

Acoustic Design Series

Quick Start Guide

AD-S.SUB

AD-S.SAT

EXPLANATION OF SYMBOLS

The term **“WARNING”** indicates instructions regarding personal safety. Failure to follow them may result in bodily injury or death.

The term **“CAUTION”** indicates instructions regarding possible damage to physical equipment. Failure to follow them may result in equipment damage to equipment that may not be covered under the warranty.

The term **“IMPORTANT”** indicates instructions or information that are vital to the successful completion of the procedure.

The term **“NOTE”** indicates additional useful information.



The lightning flash with arrowhead symbol in a triangle alerts the user to the presence of uninsulated dangerous voltage within the product's enclosure that may constitute a risk of electric shock to humans.



The exclamation point within a triangle alerts the user to important safety, operating, and maintenance instructions in this manual.



IMPORTANT SAFETY INSTRUCTIONS



1. Read these instructions and keep a copy for future reference.
2. Strictly follow and heed all instructions and warnings.
3. Consult a licensed and qualified professional engineer to devise and/or review an appropriate mounting scheme.
4. Do not use or submerge this loudspeaker product in or near water or liquids.
5. Clean only with a dry cloth. Do not use any aerosol spray, cleaner, disinfectant or fumigant on, near, or into the loudspeaker product.
6. Do not block any ventilation opening. Install in accordance with the manufacturer's instructions.
7. Do not install the loudspeaker near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers).
8. Do not use any attachments, accessories, mounts, or brackets that are not specified or approved by QSC, LLC.
9. Refer all service to qualified personnel. Service is required if the hanging mechanism or loudspeaker have been damaged in any way, such as liquid having been spilled or objects have fallen into the loudspeaker or the loudspeaker has been exposed to rain or moisture, does not operate normally, or has been dropped.
10. Observe all applicable local codes.
11. Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

Maintenance and Repair

Advanced technology—e.g., the use of modern materials and powerful electronics—requires specially adapted maintenance and repair methods. To avoid subsequent damage to the equipment, personal injury, and/or creation of additional safety hazards, have all maintenance or repair work on the equipment performed only by a QSC authorized service station or an authorized QSC International Distributor. QSC is not responsible for any injury, harm, or related damages that arise from any failure of the customer, owner, or user of the equipment to facilitate those repairs.

Warranty

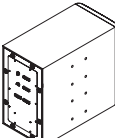
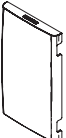
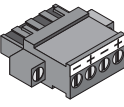
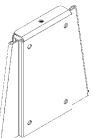
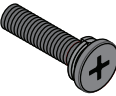
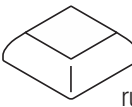


For a copy of the QSC Limited Warranty, visit the QSC website at www.qsc.com

TD-001547-01-A



Install the AD-S.SUB Subwoofer

What's in the AD-S.SUB Box

 1x AD-S.SUB	 1x Rear panel cover	 3x Euro-style plug (4-pole)	 1x Wall mount bracket	 5x Fasteners
 4x Adhesive rubber feet	 1x Warranty TD-000453	 1x Quick Start Guide TD-001547		

Mount the Subwoofer

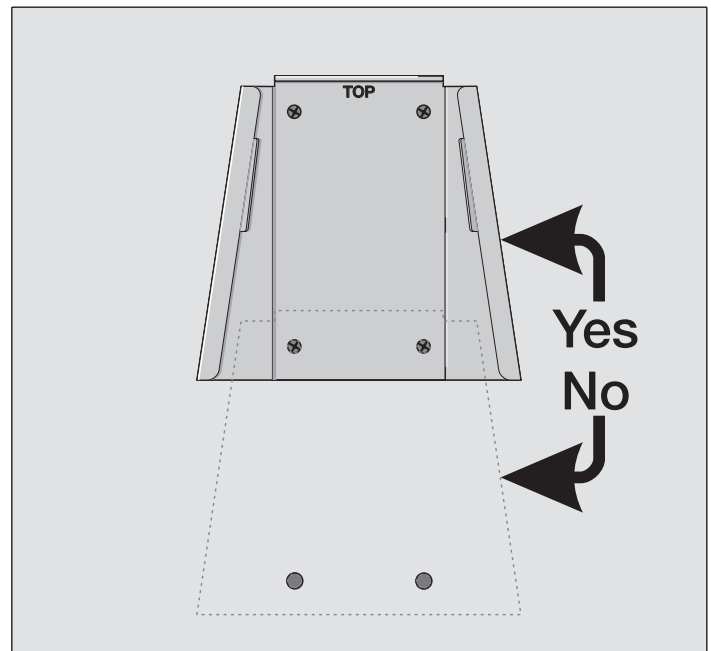
Horizontal surface

Before you place the subwoofer on a shelf, floor, or other horizontal surface, attach the four adhesive rubber feet onto the bottom side of the subwoofer enclosure at the corners. If you place the subwoofer on a shelf or other raised surface, make sure it cannot "walk" off the edge because of vibration.

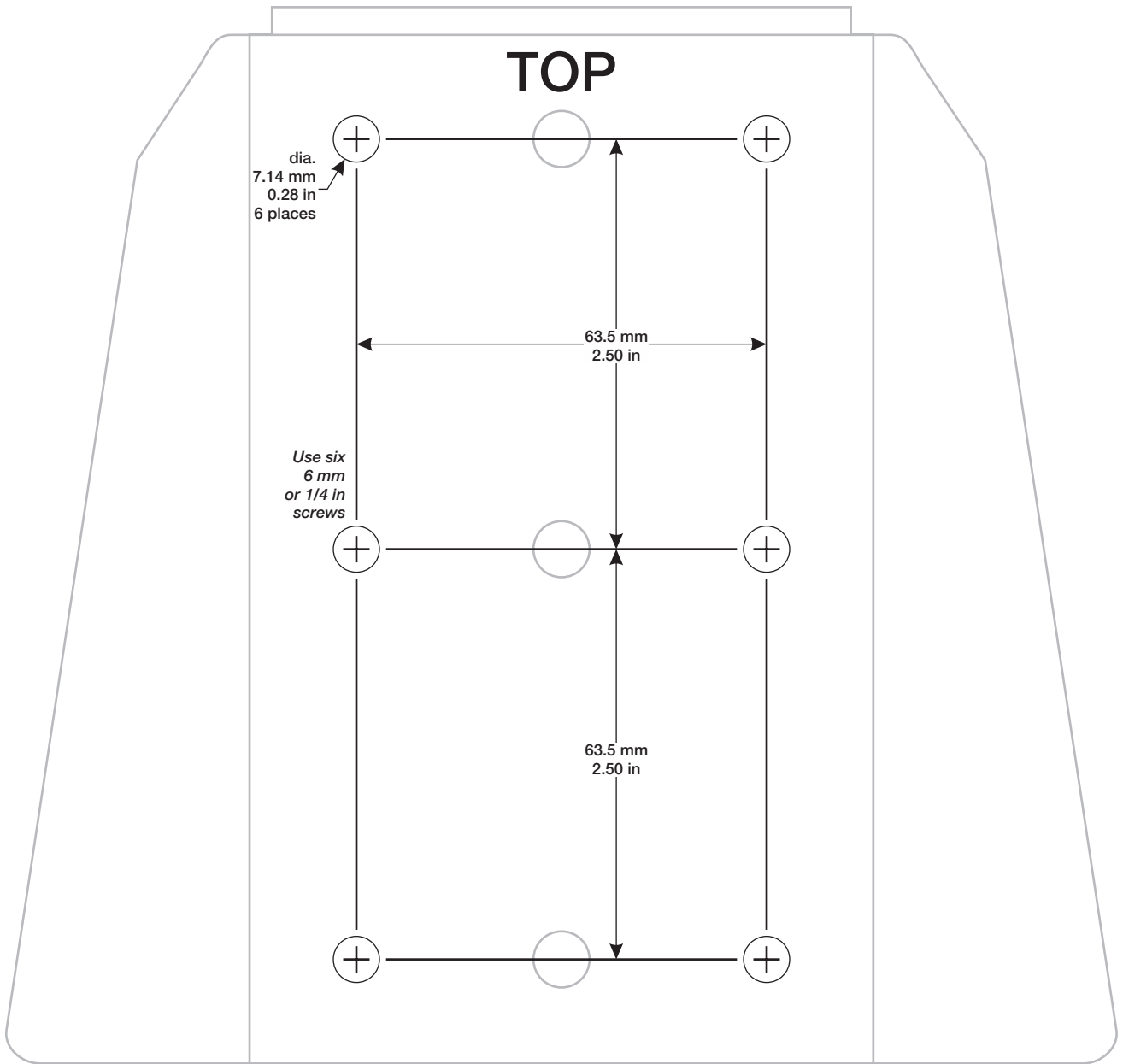
Vertical surface (e.g., a wall)

Note that the wall mount bracket can be attached to the subwoofer enclosure in several ways, allowing you to orient the ports and the connections as desired. The bracket has two parts; Figure 1 depicts the one that attaches to the subwoofer enclosure.

1. Remove the plugs from four of the mounting holes in the enclosure and attach the bracket securely using four of the fasteners provided. Whichever way you choose to orient the subwoofer, make sure the top of the bracket is near the top of it
2. Use the template (Figure 2) on the next page to locate and mark the six attachment points for the other part of the bracket. Use anchoring fasteners that are appropriate for the surface. Make sure that the surface and the fasteners can support the weight of the subwoofer (AD-S.SUB: 10.7 kg; 23.5 lb) plus a 5× or higher safety factor (some jurisdictions may require higher safety factors).
3. Attach the bracket to the wall or vertical surface.
4. Lower the subwoofer enclosure onto the wall bracket. Use the remaining fastener, inserted into the top of the brackets, to secure the bracket parts together.



–Figure 1–



-Figure 2-

Wire the Subwoofer

We recommend using insulated twisted pair stranded copper wire of an adequate gauge to minimize resistive losses. To facilitate connection, the AD-S.SAT loudspeakers have four-pole connectors for the inputs and two more for the high-pass outputs to as many as four 16Ω satellite loudspeakers (Figure 5). Each subwoofer comes with three Euro-style four-pole pluggable connectors with clamping screws for securing to the wire conductors.

Unsnap the end cover of the subwoofer enclosure to access the rear panel, where the connections and configuration switches are (Figure 3). The cover is reversible so the subwoofer enclosure can be oriented in either direction.

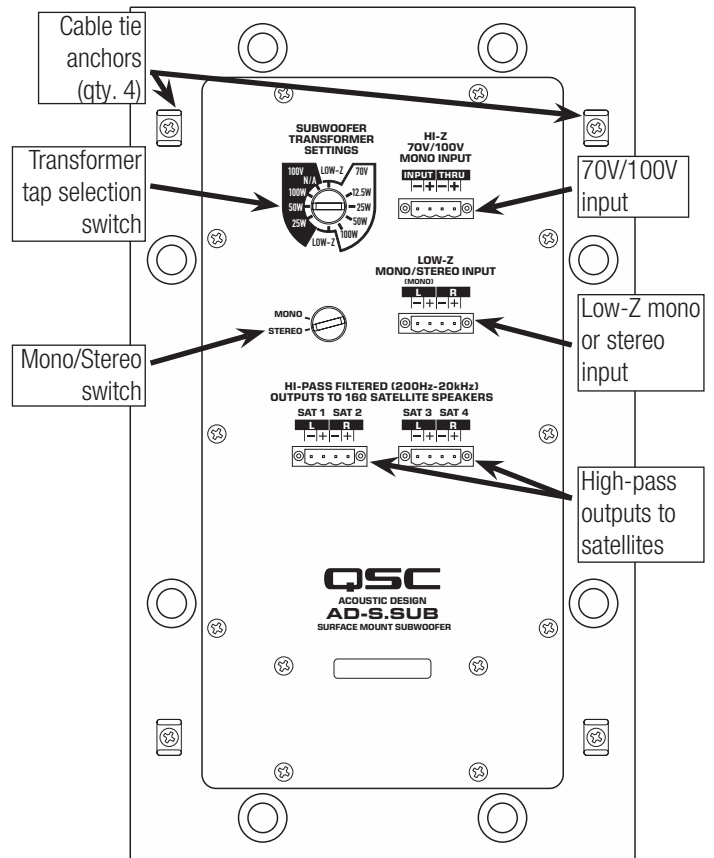
Mono 70- or 100-volt system

Use a mono 70- or 100-volt power amplifier. Multiple subwoofer and satellite systems may be connected on the same distributed line, limited by the amplifier's power capacity and the subwoofers' transformer settings.

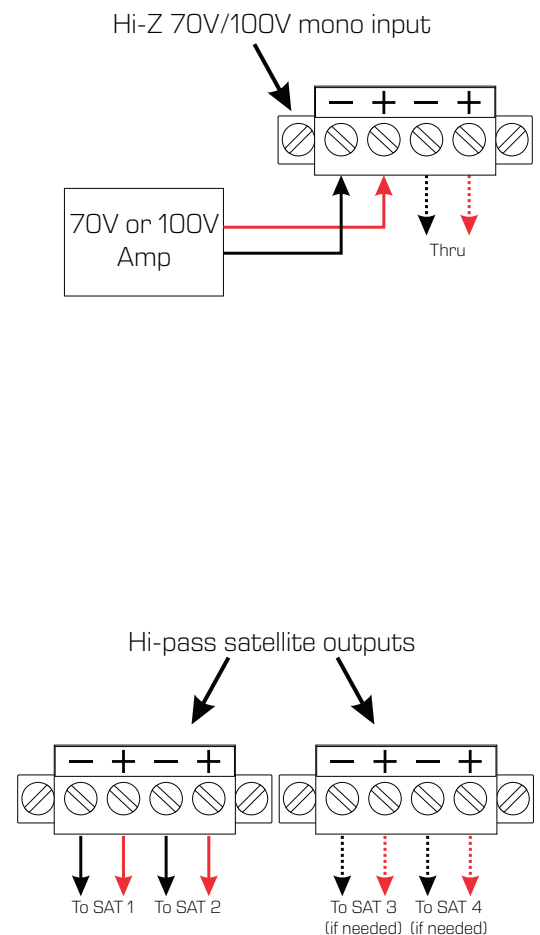
1. Set the transformer to the desired power (in watts); **LOW-Z** is only for mono 4Ω or stereo 8Ω operation.
2. Set the Mono/Stereo switch to **MONO**.
3. Strip the wire ends about 6 mm or about 1/4 inch.
4. Connect the pairs of wires to the + and - terminals of the Euro-style connectors as shown in Figure 4. Tighten the clamping screws to hold the wires securely.

To daisy-chain forward to one or more other subwoofers, connect a second wire pair to the **THRU** terminals of the input Euro-style connector. Be mindful of polarity when connecting multiple loudspeakers; always connect **+** to **+** and **-** to **-**.

5. Connect the wires to the pair of satellite loudspeakers (SAT 1 and SAT 2) to a Euro-style connector as depicted. If you are using a second pair of satellites (SAT 3 and SAT 4), wire them to a second Euro-style connector.
6. Plug the input Euro-style connector into the Mono 70/100V input. Plug the SAT 1 and SAT 2 Euro-style connector into the SAT 1 and SAT 2 high-pass output.
- If you have SAT 3 and SAT 4, plug their Euro-style connector into the SAT 3 and SAT 4 high-pass output.
- Tighten the anchor screws on each Euro-style connector.
7. To strain-relieve the wires, use tie-wraps to lash them to the cable-tie anchors.
8. Snap the rear panel cover onto the subwoofer enclosure.



-Figure 3-



-Figure 4-

Mono or stereo Low-Z operation

Mono and stereo

The subwoofer driver has dual 8-ohm voice coils. In stereo operation the voice coils are separate, presenting an 8-ohm load on both the left and the right amplifier channel. In mono, the coils are parallel, amounting to a single 4-ohm load.

In stereo operation, SAT 1 and SAT 3 are the left satellites, while SAT 2 and SAT 4 are the right ones. In mono, all the satellites are mono.

Use the mono/stereo switch for selecting mono or stereo operation.



WARNING! The MONO position is only for use with one amplifier output. Never connect separate amplifier outputs to both the L and R inputs when the switch is in the MONO position; doing so could damage the amplifier circuitry.

Mono input connection

1. Set the transformer to **LOW-Z**.
2. Set the Mono/Stereo switch to **MONO**.
3. Strip the wire ends about 6 mm or about 1/4 inch.
4. Connect the pair of wires from the amplifier to the + and - terminals of the Euro-style input connector as shown in Figure 5. Tighten the clamping screws to hold the wires securely.
5. Plug the input Euro-style connector into the Low-Z mono/stereo input. Tighten the anchor screws on the connector.

Continue to **Satellite connections**.

Stereo input connection

1. Set the transformer to **LOW-Z**.
2. Set the Mono/Stereo switch to **STEREO**.
3. Strip the wire ends about 6 mm or about 1/4 inch.
4. Connect the pair of wires from the amplifier left output to the + and - terminals, and the pair from the amplifier right output to the other + and - terminals, of the Euro-style input connector as shown in Figure 6. Tighten the clamping screws to hold the wires securely.
5. Plug the input Euro-style connector into the Low-Z mono/stereo input. Tighten the anchor screws on the connector.

Continue to **Satellite connections**.

Satellite connections

6. Connect the wires to the pair of satellite loudspeakers (SAT 1 and SAT 2) to a Euro-style connector as depicted. If you are using a second pair of satellites (SAT 3 and SAT 4), wire them to a second Euro-style connector.

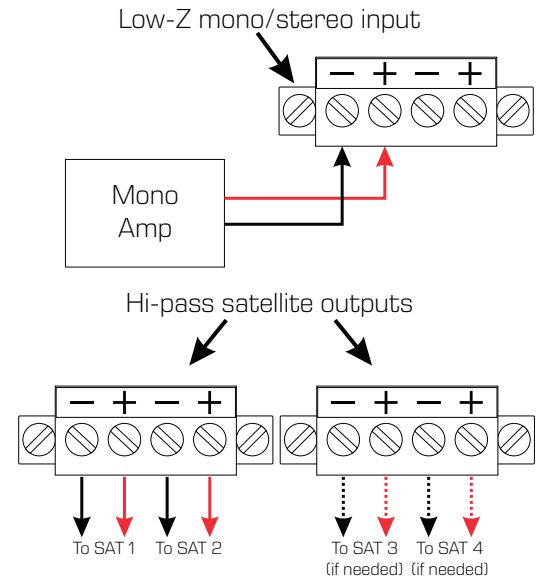
Be mindful of polarity when connecting multiple loudspeakers; always connect + to + and - to -.

Plug the SAT 1 and SAT 2 Euro-style connector into the SAT 1 and SAT 2 high-pass output.

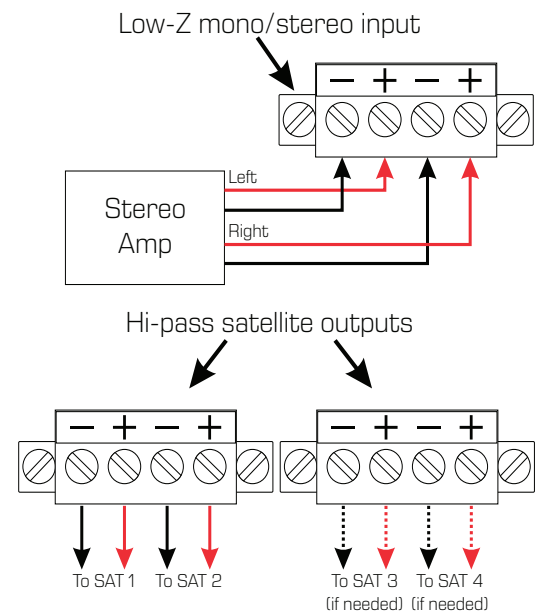
If you have SAT 3 and SAT 4, plug their Euro-style connector into the SAT 3 and SAT 4 high-pass output.

Tighten the anchor screws on each Euro-style connector.

7. To strain-relieve the wires, use tie-wraps to lash them to the cable-tie anchors.
8. Snap the rear panel cover onto the subwoofer enclosure.



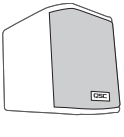
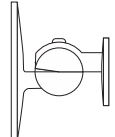
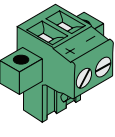


-Figure 5-



-Figure 6-

Install the AD-S.SAT Satellites

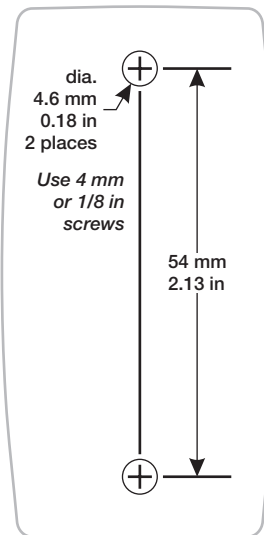
What's in the AD-S.SAT Box (Pair Pack)

 *2x AD-S.SAT	 *2x Mounting bracket	 *2x Euro-style plug (2-pole)	 1x Warranty TD-000453	 1x Quick Start Guide TD-001547
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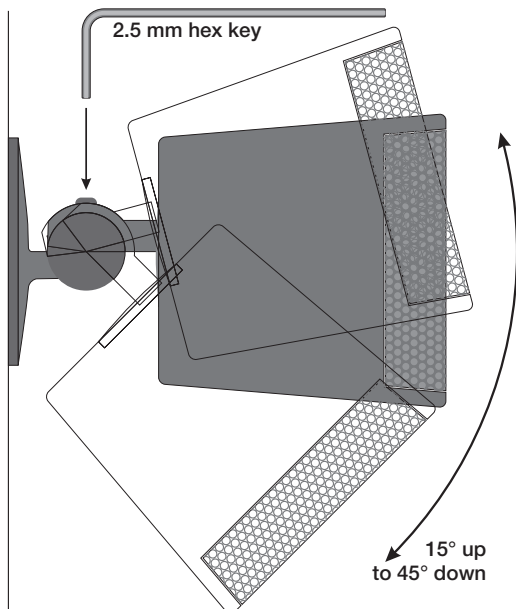
Quantities marked with an asterisk () are doubled in the Master Pack.

Mount the Satellites

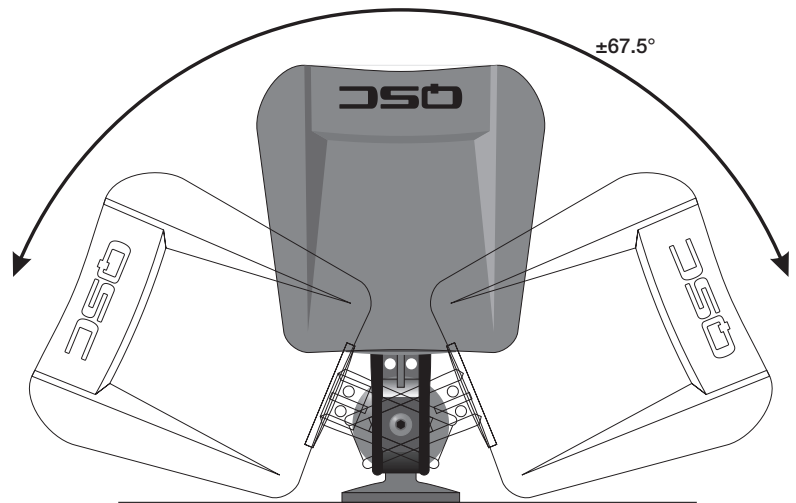
1. Use the template at right (Figure 7) to locate and mark the two attachment points for the mounting bracket on the wall or mounting surface. Make sure the wall or mounting surface and the fasteners can support the weight of the satellite (AD-S.SAT: 433 g; 0.95 lb) plus a 5× or higher safety factor (some jurisdictions may require higher safety factors).
 2. Using a 2.5 mm hex key, loosen the screw on the ball joint.
 3. Attach the bracket to the wall or mounting surface.
 4. Position the satellite as desired. The bracket allows up to 15 degrees upward tilt and 45 degrees downward tilt (Figure 8), as well as horizontal panning up to ±67.5 degrees (Figure 9).
- Tighten the ball joint screw.



–Figure 7–



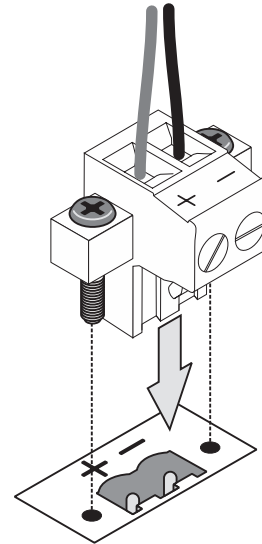
–Figure 8–



–Figure 9–

Wire the Satellites

1. Strip the wire ends back about 6 mm or 1/4 inch.
2. Connect the pair of wires to the + and - terminals of the Euro-style connector. Tighten the clamping screws to hold the wires securely. Be mindful of polarity. See Figure 10.
3. Plug the Euro-style connector into the satellite loudspeaker. Tighten the connector's anchor screws to securely fasten it.



—Figure 10—



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