



Code: DR-12-012-4R-B2-C0001

REDCATT 121FIND 12-inch ferrite professional mid-woofer: 250 W AES, 96.4 dB sensitivity, 4 Ω , Fs 59 Hz, 50.8 mm voice coil. Full T/S parameters, datasheet, 2D drawing and STEP CAD file.

KEY FEATURES

- ✓ EXTENDED FREQUENCY RESPONSE
- ✓ Proven cost effective design
- ✓ Nomex spider, water-repellent & non-flammable paper cone

QUICK SPECS

Impedance
4 Ω

Program Power
500 W

Sensitivity
96.40 dB

Fs
59.00 Hz

Magnet
Ferrite

Voice Coil
50.8 mm

 [Datasheet \(PDF\)](#)

 [2D Drawing](#)

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

Design Notes

The 121FIND is a high efficiency, (96 dB 1watt/ 1 meter) 12inch woofer with incredibly linear frequency response characteristics, high power handling capability while generating low harmonic distortion artifacts. 121FIND uses lightweight cone which movement is controlled by "M" shaped surround. Pistonic behavior and the long term stability

Is supported by Nomex spider. The woofer cone is treated to withstand harsh environments and high humidity.

delivers seizable amounts of low frequencies.

The metal parts in the speaker are coated and tested to ensure extreme weatherization protection.

Specifications

GENERAL SPECS

Nominal Diameter	12"
Rated Impedance	4 Ohm
Magnet	Ferrite
Basket Material	Steel

POWER HANDLING

AES Power	250 W
Continuous Power	500 W
Peak Power	1000 W

VOICE COIL

Diameter	50.8 mm
Winding Wire	CCAW
Former	Glass Fiber
Winding Height	11.7 mm

Resonant Frequency (Hz)	55.55 Hz
Re	3.10 Ω
Qes	0.560
Qms	7.34
Qts	0.520
Vas	59.10 liters
Sd	531.00 cm ²
Mms	49.10 grams
Rms	2.48
Cms	0.1500
Bl	10.20 T·m
Le	0.320 mH
Sensitivity	96.40 dB

General Material

Table

Cone/Dome Material	Paper GF
Spider	Nomex
T-Plate	8 mm
Xmax (peak)	1.85 mm
Xmech	9.85 mm
Overall Diameter	320.00 mm
Bolt Circle Diameter	302.00 mm
Baffle Cutout Dia.	282.00 mm
Mounting Holes	8
Depth (flange to rear)	124.00 mm
Net Weight	4.60 kg
Packaging Dimensions	360X360X180 mm

ORDERING CODES

Product Code DR-12-012-4R-B2-C0001

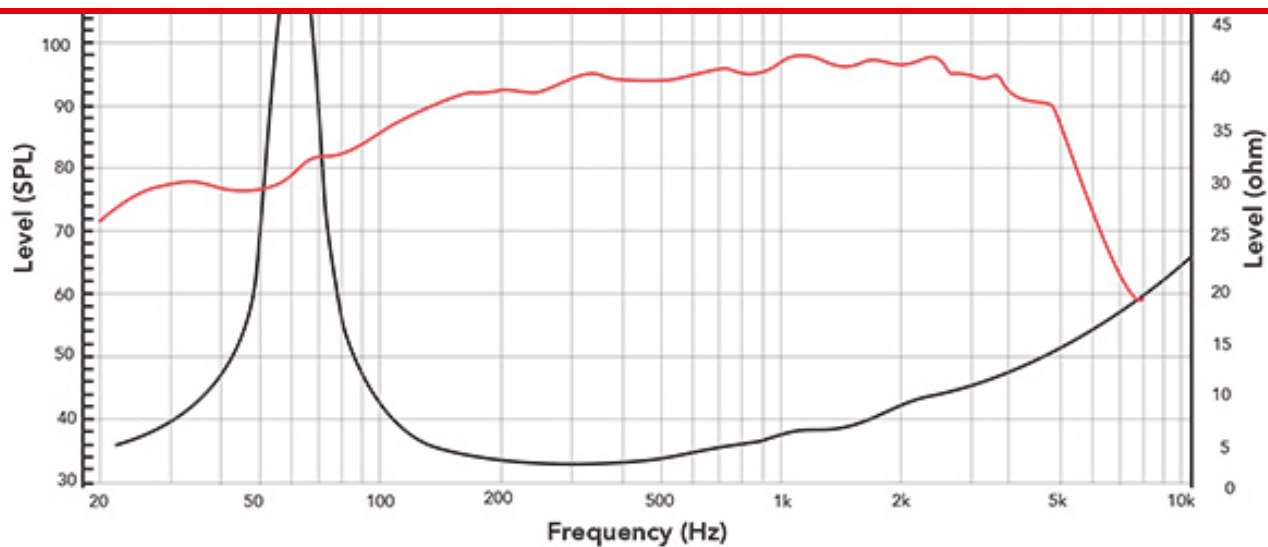
DOWNLOADS

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

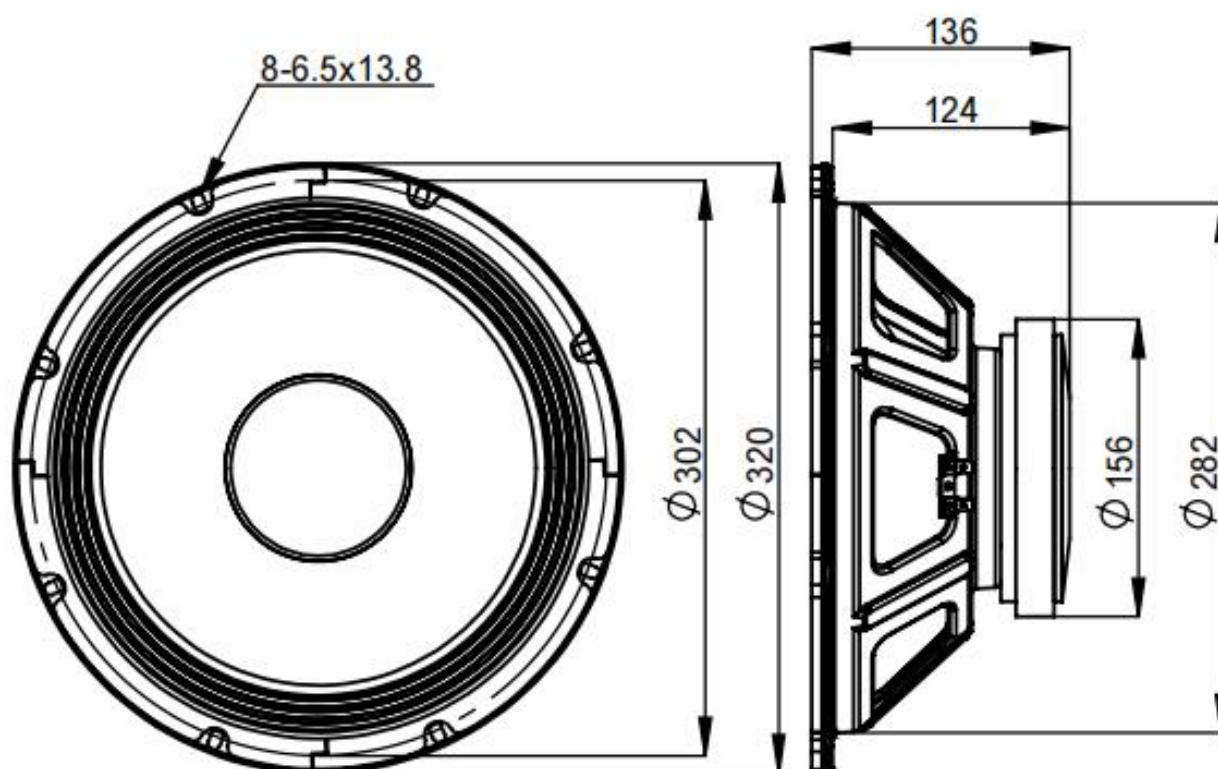
Covered by the REDCATT **3-year Limited Warranty**.

Frequency Response & Impedance





2D Drawing



PA speaker systems, compact touring cabinets, and permanently installed enclosures crossed to a compression driver or horn. It features a weatherized glass fiber treated paper cone, M-shaped fabric surround, non-flammable Nomex spider, and coated steel basket for harsh environment and high-humidity protection. The 50.8mm CCAW voice coil on a glass fiber former is rated at 250W AES. Sensitivity is 96.4 dB (1W/1m). With a Qts of 0.52, this driver uses a compliant suspension design suited to moderate-volume enclosures, and operates effectively in both sealed and vented configurations depending on application.

The 121FINDX4-233 handles approx. 250 W AES and 500 W continuous power into 4 ohms; two drivers wired in series present an 8-ohm load with a combined +3 dB sensitivity gain. A high-pass filter at 40-60 Hz is recommended depending on alignment. The operating bandwidth is approximately 65-843 Hz, with cone beaming onset near 843 Hz defining the practical upper limit; a crossover to a compression driver on horn at 800 Hz to 1.2 kHz is required. The very low Le of 0.32 mH keeps impedance rise minimal through the crossover region, simplifying passive network design and improving crossover accuracy compared to higher-inductance alternatives.

This driver is suited for compact single-driver vented 2-way PA touring cabinets; 2-way portable and installed PA enclosures for live sound and fixed-venue reinforcement; stage monitor wedges crossed to a compression horn at 800 Hz to 1.0 kHz; and compact sealed installed 2-way systems where a subwoofer provides low-frequency support below 80-100 Hz. The weatherized cone, fabric surround, and coated steel basket are suited to demanding outdoor and touring environments where moisture, humidity, and mechanical stress are factors.

Recommended enclosure volumes are simulated results. For best enclosure volumes and tuning, we recommend secondary simulation and careful evaluation. Several rounds of samples and fine-tuning may be required for optimal results.

Enclosure Recommendations

Recommended enclosure alignments (bass reflex):

approx. 57 Hz, HP filter 52 Hz

- 40 liters tuned to 56 Hz: extended low-frequency, requires HP filter protection; -3 dB

approx. 48 Hz, HP filter 44 Hz

Frequently Asked Questions

What are the key features of the 121FIND?



What enclosure is recommended for the 121FIND?



What applications is the 121FIND suited for?



What are the power and sensitivity specs of the 121FIND?



Related professional mid-woofers & midranges

[All professional mid-woofers & midranges](#) [All 12-inch woofers](#)



LF 12"
12NPM



LF 12"
121FIND



LF 12"
121NPM



LF 12"
121XR

Professional woofers

Professional subwoofer drivers

Professional mid-woofers & midranges

Professional compression drivers

Professional tweeters

Full-range drivers

Coaxial drivers

Neodymium drivers

Full catalog & filters

COMPANY

About

OEM & ODM Development

Engineering Data & API

Technology

Quality

Warranty

FAQ

Contact

Warranty Claim

CONTACT

✉ info@redcatt.net

☎ (+86) 769 8318 1898

📍 Dongguan, China

