CPS-210 (64/96) CPS SERIES DATASHEET

TWO MODELS: 60x40 or 90x60

Extremely compact & powerful 3-way, tri-amplified (3000 W Class-D with PFC), DSP integrated coaxial point source element. Dual high power 10" neodymium transducers and a unique 1.4" Exit throat (HF 2" voice coil/ MF 3" voice coil) coaxial neodymium compression driver. Two models depending on rotatable horn: CPS-210/64 (60°H x 40°V) or CPS-210/96 (90°H x 60°V).

Key features

- Extraordinary power-to-size ratio
- Three way active system
- 1.4" dual diaphragm compression driver
- Integrated Digital Processor (64 bit / 96KHz)
- Two models depending on coverage
- FIR linear phase filtering
- Ergonomic design in premium birch plywood & finished in polyurea
- 2.8" IPS display with multifunction joystick control

Applications

- Outdoor events
- Medium sized stadiums
- Houses of worship
- Clubs
- Theatres
- Auditoriums

General description & specifications

The CPS-210 is a high-output extremely compact and extremely powerful 3-way, tri-amplified, self-powered, DSP integrated, symmetrical Coaxial Point Source element designed for medium sized touring & fixed installations.

It uses two low distortion 10" (3" DUO double layer voice coil) speakers for the low frequencies with exclusive Malt Cross cooling technology, FEA optimized neodymium magnet circuit, aluminium demodulating ring and weatherproof cone.

For the mid/high frequencies it uses an ultra light weight 1.4" dual diaphragm coaxial compression. The unique voice coil technology employs a light weight copper clad aluminium wire, wound inside and out of the Kapton former to improve heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimizes the power compression.

The larger annular midrange diaphragm covers the frequency range between 300Hz and 7KHz with a smooth, linear response. The ultra light annular diaphragm for the high frequencies offers exceptional transient response with very high efficiency from 4KHz to 22Khz. With two subsystems in one each driver covers a smaller frequency range for increased power handling, high dynamic and extremely low distortion and delivers excellent phase coherence & perfect time alignment without problems of multi-source interference.

The 3000 W 3 channel Class-D amplifier with PFC (Power Factor Correction) offers exceptional efficiency with maximum system performance whilst significantly lowering power consumption. With Thermal, short-circuit and overload protections the system module delivers superior sonic performance. Coupled together with our new generation, 64 bit/96KHz processor the system electronics are yet further guaranteed not only the utmost protection but the best performance.

Designed in-house by Lynx Pro Audio engineers our DSP offers the most recent advances in digital processing such as FIR filters delivering a linear phase & frequency response. The latest 32 bit/96KHz AD/DA converters make the system one of the most advanced & innovative point source systems on the market resulting in pristine sound quality.

A 2.8" IPS user interface is located on the enclosure's back panel and has multifunction joystick control enabling the user to control, select and/or adjust parameters such as cabinet presets, gain, delay and input EQ (see user manual). Two Ethernet ports enable the system to be controlled with the OCS platform for easier alignment, monitoring and processing of the system and together with the new Rainbow 3D prediction software delivers a complete system design tool.

The enclosure is made from premium grade birch plywood and finished with a polyurea coating for longer durability & weather protection.

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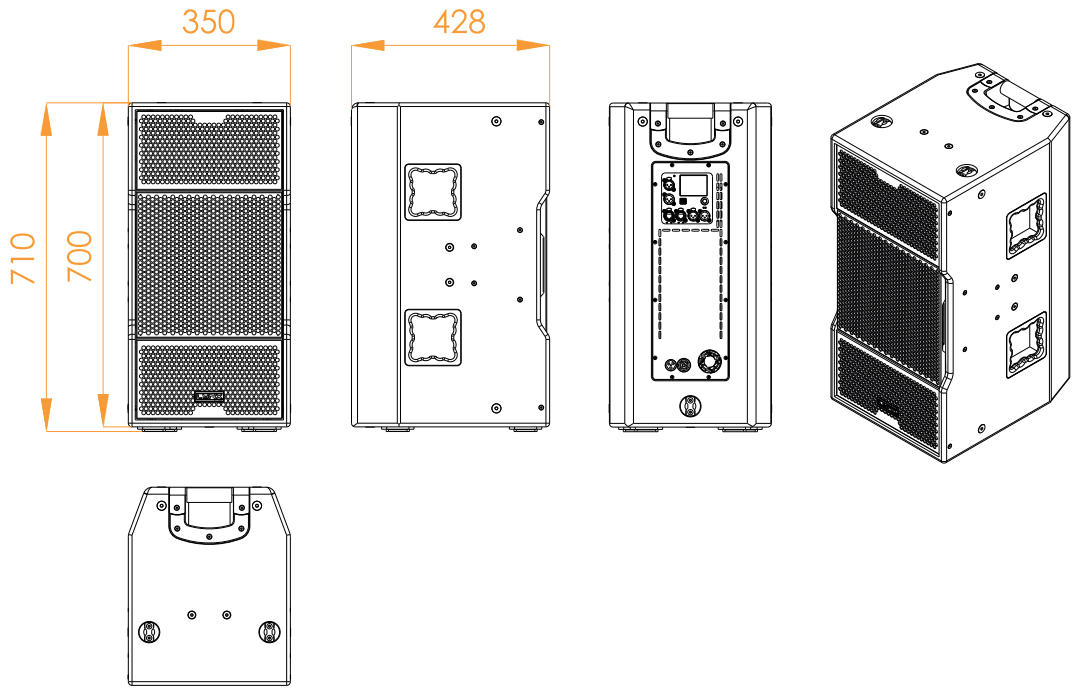
Technical Data

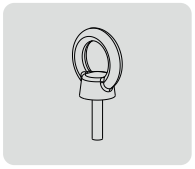
Components	
• LF:	LF: 2 x 10" (3" voice coil), neodymium magnet, 1400W (AES).
• MF/HF:	MF: 3" (76mm) voice coil, 90W (AES). HF: 2" (51 mm) voice coil, 50W (AES)
Frequency range	63 Hz - 20 KHz (-6dB)
Coverage	Rotatable 60°H x 40°V / 90°H x 60°V
Max SPL*	Low: 130.5 dB / 136.5 dB - Mid/High: 131 dB / 137 dB
Power amplifier	3000 W Class D with switching power supply & PFC LF: 1 x 1500 W MF: 1 x 750 W HF: 1 x 750 W
Processing	Internal Lynx Processor DSPB-FL. 96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Crossover	Digital: FIR filter 600 Hz / 4500 Hz
Control	User control interface with 2.8" IPS screen and multifunction joystick controller
Control connections	USB (DSP programming) / Dual Ethernet port
Input	BAL/UNBAL XLR connectors analog input AES/EBU digital input
Nominal voltage	100 - 240V AC @ 50-60 Hz
Operating voltage	85 - 264V AC
AC Connectors	16A Neutrik powerCON TRUE1 TOP with looping output
Finish	Polyurea coating, high grade resistant paint
Material	15 mm Premium birch plywood
Dimensions	710 x 350 x 428 mm (H x W x D)
Weight	35 Kg (77.1 lbs)

*Calculated maximum SPL based on rated peak power and measured sensitivity.

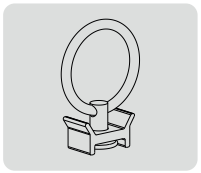
Dimensions



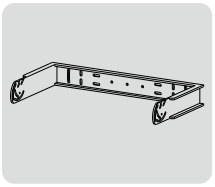
Accessories



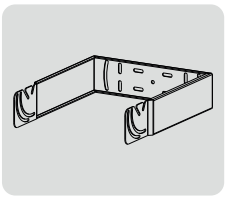
AGR-10
Eye bolt for CPS-214, CPS-210 and CPS-14



SC-FC1
Lightweight install stud for CPS-214, CPS-210 and CPS-14



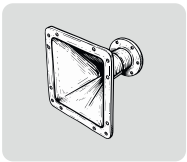
UBR-HCPS210
Horizontal U bracket for CPS-214, CPS-210 or CPS-14



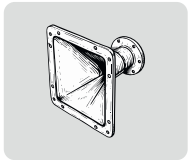
UBR-VCPS210
Vertical U bracket for CPS-214, CPS-210 or CPS-14

FD-1CPS210NL
Rain cover for the back panel of the CPS-214, CPS-210, CPS-14 or CPS-18S

FD-CPS210
Nylon protection for CPS-214



DI-1464C
Rotatable horn for CPS-210/64 or CPS-14/64 (60° x 40°)



DI-1496C
Rotatable horn for CPS-210/96 or CPS-14/96 (90° x 60°)