

# **CPS CATALOGUE**

**Latest** edition



# **CPS Series**

The CPS (Coaxial Point Source) Series is our brand new high power, point source system.

# **CPS-214**



- · 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

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.

The 6000W 2 channel Class-D amplifier with PFC (Power Factor Correction) 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.























CPS-214
LF: 2 x 14" (4" voice coil), neodymium magnet, 2000W (AES) MF: 3.5" (90mm) voice coil, 150W (AES) HF: 1.5" (44,4 mm) voice coil, 80W (AES)
55 Hz - 22 KHz (-6dB)
Rotatable 60°H x 40°V
Low: 137 dB / 143 dB - Mid/High: 139,5 dB / 142,6 dB
6000 W Class D with switching power supply & PFC Amp: 3000 W @4 Ohm MF/HF Amp: 3000 W @4 Ohm
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 120dB
Digital: FIR filter 550Hz / Passive: 6.3 KHz
User control interface with 2.8" IPS screen and multifunction joystick control
USB (DSP programming) / Dual Ethernet port
BAL/UNBAL XLR connectors analog input AES/EBU digital input optional
100 - 240V AC @ 50-60 Hz
85 - 264V AC
16A Neutrik powerCON TRUE1 TOP with looping output
Polyurea coating, high grade resistant paint
15 mm Premium birch plywood
900 x 420 x 515 mm (H x W x D)

49 Kg (108 lbs)

CDC-21/

Weight



- · Extraordinary power-to-size ratio
- · Three way active system
- · 1.4" 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

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 coverage: CPS-14/64 (60°H x 40°V) or CPS-14/96 (90°H x 60°V).

The 3000W 3 channel Class-D amplifier with PFC (Power Factor Correction) 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.

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#### CPS-210 (64 / 96)

	CF3-210 (047 70)
Components	LF: 2 x 10" (3" voice coil), neodymium magnet, 1400W (AES) 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
DSP	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 120dB
Crossover	Digital: FIR filter 600 Hz / 4500 Hz
Control	User control interface with 2.8" IPS screen and multifunction joystick control
Control connections	USB (DSP programming) / Dual Ethernet port
Input	BAL/UNBAL XLR connectors analog input AES/EBU digital input optional
Nominal voltage	100 - 240V AC @ 50-60 Hz
Operational 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)

<sup>\*</sup> Calculated based on power rating and measured sensitivity

CPS-14 (64/96)



- · Extraordinary power-to-size ratio
- · Three way active system
- · 1.4" 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

Extremely compact & powerful, 3-way tri-amplified (3000 W Class D with PFC), DSP integrated coaxial point source element. High power 14" neodymium transducer and a unique 1.4" exit dual diaphgram coaxial driver.

Two models depending on coverage: CPS-14/64 (60°H x 40°V) or CPS-14/96 (90°H x 60°V).

The 3000W 3 channel Class-D amplifier with PFC (Power Factor Correction) 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.























#### CPS-14 (64/96)

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Components	LF: 1 x 14" (4" voice coil), neodymium magnet, 1000W (AES) 1 x 1.4" exit dual diaphragm coaxial driver. MF: 3" (76 mm) voice coil, 90 W (AES) HF: 2" (51 mm) voice coil, 50W (AES)
Frequency Range	55 Hz - 22 KHz (-6dB)
Coverage	Rotatable 60°H x 40°V / 90°H x 60°V
Max. SPL*	Low: 130 dB / 136 dB peak - Mid/High: 132 dB / 138 dB peak
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
DSP	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 120dB
Crossover	Digital: FIR filter 600 Hz / 4500 Hz
Control	User control interface with 2.8" IPS screen and multifunction joystick control
Control connections	USB (DSP programming) / Dual Ethernet port
Input	BAL/UNBAL XLR connectors analog input AES/EBU digital input optional
Nominal voltage	100 - 240V AC @ 50-60 Hz
Operational 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	755 x 415 x 430 mm (H x W x D)
Weight	33 kg (72.75 lbs)

<sup>\*</sup> Calculated based on power rating and measured sensitivity



- · 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

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 3000W Class-D amplifier with PFC (Power Factor Correction) offers exceptional efficiency with maximum system performance whilst significantly lowering power consumption. 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.

CPS	-18S
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	CP3-103
Components	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
DSP	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
Crossover	6th Order Band Pass Subwoofer
Control	User control interface with 2.8" IPS screen and multifunction joystick control
Control connections	USB (DSP programming) / Dual Ethernet port
Input	BAL/UNBAL XLR connectors analog input AES/EBU digital input optional
Nominal voltage	100 - 240V AC @ 50-60 Hz
Operational 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 based on	nower rating and measured sensitivity

<sup>\*</sup> Calculated based on power rating and measured sensitivity























# CPS-5

CPS-4



- · Compact & versatile
- · Easy to use, easy to install
- Portable
- · Available in black or white

- · Compact & versatile
- · Easy to use, easy to install
- Portable
- · Available in black or white



The CPS-5 is a two-way passive vented system offering a coverage of  $70^{\circ}$  conical dispersion, with a 5" coaxial speaker (1.5" LF voice coil and 1" HF voice coil) and 117 dB SPL (300 W program) in a compact enclosure designed for short throw applications.

Due to its small size and sleek design, this system suits very well indoor installation and also can be used as background sound reinforcement.

Weight has been left as low as possible providing easy set ups in fixed installation as well as easy transport for portable applications.

Components	1 x 5" coaxial speaker with LF 1.5" and HF 1" voice coil
Frequency range	64 Hz - 20 KHz (-10dB)
Frequency response	90 Hz - 20 KHz (± 3dB)
Sensitivity	93 dB (1W@1m)
Max SPL*	114 dB / 120 dB peak
Coverage	70° conical dispersion
Power	150 W AES (300 W program, 600 W peak)
Nominal Impedance	16Ω
Connectors	2 x NEUTRIK Speakon NL4
Finish	Polyurea coating - available in RAL colous on demand
Material	9 mm premium birch plywood
Dimensions	140 x 140 x 220 mm (H x W x D)
Weight	3 Kg (6.6 lbs)

<sup>\*</sup> Calculated based on power rating and measured sensitivity

The CPS-4 is a passive coaxial speaker in an ultra-compact enclosure designed to deliver a clear and balanced sound for short throw applications.

CPS-4 is a two-way passive point source system with a 4" coaxial transducer mounted in a closed enclosure that produces a  $90^{\circ}$  conical dispersion without secondary lobes over the whole frequency range.

Due to its small size and sleek design, this system suits very well indoor installation and also can be used as background sound reinforcement. Weight has been left as low as possible providing easy set ups in fixed installation as well as easy transport for portable applications.

4,5,5,1,54,1,51	
Components	1 x 4" coaxial speaker
Frequency range	120 Hz - 20 KHz (-10dB)
Sensitivity	86 dB (1W@1m)
Max SPL*	106 dB / 112 dB peak
Coverage	90° conical dispersion
Power	100 W AES (200 W program, 400 W peak)
Nominal Impedance	16Ω
Connectors	1 x NEUTRIK Speakon NL4/4 x Terminal Block 7.62 mm between pins
Finish	Polyurea coating - available in RAL colous on demand
Material	9 mm premium birch plywood
Dimensions	122 x 122 x 131 mm (H x W x D)
Weight	1.5 Kg (3.3 lbs)
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<sup>\*</sup> Calculated based on power rating and measured sensitivity

# Software

Prediction, control, DSP updates, management system...all our softwares are designed in-house and are a fundamental part of the Lynx Pro Audio technology. They are designed by and for sound technicians, with a very intuitive interface easy to use.

Masters of DSP technology and one of the few companies in the world that develops its own digital processing systems. This allows us to control all internal processing, from gain to crossover, dynamics, etc.



software

### Online Control System (OCS)

Control and monitoring software for multiple devices (loudspeakers, amplifiers and processors). Allows control via Ethernet / USB for Lynx Pro Audio systems with integrated DSP.

It controls the powered cabinets in real time and obtain detailed information of cabinet behavior.



#### **ARK Software**

The ARK software works via USB or Ethernet (cable or wireless) and is the interface to configure all the parameters of the range of processors ARK-70 and ARK-20 series.

The ARK software has been completely designed at the Lynx Pro Audio laboratory by our own engineers. It allows you to configure every one of the parameters in the processor, being in "Real Time" or "Offline", storing them in the processor via the USB interface or ETHERNET.



## Cabinet Updater

Connect the cabinet by USB to your PC. The Cabinet Updater software will automatically detects your cabinet hardware and updates the presets to the latest and optimum configuration available.



## Rainbow 3D

Rainbow 3D is an electro-acoustical prediction software for loudspeaker systems, boasting comprehensive high-speed simulation in a three-dimensional environment. With a sophisticated design, Rainbow 3D stands out for its speed, being able to do a simulation in a few seconds.

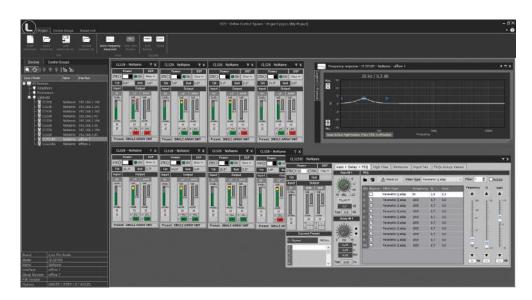
Thanks to this software you will be able to "virtually" determine the acoustical response of one or various cabinets at the same time.

# Online Control System (OCS)

OCS is our control software, working in real time for all our digital processing systems. It is a user interface enabling the set-up of all digital devices in an installation.

With OCS you can configure / monitor all the parameters of a self-powered Lynx Pro Audio system (input levels, cabinet angles, module temperature, compression levels....), all parameters available in our processors and all settings for our HPX amplifiers, from the input sensitivity to the digital process for each channel independently. You can change the preset,gain, mute and polarity, activate the weather compensation and the SOLO mode.

OCS enables configuration from one single software system for all devices connected to an Ethernet network and incorporates direct communication with Smaart(R) measurement system. Through our Smaart Link we can connect to any of Smaart(R) session connected to the local network. This allows us to see, in real time, the captured measurement directly in our process window.



Control and monitoring software for multiple devices (loudspeakers, amplifiers and processors). Allows control via Ethernet / USB for Lynx Pro Audio systems with integrated DSP.

#### • Who is it for?

Users of Self powered DSP incorporated Lynx Pro Audio Cabinets where the user has requested the cabinets to be supplied with the Ethernet Module kit.

#### • What is it for?

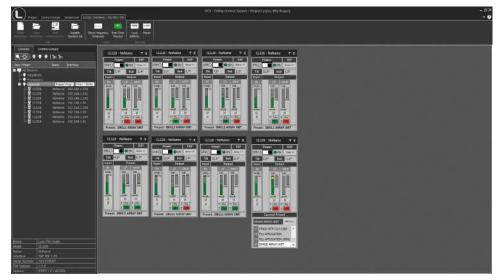
Obtain detailed information of cabinet behaviour and monitor the cabinet/s in real time through the users PC so you can control online a single cabinet or a complete cabinet system from the OCS window. You can apply a Parametric EQ with 6 filters totally configurable, insert a delay up to 90 ms, change the preset, gain, mute, polarity and phase of every cabinet connected. You can also activate the air absorption compensation and select the «SOLO» mode.

#### How does it work?

Via Ethernet (cable or wireless). Once installed, the OCS software automatically detects all the cabinets connected to the network and displays them in the OCS window on the users PC.

#### What does it show?

As well as displaying the cabinet model and IP address the OCS will be monitoring in real time and the user will be able to view RMS levels, compression and output levels per way, delay, EQ, power module temperature, air absorption compensation and cabinet angulation.



# Rainbow 3D Electroacoustical prediction software

Rainbow 3D is an electro-acoustical prediction software for loudspeaker systems, boasting comprehensive high-speed simulation in a three-dimensional environment. With a sophisticated design, Rainbow 3D stands out for its speed, being able to do a simulation in a few seconds.

Being a technology that has been developed in-house by our engineers, we are able to adapt to the needs of our clients, make improvements when necessary and develop new tools. Rainbow 3D is an ongoing project that will be constantly adding new features.

#### • Designed from scratch by professionals

Despite the existence of the previous Rainbow 2D, this new software has been coded from scratch by our engineers in order to achieve an ultra-fast simulation and to create a visually rich 3D environment. The simulation takes advantage of all cores in the computer using multi-threading techniques for optimised calculation speed.

The program can simulate all Lynx Pro Audio's acoustic enclosures located in a 3D space. New spherical measurements of the loudspeakers have been performed, with up to one degree of accuracy, in the recently built anechoic chamber.

#### • Complex-shaped surfaces

The program can simulate all Lynx Pro Audio's acoustic enclosures located in a 3D space, including the classic side and top views. It can also define multiple listening zones and allows offset positioning and symmetry.

You can create complex-shaped surfaces as listening zones (venues): trapezoidal forms, semicircles, circles, rectangles and other asymmetrical forms. Each corner in a 4-vertex surface is independently definable as straight or round.

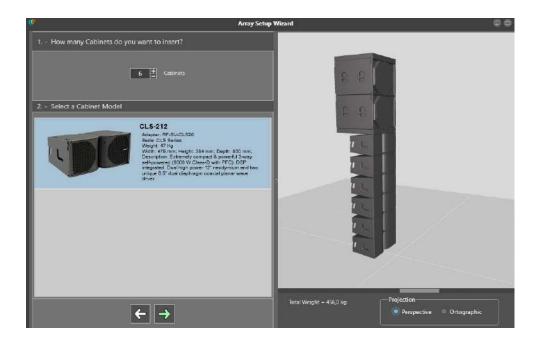
#### • Blueprints, textures and ornaments

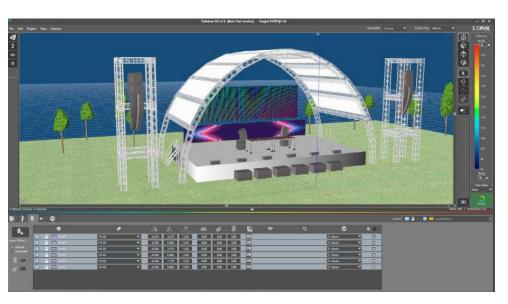
Blueprints can be loaded and used as a reference point or template on which reproduce the venue more closely to reality.

Furthermore, you can add textures and ornaments (decorative 3D objects) that you will find in the library to make the project more realistic and visually appealing.

### • Create projects with endless zones

You can create customized designs using multiple edition and productivity tools: create surfaces, duplicate, apply symmetry on X and Y, show/hide surfaces, change dimensions, change position, change rotation, take screenshots, etc.





#### Unlimited sound sources

Allows the acoustic simulation for an unlimited number of sound sources and audio systems.

You can place as many systems (subwoofers, line arrays, columns and individual cabinets) as you desire or you can create your own group of customized sound systems.

Line arrays can be placed in stack or flown configuration. Also, you can create clusters from any individual cabinet available in the library.

#### Create your own "Sound Systems"

You can select different models of cabinets from the library, create a group with the desired configuration and save them as a sound system. In this way, you can create a group of customized sound systems with your own configurations and reuse them in other projects, saving time.

To make this possible, you will need to create a "system" file. This can be integrated upon other projects with the "Load sound system from file" option or you can import it directly into the library to get access whenever you need it with the "Insert sound system" option.

When you create a Sound System, you can add a name, a description and you have the chance to upload a picture.

#### Organisation by layers

To work in a more organized way you can create multiple layers, with different names and colors to distinguish them. All elements within a layer can be selected and/or moved among them. You can also lock a layer, delete it or disable the speakers for simulation.

#### • DSP process over sound sources

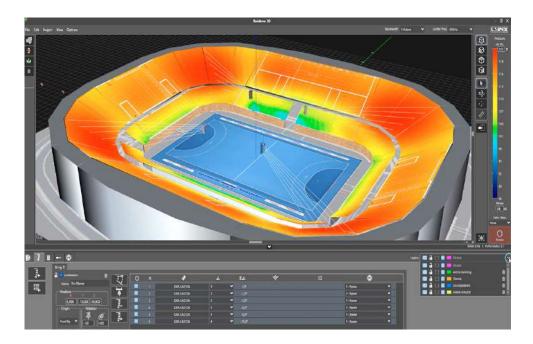
Adding DSP process to sound sources to make corrections and optimize sound, using EQ filters, delay, gain and polarity inversion. In the near future, direct communication with Lynx Pro Audio's cabinets will be available.

### • Multiple measures and tools

Likewise, the R&D department is developing multiple measurements and analysis tools for the calculated data. For example, adding virtual microphones that show the frequency response in the points of location indicated.

Among other tools you will find a wizard to set up different line array arragements, a tool for line array autosplay and a ruler to take measurements (meters) in the 3D scene.

A PDF report can be generated with extensive information that includes 3D views of the project as well as a list of surfaces and loudspeakers with set-up data and EQ.







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