

## KEY FEATURES

- 97 db SPL 1W / 1m ( LF ) average sensitivity
- 77 mm ( 3" ) high temperature voice coil ( LF )
- 700 W AES program power ( LF )
- Double aluminium demodulating rings
- Silicon spider
- Water protected cone
- 1.4" exit HF neodymium compression driver
- 72 mm (2.85") HF high temperature voice coil
- 80 degrees nominal dispersion
- Very light weight

**PART NUMBER:** 12110N0108

**Application:** Stage monitors and compact bass reflex boxes.

**Description:** The 10NCX is a 10" / 1.4" coaxial transducer designed for use in compact reflex enclosures and stage monitors with a nominal dispersion of 80 degrees. The low profile, smooth curvilinear LF cone provides smooth response within its intended frequency range. The cone with water prove protective coating, allowing application in a wide range of environments. The state-of-the-art 77 mm (3 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 on the magnet structure reduce distortion and inductance and improve transient response. The neodymium 1.4" exit compression driver adopted is our ND72CT model. The HF driver diaphragm assembly, using cotton composite dome this together with phasing plug improve linearity of frequency response in high end. This new dome material provides excellent vocal reproduction with very warm and clean sounding. The HF magnet structure has cooper ring on the pole piece, which reduces the inductance figure of frequencies above 10 kHz, improving phase and impedance linearisation. This ensures extremely high SPL in the high end of the frequency response. The neodymium 1.4" exit compression driver adopted is our ND72HB model. The HF driver diaphragm assembly, using hybrid dome this together with phasing plug improve linearity of frequency response in high end. The double magnetic structure allow to get maximum performance. The HF part of magnet structure has cooper ring on the pole piece, which reduces the inductance figure of frequencies above 10 kHz, improving phase and impedance linearisation. This ensures extremely high SPL in the high end of the frequency response.

## SPECIFICATIONS

Nominal diameter 263 mm (10 in)  
Impedance LF 8 OHM / HF 16 Ohm  
Minimum impedance LF 6.57 Ohm  
Frequency range 70 – 15000 Hz  
Dispersion angle 80 deg

**LF unit**

Sensitivity (200-1000 Hz) 97 dB  
Power Capacity AES <sup>1</sup> 350 W  
Program Power <sup>2</sup> 700 W  
Voice Coil Diameter 77 mm (3 in)  
Voice Coil Material Copper Clad Aluminium  
Voice Coil Former Glassfiber  
V. C. Winding Depth 15 mm  
Magnet Gap Depth 9 mm  
Cone Material Paper  
Basket Die Cast Aluminium  
Magnet Neodymium  
Flux Density 1.1 T

**HF unit**

Minimum impedance HF 11.7 Ohm  
DC resistance 10 ohm  
Sensitivity (1-15 kHz) 105.5 dB  
Power capacity (1-20 kHz) 75 W  
Program power 150 W  
Voice coil diameter 72 mm (2.85 in)  
Winding material (Copper Clad Aluminium)  
Diaphragm material Cotton  
Flux density 1.85 T

## THIELE-SMALL PARAMETERS

Fs 79.29 Hz  
Qms 10.01  
Qes 0.298  
Qts 0.289  
Vas 20.614 Litres  
Mms 28.03 grams  
Re 5.6 Ohms  
Sd 317.3 cm<sup>2</sup>  
Xmax\* ± 5.25 mm  
Cms 0.144 mm/N  
BL 16.21 T.m  
Le at 1kHz 0.56 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 163.6 mm  
Baffle Hole Diameter 225 mm  
Mounting Holes 8 diam. 7 mm  
Bolt Circle Diameter 244 mm  
Net Weight 5.16 kg

### LF Recone Kit:

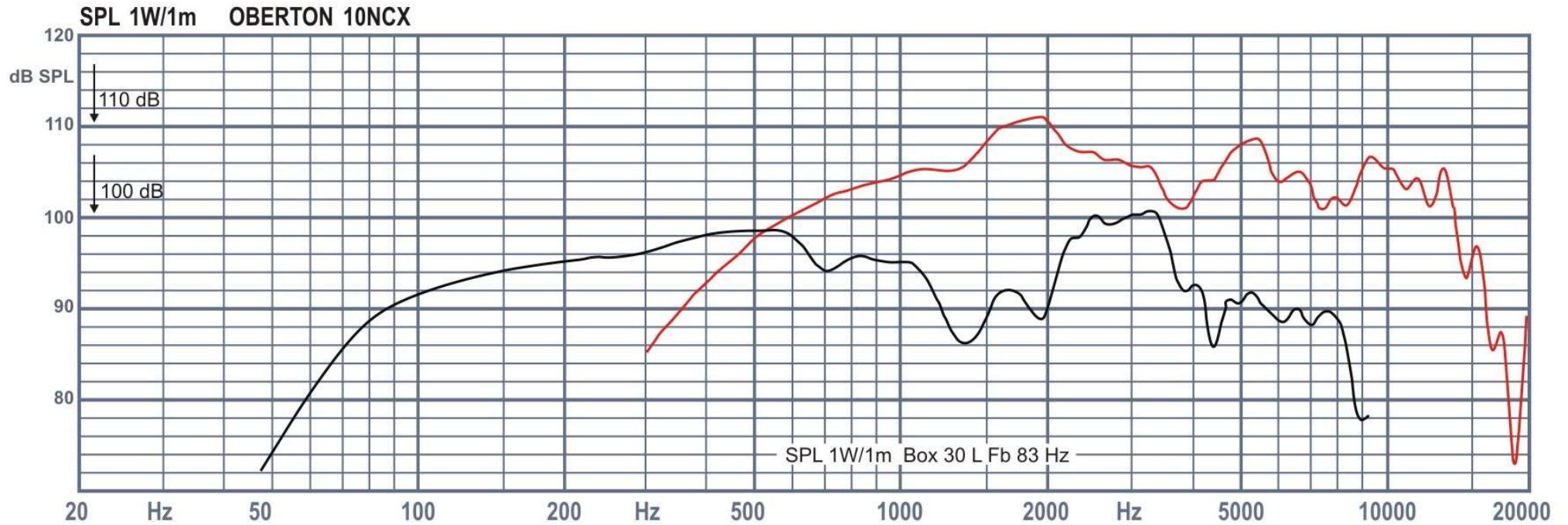
**RK10NCX**, part No: R2110N0108

### HF Service Kit:

Diaphragm assembly:

**DA75CT/h-16** part No: R412800716

## Frequency Responce



## Drawings

