

SM890i-WX

8" PREMIUM HIGH-SPL SURFACE-MOUNT SPEAKER WITH WEATHERX TECHNOLOGY

SOUNDTUBE
ENTERTAINMENT



Specifications: SM890i-WX

Mounting hardware included

Nominal Impedance	8 ohm
Impedance (min)	8.0 ohm
Sensitivity dB @ 2.83V/1M	92.0dB
Sensitivity dB @ 1W/1M (2)	92.0dB
Frequency Response (± 3 dB)	105 Hz - 22 kHz
Frequency Response (± 10 dB)	80Hz - 22 kHz
Max. Program Power	300w
Max. Continuous Power RMS	150w
Max. Power SPL @ 1 M	114.0dB
Directivity Factor (Q) (Averaged 100Hz - 10kHz, @ 2kHz)	5.4 (Averaged 100 Hz - 10 kHz) 7.2 (2 kHz)
Directivity Index (DI) dB (Averaged 100Hz - 10kHz, @ 2kHz)	6.7dB (Averaged 100 Hz - 10 kHz) 9.4dB (2 kHz)
Tap Selector	6 Position rotary switch with transformer bypass
70.7 Volt Transformer Taps	150w / 114.0dB
100 Volt Transformer Taps (dB)	150w / 114.0dB
25 Volt Transformer Taps (dB)	19w / 105.0dB
Transformer Options	25 / 70.7 / 100 Volt option with a 8 Ohm direct
Transducer - Low Frequency Driver	8" Treated Paper Cone w/ Cloth Surround
Transducer - High Frequency Driver	36mm (1.42") Titanium Compression Driver w/ Waveguide
Network Type: Low Pass	12dB per octave, 2nd order
Network Type: High Pass	12dB per octave, 2nd order
Colors	Black / White, or Custom
Connections	Four-pin, 5.08 mm Euroblock
Inputs	4 Pin, 5.08 mm Euroblock for individual or daisy chain connection
Height (SM = Height)	477 mm / 18.78 in
Diameter (SM = Width)	295.9 mm / 11.65 in
SM Depth (Including Bracket)	390.4 mm / 15.37 in
Weight	9.5 kg / 21 lb

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Specifications: SM890i-WX	Mounting hardware included
Shipping Weight	10.9 kg / 24 lb
Accessories Included	Surface-Mount Bracket, Safety Cable, Euroblock Connector, Terminal Weather Boot, Paint Mask
Packaging	1 per box
Regulatory - UL	Approved 1480
Regulatory - CE	Approved
Regulatory - RoHS	approved
Regulatory - IP	IP44 approved

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Key Features

- Patented BroadBeamHP® waveguide technology delivers a consistent dispersion pattern for maximum intelligibility and edge-to-edge coverage (up to 8 kHz, independently verified).
- One 8.00 inch (203 mm) treated fiber driver with an offset 1.42 inch (36 mm) compression horn configuration.
- Includes stainless steel screws for severe weather, outdoor applications.
- Proprietary tool-free rotatable 110° x 85° bayonet-mounted horn for tailored dispersion and throw.
- 150-watt low-insertion loss transformer and maximum output (115 dB max. SPL, 93 dB sensitivity) for short to medium throw, PA and sound reinforcement.
- Easy-access six-position tap switch for 25/70.7/100-volt applications with transformer bypass position.
- Powder-coated steel grille with tool-free locking system.
- Tool-free, low-profile Stealth™ bracket with an integrated internal wedge cam for stable and precise aiming from 0 to 90 degrees. Mounting hardware is constructed of die-cast aluminum.
- Included pre-mountable pole and surface mount bracket allows for quick and easy division of labor.
- UL 1480 (UEAY) listed.
- High-quality black or white paint finish, custom colors optional.
- Included accessories: Surface-mount bracket, safety cable, paint mask, Euroblock connector, terminal weather boot and paint mask.

Description

SoundTube's WX Weather Guard technology utilizes a dual layer hydrophobic material inside the speaker grille to keep water from the drivers and internal electronics in even the most extreme weather conditions.

Applications

Engineered for outdoor applications requiring high SPL and maximum intelligibility, the SM890i-WX delivers a smooth and even coverage pattern ideal for casinos, convention centers, gyms, nightclubs, aerobic rooms, airports, super stores, arenas, theme parks, transportation hubs, shipping centers and stadiums. For additional low-frequency response down to 41 Hz (-10 dB) the powered SM1001-P may be incorporated.

BroadBeamHP® Wide Dispersion Technology

BroadBeamHP® technology delivers a consistent dispersion pattern across the upper registers of the frequency spectrum and delivers maximum edge-to-edge coverage and intelligibility. For the SM890i-WX, SoundTube's proprietary BroadBeamHP® technology incorporates a high-frequency compression driver with a 1-inch exit and an 8-inch treated fiber woofer. For installer convenience, the SM890i-WX 110° x 85° compression horn can be rotated 90 degrees to tailor the speaker coverage to the venue.

Patented SoundTube Technologies

SoundTube and MSE Audio Group constantly develop new technologies that enhance audio product performance. SoundTube innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dispersion, enclosure and dome technologies. MSE Audio Group 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. 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

Data Acquisition and Verification

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

WX Weather Guard Technology

SoundTube's WX Weather Guard technology utilizes a dual layer hydrophobic material inside the speaker grille to keep water from the drivers and internal electronics in even the most extreme weather conditions. An optional upgrade to the SM speaker products, the WX material greatly reduces water penetration through grille openings without compromising sound quality and performance. All speakers with WX technology are built using non-corrosive materials (stainless steel, or aluminum) for all exposed metal components, including grills, screws, and mounting systems. IP44 rating approved.

Architectural Specifications

The loudspeaker shall consist of one 203 mm (8.0 in.) low-frequency transducer and one 36.0 mm (1.42 in.) compression driver. The system shall include a crossover

network and a 150-watt low-insertion loss transformer installed in the enclosure. The low frequency voice coil diameter shall be 34 mm (1.34 in.). Performance specifications for a typical production unit shall be as follows: Useable frequency response shall extend from 63 Hz - 22 kHz (-10 dB). Measured sensitivity (2.83 volt, 1 meter) shall be at least 93 dB. The speaker shall have a nominal impedance of 8 ohms. The speaker shall be available for 25-, 70.7- and 100-volt modes and shall include a six-position tap switch with a transformer bypass position. The frequencydividing network shall have a crossover frequency of 2.5 kHz with slopes of 12 dB per octave (2nd order) for both low- and high-pass filters. Rated power capacity shall be at least 150 watts continuous (RMS) and conform to EIA-426B testing. Maximum continuous output at 1 meter shall be 115 dB. The low-frequency transducer shall have a treated fiber cone with treated cloth surround. The high-frequency transducer shall be an offset compression driver with a proprietary 110° x 80° BroadBeamHP® waveguide. The high-frequency transducer shall be bayonet-mounted to allow the horn to be rotated 90 degrees to tailor the coverage pattern to the venue. Installation for the speaker shall be by a tool-free, low profile bracket with an integrated internal wedge cam for stable and precise aiming from 0 to 90 degrees. Mounting hardware shall be constructed of diecast aluminum. Speaker is IP44 approved. The enclosure shall be constructed of injection-molded ABS with glass fiber reinforcement. The grille shall be powder-coated steel with a tool-free locking system. Overall dimensions including the mounting plate and bracket for the unit are 477.0 mm (18.78 in.) tall by 295.9 mm (11.65 in.) wide by 350.1 mm (13.78 in.) deep. The system shall be the SM890i-WX for both low- and high-impedance applications.

SoundTube

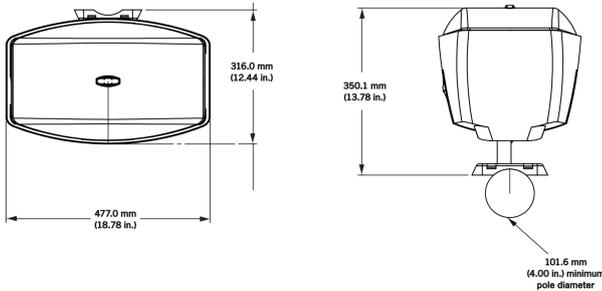
8005 W. 110th St. | Suite 208
Overland Park, KS 66210
Phone 9136635600
Fax 8556635600
Toll Free 8556635600
<https://soundtube.mseaudio.com>
All SoundTube products come with a 5-year limited warranty.

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Mechanical Drawings



Included Accessories

Surface-Mount Bracket
Terminal Weather Boot

Safety Cable
Paint Mask

Euroblock Connector

Optional Accessories



Wall Mount Bracket (AC-SM82-WM)