

# **BLENDS INVISIBLE SPEAKERS**



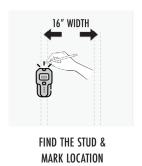
## BLENDS602 | BLENDS802 | BLENDS803 | BLENDS800SUB



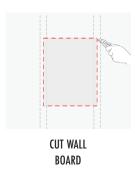




# 1A. FRAMING: <u>RETROFIT</u> (SPEAKER ONLY/NO BACK BOX)











Installing the Blends Invisible Speaker into an already finished wall is similar to making a wall board patch.

- Once you have identified the approximate speaker locations, use a stud finder to locate the nearest stud (framing cavity) and drill test holes to verify it. Mark the wall board to the size of the speaker, so it is centered over the existing framing. Then cut the wall board to the size of the speaker so that the finished opening measures a 16" width by 24" height, centered on the framing studs.
- Install regular speaker wiring and leave sufficient slack length to be able to connect the speaker
- For runs of 50 feet (15m) or less, use 16 gauge wire.
- For runs longer than 50 feet (15m), use 14 gauge wire.
- Next, add two studs (each 2 x 4") on the top and bottom of the side framing. On the top stud, add a cut out on the right side so you are able to feed the speaker wire though. Secure the top and bottom studs with screws.
- Now go to Step 6.

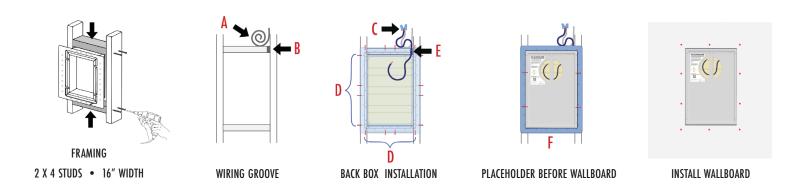
Please visit docs.originacoustics.com or scan this QR code using your smart device for the most up to date safety information and use instructions for this product.\*

\*All warranties and warranty conditions are subject to change.

Please refer to docs.originacoustics.com for the latest information.







## 1B. FRAMING: **NEW CONSTRUCTION**

• First, place the (optional) back box model in between the two side studs, and frame it, in order to identify the installation location. Add markings of where you will need to add the cross member frames, remove the back box, and then install two framing studs above and below the box so the back box can be attached on all four sides.

#### 2. WIRING INSTALLATION

• Install the speaker wire and secure on top of the top stud frame (A), then cut a groove on the right side of top studs to frame (B) so the speaker wire from the back box can fit.

- FOR RUNS OF 50 FEET (15M) OR LESS, USE 16 AWG GAUGE WIRE.
- FOR RUNS LONGER THAN 50 FEET (15M), USE 14 AWG GAUGE WIRE.

#### 3. SECURING BACK BOX TO FRAME

• Route the wire from the back box so it fits into the top stud frame opening (**C**), then place the back box into the stud framing and screw the back box into place. Using the provided drywall screws, secure the back box to the stud frame (**D**), and once the back box is secure in place, connect the speaker wire (**E**) using the wire nuts provided.

#### (Pay attention to wire polarity).

• To mount the back box directly to the studs, use ONLY the provided screws, that match the pre-drilled holes (4 screws on each side flange/ 4 top flange & 4 bottom flange)

USE ONLY THE PROVIDED SCREWS. OTHER SCREWS MAY DAMAGE THE SPEAKER.

#### 4. REUSABLE PLACEHOLDER BEFORE WALL BOARD

• Once the speaker wire is connected, install the Reusable Placeholder (BLENDSPH24) into the back box (F), and using the 4 provided screws, secure in place, to reserve space for the speaker during wall board installation. This will prevent the speaker panel itself from exposure to a harsh construction environment while the wall board is installed around it.

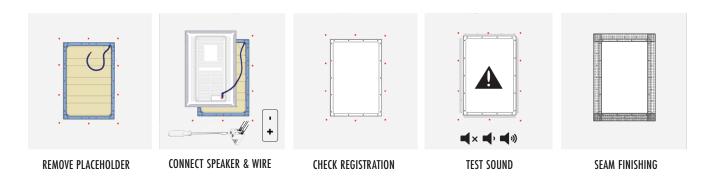
#### 5. WALL BOARD INSTALLATION

- Cut an opening in the wall board so the back box trim can fit, then place the screw template to mark the locations of the predrilled holes and secure the wall board in place. As an alternative, you can use a 7/64 drill bit to secure the wall board into place by making a set of new screw hole locations.
- Once the wallboard has been installed, you may remove the Reusable Placeholder, in order to install the speaker.

#### 6. SPEAKER INSTALLATION & WIRING

- Now, take the speaker wire and connect it into the 2P Connector on the speaker, noting proper polarity as indicated.
- For smaller gauge wires, bend the exposed wire back upon itself prior to insertion to make better contact with the binding posts.





• Securely attach the speaker panel screw flanges into the back box (New Construction), or to the wall studs (Retrofit), by screwing the provided wall board screws into the remaining pre-drilled holes. **DO NOT USE NAILS.** 

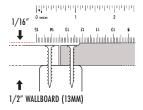
#### 7. SPEAKER REGISTRATION

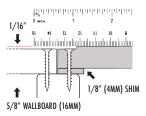
- Check that correct registration has been achieved: ensure that the perimeter screw flange of the speaker is flush with the adjoining wall board allowing the face of the speaker to protrude approximately **1/16" (2mm)** beyond the wall board. (This creates a recess for the seam tape which prevents sanding back into the tape during the finishing process).
- If necessary, add the magnetic shim to the back box (if using back box), or layer the provided self-adhesive shims around the perimeter of the rear of the speaker (shims should cover the screw holes), so you can reach the correct 1/6" (2mm) gap.

INSTALL WITH SCREW FLANGE FLUSH TO WALLBOARD. SPEAKER FACE PROTRUDES 1/16" (2MM), SO THAT PLASTER CAN BE FEATHERED AWAY FROM SPEAKER.

ADD THE CORRECT NUMBER OF SHIMS SO WALLBOARD AND FLANGE SURFACES ARE FLUSH WITH ONE ANOTHER. IF THE SPEAKER IS RECESSED IN RELATION TO THE WALLBOARD, OR EXCESSIVE MATERIAL BUILDS UP ON THE SURFACE OF THE SPEAKER DURING THE FINISHING PROCESS, POOR SOUND QUALITY OR POSSIBLE PREMATURE FAILURE MAY OCCUR.

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





- The correct registration minimizes the amount of joint compound that may build up over the speaker face during the finishing process. This **1/16" (2mm)** protrusion of the speaker face will become invisible after the seams are properly finished and joint compound is feathered out from the speaker appropriately.
- Once the speaker is secured, place a 4-foot straight edge across middle of the speaker to re-verify that the speaker face protrudes approximately **1/16" (2mm)** beyond the wall board in each direction, and the outer flange of the speaker is flush with the surrounding wall board.

CHECK THAT THE SPEAKER IS NOT WARPED FROM STRAIN CAUSED BY UNEVEN FRAMING. A WARPED SPEAKER FRAME WILL CAUSE THE SPEAKER FACE TO BULGE

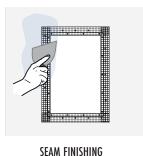
#### 8. TEST SPEAKER SOUND

BEFORE WALL FINISHING, TEST EACH SPEAKER WITH MUSIC/PINK NOISE FROM AMPLIFIED SOUND SOURCE AT LISTENING VOLUME, TO ENSURE FULL SPEAKER FUNCTIONALITY.

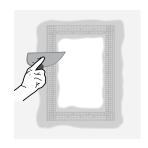
• Make note of sound coming from the high/mid/low frequency drivers of each speaker. Listen for any rattling or vibration.

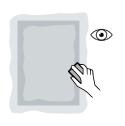
NOW IS THE TIME TO CORRECT ANY POTENTIAL ISSUES.













WAIT 24 HRS

PLASTER FEATHERING

SANDING SMOOTH

PAINT & FINISH

#### 9 SFAM FINISHING

- After the registration and sound check, the speaker panel should be finished in place similar to any piece of wallboard.
- Self-adhesive nylon mesh tape is recommended due to its ease of use, however paper tape is also acceptable.

USE ONLY AIR-DRY JOINT COMPOUNDS AND PLASTERS FOR SEAM FINISHING. DO NOT USE CHEMICALLY CURING JOINT COMPOUND.

• For best results, we recommend at least **THREE** light applications of joint compound, **SANDING BETWEEN COATS.** 

ALLOW 24 HOURS BETWEEN EACH APPLICATION OF JOINT COMPOUND FOR COMPLETE DRYING. FAILURE TO ALLOW THE JOINT COMPOUND TO COMPLETELY DRY BETWEEN APPLICATIONS MAY RESULT IN FINE HAIRLINE CRACKING AROUND THE SPEAKER. IF THIS OCCURS. REPAIR THE CRACK USING STANDARD WALL FINISHING TECHNIQUES. THE CRACK WILL NOT REAPPEAR.

- Spread the joint compound beginning 2"- 3" in from the speaker edge and then feather outward 16"- 20" to achieve a smooth, flat transition.
- Be sure to feather the joint compound AWAY from the speaker to ensure a thickness of LESS THAN 1/16" (2 mm) of joint compound remains over the face of the speaker panel.
- Ensure enough joint compound is applied to make a very gradual transition from the speaker panel face to the surface of the wallboard. Every situation is different, but usually at least a 16"-20" (30cm) fan of joint compound around the perimeter of the panel will be needed to create a flat-looking transition.
- Blends speakers do not require a skim coat to attain a smooth finish. However, in the context of some advanced finishing techniques/materials (such as Venetian plaster/heavy plaster coats), check if necessary to shim the speaker proud of the surrounding wallboard so that no more than **1/16**" (2 mm) in thickness remains on the face of the speaker.

#### 10. SAND SMOOTH

- The quality of the sanding can make or break the quality of the installation. If any imperfections in the joint compound appear when sanding, add additional joint compound and re-sand to ensure a seamless transition.
- Ideally, use a flashlight to shine sheer light down the wall or ceiling to help identify any high/low spots in the finish work.

#### 11. PAINT AND FINISH

- The face panel is ready for painting, once the sanding has been perfected.
- Light "orange peel" texture, light knock-down texture, wallpaper, veneer, or level 5 finish may be applied.

DO NOT USE HEAVY KNOCK DOWN OR TROWEL FINISHES. BLENDS SPEAKER FACE PANELS ARE ENGINEERED FOR OPTIMUM AUDIO PERFORMANCE WITH NO MORE THAN 1/16" (2MM) OF ANY MATERIAL APPLIED TO THE SURFACE OF THE SPEAKER. TO EXCEED THE 1/16" (2MM) LIMITATION WILL CAUSE DEGRADATION OF AUDIO QUALITY.

