



XT850-LED PRODUCT SPECIFICATIONS

System Type	8" coaxial outdoor (64 W transformer for 25/70.7/100 Volt of 4 Ω transformer bypass position)
Impedance (Nominal)	4 Ω
Impedance (Min)	3.7 Ω
Sensitivity dB @ 2.38 V / 1 M ³	88 dB
Sensitivity dB @ 1 W / 1 M	85 dB
Frequency Response (±3 dB) ¹	51 Hz - 10 kHz
Frequency Response (±10 dB) ¹	38 Hz - 22 kHz
Max. Program Power	200 W
Max. Continuous Power RMS ²	100 W
Max. SPL dB @ 1 M	105 dB
Coverage Angle (±6 dB @ 2 kHz)	360° Horizontal 40° Vertical
Coverage Angle (±6 dB @ 10 kHz)	360° Horizontal 40° Vertical
Tap Selector	5-position rotary switch with transformer bypass position
Transducer- Low-Frequency Driver	1 x 203 mm (8") Polypropylene cone, butyl rubber surround
Transducer- High-Frequency Driver	1 x 25 mm (1") Aluminum dome tweeter
Low-Frequency Voice Coil	32 mm (1.26")
Network Type- Low Pass	6 dB per octave, 1st order
Network Type- High Pass	6 dB per octave, 1st order
Crossover Frequency	3 kHz
Enclosure Material	Roto-molded polyethylene plastic
Grille	Stainless steel with powder-coat finish
Inputs	18-Gauge wire lead
Color Options	Granite green or sandstone
Diameter	359.9 mm 14.17"
Total Height	317.1 mm 12.48"
Weight	7.6 kg 16.7 lbs
Shipping Weight	10 kg 22 lbs
Included Accessories	Anti-theft brackets, water-tight strain relief
Optional Accessories	N/A
Packaging	1 Per box
IP-Rating	IP55
Certifications	CE, RoHS

Description

The SoundTube XT850-LED is a premium 2-way outdoor loudspeaker solution for installations requiring LED landscape lighting with high-performance sound. The SoundTube XT850-LED is designed for outdoor use with LED lighting and full-range background music, foreground music, and paging capabilities.

The sealed, in-ground enclosure design delivers true low end response (38 Hz, ±10 dB) and optimal off axis performance.

The XT850-LED includes theft-resistant mounting hardware and a weather-proof 5-position tap switch for 25/70.7/100 V applications with transformer bypass position.

Omni-directional LED strips are integrated into the underside of the speaker enclosure to create warm pathway lighting for outdoor applications. The LEDs are powered by a conventional 12V landscape lighting transformer (not included) and connect just like standard landscape lights. The XT850-LED has a 3000K warm-white color temperature and are compatible with third-party dimmer switches.

Features

- 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 mm) aluminum dome tweeter with integrated horn & mounting bracket.
- UV-, scratch-, chlorine-, and weather-resistant with professional-grade components for long-lasting performance and durability.
- Patented, durable and weather sealed ZeroReflection™ enclosure.
- Weather-proof 5-position tap switch for 25/70.7/100 V applications with transformer bypass position. 64 W transformer included.
- Liquid-tight compression fittings for water-tight protection.
- Multiple wire inlet locations for fast and easy daisy chaining.
- Stainless steel fasteners & grille.
- Color options: granite green.

¹ Frequency response measured in half or full space.

² Continuous power rating, EIA-426-B test

³ 2.83 Volts at a distance of 1 meter

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.

LED SPECIFICATIONS	
Power Requirements	12VDC
Color Temperature	3000K Warm White
Certifications	CE, RoHS, UL, cUL
Watts per LED Strip	1.2 W
Watts per Speaker	3.6 W
Lumens per LED Strip (12 V)	120 lm
Lumens per Speaker (12 V)	360 lm
*Lumens measured @ 1m distance. LEDs are compatible with third-party dimmer switches. 9 V operation yields approx. 35% brightness.	

Transformer Taps (If applicable)

70.7 V	Output	100 V	Output	25 V	Output
64 W	103 dB	64 W	103 dB	8 W	94 dB
32 W	100 dB	32 W	100 dB	4 W	91 dB
16 W	97 dB	16 W	97 dB	2 W	88 dB
8 W	94 dB			1 W	85 dB

Applications

The ultra-wide 360° horizontal dispersion pattern makes the XT850-LED an ideal choice for theme parks, promenades, playgrounds, shopping malls, restaurants, resorts, gardens and other outdoor applications. XT850-LED 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 XT850-LED's 360° horizontal by 40° vertical coverage pattern. Designed specifically for outdoor music & paging, the XT850-LED projects even coverage and smooth response over a larger area than typical outdoor speakers, with fewer units per install - saving time and money on speakers, installation and amp power.

Enclosure Technology

XT enclosures are engineered for maximum durability and performance. Unlike other outdoor speakers, SoundTube incorporates ZeroReflection™ internal shaping to create the most effective environment for sound reproduction. The result is accurate sounds 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 mm (1") aluminum dome high-frequency transducer with a 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 27 Hz - 22 kHz (±10 dB). Measured sensitivity (2.83 V input, 1 M) shall be at least 88 dB. The maximum continuous output at 1 meter shall be 105 dB. Rated power capacity of the components and network shall be at least 100 W continuous RMS power. The loudspeaker shall have a nominal impedance of 4 Ω and be available for 25/70.7/100 V modes with transformer bypass position. The frequency-dividing network shall have a crossover frequency of 3 kHz.

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 or sandstone. All transducers and network circuitry are weather resistant and housed in a sealed enclosure.

Installation shall be by in-ground mount. The external wiring input connector shall be hard-wire leads. The overall cabinet dimensions shall be no more than 359.9 mm (14.17") in diameter by 417.1 mm (16.42") in height and shall weigh no more than 7.6 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 brackets and square-tip screws.

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

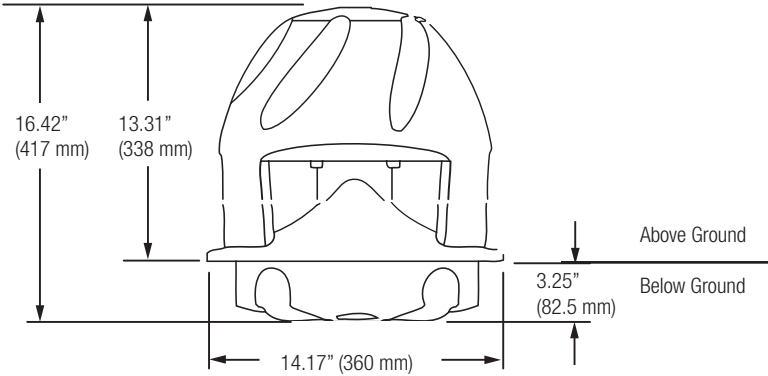
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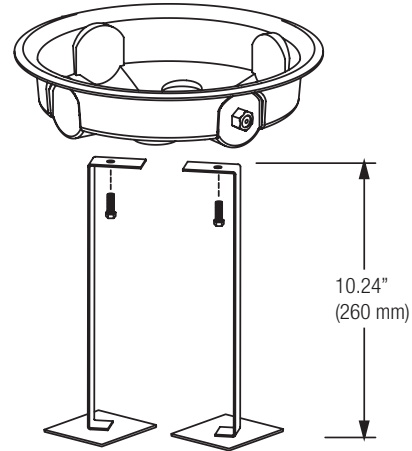
All SoundTube speakers come with a 5-year limited warranty and 3-year warranty on all electronics.

Mechanical Drawings

Front

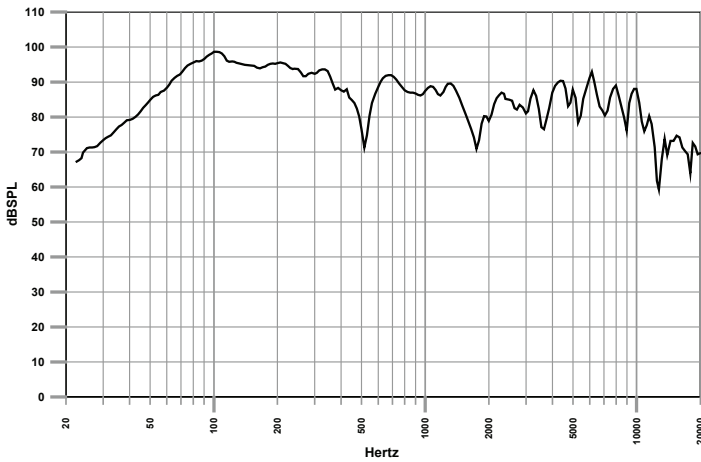


Included Accessory



Graphs

Frequency Response



Phase/Impedance Response

