

## DRIVER

# ND640

Professional High Frequency Transducer

The ND640 is a high performance 2.5-inch diaphragm compression driver with a 1.4 inch exit throat featuring the smallest size of the art technology. The diaphragm are precision completely formed from pure titanium. Voice coil assembly is designed using high temperature kapton former and it is joined to the diaphragm by RCF proprietary Direct Drive kapton technology. Diaphragm suspension is designed by extensive FEM study for low distortion and low frequency range extension.

PART NUMBER **15129051**

- 2.5-inch Diaphragm, 1.4-inch Exit Throat/ Pure Titanium Compression Driver
- 180 watt Continuous program power handling
- Frequency range: 700Hz - 20kHz
- 3-slot, optimized geometry phase plug
- Direct Drive kapton technology
- Copper inductance ring for extended response
- Vented, damped, low distortion suspension System
- Neodymium magnet assembly
- Compact size

## APPLICATIONS

Perfect driver for professional high performance applications, from high power 2-way systems to multiple-way long throw systems and medium to large format line arrays. Very compact size and easy to crossover, offer the clarity of the 1" and the efficiency and power handling of a large format compression driver. Very good linearity and efficiency in combination with RCF HF series horns.



## NOTES TO SPECIFICATIONS

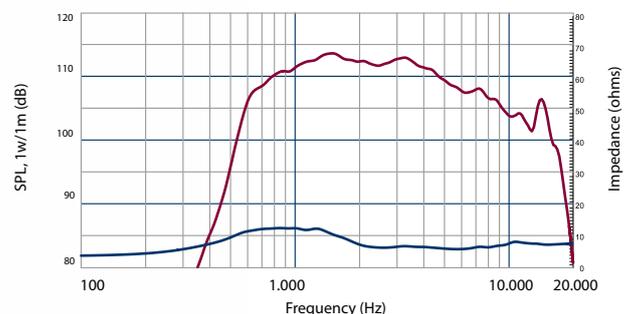
1. Continuous pink noise power ratings are derived from suggested AES standards sending a pink noise signal having a 6 dB crest factor with a high pass filter set at the specified lower limiting frequency for two hours. Continuous program power is a conservative power rating for reproduction of typical 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. The data are not binding; RCF reserves the right to modify the data at any time and without previous notice.

## GENERAL SPECIFICATIONS

Exit Throat Diameter	35.5/1.4	mm/inch
Rated Impedance	8	ohm
Power handling capacity <sup>1</sup>		
continuous program above 1.0 kHz	180	Watt
AES above 1.0 kHz	90	Watt
Sensitivity 1 W, 1 M, on axis, on horn <sup>2</sup>	110	dB
Frequency Range <sup>3</sup>	700 - 20000	Hz
Diaphragm Material	Pure Titanium	
Suspension Material	Pure Titanium	
Suspension Design	Double Roll	
Minimum Impedance	7.5 ohm at 2500 Hz	
Voice Coil Diameter	63.7/2.5	mm/inch
Voice Coil Material	Edgewound Aluminum	
Voice Coil Former Design	Direct Drive Kapton	
Number of layers	1 - Outside	
BL Factor	9.8	T · m
Flux Density	1.9	T
Phase Plug Design	3 slot	
Phase Plug Material	Aluminum	
Magnetics	Neodymium	
Voice Coil Demodulation	Copper ring	

## MOUNTING INFORMATION

Overall Diameter	102/4	mm/inch
Overall Height	40/1.6	mm/inch
Mounting		
4 x 6 mm threaded holes at 90 deg.	87/3.4 and 76.2/3	mm/inch
Net Weight	1.1/2.4	kg/Lbs
Shipping Weight	1.4/3	kg/Lbs



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

700

20.000

20

100

1.000

10.000

20.000