



by HARMAN



Installation Guide

FBB8PRO Fire-Rated Backboxes for Control 128W or 128WT into New Construction

Meets One-Hour Fire-Rating Requirements per the Following Standards:
ASTM E 119, NFPA 251, UL263 & 2043, ULC CAN/ULC-S101 and UBC 7-1



INCLUDED

- 1 x Loudspeaker Backbox
- 2 x Suspended Ceiling Rails
- 1 x Conduit Set Screw Connector
- 1 x Hole Plug
- 1 x Installation Guide

IMPORTANT NOTES

1. Installation -- The loudspeaker backbox was designed to be easily installed. However, if you are unable to clearly and fully understand and follow the instructions in this guide, or if you are unsure of your ability to properly install the backbox, please contact your dealer or a qualified installer.

2. Mounting Hardware Selection -- The installer is responsible for the correct selection and use of mounting hardware (available through hardware stores) that will ensure the proper and safe wall- or ceiling-mounting of the backbox.

3. Drywall Thickness -- In order to provide sufficient depth for loudspeakers, drywall used must be 5/8 inch (16 mm) thick or thicker.

4. Tweeter & Woofer Sides of Backbox -- Please make sure the backbox is mounted in the correct orientation, as identified with the indented markings on the backbox baffle, "TWEETER SIDE" and "WOOFER SIDE." Ordinarily, when in-wall speakers are mounted vertically, the tweeter would be located above the woofer. Consult your speaker's owners manual for more details.

5. Cardboard Retainer -- After the backbox is mounted in the wall and drywall is installed, please remember to remove the cardboard retainer from inside the backbox before the speakers are installed.

6. Insulation Materials -- There are insulation materials installed inside each backbox that are essential for its fire-rating properties. Please ensure that this insulation is not shifted inside or removed from the backbox.

INSTALLATION

Stud Installation

The backbox can be installed in a horizontal or vertical orientation. These backboxes are designed to be installed in a stud bay with 2 by 4 inch (50mm x 100mm) studs, minimum. The orientation you choose depends on the stud bay spacing and the desired orientation of the speaker. Choose your mounting orientation from the options shown in Figures 1 and 2.

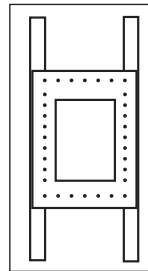


Figure 1. Vertical

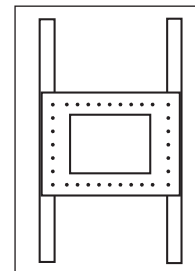


Figure 2. Horizontal

Note: Make sure the hanging tab on the back of the backbox remains fully recessed and does not come in contact with the wall behind the loudspeaker backbox.

Depending on the orientation, install the conduit set-screw connector and the hole plug, as shown in Figure 3.

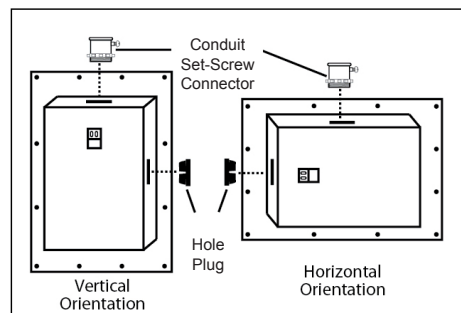


Figure 3. Conduit Set-Screw Connector / Hole-Plug Installation

If conduit is required, attach the conduit to the conduit set-screw connector and pull the speaker wire through the conduit and conduit set-screw connector and into the backbox. Tighten the screws on the conduit set-screw connector.

If conduit use is not required, pass the speaker wire through the conduit set-screw connector into the backbox. Pull enough speaker wire into the backbox to provide an easy connection to the speaker. When not using a conduit, you may use a UL-approved strain-relief cable clamp of the same hole diameter, instead of the supplied conduit set-screw connector.

Position the backbox at the desired location against the studs, using the loudspeaker cutout on its baffle as a guide of where the speaker will be located, and check for possible clearance/interference issues, repositioning if necessary. Before securing the backbox to the stud, make sure that the backbox is equally spaced away from the stud on both sides. This will ensure that the backbox does not touch the stud. Attach one side of the backbox to the stud, using an appropriate screw through one of the center pre-drilled holes. Level the backbox and secure it to the other stud with a screw. Install the remaining screws through the pre-drilled holes into the studs.

After the 5/8 inch (16mm) or thicker drywall is installed, cut the opening for the speaker by using the outside rim of the backbox as a template.

The loudspeaker can now be installed into the backbox per the loudspeaker installation guide.

Suspended Ceiling Installation

Determine the desired location and remove the tile from the ceiling tile system. Ensure that there is a clearance of 6 inches (153 mm) above the ceiling tile chosen. If not, choose a nearby tile that has a clearance of 6 in (153 mm) above it. Place the tile on a flat surface. Set the backbox in desired position, on the ceiling tile. Gently press down on the back of the backbox. This will make an impression in the ceiling tile. This impression will be the template for cutting the hole in the ceiling tile. Cut the hole on the outside of the impression.

Cutout Size Required for the Opening in the Ceiling Tile*:

Model	Drop-Ceiling Cutout Size
FBB8PRO	9.8 x 7.2 in (249mm x 183 mm)

* for reference only

To perform the installation step below, you will need to purchase two sets of carriage bolts and nylon-insert locknuts (not included). As noted earlier, the installer is responsible for the correct selection and use of mounting hardware (available through hardware stores) that will ensure the proper and safe installation of the backbox. 1/4 in-20 x 1/2 in (13 mm) carriage bolts are recommended. If your local building safety codes and regulations or hardware standards rate bolts and nuts by strength, please ensure that your selected bolts and nylon-insert locknuts are capable of withstanding the weight of the in-ceiling backbox and the loudspeaker. Utilizing the two rails and the two carriage bolts with nylon-insert locknuts, attach the ceiling rail to the "L" bracket on the backside of the backbox front plate with a carriage bolt and locknut as shown in Figure 4.

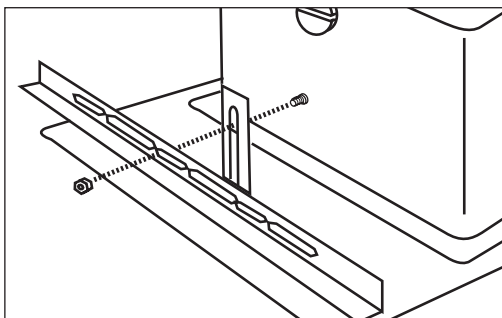


Figure 4. Rail Attachment

Hand-tighten the nut using a wrench or socket. Ensure that the nut is snug, but allow the rail to move. Do not overtighten the nut.

If the backbox needs to be attached to the building structure using wire hangers or a safety harness, lift the free end of the hanging tab located on the top of the backbox by bending the tab upwards, as shown in Figure 5, and attach the wire hangers or safety harness.

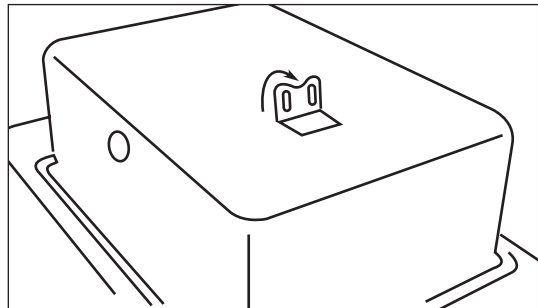


Figure 5. Bending Hanging Tab

Determine which side of the backbox on which to install the conduit or speaker wire. Place the conduit set-screw connector on this side of the backbox and install the hole plug on the other side of the backbox.

Install the cut ceiling tile in the suspended ceiling grid. Align the loudspeaker backbox with this hole and install it above the tile. Adjust the rails on the backbox so that the ends of the rail are on top of the suspended ceiling grid (T-bar) and the rail overhangs the grid on both sides. Let the weight of the box rest on the ceiling tile, but do not compress the tile. Once the rails are in the right spot both vertically and horizontally, tighten the lock nuts on the screw with a wrench or socket. Ensure that the locknuts on both sides of the backbox are tightened and the rail cannot move.

If conduit is required, attach the conduit to the conduit set-screw connector and pull the speaker wire through the conduit and conduit set-screw connector and into the backbox. Tighten the screws on the conduit set-screw connector.

If conduit use is not required, pass the speaker wire through the conduit set-screw connector into the backbox. Pull enough speaker wire into the backbox to provide an easy connection to the speaker. When not using a conduit, you may use a UL-approved strain-relief cable clamp of the same hole diameter, instead of the supplied conduit set-screw connector.

If the safety strap is used, attach the other end of the strap to an approved point on the building structure and attach it to the hanging tab on the backbox. Both attachment points need to meet the requirements of the local building codes, and it is the responsibility of the installer to ensure that these codes are met.

If the wire hanger is used to attach to the deck of the ceiling, follow the instructions of the installation guide supplied with your wire hanger and attach the wire to the hanging tab on the back of the loudspeaker backbox.

The loudspeaker can now be installed into the backbox per the loudspeaker's instructions.



JBL Professional
8500 Balboa Boulevard, P.O. Box 2200
Northridge, CA 91329 USA