

# SP4K-15

17,000 lumens smart cinema projector

**\*\*PRELIMINARY SPECS\*\***



- **Brilliant image**
- **Ready for tomorrow, today**
- **Barco EcoPure™**
- **Fit and forget**

SP4K-15 is part of the Series 4 portfolio, designed in close collaboration with industry partners. Market trends in content creation, exhibition and technology were taken into account. The result? A next-generation laser projection family for all cinema screens. The SP4K models come in many different configurations offering you the freedom of choice. A wide range of brightness options, compatibility with both Barco lenses and selected 3rd party lenses, as well as a touch display and live streaming option. Play with the available options to match your specific needs.

## **Brilliant image**

The SP4K models of the Series 4 family brings native 4K resolution, higher contrast and enhanced uniformity into the movie theater. The Barco Active Image Management™ includes patented technology to guarantee sharp, consistent image quality over time.

## **Ready for tomorrow, today**

With the SP4K models and their RGB laser lightsource, the Barco Colorgenic™ technology opens up more than 98.5% of Rec. 2020. Moreover, all SP4K models are fully enabled for future innovations like 4K 120fps and compatibility with the latest immersive audio standard.

## **Barco EcoPure™**

This silent running projector (51dB(A)) is fully ready for boothless operation. In addition, the SP4K-15 smartly manages its power consumption reaching projector efficiency levels up to 10.3 lumens per Watt. In eco-mode it consumes even less than 3 Watt. What's more, remote wake up on LAN is possible for scheduled maintenance or ingest.

## **Fit and forget**

The modular design of the Series 4 projectors allows for cost-effective maintenance. There are only six Barco laser plate™ spare parts to service all light source configurations. Anyone can replace the filters thanks to the toolless cover and filter handling. The SP4K-15 seamlessly integrates into your current setup.

**PRODUCT SPECIFICATIONS****SP4K-15**

Native brightness	17,000 lumens (typical)
Native contrast ratio	2000:1 (typical) up to 3000:1 with HC lens
Digital MicroMirror Device™	3x 1.38" DC4K
Resolution	native 4K: 4096 x 2160
Color gamut	DCI P3 compliant (98.5% of Rec.2020)
Light source	Laser
Prime lenses	0.8; 1.01; 1.13-172; 1.35-1.86; 1.46-2.10; 1.65-2.60; 2.00-3.35; 2.53-4.98 High-brightness and high-contrast B-lenses compatible
Long-term brightness stability	40,000 hrs @ average usage conditions
Housing	integrated cooling design and patented sealed optical assembly
Dimensions (WxLxH)	Projector incl feet: 760 x 1470 x 612 mm/ 29,92 x 57,54 x 24,09 inches
Weight	141kg/311lbs
Power requirements	single phase or triple phase 200-240V 9A
Heat load (max. power)	5300BTU/hr
Exhaust airflow	400CFM
Ambient temperature	40°C/104F Max.
Ambient humidity	85% RH max
Media server	Barco Alchemy ICMP-X and other media server brands** supported.
Power consumption	1.55kW (3W in Eco mode)
Noise Level	50dB(A)
3D systems	Active glasses systems and polarization systems on silver screens are supported. Color separation systems are not supported.
Safety requirements	Class 1 risk group 3
User interface	Touch Display and / or web-based
Notes	**projector configuration with ICP-D; contact Barco service for the list of supported brands

Last updated: 15 Feb 2023

© 2018 Barco nv. All rights reserved. Reproduction in whole or in part without written permission is prohibited. All brand names and product names are trademarks, registered trademarks or tradenames of their respective holders. Due to continued innovation, information and technical specifications are subject to change without prior notice. Please check [www.barco.com](http://www.barco.com) for the latest specifications.

B-lens HC 1.65-2.60 (1.38" DMD) / 1.82-2.86 (1.2" DMD) / 2.32-3.66 (0.98" DMD)



This product is an option of the following products

[DP2K-17BLP](#), [DP2K-19B](#), [DP2K-23B](#), [DP2K-23BLP](#), [DP2K-32B](#), [DP2K-36BLP](#), [DP4K-17BLP](#), [DP4K-19B](#), [DP4K-22L](#), [DP4K-23B](#), [DP4K-23BLP](#), [DP4K-30L](#), [DP4K-32B](#), [DP4K-36BLP](#), [DP4K-45L](#), [DP4K-60L](#), [SP4K-12](#), [SP4K-15](#), [SP4K-20](#), [SP4K-25](#), [SP4K-35](#), [SP4K-40](#), [SP4K-55](#), [Thor](#)



# Dolby® Integrated Media Server IMS3000



## A ROBUST PLATFORM FOR TODAY, THE RIGHT INVESTMENT FOR TOMORROW.

Built on a proven platform, the IMS3000 provides you with cost-effective and reliable performance, backed by Dolby's industry-leading technology and support.

The IMS3000 comes with a robust feature set, flexible storage options, and an exclusive scalable design built on a framework ready for tomorrow.

Now offered with audio processing disabled, the IMS3000 can be paired with any external processor such as the Dolby CP950, Dolby CP850, or activate the internal audio processor with a feature activation license.

Easily enable the main audio processor\* (5.1 and 7.1), or unlock the full power of Dolby Atmos\* to deliver unforgettable sound experiences to your audiences.

A specific IMS3000 model (IMS3-L-NB) is now offered for cinema LED wall applications (consult the price list for details).

The IMS3000 remains the platform of choice for current and next generation server developments.

## DOLBY INTEGRATED MEDIA SERVER IM3000 FEATURES

- Low cost of ownership (maintenance, power consumption, simplified system design)
- Playback for SMPTE and INTEROP digital cinema packages (DCP) at bit rates up to 500 Mbps
- Web-based UI allows easy access from anywhere on the theatre network
- Access the UI via Bluetooth from a tablet. Get the app "Cinema Server Control" on the Google Play or Apple Store. (requires purchase of separate USB Bluetooth adapter that is plugged into IMS3000).
- Single-board design
- Hot-swappable hard drives
- Scan network for content to ingest
- Drag-and-drop scheduler
- Drag-and-drop playlist builder
- Support for accessibility products including Dolby Fidelio and CaptiView or other SMPTE ST430-10 devices
- Dolby and RealD® ghost busting (user selectable)
- Ingest through eSATA, USB 3.0, or Ethernet (up to 500 Mbps)
- RealD(R) ghost busting for polarized 3D systems.
- 6 × GPO
- Linear timecode (LTC) output
- Live-event Ethernet stream support
- Internal scaling and de-interlacing up to 4K
- JPEG 2000, MPEG-2, H.264 decoding
- 4K 60 fps (On select NEC projectors and LED walls)
- DCI-compliant
- Play from Shipping Drive
- HDMI 2.0 4K 60fps with HDCP 2.2
- HDMI Rec.2020 input to P3 color gamut conversion
- HDMI 4K downscaling to 2K
- Dolby Pngest
- Play while ingest
- Ingest while IMS3000 is powered down\*\*

\*License purchase required

\*\* This feature is only available with the NAS as main storage option (NAS-Q1)

\*\*\* Contact customer support for list of supported NAS devices and models.



# Dolby Integrated Media Server IMS3000

## I/Os

---

- 3 × GB Ethernet (1000Base-T/RJ-45)
- 1 × eSATA 3 Gbps
- 1 × USB 2.0
- 2 × USB 3.0
- Dual 3G SDI Inputs
- 1 × HDMI® 1 (Up to 4K 60 fps)
- 8 × AES-3 audio pairs (2 × RJ-45)
- 2 × AES-3 Auxiliary Outputs
- 2 × AES-3 Auxiliary Inputs
- 1 × Dolby Atmos Connect output with loopback (AES67 Protocol Only)
- 4 × GPI (1 × RJ-45)
- 6 × GPO (1 × RJ-45)
- LTC output
- 3 × hot-swappable removable 2.5" HDDs
- Mini DisplayPort console out (no UI)
- Dolby Remote Fader Port for use with optional CAT868

## DCP PLAYBACK

---

- 2K up to 120 fps
- 4K up to 30 fps (60 fps on select NEC projectors)
- Bit rates up to 500 Mbps
- 12-bit 4:4:4 XYZ' for all formats
- Support of SMPTE and INTEROP formats
- Internal subtitle engine, or integrate with a projector for CineCanvas subtitle rendering
- DCI-compliant
- JPEG2000, MPEG2 and H.264 Playback

## MPEG-2/H.264

---

- 720p 60, 1080i 60, and 1080p 60
- Bit rates up to 50 Mbps
- 4:2:0 8-bit color

## VIDEO PROCESSING FEATURES

---

- Color-space conversion—supports YCbCr601, YCbCr709, REC 709, XYZ', YCxCz
- Deinterlacing
- Scaler up to 4K

\*\*Contact support for list of qualified bluetooth dongle

The English version of this document is the only legally binding version. Translated versions are not legally binding and are for convenience only.

Specifications are subject to change without notice.

This documentation applies to Model CID1002



Dolby Laboratories, Inc. 1275 Market Street, San Francisco, CA 94103-1410 USA [dolby.com](http://dolby.com)

Dolby, Dolby Atmos, and the double-D symbol are registered trademarks of Dolby Laboratories. DLP is a registered trademark of Texas Instruments. HDMI is a trademark or registered trademark of HDMI Licensing, LLC in the United States and other countries. © 2017 Dolby Laboratories, Inc. All rights reserved.

## AUDIO PROCESSING FEATURES (REQUIRES ENABLEMENTS)

---

- Dolby Surround 7.1 and 5.1 playback
- Dolby Atmos rendering to Dolby Surround 7.1 on base configuration units
- Dolby Atmos rendering up to 64 speakers with Full Atmos enablement
- Dolby Digital Plus
- Dolby Digital (AC-3)
- TrueHD Audio – Support Consumer Atmos on HDMI Input
- 44.1 kHz, 48 kHz 96 kHz support at 16, 20 and 24 bit
- AES67
- Alternative Content Surround Processing
- Raised Cosine equalization, 1/12<sup>th</sup> octave resolution
- Internal crossover supports up to 4-way loudspeakers

## CONTROL

---

- Web-based user interface
- Bluetooth support for control from a mobile device (Android and iOS)\*\*
- Mini DisplayPort console out (debug console only)
- Third-party TMS and NOC systems
- API documentation available on request

## SECURITY

---

- DCI-compliant forensic watermarking
- FIPS 140-2 (Level 3 security certified)

## POWER CONSUMPTION

---

- <70 W

## STORAGE

---

- Internal—3 × 2.5" 1 TB hard disk drives (RAID 5 Configuration) Approximately 1.8 TB of user storage
- Internal—3 × 2.5" 2TB Solid State Drives (RAID 5 Configuration) Approximately 3.6 TB of user storage
- IMS3000 + Main Storage NAS - 4 × 3.5" 4TB hard disk drives RAID 5 configuration). Approximately 10.5 TB of user storage No internal drives are used in the IMS3000 and the NAS can ingest when the IMS3000 is off.
- IMS + Additional Storage NAS - (This option uses the IMS internal storage and an external storage NAS but does not support offline ingest to the NAS).

## NAS upgrade for Dolby IMS3000



- 1RU Rack Mount NAS upgrade for Dolby IMS3000
- 1RU rack mount NAS storage device with pre-RAIDed HDDs (4x4TB) that results in approximately 10.5TB of storage. Use this to upgrade an existing IMS3000s to the NAS only storage configuration.



# **Dolby® Cat. No. 868 Remote Fader for the CP750**

Issue 1

Part Number 9110360



---

# Dolby Laboratories, Inc.

## Corporate Headquarters

**Dolby Laboratories, Inc.**  
100 Potrero Avenue  
San Francisco, CA 94103-4813 USA  
**Telephone** 415-558-0200  
**Fax** 415-863-1373  
[www.dolby.com](http://www.dolby.com)

## European Headquarters

**Dolby Laboratories, Inc.**  
Wootton Bassett  
Wiltshire SN4 8QJ England  
**Telephone** 44-1793-842100  
**Fax** 44-1793-842101

### **DISCLAIMER OF WARRANTIES:**

EQUIPMENT MANUFACTURED BY DOLBY LABORATORIES IS WARRANTED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE. THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES AND NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OF NONINFRINGEMENT OF THIRD-PARTY RIGHTS (INCLUDING, BUT NOT LIMITED TO, COPYRIGHT AND PATENT RIGHTS).

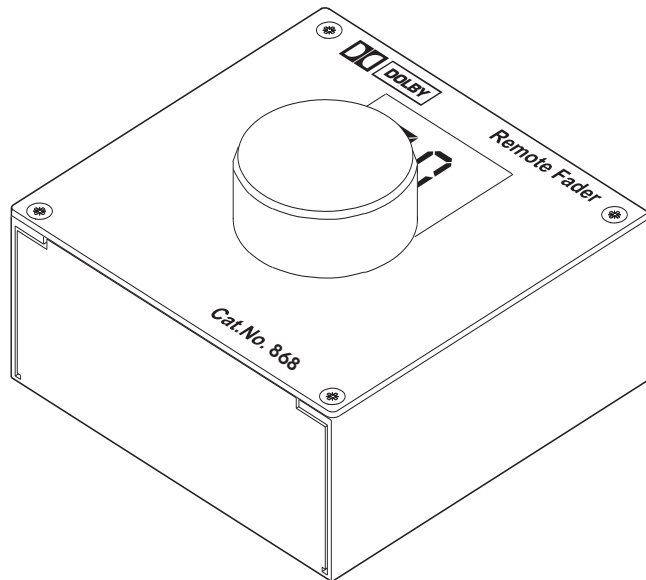
### **LIMITATION OF LIABILITY:**

IT IS UNDERSTOOD AND AGREED THAT DOLBY LABORATORIES' LIABILITY, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY, IN NEGLIGENCE, OR OTHERWISE, SHALL NOT EXCEED THE COST OF REPAIR OR REPLACEMENT OF THE DEFECTIVE COMPONENTS OR ACCUSED INFRINGING DEVICES, AND UNDER NO CIRCUMSTANCES SHALL DOLBY LABORATORIES BE LIABLE FOR INCIDENTAL, SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, DAMAGE TO SOFTWARE OR RECORDED AUDIO OR VISUAL MATERIAL), COST OF DEFENSE, OR LOSS OF USE, REVENUE, OR PROFIT, EVEN IF DOLBY LABORATORIES OR ITS AGENTS HAVE BEEN ADVISED, ORALLY OR IN WRITING, OF THE POSSIBILITY OF SUCH DAMAGES.



# The Cat No. 868 Remote Fader

The Cat. No. 868 Remote Fader includes the fader knob and level display shown in [Figure 1](#).



**Figure 1** The Cat. No. 868 Remote Fader

## 1 Guidelines for Use

Only one Cat. No. 868 remote unit can be used with a CP750.

The combined length of cable connecting the remote unit to the CP750 should not exceed 100 m (300 ft).

As soon as you connect the remote unit, it is live and communicates with the CP750. A level adjustment made on either changes the display on both.

## 2 Installation

The Cat. No. 868 Remote Fader can be mounted on a wall or in a console, or can stand alone.

Installing the remote fader consists of these processes:

- [Removing the Housing](#)
- [Connecting the Interface Cable](#)
- [Reattaching the Housing](#)
- [Connecting to the CP750](#)

---

## 2.1 Removing the Housing

To remove the housing:

1. Remove the four screws from the corners of the front panel. Store the screws nearby.
2. Remove the rear housing.



---

**Caution:** Do not touch circuit board components. Static electricity can damage components.

---

## 2.2 Connecting the Interface Cable

Follow these steps:

1. Select the cable you intend to use to connect to the CP750. Use a Cat 5 cable or better.
2. Slide a rubber or neoprene grommet or conduit bushing onto the cable to prevent wear on the cable from the metal edge of the hole you create.
3. Make a hole in the housing for the interface wire. The diameter of the hole you make should be the same as the diameter of the cable grommet or conduit bushing.  
We recommend you place the hole on the bottom if the remote fader will be mounted, or on a side if the fader will stand alone.
4. Thread the interface wire through the hole in the housing and connect an RJ45 connector to the end of the wire.
5. Plug the newly wired connector into J1 on the remote fader circuit board.
6. Using the two holes in the circuit board along with the included wire tie, secure the cable as shown in [Figure 2](#).

**Figure 2** Circuit Board Interface Cable Connection

## 2.3 Reattaching the Housing

Secure the front panel to the housing with the screws that were removed in Step 1.

---

## 2.4 Connecting to the CP750

To connect the remote to the CP750:

1. Attach an RJ45 connector to the loose end of the interface cable.
2. Plug the newly wired connector into the **Remote** port on the CP750.

Your remote fader is ready to use.

**GENIO Flex Plus Dual**



USVSD110



USVSD110

1:1 1100-3000VA



Mobil Code



USVSD110

**Schrack-Info**

- **Automatic Voltage Regulation (AVR)**
- **Superior protection**
- **High efficiency**
- **High availability**
- **Versatility**
- **Advanced communications**

GENIO Flex Plus Dual is available with sinusoidal digital power output between 1100VA and 3000VA. Using top-notch communication and connection technologies, it is the ideal solution for high-end customers seeking high levels of reliability and extreme versatility of the power supply system. GENIO Flex Plus Dual means top safeguarding of peripherals, conventional servers and network backup systems. GENIO Flex Plus Dual has a functional, modern design and includes cutting-edge features. The UPS provides efficiency levels of up to 98%. It has an output power factor of 0.9.

**Superior Protection**

The automatic voltage regulator (AVR) provides protection from surges, overvoltages and undervoltages, without battery intervention. Reduced battery usage ensures that the battery set is 100% available for mains power supply failures and is able to provide greater autonomy. EMV filters provide then provide further protection from voltage surges and transients. When the mains power supply fails, the load is powered by the inverter

and receives a perfectly sinusoidal supply for maximum power continuity and reliability.

**High Availability**

The EnergyShare socket allows load shedding and the shutdown of less sensitive peripheral devices to extend battery runtime for critical loads.

Hot Swap: batteries can be removed via the front panel for easy and safe UPS maintenance. For business continuity applications requiring long battery runtimes, battery autonomy can be extended up to several hours using ER models (versions 2200 and 3000) fitted with more powerful battery chargers. Battery test facility to detect deteriorating battery performance. Deep discharge protection to reduce battery ageing.

**Versatility**

GENIO Flex Plus Dual can be installed as a tower or in 19" rack cabinets. The display panel in the front panel can be easily removed and rotated to suit the type of installation required. GENIO Flex Plus Dual is equipped with an emergency power off (EPO) contact that allows for remote shutdown in emergency situations. Cold Start function to allow the UPS to power up with no mains power supply present. Vision Dual models have a backlit LCD display providing UPS status information, load and battery performance.

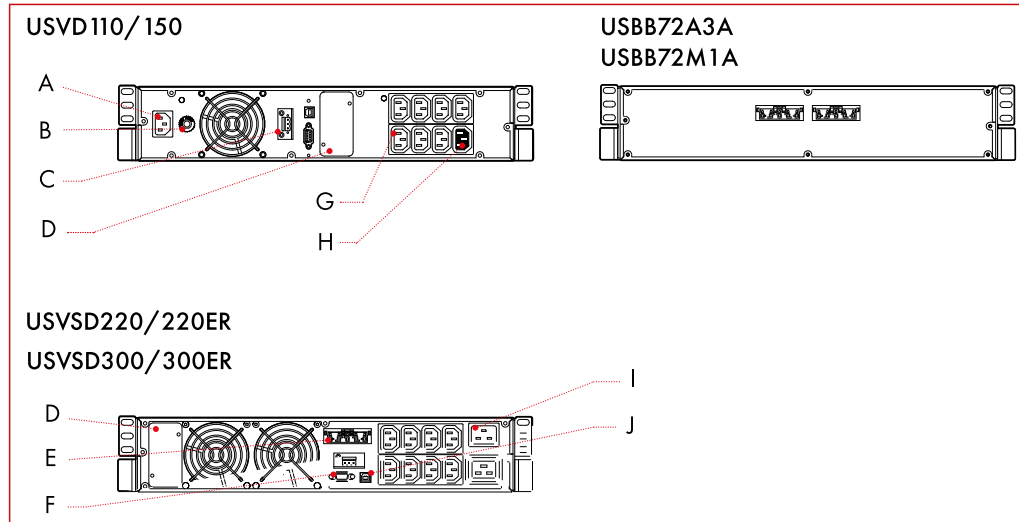
**GENIO Flex Plus Dual**

**Advanced Communications**

- Advanced multi-platform communications for all operating systems and network environments: UPSMon monitoring and shutdown software is available for free download at [www.ups-tech.net](http://www.ups-tech.net) for the operating systems Windows 10, 8, 7, 2008, Vista, 2003, XP, Linux, Mac OS X, Sun Solaris, Linux, VMWare ES X and other Unix operating systems

- USB or RS232 serial port interface (selectable)
- Expansion slot for SNMP interface board
- UPS status, measurements, alarms and input, output and battery parameters available on LCD display

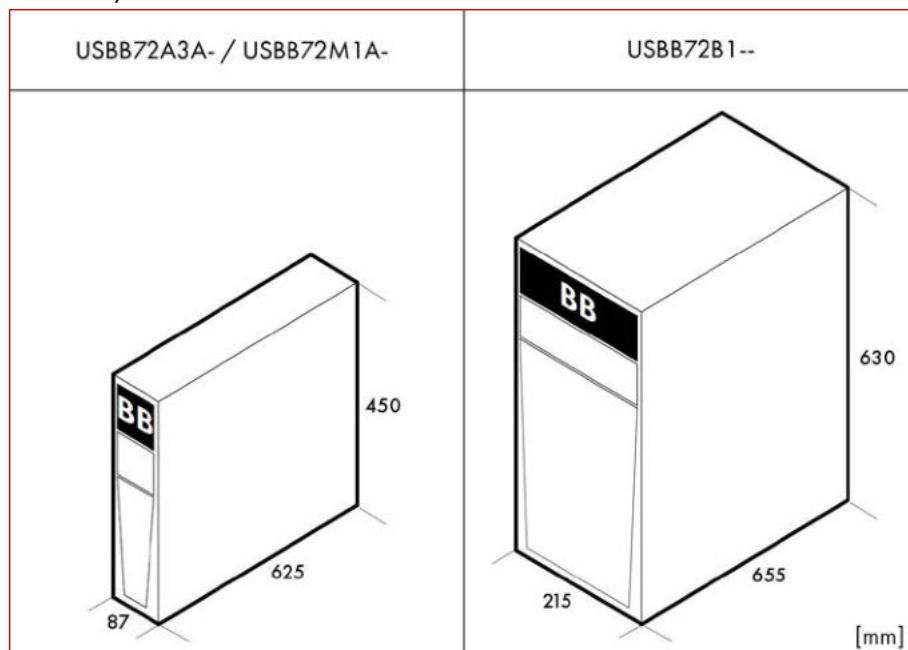
**Details**



**Key**

<b>A</b>	Input socket
<b>B</b>	Input thermal protection
<b>C</b>	Communication board REPO
<b>D</b>	Slot for communication boards
<b>E</b>	Battery expansion socket
<b>F</b>	RS232 serial
<b>G</b>	Output sockets
<b>H</b>	Energysare
<b>I</b>	Input plug
<b>J</b>	USB port

**Battery Boxes**



## GENIO Flex Plus Dual

### Autonomy Times

Order no.	Max. Apparent Power	Max. Effective Power	Autonomous Time		Overall Weight
			Typical Load*	Full Load**	
USVSD110	1100VA	990W	11min.	6min.	16.5kg
USVSD150	1500VA	1350W	11min.	6min.	17.5kg
USVSD220	2200VA	1980W	12min.	7min.	28kg
USVSD220 +USBB72A3A	2200VA	1980W	28min.	18min.	53kg
USVSD220 +USBB72M1A	2200VA	1980W	48min.	32min.	66kg
USVSD220 +2 USBB72M1A	2200VA	1980W	89min.	60min.	104kg
USVSD220ER +USBB72B1 (tower)	2200VA	1760W	129min.	80min.	115.5kg
with load 1000VA 700W:				183min.	
with load 1500VA 1000W:				116min.	
USVSD300	3000VA	2700W	12min.	6min.	31.5kg
USVSD300 +USBB72A3A	3000VA	2700W	20min.	13min.	56.5kg
USVSD300 +USBB72M1A	3000VA	2700W	32min.	22min.	69.5kg
USVSD300ER + 2x USBB72M1 (tower)	3000VA	2400W	50min.	32min.	107.5kg
USVSD300ER + USBB72B1 (tower)	3000VA	2400W	92min.	55min.	116.5kg
USVSD300ER + 2 USBB72B1 (tower)	3000VA	2400W	199min.	130min.	216.5kg

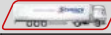
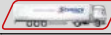
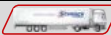




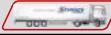
\* Typical Load: Autonomous Time calculated with 75% load [VA] with Power factor 0.66

\*\* Full Load: Autonomous Time calculated with 100% load [VA] with Power factor 0.7

### Technical Data

Models	USVSD110	USVSD150	USVSD220	USVSD220ER	USVSD300	USVSD300ER
Power	1100VA / 990W	1500VA / 1350W	2200VA / 1980W	2200VA / 1760W	3000VA / 2700W	3000VA / 2400W
<b>Input</b>						
Nominal voltage	220-230-240VAC					
Voltage range without battery intervention	V <sub>in</sub> 162-290VAC					
Maximum permitted voltage	300V					
Nominal frequency	50 or 60Hz ±5Hz					
Frequency tolerance	50Hz ±5% / 60Hz ±5%					
Power factor	≥0.98					
Current distortion	≤7%					
<b>Output</b>						
Voltage distortion with linearload / with non-linear load	≤3% / ≤8%					
Frequency	Selectable: 50 or 60 or self-learning					
Waveform	Sinusoidal					
Crest factor	2.5:1					
Efficiency ECO and SMARTACTIVE Modes	98.5%					
Overload times	125% for 10s, 150% for 1s					
<b>Batteries</b>						
Type	VRLA AGM maintenance-free lead based					
Recharge time	2-4h					
<b>Other features</b>						
Net weight	16.5kg	17.5kg	28kg	15.5kg	31.5kg	16.5kg
Gross weight	20kg	21kg	33kg	20.5kg	36.5kg	21.5kg
Dimensions (WxDxH)	Tower: 87x425x450mm Rack: 450 (19") x425x87mm (2U)			Tower: 87x625x450mm Rack: 450 (19")x625x87mm (2U)		
Packaging dimensions (WxDxH)	240x500x600mm			240x760x600mm		
Protection against overvoltage	300 Joule					
Protections	Overcurrent - short circuit - overvoltage - undervoltage - temperature - excessive low battery					
Communication	USB / DB9 with RS232 and contacts / Slot for communications interface					
Input plugs	1 IEC 320 C14			1 IEC 320 C20		
Output sockets	8 IEC 320 C13			8 IEC 320 C13 + 1 IEC 320 C19		
Standards	European directives: L V 2014/35/EU low voltage Directive EMC 2014/30/EU electromagnetic compatibility Directive Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2; RoHS compliant					
Ambient temperature	0°C / +40°C					
Recommended temperature for battery life	20°C - 25°C					
Range of relative humidity	5-95% non condensing					
Colour	Black					
Noise level at 1m	≤40dBA					
Standard equipment provided	Power cable, serial cable, USB cable, safety manual, quick start guide, user manual on CD-ROM					



DESCRIPTION	AVAILABLE	STORE	ORDER NO.
<b>GENIO Flex Plus Dual (stand alone and 19" rack mounting)</b>			
1100VA / 990W / full load: 6min. / typical load: 11min. / 87x425x450mm (WxDxH) / 17kg			USVSD110
1500VA / 1350W / full load: 6min. / typical load: 11min. / 87x425x450mm (WxDxH) / 18kg			USVSD150
2200VA / 1980W / full load: 7min. / typical load: 12min. / 87x625x450mm (WxDxH) / 28kg			<b>USVSD220</b>
2200VA / 1760W / 0min. / 8A charger / 87x625x450mm (WxDxH) / 16kg			USVSD220ER
3000VA / 2700W / full load: 6min. / typical load: 12min. / 87x625x450mm (WxDxH) / 32kg			<b>USVSD300</b>
3000VA / 2400W / 0min. / 8A charger / 87x625x450mm (WxDxH) / 17kg			USVSD300ER
<b>Battery boxes incl. batteries</b>			
For USPRD.. / USPVSD.. from 2.2kVA 72V 7Ah tower and rack mounting / 87x625x450mm (WxDxH) / 25kg			USBB72A3A
For USPRD220ER, USPRD300ER, USPRP220ER, USPRP300ER, USSEP220ER and USSEP300ER 40Ah tower mounting / 215x655x630mm (WxDxH) / 101kg			USBB72B1
For USPRD.. / USPVSD.. from 2.2kVA 72V 14Ah tower and rack mounting / 87x625x450mm (WxDxH) / 38kg			USBB72M1A
<b>Accessories</b>			
US Netman 204 Plus, plug in board TCP/IP			<b>USNETMA204</b>
Universal rack mount slide for UPS expandable from 48 to 82cm, uses one Height Unit, suitable for UPS from 2 HE, max. load 50kg			<b>USRACKGUID</b>
J-Bus/ModBUS UPS interface via RS232/RS485min. boxed version			USMULTI301
J-Bus/ModBUS UPS interface via RS232/RS485min. plug in card			USMULTI302
Plug in board for UPS alarm and status indication with potential free contacts			<b>USMULTI384</b>
Interface 8 inp. 8 outp. (programmable), Modbusmin. / boxed version			USMULTIIOB
Remote supervision panel for UPS with graphic display and RS232			USMULTIPAN
Maintenance bypass 16A (upto 3kVA UPS) - wall mounting / 220x480x50mm (WxDxH) / 2kg			<b>USBYM</b>
Maintenance bypass 16A (upto 3kVA UPS) - rack mounting / 260x100x600mm (WxDxH) / 4.8kg			USBYMR
PDU for UPS, 4 Outlets Schuko, 10A, 1.1m cable with IEC C14 plug, black			<b>Q7533060-A</b>
19" PDU for UPS, 8x schuko red, 1x fuse 10A, profile ALU 1U, 2m connector cable with IEC connector C14, RAL7035			<b>IU070130</b>
Profibus UPS interface (DP-V1, Profidrive V2 PP05)			USMULTI411



MikroTik

# hAP ac<sup>3</sup>

A wireless dual-band router with 5 Gigabit Ethernet ports.  
The right choice for most homes!



5x Gigabit  
Ethernet ports



iOS/Android app for quick  
and easy configuration



USB port



128 MB NAND



PoE-in/PoE-out



Strong dual-chain dual-  
band 2.4/5 GHz Wireless



Powerful external high gain  
antennas (3 - 5.5 dBi)



Quad-core CPU



Extreme versatility with  
the powerful RouterOS



Forget about endless searching for the perfect router and scrolling through an eternity of reviews and specifications! We have created a single affordable home access point that has all the features you might need for years to come.

### Next level signal

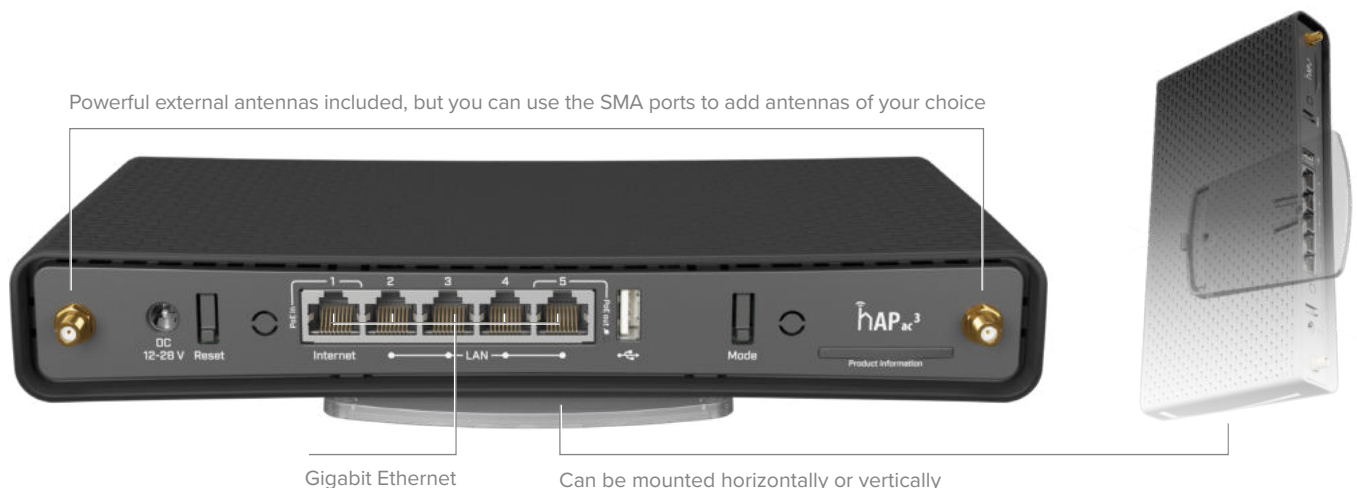
Is your old router struggling to reach every corner of your home? Well, forget about that! We have included external high gain wireless antennas with outstanding coverage. Only strong and stable wireless connection in every room from now on!



## hAP ac<sup>3</sup> - the new standard of home access points.

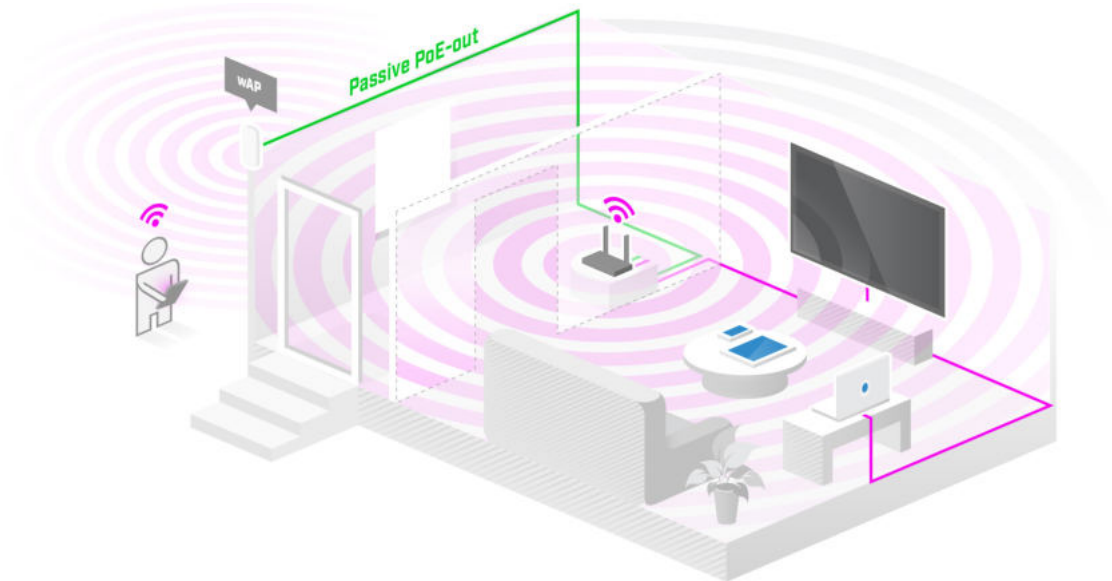
### Function, form, versatility

With 5 Gigabit Ethernet ports, 256 MB of RAM and quad-core CPU, hAP ac<sup>3</sup> can satisfy even the biggest and most demanding households. With PoE support, it can power or be powered by other devices. There is a 128 MB NAND and a full-size USB port that you can use to add extra storage. The new enclosure allows mounting the device vertically or horizontally. A wall mount set is also included.



## Reliable connection for all your devices

Stop sharing the frequency with all your neighbors! Strong **dual-chain dual-band** 2.4/5 GHz wireless for concurrent coverage will solve most interference issues in a crowded environment. This is a must-have these days! You can use the 2.4 GHz channel for older devices and the 5 GHz channel for everything else, since this frequency is less cluttered.



## RouterOS – extreme versatility

Run a secure VPN from the office directly to your home, enable parental control, Quality of Service (traffic prioritization for certain needs, such as streaming), specific firewall rules, IPsec hardware acceleration, VLAN, DHCP, e-mail or SMS notifications, and so on. With RouterOS scripting you can automate a lot:

- modify queues based on bandwidth usage;
- complex trigger notifications, such as “Your bandwidth has reached X for Y minutes!”
- backups and setup of additional devices, and so much more!

If you can imagine it – RouterOS can achieve it. You can even install RouterOS on a PC or a virtual machine for even more networking experiments!

We also include a free handy tool for centralized management of all your wireless MikroTik devices – the CAPsMAN. Unlike traditional controller software, CAPsMAN doesn’t require a separate device to run, it can use any existing RouterOS device in your network.

We have been making our own software since 1996. With each new version our priority remained the same: to provide users with the freedom to explore different setups and always have the right tools for the job. Without unnecessary paywalls.

## Specifications

Product code	RBD53iG-5HacD2HnD
CPU	4 core IPQ-4019 716 MHz
Number of 1GbE ports	5
Number of 1GbE ports with PoE-out	1
Size of RAM	256 MB
Size of NAND	128 MB
Wireless	2.4 GHz 802.11 b/g/n dual-chain, 5 GHz 802.11 a/n/ac dual-chain
Wireless regulations	Specific frequency range and power will be limited by country regulations
Wireless antenna max gain	2.4 GHz (3 dBi), 5 GHz (5.5 dBi)
Antenna beam width	360°
Dimensions	251 x 129 x 39 mm
Operating system	RouterOS, License level 4
USB port	1 USB 2.0 port type A
Operating temperature	-40°C to +70°C

## Powering

PoE-in	Passive PoE
PoE-out *	Passive PoE
Supported input voltage	DC jack (12 - 28 V) PoE-in (18-28 V)
Power adapter nominal voltage	24 V
Power adapter nominal current	1.5 A
Max out per port output (input < 30 V)	0.5 A
Max power consumption without attachments	12 W
Max power consumption	30 W

\* If PoE-out used, then input voltage (DC jack, PoE-in) should be  $\geq 24$  V

## Certification & Approvals

Certification	CE, FCC, IC
---------------	-------------

## Wireless specifications

Rate (2.4 GHz)	Tx (dBm)	Rx (dBm)	Rate (5 GHz)	Tx (dBm)	Rx (dBm)
1Mbit/s	25	-100	6MBit/s	26	-96
11Mbit/s	25	-94	54MBit/s	22	-80
6Mbit/s	26	-96	MCS0	26	-96
54Mbit/s	23	-78	MCS7	21	-75
MCS0	26	-96	MCS9	19	-70
MCS7	22	-73			

## Included parts



24 V 1.5 A  
power adapter



Base leg  
and pads



K-47  
fastening set



HGO indoor  
antenna kit



Point source speaker, 2 way passive or active, with coaxial 15" LF and 3" diaphragm HF.

The P15 speaker is a powerful high-technology versatile point source.

### P15 main features

- Extremely powerful (139 dB peak) point source that can be used for FOH or monitor, with or without its companion sub the L18.
- Lightweight (23 kg / 51 lbs) design using custom-made 15 mm Birch and Poplar bent plywood.
- Modular directivity: from the Standard 60°x60° horn to the rotating 90°x40° or Asymmetric ("PS like") pattern in a few seconds.
- Quick release Magnelis® steel grille for easy access to the horn magnetic flanges.
- Dual ultra-low distortion shaped bass port.
- Comprehensive range of versatile, accessories for deploying the P15 in a wide variety of applications for both touring and fixed installation.

NEXO has always been well-known for its compact and very powerful versatile point source speakers, ideal in both FOH and wedge application.

This expertise is now applied to the P15, featuring a new extremely powerful coaxial 15" speaker and lots of innovation, making the P15 unique in its category.

### Advanced NEXO technology included

The P15 is built around a 15 mm custom-made bent plywood shell, with poplar veneer for the inside layers and birch on the outside. The result is a robust enclosure with exceptionally good sound quality and light weight.

The bass-reflex tuning is done through two computer optimized shaped port which guarantee ultra-low distortion even at very high level.

Two large comfortable handles on each side (on *Touring* version only) hold a 35 mm pole stand adapter and a Speakon® connector for discrete connection when on pole stand or in wedge monitor mode.

The back plate holds two other Speakon® connectors and a recessed switch to change the cabinet from 2-way passive to 2-way active (on *Touring* version only).

The Installation version is passive only and has a cable gland with a 2 core cable for audio input ensuring IP54 protection.

The internal passive filter is encapsulated in a certified resin to protect components from vibration and dust, ensuring an extra-long life.

The custom-designed common neodymium magnet coaxial driver with a 3.5" voice coil for the LF driver and a 3" diaphragm for the HF motor is the heart of the P15 and responsible both for its smooth, clean sound and enormous power.

### One box fits all applications

Thanks to its fully symmetric design, there is no left or right version of the P15 and all speakers in inventory can be the same.

To match even more precisely every possible application the directivity of the P15 can be changed in seconds through the addition of an optional magnetic flanges.

As standard, the P15 uses a 60°x60° horn, but the front steel grille can be quickly removed without tools (on *Touring* version only) and the optional rotatable 90°x40° or Asymmetrical ("PS type") magnetic flange can be added to change the dispersion characteristics of the P15.

For each optional flange a dedicated setup is available on the NXAMP powered controller to ensure perfect coverage at any frequency. The results are even better in Active mode, where the crossover frequency can be adapted to offer the best coverage.

P15 acoustic phase response is NEXO phase signature allowing inter-operability between all NEXO speakers at all cross-over points, except for the monitor setups where latency is minimized.



Grille removed, an additional magnetic flange can be quickly fitted to change directivity from 60°x60° to Asymmetrical

NEXO is one of the world's leading sound reinforcement loudspeaker manufacturers. Founded in 1979, the company is dedicated to crafting practical solutions with solid engineering. Each new design begins with a proprietary sophisticated computer simulation process that allows every parameter to be extensively modeled and simulated, leading to breakthrough cost and performance gains. NEXO's comprehensive product line includes loudspeakers, analogue and digital control electronics and amplification; all designed to deliver consistent sound quality and long term reliability for a broad range of applications.

### P15 WITH NEXO PROCESSING

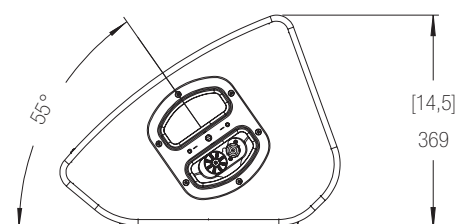
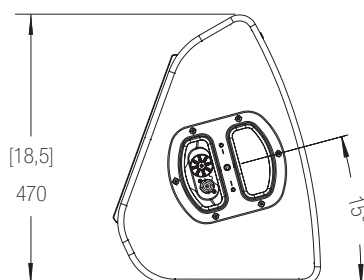
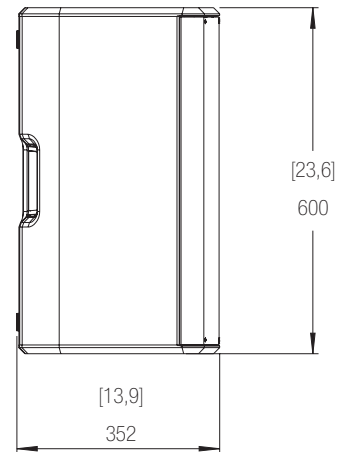
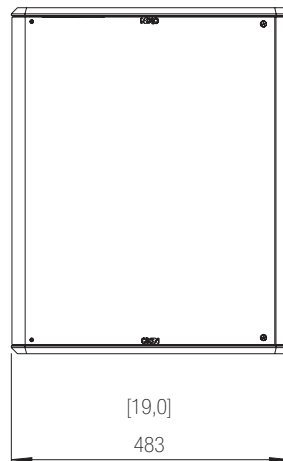
Frequency Response @-6 dB	57 Hz to 20 kHz
Sensitivity 1W@1m	108 dB SPL Nominal
Peak SPL@1m	139 dB Peak (Passive mode) / 141 dB Peak (Active mode)
Operating Voltage	55 Vrms (180 Vpeak)
HF Dispersion (according to flanges)	60°x60° (Default) - 90°x40° (with 90x40 flange) - 60°~100°x40° (with PS flange)
Crossover Frequency	57 Hz, 85 Hz, 120 Hz
Nominal Impedance	Active: (8 Ω LF + 8 Ω HF) / Passive: 8 Ω
Recommended Power	Active: (800 to 1350 W LF + 400 to 630 W HF) / Passive: 800 to 1350 W

### PRODUCT FEATURES

Components	1 x Coaxial Neodymium LF 15" 8 Ohms long excursion & HF 3" 8 Ohms
Number of ways (Touring version)	2 ways passive (2+2 P15) or 2 ways active (1+1 LF, 2+2 HF) switchable
Number of ways (Install version)	2 ways passive
Connectors (Touring version)	4 x NL4, 4 poles connectors (1 per handle + 2 at the back)
Connectors (Install version)	1 x Cable gland with 2 cores cable
Rigging points	1 x universal accessory fit on each side + 1 x on the bottom
Material	Custom made bent plywood of baltic birch and poplar
Finish	Black or White structural paint
Front Finish (Touring version)	Steel front grille + back mesh
Front Finish (Install version)	Acoustic fabric fitted front grill
Height x Width x Depth	600mm x 483mm x 352 mm (23.6" x 19.0" x 13.9")
Weight: Net	23 kg (51 lbs)
Operating temperature range	0°C - 40 °C (32° F - 104° F)
Storage temperature range	-20 °C - 60 °C (-4 ° F - 140° F)

### SYSTEM OPERATION

Recommended powering solution	NXAMP4x2mk2 Powered TDcontroller: up to 2 x P15 per channel
Optional powering solution	DTDcontroller + DTDAMP4x1.3 : 1 x P15 per channel
	NXAMP4x1mk2 Powered TDcontroller (Bridged): up to 2 x P15 per channel
	NXAMP4x4mk2 Powered TDcontroller: up to 4 x P15 per channel



NEXO S.A.  
 Parc d'Activité  
 du Pré de la Dame Jeanne  
 B.P. 5  
 60128 PLAILLY  
 Tel: +33 (0) 3 44 99 00 70  
 Fax: +33 (0) 3 44 99 00 30  
 e-mail: info@nexo.fr

### LIMITED WARRANTY

NEXO loudspeakers and electronics are covered against defects in workmanship or materials for a period of five (5) years from the original date of purchase. At the option of NEXO the defective item will be repaired/replaced with no charge for materials/labour. The item is to be adequately packaged and dispatched, pre-paid, to a NEXO authorised distributor/service centre. Unauthorised repair shall void the warranty. The NEXO warranty does not cover cosmetics or finish and does not apply to any items which in NEXO's opinion have failed due to used abuse, accidents, modifications or any type of misuse. All images and text herein are the property of NEXO SA, and deemed accurate, although specifications are subject to change without notice.



Compact Horn Loaded sub-bass, with high-excursion 18" woofer.

The L18 sub offers extremely high-output level and strong impact in a compact enclosure.

### L18 main features

- Extremely Powerful (140 dB peak) sub tailored to match the P15 main speaker.
- Lightweight (50 kg / 110 lbs) design using custom made 15 mm bent plywood of Birch and Poplar.
- Rounded shape to prevent damage in the corners and optimize air flow.
- Low-frequency horn ensure maximum radiating surface and high efficiency.
- Comprehensive range of versatile, accessories for deploying the L18 in a wide variety of applications for both touring and fixed installation.

To match the extremely efficient P15 and still offer the same kind of power over weight ratio, NEXO has developed the L18, a compact sub-woofer with extremely high output level.

### Unique acoustic design

The L18 is built around a 15 mm custom made bent plywood shell, using poplar veneer for the inside layers and birch of the outside. The result is a plywood with exceptionally good sound quality, a very robust enclosure and a light weight.

The band-pass, Horn loaded tuning is done through two computer optimized shaped port guarantee of ultra-low distortion even at very high level.

### Road-ready package

Three large comfortable handles on each side ensure easy manipulation of the L18 in any situation, particularly when used with its dedicated wheel-board and cover.

The back plate holds two Speakon® connectors that can be used for both multiple L18 daisy-chaining or to link a P15 speaker.

The strong front grill uses a very large hexa shaped design, mandatory not to restrict the air flow from the two larges tuned chambers.

### A Beast of a driver

The 18" neodymium transducer with a 4.5" voice coil offers an enormous stiffness and a very high displacement capacity.

Together with the very unique cabinet design they produced a very tight sub-bass sound with a high impact.

### Premium DSP Processing

Just like its companion main speaker P15, the L18 has been developed to precisely match the output power of the NXAMP4x2mk2.

The L18 takes also advantage of the new processing algorithm running on the NXAMPmk2 amplifiers. The *Advanced Dynamic Processing* optimizes the match between the L18 maximum excursion with the NXAMPmk2 output voltage capacity. The result is a highly dynamic sound while preventing to trigger the thermal limit of the driver.

Three different crossovers frequency (60, 85 and 120 Hz) using the same phase response that all other NEXO speaker will ensure a instant phase match with the P15 without hassle, or with any other sub for example.

A dedicated minimum latency setup is also available, compatible with the minimum latency monitor setups of the P15. The result is a very efficient drum-fill system, both cabinet sharing the same width.



*A P15 stacked on top of a L18 offers a compact yet efficient drum fill.*

NEXO is one of the world's leading sound reinforcement loudspeaker manufacturers. Founded in 1979, the company is dedicated to crafting practical solutions with solid engineering. Each new design begins with a proprietary sophisticated computer simulation process that allows every parameter to be extensively modeled and simulated, leading to breakthrough cost and performance gains. NEXO's comprehensive product line includes loudspeakers, analogue and digital control electronics and amplification; all designed to deliver consistent sound quality and long term reliability for a broad range of applications.

NEXO S.A.  
 Parc d'Activité  
 du Pré de la Dame Jeanne  
 B.P. 5  
 60128 PLAILLY  
 Tel: +33 (0) 3 44 99 00 70  
 Fax: +33 (0) 3 44 99 00 30  
 e-mail: info@nexo.fr

### L18 WITH NEXO PROCESSING

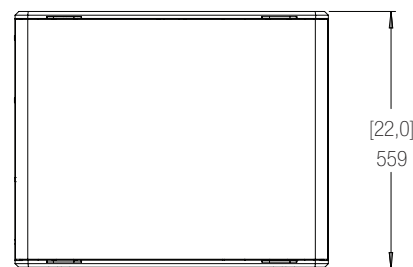
Frequency Response @-6 dB	32 Hz to 120 Hz
Peak SPL@1m	140 dB Peak
Operating Voltage	80 Vrms (180 Vpeak)
Crossover Frequency	60 Hz, 85 Hz or 120 Hz
Nominal Impedance	4 Ω

### PRODUCT FEATURES

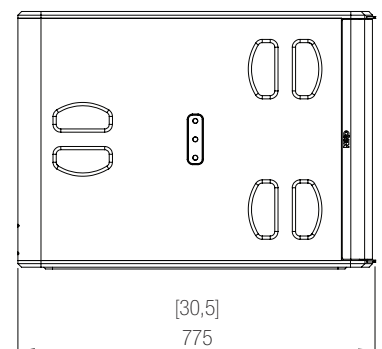
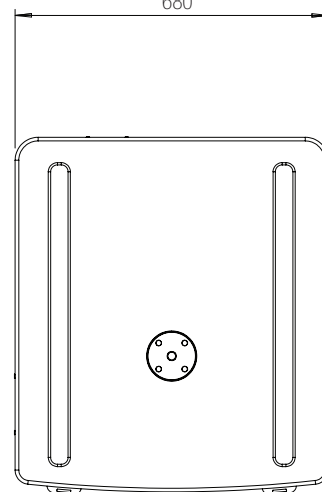
Components	1 x Neodymium 18" 4 Ohms long excursion
Connectors	2 x NL4, 4 poles connectors.
Rigging points	1 x universal accessory fit on each side + 1 x M20 thread for Pole Stand on top
Material	Custom made bent plywood of baltic birch and poplar
Finish	Black or White structural paint
Front Finish	Steel front grille
Height x Width x Depth	559mm x 680mm x 775 mm (22.0" x 26.8" x 30.5")
Weight: Net	50 kg (110 lbs)
Operating temperature range	0°C - 40 °C (32° F - 104° F)
Storage temperature range	-20 °C - 60 °C (-4 ° F - 140° F)

### SYSTEM OPERATION

Recommended powering solution	NXAMP4x2mk2 Powered TDcontroller: 1 x L18 per channel
Optional powering solution	NXAMP4x1mk2 Powered TDcontroller (Bridged): 1 x L18 per channel
	NXAMP4x4mk2 Powered TDcontroller: up to 2 x L18 per channel



[26,8]  
680



### LIMITED WARRANTY

NEXO loudspeakers and electronics are covered against defects in workmanship or materials for a period of five (5) years from the original date of purchase. At the option of NEXO the defective item will be repaired/replaced with no charge for materials/labour. The item is to be adequately packaged and dispatched, pre-paid, to a NEXO authorised distributor/service centre. Unauthorised repair shall void the warranty. The NEXO warranty does not cover cosmetics or finish and does not apply to any items which in NEXO's opinion have failed due to used abuse, accidents, modifications or any type of misuse. All images and text herein are the property of NEXO SA, and deemed accurate, although specifications are subject to change without notice.





Point source speaker, 2 way passive or active, with coaxial 12" LF and 3" diaphragm HF.

The P12 speaker is a powerful high-technology versatile point source.

### P12 main features

- Extremely powerful (138 dB peak) point source that can be used for FOH or monitor, with or without its companion sub the L15.
- Lightweight (20 kg / 44 lbs) design using custom-made 15 mm Birch and Poplar bent plywood.
- Modular directivity: from the Standard 60°x60° horn to the rotating 90°x40° or Asymmetric ("PS like") pattern in a few seconds.
- Quick release Magnelis® steel grille for easy access to the horn magnetic flanges.
- Dual ultra-low distortion shaped bass port.
- Comprehensive range of versatile, accessories for deploying the P12 in a wide variety of applications for both touring and fixed installation.

NEXO has always been well-known for its compact and very powerful versatile point source speakers, ideal in both FOH and wedge application.

This expertise is now applied to the P12, featuring a new extremely powerful coaxial 12" speaker and lots of innovation, making the P12 unique in its category.

### Advanced NEXO technology included

The P12 is built around a 15 mm custom-made bent plywood shell, with poplar veneer for the inside layers and birch on the outside. The result is a robust enclosure with exceptionally good sound quality and light weight.

The bass-reflex tuning is done through two computer optimized shaped port which guarantee ultra-low distortion even at very high level.

Two large comfortable handles on each side (on *Touring* version only) hold a 35 mm pole stand adapter and a Speakon® connector for discrete connection when on pole stand or in wedge monitor mode.

The back plate holds two other Speakon® connectors and a recessed switch to change the cabinet from 2-way passive to 2-way active (on *Touring* version only).

The Installation version is passive only and has a cable gland with a 2 core cable for audio input ensuring IP54 protection.

The internal passive filter is encapsulated in a certified resin to protect components from vibration and dust, ensuring an extra-long life.

The custom-designed common neodymium magnet coaxial driver with a 3.5" voice coil for the LF driver and a 3" diaphragm for the HF motor is the heart of the P12 and responsible both for its smooth, clean sound and enormous power.

### One box fits all applications

Thanks to its fully symmetric design, there is no left or right version of the P12 and all speakers in inventory can be the same.

To match even more precisely every possible application the directivity of the P12 can be changed in seconds through the addition of an optional magnetic flanges.

As standard, the P12 uses a 60°x60° horn, but the front steel grille can be quickly removed without tools (on *Touring* version only) and the optional rotatable 90°x40° or Asymmetric ("PS type") magnetic flange can be added to change the dispersion characteristics of the P12.

For each optional flange a dedicated setup is available on the NXAMP powered controller to ensure perfect coverage at any frequency. The results are even better in Active mode, where the crossover frequency can be adapted to offer the best coverage.

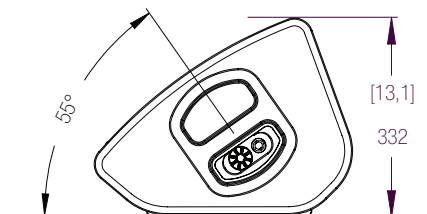
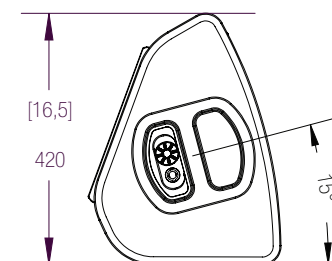
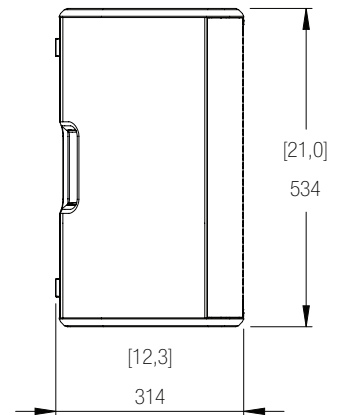
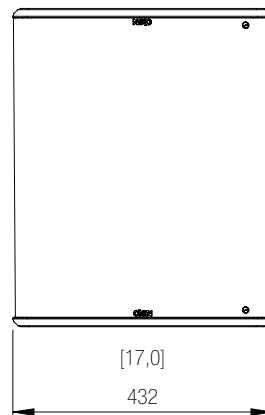
P12 acoustic phase response is NEXO phase signature allowing inter-operability between all NEXO speakers at all cross-over points, except for the monitor setups where latency is minimized.



Grille removed, an additional magnetic flange can be quickly fitted to change directivity from 60°x60° to 90°x40°

NEXO is one of the world's leading sound reinforcement loudspeaker manufacturers. Founded in 1979, the company is dedicated to crafting practical solutions with solid engineering. Each new design begins with a proprietary sophisticated computer simulation process that allows every parameter to be extensively modeled and simulated, leading to breakthrough cost and performance gains. NEXO's comprehensive product line includes loudspeakers, analogue and digital control electronics and amplification; all designed to deliver consistent sound quality and long term reliability for a broad range of applications.

P12 WITH NEXO PROCESSING	
Frequency Response @-6 dB	60 Hz to 20 kHz
Sensitivity 1W@1m	107 dB
Peak SPL@1m	138 dB Peak (Passive mode) / 140 dB Peak (Active mode)
Operating Voltage	55 Vrms (150 Vpeak)
HF Dispersion (according to flanges)	60°x60° (Default) - 90°x40° (with 90x40 flange) - 60°~100°x40° (with PS flange)
Crossover Frequency	60 Hz, 85 Hz, 120 Hz
Nominal Impedance	Active: (8 Ω LF + 8 Ω HF) / Passive: 8 Ω
Recommended Power	Active: (800 to 1250 W LF + 400 to 630 W HF) / Passive: 800 to 1250 W
PRODUCT FEATURES	
Components	1 x Coaxial Neodymium LF 12" 8 Ohms long excursion & HF 3" 8 Ohms
Number of ways (Touring version)	2 ways passive (2+2 P12) or 2 ways active (1+1 LF, 2+2 HF) switchable
Number of ways (Install version)	2 ways passive
Connectors (Touring version)	4 x NL4, 4 poles connectors (1 per handle + 2 at the back)
Connectors (Install version)	1 x Cable gland with 2 cores cable
Rigging points	1 x universal accessory fit on each side + 1 x on the bottom
Material	Custom made bent plywood of baltic birch and poplar
Finish	Black or White structural paint
Front Finish (Touring version)	Steel front grille + back mesh
Front Finish (Install version)	Acoustic fabric fitted front grill
Height x Width x Depth	534mm x 432mm x 314 mm (21.0" x 17.0" x 12.3")
Weight: Net	20 kg (44 lbs)
Operating temperature range	0°C - 40 °C (32° F - 104° F)
Storage temperature range	-20 °C - 60 °C (-4 ° F - 140° F)
SYSTEM OPERATION	
Recommended powering solution	NXAMP4x2mk2 Powered TDcontroller: up to 2 x P12 per channel
Optional powering solution	DTDcontroller + DTDAMP4x1.3 : 1 x P12 per channel
	NXAMP4x1mk2 Powered TDcontroller (Bridged): up to 2 x P12 per channel
	NXAMP4x4mk2 Powered TDcontroller: up to 4 x P12 per channel



NEXO S.A.  
 Parc d'Activité  
 du Pré de la Dame Jeanne  
 B.P. 5  
 60128 PLAILLY  
 Tel: +33 (0) 3 44 99 00 70  
 Fax: +33 (0) 3 44 99 00 30  
 e-mail: info@nexo.fr

#### LIMITED WARRANTY

NEXO loudspeakers and electronics are covered against defects in workmanship or materials for a period of five (5) years from the original date of purchase. At the option of NEXO the defective item will be repaired/replaced with no charge for materials/labour. The item is to be adequately packaged and dispatched, pre-paid, to a NEXO authorised distributor/service centre. Unauthorised repair shall void the warranty. The NEXO warranty does not cover cosmetics or finish and does not apply to any items which in NEXO's opinion have failed due to used abuse, accidents, modifications or any type of misuse. All images and text herein are the property of NEXO SA, and deemed accurate, although specifications are subject to change without notice.



**DIGITAL**  
TD CONTROLLER

## NXAMP4x2<sup>MK2</sup>

### 4 channel Powered TD Controller

The new generation of NEXO Powered TD Controllers offers the best sound quality and massively improved processing capacities.

#### NXAMP4x2<sup>MK2</sup> main features

- Speaker controller and four channels of power amplifier.
- Four high-end Balanced Analog inputs with cascaded converters for improved dynamic range, four optional digital AES/EBU, Ethersound™, Dante™ or AES67 input through expansion slot.
- Four channel Class-D amplifiers using unique proprietary LSI chip for uncompromised sound quality, 4 x 2500 Watts/2 ohms.
- Universal Power Supply (100~240 Volts) using PFC technology for best efficiency and smooth current drawn.
- 4.3 inches color, tactile, LCD display gives an easy access to all parameters while the native dual Ethernet port offers seamless integration with NeMo remote control software.

**NEXO**  
nexo-sa.com

The NXAMP4x2<sup>MK2</sup> combines advanced signal processing, inherited from the first generation NXAMP, coupled with a state-of-the-art four channel Class-D amplifiers, a robust universal power supply with PFC and a comprehensive user interface.

#### Road proof Power Supply

With its continuous usable mains voltage range from 100 to 240 Volts, the NXAMP4x2<sup>MK2</sup> can be used worldwide and run on all kinds of power generator. Its power supply uses a PFC (Power Factor Correction) technology, ensuring that the efficiency of the power conversion is always at its best, while the current drawn is smoothed and spike-free to limit the stress on the mains network.

#### Flexible audio input system

Natively the NXAMP4x2<sup>MK2</sup> has four high-end analog inputs using cascaded converters. This technique allows a very low output noise even with powerful amplifiers. Four digital inputs are also available through the expansion slot, offering AES/EBU, Ethersound™, Dante™ or AES67 input capacity, all with an automatic analog fallback possibility.

#### Extended computing capacities

With its multicore ARM CPU and not less than three multicore DSPs, the NXAMP4x2<sup>MK2</sup> is ready for years of new algorithms and compatibility with the latest generation software.

#### Unique Class-D amplifier design

While the concept of Class-D amplifiers is well known for decades, the major professional power amplifiers manufacturers are jealously keeping their

know-how in the way the power amplifier stage is driven, by more and more complex and intelligent circuits.

In this domain the NXAMP4x2<sup>MK2</sup> uses a dedicated LSI (Large Scale Integrated) chip specifically designed and manufactured by Yamaha, that cannot be found in any other amplifier in the NXAMP category.

The result is an unbelievable precise and clear sound with an extremely low distortion even at high level.

#### User Interface

The user interface has been massively improved regarding the first generation NXAMP. All information is now clearly displayed on a large 4.3 inches color and tactile display, while the NeMo inspired interface design makes all parameters easy to monitor or to set-up.

#### Communication ports

By default the expansion slot, compatible with the already existing extension cards, is fitted with a remote control card, offering 2 x RJ45 ports for remote control, firmware update and easy daisy chain between NXAMP<sup>MK2</sup> devices.

The classical Serial port and GPIO port from the first generation NXAMP are also available, to communicate with the DMU (Digital Metering Unit) and the DPU (Digital Patching Unit).

#### Road Ready racks

As an option, Nexo offers a 4U touring rack, with front and back integrated sliding doors, that can be fitted with 2x NXAMP4x2<sup>MK2</sup>, or 1 x NXAMP4x2<sup>MK2</sup> plus a DPU and a DMU.

**DIGITAL**  
TD CONTROLLER

**NXAMP4x2<sub>Mk2</sub>**

NEXO is one of the world's leading sound reinforcement loudspeaker manufacturers. Founded in 1979, the company is dedicated to crafting practical solutions with solid engineering. Each new design begins with a proprietary sophisticated computer simulation process that allows every parameter to be extensively modeled and simulated, leading to breakthrough cost and performance gains. NEXO's comprehensive product line includes loudspeakers, analogue and digital control electronics and amplification; all designed to deliver consistent sound quality and long term reliability for a broad range of applications.

NEXO S.A.  
Parc d'Activité  
du Pré de la Dame Jeanne  
B.P. 5  
60128 PLAILLY  
Tel: +33 (0) 3 44 99 00 70  
Fax: +33 (0) 3 44 99 00 30  
e-mail: info@nexo.fr

nexo-sa.com

### POWER SPECIFICATIONS FOR NXAMP4x2<sub>Mk2</sub>

Number of channels	4x amplifier channels, bridgeable by pairs
Max. output voltage (no load)	4x 140 Volts
Max. output power (4 channels mode /8 Ohms load per channel)	4x 1200 Watts
Max. output power (4 channels mode /4 Ohms load per channel)	4x 1900 Watts
Max. output power (4 channels mode /2 Ohms load per channel)	4x 2500 Watts
Max. output power (2 channels mode /8 Ohms load per channel)	2x 3800 Watts
Max. output power (2 channels mode /4 Ohms load per channel)	2x 5000 Watts
Power consumption (Standby)	10 Watts
Power consumption (Idle)	200 Watts

### INPUT TO POWER OUT SPECIFICATIONS

Frequency response	+/-1 dB from 10 Hz to 20 kHz
Input impedance / Input Sensitivity	20 kΩ / +16 dBu
Dynamic range / TDH + N	110 dB unweighted / Typical 0.01% on a flat setup
Latency	580 us on a flat setup
Audio AD and DA Converters	24 bits @ 96 kHz
Processing	3 x multicore 64 bits processing DSPs

### BACK PANEL FEATURES

Analog audio inputs	4x balanced analogue inputs on XLR3
Power outputs	4x Neutrik Speakon NL-4 outputs
RS232 port	1x DB-9 connector dedicated for DPU connection
GPIO port	1x DB-25 connector with 5x Inputs and 8x Outputs or for DMU connection
Expansion slot	For networking and digital audio cards, 4x digital audio inputs and remote control
Mains sockets	1x Neutrik Powercon NAC3 (1x 20 A)

### USER INTERFACE AND CONTROLS

Front panel buttons and knobs	Rotary Encoder with push and backlight, tactile screen.
Display	4.3 inches diagonal color display, WQVGA, resolution 480 x 272.

### MAINS REQUIREMENTS

Mains voltage	Universal Power Supply with Active PFC 100 - 240 Volts (50/60 Hz)
Power consumption 1/4 max. 2 Ohms	3500 Watts

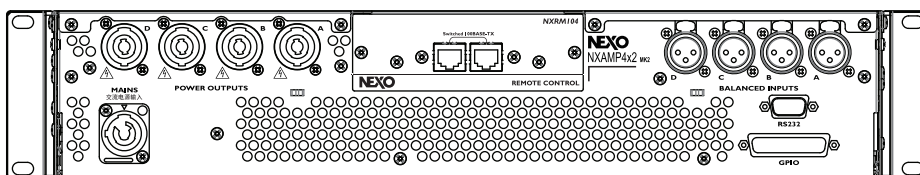
### DIMENSIONS AND CERTIFICATIONS

Dimensions	2U 19" Rack, 502 mm (20") depth, 16.1 kg (35.3 lbs)
Electrical safety certification	cULus, CB (CE), CCC, PSE, KC
EMC certification	CE, FCC
Green status	Compliant with ROHS directive

### EXTENSION CARDS SPECIFICATIONS

	NXES104	NXDT104mk2(*)	NXAE104
Audio format	Ethersound™	Dante™	AES/EBU
Remote control	Ethersound™ based	IP based	IP based
Number of input channels	4	4	4
Resolution / Sample rate	24 bits / 48 kHz	24 bits / 48 kHz	24 bits / 44.1~96
Audio Connectors	2 x Ethercon™	2 x Ethercon™	3 x XLR
Additional port	1 x RJ45	1 x RJ45	2 x RJ45
Power supply	2 W from NXAMP	3 W from NXAMP	2 W from NXAMP
Dimensions & weight	120 x 160 x 40 mm (NXAMP slot) - 200 g		
EMC certification	CE, FCC, ICES	CE, FCC	CE, FCC
Green Status	ROHS and REACH		

\*NXDT104 can be used as well, except that it is not possible to upgrade the NXAMPmk2 firmware. Default NXRM104 card should be put back for firmware update.



### LIMITED WARRANTY

NEXO loudspeakers and electronics are covered against defects in workmanship or materials for a period of two (2) years from the original date of purchase. At the option of NEXO the defective item will be repaired/replaced with no charge for materials/labor. The item is to be adequately packaged and dispatched, pre-paid, to a NEXO authorized distributor/service center. Unauthorized repair shall void the warranty. The NEXO warranty does not cover cosmetics or finish and does not apply to any items which in NEXO's opinion have failed due to used abuse, accidents, modifications or any type of misuse. All images and text herein are the property of NEXO SA, and deemed accurate, although specifications are subject to change without notice.

# NXAMP Digital Audio Input Extension Cards

NXAMPs can be fitted with EtherSound™, Dante™ or AES/EBU network cards.



## NXES104

EtherSound™ Network Card

### Key Features

- Extracts 4 audio streams (24 bits / 48 kHz) among the 2 x 64 channels of a ES100 Ethersound™ stream.
- IN and OUT port for simple daisy chain without any need for an external switch.
- 3rd Ethernet port for remote control of the whole network from any NXES104 card and ASIO streaming.

## AES/EBU

## NXAE104

AES/EBU and Remote Control Card

### Key Features

- Receives 4 audio channels (24 bits / 44.1 – 96 kHz) in AES/EBU format.
- 2 x AES/EBU stereo input on XLR, one with AES/EBU buffered output on XLR with fail safe relay.
- 2 x switched RJ45 for remote control and daisy chain of the devices.



## NXDT104mk2

Dante™ Network Card

### Key Features

- Receives 4 audio streams (24 bits / 44.1 – 96 kHz) in Dante™ format.
- Remote control from any computer on a local area network using TCP/IP commands.
- Unique 3-port design can be used:
  - As an integrated 3 port gigabit switch
  - As two Dante™ redundant port plus an optional 3rd port for additional remote control

## Specifications - NXES104 | NXAE104 | NXDT104mk2

### DIGITAL AUDIO FORMAT

	NXES104	NXAE104	NXDT104mk2
Digital audio type	Ethersound networks	AES/EBU	Dante™ networks
Media type	Dedicated Ethernet 100 Mb network	110 Ohms 3 wires twisted pair with XLR connector	Standard TCP/IP over Ethernet network, minimum 100 Mb, recommended 1 Gb
Number of channels	4 channels from network to NXAMP	4	4 channels from network to NXAMP
Resolution / Sample Rate	24 bits / 48 kHz	24 bits / 44.1 - 96 kHz	24 bits / 44.1 - 96 kHz
Latency	0.10 ms	1.4 ms to 2.4 ms	0.15 ms to 5.0 ms (typical 1 ms)

### REMOTE CONTROL FORMAT

	NXES104	NXAE104	NXDT104mk2
Network format	Embedded in the Ethersound frame	Standard TCP/IP	Standard TCP/IP
Device addressing	Automatic, based on Mac address	Automatic, based on IP address with Zeroconf	Automatic, based on IP address with Zeroconf

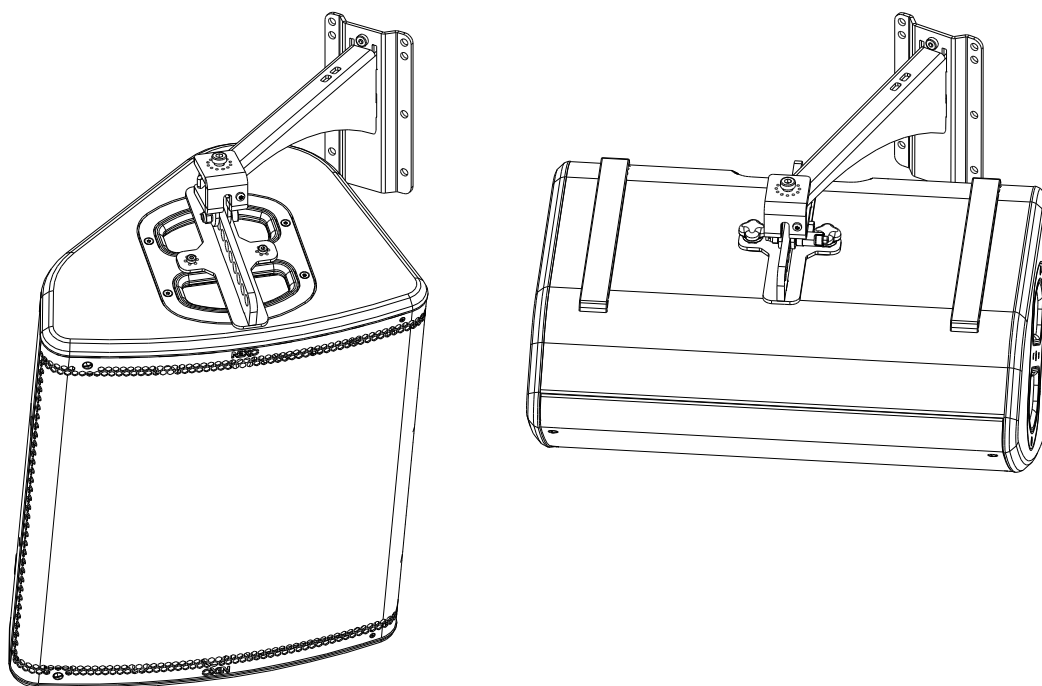
### FRONT PANEL FEATURES

	NXES104	NXAE104	NXDT104mk2
Digital audio connectors	2 shielded Neutrik Ethercon	2 x XLR-F and 1 x XLR-M	2 shielded Neutrik Ethercon
Additional port	RJ45 for additional remote control	2 x RJ45 for remote control	RJ45 for additional remote control
LEDs on digital audio ports	Tx and Rx on each port	None	Link/Act and Speed on each port
LEDs on remote port	Link and activity	Link and Activity	Link and activity

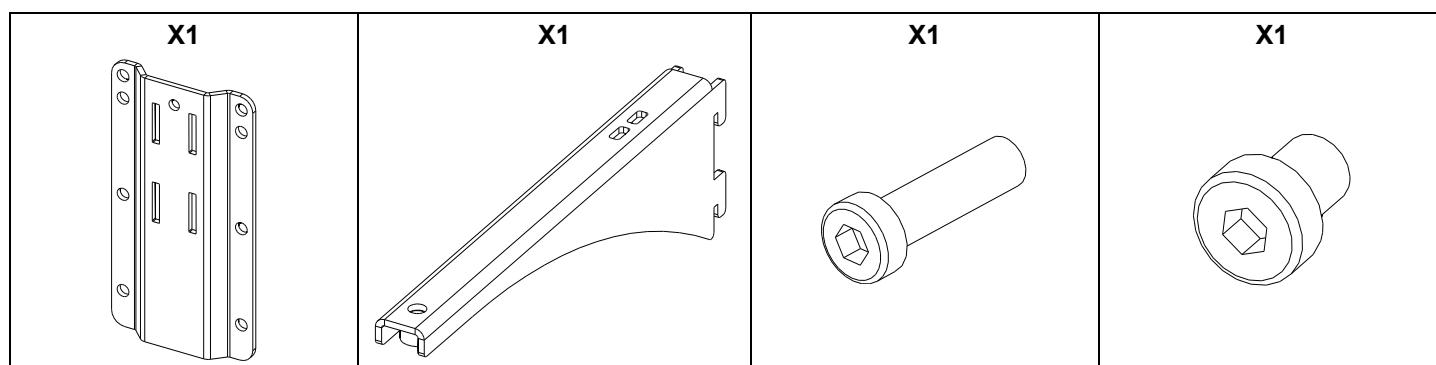
### GENERAL SPECIFICATIONS

	NXES104	NXAE104	NXDT104mk2
Power supply	+ 3.3 Volts, 5 W from NEXO slot	+3.3 Volts, 2 W from NEXO slot	+ 3.3 Volts, 7 W from NEXO slot
Dimensions (W x D x H)	120 x 160 x 40 mm (NXAMP slot)	120 x 160 x 40 mm (NXAMP slot)	120 x 160 x 40 mm (NXAMP slot)
Weight	160 g	200 g	200 g
EMC certification	CE, FCC, ICES	CE, FCC	CE, FCC, ICES
Green Status	ROHS and REACH	ROHS and REACH	ROHS and REACH

## Wallmount for P12

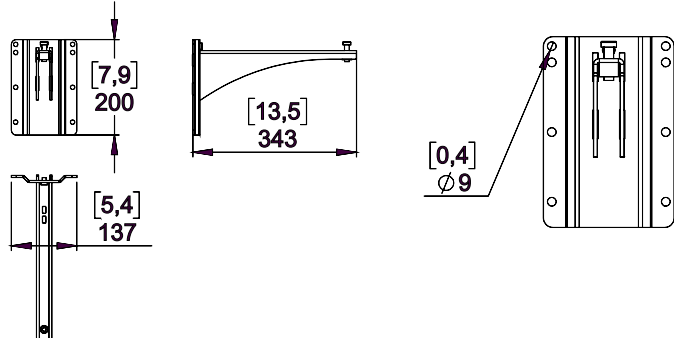


### Contents:



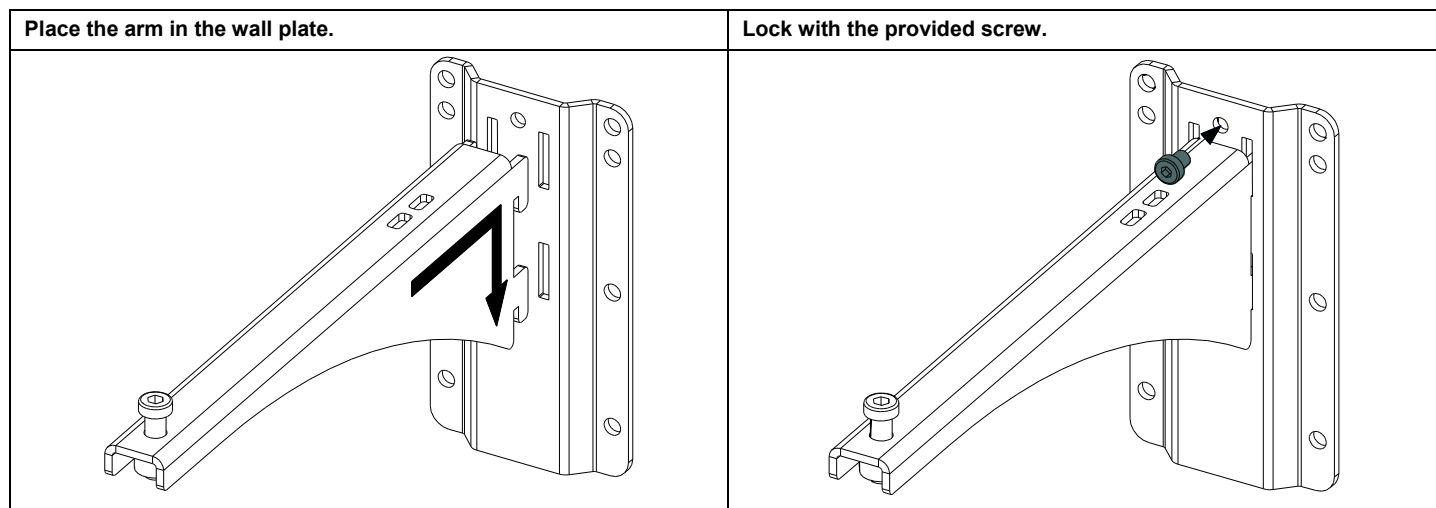
Weight: 1.8 kg / 4 lb

**Dimensions:**



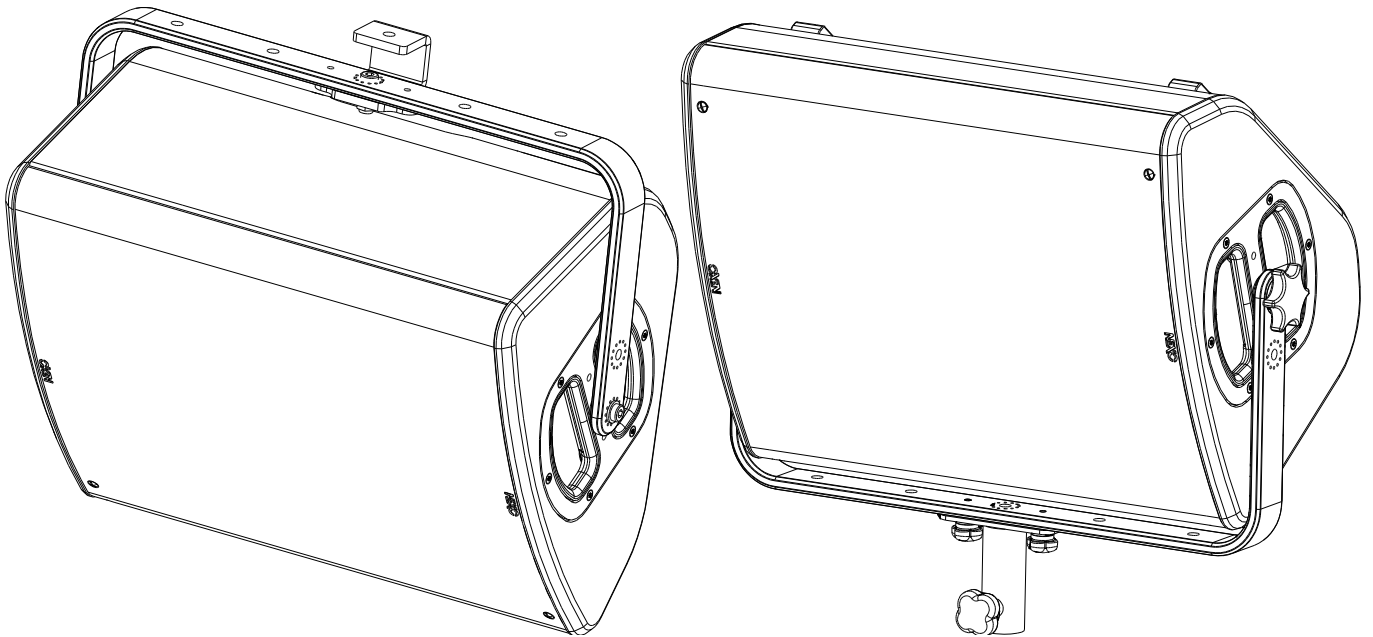
**Use:**

**Please, select screws and mounting location supporting 4 times the system weight.  
Mount the wall plate.**

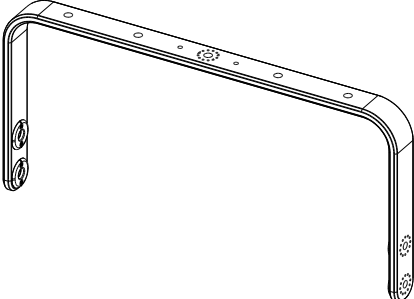
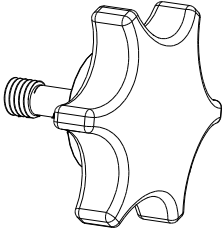
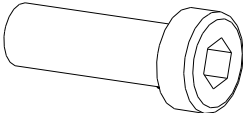
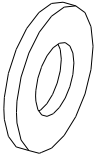


- NEXO cannot accept responsibility for accidents caused by any factor other than defects in this product itself.
- Please check the web site [nexo-sa.com](http://nexo-sa.com) for the latest update.

## P12 Horizontal cradle



### Contents:

<p>X1</p> 	<p>X2</p> 	<p>X2</p> 	<p>X2</p> 
--	---	--	---

Weight: 1.5 kg / 3.3 lb



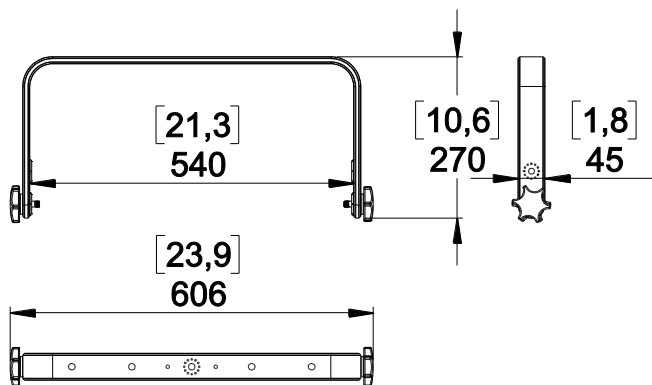
nexo-sa.com  
ZA du Pre de la Dame Jeanne  
60128 PLAILLY - France

- Read this document before using.
- Keep this document.
- Observe all warnings and cautions.





**Dimensions:**

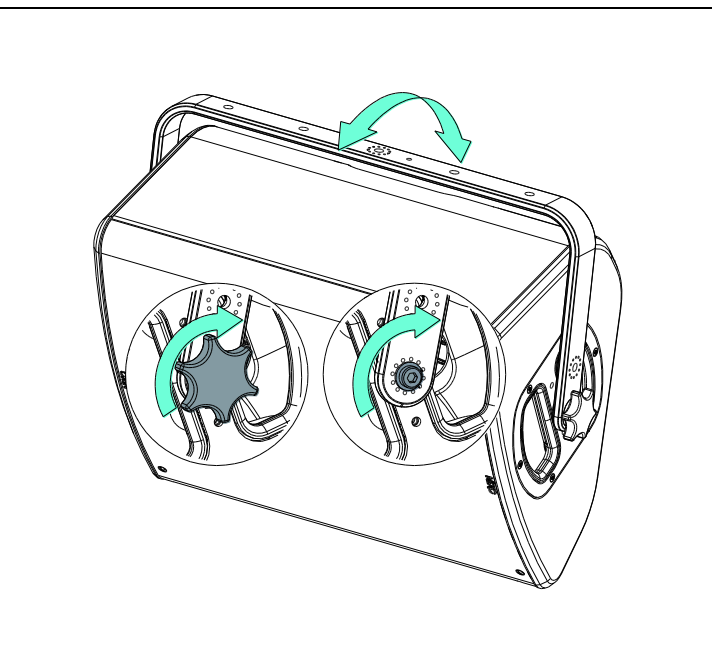
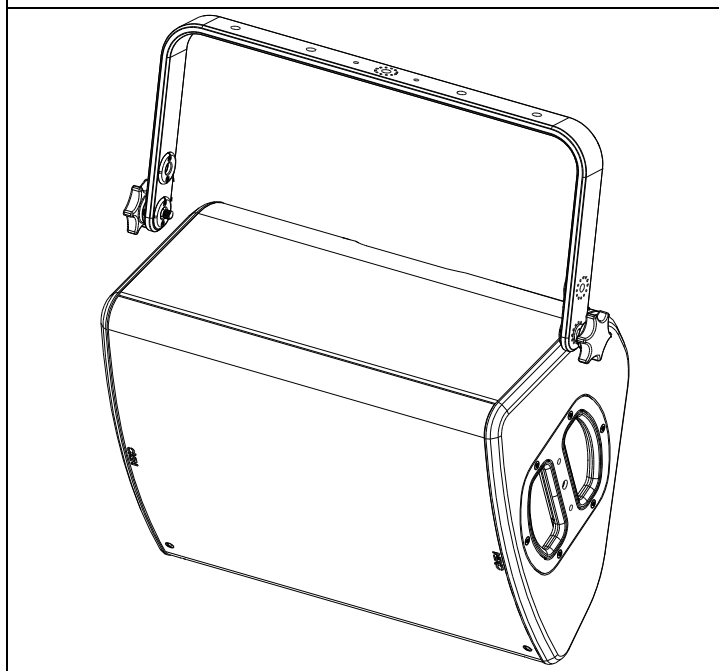


Fixing holes diameter 11mm – 0.433 inch

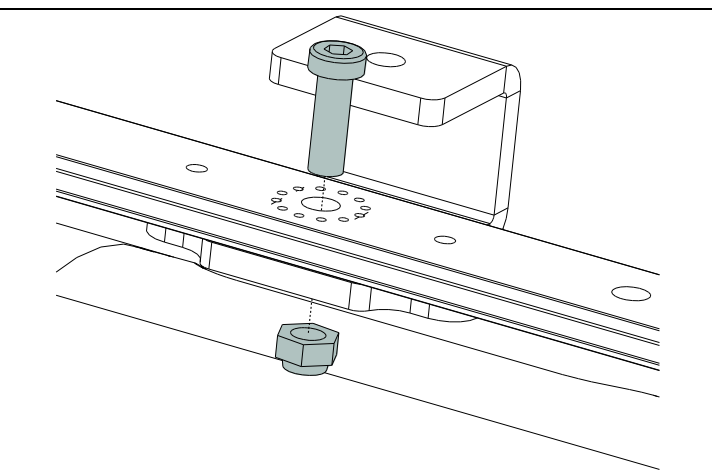
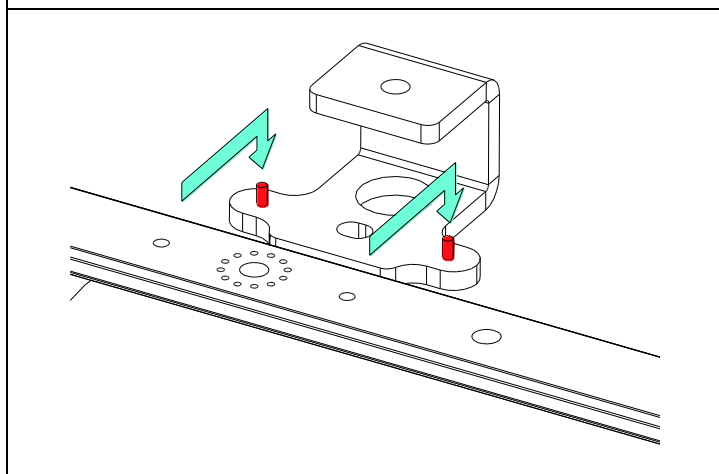
**Please, select screws and mounting location supporting 4 times the system weight.**

**Use:**

Place HBRK12 on P12, use only fasteners provided (thread lock coated screws for fixed installation). Tight properly



Place on CLADAPT, use the 2 guides. Tight with the fasteners provided with CLADAPT.



See PLADAPT Product Data Sheet for the use

- NEXO cannot accept responsibility for accidents caused by any factor other than defects in this product itself.
- Please check the web site [nexo-sa.com](http://nexo-sa.com) for the latest update.



nexo-sa.com  
ZA du Pre de la Dame Jeanne  
60128 PLAILLY - France

- Read this document before using.
- Keep this document.
- Observe all warnings and cautions.



24730

## Wind-up stand »3000«

### Product variant

24730-000-55 - black

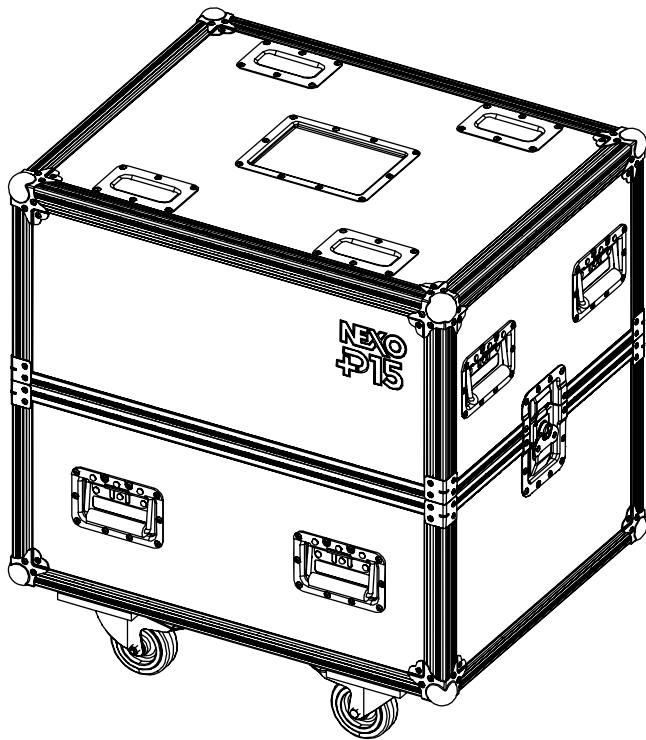
### Data

Base diameter	1550 mm
EAN	4016842117062
Height	from 1,405 to 3,000 mm
Height adjustment	hand crank with push-button system and locking screw
Leg construction	tube legs with double cross braces
Material	aluminum
Max. load capacity*	40 kg
Number of legs	3
Product Category	Starline
Rod combination	3-piece folding design
Size when folded	1,390 x 200 x 165 mm
Special features	steel extension tubes; push-button system and hand crank avoid uncontrolled reverse motion; locking screw provides additional safety; zinc die-cast connecting parts
Tube end(s)	diameter 35 mm, integrated threaded bush M10 for crossbars
Type	black
Weight	12 kg

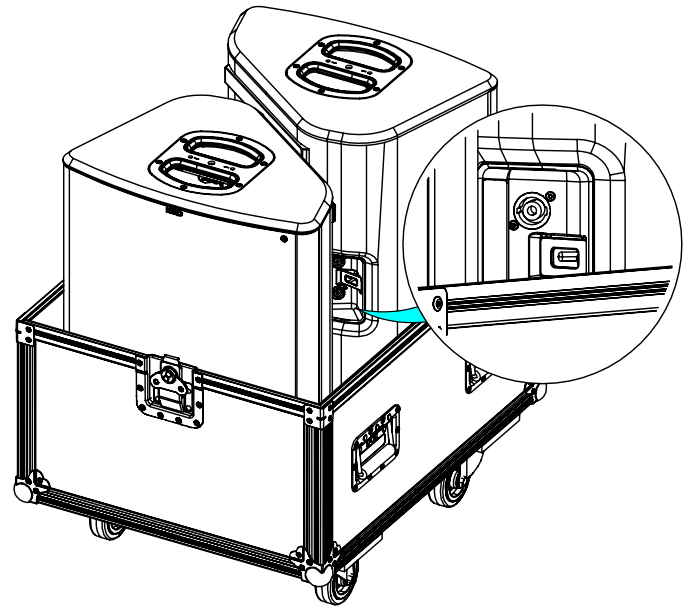


Professional light and speaker stand with an innovative dual crank mechanism. A low base height of 1,405 mm ensures easy, ergonomic positioning of the load. The 3-piece tube combination reaches a height of 3 meters. Lifting and lowering the load is user-friendly, safe and reliable via two separate crank gears. The integrated »Auto Lock« system prevents sudden lowering of the load by automatic locking. The crank can also be removed to prevent unauthorised use. Since no cables are needed, the stand is completely maintenance-free. The robust stand focuses on stability and steadiness, so that the 5° stability test according to DIN 56950-3 with a load capacity of 40 kg is easily realised. The compact transport dimensions are 1,390 x 200 x 165 mm and the weight is approx. 12.0 kg. The integrated M10 threaded bush allows additional trusses or individual spotlights to be mounted directly.

## Flight Case for 2x P15

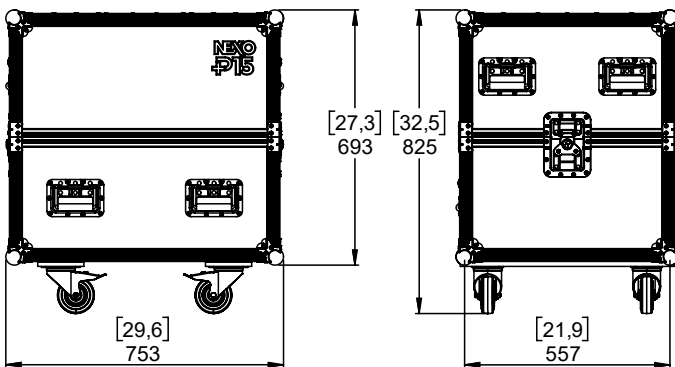


Direct Access to CNX



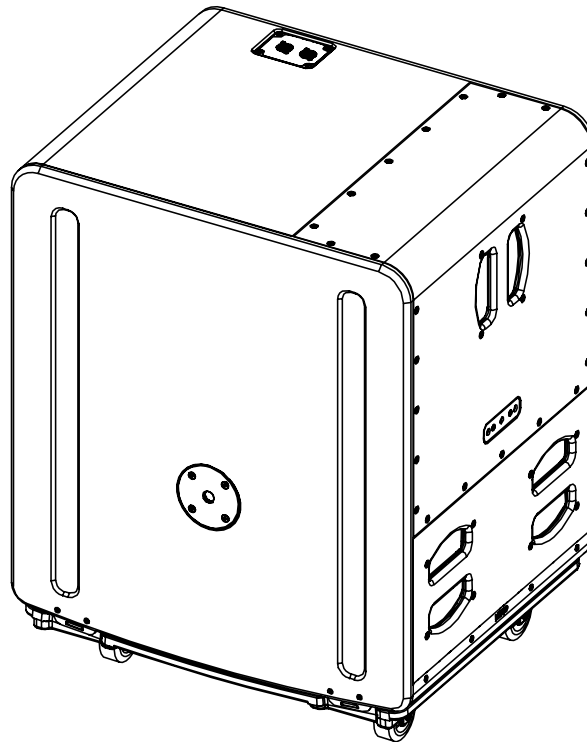
Weight: 32 kg / 71 lb

Dimensions:

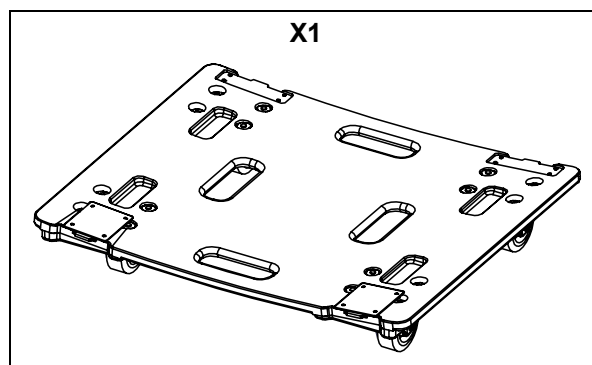


- NEXO cannot accept responsibility for accidents caused by any factor other than defects in this product itself.
- Please check the web site [nexo-sa.com](http://nexo-sa.com) for the latest update.

## Wheelboard for L18

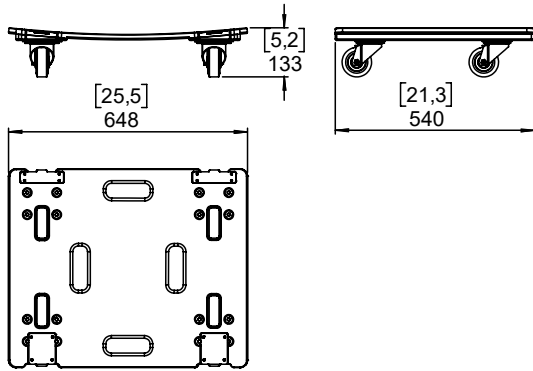


### Contents:



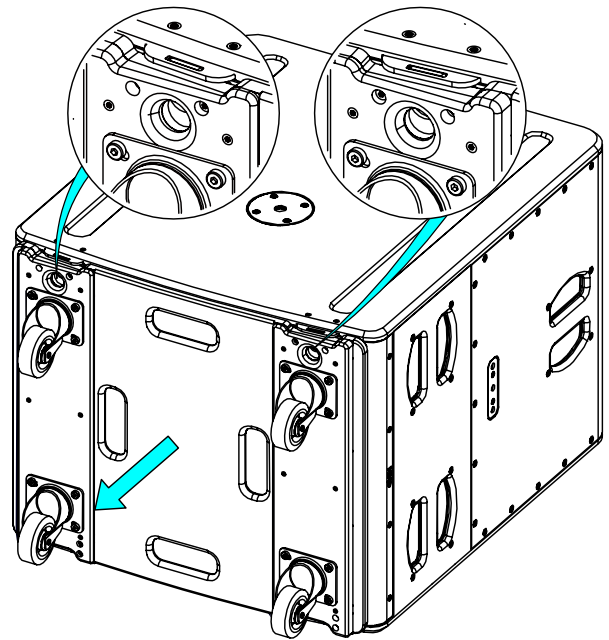
Weight: 8 kg / 17.6 lb

## Dimensions:

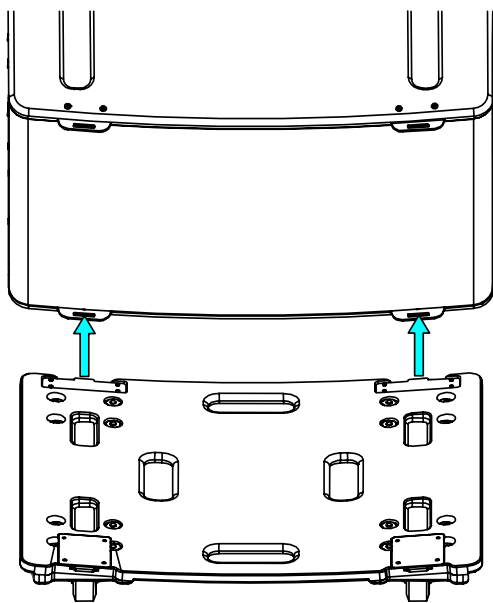


## Use:

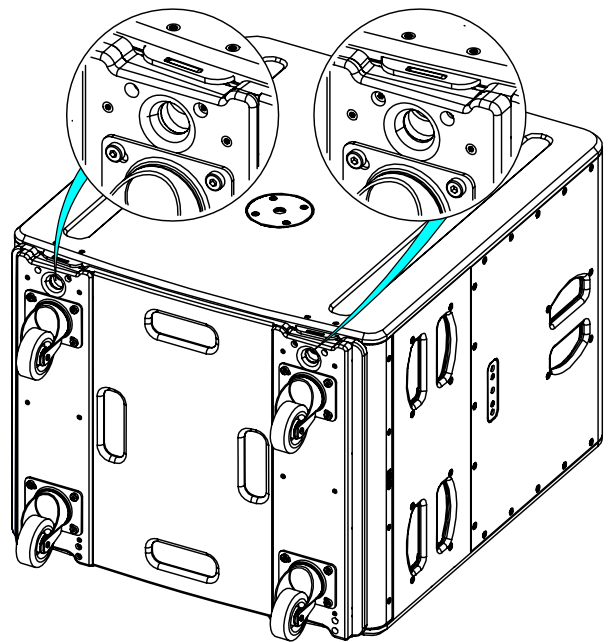
- Push the 2 latches to unlock the Wheelboard.
- Pull up the Wheelboard towards you.



Insert the 2 metal brackets in the spigots.



Push the 2 latches and lock the Wheelboard.



- NEXO cannot accept responsibility for accidents caused by any factor other than defects in this product itself.
- Please check the web site [nexo-sa.com](http://nexo-sa.com) for the latest update.

# NEXO

[nexo-sa.com](http://nexo-sa.com)

ZA du Pre de la Dame Jeanne  
60128 PLAILLY - France

- Read this document before using.
- Keep this document.
- Observe all warnings and cautions.





**multicore speaker cable - LHC**

**1.5 - 6.0 mm<sup>2</sup> - FRNC - DCA**

- extreme low heat of combustion (LHC)
- by a tubular overall jacket
- fine stranded bare copper wires
- flame retardant and non corrosive (FRNC)
- CPR class Dca - s2, d2, a1 acc. to EN50575

**FRNC**

**Dca**

The characteristic feature of this speaker cable is the extremely thin and tubular overall jacket, which has two advantages: beside the costs, also the heat of combustion is kept down - an important criteria in several building installations.

**design**

**conductor**                      stranded bare copper  
**core insulation**              LSZH, different colors  
**twisting**                        n cores stranded to cable core  
**outer jacket**                   FRNC, tubular extruded

**electric**

**insulation resistance**        > 200 MΩ x km  
**test voltage**                    2000 V  
**max. operating voltage**      300 V

**mechanics**

**min. bending radius**        5x overall diameter  
**working temperature**        -30°C / +70°C  
**flame retardancy**            acc. to IEC 60332-1-2  
**halogen-free**                    acc. to IEC 60754-2

order code	no. of cores x cross section mm <sup>2</sup>	cond. construction mm	conductor resistance Ω/km	outer Ø mm	heat of combustion kWh/km
SCH2015-D	2 x 1.5	30 x 0.25	11.8	7	165
SCH2025-D	2 x 2.5	50 x 0.25	7	7.6	175
SCH2040-D	2 x 4.0	56 x 0.30	4.35	9.2	230
SCH2060-D	2 x 6.0	84 x 0.30	3	10.6	280
SCH4025-D	4 x 2.5	50 x 0.25	7	8.8	251
SCH4040-D	4 x 4.0	56 x 0.30	4.35	10.7	363
SCH4060-D	4 x 6.0	84 x 0.30	3	12.8	480

order code	cable color	weight kg/m	copper weight g/m	standard lengths m
SCH2015-D	black	0.06	30	20 / 30 / 50 / 100 / 200 / 300 / 500
SCH2025-D	black	0.08	50	20 / 30 / 50 / 100 / 200 / 300 / 500
SCH2040-D	black	0.12	80	20 / 30 / 50 / 100 / 200 / 300 / 500
SCH2060-D	black	0.17	120	20 / 30 / 50 / 100 / 200 / 300 / 500
SCH4025-D	black	0.14	100	20 / 30 / 50 / 100 / 200 / 300 / 500
SCH4040-D	black	0.23	160	20 / 30 / 50 / 100 / 200 / 300 / 500
SCH4060-D	black	0.32	240	100 / 200 / 300

technical specifications are subject to change