

Product Description

The SB 33 A speaker is an under-the-display powered soundbar speaker for use in small-to-medium conference rooms. It features two 3" full range speaker drivers driven by an internal amplifier module. The SB 33 A accepts analog and unbalanced stereo input signals. Three individually buffered inputs are available so three separate sources can be connected without altering performance.

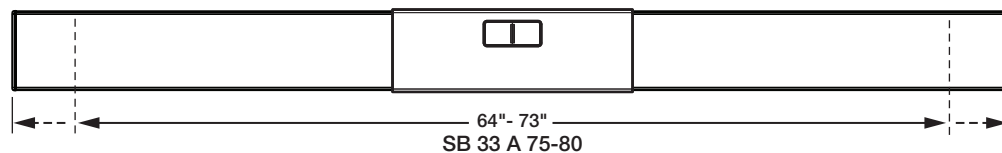
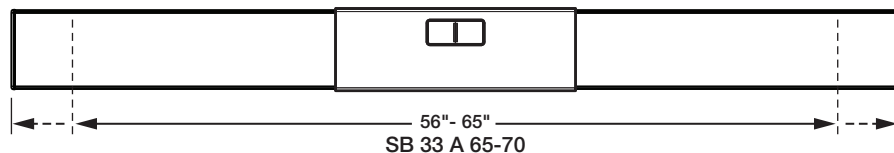
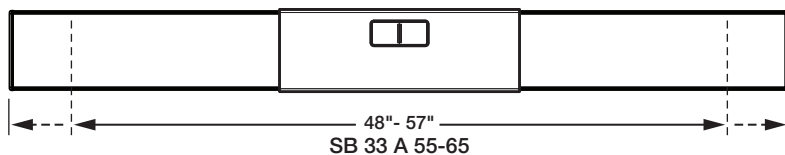
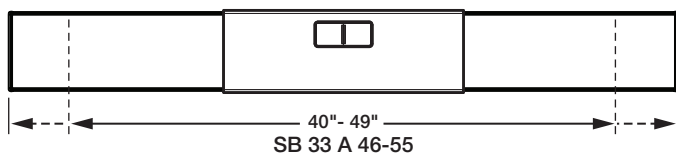
The SB 33 A speaker enclosure is adjustable to match the width of the display and is mounted under the display. It features an adjustable shelf to accommodate the mounting of a web cam or small conferencing camera. The SB 33 A is offered in four different sizes to accommodate screen sizes from 46" to 80", as shown in the table below.

Installation Overview

The installation of the SB 33 A speaker uses the included wallplate to mark the wall where the SB 33 A is being mounted. After the wallplate is attached to the wall the SB 33 A is then attached to the wallplate. The following section describes the mounting procedure for safely and securely mounting the speaker.

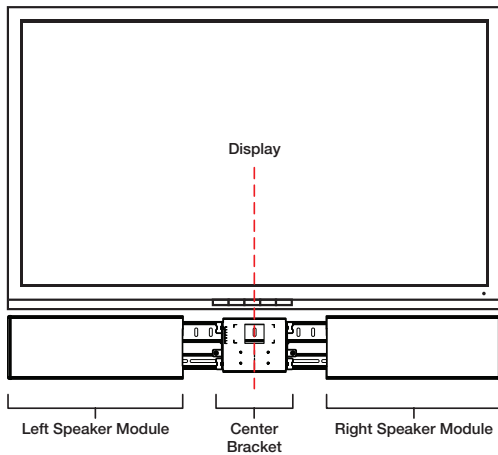
NOTE: Install the wallplate onto wall material using common installation methods with applicable hardware dictated per local building code.

Option	Fit Display Size (diagonal)	Fit Display Width	Speaker Module Width
SB 33 A 46-55	46" — 55"	40" — 49" (101.6 cm — 124.5 cm)	16.25" (41.3 cm)
SB 33 A 55-65	55" — 65"	48" — 57" (121.9 cm — 144.8 cm)	20.25" (51.4 cm)
SB 33 A 65-70	65" — 70"	56" — 65" (142.2 cm — 165.1 cm)	24.25" (61.6 cm)
SB 33 A 75-80	75" — 80"	64" — 73" (162.6 cm — 185.4 cm)	28.25" (71.8 cm)



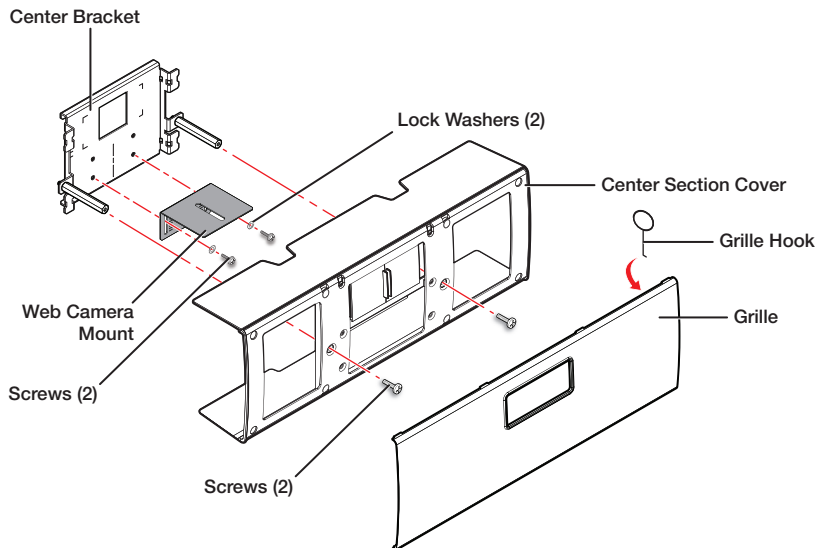
SB 33 A Series • Setup Guide (Continued)

Preparing the Mounting Location



NOTE: Observe all applicable building codes and local ordinances when installing the SB 33 A speaker.

Before starting the installation, remove the center section assembly from the packaging and do the following:



1. Remove the front grille from the center section cover using a grille hook.
2. Remove the center section cover from the center bracket standoffs by removing the two screws.
3. Remove the web camera mount from the center bracket (if necessary) by removing the two screws and lock washers that attach it to the center bracket.

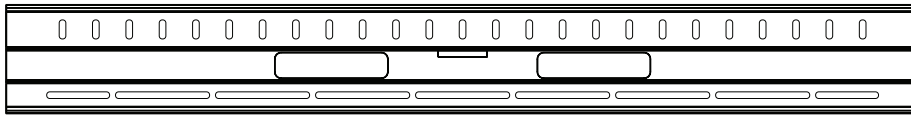
Installing the Wallplate on a Non-masonry Wall

NOTE: When attaching the wallplate to masonry, see [Installing the wallplate on a masonry wall](#) on page 4.

1. Mark the locations of the wall studs through the top vertical slots and bottom horizontal slots where four screws (not included) will secure the SB 33 A speaker wallplate to the wall. Position and level the included wallplate (shown on the next page) under the display screen (see the illustration above at the top of the page).

NOTES:

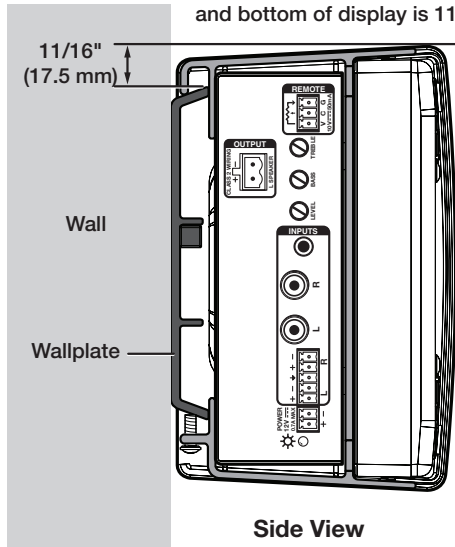
- If the wallplate cannot be attached to two studs, the wallplate can be offset such that one side of the wallplate can be attached to one stud and the other end of the wallplate can be attached to the wall using two (not included) 1/4" Kap Toggles. If the stud must come down the middle of the wallplate, secure the wallplate to the stud using two screws and to the wall using two (not included) 1/4" Kap Toggles (one on the leftmost top slot and one on the rightmost top slot)
- The center of the wallplate does not need to be precisely aligned with the center of the display above it because the speaker module on either end of the wallplate can be adjusted on the wallplate.



NOTE: Assuming that the display screen is level, allow for some space between the bottom of the display screen and the top of the speaker because the speaker assemblies and the center bracket attach to the wallplate by hooking the top mounting clasps of the speaker assemblies and center bracket over the top mounting rail of the wall plate.

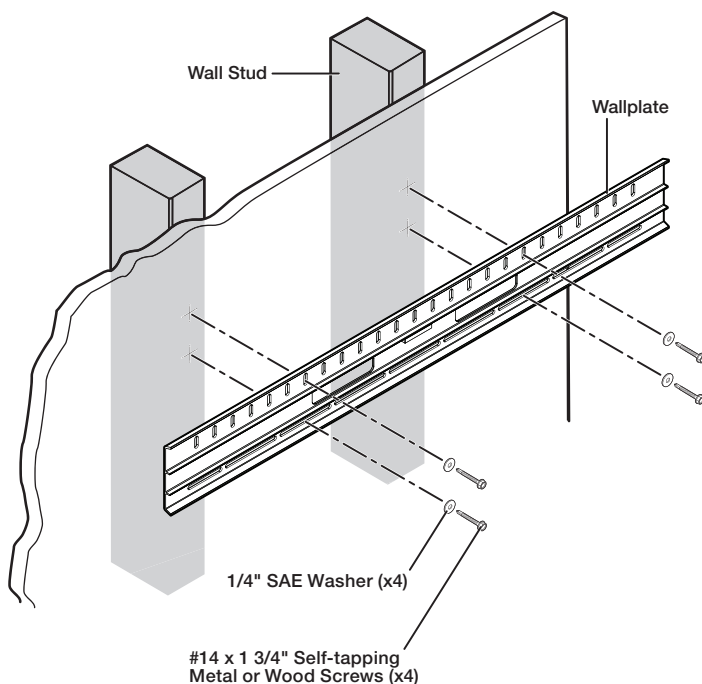
To allow sufficient clearance between the top of the SB 33 A and the display screen above it, allow for at least a minimum clearance of 11/16 inches (17.5 mm) between the highest part of the top rail of the wallplate and the top of the speaker, as shown below. The display screen should not encroach into this area above the top rail.

Minimum clearance between top of wallplate and bottom of display is 11/16" (17.5 mm).



2. If necessary, cut a hole in the wall to route cables to the SB 33 A speaker.
3. Drill four pilot holes through the marked locations on the wall.
4. Screw the wallplate to the wall studs using four #14 x 1 3/4" self-tapping wood or metal screws and four 1/4" SAE washers into the pilot holes.

NOTE: Use wood or metal screws depending on whether the studs are wood or metal.



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Installing the Wallplate on a Masonry Wall

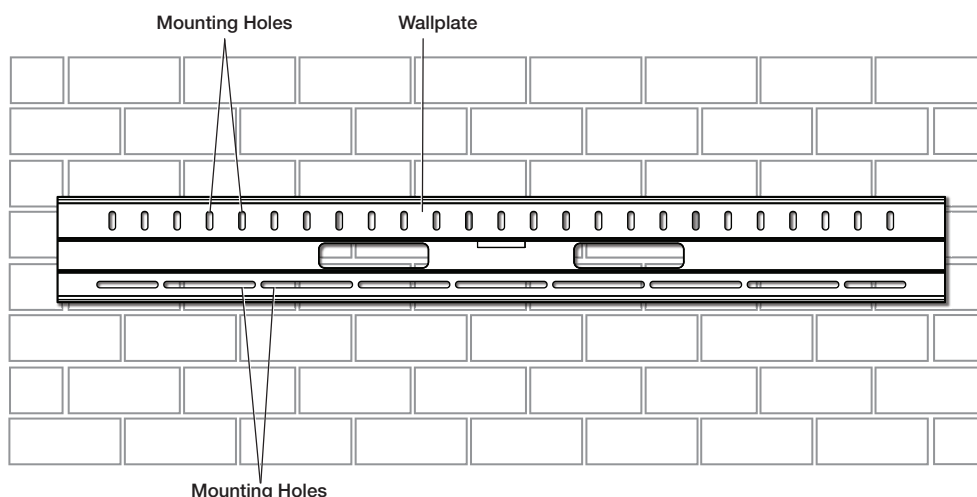
Mount the wallplate on a brick, stone, or concrete wall by doing the following:

1. Follow [steps 1 and 2](#) of “Installing the wallplate on a non-masonry wall” starting on page 2.

NOTE: Because masonry installation does not involve wall studs, position the wallplate so that the mounting holes will evenly distribute the weight of the SB 33 A.

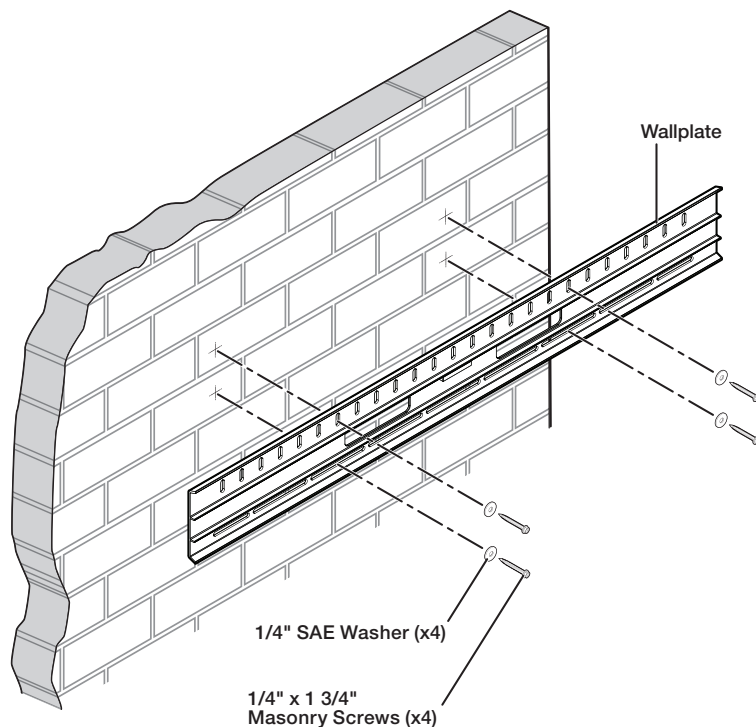
2. Using a masonry drill bit, drill four pilot holes in the masonry wall at the locations you marked in step one.

NOTE: If you drill the pilot hole too shallow, the screw head might break off while it is being fastened into the hole.



NOTE: The center of the wallplate does not need to be precisely aligned with the center of the display above it because the speaker module on either end of the wallplate can be adjusted on the wallplate.

3. For each pilot mounting hole:
 - a. Insert a 1/4" x 1 3/4" masonry screw through a 1/4" SAE washer.
 - b. Position the wallplate over the pilot holes
 - c. Insert each screw and washer through the wallplate and into the pilot hole.



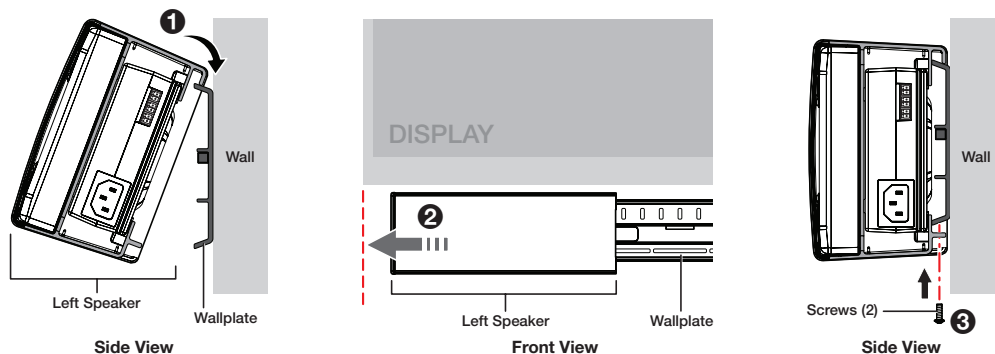
- d. Securely tighten the four screws to the wallplate.

Attaching the SB 33 A to the Wallplate

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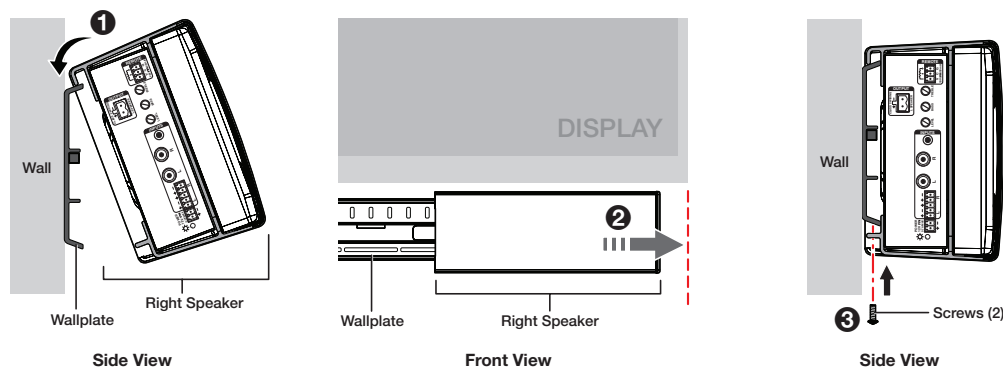
- When attaching either speaker assembly or the center section to the wallplate, avoid damaging or scratching the speaker assembly and center section cover.
- Lorsque vous fixez les enceintes ou la section centrale à la plaque murale, prenez garde à ne pas endommager ni à rayer les enceintes et le couvercle de la section centrale.

1. Hook the top clasp edge of the left speaker assembly over the top rail (❶) of the wallplate and slide it to left end of the wallplate (❷) so that the left end of the speaker assembly is aligned with the left end of the display.



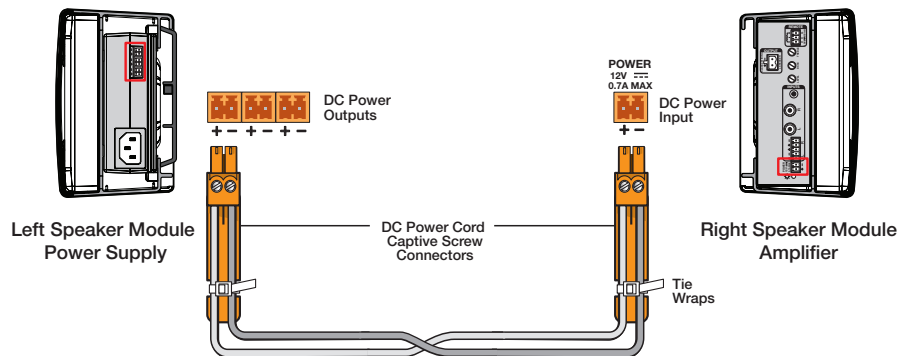
Tighten the two set screws on (❸) the bottom of the left speaker assembly to the bottom rail of the wallplate.

2. Hook the top clasp edge of the right speaker assembly over the top rail (❶) of the wallplate and slide it to right end of the wallplate (❷) so that the right end of the speaker assembly is aligned with the right end of the display.



Tighten the two set screws (❸) on the bottom of the right speaker assembly to the bottom rail of the wallplate.

3. Route the supplied power cable from the power supply in the left speaker enclosure to the power input connector of the amplifier in the right speaker enclosure.



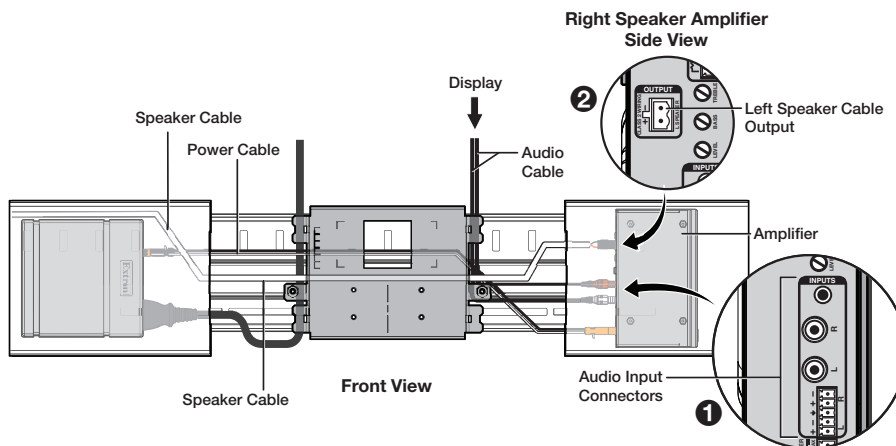
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ATTENTION:

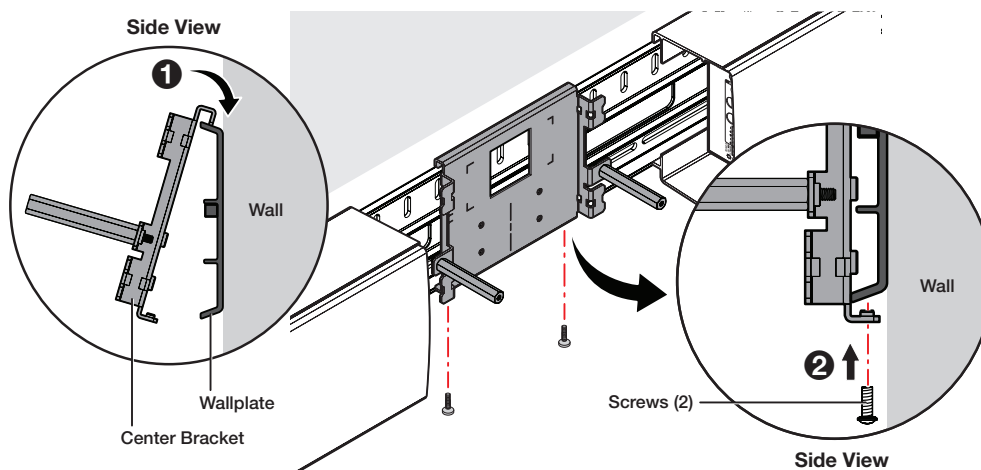
- Always use a power supply supplied by or specified by Extron. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the end product.
- L'utilisation d'une source d'alimentation non autorisée annule toute certification de conformité réglementaire, et peut endommager la source d'alimentation et l'unité.
- The installation shall be in accordance with the applicable provisions of National Electrical Code ANSI/NFPA 70, article 725 and the Canadian Electrical Code part 1, section 16.
- Cette installation doit toujours être conforme aux dispositions applicables du Code américain de l'électricité (National Electrical Code) ANSI/NFPA 70, article 725, et du Code canadien de l'électricité, partie 1, section 16.
- The length of the exposed wires in the stripping process is **critical**. The ideal length is 3/16 inches (5 mm). Any longer and the exposed wires may touch, causing a short circuit between them. Any shorter and the wires can be easily pulled out even if tightly fastened by the captive screws.
- La longueur des câbles exposés est **primordiale** lorsque l'on entreprend de les dénuder. La longueur idéale est de 5 mm (3/16 inches). S'ils sont trop longs, les câbles exposés pourraient se toucher et provoquer un court-circuit. S'ils sont trop courts, ils peuvent être tirés facilement, même s'ils sont correctement serrés par les borniers à vis.

NOTE: Do not tin the wires. Tinned wire does not hold its shape and can become loose over time.

4. Route the supplied speaker cable from the left speaker module to the left speaker output of the amplifier (②), as shown below.



5. Hook the top clasp edge of the center bracket over the top rail (①) of the wallplate and slide it to center of the display.

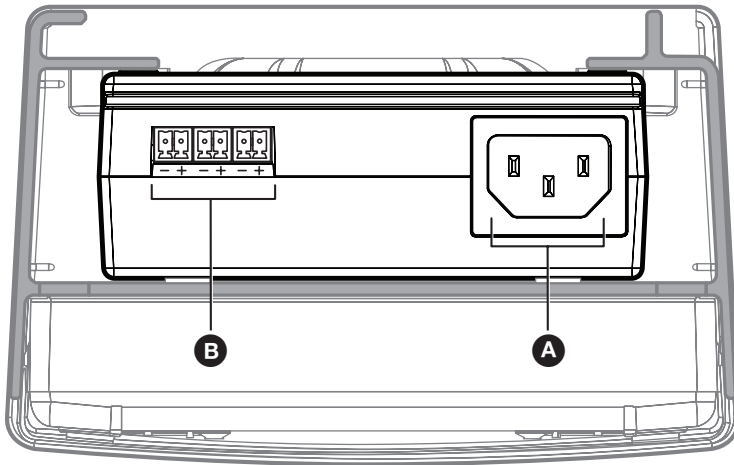


Tighten the two set screws (②) on the bottom of the center bracket to the bottom rail of the wallplate.

Attaching Power and Audio Sources to the SB 33 A

The SB 33 A has a power supply for the amplifier housed in the left speaker enclosure. The power supply has an AC power input connector (A) and a DC power output connector (B) that routes power to the amplifier. See the illustration below.

Left Speaker/Power Supply
(Side View)



This section describes how the power and audio sources are attached to the SB 33 A, as shown in the following steps.

NOTE: Speaker and DC power cables must be routed before attaching the center bracket to the wallplate. See the previous section.

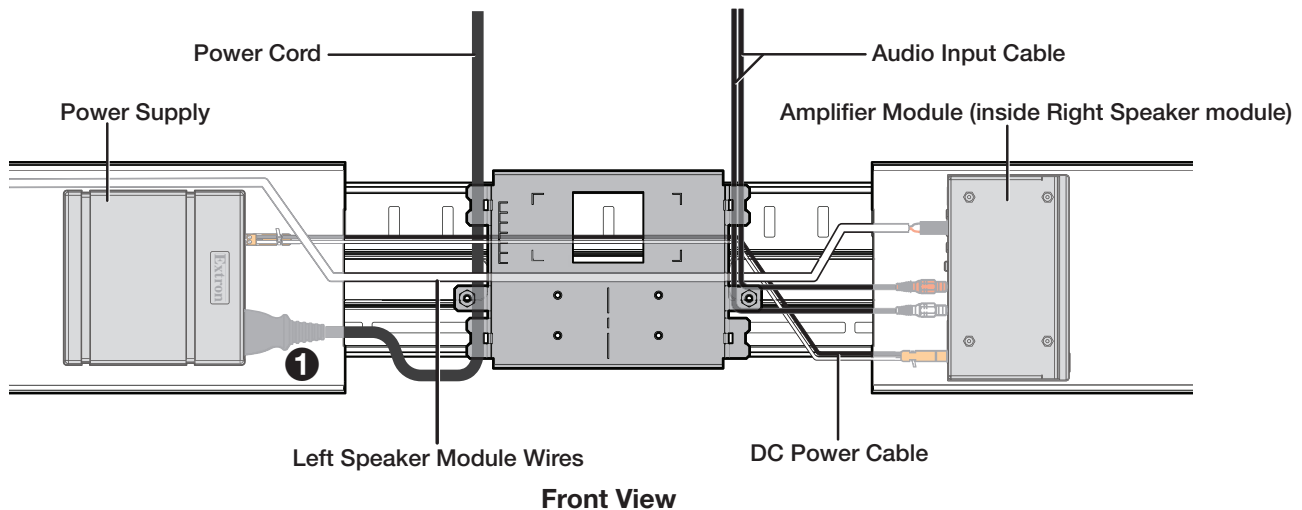
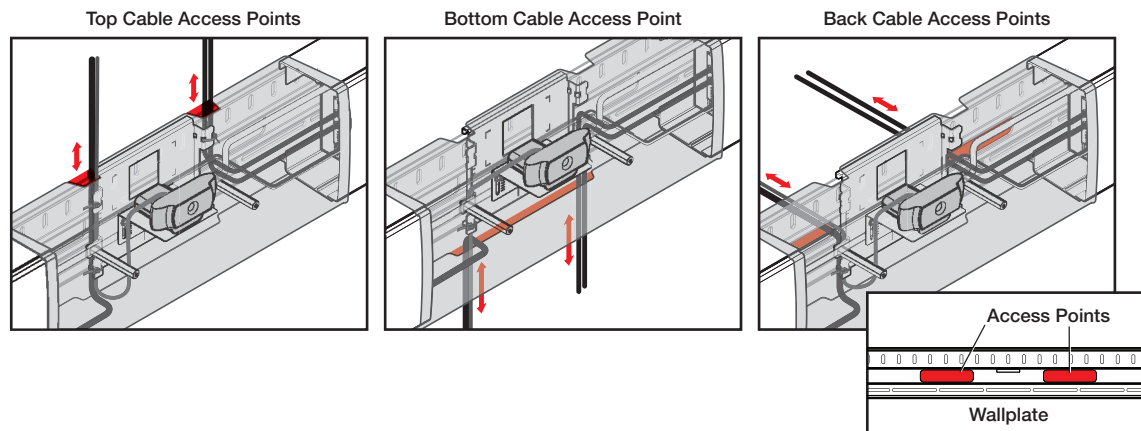


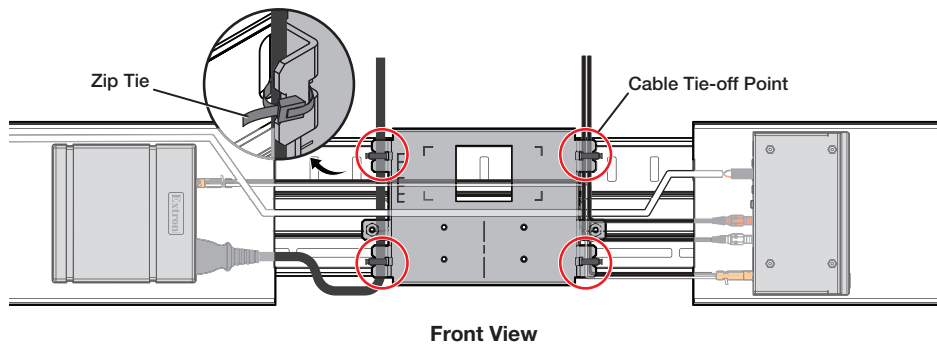
Figure 1. Speaker and DC power cable routing

1. Wiring access points for the power and speaker cables to the SB 33 A are shown below.

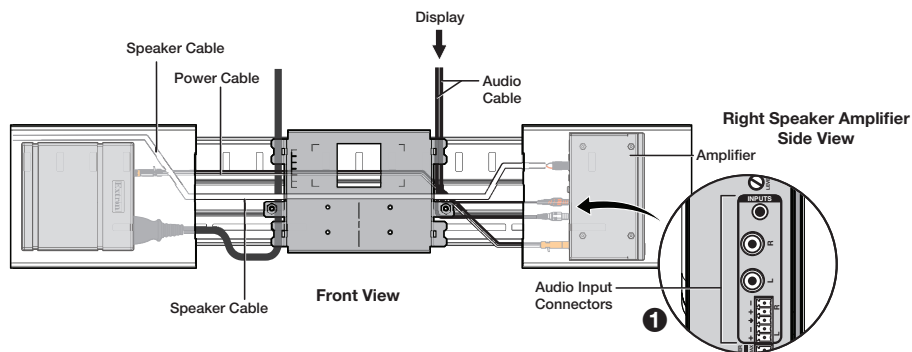


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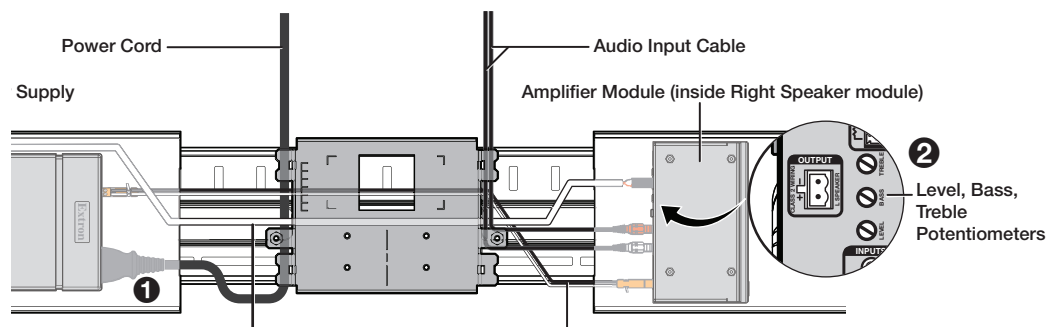
Cables can be secured with zip ties to cable tie off points located on the center bracket, as shown below.



2. Route the audio cable from the display to the audio input connectors of the power amplifier (1) in the right speaker assembly. See the cable access points illustration in **step 1**.



3. Connect the power cord to the power supply in the left speaker assembly (1), as shown below.

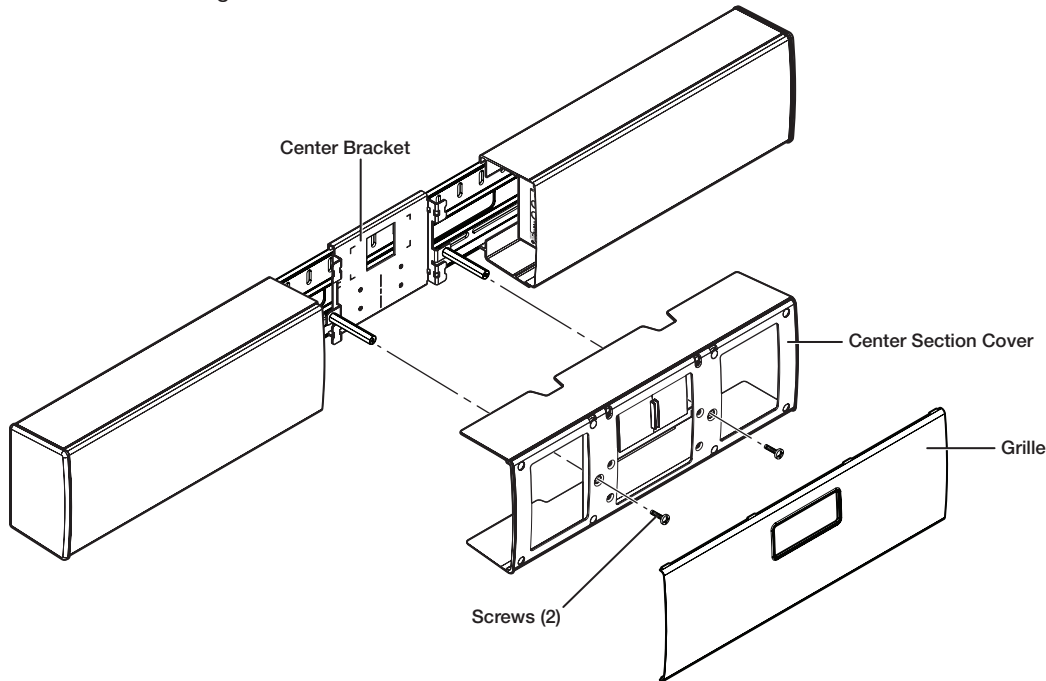


4. Set the level, bass, and treble potentiometers shown above (2) appropriately.

NOTE: If a web camera or PTZ camera is to be mounted to the center bracket, see [Mounting a Web Camera](#) or [Mounting a PTZ camera with optional PTZ camera shelf](#) section before proceeding to the next step.

Attaching the Center Section Cover

1. Slide the center section cover over the center section and attach the two cover screws to the center bracket standoffs being careful not to overtighten the screws.



2. Attach the grille to the center section cover. Six magnets hold the grille in place. See the illustration above.

NOTES:

- Two grille hooks are included to facilitate grill removal while avoiding damage to the grille. It is best to insert the hook along the outer edge of the grille.
- If the optional blank grille is being installed, see [Attaching the optional blank grille](#) on page 12.

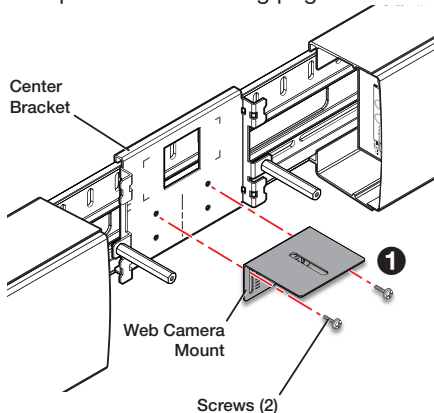
Mounting a Web Camera

If mounting a PTZ camera, please go to the [Mounting a PTZ Camera with optional PTZ camera shelf](#) section.

The SB 33 A speaker can accommodate a camera mounted to the center bracket. A small webcam can be mounted behind the center cover, and a larger PTZ camera can be mounted in front of the center cover.

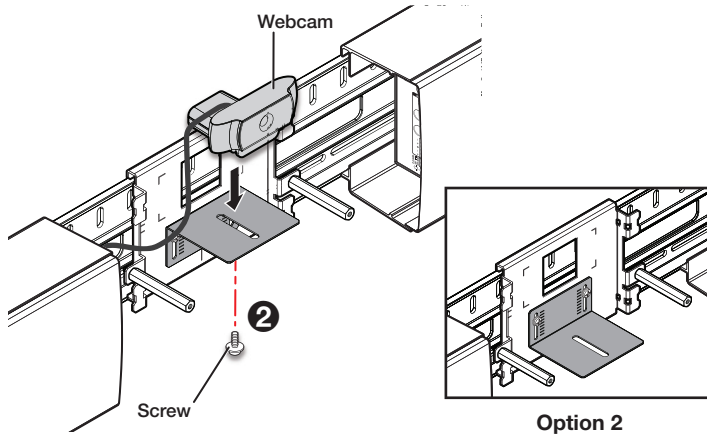
A webcam can be installed using the included webcam shelf.

1. Install the webcam shelf by attaching it to the center bracket using two screws going through the two vertical slots on the shelf and into two mounting holes in the bracket. There are two pairs of available holes in the bracket. The shelf height can be adjusted by positioning the screws in the shelf slots (1).
2. For cameras that require more overhead clearance, the shelf can be inverted to accommodate taller webcams. See Option 2 of step 2 on the following page.



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3. A screw is inserted in the bottom slot of the shelf (2) to secure the webcam.



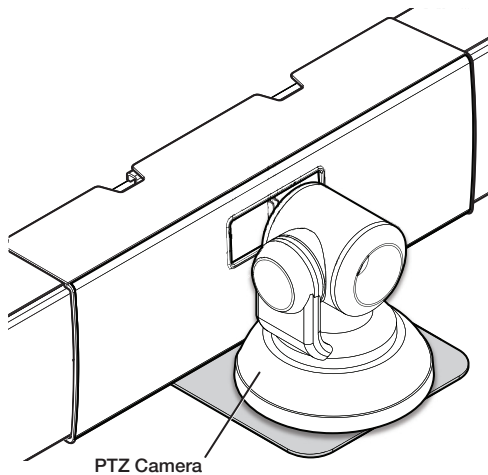
4. See [Attaching the Center Section Cover](#) on page 9 to continue the installation.

Mounting a PTZ camera with optional PTZ camera shelf

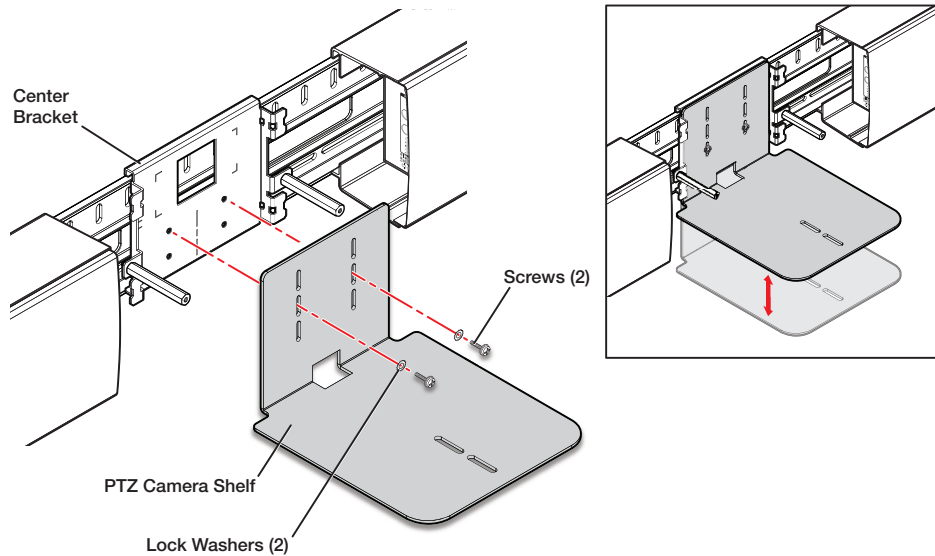
A larger PTZ camera that takes up more space can be installed in front of the front cover using the optional PTZ camera shelf. Follow the steps below.

ATTENTION:

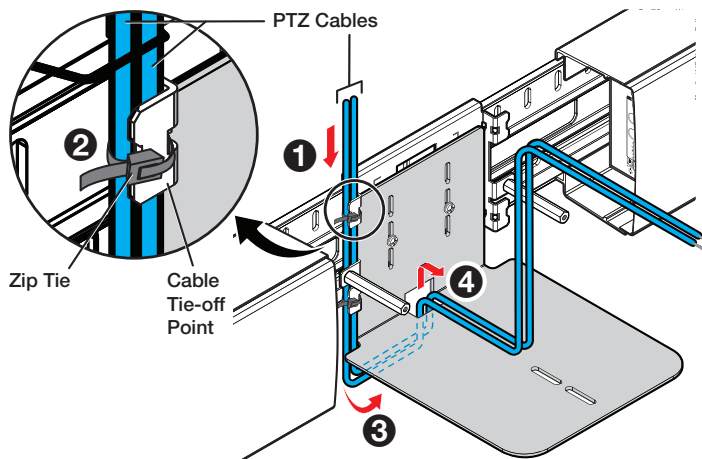
- The PTZ camera cannot exceed 4 lbs. (1.81 kg).
- La caméra PTZ ne peut peser plus de 1,81 kg (4 lb).



1. Install the PTZ camera shelf by attaching it to the center bracket using two screws and lock washers going through vertical slots on the shelf and into two mounting holes in the bracket. There are two pairs of available holes in the bracket. The shelf height can be adjusted by positioning the screws in the shelf slots.

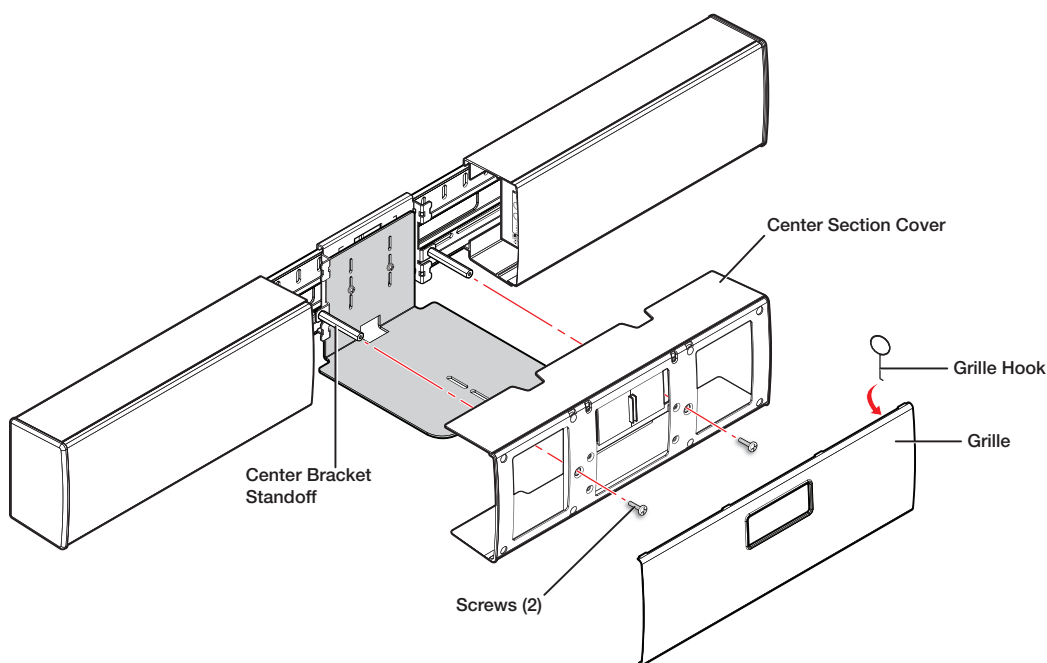


2. To install a PTZ camera:



- a. Route the PTZ cable to the PTZ camera through the center section cover (1) and along a center bracket cable tie-off point (2).
- b. Route the cable to the camera shelf (3).
- c. Route the cable through the access hole at the rear of the camera shelf (4).
3. If the optional blank grille is being installed, see [Attaching the optional blank grille](#) on the next page.
4. Slide the center section cover over the center bracket and attach the two cover screws to the center bracket standoffs being careful not to overtighten the screws.

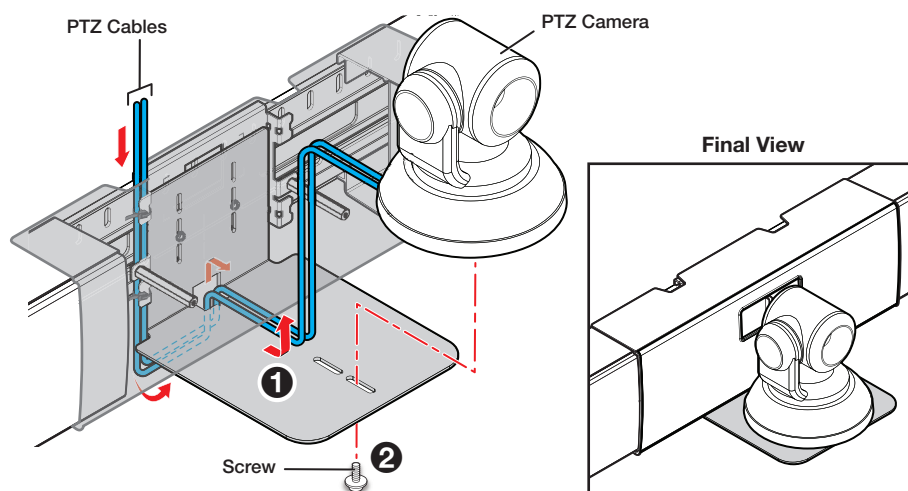
SB 33 A Series • Setup Guide (Continued)



5. Attach the grille to the center section cover. See the illustration above.

NOTE: Two grille hooks are included to facilitate grille removal while avoiding damage to the grille. It is best to insert the hook along the top or bottom outer edge of the grille, as shown above.

6. Route the cable to the PTZ camera (❶) and attach it to the camera. See the figure on the next page.
7. Place the camera on the shelf and attach it to the shelf with the mounting screw (❷). See the figure below.



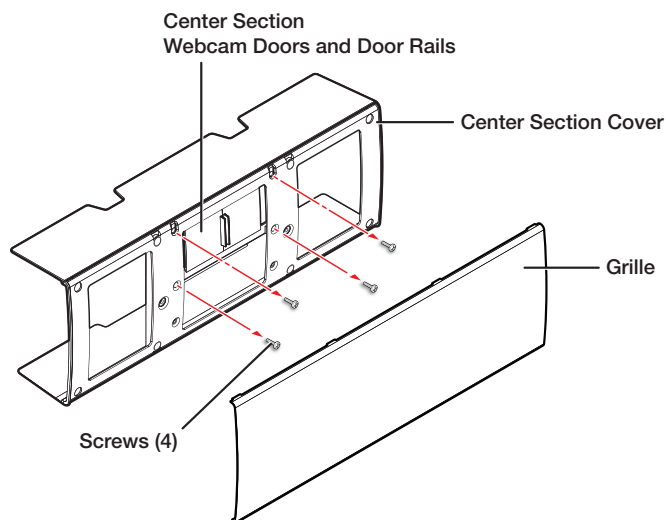
Attaching the Optional Blank Grille

The optional blank grille can be attached to the center section cover by following the steps below.

1. If the grille is attached, use the grille hooks to remove the grille.

NOTE: Two grille hooks are included to facilitate grille removal while avoiding damage to the grille. It is best to insert the hook along the outer edge of the grille.

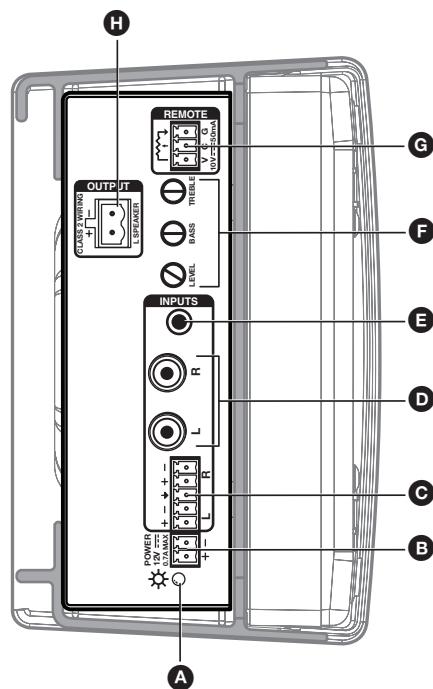
2. Remove the four screws that attach the center section cover doors to the center section cover. Two door rails behind the cover and the sliding doors will be separated from the center section cover after the screws are removed.



3. Remove the center section webcam doors and door rails (not shown).
4. Attach the blank grille to the center section cover.

Operation

SB 33 A Amplifier Front Panel (inside right speaker)

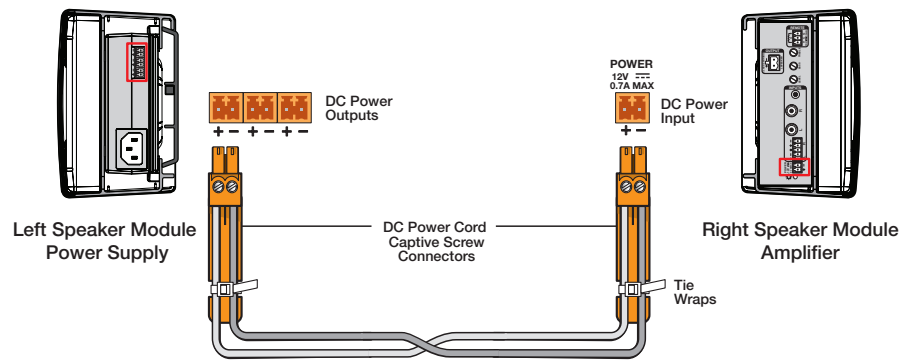


Right Speaker Module/Amplifier (Side View)

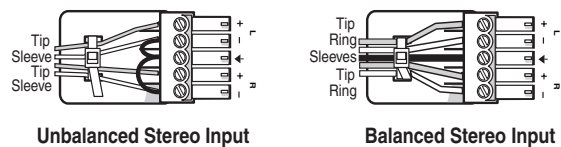
- A **Power LED**
- B **Amplifier power supply connector**
- C **Captive screw balanced or unbalanced audio input connector**
- D **RCA unbalanced stereo input connectors**
- E **3.5 mm unbalanced stereo input jack**
- F **Level, bass, and treble potentiometers**
- G **Remote volume control connector**
- H **Left Speaker output receptacle (to left speaker)**

- A **Power LED** — The LED lights green when the amplifier is receiving power and active. It lights amber when the unit is in standby (after 25 minutes of inactivity).
- B **Amplifier power supply connector** — Connect one end of the DC power cord to one of the two pole, 3.5 mm captive screw outlets on the power supply. Connect the other end into the power receptacle on the rear panel of the amplifier, as shown below. See the **Attention** (on page 6) and **Note** (on page 6) for important information about connecting wires to captive screw connectors.

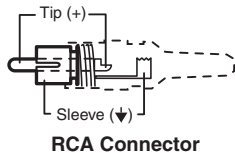
SB 33 A Series • Setup Guide (Continued)



- C Captive screw balanced or unbalanced audio input connector** — This 5-pole 3.5 mm captive screw receptacle accepts line level, balanced or unbalanced, mono or stereo audio signals. See the **Attention** (on page 6) and **Note** (on page 6) for important information about connecting wires to captive screw connectors.

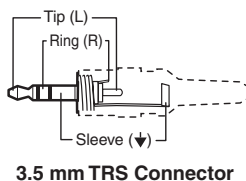


- D RCA unbalanced stereo input connectors** — These receptacles accept unbalanced, line level audio signals. If unused, the receptacle automatically terminates to lower the noise floor.



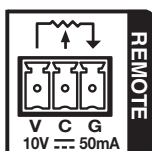
If unused, the receptacles automatically terminate to lower the noise floor.

- E 3.5 mm unbalanced stereo input jack** — This input also accepts unbalanced, line level audio signals through a 3.5 mm tip-ring-sleeve (TRS) stereo connector. If unused, the receptacle automatically terminates to lower the noise floor.

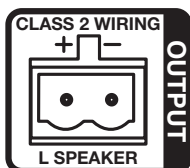


- F Level, Bass, and Treble potentiometers** — Three front panel potentiometers are used to optimize input level, bass, and treble settings.

- G Remote volume control connector** — This 3-pin, captive screw port allows an audio controller to control volume levels and mute remotely. See the *SM 33 A Series User Guide*.



- H Left Speaker output receptacle (to left speaker)** — This 2-pole, 5 mm captive screw receptacle is used to connect the amplifier to the left speaker.



The amplifier produces up to 15 watts per channel.

See the **Attention** (page 6) and **Note** (page 6) for important information about connecting wires to captive screw connectors.

ATTENTION:

- Do not short or ground the speaker outputs as this will damage the amplifier.
- Ne pas mettre à la terre ni créer de court-circuit dans les sorties de l'enceinte, afin d'éviter tout risque de détérioration de l'amplificateur.

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.