# XT800

# **Outdoor/In-Ground Speaker**

Technical Information for System Engineers





# Specifications: XT800-T64 XT800-8

System Type	
	8" coax outdoor (voice coil/8 Ohm direct, 64 Watt
	transformer for 70.7/100 Volt applications)
Frequency Response (-3 dB) <sup>1</sup>	60 Hz – 20 kHz
Frequency Response (-6 dB) <sup>1</sup>	50 Hz – 20 kHz
Low Frequency (-10 dB) <sup>1</sup>	40 Hz
Max. Program Power	200 W
Max. Continuous Power RMS <sup>2</sup>	100 W
Max. SPL dB @ 1M	107.5 dB
Sensitivity dB @ 1W/1M <sup>3</sup>	87.5 dB
Impedance	8 Ohm (nominal value)
Tap Selector	Selectable via tap wires

#### **Transformer Taps**

64 Watt model

70.7 V	Output	100 V	Output
64 W	105.5 dB	n/a	n/a
32 W	102.5 dB	64 W	105.5 dB
16 W	99.5 dB	32 W	102.5 dB
8 W	96.5 dB	16 W	99.5 dB

Coverage Angle (-6 dB @ 2 kHz)	360° horizontal x 40° vertical coverage pattern	
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) silk dome	
Crossover Frequency	2.4 kHz	
Inputs	Selectable tap wire	
Enclosure Material	Roto-molded polyethylene plastic	
Colors	Green granite, custom colors available	
Diameter	368 mm (14.5 in)	
Total Height	450 mm (17.7 in)	
Weight	7.5 kG (16.5 lbs)	
Accessories		
Included Accessories	Anti-theft brackets	

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**

- BroadBeam<sup>®</sup> wide dispersion pattern provides smooth off-axis coverage and reduces overall system costs.
- One 203 mm (8.0 in) weather-resistant polypropylene woofer and one 25 mm (1.0 in) silk dome tweeter.
- Professional-grade components for lasting performance and durability.
- Patented ZeroReflection<sup>™</sup> enclosure for enhanced bass response.
- Liquid-tight compression fittings for water-tight protection.
- UV, weed whacker and weather resistant for long-lasting performance.
- Multiple inlet locations for fast and easy daisy chaining.
- Green granite standard color; custom color options available.

# **Applications**

The SoundTube XT800 is a premium 2-way outdoor loudspeaker for installations requiring high-performance sound in a durable speaker design. The XT800 is designed for full-range background/foreground music and paging. With a 360° dispersion pattern, the XT800 is an ideal choice for theme parks, shopping malls, restaurants, resorts, waterparks, gardens and other outdoor applications requiring high-performance sound with additional bass.

XT800 speakers come with in-ground antitheft brackets for increased outdoor security.

## Reduce Overall System Costs

SoundTube's BroadBeam® dispersion technology utilizes an advanced diffuser/tweeter system to provide maximum dispersion across the entire audio spectrum, resulting in excellent off-axis response well beyond 10 kHz.

Designed specifically for outdoor music & paging, the XT800 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, SoundTubes incorporate patented ZeroReflection $^{\text{TM}}$  internal shaping to create the most effective

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

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

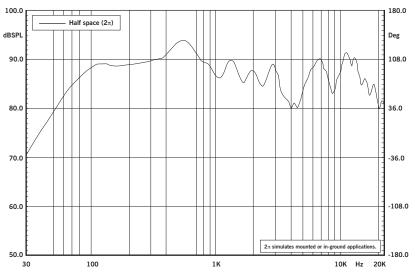
<sup>&</sup>lt;sup>3</sup> 2.83 Volts at a distance of 1 meter.

# XT800 Outdoor/In-Ground Speaker

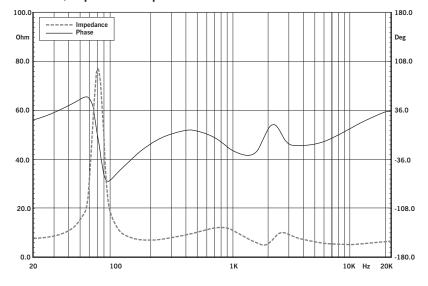
Technical Information for System Engineers



#### Frequency Response



#### Phase/Impedance Reponse



environment for sound reproduction. The result is accurate sound and tight bass in an indestructible enclosure.

## **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.

Technical data and downloads include:

Tech Sheets - Technical information and architectural specs for system engineers.

# **Data Acquisition**

All performance data acquired at SoundTube's Technical Measurement Center (TMC) are analyzed using standardized measurement techniques, including Measured Length Sequence (MLS) and Time Delay Spectrometry (TDS). Performance, development, and data acquisition tools include: Gold Line TEF 20 Suite, CLIO, LMS, LEAP, and proprietary modeling software.

# Data for Other SoundTube **Products**

Also available: Sales & installation information for all SoundTube speaker systems including open-ceiling, in-ceiling, surfacemount, in-ground and sound-focusing speakers.

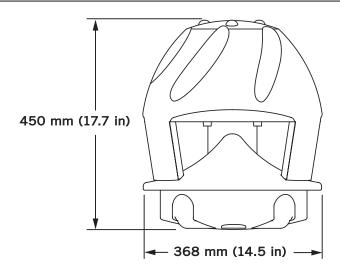
## **Architectural Specifications**

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) high-frequency transducer with a frequency-dividing network installed in a vented enclosure. The low-frequency voice coil diameter shall be 40 mm (1.6 in).

Performance specifications of a typical production unit shall be as follows: Usable frequency response shall extend from 40 Hz – 20 kHz. The loudspeaker shall be available in 64 W transformer and 8 Ohm models. Taps shall be nominally 4 W @ 70.7 V (8 W @ 100 V), 8 W @ 70.7 V (16W @ 100 V), 16 W @ 70.7 V, 64 W @ 100 V and 64 W @ 70.7 V (not used in 100 V systems). The frequency-dividing network shall have a crossover frequency of 2.4 kHz. Rated power capacity of the components and network shall be at least 100 Watts continuous RMS power.



# **Mechanical Drawings**



The enclosure shall be constructed of a roto-molded polyethylene plastic. The grille shall be constructed of heat-resistant ABS plastic material. Transducers and network circuitry are weather resistant to provide optimum sound quality for outdoor applications.

Installation shall be by in-ground mount. The external wiring input connector shall be hardware leads. The overall cabinet dimensions shall be no more than 368 mm (14.5 in) in diameter by 450 mm (17.7 in) in height and shall weigh no more than 7.5 kG (16.5 lbs).

The low-frequency transducer shall have a weatherproof polypropylene cone, butyl rubber surround formulated to resist weather elements and insects. The highfrequency transducer shall be constructed of a silk dome configuration.

For theft deterrence, all XT800 speakers come with anti-theft brackets.

The systems shall be the SoundTube XT800-8 for low impedance and XT800-T64 for high impedance.

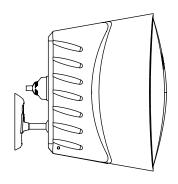
# SoundTube Entertainment

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

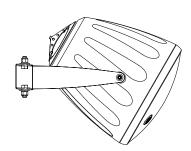


# SoundTube's complete line of outdoor products includes:



# **SM500i**

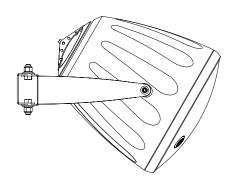
5.25" Surface-mount 6-position tap for 25/70.7/100 V with voice coil/8 Ohm direct systems.



#### **RS600i**

with surface-mount option

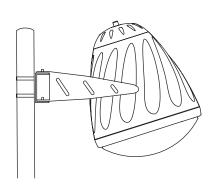
6.5" Surface-mount 6-position tap for 25/70.7/100 V with voice coil/8 Ohm direct systems.



# **RS800i**

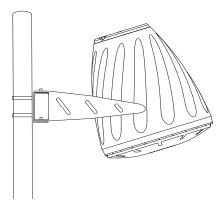
with surface-mount option

8" Surface-mount 6-position tap for 25/70.7/100 V with voice coil/8 Ohm direct systems.



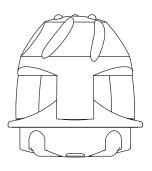
# HP8i - SM

8" 2-way outdoor wall/pole mount 64 Watt voice coil/8 Ohm direct systems.



**HP12i - SM** 

12" 2-way outdoor wall/pole mount 64 Watt or voice coil/8 Ohm direct systems.



# **XT610**

5.25" 2-way outdoor in-ground 32 Watt or voice coil/4 Ohm direct systems.

To download tech sheets for all SoundTube products visit: www.soundtube.com