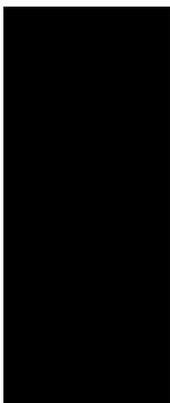




Titanium II Component Systems



Installation and Operation Guide

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I. Introduction

You have purchased a very sophisticated component speaker system manufactured by **Ultimate® Sound**. Founded in 1975, **Ultimate® Sound** makes speakers for every car audio application, speakers for marine environments, enclosed speaker systems, amplifiers, accessories and other products. Our tradition of leadership and innovation in the audio industry continues with innovative products like **Titanium II Component Systems**.

We recommend you have your new **Titanium II Component System** installed by a professional. Professional installation shops have the equipment to do the job correctly, and the experience to recommend the best mounting locations in your vehicle.

Please use your new **Titanium II Component System** responsibly. Very loud music can cause permanent hearing loss.

PLATINUM FORMAT FEATURES:

- **Titanium II cone formula-** for strength, durability and stability during high power operation at extreme temperatures.
- The **Butyl Rubber Surround** has superior damping characteristics and will last longer than foam surrounds
- **Titanium Dome Tweeters with Neodymium Magnets** provide smooth response beyond 25kHz for crystal clear high frequencies. Flush, surface, or angle mount for complete flexibility in planning your installation.
- **Bumped back plate-** makes sure the voice coil never bottoms out.
- **Matched 12dB/Octave Crossovers** for precise system tuning.

II. Package Contents

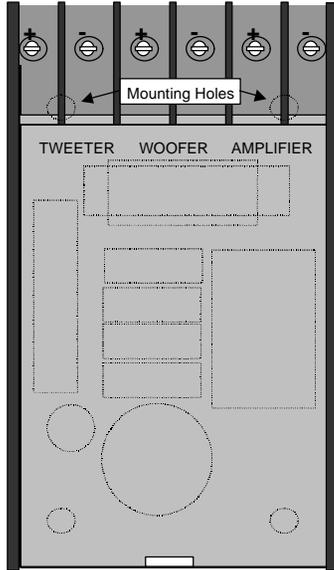
- 1 pair of **Titanium II** component mid-woofers
- 1 pair of speaker grilles and mounting rings
- Grille mounting adhesive
- Mounting hardware(nuts, screws and screw clips)
- 1pair of titanium dome tweeters
- Tweeter mounting hardware(flush, surface and angle)
- 20' of #18AWG speaker wire
- 1 pair of 12dB/Octave crossovers
- Instruction manual, warranty card and cut-out template

III. Installation- Crossovers

1. Choose mounting locations for your Platinum Format crossovers.

Make sure the the crossovers will not obstruct the mechanical function of any device or system in the vehicle. Be sure the mounting location and the drilling of screw holes for mounting will not present a hazard to any wires, control cables, fuel lines, fuel tanks, hydraulic lines, or other vehicle systems or components.

2. Press the indentation at the end opposite the connecting terminals and lift off the crossover cover. If you wish to mount the crossover to a flat surface, use the crossover as a template to mark where to drill the mounting holes. Use a 1/8"(3mm) bit, drill the holes and use the supplied screws to mount the crossover.



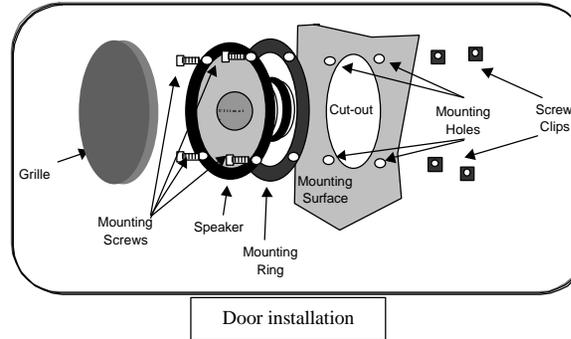
3. Connect the crossovers to your amplifier, mid-woofer, and tweeter locations. The terminals are marked for easy identification and to help you observe the correct polarity. Just insert the wire ends into the terminal slots, and secure the connection by tightening the terminal screws.

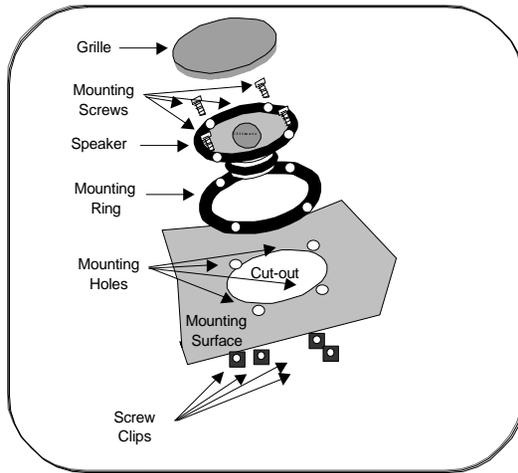
IV. Installation- Mid-Woofers

1. Choose mounting locations for your **Titanium II** mid-woofers. Check for clearance behind the speaker mounting locations, making sure the speakers will not interfere with any handles, window cranks, door locks, or brackets. If the speakers are to be mounted in the vehicle doors, check the operation of all functions(windows, locks, and any other switches or hand cranks) to make sure there is no obstruction. Be sure the mounting location and the drilling of screw holes for

mounting will not present a hazard to any wires, control cables, fuel lines, fuel tanks, hydraulic lines, or other vehicle systems or components. For rear deck installations, make sure the speakers will not interfere with opening and closing the trunk.

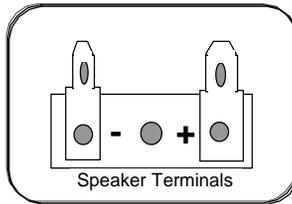
2. If you are replacing an original factory speaker with a speaker that is exactly the same size, you may not need to cut or drill any new holes or run any additional wires. Simply connect the speakers, observing correct polarity, and mount the speakers in the factory location, using the original mounting cut-outs, screw holes and hardware. You probably will not need the grilles and mounting rings for replacement installations.
3. Use the supplied template as a guide to cut the proper diameter mounting holes. Use the template or mounting ring to mark the locations for the mounting screws and drill the holes with a 1/8" diameter bit.





Rear Deck installation

4. Feed the speaker wire from the crossover W+ and W- terminals through the opening and mounting ring, and connect it to the speaker terminals. Make sure you maintain the correct polarity. The supplied speaker wire is marked to help you maintain correct polarity when making connections. The terminals at one end of the speaker wire are coded by size to match the speaker terminals. Just push the connectors onto the matching terminals.

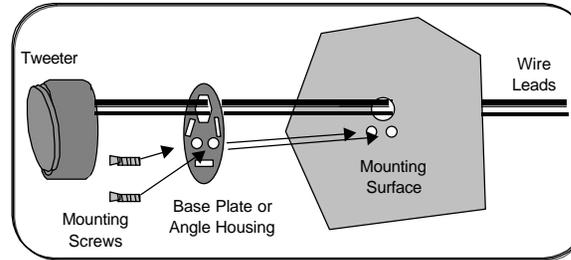


5. Fit the mounting ring and speaker to the cut-out and mount with the supplied screws and clips. Apply a small amount of the grille adhesive at 4 or more points around the edges of the grilles and carefully, but firmly, press the grilles into place.

V. Installation- Tweeters

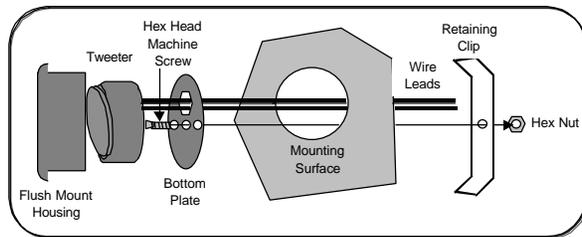
Choose mounting locations for your Titanium dome tweeters. Remember that for the best performance, the tweeters should be mounted as close to the mid-woofers as possible, with an unobstructed, direct path to the listening area. Check for clearance behind the tweeter mounting locations, making sure the tweeters will not interfere with any handles, window cranks, door locks, or brackets. If the tweeters are to be mounted in the vehicle doors, check the operation of all functions (windows, locks, and any other switches or hand cranks) to make sure there is no obstruction. Be sure the mounting location and the drilling of screw holes for mounting will not present a hazard to any wires, control cables, fuel lines, fuel tanks, hydraulic lines, or other vehicle systems or components.

1. **Surface or Angle Mount-** Using the base plate or angle housing as a template, mark and drill two 1/8"(3mm) mounting screw holes and a 1/4"(6mm) wire exit hole in the mounting surface. Mount the base plate or angle housing to the mounting surface with the screws. Feed the tweeter's attached lead wires through the exit hole. Carefully, but firmly press the tweeter back against the base plate or angle housing, matching the slots on the bottom of the tweeter with the bayonet style mounting tabs on the base plate or angle housing. Rotate the tweeter body to lock it into place. Connect speaker wire from the crossover T+ and T- terminals to the tweeter lead wires, observing correct polarity.



Tweeter Surface or Angle Mount

2. **Flush Mount-** Using the flush mount housing as a template, mark the cut-out hole in the mounting surface carefully. The exact size of the hole should be 2 1/8"(53.8mm), and it will be difficult to hide any mistakes. Cut out the mounting hole. Slide the tweeter into the flush mount housing. Push the hex head machine screw through the center hole in the bottom plate from the side with the hex recess. Make sure the screw head is seated in the recess so it will not turn. Feed the wire leads through the exit hole in the bottom plate. Press the bottom plate into the bottom of the flush mount housing and turn it to lock it in place. Feed the wire leads through first, then press the entire assembly through the cut-out hole in the mounting surface. Press the retaining clip onto the machine screw, and tighten the hex nut on the screw until the entire assembly is firmly in place. Do not over tighten. Connect speaker wire from the crossover **T+** and **T-** terminals to the tweeter lead wires, observing correct polarity.



Specifications

Model	TC650	TC525
Size	6.5"/165mm	5.25"/133mm
Impedance	4Ω	4Ω
Frequency Response	58Hz-25kHz	70Hz-25kHz
Sensitivity	92dB	90dB
Power- RMS	65 Watts	50 Watts
Power- MAX	130 Watts	100 Watts
Cone	Titanium II	Titanium II
Surround	Butyl	Butyl
Tweeter	Titanium	Titanium
Frame	Steel	Steel
Bumped Back Plate	Yes	Yes
Crossover	2-Way, 12dB/Octave	2-Way, 12dB/Octave
Mounting Depth(In.)	2.52"	2.23"
Mounting Depth(mm)	64mm	56.7mm

See the supplied warranty card for service information

Call 888-909-9988 for technical assistance.