



QSE-216

**6.5 INCH 2-WAY
COMPONENT
SPEAKERS**



CONGRATULATIONS

By purchasing the QSE-216 2-Way Component System you have chosen an excellent MB Quart product.

Q is the perfect example of the technical achievements that can be made in the area of in-car loudspeakers by means of intensive research. Q is more than a philosophy, since Q enables perfect sound reproduction in conjunction with conveniently compact dimensions. Q can be installed quickly and easily, since every detail of the system has been designed with functionality in mind.



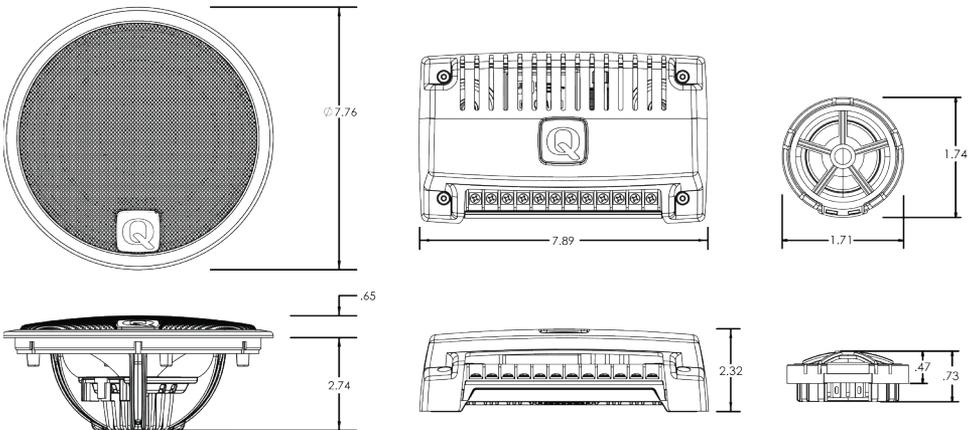
CAUTION



Always consider consulting a professional audio installer before installing new speakers. Many car manufacturers locate speakers behind interior panels that require special tools to remove those panels to access the speakers. Some panels will be screwed in, some will use plastic fasteners, many will have both. Be careful and take your time.

If you are using the speaker wire supplied with your new speakers make sure that you run the speaker wires through the factory boot. Do not let speaker wire make contact with metal edges of doors or other access holes.

Speaker dimensions



Specifications

Model	QSE-216	Crossover Slope	12dB/Octave
Power Handling RMS	170 Watts	Cut-Off	5.68"
Power Handling Peak	360 Watts	Chassis Depth from Flange	2.5"
Impedance	4 Ohms		
Sensitivity (1 Watt / 1 Meter)	8.5 dB		
Frequency Response +/- 10dB	35Hz - 32Khz		

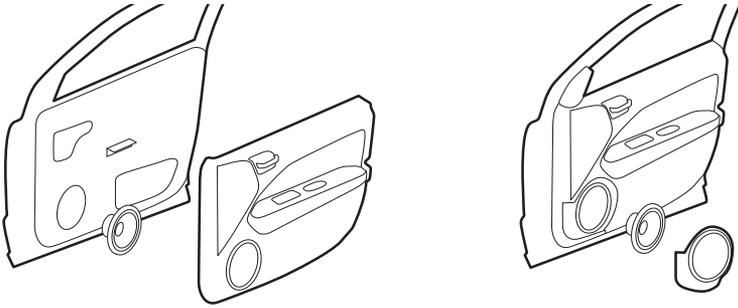
General

It's a good idea to confirm that you have purchased the correct size speakers to fit your vehicle. If you have any reservations about being able to complete the installation yourself, we recommend contacting a professional. The removal of interior panels can be tricky and may require special tools. Disconnect the negative terminal of the vehicle battery during the installation, in order to avoid possible short-circuits. Be careful as you go.

Factory speaker removal

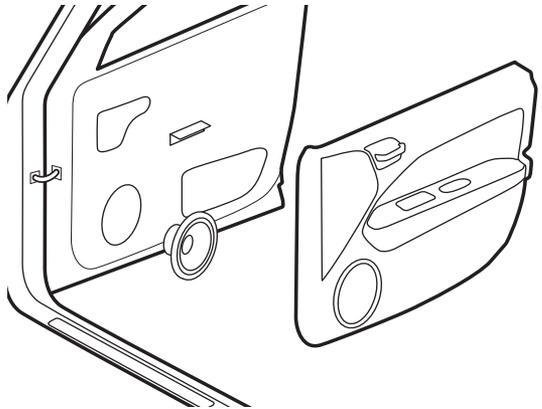
A Access and remove factory door speakers

Most modern vehicles have speakers that are mounted directly to the structure of the door. Access is achieved by the removal of the door panel. Some vehicles may only require the removal of a small panel around the speaker itself.



B Fit and Wiring

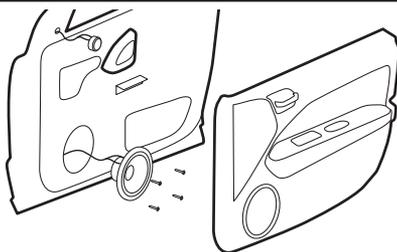
Once the factory speakers are removed, check the fit and determine if there is enough depth clearance for the new speaker. A good way to do this is to roll the window down and back up while holding the speaker in place. If you decide to run wires, make sure to use factory harness boots and grommets where ever possible.



Installation

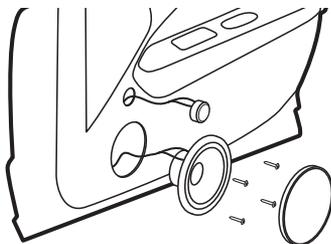
A *Factory location behind door panel*

Vehicles that have premium sound systems will often have separate tweeters in a dash or door location. Try to use this location for mounting the component tweeter if possible.

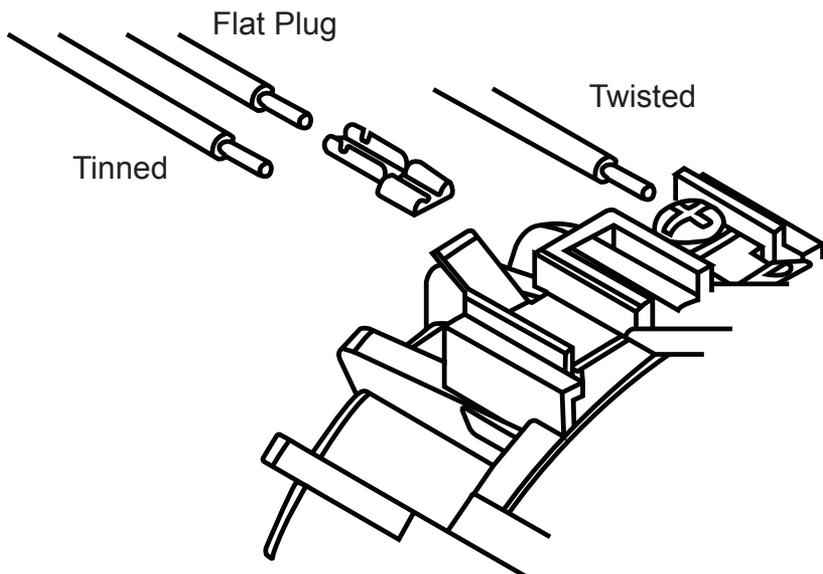


B *Custom location*

If there is not a suitable factory location for woofer or tweeter to be mounted, custom mounting may be necessary. Use provided templates for mounting. Before making any permanent changes to your vehicle make sure there is adequate mounting depth.

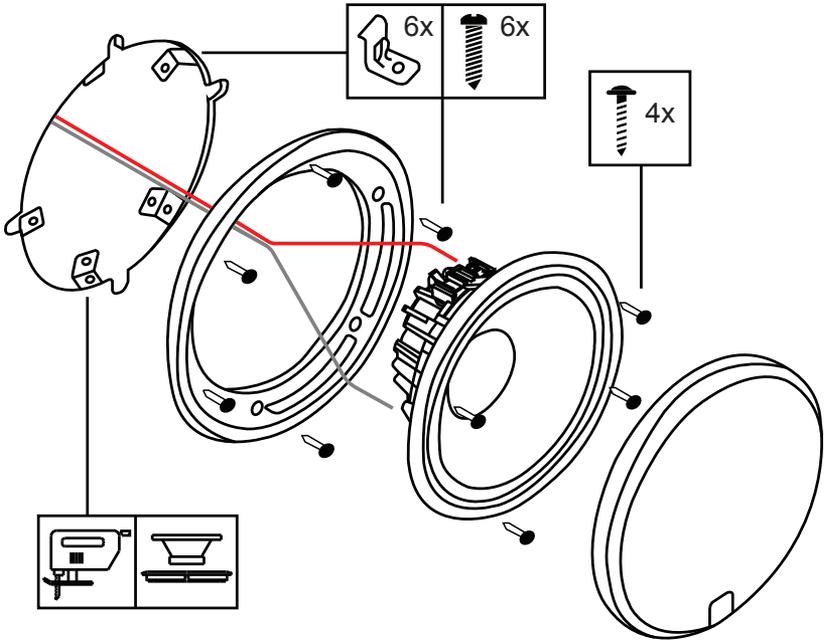


C *Connection Possibilities*

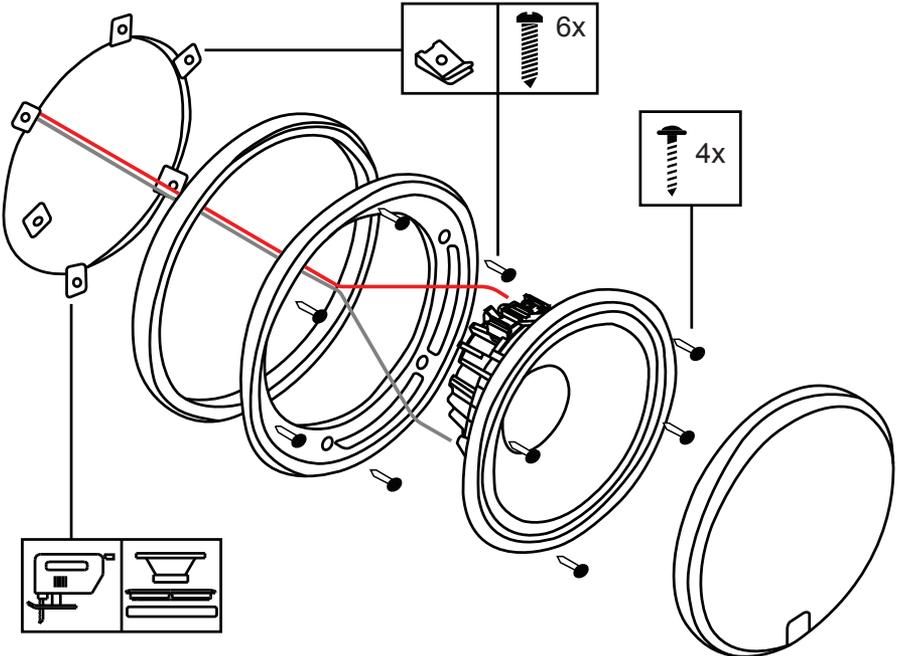


D Speaker
Mounting

Flush Mounting Ring

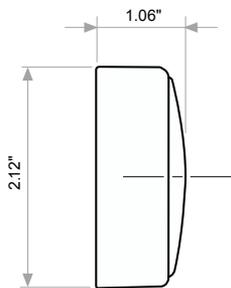


Flush Mounting with Spacer Ring

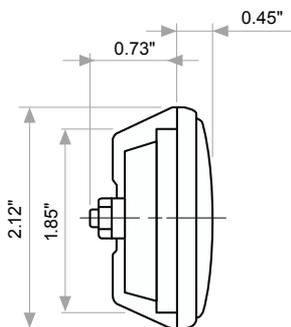
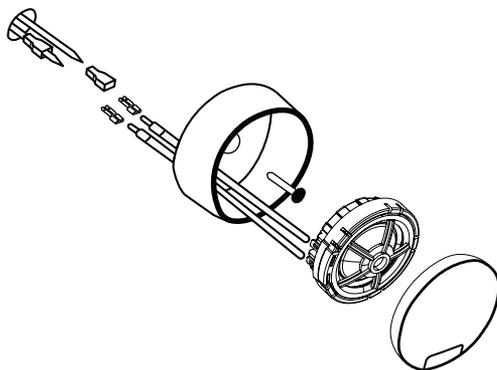


E *Tweeter Mounting*

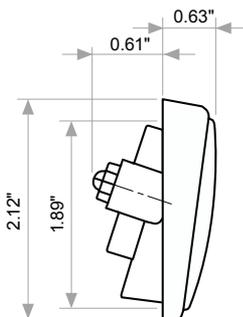
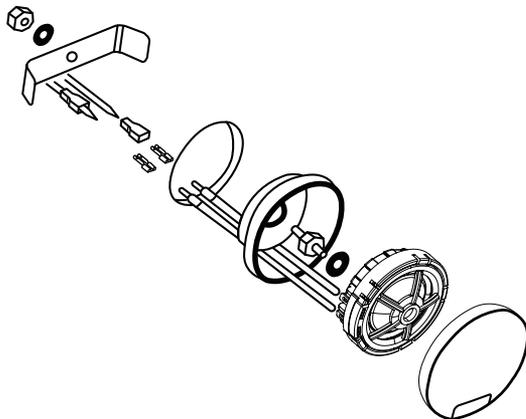
There are three primary ways the tweeter can be mounted. Surface Flush, and Oblique mounting. Make sure to check for any obstructions before cutting into any panel.



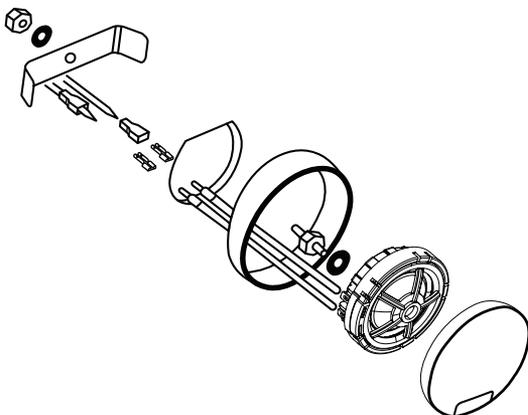
Surface Mount



Flush Mount

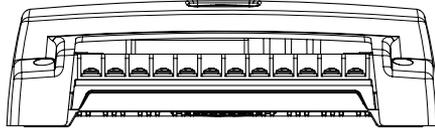
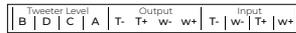
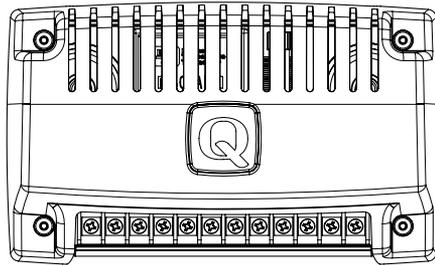


Oblique Mount

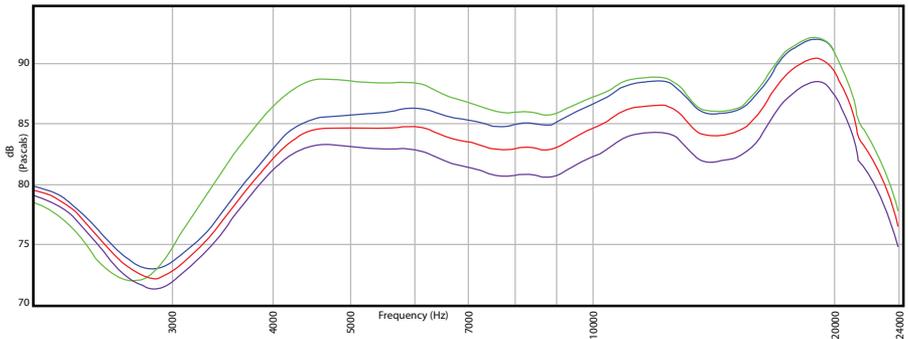


F Crossover Wiring

The crossover is necessary for the proper operation of the component speaker system. Make sure the wires are securely attached and that there are no stray strands of wire contacting other terminals. Mount the crossover to a secure surface that is free of interference from window mechanisms and excessive moisture.



G Tweeter Connection Adjustment Graph



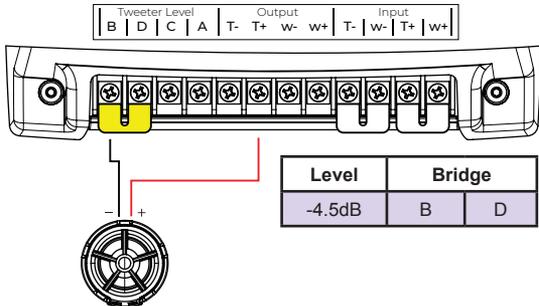
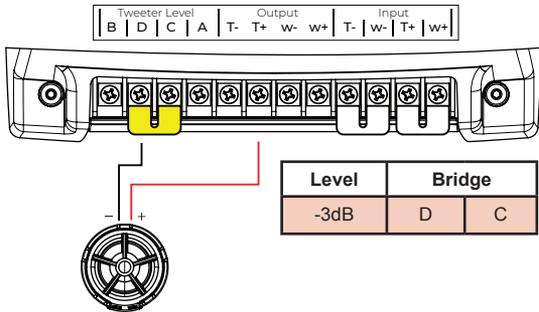
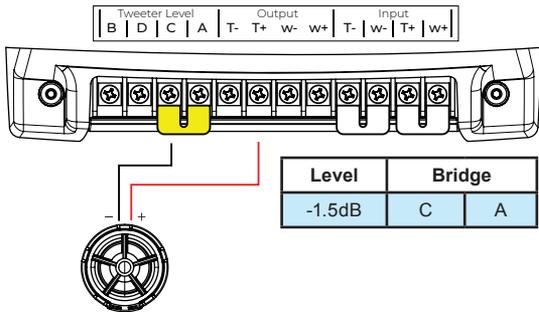
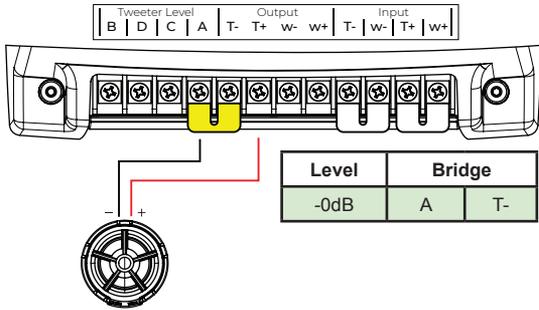
Tweeter Adjustment		
Level	Bridge	
-0dB	A	T-
-1.5dB	C	A
-3dB	D	C
-4.5dB	B	D

The QSE-216 2-Way crossover network included in your Q speaker set is equipped with individually selected sound frequency components, gold connection terminals and gold terminal jumpers, together with reinforced conductor tracks with 140 copper plating. In addition, it uses our new Balanced Temperature Technology which, in combination with the cast aluminium baseplate, means that the temperature variations between the different components therefore work at the same, exactly pre-defined temperature.

Your QSE crossover network is also equipped with a special tweeter protection, which prevents damage to the tweeter voice coil. The various different connections and setting variants offer all the conditions required for the optimal adjustment of the speakers to the vehicle acoustics and to your individual listening preferences.

Leaving the jumper connected between tweeter negative and A provides a boost in the upper midrange, between 3kHz and 8kHz. The Negative tweeter wire needs to be connected on the jumper.

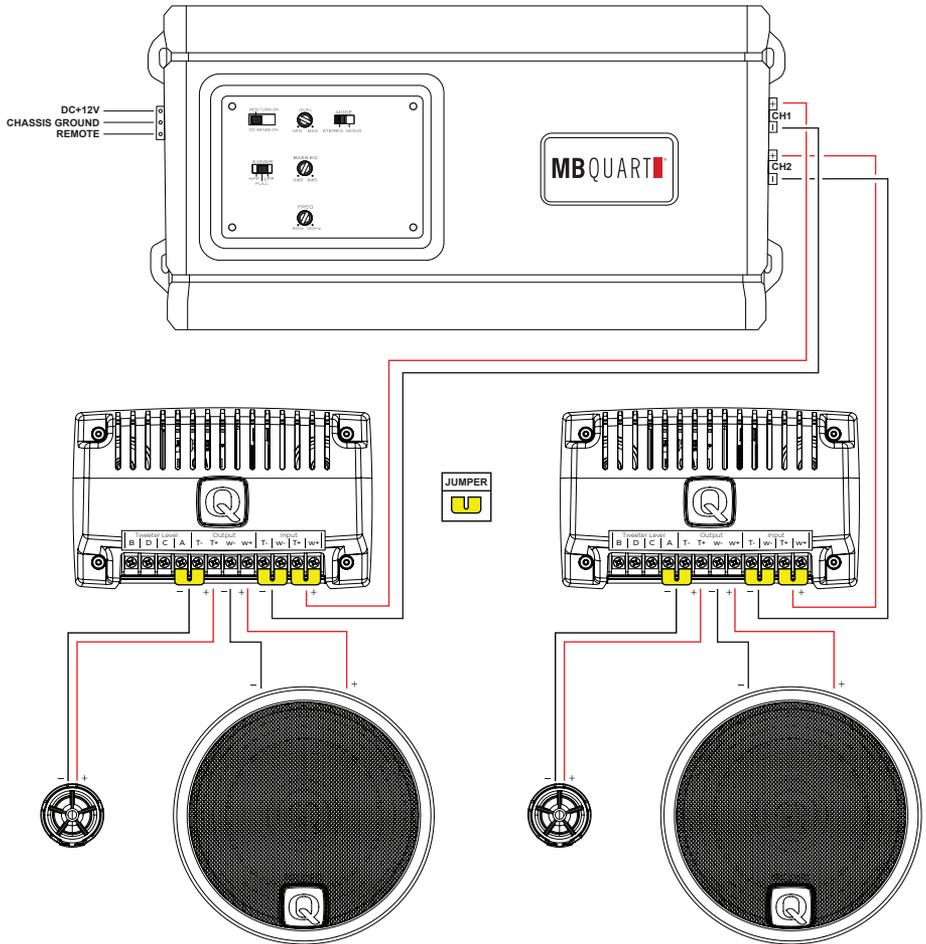
H Tweeter Jumper Connections





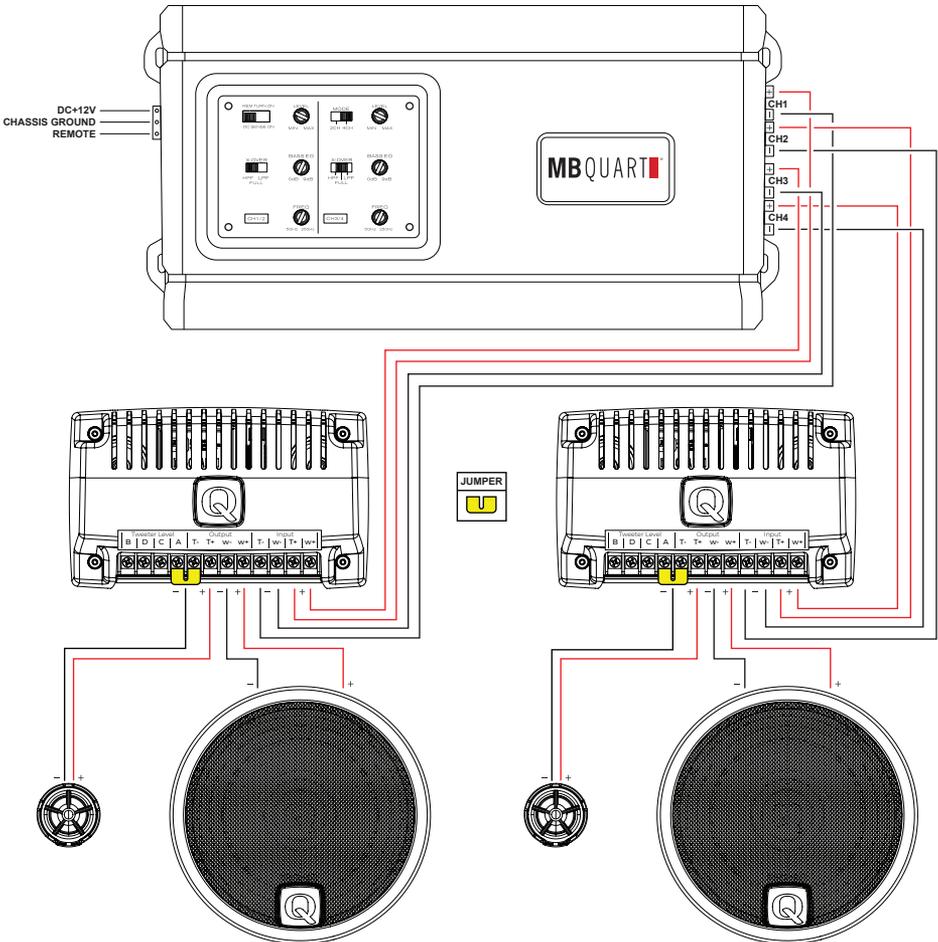
Standard System Setup

1. Connect the output of the sound equipment to the input terminals W+ and W- of the crossover network
2. Connect the tweeter positive wire to the T+ output terminal.
The tweeter negative connection will be determined by your tweeter adjustment settings (See table on Step G). Once your adjusting setting is chosen, connect the tweeter negative wire with the frequency jumper (See step H)
3. Connect the woofers to the output terminals W+ and W-



J**Bi-Amping
System Setup**

1. Remove the jumpers T+/W+ and T-/W- at the input terminals.
2. Connect the output of the sound equipment to the input terminals W+/W- and T+/T- of the crossover network
3. Connect the tweeter positive wire to the T+ output terminal.
The tweeter negative connection will be determined by your tweeter adjustment settings (See table on Step G). Once your adjusting setting is chosen, connect the tweeter negative wire with the frequency jumper (See step H)
4. Connect the woofers to the output terminals W+ and W-





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WARRANTY

Maxxsonics, LLC. warrants this product, to the original consumer purchaser, to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. Maxxsonics, LLC. will, at it's discretion, repair or replace defective products during the warranty period. Components that prove to be defective in materials and workmanship under proper installation and use must be returned to the original authorized Maxxsonics, LLC. retailer from where it was purchased. A photocopy of the original receipt must accompany the product being returned. The costs associated with removal, re-installation and freight are not the responsibility of Maxxsonics, LLC. This warranty is limited to defective parts and specifically excludes any incidental or consequential damages connected therewith. To view the full warranty, please visit the website.

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MAXXSONICS®