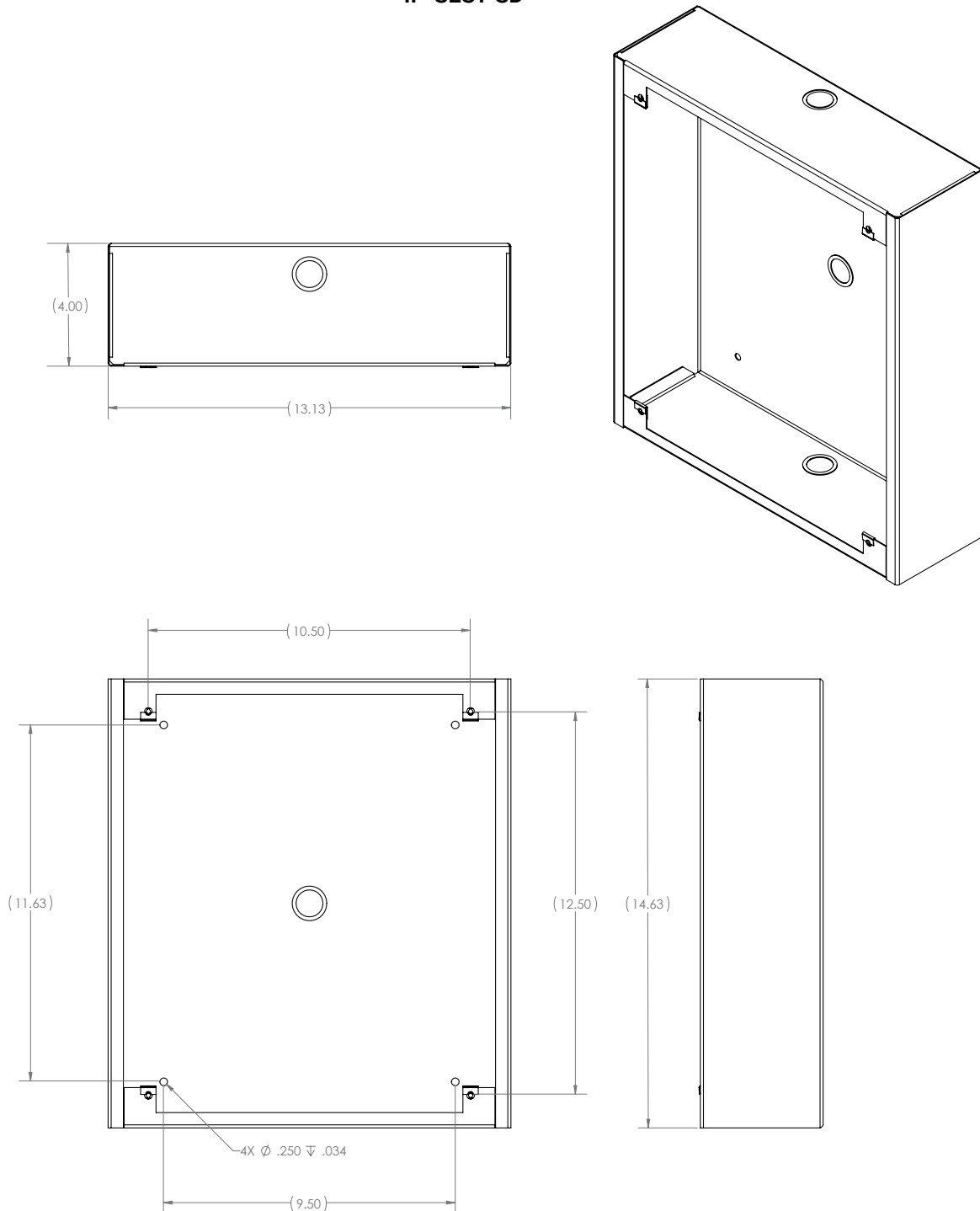
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Accessories
IP-SEST-SD



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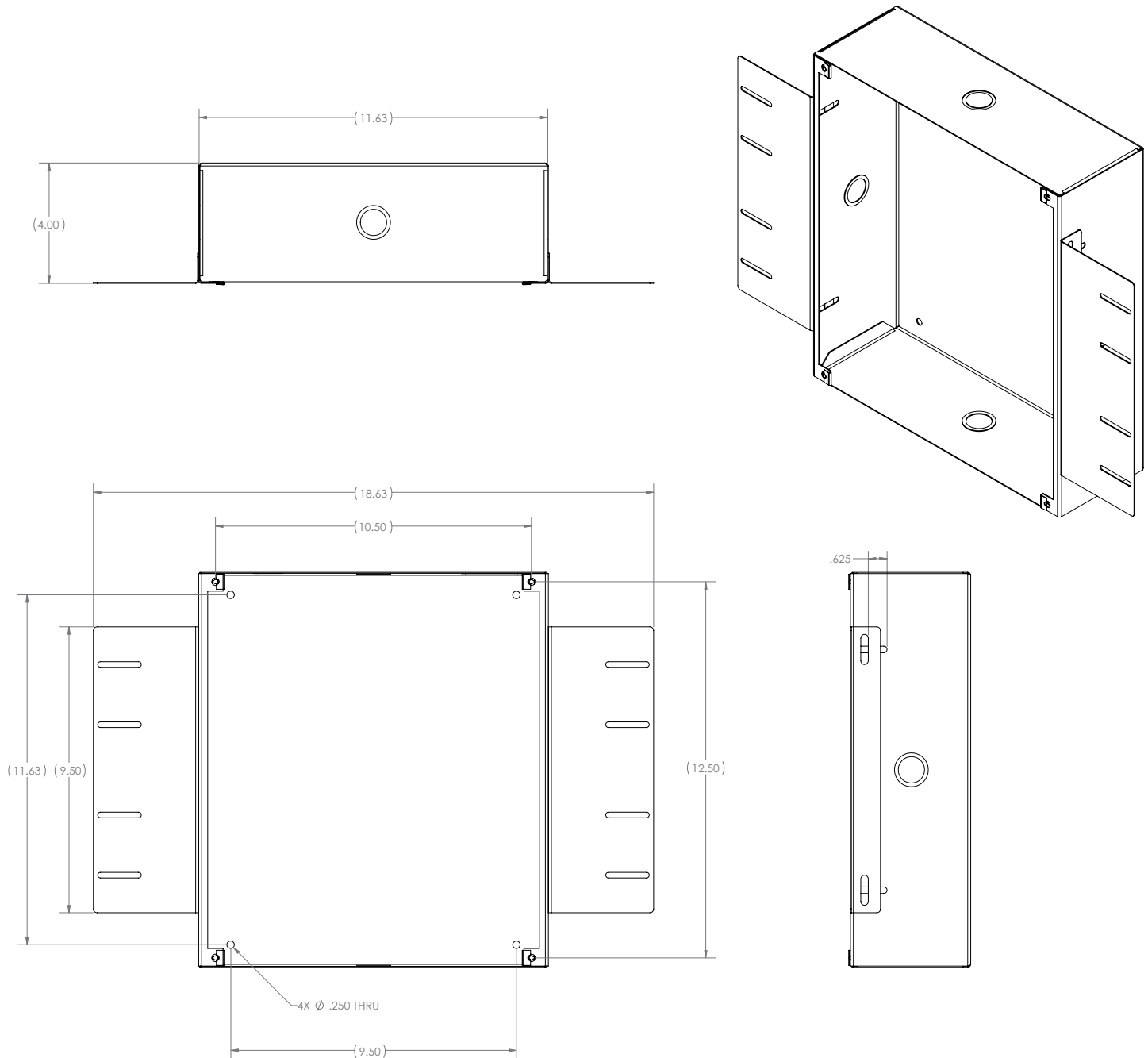
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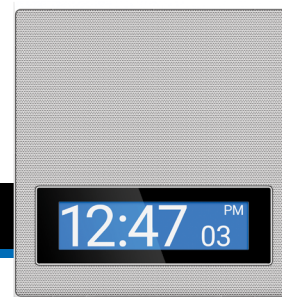
Accessories
IP-FEST-SD



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ARCHITECT AND ENGINEER SPECS

The unit shall be AtlasIED model IP-SDH. The PoE+ indoor IP endpoint audio system shall include factory assembled horn, IP addressable PCB amplifier/control, high-resolution multicolor LCD display, and plastic baffle.

The horn shall be a double re-entrant type with a 3.8" high-output compression driver. The impedance shall be 8Ω and a voice coil diameter of 1.25" (32mm). Frequency response shall be 600-14,000 Hz (nominal), 700-5500 Hz (± 5dB). Sound pressure level shall be 114dB (15-Watts/1m), 104dB (1-Watt/1m), and max peak output at 1-Watt/1m shall be 120dB SPL. Sound dispersion angle shall be 95°. The Horn dimensions shall be Diameter 5 $\frac{3}{8}$ " x D 3 $\frac{7}{16}$ " x Diameter Flange 6 $\frac{15}{16}$ "

The amplifier/control board shall receive announcements and messages using dynamically routed data on a standard Ethernet network. It shall include a single-channel class D topology amplifier with primary and secondary outputs capable of producing 25-watts RMS when using an IEEE 802.3at compatible PoE+ switch or 24VDC local power supply. Interconnect shall be via female RJ-45 connector mounted to the PCB.

The amplifier/control board shall include (2) logic inputs, (1) relay output, (1) auxiliary balanced line level audio input and (1) balanced line level audio output. The auxiliary line level input shall include an auto mute function that is activated when a broadcast is sensed from the control application.

The amplifier/control board shall include a Graphical User Interface (GUI) for SIP configuration. The SIP implementation shall support standards G.711, G.722 and RTP protocols. The GUI shall configure and manage logic inputs, relay outputs, and auxiliary audio input.

The unit shall incorporate a high-resolution back-lit color LCD display with viewable dimensions of 8.66" (221mm) wide x 2.23" (57mm) high. It shall receive visual notifications by AtlasIED's GCK, Syn-Apps' SA-Announce or Revolution, and Singlewire's InformaCast software platforms. It shall allow Singlewire's or Syn-Apps' custom display priority profile feature to automatically change its default background color to the user defined color styles while an alert is in progress. It shall display time and date when in standby mode from AtlasIED's, Syn-Apps', or Singlewire's software platforms or by NTP. The display shall produce 1900 cd/m² lux brightness and display text and/or time.

All control functionality shall be determined via software. It shall be compatible with AtlasIED's GCK, Syn-Apps' SA-Announce or Revolution, Singlewire's InformaCast software platforms and SIP standalone operation. The PoE+ indoor IP endpoint audio system overall dimensions shall be 14.37" (365mm) x 12.87" (327mm) x 4.18" (106.17mm). Finish shall be neutral white electrostatic powder coat micro perforated grill with plastic trim ring.

Optional enclosures shall include:

- IP-SEA-SD** Surface mount angled enclosure for IP-SDH neutral white finish
- IP-SEST-SD** Surface mount straight enclosure for IP-SDH neutral white finish
- IP-FEST-SD** Flush mount straight enclosure for IP-SDH reclaimed powder coat finish