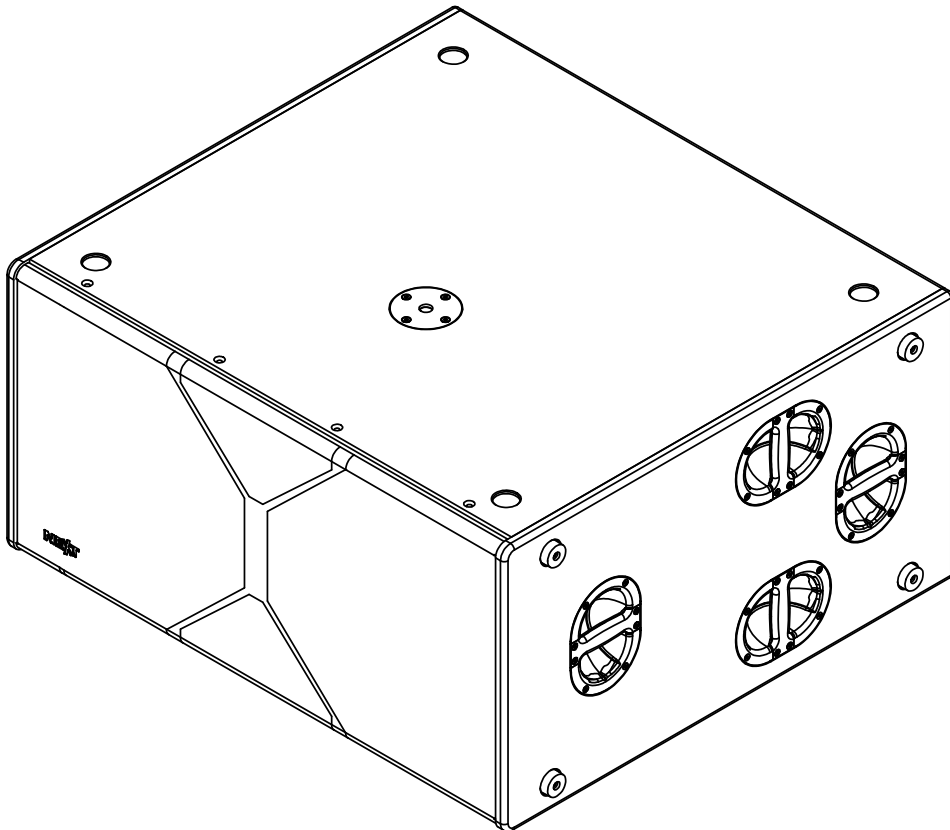




# LA518A

## User Guide





# Contents

<b>1</b>	<b>Safety and Warnings</b>	<b>4</b>
1.1	Certificates of Conformity	4
1.2	Warranty	4
1.3	End of Life	4
<b>2</b>	<b>Introduction and Overview</b>	<b>5</b>
2.1	Introduction	5
2.2	Unpacking	5
2.3	Overview	5
2.4	Specifications	7
<b>3</b>	<b>Cabling and Amplification</b>	<b>8</b>
3.1	Amplifier Layout	8
3.2	Wiring Diagram	9
3.3	LCD Screen and Menu	10
3.4	LEDs	11
3.4.1	Status LED	11
3.4.2	ETH/AES Connector LED	11
3.5	Preset List	12
3.6	Signal Distribution	13
3.7	Power Distribution	14
<b>4</b>	<b>Accessories</b>	<b>15</b>

# 1 Safety and Warnings



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.



The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions

- Read these instructions
- Keep these instructions
- Heed all warnings
- Follow all instructions
- Use the equipment only for its intended purpose as instructed in this manual
- Before installing, observe the applicable safety regulations for your country
- Always check if the equipment is installed securely and will not fall
- Never install close to ignition or heat sources such as radiators, ovens or any other apparatus that produce heat.
- Do not use or install the equipment near water or exposed to rain
- If the equipment is not functioning properly or has been damaged in any way, switch it off immediately
- Do not open or try to service the equipment. It may only be repaired by authorized, qualified personnel
- Clean the equipment using only a clean dry cloth
- Do not operate the unit for an extended period with the sound distorting
- Never remove the cover, because otherwise there may be a risk of electric shock. There are no user serviceable parts inside. Have repairs carried out only by qualified service personnel.



This equipment is intended for professional use. Therefore, commercial use of this equipment is subject to the respectively applicable national accident prevention rules and regulations. As a manufacturer, NEXT-proaudio is obligated to notify you formally about the existence of potential health risks. Hearing damage due to high volume and prolonged exposure: When in use, this product is capable of producing high sound-pressure levels (SPL) that can lead to irreversible hearing damage in performers, employees, and audience members.

For this reason, avoid prolonged exposure to volumes in excess of 90dB.

ATTENTION! Because of the continuous evolution of techniques and standards, NEXT-proaudio reserves the right to change the specifications of its products without warning. For the most updated version of this manual and general information about this and other products, please visit our website [www.nextaudiogroup.com](http://www.nextaudiogroup.com).

## 1.1 Certificates of Conformity

Certificates of conformity can be found at:

<https://www.nextaudiogroup.com/en/apoio-ao-cliente/downloads>

## 1.2 Warranty

Warranty details can be found at:

[www.nextaudiogroup.com/en/apoio-ao-cliente/warranty](http://www.nextaudiogroup.com/en/apoio-ao-cliente/warranty)

## 1.3 End of Life



When to be definitively put out of operation, take the product to a local recycling plant for a disposal which is not harmful to the environment.

Devices marked with this symbol must not be disposed of as household waste. Contact your retailer or local authorities for more information.

# 2 Introduction and Overview

## 2.1 Introduction

Thank you for purchasing a NEXT LAs518A active subwoofer. This manual will provide you with useful and important information about your NEXT LAs518A. Please devote some time reading this manual and keep it at hand for future reference. NEXT-proaudio is concerned with your safety and well-being so please follow all instructions and heed all warnings. A better understanding of specific features of the LAs518A active subwoofer will help you to operate your system to its full potential. With a continuous evolution of techniques and standards NEXT-proaudio reserves the right to change the specifications of its products without warning. For the latest information please visit: [www.nextaudiogroup.com](http://www.nextaudiogroup.com).

## 2.2 Unpacking

Each NEXT LAs518A active subwoofer is built in Europe (Portugal) by NEXT-proaudio, according to the highest standards and thoroughly inspected before it leaves the factory. When unpacking your LAs518A please examine it carefully for any signs of transit damage and inform your dealer immediately if any is found.

NEXT-proaudio recommends that you retain the original packaging so that the system can be repackaged in future if necessary. Please note that NEXT-proaudio and its authorized distributors cannot accept any responsibility for damage to any returned product using non-approved packaging.

## 2.3 Overview

Introducing the LAs518A, the ultimate compliment to the LA210x. Boasting dual long-excursion, high-power neodymium 18" drivers, the LAs518A delivers unparalleled low-frequency performance.

With optimized port tuning and exceptional peak-to-peak excursion capability, the LAs518A ensures deep, resonant bass down to 24 Hz at -10 dB. Encased in a sturdy 89 kg front-loaded bass reflex enclosure, the LAs518A is equally adept for installation and rental applications, delivering a maximum peak SPL of 143 dB.

Driving the LAs518A is a lightweight, highly efficient 2-channel class D amplifier module, capable of delivering up to 2800 W RMS with remarkable precision and detail. Equipped with an integrated universal mains power supply featuring PFC, this subwoofer guarantees consistent performance worldwide.

# 2 Introduction and Overview

At its core lies an advanced 96 kHz/40-bit SHARC DSP engine, monitored via a built-in LCD screen with a preset loading encoder. Additionally, remote monitoring and control through Ethernet connectivity allow seamless integration with a PC, offering unparalleled convenience. The X-NET PC software enables effortless fine-tuning of your system's sound, with the ability to control multiple devices simultaneously through a grouping facility.

Experience the pinnacle of subwoofer technology with the LAs518A – where power, precision, and versatility converge to elevate your audio experience to new heights.

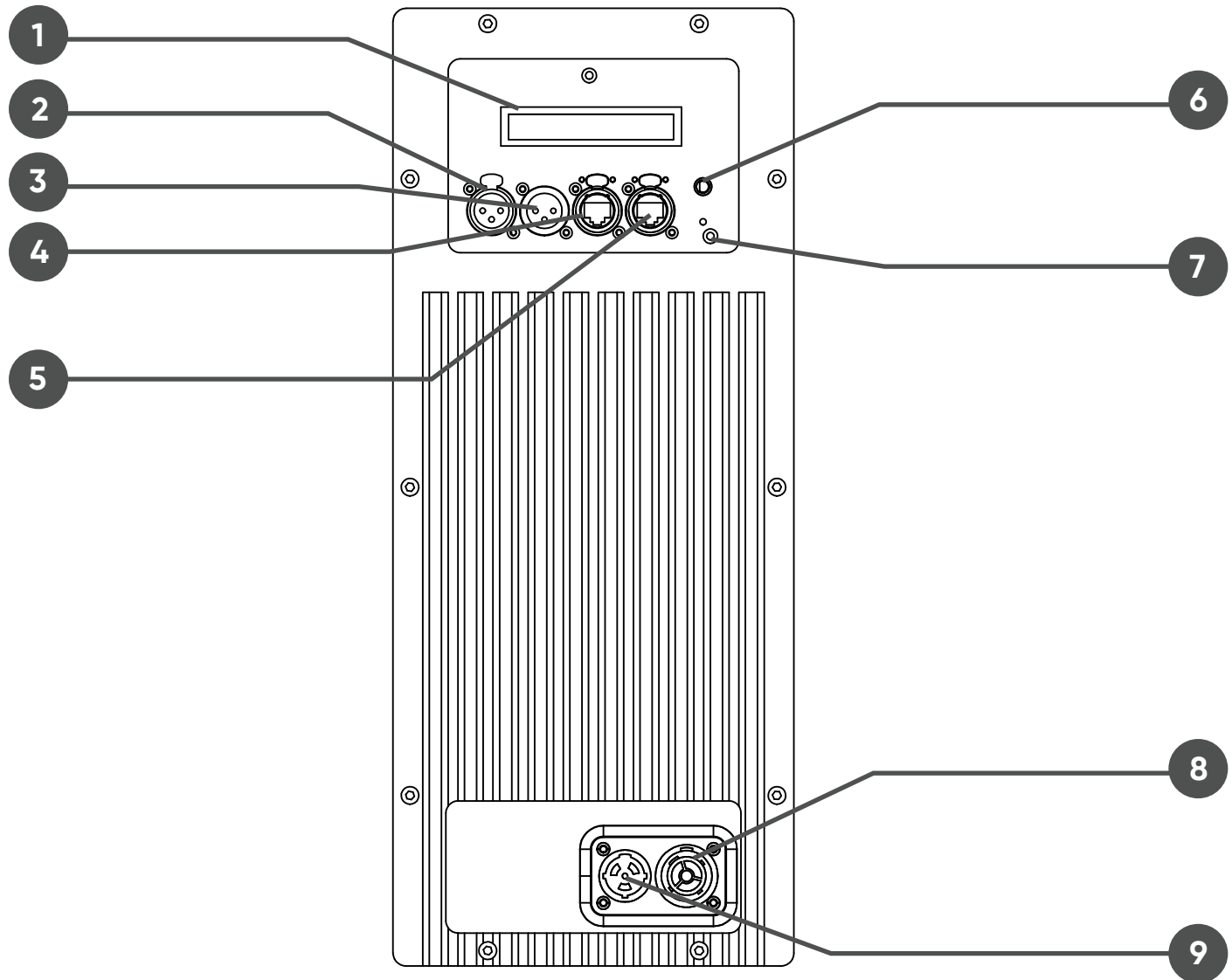
# 2 Introduction and Overview

## 2.4 Specifications

Frequency Response (-6 dB)	28Hz - 250 Hz
Low Frequency Extension (-10 dB)	24 Hz
Amplifier Technology	2-Channel UMAC Class D - Full Bandwidth PWM Modulator With Ultra-Low Distortion
Amplifier Power	RMS: 2800 W / Program: 5000 W / Peak: 7000 W
DSP Technology	96 kHz / 40 bit SHARC DSP
Latency	1.5 ms
DSP Adjustable Parameters	Filters: PEQ, FIR, hi/lo-shelving, all-pass, band-pass, hi/lo-pass   Limiters: RMS Voltage, Peak Voltage   Groups: Mute, Delay, Level, Polarity, EQ
DSP Presets	24 (4 User Presets)
Delay Adjustment	500 ms (172 m) on Input + 400 ms (138 m) on Groups
Control Type	Control via LCD and Encoder on the Back Panel   Control via Software using Ethernet - Max. Cable Length 70 m
Maximum SPL (calculated)	141 dB/144 dB (Half-Space)
Subwoofer Driver	2 x 18" (460 mm)/4" (100 mm) VC, high excursion, B&C custom speaker
Audio Signal Inputs	Analog   AES (AESOP)
Input Connectors	1 x XLR   1 x Neutrik EtherCON®
Audio Signal Outputs	Analog   AES (AESOP)
Output Connectors	1 x XLR   1 x Neutrik EtherCON®
Protections	Clip Limiter   Temperature   Over Current   DC Protection   HF Protection
Operating Temperature Range	0° C - 40° C
Cooling Type	External Aluminum Heat Sink with Internal Speed Controlled Fans
Power Supply	UREC Universal Mains Switch Mode Power Supply (SMPS) with Power Factor Correction (PFC) and Standby Converter
Power Input	AC 100 V - 240 V 50 Hz/60 Hz
Mains Connector	Dual (IN/OUT) Neutrik powerCON TRUE1 TOP®
Power Consumption	700 W
Special Features	Speaker Cabinet Auto-Identification via Software
Fittings	1 x M20 pole mount socket, 16 x M8 threaded inserts for optional wheel kit, 8 replaceable feet
Handles	4 on each side
Grille	Black Perforated Steel
Construction	Heavily braced, 18 mm multi-laminate birch ply
Finish	Semi-Matte Black Polyurea Coating
Dimensions (WxHxD)	1030 x 516 x 920 mm (40.55 x 20.31 x 36.22")
Net Weight	89 kg (196.2lb)
Shipping Weight	94 kg (207.2lb)
Accessories	Rain Cover   Transportation Dolly   Ground Stack Accessory for LA210x

# 3 Cabling and Amplification

## 3.1 Amplifier Layout

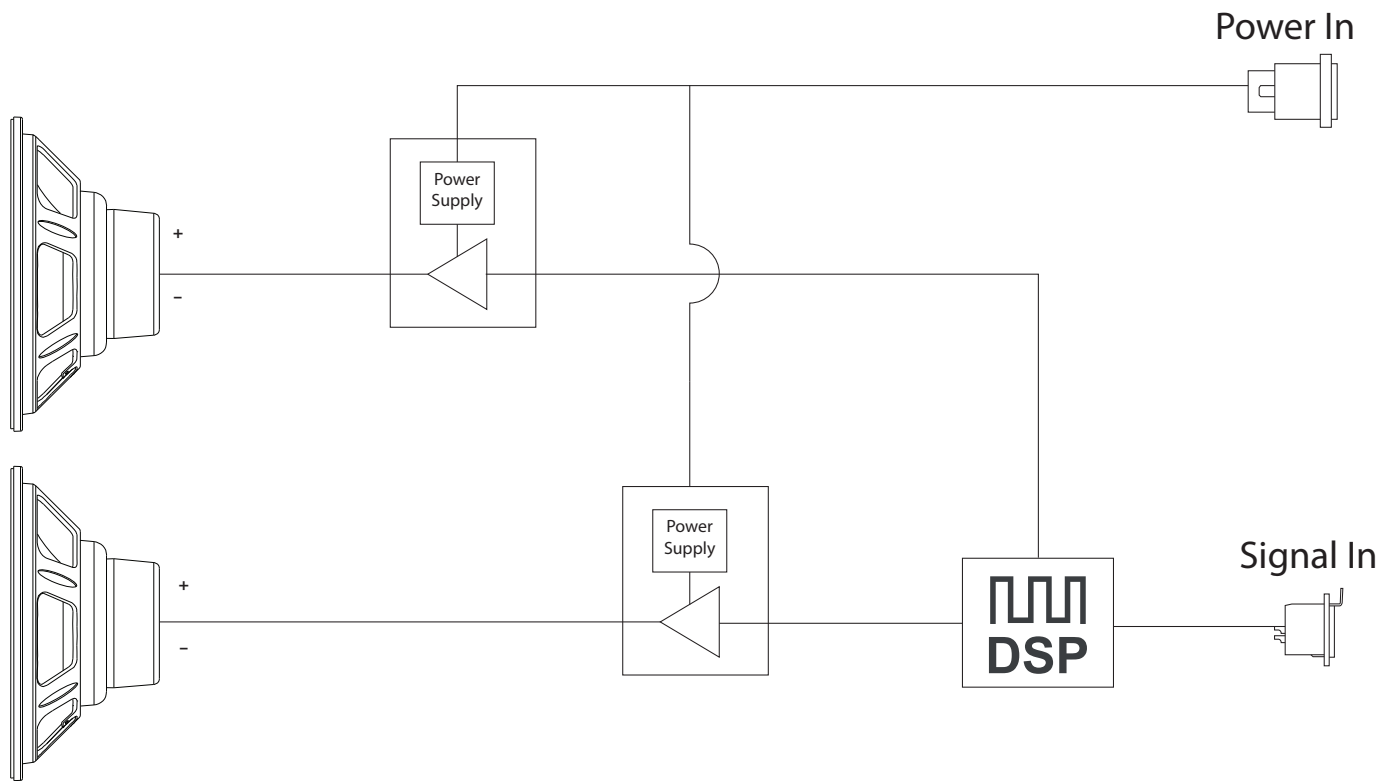


1. LCD Screen
2. Analogue Out (XLR)
3. Analogue In (XLR)
4. ETH/AESOP In (Neutrik® etherCON)
5. ETH/AESOP Out (Neutrik® etherCON)
6. Encoder
7. Status LED
8. Power In (Neutrik® PowerCON TRUE1 TOP)
9. Power Out (Neutrik® PowerCON TRUE1 TOP)



# 3 Cabling and Amplification

## 3.2 Wiring Diagram



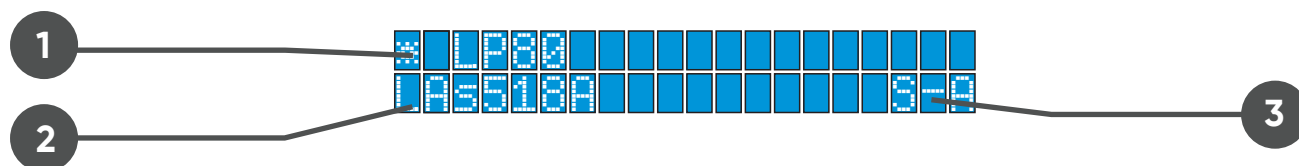
# 3 Cabling and Amplification

## 3.3 LCD Screen and Menu

At start up the load screen will display for about four seconds.



After that the main menu screen will display:



1. Displays the current active preset.
2. Displays the name of the device.
3. Displays the amplifier state. The letters displayed have the following meaning:

O: System is running normally	S: Amp is starting up
E: Error on AMP connection state	C: PC is connected
-: No connection Input state	A: Analogue input
L: AES-input locked	U: AES-input unlocked

To access the settings menu push the encoder. Rotate the encoder and push again to select the required setting. Select the setting using the encoder, to return to the main menu simply wait for four seconds. The settings menu is as follows:

0. Main Menu	6. Select input
1. Volume	7. System temp
2. Delay	8. Backlight
3. Load Preset	9. Info
4. Set IP	A. Amp state
5. Set Subnet	

All of this information can be accessed and changed via the X-NET control software. For more information and guidance on its use go to the download section of the LAs518A product page:

<https://www.nextaudiogroup.com/en/product/las518a>

# 3 Cabling and Amplification

## 3.4 LEDs

### 3.4.1 Status LED

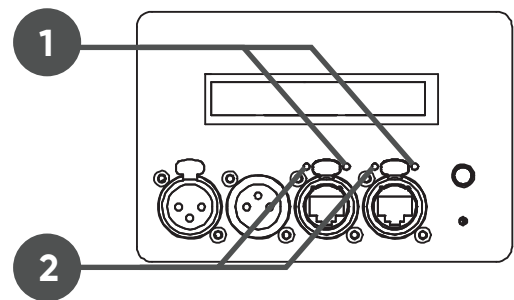
The status LED, see section 3.1, has the following meaning:

- Solid Green: analogue signal present
- Red Blinking: analogue input clip
- Solid Red: AES locked

### 3.4.1 ETH/AES Connector LED

The ETH/AES connectors have two LED indicators above them as shown in the diagram.

1. A standard Ethernet indicator and flashes green when the connection is active.
2. This LED indicates the AESOP connection. If the LED is inactive then AESOP is not selected. If flashing yellow then AESOP is selected but not locked. A solid yellow light indicates the AESOP is selected and locked.



# 3 Cabling and Amplification

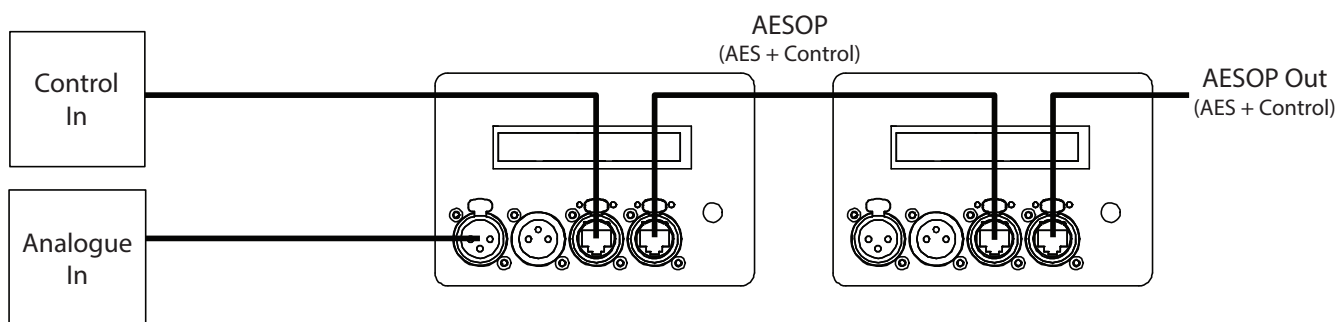
## 3.5 Preset List

Preset Number	Display Name	Description
1	USER_PRESET_1	Location to store a user preset. Default: LP80
2	USER_PRESET_2	Location to store a user preset. Default: LP80
3	USER_PRESET_3	Location to store a user preset. Default: LP80
4	USER_PRESET_4	Location to store a user preset. Default: LP80
5	LP60	Low pass 60 Hz
6	LP60_CRD_1_TO_1	To be used on the rear faced LAs518A on a 1 to 1 ratio cardioid configuration - low pass 60 Hz
7	LP60_CRD_2_TO_1	To be used on the rear faced LAs518A on a 2 to 1 ratio cardioid configuration - Low Pass 60Hz
8	LP70	Low Pass 70Hz
9	LP70_CRD_1_TO_1	To be used on the rear faced LAs518A on a 1 to 1 ratio cardioid configuration - Low Pass 70Hz
10	LP70_CRD_2_TO_1	To be used on the rear faced LAs518A on a 2 to 1 ratio cardioid configuration - Low Pass 70Hz
11	LP80	Low Pass 80Hz
12	LP80_CRD_1_TO_1	To be used on the rear faced LAs518A on a 1 to 1 ratio cardioid configuration - Low Pass 80Hz
13	LP80_CRD_2_TO_1	To be used on the rear faced LAs518A on a 2 to 1 ratio cardioid configuration - Low Pass 80Hz
14	LP100	Low Pass 100Hz
15	LP100_CRD_1_TO_1	To be used on the rear faced LAs518A on a 1 to 1 ratio cardioid configuration - Low Pass 100Hz
16	LP100_CRD_2_TO_1	To be used on the rear faced LAs518A on a 2 to 1 ratio cardioid configuration - Low Pass 100Hz
17	LP120	Low Pass 120Hz
18	LP120_CRD_1_TO_1	To be used on the rear faced LAs518A on a 1 to 1 ratio cardioid configuration - Low Pass 120Hz
19	LP120_CRD_2_TO_1	To be used on the rear faced LAs518A on a 2 to 1 ratio cardioid configuration - Low Pass 120Hz
20	NO LOW PASS	No Low Pass - To be defined by user and saved on a free memory position

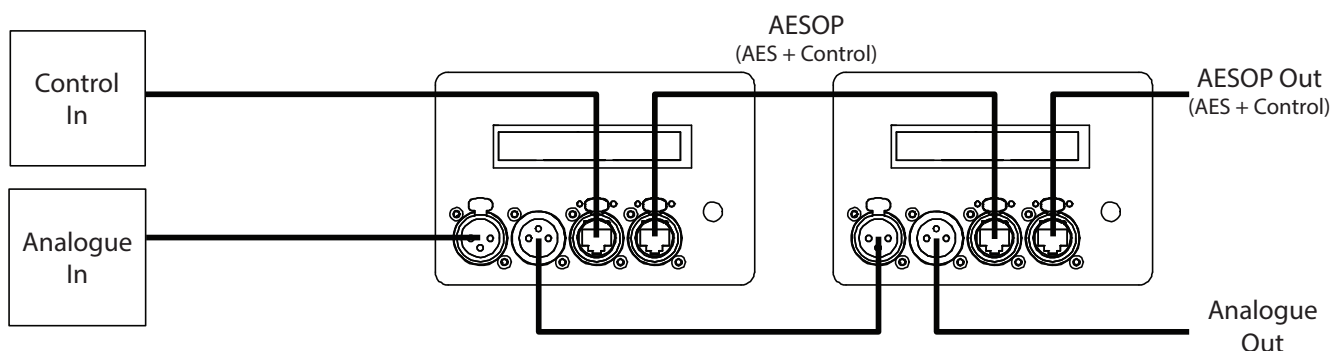
# 3 Cabling and Amplification

## 3.6 Signal Distribution

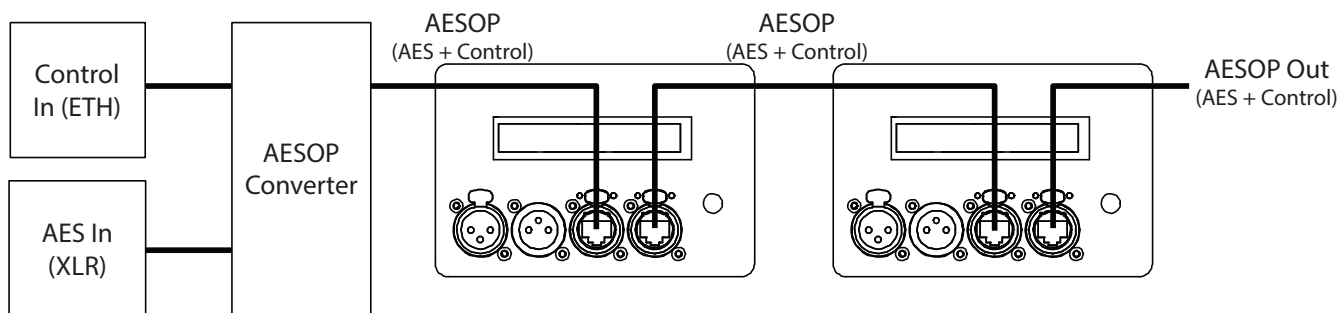
In this first example the analogue cable is only supplied to the first unit and from there is distributed by AESOP using the ethernet cable.



A redundancy can be added by linking the cabinets with XLR cable.

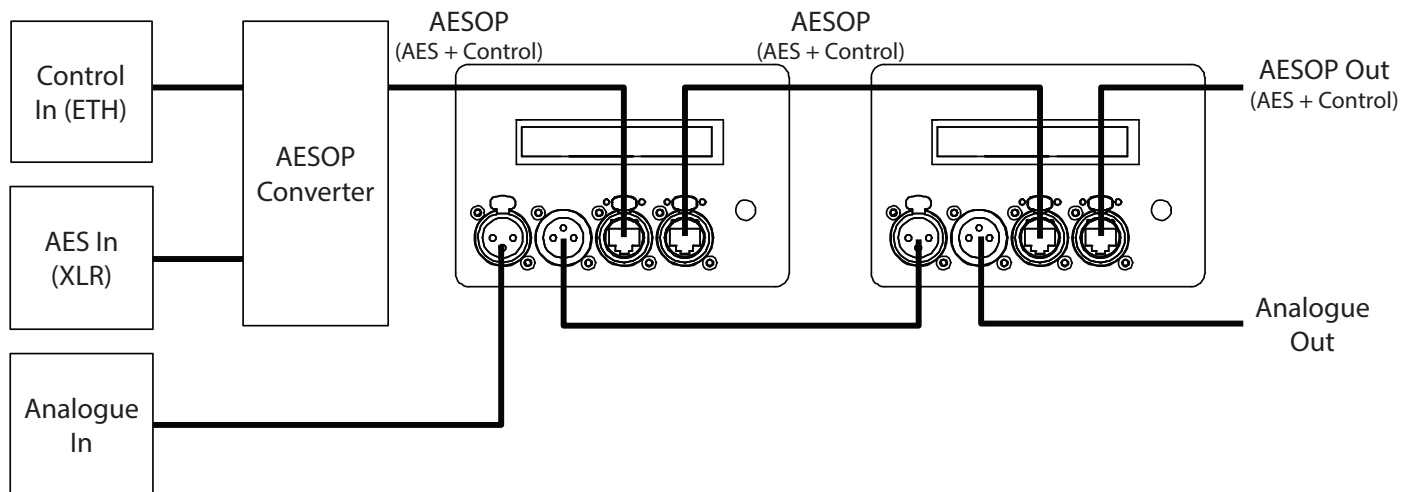


It is also possible to connect AES directly (XLR cable) from a mixer, using the NEXT AESOP Converter. The AESOP Converter will mix both AES and control signals into one single AESOP ethernet cable.



# 3 Cabling and Amplification

In this example if the AESOP signal is interrupted for any reason, the DSP will switch to the analogue signal instantly (fallback option must be enabled on X-NET software). This method is highly recommended when redundancy is needed.



Maximum Ethernet cable distance between devices is 70 m. NEXT-proaudio advises using CAT6 S/FTP cable

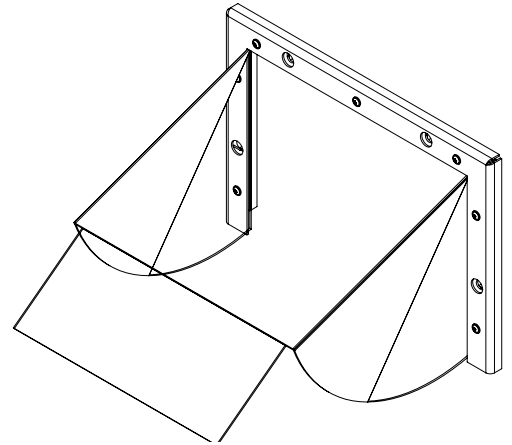
## 3.7 Power Distribution

When linking units for power distribution the following is the maximum units that can be linked:

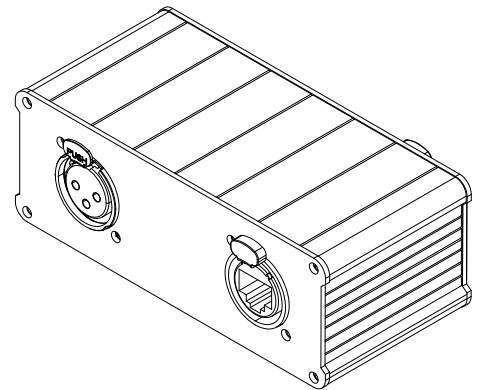
Voltage	LA210x	LAs518A
230 V	Max 6 units	Max 2 units
110 V	Max 4 units	Max 1 unit

# 4 Accessories

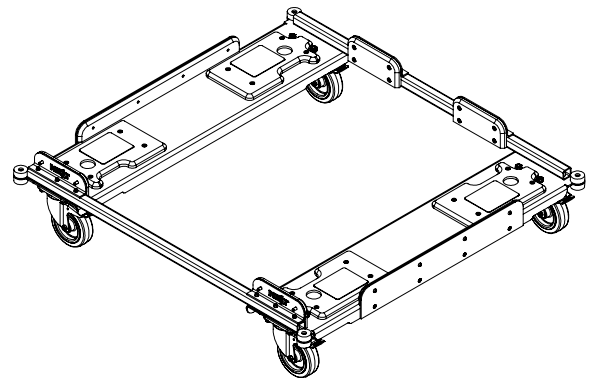
NEXT Individual Rain Cover for LA210x/LAs518A  
Part number: TX12209



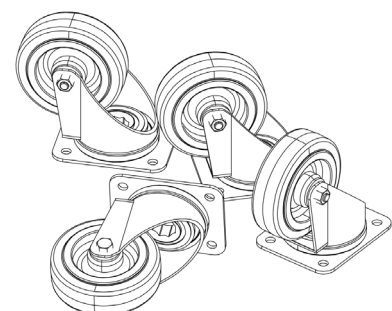
NEXT AES Converter  
Part number: EA00206



LAs418/518A Dolly  
Part number: NC86418

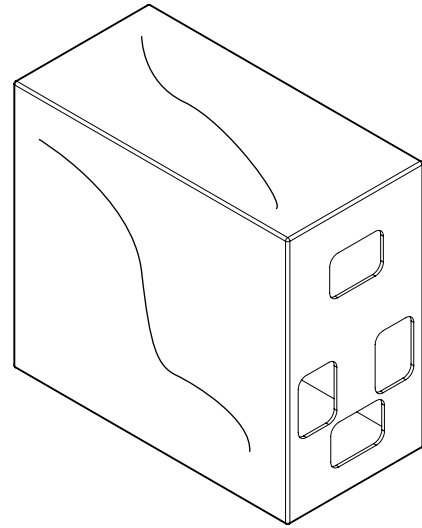


Individual Wheel Kit  
Part number: NC83600

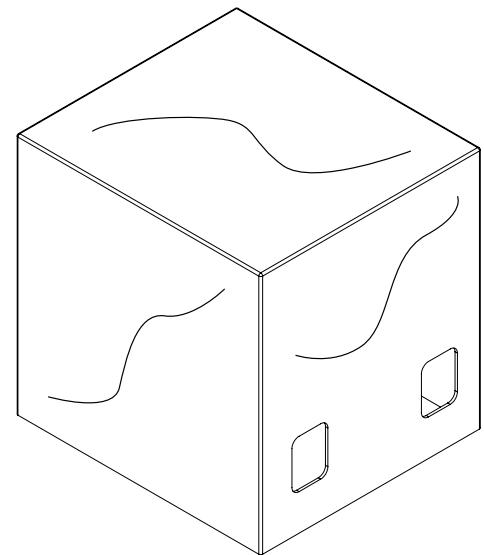


# 4 Accessories

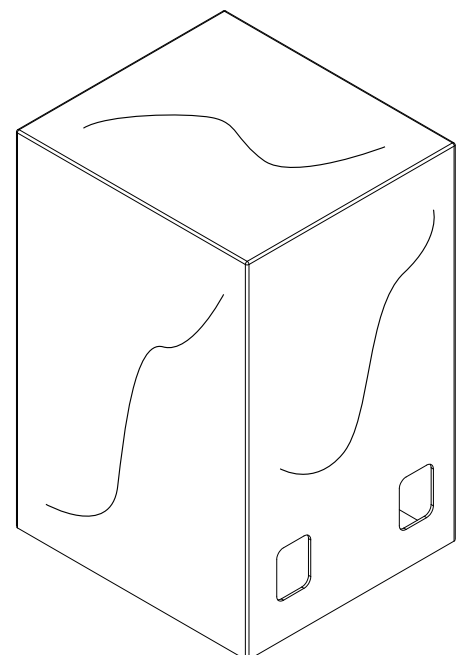
NEXT Individual Heavy Duty Cover LAs518A  
(for use with Individual Wheel Kit)  
Part number: TX41425



NEXT Heavy Duty Cover for 2 x LAs518A (for  
use with Dolly)  
Part number: TX41423



NEXT Heavy Duty Cover for 3 x LAs518A (for  
use with Dolly)  
Part number: TX41424







 Rua da Venda Nova, 295 | 4435-469 Rio Tinto, Portugal

 [info@nextaudiogroup.com](mailto:info@nextaudiogroup.com)

 [www.nextaudiogroup.com](http://www.nextaudiogroup.com)

 [www.instagram.com/next.audiogroup](https://www.instagram.com/next.audiogroup)

 [facebook.com/nextproaudio](https://facebook.com/nextproaudio)

