Extron

BCK SF 26CT • Setup Guide

This setup guide contains installation information about the BCK SF 26CT back-can. When installed and assembled together with the DAK SF 26CT, they become a fully functional SF 26CT SoundField® XD 2-way speaker.

The complete assembly can be installed by a single-trade installation or a multi-trade installation procedure (see the *SF 26CT 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 par le personnel autorisé uniquement.

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

Installing the BCK SF 26CT into a Suspended Ceiling

Preparing the Installation Location

1. **Power down** all attached devices before proceeding.

2. Using the provided cutout template for the outline, **cut a hole for the BCK SF 26CT** in the ceiling tile, as described below.

   > **NOTE:** For hard ceiling installations:
   > Skip **steps a through e** and just use the 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.

3. **Attach two V-rails and one C-ring** above the hole cut in step **2**, 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 by fitting the tab of one end into the slot of the other end. Open the V-rail until it locks together (see figure 1). Repeat this procedure for the other V-rail.

   b. For ease of access, Remove a ceiling tile adjacent to the cut tile.

   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 (see figure 2, on next page).
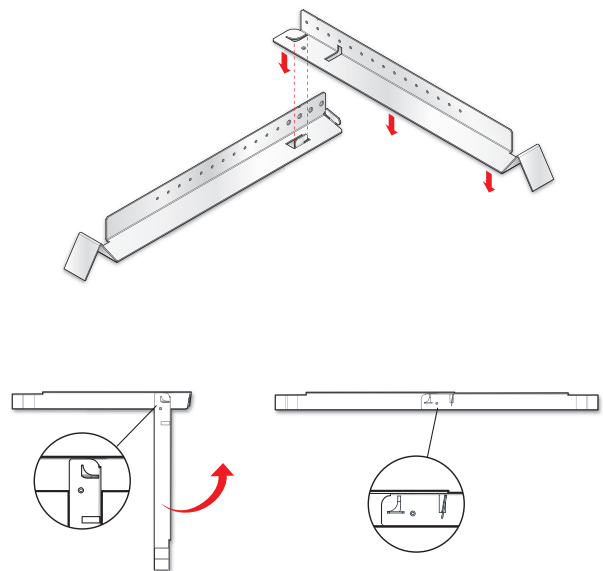

Figure 1. **Assembling the V-rails**

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 (see figure 2).

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

5. **Configure the locking arms for thicker ceilings (optional)**.
Four speaker locking arms are used to secure the speaker to ceiling tiles up to 2.25 inches (5.72 cm) thick. The locking arms are equipped with removable inserts that accommodate ceiling tiles of up to 1.5 inches (3.81 cm) in thickness. For ceiling tiles thicker than 1.5 inches, the locking arm inserts must be removed.

To remove the insert:

a. Using a screwdriver, rotate the locking arm so that the insert can be accessed (see figure 3).

b. Use a small screwdriver to pry and separate the insert from the locking arm (see figure 4).

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

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

6. **Configure the cable/conduit access plate and captive screw connector** (see figure 5):

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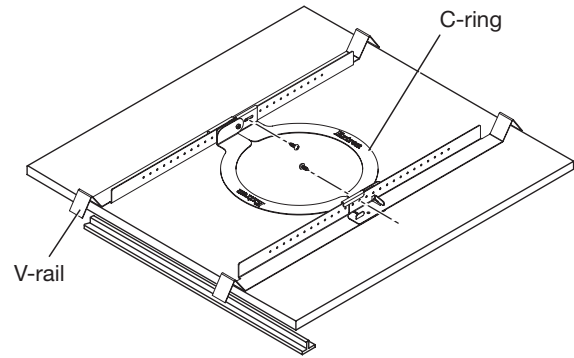
d. Strip 0.2 inches (5 mm) from the wire ends.

C-ring
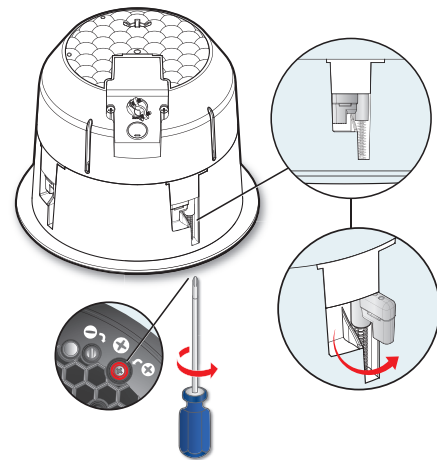
V-rail

Figure 2. Secure the C-ring to the V-rails

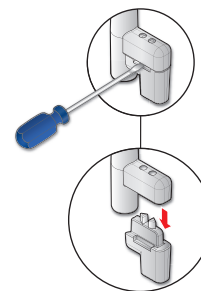**Figure 3. Accessing the Locking Arm Insert**

Figure 4. Prying off the locking arm insert

Cable/conduit Access Plate
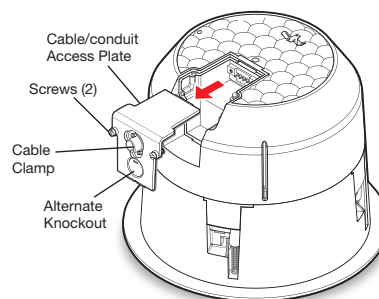
Screws (2)

Cable Clamp

Alternate Knockout

Figure 5. Removing the cable/conduit access plate

e. Use one of three methods to attach the speaker wires to the captive screw connector, depending on the configuration (see figure 6).

> **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 retirés.

f. Insert the captive screw plug into the four-pole receptacle of the speaker and screw it down.

If using a cable clamp to secure cabling, see figure 7.

If using a conduit adapter to secure cabling, see figure 8.

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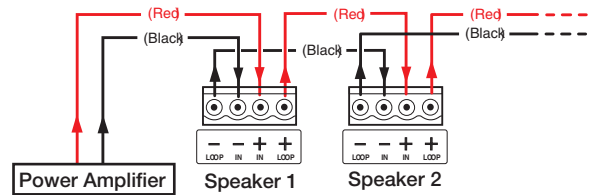
> **NOTE:** The cable/conduit access plate can be positioned in one of two ways, depending on the application. Flip the plate to the desired position with the wire openings either on the side or on the top of the speaker enclosure before tightening the screws.
>
> OR
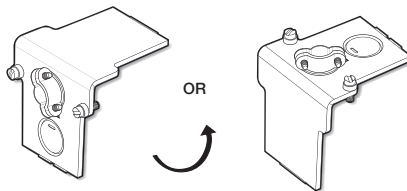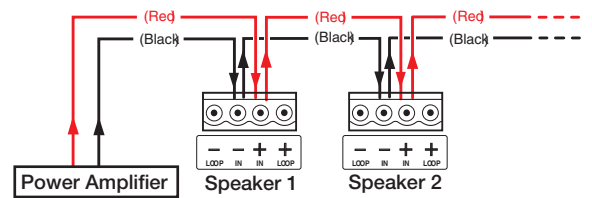
h. If used, tighten the cable clamp.

① Wiring Multiple Speakers Using Loop-through
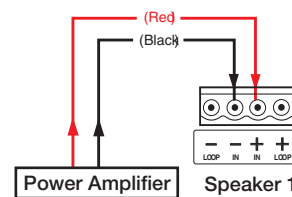When a chain of speakers is wired this way, disconnecting one speaker removes power from all downstream speakers.

(Red) (Red) (Red)
(Black) (Black) (Black)

LOOP IN IN LOOP   LOOP IN IN LOOP

Power Amplifier   Speaker 1   Speaker 2

② 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.

(Red) (Red) (Red)
(Black) (Black) (Black)

LOOP IN IN LOOP   LOOP IN IN LOOP

Power Amplifier   Speaker 1   Speaker 2

③ 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

Figure 6. Wiring the Captive Screw Connector
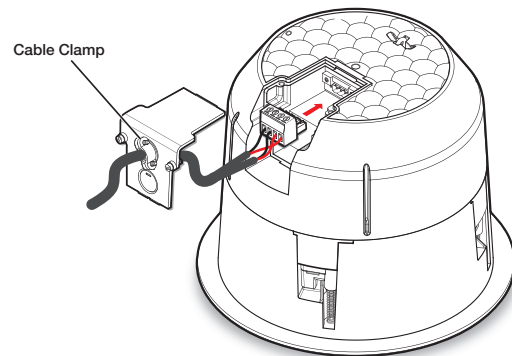
Cable Clamp

Figure 7. Using a Cable Clamp to Secure Cabling

Flexible Conduit Adapter
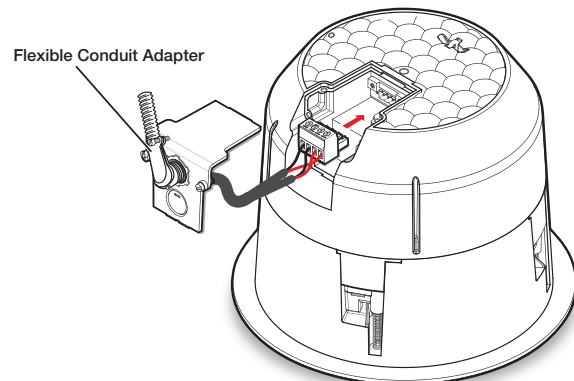
Figure 8. Using a Conduit Adapter to Secure Cabling
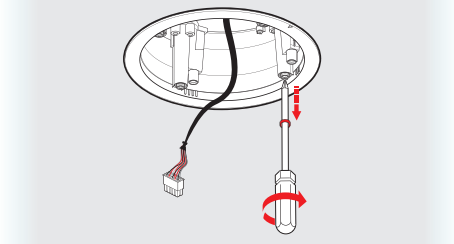
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7. **Mount the speaker back can enclosure**

> **NOTE:** For hard ceiling installations:
> Attach the secondary support line (step 8, on the next page) prior to mounting the speaker back can enclosure in the hard ceiling.

a. Insert the back can through the hole in the ceiling tile that was cut in **step 2**. Move **the wires out of the way to make this easier (see figure 9).**

b. Clamp the speaker to the C-ring by using a Phillips screwdriver to tighten the four locking arms to the C-ring (**see figure 10**).

If tightening the locking arms into rigid material, use the Opti-Torque™ indicator as a tightening guide.

> **NOTE:** Each of the four 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 speaker, do not overtighten the four locking arm screws.
> • Pour éviter d'endommager l'enceinte, ne serrez pas trop les quatre vis.

If 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.
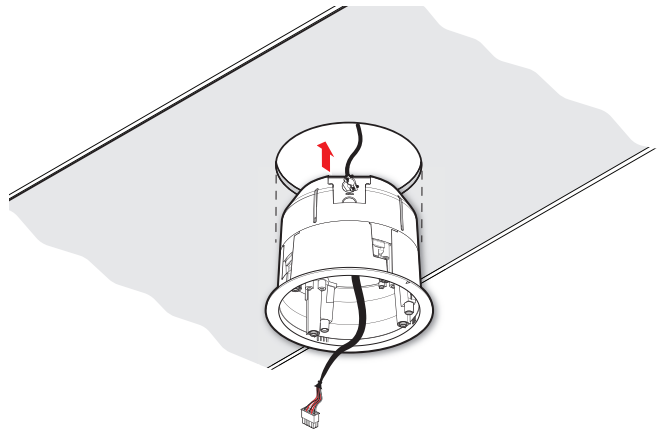

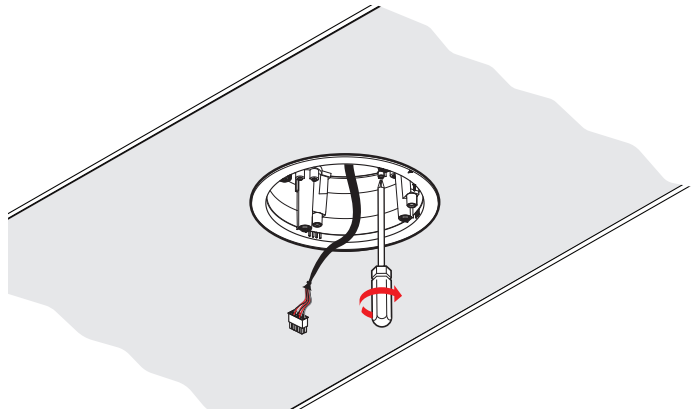**Figure 9.** Insert the Back Can into the Ceiling Tile

Figure 10. Tighten the Locking Arms to the C-ring

ATTENTION:

- To avoid damaging or deforming soft ceiling material, tighten the locking arms to secure the speaker, but do not overtighten to prevent damaging the flat mounting surface of the ceiling (see image 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.
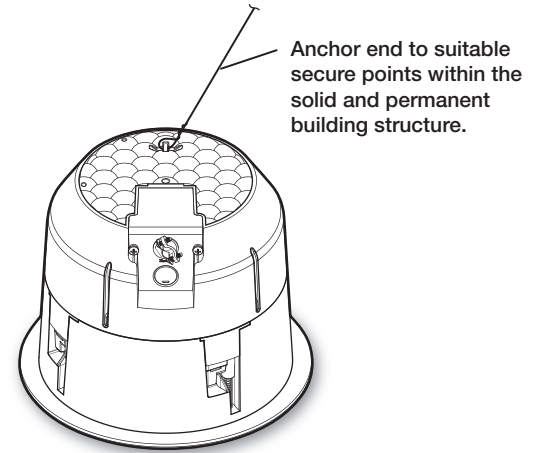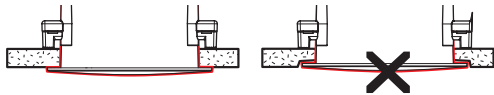
Anchor end to suitable secure points within the solid and permanent building structure.

Figure 11. Attach Secondary Support Line

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

   a. Connect a secondary support line to the support loop on the back of the speaker enclosure (see figure 11).

   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 3**.

9. **Repeat all steps for all the speakers.**

The back cans are now ready for installation of the speaker driver (DAK SF 26CT).

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the **Extron Safety and Regulatory Compliance Guide** on the Extron website.