



Titanium II Full Range Loudspeakers



Installation and Operation Guide

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I. Introduction

You have purchased a very sophisticated full range audio transducer 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 products like **Titanium II** full range loudspeakers.

We recommend you have your new **Titanium II** loudspeakers 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** loudspeakers responsibly. Very loud music can cause permanent hearing loss.

TITANIUM II FULL RANGE LOUDSPEAKER 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
- **Bumped back plate-** makes sure the voice coil never bottoms out.
- **Titanium Dome Tweeters** provide smooth response beyond 25kHz for crystal clear high frequencies. An integral phase plug insures even dispersion throughout the listening area.
- **Titanium Dome Mid-ranges** add warmth and presence to the sound of the **TF690** and **TF800**.
- The **TF800** includes an adapter for mounting in a 6" X 9" cut-out.

II. Package Contents

- 1 pair of **Titanium II** full range loudspeakers
- 1 pair of speaker grilles and mounting rings
- Grille mounting adhesive
- 20' of #18AWG speaker wire
- Mounting hardware(screws and screw clips)
- Instruction manual, warranty card and cut-out template

III. Installation

1. Choose a mounting location for your **Titanium II** loudspeakers. 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 the original factory speakers with speakers that are 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.

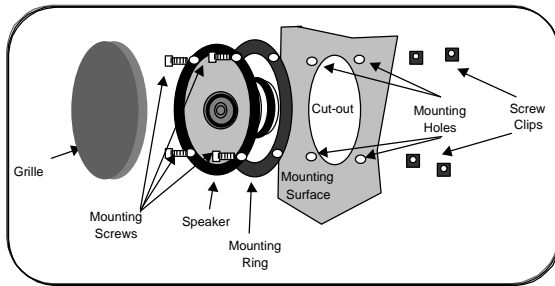


Fig. 1- Door installation

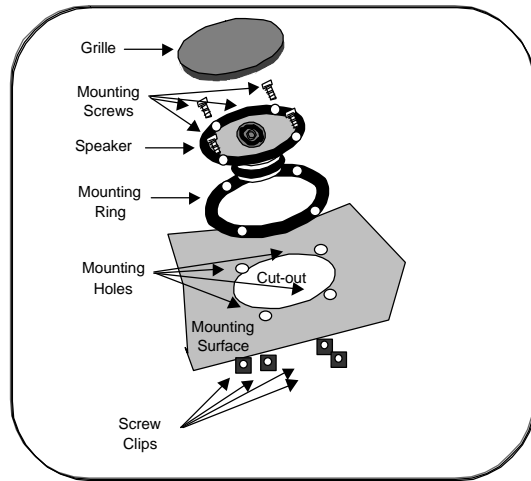


Fig. 2- Rear Deck installation

4. Feed the speaker wires through the openings and mounting rings, and connect them to the speaker terminals. Make sure you maintain the correct polarity. If you need to run new wiring, 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 rings and speakers to the cut-outs, 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.

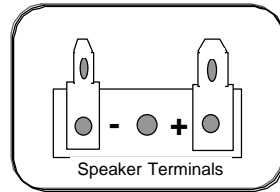


Fig. 3- Speaker Terminals

Specifications

Model	TF400	TF525	TF650	TF6857	TF690	TF800
Size(Inches)	4"	5.25"	6.5"	5" x 7"	6" X 9"	8"
Size(mm)	101mm	133mm	165mm	127mm X 178mm	153mm X 228mm	203mm
2-way/3-way	2-way	2-way	2-way	2-way	3-way	3-way
Impedance	4Ω	4Ω	4Ω	4Ω	4Ω	4Ω
Frequency Response	80Hz-25kHz	80Hz-25kHz	60Hz-25kHz	50Hz-25kHz	50Hz-25kHz	40Hz-25kHz
Sensitivity	89dB	90dB	90dB	90dB	91.5dB	92dB
Power- RMS	40 Watts	50 Watts	60 Watts	65 Watts	75 Watts	100 Watts
Power- MAX	80 Watts	100 Watts	120 Watts	130 Watts	150 Watts	200 Watts
Cone	Titanium II™	Titanium II™	Titanium II™	Titanium II™	Titanium II™	Titanium II™
Surround	Butyl	Butyl	Butyl	Butyl	Butyl	Butyl
Tweeter	Titanium	Titanium	Titanium	Titanium	Titanium	Titanium
Mid-range	-	-	-	-	Titanium	Titanium
Frame	Steel	Steel	Steel	Steel	Steel	Steel
Bumped Back Plate	Yes	Yes	Yes	Yes	Yes	Yes
Mounting Depth(In.)	2"	2.23"	2.5"	2.36"	3.15"	3.63"
Mounting Depth(mm)	50mm	56.7mm	64mm	60mm	80mm	92.2mm

See the supplied warranty card for service information

Call 888-909-9988 for technical assistance.