

- 98 dB LF / 107 dB HF SPL 1W/1m average sensitivity
- 800W LF - 140W HF program power handling
- Single magnet neodymium motor
- 75 mm (3") Interleaved Sandwich LF 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
- 80 degrees nominal conical dispersion
- Suitable for very compact enclosures and stage monitors

The 15NCX750 is a 15" diameter neodymium coaxial transducer designed for use in compact reflex enclosures and stage monitors as small as 80 lt 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 75 mm (3 in) LF copper voice coil employs our 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 flatten LF impedance and phase with a constant power transfer. Equipped with proprietary hybrid radial tangerine phase plug 3P architecture, the integrated HF compression driver has been designed to give smooth coherent wavefront in the horn entrance in all working frequency range and high level 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 ring on the pole piece reduces the inductance figure of frequencies above 10 kHz, improving phase and impedance linearisation.

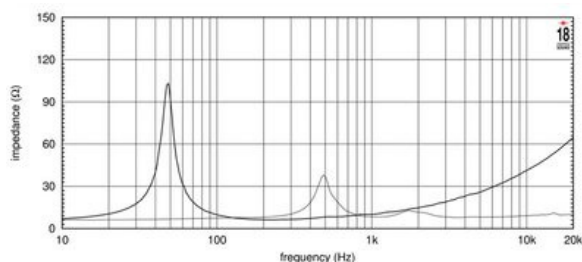
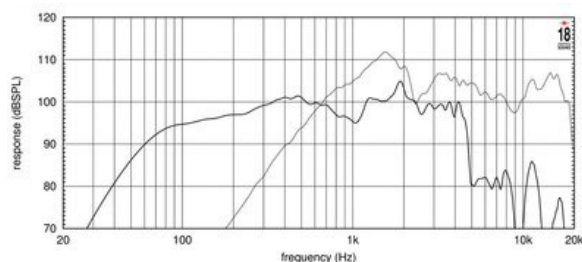
The 2.4" diameter HF diaphragm assembly uses a high strength, high temperature treated Nomex voice coil former joined directly to the titanium diaphragm on its upper bend edge, assuring extended frequency energy transfer. This improves linearity and shows unparalleled reliability when compared with a 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 15NCX750 a lightweight speaker for its performance class - 5,1 kg (11.24 lb).

The XO15NCX dedicated passive crossover filter is offered, making this coaxial speaker a ready-to-use transducer system.

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 15NCX750. This has been achieved using exclusive cone and magnet plate treatment processes which increase resistance against corrosion and make the cone water repellent.



SPECIFICATIONS

Nominal Diameter	380 mm (14.96 in)
Nominal Impedance	8 Ω
Minimum Impedance LF	6.3 Ω
Frequency Range	55 - 4500 Hz
Dispersion Angle ¹	80 °
Woofers Cone Treatment	Water repellent
Magnet Material	Neodymium

SPECIFICATIONS HF UNIT

HF Sensitivity ⁵	107.5 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

MOUNTING AND SHIPPING INFO

Overall Diameter	393 mm (15.47 in)
Bolt Circle Diameter	371 mm (14.61 in)
Baffle Cutout Diameter	360 mm (14.17 in)
Depth	185 mm (7.28 in)
Flange and Gasket Thickness	14 mm (0.55 in)
Net Weight	4.9 kg (10.8 lb)
Shipping Weight	5.9 kg (13.01 lb)
Shipping Box	405 x 405 x 260 mm (15.94x15.94x10.24 in)

SPECIFICATIONS LF UNIT

LF Sensitivity ²	98.0 dB
LF Nominal Power Handling ³	400 W
LF Continuous Power Handling ⁴	800 W
LF Voice Coil Diameter	75 mm (3.0 in)
LF Winding Material	- Copper -

PARAMETERS

Resonance Frequency	49 Hz
Re	5.4 Ω
Qes	0.4
Qms	6.32
Qts	0.37
Vas	141.0 dm ³ (4.98 ft ³)
Sd	881.0 cm ² (136.56 in ²)
η _o	4.5 %
X _{max}	5.5 mm
M _{ms}	81.0 g
Bl	18.4 Txm
Le	0.66 mH
EBP	122 Hz

CROSSOVER

Model	03715XCR00
Nominal Impedance	8.0 Ω
Low-pass Slope	24.0 dB/oct
High-pass Slope	12.0 dB/oct

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.