

# STEALTH

## L-RAD 116

INVISIBLE SPEAKER

6.5" 2-WAY INVISIBLE LOUDSPEAKER  
IN-WALL OR IN-CEILING



LINEAR **R**ADIANCE  
INVISIBLE SPEAKERS | SUBWOOFERS

### Recommended Applications:

- Multi-Room Audio Systems
- Background Music
- Foreground Music
- Voice Paging
- Sound Masking Systems
- Home Theater / Surround Sound

### Recommended Installations:

Flush mounted in walls or ceilings constructed of wood or steel framing with 1/2" (13 mm) or thicker gypsum wallboard.

### Min. Cavity Depth Required:

3 1/4" (83 mm) or 2 3/8" (65 mm) with back box removed

### Performance:

- 100 Watts RMS
- 45Hz to 20kHz (see Figure 1)
- 50W min, recommended power

### Protection:

Two independent self-resetting circuits (low and high-frequency).

### On-Site Finish Options:

Finish options include latex paint, flat finish, orange peel texture, light plaster, light wallpaper, light fabric, wood veneer, and other selected approved finishes.

The Stealth Acoustics Model L-RAD 116 is a two-way, full-range loudspeaker system that becomes completely invisible after installation. The loudspeaker has a rigid frame that attaches directly to standard structural framing. The paintable active diaphragm face is bonded to the frame of the speaker panel, creating an active area surrounded by a stable mounting area. Installation instructions are shown on a paper overlay that is to be removed before installation. The overlay can also be used as a cutting template for retrofitting the speakers into existing wallboard.

The L-RAD 116 may be installed in either the wall or ceiling and on-site finishing options include latex paint, light wallpaper, fabrics and selected texture coats. There is no need for special vellums or other nonstandard wallboard finishing materials. Advanced finishing

methods may be supported using special techniques.

The Stealth Acoustics L-RAD 116 incorporates an acoustically coupled high quality, high-power 6.5" cone woofer, a direct coupled 30 mm neo-magnet high-frequency driver, and an acoustically tuned back box. Advanced internal materials allow for smooth frequency extension to 20kHz. When the L-RAD 116 is installed in standard insulated 2" x 4" framing and allowed to function in a full 8 foot stud bay, frequency response below 45Hz can be achieved. The L-RAD 116 contains two independent protection circuits (high frequency and low-frequency sections) that automatically reset upon reduction of excessive amplifier power.

For proper registration, each speaker must be installed so that the surface of the perimeter edge is flush with the adjoining wallboard. When correctly in place, the surface of the speaker face panel extends

above the height of the wallboard by 1/16" (1.6 mm). This is done to allow space for the tape and joint compound needed to blend the panel into the wall. Shims are included to allow for mounting in wallboard thicker than 1/2" (13 mm).

Stealth Acoustics' invisibility offers a powerful advantage over traditional loudspeakers because they can be placed wherever they sound best, free of visual concerns that may conflict with architectural features. Accompanying the full range panels, Stealth Acoustics offers completely invisible companion subwoofers for extended low frequency response.

The L-RAD 116 also has 100 and 70 volt constant voltage transformers available as factory installed options

All Stealth Acoustics speakers are covered by a 20-year manufacturer's warranty.

### Architectural & Engineering Specifications

The loudspeaker shall be a two-way, full-range device, producing frequencies from 45Hz to 20kHz. The total radiating surface shall be 163 sq. in (1051 sq. cm) and high frequency dispersion shall be a nominal 170 degrees in both horizontal and vertical planes. The loudspeaker system shall have a sensitivity of 83 dB, 1 watt / 1 meter, with a capacity of 100 watts RMS according to EIA standard RS-426-A. The loudspeaker shall have two independent self-resetting protection devices, one each for the high-frequency driver and the low-frequency driver.

The loudspeaker shall fit into walls or ceilings with standard wood or steel stud construction and a minimum 3/4" (83 mm) depth cavity. (2 9/16" (65 mm) with back box removed) The loudspeaker shall mount directly to the structural framing and have the capability of seamlessly adjoining 1/2" (13 mm) or thicker gypsum wallboard. The minimum distance between framing members shall be 13 3/4" (350 mm) or 9 1/2" (241 mm) with back box removed. Face panel finishing methods shall be consistent with normal gypsum wallboard finishing techniques and may include latex paint, light wallpaper, light fabric wood veneer and other selected approved finishes.

The loudspeaker shall be the Stealth Acoustics Model L-RAD 116 and shall carry a 20-year manufacturer's warranty.

### Product Specifications

**Frequency Response:**

45Hz to 20kHz (see Figure 1)

**Power Capacity:**

100 watts RMS  
50 watts minimum recommended power

**Protection:**

Two independent self-resetting devices  
(low and high frequency)

**Sensitivity:**

83 dB (1 watt / 1 meter)

**Driver Components:**

High frequency: 1 1/8" (30 mm) neodymium driver  
Low-frequency: 1" (25 mm) voice coil, 6.5" (165 mm) woofer,  
15 oz. (425 gr) ceramic magnet

**System Impedance:**

8Ω nominal

**Polar Dispersion:**

170 degrees vertical and horizontal

**Dimensions:**

Width: 15 7/8" (403 mm)  
Height: 15 7/8" (403 mm)  
Mounting Depth: 3 1/4" (83 mm)  
2 9/16" (65 mm) with back box removed

**Product Weight:**

13 lbs. (5.9 kg)

**Shipping Weight:**

30 lbs. (13.6 kg) per pair  
17 lbs. (7.7 kg) per single

**Included Accessories:**

Mounting shims  
Mounting screws

**Optional Accessories:**

SA2400-MKII	Stealth Acoustics High Current 2-Channel Amplifier with DS
PS-16	PlaceSaver™
MBX-22	UL Listed Metal Back Box
MBA-22	UL Listed Metal Back Box - Adjustable
MBC-22	Concrete Back Box
SK-1	Shim Kit
CVXMR	75/100 Volt Constant Voltage Xfmr

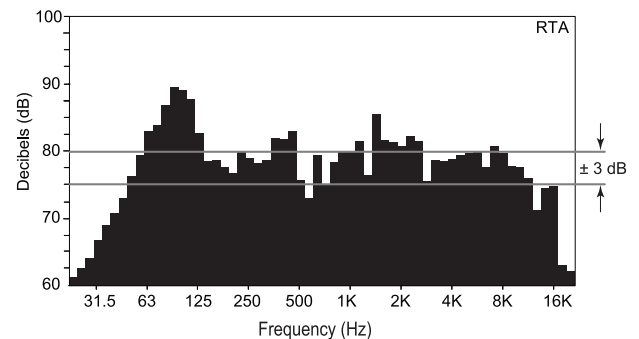
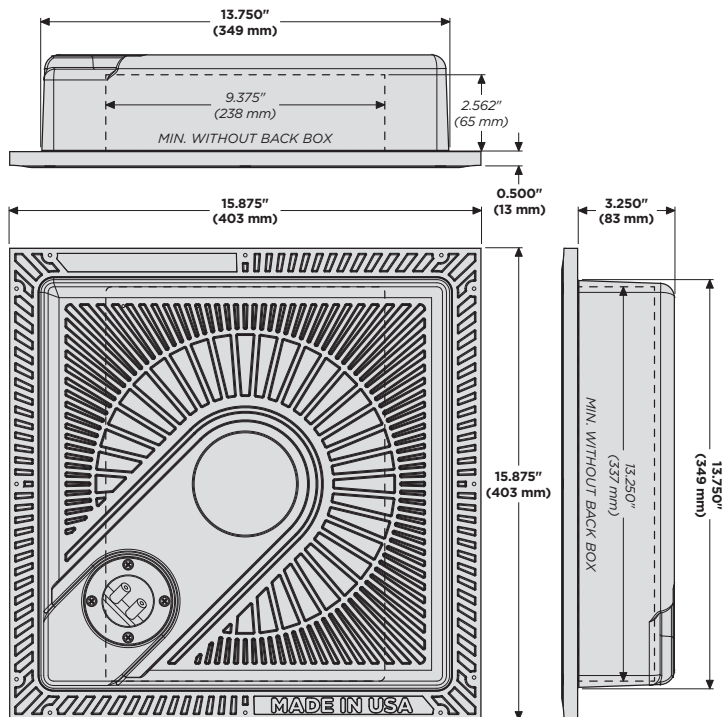


Figure 1: On-axis frequency response in standard stud wall with four coats of latex paint applied to the speaker face panel.