

8"**81XR****Woofers****Key features:**

- NONPARALLEL VOICE AND LOW FREQUENCY REPRODUCTION QUALITY
- PATENTED MAGNETIC CIRCUIT AND AIR VENTING DESIGN
- EXTREMELY LOW HARMONIC DISTORTION

Design notes:

The 81XR was designed to be simply the best driver for 2-way and multi-way systems on the market, yet this driver will also shine in sub-woofer applications. The combination of our XR patented technology with static shorting coil brings an nonparallel opportunity to the audio designers. The common request for 2-way speakers is ,Áúmore of everything,Áù. Designers wishes for more bass, more mids. Well, there you have it! But not only that.

We bring this with clarity in the mid-frequencies and undistorted bass. Our designers were able to achieve THD below 0.5% from 20Hz up to 2.5kHz. There isn,Áôt another driver like this on the market.

Motor Design

The magnetic design incorporates large neodymium magnets placed along the voice coil winding, together with the 2nd and static coil placed on the pole piece. This

has allowed us to push the cone excursion to 30mm peak to peak, while lowering the inductance. The shorting coil covers the complete main coil excursion. This is also an improvement compared to some previous designs on the market that utilizes static coil. Unique gap side venting ensures good air circulation, lowers air noise and greatly improves the reliability of this driver.

Specifications:**General specs**

Nominal Diameter: 8"

Rated Impedance: 8 ohm

Power handling

AES Power: 200 watts

Program Power: 400 watts

Peak Power: 800 watts

Voice Coil

Diameter: 2.5 in.

Winding wire: Copper Sq.

Former: Glass Fiber

Winding height: 18.3 mm

T/S Parameters

Resonant frequency: 73 Hz

Re: 5.5 ohm

Qes: 0.37

Qms: 1.466

Qts: 0.3

Vas: 7.2 liters

Sd: 201 cm²

Sensitivity: 93 dB

Mms: 38 grams

Bl: 16

Le: 0.19 mH

Design details

Surround Material: Fabric

Cone material: Paper

Spider: Nomex

Plate thickness: 31 mm

Peak to peak linear cone displacement: 28.4 mm

Overall diameter: 210 mm

Bolt circle diameter: 195 mm

Baffle cutout dia.: 186.88 mm

Number of mounting holes: 8

Depth (flange to rear): 128.3 mm

Net weight: 4.9kg

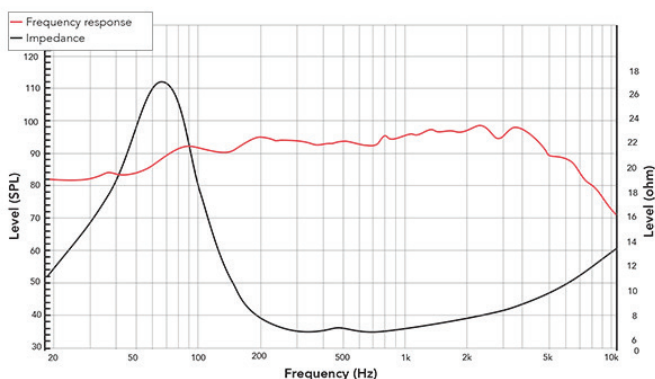
Ordering codes:

81XR-X8 ohm-424A

Recone kits:

RC81XRX-424A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance

Frequency response measured on IAC baffle

2D drawing