

# SPF-85

8" 2-Way Omnidirectional Outdoor Speaker



## Specifications: SPF-85

## Mounting hardware included

Nominal Impedance	4 ohms
Sensitivity dB @ 2.83V/1M	88 dB
Frequency Response (1)	38 Hz - 22 kHz
Recommended Power	15 - 200 Watts
Transducer - Low Frequency Driver	8" Polypropylene Cone w/ Butyl Rubber Surround
Transducer - High Frequency Driver	1" Aluminum Dome
Crossover Frequency	3 kHz
Crossover Type	2-Way Absolute Phase®
Network Type: Low Pass	6 dB per octave, 1st order
Network Type: High Pass	6 dB per octave, 1st order
Colors	Green Granite, Sandstone
Enclosure alignment	Sealed
Grille - material	Stainless Steel w/ Powder Coated Finish
Height (SM = Height)	417.1 mm / 16.42"
Diameter (SM = Width)	373.4 mm / 14.7"
Weight	7.6 kg / 16.7 lb
Shipping Weight	10 kg / 22 lb
Regulatory - UL	Approved UL1480A
Regulatory - CE	approved
Regulatory - RoHS	approved

# SPF-85

## 8" 2-Way Omnidirectional Outdoor Speaker



### Key Features

- UV-, scratch- and weather-resistant with professional-grade components for long-lasting performance and durability.
- Unique design provides smooth 360° horizontal off-axis coverage to reduce overall system costs by eliminating need for extra speakers.
- 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 (8 Ohm) position. 64 Watt transformer included.
- Durable, sealed, and weatherproof 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 Solaris SPF-85 is a durable, in-ground landscape speaker that comes standard with anti-theft brackets that anchor it deep into the ground. With its 8" mineral-filled polypropylene woofer and 1" aluminum dome tweeter, the SPF-85 delivers maximum coverage with a full-frequency 360° dispersion. Speakers can be placed 25' apart and still attain maximum coverage, SPL, and intelligibility.

Its sealed enclosure, powder coated steel grille and stainless steel fasteners allow the SPF-85 to deliver lasting performance and stand up to outdoor exposure, weed whackers, collisions with lawn mowers, and other outdoor equipment. Available in Sandstone or Green, the SPF-85 is designed to blend unobtrusively in any outdoor setting.

The SPF-55 and SPF-85 model ships with theft-resistant mounting hardware included.

### Applications

The ultra-wide 360° horizontal dispersion pattern makes the SPF-85 an ideal choice for theme parks, promenades, playgrounds, shopping malls, restaurants, resorts, gardens and other outdoor applications. SPF-85 speakers come with in-ground anti-theft brackets and stainless-steel square-tip screws for increased outdoor security.

### Patented Phase Technology Technologies

Phase Technology and MSE Audio Group constantly develop new technologies that enhance audio product performance. Phase Technology innovations are protected by multiple U.S. and international patents, which explicitly cover Phase Technology dispersion, enclosure and dome technologies. MSE Audio Group actively defends its patents in order to protect Phase Technology resellers and end users.

### Technical Data and Specification Tools

#### Technical Data

Phase Technologies 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). 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 Phase Technologies speakers are independently collected from and verified by NWAAL Labs ([www.nwaalabs.com](http://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.

## Enclosure Technology

The SPF-85 is built with UV-resistant composite materials using weatherproof manufacturing techniques to ensure it will look as good as it sounds through years of outdoor exposure.

## Technical Data and Specification Tools

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

### 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 stain-less steel. Color options shall be 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 SPF-85 speakers come with anti-theft brackets and square-tip screws. The system shall be the SPF-85 for both low and high impedance applications.

## Phase Technology

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All Phase Technologies products come with a 5-year limited warranty.

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## Graphs and Plots

**Frequency Response**



**Phase/Impedance Response**



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# SPF-85

8" 2-Way Omnidirectional Outdoor Speaker



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## Mechanical Drawings



## Included Accessories

**Anti-Theft Brackets**

**Water-tight strain relief**