

SF 10C SUB Subwoofer • Setup Guide



The SF 10C SUB is a plenum-rated, 8-ohm, 4th-order band-pass subwoofer with a tuned bass-reflex port. When installed, the subwoofer is typically suspended by wire from the structural ceiling above the suspended ceiling, but it can also be placed on a floor using the optional SMK F SF 10C kit.

This guide provides instructions for an experienced installer to install the Extron SF 10C SUB subwoofer and to make all connections. The subwoofer typically is installed above a suspended ceiling, but can also be placed on a horizontal surface with an optional floor kit.

Mounting the Subwoofer

The SF 10C SUB can be suspended in a ceiling using the provided hardware. It can also be set on legs using the optional SMK F SF 10C Plus Kit (see the *SMK F SF 10C Plus Setup Guide* [provided with the SMK F SF 10C Plus kit and also available at www.extron.com] for information on the legs).

Placing the Speaker on a Floor

For placement on a floor, attach the SMK F SF 10C Plus legs to the bottom end of the speaker. The optional SMK F SF 10C Plus Kit is provided with the SF 10C speaker and is also available on www.extron.com. See the provided SMK F SF 10C Plus Setup Guide to attach the legs to the speaker.

Ceiling Mounting

The subwoofer can be suspended using the included aircraft cables (see “Aircraft cable installation”) or, optionally, with threaded rods acquired locally (see [Threaded rod installation](#) on page 3).

WARNING:

AVERTISSEMENT :

- Properly suspending equipment requires training and expertise. Improper rigging of suspended equipment can cause the speaker to fall, resulting in **death**, personal injury, equipment damage, and legal liability. Installation must be carried out by fully qualified installers, in accordance with all required safety codes and standards at the place of installation.
- Il est indispensable de disposer de compétences techniques pour pouvoir suspendre l'équipement. Une manipulation incorrecte de l'équipement suspendu peut provoquer la chute de l'enceinte, entraînant la **mort**, des lésions corporelles, des dégâts matériels, et engageant la responsabilité d'un individu. L'installation doit être effectuée par des installateurs hautement qualifiés, conformément à l'ensemble des codes et des normes de sécurité réglementaires sur le lieu de l'installation.
- The legal requirements for suspending equipment vary from country to country. Extron strongly recommends that you consult your local safety standards office before installing any product. Extron also recommends that you thoroughly check any laws and bylaws prior to installation.
- Les conditions juridiques relatives à la suspension d'équipements varient de pays en pays. Extron vous recommande vivement de consulter les standards de sécurité en vigueur dans votre pays avant d'installer un produit. Extron vous recommande également de vérifier minutieusement toute loi et tout règlement avant l'installation.

ATTENTION:

- Installation and service must be performed by authorized personnel only.
- L'installation et l'entretien doivent être effectués par le personnel autorisé uniquement.
- This unit must be repaired by personnel trained by Extron or returned to Extron for repair.
- Cette unité doit être réparée par un technicien formé par Extron ou renvoyée à Extron pour réparation.

Aircraft cable installation

Suspend the subwoofer above a false ceiling using the included aircraft cables using the following suboperations:

- [Remove ceiling tile and install suspension cables](#) on page 2
- [Suspend the main subwoofer enclosure from the ceiling](#) on page 2



SF 10C SUB Subwoofer • Setup Guide (Continued)

Remove ceiling tile and install suspension cables

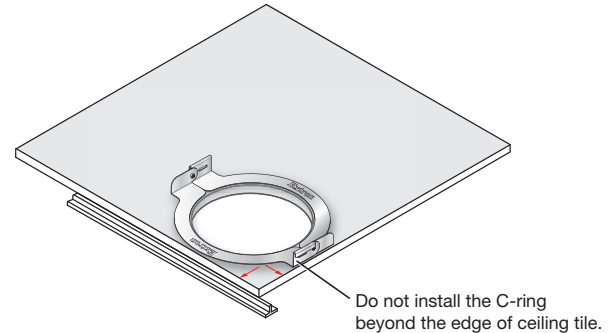
1. Determine where the subwoofer is to be suspended and its orientation above the suspended ceiling.

NOTE: Remember that the sound from the unit is directed out the port. Therefore, although you can suspend the subwoofer in any horizontal orientation, the port needs to be pointed into the listening space.

Consider the following as you make this determination:

- The size (length and width) of the subwoofer.
- The desired location of the woofer port. Ensure that the center of the port tube will be at least 5-3/16 inches (13.7 cm) from the edge of suspended ceiling tile once that tile is installed.

NOTE: This positioning ensures that the grille adapter and C-ring fit properly once installed (see the figure at right).

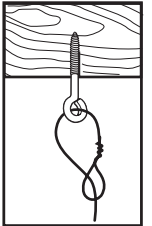


- Any obstructions above the suspended ceiling that could constrain the orientation of the suspended subwoofer.

2. At the location where the subwoofer is to be installed, remove as many ceiling tiles as necessary to install the subwoofer.

NOTE: The number of tiles to remove depends on the height of the structural ceiling above the suspended ceiling, given the 10-degree spread from the subwoofer to the structural ceiling.

3. At an approximate angle of 10 degrees out from each corner of where the subwoofer will be installed, mark and drill four holes in the structural ceiling for the suspension cable anchors.
4. Screw a lag eye bolt (or an appropriate anchor) into each hole.
5. Thread the loose end of the suspension cable through the bolt eyehole, pass the loose end of the cable through the looped end and tighten. Allow each cable to hang.



Suspend the main subwoofer enclosure from the ceiling

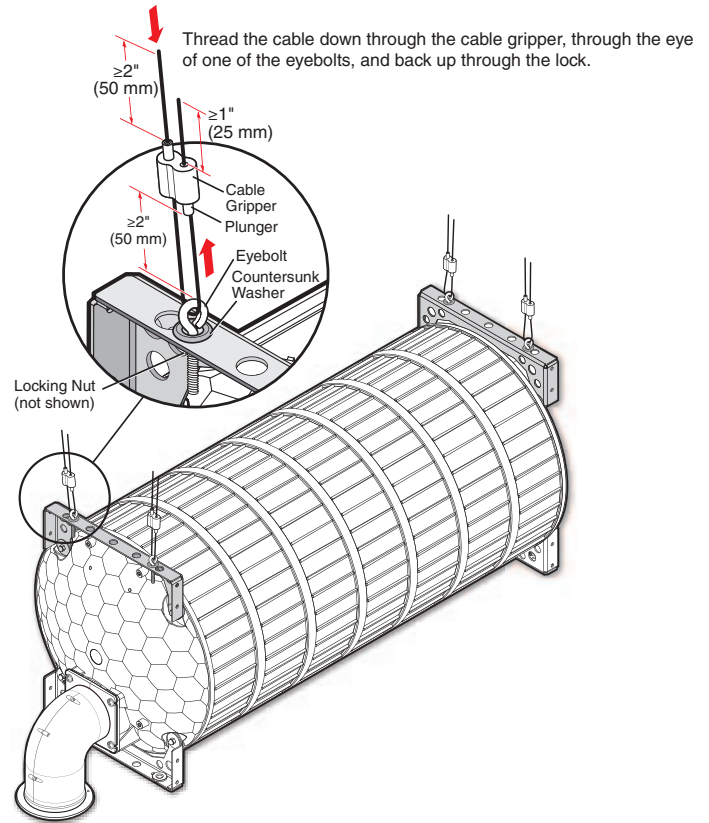
ATTENTION: The SF 10C SUB is heavy, approximately 38 pounds (17 kg), and bulky.

ATTENTION : La SF 10C SUB est lourde, et pèse environ 17 kg (38 livres), et est volumineuse.

- Use at least two people to install the subwoofer: one person to lift the unit into position **AND** to hold it, the second person to fasten the suspension cables.
- Il faut au minimum deux personnes pour installer le caisson de grave : la première pour mettre l'unité en place **ET** la tenir, et la seconde pour raccorder les câbles de suspension.
- Consider using a scissor-lift or other lifting apparatus rather than a ladder to work in the ceiling.
- Songez à utiliser une nacelle élévatrice ou tout équipement similaire plutôt qu'une échelle pour travailler au plafond.
- Do not rest the subwoofer on the ceiling grid, even temporarily.
- Ne posez pas le caisson de grave sur la grille de plafond, même temporairement.

TIP: If a scissor-lift is not available, the speaker can be hoisted using the suspension cables.

1. Remove the grommets from all four corners of the subwoofer frame (see the figure at right).
2. Install the included eyebolts through the provided countersunk washers and into the four holes on the frame. Secure the eyebolts in place with the provided locking nuts.
3. With the help of at least one other person, carefully lift the subwoofer enclosure into the installation location.
4. Pass the loose end of one of the cables down through one hole of an included cable gripper. Ensure that about 12 to 15 inches (30 to 38 cm) of cable has exited the gripper.
5. Pass the loose end of the cable through the eye of one of the eye bolts on the subwoofer enclosure and then through the other hole in the cable gripper. Ensure that at least 1 inch (2.5 cm) of cable comes through the other end of the gripper.



⚠ WARNING:

AVERTISSEMENT :

- Maintain at least a 2 inch (5 cm) clearance between the plunger on the cable gripper and any other object in the ceiling space. This includes the space between the eyebolt below the gripper and the mounting hardware above the gripper. If an object strikes the plunger, the cable gripper could disengage and allow the subwoofer to fall.
- Conservez au minimum 5 cm (2") d'espace libre entre le piston sur le serre-câble et tout autre objet se trouvant dans l'espace plafond. Il s'agit de l'espace entre l'anneau de levage sous le serre-câble et le matériel de montage au-dessus du serre-câble. Si un objet heurte le piston, le serre-câble pourrait se desserrer et entraîner la chute du caisson de basses.

6. Repeat steps 3 and 4 for each corner.
7. Adjust the cable tension through all cable grippers so that the subwoofer appears level to the critical eye and to ensure that its bottom brackets will be approximately 1 inch (2.5 cm) from the top surface of suspended ceiling tile once that tile is installed.

NOTE: The exact height of the subwoofer is not critical at this point. You will make final adjustments after the grille is installed.

Threaded rod installation

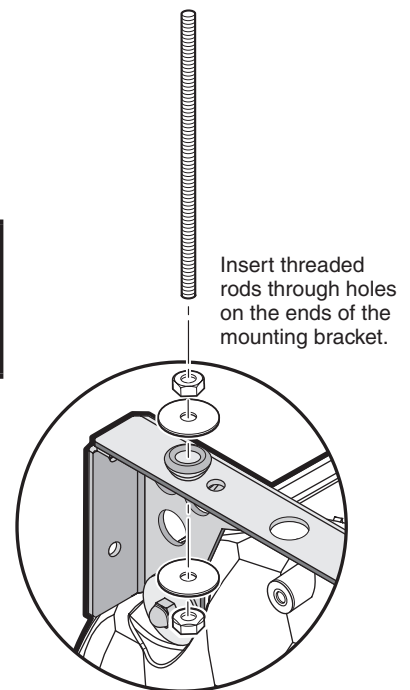
Secure the subwoofer to the structural ceiling using threaded rods as follows:

NOTES:

- Extron recommends 1/4-inch or 3/8-inch diameter threaded rods for installing this product.
- The threaded rod should be properly secured to the ceiling structure. For example, properly fasten a unistrut to the ceiling structure and attach threaded rods using nuts and washers.

1. Fasten four threaded rods to the support structure. Extron recommends fastening the rods to unistruts, one over each corner of the subwoofer installation location (see the figure at right).
2. Fasten a rod to each corner securing point of the subwoofer with nuts and washers.
3. Adjust all the nuts that secure the subwoofer to the ceiling so that the subwoofer appears level to the critical eye and to ensure that its bottom brackets will be approximately 1 inch (2.5 cm) from the top surface of suspended ceiling tile once that tile is installed.

NOTE: The exact height of the subwoofer is not critical at this point. You will make final adjustments after the grille is installed.



SF 10C SUB Subwoofer • Setup Guide (Continued)

Mounting the Port Tube

1. Orient the port tube so that it is pointed into the listening space (see the image at right).
2. Using the included hardware, attach the port tube to the speaker.

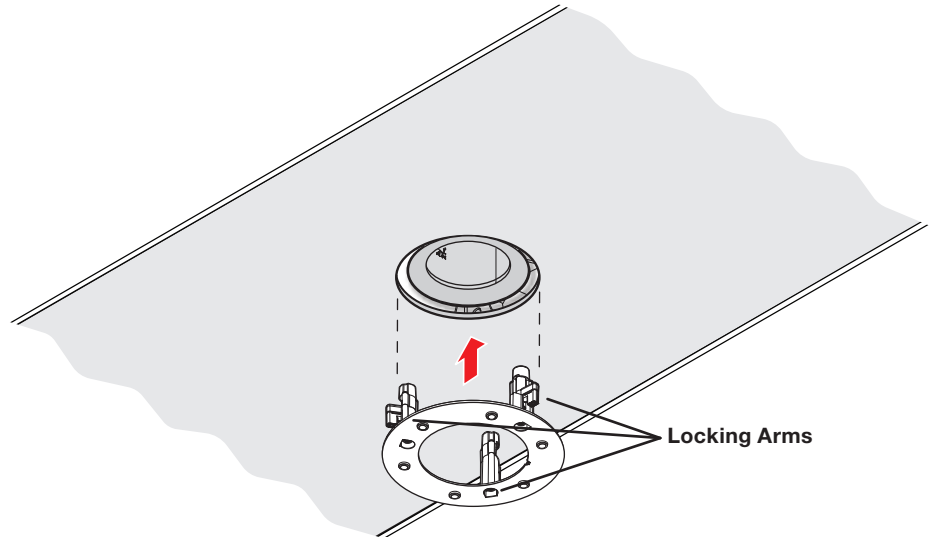
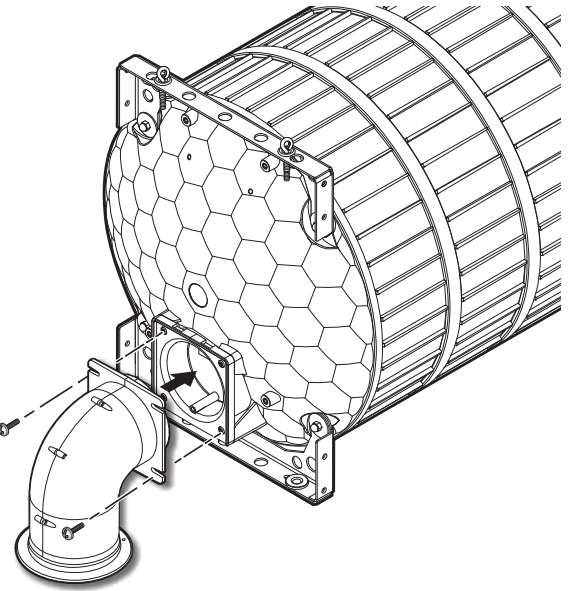
Installing the Grille

1. If not already accomplished, on the installation surface, mark where the center of the port tube faces the installation surface. The center mark must be at least 5-3/16 inches (13.7 cm) from the edge of the installation surface.

NOTE: For ceiling tile installation, if the ceiling tile is not removed for the subwoofer installation, remove it.

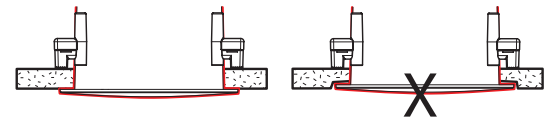
2. If not already accomplished, using the included grille cut-out template, mark and cut the hole in the surface.
3. For ceiling tile installation, replace the ceiling tile in the grid.
4. Place the C-ring on the subwoofer side of the installation surface and center it over the hole (see the image at right).
5. Place the grille adapter on the opposite side of the installation surface and use a Phillips screwdriver to turn the three locking arms to loosely mate the adapter to the C-ring.
6. Rotate the C-ring and grille adapter such that the locking arms and the C-ring do not touch the subwoofer.
7. Use a Phillips screwdriver to tighten the three locking arms to clamp the adapter to the C-ring.

Mounting Screws
(4 places)



ATTENTION:

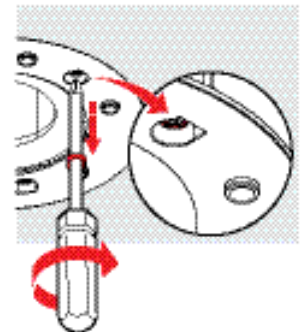
- To avoid damaging or deforming soft ceiling material, tighten the locking arms to secure the speaker, but short of causing the speaker to deform the flat mounting surface of the ceiling, as seen from below.
- Afin de ne pas endommager ni altérer un plafond souple, serrez les bras de verrouillage pour sécuriser l'adaptateur en grille, en veillant cependant à ce que l'unité ne cause l'altération de la surface de montage plane du plafond, comme illustré ci-dessous.



NOTE:

 For installation in rigid vs. soft material:

- **Rigid material** — Three locking arm screws use Opti-Torque indicator rings that snap and separate from their plastic rings when the screws are tightened to the correct torque. The indicator ring falls down the screwdriver shaft. When this occurs, stop tightening the screw to avoid overtightening the locking arms to the C-ring (see the image at right).
- **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 be used as a tightening guide due to the risk of overtightening (see the **ATTENTION**, above).



8. Affix the magnetic grille to the grille adapter.
9. Adjust the position of the subwoofer relative to the installation so that the subwoofer appears level to the critical eye and is centered over the grille. Ensure that the port tube is as close as possible to the installation surface without touching it.

NOTE: Do not allow the port tube or any part of the subwoofer to touch the installation surface. Undesired audio vibrations can occur.

Connection and Operation

Configure the cable conduit access plate and captive screw connector as follows:

1. Loosen the cable conduit access plate screw and remove the plate before wiring the subwoofer (see the figure at right).
2. Configure the cable conduit access plate, using either of the following methods:
 - **When not using flexible conduit:** Route the speaker wires through the cable clamp (see figure 1, ①).
 - **When using flexible conduit:** Remove the cable clamp and install the flexible conduit into the plate opening. Secure the flexible conduit to the plate with the locking nut and pull the speaker wires from the flexible conduit (②).

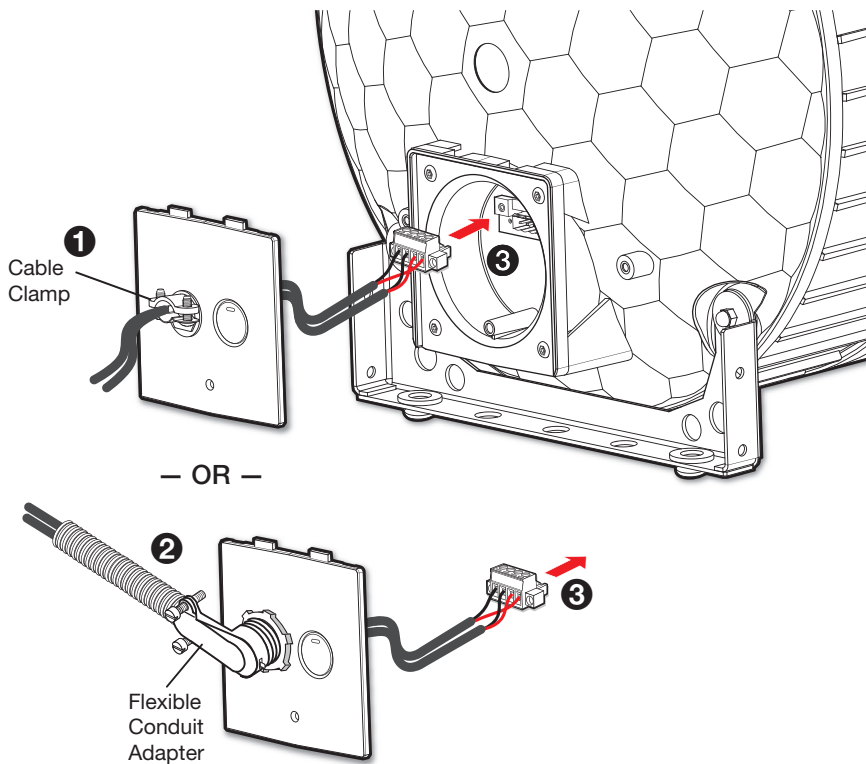
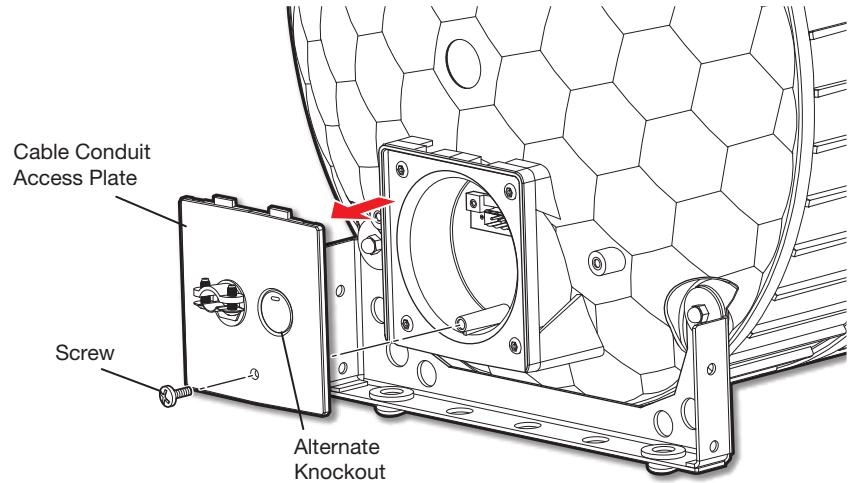


Figure 1. Connection Using a Cable Clamp or Flexible Conduit

NOTE: The cable conduit access plate has an alternate hole available by removing the knockout.

3. Strip 3/16 inch (5 mm) from the wire ends.

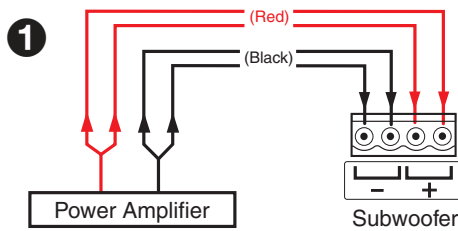
NOTES:

- The length of exposed wires is important. The ideal length is 3/16 inch (5 mm).
 - If the stripped section of wire is longer than 3/16 inch, the exposed wires may touch, causing a short circuit.
 - If the stripped section of wire is shorter than 3/16 inch, wires can be easily pulled out even if tightly fastened by the captive screws.
- Do not tin the leads before installing them in the connector. Tinned wires are not as secure in the connector and could be pulled out.

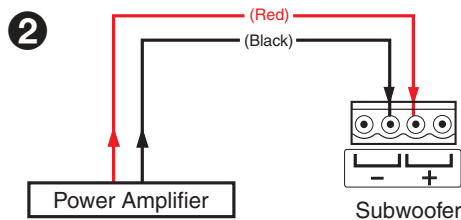
4. Connect four or two speaker wires to the captive screw connector by one of two methods, as shown in the following two examples:

Double Wiring

Using two 12 AWG wires yields effective 9 AWG wiring, reducing cable losses.

**Wire Gauge Table**

| Number of Wires per Pole | Maximum Wire Gauge |
|--------------------------|--------------------|
| 1 | 12 AWG |
| 2 | 16 AWG |
| 4 | 18 AWG |

Single Wiring**Figure 2. Subwoofer Wiring Methods**

5. Insert the captive screw plug into the four-pole receptacle of the subwoofer (see figure 1, ③, on the previous page).
6. Replace the access plate and tighten the retaining screw.
7. Tighten the cable clamp if it was used.

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.