



IPD-XT850 PRODUCT SPECIFICATIONS

System Type	8" coaxial outdoor
Frequency Response (± 3 dB) ¹	51 Hz - 10 kHz
Frequency Response (± 10 dB) ¹	38 Hz - 22 kHz
Max. SPL dB @ 1 M	101 dB
Coverage Angle (± 6 dB @ 2 kHz)	360° Horizontal 40° Vertical
Coverage Angle (± 6 dB @ 10 kHz)	360° Horizontal 40° Vertical
Transducer: Low-Frequency Driver	1 x 203 mm (8") polypropylene cone, butyl rubber surround
Transducer: High-Frequency Driver	1 x 25 mm (1") convex aluminum tweeter
Low-Frequency Voice Coil	32 mm 1.26"
Network Type: Low Pass	12 dB per octave, 2nd order
Network Type: High Pass	12 dB per octave, 2nd order
Crossover Frequency	3 kHz
Enclosure Material	Roto-molded polyethylene plastic
Grille	Stainless steel with powder-coat finish
Inputs	RJ45
Diameter	360 mm 14.17"
Total Height	417.1 mm 16.42"
Weight	7.6 kg 16.7 lbs
Included Accessories	Anti-theft brackets, watertight strain relief
Optional Accessories	N/A
Packaging	One per box
Certifications	RoHS, IP55

Description

The SoundTube IPD-XT850 is a premium 2-way outdoor loudspeaker solution for IP-addressable audio networks on the Dante™ and AES67 platform. The IPD-XT850 is designed for installations requiring high performance sound for full-range background/foreground music and paging. The sealed, in-ground enclosure design delivers true low end response (38 Hz, ± 10 dB) and optimal off-axis performance. The IPD-XT850 includes theft-resistant mounting hardware.

Power, audio and control are delivered to the speaker via a CAT5 or CAT6 cable. Connection on the other end is made to the STNet Switch, which provides 40 W PoE (Power over Ethernet) to each speaker. Configuration of the speaker is done via software. Should any problems occur with the speaker during operation, it will be reported immediately via SoundTube monitoring software.

Features

- STNet IP-addressable, self-powered (PoE) speaker.
- Dante™ and AES67 I/O for interconnectivity with Dante and AES67-enabled audio systems.
- AES67 compatible
- Fast connection of power, audio, and control functions via one CAT5 or CAT6 cable.
- 40 W PoE provided by SoundTube STNet Switch; also works with standard PoE+ and PoE switches.
- Provides report-back on any problems via SoundTube software.
- Patented BroadBeam® waveguide technology provides smooth 360° horizontal off-axis coverage and reduces overall system costs.
- One 8" (203 mm) weatherproof polypropylene woofer with butyl rubber surround and one 1" (25.4 mm) convex aluminum tweeter with integrated horn and mounting bracket.
- UV-, scratch-, chlorine-, and weather-resistant with professional-grade components for long-lasting performance and durability.
- Patented, durable and weather sealed Zero-Reflection™ enclosure.
- Liquid-tight compression fittings for water-tight protection.
- Stainless steel fasteners & grille.
- Color options: granite green

¹ Frequency response measured in half space

SoundTube continually develops new product innovations and improvements.

Updates to existing products without prior notice are an example of SoundTube's drive for constant improvement.

Applications

The ultra-wide 360° horizontal dispersion pattern makes the IPD-XT850 an ideal choice for theme parks, promenades, playgrounds, shopping malls, restaurants, resorts, gardens, and other outdoor applications. IPD-XT850 speakers come with in-ground anti-theft brackets and stainless steel square-tip screws for increased outdoor security.

Reduce Overall System Costs

SoundTube's BroadBeam® dispersion technology utilizes an advanced diffuser/tweeter system to provide maximum dispersion of the higher frequencies throughout the IPD-XT850's 360° horizontal by 40° vertical coverage pattern.

Enclosure Technology

XT enclosures are engineered for maximum durability and performance. Unlike other outdoor speakers, SoundTube incorporates patented ZeroReflection™ internal shaping to create the most effective environment for sound reproduction. The result is accurate sound and tight bass in an indestructible enclosure.

Patented Technologies

SoundTube Entertainment and the MSE Audio Group constantly develop new technologies which enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dome, enclosure and dispersion technologies. The MSE Audio Group actively defends its patents in order to protect SoundTube resellers and end-users.

Technical Data and Specification Tools

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data is available from SoundTube Entertainment or at www.soundtube.com.

Technical data and downloads include:

- EASE™ data - 3-D polar plots.
- EASE™ Address - 2-D modeling for distributed systems
- AutoDesk® Revit® software
- Tech Sheets - technical information and architectural specs for system engineers
- SoundTubeSPEC™ - Proprietary speaker placement software

Independent Data Acquisition and Verification

All data for SoundTube speakers is independently collected from and verified by NWAALabs (www.nwaalabs.com) using their proprietary MACH testing system. All data is collected and analyzed according to ASTM, ISO and AES standards using EASERA, TEF and MLSSA. Full balloon data including both phase and magnitude is compiled into a variety of formats including EASE 4.x, GLL and CLF.

Architectural Specifications

The loudspeaker shall be of in-ground design consisting of one 203 mm (8")

low-frequency transducer and one 25.4 mm (1") aluminum dome high-frequency transducer with a frequency dividing network installed in a sealed enclosure. The low-frequency voice coil diameter shall be 32 mm (1.26").

Performance specifications of a typical production unit shall be as follows: Usable frequency response shall extend from 38 Hz - 22 kHz (± 10 dB). The maximum continuous output at 1 meter shall be 101 dB.

The frequency dividing network shall have crossover frequency of 3 kHz. The unit shall accept 40 W PoE in addition to PoE+ and standard PoE, as well as audio signal from a provided network switch, and shall be configurable via software. Maximum continuous output at 1 meter with a 40 W input shall be 101 dB.

The enclosure shall be constructed of a roto-molded polyethylene plastic. The grille shall be constructed of powder-coated stainless steel. Color options shall be granite green. All transducers and network circuitry are weather resistant and housed in a sealed enclosure.

The external wiring input connector shall be via RJ45 Ethernet port, accepting standard RJ45 Ethernet cable. The system shall be for indoor/outdoor applications and shall include a weather resistant cover over all wire connections.

Installation shall be by in-ground mount. The overall cabinet dimensions shall be no more than 360 mm (14.17") in diameter by 417 mm (16.42") in height and shall weigh no more than 7.5 kg (16.7 lbs).

The low-frequency transducer shall have a weatherproof butyl rubber surround to resist weather, elements, and insects. The high-frequency transducer shall be a horn-loaded dome and constructed of aluminum.

For theft deterrence, all units come with anti-theft bracket and square-tip screws.

The system shall be the IPD-XT850 for both low and high impedance applications.

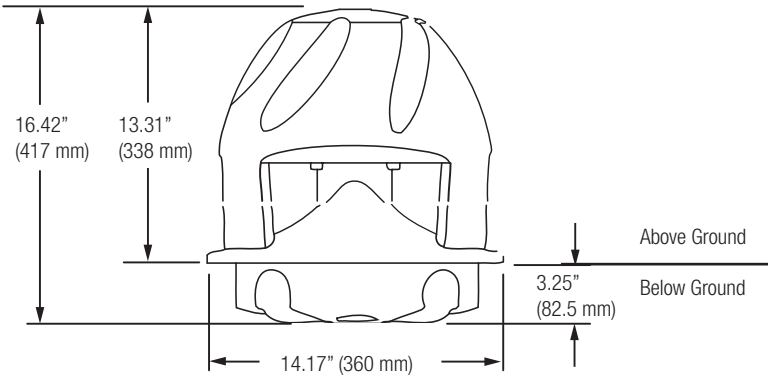
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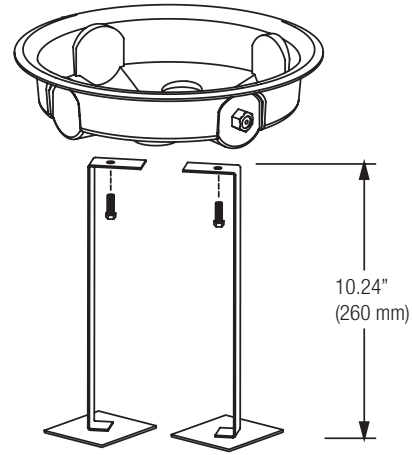
All SoundTube speakers come with a 5-year limited warranty and 3-year warranty on all electronics.

Mechanical Drawings

Front



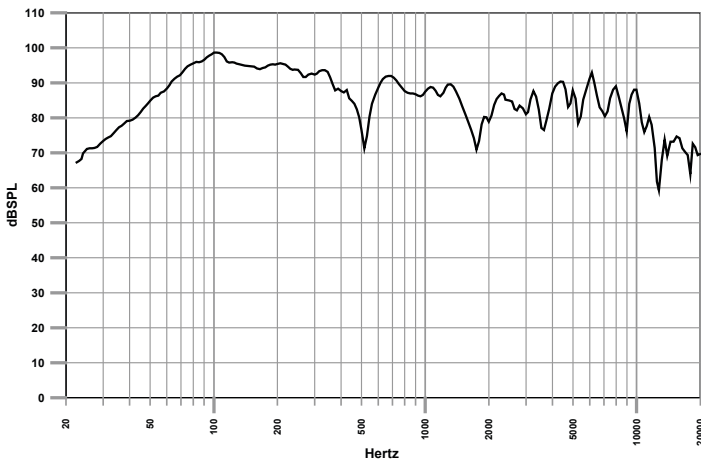
Included Accessory



Anti-theft hardware

Graphs

Frequency Response



Phase/Impedance Response

