12NCX910N 8Ω

Coaxials - 12.0 Inches

- 99.5 dB LF / 108 dB HF SPL 1W/1m average sensitivity
- 900W LF - 240W HF maximum program power handling
- Single magnet neodymium motor
- 75 mm (3") Interleaved Sandwich LF Voice coil (ISV)
- Aluminum Demodulating Ring (SDR) for minimum LF distortion
- 75 mm (3") HF Nitride coat 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

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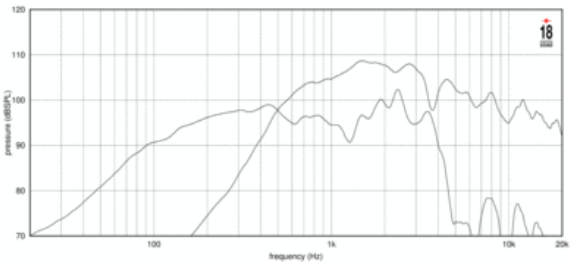
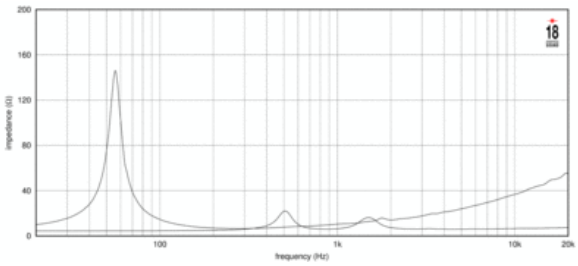
Coaxials - 12.0 Inches

The 12NCX910N is a 12" diameter neodymium coaxial transducer designed for use in compact reflex enclosures and stage monitors as small as 25 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 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, assuring 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 linearization.
The 3" diameter HF diaphragm assembly uses a high strength, high temperature treated Nomex voice coil former joined directly to the titanium diaphragm which is treated with our proprietary nitride coat to improve stiffness, 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.
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 12NCX910N. This has been achieved using exclusive cone and magnet plate treatment processes which increase resistance against corrosion and make the cone water repellent.





12NCX910N 8Ω

Coaxials - 12.0 Inches

SPECIFICATIONS

Nominal Diameter	300 mm (11.81 in)
Nominal Impedance	8 Ω
Minimum Impedance LF	6.4 Ω
Minimum Impedance HF	6.1 Ω
Frequency Range	60 - 4000 Hz
Dispersion Angle[1]	80 °

SPECIFICATIONS LF UNIT

LF Sensitivity[2]	99.5 dB
LF Nominal Power Handling[3]	450 W
LF Continuous Power Handling[4]	900 W
LF Voice Coil Diameter	75 mm (3.0 in)

SPECIFICATIONS HF UNIT

HF Sensitivity[5]	108.0 dB
HF Nominal Power Handling[6]	120 W
HF Continuous Power Handling[7]	240 W
HF Voice Coil Diameter	75 mm (3.0 in)
HF Winding Material	Edge wound Aluminum
Diaphragm Material	Titanium
Recommended Crossover[8]	1.5 kHz

PARAMETERS

Resonance Frequency	57 Hz
Re	5.3 Ω
Qes	0.31
Qms	10.0
Qts	0.3
Vas	58.0 dm^3 (2.05 ft^3)
Sd	531.0 cm^2 (82.31 in^2)
η_0	3.4 %
Xmax	6.9 mm
Xvar	7.5 mm
Mms	53.0 g
Bl	18.1 Txm
Le	0.78 mH
EBP	183 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	310 mm (12.2 in)
Bolt Circle Diameter	295 mm (11.61 in)
Baffle Cutout Diameter	282 mm (11.1 in)
Depth	173 mm (6.81 in)
Flange and Gasket Thickness	13 mm (0.53 in)
Net Weight	6.0 kg (13.23 lb)
Shipping Weight	6.5 kg (14.33 lb)
Shipping Box	332 x 332 x 184 mm (13.07x13.07x7.24 in)

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.