

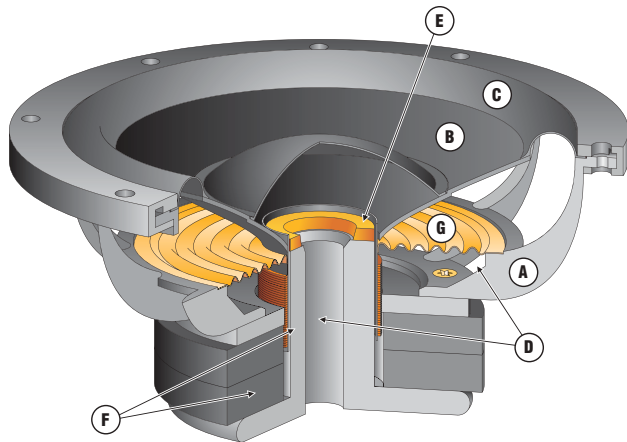
Speaker Building

Drivers



Titanic MKIII Subwoofers

The Dayton Audio Titanic Series subwoofers offer only the best in American-made subwoofer technology. Our main goal was to create drivers that produce deep clean bass, have high power handling capabilities and long term reliability. The Titanic MKIII Subwoofers exceeded all of our expectations. These drivers will work well in both vented and sealed enclosures, and with their unique VCS™ cooling system, copper shorting ring, and 2-1/2" diameter voice coils, they can handle even more power to produce higher output levels with less distortion! We've used the finest materials available to ensure that each driver is built to the highest quality standards for long-term trouble-free performance even under extreme sound pressure levels!



A. Rigid Cast Frame

The cast aluminum basket features aerodynamic supports that provide maximum rigidity for the motor structure without impeding air movement from the rear of the cone or causing unwanted reflections. The mounting flange features a thick rubber gasket that not only provides an air tight seal but also looks cool!

B. Ultra Stiff Composite Fiber Cone

The cone is manufactured using the finest grade pulp reinforced with Kevlar fibers and sealed with a polymerized coating. The result is a very stiff cone that remains stable even under the stress of very high sound pressure levels.

C. Advanced Rubber Surround

A large roll surround is used so the suspension has the travel to handle the long excursions that this driver is capable of producing. The surround is made of durable rubber for long-term stability and reliability. The thickness of the surround was precisely calculated to eliminate the possibility of "suck back" in small enclosures, while still providing good linearity.

D. Ventus Cooling System (VCS™)

This unique cooling system utilizes a vented spider and pole piece. As the cone moves in and out, air is drawn across the voice coil and through the motor structure greatly improving its thermal capacity thus reducing distortion and power compression. The harder you push the driver, the greater the cooling effect!

E. Copper Shorting Ring

A copper ring has been added to the pole piece to counter the effects of back EMF (electromotive force), resulting in reduced second harmonic distortion. By locating the shorting ring at the top of the pole piece, we also get the added benefit of reducing the effective voice coil inductance.

F. Optimized Motor System

The motor system features double stacked magnets and an extended pole piece. It was optimized using FEA (Finite Element Analysis) to ensure a strong symmetric magnetic field in the air gap. The double-stacked magnets ensure there is plenty of clearance to prevent the long-excursion voice coil from bottoming. The motor system also features a long 2-1/2" voice coil, which is wound on a Kapton former for improved heat dissipation and higher power handling.

G. Flat Progressive Nomex Spider

This proprietary spider is made from high tech Nomex blended material for long term stability. It provides a uniform restoring force throughout its normal range of travel. As the driver nears its maximum excursion the spider gets "progressively" stiffer. This prevents the voice coil from accelerating out of the magnetic gap during high output peaks reducing distortion and possible voice coil bottoming. This unique spider also has the heavy gauge voice coil leads stitched or "snaked" through the spider. This eliminates "lead slapping" during extreme excursion.

TIT280C-4 10" Titanic MKIII Subwoofer



Building on the reputation of the 10" MKII subwoofer, the MKIII sub excels at producing very clean and musical bass in a small enclosure. Reaping the benefits of the MKIII improvements, this woofer is now even better for medium-duty home theater applications in small-to-medium sized rooms. The small 10" size is perfect for multi-driver or multi-subwoofer situations. With an upgraded 2-1/2" voice coil and 18.7 mm of X_{MAX} this subwoofer is great for home and automotive applications in both sealed and vented enclosures.

Thiele-Small Parameters: • Power handling: 400 watts RMS/565 watts max • VC_{DIA}: 2-1/2" • Le: 3.15 mH • Impedance: 4 ohms • Re: 3.1 ohms • Frequency range: 28-400 Hz • Magnet weight: 100 oz. • Fs: 28 Hz • SPL: 88 dB 2.83V/1m • VAS: .95 cu. ft. • QMS: 5.23 • QES: .42 • QTS: .39 • X_{MAX}: 18.7 mm • Dimensions: A: 10-15/16", B: 9-3/16", C: 6-1/4".

#295-414 .. \$194.99 LIST **\$149.66** (1-3) **\$139.88** (4-UP)

TIT320C-4 12" Titanic MKIII Subwoofer



We took our most popular subwoofer driver and improved both its power handling and its performance. The 12" MKIII subwoofer is ideal for most home theater environments and will produce prodigious amounts of output in just about any listening room. Works great in sealed or vented enclosures, this is the woofer of choice for most rooms, offering outstanding performance and a reasonable box size.

Thiele-Small Parameters: • Power handling: 500 watts RMS/700 watts max • VC_{DIA}: 2-1/2" • Le: 3.17 mH • Impedance: 4 ohms • Re: 3.1 ohms • Frequency range: 22-500 Hz • Magnet weight: 100 oz. • Fs: 22 Hz • SPL: 89 dB 2.83V/1m • VAS: 2.61 cu. ft. • QMS: 6.12 • QES: .47 • QTS: .44 • X_{MAX}: 18.7 mm • Dimensions: A: 12-1/2", B: 11-1/8", C: 6-1/2".

#295-404 .. \$207.99 LIST **\$159.66** (1-3) **\$149.88** (4-UP)

TIT400C-4 15" Titanic MKIII Subwoofer



To produce loud, hard hitting, deep bass, you need to move a lot of air, and the 15" Titanic MKIII will do just that! With its large surface area and long excursion, the 15" MKIII will sweep over 1.5 liters of air! Optimized for a variety of enclosures, the 15" MKIII is THE driver when you are looking to build the ultimate home theater subwoofer!

Thiele-Small Parameters: • Power handling: 800 watts RMS/1,100 watts max • VC_{DIA}: 2-1/2" • Le: 3.84 mH • Impedance: 4 ohms • Re: 3.7 ohms • Frequency range: 19-500 Hz • Magnet weight: 136 oz. • Fs: 20 Hz • SPL: 92 dB 2.83V/1m • VAS: 7.79 cu. ft. • QMS: 5.89 • QES: .41 • QTS: .38 • X_{MAX}: 20.5 mm • Dimensions: A: 15-9/16", B: 14-1/16", C: 8-3/8".

#295-420 .. \$285.99 LIST **\$219.88** (1-3) **\$198.66** (4-UP)