



# Titanium 10/10d and 12/12d High Excursion Subwoofer

## SPECIFICATIONS

### Titanium 10/10d and 12/12d

	10/10d	12/12d
Mounting Depth	.5 3/4 in	.6 5/8 in
Mounting Diameter	.9 3/16 in	.11 in
Overall Diameter	10 3/4 in	12 3/4 in
Speaker Displacement	.0.1 ft <sup>3</sup>	.0.15 ft <sup>3</sup>
Peak Power Handling	600 Watts	700 Watts
RMS Power Handling	.450 Watts	.500 Watts

### Titanium 10

#### T/S Parameters

Fs	.29.9 Hz
Re	.3.7 Ohms
Qms	.9.0
Qes	.0.422
Qts	.0.404
Vas	.28.46 liters
Mms	.168.36 grams
Cms	.168.4 uM/Newton
BL	.16.64 Tesla-M
SPL (1W/1M)	.85 dB
Sd	.345 sq cm
Xmax (field)	.35mm p-p

### Titanium 10d

#### T/S Parameters

Fs	.27.9 Hz
Re	.1.176 Ohms
Qms	.5.42
Qes	.0.457
Qts	.0.421
Vas	.31.64 liters
Mms	.173.84 grams
Cms	.187 uM/Newton
BL	.8.86 Tesla-M
SPL(1W/1M)	.86 dB
Sd	.345 sq cm
Xmax (field)	.36.2mm p-p

### Titanium 12

#### T/S Parameters

Fs	.27.22 Hz
Re	.3.01 Ohms
Qms	.6.83
Qes	.0.438
Qts	.0.412
Vas	.47.25 liters
Mms	.240.4 grams
Cms	.47.25 uM/Newton
BL	.16.91 Tesla-M
SPL(1W/1M)	.86.5 dB
Sd	.490 sq cm
Xmax (field)	.36.2mm p-p

### Titanium 12d

#### T/S Parameters

Fs	.29.61 Hz
Re	.2.2 Ohms
Qms	.4.017
Qes	.0.57
Qts	.0.499
Vas	.40.91 liters
Mms	.234 grams
Cms	.120 uM/Newton
BL	.13.06 Tesla-M
SPL(1W/1M)	.84.2 dB
Sd	.490 sq cm
Xmax (field)	.35mm p-p

## 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 90 days 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.

# PHOENIX GOLD

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## Titanium 10/10d and 12/12d High Excursion Subwoofer

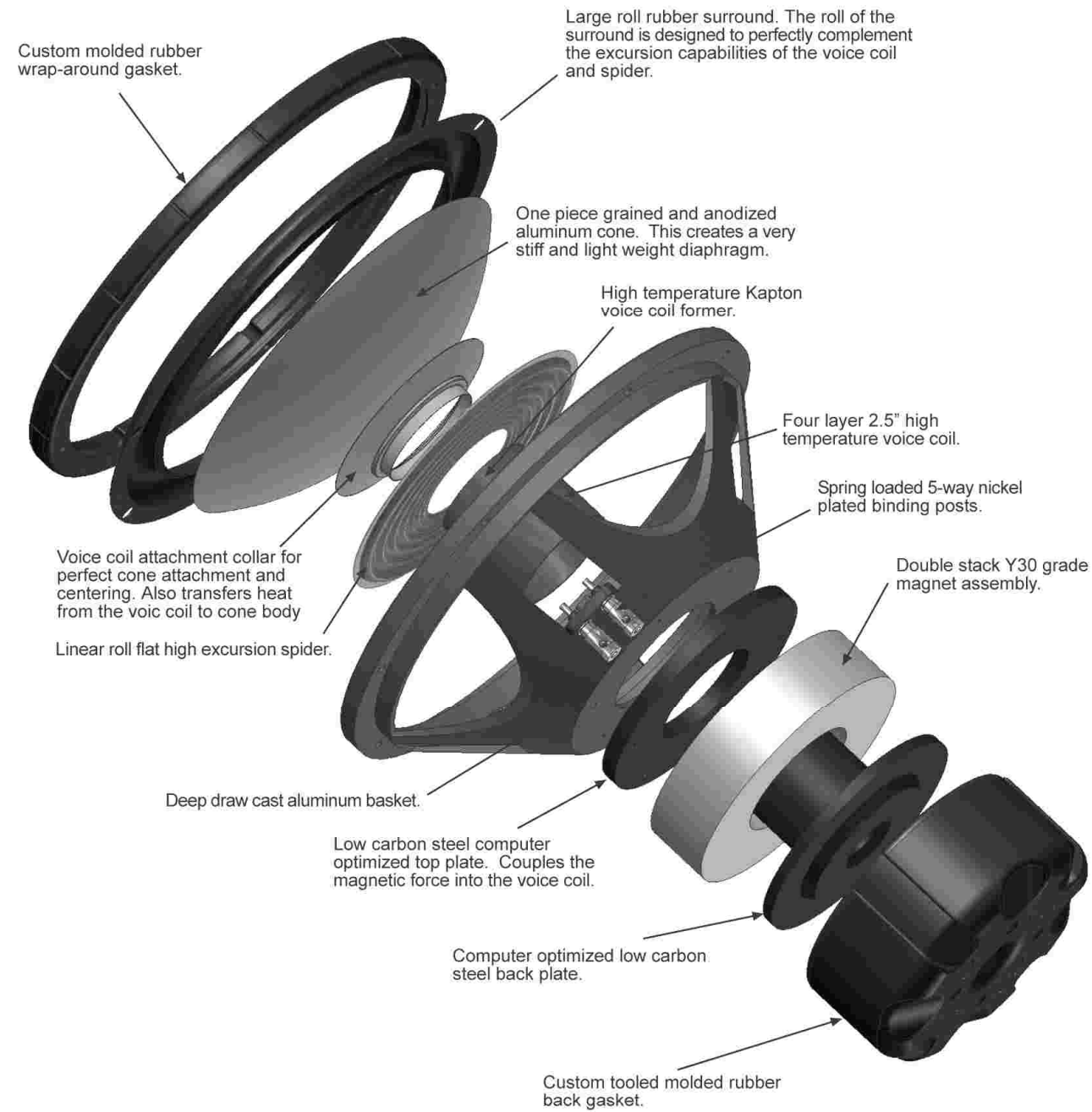
## FEATURES

\* For complete manuals, technical tips, FAQ's, system diagrams and new product information visit us @

- One piece titanium anodized aluminum cone
- Four layer 2.5in. voice coil
- High temperature Kapton former
- Injection molded rubber mounting gasket
- Heavy cast aluminum basket with titanium blue powder coat
- Injection molded rubber motor housing
- Five-way nickel plated binding posts
- Custom tooled linear roll high excursion spider
- Large 105oz. double stack magnet structure

# Speaker Anatomy

## Titanium Woofer Anatomy



## Speaker Design

The Titanium subwoofer was developed from the ground up to compliment the amazing performance of our Titanium Series amplifiers. Utilizing cutting edge design techniques, we can deliver a woofer that has an unprecedented linear one direction in the field excursion of over 18mm. Coupled to a one piece Titanium anodized aluminum cone provides exceptional musicality at very high drive levels. All of the motor and suspension parts have been computer optimized to provide symmetrical driving force in both directions. This translate into very low distortion even as your amplifier is running out of steam.

# Enclosure Recommendations

The Titanium subwoofers are overengineered and overbuilt in virtually every way conceivable. Its very important that the enclosure is built to these same exacting standards. The enclosure **MUST** be comprised of 1 inch MDF or two separate 3/4 inch MDF layers. A single layer of 3/4 inch MDF is not recommend due to the intense internal combustion chamber and weight of the driver. Internal crossbracing is highly recommended for further enclosure rigidity. Screws or air staples are excellent construction fasteners when used with a strong bonding "yellow" wood working glue that can fill joint gaps. Be sure that the enclosure's panels are airtight at all joining seams. Lining the walls with a polyester matting 1 to 3 inches thick is sufficient.

Your PG dealer has extensive knowledge, tools and the experience needed for the design and construction necessary for your Titanium subwoofer application. We also recommend you consult with your dealer for specific detailed technical assistance related yo your installation.

The charts provided should be used as a reference when building an enclosure for your Titanium subwoofer. The charts contain several enclosure types. The Sound Quality enclosure provides deeper, tighter, and more musical output to truly reproduce the original source material. While the SPL fits the basshead's needs of maximum output while sacrificing some sound quality.

### Ti 10/10d Enclosure Recommendations

	Sealed		Vented	
	Vb	Vd	Vd	Vl
<b>Musical</b>	0.55	1.0	2"	9.5"
<b>SPL</b>	0.3	.75	3"	13.5"

### Ti 12/12d Enclosure Recommendations

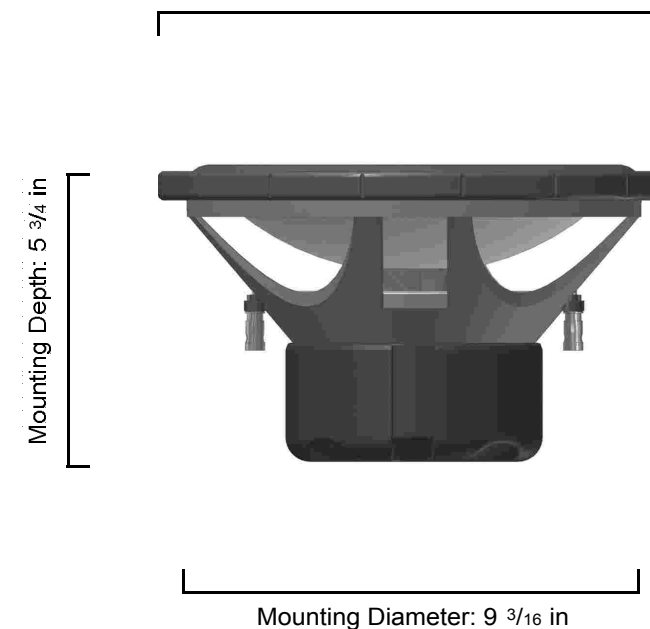
	Sealed		Vented	
	Vb	Vd	Vd	Vl
<b>Musical</b>	1.1	1.75	3"	11"
<b>SPL</b>	.65	1.2	4"	12.4"

\*The Above enclosures do not include the driver displacement

## Mounting Dimensions

### Ti 10/10d Mounting Depth

Overall Diameter: 10 3/4 in



### Ti 12/12d Mounting Depth

Overall Diameter: 12 3/4 in

