

**TRUST  
THE  
ORIGINAL**

# speakON<sup>®</sup> Connectors

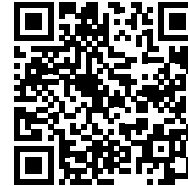


**NEUTRIK<sup>®</sup>**

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**speakON® Connectors**

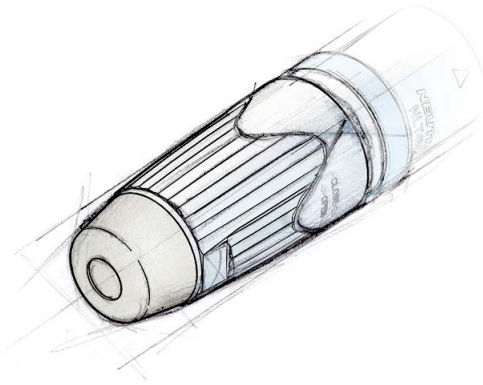


**Introduction**

The Neutrik speakON® Series, known in the professional audio industry as "The loudspeaker connector" has become the state of the art in speaker and amplifier connectivity. Introduced in 1987 speakON was invented by Neutrik as a result of customer demand for a reliable speaker connection. The pro audio market quickly realized the advantages of this completely new connection system.

The design is optimized for loudspeaker applications with an outstanding cost-performance ratio. As market leader for speaker connections we are proud to offer an all-encompassing product line for the specific needs of today's market. Recent designs such as the STXX series and the speakON Combo offer solutions for nearly every speaker application.

## Integrated Design



One of Neutrik's goals is to create products that are easily distinguished from other manufacturers. We have successfully achieved this in our engineering efforts as well as the patent and trademark protection granted for our unique products. To further establish a clear difference between Neutrik and our competitor's products we give our customer the means to easily identify original Neutrik products. Therefore all of our new products such as the SPX and the STX series are designed according to the protected integrated design. (EU-Pat.: DM/057 379, US-Pat. Pending, CHINA-Pat.: 02305192.2 / 193.0/194.9 / 195.7)

## Features & Benefits



Today's speakON series is a result of a continuous product improvement process. The principal idea has been kept and optimized with material and design modifications over the years.

A traditional speakON stands for:

- Reliable and robust, easy and fast to assemble
- 2, 4 and 8 pole cable and chassis connectors in various versions
- Optimal "Quick Lock" system for speaker applications
- Neutrik proven and unique chuck type cable strain relief
- Outstanding cost-performance ratio
- De facto standard
- Meets all worldwide safety requirements (IEC, UL, ...)

Beyond that, the latest designs as the SPXX and STXX series offer:

- Up to 50 A current rating
- Only 3 parts with 1 piece strain relief design for even easier assembly
- Convertable right-angle version
- Weatherproof and extremely robust



Quick lock



Chuck type strain relief



Right angle conversion



**speakON® SPX Series 2 & 4 Pole Cable Connector**



NL2FX



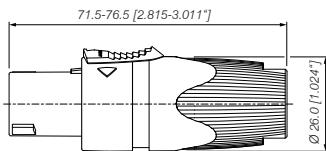
NL4FX



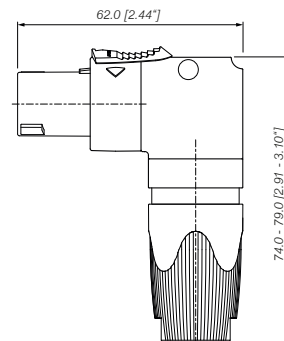
NL4FRX

- Current rating 40 A rms continuous
- Up to 50 A audio signal, duty cycle 50%
- Only 3 parts, easy to assemble
- High impact materials – long-lasting and reliable
- Easy and extremely precise locking system "Quick Lock"
- Improved grip on latch
- 1 piece strain relief, chuck for 7 to 14.5 mm cable O.D.
- Color coding possible
- Improved screw-type termination for highest pull-out force
- Integrated design guarantees "Made by NEUTRIK®"

NL4FX



NL4FRX



## Design Criteria

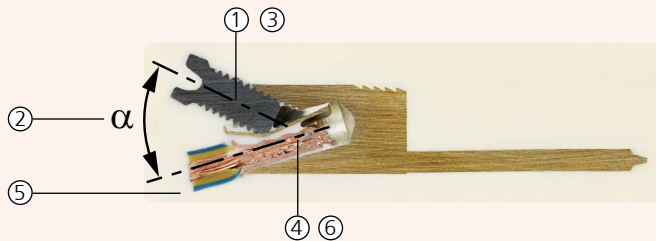
This second generation of speakON connectors features higher current rating for the operation of high power speakers and amplifiers carrying more than 1'000 Watts. Only 3 parts make it fast and easy to assemble with a more reliable

performance. Our unique design makes it possible to change easily and quickly from a straight connector to the right-angle version, even without disconnecting the cable.



- ① Easy and extremely precise locking system "Quick Lock"
- ② Improved grip on latch
- ③ 1 piece strain relief, chuck for 7 to 14.5 mm cable O.D., with accessory NLRR 5-8 mm
- ④ Color coding possible
- ⑤ Integrated design guaranties "Made by NEUTRIK®"

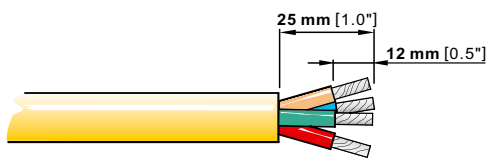
## Improved SPX-Series screw contacts! (Wire position after assembly)



- ① Progressive clamping as wire is pushed forward
- ② Acts as screw locking device due to side forces
- ③ Large combi drive - M4 screw
- ④ Wire size 1.5 - 4 mm<sup>2</sup> (AWG 12) for 6 mm<sup>2</sup> (AWG 10) remove screw & solder
- ⑤ Pull out force > 200 N @ 80 cNm
- ⑥ Gas tight connection

## Assembly

Prepare cable as shown.



### HINT:

For easy wiring especially of thick cables, first screw on the inner contacts 1+ and 2+ and afterwards the outer contacts 1- and 2- !

Use screwdriver Pozidriv #1 only.





Glass reinforced housing



Quick lock



**speakON® FC Cable Connector Series**

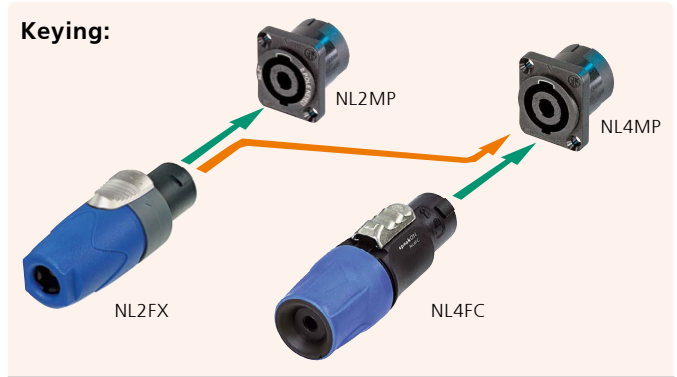


NL4FC

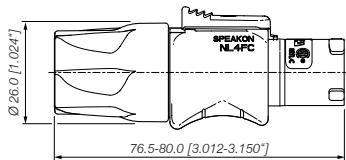


NL8FC

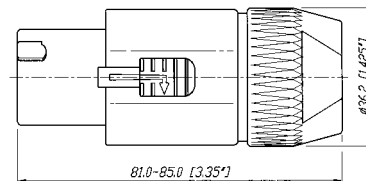
- Up to 30 A rms current rating
- Glass reinforced materials for housing and inserts
- Unique Neutrik chuck type strain relief
- Precise keyway for secure mating
- Accurate twist lock latching system
- 4 pole in new design with more ergonomic latch



**NL4FC**



**NL8FC**





1/4" Jack adapter



Extention coupler



Secure Lock

**speakON® Adapter**



NA4LJX



NL4MMX



NL8MMXX

**NL4MMX:**

Features permanent secure connection on a speakON cable connector using 2<sup>nd</sup> lock.



**Secure Lock!**

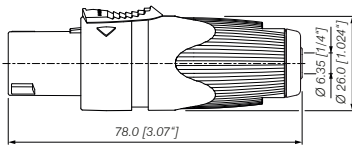
**NL4MMX + NL4FX:**

(locked on the cable)

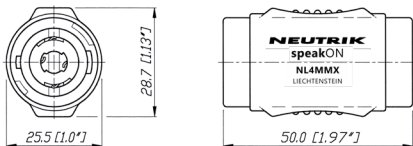
Changes gender to male when permanently locked on the cable.



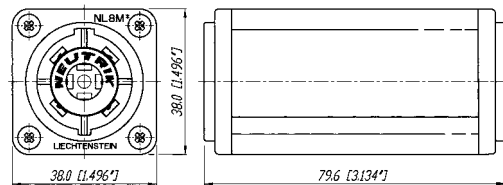
**NA4LJX**



**NL4MM**



**NL8MM**





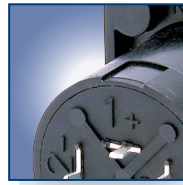
Reinforced locking area



Nickel housing



3/16" flat tabs



Vertical PCB mount



## speakON® Chassis Connector



NL2MDXX-V



NL4MDXX-H-3



NL4MPXX



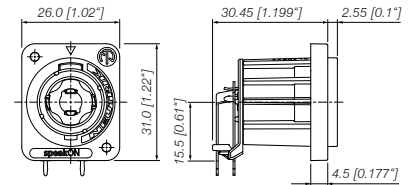
NL4MPRXX



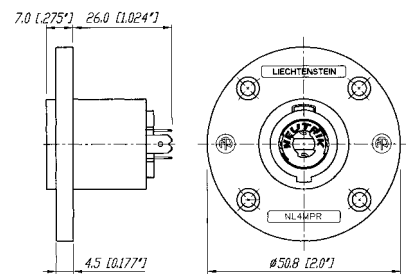
NL8MPRXX

- Standard version up to 25 A rms, ultra high current version up to 50 A audio current
- Glass reinforced materials
- Precise keyway for secure mating
- Accurate twist lock latching system
- Metal front plate (8 pole) or metal insert in locking area (2 & 4 pole)
- Various mounting and wiring possibilities
- "Air tight design", optimized for speaker applications
- D or G panel cutouts to be easily mounted on audio industry standard panels

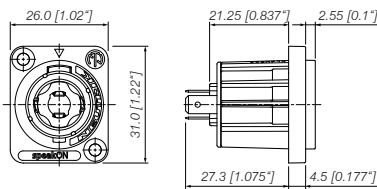
### NL4MDXX-H-3



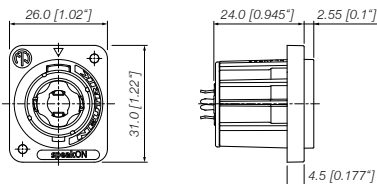
### NL4MPRXX



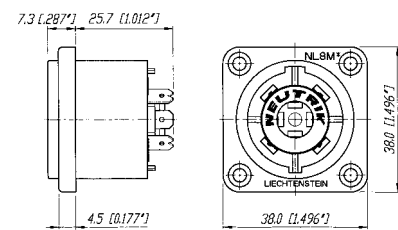
### NL4MPXX



### NL4MDXX-V-2



### NL8MPRXX







Locking key



PCB solder pins



s p e a k O N<sup>®</sup> C o m b o



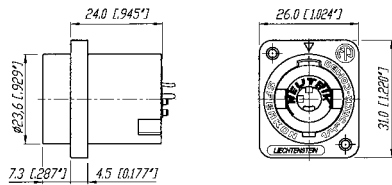
NLJ2MDXX-V

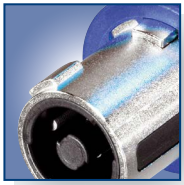
- D-size flange
- Compatible PCB layout and panel mount to NL4MD-V-1 (NL4MD-H)
- Cost saving – combines two connectors in one housing
- Mates with all 2, 4 pole speakON<sup>®</sup> and 1/4" Phone Plugs
- PA-wiring: 1+ is connected to TIP, 1- to the SLEEVE
- PCB layout of NLJ2MD-V is compatible with NL4MD-V and PCB layout of NLJ2MD-H is compatible with NL4MD-H



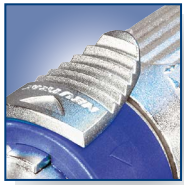
Combines a speakON<sup>®</sup> and 1/4" Phone Jack – one for two

NLJ2MDXX-V





Reinforced locking



Latch lock



XL-solder contacts



Protected latch

**speakON® STXX Series Cable Connectors**



NLT4FXX-BAG



NLT4MXX



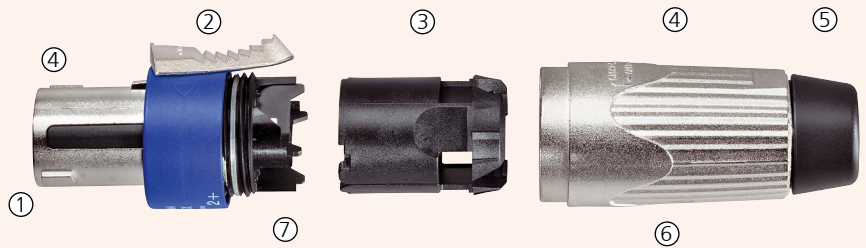
NLT8FX



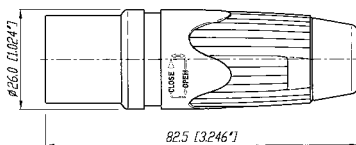
NLT8MX-BAG

- Up to 30 A current rating
- Robust and durable all metal housing
- Sealing ring provides weatherproof IP 54 rating in mated condition on 4 pole version
- Reinforced metal quick lock system for ease and precise locking
- Extra large solder contacts for up to 6 mm<sup>2</sup> (AWG 10) wires
- Compatible with all available speakON products

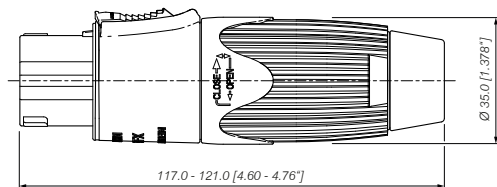
- ① Easy and extremely precise locking system "quick look", reinforced with metal
- ② Improved grip on latch
- ③ 1 piece strain relief, chuck for cables from 9 to 16 mm O.D.
- ④ Extreme rugged "Touring Approved"
- ⑤ Rubber sealing boot
- ⑥ Integrated Design guarantees "Made by NEUTRIK®"
- ⑦ X-large solder contacts for up to 6 mm<sup>2</sup> (AWG 10) wires



**NLT4MXX**



**NLT8FXX**

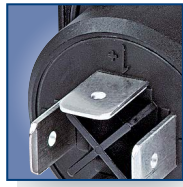




Robust metal housing



XL-solder contacts



1/4" flat tabs



**speakON® STXX Series Chassis Connectors**



NLT4FPXX-BAG



NLT4MPXX



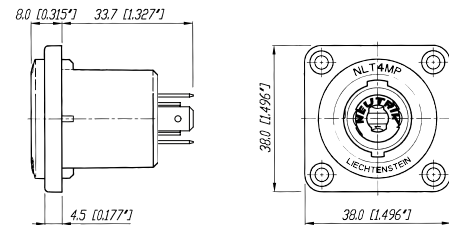
NLT4MPXX-BAG



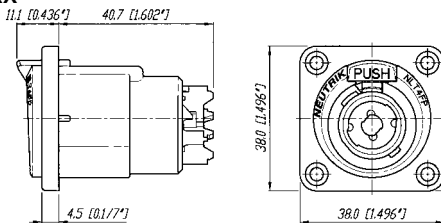
NLT8MPXX-BAG

- Extremely robust metal housing designed for harsh and demanding environment
- Weatherproof design features sealing gaskets
- 4 type range – also male cable connector and female receptacle on 4 pole version
- All-metal housing makes the STXX Series rugged and durable
- Weatherproof built-in gasket meets IP 54 protection class (4 pole)
- Ideal product for touring applications and harsh environments
- Best electrical performance up to 50 A audio current
- Uses precise “Quick Lock” system
- Compatible with all currently available speakON products
- 4 pole version has UL recognized components, CSA listed

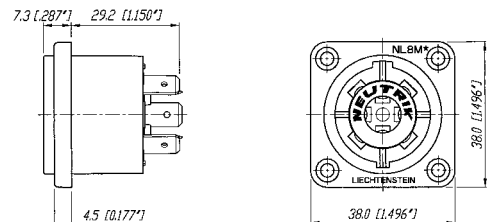
**NLT4MPXX**



**NLT4FPXX**



**NLT8MPXX**



Specification		SPX Series Cable Con.	STXX Series Cable Con.	speakON FC Cable Con	speakON Chassis + Combo	Adapter	STX Series Chassis
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## Electrical

Number of contacts		2 + 4	4 + 8	4 + 8	2, 4, 8	2, 4, 8	4 + 8
Rated current per contact	40 A rms continuous	●	●	30 A	30 A**	15 A	●
CSA approved rating	25 A (4 pole) rms continuous	●	●	-	10 A	-	-
	50 A audiosignal, duty cycle 50%	●	●	40 A	40 A	30 A	●
Combo	15 A rms continuous	-	-	-	●	-	-
Rated voltage	250 V ac	●	●	●	●	●	●
Contact resistance after lifetime	< 2 mΩ	●	●	≤ 3	≤ 3	≤ 3	●
Insulation resistance	> 1 GΩ	●	>100MΩ	●	●	●	>100MΩ
Dielectric strength	4 kVac peak	●	●	●	●	●	●
	1/4" Jack	1.5 kV peak	-	-	-	●	-

## Mechanical

Locking System	Quick lock (latch)	●	●	●	●	●	●
Life time (mating cycles)	> 5'000	●	●	●	●	●	●
Cable O.D. range (mm)	2 pole	6 - 10	-	-	-	-	-
	4 pole	7 - 14.5	9 - 16	6 - 15	-	-	-
	8 pole	-	8 - 20	8 - 20	-	-	-
Wiring	screw type terminals	4 mm <sup>2</sup> (AWG 12)	-	4 mm <sup>2</sup> (AWG 12)	● (ST)	-	-
	soldering	6 mm <sup>2</sup> (AWG 10)	6 mm <sup>2</sup> (AWG 10)	4 mm <sup>2</sup> (AWG 12)	●	-	●
	flat tabs for 3/16" FASTON® (4.8 x 0.5 mm)	-	-	-	●	-	-
	flat tabs for 1/4" FASTON® (6.3 x 0.8 mm)	-	-	-	● (UC)	-	●
	PCB-version	-	-	-	●	-	●
Insertion / withdrawal force	Combo Jack: ≤ 20 N / > 10 N	-	-	-	●	-	-
Cable retention force	≥ 220 N*	●	●	●	-	-	-

## Material

Housing	Polyamide UL94 V-0	-	-	●	●	●	-
	PBTP 20% GR	●	-	-	-	-	-
Insert	Zinc diecast (ZnAl4Cu1)	(8 pole)	●	-	-	-	●
	Polyamide PA 6 30% GR	-	●	-	-	●	●
Contacts	PBTP 20% GR	●	-	●	-	-	-
	Brass (CuZn39Pb3)	●	●	●	-	-	-
	Bronze (CuSn6)	-	-	-	●	●	-
Contact plating	Spring copper	-	●	-	● (UC)	-	●
	4 μm Ag	●	●	●	●	●	●
Locking Element	Zinc diecast (ZnAl4Cu1)	●	●	●	-	-	● (FP)
Chuck	Polyacetal (POM)	●	●	●	-	-	-
Bushing	Polyamide (PA 6 15% GR)	●	●	●	-	-	-

## Environment

Temperature range	-30 °C to +80 °C	●	●	●	●	●	●
Protection class	IP 54 (mated condition)	-	●	-	-	-	●
	IP 50 (8 pole, mated cond.)	-	●	-	-	-	●
Flammability	UL94HB (*: UL94 V-0)	●	●	●*	●	●	●
Finger- Safety	IP2X/IEC 61984	●	●	●	●	●	●
Approvals	UL-Recognized, CSA listed	●	4 pole	●	●	●	4 pole
Solderability	complies with IEC 68-2-20	●	●	●	●	●	●

\*: subject to cable O.D. and material

\*\* : NL4MD-V-S - Rated current per contact: 20A

## Ordering Information Cable Connectors

### SPX Series

NL2FX	2 pole	Cable connector with chuck and blue bushing, intermates with 4 pole chassis connector and makes contact with +1/-1
NL4FX	4 pole	Cable connector with chuck and black bushing
NL4FX-2	4 pole	Cable connector with chuck and red bushing
NL4FX-4	4 pole	Cable connector with chuck and yellow bushing
NL4FX-5	4 pole	Cable connector with chuck and green bushing
NL4FX-9	4 pole	Cable connector with chuck and white bushing
NL4FRX	4 pole	Right-angle cable connector with chuck and black bushing

### FC Series

NL4FC	4 pole	Cable connector with latch lock
NL8FC	8 pole	Cable connector with latch lock

### Adapters

NA4LJX	4/2 pole	Adapter from speakON cable connector to 2 pole 1/4" Jack, wiring: +1 to TIP and -1 to SLEEVE
NL4MMX	4 pole	Lockable coupler to extend two 4 pole cables
NL8MM-BAG	8 pole	Coupler to extend two 8-pole cables, black-chrome metal housing, chuck and bushing

### STX Series

NLT4FXX	4 pole	Female cable connector, nickel metal housing, chuck and bushing
NLT4FXX-BAG	4 pole	Female cable connector, black-chrome metal housing, chuck and bushing
NLT4MXX	4 pole	Male cable connector, nickel metal housing, chuck and bushing
NLT4MXX-BAG	4 pole	Male cable connector, black-chrome metal housing, chuck and bushing
NLT8FX	8 pole	Female cable connector, nickel metal housing, chuck and bushing
NLT8FX-BAG	8 pole	Female cable connector, black-chrome metal housing, chuck and bushing
NLT8MX-BAG	8 pole	Male cable connector, black-chrome metal housing, chuck and bushing

### Accessories



### SPX Series

LCR-*	Colored coding rings for the right-angle version of the SPX Series. Available in blue (Standard), white, red, green and yellow.
LRX	Right-angle speakON conversion kit for changing the straight connector NL4FX into a right-angle version without removing the cable from the insert.
NLRR	Strain relief reduction ring for NL4FX for thin loudspeaker cables with an O.D. of 5 to 8 mm
HTFAC	Hand tool for tightening the bushing of the speakON NL4FC and the powerCON 20A cable connectors.

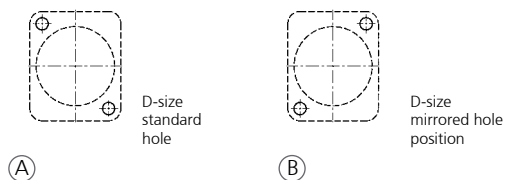
### FC Series

BSL-*	Colored 2 component bushing for NL4FC *: 0 - Black, 1- Brown, 2 - Red, 3 - Orange, 4 - Yellow, 5 - Green, 6 - Blue, 7 - Violet, 8 - Grey, 9 - White; Must be ordered in multiples of 100.
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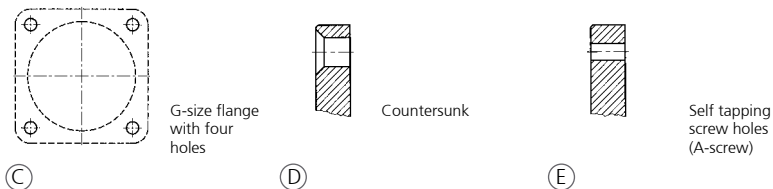


## Ordering Information Chassis Connectors

Flange layout:



Hole layout:



Pole	Flange size	Flange layout	Fastening method	Color	Wiring	Remarks
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### Traditionally

NL2MPXX	2	D-size	A	D	black	3/16" flat tabs*	Does not intermate with 4-pole cable connector
NL2MDXX-H-3	2	D-size	A	E	black	horizontal PCB	Does not intermate with 4-pole cable connector
NL2MDXX-V	2	D-size	A	D	black	vertical PCB	Does not intermate with 4-pole cable connector
NL2MDXX-V-3	2	D-size	A	E	black	vertical PCB	Does not intermate with 4-pole cable connector
NL4MPXX	4	D-size	A	D	black	3/16" flat tabs*	
NL4MPXX-3	4	D-size	A	E	black	3/16" flat tabs*	
NL4MDXX-H-2	4	D-size	B	E	black	horizontal PCB	
NL4MDXX-H-3	4	D-size	A	E	black	horizontal PCB	
NL4MDXX-V	4	D-size	A	D	black	vertical PCB	
NL4MDXX-V-3	4	D-size	A	E	black	vertical PCB	
NL4MDXX-V-2	4	D-size	B	E	black	vertical PCB	
NL4MPXX-ST	4	D-size	A	D	black	screw terminal	
NL4MPXX-UC	4	D-size	A	D	black	1/4" flat tabs*	Ultra high current, up to 40 A rms
NL4MPRXX	4	round G-size flange	C	D	black	3/16" flat tabs*	
NL8MDXX-V	8	square G-size flange	C	D	Ni	vertical PCB	
NL8MDXX-V-BAG	8	square G-size flange	C	D	black chrome	vertical PCB	
NL8MDXX-V-3	8	square G-size flange	C	E	Ni	vertical PCB	
NL8MPRXX	8	square G-size flange	C	D	Ni	3/16" flat tabs*	
NL8MPRXX-BAG	8	square G-size flange	C	D	black chrome	3/16" flat tabs*	

### STX Series

NLT4MPXX	4	square G-size flange	C	D	nickel	1/4" flat tabs*	
NLT4MPXX-BAG	4	square G-size flange	C	D	black chrome	1/4" flat tabs*	
NLT4MDXX-V-3	4	square G-size flange	C	E	nickel	vertical PCB	
NLT4MDXX-V	4	square G-size flange	C	D	nickel	vertical PCB	
NLT4FPXX	4	square G-size flange	C	D	nickel	solder contacts	
NLT4FPXX-BAG	4	square G-size flange	C	D	black chrome	solder contacts	
NLT4FD-V-BAG	4	square G-size flange	C	D	black chrome	vertical PCB	
NLT8MPXX	8	square G-size flange	C	D	nickel	1/4" flat tabs*	
NLT8MPXX-BAG	8	square G-size flange	C	D	black chrome	1/4" flat tabs*	
NLT8FPXX-BAG	8	square G-size flange	C	D	black chrome	solder contacts	

\*: flat tabs to be used with FASTON® connectors or to solder the wire (FASTON® is a trademark of AMP Inc.)



## Ordering Information Chassis Connectors

Pole	Flange size	Flange layout	Fastening method	Color	Wiring	Remarks
<b>Combo Series</b>						
NLJ2MDXX-V	2	D-size	A	E	green	vertical PCB
NLJ2MD-V-1	2	D-size	A	E	grey	vertical PCB
NLJ2MDXX-H	2	D-size	A	E	green	horizontal PCB

## Accessories

						
A-Screw-1-8	E-Screw1-12Ni	E-Screw1-12B	NLFASTON	MFD	NDL	SCL
						
SCDR	SCDX	SCCD-W	SCDP-*			
						
SCNLT	Example: SCNLT + NLT4MP*	NZIP1RU-12				

A-Screw-1-8	Black self tapping PLASTITE** screw 2.9 x 1.05 tri-rondular configuration, 8 mm long, panhead, for rear panel mount (A, AA and speakON Combo)
E-Screw1-12Ni	Nickel self-tapping PLASTITE® countersunk screw 2.9 x 12 for rear panel mount, only suitable for panels with countersunk thru holes
E-Screw1-12B	Black self-tapping PLASTITE® countersunk screw 2.9 x 12 for rear panel mount, only suitable for panels with countersunk thru holes
NLFASTON	FASTON® receptacle for tabs with "positiv lock" for use with NL4MP, NL4MPR, NL8MPR, Pack of 100 pcs.
MFD	M3 mounting frame for D-size chassis
NDL	dummyPLUG for 2 & 4 Pole chassis connector
NZIP1RU-8	Panel 1RU housing with 8 D-shape cutouts
NZIP1RU-12	Panel 1RU housing with 12 D-shape cutouts
SCL	Plastic sealing cover to protect the connectors against dust and moisture
SCDR	Rear end protection cover for D-size chassis connectors
SCDP-*	D-Size sealing gaskets, color coding
SCDX	Hinged cover seals D-size chassis connectors, IP 42 rated
SCCD-W	Spring-loaded cover to seals for D-size chassis Connectors, IP 65 rated
SCNLT	Gasket for NLT4MP
(To make a cabinet with an Amphenol EP cutout airtight, use the rubber sealing which covers the entire hole.)	
(*: 0- black, 2- red, 4- yellow, 5- green, 6- blue, 9- white)	
**PLASTITE® is a registered trademark of SFS Unimarket	

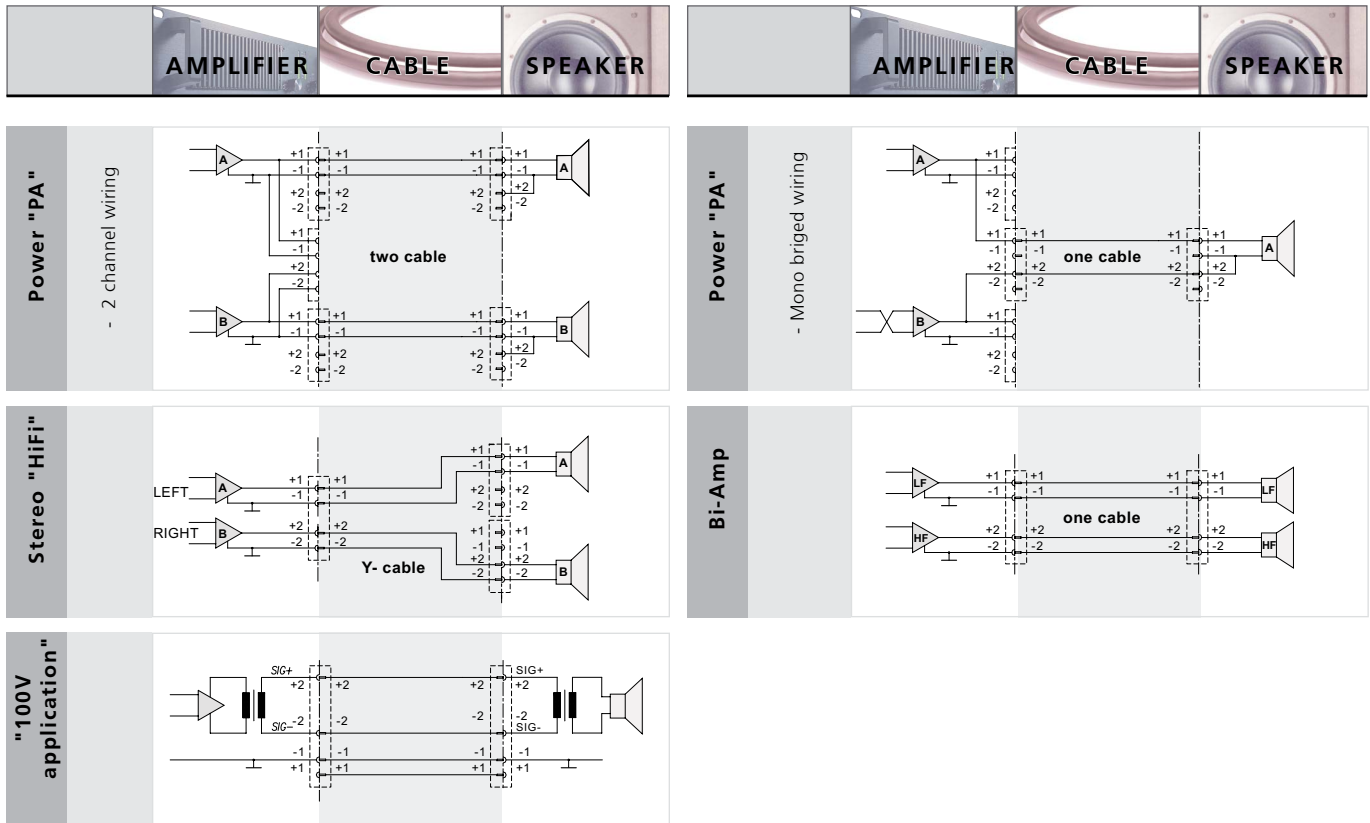


## Wiring Suggestion

Positive signal on speaker pin "+" produces positive waveform from driver (moves cone outwards)

"+" = In phase (high) "-" = Ground (out of phase, low)  
Lower numbers for lower frequencies.

	AMPLIFIER	CABLE	SPEAKER
<b>Stereo ("HiFi")</b>	one NL4MP socket left channel pins 1+/1- right channel pins 2+/2-	NL4FC on amplifier end, four conductor cable splits into two pairs with NL4FX on each end	one NL4MP per speaker left speaker pins 1+/1- right speaker pins 2+/2-
<b>POWER ("PA") Standard</b>	three NL4MP sockets "A" socket: left channel pins 1+/1- "B" socket: right channel pins 1+/1-	a two-conductor cable for each channel with NL4FX on both ends	NL4MP pins 1+ to speaker coil "+" NL4MP pins 1- and 2+ to speaker coil "-"
<b>Bridged mono</b>	"M" socket: left channel pins 1+/1- right channel pins 2+/2-	a special two-conductor cable, on both ends wired to pin 1+/2+ of NL4FX	NL4MP pin 1+ to speaker coil "+" NL4MP pins 1- and 2+ to speaker coil "-"
<b>Bi-Amp</b>	one NL4MP socket low frequency pins 1+/1- high frequency pins 2+/2-	a four-conductor cable on both ends wired to pins 1+/1-, 2+/2- of NL4FX	one NL4MP socket low frequency pins 1+/1- high frequency pins 2+/2-
<b>4 Way System</b>	one NL8MPR socket low frequency pins 1+/1- low mid frequency pins 2+/2- high mid frequency pins 3+/3- high frequency pins 4+/4-	an eight-conductor cable wired on both ends to pins 1+/1-, 2+/2-, 3+/3-, 4+/4- of NL8FC	one NL8MPR socket low frequency pins 1+/1- low mid frequency pins 2+/2- high mid frequency pins 3+/3- high frequency pins 4+/4-





## Definitions, Abbreviations & Useful Information

### ELEMENTS

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

### ALLOYS, PLASTICS, POLYMERS

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

### MEASUREMENT LEGEND

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


### ENGLISH TO METRIC CONVERSIONS



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

### METRIC TO ENGLISH CONVERSIONS

<b>1 centimeter</b>	0.3937	inches
<b>1 meter</b>	39.37	inches
<b>3.281 meter</b>	10	feet
<b>10 meters</b>	32.808	feet
<b>50 meters</b>	164.041	feet
<b>100 meters</b>	328.084	feet

### OTHER ABBREVIATIONS

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

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

**NEUTRIK, crystalCON®, etherCON®, maxCON®, miniCON®, nanoCON®, neutriCON®, opticalCON®, powerCON®, powerCON®TRUE1®, rofi®, rearTWIST®, silentPLUG®, speakON®, TOP®, DiWA®, XIRIUM®, are registered trademarks of Neutrik AG.**

## Neutrik® Part Number Guide

### NC3FAH1-B-0-D

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

Definitions, abbreviations & useful information see page 17.

# Neutrik® Product Line

<p><b>XLR Connectors</b></p>	<p><b>Plugs &amp; Jacks</b></p>	<p><b>SpeakON® Connectors</b></p>	<p><b>Data Connectors</b></p>	<p><b>Circular Connectors</b></p>	<p><b>powerCON® Connectors</b></p>	<p><b>Patch Panels</b></p>	<p><b>Accessories</b></p>	<p><b>Digital Audio Network</b></p>
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