

PD.1850/3 SUB BASS DRIVER



18" / 457.2 mm
NOMINAL DIAMETER

35 Hz - 2 kHz
FREQUENCY RESPONSE

5.0" / 127 mm
VOICE COIL DIAMETER

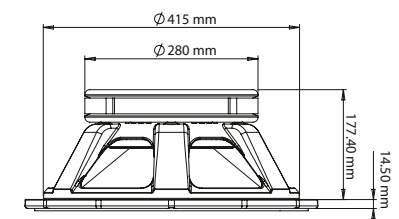
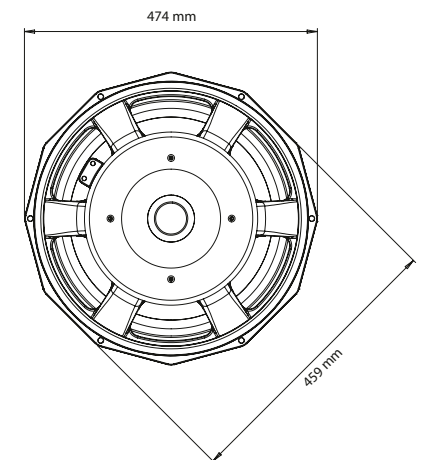
98 dB
SENSITIVITY (1W/ 1m)

800 W (A.E.S.)
POWER HANDLING

11.05 mm Xmax
MAXIMUM LINEAR EXCURSION

- > **NEW ERGONOMIC, VENTED CAST ALUMINIUM CHASSIS OFFERS IMPROVED THERMAL CONTROL**
- > **POWER COMPRESSION ONLY 1.6DB AT RATED POWER***
- > **A B/L IN EXCESS OF 30 T/M.**
- > **DOUBLE SUSPENSION SYSTEM**
- > **IMPROVED MOTOR PLATING PROVIDING A MORE RESILIENT FINISH AND RESISTANCE TO CORROSION**
- > **APPROPRIATE FOR APPLICATIONS AS DIVERSE AS SCOOP BINS, CONVENTIONAL REFLEX CABINETS AND HORN LOADED SYSTEMS**
- > **VENTED VOICE COIL WITH INSIDE/ OUTSIDE COIL WINDINGS**

Designed specifically to provide powerful and accurate bass frequencies with minimal distortion and power compression. The PD.1850/2 is the optimum choice for top of the range sub bass systems. Suitable for sound reinforcement in a variety of enclosure types such as scoop bins, conventional reflex cabinets and horn loaded systems.



PD.1850/3 SUB BASS DRIVER

GENERAL SPECIFICATIONS

Nominal Diameter	18" / 457.2 mm
Voice Coil Diameter	5.0" / 127 mm
Available Impedances	4 / 8 / 16 Ohm
Power Rating ^{1,2*}	800 W (A.E.S.)
Peak Power (6dB Crest Factor)*	3200 W (A.E.S.)
Sensitivity (1W - 1m)*	98 dB
Frequency Range	35 Hz - 2 kHz
Recommended Enclosure Volume	90 - 220 Litres
Resonance	33.15 Hz
Voice Coil Winding Depth	28.00 mm / 1.1"
Magnet Gap Depth	12.0 mm / 0.47"
Flux Density	1.18 Tesla
Magnet Material	Ceramic
Voice Coil Material	Copper
Former Material	Glass Fibre
Dust Dome Material	Paper
Suspension Material	Fabric
Cone Material	Paper
Surround Material	Fabric

WEIGHT

Nett Weight	22.80 kg / 50.26 lb
Shipping Weight	26.60 kg / 58.64 lb

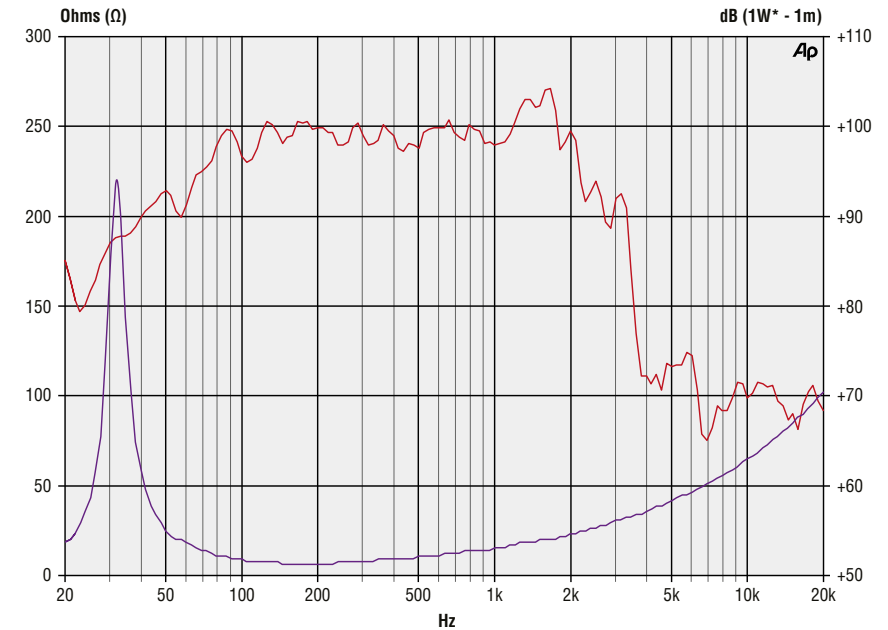
THIELE SMALL PARAMETERS (8 Ω MODEL)³

Fs	33.15 Hz
Re	5.22 Ω
Qms	15.42
Qes	0.24
Qts	0.24
Le (@ 1 kHz)	1.33 mH
Le (@ 10 kHz)	- mH
Vas	203.84 Litres
Mms	215.24 g
Sd	1164.16 cm ²
Cms	107 μm/N
BL	30.99 T/m
Xmax	11.05 mm
Vd	1.28 Litres
Ref. Efficiency	2.88%
EBP	138.12 Hz

DIMENSIONS & MOUNTING INFORMATION

Overall Diameter	474 mm
Width Across Flats	459 mm
Flange Height	14.5 mm
Depth (Excl. Flange)	177.4 mm
Magnet Diameter	280 mm
Chassis Shoulder Diameter	415 mm
Outer Bolt Circle	x6 M6 on 456 mm PCD

FREQUENCY RESPONSE & IMPEDANCE CHARTS⁴



* Power compression is the reduction of sensitivity at the specified power. Higher power ratings do not necessarily give a proportionate increase in SPL therefore the maximum SPL of the driver may significantly exceed that of other manufacturers with high power ratings.

** Distortion is measured at 10% of the rated power (A.E.S. Standard).

1. A.E.S. Standard (35 to 350 Hz). Program 1600 Watts.

2. A.E.S. Recommended Practice.

3. Thiele - Small Parameters follow a 800 Watt preconditioning period verified by Klippel LSI measurement.

4. 2.83V. Half space response measured in a 975 Litre sealed enclosure.

Please note that frequency response measurements are supplied for comparison purposes only and are not a measure of the low frequency performance which may be achievable in a fully optimised system.