

- 98dB LF / 107,5dB HF SPL 1W/1m average sensitivity
- 100 mm (4") Interleaved Sandwich Voice LF coil (ISV)
- 850W LF - 100W HF AES power handling
- Copper shorting ring for constant power transfer
- 1,4" exit HF neodymium compression driver
- 75 mm (3") HF edgewound voice coil with high temperature ferrofluid
- FEA optimized coupling horn profile
- 70 degrees nominal conical dispersion
- Suitable for very compact enclosures and stage monitors
- Weather protected cone and plates for outdoor usage

The 15CX1000 is a 15" - 1.4" coaxial transducer designed for use in compact reflex enclosures and stage monitors as small as 50 lt with a nominal dispersion of 70 degrees.

The low profile, carbon fiber reinforced, smooth curvilinear LF cone provides smooth response within its intended frequency range and exceptional strength, with maximum reliability under high mechanical stress.

The state-of-the-art 100 mm (4 in) LF voice coil employs our Interleaved Sandwich Voice coil (ISV) technology, in which a high strength fibreglas 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.

A copper-shorting ring on the LF section plates has been adopted to reduce inductance and improve transient response. Hence, the intermodulation distortion figure has been heavily improved.

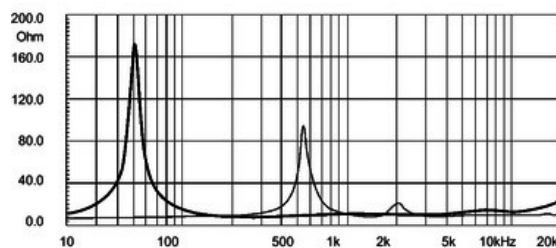
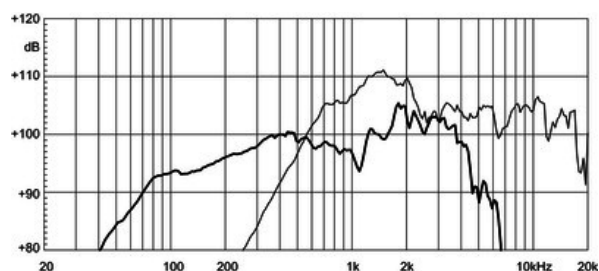
The neodymium 1.4" exit compression driver adopted is our ND1480 model, which has been given further thermal power handling capacity by adding high temperature ferrofluid in the gap. This has improved the thermal exchange properties even more.

The HF driver diaphragm assembly, using a high strength, high temperature treated Nomex voice coil former joined directly to the titanium diaphragm on its upper bend edge, assures extended frequency energy transfer. This improves linearity and shows unparalleled reliability when compared with a usual straight former joint.

The HF motor structure utilizes a precisely machined coherent phase plug with 3 circumferential slots. A copper ring on the pole piece reduces the inductance figure of frequencies above 10 kHz, improving phase and impedance linearisation.

A specific design has been chosen by Eighteen Sound engineers 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 15CX1000. This has been achieved using exclusive cone and magnet plate treatment processes which increase resistance against corrosion and make the cone water repellent.





# 15CX1000 8Ω

Coaxials - 15.0 Inches

## SPECIFICATIONS

Nominal Diameter	380 mm (14.96 in)
Nominal Impedance	8 Ω
Minimum Impedance LF	6.0 Ω
Frequency Range	45 - 5100 Hz
Dispersion Angle <sup>1</sup>	70 °
Woofer Cone Treatment	Water repellent

## SPECIFICATIONS HF UNIT

HF Sensitivity <sup>5</sup>	107.5 dB
HF Nominal Power Handling <sup>6</sup>	100 W
HF Continuous Power Handling <sup>7</sup>	200 W
HF Voice Coil Diameter	75 mm (2.95 in)
Recommended Crossover <sup>8</sup>	1.0 kHz

## SPECIFICATIONS LF UNIT

LF Sensitivity <sup>2</sup>	98.0 dB
LF Nominal Power Handling <sup>3</sup>	850 W
LF Continuous Power Handling <sup>4</sup>	1000 W
LF Voice Coil Diameter	75 mm (2.95 in)
LF Winding Material	- Aluminum -

## PARAMETERS

Resonance Frequency	48 Hz
Re	5.5 Ω
Qes	0.32
Qms	6.0
Qts	0.31
Vas	132.5 dm <sup>3</sup> (4.68 ft <sup>3</sup> )
Sd	881.0 cm <sup>2</sup> (136.56 in <sup>2</sup> )
Xmax	6.0 mm
Mms	85.0 g
Bl	21.0 Txm
Le	1.5 mH
EBP	150 Hz

## MOUNTING AND SHIPPING INFO

Overall Diameter	387 mm (15.24 in)
Bolt Circle Diameter	370 mm (14.57 in)
Baffle Cutout Diameter	353 mm (13.9 in)
Depth	218 mm (8.58 in)
Flange and Gasket Thickness	19 mm (0.75 in)
Net Weight	14.4 kg (31.75 lb)
Shipping Weight	15.0 kg (33.07 lb)
Shipping Box	405 x 405 x 230 mm (15.94x15.94x9.06 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.