CPS-18S

CPS SERIES DATASHEET

CPS-18S is a compact & extremely powerful, self-powered (3000W Class-D with PFC), DSP integrated subwoofer unit in 6th order band pass configuration. 18” (4” voice coil). Max SPL 138 dB.

Key features

- Extraordinary power-to-size ratio
- Integrated Digital Processing
- 18” neodymium transducer
- Integrated Digital Processor (64 bit / 96KHz)
- FIR linear phase filtering
- Ergonomic design in premium birch plywood & finished in polyurea
- Band pass configuration
- 2.8” IPS display with multifunction joystick control

Applications

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

General description & specifications

The CPS-18S is a high-output, extremely powerful sub-bass element designed to be used in unison with the coaxial CPS-214 point source module.

It uses one low distortion 18” (4” QUATTRO in/out copper voice coil) custom speaker with FEA optimized ceramic magnet circuit and Exclusive Malt Cross Technology cooling system. It implements Exclusive NCR (Neck Coupling Reinforcement) and is optimized for band pass configuration.

The extra strong, especially designed internal wooden reinforcements reduce unwanted vibrations eliminating any noise, lowering distortion and delivering a clear sound. At the same time, the bass port is designed with a flare to eliminate any turbulence caused by sharp edges in the sound waves path.

The 3000W 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 an outstanding 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, delivering a linear phase & frequency response. The latest 32 bit/96KHZ AD/DA converters make the system one of the most advanced & innovative point subwoofers on the market resulting in superior 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.

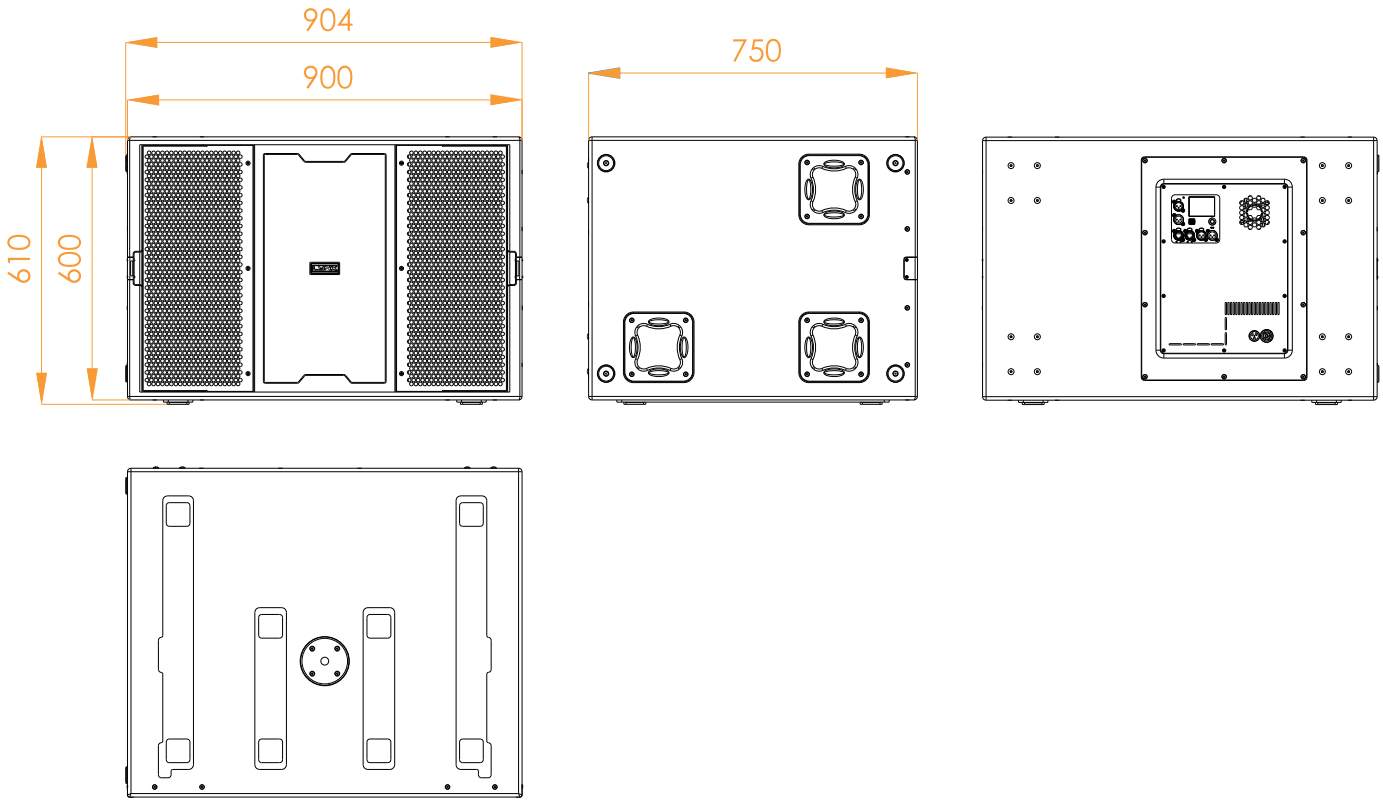
The enclosure is made from premium grade birch plywood and finished with a polyurea coating for longer durability & weather protection.

Technical Data

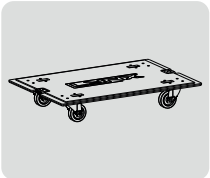
Components	
• LF:	1 x 18" (4" QUATTRO in/out copper voice coil), waterproof cone with treatment for both sides
Frequency range	35 Hz - 100 Hz (-6dB)
Coverage	QUASI omnidirectional
Max SPL*	132 dB / 138 dB
Power amplifier	3000 W Class D with switching power supply & PFC
Processing	Internal Lynx Processor DSPB-FL. 96 KHz / 64 bit double-precision, DSP with FIR filter linear phase High performance 32 bit 96 KHz AD/DA converters 120 dB
Configuration	6th Order Band Pass Subwoofer
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	600 x 900 x 750 mm (H x W x D)
Weight	62 Kg (136.6 lbs)

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

Dimensions



Accessories



CA-CPS18S
Removable front transport dolly for CPS-18S

FD-1CPS18SNL
Rain cover for the back panel of the CPS-214, CPS-210, CPS-14 or CPS-18S

FD-CPS18S
Nylon protection for CPS-18S