

# WOOFER LF18N401

Professional Low Frequency Transducer

PART NUMBER 11100010

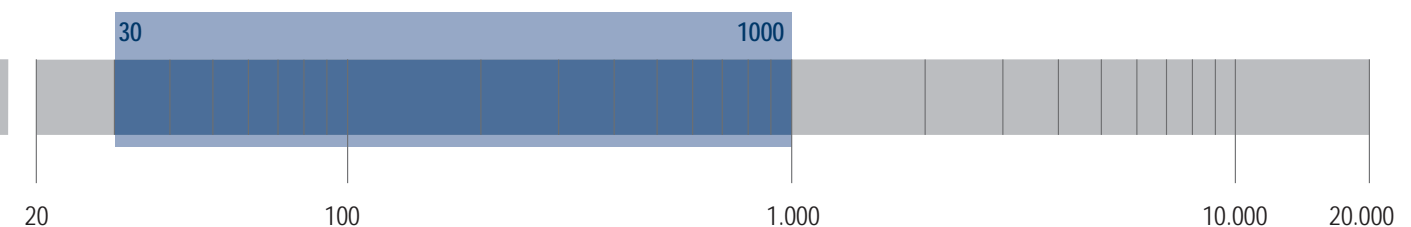
Incredibly linear frequency response characteristics, the highest power handling of any comparable 18-inch neodymium transducer, the lowest power compression. The LF18N401 uses a fibre loaded cone assembly along with a high excursion triple roll, constant geometry surround. This combination provides remarkable strength and a peak to peak maximum excursion of 52 mm. The unique Dual-forced air venting system guarantee a very efficient voice coil ventilation for minimum power compression and higher power handling.

## Features

- 4-inch, fibreglass inside-outside copper voice coil
- 2400 Watt continuous program power handling
- 98 dB Sensitivity
- 30 Hz - 1 kHz Frequency range
- Dual-forced air ventilation and 15 mm top plate for minimum power compression
- Dual spider design with silicon based dampening control
- Triple-roll surround and corrugated straight cone geometry

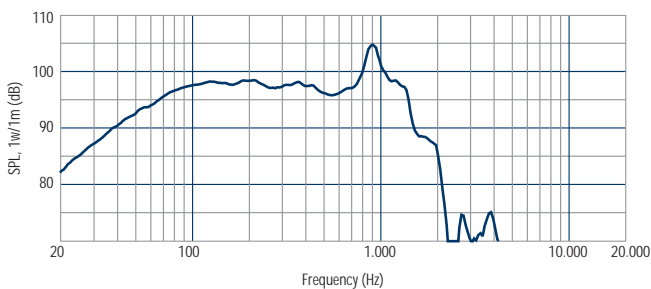
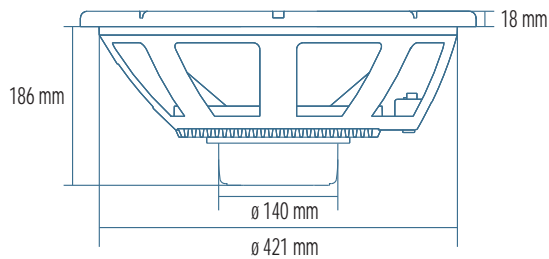
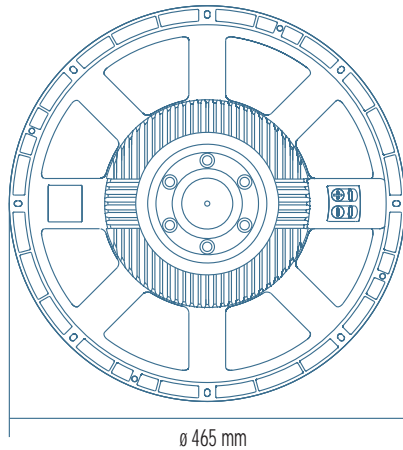
## Applications

The LF18N401 is ideal for use in applications where incredible power handling is required, long excursion and light weight. Specially designed for touring, perfect for high quality professional bass reflex and bass-horn systems. The transducer's low frequency extension and control also makes it ideal for use within critical listening applications such as studio monitoring subwoofer systems.

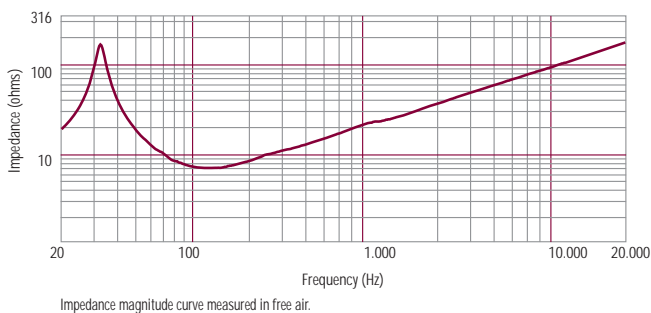




8 x  $\phi$  6.5 mm holes to 45°  
on 442 and on 447 mm



Frequency response curve of the loudspeaker taken in a hemispherical, free field environment and mounted in a closed box with an internal volume of 600 litres (21.2 cu.ft) enclosing the rear of the driver.



Impedance magnitude curve measured in free air.

## Notes to Specifications

1 Program Power is defined as 3 dB greater than AES power. - 2 AES standard. - 3 Sensitivity measurement is based on a 100-500 Hz pink noise signal with input power of 2.83V @ 8 Ohms. - 4 Thiele-Small parameters are measured after a 2 hour warm up period running the loudspeaker at full power handling capacity. - 5 The maximum linear excursion is calculated as:  $(Hvc - Hg)/2 + Hg/4$  where Hvc is the voice coil depth and Hg the gap depth. - 6 Calculated for front mounting on 18 mm thick board.

## General Specifications

Nominal Diameter	460/18	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	2400	Watts
Power handling capacity <sup>2</sup>	1200	Watts
Sensitivity <sup>3</sup>	98	dB
Frequency Range	30 - 1000	Hz
Effective Piston Diameter	395/15.6	mm/inch
Max Excursion Before Damage (peak to peak)	52/2.1	mm/inch
Minimum Impedance	6.3	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	25/1.0	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	15/0.6	mm/inch
Cone Material	No pressed pulp	
Cone Design	Straight	
Surround Material	Polycotton	
Surround Design	Triple roll	

## Thiele - Small Parameters <sup>4</sup>

Resonance frequency	Fs	32	Hz
DC resistance	Re	5.1	ohm
Mechanical factor	Oms	6.5	
Electrical factor	Oes	0.27	
Total factor	Ots	0.26	
BL Factor	BL	27.8	T · m
Effective Moving Mass	Mms	201	gr
Equivalent Cas air load	Vas	257	liters
Effettive piston area	Sd	0.122	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	8.8	mm
Voice - coil inductance @ 1KHz	Le1K	2.5	mH
Half-space efficiency	Eff	3.01	%

## Mounting Information

Overall Diameter	465/18.3	mm/inch
Bolt Circle Diameter	442-447/17.4-17.6	mm/inch
Bolt Hole Diameter	6.5/0.3	mm/inch
Front Mount Baffle Cut-out	424/16.7	mm/inch
Rear Mount Baffle Cut-out	424/16.7	mm/inch
Depth	205/8.1	mm/inch
Volume occupied by the driver <sup>6</sup>	5.5/0.19	liters/ft3

## Shipping Information

Net Weight	9.1/20.2	Kg/Lbs
Shipping Weight	9.8/21.8	Kg/Lbs