

# Titanium Elite Component Speaker System



## SPECIFICATIONS

### Titanium Elite It Tweeter

Flush Mounting Depth		 	 -	 	 	.1.1	25	ir
Flush Mounting Hole Diamete	r.	 		 	 	1.	85	ir

#### <u>Titanium Elite 5m Midrange</u>

Mounting Depth	n
Optional Sealed Enclosure Size	ť
T/S Parameters:	
Fs	z
Re	5
Qms	3
Qes	
Qts	2
Vas	S
Mms	S
Cms	n
Vas	Λ
SPL	3
Sd	n

### Titanium Elite 6m Midrange

	_
Mounting Depth	
Mounting Diameter	
Overall Diameter	
Optional Sealed Enclosure Size	04 - 1 cu. ft.
T/S Parameters:	
Fs	62.18 Hz
Re	
Qms	
Qes	
Qts	
Vas	
Mms	
Cms	-
Vas	6.31 Tesla-M
SPL	
Sd	

### Titanium Elite System Specifications

Frequency Response±1	dB, 20Hz to 20kHz
Nominal Impedance	
Crossover Frequency	
Acoustic Crossover Slopes	. 24dB per Octave
Crossover Housing Dimensions9.75"	W x 6.25"L x 2.0"H
Titanium 5 Elite System Power Handling	250 Watts RMS
Titanium 6 Elite System Power Handling	300 Watts RMS

### LIMITED WARRANTY

Phoenix Gold International, Inc. (or "Phoenix Gold") warrants its products against defects in materials and workmanship for a limited period of time.

For a period of one (1) year from date of original purchase, we will repair or replace the product, at our option, without charge for parts and labor. Customer must pay all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase. This limited warranty applies only to purchases from authorized Phoenix Gold Electronics/Speaker retailers.

This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States. Consumers are required to provide a copy of the original sales invoice from an authorized Phoenix Gold dealer when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than Phoenix Gold, or damage that is attributable to Acts of God. It does not cover costs of transportation to Phoenix Gold or damage in transit.

This warranty will become void if the serial number identification has been wholly or partially removed, altered or erased. Repair or replacement under the terms of this warranty does not extend the terms of this warranty.

Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. Under no circumstances shall Phoenix Gold be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.



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## FEATURES

- **Titanium Elite 1t Tweeter Features:**
- 28mm hand doped diaphragm
- FEA optimized neodymium motor assembly

Titanium Elite 5m-6m Midrange Features:

- 3 inch multi-layer voice coil
- · Custom cast aluminum basket
- Ultra thin mounting depth
- · Threaded speaker connection terminal

#### **Titanium Elite Passive Crossover Features:**

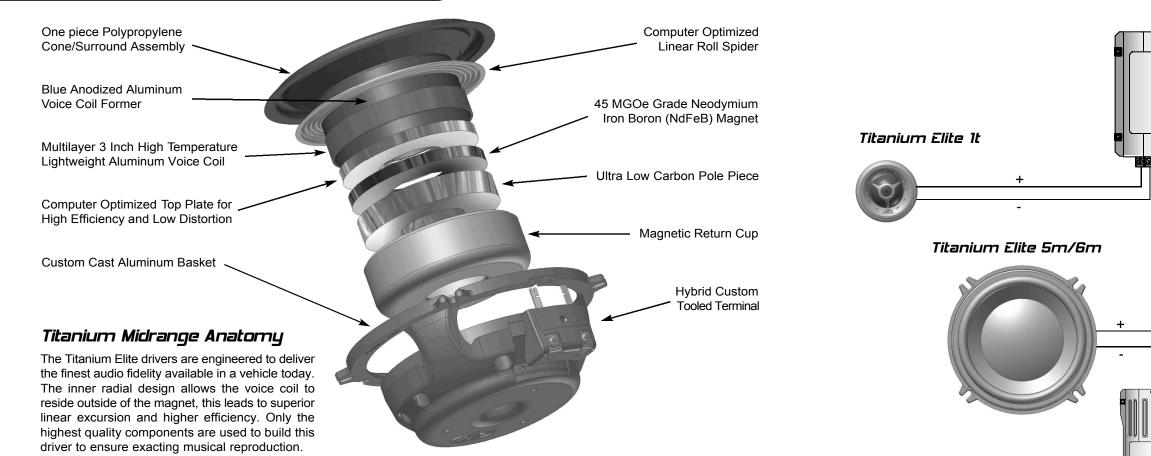
🔹 For complete manuals, technical tips, FA()'s, system diagrams and new product information visit us 🛽 🥿

• Ultra flush mounting cup for improved in car response · Integrated phase plug for enhanced dispersion

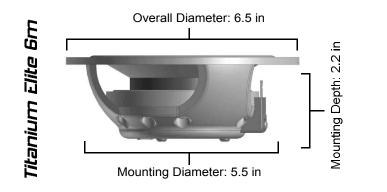
· Solid one piece polypropylene cone/dust cap assembly · FEA optimized inner radial neodymium motor structure

· State of the art computer aided design process for uncompromised fidelity Shielded Titanium Crossover Housing with gold plated threaded speaker connections · Audiophile Components: air core inductors/composite bypassed capacitors

# Speaker Design



## Mounting Information





### Titanium Elite It

The diagram to the right illustrates how the flush mount kit is used for installing the tweeter. Simply secure the mounting cup by turning the mounting screw, this will tighten the mounting clamp. The door panel or mounting baffle will be located between the mounting clamp and flush mount cup. After the flush mount cup is securely tightened to the door panel or mounting baffle then simply snap the tweeter into the flush mount cup. To remove the tweeter carefully use a small screw driver to unsecure the tweeter from of the flush mount cup.

Flush Mounting Depth: 1.125 in Flush Mounting Hole Diameter: 1.85 in



Mounting Clamp Flush Mounting Cup Tweeter

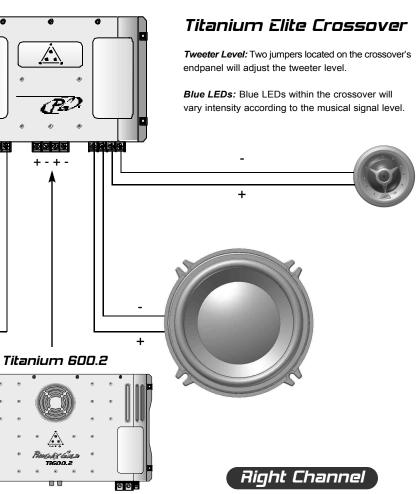
**Left Channel**The above diagram illustrates how to wire the Titanium Elite Component System to an amplifier. Please note the labeling on the Titanium Elite crossover and speaker terminals for proper installation. Minimum speaker wire size is 16 gauge. For optimal speaker performance we recommend an amplifier that can provide at least 75 watts of continuous power.

There are three main ingredients to maximize the performance of the Titanium Elite Components. The first is to equalize the speaker's path lengths between the driver's and passenger's side of vehicle. Ideally, for equal pathlengths it would be best to sit in the middle of the vehicle, but obviously that's not an option. The best way to equalize the path lengths is to move the left and right speakers to location where the both of listeners' positions are an equal distance from the left and right speakers. This is usually accomplished by mounting the speakers low in the kick panel. This gives the most linear sound stage and spectral balance. The only drawback to kick panel installations is the inherent lack of height in the sound stage.

The second key ingredient to speaker placement is attempting to locate the speakers on the same acoustical plane. Due to the very shallow depth of the Titanium Elite Drivers they are naturally "Time-Aligned". By placing the mid and tweeter on a flat baffle and "aiming" that baffle at the listener will give the best phase response between the two drivers.

The third most important requirement for best performance is proximity. The closer you can get the two drivers together the better acoustical coupling you will get. This makes the individual drivers disappear and sound like one acoustical point source.

Because of the harsh Car Audio environment it is not always possible to mount speakers in the most optimum location. Also, due to listener preference it might make sense to mount the speakers in a non-optimal location. One mounting technique that has become popular is to mount the tweeter up in the A-Pillar firing towards each other or even tilted inward facing the windshield about 5 degrees. This gives the effect of a very high sound stage and excellent left and right imaging. The drawback to this technique is the effect the windshield and hard plastic dashboards have on the spectral response of the system. Each installation is drastically different so be sure to experiment with several different locations locations to find optimal results.



System Wiring

## Speaker Placement