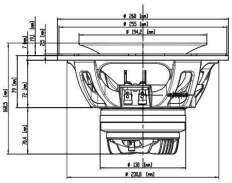
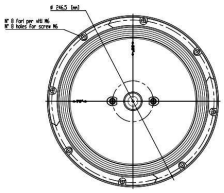
10NCX750H 8Ω

Coaxials - 10.0 Inches





- 95 dB LF / 105 dB HF SPL 1W/1m average sensitivity
- Single magnet neodymium motor
- 700W LF - 140W HF program power handling
- 75 mm (3”) LF Interleaved Sandwich Voice coil (ISV)
- Aluminum demodulating ring (SDR) for minimum LF distortion
- 60 mm (2.4”) HF Titanium diaphragm
- Edge-wound Aluminum ribbon HF voice coil (EWAL)
- HF copper sleeve for reduced distortion and higher output
- 70°H x 50°V nominal coverage
- Suitable for very compact enclosures and stage monitor
- Proprietary Phase Plug (3P)

Eighteen Sound Srl
Via Botticelli 8 - 42124 Mancasale (RE) - ITALY - Ph. +39 0522 1861800 - Fax +39 0522 1861801 - info@eighteensound.it

10NCX750H 8Ω

Coaxials - 10.0 Inches

The 10NCX750H is a 10" neodymium coaxial transducer designed for use in compact reflex enclosures and stage monitors as small as 15lt with a nominal dispersion of 80 degrees.

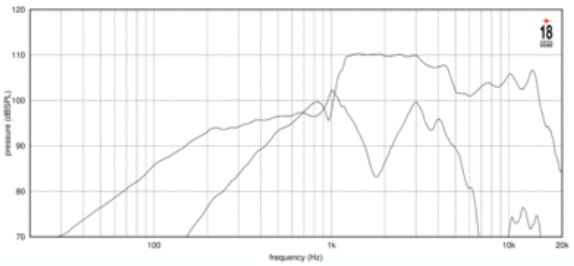
The curvilinear profile LF cone provides smooth response within its intended frequency range thanks to its high damping pulp composition. The 75mm (3in) LF copper voice coil employs Interleaved Sandwich Voice coil (ISV) technology, in which a high strength former carries windings on both the outer and inner surfaces. This results in a balanced coil with a uniform distribution of mass and motive energy and an extremely linear motor assembly. The low distortion and sound quality are further improved by an aluminum demodulating ring (SDR technology) that flattens LF impedance and phase with constant power transfer.

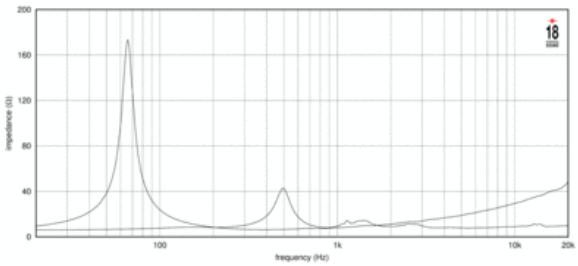
Equipped with a proprietary hybrid radial tangerine phase plug, the integrated HF compression driver has been designed to give a smooth, coherent wavefront at the horn entrance in all working frequency ranges with an high level of manufacturing consistency. The phase plug, with its short openings and high flare rate value, assures low distortion and remarkable improvements in mid-high frequency reproduction. A copper sleeve reduces the inductance value above 10kHz, improving phase and impedance linearization.

The 2.4" diameter HF diaphragm assembly uses a high strength, high temperature treated Nomex voice coil former joined directly to the titanium diaphragm on its upper bend edge, assuring extended frequency energy transfer. This improves linearity and shows unparalleled reliability when compared with a straight former joint. A specific HF exit profile design has been chosen in order to maximize the cone’s profile coupling.

The high force neodymium single magnet structure makes the 10NCX750H a lightweight speaker for its performance class - only 4.2KG.

Due to the widespread use of high power audio systems at outdoor events, the ability to perform in adverse weather conditions is an additional key feature of the 10NCX750. This has been achieved using exclusive cone and magnet plate treatment processes which increase resistance against corrosion and make the cone water repellent.





10NCX750H 8Ω

Coaxials - 10.0 Inches

SPECIFICATIONS

Nominal Diameter	260 mm (10.0 in)
Nominal Impedance	8 Ω
Minimum Impedance LF	6.2 Ω
Minimum Impedance HF	8.0 Ω
Frequency Range	60 - 1500 Hz
Dispersion Angle[1]	50x70 °
Woofer Cone Treatment	Water repellent
Magnet Material	Neodymium

SPECIFICATIONS LF UNIT

LF Sensitivity[2]	95.0 dB
LF Nominal Power Handling[3]	350 W
LF Continuous Power Handling[4]	700 W
LF Voice Coil Diameter	75 mm (3.0 in)
LF Winding Material	- Copper -
Winding Depth	15.0 mm (0.59 in)
Magnetic Gap Depth	7.6 mm (0.3 in)

SPECIFICATIONS HF UNIT

HF Sensitivity[5]	105.0 dB
HF Nominal Power Handling[6]	70 W
HF Continuous Power Handling[7]	140 W
HF Voice Coil Diameter	64 mm (2.5 in)
HF Winding Material	Edge wound Aluminum
Diaphragm Material	Titanium
Recommended Crossover[8]	1.2 kHz

PARAMETERS

Resonance Frequency	65 Hz
Re	5.3 Ω
Qes	0.26
Qms	8.4
Qts	0.25
Vas	21.7 dm^3 (0.77 ft^3)
Sd	346.0 cm^2 (53.63 in^2)
η_0	2.2 %
Xmax	5.5 mm
Xvar	7.0 mm
Mms	47.0 g
Bl	19.8 Txm
Le	0.54 mH
EBP	250 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	260 mm (10.24 in)
Bolt Circle Diameter	243 mm (9.57 in)
Baffle Cutout Diameter	230 mm (9.06 in)
Depth	148 mm (5.83 in)
Flange and Gasket Thickness	14 mm (0.55 in)
Net Weight	4.25 kg (9.37 lb)
Shipping Weight	4.9 kg (10.8 lb)

1. Included by –6 dB down points.
2. Applied RMS Voltage is set to 2.83V.
3. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
4. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
5. Applied RMS Voltage is set to 2.83V.
6. 2 hour test made with continuous pink noise signal within the range from the recommended crossover frequency to 20 kHz. Power calculated on rated nominal impedance. Loudspeaker in free air.
7. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
8. 12 dB/oct. or higher slope high-pass filter.