

# LABO ★ K EFFECTS

USER MANUAL FOR THE PRE81  
REPLICA OF THE NEVE 8108  
PREAMP IN 500 FORMAT ( ISS 4 )



## OVERVIEW

The PRE 81 is a replica of the preamplifier and sweep filter section of the 34136 console channel of the NEVE 8108 series.

This preamp has a microphone input, a line input and an instrument input.

A gain trim +/- 10dB.

A Micro gain selector (20dB to 80dB in 6dB steps)

A phase inverter and a 48V power supply for condenser microphones.

The filter section has a low-cut filter and a high-cut filter with switchable sweeps.

A potentiometer is used to adjust the output level.

An FET transistor instrument input is switched by a relay when a jack is inserted in the front panel. The signal passes through the Micro input transformer.

It is possible to insert the EQ portion of an adjacent EQ81 module into the preamp path after the filters and before the fader exactly as in the original 8108 channel by pressing the channel (**CH**) button on the EQ. This feature is available when using a link cable or when the modules are used with a **Labo K Effects K551X format** rack.

The **Pre81** module can be powered in +/-16V (API 500 format) or +/-18V in a 51X or K551X format rack. Regulators on the module convert the +/-24V available on 51X and K551X format to +/-18V.

This module is compatible with API500, 51X, VPR, and K551X formats.

### Optional accessories

#### Labo★K Effects K551X rack

Rack system in K551x format with modular backplanes powered by a ribbon cable.



#### EQ81 by Labo★K Effects

Replica of the Neve 8108 Equalizer



## FEATURES AND IMPROVEMENTS

Balanced Microphone and line inputs

The microphone preamp uses a **Belclere TF10015** transformer.

Component values are as in the original.

### **Improvements**

Audio switching is by relay to avoid switch problems.

A 48V switch has been added.

A high impedance instrument input has been added.

The balanced output of the module uses the THAT1646 circuit.

NOTE :

3 Jumpers allow the preamp to be configured according to the desired use.

See the options configuration page.

## USER CONTROLS

**LINE :** Selects the Microphone or Line input

**48 :** Enables 48V power supply for condenser microphones (LED display)

**PH:** Reverse the phase of the signal

**TRIM:** Reduces or increases the gain by +/- 10dB

**MIC GAIN:** selects the gain of the microphone preamplifier (20dB to 80dB)

**FILTRES :** Low-cut and high-cut filters with potentiometer scanning.

**LEVEL:** Output volume (Fader)

In the 500, 51X format, the modules must be connected with the cable supplied.

With the Labo K Effects K551X format rack this function is possible with the addition of a K551X 02-02 backplane.

**INSTRUMENT:** Inserting an instrument jack into this socket disconnects the XLR mic input (via a relay) so that the instrument takes the mic audio path via the preamp input transformer.

## OPTIONS SETTINGS

### Rack use in API500, 551X and VPR format

Jumper **JP1** is placed between pins 2&3 of connector **X3** (Figure 1).  
 The preamp **LINE** switch directs the XLR input from the rack to the Line or Microphone input of the preamp.  
 Jumper **JP3** is in place.



**Figure 1**



**Figure 2**

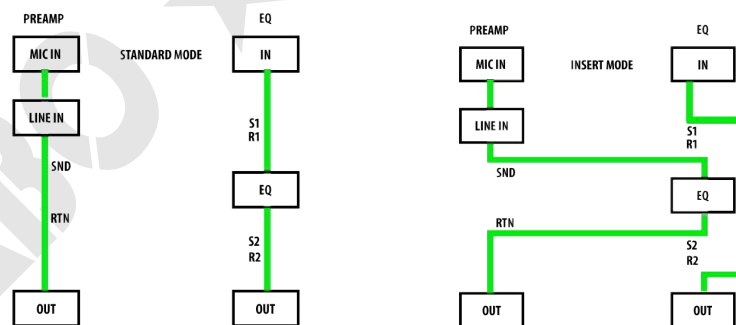
### Use in LABO K EFFECTS K551X format rack

In this mode, the Microphone input and Line input each have an XLR connector.  
 To use this mode, it will be necessary to remove the **JP3** jumper and to place it in **JP2** (Figure 2).

The Microphone input is connected to pins 10(Hi) and 8(Lo)  
 The line input is connected to pins 9(Hi) and 7 (Lo)

### Using the INSERT mode

In this mode the Jumper **JP1** must be removed and the Pre81 must be connected to the EQ81 via an insert link cable. In a K551X rack, jumper JP1 must be placed in JP1.



Insert Link Wire

The wires 2 (Send) and 3 (Receive) are crossed



## CONNECTOR DETAILS

| PIN # | PRE81         |                               |
|-------|---------------|-------------------------------|
|       |               |                               |
| 1     | Chassis       | Chassis                       |
| 2     | OUT +         | Module Hi output              |
| 3     | SND           | Output of the Filter section  |
| 4     | OUT –         | Lo output of the module       |
| 5     | PSU/Audio GND | PSU/Audio GND                 |
| 6     | RECEIVE       | Input to module output stage  |
| 7     | INPUT-(2)     | Module Line Lo input          |
| 8     | INPUT – (+4)  | Module MIC Lo input           |
| 9     | INPUT+(2)     | Module Line Hi input          |
| 10    | INPUT + (+4)  | Module MIC Hi input           |
| 11    | Remote        | Activates the Insert Function |
| 12    | + 16V DC      | + 16V DC                      |
| 13    | PSU/Audio GND | PSU/Audio GND                 |
| 14    | –16V DC       | –16V DC                       |
| 15    | +48V DC       | Phantom power supply          |
| 16    | NC            | NC                            |
| 17    | + 24V DC      | + 24V DC                      |
| 18    | – 24V DC      | –24V DC                       |