



### Specifications: XT850

System Type	8" Coax outdoor (64 Watt transformer for 25/70.7/100 Volt or voice coil/8 Ohm direct)
Frequency Response (-3 dB) <sup>1</sup>	76 Hz - 10 kHz
Low Frequency (-10 dB) <sup>1</sup>	59 Hz - 22 kHz
Max. Program Power	200 Watts
Max. Continuous Power RMS <sup>2</sup>	100 Watts
Max. SPL dB @ 1 M	112.0 dB
Sensitivity dB @ 1W/1M <sup>3</sup>	90 dB
Impedance (nominal)	4 Ohms (nominal)
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 voice coil direct (4 Ohm)

#### Transformer Taps

70.7 V	Output	100 V	Output	25 V	Output
64 W	108 dB	64 W	108 dB	8 W	99 dB
32 W	105 dB	32 W	105 dB	4 W	96 dB
16 W	102 dB	16 W	102 dB	2 W	93 dB
8 W	99 dB			1 W	90 dB

Transducers	
Low-Frequency Driver	1 x 203 mm (8.0 in) Polypropylene cone, butyl rubber surround
High-Frequency Driver	1 x 25 mm (1.0 in) Aluminum dome
Low-Frequency Voice Coil	32 mm (1.26 in)
Network Type	
Low Pass	6 dB per octave, 1st order
High Pass	6 dB per octave, 1st order
Crossover Frequency	3.0 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	360 mm / 14.17 in
Total Height	417 mm / 16.42 in
Weight	7.5 kG / 16.7 lbs
Shipping Weight	10 kG / 22 lbs
Accessories	
Included	Anti-theft brackets, water-tight strain relief
Optional	N/A
Packaging	1 Per box

<sup>1</sup> Frequency response is measured in half space.

<sup>2</sup> Continuous power rating, EIA-426-B test.

<sup>3</sup> 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.

### Key Features

- UV-, scratch- and weather-resistant with professional-grade components for long-lasting performance and durability.
- Patented BroadBeam® waveguide technology provides smooth 360° horizontal off-axis coverage and reduces overall system costs.
- One 203 mm (8.0 in) weatherproof polypropylene woofer with butyl rubber surround and one 25 mm (1.0 in) aluminum dome tweeter with integrated horn & mounting bracket.
- Weather-proof 5-position tap switch for 25/70.7/100 Volt applications with voice coil direct (4 Ohm) position. 64 Watt transformer included.
- Patented, durable and sealed Zero-Reflection™ enclosure.
- 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 or sandstone.

### Description

The SoundTube XT850 is a premium 2-way outdoor loudspeaker solution for installations requiring high-performance sound in a durable speaker design. The XT850 is designed for full-range background/foreground music and paging. The sealed, in-ground enclosure design delivers true low end response (59 Hz, -10 dB) and optimal off axis performance. The XT850 includes theft-resistant mounting hardware and a weather-proof 5-position tap switch for 25/70.7/100 Volt applications with voice coil direct (4 Ohm) position.

### Applications

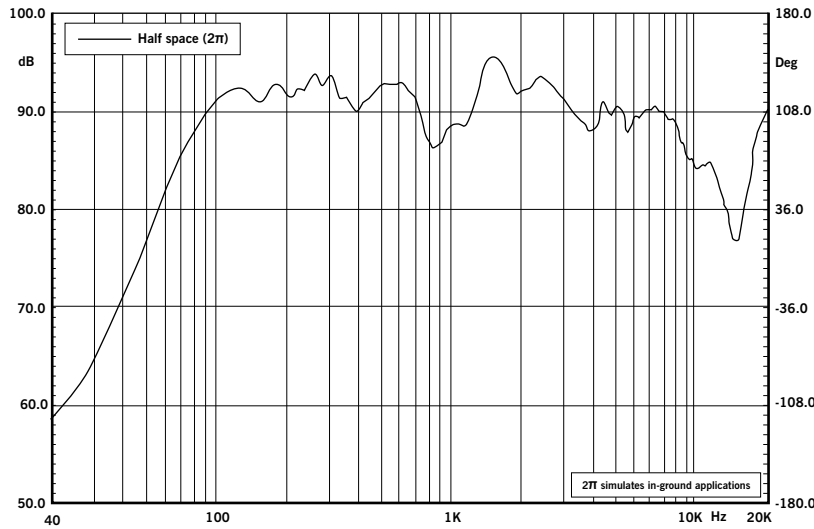
The ultra-wide 360° horizontal dispersion pattern makes the XT850 an ideal choice for theme parks, promenades, playgrounds, shopping malls, restaurants, resorts, gardens and other outdoor applications. XT850 speakers come with in-ground anti-theft brackets and stainless-steel square-tip screws for increased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

### Reduce Overall System Costs

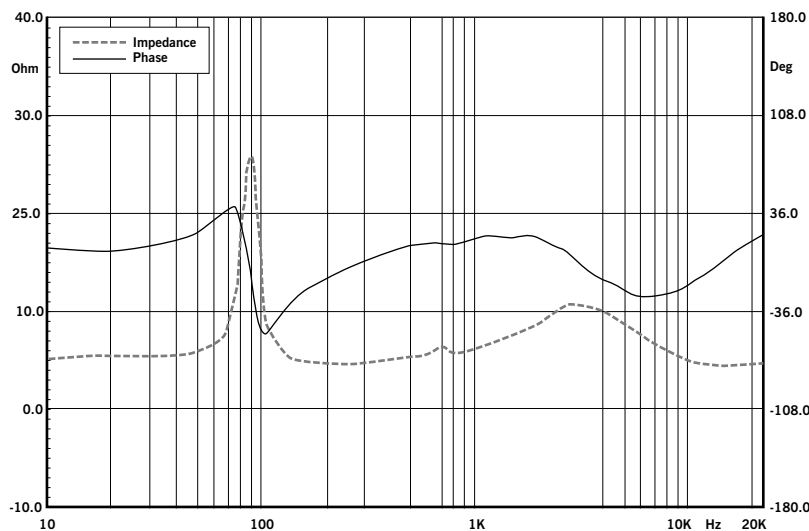
SoundTube's BroadBeam® dispersion technology utilizes an advanced diffuser/tweeter system to provide maximum dispersion of the higher frequencies



### Frequency Response



### Phase/Impedance Reponse



throughout the XT850's 360° horizontal by 40° vertical coverage pattern.

Designed specifically for outdoor music & paging, the XT850 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 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 SoundTube Technologies

SoundTube Entertainment is constantly developing new technologies that enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. & international patents, which explicitly cover SoundTube dispersion, enclosure & dome technologies. SoundTube Entertainment actively defends its patents in order to protect SoundTube resellers and end users.

### Technical Data and Specification Tools

#### Technical Data

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data are available from SoundTube Entertainment or at [www.soundtube.com](http://www.soundtube.com)

#### Data Acquisition

All performance data acquired at SoundTube's Technical Measurement Center (TMC) are analyzed using a variety of standard measurement techniques, including Measured Length Sequence (MLS) and Time Delay Spectrometry (TDS). Performance, development and data acquisition tools include: Gold Line TEF 20, CLIO, LMS, LEAP, and proprietary modeling software. EASE™ data are acquired through an automated TEF20/Outline/EASE™ interface.

# XT850

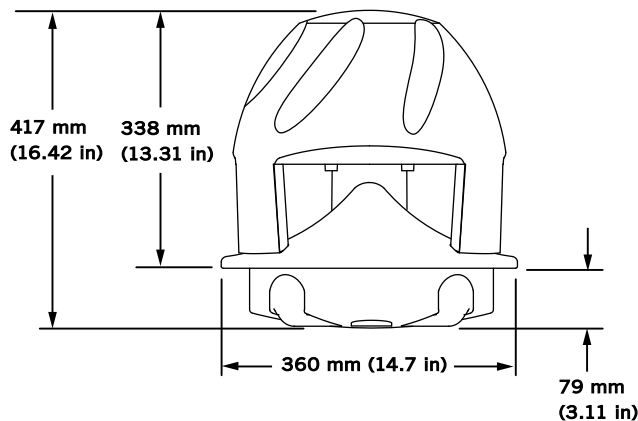
## Outdoor/In-Ground Speaker

Preliminary Technical Information for System Engineers

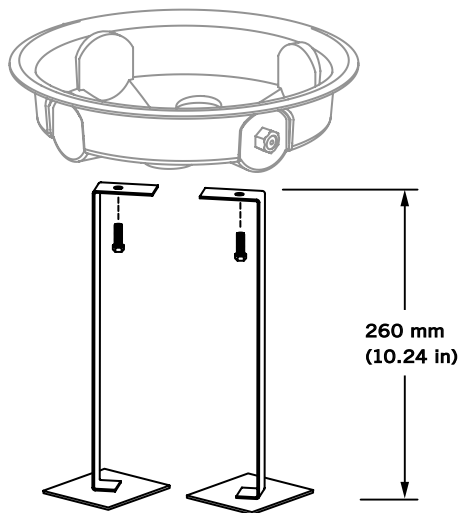


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### Mechanical Drawings



### Included Accessory



### Anti-theft hardware

### Architectural Specifications

The loudspeaker shall be of in-ground design consisting of one 203 mm (8.0 in) low-frequency transducer and one 25 mm (1.0 in) 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 in).

Performance specifications of a typical production unit shall be as follows: Usable frequency response shall extend from 59 Hz – 22 kHz (-10 dB). Measured sensitivity (2.83 Volt input, 1 meter) shall be at least 90 dB. The maximum continuous output at 1 meter shall be 112 dB. Rated power capacity of the components and network shall be at least 100 Watts continuous RMS power. The loudspeaker shall have a nominal impedance of 4 Ohms and be available for 25/70.7/100 Volt modes with voice coil/4 Ohm direct. The frequency-dividing network shall have a crossover frequency of 3.0 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 hardwire leads. The overall cabinet dimensions shall be no more than 360 mm (14.7 in) in diameter by 417 mm (16.42 in) 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 XT850 speakers come with anti-theft brackets and square-tip screws.

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

### SoundTube Entertainment

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**All SoundTube products come with a 5-year limited warranty.**