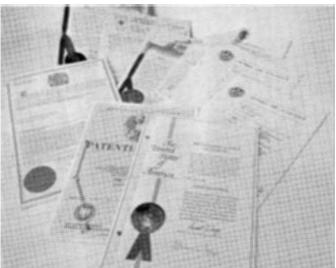


WHO IS NEUTRIK AG?







The company

NEUTRIK was founded in the Principality of Liechtenstein (Swiss Economic Territory) in 1975 by well identified, internationally acknowledged professionals, who had worked for many years in the associated fields of electro-acoustics and precision engineering.

As it has been from the very beginning of the company, the singular goal remains that of deriving optimum solutions to market needs by linking long standing talents and continuing research in these two disciplines: electro-acoustics and precision engineering.

Vitally important to the success of the company and its products around the world, is the assembled team of creative, market responsive, engineers and technicians. Valuable, as well, in the development of NEUTRIK's products is the highly regarded local tradition of expertise in precision-mechanics and the most advanced design and manufacturing technologies.

An outstanding network of representatives around the world has been established, after thorough evaluation, to provide technical support and consulting as well as product and logistic service.

Since its inception, NEUTRIK's international technical reputation has been built upon, and products derived, from some 25 innovative patents granted. As well, many formally documented acceptance standards, issued upon completion of severe and comprehensive test and evaluation programs, by some of the world's foremost audio authorities and OEM users has added to NEUTRIK's worldwide reputation.

The product

- A NEUTRIK product must be innovative and original.
- A NEUTRIK product must be market responsive.
- A NEUTRIK product must give the user better service than one previously used.
- A NEUTRIK product must be exciting.

The quality

- Quality starts with the initial concept and design.
- Maintaining «controlled quality througout the entire process of manufacture» is the essential achievement of customer satisfaction.
- International standards of test and evaluation, quality assurance and quality control, performed in the most comprehensively equipped laboratories form the basis for the recognized quality of NEUTRIK products.
- Every NEUTRIK staff member constantly employs the ideal of Swiss Precision quality, which the World has so grown to respect, and which has been so important in the establishment of customer confidence in NEUTRIK products.

Our goal: To offer you an outstanding product at an attractive price.

NEUTRIK AG



INTRODUCTION

We are pleased to be able to present you with our new catalogue. It contains all our connector products and accessories available as at June 1987 apart from our customized «OEM» items.

This catalogue has been carefully prepared and edited but we can not accept responsibility for any mistakes or errors. We also reserve the right to make any technical alterations and improvements.

General technical data and our international representatives are listed on the fold out of this page.

Our connectors are manufactured with great care in our own facilities, with our own tools and machines and are protected by international patents, trade marks etc. Almost every model incorporates substantial innovations and improvements above the state of the art.

All XLR products are fully compatible with all known brands which are manufactured according to the relevant standards like IEC 268 as well as IEC WG 48B, sec, 114 (draft). We ask you to take special note of our gooseneck kits, our modules, adapters and transformers.

CONTENTS

Page	2	Who is NEUTRIK AG?
Page	3	Contents Fold out: technical data / International partners
Page	4	Cable connectors, male and female
Page	5	Right angle connectors / Mains connectors NLE
Page	6	Chassis connectors Standard «P» und «PP»
Page	7	D-Connectors / panel receptacles for direct PCB-mount
Page	8	Phone plugs and phone jacks
Page	9	Neutricon miniature circular connector system
Page ¹	10	Goosenecks and adapters
Page	11	Modules / Transformers / Cables
Page ¹	12	Neutrik R&D and manufacturing



MALE AND FEMALE CABLE CONNECTORS

X-SERIES

A new worldwide accepted standard – the **smallest** available XLR-cable-connector consists of only 4 parts and eliminates the use of a set screw or crimping during assembly. One piece unbreakable die-cast housing, bellows-style polyurethane flex relief and chuck types snap on cable clamp providing a secure strain relief with maximal cable protection for cables between $2.8 - 8 \text{ mm} \varnothing$. Special versions available:

HEAVY DUTY (HD)-VERSION for hostile environments / S-VERSION with built in ON/OFF switch



MX:

3-pin male cable connector, rear mountable insert, no tool required.

MX-HD:

HD-version: all metal, stainless steel shell (18/8), dust and water proof according to IP65.

MX-TYPE	shell	nickel	black chrome
STANDARD	silver	NC3MX	NC3MX-BAG
STANDARD	gold	—	NC3MX-B
HEAVY DUTY	gold	NC3MX-HD	NC3MX-HD-B

FX:

3-pole female cable connector, one piece unbreakable die-cast housing, damping ring for tight and noiseless fit, steel latch lock with ground contact.

FX-HD:

HD-version: metal strain relief bushing, rubber jacket, dust and water protected according to IP 65 when mated with MX-HD, minimum IP 54 with most other mating connectors or microphones.

FX-S:

Cable connector with integrated ON-OFF rotary switch (OFF: short circuit between contact 2 and 3). Noiseless, easy to operate and to assemble.

FX-TYPE	shell	nickel	black chrome
STANDARD	silver	NC3FX	NC3FX-BAG
STANDARD	gold		NC3FX-B
HEAVY DUTY	silver	NC3FX-HD	—
SWITCH	gold	NC3FX-S	NC3FX-SB

Note:

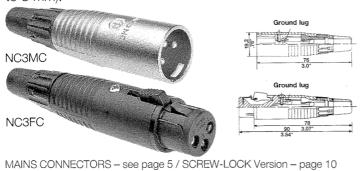
- 4- to 6-pole versions are available from Feb. '88 onwards.
- Coloured sleeves, colours 1÷9 according resistor code. Boxes by 100 pcs.

Order Nr.: BSX 1-9

C-SERIES

More than 15 million of these tried and trusted connectors have been made during the last 10 years. They are simple to disassemble and reassemble without removing the flex-relief. For cables 3,8-7,5 mm \emptyset (0,15"-0,27") (with «grey» chuck up to 8 mm).

shell



		3	4	5	р	
nickel	silver			NC5MC	NC6MC	
black chrome black chrome	5			NC5MC-B NC5MC-BAG	NC6MC-B NC6MC-BAG	
TYPE: FC					-	

shell	contacts	number of contacts			
311611		3	4	5	6
nickel black chrome black chrome	3	NC3FC-B	NC4FC-B	NC5FC-B	NC6FC NC6FC-B NC6FC-BAG





SPECIFICATIONS

General specifications and materials* (XLR and phone plugs)

Mechanical properties

Retention Method:

Wiring:

Cable retention:

soldering or crimping chuck type and sleeve

snap lock

Housing:

Zn Al 4 Cu1, gal Cu / Ni / (Cr)

Contact insert:

PBTPgv (Polyester)

Latch lock:

PA6-6gv (Nylon) CK 60 / St3K32

Cable clamp: Sleeve:

POM (Polyacetal) PU (Polyurethan)

Contacts:

all 3-pole contacts are furnished with

Neutrik-Helitact contacts

Material: CuZn 39 Pb 3, CuSn 8

Contact surface:

gal 3µ Ag

gal 0,5µ Au hard (Galvatronic®) over 5µ Ni. gal. Optalloy®: ternary alloy 55 % Cu,

25 % Sn, 20 % Zn, 650 Hv

Operating temp.:

-30°C - +80°C

Insertion force:

 \leq 20 N

Withdrawal force:

 $\leq 10 \text{ N}$

Electrical properties

number of contacts

5 6

Rated current per

contact:

16

3

7.5 7.5 1,5/16 1,2/18 1,2/18 1,2/18 mm²/AWG

рF

Max. wire size: Capacity between

contacts:

 ≤ 4 ≤ 7 ≤ 7 < 7

Rated voltage:

250 Vac

10

Test voltage:

1500 Vac

Current resistance:

≤ 3m Ohm

Insulation resistance after

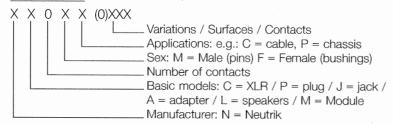
salt spray test IEC 68-2-11:

 $\geq 10^9$ Ohm

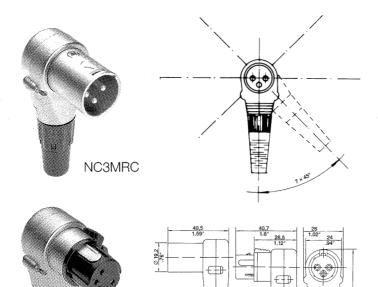
No significant deterioration of all properties after environmental tests according to IEC 68-2-30 Db.

*) Different specifications are quoted at relevant items.

Article-Code:



RIGHT-ANGLE CONNECTORS



Compact very low profile right-angle connectors. $7 \times 45^\circ$ indexing of main body allows highest packing density. Neutrik Chuck Type cable clamp for cables from 3.8 to 7.5 mm \varnothing .

Right-Angle Male: connector insert same as MC-versions

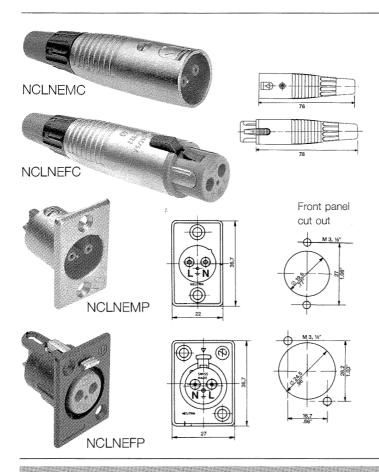
shell	contacts	number of contacts			
SHORE	Contacts	3	4	5	6
nickel black chrome black chrome	silver gold silver	NC3MRC-B		NC5MRC-B	NC6MRC NC6MRC-B NC6MCR-BAG

Right-Angle Female: connector insert same as FC-versions

shell	contacts	number of contacts			
		3	4	5	6
nickel black chrome black chrome	silver gold silver		110 11 110 0	1.1001.110.0	NC6FRC NC6FRC-B NC6FRC-BAG

MAINS CONNECTORS «LNE»

NC5FRC



Extremely robust **lockable** mains connectors for industrial/medical electronics, instrumentation and computer technology, where a fail proof mains connector is of vital importance.

Excellent cable protection, simple assembly and very compact right-angle versions are additional benefits of these connectors.

Electrical data:

Max. wire size

Number of contacts 2P + E (life, neutral, earth) Operating voltage 250 VAC Rated current (20°C) 5 A Test voltage (IEC 65) 4240 V peak to peak Insulation resistance $\geq 10^8$ Ohms (after 48 h, 30°C, 95 % rh) Contacts resistance ≤ 3 m Ohms Flammability UL 94 V-OOperating temperature -40°C - +80°C Cable size 3.8 - 7.5 mm Ø

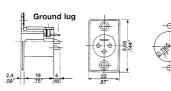
LNE-TYPES	Order Numbers
Cable connector female	NC LNE FC
Cable connector male Angle connector female	NC LNE MC NC LNE FRC
Angle connector male Chassis female	NC LNE MRC NC LNE FP
Chassis remaie Chassis male	NC LINE MP

0.5 mm² (AWG 20)



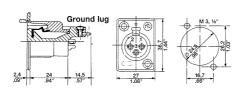
RECEPTACLES, STANDARD: «P», PLASTIC: «PP»





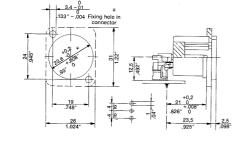
NC6MP-BAG



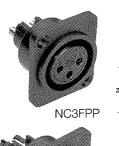


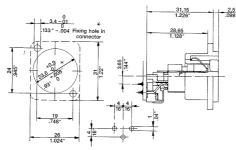


NC3MPP



NC3MPP + PPCB-H







NC3FPP + PPCB-H



PPCB-H

These «classics» are fully compatible with the equivalents from e.g. Cannon, Switchcraft etc., made according accepted standards.

MP:

Male chassis receptacle, all metal, 3-6 poles, shell connected via ground lug.

shell	contacts	number of contacts			
SHEII		3	4	5	6
nickel black chrome black chrome	silver gold silver	NC3MP-B	NC4MP-B		NC6MP NC6MP-B NC6MP-BAG

FP:

Female chassis receptacle, all metal, 3-6 poles, unbendable latchlock, ground contact via soldering lug.

shell	contacte	number of contacts				
shell contacts	3	4	5	6		
nickel black chrome black chrome	silver gold silver			NC5FP NC5FP-B NC5FP-BAG	NC6FP NC6FP-B NC6FP-BAG	

MPP / FPP:

These male and female receptacles are a low cost alternatives to the all metal versions.

They are recommended when a complete RF-protection, demanding mechanical stability and a latching possibility are of minor consideration.

Dimensions of the housings are compatible with «D»-versions, contacts are same as with the «X»-versions.

The female receptacle is furnished with a retention spring which also provides electrical grounding of the mating shell.

PPCB:

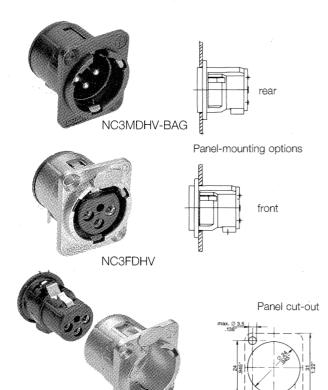
Adapters for printed circuit mount, for vertical and horizontal PCB's, flow solderable, allow a very simple and easy to release connection from the connector to the PCB. The connectors are mounted to the chassis (front or rear), the adapters soldered to the print and both parts pluged together.

chassis male, 3-poles chassis female, 3-poles	NC3MPP NC3FPP
print adapter for vertical prints print adapter for horizontal prints	PPCB-V PPCB-H



«D» RECEPTACLES FOR DIRECT PC-BOARD MOUNTING

The Neutrik D-series, with its new concepts for modern assembly technology has become an internationally accepted and patented standard. In recognition of this Neutrik granted a patent – license to Switchcraft®.

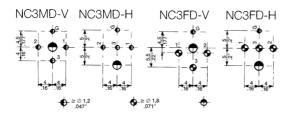


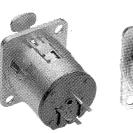
- Insert mounts on printed circuit board, shell mounts on panel
- Insert mates with shell from rear, locked from front without any screws
- Same housing for both male and female versions
- Requires less panel space (26×31 mm). Shell can be mounted from the front or rear of the panel
- No screws or fasteners to take out in order to remove PCB. Makes servicing faster, easier and cheaper
- Connectors may be used to retain the PCB in the chassis without strain to the solder pads
- Complete RF shielding via 3-point coaxial ground contact to shell of mated connector
- Vertical or horizontal mounting versions available
- Locking or non-locking versions available
- New improved metal latch

Version with retention-spring instead of locking latch: suffix $\sim\!-0$ for female version

shell	contacts	print horizontal «H»		print vertical «V»	
SHOII		male	female	male	female
nickel black chrome black chrome	silver gold silver	NC3MDH NC3MDH-B NC3MDH-BAG	NC3FDH-B		NC3FDV NC3FDV-B NC3FDV-BAG

shell	contacts soldering to		ninals «L»	
SHOIL	Contacts	male	female	
nickel black chrome black chrome	silver gold silver	NC3MDL-B	NC3FDL NC3FDL-B NC3FDL-BAG	

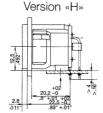




PC Board Layout

Version «V»

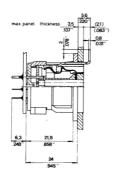


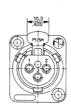




Version «L»

Soldering terminals: conical springs keep wire in position and allow fast and clean soldering



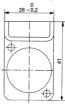


ACCESSORIES:

TYPE DBA
Covering plate for unused cut-outs.



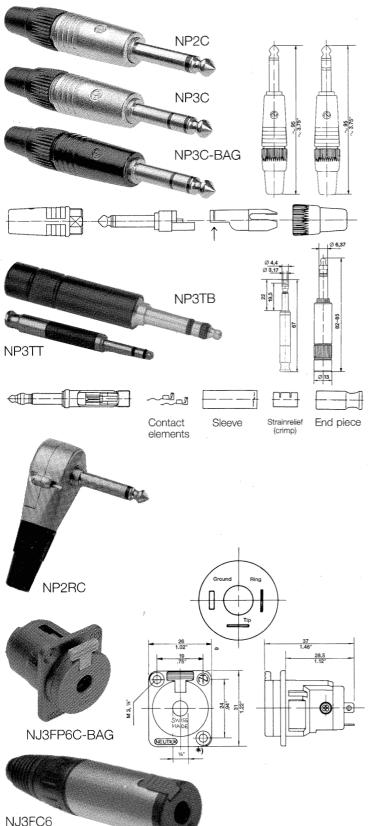
TYPE DSS Lettering plate







PLUGS AND JACKS



PHONE PLUGS

The phone plug originates from the telephone switch board – a very professional descent.

In the Audio industry it somehow degenerated in to a low cost consumer item with invariably very limited quality. Neutrik offers to the Audio world a return to professional standards.

The Neutrik 1/4" phone plug features a shell from die-cast zinc, a one piece, completely machined, sleeve as well as the patented Neutrik chuck-type strain-relief with maximal cable protection. It accepts cables from 2.8–7 mm \varnothing . (0.1"–0.28"). They are available in 2- or 3-pole versions, in heavy duty right-angle version and also in a «B-gauge»-(BPO316-«longframe»)-configuration. The new 4.4 mm «Bantam» miniature plug features a simple and fast assembling technique without the use of screws (crimping or soldering) and an excellent cable strain relief for cables from 3–5 mm \varnothing (0.2"). The design of the «B-gauge» as well as the «Bantam» allows durable hard plating of the contact surfaces and guarantees a drastic increase in durability and corrosion resistance.

shell	contacts	1	1/4"		4.4 mm TT
	Contacts	2-poles	3-poles	3-poles	3-poles
nickel black black red	Ni Ni Optalloy Optalloy	NP2C NP2C-BAG 	NP3C NP3C-B 	 NP3TB-B NP3TB-R	 NP3TT-B NP3TT-R
nickel black	Ni Ni	NP2RC NP2RC-BAG	NP3RC NP3RC-BAG		

NP3TT connectors are also available as sets with parts for 100 units: NP3TT-100: with contacts on strips

Tools:

CR-TT:

semi-automatic crimping machine

HX-TT:

crimping tool for HEX- or indent-crimping of strain

relief.

NP2C-T10: NP2C with built in 1:10 transformer to link a low impedance microphone to a guitar input.

PHONE JACKS

- The first and only professional latching phone jack
- All three contacts spring loaded and insulated
- Die-cast or polyester shells, compatible with D-series XLR connectors
- The locking cable jack allows for the first time a secure «in-line» connection (extension) of phone plug cables, non detachable by any accident.
- Same cable strain relief as with our X-series for max. cable protection
- Mates with all 1/4" 2 or 3 pole phone plugs according EIA RS-453.

version	housing	contacts
VOI 01011	Trodoing	Cu-Be 3µ Silver
Panel Panel Panel Cable Cable	nickel black chrome Polyester nickel black chrome	NJ3FP6C NJ3FP6C-BAG NJ3FP6C-P NJ3FC6C NJ3FC6C-BAG



NEUTRICON®: MINIATURE CIRCULAR CONNECTOR SYSTEM, NEW WATERPROOF VERSIONS

INTRODUCTION

The NEUTRICON modular connector system represents an innovative and economical approach to a broad variety of connector requirements, fulfilling the most demanding standards in terms of reliability and durability as well as offering a practical solution to ease of assembly.

The system consists of only eight (8) components and permits pin arrangements from one (1) to eight (8) contacts in any desirable configuration.

The eight modular system components are:

HOUSINGS, precision crafted zinc-alloy with black-chrome finish a) chassis receptacle housing (RP8) b) cable connector housing (SC8) and c) mating cable connec-

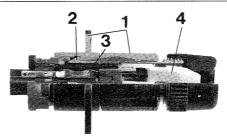
tor housing (MC8). CONTACT CARRIERS in radial (Ri8) and tangential (Ti8) orientation, thereby providing a male and female assembly respectively and either one may be used selectively

any of the three housings.

CONTACT PIN type for either crimp (CC1) or solder (CS1) connection. Easy, snap-in insertion into either one of the two contact carriers, for up to eight (8) contact points. STRAIN RELIEF components, chuck-type cable clamp and bushing (SR8).

The NEUTRICON system incorporates numerous features in terms of 1) contact integrity with self-cleaning action 2) overall system reliability and ruggedness 3) labor and time saving assembly 4) choice of configuration 5) minimum components 6) coding of connectors through choice of contact pin positioning to prevent incorrect

Neutrik's well-established reputation for uncompromising Swiss quality and precision is reflected in each detail of these connectors. They have been designed for professional, industrial and commercial applications — wherever reliability and performance are the foremost requirements.



DESCRIPTIONS

The Beryllium-Bronze contact pins (3) are standard silver or optionally gold plated and are formed to provide a) large contact surface and b) self-cleaning action. The contact pins are available for either crimping or soldering to cable assemblies prior to insertion (snap-in) into the tangential or radial contact carriers.

The radial or tangential contact carriers are coded for proper insertion into the rear of any of the three housings and, after assembly, are held into place by the chuck (4)

and bushing of the cable strain relief, requiring no retention screw.

The self-adjusting strain relief, accommodating cable diameters from 3-7 mm, prevents a) damage to cable sleeve and b) stress on contact assembly. This unique Neutrik innovation has proven itself manyfold in the XLR-series of audio connectors. The precision crafted zinc alloy housings (1) are first copper and nickel plated and then finished with a wear resistant high quality matt-black chrome finish. The connector features a self-activating locking system (2); release can only be accomplished by pulling the cable connector housing.

Contact elements	Carrier	Strain relief	Housings
CS1s soldering	RI8 radial	SR8	SC8 Plug
CC1g crimping	TI8 tangential		MC8 Mating Plug
			RP8 Receptacle

TECHNICAL DATA

Number of Contacts: Contact Arrangement:

contact carrier (RI 8) and

correspondingly into the tangential contact carrier (TI 8) Wiring to Pins: Crimp or solder max. 0.2 mm² (24 AWG) Lead Diameter

Locking System: Self-activating, release via cable connector housing Mechanical Force

(insertion and withdrawal): Cable Diameter: Operating Temperature: Rated Current per contact: Operating Capacitance between

2 adjacent contacts: Rated Voltage per VDE 0110/72 section A: Test voltage:

Contact Resistance: Insulation Resistance, Moisture Test IEC 68-2-3, Ca, 4 Days:

Waterproof version:

1 to 8, selectable Selectable

The selected number of contact pins are arranged into the radial

~30 N max., 8 contacts

3-7 mm -40°C / +90°C

~3 pF

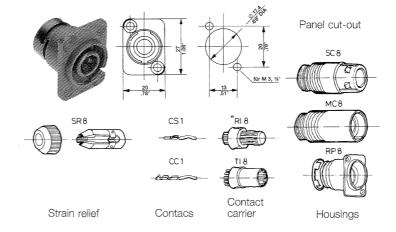
125 V 1,500 V ≤ 3 m ohm

· 108 ohm (SC8 w + SR8 w) IP65

COMPONENT DESCRIPTION

Model #	Description	Material / Plating	Packaged (units)
SR8	Strain relief-chuck & bushing	PA 6,6	
	cable diameter 3-7 mm	POM	10
SR8-w	SR8, waterproof		_
CC1s	Contact pin, crimp, silver	CuBe2, gal. 2,0 µ Ag	100
CC1g	Contact pin, crimp, gold	CuBe2, gal. 0,5 µ Au hart	100
CS1s	Contact pin, solder, silver	CuBe2, gal. 2,0 µ Ag	100
CS1g	Contact pin, solder, gold	CuBe2, gal. 0,5 µ Au hart	100
RI8	Radial contact carrier	PA 6,6 15 % GR	10
TI8	Tangential contact carrier	PA 6,6 15 % GR	10
SC8	Cable connector housing	ZnA14 Cu1, gal. swCr	
	(with locking system)	Ms58 gal. Cr	10
SC8-w	SC8, waterproof		_
MC8	Mating connector housing	ZnA14 Cu1, gal. swCr	10
RP8	Chassis receptacle housing	ZnA14 Cu1, gal. swCr	10
WS	Assembly tool	To insert pins into carrier	1
WM	Jig	Hold pins for proper	1
		assembly to color coded	
		cable leads	
CR-TT	Crimping tool	Crimps cable leads to	1
		pins, semi automatic	







GOOSENECKS AND ADAPTERS

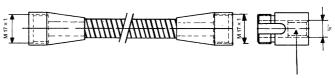


Modular gooseneck sets «GN», «GNS»

- Modular system which allows all conceivable combinations
- Available in three lengths, comes with three adapters
- Stainless steel, non reflective matt black
- No rust, no noise, no fatigue
- A female XLR module with locking ring, tight and theft-proof mounting and securing of microphones

Gooseneck with adapters*) as pictured	
Type GNS 18: L = 180 mm \emptyset = 12 mm (7", .5" DiA) GNS 36: L = 360 mm \emptyset = 13 mm (14", .52" DiA) GNS 50: L = 500 mm \emptyset = 15 mm (20", .6" DiA)	

 $\ensuremath{^{\star}}\xspace$) Standard set includes: gooseneck, female XLR-module, 3 thread adapters - as pictured



Thread adapter M 17×1 - 5/8" female with cable outlet, through hole and mounting facility to panels up to 7 mm thickness.

	Gooseneck without adapters			
Type GN 18: L = 180 mm \emptyset = 12 mm (7", .5" DiA) GN 36: L = 360 mm \emptyset = 13 mm (14", .52" DiA)				
	GN 50: L = 500 mm \emptyset = 15 mm (20", .6" DiA)			

ADAPTERS AND ACCESSORIES

Neutrik adapters are versatile, pre-assembled problem solvers to interlock various connector systems or thread standards.

	FUNCTION		
TYPE	INPUT	OUTPUT	
NA3FF	XLR-female	XLR-female	
NA3MM	XLR-male	XLR-male	
NA3FM	XLR-female	XLR-male	
NA3JM	XLR-male	Locking jack	
NA2FP	XLR-female	2-pol phone plug ●x	
NA3FP	XLR-female	3-pol phone plug ●	
NA3FBNC	XLR-female	BNC-receptacle	
NA3MBNC	XLR-male	BNC-receptacle	
NA2MPMF	XLR-male	Phono-jack ("RCA-type") ●x	
NA2FPMM	XLR-female	Phono-plug ("RCA-type") ●x	
NAM 2	XLR-male	DIN-jack	
NAM 3	XLR-female	DIN-plug (DIN 41524)	
NAM 1	M 17 × 1 ext.	5/8" UNS ext.	
NAM 4	M 17 × 1 ext.	5/8" UNS int.	
NAM 5	3/8" int.	5/8" UNS ext.	

= not pictured

x = wired according IEC 268-12: pin 2: signal, pin 1-3 connected









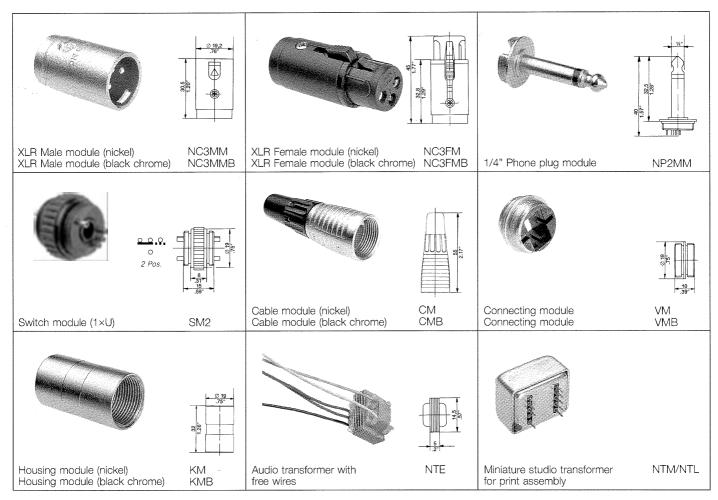
NA3FF

NA3FM

NA3MM

MODULES TRANSFORMERS CABLES

NEUTRIK connector modules let you design new adapters to suit your specific needs. NTE-transformers fit into the VM-module.



NEUTRIK TRANSFORMERS

Top quality audio transformers for multiple applications. Please ask for detailed specifications and design assistance.

TYPE	Colour code	Turns-ratio	Frequency response at 200 Ω source	max. Input level 1 % THD/50 Hz
NTE 1	red 5	1:1	30-20 K ± 0,5 dB	600 mV
NTE 4	yellow	1:4	30-20 K ± 1,0 dB	500 mV
NTE 6	green	1:6	30-20 K ± 1,0 dB	500 mV
NTE 10/3	orange	1:3:10	30-20 K ± 1,0 dB	450 mV
NTM 1		1:1	15-25 K ± 0,5 dB	1,5 V
ITM 4		1:4	15-25 K ± 0,5 dB	1,5 V
NTL 1		1:1	Depends on circuit:	to + 24 dBu (Line)

PATCH CABLE

highly flexible, PVC or «tinsel wire» with fabric jacket

«Bantam-cable», 2 × NP3TT				
Туре	Length	Cable type		
NKTT03 NKTT05 NKTT1 NKTT03T NKTT1T	12" 24" 36" 12" 36"	2 × 0,19, Braided screen 95 %, PVC-jacket 2 × 0,1 + Screen, tinsel wire Fabric jacket		

BPO-cable, 2 × NP3TB			
	Туре	Length	Cable type
	NKTB03 NKTB05 NKTB1 NKTB03T NKTB1T	12" 24" 36" 12" 36"	2 × 0,19, Braided screen 95 %, PVC-jacket 2 × 0,1 + Screen, tinsel wire Fabric jacket

Microphone-, Guitar- and Loudspeaker-cables on application.



RESEARCH, DEVELOPMENT AND PRODUCTION



Neutrik electronic development with the aid of CAD / CAE

The complex circuitry used in our Audiograph 3300 System, can only be developed competitively with the aid of computers at every stage. Our most modern system starts from the components library and finishes with the plotted printed circuit film.



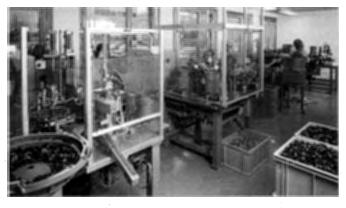
The quality of your Neutrik product is assured in our test laboratory

The Neutrik test laboratory is equiped with the latest equipment and measuring instruments, which enables us to maintain our high standards. An insertion machine, cable pull-bend-machine, shaker, artificial climate cabinet, salt spray chamber, etc., ensure that our products will function perfectly in all conditions.



CAM - Parts production

The turning centre with automatic bar loading, works round the clock. Parts can be changed within 15 minutes.



Fully automated connector assembly

Our Processor controlled assembly robots, have a total capacity of up to 35 000 connector inserts per day. Consistent quality is maintained throughout. One operator can control 5 such machines.

Distributed	by
-------------	----

