EDGE C210P

Features

- Rotatable horn, available with either $60^{\circ} \times 40^{\circ}$ or $90^{\circ} \times 60^{\circ}$ coverage
- High power driver Voice Coil
- Extended performance woofer
- Audiophile passive crossover network with Bi Amplification option

Description

The EDGE C15P is a 2-way speaker system with a rotatable horn. The bass section is equipped with two 10" speaker cone, a 3" 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 metalmetal heat radiation surface, significantly reducing power compression. The flux demodulation devices (SDR) 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 C210P extends down to 65 Hz, with a full range, effective sound reproduction. When very low frequency extension is required support can be provided by the EDGE121SP subwoofer.

System	
System Type	2-way vented enclosure
Frequency Response	50 Hz - 18 kHz (±6 dB)
Coverage Angle H. (-6 dB)	90° or 60° average, 630 Hz to 18 kHz
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Coverage Angle V. (-6 dB)	60° or 40° average, 630 Hz to 18 kHz
Directivity Index (DI)	5.9 or 4.7 average, 630 Hz to 18 kHz
Maximum Peak Output	132 dB @ 1m
Signal Processing	Proel DSO26 - DSO480 (biamp)
Transducers	
Low Frequency Device	15" woofer - 4" voice coil
Nominal Impedance	8 Ω
Power Rating	800 W AES, 1600 W program
Sensitivity	99 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 $^{\circ}$)
	15 mm birch plywood, internally reinforced
	with paint finish
Flying System	flying track
Mounting Pole	1 × botom
Dimensions (WxHxD)	47 × 73 × 46 cm
Weight	36.7 kg

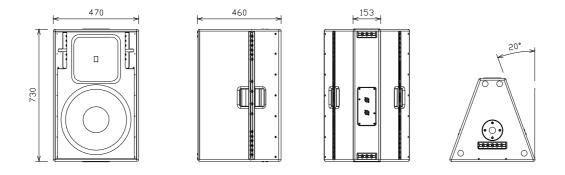
Technical Characteristics

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 ⁶ constant coverage horn with a 3" diaphragm, 1,4" throat and a power handling of 100 W AES. The system shall have an 15", 8 ohm, bass speaker with a 4" voice coil and a power handling of 800 W AES 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 73 cm, width 47 cm and depth of 46 cm. The system shall be the Proel EDGE C15P ⁷.

Dimensions

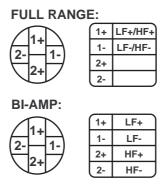


Connections

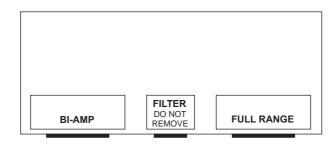
The C210P can work in two modes: Full range or Bi-amp. In the bi-amplified mode, the internal crossover filter is disconnected and it is therefore necessary to use the DSO26 or DSO480 processor as crossover filter and protection of the components. In Full range mode, the internal crossover is connected. The C210P gives the best performance in the Bi-amp mode with the DSO26 or DSO480 processor.

 $^{^6}Substitute~90^\circ$ \times 60° for C15P96 model or 60° \times 40° for C15P64 model

 $^{^7\}text{enter}$ 96 for the model with 90° \times 60° horn or 64 for the model with 60° \times 40° horn



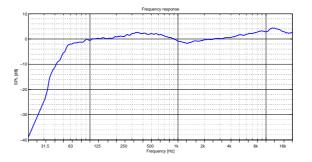
The two Neutrik Speakon NL4MP are ever connected in parallel. When the FULL RANGE mode is selected, the Speakon connectors take the signal form the 1+ and 1- pins and send this signal to the internal passive crossover. When the BI-AMP mode is selected, the connectors take the LF signal from the 1+ and 1- pins and the HF from the 2+ and 2- pins. In this case, the passive crossover is by-passed and therefore it is necessary to use the Proel DSO26 or DSO480 digital processor to filter the signal sent to the transducers for correct operation and not be damaged.



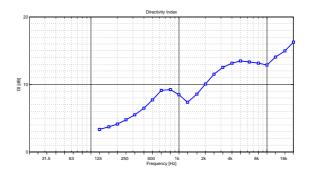
To select the operational mode it is necessary to open the connection panel. Remove the internal connector from the FULL RANGE position to BI-AMP and vice-versa. Do not move, for any reason, the central FILTER connection.

Graphics C210P64

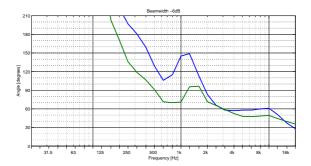
Frequency response:



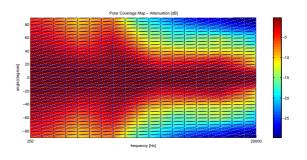
Directivity index:



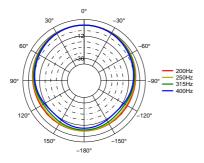
Beamwidth diagram (-6 dB):

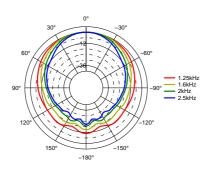


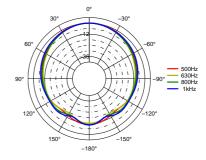
Attenuation map (horizontal):

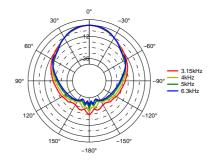


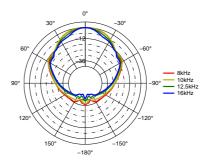
Polar diagram (horizontal):



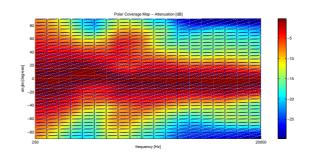




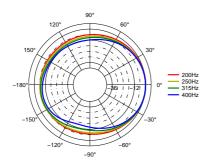


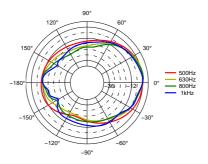


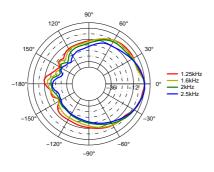
Attenuation map (vertical):

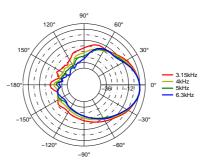


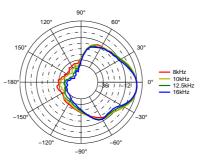
Polar diagram (vertical):





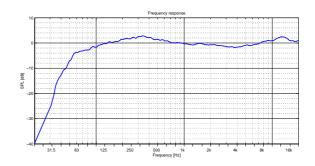




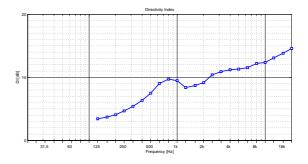


Graphics C210P96

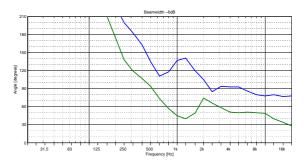
Frequency response:



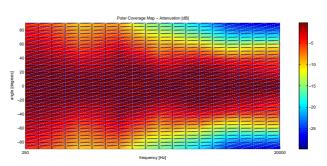
Directivity index:



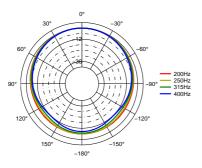
Beamwidth diagram (-6 dB):

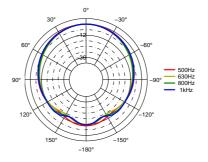


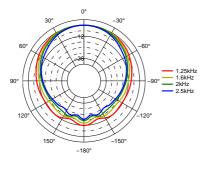
Attenuation map (horizontal):

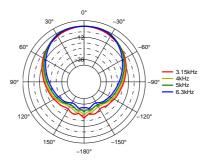


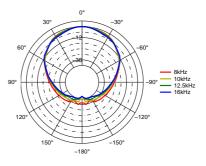
Polar diagram (horizontal):



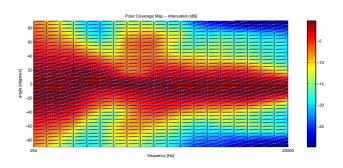








Attenuation map (vertical):



120

Polar diagram (vertical):

