12" | 121XR

Neodymium X-Woofer

REDCAT

Key features:

- EXTENDED FREQUENCY RESPONSE, HIGH EXCURSION, ULTRA LOW THD
- STATIC DEMODULATION COIL, LARGE SPIDER WITH STITCHED TINSEL WIRES
- CARBON FIBER LOADED PAPER CONE

Design notes:

The 121XR 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 ‚Äúmore of everything‚Äù. 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‚Äôt 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. Unique gap venting ensures good air circulation and greatly improves the reliability of this driver.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	8 ohm

Power handling	
AES Power:	500 watts
Program Power:	1000 watts
Peak Power:	2000 watts

Voice Coil	
Diameter:	2.5 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	18.3 mm

T/S Parameters	
Resonant frequency:	46 Hz
Re:	5.6 ohm
Qes:	0.42
Qms:	1.56
Qts:	0.33
Vas:	69.1 liters
Sd:	531 cm2
Sensitivity:	95.78 dB
Mms:	66.8 grams
Bl:	16
Le:	0.16 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	31 mm
Peak to peak linear cone displacement	12.7 mm
Overall diameter:	320 mm
Bolt circle diameter:	299 mm
Baffle cutout dia.:	281 mm
Number of mounting holes:	8
Depth (flange to rear):	172.5 mm
Net weight:	5.1kg

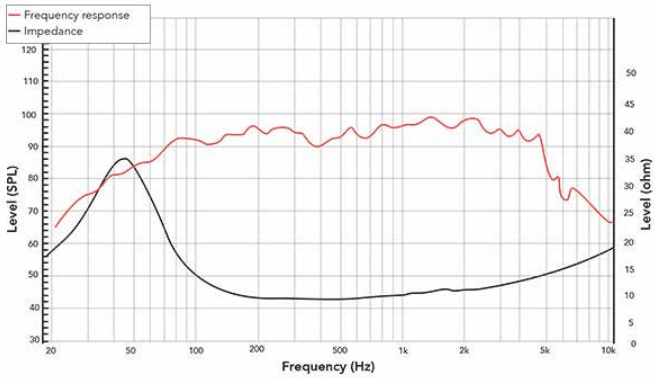
Ordering codes:

121XRX8-352

Recone kits:

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