GXR-LA10A

USER MANUAL

GXR-D15A
GXR-D18A

V.18.06
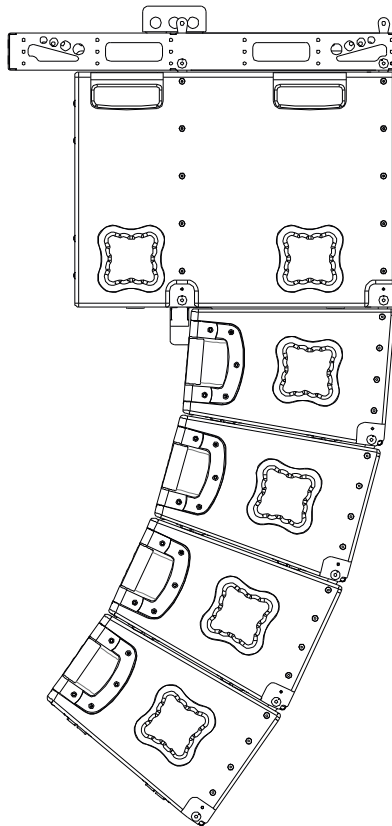
GXR-LA10A

GXR-D15A

GXR-D18A

Manufacturer

LYNX Pro Audio S.L.
Calle uno - Pol. Ind. Picassent
E-46220 Picassent (Valencia)

C E

CE CERTIFICACTION, EUROPEAN PRODUCT

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

GXR-LA10A

| Components	LF: 10″, 2″ voice coil, Malt Cross Cooling System	Processing	48 KHz / 56 bit double precision DSP with FIR filters
	HF: 1.4″ exit throat 3″ voice coil titanium diaphragm + waveguide	Control	User control interface with LCD
Frequency Range	60 Hz – 20 KHz (-10dB)	Control Connections	USB / Ethernet (OCS) optional
Frequency Response	68 Hz – 18 KHz (± 3dB)	AC Power	90 – 264 V 50/60 Hz with PFC
Max. SPL	135 dB	AC Connections	16A Neutrik powerCon TRUE1 with looping output
Coverage	100º H x 10º V	Finish	Polyurea coating, black colour
Power	1400 W Class D with switching power supply & PFC	Material	15mm Premium birch plywood
LF Amplifier	1 x 800 W	Dimensions (H x W x D)	298 x 790 x 436 mm
HF Amplifier	1 x 600 W	Weight	31 Kg (68 lbs)
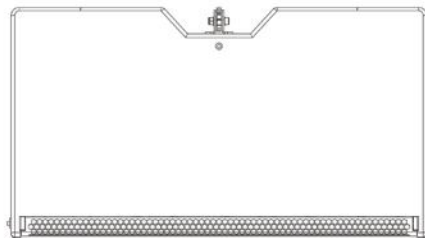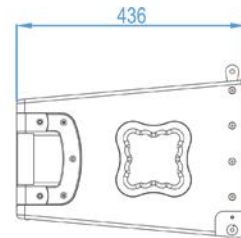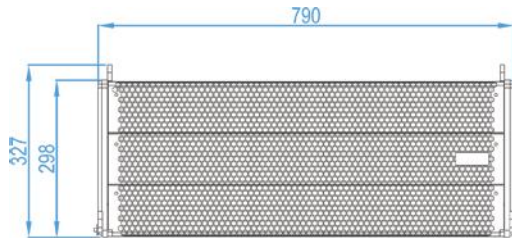
GXR-D15A

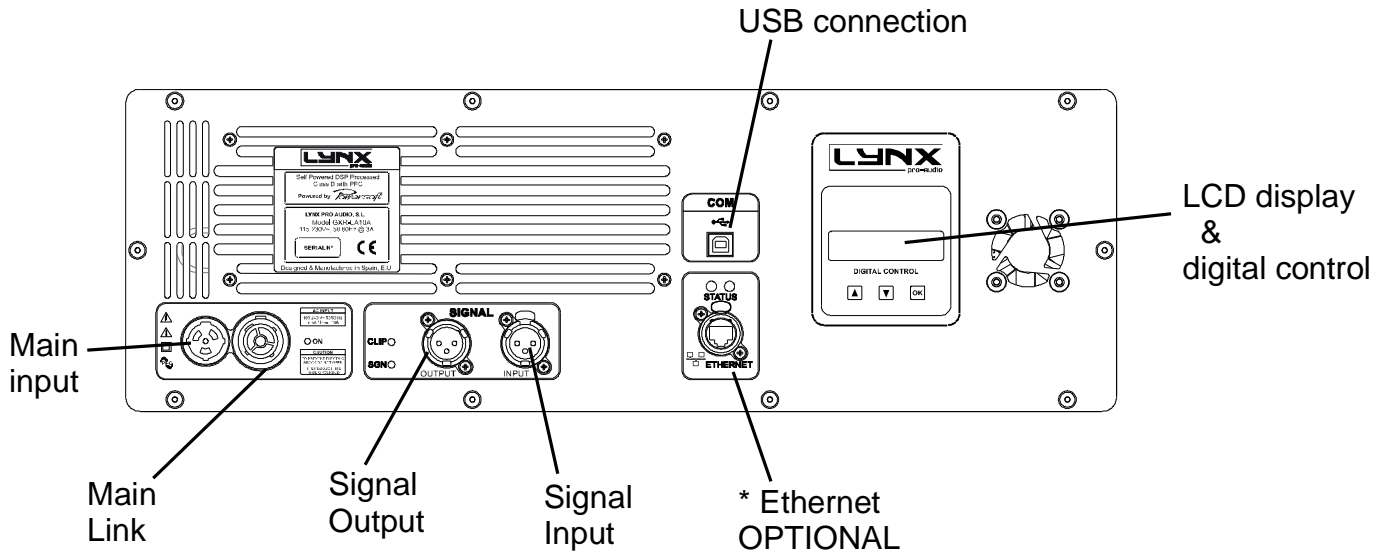| Components	LF: 2 x 15" (4" voice coil) Neodymiun magnet assembly	Processing	48 KHz / 56 bit double precision DSP
		Control	User control interface with LCD
Frequency Range	30 Hz – 140 Hz (-10dB) processed	Control Connections	USB / Ethernet (OCS) optional
Frequency Response	35 Hz – 125 Hz (± 3dB) processed	AC Power	90 – 264 V 50/60 Hz with PFC
Max. SPL	134 dB	AC Connections	16A Neutrik powerCon TRUE1 with looping output
Coverage	Omnidirectional	Finish	Polyurea coating, black colour
Power	2400 W Class D with switching power supply & PFC	Material	18mm Premium birch plywood
LF Amplifier	2 x 1200 W	Dimensions (H x W x D)	505 x 790 x 690 mm
		Weight	63 Kg (139 lbs)
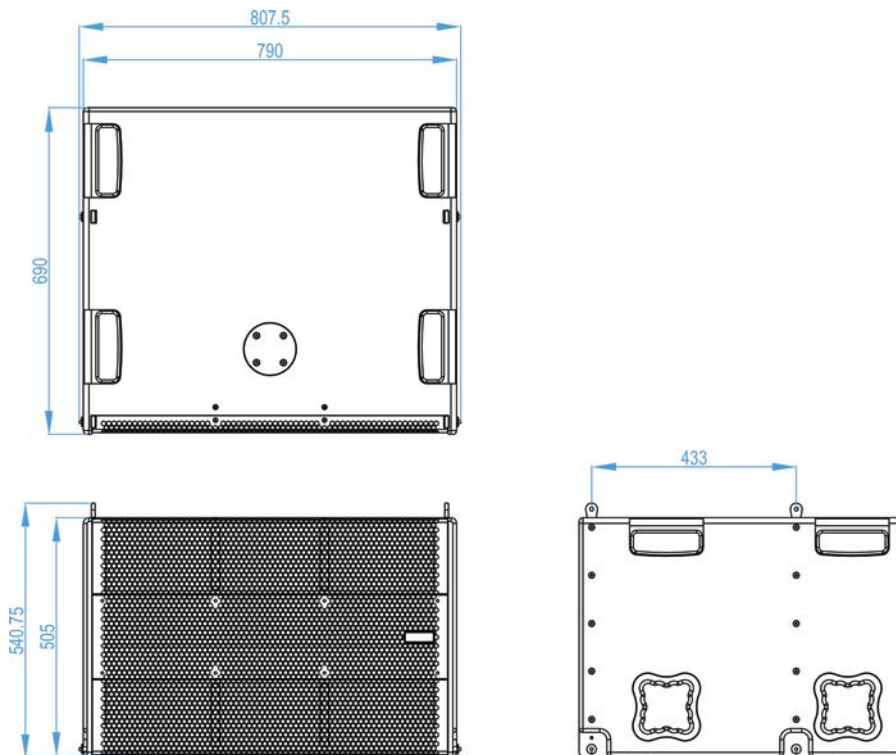
GXR-D18A

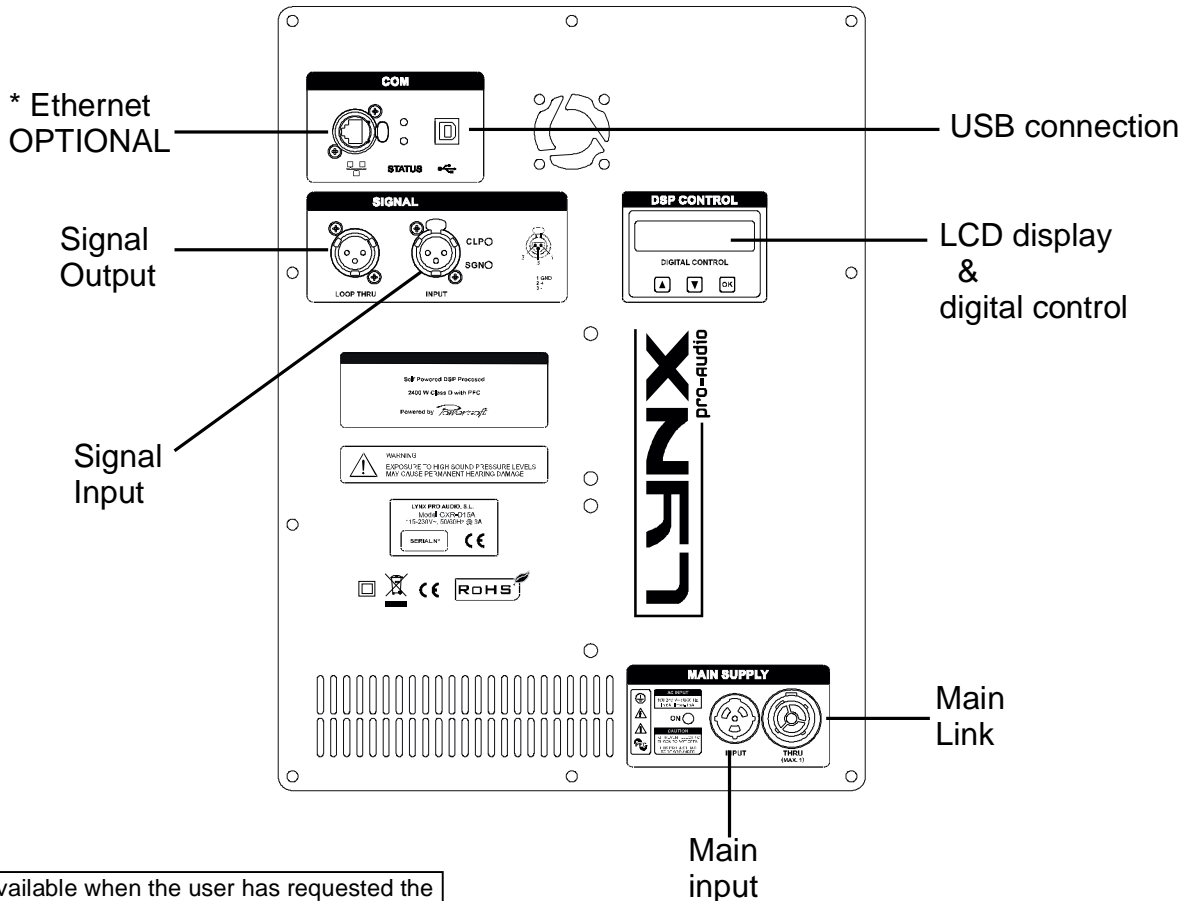|			
Components	LF: 2 x 18″ (4″ voice coil) Neodymiun magnet assembly	**Processing**	48 KHz / 56 bit double precision DSP
		Control	User control interface with LCD
Frequency Range	30 Hz – 120 Hz (-10dB) processed	**Control Connections**	USB / Ethernet (OCS) optional
Frequency Response	35 Hz – 100 Hz (± 3dB) processed	**AC Power**	90 – 264 V 50/60 Hz with PFC
Max. SPL	134 dB	**AC Connections**	16A Neutrik powerCon TRUE1 with looping output
Coverage	Omnidirectional	**Finish**	Polyurea coating, black colour
Power	2400 W Class D with switching power supply & PFC	**Material**	18mm Premium birch plywood
LF Amplifier	2 x 1200 W	**Dimensions (H x W x D)**	605 x 1100 x 750 mm
		Weight	92 Kg (202 lbs)
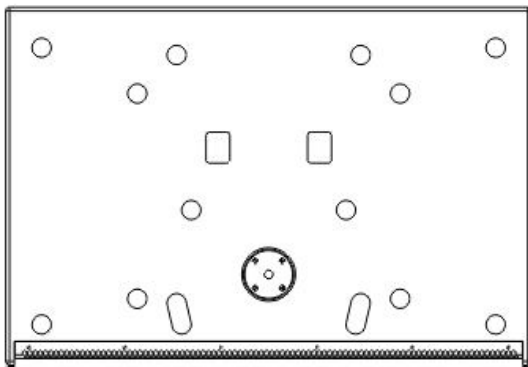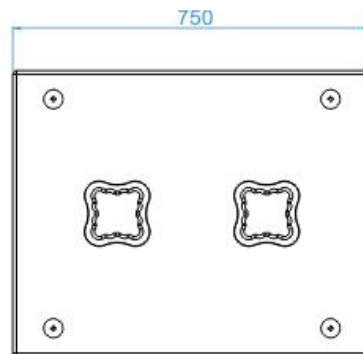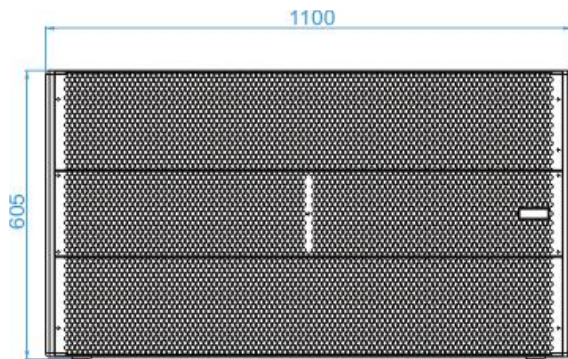
GXR BACK PANEL

This is the back pannel of the GXR-LA10A tops, icluding the connectors and digital control display.

USB connection

LCD display
&
digital control

Main
input

Main
Link

Signal
Output

Signal
Input

* Ethernet
OPTIONAL

Both cabinets GXR-D15A and GXR-D18A have the same rear panel, including the connectors and digital control display.

* Ethernet
OPTIONAL

USB connection

Signal
Output

LCD display
&
digital control

Signal
Input

Main
Link

Main
input

* Available when the user has requested the cabinets to be supplied with the Ethernet Module kit.

CONNECTORS AND CONNECTIONS

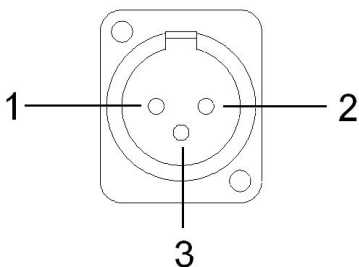**SOCKET POWERCON TRUE1**

NAC3FX-W

NAC3MX-W
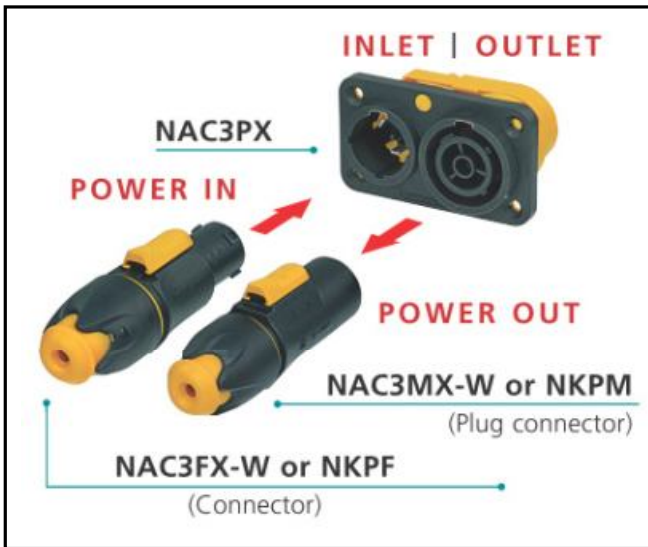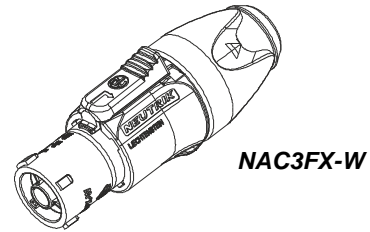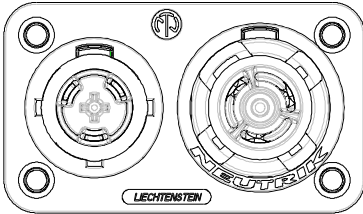
CAUTION: Do not connect or disconnect the AC Power connectors under load.
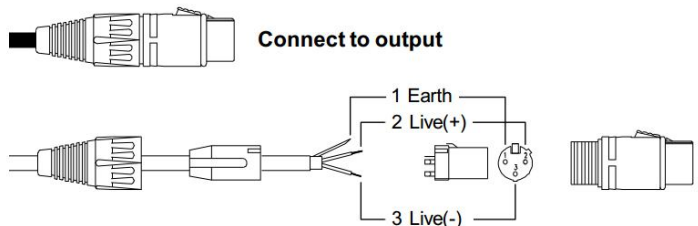
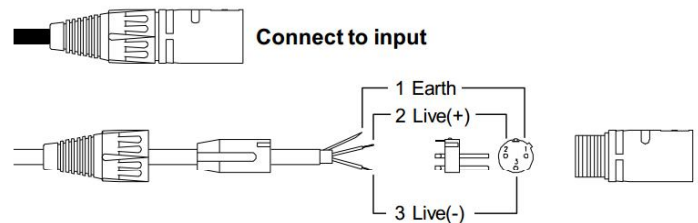**XLR SOCKET CONNECTORS**
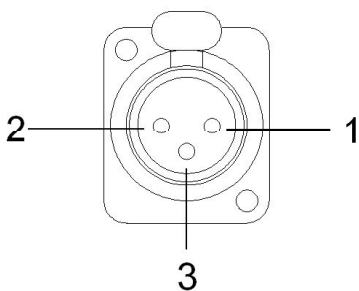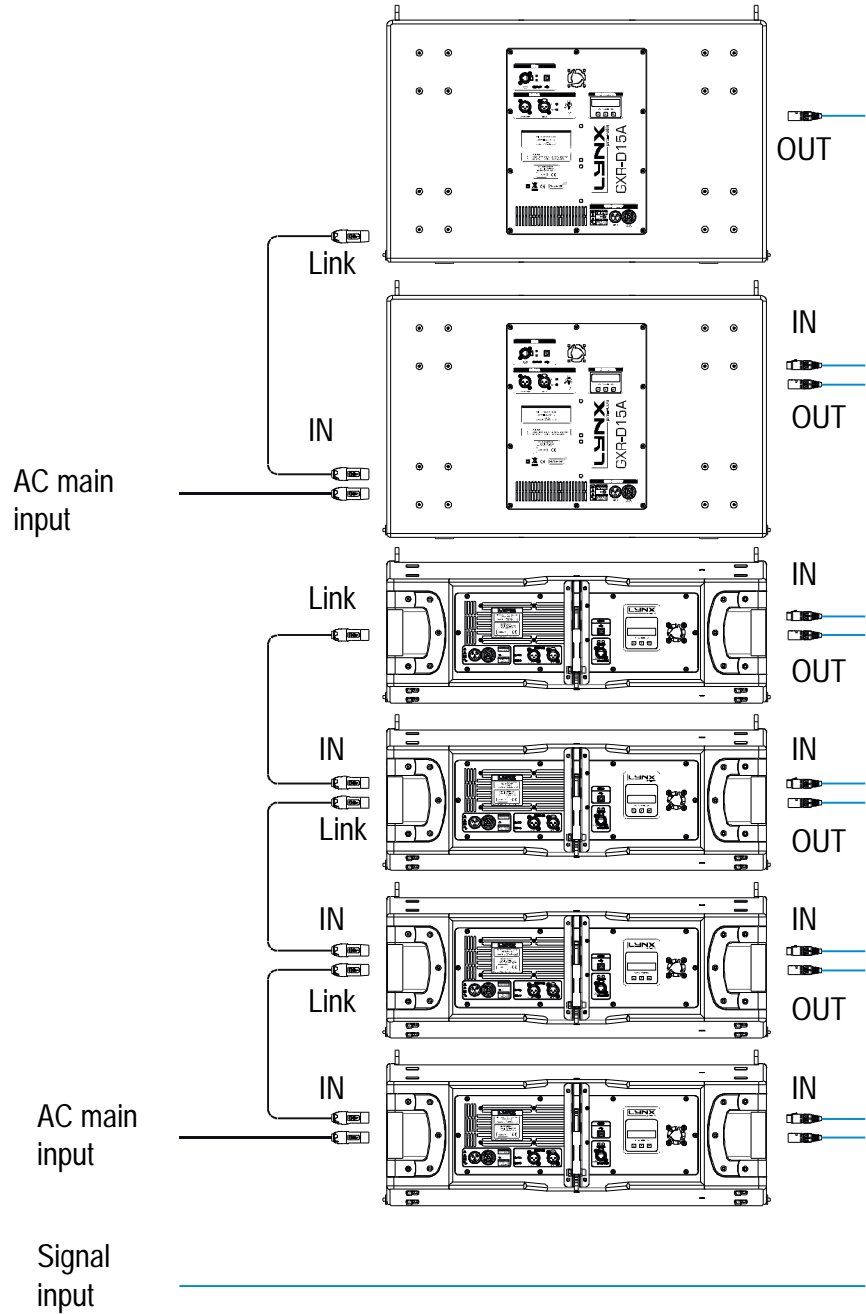

INPUTS
1.- EARTH
2.- LIVE (+)
3.- LIVE (-)

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

XLR AEREAL CONNECTORS

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

Connect to output
1 Earth
2 Live(+)
3 Live(-)

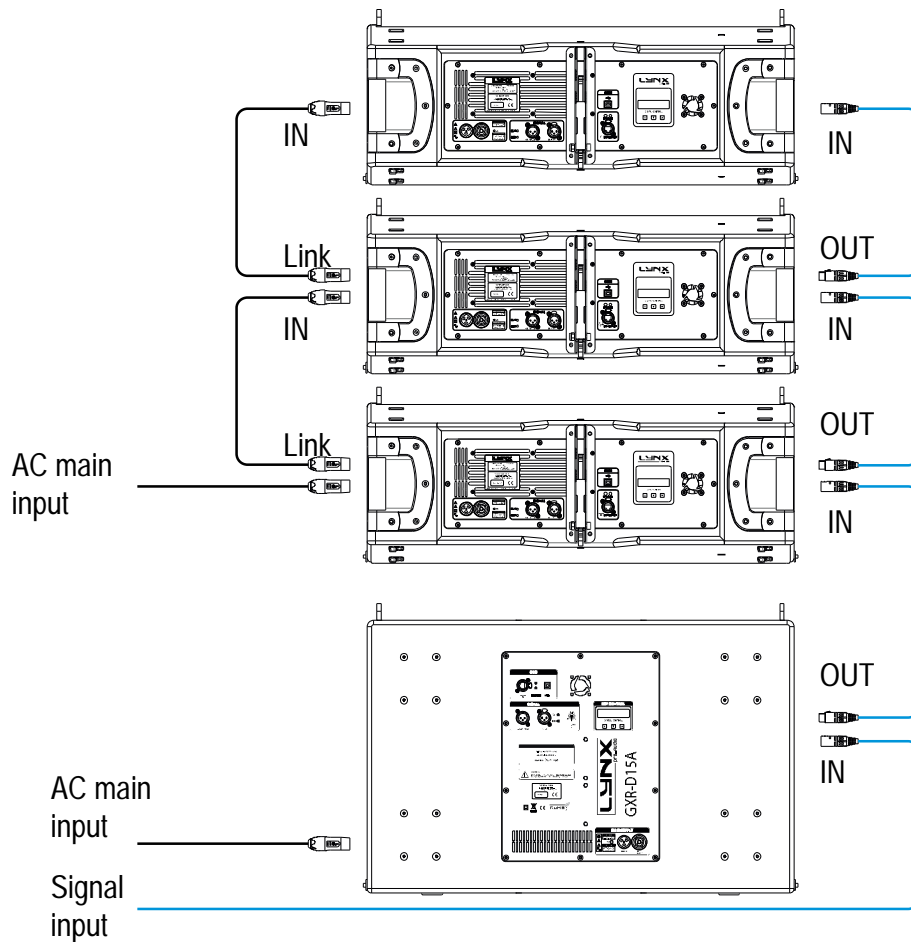## FLOWN CONNECTION EXAMPLE (mono channel)
Four tops GXR-LA10A + two subs GXR-D15A

OUT

Link

IN

OUT

AC main
input

IN

Link

IN

OUT

IN

IN

Link

IN

OUT

IN

IN

Link

OUT

AC main
input

IN

IN

Signal
input

STACKED CONNECTION EXAMPLE (mono channel)
Three tops GXR-LA10A + one sub GXR-D-15A

IN

IN

Link

OUT

IN

IN

Link

OUT

IN

AC main
input

OUT

AC main
input

IN

Signal
input

STACKED

CONNECTION EXAMPLE (mono channel)
Four tops GXR-LA10A + two subs GXR-D18A

IN

IN

Link

OUT

IN

IN

Link

OUT

IN

IN

Link

OUT

AC main
input

Link

OUT

IN

Signal
input

Signal
input

IN

Link

AC main
input

IN

Link
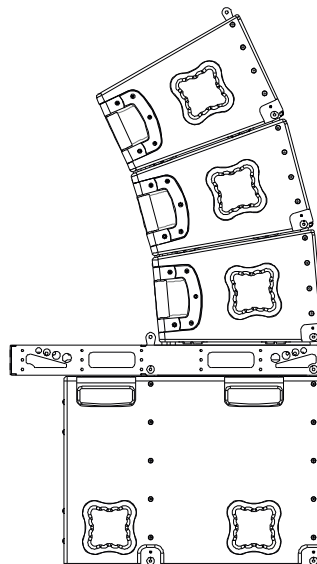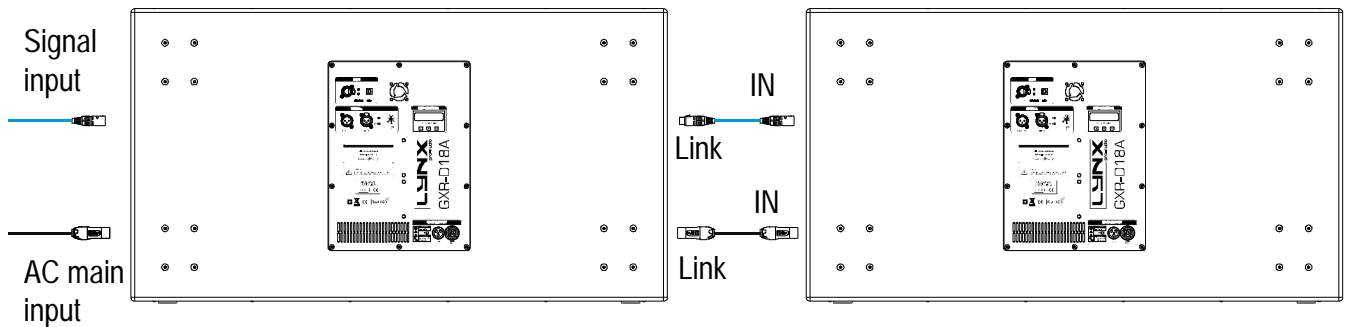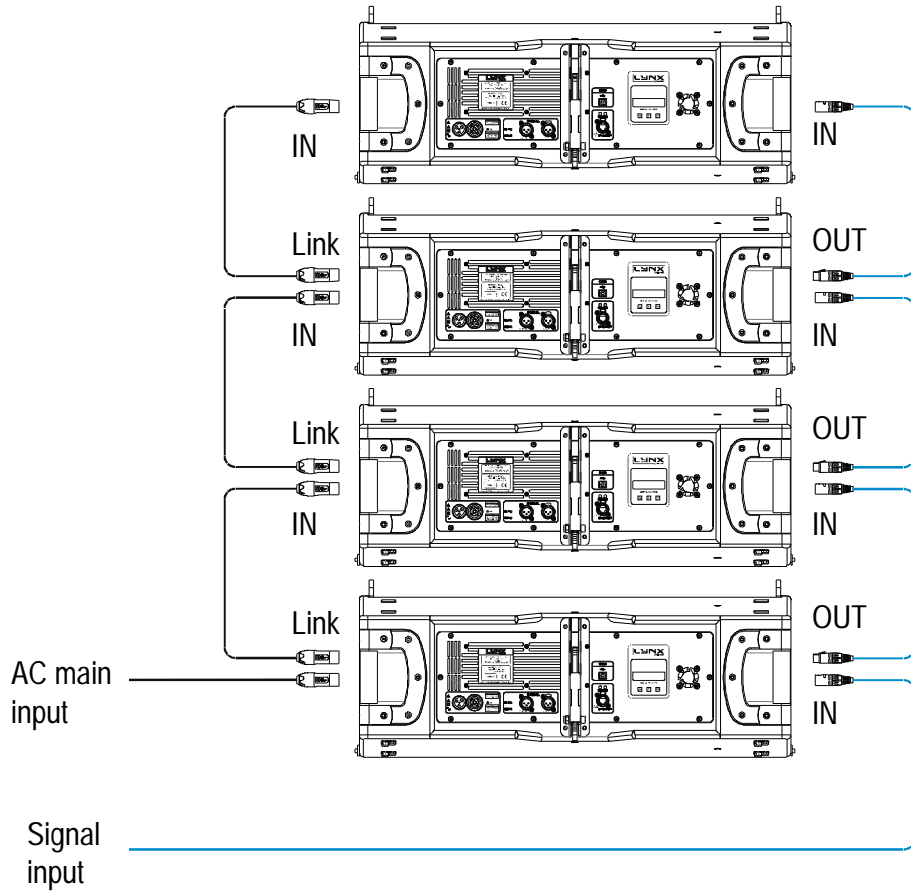
FIR FILTERS

Finite Impulse Response (FIR) filters are used in the signal processing of the GXR-LA10A cabinet. 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

From the buttons below the display on the cabinet's back panel you are able to configure the Basic adjustment functions of the internal DSP.

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

CONFIGURATION PANEL

On the back panel you will see 3 buttons and an information screen, on which you can read the established parameters and information such as amplification module temperature, input signal level and name of the current preset (Fig1). If changes are not made the display will automatically dim to save energy and avoid unnecessary light in situations where light is not wanted. To re-activate the light simply press the OK button.


Fig 1

SELECT THE INPUT: DIGITAL OR ANALOG

This selection is only available when the user has requested the cabinets to be supplied with the Digital input kit. There are four input options: Analog / Digital L / Digital R / Digital L+R

To select the input mode just press the OK button (3) and the up button (1), both at the same time but pressing the OK button first. Then you can select one of the four options using the up button (1).

To confirm your selection press OK (3) until the progress bar finishes.

The display will show an inverted D (digital) or an inverted A (analog) so you can always know if the input is digital or analog.
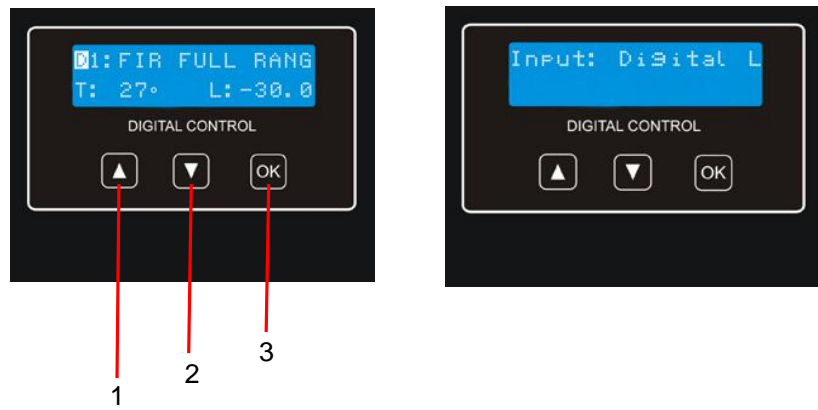
SELECT AND RUN PRESET

To change the preset configuration (see Fig 2) just press the up button (1) and down button (2) until you see the title and present number required and once found press OK (3) until the progress bar finishes (Fig 3). The display will indicate "Loading DSP" (Fig 4)

Fig 2   Fig 3   Fig 4

Note: In case of a power cut, the DSP will save its last configuration when restarted.

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.
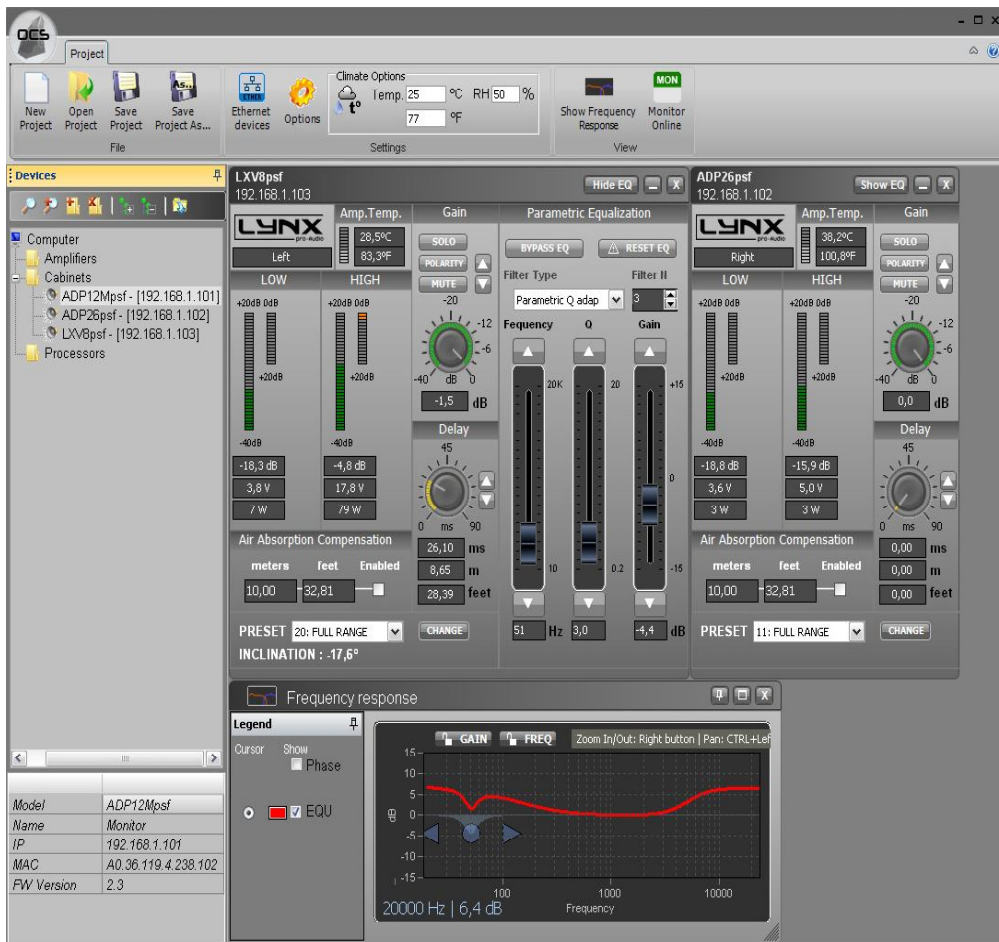
HARDWARE AND ACCESSORIES

(16)

The GXR 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. More accesorries are being added to the family, as a practical transport dolly or some nylon covers.

BALL-PSR6
Ball pin with thread for
GXR-LA10A and
GXR-D15A cabinets

FD-1GXRLA10ANL
FD-1GXRD15ANL
FD-1GXRD18ANL
Rain cover for the
back panel of the GXR
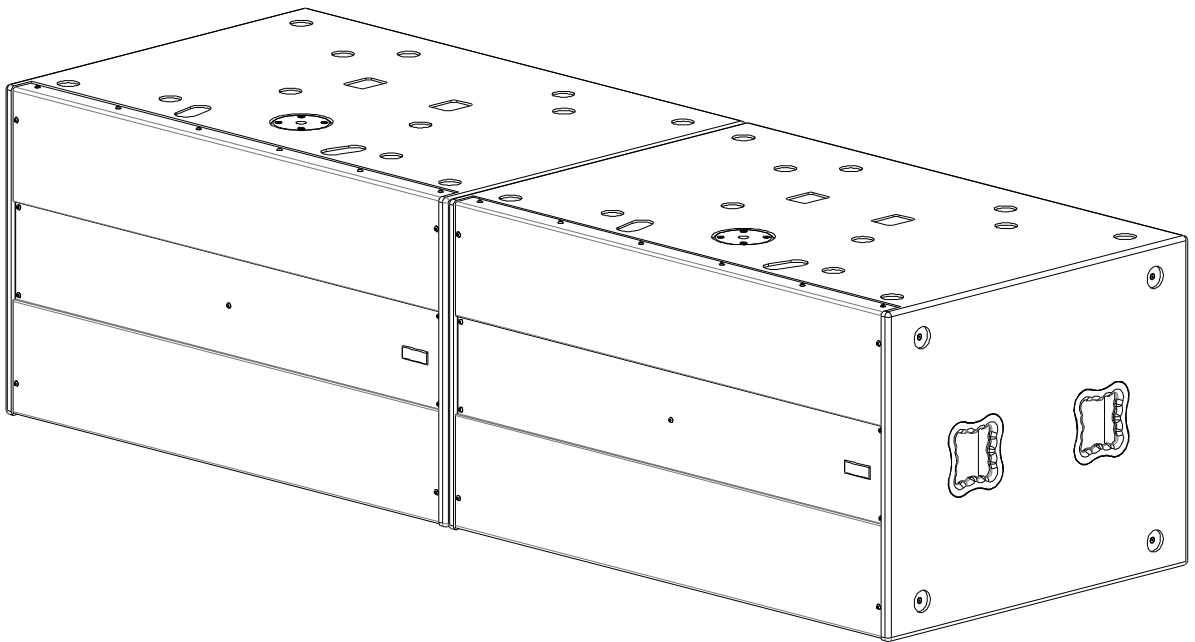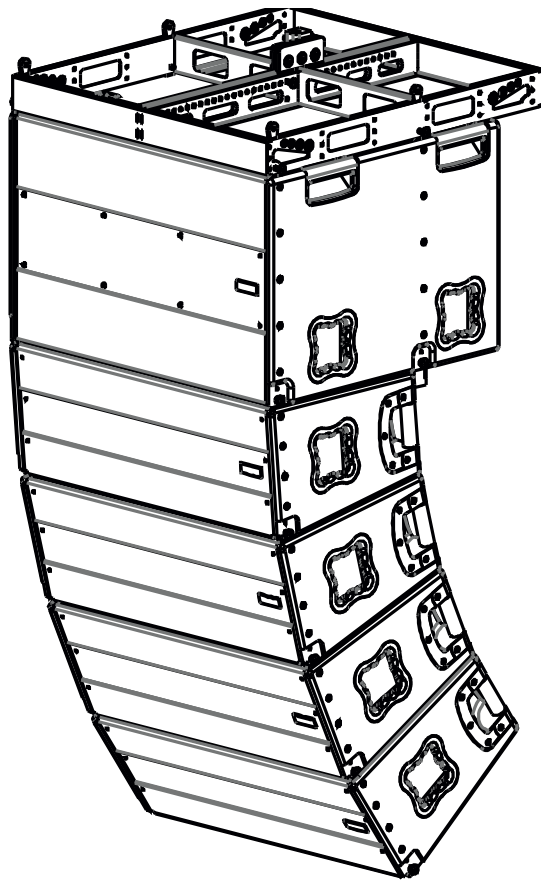cabinets
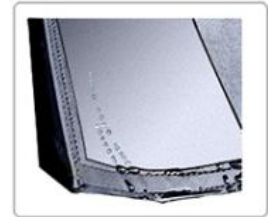
SV-GXRLA10A
Flying frame designed for
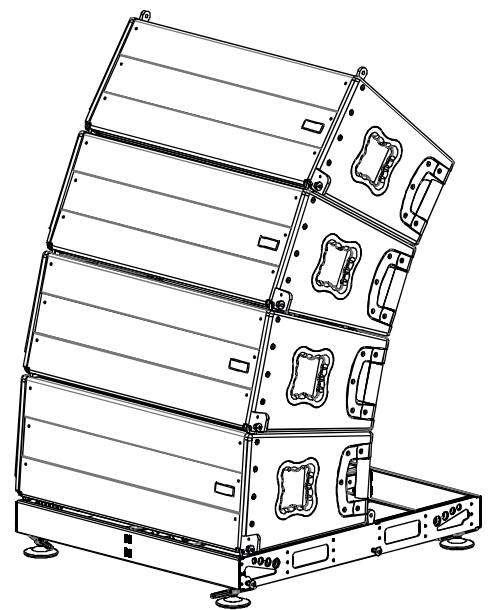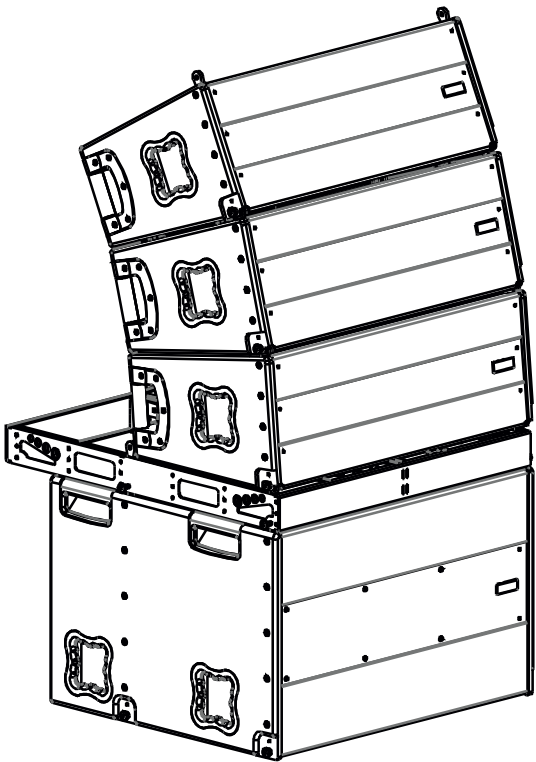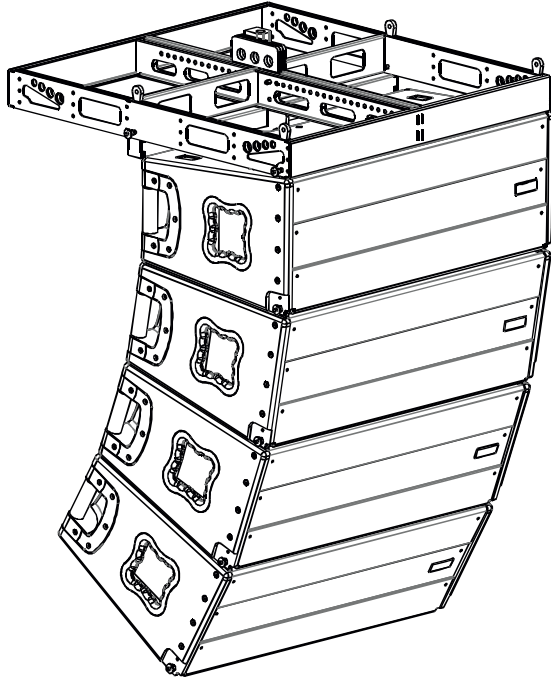rigging the GXR cabinets

FC-GXRLA10A
Flight case

*FOR A MULTITUDE OF APPLICATIONS*

FOR A MULTITUDE OF APPLICATIONS

HOW TO USE THE FLYING FRAME SV-GXR

The flying system SV-GXR is constructed with steel and is composed by the flying frame and a special upper support piece. All the cabinets are hung from this flying frame, one beneath the other correspondingly.

Different accessory pieces are available to fit all your needs.

BALL-PINS

EXTERNAL UPPER PIECE

FLYING FRAME

TO FIT

BALL-PINS

TO FIT

TO FIT
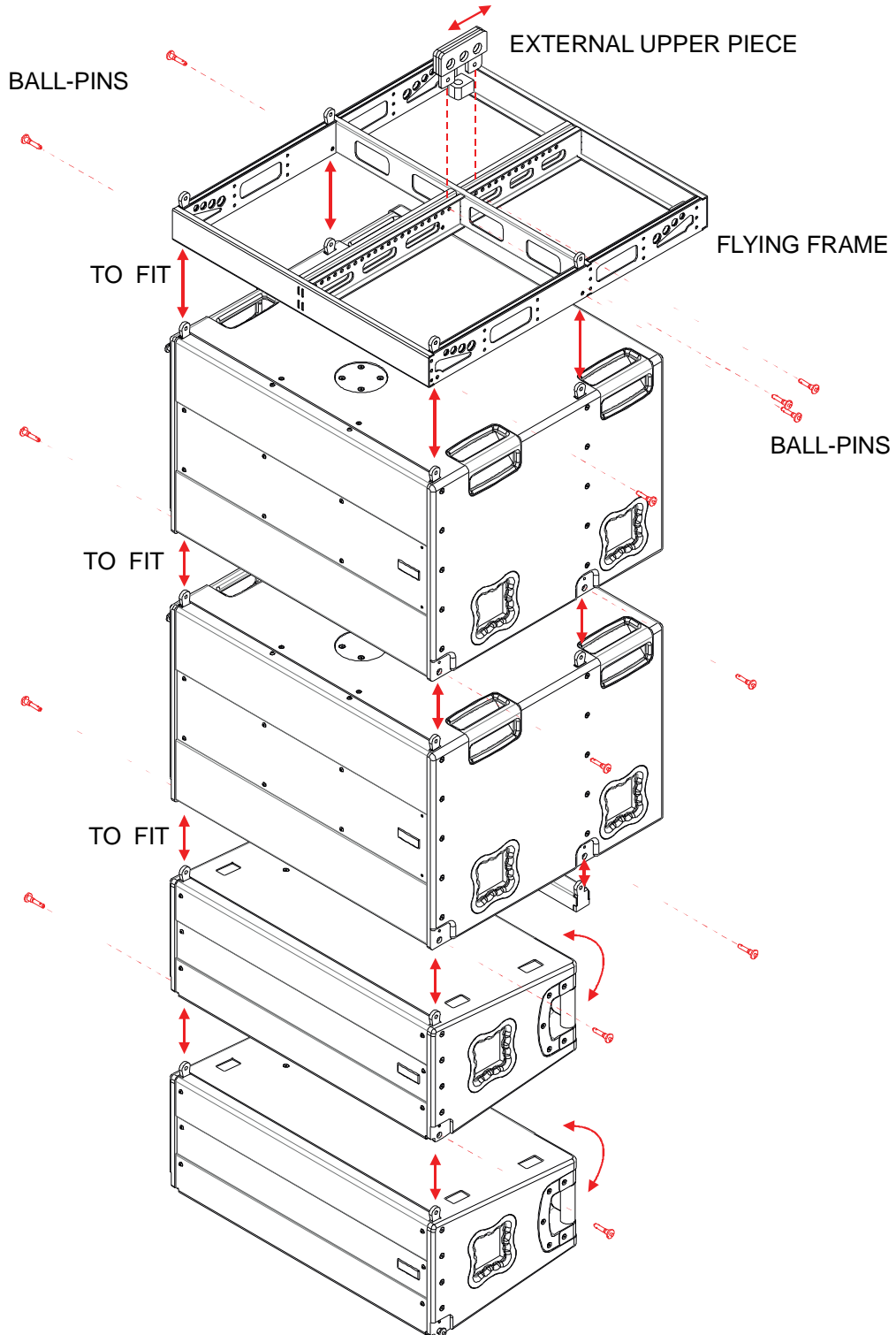
Place the shackles in position so that when the system is lifted it raises correctly and achieves maximum system orientation. You have different holes to place the shackles and orientate the system to your requeriments.

Fix the shackles to the elevation system (e.g motors, lifts) and elevate enough so as to fix the SV-GXR on to the first cabinet (GXR-LA10A or sub GXR-D15A) so that the link of support fit in to position in the upper lateral fixing points of the cabinet.
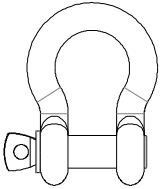
Note: To hang the system with motors or hoists, use the shackles code nº GS-12.

The external upper support piece is used to fix the shackels to the flying frame. This piece has three holes and must be placed into the transversal part of the frame. Its position is adjustable and locked by steel pins.
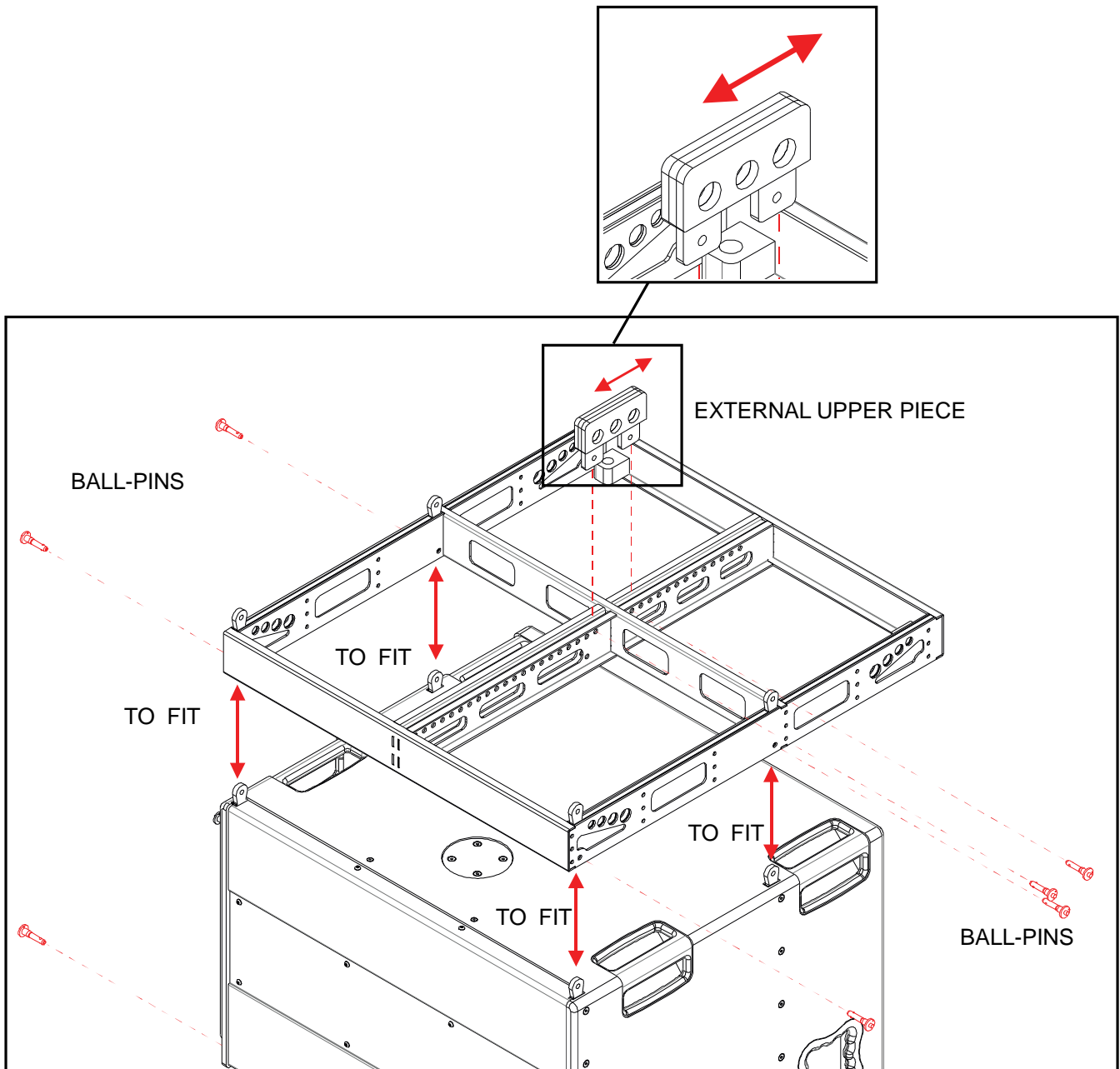
EXTERNAL UPPER PIECE

BALL-PINS

TO FIT

TO FIT

TO FIT

TO FIT

TO FIT

BALL-PINS

Note: Ensure all pins on all cabinets are inserted correctly and fully in their corresponding holes.

When using the flying frame with the GXR-LA10A enclosures they are supported via 2 fixing points incorporated in each side of the cabinet. And other 2 fixing points at the special support piece provided. All the fixations are made by a special steel pin, designed for maximum security.
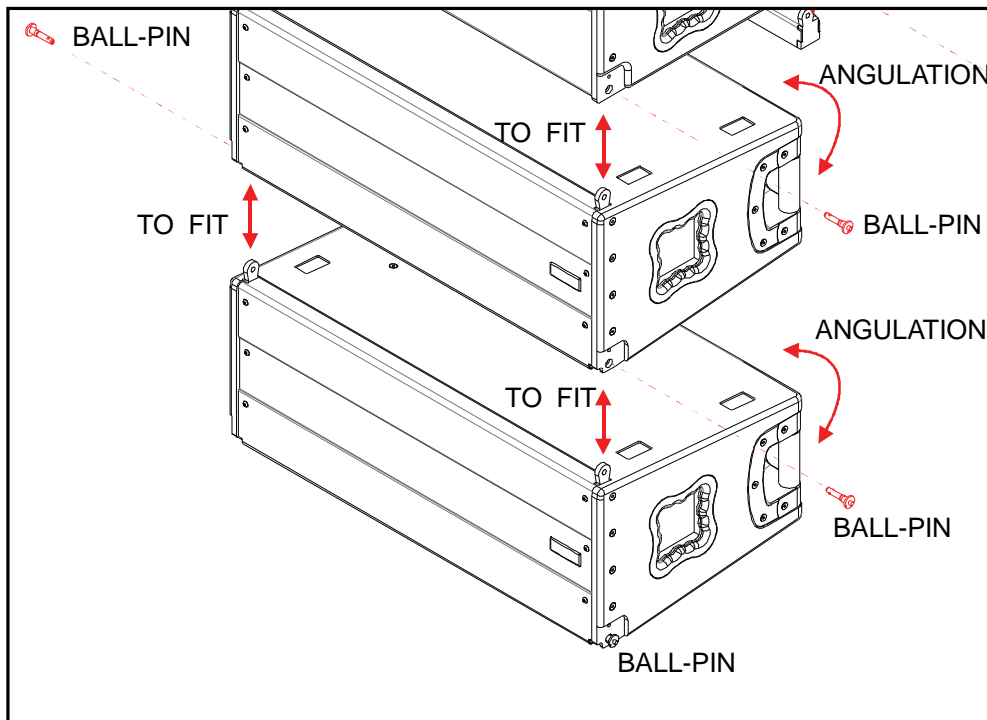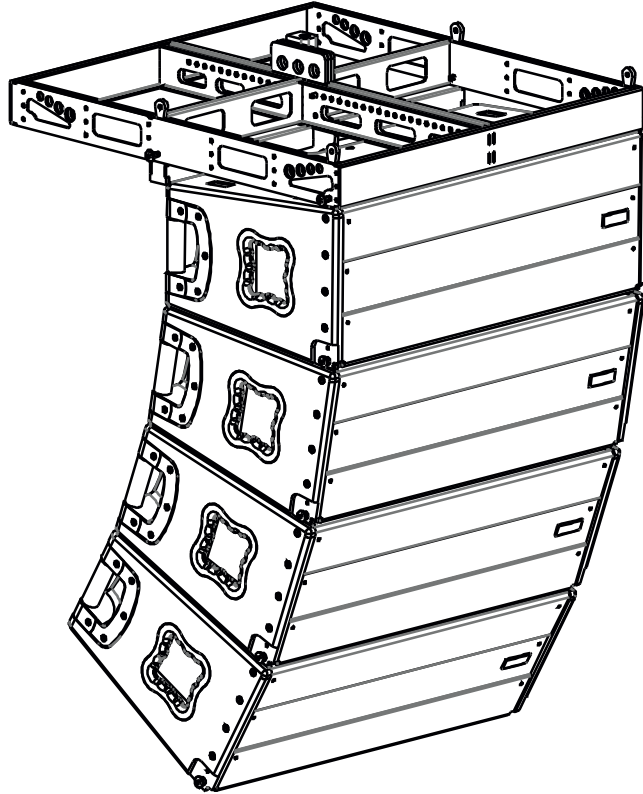
Note: Ensure all pins on all cabinets are inserted correctly and fully in their corresponding holes.

When flying the GXR-D15A enclosures they are supported via 4 fixing points incorporated in each side of the cabinet. All the fixations are made by a special steel pin, designed for maximum security.

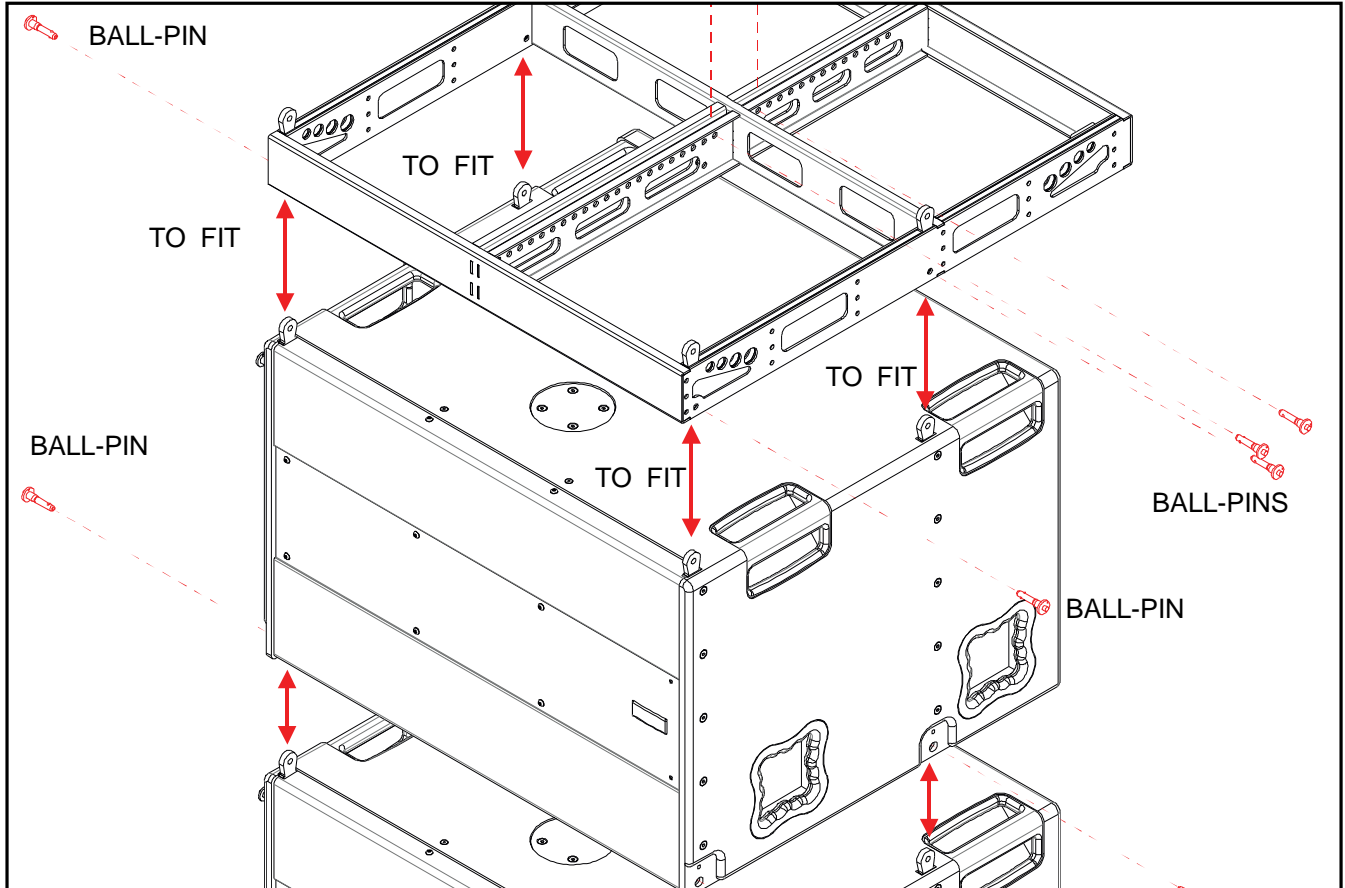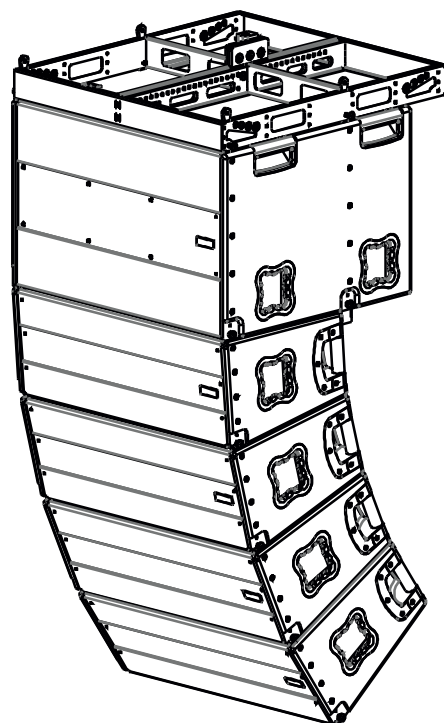
Note: Ensure all pins on all cabinets are inserted correctly and fully in their corresponding holes.

When flying the GXR-LA10A in combination with the subs GXR-D15A you must use the GXR connection piece as indicated below.

BALL-PIN

GXR-D15A

BALL-PIN

Connection Piece

ANGULATION

GXR-LA10A
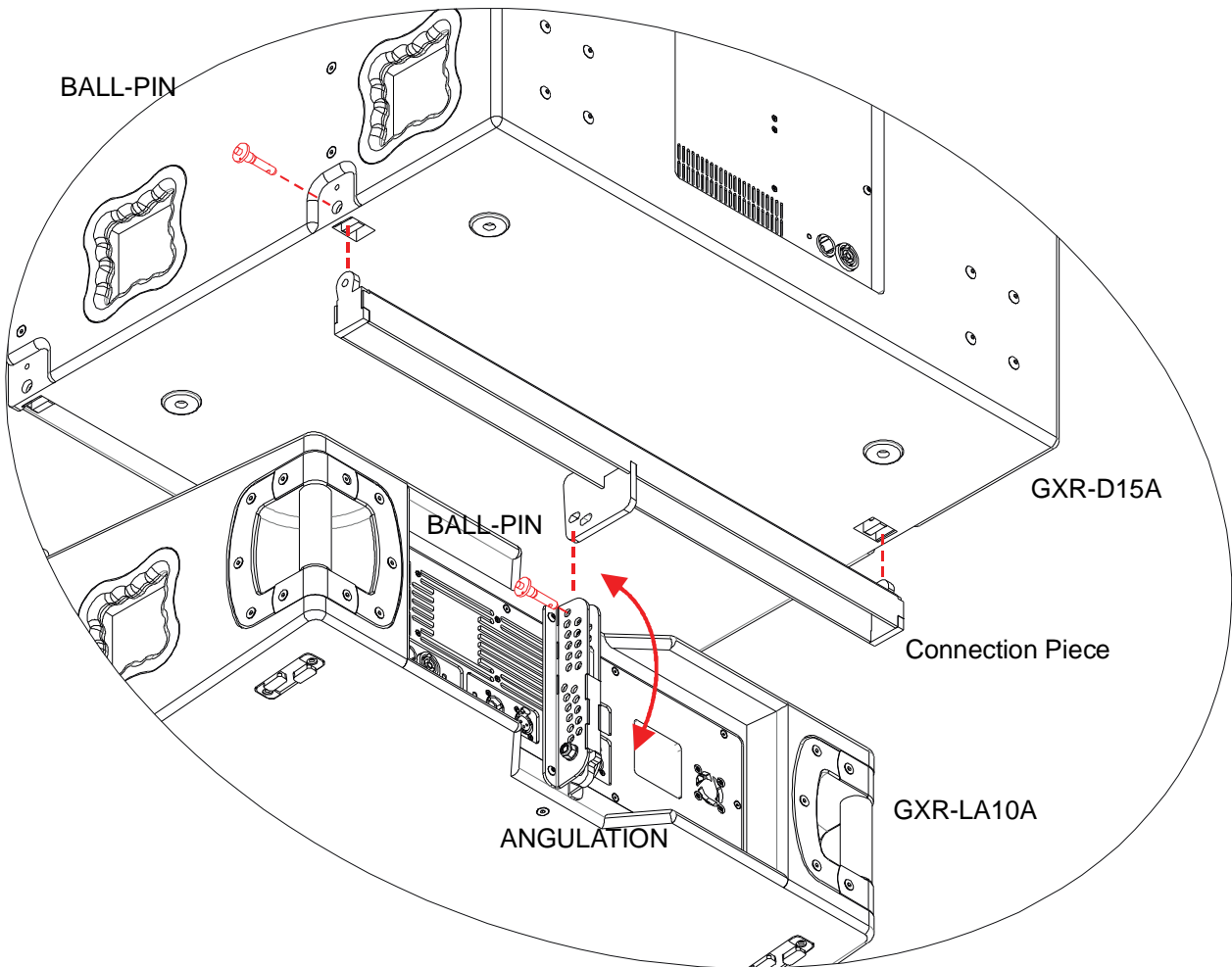
The support of the cabinets to the flying system and between them is carried out with special 6mm steel pins. To extract or fix the steel pins it is necessary to press the central button of the pin.
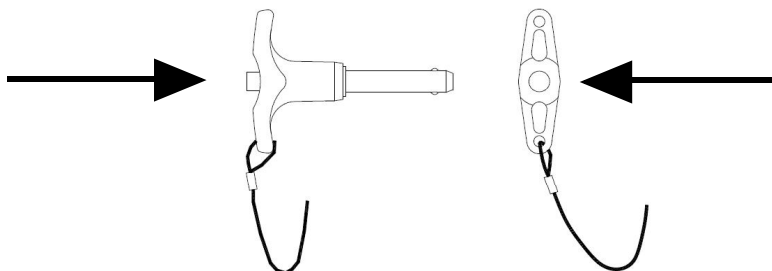
The flying frame can also be used as a ground support for stack mode configurations.

Safety precautions

To fix the cabinets to the Flying Frame always use the pins supplied with the equipment. Do not use different bolts etc.

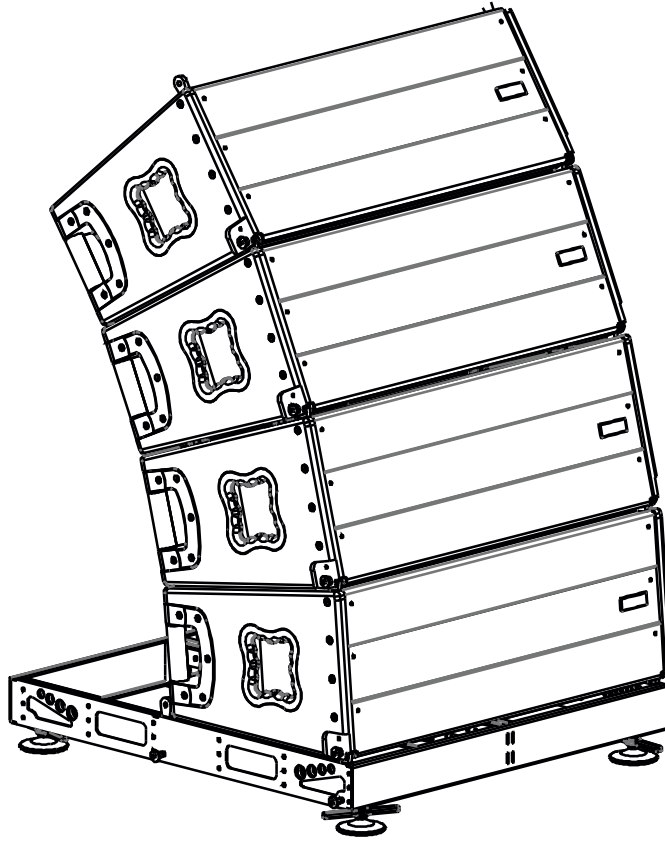To hang the motors or manual hoists, use the hooks supplied with the flying frame SV-GXR. In case of failure, the link system used should be capable of supporting the total weight of the complete system.

If the system is installed outdoors check that the support structure will be stable against the wind strength and secure it with a cable to avoid pendular movement.

Do not stand underneath the system.

A very practical transport dolly is available for touring applications. This dolly transport up to 4 top enclosures including the flying frame. And a nylon protection cover is also available for this pack.

LYNX
pro-audio

C E
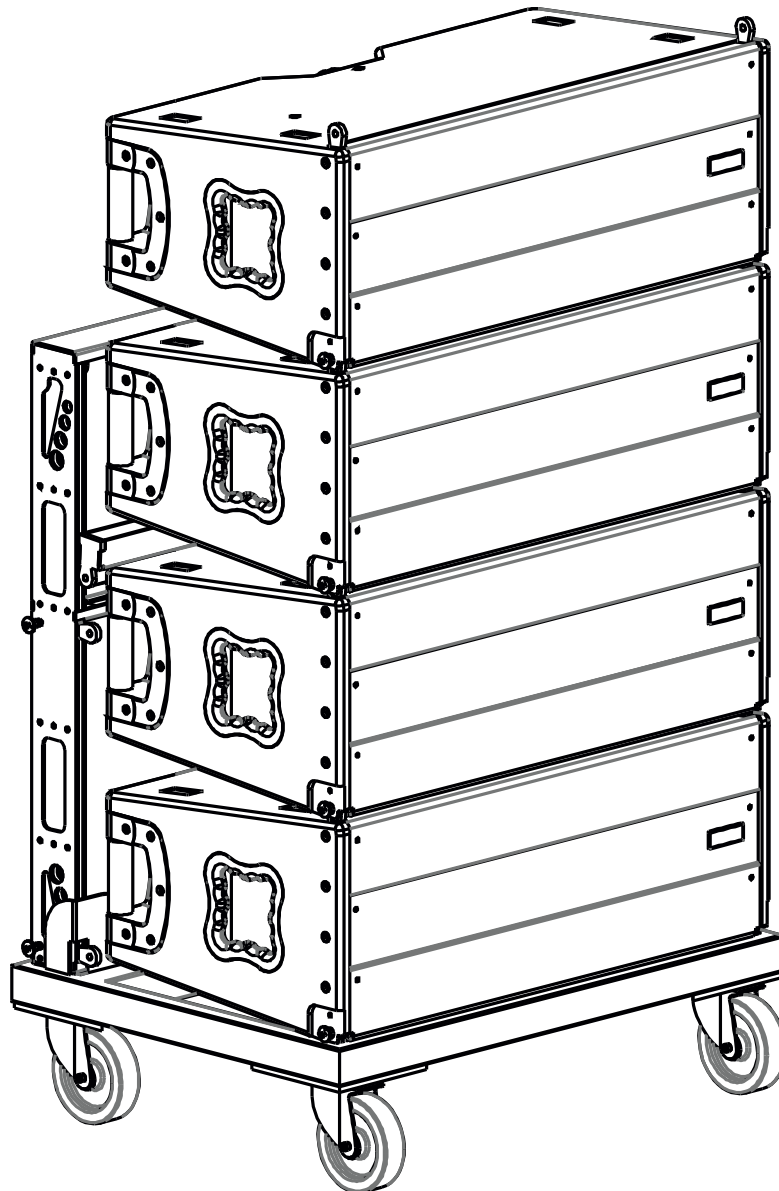
DECLARATION OF CONFORMITY

LYNX Pro Audio S.L.
Calle 1 - Pol. Ind. Picassent
46220 Picassent (Valencia)
SPAIN - EU
Tel.: (+34) 961 10 96 01
www.lynxproaudio.com

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

Low Voltage Directive   2006/95/EC
Electromagnetic Compatibility EMC   2004/108/EC
RoHS Directive   2002/95/EC

In accordance with Harmonized European Norms:

EN 60065:2002   Audio, video and similar electronic apparatus. Safety requirements

EN 55103-1:1996   Electromagnetic compatibility. Product family standard for audio, video, audiovisual
                         and entertainment lighting control apparatus for professional use. Part 1: Emission.

EN 55103-2:1996   Electromagnetic compatibility. Product family standard for audio, video, audiovisual
                         and entertainment lighting control apparatus for professional use. Part 2: Immunity.

CXA models: **GXR-LA10A / GXR-D15A / GXR-D18A**

LYNX
pro-audio

LYNX PRO AUDIO GUARANTEE

Lynx products are guaranteed against every kind of manufacturing fault 2 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.

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.