## Stealth Acoustics

Totally Invisible Audio Solutions

# LRG Series Installation Instructions

Installs Like A Standard Drywall Patch™

Stealth Acoustics invisible speakers deliver maximum audio performance while minimizing the aesthetic pollution in your home or business. The installation process is as simple as fitting a drywall patch, and the speakers may be finished with a number of common modern methods.

The speaker line is comprised of two and three-way full range speakers as well as completely invisible subwoofer solutions. All speakers are installed using the same technique. The speakers are built on solid frames that contain the traditional drivers, exciters, and crossovers found in most speakers and are designed to mount directly to the wall or ceiling's structural framing. The face of the speaker is smooth and durable and is designed to finish in a similar fashion to the wallboard surrounding it.

Stealth Acoustics speakers are equally at home in the wall or ceiling and install with the edges of the speaker panel fitting flush with the surrounding wallboard. The seams are taped and spackled using common materials and techniques. Sand the seams, apply your desired finish, and then paint or wallpaper.

Enjoy quality sound that is heard but never seen.

#### SPEAKER INSTALLATION



#### STEP I Install PlaceSaver™

In new construction, PlaceSavers<sup>TM</sup> must be installed when the job is pre-wired. Installing the PlaceSaver<sup>TM</sup> reserves the exact space for the speaker without subjecting the speaker panel itself to the harsh construction environment.

With the use of PlaceSavers<sup>TM</sup>, installation of the speaker panels can take place after the drywall has been hung. The PlaceSaver<sup>TM</sup> is sized slightly larger than the speaker panel to ensure the opening in the drywall will easily accept the speaker. Using PlaceSavers<sup>TM</sup> will save you time and money.



#### STEP 2 Pre-Wire

Install regular speaker wiring and attach it securely to the studs, leaving sufficient slack length to be able to connect to the speaker panel when installed.

- For runs of 50 feet (15m) or less, use 16 gauge wire.
- For runs longer than 50 feet (15m), use 14 gauge wire.



Remove the PlaceSaver™ once the drywall has been hung.



## **STEP 4** Check Speaker Registration



After the wallboard is installed, but before seam taping occurs, check speaker registration and wallboard thickness. The raised center of the speaker panel should be approx. I/16" (I.5mm) proud of the surrounding wallboard for best results.

For correct registration, the perimeter edge of the face panel must fit flush with the adjoining wallboard. It is critical to install the correct number of shims in Step 5 so that THIS SURFACE IS FLUSH WITH WALLBOARD.





- For typical 1/2" (13 mm) wallboard installations, no shims are needed.
- For typical 5/8" (16 mm) wallboard installations, one thick shim (approx. 1/8") is needed for correct registration and should be taped to the rear of the speaker prior to installation.
- Thin shims are also provided for minor adjustments to registration.

**Note:** The typical installations shown above are provided as guidelines. For your installation, the number and thickness of shims needed may differ due to variances in wallboard material and other construction variables.



#### LRG Series Joint Compound Face Panel Face Panel Joint Compound Speaker Frame 5/8" Wallboard 1/2" Wallboard Speaker Frame Shim as Needed I Thick Shim or as Needed Structural Structural Framing Framing Typical I/2" (13 mm) Wallboard Installation Typical 5/8" (16 mm) Wallboard Installation





## **STEP 6** Remove Cover Overlay

The cover overlay provides installation instructions and identifies the active area of the panel. Remove the cover overlay and keep it handy to provide proper speaker finishing information for the wallboard finishers.

Note: the cover overlay may also be used as a cutting template for retrofitting Stealth Acoustics speakers into existing construction.

### **STEP 7** Connect Wires

Insert the speaker wires into the binding posts on the speaker crossover, noting proper polarity. Tighten the binding posts securely using the provided plastic terminal wrench. Jiggle the wires and retighten for a snug fit. Do not overtighten. With smaller gauge wires, bend the exposed wire back upon itself prior to insertion to make better contact with the binding posts.

## **STEP 8** Install Speaker

Attach the speaker panels directly to the structural framing using the provided drywall screws. The panels have been pre-drilled with the proper number of holes. Be sure that all of the screws are installed and that they hold securely to the framing. Confirm that the perimeter edge of the face panel remains flush with surrounding wallboard.



#### Do not use nails.

#### STEP 9 Test Sound



Test the speaker and wiring with an amplified sound source to ensure that everything is connected and working properly **prior** to taping and finishing.







#### **TAPING AND FINISHING**

## **STEP 10** Tape Speaker Panel

When correctly installed, the face of the Stealth Acoustics face panel extends I/16" (1.5 mm) above the height of the wallboard. This is done to allow room for the tape and joint compound needed to blend the panel into the wall. We recommend using the self-adhesive nylon mesh tape provided, but paper tape may also be used.

## **STEP II** Feather Joint Compound to the Wall

Feathering the speaker face panel to the wall is done with standard drywall joint compound in the same manner any other drywall joint is treated. In this case, it is important that enough joint compound be applied to make a very gradual transition from the surface of the wallboard to the face of the speaker panel. It will normally take at least a 12" (30 cm) fan of joint compound around the perimeter of the panel to create a seamless transition.

For best results, we recommend two or three light applications of joint compound with sanding in between coats rather than one heavy application.

Stealth Acoustics speakers do not require a skim coat to attain a smooth finish. However, some advanced finishing techniques may require covering the speaker face panel with a very thin skim coat (I.5 mm or less.) In these situations, the panel must be lightly sanded and primed prior to material application.



#### STEP 12 Sand Smooth

Sanding is the last important step before the painting begins. This can make or break the quality of the installation. When sanding, imperfections in the application of the joint compound may appear and additional joint compound may need to be applied and sanded to create a seamless transition.

#### STEP 13 Paint and Finish

Once the feathering is complete the face panel is ready for painting. Stealth Acoustics speaker face panels are engineered for optimum audio performance with four coats of latex paint applied to the surface. A light spray-on orange peel texture can be applied, or even light wallpaper. Heavy knock down or trowel finishes are not recommended. Before applying any texture or skim coat finish, it is important to lightly sand and prime the face panel.

For use with advanced wall finishes, please contact Stealth Acoustics.

## Stealth Acoustics

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