

XR1564

Key Features

- 1.5 inch throat entry
- Aluminium construction for excellent heat transfer
- Uniform on-axis and off-axis frequency response
- 60° x 40° horizontal and vertical constant coverage
- Very low distortion at high sound pressure
- Improved compression driver cooling
- Rotatable structure

General Description

The XR1564 is a 1.5 inch throat entry constant directivity horn. It has been developed to reach optimum performances when it will be coupled with 1.5 inch exit Eighteen Sound high frequency compression drivers like the exclusive beryllium ND4015BE and the high performance nitrogen NSD4015N unit.

All XR series horns have been designed in order to reach smooth driver frequency response, to maintain constant coverage and directivity and eliminating the midrange narrowing and high frequency beaming problems common of many similar horns on the market.

XR1564 horn is made in low pressure injected aluminium material, in order to obtain the best performance under many point of view:

- thermal dissipation: if compared to equivalent size plastic horn, it is capable to reduce up to 30°C the steady state compression driver working temperature when operating at full power. This results in a lower power compression ratio (down to 1dB) and higher driver power handling (30% higher);

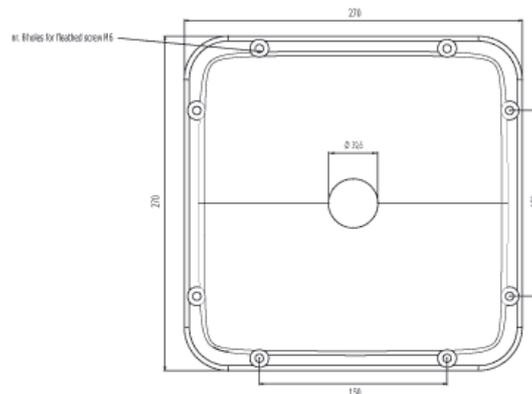
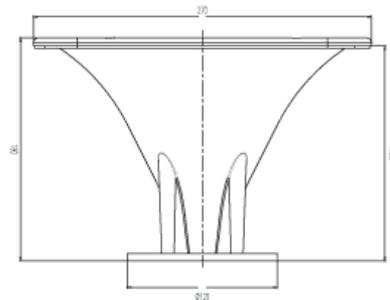
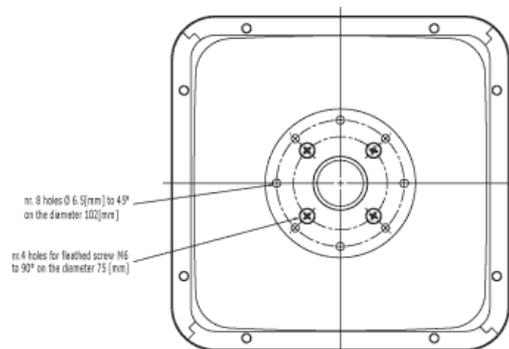
- mechanical: it does not require any extra support when used in combination with large format HF ceramic drivers. At the same time the aluminum structure eliminates the problem of horn resonance with optimum waterfall and impulse system behavior.

The XR1564 provides nominal 60° Horizontal x 40° Vertical pattern control, with consistent on-axis and off-axis frequency response from 1,2kHz to 16kHz in both horizontal and vertical planes. Horn directivity index is constant down to 1,2kHz.

Constant Coverage Horn



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CONSTANT COVERAGE HORNS

XR1564

Constant Coverage Horn

CONSTANT COVERAGE HORNS

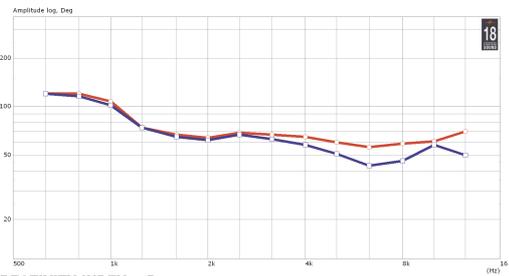
GENERAL SPECIFICATIONS

THROAT DIAMETER	39,7 mm (1,56 in)
HORIZONTAL COVERAGE (-6DB)	60° (10 ÷ -2) average range (1,25kHz - 12,5kHz)
VERTICAL COVERAGE (-6 DB)	40° (25 ÷ 0) average range (1,25kHz - 12,5kHz)
DIRECTIVITY INDEX	11 dB (2 ÷ -1) average range (1,25kHz - 12,5kHz)
USABLE FREQUENCY RANGE	Above 800 Hz
RECOMM. CROSS.FREQUENCY	800 Hz or more
SENSITIVITY (ON AXIS) (1)	112 dB
FREQUENCY RANGE	800 Hz ÷ 18KHz
MATERIAL	Low gravity injected aluminum

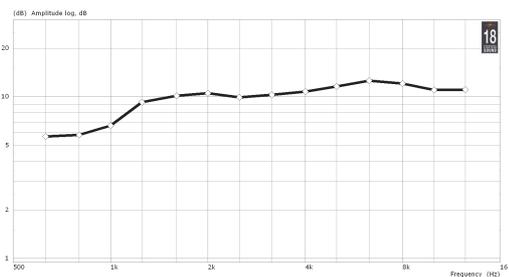
MOUNTING INFORMATIONS

Mouth Height	270 mm (10,6 in)
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Depth	180 mm (7,1 in)
Mouth Mounting Dimensions	8 ø 6 holes
Net weight	1,9 Kg (4 lb)

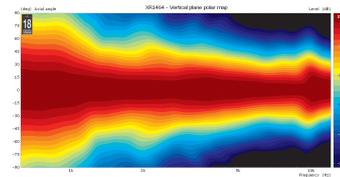
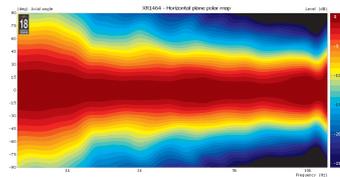
HORIZONTAL BEAMWIDTH – RED PLOT – VERTICAL BEAMWIDTH – BLUE PLOT – A



DIRECTIVITY INDEX – B



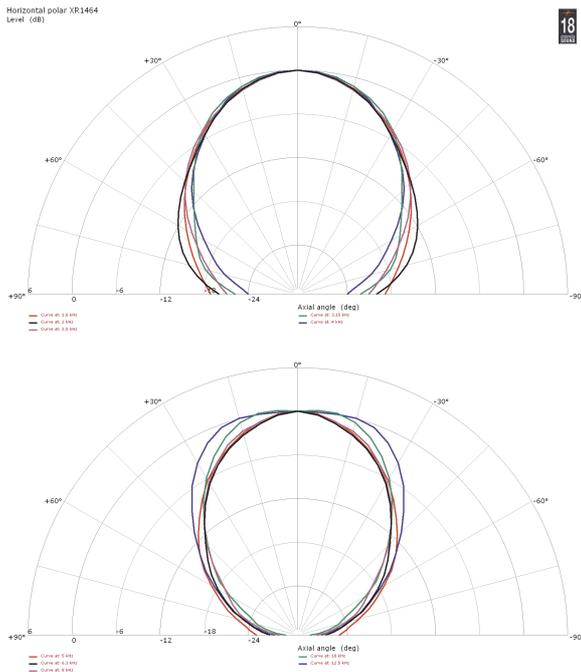
HORIZONTAL POLAR DIRECTIVITY MAP – C
VERTICAL POLAR DIRECTIVITY MAP – D



NOTES

(1) Sensitivity is measured at 1W input on ND4015BE rated impedance at 1m on axis from the mouth of the horn, averaged between 1kHz and 4 kHz.

HORIZONTAL 1/3 OCTAVE POLAR PLOTS



VERTICAL 1/3 OCTAVE POLAR PLOTS

