

**TRUST
THE
ORIGINAL**

Digital Audio Network



NEUTRIK®

Content **Page**

XIRIUM PRO - DiWA Technology	2
XIRIUM PRO - The product	3
XIRIUM PRO - System Components	4
XIRIUM PRO - Interference-free transmission	5
NA2-IO-DLINE - Line I/O to Dante® Interface	6

General information:

Definition, Abbreviation & Useful Information	9
Neutrik Part Number Guide	10
Neutrik Product Line	11

Digital Audio Network



XIRIUM PRO

SOLUCIÓN INALÁMBRICA DE TRANSMISIÓN DIGITAL DE AUDIO

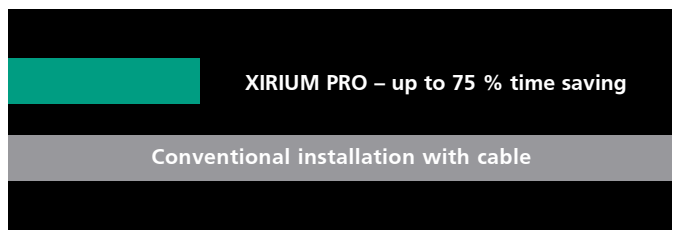
Regardless of the event, live sound, or house of worship: XIRIUM PRO provides the perfect audio solution. As a true replacement for cable bound systems it eliminates the often difficult and time consuming task of running cables.

NEUTRIK – the vision

The vision of a wireless transmission system between two connectors and to transmit audio signals in studio quality has led to the development of the innovative DiWA technology. DiWA (Digital Wireless Audio) provides FCC license-free, compression-free, studio quality, full bandwidth audio with extremely low latency.

XIRIUM PRO – time and money saver

With XIRIUM PRO Neutrik introduces a new, innovative product, allowing for easy adoption of DiWA technology. With just two devices, namely the transmitter (TX) and the receiver (RX), audio transmission can be established quickly, and more cost effectively than using traditional audio cables or other wireless systems. Engineers, artists, and project designers can now think beyond the physical limitations of the traditional audio cable. Equipment such as loudspeakers, amplifiers, and mixing consoles can now be positioned for optimal audio performance and what makes the most acoustic sense allowing artistry and sonic performance to take priority over venue logistics.





PURE SOUND

- Superior audio quality
- 5 GHz band
- Digital Transmission



ROBUST TRANSMISSION

- Proprietary protocol
- Correction algorithm
- Repeater unit
- XROC mode
- Software App



PLUG & PLAY

- Easy setup
- Modular I/O concept
- Flexible power supply



Innovative technology – studio sound quality

With XIRIUM PRO, a digital wireless audio system based on DiWA technology, Neutrik sets a new standard in professional wireless audio transmission.

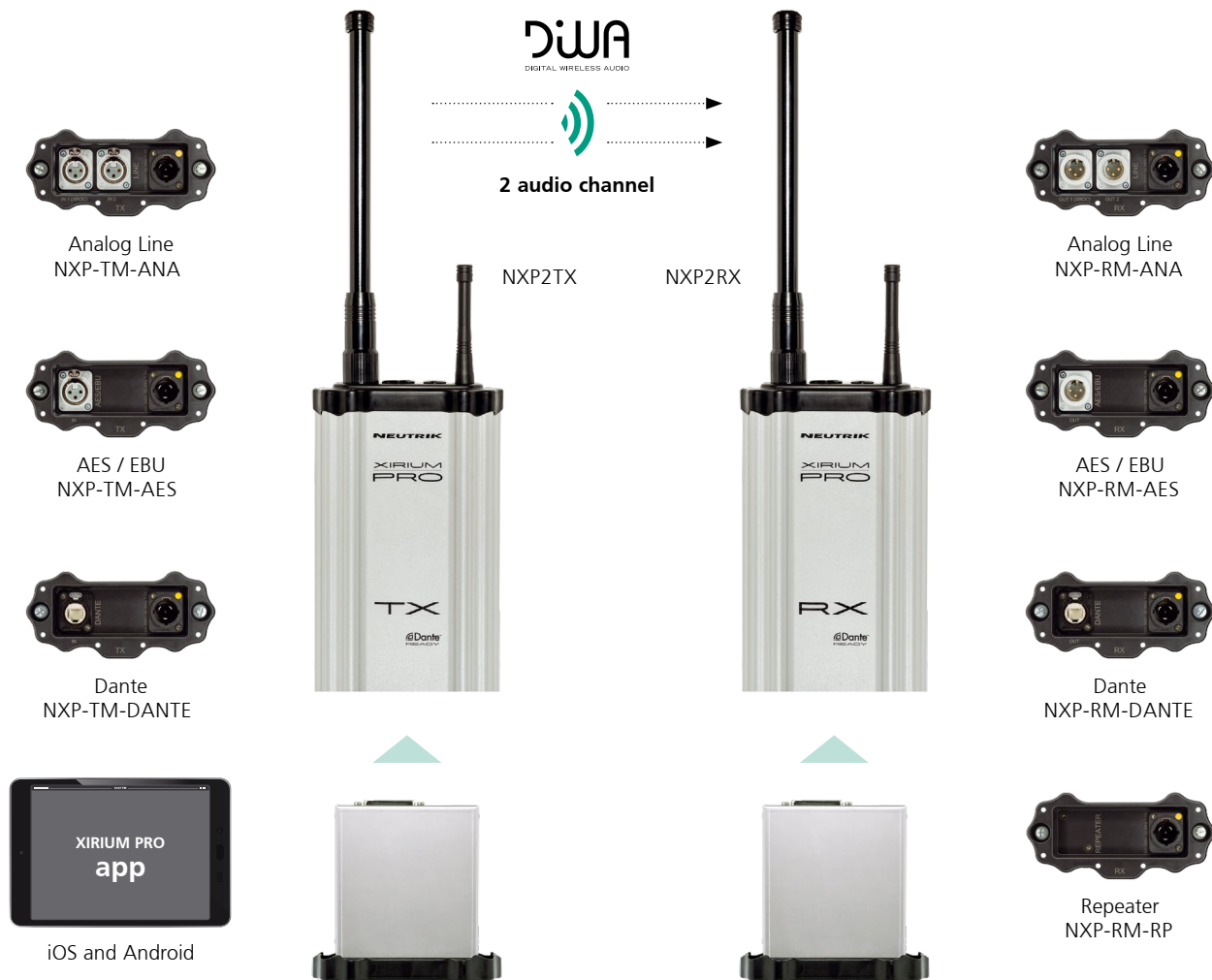
XIRIUM PRO – the product

XIRIUM PRO combines digital transmission facilitating the highest possible sound quality, reliability, and outstanding performance in one unique solution. Neutrik, known as the global leader in manufacturing connector technology for the professional entertainment industry, completes the innovation circle in audio connectivity, by providing solutions with copper connectors, fiber optic systems and now wireless solutions.



XIRIUM PRO – the system components ...

... with 2 base stations, 7 modules and the XIRIUM PRO software app



A XIRIUM PRO unit consists of a TX or RX base station and an input or output module. XIRIUM PRO offers the greatest flexibility available in a wireless audio system today. In order to make this flexibility possible, XIRIUM PRO offers a combination of 7 different input and output audio modules and 2 base stations. There are modules for analog (line-level), digital (AES/EBU), Dante, as well as a repeater module (RX only). All the modules contain

a rechargeable lithium- Ion battery and can be operated either on battery power or on direct mains power. These modules can be mixed and matched within each base station allowing for a signal conversion from one type of signal to another. No matter which audio signal type, XIRIUM PRO can handle it.

Interference-free transmission

Using the 5 GHz band for transmission, XIRIUM PRO offers an alternative to the reduced availability of VHF/UHF channels and congestion found in the 2.4 GHz band.

Exceeding boundaries

The repeater is the perfect extension of the system: When used, the system range can be doubled, and walls, corners, or other obstacles may be overcome.

Extended true diversity for even more reliable reception

Since the repeater duplicates and forwards the signals received from the transmitter it becomes a second, redundant audio source for every receiver. Each receiver automatically selects the best signal and switches between them without interruption.

Channel occupation

The constant DiWA data flow prevents interference from other devices occupying the 5 GHz frequency band.

Reliable operation/Forward error correction

Specially developed and patented data protocols transmit redundant data packets assuring trouble-free transmission.


Using advanced error correction ensures uninterrupted signal reception, eliminating delays or loss of the audio transmission. In fact, as many as 17 data packets may be lost without harming the signal.

XROC (Extreme Ruggedized One Channel)


When RF congestion at a venue or event is at its worst, activate the exclusive Xirium Pro XROC feature and eliminate any opportunity for offending RF traffic to affect your wireless audio signal.

XIRIUM PRO software app

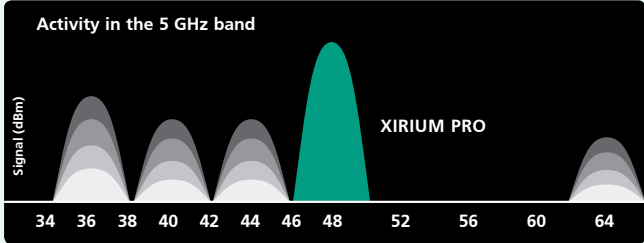
Available for iPad and Android tablets, the user friendly XIRIUM PRO app provides enhanced setup functions and allows monitoring and control of XIRIUM PRO devices.



DIGITAL WIRELESS AUDIO



www.xirium.net




Activity in the 5 GHz band

Signal (dBm)

XIRIUM PRO

34 36 38 40 42 44 46 48 52 56 60 64



RX PRO 210000

RX 48 94% OFF

TX CHANNEL BATTERY INTERFACE

TX 34 dBm 75 ms

RP 36 dBm

NAME: RX PRO 210000

Delay: 75 ms

Info & Settings

IDENTIFY DEVICE RESET DEVICE

CONNECTION SETUP LINKS OVERVIEW EDIT SETTINGS HELP NEUTRIK

NA2-IO-DLINE

**RUGGED
HOUSING**

**RACK
MOUNTABLE**



**2 x INPUT/
OUTPUT**

**LOCKABLE
CHASSIS**



NA2-IO-DLINE

Line I/O to Dante® Interface

Connect your legacy audio gear to the Dante® world



NA2-IO-DLINE

- Connect analog audio equipment to a Dante® network
- Heavy duty adapter for rugged stage conditions
- Lockable audio and network connections
- Convert up to two analog line signals to a Dante® network
- Feed non Dante® ready amplifiers, speakers or mixing desks with signals from the Dante® network
- Requires a Power over Ethernet switch or a PoE injector (802.3 af/at; class 1)
- AES67 compliant
- Rack mountable

What is it?

The NA2-IO-DLINE is an end-of-network device. It is a breakout box which allows two channels of audio to be integrated into a Dante® network. Simultaneously, NA2-IO-DLINE converts a Dante™ stream into analog audio signals. Hence, it is possible to use this tiny box to feed analog audio signals into the Dante® network while at the same time receiving a mix from another Dante® source.

NA2-IO-DLINE is designed for harsh stage conditions. It therefore features lockable chassis connectors for both the audio and network connections. For fixed installations, the rubber protection can be removed. With optional mounting brackets or a rack panel, the box can be mounted below tables, in floor boxes, or in equipment racks.

Accessories



NRP1RU-2A: 1 RU 19" Rack unit for NA2-IO-DLINE



NA-MB-KIT: Mounting bracket kit

NA2-IO-DPRO

2 x etherCON®
PRIMARY/SECONDARY DANTE™

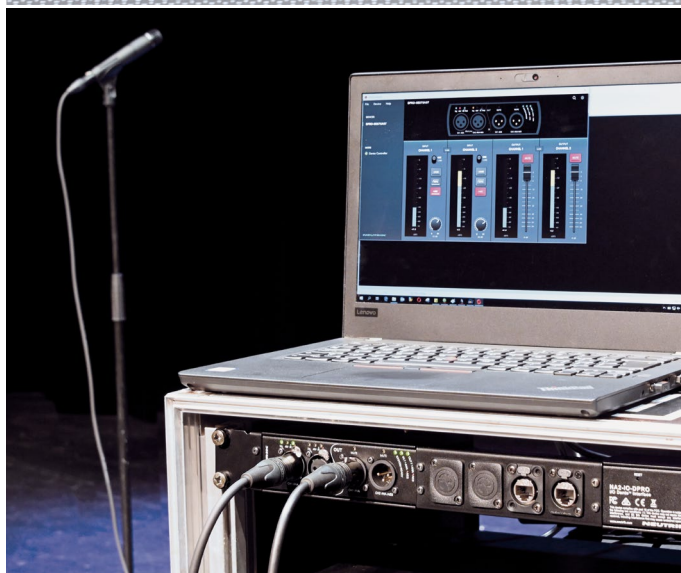
RUGGED
HOUSING

RACK
MOUNTABLE



LINE, AES
OUTPUT

MIC, LINE, AES
INPUT



NA2-IO-DPRO

Line I/O to Dante® Interface

Connect your legacy audio gear to the Dante® world



NA2-IO-DLINE

- Connect analog audio equipment to a Dante® network
- Heavy duty adapter for rugged stage conditions
- Lockable audio and network connections
- Convert up to two analog line signals to a Dante® network
- Feed non Dante® ready amplifiers, speakers or mixing desks with signals from the Dante® network
- Requires a Power over Ethernet switch or a PoE injector (802.3 af/at; class 1)
- AES67 compliant
- Rack mountable

What is it?

The NA2-IO-DLINE is an end-of-network device. It is a breakout box which allows two channels of audio to be integrated into a Dante® network. Simultaneously, NA2-IO-DLINE converts a Dante™ stream into analog audio signals. Hence, it is possible to use this tiny box to feed analog audio signals into the Dante® network while at the same time receiving a mix from another Dante® source.

NA2-IO-DLINE is designed for harsh stage conditions. It therefore features lockable chassis connectors for both the audio and network connections. For fixed installations, the rubber protection can be removed. With optional mounting brackets or a rack panel, the box can be mounted below tables, in floor boxes, or in equipment racks.

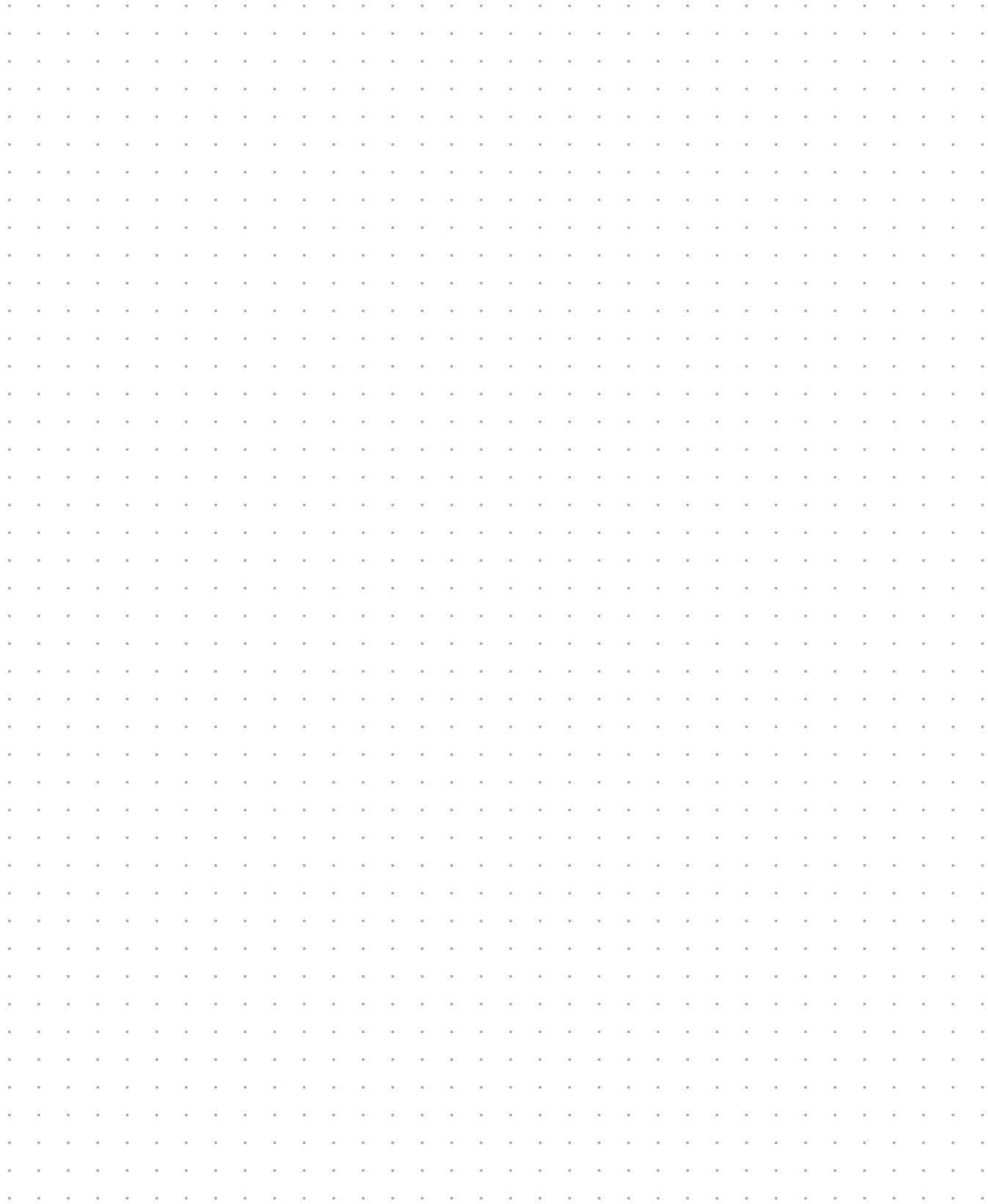
Accessories

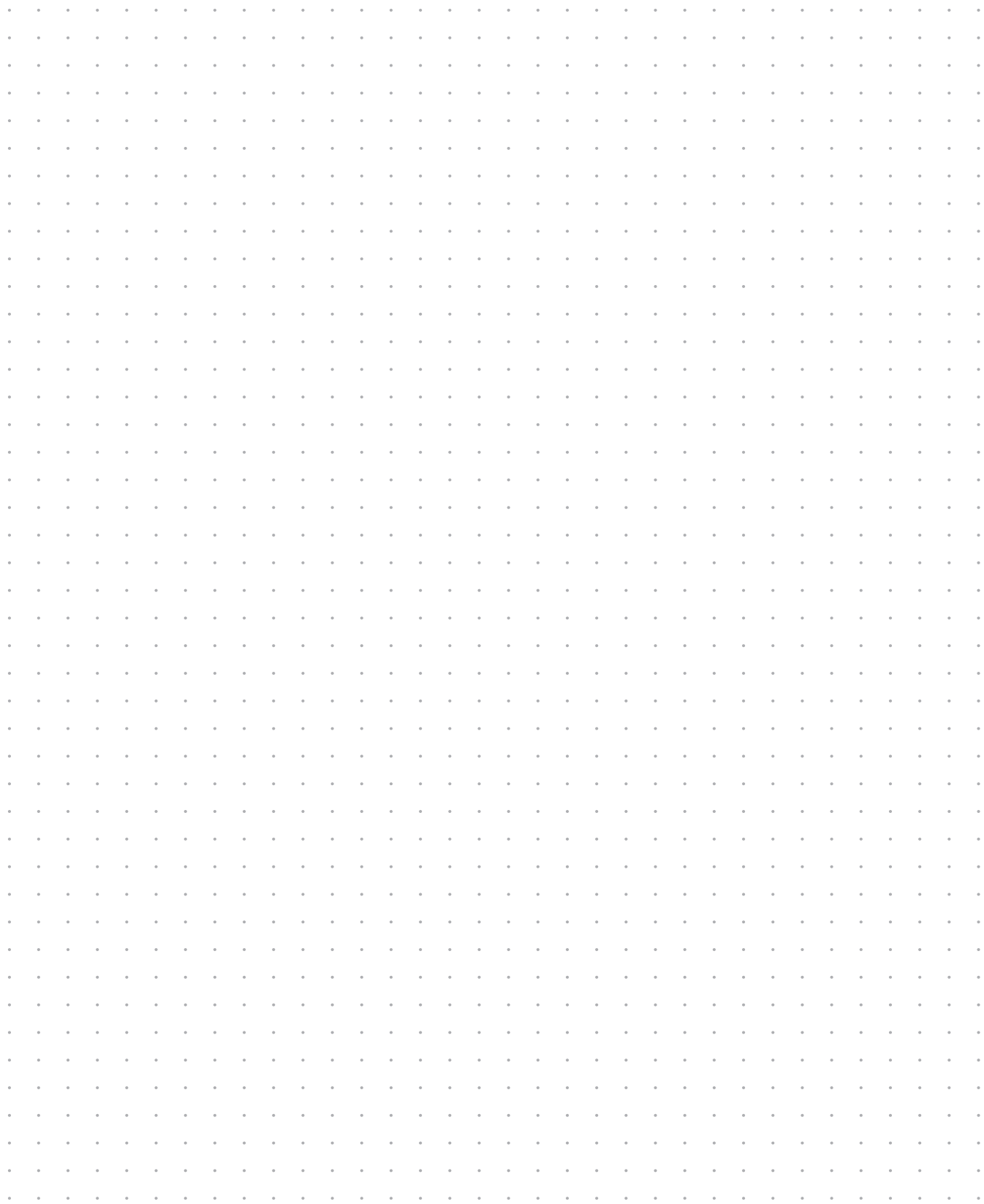


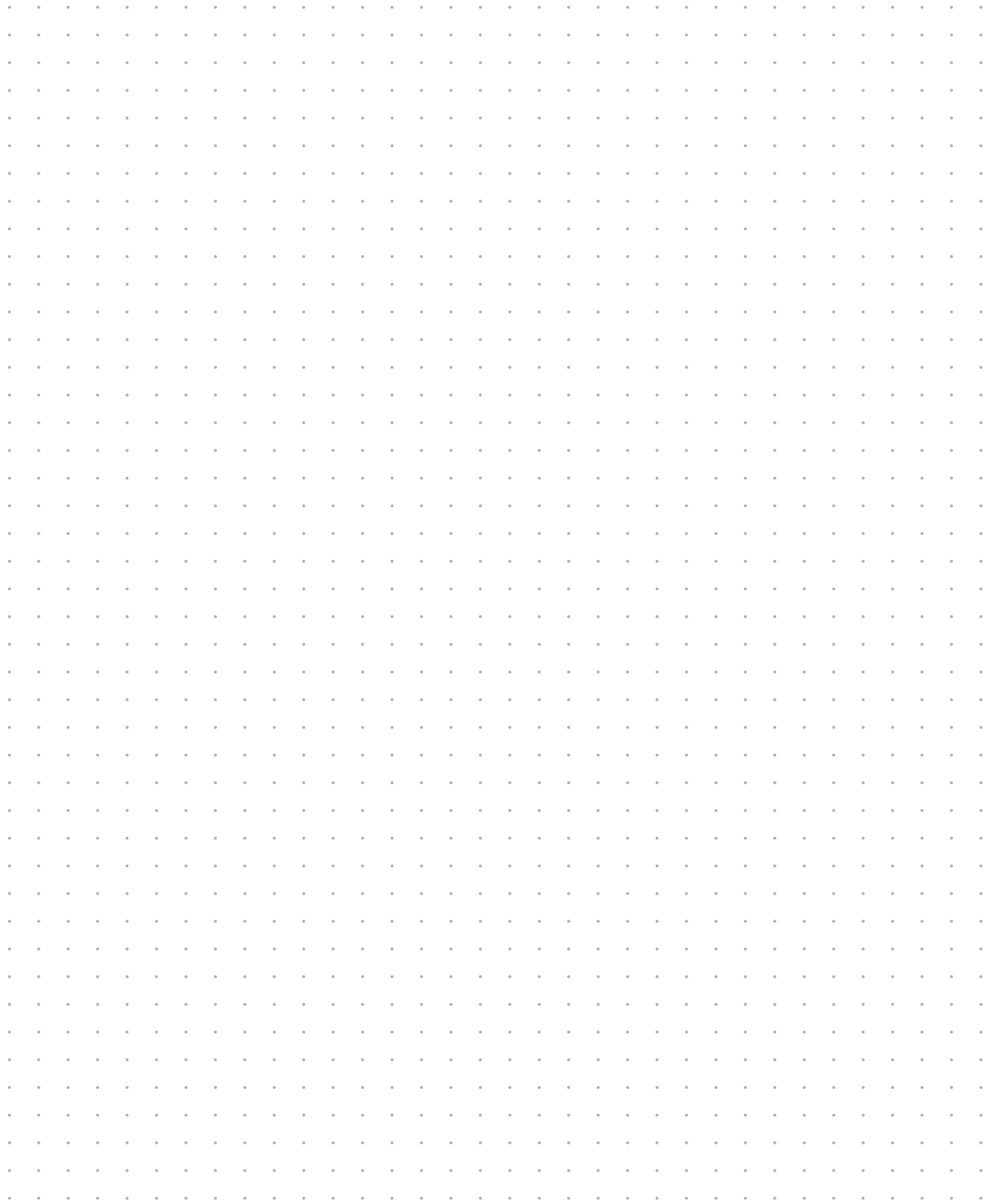
NRP1RU-2A: 1 RU 19" Rack unit for NA2-IO-DLINE



NA-MB-KIT: Mounting bracket kit







Definitions, Abbreviations & Useful Information

ELEMENTS

Ag	Silver
Al	Aluminium
Au	Gold
Co	Cobalt
Cr	Chromium
Cu	Copper
Ni	Nickel
P	Phosphorus
Pb	Lead
Pd	Palladium
Sn	Tin
Zn	Zinc
SS	Stainless Steel

ALLOYS, PLASTICS, POLYMERS

Brass (Alloy)	CuZn39Pb3
Bronze (Alloy)	CuSn6
Ck 67	Carbon Steel
EPDM	Ethylene Propylene
GR	Glass Reinforced
PA	Polyamide
PBTP	Polybutylene Terephthalate
POM	Polyacetal
PTFE	PolyTetraFluoroEthylene (TEFLON)
PUR	Polyurethane

MEASUREMENT LEGEND

N	Newton
Ω	Ohm
μ	Micro
OD	Outside Diameter
m	Meter(s)
k	Kilo


ENGLISH TO METRIC CONVERSIONS



1/8 inch	3.175	millimeters (mm)
1/4 inch	6.35	millimeters (mm)
1 inch	25.4	millimeters (mm)
	2.54 cm	1 inch
1 foot	30.48	centimeters (cm)
	0.305	meter (m)
6 foot	1.828	meters (m)
50 foot	15.24	meters (m)
100 foot	30.48	meters (m)
1000 foot	304.8	meters (m)

METRIC TO ENGLISH CONVERSIONS

1 centimeter	0.3937	inches
1 meter	39.37	inches
3.281 meter	10	feet
10 meters	32.808	feet
50 meters	164.041	feet
100 meters	328.084	feet

OTHER ABBREVIATIONS

UL®	Underwriters Laboratories
IP Rating	Ingress Protection rating for objects and water ACC IEC529/EN60529
IEC	International Electrotechnical Commission is the international standards and conformity assessment body for all fields of electrotechnology
	UL Recognized Component Mark

	ENEC – European norms electrical certification, demonstrates compliance with European safety standards.
	VDE Association for Electrical, Electronic and Information Technologies e.V.
AWG	American Wire Gauge

NEUTRIK, crystalCON®, etherCON®, maxCON®, miniCON®, nanoCON®, neutriCON®, opticalCON®, powerCON®, Profi®, rearTWIST®, silentPLUG®, speakON®, TOP®, DiWA®, XIRIUM®, are registered trademarks of Neutrik AG.

Neutrik® Part Number Guide

NC3FAH1-B-0-D

Packaging:	D	Cable connector: bulk packed
Assembly:	D	Chassis connector: disassembled push latch
Retention:	w/o	Latch lock
	-0	Retention spring
	-DA	Asymmetric PUSH
	B	Black shell, gold contacts
Shell:	BAG	Black shell, silver contacts
	0	Separate ground contact connected to shell, male only
Grounding:	1	Pin 1 & panel & shell connected, no separate ground contact
	2	Separate ground contact connected to shell & panel, separate Pin 1
	E	Additional ground contacts
	w/o number	No ground/shell contact (except 4/5 pole), female only
	Termination:	H
HL		Lateral left PCB mount
HR		Lateral right PCB mount
L		Solder cups
V		Vertical PCB mount
Y		IDC for wires (no ground)
M3		Mounting holes with M3 thread
M25		Mounting holes with M2.5 thread
-		Not applicable
Series:		A, AA, B, D, DL, DLX, MPR, P, PX, RX, X, XX
Gender:	F	Female
	M	Male
Number of Contacts:	2, 3, 4, 5, 6, 7, 8, 12	
Connector Type:	A	Adapter
	AC	powerCON
	B	BNC
	C	XLR
	D	dummyPLUG
	E	etherCON - RJ45
	F	RCA / CINCH
	J (MJ, RJ, SJ)	Jack
	K	Cable Assembly
	L	speakON - Loudspeaker
	M	Module
	O	opticalCON - Fiber Optic Connector
	P	Plug
	PP	Patch Panel
	R	Circular Connector
	T	Transformer
	TOP	True Outdoor Protection

Definitions, abbreviations & useful information see page 11.

Neutrik® Product Line

<p>XLR Connectors</p>	<p>Plugs & Jacks</p>	<p>SpeakON® Connectors</p>	<p>Data Connectors</p>	<p>Circular Connectors</p>	<p>powerCON® Connectors</p>	<p>Patch Panels</p>	<p>Accessories</p>
------------------------------	---------------------------------	-----------------------------------	-------------------------------	-----------------------------------	------------------------------------	----------------------------	---------------------------

NEUTRIK®

The premium brand of the Neutrik Group

LIECHTENSTEIN (HEADQUARTERS)

Neutrik AG, Im alten Riet 143, 9494 Schaan
T +423 237 24 24, F +423 232 53 93, neutrik@neutrik.com

GERMANY / NETHERLANDS / DENMARK / AUSTRIA

Neutrik Vertriebs GmbH, Felix-Wankel-Strasse 1, 85221 Dachau, Germany
T +49 8131 28 08 90, neutrik@neutrik.de

GREAT BRITAIN

Neutrik (UK) Ltd., Westridge Business Park, Cothey Way
Ryde, Isle of Wight PO33 1 QT
T +44 1983 811 441, sales@neutrik.co.uk

FRANCE

Neutrik France SARL, 52 rue d'aguesseau, 1er etage, 92100 Boulogne-Billancourt
T +33 1 41 31 67 50, info@neutrik.fr

USA

Neutrik USA Inc., 4115 Taggart Creek Road, Charlotte, North Carolina, 28208
T +1 704 972 30 50, info@neutrikusa.com

JAPAN

Neutrik Limited, Yusen-Higashinonbashi-Ekimae Bldg., 3-7-19
Higashinonbashi, Chuo-ku, Tokyo 103
T +81 3 3663 47 33, mail@neutrik.co.jp

HONG KONG

Neutrik Hong Kong LTD., Suite 18, 7th Floor Shatin Galleria
Fotan, Shatin
T +852 2687 6055, sales@neutrik.com.hk

CHINA

Ningbo Neutrik Trading Co., Ltd., Shiqi Street, Yinxian Road West
Fengjia Villiage, Hai Shu District, Ningbo, Zhejiang, 315153
T +86 574 88250833, sales@neutrik.com.cn

INDIA

Neutrik India Pvt. Ltd., Level 3, Neo Vikram, New Link Road,
Above Audi Show Room, Andheri West, Mumbai, 400053
T +91 982 05 43 424, anklesaria@neutrik.com

ASSOCIATED COMPANIES

Contrik AG

Steinackerstrasse 35, 8902 Urdorf, Switzerland
T +41 44 736 50 10, contrik@contrik.ch

H. Adam GmbH

Felix-Wankel-Straße 1, 85221 Dachau, Germany
T +49 08131 28 08-0, anfrage@adam-gmbh.de



www.neutrik.com