

## Coaxial Loudspeakers

### CNX0820



## 8-inch cast aluminium chassis, neodymium magnet coaxial driver

- Neodymium magnet assembly acts as common motor for both LF and HF
- Polyimide HF diaphragm: field repairable
- Twin demodulation rings to reduce harmonic and intermodulation distortion
- Integrated 50° dispersion constant directivity horn

**500W**

Continuous power rating

**95dB**

sensitivity

**2in**

Edgewound clad copper voice aluminium coil

**1.75in**

#### General Specifications

|                         |                                 |
|-------------------------|---------------------------------|
| Nominal Diameter        | 200mm / 8in                     |
| Power Rating            | 250W                            |
| Continuous power rating | 500W                            |
| Rated impedance         | 8 ohm                           |
| Sensitivity             | 95dB                            |
| Frequency range         | 80Hz-5,000Hz                    |
| Chassis type            | Cast aluminium                  |
| Magnet type             | Neodymium                       |
| Voice coil diameter     | 50mm / 2in                      |
| Voice coil material     | Edgewound copper clad aluminium |
| Former material         | Polyimide                       |
| Cone material           | Kevlar loaded paper             |
| Surround material       | Triple roll, cloth sealed       |
| Suspension              | Single                          |
| Gap height (Hg)         | 8mm / 0.31in                    |
| VC winding height (Hvc) | 16mm / 0.63in                   |

#### Mounting Information

|                          |                       |
|--------------------------|-----------------------|
| Overall diameter         | 215mm / 8.5in         |
| Overall depth            | 115mm / 4.53in        |
| Cut-out diameter         | 187mm / 7.4in         |
| Mounting hole dimensions | 7x5.6mm / 0.28x0.22in |
| Number of mounting holes | 8                     |
| Mounting hole PCD        | 197-200mm / 7.8-7.9in |
| Unit weight              | 2.5kg / 5.5lb         |

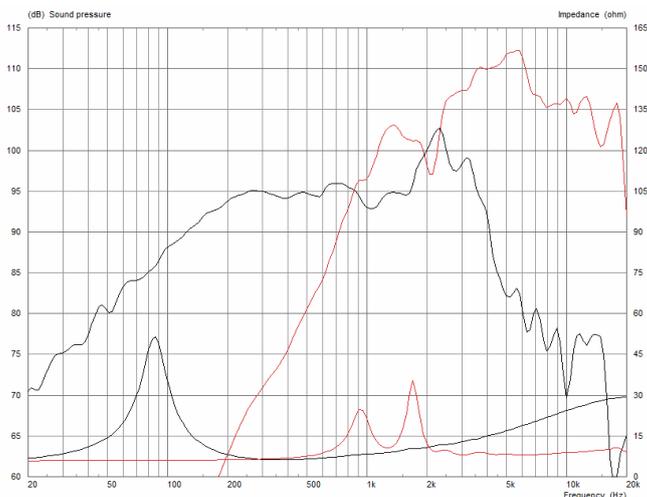
#### Parameters

|              |  |
|--------------|--|
| Sd           | 226.98cm <sup>2</sup> / 35.18in <sup>2</sup> |
| Fs           | 94.6Hz                                       |
| Mms          | 20.9g/0.74oz                                 |
| Qms          | 3.293  |
| Qes          | 0.448  |
| Qts          | 0.395  |
| Re           | 5.10 ohm                                     |
| Vas          | 9.89l / 0.35 ft <sup>3</sup>                 |
| Bl           | 12.02Tm                                      |
| Cms          | 0.14 mm/N                                    |
| Rms          | 3.77kg/s                                     |
| Le (at 1kHz) | 0.46mH                                       |
| Xmax         | 6mm / 0.24in                                 |

#### Additional HF Specifications

|                                     |                         |
|-------------------------------------|-------------------------|
| Power rating                        | 50W                     |
| Continuous power rating             | 100W                    |
| Rated impedance                     | 8 ohm                   |
| Sensitivity                         | 107dB                   |
| Frequency range                     | 1,200Hz-20,000Hz        |
| Recommended min. crossover 12dB/oct | 2,000Hz                 |
| Voice coil diameter                 | 44mm / 1.75in           |
| Magnet type                         | Neodymium, common motor |
| Diaphragm material                  | Polyimide               |
| Surround material                   | Polyimide               |

#### Frequency Response and Impedance Curves



Power rating: Tested for two hours using a continuous, band-limited pink noise signal as per AES standard. Power calculated on minimum impedance. Loudspeaker tested in free air.

HF power rating: Tested for two hours on plane wave tube using a continuous, band-limited pink noise signal as per AES standard. Power calculated on minimum impedance.

Continuous power rating: Defined as 3dB greater than the AES rating.

Sensitivity: Measured on axis at 1W, 1m in 2° anechoic environment.

Xmax: 0.5\*(Hvc-Hg) + 0.25\*Hg