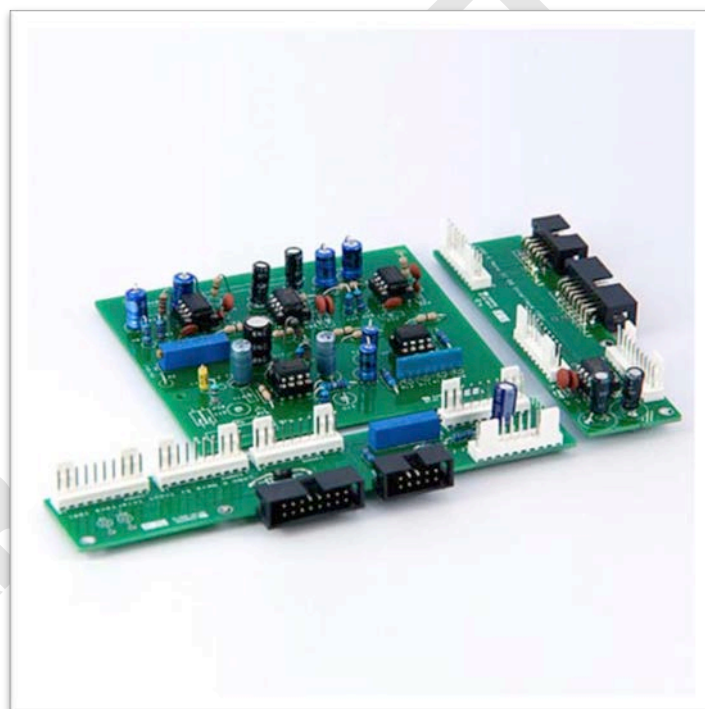


# LABO ★ K EFFECTS

CONNECTION KIT FOR NEVE 51 PREAMPLI+EQUALISER



## CONTENTS

<b>INTRODUCTION</b>	<b>3</b>
<b>KIT OVERVIEW</b>	<b>4</b>
<b>ASSEMBLY INSTRUCTIONS</b>	<b>5</b>
<b>INPUT INTERFACE BOARD PARTS LIST</b>	<b>6</b>
<b>INPUT INTERFACEBOARD CONNECTOR PINOUT</b>	<b>6</b>
<b>EQ INTERFACE BOARD PARTS LIST</b>	<b>7</b>
<b>EQ INTERFACE BOARD CONNECTOR PINOUT</b>	<b>7</b>
<b>PSU BUS PINOUT</b>	<b>8</b>
<b>INSERT OUTPUT BOARD PARTS LIST</b>	<b>9</b>
<b>MOD ON INSERT OUPUT BOARD</b>	<b>10</b>
<b>INTERCONNECTIONS PARTS LIST</b>	<b>11</b>
<b>REPLACING THE NEVE EV10882 BOARD</b>	<b>12</b>
<b>RIBBONS PLACEMENT</b>	<b>13</b>
<b>INPUTS &amp; OUTPUTS CONNECTIONS</b>	<b>13</b>
<b>INPUT INTERFACE BOARD WIRING</b>	<b>14</b>
<b>SIDE CHAIN FUNCTION</b>	<b>14</b>
<b>EQ INTERFACE BOARD WIRING</b>	<b>15</b>
<b>SETTINGS</b>	<b>16</b>

## INTRODUCTION

This kit allows to interconnect one NEVE 51 series preamp module and one equalizer module to put them in 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. You just have to build the adequate ribbon.


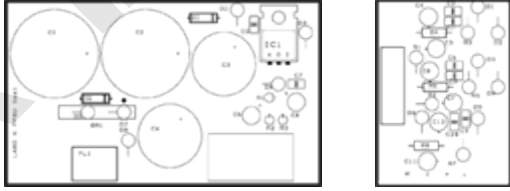


This bus also allows to wire the side chain function of the compressors / gates and the signal indicator threshold bus.

The Patch interface board EV10882 of the EQ module giving the facility of an insertion ligne to an active patchbay and requiring a +25v /-25V psu will be replaced by the Labo K Neve 51 Insert and output board. It will allow to eliminate the +25v /-25v psu on one hand and to have a level control for the ouput stage fitted on EQ interface or for an external output stage on the other hand.

The layout of the Input interface card has been designed to use the switch "OD" (useless) in order to switch the 48V phantom power.

The presence of this power is indicated by the yellow LED on the preamp module

### Optional accessories

<p><b>Labo★K Effects PSU bus adapter</b></p> <p>Allows to connect the psu to the bus via 5 cables (Stuffed or PCB only).</p>	
<p><b>Labo★K Effects Neve 51/V PSU Kit</b></p> <p>Regulated PSU +48V,+/-16V,-15V (Logic) (Kit or PCB only).</p> <p><i>R-Core transformer not supplied.</i></p>	
<p><b>Labo★K Effects Mounting clip</b></p> <p>Matching NEVE 51 and V series Allow to fix module on front plate. Matching with Input &amp; Equaliseur.</p>	
<p><b>Labo★K Effects Neve PSU Metalwork</b></p> <p>Allows to fix pcbs and heat sink. Compact module easy to fix into rack.</p>	



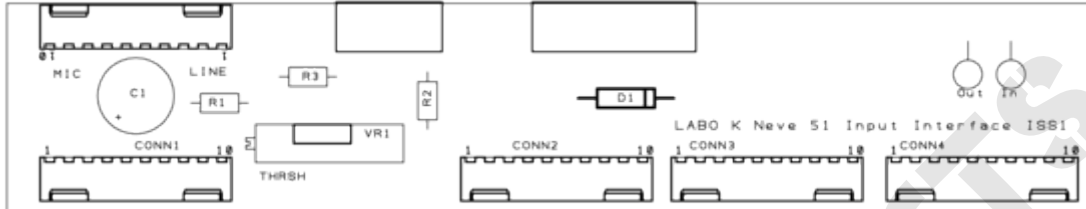
For proper operation of the unit, it is advisable to use modules in good conditions and with coupling capacitors that will have been replaced if necessary.

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

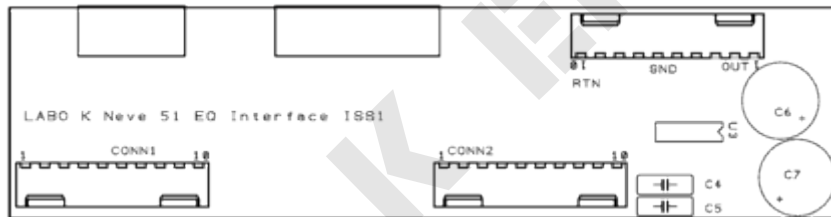
- **1 Interconnect board PCB 2 layers plated pads for connecting:**

- 1 Preamp/Dynamic module
- Micro and Line inputs
- PSU Bus , Dynamic link
- Signal indicator Threshold bus
- 1 Equalizer Module



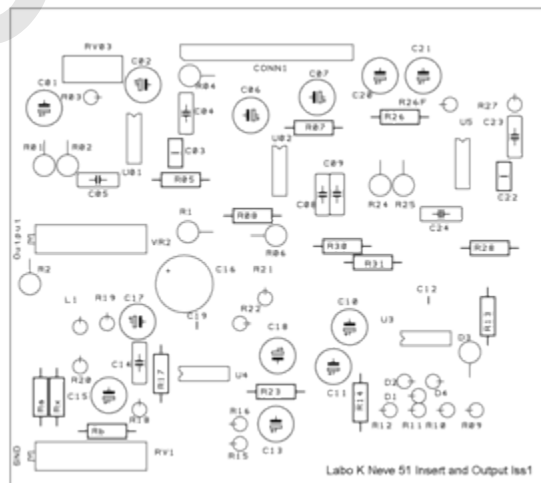
- **1 Interconnect board PCB 2 layers plated pads for connecting:**

- 1 Equalizer module
- PSU Bus
- Signal indicator Threshold bus
- 1 Preamp/Dynamic module
- 1 +4db balanced output ( stage fitted on the PCB )



- **1 single side board PCB to replace the EV10882 board**

- This board contains:
- 1 balanced +4dB SEND output stage.
- 1 balanced RTN input stage.
- 1 adjustable gain buffer for output stage.



- **Connectors, components and ribbons.**

- XLR and Jack Connectors not supplied.

## ASSEMBLY INSTRUCTIONS

- 1) Solder components on PCB.
- 2) Prepare interconnection ribbons
- 3) Unsolder Neve EV10882 board and FSP1 flexstrip.
- 4) Wire the Insert Out board using JMP1 et JMP2 ribbons.
- 5) Bind inputs and outputs connectors to your XLR or stereo Jacks.
- 6) Bind PSU bus to a regulated power supply +48v, 0V, +16V, -16V et -15V (Logic)

**Note about +16V/-16V and -15v PSU:**

Plan 250 mA for each module.

It is possible to use a +16V/-16V psu by connectindg -16V and -15V of the ribbon as indicated on figure 1.

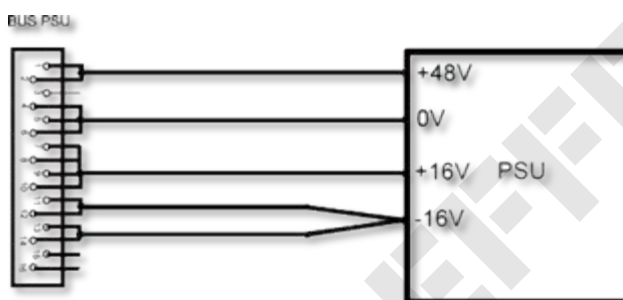


Figure 1

**The OD switch on input module can now be used to activate 48v phantom power.**

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

## INPUT INTERFACE BOARD PARTS LIST

Connector 1, 2, 3, 4, 5	Molex 22-27-2101-10	
Connector 6	3M 2510-6002	
Connector 7	3M 2516-6002	
D1		1N4001-1N4007
R1		100R
R2, R3		10K
VR1 Threshold adjust		1K
C1		47µF/63v
R in (side chain)		0R or strap
R out (side chain)		0R or strap

*All resistors are 1/4w metal film 1%*


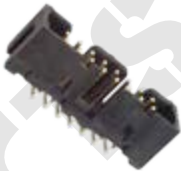



If several preamp modules are fed by the same PSU Bus, R2 R3 et VR1 must be fitted on only one board.

## INPUT INTERFACE BOARD CONNECTOR PINOUT

1	Line in Lo
2	Line in Hi
3	Line in Screen
4	NC
5	NC
6	NC
7	NC
8	Mic in Screen
9	Mic in Hi
10	Mic in Lo

## EQ INTERFACE BOARD PARTS LIST

Connector 1, 2, 3	Molex 22-27-2101-10	
Connector 4	2516-6002	
Connector 5	3M 2510-6002	
C4, C5		100n/50v
C6, C7		10µF/50v NP
U01		THAT 1646
U01 IC socket		Dil 8 IC socket

*All resistors are 1/4w metal film 1%*

## EQ INTERFACE BOARD CONNECTOR PINOUT

1	Out Hi
2	Out Lo
3	Screen
4	Pot viper (Option)
5	Pot send (Option)
6	Insert SND Hi
7	Insert SND Lo
8	Insert Screen
9	Insert RTN Lo
10	Insert RTN Hi

## PSU BUS PINOUT

1	+48V
2	+48V
3	Threshold Bus
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

LABO ★ K EFFECTS

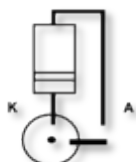


## INSERT OUTPUT BOARD PARTS LIST

<b>Buffer</b>	
R24	18K
R25	1K2
R26, R27, R28, R30, R31	0R0 (or strap)
VR2 Output	5K
C20, C21	100µF/16v
C22	22P
C23, C24	100n/50v
U5	NE 5534
U5 IC socket	Dil 8 IC socket

<b>Insert</b>	
R01	18K
R02	1K2
R03	2K2
R1, R2, R04, R05, R07, R08, R17	0R0 (or strap)
R06, R 21	10K
R09	12K
R10	3K
R11	7K68
R12	2K
R13, R14, R22, R23	51R
R15	270R
R16	470R
R20	33R
C01, C02,	100µF/16v
C13 Not fitted	Replace by a strap
C03, C12, C19	22pF
C04, C05, C08, C09	100nF/50V
C06, C07	10µF/50V NP
C10, C11, C17, C18	22µF/25v
C16	330µF/25v
D1, D2, D3, D4	1N4148
L1	10µH
U01, U3, U4	NE5534
U02	THAT 1646
U01 to U4 IC sockets	Dil 8 IC sockets
<b>RV1, Ra, Rb, Rx, R18, R26F, C14, C15</b>	<b>Are not fitted</b>

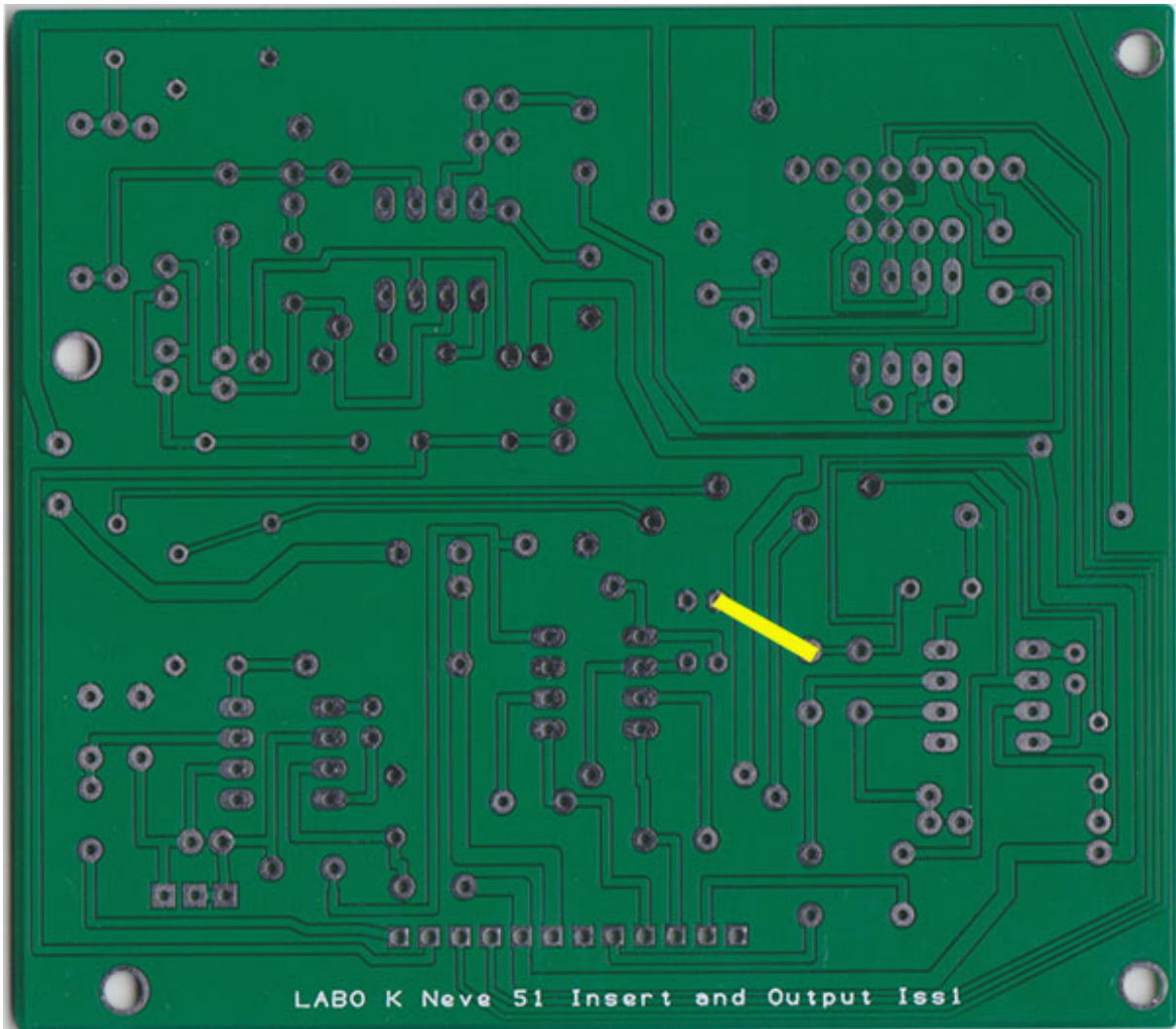
All resistors are 1/4w metal film 1%



Diodes impémentation:


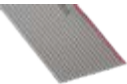
## MOD ON INSERT OUPUT BOARD

After components have been fitted on the board  
A strap is required on the solder side of the board as shown below.






## INTERCONNECTIONS PARTS LIST


### BUS PSU

Input interface board Equalizer interface board PSU	AWP 16 AWP 16 AWP 16	
16 way ribbon	AGW28 10 16	



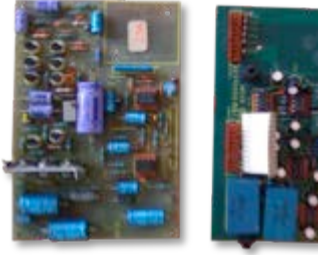


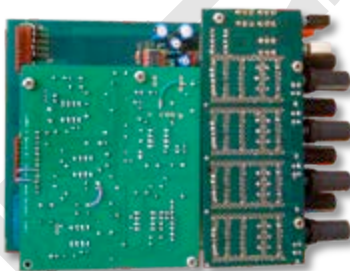
### Dynamic/Equaliseur interconnection

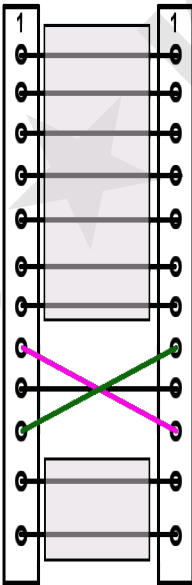
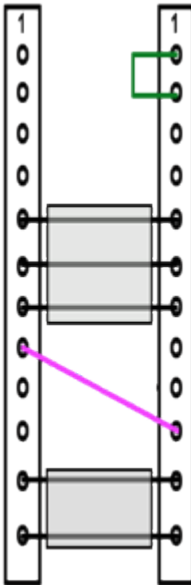
Input interface board	AWP 10	
Equalizer interface board	AWP-10	
10 way ribbon	AGW28 1010	

### EV10880 and Insert Out boards interconnection

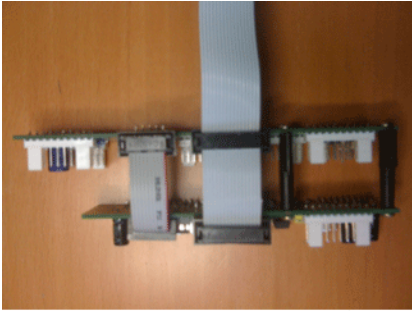

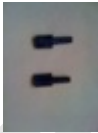
7 way ribbon 2 way ribbon 3 single wires	JMP1 JMP2	
--	--------------	---

## REPLACING THE NEVE EV10882 BOARD





		
Separate 10880 & 10882 boards	Unsolder 10882 board	Unsolder ribbon
		
Solder JMP1 ribbon	Solder JMP2 ribbon	Screw the Insert out board

Standard version		Without insertion	
<p><b>10880 Board</b>                      Solder the 7 ways of JMP1 ribbon                      Solder the way 10 in 8 position                      Solder the way 9 in 9 position                      Solder the way 8 in 10 position                      Solder the 2 ways of JMP2 ribbon in position 11 and 12</p>	<p>Insert Out      10880</p> 	<p><b>Insert out Iss1 board</b>                      Delete 4 ways of JMP1 ribbon                      Delete 2 wires of JMP1 ribbon  <b>10880 board</b>                      Bind pads 1 &amp; 2                      Solder the 3 ways of JMP1 ribbon in position 5, 6, 7                      Solder the 8 wire in position 10                      Solder the 2 ways of JMP2 ribbon in position 11 and 12</p>	<p>Insert Out      10880</p> 

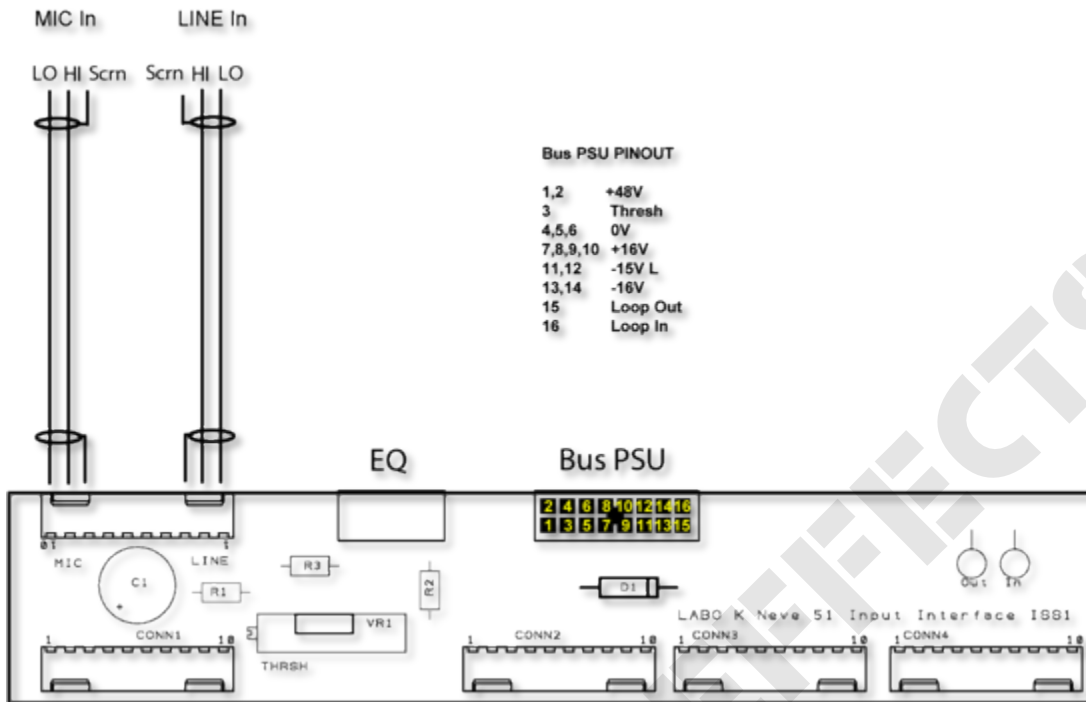
## RIBBONS PLACEMENT

	
<p>In case of vertical mount of the modules it is planned to be able to use 2 small NEVE spacers to assemble 2 boards</p>	

## INPUTS & OUTPUTS CONNECTIONS

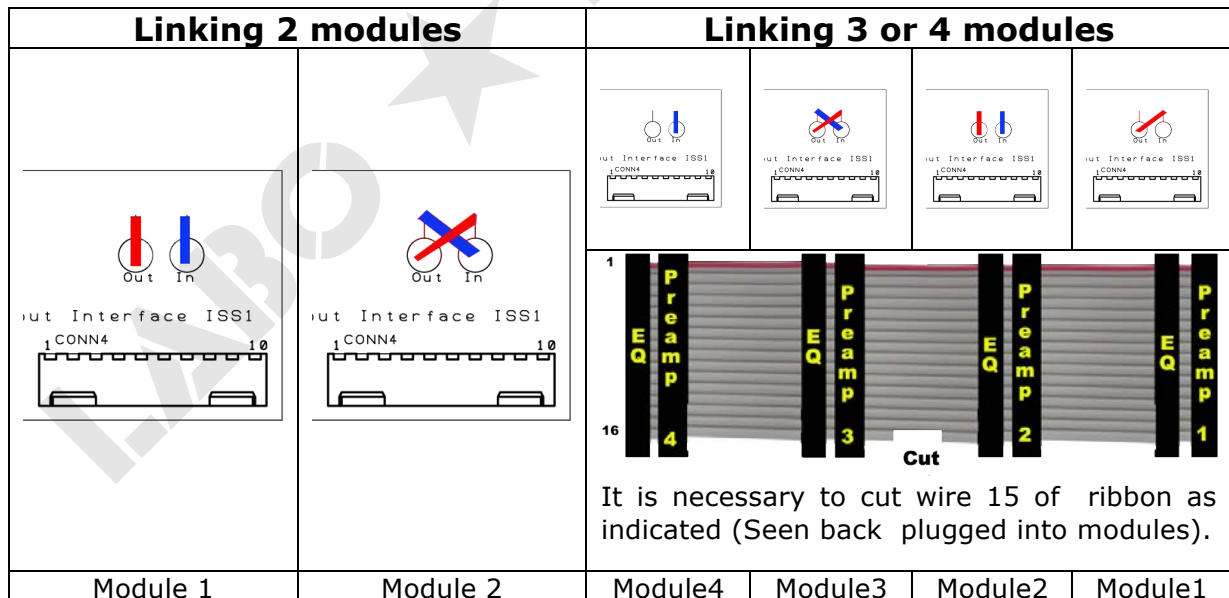
<p>Mic/Line Connector Out Connector</p>	<p>Molex 22-01-2105 Molex 22-01-2105</p>	
<p>16 crimp terminals</p>	<p>Molex 08-50-0005</p>	
		<p>Sample wiring</p>

# INPUT INTERFACE BOARD WIRING



# SIDE CHAIN FUNCTION

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



# EQ INTERFACE BOARD WIRING

## Standard version

Bind 4&5 pins or solder a strap as indicated on figure 2

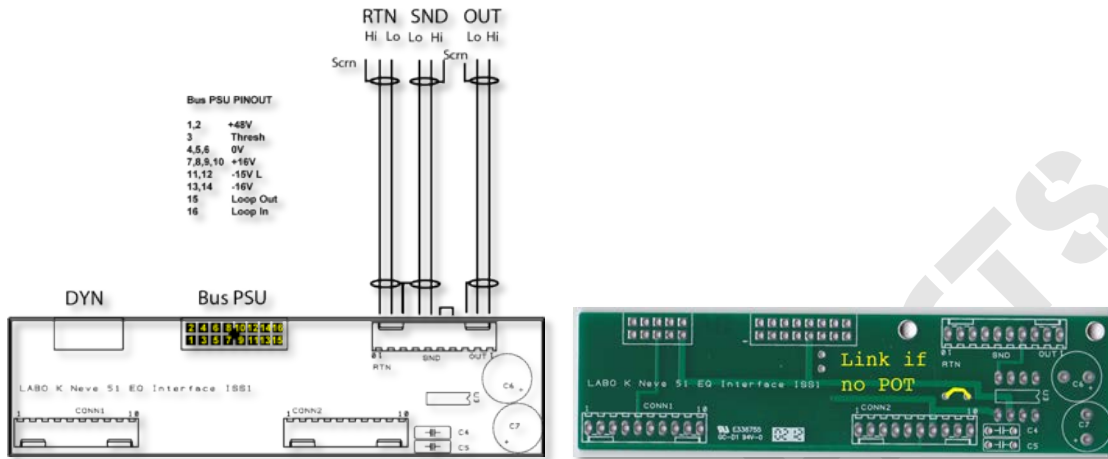


Figure 2

## Volume potentiometer version

Wire potentiometer as indicated on figure 3.

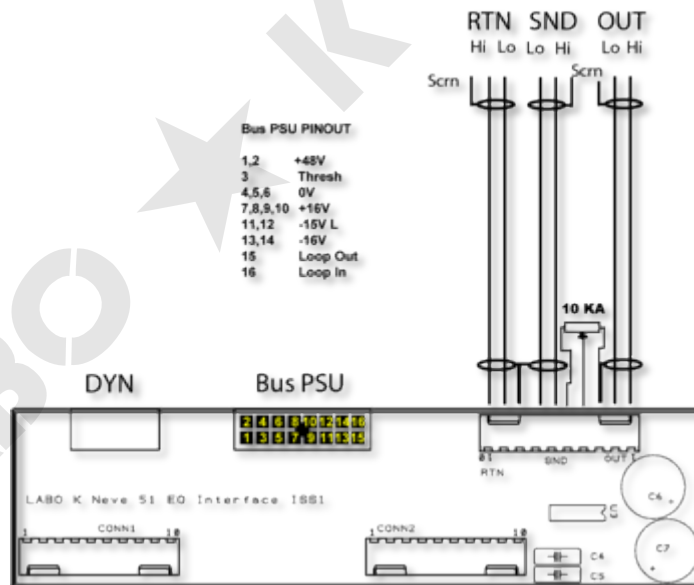


Figure 3

## SETTINGS

### 1) Output level:

- Inject a 0dBm 1kHz sinus signal in Line input.
- Plug a dB-meter on preamp output connector
- Set gain selector on 0dB.
- Make shure that filters, equalizer and Dynamics are disabled.
- Set level pot on max if fitted.
- Adjust VR2 on Insert Out board to read 0dBm on dB meter on output connector.

### 2) Signal indicator threshold:

- For a 0dBm threshold.
- Inject a 0dBm 1kHz sinus signal in Line input.
- Set gain selector on 0dB.
- Adjust VR1 on 51 Input Interface to make the signal led blink

It is possible to choose another threshold of release.  
Just apply the wished level to the input of the module and then adjust the trimmer VR1 as indicated higher.

#### **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.***