EDGE C12P

Features

- Rotatable horn, available with either 60° x 40° or 90° x 60° coverage
- High power driver Voice Coil
- Extended performance woofer

Description

The EDGE C12P is a 2-way speaker system with a rotatable horn. The bass section is equipped with a 12" speaker cone, a 4" voice coil, is treated for exposure to the elements and features an optimized heat sink for optimised heat dissipation. This woofer has a neodymium magnet and has been designed to achieve an extended frequency response even inside a compact cabinet and is capabile of high SPL and low distortion. Among the auxiliary transducer features, systems such as a Double Silicon Spider (DDS) grant exceptional elastic retention capacity and control the cone movements with increased peak power. The moving coil has multiple layers wound around the bearing both internally and externally (Interleaved Sandwich Voice Coil), which doubles the metal-metal heat radiation surface, significantly reducing power compression. The flux demodulation devices (DDR) mounted on the transducers reduce distortion, especially in the vital mid range and grant an excellent level of control of over-excursion. The 1.4" driver features a 3 " voice coil, titanium diaphragm and a particular suspension architecture which allows the neodymium magnet to reach 19KGauss in the gap in compact and lightweight structure. The new wave guide has been designed in order to obtain a smooth frequency response maintaining constant coverage and directivity pattern as well as avoiding the midrange narrowing effect and high frequency beaming problems - very common

defects with many products available on the market. The die cast aluminium construction brings advantages in terms of both thermal and mechanical performance. The frequency response of C12P extends down to 60 Hz, with a full range, effective sound reproduction. When very low frequency extension is required support can be provided by the EDGE121SP subwoofer.

Technical Characteristics

System	
System Type	2-way vented enclosure
Frequency Response	60 Hz - 18 kHz (±6 dB)
Coverage Angle H. (-6 dB)	90° or 60° average, 630 Hz to 18 kHz
Coverage Angle V. (-6 dB)	60° or 40° average, 630 Hz to 18 kHz
Directivity Index (DI)	6 or 4.9 average, 630 Hz to 18 kHz
Maximum Peak Output	130 dB @ 1m
Signal Processing	Proel DSO26 - DSO480 (biamp)
Transducers	
Low Frequency Device	12" woofer - 4" voice coil
Nominal Impedance	8 Ω
Power Rating	800 W AES, 1600 W program
Sensitivity	98 dB SPL (2,83 V @ 1m)
High Frequency Device	1.4" compression driver
Nominal Impedance	8 Ω
Power Rating	100 W AES, 200 W program
Sensitivity	110 dB SPL (2,83 V @ 1m)
Mechanical Data	
Construction	trapezoidal (20°) 15 mm birch plywood, internally reinforced with paint finish
Flying System	flying track
Mounting Pole	1 x botom
Dimensions (WxHxD)	41 x 63 x 37 cm
Weight	27.2 kg

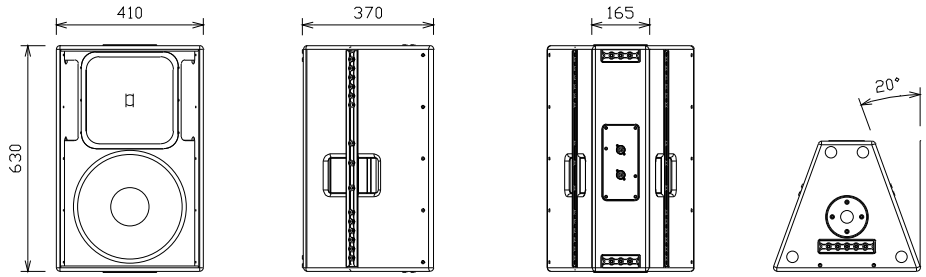
Architects' and Engineers' Specifications

The system shall be a passive two way with a frequency response of 60 Hz to 18 kHz and a constant coverage angle. The system shall have an 8 ohm driver assembly with a [2] constant coverage horn with a 3" diaphragm, 1,4" throat and a power handling of 100 W AES. The system shall have an 12", 8 ohm, bass speaker with a 4" voice coil and a power handling of 800 W AES

[2] Substitute 90° x 60° for C12P96 model or 60° x 40° for C12P64 model

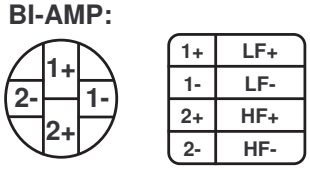
loaded in a bass reflex configuration. The speaker shall be provided attachment points to achieve columns of boxes hung by rapid hooks and with a top-hat for mounting on a speaker stand. The speaker shall be constructed from 15 mm Birch plywood reinforced internally in an trapezoid shape with an angle of 20°. The height shall be 63 cm, width 41 cm and depth of 37 cm. The system shall be the Proel EDGE C12P [3].

Dimensions



Connections

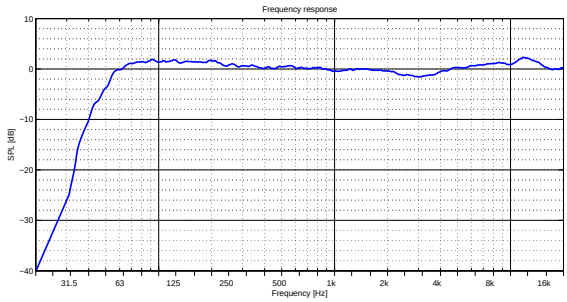
2 Neutrik Speakon NL4MP connectors in parallel.



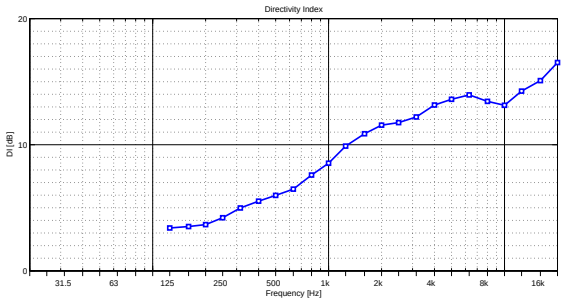
[3] enter 96 for the model with 90° x 60° horn or 64 for the model with 60° x 40° horn

Graphics C12P64

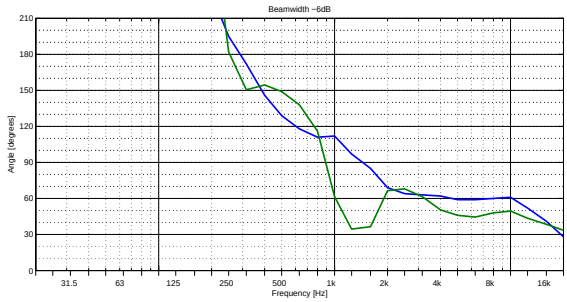
Frequency response:



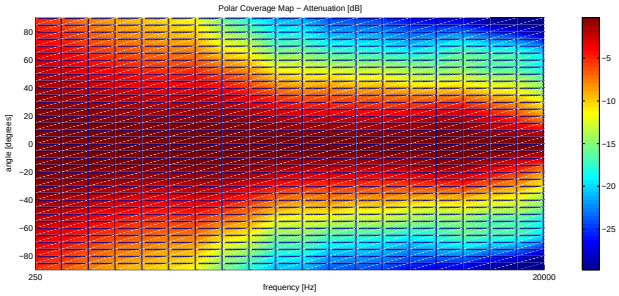
Directivity index:



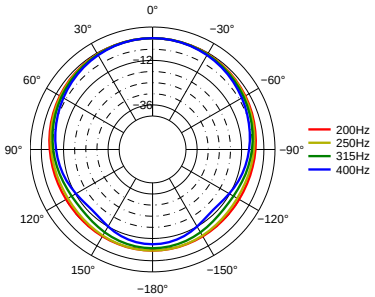
Beamwidth diagram (-6 dB):

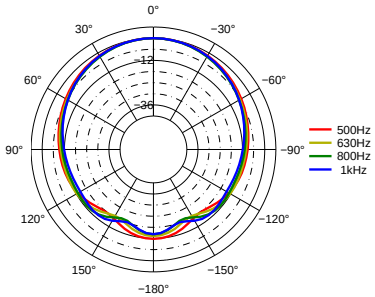


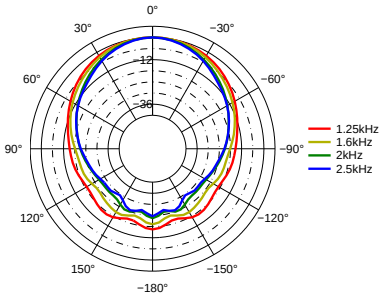
Attenuation map (horizontal):

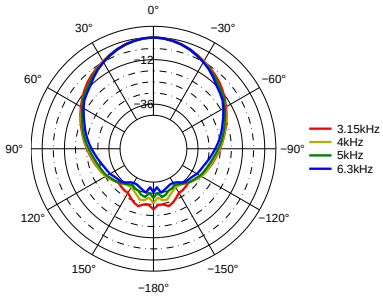


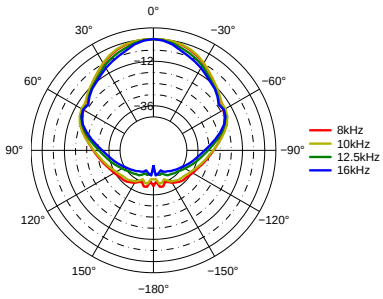
Polar diagram (horizontal):



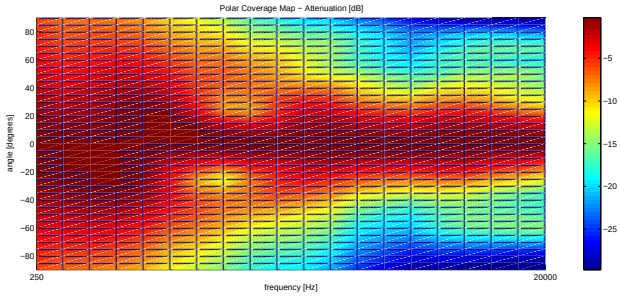




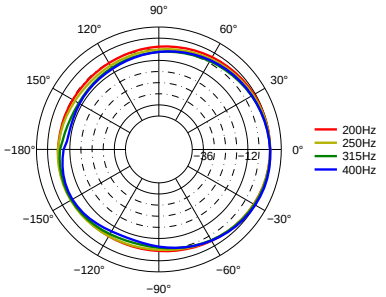


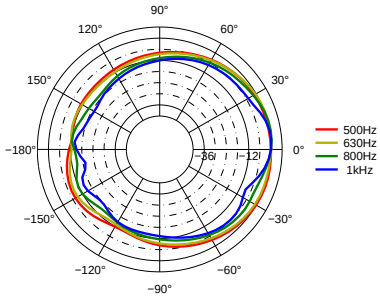


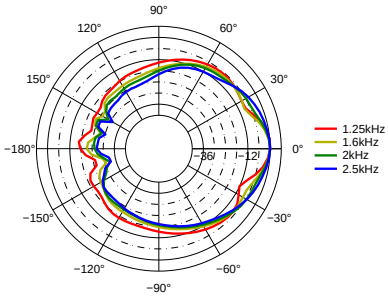
Attenuation map (vertical):

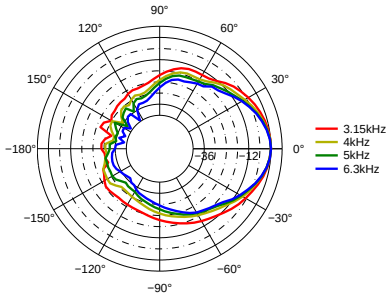


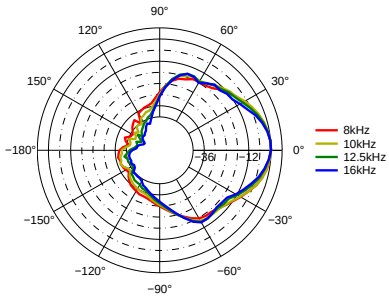
Polar diagram (vertical):





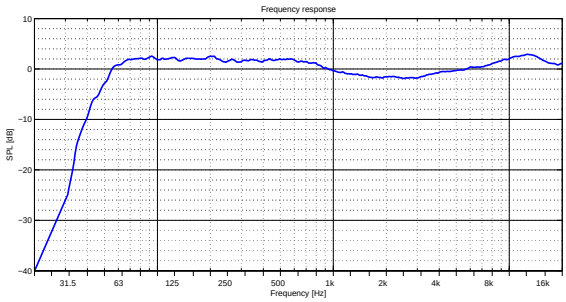




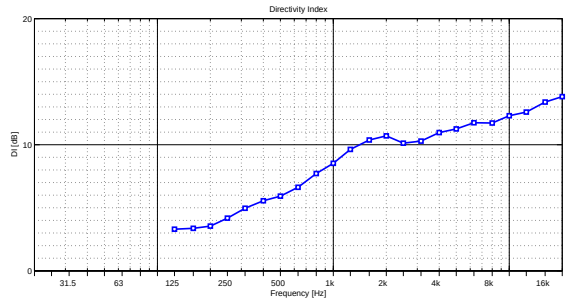


Graphics C12P96

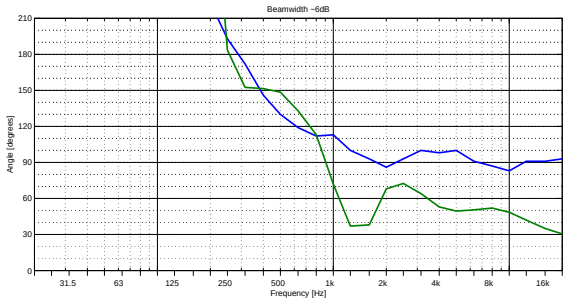
Frequency response:



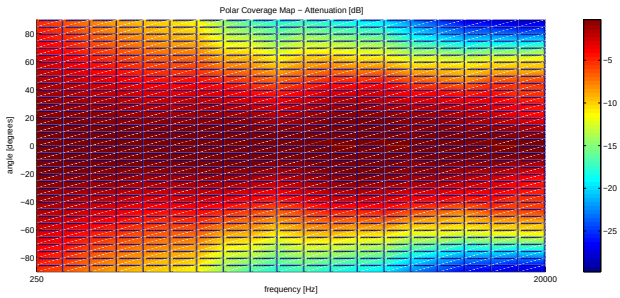
Directivity index:



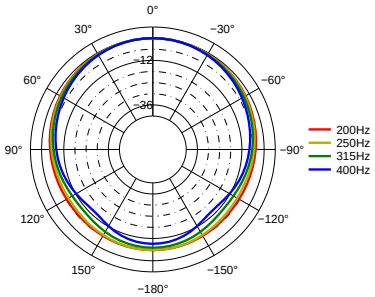
Beamwidth diagram (-6 dB):

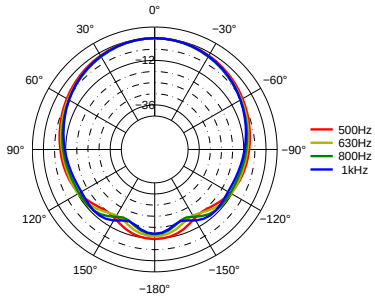


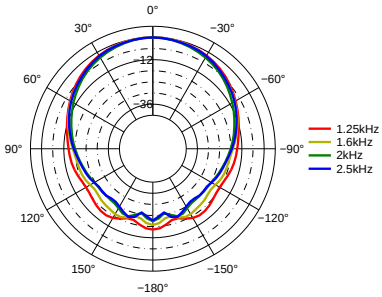
Attenuation map (horizontal):

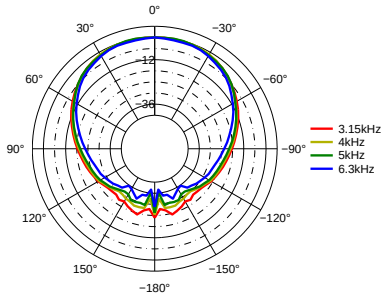


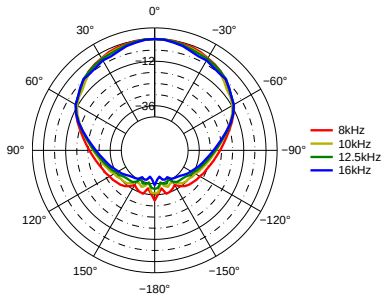
Polar diagram (horizontal):



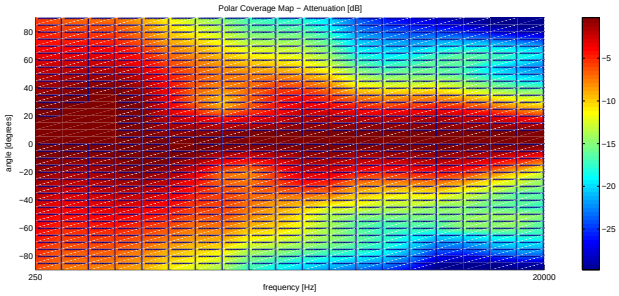








Attenuation map (vertical):



Polar diagram (vertical):