Extron

BCK SF 3CT LP and BCK SF 3C LP • Setup Guide

This setup guide contains installation information about the BCK SF 3CT LP, and BCK SF 3C LP. When fully assembled with a DAK SF 3CT or DAK SF 3C they become a fully functioning SF 3CT LP or SF 3C LP Soundfield® XD full range speaker, respectively. These speakers can be installed by a single trade installation procedure or by a multitrade installation procedure (see the *SF 3C LP and SF 3CT LP User Guide*, available at **www.extron.com**, for details). The entire assembly is plenum rated.

> ⚠ **WARNING: Potential risk of severe injury.** Installation and service must be performed by authorized personnel only.
>
> **AVERTISSEMENT :** **Risque potentiel de blessure grave ou de mort.** L'installation et l'entretien doivent être effectués uniquement par un technicien qualifié..

> **NOTE:** Installation of conduit and conduit adapters must conform to all applicable building codes and local ordinances.

1. **Disconnect power** from all devices.

2. **Verify the space where the system will be installed** — Ensure that there is sufficient clearance above the ceiling tile for the unit to be installed.

3. **Cut a hole for the speaker** — Use the provided cutout template to outline the hole to be cut in the ceiling tile, as described below.
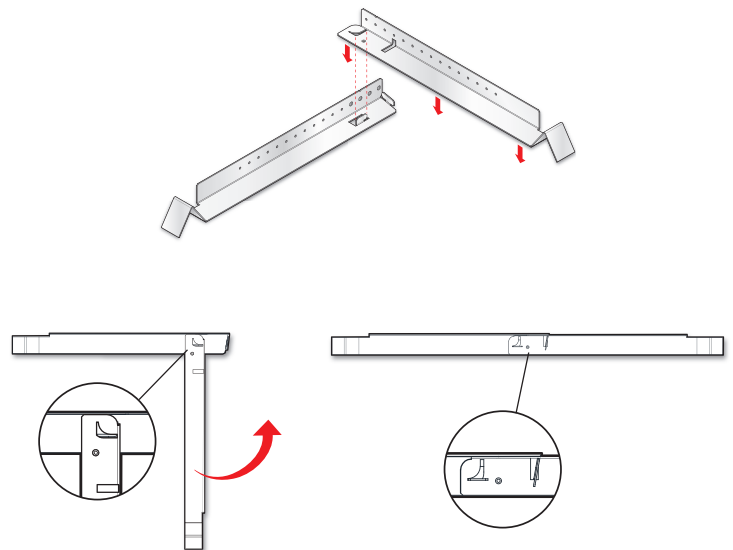
   > **NOTE:** For hard ceiling installations skip steps **a** through **e** and use the cutout template to cut a hole in the ceiling.

   a. Remove the ceiling tile, and draw diagonal lines across it from opposite corners to locate its center. Mark the intersection where the lines cross.

   b. Position the center hole of the cutout template directly over the center of the tile, marked in step 2a.

   c. Trace a circle on the ceiling tile around the cutout template.

   d. Cut out the circle traced in the ceiling tile.

   e. Replace the ceiling tile in the ceiling.

4. **Attach two V-rails and one C-ring** acoss the tile and above the hole cut in step **3**, as described below.
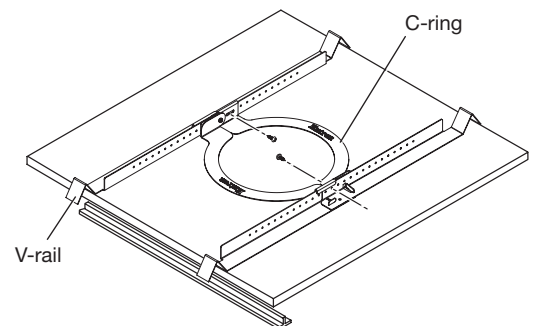
   > **NOTE:** For hard ceiling installations:
   > - Fold one C-ring assembly in half and insert it through the hole in the ceiling.
   > - Unfold the C-ring and center it over the hole with the flat side down.
   > - V-rails are not needed.

   a. Assemble two V-rail half sections so that they become one single piece by fitting the tab of one end into the slot of the other end. Open the V-rail until it locks together, as shown in the following illustrations. Repeat this procedure for the other V-rail.

   b. Remove a ceiling tile adjacent to the tile with the hole.

   c. Place both assembled V-rails on the cut ceiling tile and position them equally on either side of the hole. The ends of the V-rails go over the ceiling grid.

   d. Position the C-ring assembly on the two V-rails so that the C-ring is centered over the hole.

   e. Secure the C-ring to the V-rails using two screws.

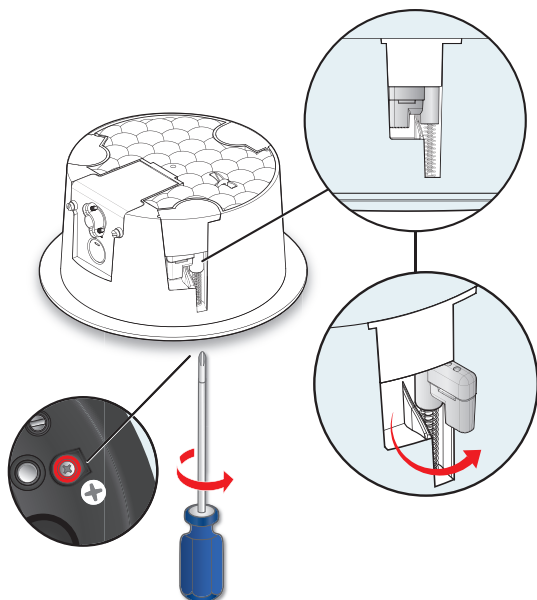5. **Route the speaker wires** through the ceiling tile hole.

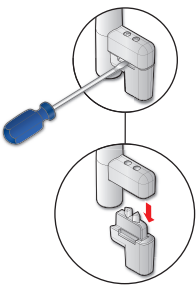**6.** **Configure the locking arms for thicker ceilings (optional).**

Three speaker locking arms, as shown below, are used to secure the speaker to ceiling tiles up to 2.5 inches (63 mm) thick. The locking arms are equipped with removable inserts that accommodate ceiling tiles of up to 1.5 inches (3.81 mm) in thickness. For ceiling tiles thicker than 1.5 inches, the locking arm inserts must be removed.

To remove the inserts:

a. Using a screwdriver, rotate the locking arm so that the insert can be accessed.

b. Use a small screwdriver to pry and separate the insert from the locking arm, as shown below.
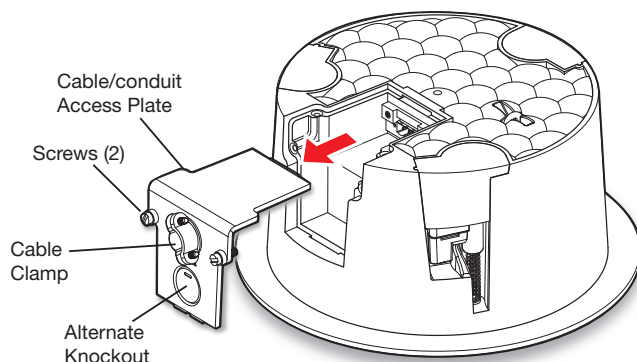

c. Repeat this process for the remaining two locking arms.

d. Rotate all three locking arms back into the speaker.

7. **Configure the cable/conduit access plate and captive screw connector,** as described below.

a. The cable/conduit access plate has one alternate hole available covered by a knockout. This hole may be used for loop out when using conduit. If this knockout needs to be removed, do the following:
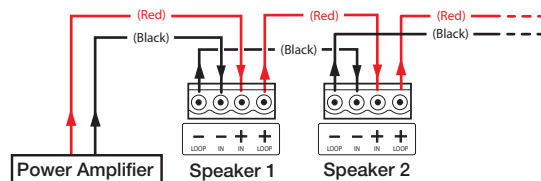
i. With the cable/conduit access plate still attached to the speaker, place the tip of a flat-head screwdriver against the notch of the knockout.

ii. Lightly tap the screwdriver with a hammer to remove the knockout.

b. Loosen the two side cable/conduit access plate screws and remove the cover.

c. Configure the cable/conduit access plate.

- **When not using conduit**: Route the speaker wires through the cable clamp.

- **When using conduit**: Remove the cable clamp and install the conduit into the access plate opening. Secure the conduit to the plate with the locking nut and pull the speaker wires from the conduit.

d. Strip 0.2 inches (5 mm) from the wire ends.

e. Use one of the following three methods to attach the speaker wires to the captive screw connector (depending on the configuration).
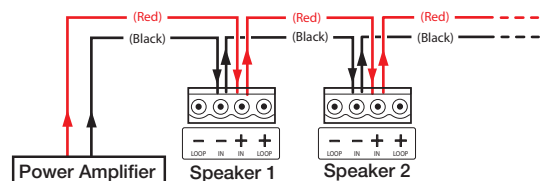
❶ **Wiring Multiple Speakers Using Loop-through**
When a chain of speakers is wired this way, disconnecting one speaker removes power from all downstream speakers.
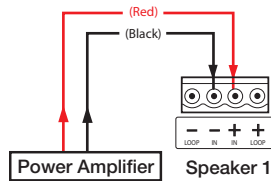

❷ **Wiring Multiple Speakers in Parallel**
When a chain of speakers is wired this way, disconnecting one speaker does not remove power from the remaining speakers in the chain.
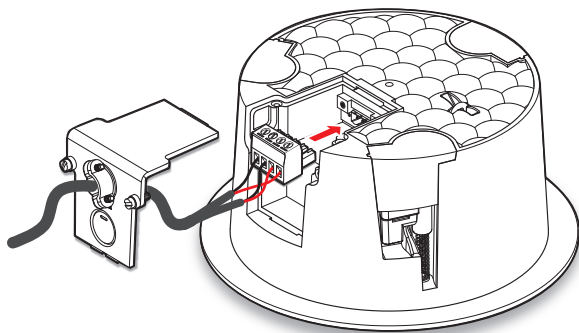
❸ Wiring a Single Speaker

(Red)
(Black)

LOOP IN IN LOOP

Power Amplifier   Speaker 1

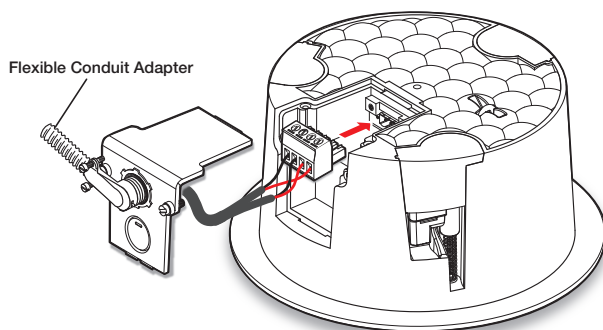| Number of Wires per Connection Point	Maximum Wire Gauge
1	12 AWG
2	16 AWG
4	18 AWG

ATTENTION:

- Do not tin the wire leads before installing into the connector. Tinned wires are not as secure in the connector and could be pulled out.

- Ne pas étamer les conducteurs avant de les insérer dans le connecteur. Les câbles étamés ne sont pas aussi bien fixés dans le connecteur et pourraient être tirés.

- When connecting multiple speakers in 8-ohm mode, be sure that the combined rated impedance does not equal a value less than the minimum rated impedance of the amplifier.
- Lors de la connexion de plusieurs enceintes en mode 8 ohm, assurez vous que le niveau d'impédance combinée ne soit pas équivalent à une valeur inférieure à l'impédance minimum de l'amplificateur.

f. Insert the captive screw plug into the four-pole receptacle of the speaker and screw it down.
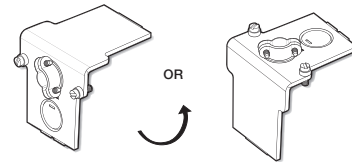
Using a cable clamp:

Using a conduit adapter:

Flexible Conduit Adapter

g. Replace the cable/conduit access plate and tighten the two screws.

> **NOTE:** The cable/conduit access plate can be positioned in one of two ways depending on the application. Flip the plate to the desired position with the wire openings either on the side or on the top of the speaker enclosure before tightening the screws.
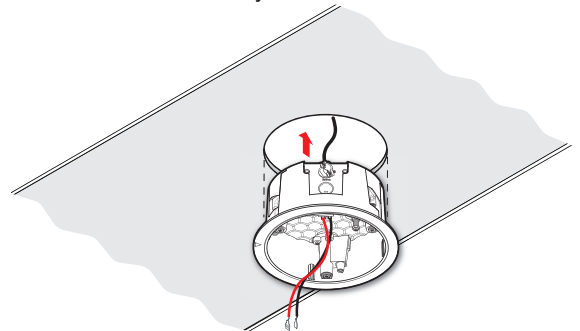>
>
> OR

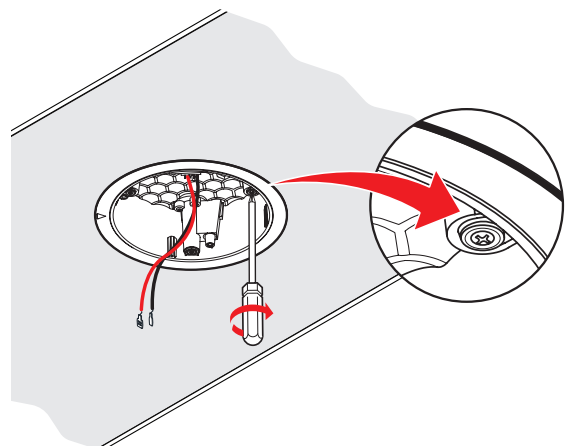**h.** Tighten the cable clamp if it was used.

8. Mount the speaker back can enclosure.

> **NOTE:** For hard ceiling installations: Attach the secondary support line (see **step 9**, page 4) prior to mounting the speaker back can enclosure in the hard ceiling.

a. Insert the speaker through the bottom of the hole in the ceiling tile that was cut in **step 3** on page 1 with the wires out of the way.
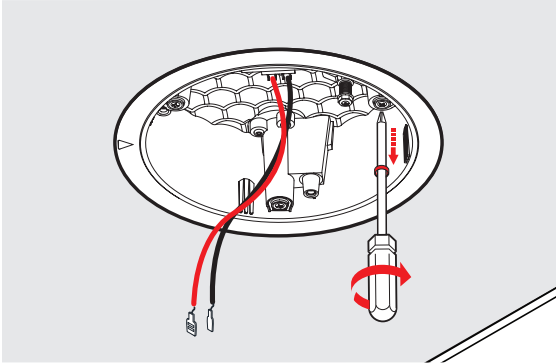

b. Clamp the back can to the C-ring using a Phillips screwdriver to tighten the three locking arms to the C-ring.

3

NOTE: Each of the three locking arm screws uses an Opti-Torque™ indicator. The indicator releases a red plastic ring onto the screwdriver once the screw is tightened to the correct torque. Stop tightening any further when this occurs to avoid overtightening the locking arms to the C-ring.
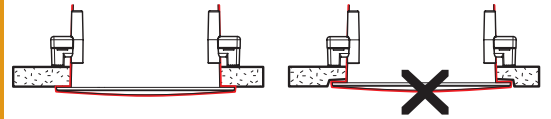

ATTENTION:

- To avoid damaging the locking arms, do not overtighten the three screws.

- Ne pas trop serrer les trois vis pour éviter d'endommager les bras de verrouillage de l'enceinte.

Tightening the locking arms into soft material:

Because fiberglass ceilings and other soft materials are not as rigid as mineral tiles and other hard materials, the Opti-Torque indicator should not to be used as a tightening guide due to the risk of overtightening.
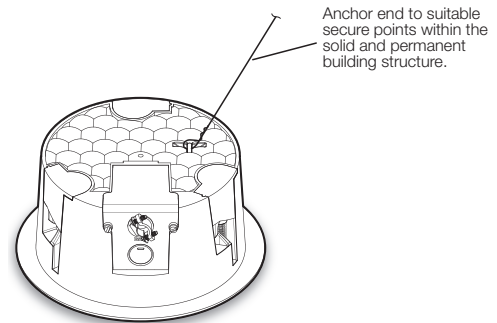
ATTENTION:

- To avoid damaging or deforming soft ceiling material, tighten the locking arms to secure the speaker, but short of causing the speaker to deform the flat mounting surface of the ceiling, as seen from below.

- Afin de ne pas endommager ni d'altérer un plafond souple, serrez les bras de verrouillage pour sécuriser l'enceinte, en veillant cependant à ce que l'unité ne cause l'altération de la surface de montage plane du plafond, comme illustré ci-dessous.

9. **If required, attach a secondary support line.**

    a. Connect a secondary support line to the support loop on the back of the speaker enclosure, as shown here.

Anchor end to suitable secure points within the solid and permanent building structure.

ATTENTION:

- Do not allow any slack in the secondary support line.

- Ne laissez pas de mou au niveau du filin de sécurité secondaire.

    b. Replace the adjacent tile that was removed in **step 4b** on page 1.

10. **Repeat steps for each speaker being installed.**

The back cans are now ready for installation of the speaker driver (DAK SF 3CT and DAK SF 3C).