

# DRIVER ND940

Professional High Frequency Transducer

PART NUMBER **15129053**

The ND940 is a ultra compact size, high performance, high power handling 4.0-inch diaphragm compression driver with a 1.4 inch exit throat. A thin copper ring is precision pressed on to the pole piece in order to modify and lower the inductance characteristics of the magnetic circuit and voice coil providing a controlled extension of the acoustic frequency response. The voice coil assembly is designed using a high strength, high temperature Kapton® voice coil former and edge wound copper clad aluminium wire directly joined to the diaphragm by RCF proprietary Direct Drive kapton technology. The ND940 features a 4-slot, optimised geometry, phase plug design. Extended computer assisted mathematical modelling and testing has resulted in a geometry that provides a balanced acoustic performance controlling and lowering air distortion and maximizing output.

## Features

- 4.0 inch, Kapton former, edge wound aluminium voice coil
- 1.4" throat
- 280 Watt continuous program power handling
- 110 dB Sensitivity
- 500 Hz –20 KHz Frequency range
- Titanium dome, Polyimide surround
- 4 slot phase plug
- The minimum size 4" driver available

## Applications

With a wide frequency response range (500 Hz – 20.000 Hz) and 280 Watt power handling, the ND940 is the ideal driver for heavy duty professional applications.

### General Specifications

Exit Throat Diameter	35.5/1.4	mm/inch
Rated Impedance	8	ohm
Power handling capacity <sup>1</sup>		
continuous program above 0.8 kHz	280	Watt
AES above 0.8 kHz	140	Watt
Sensitivity 1 W, 1 M, on axis, on horn <sup>2</sup>	110	dB
Frequency Range <sup>3</sup>	500 - 20000	Hz
Diaphragm Material	Pure Titanium	
Suspension Material	Polyimide	
Suspension Design	Flat	
Minimum Impedance	8 ohm at 3500 Hz	
Voice Coil Diameter	100/4.0	mm/inch
Voice Coil Material	Edgewound Aluminum	
Voice Coil Former Design	Direct Drive Kapton	
Number of layers	1 - Outside	
BL Factor	16	T · m
Flux Density	1.9	T
Phase Plug Design	4 slot	
Phase Plug Material	Aluminum	
Magnetics	Neodymium	
Voice Coil Demodulation	Copper ring	

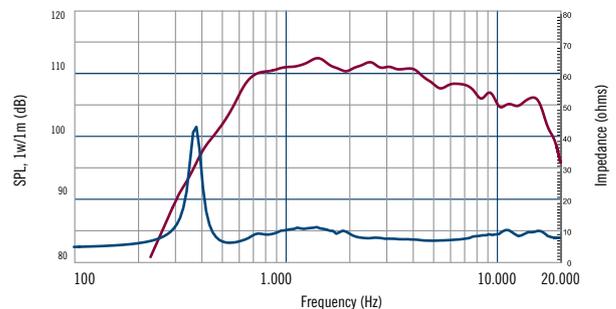
### Mounting Information

Overall Diameter	140/5.5	mm/inch
Overall Height	54/2.1	mm/inch
Mounting		
4 x 6 mm threaded holes at 180 deg.	101.6/4.0	mm/inch
Net Weight	3/6.4	kg/Lbs
Shipping Weight	3.3/7.1	kg/Lbs



### Notes to Specifications

1. Continuous pink noise power ratings are derived from suggested AES standards sending a pink noise signal having a 6 dB crest factor with a high pass filter set at the specified lower limiting frequency for two hours. Continuous program power is a conservative power rating for reproduction of typical audio program material.
2. Sensitivity measurement is based on pink noise signal with input power of 1 watt and measured at 1 meter from the mouth of a horn with a Q of 15 on axis and averaged between 2 and 5 kHz.
3. Frequency range is defined as the measured frequency response -10dB relative to the rated sensitivity.



Frequency response and electrical impedance curve of the compression driver mounted on 90°Hx40°V horn with input signal of 2.83 Volt.

