

TR050-CT

0.5-inch (12 mm) Tweeter

owner's manual

Thank you for choosing a JL Audio Evolution TR Component Tweeter for your automotive sound system. With proper installation, your new tweeters will deliver years of listening pleasure.

We strongly recommend that you have your new Evolution tweeters installed by your authorized JL Audio dealer. The installation professionals employed by your dealer have the necessary tools and experience to disassemble your interior panels, install your new tweeters and reassemble your vehicle properly. Also, keep in mind that your warranty coverage doubles to 2 years if your system is installed by your authorized JL Audio dealer. If you prefer to perform your own installation, please read this instruction manual completely before beginning the process.



TR050-CT SPECIFICATIONS:

0.50-inch (12 mm) textile dome diaphragm, integral phase plug, neodymium magnet, ferrofluid cooled and damped. Designed for flush or surface mounting.

Continuous Power Handling:

50 Watts (with appropriate crossover)

Peak Power Handling:

125 Watts (with appropriate crossover)

Frequency Response: $4 \text{ KHz} - 22 \text{ KHz} \pm 3 \text{ dB}$

Efficiency @ IW/Im: 91.0 dB Nominal Impedance: 8 ohms

Included Parts:

- Two TR050-CT 0.50-inch (12 mm) Tweeters
- Two TR050-CThp In-Line, High-Pass Filters on 5.3 ft. (1.6 m) Wire Harnesses
- Two Metal Spring Clips (for tweeter flush mounting)
- Two Surface-Mount Tweeter Fixtures
- Four #6 x .85" (22 mm) Sheet Metal Screws
- Two 1/4-inch (6 mm) Machine Screws

GETTING STARTED:

- Turn off the audio system. It is also advisable to disconnect the negative (–) terminal of your vehicle's battery whenever performing installation work.
- Before cutting, drilling or inserting any screw, check clearances on both sides of the planned mounting surface. Also check for any potential obstacles, such as window tracks and motors, wiring harnesses, etc. Check both sides of the car, many cars are not symmetrical!
- · Always wear protective eyewear:

WARNING

It is absolutely vital that your Red + component tweeter is connected as shown in the wiring diagram. Failure to connect the tweeter as shown will result in damage which is NOT covered under warranty.

Only use in-line filters clearly marked "TR050-CThp".

BUILT-IN TWEETER PROTECTION CIRCUITRY:

The TR Crossover networks are equipped with an advanced electronic tweeter protection circuit designed to minimize the possibility of tweeter failure. This electronic device monitors current going to the tweeter and will disconnect the tweeter from the signal when it senses overload. Should this occur while listening to the audio system, simply reduce the volume for a few seconds and the protection circuit will reset itself automatically.

TWEETER PLACEMENT CONSIDERATIONS:



Black





Less Desirable

More Desirable

A component system gives you the ability to place the woofer and tweeter separately in your vehicle interior. This can be good or bad, depending on how it's done.

As a general rule, the tweeters should be placed relatively close to the woofers for best tonal balance and most coherent imaging (the closer, the better). Any separation greater than 8 inches (20 cm) is likely to result in degraded sound quality.

Avoid placing tweeters where they will be blocked by objects in the interior of the car (including seated occupants). When selecting a mounting location, look at both sides of the car to make sure that this location is clear on both sides.

You can always experiment with tweeter placement before committing to a final mounting location. Simply connect the rest of the system and allow plenty of wire length for the tweeters. Using velcro or similar material, attach the tweeters in different locations until you find the one where they perform best.

TWEETER INSTALLATION:

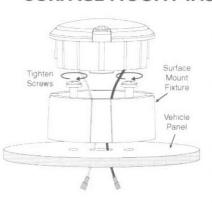
These tweeters have been designed for surface or flush mounting. Before choosing a method, carefully inspect the desired mounting location to determine which method will work best.

- I) Flush Mounting will yield a custom-installed appearance, but will require at least 3/4-inch (19 mm) of clearance behind the mounting surface of the tweeter:
- 2) Surface Mounting, using the supplied surface mount kit and hardware requires the drilling of three holes (one for the wires and two for the mounting screws). This application is useful when mounting the tweeters to a panel that has insufficient clearance behind it for the tweeter's magnet structure.

TWEETER CONNECTIONS:

Run the supplied wiring harnesses with the in-line filters from the amplifier outputs to the tweeter mounting locations. Then connect these harnesses to the wires attached to the tweeters, observing correct polarity. See Wiring Diagram on page 2 for details.

SURFACE MOUNT INSTALLATION:



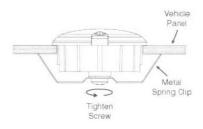
- I) Remove the vehicle panel and check to ensure that the mounting screws will have adequate clearance.
- Place the surfacemount fixture on the vehicle panel at the desired mounting

location and mark the location of the two mounting screw holes and the approximate center of one of the two rectangular cutouts (for the wires).

- 3) Using a 1/16-inch (1.5 mm) drill bit, drill a hole through the panel at the two screw locations.
- 4) Using a 1/2-inch (12 mm) drill bit, drill the hole for the tweeter's wires at the location you marked in step 2.

- 5) Screw the surface mount fixture to the vehicle panel using the supplied #6 sheet metal screws (hand-tighten).
- 6) Feed the tweeter wires through the rectangular hole in the mounting fixture and the 1/2-inch hole you drilled in the panel. Then, snap the tweeter into the surface mount fixture.
- 7) Connect the tweeter's wires to the supplied harness with the in-line high-pass filter.
- 8) Re-install the vehicle panel, taking care to route the new wiring so as not to interfere with any vehicle mechanisms (window mechanisms, for example).

FLUSH MOUNT INSTALLATION:



- I) Remove the vehicle panel and check to ensure that there is at least 3/4 inch (19mm) clearance behind the panel for the tweeter's magnet structure.
- 2) Carefully cut a 1 9/16-inch (40 mm) diameter hole in the vehicle panel. This will achieve a snug fit and allow the tweeter flange to conceal the cut line.
- 3) Insert the tweeter from the front of the panel (do not attach the spring clip at this time).
- 4) Attach the spring clip from behind the panel using the supplied 1/4 inch (6 mm) machine screw.
- 5) Tighten the screw by hand until the tweeter is tight on the panel. Do not overtighten.
- 6) Connect the tweeter's wires to the supplied harness with the in-line high-pass filter.
- 7) Re-install the vehicle panel, taking care to route the new wiring so as not to interfere with any vehicle mechanisms (window mechanisms, for example).

JL AUDIO LIMITED WARRANTY (USA)

Evolution Speaker Systems

JL AUDIO warrants these speakers (and crossover networks, where applicable) to be free of defects in materials and workmanship for a period of **one (I) year** from the original date of purchase. The warranty term is extended to **two (2) years** if installation is performed by an authorized JL AUDIO dealer (proof of installation required on purchase receipt).

This warranty is not transferrable and applies only to the original purchaser from an authorized JL AUDIO dealer. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction, JL AUDIO will, at its discretion, repair or replace the defective product with new or remanufactured product at no charge.

Damage caused by the following is not covered under warranty: accident, misuse, abuse, product modification or neglect, failure to follow installation instructions, unauthorized repair attempts, misrepresentations by the seller. This warranty does not cover incidental or consequential damages and does not cover the cost of removing or reinstalling the unit(s). Cosmetic damage due to accident or normal wear and tear is not covered under warranty.

Any applicable implied warranties are limited in duration to the period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you need service on your JL AUDIO product:

All warranty returns should be sent to JL AUDIO freight prepaid through an authorized JL AUDIO dealer and must be accompanied by proof of purchase (a copy of the original sales receipt.) Direct returns from consumers or non-authorized dealers will be refused unless specifically authorized by JL AUDIO with a valid return authorization number. Warranty expiration on products returned without proof of purchase will be determined from the manufacturing date code. Coverage may be invalidated as this date is previous to purchase date. Return only defective components. If one speaker fails in a system, return only that speaker component, not the entire system. Non-defective items received will be returned freight-collect. Customer is responsible for shipping charges and insurance in sending the product to JL AUDIO. Freight damage on returns is not covered under warranty.

For Service Information in the U.S.A. please call:

JL Audio customer service: (954)443-1100 during normal business hours (Eastern Time)

JL Audio, Inc

10369 North Commerce Pkwy. Miramar: FL 33025

International Warranties:

Products purchased outside the United States of America are covered only by that country's distributor and not by JL Audio, Inc.