

DA-APX

POE / POE+ DANTE OUTDOOR WEATHER RESISTANT HORN SPEAKER

TECHNICAL DATA SHEET



PRODUCT SUMMARY

AtlasIED DA-APX is a weather resistant IP PoE amplified constant directivity high-output horn featuring Audinate's Dante digital audio transport platform. The DA-APX features a 60° x 40° constant-dispersion pattern across the controlled frequency band of 1.25-10 kHz. The rotating bell pivots in precise 15° increments for exact on-site positioning of projection angles. A triple lock security mounting method saves installation time and provides long-term stability.

AtlasIED Dante™ PoE speakers consist of a speaker, amplifier, control board, and a Dante™ interface. The DA-APX amplifier can produce up to 20-watts RMS of power in single channel mode or up to 2 x 10-watts in dual channel mode with IEEE 802.3at compliant PoE+ switches and 10-watts single channel mode or 2 x 5-watts in dual channel mode with PoE power. Interconnection is via a top panel mounted female RJ-45 connector. All models are compatible with Audinate's Dante™ digital audio transport platform.

The DA-APX features user configurable amplifier modes, Input EQ and Level Control. All controls are done via the AtlasIED IP Discovery and Control software. Through this software, the active IP speaker can be discovered on the network with the ability to custom name each speaker with a location tag for system management. The AtlasIED control software features an audible ping-me locator making it convenient to physically locate the speaker. System tuning can be done on an Individual speaker or by an assigned group.

The DA-APX ships configured for single speaker use. It can also be configured to Dual mode to drive a second passive speaker of the same type like the APX40N. When the DA-APX amplifier is configured to Dual mode the amplifier power is split between the DA-APX and passive speaker. The secondary speaker output shares the same factory EQ settings as the DA-APX. Amplifier levels can be adjusted separately.

The DA-APX can be mounted in a variety of ways to meet the installation requirements. Incorporated is a base mount bracket that allows it to be mounted to a surface or to mounted to a beam or pole. The base can be mounted to a standard 1-gang, 2-gang, or 4 sq. E.O. box.

APPLICATIONS

AtlasIED DA-APX is used where a network PoE Dante digital audio endpoint is required to transmit a page, deliver a critical message or supply background music.

KEY FEATURES

- Controlled Coverage of 60° x 40° Across a Wide Frequency Range for Predictable Beamwidth Control
- Rotating Bell Pivots in 15° Increments for Exact On-Site Positioning of Projection Angles Detailed in Acoustic Simulation Programs.
- Hi Output 120dB Peaks
- Sturdy Die-Cast Base Includes Provisions for Flex Conduit
- Internal PoE Amplifier
- Secondary Amplifier Output for 8Ω Speaker
- Audinate Dante Digital Audio
- AES67 Compatible

Amplifier Configurations

- Single Channel Mode
- Dual Channel Mode

DSP & Control

- Individual Channel Level Control
- Dante Input Level, EQ & Limiter
- Find Me Locator Tone

Unique Features

- Create Custom Identification Names
- Group Control & Updating
- Status & Log Reporting

Network Features

- PoE or PoE+ Select or Auto Detect
- Dynamic or Static IP Address
- IEEE 802.3af Compliant
- Auto Registration with Dante Controller and AtlasIED Discovery Software

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AUDIO SPECIFICATIONS / PERFORMANCE

SYSTEM	
Type	PoE / PoE+ Constant Directivity and Weather Resistant Wall Mount IP Speaker
Indicators	Network Status
Frequency Response (+/- 5dB)	400Hz - 7500Hz
Vertical Coverage	40°
Horizontal Coverage	60°
Max SPL at 1m	107dB SPL Continuous / 120dB SPL Peak
Recommended Signal Processing	Built-In Processing
TRANSDUCERS	
Transducer Qty	1
Compression Driver	1"
Cone Material	Double Entrant Compression Driver
Sensitivity (1W / 1m)	107dB Average
AMPLIFICATION	
Type	Two-Channel Class D Topology
Power Input	PoE (IEEE 802.3af) / PoE+ (IEEE 802.3at)
Single Ch Mode, Power Rating (RMS) PoE (IEEE 802.3AF)	10 Watts Max
Two Ch Mode, Power Rating (RMS) PoE (IEEE 802.3AF)	5 Watts Max, plus 5W @ 8 Ohm Paralleled Output
Single Ch Mode, Power Rating (RMS) PoE+ (IEEE 802.3AT)	20 Watts Max
Two Ch Mode, Power Rating (RMS) PoE+ (IEEE 802.3AT)	10 Watts Max, plus 10W @ 8 Ohm Paralleled Output
THD	<.02%
Cooling	Passive / Convection
AUDIO INPUTS AND OUTPUTS	
Input: Network Audio Type(s)	Audinate Dante, AES67
Input: Network Connectivity	RJ-45 Female
Output: Speaker Connectivity	Secondary Speaker Amplifier Output, Screw Terminal Block
SOFTWARE	
AtlasIED Discovery & Control Software	Discover, Status, Fault Report, User Setup & Control
USER CONTROL ELEMENTS	
Amplifier Operation Mode	Single Unit Mode or Two Channel Mode (Parallel Secondary Output)
Login	Username & Password

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SPECIFICATIONS / PERFORMANCE (CONTINUED)

IP Mode	Static or DHCP
Product Locator	Audible Find Me Ping
Dante Input	Parametric EQ, 3 Filters Hi-Pass Filter Input Limiter Level
Amplifier Level	Ch 1 & CH 2
File Export	Settings File Device Profile
File Input	Settings File Device Profile

NETWORK

Ethernet	IEEE 802.3 10/100Base-T
PoE / PoE+	IEEE 802.3 AF/AT Compliant

PROTOCOLS

IP Addressing	DHCP / Static
Auto-Registration	Dante Controller, AtlasIED Discovery & Control Software
Digital Audio	Audinate Dante Audio
Time	NTP

MECHANICAL

Color	Pantone Warm Gray 3 C - RAL 7044
Mounting / Rigging Provisions	Die Cast Base May be Mounted to 1-gang, 2-gang, 4-gang square E.O. or by Band or Pole
Ingress Protection	IP-56
Logo	Black and Silver
Product Dimensions (HxWxD)	8.02" x 14.61" x 13.86" (204mm x 371mm x 352mm)
Shipping Dimensions (HxWxD)	14.25" x 14.875" x 10.32" (362mm x 378 mm x 262mm)
Net Weight	6.45 lbs (2.92kg)
Shipping Weight	7.75 lbs (3.51kg)

SAFETY RATINGS

Safety Agency Ratings	ETL Listed 62368-1, CSA C22.2 #62368-1, IEC 62368-1 CB Scheme and FCC
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WARRANTY COVERAGE

Warranty Period	1 Year
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NOTES:

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.

DA-APX

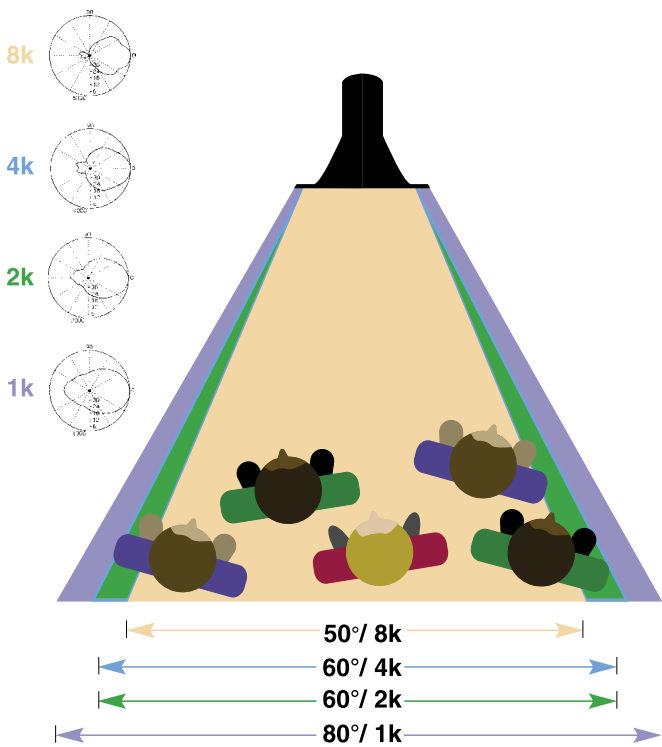
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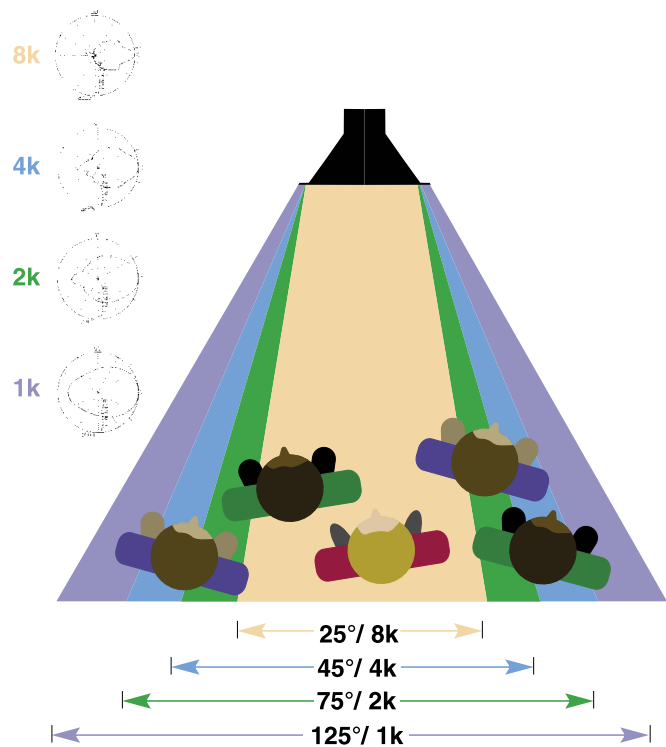
APX Beamwidth

Controlled coverage across a wide frequency range.



Conventional Beamwidth

Collapsing coverage across a wide frequency range.



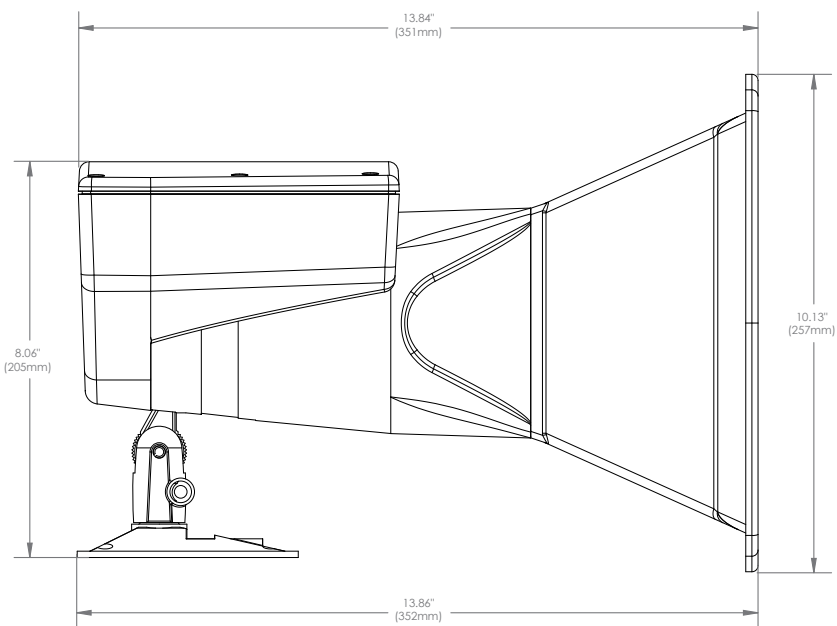
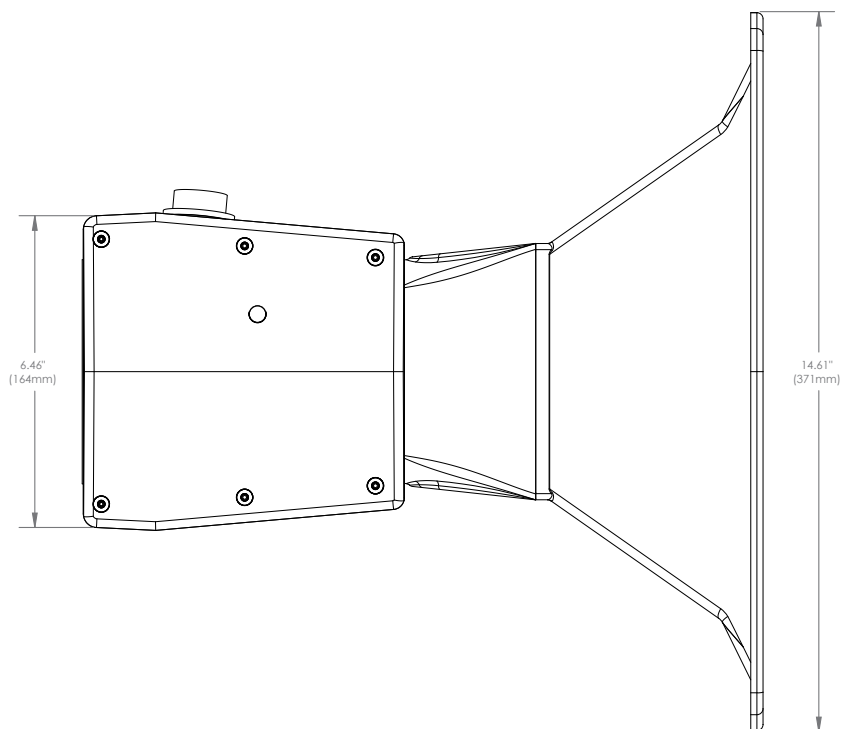
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DIMENSIONAL DRAWING



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ARCHITECT AND ENGINEER SPECS

The unit shall be AtlasIED model IP-APX. The PoE / PoE+ constant directivity indoor / outdoor IP endpoint speaker system shall include factory assembled horn, IP addressable PCB amplifier / control, and sturdy die-cast base.

Loudspeaker is molded of high-impact, neutral-grey polycarbonate resin with UV light inhibitor preventing embrittlement or discoloration. The impedance shall be 8 ohm and a voice coil diameter of 1.25" (32mm).

Frequency response shall be 600-14,000 Hz (nominal), 500-5000 Hz (± 5 dB). Sound pressure level shall be 107dB at 1 Watt / 1 meter, and max peak output at 1m shall be 120dB SPL. Sound dispersion angle shall be 60°x 40°.

The amplifier / control board shall incorporate conformal coating to protect against moisture, dust, chemicals, and temperature extremes. It shall include a dual-channel Class D topology amplifier with primary and secondary outputs capable of producing a total of 20-watts RMS when using an IEEE 802.3at compatible PoE+ switch. Interconnect shall be via female waterproof RJ-45 connector mounted to the side of the enclosure.

All control functionalities shall be determined via software. It shall be compatible with AtlasIED Discovery and Control software. Audio transport is done using Audinate's Dante Digital Audio protocol. Audio routing is done using Dante Control Software.

The DA-APX ships configured for single speaker use. It can also be configured to Dual mode to drive a second passive speaker of the same type like the APX40N. When the DA-APX amplifier shall be configured to Dual mode, the amplifier power is split between the DA-APX and passive speaker. The secondary speaker output shares the same factory EQ settings as the DA-APX. Amplifier levels can be adjusted separately.

The DA-APX may be mounted to 1-gang, 2-gang, and 4" square E.O. or band to pole.

The DA-APX horn dimensions shall be 8" x 145/8" x 137/8" (203mm x 371mm x 352mm). The AtlasIED PoE speaker shall be called the model DA-APX.