

Code: CD-1.4-002-8R-B2-C0001

REDCATT 140NCD 1.4-inch neodymium compression driver: 30 W AES, 109 dB sensitivity, 8 Ω , Fs 1200 Hz, 35.6 mm voice coil. Full T/S parameters, datasheet, 2D drawing and STEP CAD file.

KEY FEATURES

- ✓ Very high performance at small size
- ✓ 2-way and multi-way speaker systems

QUICK SPECS

Impedance
8 Ω

Sensitivity
109.00 dB

Magnet
Neodymium

Program Power
60 W

Fs
1200.00 Hz

Voice Coil
35.6 mm

 [Datasheet \(PDF\)](#)

 [2D Drawing](#)

 [3D Model \(STEP\)](#)

Design Notes

The 140NCD is a high performance high frequency device ideal for professional loudspeaker systems. The unit delivers extended frequency response and high power handling through 1.3inch exit throat. The suspension has designed and FEM optimized venting features to lower the harmonic distortion. The venting holes also improves the control over the dome movements at low frequencies.

140NCD ultra compact design ensures the driver can be used in enclosure designs where the space is very limited, such as line array systems.

Redcatt has focused on designing an optimized neodymium based magnetic circuit

Specifications

GENERAL SPECS

Nominal Diameter	1.4"
Rated Impedance	8 Ohm
Magnet	Neodymium
Basket Material	Plastic

POWER HANDLING

AES Power	30 W
Continuous Power	60 W
Peak Power	120 W

VOICE COIL

Diameter	35.6 mm
Winding Wire	CCAR
Former	kapton
Winding Height	2.5 mm

Resonant Frequency (Hz)	1200.00 Hz
Re	5.50 Ω
Sensitivity	109.00 dB

DESIGN DETAILS

Surround Material	N/A
Cone/Dome Material	PEN
T-Plate	3 mm
Overall Diameter	95.00 mm
Bolt Circle Diameter	76.00 mm
Mounting Holes	4
Depth (flange to rear)	47.85 mm
Net Weight	0.54 kg
Packaging Dimensions	150X135X55 mm

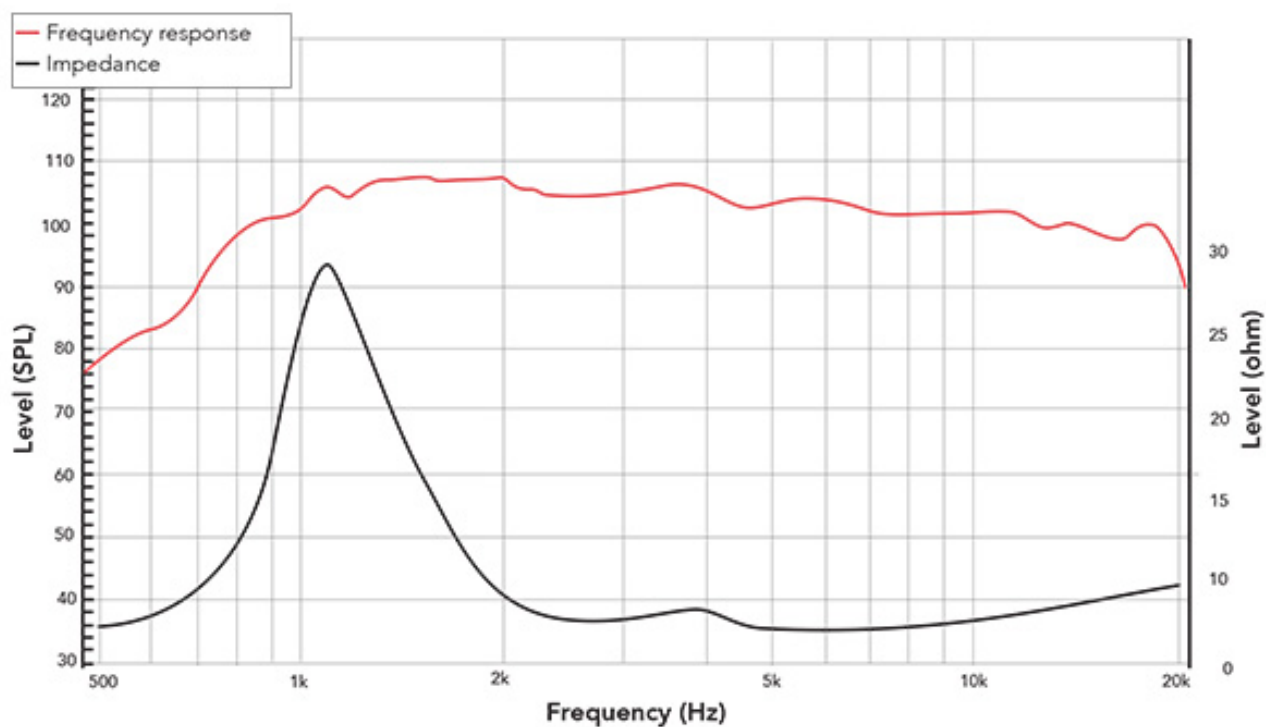
ORDERING CODES

Product Code	CD-1.4-002-8R-B2-C0001
Horn Exit	25mm

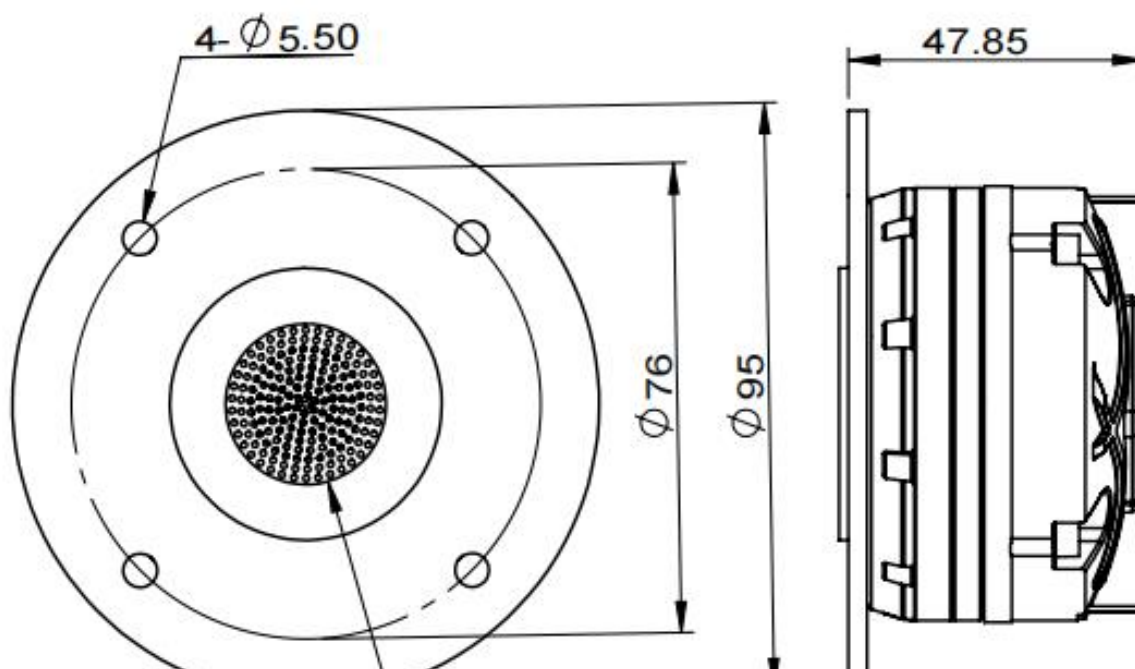
DOWNLOADS

 Datasheet (PDF)  2D Drawing (PDF)  3D Model (STEP)

Covered by the REDCATT **3-year Limited Warranty**.



2D Drawing



Technical Summary

The 140NCDX8-077 is a 1.4-inch neodymium compression driver rated at 30 W AES (60 W continuous) into a nominal 8-ohm load. Sensitivity is 109 dB (1 W/1 m), the highest in the 1.4-inch format in the REDCATT range, and among the highest sensitivity compression drivers for portable PA applications. With a free-air resonance of 1,200 Hz and a 25 mm horn exit, this driver is compatible with standard 1-inch family horns via standard adapters. The neodymium motor achieves the sensitivity and power handling of a 1.4-inch driver in a very compact and lightweight package, making it well suited to portable PA systems where weight is a primary constraint.

The frequency response is usable from approximately 1,000 Hz with horn loading, with a flat plateau of 107-110 dB maintained from approximately 1.5 kHz to 16 kHz. Two impedance peaks - at F_s (1,200 Hz) and the horn cavity resonance above 2 kHz - are clearly defined. The very high sensitivity of 109 dB with horn loading means very high SPL is achievable with modest amplifier power, a key advantage for battery-powered and portable PA applications.

The driver is rated for 30 W AES and is suited for 2-way PA tops, compact line-array elements, and portable PA designs where the neodymium motor weight savings and 109 dB sensitivity are decisive design advantages. A crossover frequency of 1,200-2,000 Hz (18-24 dB/octave high-pass) is recommended. Good to use with 10-15-inch neodymium professional woofers such as 10NPMX8-055, 121NPMX8-079, 15NPWX8-016, or 15FPMX8-063 in lightweight high-sensitivity 2-way PA top and touring monitor designs.

The 140NCDX8-077 is suited for 2-way PA top cabinets, portable column PA systems, compact line-array elements, and commercial installation products where very high sensitivity, the 1.4-inch format power handling, and the neodymium motor's weight advantage are the primary design criteria.

What are the key features of the 140NCD? ▾

What applications is the 140NCD suited for? ▾

What are the power and sensitivity specs of the 140NCD? ▾

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