CPS series

USER MANUAL

LYNX
pro-audio

INTRODUCTION

This manual describes the recommended installation procedure for the coaxial point source CPS-214, CPS-210, and CPS-14 in combination with the subwoofers CPS-18S, CPS-F10S, and CSM-210. Additionally, two ultra-compact passive coaxial cabinets, CPS-5 and CPS-4, are included.

The CPS (Coaxial Point Source) Series is our new high-power, point source system. There are three coaxial point source cabinets available: CPS-214, CPS-210, and CPS-14 (all available in passive versions), together with three sub-bass units: CPS-18S, CPS-F10S, and CSM-210.

Extreme care has been taken to select and customize the most advanced components on the market, including coaxial mid/high drivers, along with full electronic synergy through the coupling of system amplification and integrated DSP technology.

Total system control is achieved through our 3D prediction software (Rainbow 3D), working together with our remote system management platform (OCS). These cutting-edge software tools, combined with CPS technology, provide the most optimal and precise listening experience for every ear in the audience.

CONTENTS

Before starting to use this device, please read this instruction manual carefully.
Keep these instructions in the place where the equipment will be used and with easy access to them.

• Electrical appliance
The exclamation mark within a triangle identifies the presence of electricity. Use the system carefully without wet hands or feet. Avoid installing the speaker in wet or excesively humid places. Do not place material that contains liquid on or near the unit. Avoid dripping or splashing water or any liquid over the unit. Regularly check the condition of the cables and make sure these are not being walked on or pinched. Connect the speaker to bipolar, earthed mains. The mains plug must be connected to the appropriate protection (fuse or breaker). Connection to any other type of mains could result in an electrical shock and violate local electrical codes. CAUTION: DO NOT CONNECT OR DISCONNECT THE AC POWER CONNECTORS UNDER LOAD.

• Heavy equipment
Apply back protection when using the system. Avoid loading and unloading at heights.

• Electrical shock risk
The diagonal mark within a triangle identifies the presence of dangerous voltage.
Do not open or handle the interior of the box. These parts are not to be adjusted by the user. For maintenance and/or repair please go to an authorized service centre.In order to reduce the risk of electric shock, disconnect from AC before plug in or unplugging Audio signal cables. Reconnect to AC only if all signal connections are made and secured. Never manipulate the ground type plug provided.
The AC mains plugs should always remain accessible for operation.
Unplug the loudspeaker during storms or when it's being used for a long time.

• Hearing damage risk
These systems can reproduce large quantities of sound pressure which can damage hearing. Take precautions if you are going to be near them for extended amounts of time and do not get too close.

• Hanging / Flying
Do not hang the cabinets from the handles or from any other part other than the designated hanging point. When flying this system please observe the technical and "Rainbow" software data carefully. Never exceed the maximum safe working loads or ignore the instructions included within this manual. Use Only flying accessories provided by Lynx Pro Audio S.L. Rigging must be always carried out by professionals.

• Delicate Material
Please ensure no foreign object or water enters the speaker. Only clean the unit with dry cloths. Do not use solvents.

• Overheating / Fire risk
To reduce the risk of the speaker over heating, avoid direct contact with sunlight. Avoid placing the unit close to heat inducing objects such as radiators. Do not cover the equipment in use and do not block any ventilation openings. Do not put naked flame, such as lighted candles, close or on top of the unit.

• Electromagnetic and interferente emissions
Avoid placing objects which through electromagnetic waves can damage the unit, such as mobile phones, lap tops, magnetic strip cards etc.
This system complies with normatives   EN 55103-1 (1)
                                                         EN 55103-2 (2)

(1) This device may not cause harmful interferences.
(2) This device may receive interference including interferences that may cause undesired working.

•IMPORTANT NOTE
This Equipment must be used in accordance with these instructions and by trained professional personnel only. This equipment should not be used in places with extreme tropical climates. Don't expose this apparatus to extreme humidity and or temperature values.

SYSTEM OVERVIEW

- CPS-214

    Extremely compact & powerful 3-way, self-powered (6000 W Class-D with PFC), DSP integrated coaxialpoint 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.

- Technical Data:

    Components:
    - LF: 2 x 14" (4" voice coil), neodymium magnet, 2000W (AES)
    - MF/HF: MF: 3.5" (90 mm) voice coil, 150W (AES)

    HF: 1.5" (44,4 mm) voice coil, 80W (AES)

    Frequency range: 55 Hz – 22 KHz (-6dB)
    Max SPL / Peak*:   Low: 137 dB / 143 dB - Mid/ High: 139.5 dB / 142.6 dB
    Coverage angle: Rotatable 60°H x 40°V
    Power amplifier: 6000 W Class D with switching power supply & PFC

    Amp: 3000W @4 Ohm

    MF/HF Amp: 3000 W @4 Ohm

    Processing: 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 optional

    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.

- CPS-214 measurements
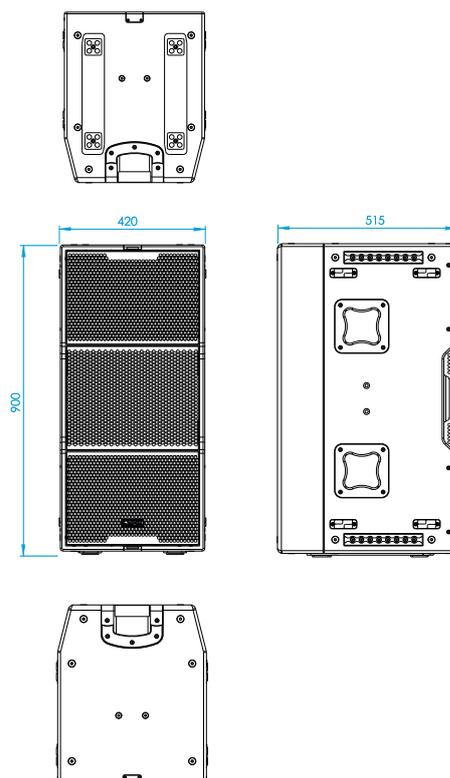
## SYSTEM OVERVIEW

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

  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-210/64 (60ºH x 40ºV) or CPS-210/96 (90ºH x 60ºV).

- **Technical Data:**

  Components:
  - LF: 2 x 10" (3" voice coil), neodymium magnet, 1400W (AES)
  - MF/HF: MF: 3" (76 mm) voice coil, 90W (AES)
                         HF: 2" (51 mm) voice coil, 50W (AES)

Frequency range:	63 Hz – 20 KHz (-6dB)
Max SPL / Peak: Low:	130.5 dB / 136.5 dB - Mid/ High: 131 dB / 137 dB
Coverage angle:	Rotatable 60ºH x 40ºV / 90ºH x 60ºV
Power amplifier:	3000 W Class D with switching power supply & PFC
	LF Amp: 1 x 1500 W / MF amp: 1 x 750 W / HF amp: 1 x 750 W
Processing:	96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Crossover:	Digital: FIR filter 600 Hz / Passive: 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 optional
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.

- **CPS-210 measurements**
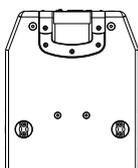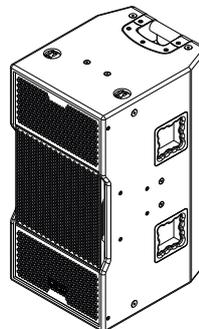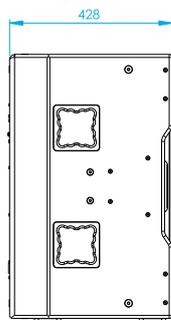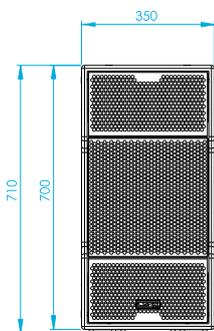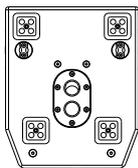
SYSTEM OVERVIEW

- CPS-14 (64/96)

  Extremely compact & powerful 3-way, tri-amplified (3000 W Class-D with PFC), DSP integrated coaxial point source element. High power 14" 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).

- Technical Data:

  Components:
  - LF: 1 x 14" (4" voice coil), neodymium magnet, 1000W (AES)
  - MF/HF: MF: 3" (76 mm) voice coil, 90W (AES)
                         HF: 2" (51 mm) voice coil, 50W (AES)

Frequency range:	55 Hz – 20 KHz (-6dB)
Max SPL / Peak*:	Low: 130 dB / 136 dB - Mid/ High: 132 dB / 138 dB
Coverage angle:	Rotatable 60°H x 40°V / 90°H x 60°V
Power amplifier:	3000 W Class D with switching power supply & PFC
	LF Amp: 1 x 1500 W / MF amp: 1 x 750 W / HF amp: 1 x 750 W
Processing:	96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Crossover:	Digital: FIR filter 600 Hz / Passive: 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 optional
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:	755 x 415 x 430 mm (H x W x D)
Weight:	33 Kg (72.75 lbs)

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

- CPS-14 measurements
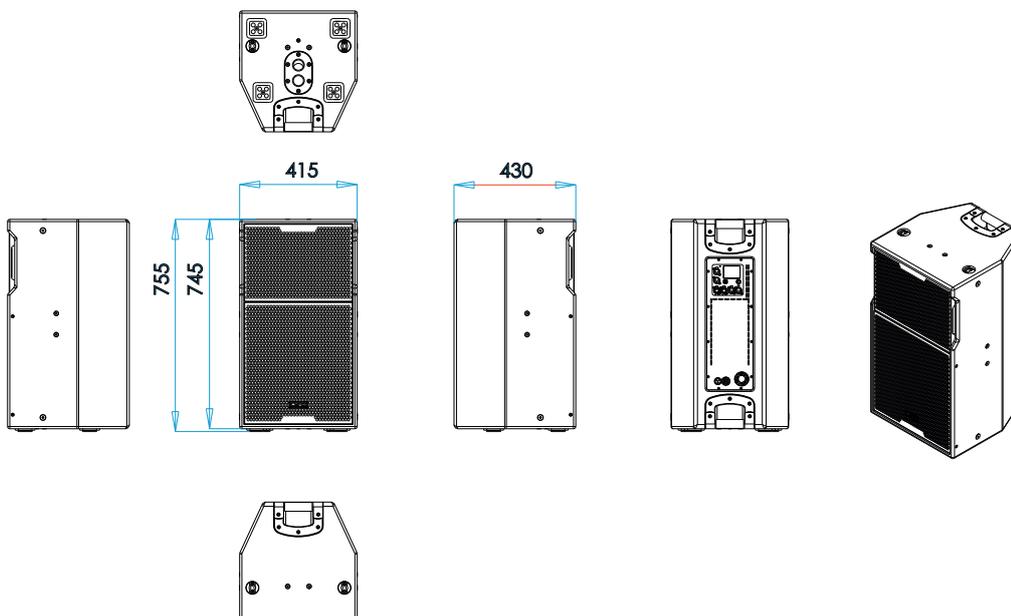
- CPS-5

  The CPS-5 is a two-way passive vented system part of the CPS series, with a 5" coaxial speaker (1.5" LF voice coil and 1" HF voice coil) offering a coverage of 70° conical dispersion and 120dB SPL in a compact enclosure designed for short throw applications.

- Technical Data:

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)
Max SPL / Peak*:	114 dB / 120 dB
Sensitivity:	93 dB (1W@1m)
Coverage:	70° conical dispersion
Power:	150 W AES (300 W program, 600 W peak)
Nominal impedance:	16 Ω
Connectors:	2 x Neutrik Speakon NL4MP
Finish:	Polyurea coating, high grade resistant paint
Material:	9 mm Premium birch plywood
Dimensions:	152 x 152 x 221 mm (H x W x D)
Weight:	3 Kg (6.6 lbs)

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

- CPS-5 measurements
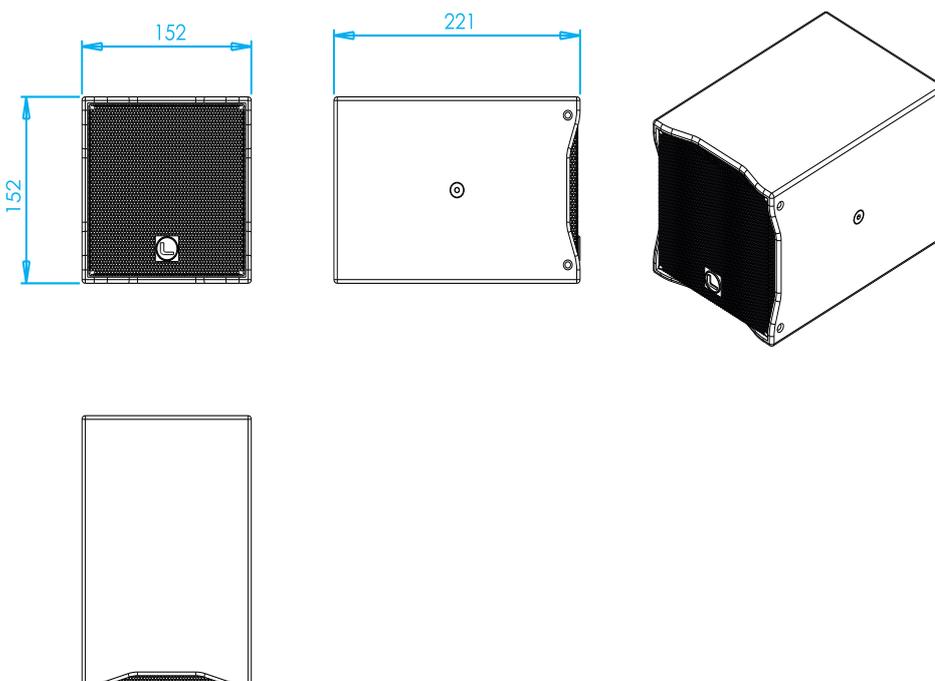
- **CPS-4**

   The CPS-4 is a two-way passive point source system with a 4" coaxial transducer mounted in a closed enclosure that produces a 90° conical dispersion without secondary lobes over the whole frequency range. Due to its ultra-compact size and sleek design, this system suits very well indoor installations and can be used as background sound reinforcement.

- **Technical Data:**

 | | |
   |---|---|
   | Components: | 1 x 4" coaxial speaker |
   | Frequency range: | 120 Hz – 20 KHz (-10dB) |
   | Sensitivity: | 86 dB (1W@1m) |
   | Max SPL / Peak*: | 106 dB / 112 dB |
   | Coverage: | 90° conical dispersion |
   | Power: | 100 W AES (200 W program, 400 W peak) |
   | Nominal impedance: | 16 Ω |
   | Connectors: | 2 x Neutrik Speakon NL4MP / 4 x Terminal Block 7.62 mm between pins |
   | Finish: | Polyurea coating, high grade resistant paint |
   | 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) |

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

- **CPS-4 measurements**
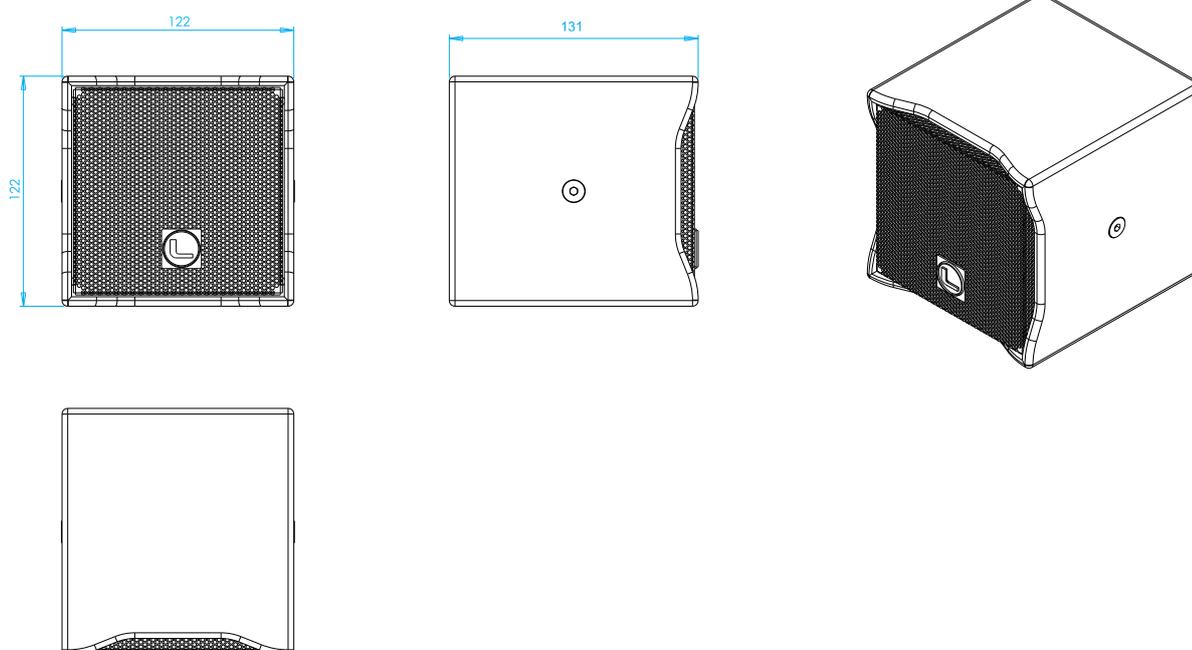
- CPS-18S

  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.

- Technical Data:

  Components:
  - LF: 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)

  Max SPL / Peak: 132 dB / 138 dB

  Coverage: QUASI Omnidirectional

  Power amplifier: 3000 W Class D with switching power supply & PFC

  Processing: 96 KHz / 64 bit double-precision, DSP with FIR filter linear phase

  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 optional

  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)

- CPS-18S measurements
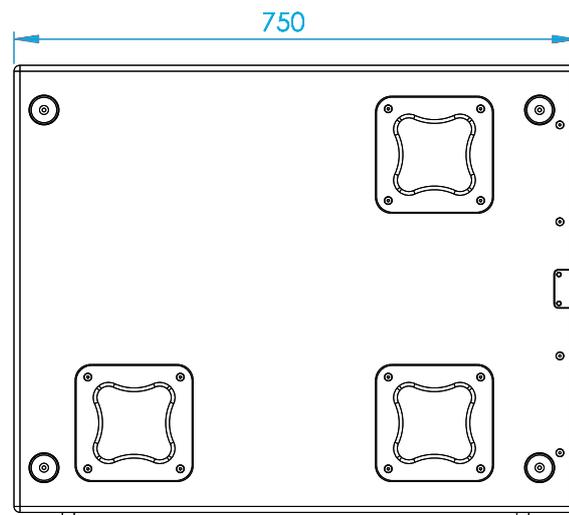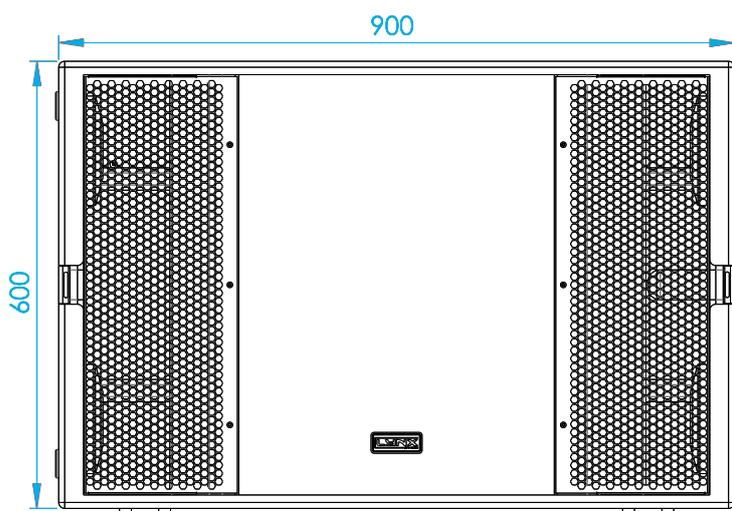
- ● CPS- F10S

    Ultra-compact direct radiation bass reflex passive subwoofer with one 10" transducer, 2,5" voice coil and rubber suspension. 119 dB SPL, 600W program

- ● Technical Data:

Components:	1 x 10″ transducer 2,5" voice coil
Frequency range:	30 Hz – 90Hz (-10dB) (X90Hz)
Frequency response:	36 Hz – 80Hz (± 3dB) (X90Hz)
Sensitivity:	91 dB (1W@1m)
Rated power:	300W AES, 600W program, 1200 W
Max SPL:	116 dB – 122 dB peak (X90Hz)
Coverage:	Omni directional
Power:	100 W AES (200 W program, 400 W peak)
Nominal Impedance:	8 Ω
Connectors:	2 X NEUTRIK Speakon NL4 Pin connections: +1 / -1 input +1 / -1 link
Finish:	Polyurea coating - available in RAL colous on demand
Material:	15 mm Premium birch plywood
Dimensions:	595 x 595 x 170 mm (H x W x D)
Weight:	18 Kg
Fittings:	8 x M6 U bracket, 2 x M6 wall bracket

- ● CPS- F10S measurements
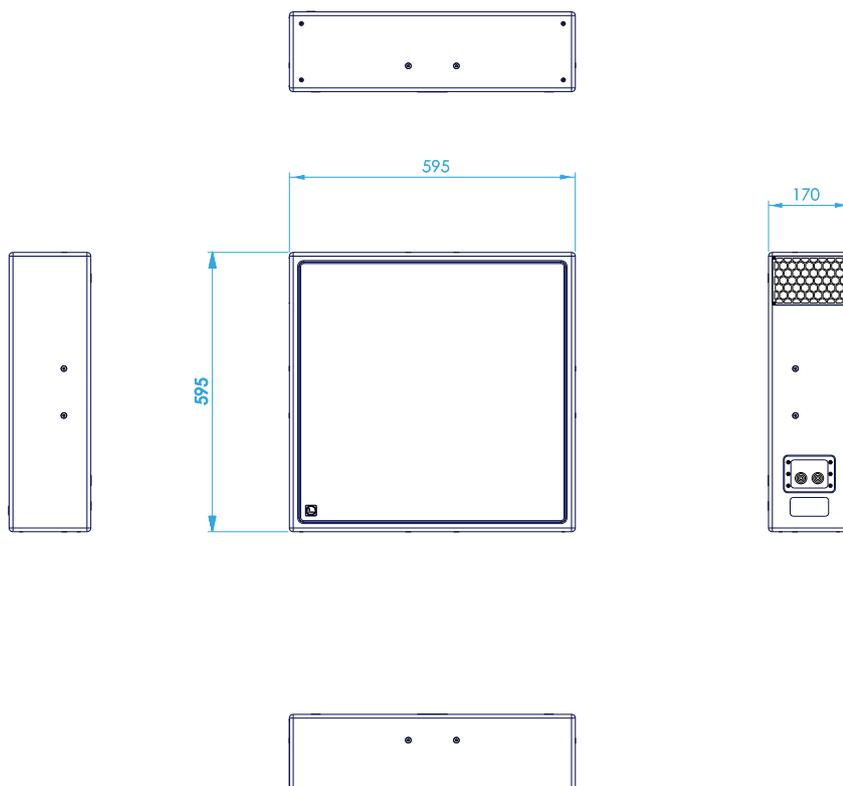
- CSM- 210 (65/85)

 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: CMS-210/65 (60°H x 50°V) or CSM-210/96 (80°H x 50°V).

- Technical Data:

 Components:
  - 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 50°V / 80°H x 50°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 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
 Operating voltage: 85 - 264V AC
 AC Connectors: 16A Neutrik power CON TRUE1 TOP with looping output
 Finish: Polyurea coating, high grade resistant paint
 Material: 15 mm Premium birch plywood
 Dimensions: 407 x 588 x 572 mm (H x W x D)
 Weight: 30 Kg (77.1 lbs)

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

- CSM- 210 measurements
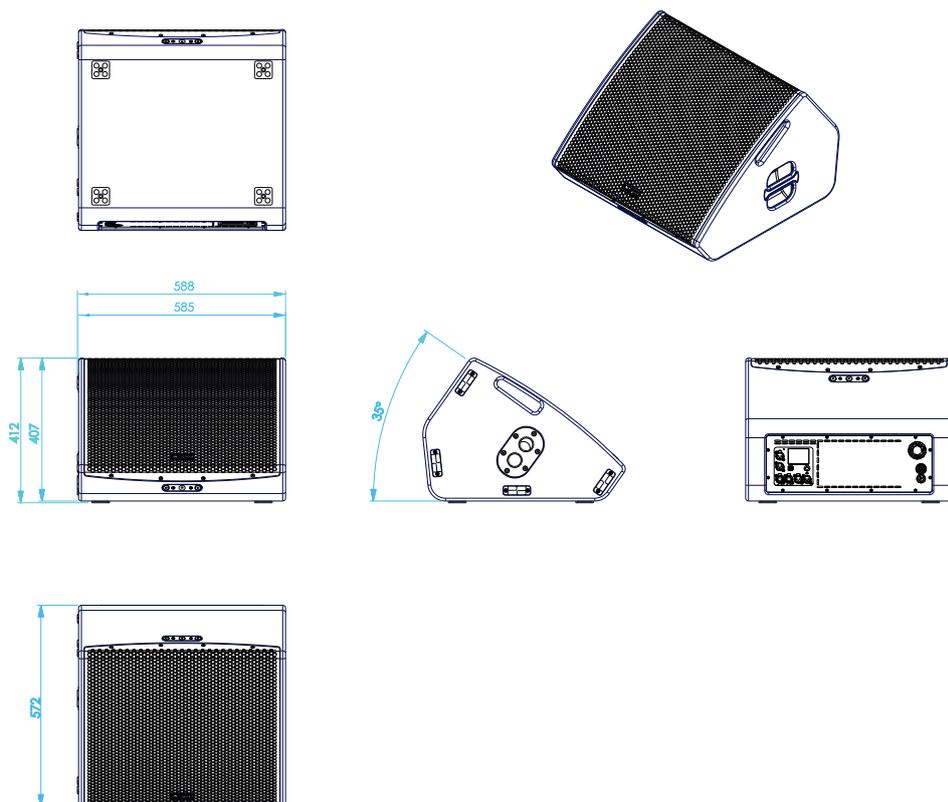
CPS BACK PANEL panel

CPS-214, CPS-210 and CPS-14 back panel:

IPS display & digital control

Multifunction joystick control

Main input

Main Link

digital INPUT

digital Through

USB connection

Ethernet

analog INPUT

analog Through

CPS BACK PANEL panel
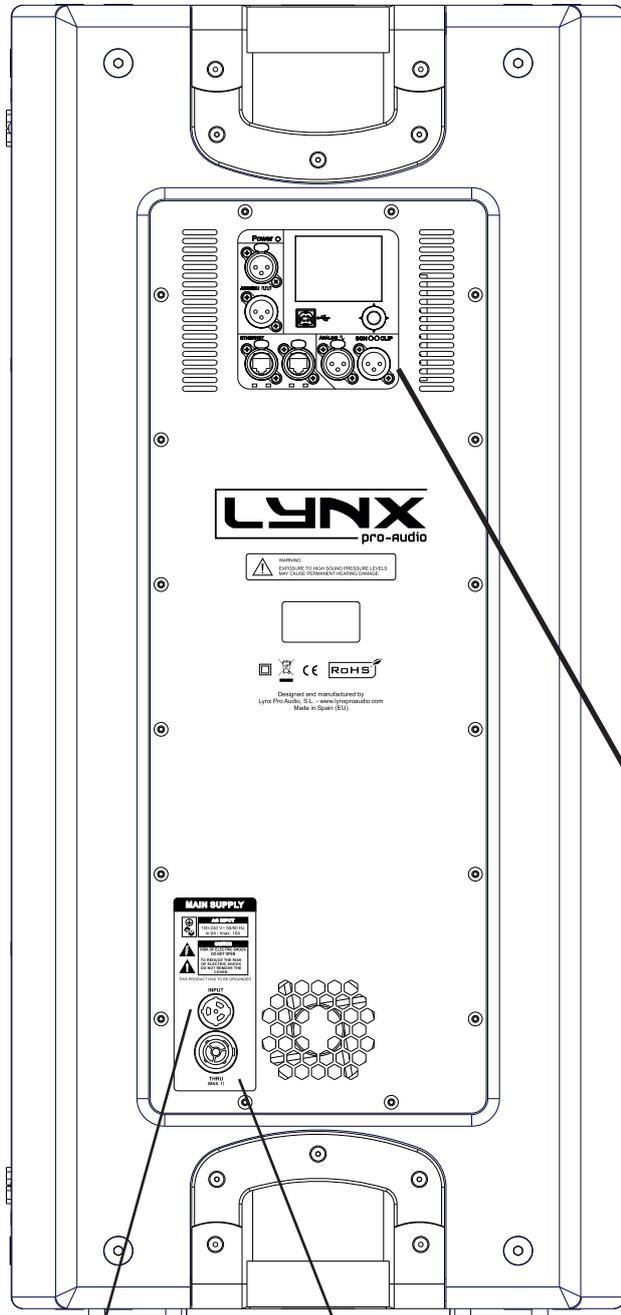
CPS-18S back panel:

Main input

Main Link

IPS display &
digital control

digital
INPUT

digital
Through

Multifunction
joystick control

USB
connection

Ethernet

analog
INPUT

analog
Through
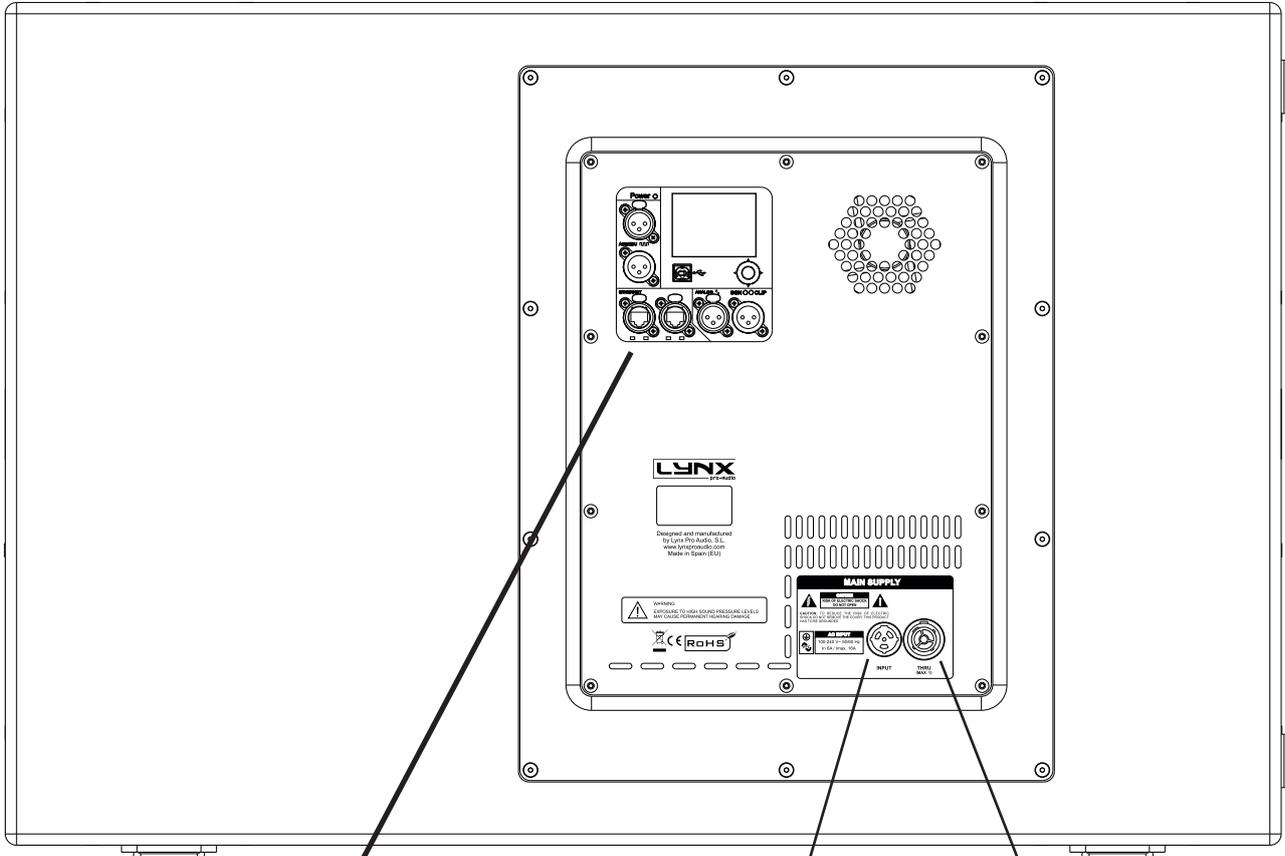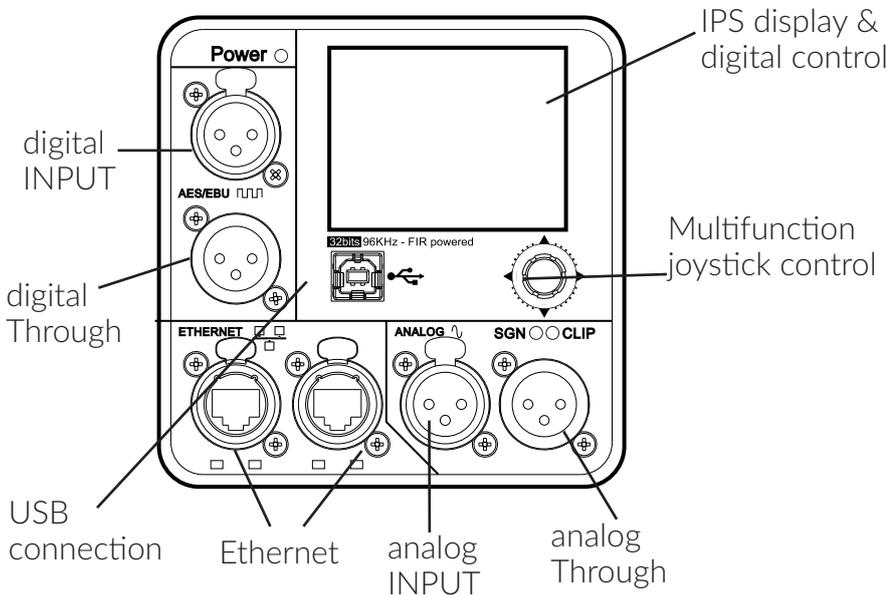
CONNECTORS AND CONNECTIONS
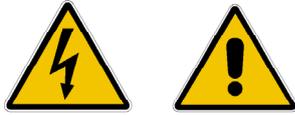
SOCKET POWERCON TRUE1

CAUTION: Do not connect or disconnect the AC Power connectors under load.
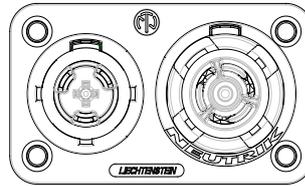
INLET | OUTLET

NAC3PX

NAC3FX-W

POWER IN

POWER OUT

NAC3MX-W or NKPM
(Plug connector)

NAC3MX-W

NAC3FX-W or NKPF
(Connector)
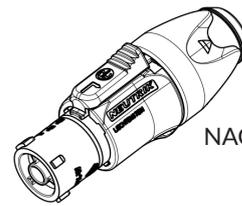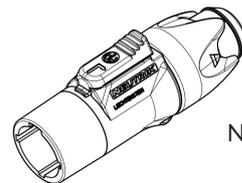
XLR SOCKET CONNECTORS

INPUTS
1.- EARTH
2.- LIVE (+)
3.- LIVE (-)

XLR AEREAL CONNECTORS
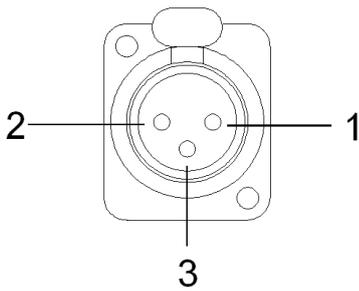
Connect to input
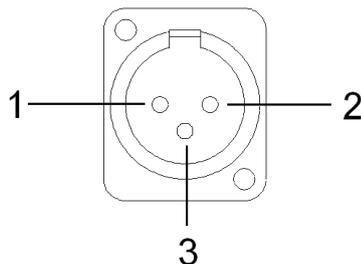
1 Earth
2 Live(+)
3 Live(-)

OUTPUTS
1.- EARTH
2.- LIVE (+)
3.- LIVE (-)

Connect to output

1 Earth
2 Live(+)
3 Live(-)
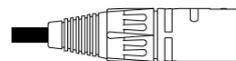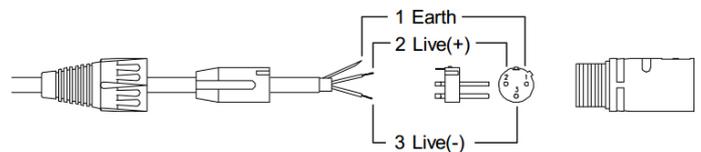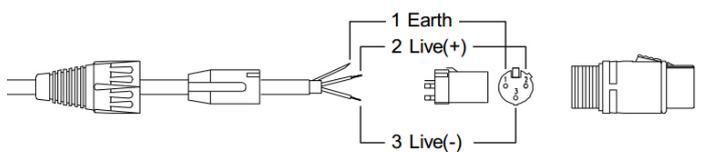
FIR FILTERS

Finite Impulse Response (FIR) filters are used in the signal processing of the cabinets. FIR is a type of digital filter with linear phase characteristics. This frees system designers from the constraints of phase anomalies associated with analogue filters or their digital versions (IIR, Infinite Impulse Response). When properly used, FIR filtering can audibly improve a system's impulse response and reduce crossover interference.

CONFIGURING THE CABINET DSP OPTIONS

On the back pannel of the cabinet you will find the digital control area. From the compact joystick located below the screen you are able to configure the Basic adjustment functions of the internal DSP. Just move the joystick to select the icons on the left of the screen. You can enter into the following functions:

Home   Settings   Folder   Configuration   Information

Please note that you must apply the desired configuration in each one cabinet and requires electrical power to work.

If changes are not made the display will automatically dim to avoid unnecessary light in situations where light is not wanted. To re-activate the light simply press the joystick.

CONFIGURATION PANEL

On the main screen you can see the cabinet's input and output.
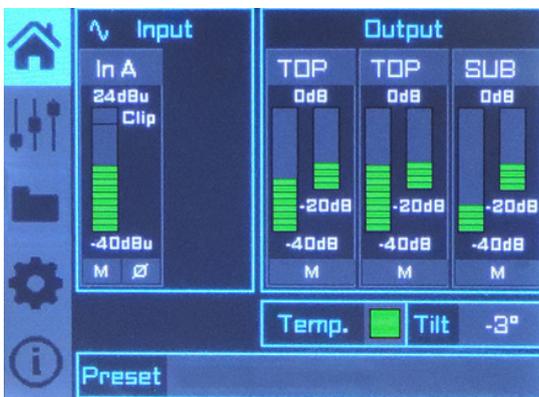
• **Input:**

You can see a vumeter with the input level and a clip signal.

• **Output:**

You have a vumeter with the output level (0 dBu is the amp's maximum level) You can check the compressor and control the dynamic activity.

On the second screen you can modify some parameters.

• Gain

• Mute

• Polarity

• Delay

• **High Pass Filter:** You can setup a High Pass filter selecting type, frequency and order.
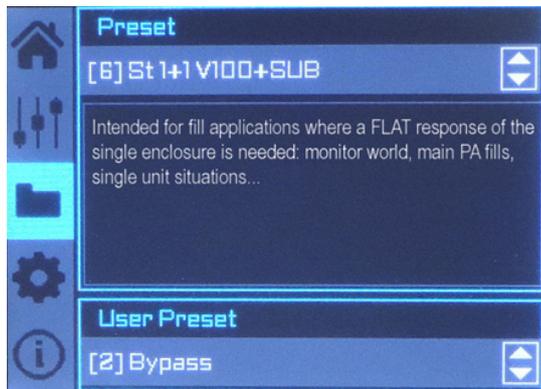
The folder screen shows you the name of the preset and its description.

Using the joystick you can change the preset.
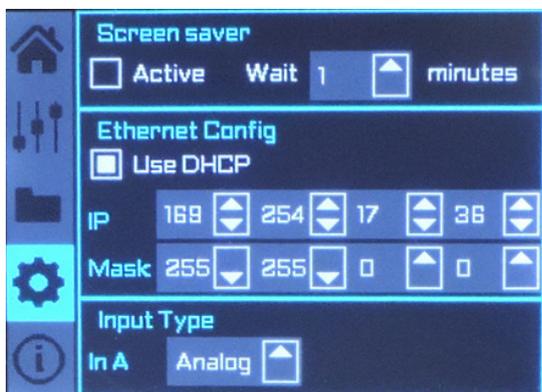
This screen is to configurate Ethernet. You can choose automatic or manual

You can also configure the screen saver.

And here you have the input selection. You can choose between analog or AES3 for channel 1 or channel 2.

The last screen shows you some general information regarding the cabinet's components.

Here you can see the cabinet model, its serial number, DSP firmware and hardware versions, amp module model with hardware version, as well as the accelerometer status.

ONLINE CONTROL SYSTEM

• Who is it for?

Users of Self powered DSP incorporated Lynx Pro Audio Cabinets where the user has requested the cabinets 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. You can change the preset, gain, mute, polarity and phase. 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 O.C.S. software automatically detects all the cabinets connected to the network and displays them in the O.C.S. window on the users PC.

• What does it show?

As well as displaying the cabinet model and IP address the O.C.S will be monitoring in real time and the user will be able to view RMS levels, Input clip, power module temperature, compression levels, air absorption compensation and cabinet angulation.
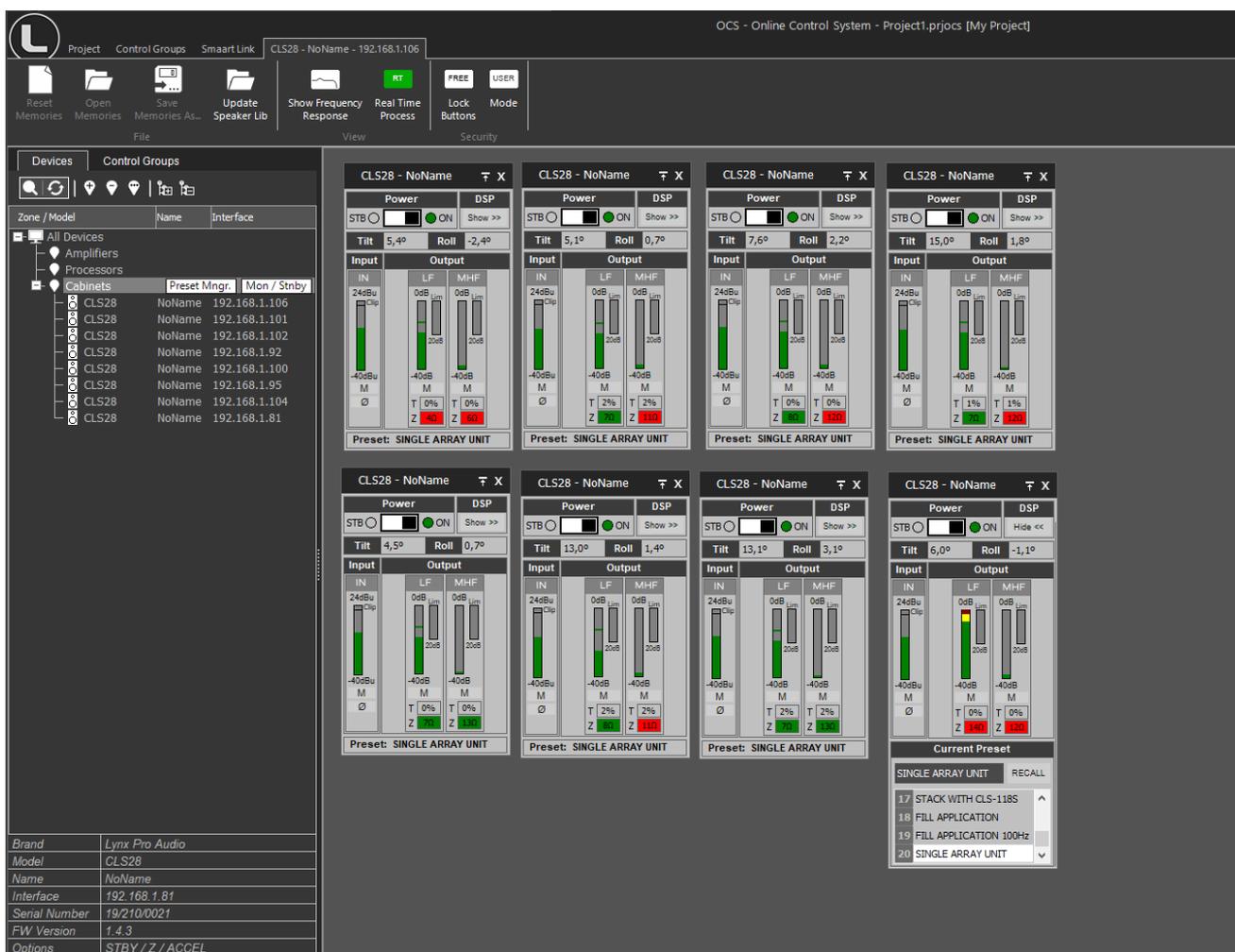
RAINBOW 3D Acoustic Prediction Software

Lynx Pro Audio's R&D department is working on Rainbow 3D, a new acoustic simulation software with dynamic 3D features. With a sophisticated design, Rainbow 3D stands out for its speed, being able to provide a simulation in just a few seconds. It also provides algorithms for beam steering and optimizing the listening area.

• Designed from scratch by professionals

Rainbow 3D has been programmed from scratch by Lynx Pro Audio engineers, using new programming procedures that achieve an effective simulation with really low calculation time.

• Multiple listening zones

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

• 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 boxes) as you desire. Also, the line arrays can be placed in stack or flown configuration.

• Beam steering

Rainbow 3D has the ability to add DSP processing to the simulation and uses algorithms to control the directivity (beam steering) in columns, without the need to tilt them physically, being able to divide the column into several beams that point to different zones.

• Accurate optimization thanks to FIR filters

Optimized algorithms are used in the listening area to improve the sound coverage and the frequency response. This feature can be executed in a matter of seconds. Additionally, the export of FIR coefficients can be performed with the optimization for later loading in the DSP via Ethernet or a USB device. In the near future direct communication with Lynx Pro Audio and OCS will be available.

• Multiple measures and tools

Likewise, the R&D department is developing multiple measurement and analysis tools for the calculated data. For example, the sound pressure curves (SPL) in the listening areas and the capture of virtual measurements that show the frequency response in the points of location indicated and added. Among other tools you will find autosplay and a wizard to set up different subwoofer arragements.
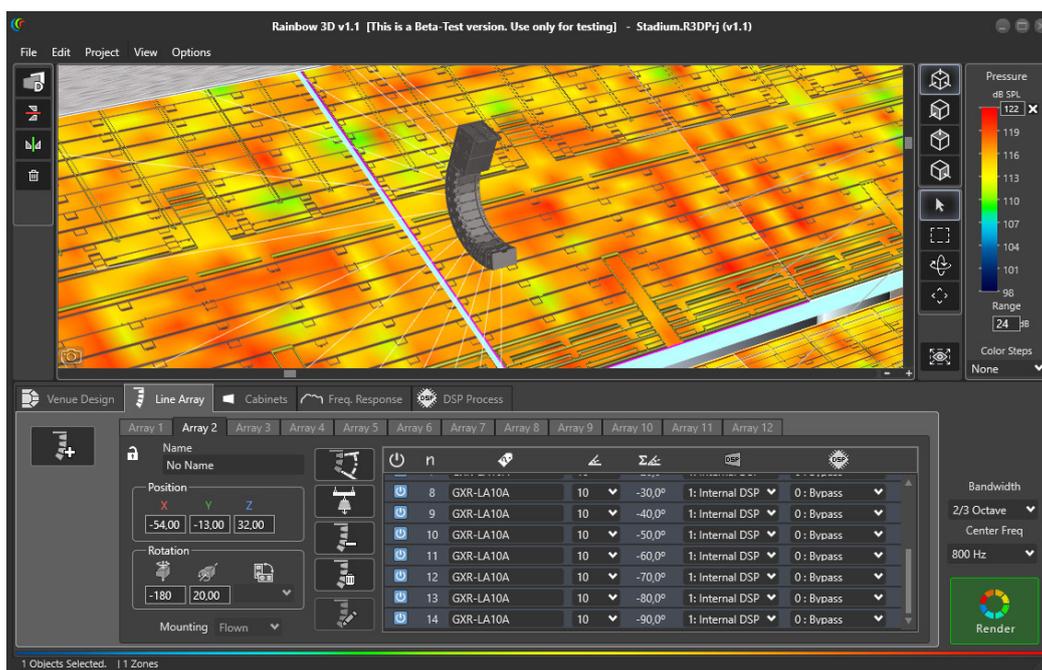
HARDWARE AND ACCESSORIES

The CPS cabinets offer a variety of practical accessories to help use the system in a number of events, from touring applications to fixed installations, indoor and outdoor.

UBR-HCPS214
UBR-HCPS210
UBR-HCPS14

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

UBR-VCPS214
UBR-VCPS210
UBR-VCPS14

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

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

CA-CPS214
Removable front transport dolly for CPS-214
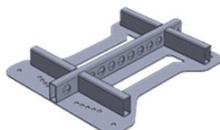
SV-CPS214
Flying frame for CPS-214

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

FD-1CPS214NL
FD-1CPS210NL
FD-1CPS14NL
FD-1CPS18SNL
Rain cover for the back panel of the CPS-214, CPS-210, CPS-14 or CPS-18S

FD-CPS214
Nylon protection for CPS-214
FD-CPS210
Nylon protection for CPS-210
FD-CPS14
Nylon protection for CPS-14
FD-CPS18S
Nylon protection for CPS-18S

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°)

MS-5CX
Quick Coupler for 3/8" to 5/8" stand

UBR-CPS5
Wall bracket for the CPS-5
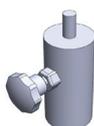
SP-5CX
35mm Speaker pole to 3/8" male thread

UBR-CPS4
Wall bracket for the CPS-4

CABINET INSTALLATION

- Mounting advice

Cabinets must be installed and suspended by professional installers.

Never place the safety of personnel at risk. Always check the accessories, slings etc are in good condition and the suspension point is secure and free of excess weight, vibration, etc. Be careful where the cabinets are suspended from.

All responsibility lies with the installation company.

- How to rotate the horn

The CPS-214, CPS-210 and CPS-14 cabinets enable the horn to be rotated 60º H x 40º V offering further coverage options. The rotatable horn feature enables the installer to also set the cabinet up horizontally whilst maintaining the horn features such as horizontal and vertical coverage. This is helpful in installs with low ceilings or where esthetically the cabinet looks better horizontally.

- To rotate the horn the user must first remove the central cabinet grill, pulling it out. It is attached with magnets.

- Then, unscrew the screws that are holding the speaker.
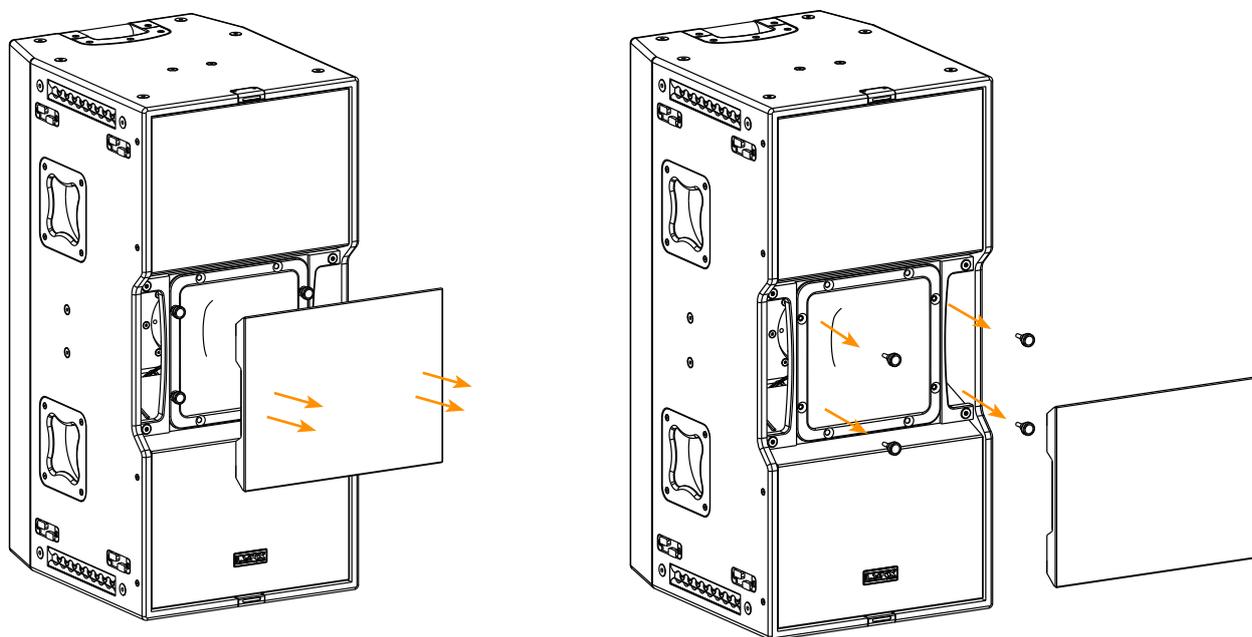
CABINET INSTALLATION

• Take the horn out and turn it to the desired position. Make sure that the horn fits correctly.

• Introduce the screws again to secure the horn. Make sure it is correctly fixed.
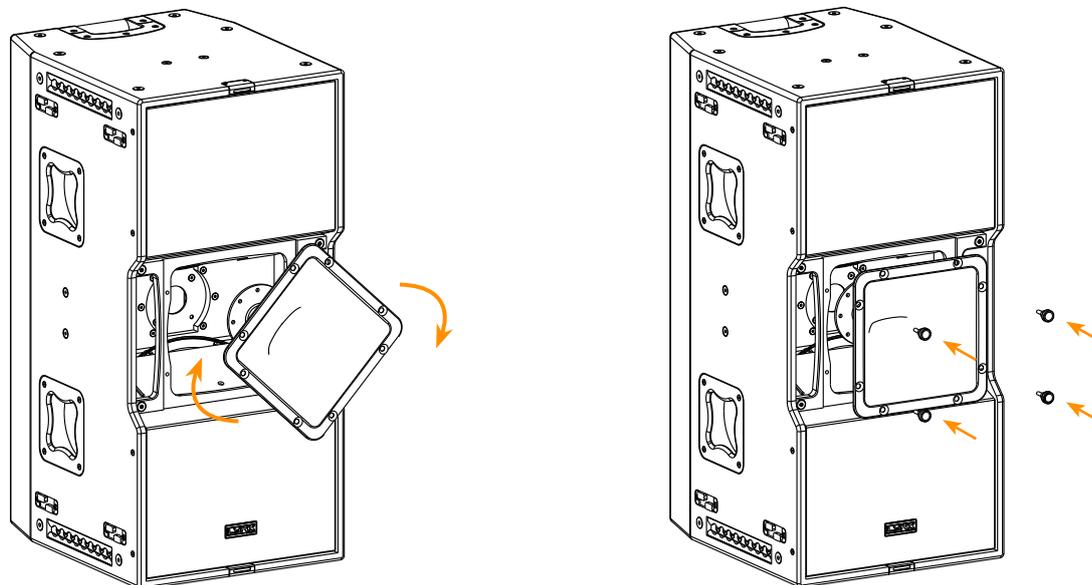
• Place the cabinet grill back into the former position. Make sure that the cabinet grill is properly fixed with the magnets.
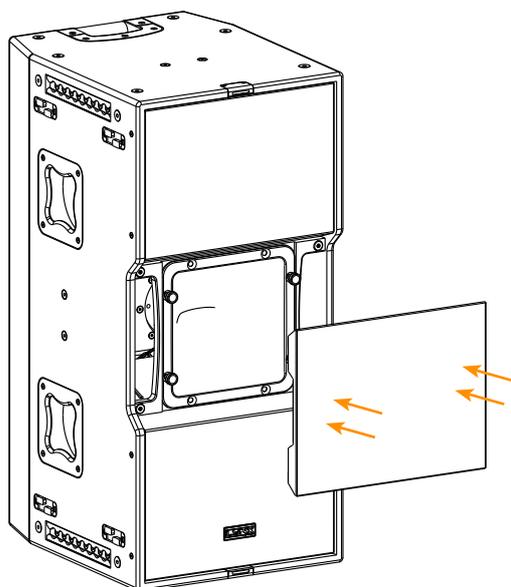
U BRACKET: HORIZONTAL MOUNTING FOR CPS-214 / CPS-210 / CPS-14

UBR-HCPS is the horizontal mounting system specially designed for Lynx Pro Audio CPS-214, CPS-210 and CPS-14 cabinets. In order to correctly mount the horizontal U bracket, you must first put the wooden adapter (Picture A) before mounting the U bracket.

Picture A:
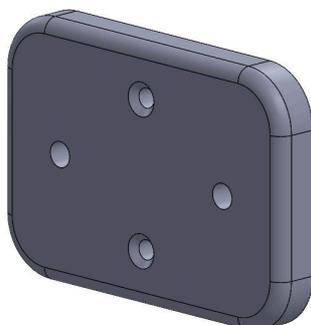
Just follow the steps to fix the wooden adapter correctly:
Step 1: Pull off the 4 screws on top and bottom side of the cabinet
Step 2: Place the wooden adapter and fix it with 2 screws, as shown in the picture below.

Step 1
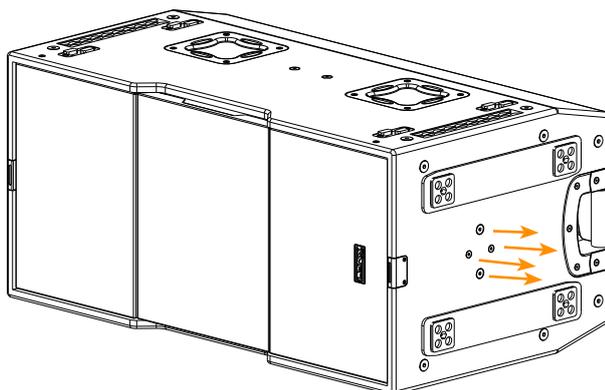
Step 2
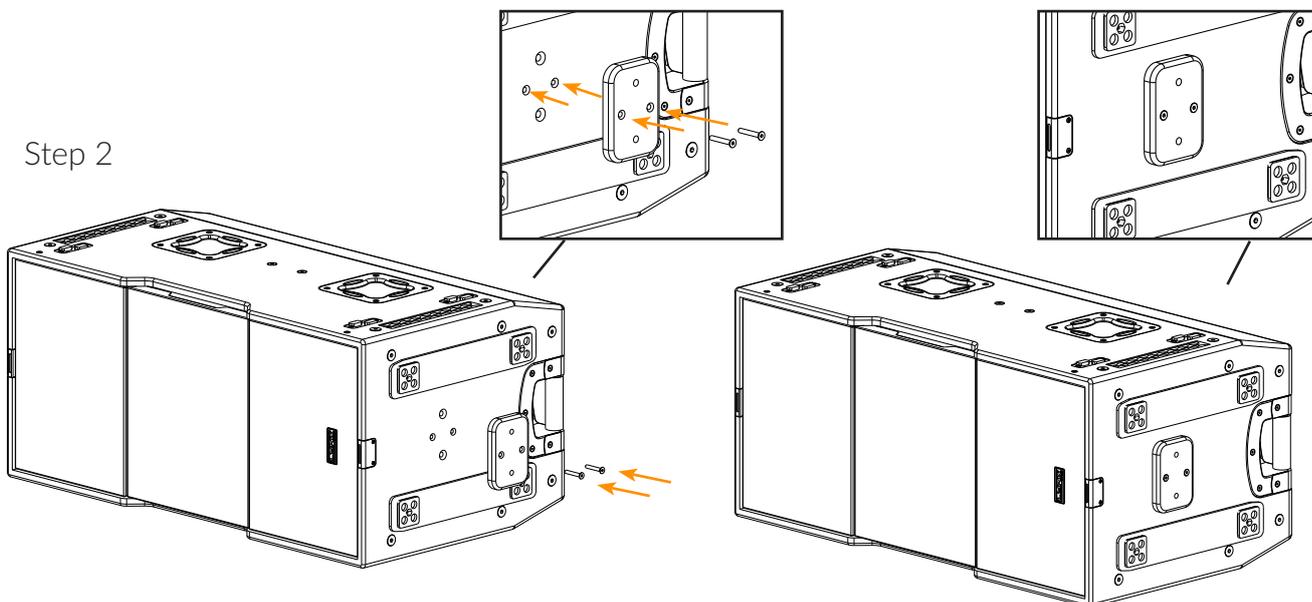
Once this is done, the U bracket for horizontal mounting can be correctly attached.

U BRACKET: HORIZONTAL MOUNTING FOR CPS-214 / CPS-210 / CPS-14

Now, you can attach the UBR-HCPS, composed by the U type support made of steel and 4 special fixing screws (2 per side) in order to fix the cabinet to the U support.
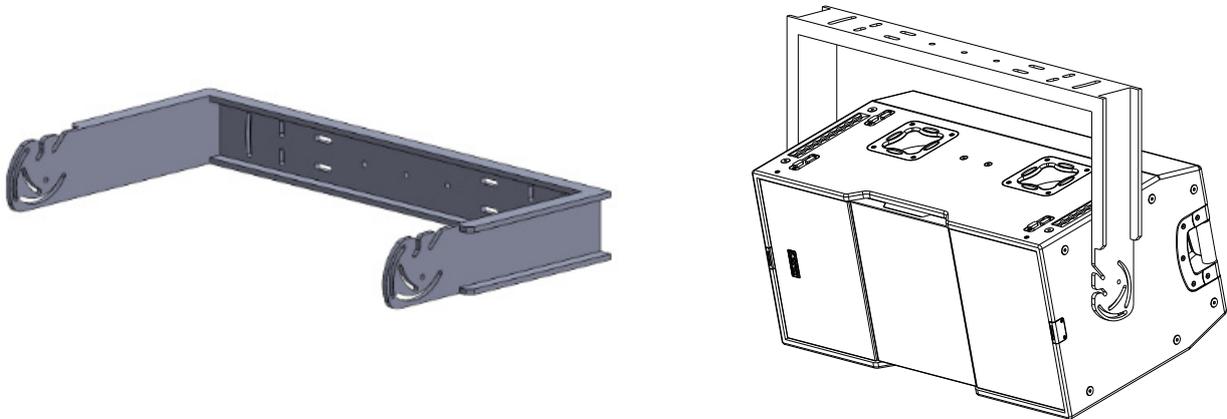
Below you can see in which direction to position the UBR support with regards to the cabinet:
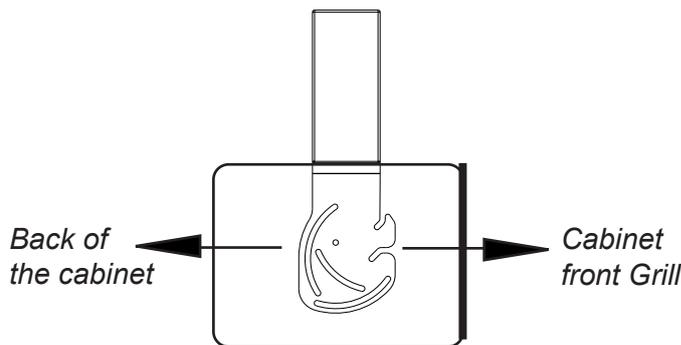
Back of the cabinet ← → *Cabinet front Grill*

How to use it?

Before starting with the installation please note that the UBR bracket offers three different options and you have to select one of them before installing the support. Simply check the following drawings and select the best option in order to achieve the coverage required.

Position 1 | *Position 2* | *Position 3*

47° 86° 69°
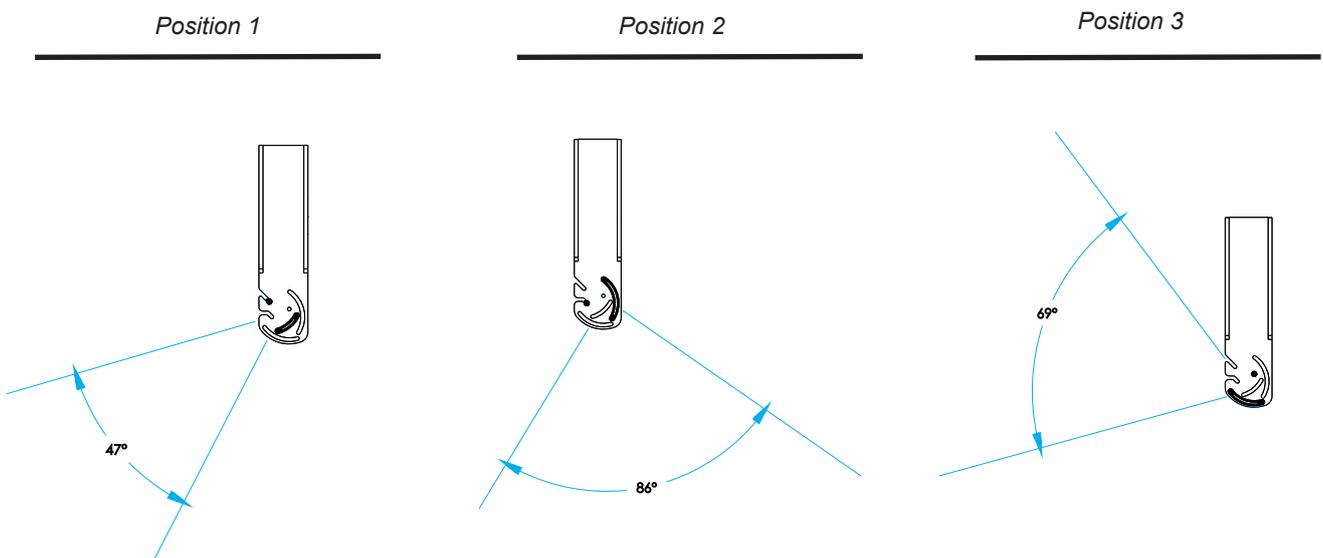
The angles show the different variations available in order to fix the center of the cabinet (front grill). Please pay special attention to the optimal positioning of your cabinet.
Once your selection is made (Position 1, 2 or 3) then you can start with the installation.

U BRACKET: HORIZONTAL MOUNTING FOR CPS-214 / CPS-210 / CPS-14

The first thing to do is to fix the UBR support in the place required (ceiling, wall, floor, etc).

Always check the suspension point is secure and free of excess weight, vibration, etc. And be careful where the cabinets are suspended from.

Before fixing it completely please check that the position of the bracket is correct. Remember where the front side is. If everything is correct then you can fix the UBR support (without the cabinet).

It is very important to ensure that the support is strongly fixed. Please always check it. Never place the safety of personnel at risk.

This picture is illustrative and may not correspond to the actual cabinet.

Once the UBR support is ready then you have to prepare the cabinet. You need to make some changes in order to hook the enclosure from the U type bracket. See below.

Please have a look at the top and bottom of your cabinet. You will find 2 screws in the middle of the top and another two screws in the middle of the bottom. Just remove these shorts screws. You will use these holes to fix the cabinet to the UBR support, using the longer screws provided with the support kit.

How to use it?

Before starting with the installation please note that the UBR bracket offers three different options and you have to select one of them before installing the support. Simply check the following drawings and select the best option in order to achieve the coverage required.

Horizontal mounting installation

Now that everything is clear we can start with the instalacion of the cabinet. We recommend the use of the Position 1 or Position 2, and this is how to proceed:

Position 1

B   A
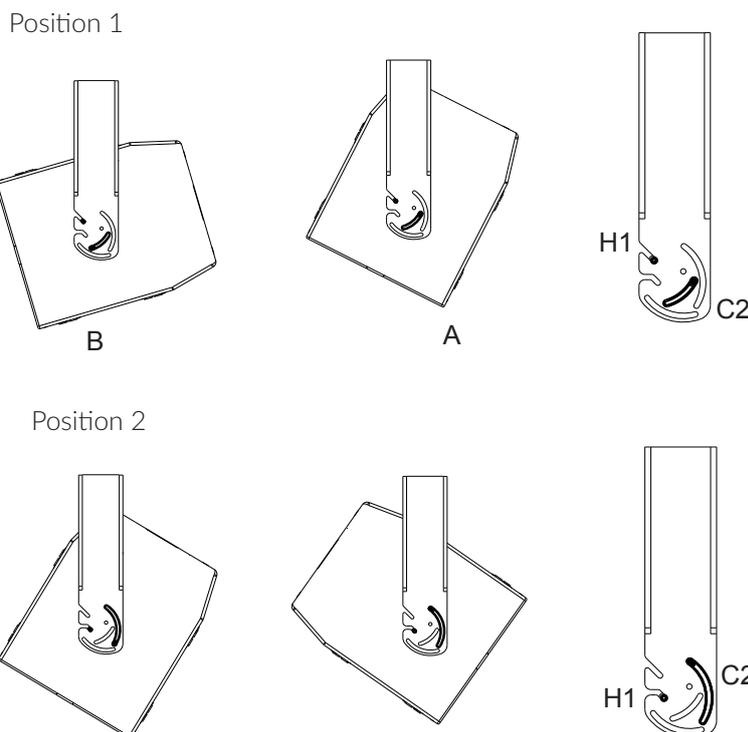
Position 2

U BRACKET: HORIZONTAL MOUNTING FOR CPS-214 / CPS-210 / CPS-14

If you choose Position 1 or 2 you will have to insert two special fixing screws into the cabinet (one per side) before installing the enclosure.

So firstly, take 2 of the fixing screws provided and insert them into your cabinet. Where? Have a look. Seeing the cabinet in horizontal position simply insert one fixing screw in the UPPER HOLE of each side (left/right), but don't insert it completly. Just keep 12 mm out of the insert. These screws will help you to hook up the cabinet from the UBR support in order to start with the cabinet installation.

Once the 2 screws are inserted (keeping 12 mm free) into the enclosure (one per side) then you can hook up the cabinet (from the 12 mm free screws) into the UBR support. See the point H1 in the drawing of your choice (Position 1 or Position 2). Just hook the cabinet placing the screws into the points H1 at both sides of the bracket. Do not fix them completely at the moment. You will do it when the cabinet is in the desired position.

Now you have to use the appropriate curve groove of the UBR support in order to slide the other fixing screw per side and orientate the cabinet.

See the curve C2 in the drawing of your choice (Position 1 or Position 2). Just insert the special screw in the appropriate curve and match the thread insert of the cabinet. You must do it on both sides of the cabinet. Do not fix them completely at the moment just keep 12 mm free so you can guide the enclosure carefully to achieve the correct coverage.

When the cabinet is in the desired position then tighten the four screws (2 per side) and the cabinet will be correctly installed.

This is how to proceed in order to install the UBR in Position 3:

Position 3
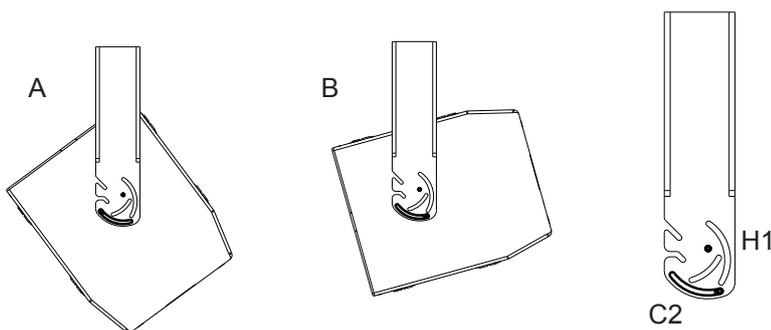
First, you need to have the 4 special fixing screws in your hand/pocket (none in the enclosure).

Seeing the cabinet in horizontal position you will use the UPPER HOLE of each side (left/right) to insert one special screw per side, but you won't insert them now.

Before inserting the screws you have to hold the cabinet into the UBR bracket and match the UBR hole (see drawing point 1) with the thread insert of your cabinet. Once hole 1 and the thread insert match then you can insert the special screw (one per side). Don't fix the screw now, just keep 12 mm out of the insert.

Now you have to use the appropriate curve groove of the UBR support in order to slide the other fixing screw per side and orientate the cabinet. See the curve C2 in the drawing. Just insert the special screw in this curve and match the thread insert of the cabinet. Do it on both sides. Do not fix them completely at the moment just keep 12 mm free so you can guide the enclosure carefully to achieve the correct coverage.

When the cabinet is in the desired position then tighten the four screws (2 per side) and the cabinet will be correctly installed.
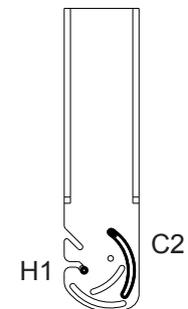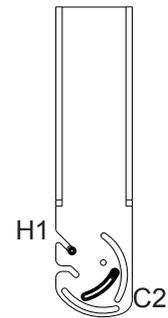
## U BRACKET: VERTICAL MOUNTING FOR CPS-214 / CPS-210 / CPS-14

UBR-VCPS is the vertical mounting system specially designed for Lynx Pro Audio CPS-214, CPS-210 and CPS-14 cabinets. It is composed by the U type support made of steel and 4 special fixing screws (2 per side) in order to fix the cabinet to the U support.

Position 1
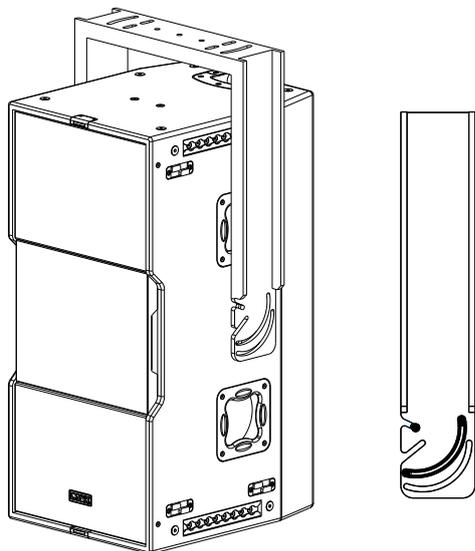
Position 2
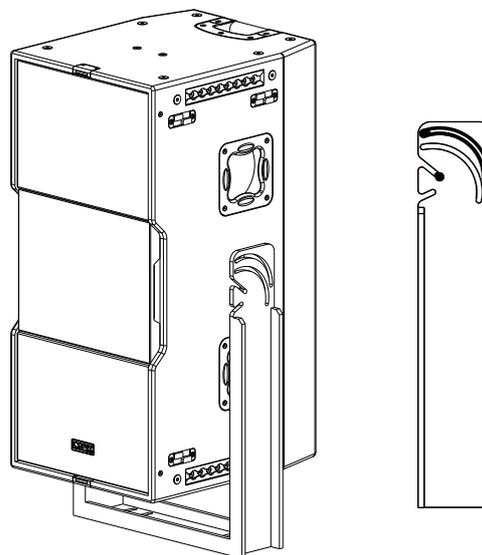
How to use it?

Before starting with the installation please note that the UBR bracket offers three different options and you have to select one of them before installing the support. Simply check the following drawings and select the best option in order to achieve the coverage required.

Position 1

Position 2

112°

110°
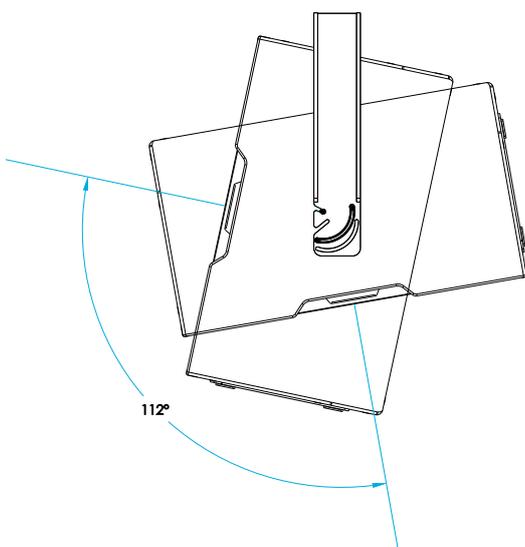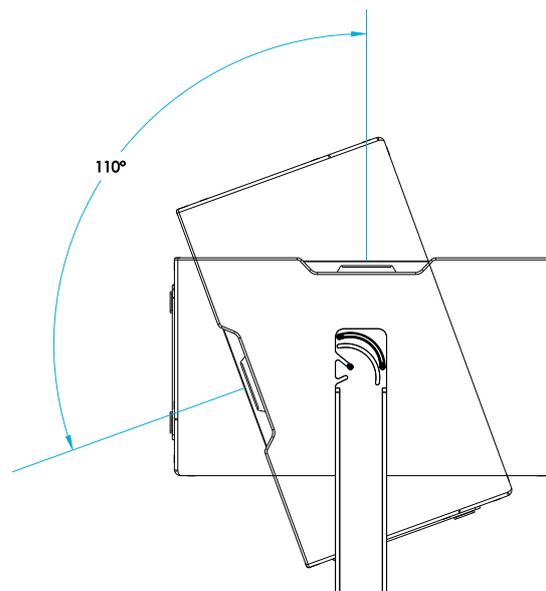
The angles show the different variations available (from A to B) in order to fix the center of the cabinet (front grill). Please pay special attention to the optimal positioning of your cabinet.

Once your selection is made (Position 1 or 2) then you can start with the installation.

U BRACKET: VERTICAL MOUNTING FOR CPS-214 / CPS-210 / CPS-14

Vertical mounting installation

The first thing to do is to fix the UBR support in the place required (ceiling, wall, floor, etc). Always check the suspension point is secure and free of excess weight, vibration, etc. And be careful where the cabinets are suspended from.

Before fixing it completely please check that the position of the bracket is correct. Remember where the front side is. If everything is correct then you can fix the UBR support (without the cabinet). It is very important to ensure that the support is strongly fixed. Please always check it. Never place the safety of personnel at risk.

Once the UBR support is ready then you have to prepare the cabinet. You need to make some changes in order to hook the enclosure from the U type bracket.

Please have a look at both sides of your cabinet. You will find 2 screws in the middle of the left side and another two screws in the middle of the right side. Just remove these shorts screws. You will use these holes to fix the cabinet to the UBR support, using the longer screws provided with the support kit. Only use the special screws provided with the support kit.

Now that everything is clear we can start with the instalacion of the cabinet. This is how to proceed:
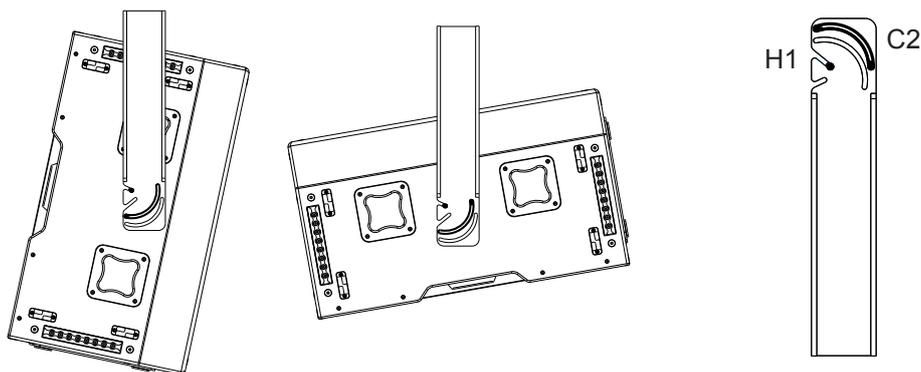
Position 1

Position 2
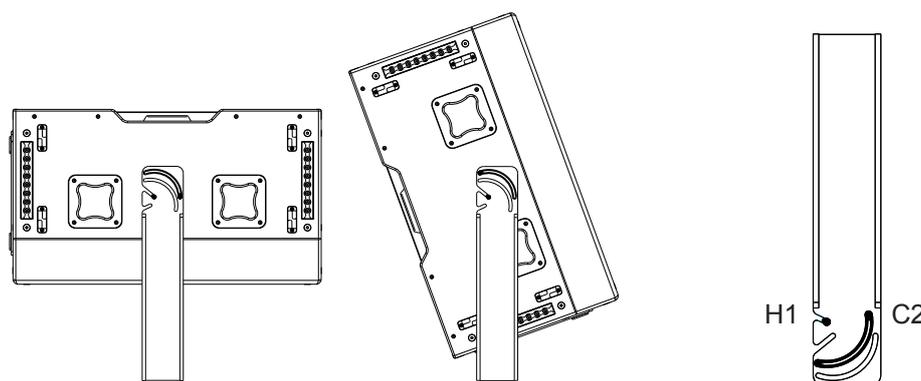
If you choose Position 1 or 2 you will have to insert two special fixing screws into the cabinet (one per side) before installing the enclosure. So firstly, take 2 of the fixing screws provided and insert them into your cabinet. Where? Have a look.

Seeing the cabinet in vertical position simply insert one fixing screw, in the LOWER HOLE for Position 1 and in the UPPER HOLE for Position 2, of each side (left/right), but don't insert it completly. Just keep 12 mm out of the insert.

These screws will help you to hook up the cabinet from the UBR support in order to start with the cabinet installation.

U BRACKET: VERTICAL MOUNTING FOR CPS-214 / CPS-210 / CPS-14

Once the 2 screws are inserted (keeping 12 mm free) into the enclosure (one per side) then you can hook up the cabinet (from the 12 mm free screws) into the UBR support.

See the point H1 in the drawing of your choice (Position 1 or Position 2). Just hook the cabinet placing the screws into the points H1 at both sides of the bracket.

Do not fix them completely at the moment. You will do it when the cabinet is in the desired position.

Position 1   Position 2

Now you have to use the appropriate curve groove of the UBR support in order to slide the other fixing screw per side and orientate the cabinet.

See the curve C2 in the drawing of your choice (Position 1 or Position 2). Just insert the special screw in the appropriate curve and match the thread insert of the cabinet.

You must do it on both sides of the cabinet. Do not fix them completely at the moment just keep 12 mm free so you can guide the enclosure carefully to achieve the correct coverage.

When the cabinet is in the desired position then tighten the four screws (2 per side) and the cabinet will be correctly installed.

HOW TO USE THE FLYING FRAME SV-CPS FOR CPS-214

The flying system SV-CPS is constructed with steel and it is composed of a plate sheet with two fixed transversal rectangular beams to ensure the robustness of the structure. Cabinets can be hunged individually or per pair, with different angulation.

• When using the flying frame with one CPS-214:

First of all, four screw located at the top of the cabinet have to be removed (as shown in Figure A).
Then, place the flying frame in order that the holes in the corners match with the holes of the screws that have been removed from the cabinet (Figure B).
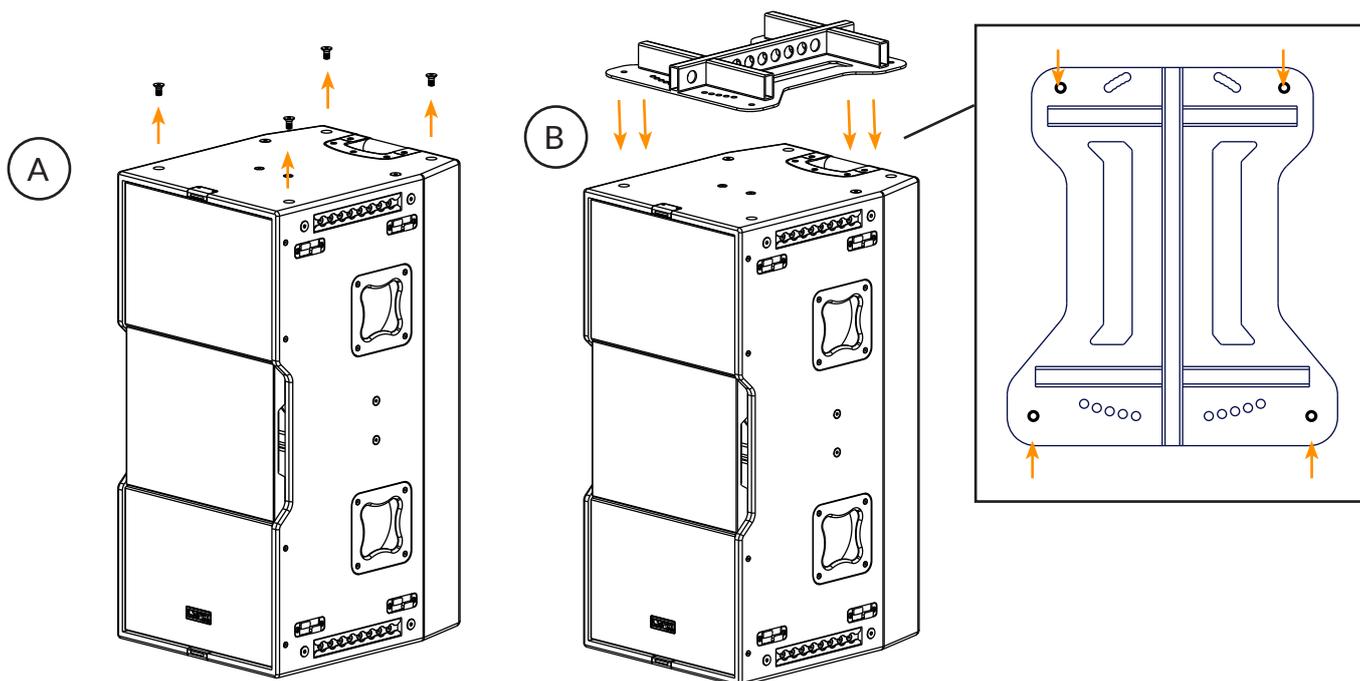
Use the screws given with support kit to fix the frame (Figure C). Once the frame is secure, it can be hooked up for its installation (Figure D).
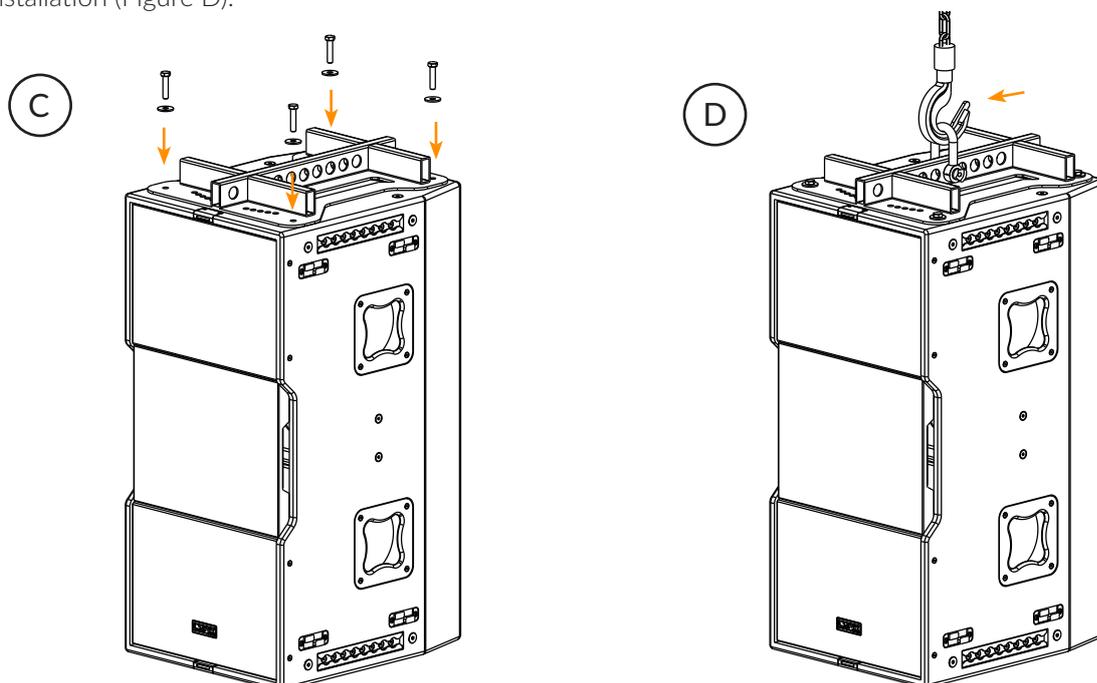
HOW TO USE THE FLYING FRAME SV-CPS FOR CPS-214

• When using the flying frame with two units of CPS-214:

   • Remove the screws shown in the Figure A from the top of the two cabinets and then place the flying frame SV-CPS on top (Figure B).
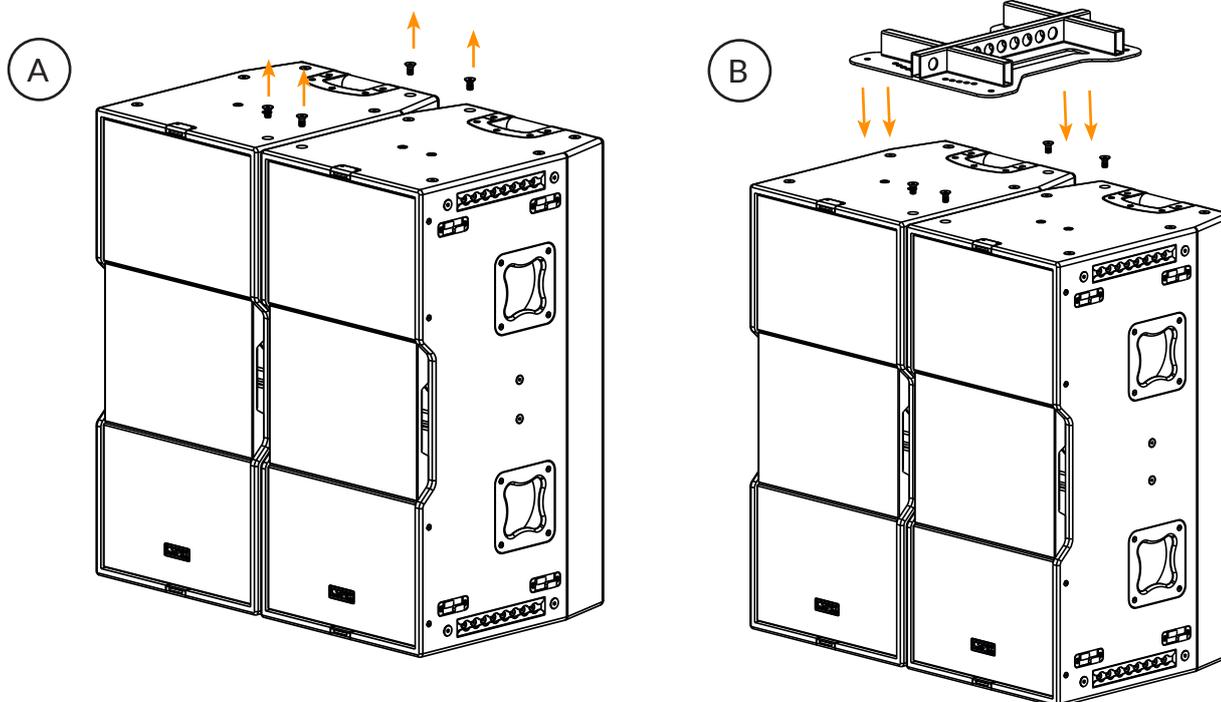
   • Use the screws given in the support kit to secure the frame to both cabinets with the desired angulation, as shown in Figure C.
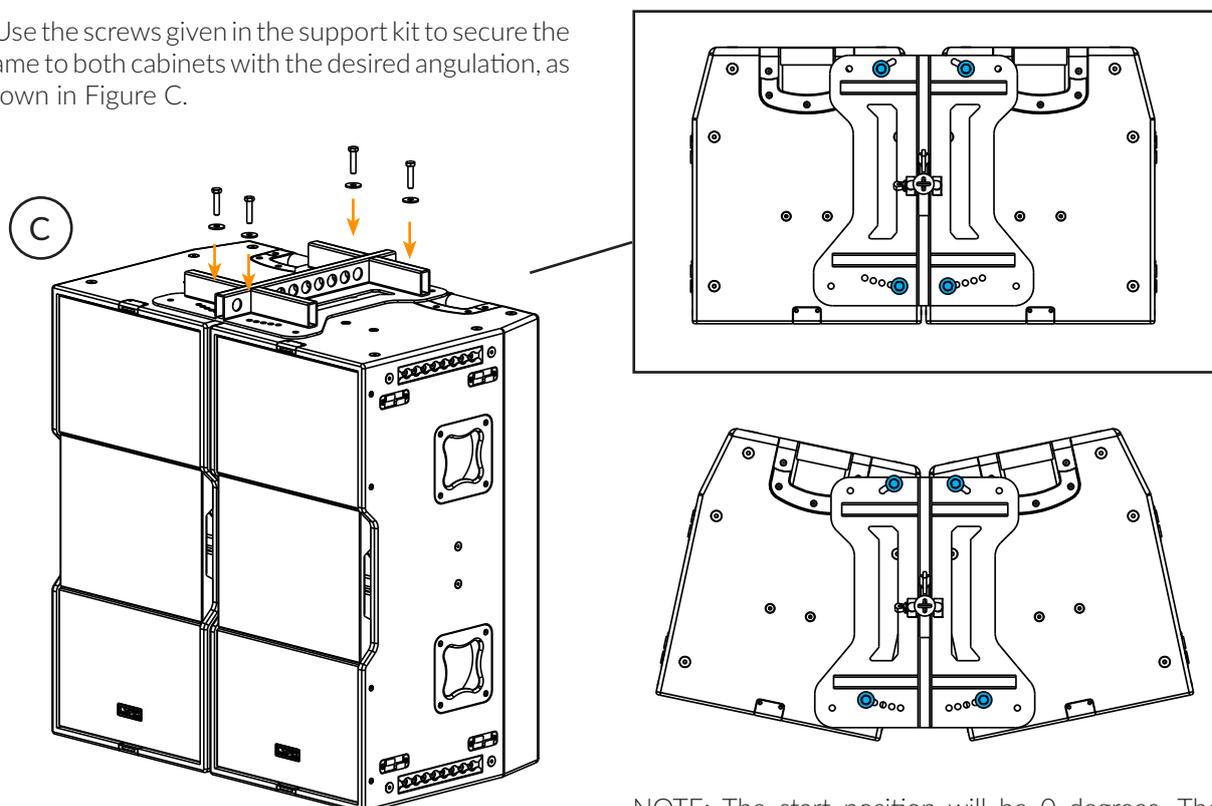
NOTE: The start position will be 0 degrees. The angulation can open up to 12 degrees. Each point will add 3 degrees of angulation.

HOW TO USE THE FLYING FRAME SV-CPS FOR CPS-214

• When using the flying frame with two units of CPS-214:

• As can be seen below, the frame include different holes for the different orentation angles. The screw must be placed in the desired holes, both in the front and at the rear of the frame unit, as show in Figure D.
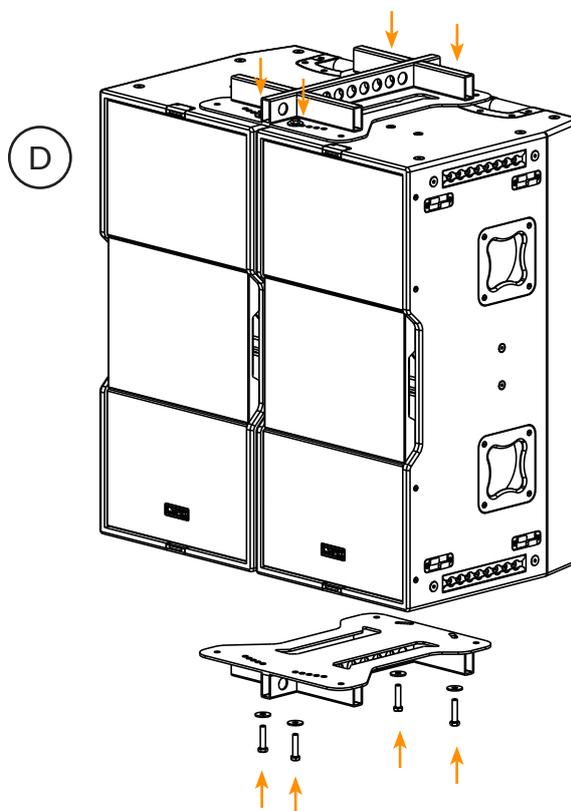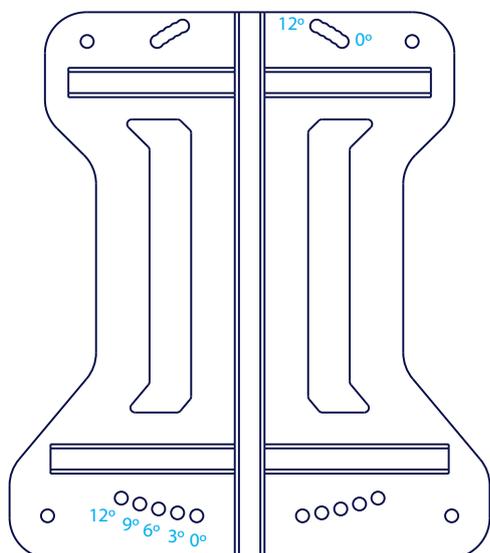

NOTE: Each hole has a degree position, as shown in the picture above. Make sure to insert the screws in the right holes to obtein the desired angulation.

• Finally, you can hook the flying bracket to the engine in the desired position.
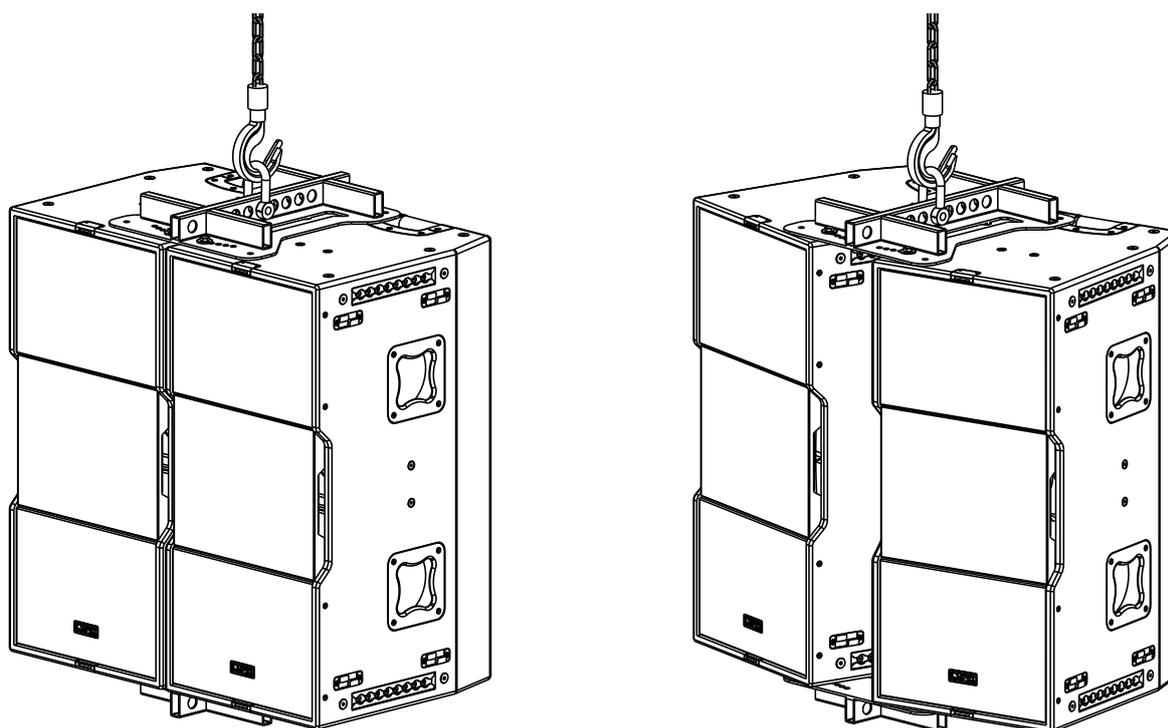
**HOW TO USE THE TRANSPORT DOLLY FOR CPS-214**

• Transport dolly for CPS-214:

• CPS-214 on a dolly with squid wheels for easy transport.

Squid wheels
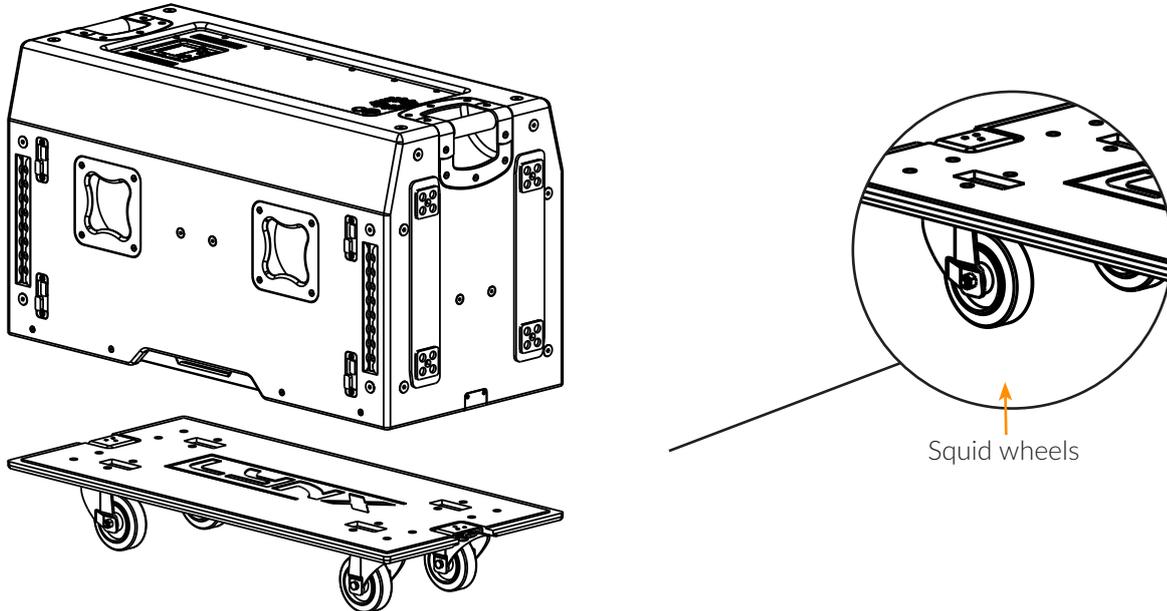
• Remove latches from above and take off the dolly.
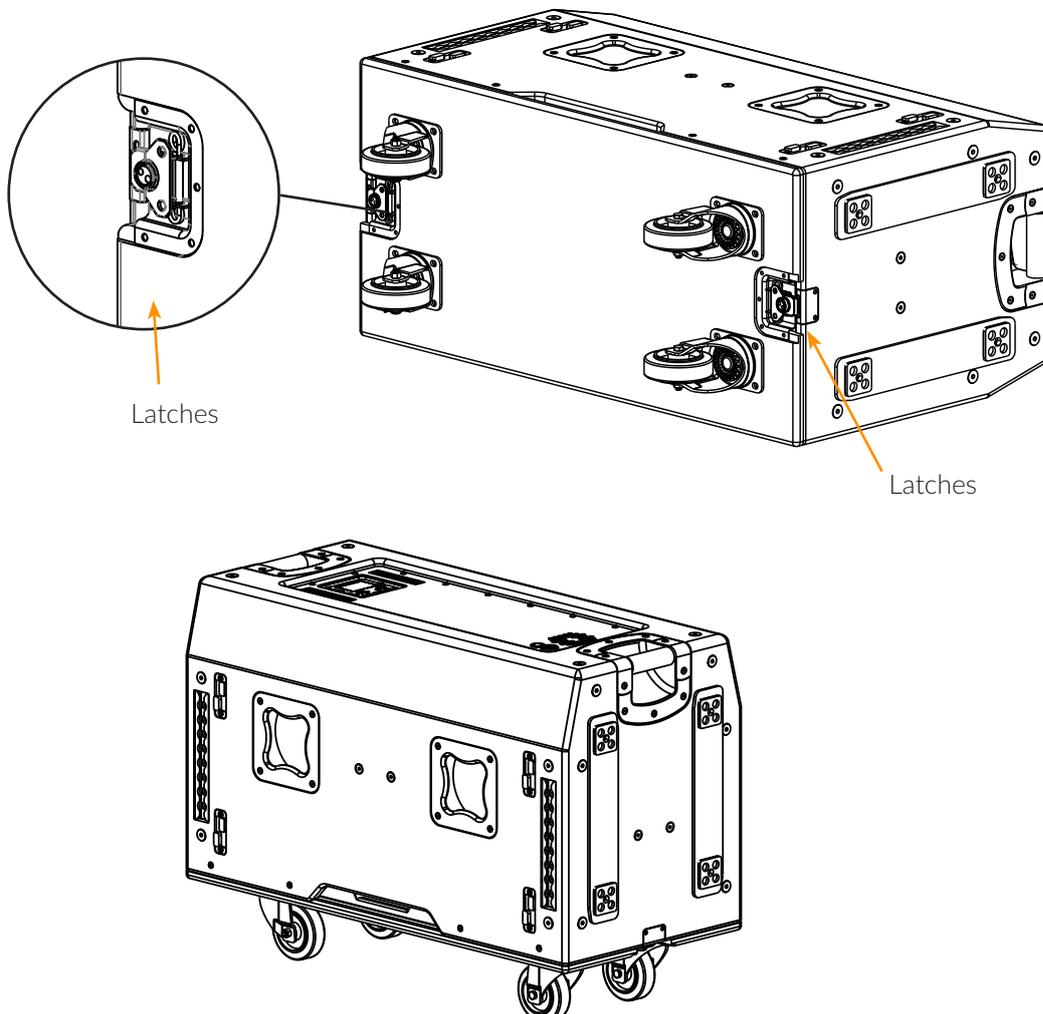
Latches

Latches

## HOW TO USE THE TRANSPORT DOLLY FOR CPS-18S

• Transport dolly for CPS-18S:

Squid wheels
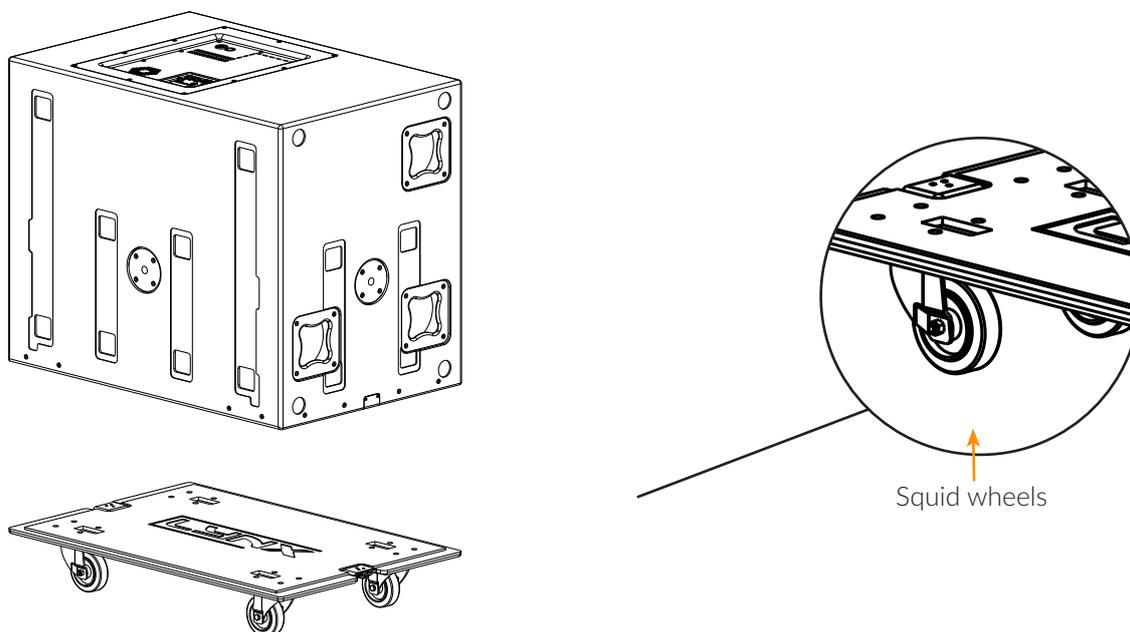
• Lay the cabinet carefully, remove latches and take off the dolly.


Latches

Latches
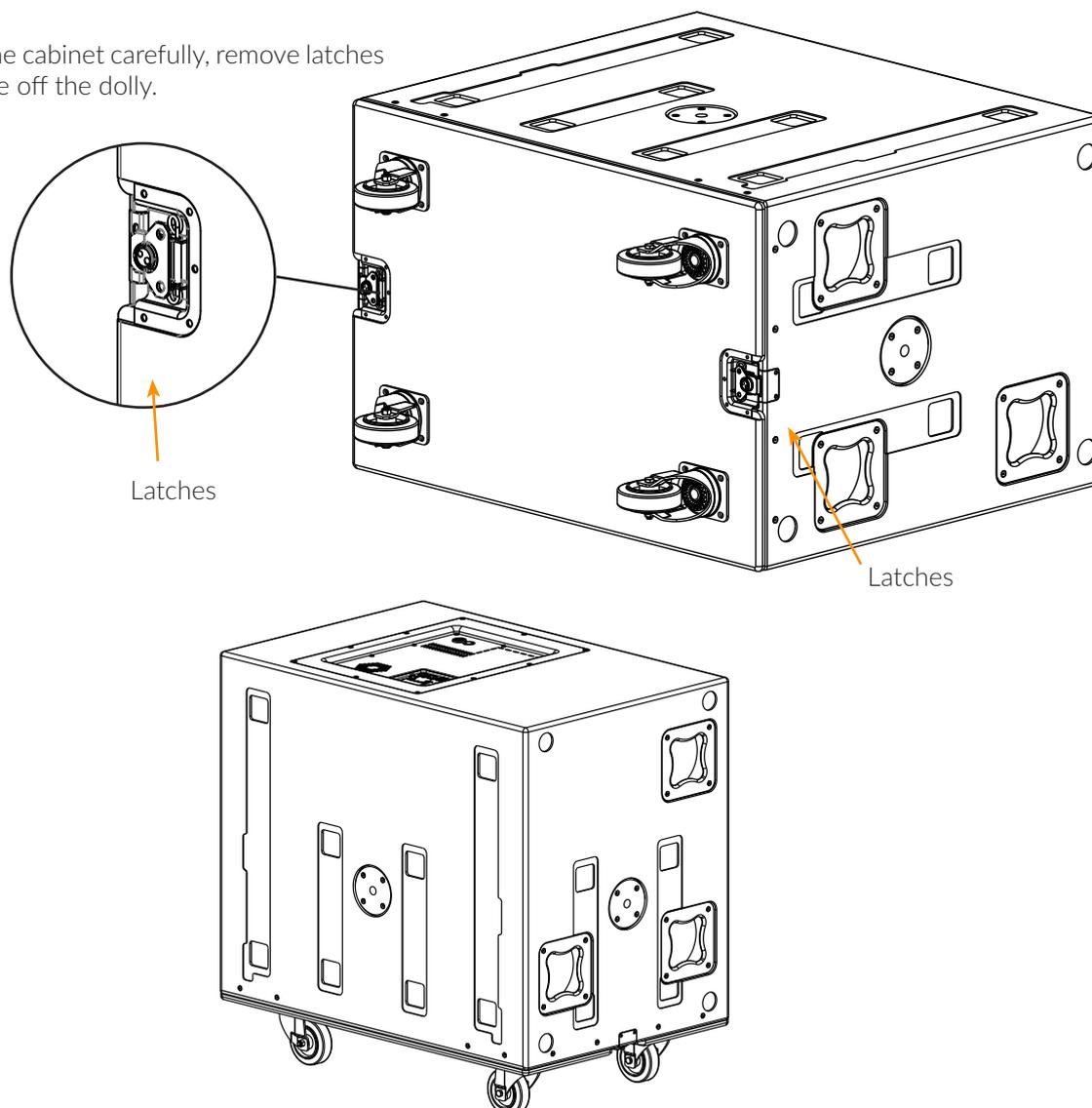
APPLICATION EXAMPLES FOR CPS-214 AND CPS-18S

• Combination: 1 CPS-214 vertically mounted on top + 1 CPS-18S subwoofer in vertical position
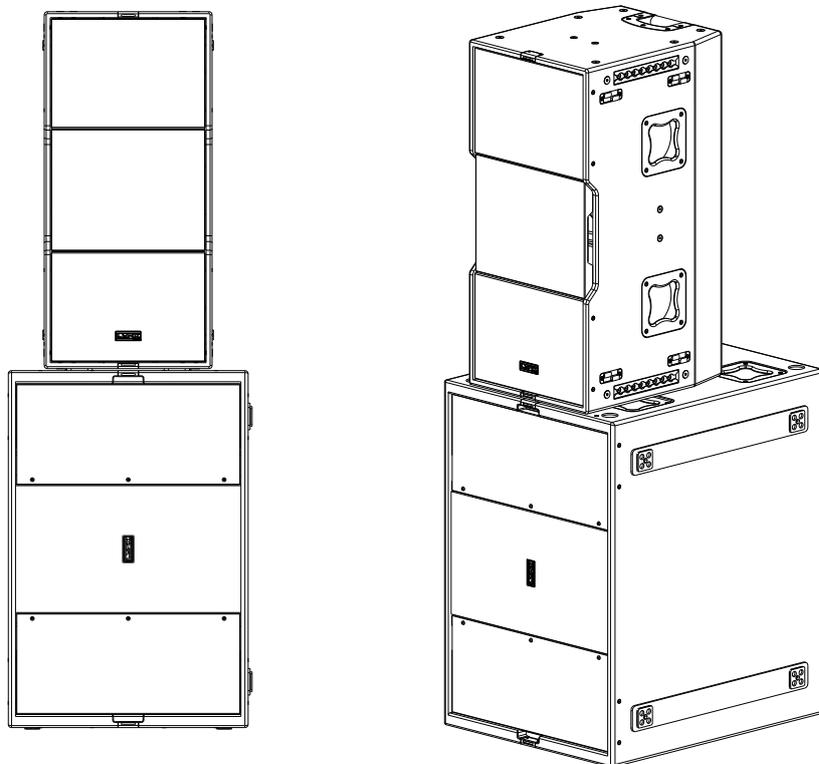
• Combination: 2 CPS-18S subwoofers stacked in horizontal + 1 CPS-214 on top in horizontal position
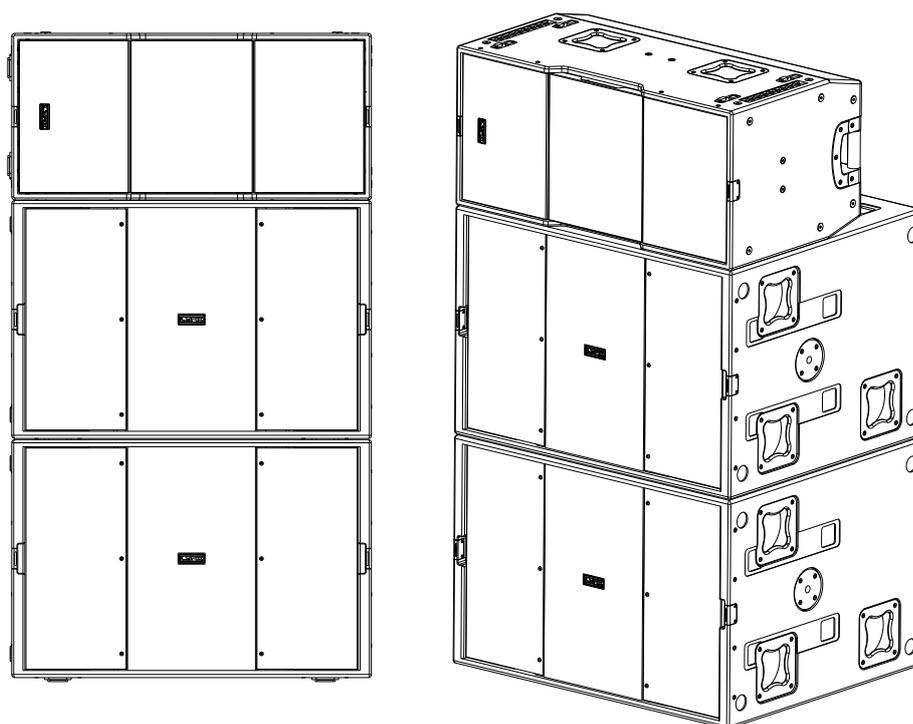
APPLICATION EXAMPLES FOR CPS-214 AND CPS-18S

• Combination: 2 CPS-18S subwoofers stacked in horizontal + 1 CPS-214 on top in vertical position
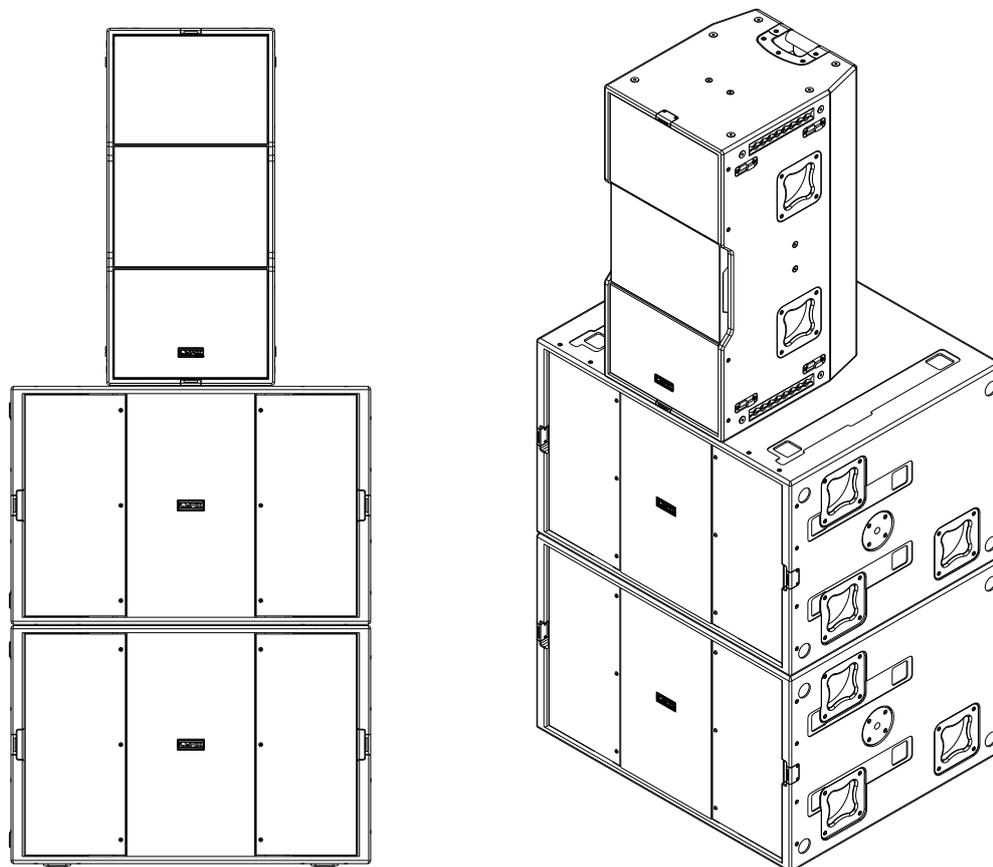
APPLICATION EXAMPLES FOR CPS-210 AND CPS-18S

• Combination A: 1 CPS-210 mounted on top on vertical position as satellite with the subwoofer CPS-18S in horizontal position.
• Combination B: 1 CPS-210 mounted on top on vertical position as satellite with the subwoofer CPS-18S in vertical position.
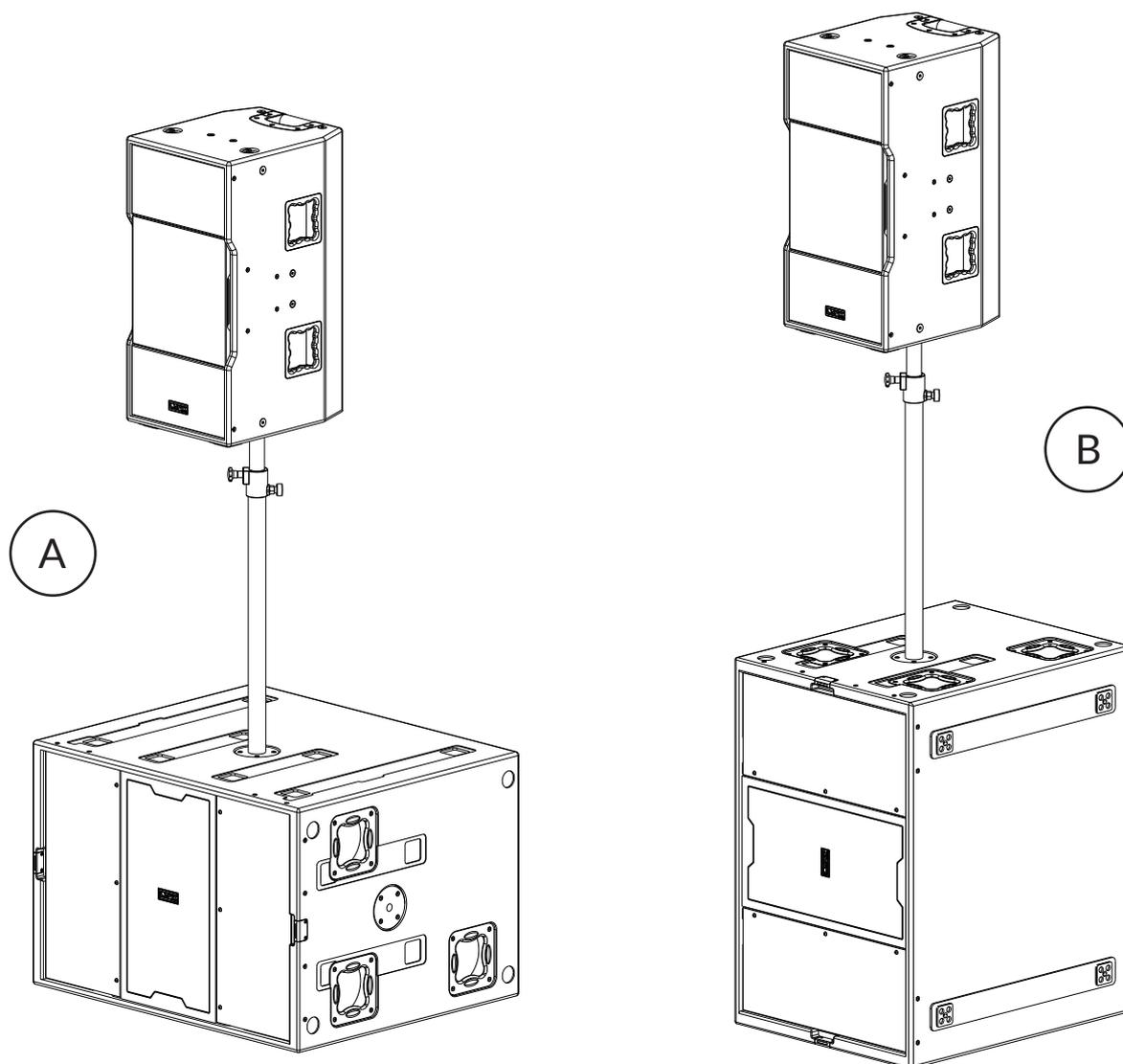
APPLICATION EXAMPLES FOR CPS-14 AND CPS-18S

• Combination A: 1 CPS-14 mounted on top on vertical position as satellite with the subwoofer CPS-18S in horizontal position.
• Combination B: 1 CPS-14 mounted on top on vertical position as satellite with the subwoofer CPS-18S in vertical position.

CE
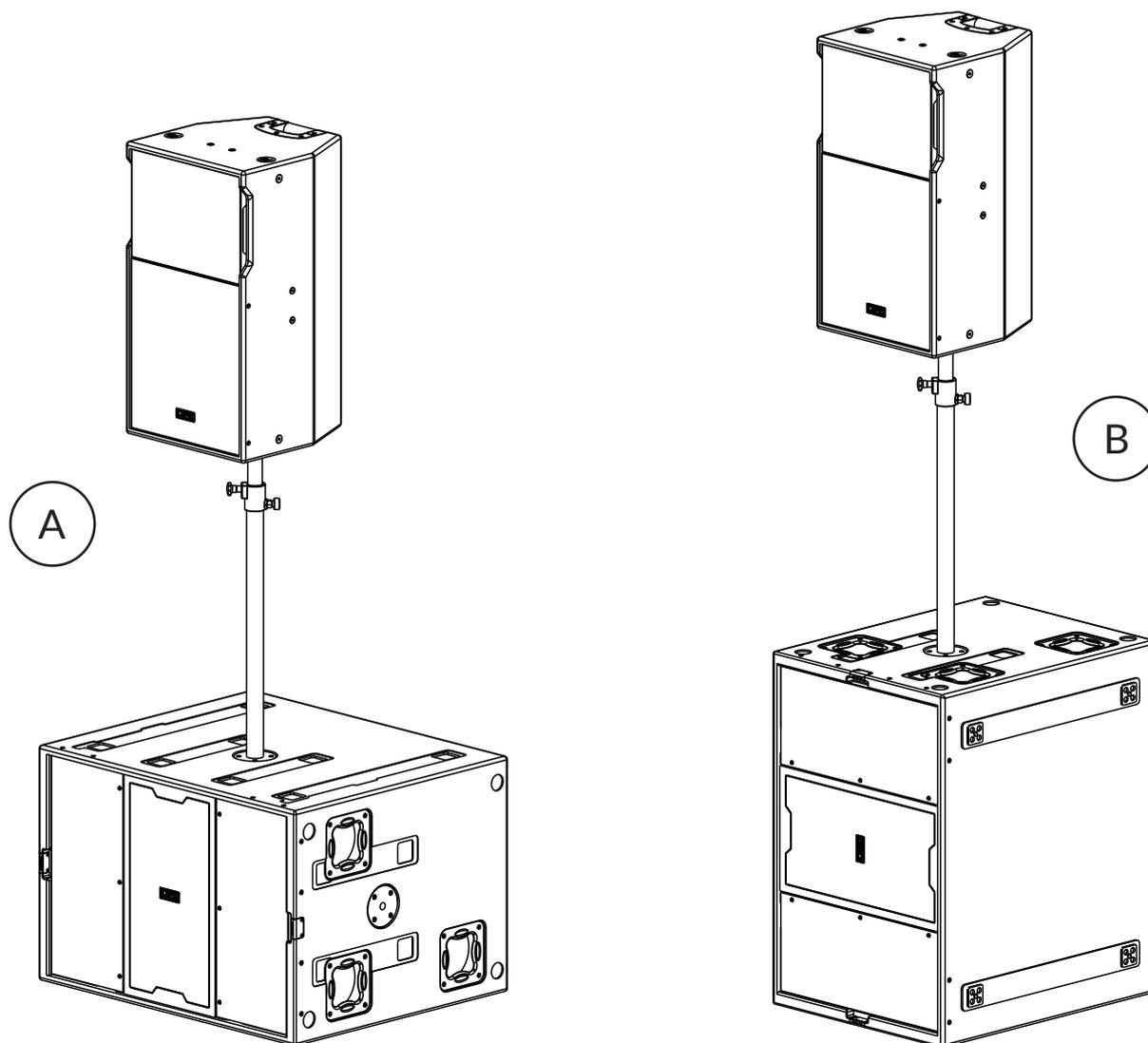
DECLARATION OF CONFORMITY

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www.lynxproaudio.com

Lynx Pro Audio S.L. declares that CPS series are in conformity with the following EC directives:

Low Voltage Directive	2014/35/UE
Electromagnetic Compatibility EMC	2014/30/UE
RoHS Directive	2011/65/UE
RAEE (WEEE)	2012/19/UE

In accordance with Harmonized European Norms:

EN 60065:2014	Audio, video and similar electronic apparatus. Safety requirements
EN 55032:2012	Electromagnetic compatibility of multimedia equipment. Emission requeriments.
EN 55103-2:2009	Electromagnetic compatibility. Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 2: Immunity.
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.
CPS models:	CPS-214	CPS- 210	CPS- 14	CPS- 5	CPS- 4	CPS- 18S	CPS- F10S	CSM- 210

LYNX PRO AUDIO GUARANTEE

Lynx products are guaranteed against every kind of manufacturing fault 3 year after the date of sale. When products are under guarantee, the repairing and the free supplying of the device parts in order to correct any kind of defect are guaranteed by Lynx Pro Audio S.L. In the case that the product could not be returned to the factory for checking and repairing, Lynx Pro Audio S.L. would supply all the necessary parts.

Lynx Pro Audio S.L. is not responsible for any damage or defect caused during the transport or caused by an undue or improper handling y a non-authorized person during the life of this guarantee.

All our products undergo rigorous tests and quality controls. We guarantee the characteristics described here within and their quality against any fabrication defect.

The user loses all warranty rights if he incorporates or carries out any modification to the product, if he uses it outside of the stated safe working loads or does not secure the system properly using all the pins in their corresponding holes.

For any question regarding the product, the user must quote the model and serial number.

WEEE Declaration: Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime. Please dispose of this product according to the respective national regulations or contractual agreements. If there are any further questions concerning the disposal of this product please contact Lynx Pro Audio S.L.