LABO * K EFFECTS

CONNECTION KIT FOR NEVE V SERIES PREAMP + EQUALIZER



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INTRODUCTION

This kit allows to interconnect one NEVE V series preamp module and one equalizer module to put them into a Rack.

The kit also allows to connect inputs, outputs and power supply necessary for the use of the set.

The PSU bus system allows to connect up to 8 modules (4 preamp and EQ pairs) rather arranged vertically.

This bus also allows to wire the side chain function of the compressors / gates.

It connects the inputs, outputs and power supply needed to use the unit by minimizing the wiring perform.

Adding an optional High impedance Instrument input is provided to the kit.

The "plug and play" design of this kit is usefull to verify the proper operation of modules before moving on to the racking.

Optional accessories

Labo∗K Effects DI socket	
Connects a high impedance instrument input. (Kit or PCB only)	
Labo∗K Effects Neve V PSU Kit	
Regulated PSU +48V, +/-16V,-15VLogic	
(Kit or PCB only)	
R-Core transformer not supplied	
Labo∗K Effects Mounting clip	
Matching NEVE 51 and V series Allow to fix module on front plate. Matching with Input & Equalizer.	
Labo∗K Effects Neve V Meter section	
To visualize the presence of the signal and the level of the gain reduction of the preamp section dynamics. A LED vumeter indicates the input level of the preamp. (Complete set or PCB only)	

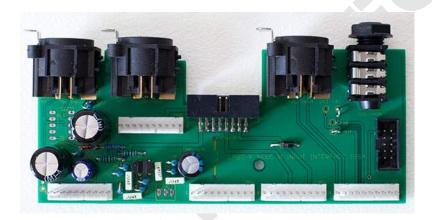
For proper operation of the unit, it is advisable to use modules in good conditions and with coupling capacitors that will have been replaced if necessary.

The poor condition of the capacitors can greatly affect the sound quality or even cut the signal. Similary, one will ensure that the various switches have been cleaned using a contact cleaner spray.

KIT OVERVIEW

One Interconnect board PCB 2 layers plated pads for connecting:

- 1 Preamp/Dynamic module
- Micro, Line and Key inputs
- LED vumeter.
- Signal indicators and gain reduction of the compressor.
- PSU Bus, Dynamic link
- 1 high impedance instrument input
- 1 Equalizer Module



One Interconnect board PCB 2 layers plated pads for connecting:

- 1 Equalizer Module
- Preamp/Dynamic module
- PSU bus.
- 1 +4db balanced output (stage fitted on the PCB)
- Insertion send balanced.
- Insertion return balanced.
- Volume potentiometer

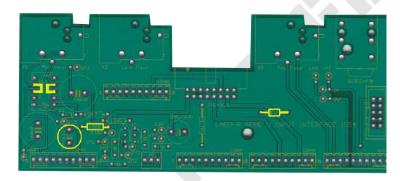


Connectors, components and ribbons.

INPUT INTERFACE BOARD PART LIST

ΙN	Manufacturer part	Description		Mouser reference	
1	Molex 22-23-2101	Molex KK10 connector		538-22-23-2101	
2	3M D2516-5002-AR	IDC 16 connector (PSU-Bus)	1	517-D2516-5002-AR	
3	Neutrik NC3FAHR2	XLR 3P connector	3	568-NC3FAHR2	
4	Neutrik NRJ6HF-1	Stereo Jack connector	1	550-20384	
5	Neutrik NRJ-NUT-B	Plastic nut for item Nr 4		550-1005	
6	Neutrik A-SCREW-1-8	Screw for item Nr 3	6	568-A-SCREW-1-8	
7	Fairchild 1N4002	1N4002 diode (D2)	1	512-1N4002	
8	$\overline{}$	100R resistor	1	660-MF1/4D52R1000F	
9	UPM1J470MPD1TA	47μF/63V capacitor 1 647-UPM1J470MPD		647-UPM1J470MPD1TA	
10	10 The various straps are made using cut resistors legs.				

If the optional high impedance instrument input is not used it will only implement the straps and the following components.



EQ INTERFACE BOARD PART LIST

ΙN	Manufacturer part	Description		Mouser reference
30	Molex 22-23-2101	Molex KK10 connector	4	538-22-23-2101
31	Neutrik NC3MAHR	XLR 3P connector	1	568-NC3MAHR
32	Neutrik NRJ6HF-1	Stereo jack connector	2	550-20384
33	Neutrik NRJ-NUT-B	Nut for item Nr 32	2	550-1005
34	Neutrik A-SCREW-1-8	Screw for item Nr 31	2	568-A-SCREW-1-8
35	Fairchild 1N4002	1N4002 Diode (D2)	1	512-1N4002
36	$\overline{}$	2K7 resistor (R gain)	1	660-MF1/4DC6800F
37	$\overline{}$	1K2 resistor	1	660-MF1/4DCT52R1201F
38	$\overline{}$	10K resistor		660-MF1/4DC1002F
39		18K resistor		660-MF1/4DC1802F
40	DEA1X3A220JC1B	22p ceramic capacitor	1	81-DEA1X3A220JC1B
41	RCER71H104K0K1H3B	100n ceramic capacitor	2	81-RCER71H104K0K1H3B
42	UVP1J100MED	10μF/63V NP capacitor	2	647-UVP1J100MED
43	UPB1A101MDD	100μF/10V capacitor	1	647-UPB1A101MDD
44	SA5534NG	NE5534 (IC1)	1	863-SA5534NG
45	THAT 1646P08-U	THAT1646 (IC2)	1	887-1646P08-U
46	TEC 1571552-2	DIL 08 socket	2	571-1571552-2
47	BI Tech 89WR10KLF	10K trimmer (RV1)	1	858-89WR10KLF

		Optional components		
I N Manufacturer part Description Qnt Mouser ref				
48		10KA Potentiometer	1	

All resistors are 1/4w metal film 1%

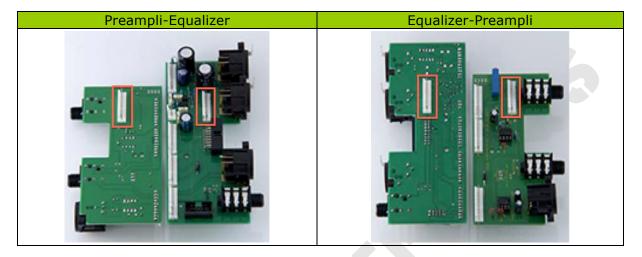
Note

It is possible to use a 10KA Pot (not supplied) to have a fader command on front

ASSEMBLY INSTRUCTIONS

1) Solder components on PCB.

Depending on the position of the preamp and equalizer modules on the front pannel of the rack, you have to implement the connectors 5 (on Preamp card) and 4 (on EQ card) as shown below.



If the high impedance instrument input option is not used, you have to implement the following straps and components.

- 2) Connect the ribbons of preamp and Equalizer modules.
- 3) Bind PSU bus to a regulated power supply +48v, 0V, +16V, -16V et -15V (Logic)

The use of the Labo K Effects Neve V PSU kit is recommended.

The GRP switch on the module can be used as a Mute.

You can link dynamics modules by placing side chain jumpers as shown later.

OUTPUT LEVEL SETTING

It is possible to add an external output volume by implanting a connector (Pot) on the EQ interface board.

If this option is not used, it will implement a strap as shown below.



Output level setting

Inject a 0dBm 1khz sinus signal in Line input.

Plug a dB-meter on preamp output connector.

Set the Neve line gain trimmer on 0dB.

Make shure that filters, equalizer and Dynamics are disabled.

Set fader pot on max if fitted.

Adjust VR1 on the EQ board to read 0dBm on dB meter on output connector.

INTERCONNECTIONS PARTS LIST

ΙN	Manufacturer part	Description	Qnt Mouser reference	
PSU BUS				
49	Molex 22-23-2101	1	538-22-23-2101	
50	Neutrik NC3MAHR	AGW28 10 16 Ribbon 16 way	1 568-NC3MAHR	
EQ / Preamp interconnection				
Use a 10 way ribbon connector taken from the Neve channelstrip				
	-			

PSU BUS PINOUT

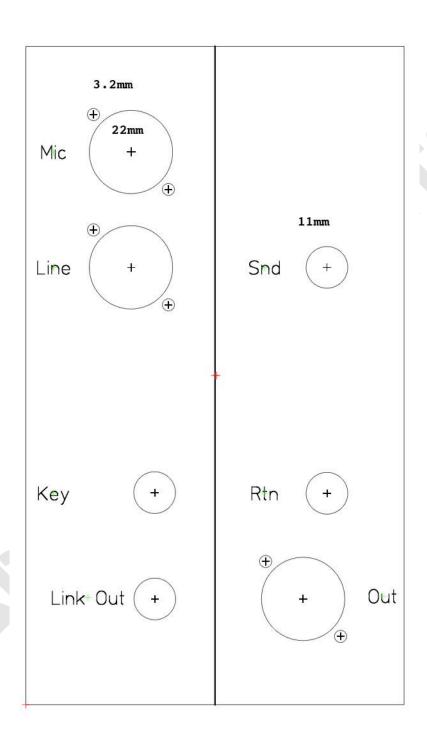
1	+48
2	+48
3	NC
4	0V
5	0V
6	0V
7	+16V
8	+16V
9	+16V
10	+16V
11	-15V
12	-15V
13	-16V
14	-16V
15	Loop Out
16	Loop In

SIDE CHAIN FUNCTION

Implementation of straps and jack connectors for the Side chain function of the compressors on the Input interface board

Linking 2	modules		Linking 3 o	r 4 modules	
LKO LKO SIDECHAIN' SIDECHAIN' OUT'	TKO TKO SIDECHVIN,		ary to cut wire	es 15 and 16 gged into mo	
Module 2	Module 1	Module4	Module3	Module2	Module1
Implementati	on of the Sidechain	connector if	the external I	ink option is	desired
YES	YES	YES	NO	NO	YES

DRILLING TEMPLATE



Legal notice:

Labo*K Effect shall not be responsible and disclaims all liability for any damage (whether direct or consequential) that may result from a wrong use of the kit by the user.