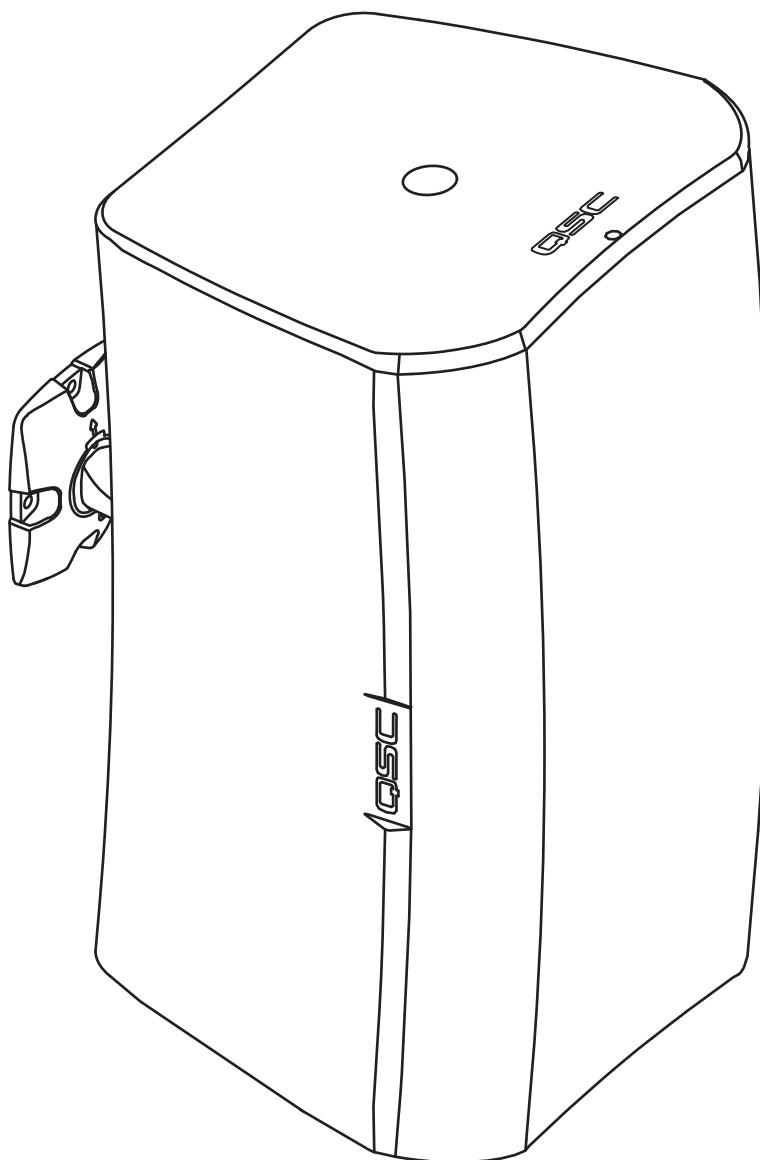


User Guide

S8T – 8" two-way, foreground/background loudspeaker with 70/100V transformer

S10T – 10" two-way, foreground/background loudspeaker with 70/100V transformer

S12 – 12" two-way, foreground/background loudspeaker



TD-000329-01-A



EXPLANATION OF SYMBOLS

The term "**WARNING!**" indicates instructions regarding personal safety. If the instructions are not followed the result may be bodily injury or death.

The term "**CAUTION!**" indicates instructions regarding possible damage to physical equipment. If these instructions are not followed, it may result in damage to the 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**" is used to indicate additional useful information.



NOTE: The intent of the lightning flash with arrowhead symbol in a triangle is to alert the user to the presence of un-insulated "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.



The intent of the exclamation point within an equilateral triangle is to alert the user to the presence of important safety, and operating and maintenance instructions in this manual.



IMPORTANT SAFETY INSTRUCTIONS



WARNING!: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.



WARNING!: While it is possible for one person to lift a loudspeaker, it is important to use proper lifting techniques. Suggested reading: OSHA Technical Manual on Back Disorders and Injuries (http://www.osha.gov/dts/osta/otm/otm_vii/otm_vii_1.html#app_vii:1_2).

- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Clean only with a dry cloth.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Only use attachments/accessories specified by the manufacturer.
- Refer all servicing to qualified service personnel.
- Adhere to all applicable, local codes.
- Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

Warranty (USA only; other countries, see your dealer or distributor)

QSC Audio Products 3 Year Limited Warranty

QSC Audio Products, LLC ("QSC") guarantees its products to be free from defective material and/or workmanship and will replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use, provided the unit is returned to our factory, one of our authorized service stations or an authorized QSC International Distributor via pre-paid transportation with a copy of proof of purchase (i.e., sales receipt). This warranty provides that the examination of the return product must indicate, in our judgment, a manufacturing defect. This warranty does not extend to any product which has been subjected to misuse, neglect, accident, improper installation, or where the date code has been removed or defaced. QSC shall not be liable for incidental and/or consequential damages. This warranty gives you specific legal rights. This limited warranty is freely transferable during the term of the warranty period. The warranty on QSC products is NOT VALID if the products have been purchased from an unauthorized dealer/online e-tailer, or if the original factory serial number has been removed, defaced, or replaced in any way. Damage to, or loss of any software or data residing on the product is not covered. When providing repair or replacement service, QSC will use reasonable efforts to reinstall the product's original software configuration and subsequent update releases, but will not provide any recovery or transfer of software or data contained on the serviced unit not originally included in the product.

Customers may have additional rights, which vary from state to state or from country to country. In the event that a provision of this limited warranty is void, prohibited or superseded by local laws, the remaining provisions shall remain in effect.

The QSC limited warranty is valid for a period of three (3) years from date of purchase in the United States and many (but not all) other countries.

For QSC warranty information in countries other than the United States, contact your authorized QSC international distributor. A list of QSC International distributors is available at www.qscaudio.com.

To register your QSC product online, go to www.qscaudio.com and select "Product Registration". Other questions regarding this warranty can be answered by calling, e-mailing or contacting your authorized QSC distributor.

Phone: 1-800-854-4079 within US and Canada, +1-714-754-6175 international, **Email:** warranty@qscaudio.com, **Website:** www.qscaudio.com.

Introduction

AcousticDesign series is a line of premium surface-mount loudspeakers intended for permanent installation applications. Housed in rugged ABS molded enclosures, each loudspeaker (except the S12) features a 70/100V transformer for use with distributed-audio lines. The unique X-Mount™ Bracket and Euro-style connector, supplied with each AcousticDesign loudspeaker, are designed for maximum flexibility and a quick install. Featuring a knurled ball-mount and discrete angle deployment marks, installers can set loudspeaker deployment angles quickly and securely. The Euro-style connector allows pre-wiring of the system and when combined with the quick "snap-on" deployment of the loudspeaker to the mount, installation is completed in a fraction of the time required versus competitive models.

Unpacking

Package Contents

1. Quick-Start Guide
2. AcousticDesign Loudspeaker
3. Euro-style Connector, 4-pin
4. Terminal Weather Protection Cover
5. Phillips Screws (4) M4 (Terminal Weather Protection Cover)
6. X-Mount™ Bracket

Set the Transformer Tap Switch

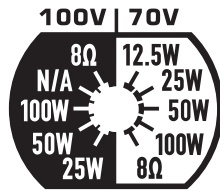
Refer to Figure 1

1. Insert a 4mm flat-tip screwdriver into Transformer Tap hole and engage the slot.
2. At fully clockwise the transformer is in 8Ω-bypass.

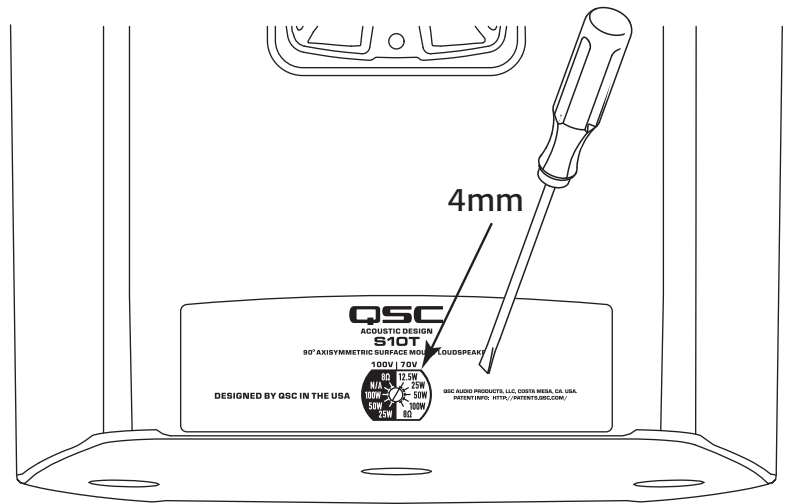
S10T

100 Volt	70 Volt
8 Ω	8 Ω
N/A	100W
100W	50W
50W	25W
25W	12.5W

– Table 1 –



– Figure 2 –

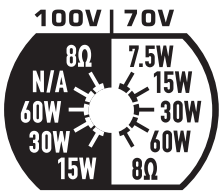


– Figure 1 –

S8T

100 Volt	70 Volt
8 Ω	8 Ω
N/A	60W
60W	30W
30W	15W
15W	7.5W

– Table 2 –



– Figure 3 –

Mount the Loudspeakers

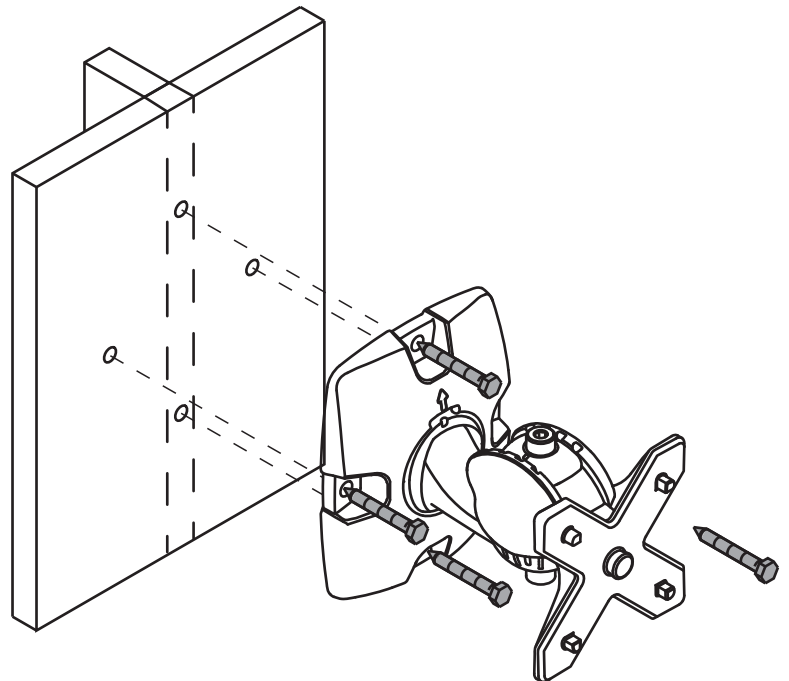
Install the X-Mount™ Bracket

Refer to Figure 4



WARNING!: Install the system in accordance with local building codes and regulations. Use a licensed contractor or professional engineer. QSC Audio Products is not responsible for damages resulting from the negligent installation of any bracket or loudspeaker.

1. Mount to a surface capable of supporting the weight of the loudspeaker.



– Figure 4 –

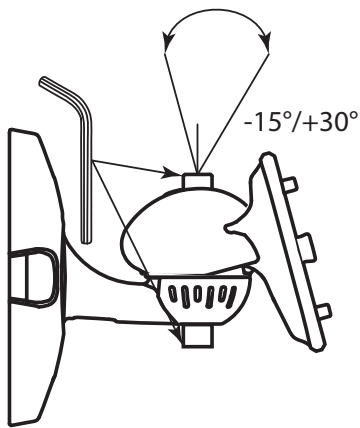
Adjust the Angle of the X-Mount™ Bracket

Refer to Figure 5

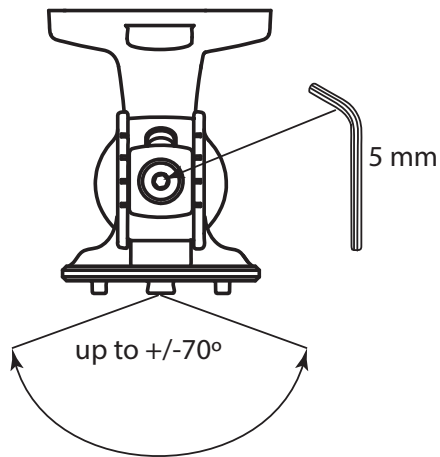


NOTE: This step may be done now or after mounting the loudspeaker.

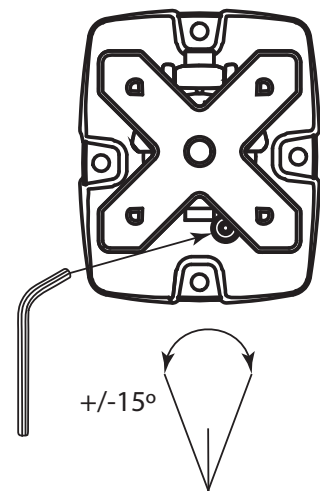
1. Use a 5mm hex wrench to loosen the adjustment locking screws.
2. Orient the bracket as necessary.



SIDE



TOP



FRONT

– Figure 5 –

3. Tighten the adjustment locking screws.

Mount the Loudspeaker on the Bracket

Refer to Figure 6.



NOTE: The loudspeaker can be placed on the mount in ANY direction (Up, Down, Left, Right).

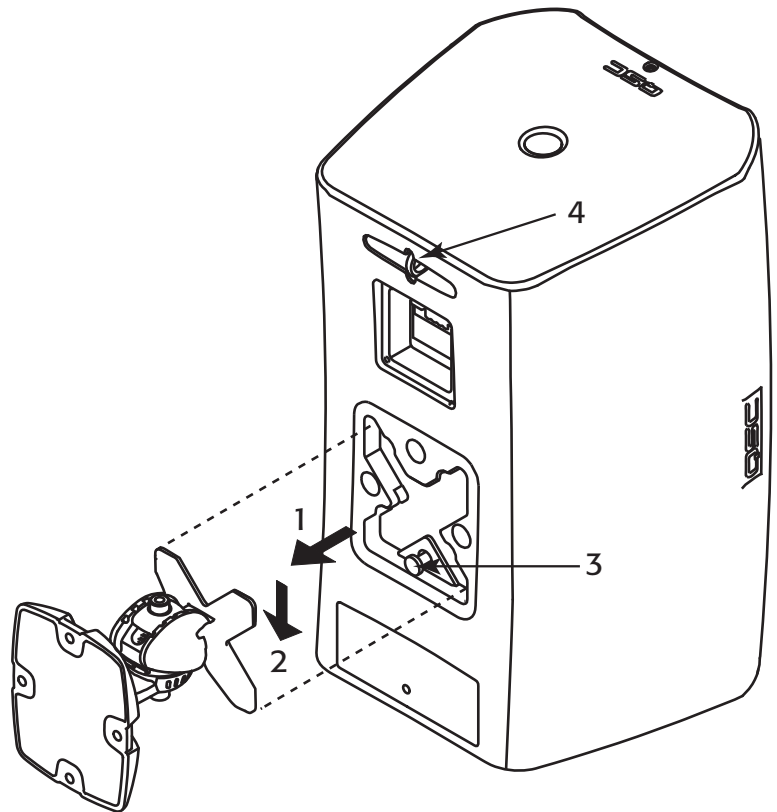
1. Align the "X" slot with the X-Mount™ bracket and push the loudspeaker onto the bracket. (1)
2. When seated, pull the loudspeaker down to lock the loudspeaker onto the bracket. (2)
3. (Optional) Remove and retain the security tab (3); pull straight out. To remove the loudspeaker, re-install the security tab, press in and then remove the loudspeaker.

Connect a Safety Tether (Not supplied)



WARNING! DO NOT connect the tether to the mounting bracket or the screws holding the mounting bracket.

1. It is recommended that you connect a safety tether from the safety ring (4) on the back of the loudspeaker to a spot on the wall that is structurally sufficient to hold the weight of the loudspeaker in the event the loudspeaker should fall.



– Figure 6 –

Suspend the Loudspeaker

Refer to Figure 7



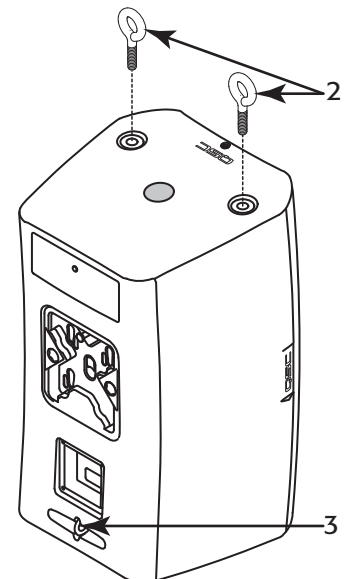
WARNING! Suspend the loudspeaker in accordance with local building codes and regulations. Use a licensed contractor or professional engineer. QSC Audio Products is not responsible for damages resulting from the negligent installation suspension cabling or loudspeaker.

The AcousticDesign loudspeakers (models S8T, S10T and S12) may be suspended using the pull-back point and M10 eyebolts you install at the bottom of the enclosures.



NOTE: Suspending the enclosure woofer side up positions the HF closer to the listener and helps improve bass response when coupled against the ceiling and wall planes.

1. Remove 2 M10 plugs (not shown) from the bottom of the loudspeaker enclosure.
2. Install two M10 -1.5 eyebolts (2) (accessory M10 Kit-C) in the M10 installation points on the bottom of the loudspeaker enclosure.
3. Attach an appropriate cable to the tether Safety Ring (3) for the pull-back point.



– Figure 7 –

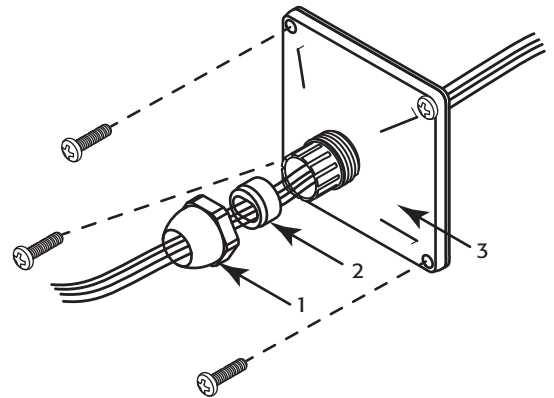
Yoke-mount the Loudspeaker

In addition to the mounting methods listed above, you can mount the loudspeaker using the optional Yoke mounting kit. Refer to instructions provided in the Yoke kit. See the "Specifications" on page 11 for information.

Install the Weather Cover (Optional)

Refer to Figure 8

1. Slide the nut (1), compression gasket (2), and weather cover / gasket (3) over the wiring for the loudspeaker.
2. Terminate the wiring to the Euro-style connector, refer to "Wire the Loudspeaker" on page 7
3. Install the Euro-style connector.
4. Slide the weather cover/gasket (3) up next to the connection box, use a small amount of wire, inside the cover, to provide strain relief.
5. Attach the weather cover to the enclosure with four screws (supplied).
6. Slide the compression gasket (2) into the weather cover receptacle.
7. Slide the nut over the weather cover receptacle and tighten.

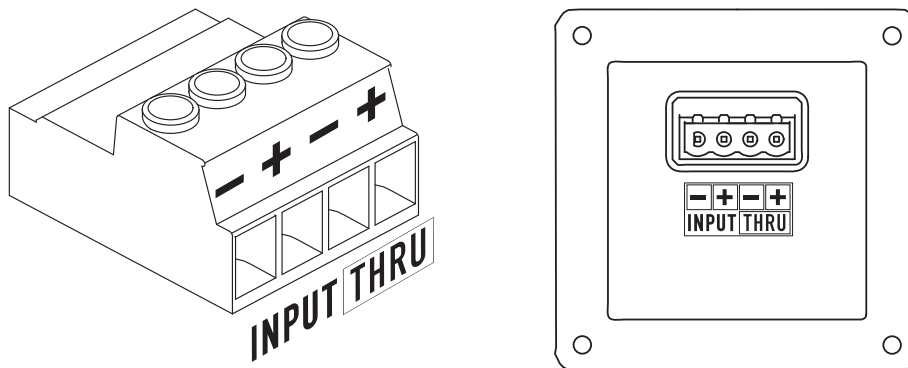


– Figure 8 –

Wire the Loudspeaker

Use up to 12 gage wiring as appropriate. Refer to Figure 9.

1. If you are using the optional weather cover, make sure the wiring is inserted through all three parts of the weather cover in the proper order.
2. Install the negative and positive wires in the "Input" +/- as shown. Tighten the wire-clamp screws.
3. Install the daisy-chaining wires into the "Thru" +/- as shown. These wires go to the next loudspeaker in the daisy-chain.

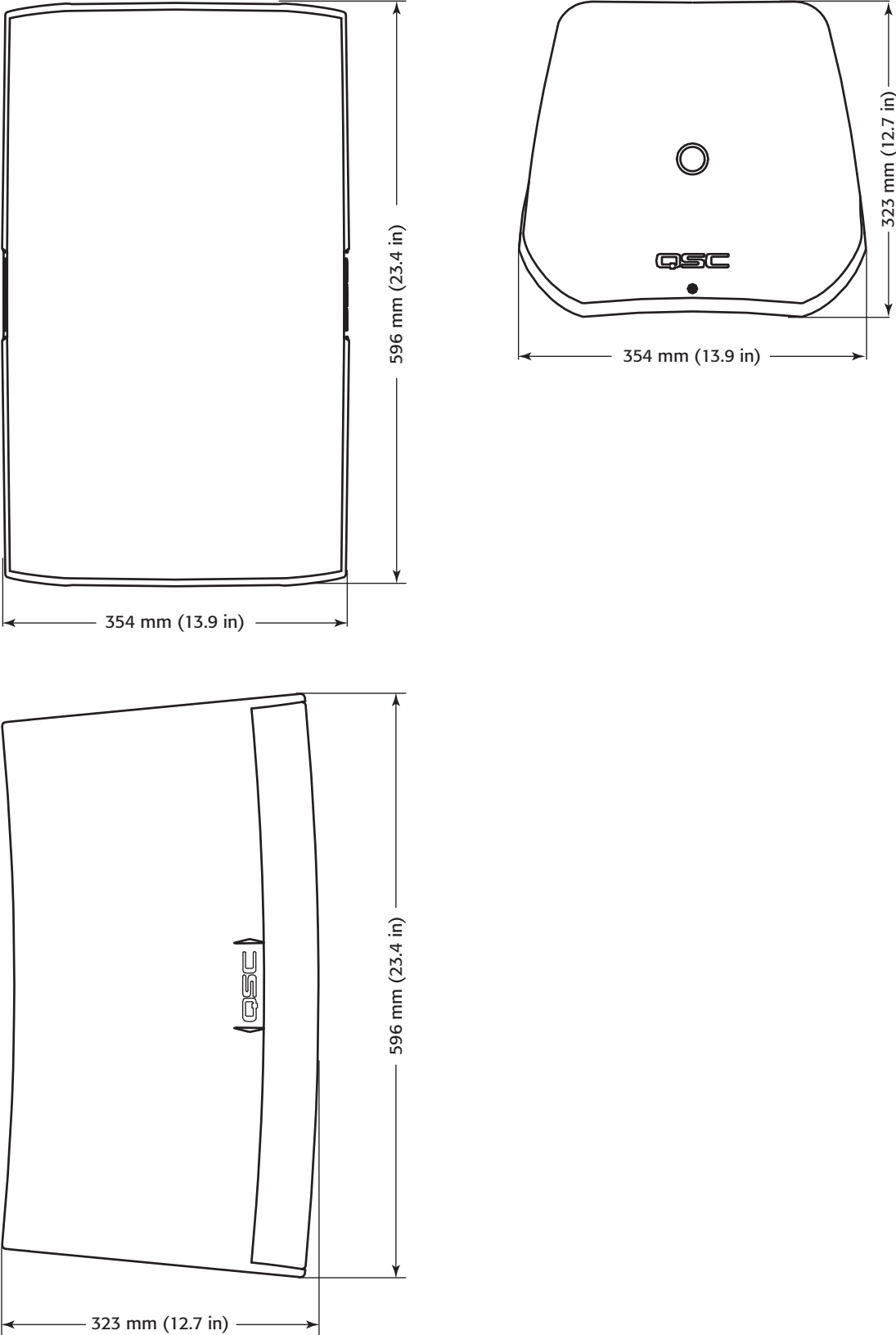


– Figure 9 –

Remove the Loudspeaker

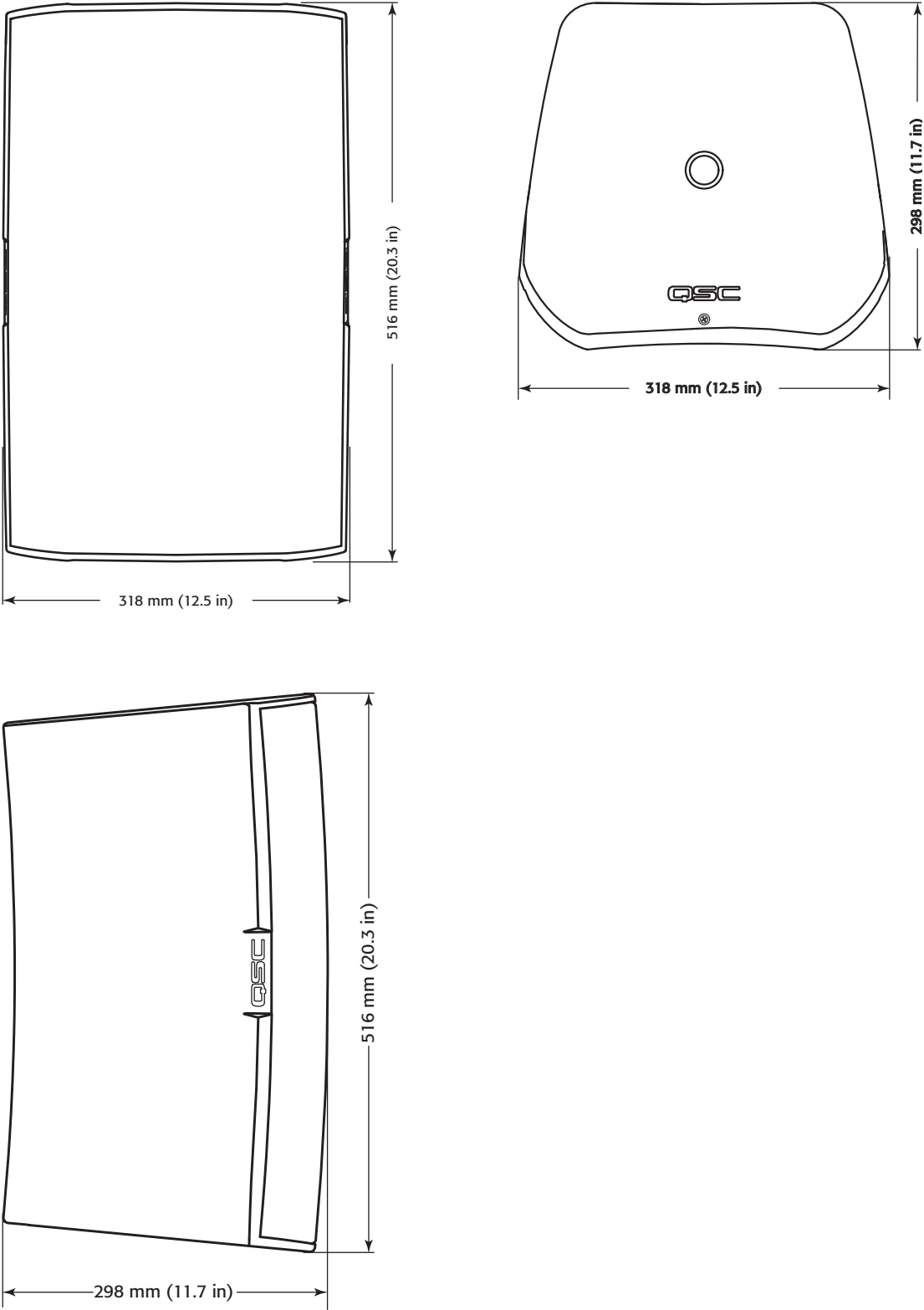
1. Make sure all the wiring is disconnected, and the safety tether is removed.
2. If the security tab, located at the base of the loudspeaker mount, has NOT been removed, push the tab in and slide the loudspeaker in the opposite direction of how it was installed.
3. If the security tab has been removed, re-insert it, or use a small rod (<4 mm / 0.16") to push in and release the mount lock.

S12 Dimensions



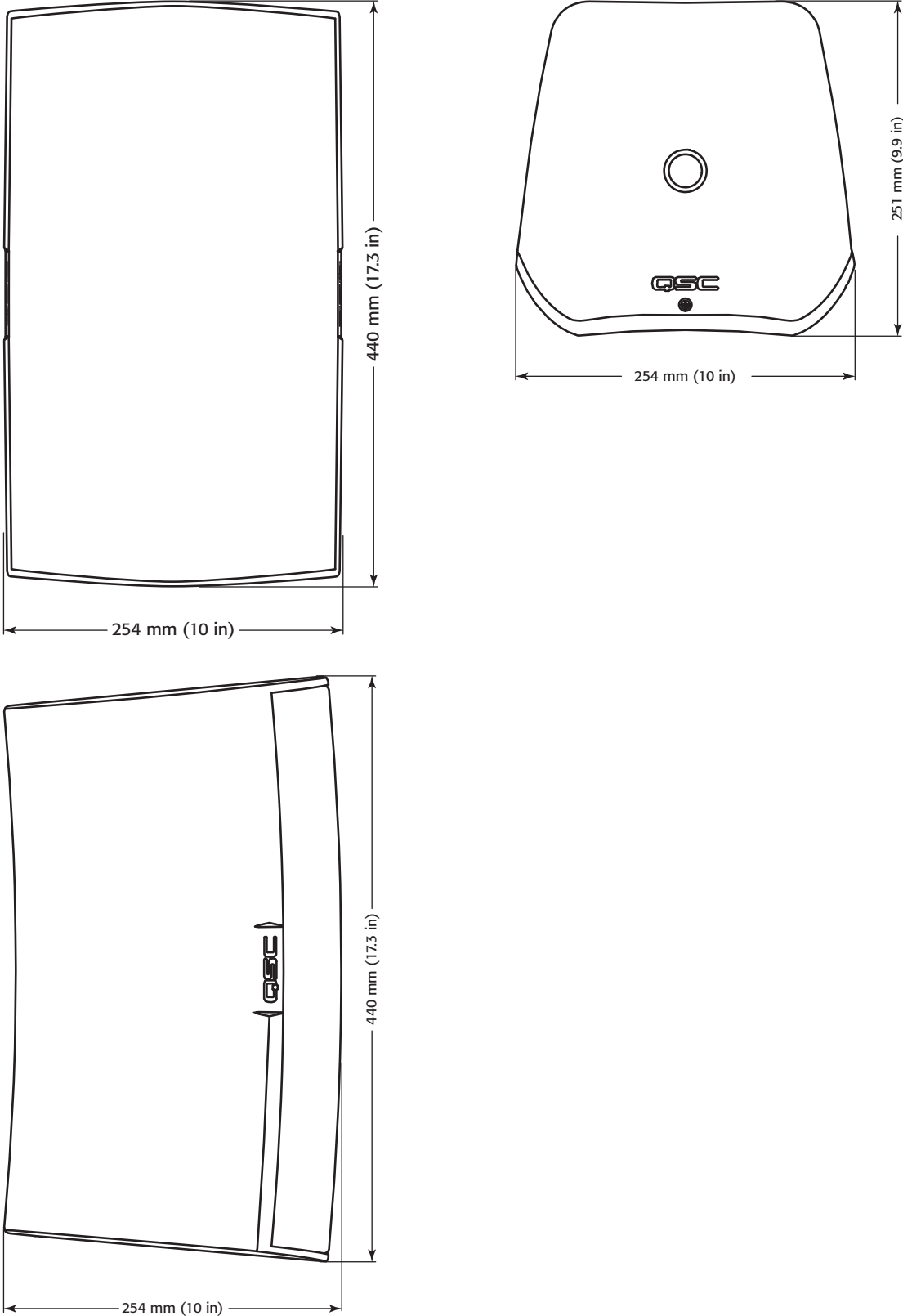
- Figure 10 -

S10T Dimensions



- Figure 11 -

8T Dimensions



– Figure 12 –

Specifications

	S8T	S10T	S12
Configuration	8" 2-way with transformer	10" 2-way with transformer	12" 2-way
Transducers			
Low-frequency	1" Exit / 1.4" Voice-coil Compression Driver	1" Exit / 1.4" Voice-coil Compression Driver	1" Exit / 1.4" Voice-coil Compression Driver
High-frequency	8" Weather Resistant Paper Cone Woofer, 2.0" / 50 mm Voice-coil	10" Weather Resistant Paper Cone Woofer, 2.5" / 64 mm Voice-coil	12" Weather Resistant Paper Cone Woofer, 3" / 76 mm Voice-coil
Rated Voltage / Power ¹	40 Vrms / 200 W	45 Vrms / 250 W	50 Vrms / 300 W
Rated Sensitivity ²	90 dB, 1 W @1 m	92 dB, 1 W @1 m	95 dB, 1 W @1 m
Frequency Range (-10 dB) ³	55 – 20 kHz	50 – 19 kHz	52 – 20 kHz
Coverage Angle (-6 dB) ^{3,4}	105°	90°	75°
Maximum SPL (1 meter) ⁵			
Continuous	113 dB	116 dB	120 dB
Peak	119 dB	122 dB	126 dB
Directivity Factor (Q)	7	10	12
Directivity Index	9 dB	10 dB	11 dB
Nominal Impedance	8Ω	8Ω	8Ω
Recommended Amplifier Power	400 W	500 W	600 W
Transformer Taps			N/A
70 V	60, 30, 15, 7.5 W and 8Ω bypass	100, 50, 25, 12.5 W and 8Ω Bypass	
100 V	60, 30, 15 W and 8Ω bypass	100, 50, 25 W and 8Ω Bypass	
Input Connector	Euro-style Connector with Parallel Outputs		
Enclosure (ABS polymer)			
Finish	Black RAL 9011 or White RAL 9010 Paint		
Grille	Powder-coated Aluminum		
Environmental	Meets IEC60529 IP-54 for dust and splash resistance. The AD Series loudspeakers qualified for outdoor use using the following tests Salt fog: MIL-STD-810G Method 509.5 for 100 hrs. Humidity: MIL-STD-810G Method 507.5, Natural cycle B2, cyclic high RH for 7 days High and low temperature: tested according to QSC internal standards between -20° and 50° C		
Dimensions (HWD)			
millimeters	440 x 254 x 251	516 x 318 x 298	596 x 354 x 323
inches	17.3 x 10.0 x 9.8	20.3 x 12.5 x 11.7	23.4 x 13.9 x 12.7
Weight (Net)	11 kg / 24 lbs	14 kg / 31 lbs	16 kg / 35.0 lbs
Available Accessories			
Included	X-Mount™ system, Euro-style connector	X-Mount™ system, Euro-style connector	X-Mount™ system, Euro-style connector
Optional	Yoke Mount Bracket Kit YMS8T-WHT YMS8T-BLK M10 Kit-C	Yoke Mount Bracket Kit YMS10T-WHT YMS10T-BLK M10 Kit-C	Yoke Mount Bracket Kit YMS12-WHT YMS12-BLK M10 Kit-C

1 IEC60268-1 noise signal for 2 Hrs

2 On-Axis, free-field sensitivity, 2.83V, 1 m

3 Free-field, -10 dB from on-axis sensitivity

4 Coverage angle measured with 3 - 10 kHz bandwidth

5 Calculated from rated noise voltage and sensitivity



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