NUARMk2
Universal Amp Rack

Intelligent Amplification

For all NEXO Speaker Systems

The NEXO NUARMk2 Universal Amp Rack provides NEXO users with a scalable, 'plug & play', amplified audio distribution solution of unrivalled power and flexibility. Systems of any size can be configured easily using channel by channel preset selection of any NEXO cabinet, and digital output patching.

The NUARMk2 rack comprises a pair of NEXO NXAMP4X4Mk2 amplifiers, twin DMU digital input metering devices to connect Analog and optional AES/EBU or Dante™ inputs and a pair of DPU digital output patching devices for easy connection to any NEXO speakers. Based on dual-phase power supplies with active PFC and universal mains inputs, the amplifiers deliver up to 8 channels of 4500 watts with the latest generation of 96kHz / 64-bit NEXO processing.

System configuration is simple, using either ESMonitor or the NEXO NeMo iPad® app. NEXO cabinet presets are selected on a channel by channel basis, with selected cabinet names displayed by the DPU for easy output patching.

Digital input metering is provided by the DMU, clearly indicating the presence and status of input signals, including network inputs. A library of presets for every single cabinet in the NEXO range delivers linear phase across any system, making it possible to mix and match NEXO cabinets.

Optional Power Distribution Units

The MDU-232C is an optional power distribution unit designed for use in countries with mains voltages in the range of 220V - 240V. 6 different output circuits are connected to 2x out of the 3 phases of the 400 volts Mains input. The NUARMk2 pre-cabled with this power distribution unit can be ordered in three variants (Yellow, Red, Blue) depending which phases are in use. Balancing the colour on the NUARMk2 on the mains allows a balanced usage of the three phases.

The Complete Integration of Power and Control

NXAMP4X4Mk2 Powered TDController

The NXAMP4X4Mk2 combines advanced signal processing with four state-of-the-art Class D amplifiers to create a flexible, light-weight powering and control solution for NEXO loudspeaker systems. Easy to set up and quick to deploy, all essential parameters readily accessible via a large colour touch-screen on the front panel and a comprehensive range of control and networking facilities on the rear panel.

The NXAMP4X4Mk2 ultra-low distortion Class D amplifier combines 32-bit/96KHz converters and 64-bit signal processing to deliver significant advances in sound quality over the already highly regarded previous generation of NXAMPs. Bass is solid and high-end definition is particularly impressive in a sonic performance that is both articulate and rich with detail. Even at low volumes, the sound is noticeably transparent and pure. The amplifier integrates three new multi core DSPs providing a future-proofed hardware platform, equipped to host new algorithms and run next-generation firmware updates for years to come.

With a mains voltage range of 100 to 240 Volts it means the amplifier can be used anywhere in the world and run on all types of power generators. Robust power supplies use PFC (Power Factor Correction) technology to ensure maximum power conversion efficiency and that the current drawn is smoothed and free of spikes to limit the stress on the mains network at all times.

Class D | P|F|C | Ether* IES Sound | Dante™* | neMo | AES/EBU* | 4.3" display | Tactile screen | Dual Ethernet Port x2

* Optional

DPU
Automated Output Patching

The DPU is an intelligent amplifier power output patch bay that can route the NXAMPMk2 outputs to any combination of SPK-4 or SPK-8 connectors. Three different modes of routing can be user selected: Automatic (lets the DPU decide the best routing to the SPK connectors), All-on-SPK8 (useful to route the NXAMPMk2 4 channel outputs on one cable) and Pass-through (to reuse existing cabling foreseen for NXAMPMk2 outputs).

Security is assured by fully redundant power supplies and dual switching. When connecting DPU to the NXAMPMk2, a routine first checks that the power from the amplifier is coming from the correct channel. If communication is lost with the NXAMPMk2, the DPU retains its configuration until contact is resumed.

Key Features

- Intelligent output patch panel offering digital communication with NXAMPMk2s.
- Provides automatic output speakons wiring regarding the configuration of the NXAMPMk2.
- Four individual LCD displays for easy labelling of the output speakons.
- Fully redundant design for maximum safety, including dual power socket and dual universal power supplies.
- Plug and play operation, entirely driven by the host NXAMPMk2

DMU
Intelligent Input Patching and Metering

The original DMU has been redesigned to accommodate the NXAEDT extension board. Front panel connectors allow connection of up to 4 Balanced Analog Inputs on XLR with link, 1 AES/EBU input on XLR with buffered and failsafe relay by-passed output, and 4 flexible 1Gb network inputs on etherCON RJ45 connector. Each audio input level can be monitored through LED based vue-meters while the network activity uses a different LED colour depending on the network port configuration (Dante™ Primary, Dante™ secondary or separate Remote Control port).

Key Features

- Intelligent input patch panel offering digital communication with NXAMPMk2s.
- Provides input level meters on all analogue and network inputs.
- Fully passive design on the audio and network paths.
- Powered through the host NXAMPMk2, no need for mains supply

Network Cards

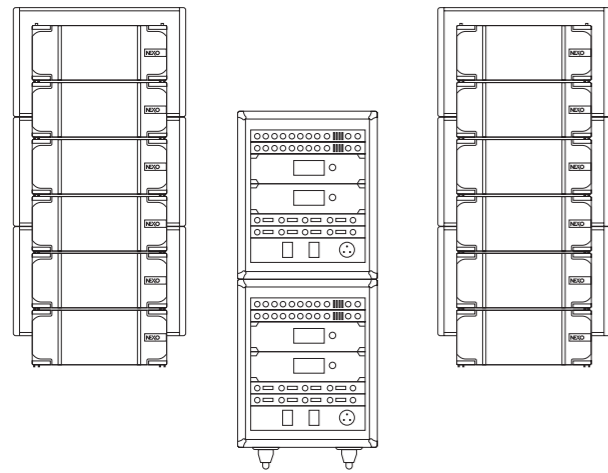| **Dante™** **AES/EBU**	**Dante™**	**Ether ES Sound**	**AES/EBU**	**Remote Control**
NXAEDT	NXDT104MK2	NXES104	NXAE104	NXRM104
Adds both AES/EBU and Dante™ inputs to NXAMPMk2 Powered Controllers. 4 channels of Dante™ inputs with Switched/Redundant mode and 44.1kHz to 96kHz digital audio support. 2 channels of AES/EBU inputs with buffered outputs and 44.1kHz to 96kHz digital audio support.	The optional Dante™ card enables seamless integration of NXAMPMk2 into Dante™ audio networks. It receives 4 audio streams (24-bits / 48kHz) in the Dante™ or AES67 formats and allows remote control from any computer on a LAN using TCP/IP commands. Its unique 3-port design can be used as an integrated 3 port gigabit switch or as two Dante™ redundant ports plus an optional third port for additional remote control.	The optional EtherSound card extracts 4 audio streams (24-bits / 48kHz) from the 2 X 64 channels of an ES100 EtherSound stream and features In and Out ports for easy daisy-chaining without an external switch and a third port for remote control and ASIO streaming.	The optional AES/EBU card receives 4 audio channels (24-bits / 44.1 - 96kHz) in AES/EBU format and features 2 X AES/EBU stereo XLR inputs; one with an AES/EBU buffered output on XLR with fail-safe relay. 2 X switched RJ45 ports enable remote control and easy daisy chaining.	Supplied as standard with the NXAMPMk2, the Remote Control card features 2 X RJ45 ports for remote control and easy daisy-chaining of amplifiers, while also facilitating firmware updates.

NeMo
Remote Monitoring App

Available free for iPad® and iPhone®, NEXO's NeMo Remote Monitoring app provides remote control over a NXAMPMk2 network from anywhere in the venue.
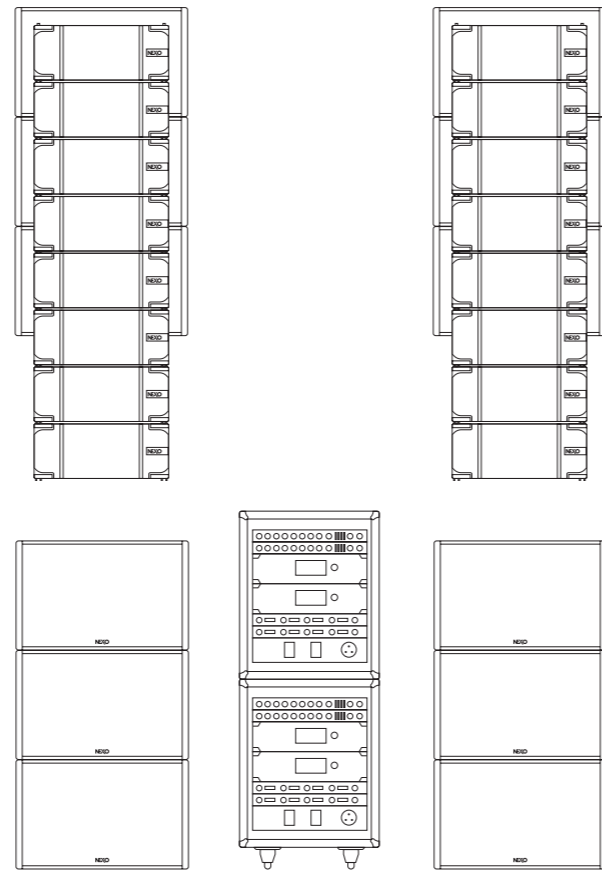
Key Features

- Visualise the NXAMPMk2 network on a 2D map
- Monitor and control the parameters of one or more devices, including:
- input levels
- output levels
- patching between outputs and inputs
- output parameters such as volume, gain, delay, array-EQ and headroom
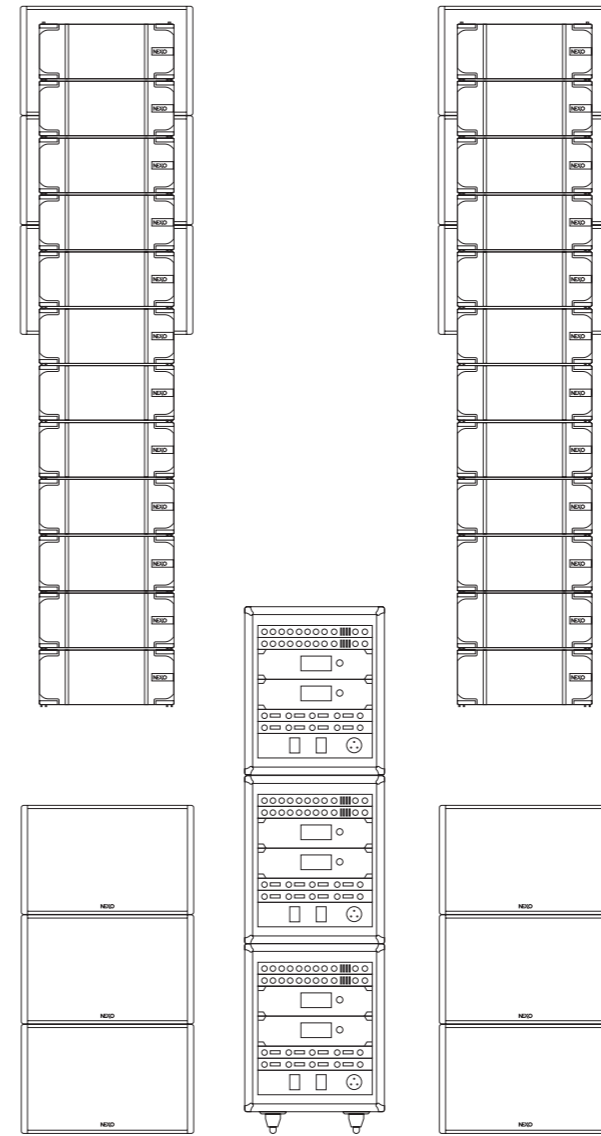- device and channel mute and solo
- setups
- scenes

NUARMk2 Power Illustrations

Dimensions

620
[24.4]

790
[31.1]

665
[26.2]

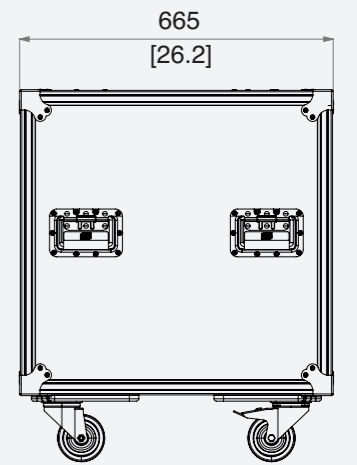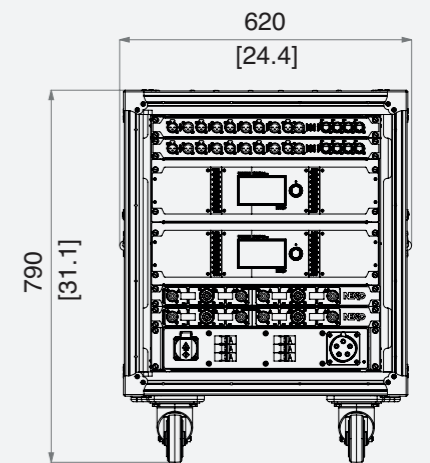12 x M28 (2 x 6 hang) / 6 x MSUB18 (3 per side) 2 x NUARMk2

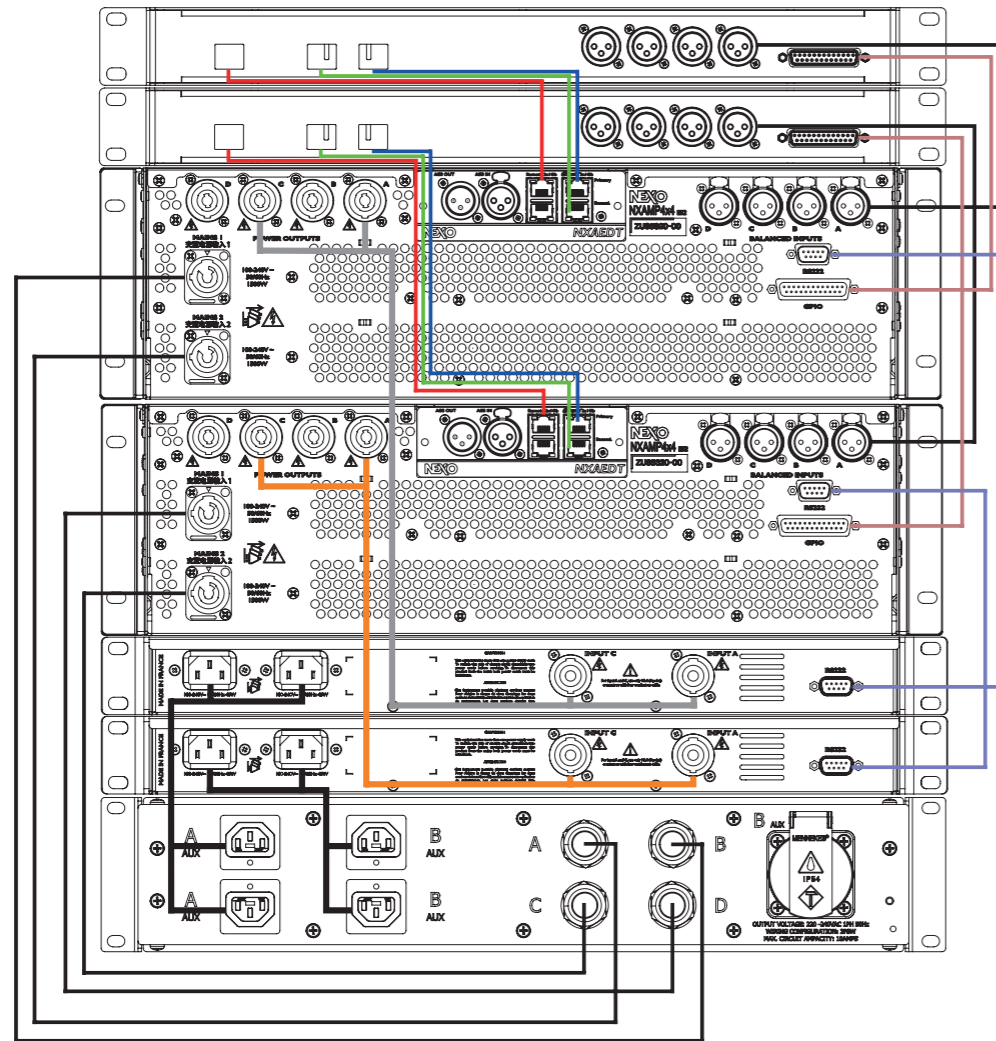16 x M28 (2 x 6 hang) / 12 x MSUB18 (3 per side) 2 x NUARMk2

24 x M28 (2 x 6 hang) / 12 x MSUB18 (3 per side) 3 x NUARMk2

Internal Cabling

Versions

NUAR2Mk2X Universal NUAR Rack Mk2 without power supply	NUAR2Mk2R Universal NUAR Rack Mk2 + power distribution - RED
NUAR2Mk2X-DNT Universal NUAR Rack Mk2 + AEDT without power supply	NUAR2Mk2R-DNT Universal NUAR Rack Mk2 + AEDT + PS RED
NUAR2Mk2B Universal NUAR Rack Mk2 + power distribution - BLUE	NUAR2Mk2Y Universal NUAR Rack Mk2 + power distribution - YELLOW
NUAR2Mk2B-DNT Universal NUAR RACK Mk2 + AEDT + PS BLUE	NUAR2Mk2Y-DNT Universal NUAR Rack Mk2 + AEDT + PS YELLOW

Specifications

POWER AMPLIFIER PART MAIN SPECIFICATIONS	
Amplifier Model	2x NEXO NXAMP4x4Mk2 Powered TD controller
Total number of channels	8 Amplifier channels, bridgeable by pairs
Total Max. output power (non bridged)	8x 4500 Watts / 2 Ohms
Total Max. output power (bridged)	4x 9000 Watts / 4 Ohms
Audio AD and DA Converters	24 bits @ 96 kHz
Total Processing	6 multi core 64 bits processing DSPs
DIGITAL METERING UNIT MAIN SPECIFICATIONS	
Integrated meters	8 Channels of 8 levels meters, one per input (4x Analog and 4x Digital)
Network activity	RGB LED per network input
Analog audio connectors	4x XLR input with parallel output link on XLR (Front) and 4x XLR output (Back)
AES/EBU audio connectors	1x XLR input with buffered output link on XLR (Front) and 2x XLR In/out (Back)
Network connectors	4x etherCON connector (Front) and 4x RJ45 connector (Back)
NXAMPMk2 interface	DB-25 for GPIO communication and power from host NXAMPMk2
DIGITAL PATCHING UNIT MAIN SPECIFICATIONS	
Routing matrix	Route any of the 4x input channels to one or several SPK pins pairs on the front
LCD displays	4x LCD displays, 2x 8 characters
Power inputs and outputs	2x SPK-4 inputs (Back) and 4x SPK-4 + 2x SPK-8 outputs (Front)
Mains inputs	2x IEC connectors with security latch (V-Lock system)
NXAMPMk2 interface	DB-9 for RS232 communication from host NXAMPMk2
OPTIONAL AES/EBU DANTE™ EXTENSION CARD MAIN SPECIFICATIONS	
Digital audio type	1 AES/EBU stereo input with link or 4 channels from a Dante™ Network
Resolution and sample rate	24 bits @ 44.1, 48, 88.2 or 96 kHz
Latency	0.25 ms to 5.0 ms (Typical 1 ms)
Network connectivity	4x 1 Gb RJ45 Ethernet connectors with flexible Gigabit switch configuration
OPTIONAL POWER DISTRIBUTION UNIT MAIN SPECIFICATIONS	
Power Input	32 A P17, 3P + N + G, 400 Volts, (Yellow, Red or Blue)
Power Outputs	4x 4" Tails wig NA3FC, 4x IEC 10A with locks, 2x auxiliary plugs
Protection	4x 20A breakers C type for Powercon output, 2x 10A breakers for Aux. output
RACK SPECIFICATIONS	
Equipement	4x wheels Ø100 with brake, 4x dish for stacking, 4x handles, 1x dish for label
Finish	Heavy duty black 900 vinyl cover
Height x Width x Depth (Net)	790mm x 620mm x 665mm (31.1" x 24.4" x 26.2")
Height x Width x Depth (Gross)	665mm x 620mm x 800mm (26.2" x 24.4" x 31.5")
Weight (Net)	116 kg (256 lbs)
Weight (Gross)	131 kg (289 lbs)
Operating temperature range	0° C - 40 ° C (32° F - 104° F)
Storage temperature range	-20° C - 60° C (-4° F - 140° F)

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