NXAMP4x4MK2 Powered TD Controller Data Sheet



DIGITAL TD CONTROLLER NXAMP4x4 MK2

4 channel Powered TD Controller

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

NXAMP4x4MK2 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 4500 Watts/2 ohms.
- Dual Universal Power Supply (100~240 Volts) using Dual PFC technlogogy for high power, 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-sa.com

The NXAMP4x4MK2 combines advanced signal processing, inherited from the first generation NXAMP, coupled with a state-of-the-art four channel Class-D amplifiers, two robust universal power supply with separate PFC and a comprehensive user interface.

Road proof Power Supply

With its continuous usuable mains voltage range from 100 to 240 Volts, the NXAMP4x4MK2 can be used worldwide and run on all kinds of power generator. Its power supplies use a PFC (Power Factor Correction) technology, ensuring that the efficiency of the power conversion is always at is best, while the current drawn is smoothed and spike-free to limit the stress on the mains network.

Flexible audio input system

Natively the NXAMP4x4MK2 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 NXAMP4x4MK2 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 know for decades, the major profesional 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 NXAMP4x4MK2 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 extremmely 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 NXAMPMK2 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 6U touring rack, with front and back integrated sliding doors, that can be fitted with 2x NXAMP4x4MK2, or 1x NXAMP4x4MK2 plus a DPU and a DMU.

NXAMP4x4MK2 Powered TD Controller Data Sheet

DIGITAL TD CONTROLLER NXAMP4x4 MK2

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 NXAMP4x4MK2

Number of channels	4x amplifier channels, bridgeable by pairs
Max. output voltage (no load)	4x 180 Volts
Max. output power (4 channels mode /8 Ohms load per channel)	4x 1900 Watts
Max. output power (4 channels mode /4 Ohms load per channel)	4x 3300 Watts
Max. output power (4 channels mode /2 Ohms load per channel)	4x 4500 Watts
Max. output power (2 channels mode /8 Ohms load per channel)	2x 6600 Watts
Max. output power (2 channels mode /4 Ohms load per channel)	2x 9000 Watts
Power consumption (Standby)	20 Watts
Power consumption (Idle)	270 Watts

INPUT TO POWER OUT SPECIFICATIONS

Frequency response	+/-1 dB from 20 Hz to 20 kHz
Input impedance / Input Sensitivity	22 kΩ / +18 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	2x Neutrik Powercon NAC3 (2x 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

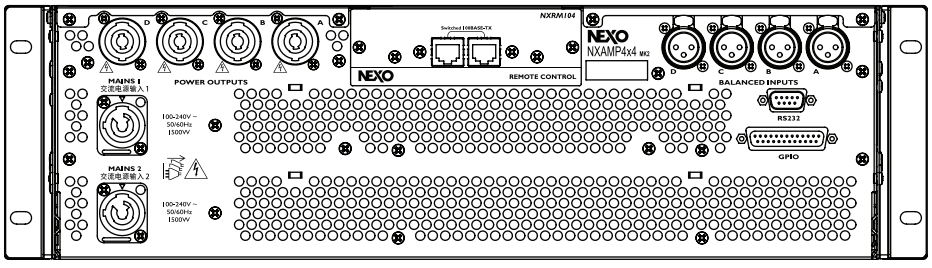
Mains voltage	Dual Universal Power Supply with Active PFC 100 - 240 Volts (50/60 Hz)
Power consumption 1/4 max. 2 Ohms	6350 Watts (Total from both Mains input)

DIMENSIONS AND CERTIFICATIONS

Dimensions	3U 19" Rack, 502 mm (20") depth, 24.9 kg (54.9 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 / 44.1~96 KHz	24 bits / 44.1~96 KHz
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 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/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.