

**NT
SERIES**

18NT-100SW

Neodymium Magnet Die-cast Chassis Driver

Features

- 4" Very high temperature sandwich voice coil
- 2400 Watts continuous program power capacity
- Active Balanced Cooling
- Neodymium magnetics
- Copper wire inside/outside coil design
- Double spiders silicon suspension
- Integrated double demodulation rings
- Die cast aluminum chassis

Applications

- 18" Neodymium ultra low distortion woofer for sub bass applications in bass Reflex/horn loaded enclosures

The P. Audio 18NT-100SW is the intersection of advanced design and state of the art manufacturing. The 18NT-100SW 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 low-weight neodymium magnetics maximize the coil's strengths by providing extra strong magnetic flux across its whole range of movement. This keeps coil motion faithful to the audio signal without distorting. Aluminium demodulation' rings negate inductance effects in the motor, further improving the fidelity of coil movement. The neodymium magnet structure cooperates with a carefully optimized venting system on the bottom of the sleek NT Series chassis to control airflow around the voice coil. This cools the durable design to further levels of reliability without losing sensitivity – the 18NT-100SW is rated at 4800W peak power handling/ 2400W AES continuous program power capacity with nominal sensitivity of 96dB. Linear and symmetrical stiffness behavior of the suspension compliments linear coil motion. The 18NT-100SW'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 18NT-100SW 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 18NT-100SW 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 | 96 dB |
| Frequency Range | 35-1000 Hz |
| Voice Coil Diameter | 99.3 mm (4.0 in) |
| Voice Coil Material | Copper (IN/OUT) |
| Former Material | Glass fiber |
| Effective Piston Diameter | 397.0 mm (15.6 in) |
| Flux Density | 1.3T |

Physical Information

| | |
|-----------------------|--------------------------------------|
| Magnet Material | Neodymium |
| 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 | 41 Hz | Vas | 1144.63 lt |
| Re | 5.8 Ω | Sd | 1225 cm ² |
| Qms | 11.67 | Le | 1.05 mH |
| Qes | 0.5 | Eff (η ₀) | 2.02% |
| Qts | 0.48 | Cms | 6.7 e-05 m/N |
| BL | 25.24Tm | Xmax | 9.0 mm |
| Mms | 212.11 g | Hag | 11.0 mm |
| Mmd | 187.45 g | Hvc | 29.0 mm |

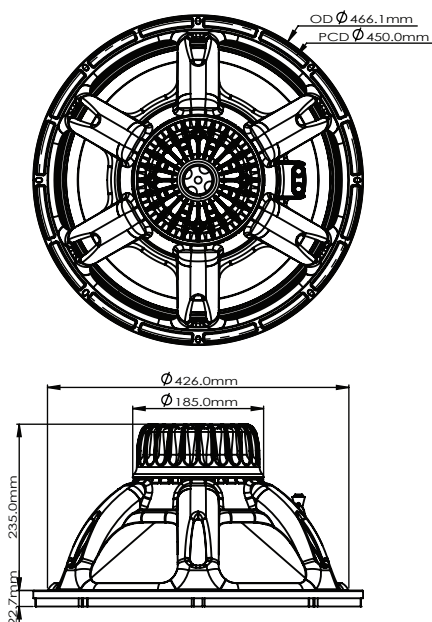
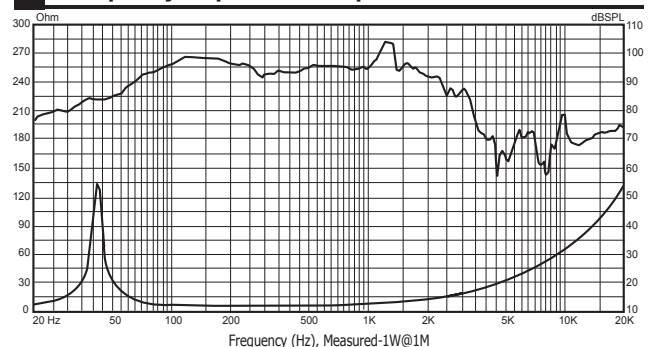
Mounting and Shipping Info

| | |
|-----------------------------|--------------------|
| Diameter | 466.1 mm (18.3 in) |
| Baffle Cutout Diameter | 426.0 mm (16.7 in) |
| Mounting Hole Diameter | 450.0 mm (17.7 in) |
| Bolt Circle Diameter | 8 x Ø (9x7) mm |
| Depth | 235.0 mm (9.2 in) |
| Flange and Gasket Thickness | 22.7 mm (0.89 in) |
| Net Weight | 9.5 kg |
| Shipping Units | 1 |
| Shipping Weight | N/A |
| Shipping Box | 500 x 500 x 302 mm |

Recone Kit

Model No.

Frequency response and Impedance curve



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