

The 2081 Module

Each inline 2081 Channel Module has two independent paths, CHANNEL path and MONITOR path. Multiple inputs can be selected for each path. The Channel path is controlled by a fader, and the Monitor path is controlled by a rotary. The Channel path is normally used to process audio to or from your DAW, and the Monitor path is normally used to listen to the return from your DAW or effects processors.

You will notice that the multiple inputs for the Channel path can be cycled through at the top of the module using INPUT, when no LEDs are active, the input is set to Line. The Channel path output fader is at the bottom of the module, this feeds the Direct Out or the Stereo Bus via the Voltage or Current Summing Bus (switchable using the Retro button). The controls for the Monitor path can also be found at the bottom of the module, just above the Channel Path Fader.

Two stereo and three mono Auxiliary Sends can be sourced from the Channel or Monitor path (pre or post fader) by depressing the level control.

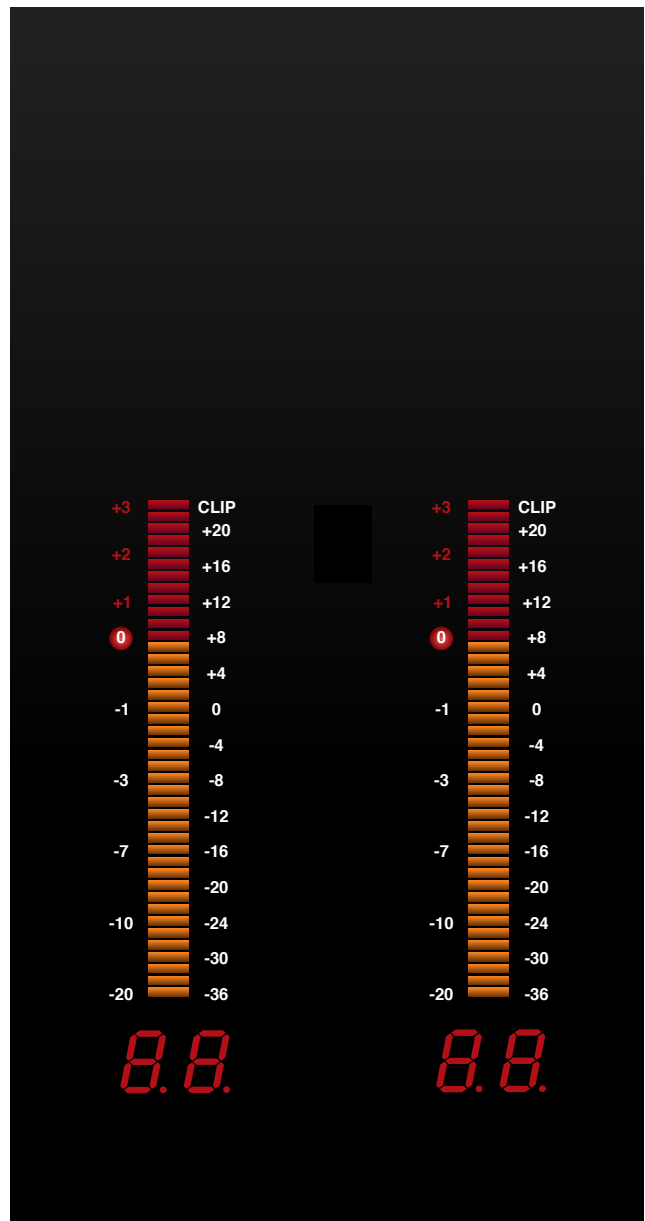
The EQ found on the 2081 Channel Module offers the classic sonic flavour of the 1073, with the functionality of a 1081. The output amp is based on the BA283, single ended, class A circuitry with a gapped core transformer, as used in the 1073 and 2254 Compressor. The recreation of the circuitry sees the same sonic qualities as the original, heralded as eminently 'musical', whilst a far cleaner and quieter signal through the redesign of the BA338 amplifying stage has been achieved.

Signals on the Channel path can be routed to multiple destinations by focusing the Channel in the Assign Section using the Channel Select button. Destinations include the Voltage Summing Bus (Retro), Current Summing Bus (Modern), Main Mix, and Groups.

The following looks at the individual controls of the 2081 Channel Module in great detail. Descriptions of the console's signal flow can be found in the Signal Flow section, and diagrams can be found in the Block Diagrams section.



Meterbridge



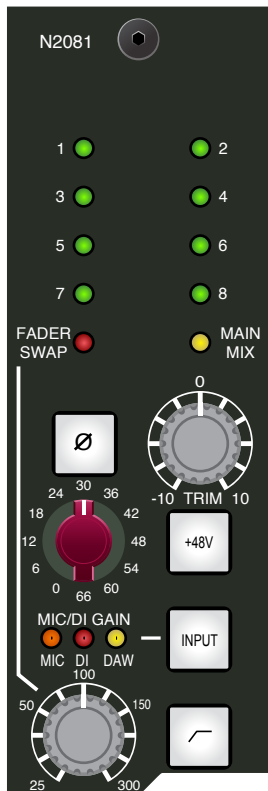
At the top of each module, there is a **Bargraph Meter**. The bargraph meters can display any of the available inputs for the module of which there are four, Mic/Line/DI/DAW (see Channel Meters section for details).

In PPM mode, the top 4 LEDs are brighter to indicate proximity to clipping. In VU mode, the top 8 LEDs are brighter.

The **Channel Number** is indicated by an LED display directly below the bargraph meters. These will light once the console has been powered up.

Labels on the left side of the bargraph indicate VU readings (+4dBu), and the right, PPM (-10dBV).

Input Module



The Input Module hosts the Channel Input Selector, Gain and Trim, Phase, 48V, and High Pass Filter. All buttons are recallable using the console's scenes.

The Input Selector cycles through the four available Channel path inputs. Mic, DI and DAW are indicated by LEDs, when no LEDs are active the Channel input is Line. Once the desired input has been selected, Phantom Power (48V), Gain and Trim controls will adjust the input signal level. The 12 position gain switch (0dB → 60dB) will allow an approximate gain value to be reached. The trim control will adjust the input signal more precisely (-10dB → +10dB).

If required, the Phase control will invert the incoming signal.

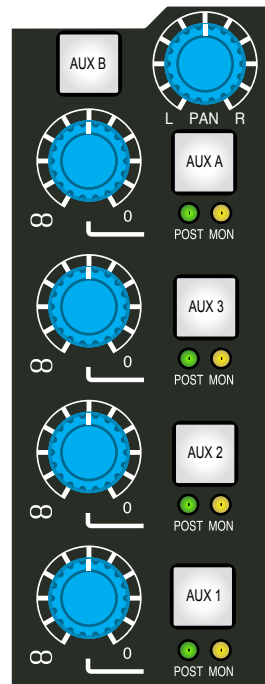
The High Pass Filter with frequency selection allows low frequencies to be rolled off using the continuously variable control between 25Hz and 300Hz (18dB/octave).

The HPF Frequency Selector has dual functionality. When the HPF button is selected it will act as a frequency selector. When depressed the module will engage Fader Swap mode.

Fader Swap will swap the Channel Path Fader with the Monitor Path Rotary. For example, when CH IN is selected in the Console Modes section, the Channel Path Fader would control signals to tape, and the Monitor Path Rotary would control Monitor Mix levels. Note that Fader Swap can also be activated on a selected Channel in the Assign Section, or globally activated across all Channels in the Console Modes section.

Below the Channel Meter are the Channel Path Destination LEDs. These display the destination to which the Channel path output has been routed. Groups 1 - 8 or Main Mix (Direct Outputs are always active). This is just an indication for convenience (see the Assign Section for how to route a Channel to a group). The Fader Swap LED indicates if Fader Swap is active on the Channel.

Auxiliaries



Each module contains two stereo (A & B) and three mono (Aux 1, Aux 2, Aux 3) **Auxiliary Sends**. The order in which Auxiliaries 1 to 3 are accessed is bottom to top respectively. A & B are situated above the three mono sends. All features other than the level controls in the Auxiliary Section are recallable.

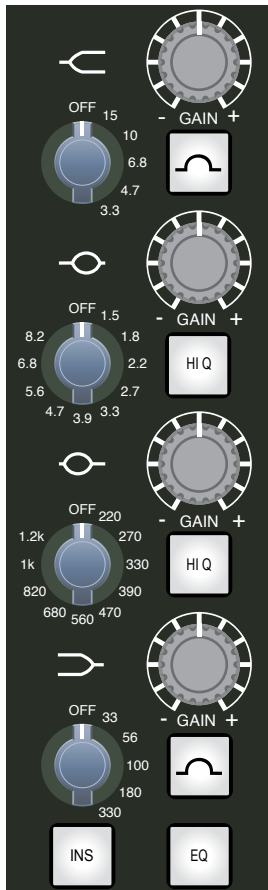
Auxiliary 1, 2 and 3 have individual level controls. **Auxiliary A** and **Auxiliary B** are stereo sends that share a level control. All Auxiliary's default position is pre-fader on the Channel path. When the level controls are depressed, they cycle through the conventional positions in the following order - Channel Pre,

Channel Post, Monitor Pre, Monitor Post.

If desired, Send A and B can be engaged simultaneously. If both sends are active (i.e. for two stereo cue sends), the shared level control will increase/decrease the overall level and the pan will balance the level across the active sends.

Two available stereo cue sends allow the flexibility of Aux A being active on one module, whilst Aux B is active on another.

2081 EQ



Based on the acclaimed 1973 - 1081 EQ. In a recording or mixdown environment the 2081 Channel Module's EQ, blurs the line between circuitry and musicality. In comparison to the original, tweaking the circuitry that controls drive ability and stability versus temperature has resulted in reduced distortion and approximately 9dB more dynamic range. If you are familiar with the original, you will experience far cleaner and quieter output, with that same eminent 'musical' quality.

All buttons are recallable.

Until **EQ** is selected, the circuitry is hard bypassed, i.e., the input is connected directly to the output. Further, each band is hard bypassed until a frequency is selected. This is a new feature not present in the original 1081, resulting in less noise on a signal running through just one or two bands

as opposed to four.

The **2081 EQ** is a four band semi-parametric EQ. Bell curve and Hi Q controls, adjacent to the Frequency Selectors, switch between a narrow/wide Q on the high and low mids, or a narrow Q/shelving EQ on the high and low frequencies.

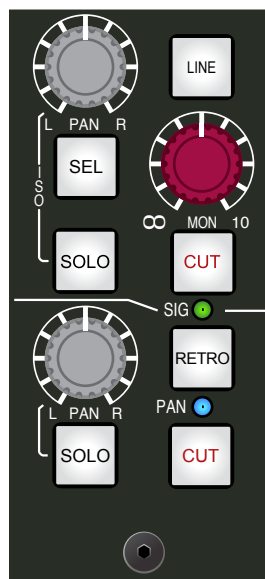
The **Frequency Selector** controls are stepped and select which frequencies will be boost/cut by the continuously variable gain controls. When set to the 12 o'clock position the Frequency Selector is off and the band is in hard bypass.

EQ Ranges:

- » HF - 3.3Khz - 15Khz
- » HM - 1.5Khz - 8.2Khz
- » LM - 220Hz - 1.2Khz
- » LF - 33Hz - 330Hz

The **INS** and **EQ** controls at the bottom of the 2081 EQ, engage the insert and EQ respectively. The insert point defaults post-EQ, pre-fader. If desired, this can be moved pre-EQ by a jumper on the Channel circuit board (for details see Modifications).

Monitor path, Channel Output & Retro



The Monitor path section features a rotary trim control and two selectable inputs, DAW and Line. Line, Retro, Cut, Solo and Solo Isolate are recallable.

The default input for the Monitor path is DAW when CH INPUT is selected, and LINE when MON INPUT is selected in the Console Modes section. Selecting LINE will toggle between these two inputs. DAW is the envisioned return from your chosen multi-track. Line may be a return from external equipment such as effects units. The Signal LED will indicate when the Monitor path is receiving signal.

The Pan control in the Monitor path section is dual function and will Solo Isolate when depressed.

Channel Select (SEL) will Focus the Channel in the Assign Section of the console. From here, the Channel can be routed to the Main Mix or Groups 1 through 8.

The Channel path Pan, Solo (see Solo Modes) and Cut can be accessed directly below the Monitor path section. By default, the Pan knob is inactive. Channel Panning can be activated globally in the Channel Modes section, or individually by selecting the Channel and pressing PAN in the Assign Section. As with the Monitor path, the Pan control in the Channel path has dual functionality and will Solo Isolate when depressed.

The Pan LED indicates if Pan is active on the Channel. Note that panning will only be effective if the Channel is routed to the Main Mix or multiple Groups.

Retro routes the Channel path to the Retro Output Stage, if inactive the Channel path feeds the Modern Output Stage.

Channel Path Fader

The Channel Path Fader feeds the **Direct Out**. The Destination LEDs situated at the top of each Module (below the Channel Path Meters) will indicate whether the Channel Path Output is also routed to one or more of the eight **Groups**, or the **Stereo Bus** (via the Retro or Modern bus) - see the Assign Section for routing details.

