

SD18-1700EL

Ferrite Magnet Die-cast Chassis Driver

Features

- 3400 W continuous program power capacity
- 114.4mm (4.5 inch) voice coil
- 35 1000 Hz response
- 98 dB sensitivity
- Ferrite magnet

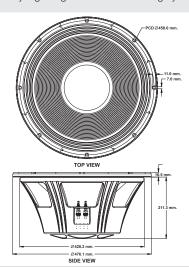
The SD18-1700EL is a high output low frequency transducer. The 18 inch (457mm) diameter piston will produce extremely high sound pressure levels at very low frequencies and is ideal for high level deep bass and sub woofer response in both live sound and recorded music venues. The operating range is 35Hz to 1000Hz. The transducer uses high energy ferrite magnetics to achieve a very high acoustic output to weight ratio.

The SD18-1700EL employs a very large 4.5 inch (114.4mm) diameter voice coil that provides an AES rated 1700 watts of continuous power handling and a full 6800 watts of peak rated power handling when sufficient amplifier headroom is available. It is recommended that the transducer be loaded into a properly designed vented enclosure and that active high order high pass filtering be employed if extremely high power levels are expected at low frequencies. The SD18-1700EL utilizes P Audio's Auto Balanced Cooling (ABC) technology to not only improve transducer power handling and reliability but to also increase power compression performance by carefully balancing and directing airflow to critical areas.

The voice coil design is an "inside/outside" geometry with P Audio's square wire technology to improve conversion efficiency and provide a very large cross-sectional area for superior cooling.

System linearity is achieved by employing magnetic flux demodulation devices in the structure to increase fidelity and sonic accuracy. The system suspension has been designed specifically for high linear displacement and extended low frequency response. The double spider design insures very high displacement and linear response while maintaining excellent control.

The transducer chassis is a die cast aluminum design that insures a very high degree of structural integrity.





General Specifications

•	
Nominal Diameter	457 mm (18 in)
Nominal Impedance	8 Ω
Nominal Power Handling	1700 W(AES)
Continuous Program Power Capacity	3400 W
Sensitivity	98 dB
Frequency Range	35-1000 Hz
Voice Coil Diameter	114.4 mm (4.5 in)
Voice Coil Material	SV-SQ (IN/OUT)
Former Material	Glass fiber
Effective Piston Diameter	394.5 mm (15.5 in)
Flux Density	0.8T

Physical Information

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

Parameters

Fs	45 Hz	Vas	99.72 lt
Re	5.2 Ω	Sd	1225 cm2
Qms	11.10	Le	1.02 mH
Qes	0.63	Eff (η_0)	1.30%
Qts	0.59	Cms	4.3 e-05 m/N
BL	25.91 Tm	Xmax	4.85 mm
Mms	307.7 g	Hag	15.0 mm
Mmd	283.0 g	Hvc	24.7 mm

Mounting and Shipping Info

Diameter	476.1 mm (18.7 in)
Baffle Cutout Diameter	428.2 mm (16.8 in)
Mounting Hole Diameter	450.0 mm (17.7 in)
Bolt Circle Diameter	8 x Ø (11x7) mm
Depth	211.3 mm (8.3 in)
Flange and Gasket Thickness	16.5 mm (0.64 in)
Net Weight	14.2 kg
Shipping Units	1
Shipping Weight	16.0 kg
Shipping Box	500 x 500 x 287 mm
Danama Kit	F05031810401PAA
Recone Kit	FU5U3181U4U1PAA

Frequency response and Impedance curve

