

**GM
SERIES**

GM18-100F

Low Frequency Ferrite Woofer

Features

- 2400 W continuous program power capacity
- 101.6mm (4.0 inch) voice coil
- 30 - 1000 Hz response
- 97 dB sensitivity
- Ferrite magnet

The P. Audio 'Golden Master' GM18-100F is the intersection of advanced design and state of the art manufacturing. The GM18-100F is an 18 inch (457mm) low frequency transducer for high performance professional audio. The 4 inch (101.6mm) inside/outside wound voice coil is designed for superior reliability and excursion, featuring ultra-high temperature wire and extended winding length. The weight-optimized ferrite magnetism maximizes the coil's strengths by providing strong magnetic flux across its whole range of movement. This keeps coil motion faithful to the audio signal without distorting. Aluminum 'demodulation' rings negate inductance effects in the motor, further improving the fidelity of coil movement.

The ferrite magnet structure cooperates with a carefully optimized venting system on the bottom of the sleek Golden Master chassis to control airflow around the voice coil. This cools the durable design to further levels of reliability without losing sensitivity – the GM18-100F is rated at 4800 W peak power handling/ 1200 W AES continuous power handling with nominal sensitivity of 97 dB.

Linear and symmetrical stiffness behavior of the suspension compliments linear coil motion. The GM18-100F's large diameter spider is a durable silicone laminate design that provides symmetrical displacement and reliable voice coil positioning even after hours at high power levels. The cone features a proprietary triple-roll cloth surround. The perfect match of material and geometry mean ultra-low distortion of cone movement and ultra-low distortion of sound. Coating keeps the cone rigid and waterproof during operation.

The ideal application for the GM18-100F is in a well-tuned vented enclosure, and it is suited to sub-woofer designs using bi-amped configurations. Performance is optimized when using a high pass 4th order Butterworth filter tuned near the enclosure vent frequency. The GM18-100F offers a 30-200Hz useable bandwidth, extending past the 80 to 150Hz upper limit of typical applications.



General Specifications

Nominal Diameter	457 mm (18 in)
Nominal Impedance	8 Ω
Nominal Power Handling	1200 W(AES)
Continuous Program Power Capacity	2400 W
Sensitivity	97 dB
Frequency Range	30-1000 Hz
Voice Coil Diameter	101.6 mm (4.0 in)
Voice Coil Material	Round Copper Wire (IN/OUT)
Former Material	Glass fiber
Effective Piston Diameter	392.0 mm (15.4 in)
Flux Density	1.0T

Physical Information

Magnet Material	Ferrite
Basket Material	Aluminium
Surround Material	Cloth
Cone Material	Paper
Dust Cap Material	Paper
Spider Material	Cotton (Silicone Impregnated Spider)
Gasket	EVA
Pole Design	T-Pole
Woofer Cone Treatment	Waterproof Front Side

Parameters

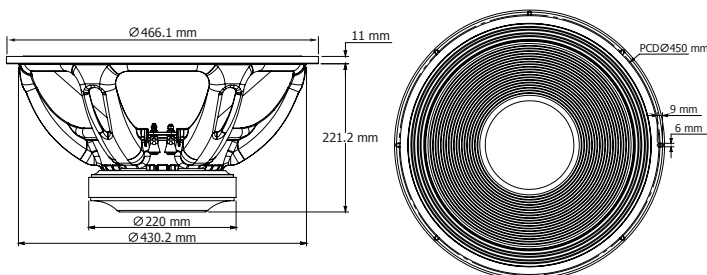
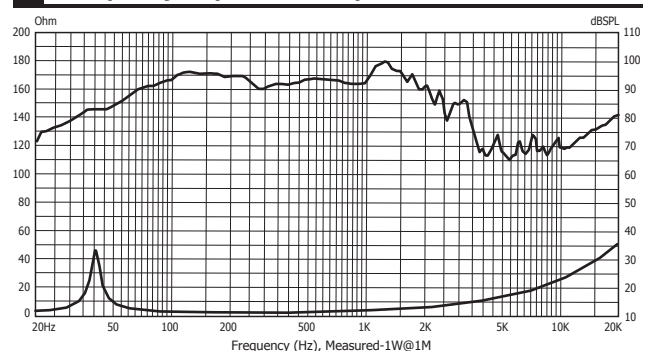
Fs	36 Hz	Vas	172.59 lt
Re	5.2 Ω	Sd	1225 cm ²
Qms	9.90	Le	1.00 mH
Qes	0.48	Eff (η ₀)	1.71%
Qts	0.45	Cms	8.2 e-05 m/N
BL	24.04Tm	Xmax	8.25 mm
Mms	231.99 g	Hag	15 mm
Mmd	207.34 g	Hvc	31.5 mm

Mounting and Shipping Info

Diameter	466.1 mm (18.4in)
Baffle Cutout Diameter	430.2 mm (16.9 in)
Mounting Hole Diameter	450.0 mm (17.7 in)
Bolt Circle Diameter	8 x Ø (9x6) mm
Depth	221.2 mm (8.7 in)
Flange and Gasket Thickness	11.0 mm (0.43 in)
Net Weight	15.2 kg
Shipping Units	1
Shipping Weight	17.1 kg
Shipping Box	500 x 500 x 287 mm

Recone Kit	F05031812401PAA
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Frequency response and Impedance curve



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