PRECISION DEVICES

PD.2150



- Heavy duty 21" cast aluminium frame with extra wide flange for increased rigidity
- 1000WRMS
- 6" copper voice coil assembly
- 220 oz. ceramic magnet
- Power compression 2dB at rated power *1
- Distortion *2 2nd Harmonic <1%
 - 3rd Harmonic <1%
- Advanced magnetic assembly incorporating a composite alloy and steel pole piece giving a uniform and stable magnetic field, improving linear excursion and providing an efficient thermal path to dissipate the heat produced by the voice coil
- A B/L in excess of 34 T/m for fast accurate lows
- Exemplary electro-acoustic performance and long term reliability in all types of professional applications
- Double suspension system maintaining a pure piston action for the moving mass even when driven with the most complex programme input signals and provides additional durability against the rigours of life on the road

APPLICATION NOTES

The PD.2150 is a unique high power, high efficiency cone transducer designed specifically to provide powerful and accurate sub bass frequencies with minimal distortion and power compression.

Delivers faultless low end performance in applications in which others fall by the wayside. Perfectly at home in new or refurbished horn loaded sub bass systems this unit also delivers powerful lows in reflex designs.

An outstanding drive unit since it allows designers considerably more freedom with enclosure design and specialised loading techniques without having to allow for physical characteristics or power handling limitations which are typically the result of more traditional designs.

*1 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 PD.2150 may significantly exceed that of other manufacturers with high published power ratings.

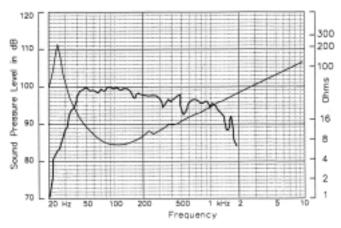
*2 Distortion is measured at 10% of the rated power (AES Standard).

WORLD HEADQUARTERS

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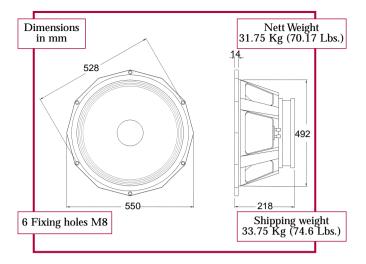
FACTORY

RESPONSE & IMPEDANCE DETAIL



Response measured in a half space environment using a vented enclosure of 234 litres.

MECHANICAL DATA



TECHNICAL SPECIFICATION

| Nominal Diameter | 53cm (21") | | |
|--|--|--|--|
| Power rating ¹ | 1000 Watts | | |
| Frequency range | 30 - 1000 Hz | | |
| Nominal Impedance | 8 Ohms | | |
| Sensitivity ² (1 W 1 M) | 99 dB | | |
| Highest Recommended Crossover ³ | 300 Hz | | |
| Resonance | 22 Hz | | |
| Enc. Vol. Recommended | 130 to 350 Litres | | |
| Effective Piston Diameter | 455 mm (18.2") | | |
| Displacement limit | 38 mm (1.5") | | |
| Voice coil diameter | 152 mm (6.08") | | |
| Voice coil | Copper | | |
| Voice coil winding depth | 30 mm (1.2") | | |
| Voice coil wire length | 56.6M (186') | | |
| Magnet gap depth | 15 mm (0.59") | | |
| Magnet material/mass | Ceramic/6.12 Kg (220 oz.) | | |
| Magnetic assembly total mass | 27.2 Kg (60.11 Lbs.) | | |
| Flux Density | 11,000 Gauss | | |
| BL product | 34.28 Tesla/M | | |
| Effective Moving Mass | 305 grams | | |
| Connectors | Spring loaded push button metal bodied | | |
| Polarity | Positive Voltage on Red Terminal gives forward cone motion | | |

Notes

1. AES Standard (30 to 300 Hz) Program 2000 Watts

Sensitivity is derived from the sine wave response between 50 - 350 Hz at 5W/2M using Zmin. It is then scaled to represent 1W/1M. It should be noted that not all manufacturers' sensitivity figures are based on this AES Recommended Practice.
In less demanding applications, the crossover point may be higher.

THIELE - SMALL PARAMETERS

| Fs | 22 Hz | Pmx | 1000 Watts | |
|------|--------------------------------------|-----|------------|--|
| Xmax | 12.00 mm | Qes | 0.2 | |
| Revc | 5.48 Ohms | Cms | 166 μM/N | |
| Vd | 20 x 10 ⁻⁴ m ³ | Vas | 628 Litres | |
| Qts | 0.19 | Mms | 305 grams | |
| No | 3.39% | Sd | 1630 sq cm | |
| Qms | 5.51 | BL | 34.28 T/m | |

Notes

4. Thiele - Small Parameters follow a 1000 Watt preconditioning period.

Precision Devices operate a policy of continuous research and development. The implementation of new materials or production methods will always equal or exceed the published specifications, which may change without notice. Details shown on this sheet are correct at time of printing. March 2004