# **Acoustic Design Series**



### Quick Start Guide

#### AD-P.SUB AD-P.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 pendant 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.
- 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

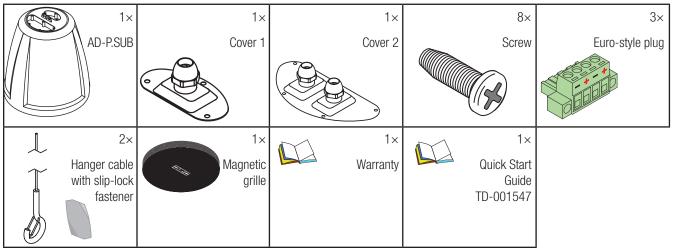
For a copy of the QSC Limited Warranty, visit the QSC website at www.qsc.com

TD-001564-01



### Install the AD-P.SUB Subwoofer

#### What's in the AD-P.SUB Box



### Suspend the Subwoofer



**WARNING!:** Do not attach the snap hook to the loudspeaker or any other load until the hanger cable has been anchored to a suitable structural member.

- Insert the wire cable into the appropriate hole in the slip-lock fastener (see Figure 1). The fastener's two holes are directional, so cable will only insert one way; if it will not go through, the cable is inserted into the wrong hole.
- Loop the cable over the structural member where the subwoofer is to hang. The structure must be capable of supporting at least 5× the weight of the subwoofer—AD-P.SUB: 17.5 lb or 8 kg.

# **NOTE:** Building codes in some jurisdictions may require higher safety factors.

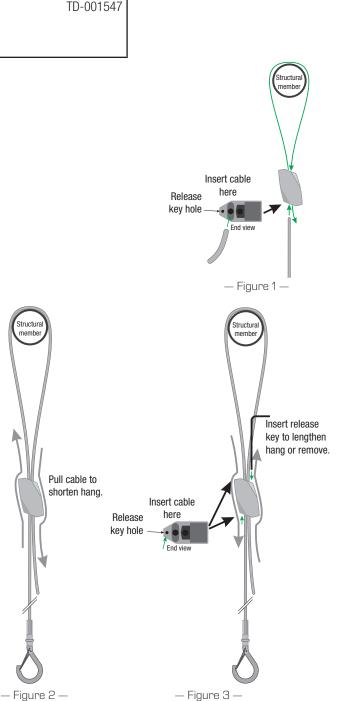
Note that the subwoofer uses two hanger cables.

- 3. Insert the cable through the other hole in the fastener.
- 4. Adjust the length of the cable hang so the snap hook is at the desired height. To shorten the hang, simply pull the cable further through one or both holes in the fastener (Figure 2). To lengthen the hang or to remove the cable from the structural member, insert the release key into the appropriate release key hole; this will unlock that hole in the fastener and allow the cable to move in the other direction (Figure 3).



# **WARNING!:** Never insert the release key while there is a load on the hanger cable.

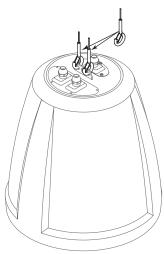
- 5. Repeat for the other hanger cables.
- Attach both snap hooks to the suspension tab on the subwoofer (Figure 4). Make sure the safety latch on the hook closes fully with the subwoofer attached before you transfer the weight of the subwoofer to the cables.





**WARNING!:** Install the system in accordance with local building codes and regulations. Some jurisdictions may require additional suspension points.

Use a licensed contractor or professional engineer. QSC is not responsible for damages that result from negligent installation of any bracket, hanger, or loudspeaker.





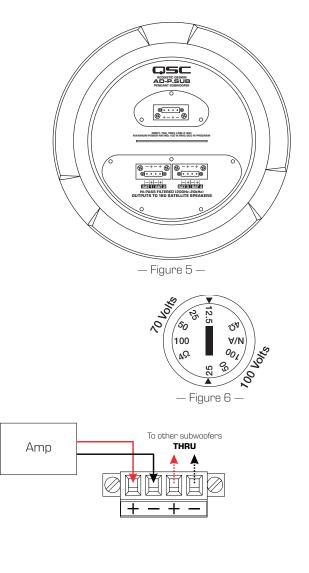
### Wire the Subwoofer

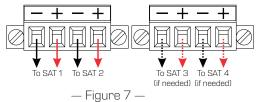
We recommend using insulated twisted pair stranded copper wire of an adequate gauge to minimize resistive losses. To facilitate connection, the AD-P.SUB loudspeakers have a four-pole connector for the input and two more for the high-pass outputs to as many as four 16 $\Omega$  satellite loudspeakers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

- Remove the magnetic grille and set the transformer tap switch to the desired power (in watts) or to 4Ω for low-impedance operation (Figure 6). Reattach the grille. This setting can always be readjusted in the future as needed.
- 2. On the top of the enclosure, remove the two protective covers over the input and output connectors. The smaller cover has one gland (protective cable pass-through) and the larger one has two.
- 3. Route the wires coming from the amplifier through the gland in the smaller cover. Route the wires for the satellte loudspeakers through one or both glands on the larger cover.
- 4. Strip the wire ends about 6 mm or about 1/4 inch.
- 5. Connect the pairs of wires to the + and terminals of the Euro-style connectors as shown in Figure 7. Tighten the clamping screws to hold the wires securely.

To daisy-chain forward to another loudspeaker, route a second wire pair through the gland and attach them to the THRU terminals of the input Euro-style connector. Be mindful of polarity when connecting multiple loudspeakers; always connect + to + and - to -.

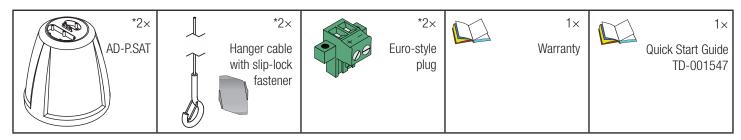
- 6. Plug the connectors into their respective locations and tighten their retaining screws. Reinstall the protective covers and tighten the gland nuts to secure the wires.
- 7. To strain-relieve the wires, secure them to a hanger cable using the tie-wraps provided.





### Install the AD-P.SAT Satellite Loudspeakers

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



\*Quantities marked with an asterisk (\*) are doubled in the Master Pack.

### Suspend the Satellite Loudspeakers



**WARNING!:** Do not attach the snap hook to the loudspeaker or any other load until the hanger cable has been anchored to a suitable structural member.

- 1. Insert the wire cable into the appropriate hole in the slip-lock fastener (see Figure 8). The fastener's two holes are directional, so cable will only insert one way; if it will not go through, the cable is inserted into the wrong hole.
- 2. Loop the cable over the structural member where the loudspeaker is to hang. The structure must be capable of supporting at least  $5 \times$  the weight of the loudspeaker—AD-P.SAT: 0.9 lb or 416 g.

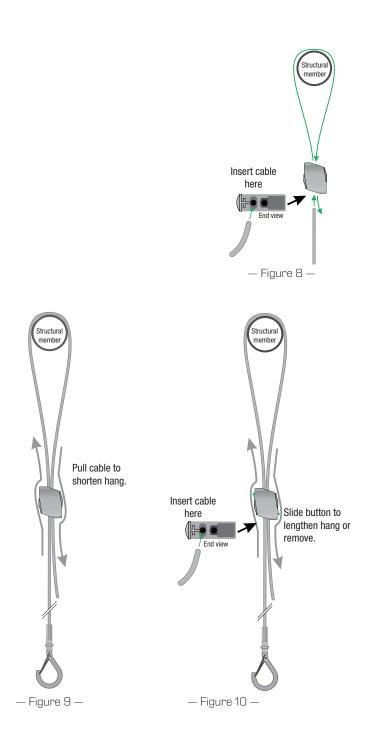
# **NOTE:** Building codes in some jurisdictions may require higher safety factors.

- 3. Insert the cable through the other hole in the fastener.
- 4. Adjust the length of the cable hang so the snap hook is at the desired height. To shorten the hang, simply pull the cable further through one or both holes in the fastener (Figure 9). To lengthen the hang or to remove the cable from the structural member, slide the appropriate release button on the fastener; this will unlock that hole in the fastener and allow the cable to move in the other direction (Figure 10).



### **WARNING!:** Never slide either release button while there is a load on the hanger cable.

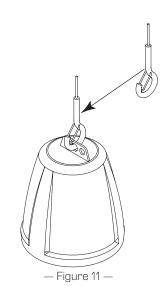
- 5. Repeat for the other hanger cables.
- Attach the snap hook to the suspension tab on the loudspeaker (Figure 11). Make sure the safety latch on the hook closes fully with the loudspeaker attached before you transfer the weight of the loudspeaker to the cables.





**WARNING!:** Install the system in accordance with local building codes and regulations. Some jurisdictions may require additional suspension points.

Use a licensed contractor or professional engineer. QSC is not responsible for damages that result from negligent installation of any bracket, hanger, or loudspeaker.



### Wire the Satellite

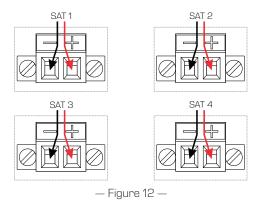
We recommend using insulated twisted pair stranded copper wire of an adequate gauge to minimize resistive losses. To facilitate connection, the AD-P.SAT loudspeaker has a two-pole input connector (Figure 12) and comes with a Euro-style two-pole pluggable connector with clamping screws for securing to the wire conductors.

- 1. On the wires from the subwoofer, strip the ends about 6 mm or about 1/4 inch.
- 2. Connect the pair of wires to the + and terminals of the Euro-style connector as shown in Figure 7. Tighten the clamping screws to hold the wires securely.

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

3. Plug the connector into the loudspeaker enclosure and tighten its retaining screws. To strain-relieve the wires, secure them to the hanger cable using the tie-wraps provided.

From Subwoofer High-Pass Outputs





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