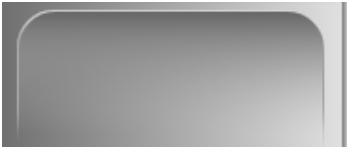



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The accurate, smooth and historic TC driver

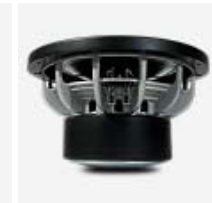
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### Key Features

- 60 Newtons<sup>2</sup>/watt Motor Force
- 400 Watts Sustained Power
- 2" Anodized Aluminum Voice Coil
  - 24mm XMax
- Single Dish Aluminum Cone
- High Excursion 1" NBR Surround
  - 135 Ounce Magnet Structure
  - Copper Shorting Ring
  - Cast Aluminum Frame
- 8.0" Diameter Suspension System

Frame color: (Silver metallic)



### Single 4Ω voice coil

15" TC-1000 **\$199**

MSRP: \$219

*Black frame*

[ADD TO CART](#)

In stock

12" TC-1000 **\$169**

MSRP: \$199

[ADD TO CART](#)

In stock

10" TC-1000 **\$159**

MSRP: \$179

[ADD TO CART](#)

### Dual 4Ω voice coil

15" TC-1000 **\$199**

MSRP: \$219

*Black frame*

[ADD TO CART](#)

In stock

12" TC-1000 **\$169**

MSRP: \$199

[ADD TO CART](#)

In stock

10" TC-1000

MSRP: \$179

[ADD TO CART](#)

In stock

Out of stock!

8" TC-1000 **\$149**

MSRP: \$169

ADD TO CART

In stock

8" TC-1000 **\$149**

MSRP: \$169

ADD TO CART

In stock!

**Free shipping to US continental states**

IMPORTANT: For shipping outside the

USA, [see details](#)**Introduction**

The TC-1000 is the ideal driver for anyone looking for powerful clean bass with superb quality for either the home or mobile environment. With a standard 135 ounce magnet structure, 2" wide all aluminum 4 layer voice coil, and up to 1.5" of highly linear excursion, this driver simply obliterates the competition. Its innate low distortion quality makes it seemly intended for high fidelity applications, but because of its high efficiency, impressive power handling and class leading displacement, the TC-1000 simply embarrasses retail SPL drivers costing twice the price with motors half its size! It can handle 400 watts of continuous power, but don't be afraid to feed it 1000 clean watts as the voice coil will harness that power and deliver surprising sound pressure levels. With adequate headroom, the dynamic capability of the TC-1000 will demonstrate ultra high quality bass typically found in high end home theater subwoofers. Did we mention we even hand build these drivers in California too?

**Specifications**

What makes the TC-1000 **The New Standard** entry driver that practically blow's away what the retail competition offers at twice the price? Find out why the TC-1000 is the leader is high output below 200 dollars and still embarrasses whippy SQ drivers time and time again which can't match the TC-1000's distortion vs. SPL performance...

**Advanced FEA Motor System**

- Double stacked 1" tall ferrite magnets and bored T-yoke for long throw
- 135oz top grade magnet structure
- Anti-flux modulation copper shorting ring to lower distortion
- Low carbon steel used for the gap plate and t-yoke
- Pole vent for lower distortion and cooling capabilities.

**Advanced high excursion soft part system**

- High excursion 8.0" linear roll poly-cotton spider
- Intergraded woven leads to prevent lead-slap
- 2" diameter, 4-layer aluminum wire voice coil with an anodized aluminum former
- Single or dual 3.7Ω (4 ohm nominal) voice coil configuration

- Lightweight brushed and powder coated aluminum cone
- 1" wide long throw, highly durable NBR surround
- High quality thermal flexible epoxies to ensure longevity

### Performance

- Effective motor force of 60 Newtons<sup>2</sup> per watt ( $BL^2/Re$ )
- 400 watts continuous power (1200 watts peak)
- 24mm BL XMax (voice coil, one-way)
- 37mm XMech (mechanically limited, one-way)

### Dimensions

Driver	Cutout Diameter	Basket Diameter	Gasket Height	Mounting Depth	Displacement	Weight
8TC-1000	7.28"	8.65"	0.65"	5.3"	0.06ft <sup>3</sup>	17.7lb
10TC-1000	9.50"	10.65"	0.65"	5.7"	0.08ft <sup>3</sup>	19.2lb
12TC-1000	11.05"	12.65"	0.65"	6.25"	0.09ft <sup>3</sup>	19.9lb
15TC-1000	14.09"	15.65"	0.65"	NA	0.1ft <sup>3</sup>	NA

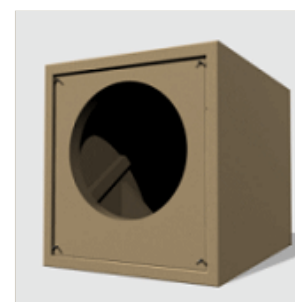


### Thiele Small Parameters

8" TC-1000		10" TC-1000		12" TC-1000		15" TC-1000	
Qts	0.269	Qts	0.228	Qts	0.282	Qts	0.346
Qes	0.286	Qes	0.242	Qes	0.305	Qes	0.381
Qms	4.56	Qms	3.803	Qms	3.780	Qms	3.82
Fs	27hz	Fs	21hz	Fs	19hz	Fs	15.6Hz
Res	3.70Ω	Res	3.70Ω	Res	3.70Ω	Res	3.66Ω
Ls	2.48mH	Ls	2.48mH	Ls	2.38mH	Ls	2.64mH
Lp	3.28mH	Lp	3.28mH	Lp	3.51mH	Lp	3.58mH
Rp	3.15Ω	Rp	3.15Ω	Rp	2.99Ω	Rp	3.16Ω
Dia	145mm	Dia	195mm	Dia	240mm	Dia	320mm
Vas	12.3l	Vas	57.7l	Vas	132l	Vas	393l
mms	105g	mms	129g	mms	153g	mms	238g
cms	312um/N	cms	458um/N	cms	460um/N	cms	433um/N
bl	15.4T*m	bl	15.4T*m	bl	15.4T*m	bl	15.0T*m
Spl	81.6dB	Spl	84.8dB	Spl	86.9dB	Spl	87.8dB

### Recommended enclosures

The TC-1000 subwoofers are engineered for sealed, ported or passive box enclosures and designed with medium to high power capabilities in mind. We recommend an amplifier between 200 and 1000 watts RMS per driver.



There is no single perfect box. Much of what we offer is merely a general guideline to get you started. All of our system recommendations are geared for flat response but it is important to note that we do not show the recommended EQ necessarily for true in room liner frequency response. At a minimum, we strongly encourage the use of a high pass filter to prevent over excursion and potential mechanical damage to the driver in any given system design.

### **Directions**

We specify six different system designs for each driver. Three of which give you linear output to around 25-20Hz which is ideal for home audio or large rooms, and the other three give you linear output to 35-30Hz which is ideal for car audio or small rooms. For each linear extension mode, there are three types of enclosures: *Sealed*, *Ported* and *Passive*. As a general rule of thumb, sealed systems can be the smallest design and have the smallest group delay, but are the least efficient and provide the least output. Ported systems are more efficient and provide more output around the system resonant frequency ( $F_b$ ) but then roll off very steep after and require a larger box. Finally, passive systems have the efficiency characteristics of the ported systems, but use a mass loaded diaphragm rather than an air loaded mass as a Helmholtz resonator. The passive design also eliminates port resonance and turbulence issues associated with ported systems, but they also have the steepest roll off after  $F_b$ . There are many other differences and arguments among the system designs, but we leave that up to you to decide and debate. There is plenty of great information about system design on the net and of course, you can just ask in our forums and we'll gladly assist you in your design. Remember, there is no single perfect box!

### **Key**

**Volume:** Net internal volume of the enclosure minus the total port volume (if any) and minus the displacement of the subwoofer which can almost usually be estimated as 0.1 cubic feet. We also recommend using 1 pound of fiberglass per cubic foot of volume for a sealed box. For a vented box, it is only generally necessary to use modest fiberglass on the outside walls.

**Tuning Fq:** The tuning frequencies specifying the actual tuning frequency of the system. For ported systems, this only depends on the port length, port area and volume of the box. For passive systems this only depends on the compliance, mass and surface area of the radiator(s) and the volume of the box. Increasing the number or size of the passive radiator(s) is like increasing the size of the port(s) and will allow for more output at tuning frequency.

**Area Port/Pass:** This is either the square area of the port used or the size and quantity of the passive radiators to be used. Multiple smaller ports can be used so long as the total combined port area equals the specified number. For passive systems, we recommend only using TC Sounds' passive radiators because of the necessary excursion. Others just won't cut it. If an alternative PR is used, the size may not apply because the compliance and excursion parameters may be different.

*Quick Conversion:*07.0in<sup>2</sup> = One 3" port12.5in<sup>2</sup> = One 4" port19.6in<sup>2</sup> = One 5" port28.3in<sup>2</sup> = One 6" port

**Length / Mass:** As stated, this is either the length or the mass to be used. The length applies exclusively to ported systems and the mass applies exclusively to passive systems. All passive radiators are weighted. If you are using TC Sounds passives, simply adjust the washers on the back of the driver so that the total moving mass of the radiator equals what is specified. The total moving mass includes the bare mass plus the added mass of the washers.

*Small Box*

## 8TC-1000

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
Sealed	0.3 ft <sup>3</sup>	NA	NA	NA
Ported	0.8 ft <sup>3</sup>	36Hz	7 in <sup>2</sup>	12 in
Passive	0.8 ft <sup>3</sup>	20Hz-35Hz	Single 12" PR	Variable

## 10TC-1000

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
Sealed	0.4 ft <sup>3</sup>	NA	NA	NA
Ported	1.2 ft <sup>3</sup>	31Hz	7 in <sup>2</sup>	11 in
Passive	1.2 ft <sup>3</sup>	20Hz-35Hz	Single 12" PR	Variable

## 12TC-1000

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
Sealed	1.1 ft <sup>3</sup>	NA	NA	NA
Ported	1.6 ft <sup>3</sup>	32Hz	12.5	14 in
Passive	1.6 ft <sup>3</sup>	20Hz-35Hz	Single 15" PR	Variable

## 15TC-1000

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
Sealed	3.9 ft <sup>3</sup>	NA	NA	NA
Ported	5.0 ft <sup>3</sup>	25Hz	25 in <sup>2</sup>	14.5 in
Passive	5.0 ft <sup>3</sup>	25-35Hz	Dual 15" PR	Variable

*Large Box (Low Extension)*

## 8TC-1000

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
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Sealed	0.7 ft <sup>3</sup>	NA	NA	NA
Ported	1.5 ft <sup>3</sup>	24Hz	7 in <sup>2</sup>	16 in
Passive	1.5 ft <sup>3</sup>	10Hz-25Hz	Single 12" PR	Variable

**10TC-1000**

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
Sealed	1.0 ft <sup>3</sup>	NA	NA	NA
Ported	2.4 ft <sup>3</sup>	22Hz	12.5 in <sup>2</sup>	20 in
Passive	2.4 ft <sup>3</sup>	10Hz-25Hz	Dual 12" PR	Variable

**12TC-1000**

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
Sealed	2.0 ft <sup>3</sup>	NA	NA	NA
Ported	3.0 ft <sup>3</sup>	20Hz	12.5 in <sup>2</sup>	20 in
Passive	3.0 ft <sup>3</sup>	10Hz-25Hz	Dual 12" PR	Variable

**15TC-1000**

Type	Volume	Tuning Fq	Area Port/Pass	Length / Mass
Sealed	7.0 ft <sup>3</sup>	NA	NA	NA
Ported	9.5 ft <sup>3</sup>	15Hz	25 in <sup>2</sup>	23 in
Passive	9.5 ft <sup>3</sup>	10Hz-25Hz	Dual 15" PR	Variable

**Wiring**

More configurations may be available depending on the number of amplifiers and/or drivers. The impedance given is the DC resistance which is the measurable resistance of the circuit while the driver(s) are rest. The nominal impedance, or the load the amplifier will see while in operation, will be higher than the DCR by factor depending on the frequency. You can safely add 30% to the DRC for the estimated nominal impedance.

