SR-5152

User Guide

QSC

SR-5152 — 15" Two-way High-Output Surround Loudspeaker with 75°axisymmetric coverage

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.

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 a triangle is to alert the user to the presence of important safety, and operating and maintenance instructions in this manual.

IMPORTANT SAFETY INSTRUCTIONS

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).

1. Read these instructions.

1. Keep these instructions.

2. Heed all warnings.

3. Follow all instructions.

4. Do not use this apparatus near water.

5. Clean only with a dry cloth.

6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

7. Only use attachments/accessories specified by the manufacturer.

8. Refer all servicing to qualified service personnel.

9. Adhere to all applicable, local codes.

10. Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

TD-000498-00-A

Warranty

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

Installing the SR-5152 Loudspeaker

Suspending the SR-5152

⚠️ **WARNING!:**   Read and follow these instructions carefully. If the loudspeaker is not suspended properly, itr could fall, causing personal injury and damage to the equipment.

Rules for Suspension

- Consult a Professional Mechanical or Structural Engineer, licensed in the jurisdiction of the sound system installation, to review, verify, and approve all attachments to the building or structure.

- Employ the services of a Professional Rigger for hoisting, positioning, and attaching the equipment to the supporting structure.

- Correct use of all suspension hardware and components is imperative in sound system suspension and deployment.

- Always calculate suspended loads before lifting to make sure suspension components and hardware are used within their respective load limits.

- Consult local codes and regulations to fully understand the requirements for suspended loads in the venue in which you will suspend the equipment.

- Use only the recommended yoke, the M10 installation points with the M10 installation kit, or the recommended third-party wall bracket and M8 mounting points on the back of the loudspeaker, for suspending the loudspeaker.

- Be absolutely certain of the integrity of any structural member intended to support suspended loads. Hidden structural members can have hidden structural weakness.

- Never assume anything! Owner or third-party supplied suspension attachment points may not be adequate for suspending the loads.

- Before lifting, always inspect all components (enclosures, suspension brackets, pins, frames, bolts, nuts, slings, shackles, etc.) for cracks, wear, deformation, corrosion, missing, loose, or damaged parts that could reduce the strength of the assembly. Discard any worn, defective, or suspect parts and replace them with new appropriately load-rated parts.

Shock Loading

When a load is either moved or stopped, its static weight is magnified. Sudden movements can magnify the static weight several times. This magnification of static weight is called "shock loading". Shock loading poses a danger to equipment and workers. The effects of shock loading can be instantaneous, or may remain undetected unless the equipment is visually damaged. Proper preparation for shock loading requires careful planning and knowledge of equipment, suspension, and lifting practices.

Shock loading of equipment and structures is usually confined to lifting and installation, but natural forces (winds, earthquakes, and so on) can impose shock loads several times the static load. Because of this, structures and suspension equipment must be capable of supporting several times the weight of the suspended equipment.

Model	Weight (kg)	Weight (lbs)
SR-5152	36.3	80

Using Integrated Suspension Points

The Suspension points are located such that the loudspeakers can be hung in any orientation.

- 14 M10 Integrated Suspension Points.

- Two on each side, two on the back, and four on the top, and four on the bottom of the loudspeaker enclosure.

- 4 M8 threaded inserts for bracket attachment.

⚠ **NOTE:** The suspension points on the SR-5152 Loudspeakers are designed for use with the eyebolts (M10, 20 mm) and washers included in the available M10 accessory kit (model number: M10 KIT-W).

1. Remove the appropriate plugs from the M10 installation points using a 6 mm hex key.

2. Thread an eyebolt into each of the appropriate M10 installation points.

3. Tighten the eyebolts until their shoulders are snug against the enclosure.

4. Continue to rotate the eyebolts until they reach the optimum desired in-line position. Do not overtighten.

5. The loudspeakers are ready for suspension.

Using Yoke Mounts

The SR-5152 can be installed using a third-party yoke mount attached to the M10 Integrated Suspension Points. A 6 mm hex key is required.
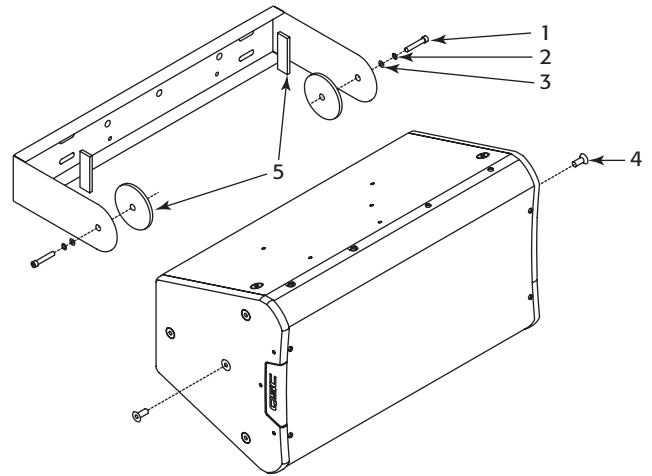
⚠ **WARNING!:** Consult a structural engineer before mounting the Yoke Mounts to any surface. Be sure the surface can support the weight of the loudspeaker, and that the proper bolts are used to secure the yoke to the surface.

1. Properly secure the yoke mount bracket to the selected surface.

Refer to **Figure 1**

2. Remove the center M10 hex plugs (4) from the top and bottom of the loudspeaker enclosure. You may discard or recycle the plugs.

3. Using proper lifting techniques place the loudspeaker in the yoke with the two circular pads (5) between the loudspeaker enclosure and the yoke.

4. Install the M10 socket head cap screw (1), lock washer (2), and flat washer (3) through the yoke and pad, and into the Integrated Suspension point. Repeat for the other end of the loudspeaker enclosure. Do not fully tighten the screws at this point.

5. Adjust the angle of the loudspeaker as required.

6. To prevent rattling in a vertical orientation, install the two rectangular pads between the loudspeaker enclosure and the yoke mount.

⚠ **NOTE:** If you reposition the loudspeaker be sure to check that the rectangular pads are in the proper positions.

7. Torque the M10 cap screws to 69 kgf/cm (60 in/lbs).
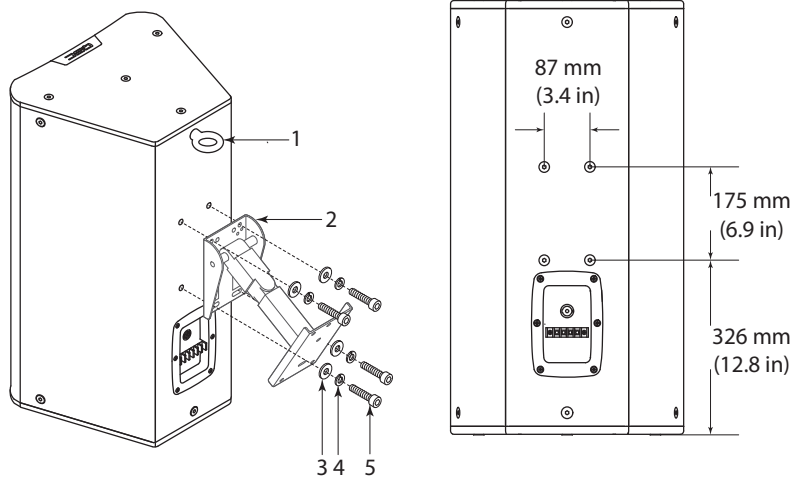
— Figure 1 —

Using Wall Brackets

The SR-5152 can be installed using a third-party multi-mount wall bracket attached to the four (4) M8 threaded inserts on the back of the loudspeaker enclosure.

⚠ **WARNING!:** Consult a structural engineer before mounting any wall mount to any surface. Be sure the surface can support the weight of the loudspeaker, and that the proper bolts are used to secure the bracket to the surface.

Refer to **Figure 2**

1. Follow the bracket manufacturer's installation instructions. Pre-install wall-side bracket part if instructed to do so.

2. Remove the four M8 socket-head cap screws, lock washers, and flat washers from the rear panel of the loudspeaker enclosure.

3. Align bracket and re-install the four M8 socket head cap screws (5), lock washers (4), and flat washers (3) through the bracket plate (2), and into the threaded inserts.

4. Torque the M8 cap screws to 138 kgf/cm (120 in/lbs).

5. Install loudspeaker with speaker-side bracket part attached onto wall, per bracket manufacturer's instructions.
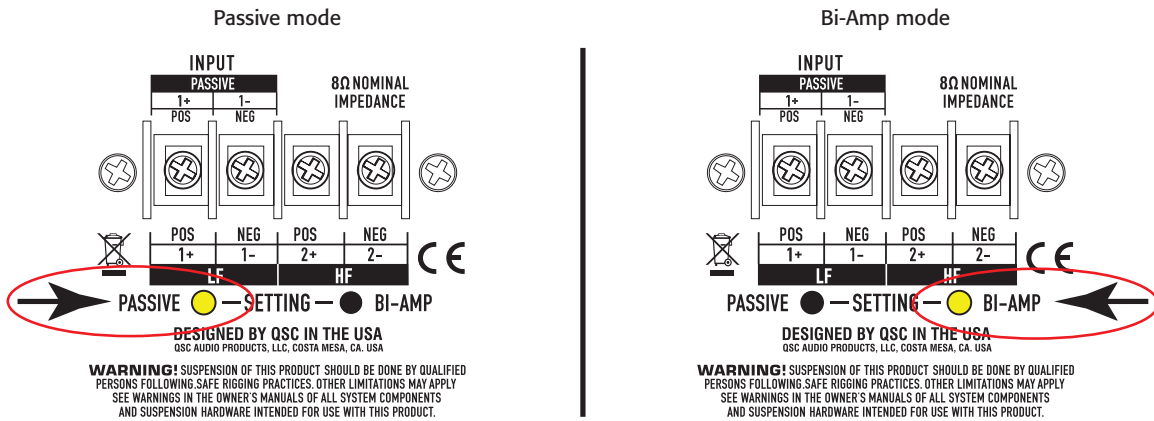
— Figure 2 —

87 mm (3.4 in)

175 mm (6.9 in)

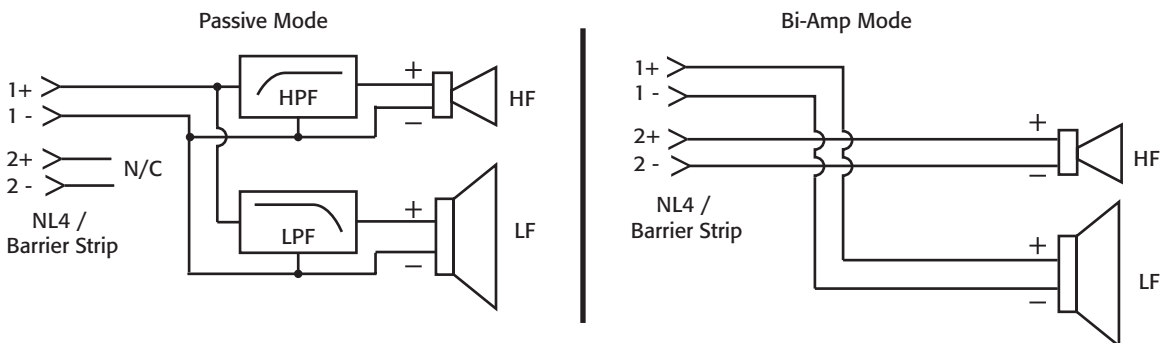326 mm (12.8 in)

Connections

The SR-5152 is capable of switching between Passive and Bi-amp mode. Look at the Setting ports to determine the current mode. **Yellow in the Setting port indicates the current mode.** Refer to Figure 3 and Figure 4

⚠️ **NOTE:** The default mode, from the factory, is the passive crossover network.

Passive mode   Bi-Amp mode

— Figure 3 —

Passive Mode   Bi-Amp Mode

— Figure 4 —

Changing from Passive to Bi-amp

The SR-5152 ships configured in passive mode. To change from Passive to Bi-amp mode or Bi-amp mode to Passive mode:

Refer to Figure 5 and Figure 6.

1. Remove the six screws holding the input cup in place.

2. Remove the input cup, being careful not to place excess stress on the connecting wiring harness.

3. Remove the wiring harness plug from the receptacle at the bottom of the cup.

1. Insert the wiring harness plug into the other receptacle at the bottom of the cup.

2. Turn the input cup over and **verify that yellow is visible in the proper SETTING port**. If not, move the plug to the other receptacle.

3. Carefully place the input cup back into position on the enclosure, being careful not to bind or pinch any of the wires.

4. Secure the input cup with the six screws removed in step 1. Torque the screws to 29 kgf/cm (25 in/lbs).

Remove six Screws

— Figure 5 —

— Figure 6 —

TD-000498-00-A
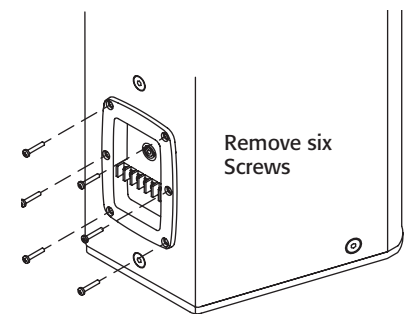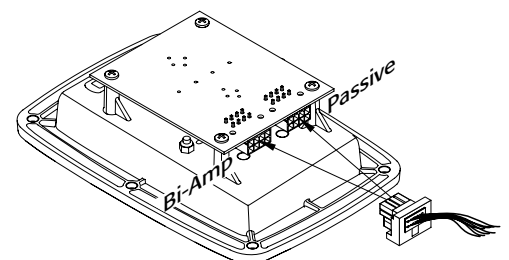
Wiring the SR-5152

⚡ **WARNING!:** Make sure the amplifiers are turned off, and disconnected from the power source, or the loudspeaker wiring is not connected to the amplifiers.

Refer to Figure 7, Figure 8, and Figure 9.

The pin numbers for the NL4 connector correspond to the pin numbers on the barrier strip.

Wiring

| Model	Size	Wiring Connections	Wire Size Maximum
SR-5152	15" Two-way	NL4 and covered 4-pin barrier strip	10 AWG

Refer to Figure 7 and Figure 9

1. Make sure the loudspeaker is set to the desired mode. Refer to "Changing from Passive to Bi-amp" on page 5.

2. Connect the wiring (10 AWG maximum) to the correct terminals if you are using the barrier strip.

Pin-out for the barrier strip and the NL4 connectors:

- Passive Mode:
  - 1+ and 1-
- Bi-amp Mode:
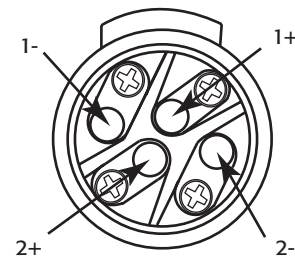 - LF 1+ and 1-
  - HF 2+ and 2-

⚠ **NOTE:** Multiple loudspeakers can be daisy-chained, in parallel, using one of the inputs as the output to the next loudspeaker.
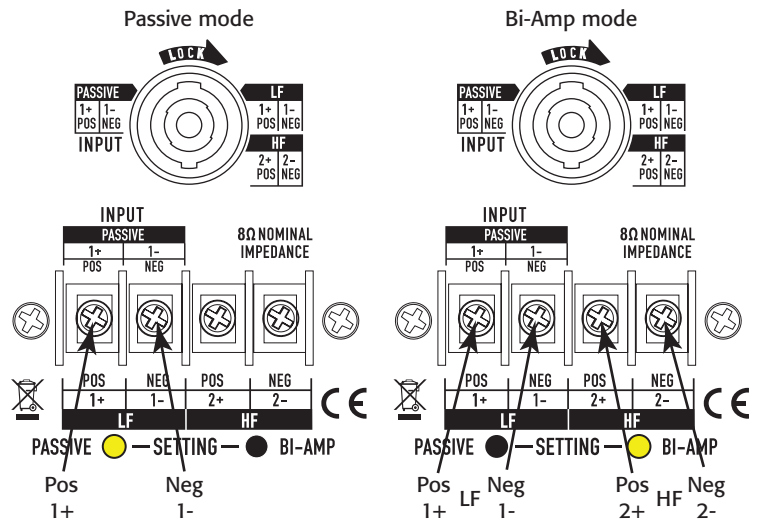
— Figure 7 —

— Figure 8 —

— Figure 9 —

Specifications

	SR-5152
System Details	
Frequency Response (-10 dB):	44 Hz − 18 kHz
Rated Noise Power[1] (Continuous)	
Passive	70.7 V / 625 W
Bi-amp HF	24 V / 72 W
Bi-amp LF	70.7 V / 625 W
Sensitivity [2]	96 dB, 1 W @1 m
Nominal Coverage Angle (Axisymmetric)	75˚
Recommended Crossover	950 Hz
Maximum Rated SPL	
Passive:	
continuous [3]	123 dB @1 m
peak [4]	129 dB @1 m
Bi-Amp:	
HF continuous [3]	127 dB @1 m
LF continuous [3]	122 dB @1 m
HF peak [4]	133 dB @1 m
LF peak [4]	129 dB @1 m
Nominal Impedance	8Ω
HF Transducer	76 mm (3″) diaphragm compression driver;
LF Transducer	102 mm (4 in) voice coil ferrite 381 mm (15″) woofer
Enclosure Details	
Input Connector	Covered Barrier Strip NL4
Pin Out	1+/1- Passive / Bi-amp LF 2+/2- Bi-amp HF
Enclosure Material	15 mm Baltic birch plywood
Attachment Points	14x threaded M10 inserts 4x threaded M8 inserts
Grille	16 Gauge powder coated steel
Dimensions (H x W x D)	660 x 381 x 330 mm (26 x 15 x 13 in)
Net Weight	36.2 kg (80 lbs)
Shipping Weight	40.8 kg (90 lbs)
Optional Accessories	M10 Kit-W
Compatible Third-party Accessories	UB-325-13 Yoke Bracket (available from Adaptive Technologies Group, www.adapttechgroup.com) MM-120-BT Wall mount bracket (available from Adaptive Technologies Group, www.adapttechgroup.com)

1   *2 hour rating using IEC60268 noise based on minimum impedance*
2   *Mid-band based on nominal impedance*
3   *Calculated as the nominal sensitivity plus 10x the log of continuous rated power in volts squared, divided by nominal impedance*
4   *Calculated as the continuous calculated max output plus 6 dB*

TD-000498-00-A

QSC™

Mailing Address:

QSC Audio Products, LLC

1675 MacArthur Boulevard

Costa Mesa, CA 92626-1468 USA

Telephone Numbers:

Main Number: (714) 754-6175

Sales & Marketing: (714) 957-7100 or toll free (USA only) (800) 854-4079

Customer Service: (714) 957-7150 or toll free (USA only) (800) 772-2834

Facsimile Numbers:

Sales & Marketing FAX: (714) 754-6174

Customer Service FAX: (714) 754-6173

World Wide Web:

www.qsc.com

E-mail:

info@qsc.com

service@qsc.com