CPS-214 (64/96) CPS SERIES DATASHEET

TWO MODELS: 60x40 or 90x60

Extremely compact & powerful 3-way, self-powered (6000 W Class-D with PFC), DSP integrated coaxial point source element. Dual high power 14" neodymium transducers and a unique 2" Exit throat (HF 1.75" voice coil/ MF 3.5" voice coil) coaxial neodymium compression driver. Two models depending on rotatable horn: CPS-214/64 (60°H x 40°V) or CPS-214/96 (90°H x 60°V).

Key features

- Extraordinary power-to-size ratio
- Three way active system
- Unique 2" dual diaphragm compression driver
- Integrated Digital Processor (64 bit / 96KHz)
- FIR linear phase filtering
- Ergonomic design in premium birch plywood & finished in polyurea
- 2.8" IPS display with multifunction joystick control
- Install version available

Applications

- Outdoor events
- Large stadiums / arena
- Houses of worship
- Clubs
- Theatres
- Auditoriums

General description & specifications

The CPS-214 is a high-output extremely compact and extremely powerful 3-way, self-powered, DSP integrated, symmetrical Coaxial Point Source element designed for large sized touring & fixed installations.

It uses two low distortion 14" (4" DUO double layer voice coil) custom 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 2" exit throat dual diaphragm coaxial compression driver. 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 6KHz 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 6000W 2 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, 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.

Install version: CPS-214IN

The CPS-214IN is the install version of the CPS-214 cabinet. This version is specially designed for fixed installations.

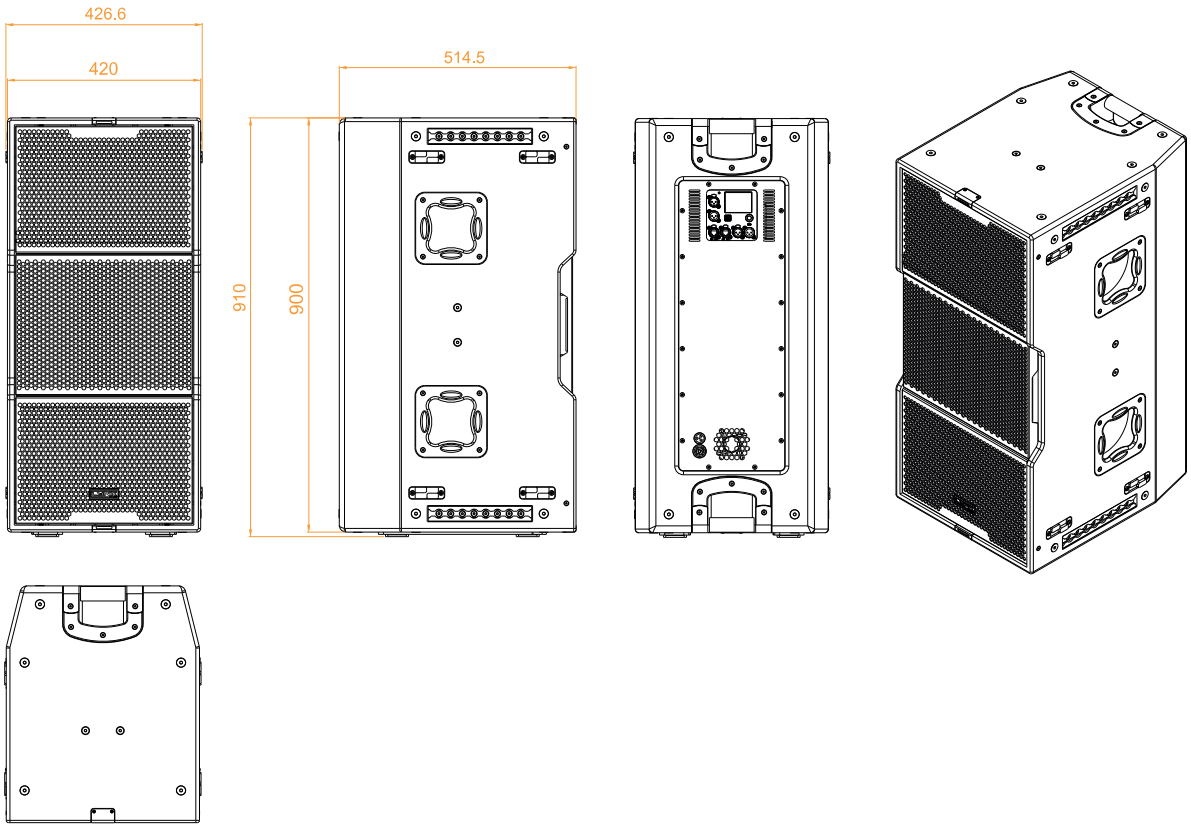
The Installation version is available in active/passive version. It has a ferrite driver, it doesn't have handles and is the only version available in RAL colour on demand.

Technical Data

Components	
• LF:	LF: 2 x 14" (4" voice coil), neodymium magnet, 2000W (AES).
• MF/HF:	MF: 3.5" (90mm) voice coil, 150W (AES). HF: 1.5" (44,4 mm) voice coil, 80W (AES)
Frequency range	55 Hz - 22 KHz (-6dB)
Coverage	Rotatable 60°H x 40°V / 90°H x 60°V
Max SPL*	Low: 137 dB / 143 dB - Mid/High: 139.5 dB / 142.6 dB
Power amplifier	6000 W Class D with switching power supply & PFC Amp: 3000 W @4 Ohm MF/HF Amp: 3000 W @4 Ohm
Processing	Internal Lynx Processor DSPB-FL. 96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Crossover	Digital: FIR filter 550 Hz / Passive: 6.3 KHz
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	900 x 420 x 515 mm (H x W x D)
Weight	49 Kg (108 lbs)

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

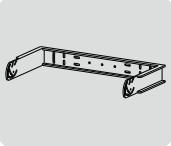
Dimensions



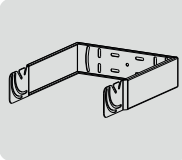
Accessories

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

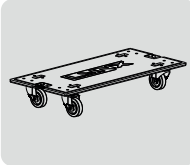
SC-FC1
Lightweight install stud for CPS-214, CPS-210 and CPS-14



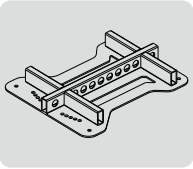
UBR-HCPS214
Horizontal U bracket for CPS-214, CPS-210 or CPS-14



UBR-VCPS214
Vertical U bracket for CPS-214, CPS-210 or CPS-14



CA-CPS214
Removable front transport dolly for CPS-214



SV-CPS214
Flying frame for CPS-214

FD-1CPS214NL
Rain cover for the back panel of the CPS-214, CPS-210, CPS-14 or CPS-18S

FD-CPS214
Nylon protection for CPS-214