

## DRIVER

# N850

## Professional High Frequency Transducer

The N850 is a high quality 3.0-inch diaphragm compression driver with a 2 inch exit. The diaphragm is precision formed from .05 mm thick pure titanium. The suspension is based on a Mylar vented design. The front aluminum adaptor guarantee a very smooth transition from the phase plug to the 2" output interface.

PART NUMBER **15120058**

- 3-inch Diaphragm, 2.0-inch Exit Throat Titanium Compression Driver
- 180 watt Continuous program power handling
- Frequency range: 500Hz - 20kHz
- 3-slot, optimized geometry phase plug
- Aluminum rear cover and front adaptor
- Copper inductance ring for extended response
- Vented suspension system

## APPLICATIONS

The N850 is a compression driver for professional applications, from high power 2-way systems to multiple-way long throw systems and large format arrays. Very good linearity and efficiency in combination with RCF H6040 horn (60 X 40 degrees dispersion).



## NOTES TO SPECIFICATIONS

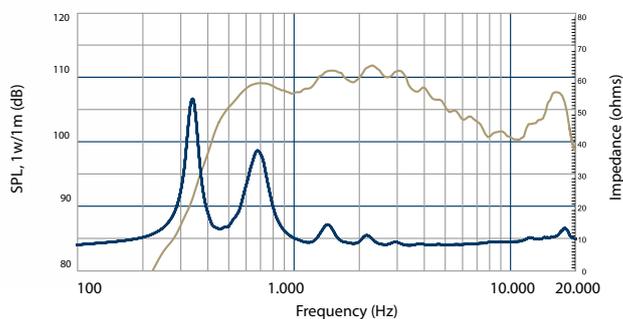
1. Continuous pink noise power ratings are derived from suggested AES standards sending a pink noise signal having a 6 dB crest factor with a high pass filter set at the specified lower limiting frequency for two hours. Continuous program power is a conservative power rating for reproduction of typical 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                                | 50.8/ 2            | mm/inch |
| Rated Impedance                                     | 8                  | ohm     |
| Power handling capacity <sup>1</sup>                |                    |         |
| continuous program above 1.2 kHz                    | 180                | Watt    |
| AES above 1.0 kHz                                   | 90                 | Watt    |
| Sensitivity 1 W, 1 M, on axis, on horn <sup>2</sup> | 109                | dB      |
| Frequency Range <sup>3</sup>                        | 500 - 20000        | Hz      |
| Diaphragm Material                                  | Pure Titanium      |         |
| Suspension Material                                 | Mylar              |         |
| Suspension Design                                   | Radial             |         |
| Minimum Impedance                                   | 8.8 ohm at 3500 Hz |         |
| Voice Coil Diameter                                 | 74.4/3.0           | mm/inch |
| Voice Coil Material                                 | Edgewound aluminum |         |
| Voice Coil Former Design                            | Straight -Kapton   |         |
| Number of layers                                    | 1 - Outside        |         |
| BL Factor   | 12                 | T · m   |
| Flux Density  | 1.85               | T       |
| Phase Plug Design                                   | 3 slot             |         |
| Phase Plug Material                                 | Composite          |         |
| Magnetics   | Ceramic            |         |
| Voice Coil Demodulation                             | Copper ring        |         |

## MOUNTING INFORMATION

|                                    |           |         |
|------------------------------------|-----------|---------|
| Overall Diameter                   | 180/7.09  | mm/inch |
| Overall Height                     | 95/3.7    | mm/inch |
| Mounting                           |           |         |
| 4 x 6 mm threaded holes at 90 deg. | 101.6/4.0 | mm/inch |
| Net Weight                         | 4.7/10.3  | kg/Lbs  |
| Shipping Weight                    | 5/11.0    | 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

