

# audio**spot**light<sup>®</sup>

by iSoundLab

## Directional Sound System



The Audio Spotlight is a revolutionary new audio technology that creates sound in a narrow beam, just like light. Aim the fat, thin speaker panel to your desired listening area, and provide...

*all* of the sound and  
*none* of the noise.™

Beam **sound** to your listeners... and preserve the **quiet**.™

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## Directional Sound System



Add **sound...**  
and preserve  
the **quiet.**<sup>™</sup>

...Audio Spotlights may be the most radical technological development in acoustics since the coil loudspeaker was invented in 1925... The Audio Spotlight will force people to rethink their relationship with sound, as the arrivals of the phonograph, the telephone and the Walkman have done before."

**The New York Times**



(actual size)



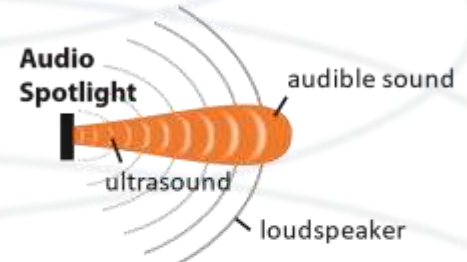
### introduction

Since 2000, thousands of **Audio Spotlight** systems have been installed in a wide range of applications around the world. From museums, exhibits, kiosks, and digital signage to retail stores and special projects, hundreds of companies have chosen this unique, patented technology to provide high-quality, precisely controlled sound, while preserving the quiet.

Based on research by MIT scientists, **Audio Spotlight** systems use entirely different physics to create sound in true, ultra-tight beams that are impossible with any other technology.

### key features

- Built-in amplifier/processor
- On-board playback via microSD
- Visual display/interface
- IR remote control
- Proprietary Bass Enhancement
- Advanced audio processing algorithms
- Optimized preset modes
- VESA 100 mounting pattern



### technology

The directivity (narrowness) of all wave producing sources depends on the size of the source compared to the wavelengths it generates. Because audible sound has wavelengths comparable to the size of most loudspeakers, sound generally propagates omnidirectionally. Only by creating a sound source much larger than its wavelengths can a narrow beam be created. In the past, loudspeaker manufacturers have created large speaker panels or reflective domes to provide some directivity, but due to the sound's large wavelengths, the directivity of these devices is still extremely weak.

To overcome these inherent limitations, we bend the laws of acoustics... **and make a narrow beam of sound from only ultrasound.**

The ultrasound has wavelengths only a few millimeters long, which are much smaller than the source, and therefore naturally travel in an extremely narrow beam. Air converts this ultrasound sound into audible sound as it travels, making truly directional sound, literally out of thin air!



No loudspeaker can ever approach the directivity of **Audio Spotlight technology**

## MUSEUMS



Using the Audio Spotlight sound system, Colombia's Planetario Combarranquilla was able to add sound selectively to specific interactive exhibits within a larger space, without intruding on one another, or on the peaceful museum ambiance.

## RETAIL



AT&T outfitted its flagship Chicago store location with a fleet of Audio Spotlight systems to sonically enhance digital signage and provide customers with an interactive shopping experience.

## DIGITAL SIGNAGE



Bulgari used Audio Spotlight systems throughout their elegant retail space at CityCenter in Las Vegas to add an audible element to their expansive video wall.

## TRADE SHOWS



Konica Minolta attracted visitors to their trade show booth using Audio Spotlight systems, while avoiding a cacophony of noise and maintaining the quiet outside the booth.

## HOSPITALS



Vanderbilt University Medical Center outfitted their patient rooms with Audio Spotlight systems to allow each patient the chance to privately listen to their own TV while maintaining serenity throughout the facility.

## LIBRARIES



New York Public Library added an open-air media vitrine at the center of its Hamilton Grange Teen Center in Harlem, using Audio Spotlight systems to pump sounds of Rock Band for Wii without disrupting the quiet surroundings.



## SYSTEM SPECIFICATIONS

- Realtime, low-distortion audio reproduction
- Built-in, ultra-efficient amplifier
- Stereo 1/8" (3.5mm) line-level input, additional balanced input
- Available subwoofer output
- Phoenix connector (audio/power input)
- microSD flash player
- IR remote control
- Worldwide power input (100-240V, 50/60Hz)
- Low power draw: 12W max (AS-168i) - 50W max (AS-24i)

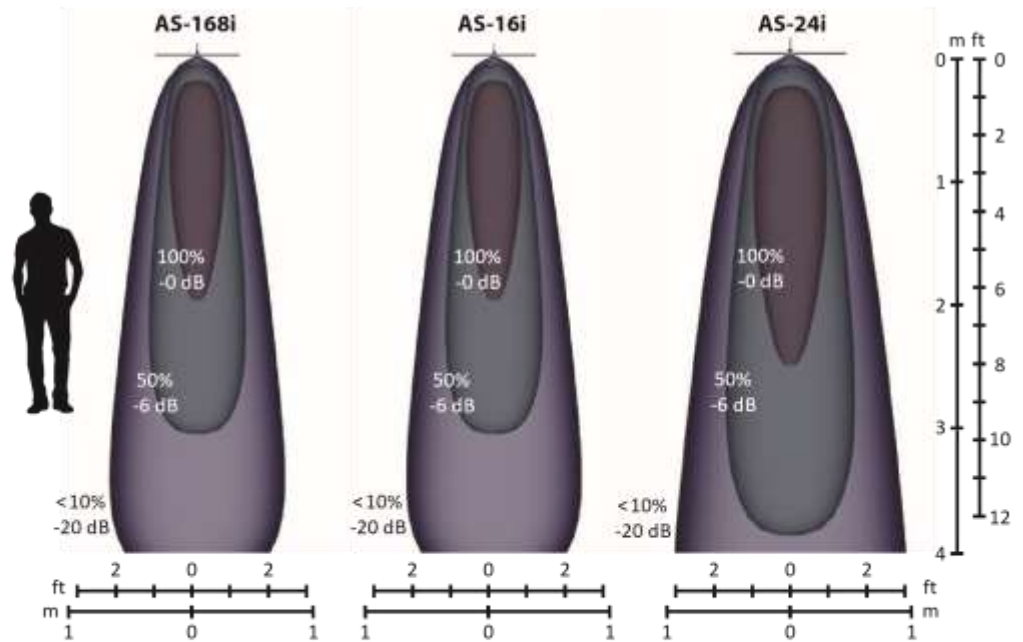
- AS-168i: 16"x8" (40x20 cm) @ 2.5 lbs (1.1 kg)
- AS-16i: 16"x16" (40x40 cm) @ 4.5 lbs (2.0 kg)
- AS-24i: 24"x24" (60x60 cm) @ 9.0 lbs (4.1 kg)
- All models 1 3/8" (3.5 cm) thick
- VESA 100 and M6 mounting inserts
- Wall, overhead, or flush mounting
- Available in black or white finish
- Custom sizes, colors, and configurations available
- Fully CE compliant

## sound field distribution

Sound field distribution is shown with equal-loudness contours for a standard 1 kHz tone. The center area is loudest at 100% amplitude, while the sound level just outside the illustrated beam area is less than 10%.

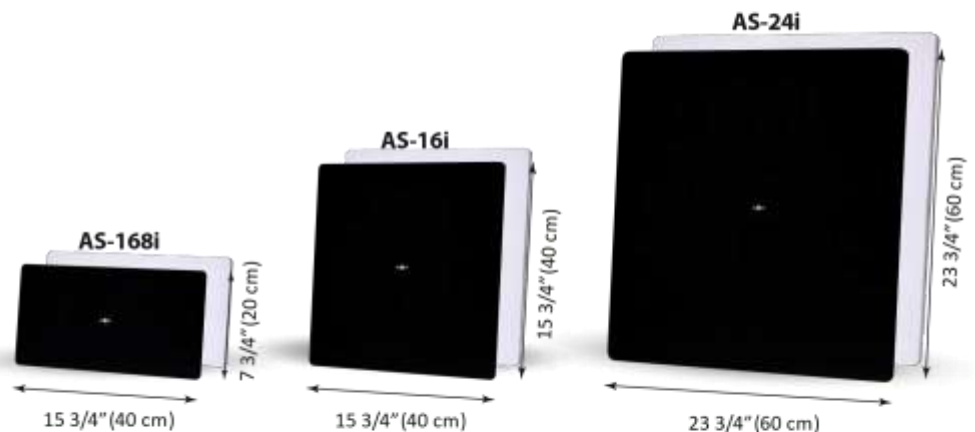
Audio Spotlight systems are much less sensitive to listener distance than traditional loudspeakers, but maximum performance is attained at roughly 1-2m (3-6 ft) from the listener.

There is a doubling of available output power and low frequency reach stepping up from the smallest AS-168i model to the AS-16i, and again from the AS-16i to the larger AS-24i.



## speaker drawings

Available in Black or White finish



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Free design assistance for any project.