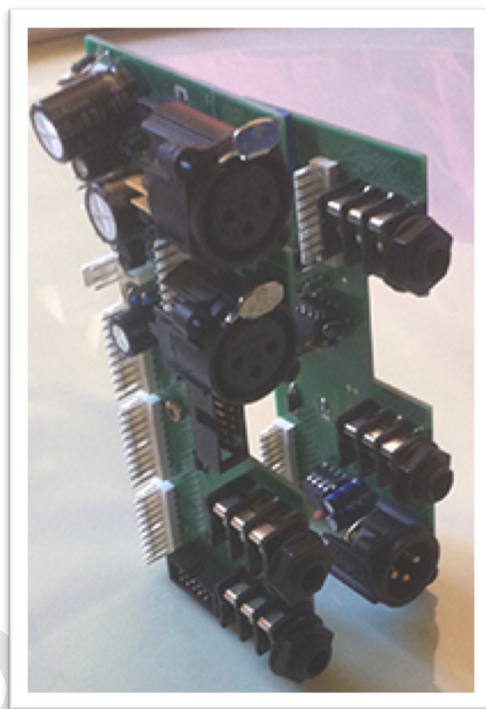


LABO ★ K EFFECTS

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.

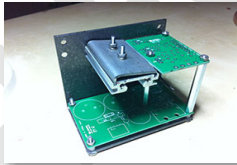
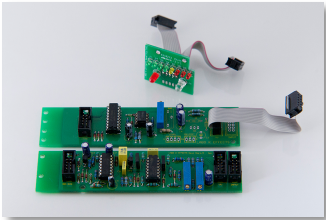
This bus also allows to wire the side chain function of the compressors / gates.

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 Neve V PSU Kit Regulated PSU +48V, +/-16V,-15VLogic (Kit or PCB only) <u>R-Core transformer not supplied</u>	
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)	



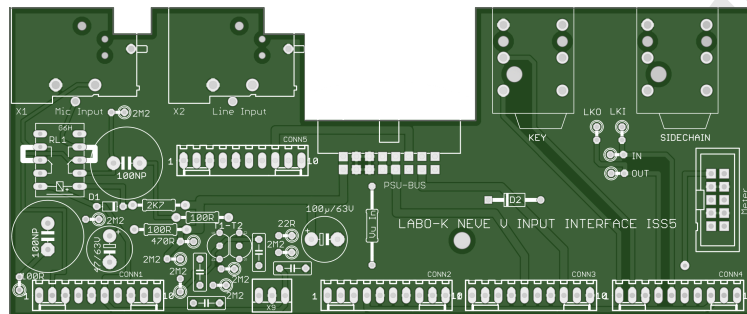
For proper operation of the unit, it is advisable to use modules in good conditions and with coupling capacitors that will have been replaced if necessary.

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. (optional)
- Signal indicators and gain reduction of the compressor. (optional)
- PSU Bus, Dynamic link
- 1 high impedance instrument input
- 1 Equalizer Module

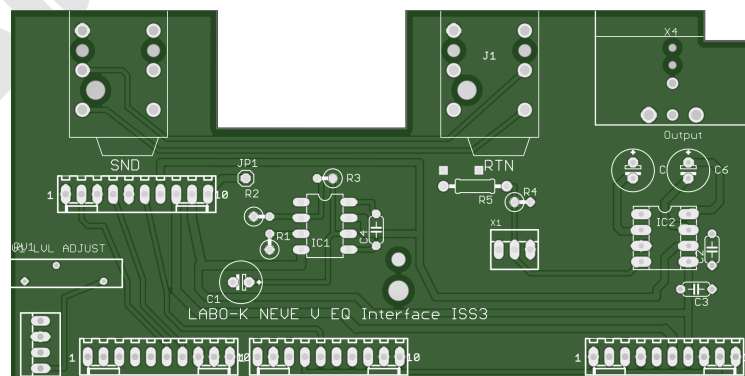


One Interconnect board PCB 2 layers plated pads for connecting:

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

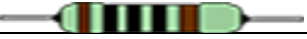
A connector (meter) is used to easily connect the signaling kit using a ribbon cable.

This connector provides the various signals and voltages needed to operate the Meter, Overload and Gain Reduction cards of the Labo K Effects Neve V Meter Section kit.

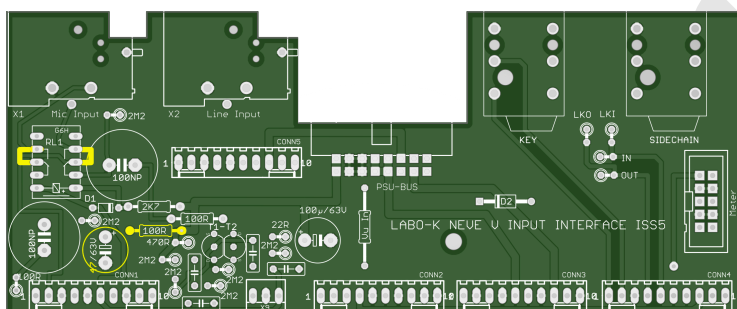


Connectors, components.

INPUT INTERFACE BOARD PART LIST

I N	Manufacturer part	Description	Qnt	Mouser reference
1	Molex 22-23-2101	Molex KK10 connector	5	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	2	568-NC3FAHR2
4	Neutrik NRJ6HF-1	Stereo Jack connector	1	550-20384
5	Neutrik A-SCREW-1-8	Screw for item Nr 3	4	568-A-SCREW-1-8
6		100R resistor	1	660-MF1/4D52R1000F
7	UPM1J470MPD1TA	47 μ F/63V capacitor	1	647-UPM1J470MPD1TA
8	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.



Optional components of the instrument input

I N	Manufacturer part	Description	Qnt	Mouser reference
11	Molex 22-23-2031	Molex KK3 connector (X9)	1	538-22-23-2031
14	Neutrik NRJ6HF-1	Stereo jack connector	1	550-20384
15	Neutrik NRJ-NUT-B	Nut for item Nr 14	1	550-1005
16				
17	Labo K Socket DI	Hiz input PCB	1	
18	Fairchild 1N4148	1N4148 diode (D1)	1	512-1N4148
19		22R resistor	1	660-MF1/4DC22R0F
20		470R resistor	1	660-MF1/4DCT52R4700F
21		100R resistor	2	660-MF1/4D52R1000F
22		2K7 resistor	1	660-MF1/4DC2701F
23		2M2 resistor	7	660-MFS1/2DCT52R2204
24	R82EC3100DQ70J	100n film capacitor	4	80-R82EC3100DQ70J
25	UVY1J101MPD	100 μ F/63V capacitor	1	647-UVY1J101MPD
26	UVP1J101MHD	100 μ F/63V NP capacitor	2	647-UVP1J101MHD
27	TE Connectivity D3026	Low signal relay (RL1)	1	655-D3026
28	Toshiba 2SK170BL	2SK170BL fet transistor (T1,2)	2	www.banzaimusic.com/2SK170BL

Optional components of the signaling section

I N	Manufacturer part	Description	Qnt	Mouser reference
29	3M N2510-6002RB	IDC 10 connector (Meter)	1	517-N2510-6002RB

All resistors are 1/4w metal film 1%

EQ INTERFACE BOARD PART LIST

I N	Item	Description	Qty	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				
34	Neutrik A-SCREW-1-8	Screw for item Nr 31	2	568-A-SCREW-1-8
36	R3	2K7 resistor (R gain)	1	660-MF1/4DC6800F
37	R2	1K2 resistor	1	660-MF1/4DCT52R1201F
38	R4	100K resistor	1	660-MF1/4DC1003F
39	R1	18K resistor	1	660-MF1/4DC1802F
40	C4	22p ceramic capacitor	1	81-DEA1X3A220JC1B
41	C2, C3	100n ceramic capacitor	2	81-RCER71H104K0K1H3B
42	C6, C7	22µF/25V capacitor	2	647-UVF1J100MED
43	C1	100µF/16V 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	Qty	Mouser reference
48		10KA Potentiometer	1	

All resistors are 1/4w metal film 1%

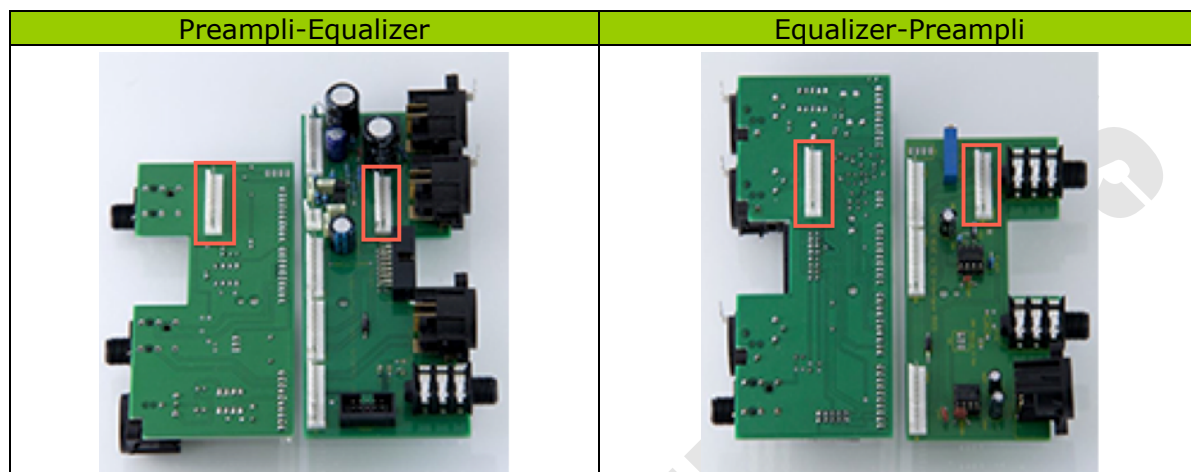
Note

It is possible to use a 10KA Pot (not supplied) to have a fader command on front. In this case do not implant R4

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 and -15V (Logic)

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

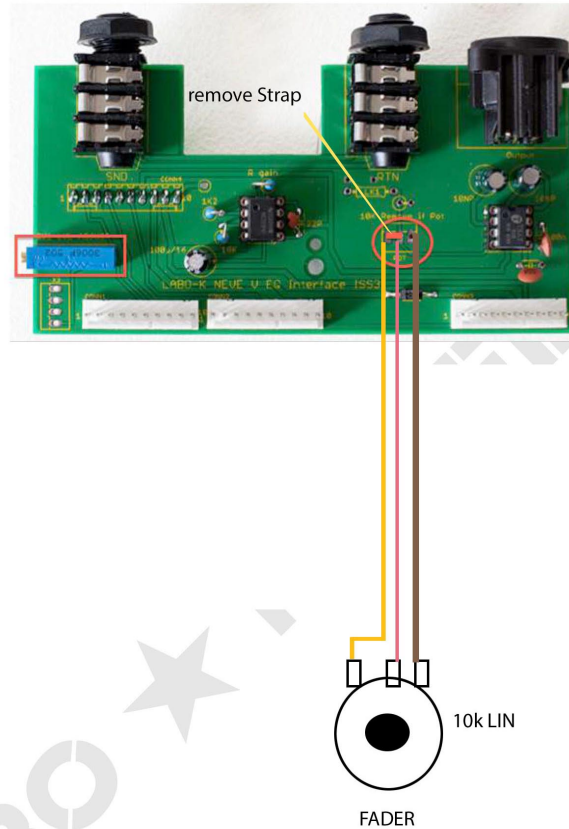
The GRP switch on the module can be used as a Mute.

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 sure 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

I N	Manufacturer part	Description	Qnt	Mouser reference
PSU BUS				
49	Molex 22-23-2101	AWP 16 connector Bus PSU	1	538-22-23-2101
EQ / Preamp interconnection				
Use a 10 way ribbon connector taken from the Neve channelstrip				
Optionnal High impedance instrument input components				
51	Neutrik NRJ6HF-1	Molex KK3F connector	1	550-20384
52		pins	3	

Use shielded mass + 1 pair cable for connection to the DI Preamp Interface

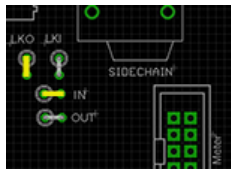
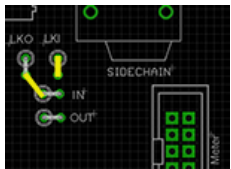
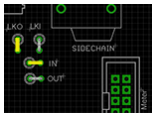
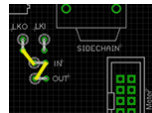
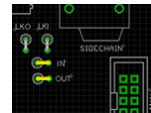
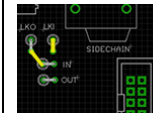
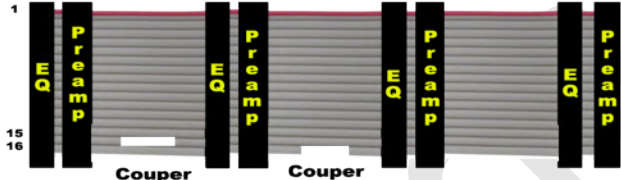


PSU BUS PINOUT

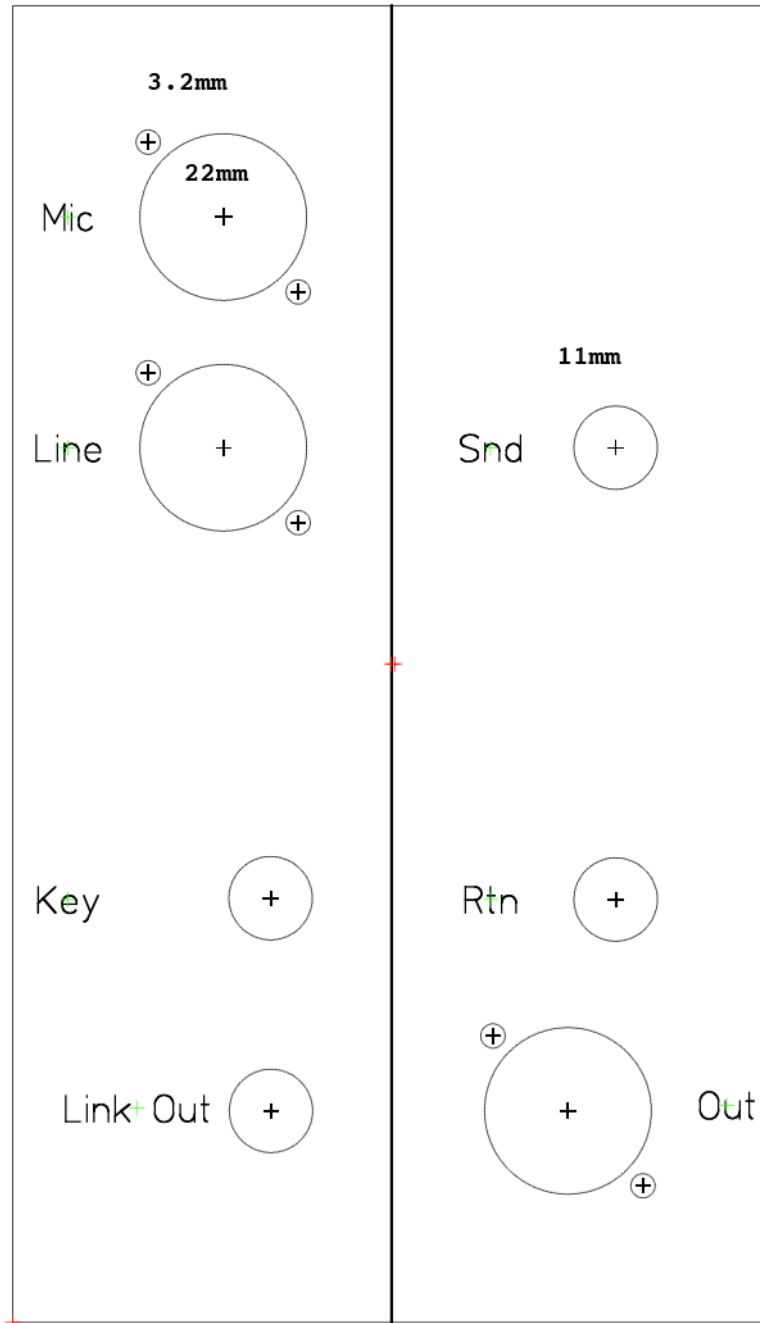
1	+48
2	+48
3	NC
4	0V
5	0V
6	0V
7	+16V
8	+16V
9	+16V
10	+16V
11	-15V
12	-15V
13	-16V
14	-16V
15	Loop Out
16	Loop In

SIDE CHAIN FUNCTION

To activate side chain function of dynamics it is necessary to implant straps as indicated.

Linking 2 modules		Linking 3 or 4 modules			
					
		 It is necessary to cut wires 15 and 16 of ribbon as indicated (Seen back plugged into modules).			
Module 2	Module 1	Module4	Module3	Module2	Module1
Implementation of the Sidechain connector if the external Link option is desired					
YES	YES	YES	NO	NO	YES

DRILLING TEMPLATE



Legal notice:

LaboK 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.