Description

The SoundTube XT550 is a premium 2-way outdoor loudspeaker solution for installations requiring high-performance sound in a durable speaker design. The XT550 is designed for full-range back-ground/foreground music and paging. The sealed, in-ground enclosure design delivers true low end response (49 Hz, ±10 dB) and optimal off axis performance. The XT550 includes theft-resistant mounting hardware and a weather-proof 5-position tap switch for 25/70.7/100 V applications with transformer bypass position.

XT550 PRODUCT SPECIFICATIONS

System Type	5.25" coaxial outdoor (32 W transformer for 25/70.7/100 V or 4 Ω transformer bypass position)
Impedance (Nominal)	4 Ω
Sensitivity dB @ 2.38 V / 1 M [3]	86 dB
Sensitivity dB @ 1 W / 1 m	83 dB
Frequency Response (±3 dB) [1]	61 Hz - 9.5 kHz port open (101 Hz - 12 kHz port closed)
Frequency Response (±10 dB) [1]	49 Hz - 22 kHz port open (62 Hz - 22 kHz port closed)
Max. Program Power	120 W
Max. Continuous Power RMS [2]	60 W
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
Tap Selector	5-position rotary switch with transformer bypass position
Transducer: Low Frequency Driver	1 x 133 mm (5.25") Polypropylene cone, butyl rubber surround
Transducer: High-Frequency Driver	1 x 25 mm (1") convex aluminum tweeter
Low-Frequency Voice Coil	25.4 mm	1"
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	358.1 mm	14.1"
Total Height	394 mm	15.51"
Weight	5.9 kg	13 lbs
Shipping Weight	8.6 kg	19 lbs
Included Accessories	Anti-theft brackets, water-tight strain relief
Optional Accessories	N/A
Packaging	1 Per box
IP-Rating	IP55
Certifications	CE, RoHS, UL 1480A

Features

- Patented BroadBeam® waveguide technology provides smooth 360° horizontal off-axis coverage and reduces overall system costs.
- One 5.25" (133 mm) weatherproof polypropylene woofer with butyl rubber surround 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 with optional port vent for added frequency response.
- Weather-proof 5-position tap switch for 25/70.7/100 V applications with transformer bypass position. 32 W transformer included.
- Liquid-tight compression fittings for water-tight protection.
- Multiple wire inlet locations for fast and easy daisy chaining.
- Stainless steel fasteners, stainless steel & powder-coated grille.
- UL 1480A approved
- Color options: granite green or sandstone

[1] Frequency response measured in half or full space
[2] Continuous power rating, EIA-426-B test
[3] 2.83 V 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.

Transformer Taps

70.7 V	Output	100 V	Output	25 V	Output
32 W	98 dB	32 W	98 dB	4 W	89 dB
16 W	95 dB	16 W	95 dB	2 W	86 dB
8 W	92 dB	8 W	92 dB	1 W	83 dB
4 W	89 dB			0.5 W	80 dB

Applications

The ultra-wide 360° horizontal dispersion pattern makes the XT550 an ideal choice for theme parks, promenades, playgrounds, shopping malls, restaurants, resorts, gardens and other outdoor applications. XT550 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 XT550's 360° horizontal by 40° vertical coverage pattern.

Designed specifically for outdoor music and paging, the XT550 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 NWAA Labs (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 an in-ground design consisting of one 133 mm (5.25") low-frequency transducer and one 25 mm (1') aluminum dome high-frequency transducer with a frequency-dividing network installed in an optionally sealed enclosure. The low-frequency voice coil diameter shall be 25 mm (1").

Performance specifications of a typical production unit shall be as follows: Usable frequency response shall extend from 49 Hz - 22 kHz (±10 dB, port open). Measured sensitivity (2.83 V input, 1 M) shall be at least 86 dB. The maximum continuous output at 1 meter shall be 101 dB. Rated power capacity of the components and network shall be at least 60 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.

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 358.1 mm (14.1") in diameter by 394 mm (15.51") in height and shall weigh no more than 5.9 kg (13 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 XT550 for both low and high impedance applications.
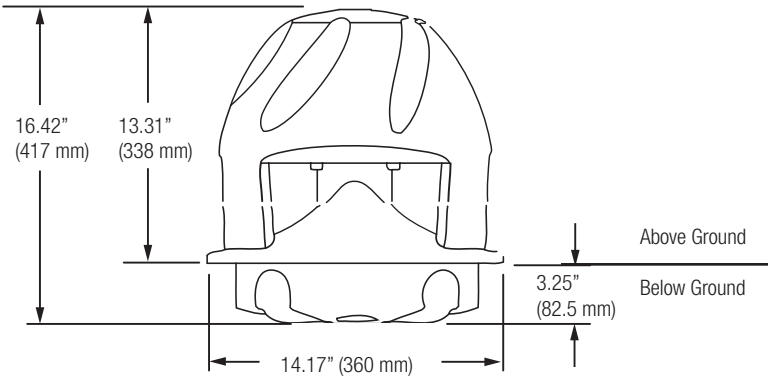
SoundTube® by MSE Audio®

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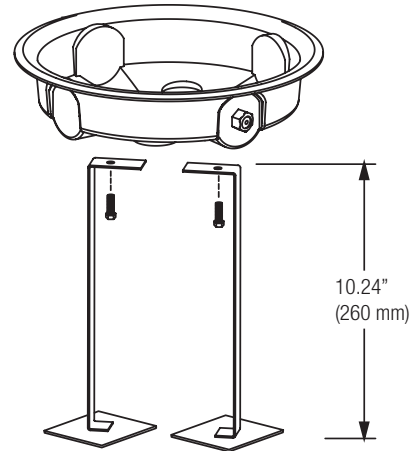Toll Free: 855.663.5600
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All SoundTube speakers come with a 5-year limited warranty and 3-year warranty on all electronics.
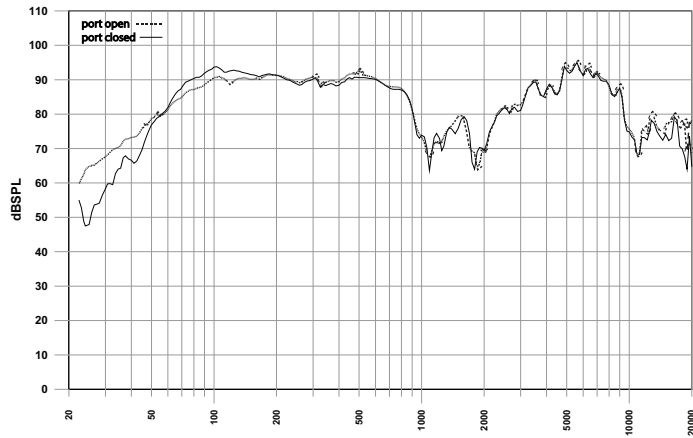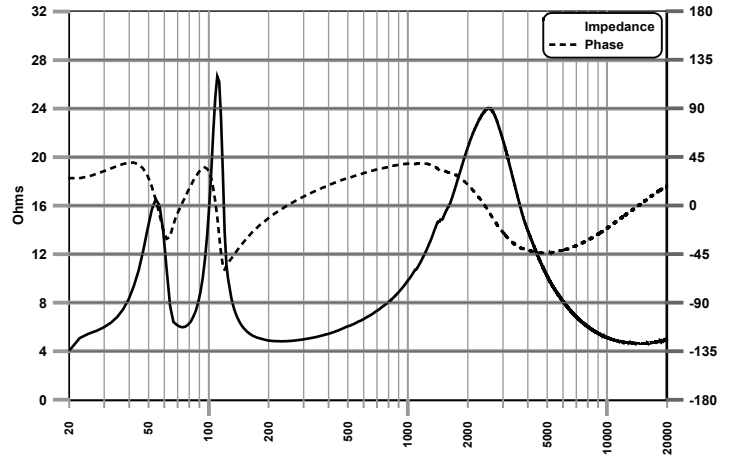
Mechanical Drawings

Front

16.42" (417 mm)
13.31" (338 mm)

Above Ground

3.25" (82.5 mm)   Below Ground

14.17" (360 mm)

Included Accessory

10.24" (260 mm)

Anti-theft hardware

Graphs

Frequency Response (open/closed port)

port open
port closed

Phase/Impedance Response (open port)

Impedance
Phase

Phase/Impedance Response (closed port)

Impedance
Phase

Technical data, EASE™ plots, SoundTubeSPEC™ software and product downloads available at www.soundtube.com