



PreSonus[®] AIR12

Two-way 1x12" Active Loudspeaker

Key Features

- Hybrid “best of both worlds” 1,200W (peak) power amp configuration:
 - Low-frequency driver: 900W, Class D amplifier
 - High-frequency driver: 300W, Class A/B amplifier
- Maximum SPL 123 dB peak
- Onboard DSP presets for front-of-house, DJ, and monitor applications.
- Onboard mixer with two combo XLR and 1/4" inputs and one summed balanced output

Applications

- Mobile sound reinforcement
- Corporate events
- Floor monitor

The best of two worlds.

Compact and lightweight, AIR12 active loudspeakers provide a rich, extended low-end and natural high-frequency extension in a compact, durable enclosure. Backed by 1,200W (dynamic) of Class D/Class AB power and enhanced with easy-to-use digital tuning functions, the AIR12 gives you all the power and tools you need for both mobile and installed sound.

Each type of power amplifier has advantages and disadvantages. By employing different amplifier types for each driver, AIR12 loudspeakers use the respective strengths of Class D and Class A/B amplifiers to provide optimal response throughout the speaker's frequency range. A 500W (continuous), Class D amplifier powers the 12-inch low-frequency driver, providing efficient, clean low end when you need it. A 200W (continuous), Class AB amplifier powers the 1-inch high-frequency driver, delivering natural sounding high-frequency reproduction. The combination provides up to 123 dB SPL between 51 Hz and 20 kHz.

Optimal design for optimal performance.

In most modern powered loudspeaker systems, Class D digital switch-mode amplifiers are used for all transducers. Class D amplifiers have many benefits. However, if the switching frequency of a Class D amp is not sufficiently high enough, or it's not properly filtered, high-frequency response can sound grainy, and transients appear to be slewed with a time smear in an impulse response analysis.

To address this, PreSonus designed AIR loudspeakers utilizing a Class A/B amplifier for the high-frequency transducer and a Class D amplifier for the low-frequency transducer. The Class A/B amplifier used in PreSonus AIR loudspeakers is pure analog, with the “always on” driving characteristic of Class A/B amplifier topology. Therefore, the impulse response filtering necessary to tune an AIR loudspeaker is simplified and has less effect on the natural sound of the AIR12's well-designed cone driver and compression driver.

To describe the design, the engineering staff at PreSonus invented the term “Advanced Impulse Response” (AIR). The term represents the “airy” sound of the high-frequency components, as well as the simplified IR filters needed to voice the loudspeaker system.

Fast and easy customization.

The AIR12 loudspeaker is equipped with a signal processor that simplifies customizing your loudspeakers. Presets customize the AIR12's response for use as front-of-house mains; as monitor wedges; for music playback (e.g., for DJs); for enhanced low end and a warmer sound; and for improved speech intelligibility. Treble and bass controls let you boost or cut by 10 dB to compensate for room anomalies. Location presets let you optimize performance for stand and bracket mounting as well as flown installations.

Flexible inputs.

AIR-series full-range loudspeakers offer a choice of inputs so you can use them with a variety of sources. You get two combo XLR mic/TRS line inputs, each with a Class A microphone preamplifier and independent gain control. A stereo 1/8" connection admits signals from smartphones, tablets, and other consumer audio devices. These signals can be combined with the AIR12's internal mixer, and a balanced XLR Mix output lets you send pass the signals to other AIR-series loudspeakers.

A sweet-sounding solution.

With a unique power-amp configuration, carefully programmed DSP presets, versatile mounting options, flexible inputs with onboard mixing, and other professional features, the AIR12 is an excellent choice for both mobile and installed sound.

Application and Deployment

The AIR12's molded plastic cabinet can be mounted in several ways. The multi-angle enclosure sports nonskid rubber feet on the bottom for upright front-of-house use and nonskid rubber feet on one side for stage monitor applications. Rig the speaker using M10 fly points or ground-stack it for portable applications. Mount it on a tripod or atop an AIR-series subwoofer using an optional sub pole. The integrated dual-position pole mount lets you aim the speaker level or at a 7.5° downward tilt. And the AIR12 is easy to transport, thanks to its top-mounted handle.

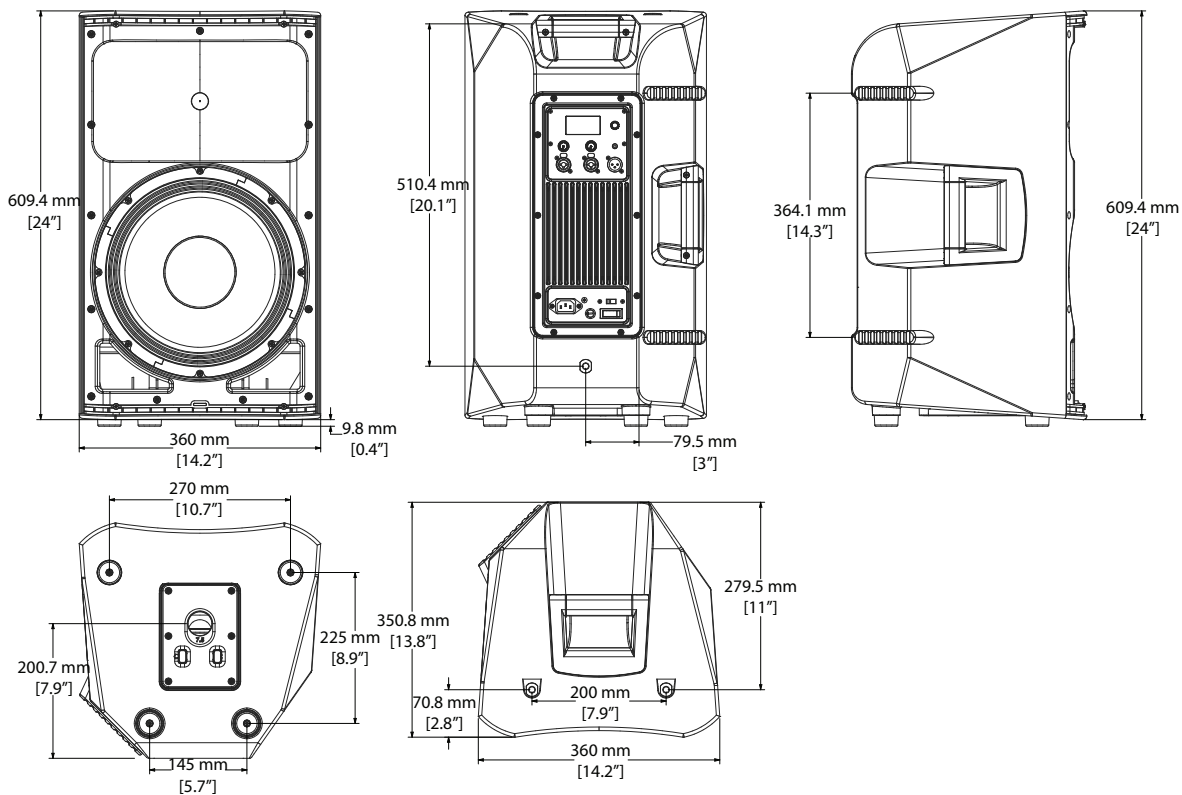
Optional Accessories (Sold Separately)

The following optional accessories are available:

AIR12-TOTE. This protective soft tote bag is custom-fitted for the AIR12. Tough, rip-resistant material protects loudspeaker cabinets during transportation. A cutout allows access to the handle.

Custom Subpole (SP2-ADJ). Use the custom, threaded pole to mount an AIR12 full-range loudspeaker over an AIR15s or AIR18s subwoofer. Pole lengths have been measured and tested for system stability.

Technical Specifications



Type	Active 2-way
LF Driver	12" (2" Voice Coil)
HF Driver	1.35" Compression
LF Amplifier Type	Class D
HF Amplifier Type	Class AB
Total System Power	1200W Peak (600W RMS)
LF Driver Power	900W Peak (450W RMS)
HF Driver Power	300W Peak (150W RMS)
Frequency Range	51 Hz – 20 kHz (+/- 3 dB)
Maximum Peak SPL	123 dB
Nominal Dispersion (HxV)	90° x 60°
Inputs	2 x XLR/TRS mic/line combo; 1 x 1/8" TRS stereo
Outputs	1 x XLR Mix Out
DSP Features	LCD screen with EQ and multiple presets
Enclosure	H-PP Molded
Flypoints	2 top, 1 back
Mounting	Dual-position pole mount (0°, 7.5°)
Handles	1 top, 1 side
Dimensions (H x W x D)	24.0" x 14.2" x 13.8" (609 mm x 360 mm x 351 mm)
Weight	37.5 lbs (17 kg)

