

STEALTH

LR324

INVISIBLE SPEAKER

8" 3-WAY EXPERT GRADE INVISIBLE LOUDSPEAKER
IN-WALL OR IN-CEILING



LINEAR  RADIANCE
INVISIBLE SPEAKERS | SUBWOOFERS

The Stealth Acoustics model LR324 is a three-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 diaphragm speaker front is bonded to the frame of the speaker, 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 LR324 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 nonstandard wallboard finishing materials. Advanced finishing methods such as veneer treatments or heavy plaster applications may be supported using special techniques - call Stealth for details.

The Stealth Acoustics LR324 incorporates an acoustically coupled high quality, low profile, high-power 8" cone woofer, a 30 mm direct coupled neo-magnet mid-range driver and a direct coupled 25 mm neo-magnet high-frequency driver. Advanced internal materials allow for smooth frequency extension to 20 kHz. When the LR324 is installed in the recommended enclosure size, frequency response below 40 Hz can be achieved. The LR324 contains three independent protection circuits (high-, mid-, 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 $\frac{1}{16}$ " (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 $\frac{1}{2}$ " (13 mm) or for fine adjustment.

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 the LR30W – completely invisible companion subwoofer for extended low frequency response.

The LR324 also has a 70-100 volt constant voltage transformer available as a factory installed option.

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

Recommended Applications:

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

Recommended Installations:

Flush mounted in walls or ceilings constructed of wood or steel framing with $\frac{1}{2}$ " (13 mm) or thicker gypsum wallboard.

Min. Cavity Depth Required:

$3\frac{1}{4}$ " (83 mm) or $2\frac{13}{16}$ " (71 mm) with back box removed.

Performance:

160W RMS / 320W Watts Peak
80W min. recommended power

Protection:

Three independent self-resetting circuits (high-, mid-, and low-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.

Architectural & Engineering Specifications

The invisible loudspeaker shall be a three-way, full-range device, incorporating an 8" cone woofer, 30 mm neo magnet direct coupled mid-range driver, and a 25 mm neo magnet direct coupled high frequency driver, producing frequencies from 40Hz to 20kHz. The total flat-front radiating surface shall be 256 sq. in (1,652 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 82 dB, 1 watt/1 meter, with a capacity of 160 watts RMS according to EIA standard RS-426-A. The loudspeaker shall have three independent self-resetting protection devices, one for the high-, mid-, and low-frequency drivers.

The loudspeaker shall fit into walls or ceilings with standard wood or steel stud construction and a minimum cavity depth of 3 1/4" (83 mm) or 2 13/16" (72 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" (349 mm) or 9 3/8" (238 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 as specified.

The invisible loudspeaker shall be the Stealth Acoustics model LR324 and shall carry a 20-year manufacturer's warranty.

Product Specifications

Frequency Response:

40Hz to 20kHz (see Figure 1)

Power Capacity:

160 watts RMS

80 watts minimum recommended power

Protection:

Three independent self-resetting devices
(high-, mid-, and low-frequency)

Sensitivity:

82 dB (1 watt/1 meter)

Driver Components:

High-frequency: 1" (25 mm) neodymium driver

Mid-frequency: 1 1/8" (30 mm) neodymium driver

Low-frequency: 1 1/2" (38 mm) voice coil 8" (203 mm) woofer,
20 oz. (567 gr) ceramic magnet

System Impedance:

8Ω nominal

Polar Dispersion:

170 degrees vertical and horizontal

Dimensions:

Width: 15 7/8" (403 mm)

Height: 23 3/8" (607 mm)

Mounting Depth: 3 1/4" (83 mm)

2 13/16" (72 mm) with back box removed

Product Weight:

20 lbs. (9.1 kg) each (approx.)

Shipping Weight:

44 lbs. (20 kg) per pair (approx.)

24 lbs. (10.9 kg) per single (approx.)

Included Accessories:

Mounting shims
Mounting screws

Optional Accessories:

SA2400-MKII Stealth Acoustics High Current
2-Channel Amplifier with DSP

PS-24 PlaceSaver™

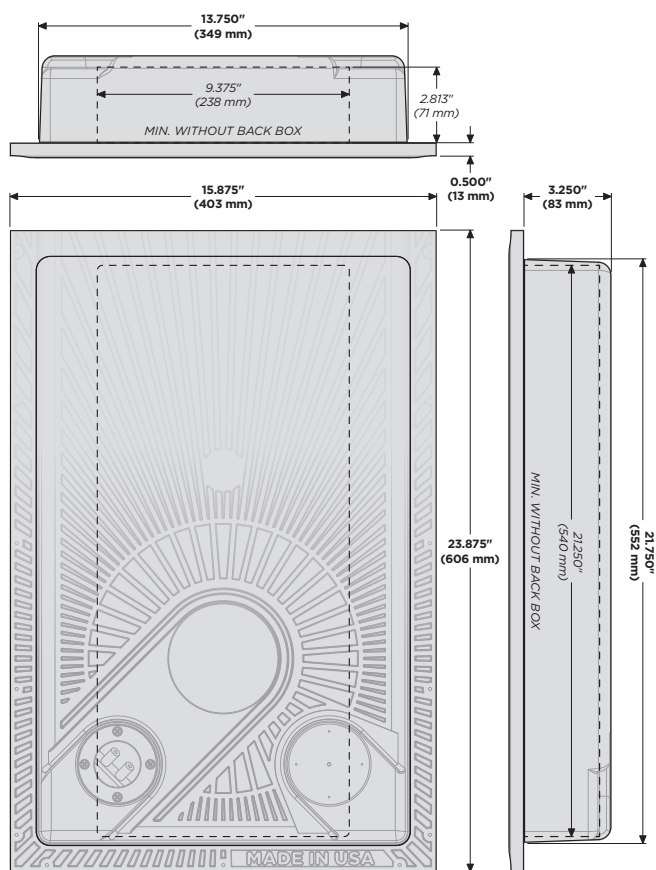
MBX-24 UL Listed Metal Back Box

MBA-24 UL Listed Metal Back Box - Adjustable

MBC-24 Concrete Back Box

SK-1

Shim Kit



Standard Installation

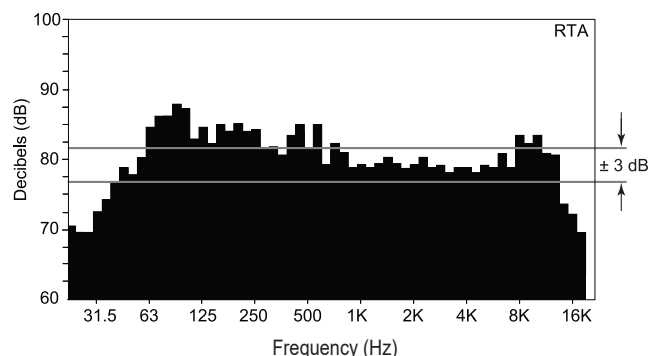


Figure 1: On-axis frequency response in standard stud wall with four coats of latex paint applied to the speaker face panel.