



## KEY FEATURES

- 99db SPL 1W / 1m ( LF ) average sensitivity
- 62 mm ( 2.5" ) high temperature voice coil ( LF )
- 500 W AES program power ( LF )
- Double aluminium demodulating rings
- Double neodymium magnet assembly
- Water protected cone ( front )
- 1" exit HF neodymium compression driver
- 44 mm ( 1.75" ) HF high temperature voice coil
- 60 degrees nominal dispersion

**PART NUMBER:** 13110N0108

**Application:** Compact bass reflex boxes.

**Description:** The 10NHCX is a 10" / 1" coaxial transducer with integrated HF horn, designed for use in compact reflex enclosures with high SPL and nominal dispersion of 60 degrees.

The low profile, smooth curvilinear LF cone together with HF horn increase the SPL in vocal range, which ensure big headroom. The cone with water prove protective coating, allowing application in a wide range of environments. The state-of-the-art 62 mm (2.5 in) LF voice coil has Glassfiber former, which together with high temperature resistant resin ensure high reliability by high power.

The double aluminium demodulating rings reduce distortion and inductance and improve transient response.

The neodymium 1" exit compression driver adopted is our ND2545 model.

The HF driver diaphragm assembly, using triple layer polyester dome this together with phasing plug improve linearity of frequency response in high end.

## SPECIFICATIONS

Nominal diameter 263 mm (10 in)  
Impedance LF 8 OHM / HF 16 Ohm  
Minimum impedance LF 6.6 Ohm  
Frequency range 70 – 20000 Hz  
Dispersion angle 60 deg

### **LF unit**

Sensitivity (200-1000 Hz) 99 dB  
Power Capacity AES <sup>1</sup> 250 W  
Program Power <sup>2</sup> 500 W  
Voice Coil Diameter 62 mm (2.5 in)  
Voice Coil Material Copper Clad Aluminium  
Voice Coil Former Glassfiber  
V. C. Winding Depth 12 mm  
Magnet Gap Depth 7 mm  
Cone Material Paper  
Basket Die Cast Aluminium  
Magnet Neodymium  
Flux Density 1.55 T

### **HF unit**

Minimum impedance HF 12.74 Ohm  
DC resistance 10.6 ohm  
Sensitivity (1-15 kHz) 1110 dB  
Power capacity (1-20 kHz) 40 W  
Program power 800 W  
Voice coil diameter 44 mm (1.75 in)  
Winding material (Copper Clad Aluminium)  
Diaphragm material Sandwich polyester  
Flux density 1.9 T

## THIELE-SMALL PARAMETERS

Fs 71.63 Hz  
Qms 11.23  
Qes 0.243  
Qts 0.238  
Vas 24.54 Litres  
Mms 28.84 grams  
Re 5.7 Ohms  
Sd 317.3 cm<sup>2</sup>  
Xmax\* ± 4.25 mm  
Cms 0.171 mm/N  
BL 17.44 T.m  
Le at 1kHz 0.316 mH

*1. AES standard. Power is calculated on rated minimum impedance.  
Measurement is in 30 L box enclosure tuned 60 Hz using a 50-1000 Hz  
band limited pink noise test signal applied continuously for 2 hours.  
2. Program power is defined as 3db greater than AES Power Capacity.  
\* Linear Mathematical Xmax is calculated as:  $(Hvc - Hg)/2 + Hg/4$   
where Hvc is the voice coil depth and Hg is the gap depth.*

## MOUNTING INFORMATION

Overall Diameter 263 mm (10 in)  
Depth 167 mm  
Baffle Hole Diameter 225 mm  
Mounting Holes 8 diam. 7 mm  
Bolt Circle Diameter 244 mm  
Net Weight 4.1 kg

### **LF Recone Kit:**

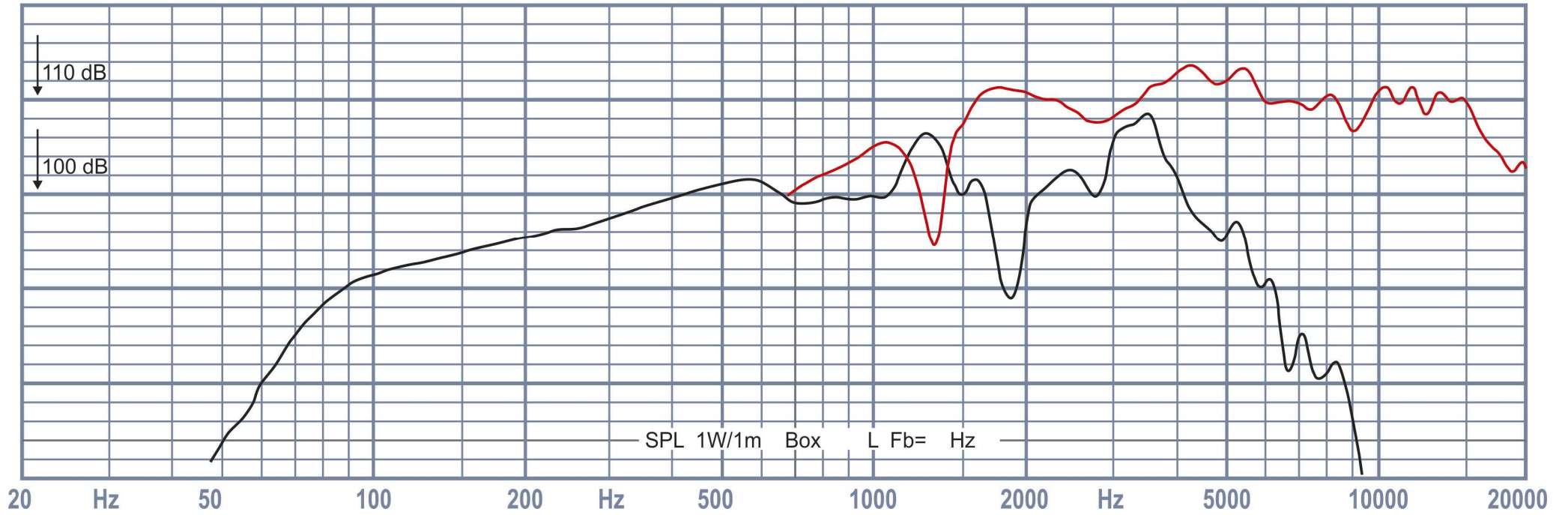
**RK10NH CX**, part No: R3110N0108

### **HF Service Kit:**

Diaphragm assembly:  
**NDA45-16** PET part No: R411700316

## Frequency Responce

SPL 1W/1m OBERTON 10NHCX



## Drawings

