Use a fast **Attack** (0.2mS - 100mS) to catch transients, mid speeds to control the dynamics and slow for buss compression and drums. **Release** (0.05S - 2S) settings should be slow enough not to cause pumping, but fast enough that attenuation triggered by the last note doesn't linger into the next, this can be automated using the **PGM** switch. In addition **Big** & **Air** switches are included that alter the compressor side chain to thicken the low end and add vibrancy to the high end. Above a **Gain Reduction Meter** shows how many dB's the signal has been attenuated by.

A **Saturate** section is located next as part of the compressor stage(see below).

During compression the signal is attenuated so gain may be required to produce the required output level using the **Make Up Gain** (-10 to +20dB) control. The amount of gain required in order to bring the signal level to the same is at input is displayed on the G.R. meter.

A fully hardwired bypass switch toggles the Compressor section to be active or not, and is best used for A/B comparisons, or to remove the compressor stage from the signal path altogether.

SATURATE

The Saturation circuit is located as part of the compressor stage and is used to add distortion and warm to a recording. The **Saturate Level** (0 to 10) sets the amount of Saturation applied to the signal, from very subtle, through to warm and to over-driven.

Two switches effect the **Type** of saturation applied. With both switches inactive the Saturation control operates throughout the entire frequency range, however, this can produce unwanted harshness in the low frequencies and excessive sibilance in the high frequencies - the ⌐ switch when active cuts the low frequencies prior to the saturation stage, thus reducing the harshness of the saturation giving a warmer sound rather than over-distortion to the bass. The same is true of the ¬ switch, it reduces the harshness of the saturation in the high frequencies, with the effect of far less sibilance than may otherwise occur.

The combination of variable Saturation plus the Type switches provide absolute control over the amount of distortion used and allows the engineer to apply either very subtle saturation or to really drive the saturation whilst still having control over the harshness that may occur.

VU METER & OUTPUT

A backlit moving coil **VU Meter** monitors the level of the output signal, this has a **Pad** switch that adjusts it to show either normal output level or, for those working at 'hot' output levels, **VU +10dB**.

The overall EQ/compression/saturation of the signal can be altered using the **Mix** control by adjusting an amount of the original signal (dry) with the EQ/compressed/saturated signal (wet) in an effect similar to 'parallel compression', and, in addition, a single **Fade** (Off to +12dB) control modifies the output. Adjust this to fade out the signal or so that the output signal approaches the desired level only on signal peaks.

Finally a fully balanced hard-wire **Preamp Direct** switch connects the preamplifier directly to the output without passing through the E.Q., the compressor and saturation FET's, or the mix and gain controls at all. Use this to provide an ultra clean microphone signal or to hear the extent of the effects in an A/B comparison.

CONTACTING ***DRAWMER***

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1977

CHANNEL STRIP

QUICK START GUIDE

Congratulations on the purchase of your 1977 Channel Strip. This quick start guide should provide you with the very basics to get you started with integrating the 1977 into your studio. More information can be found by going to the 1977 page on the Drawmer website: **www.drawmer.com**.

DOWNLOAD MANUAL

Obtain the 1977 Operator's Manual at
https://www.drawmer.com/uploads/manuals/1977_operators_manual.pdf
or scan the code to the left using a QR scanner app on your mobile device.

PRODUCT REGISTRATION

Register your 1977 at
https://www.drawmer.com/register.php
or scan the code to the left using a QR scanner app on your mobile device.

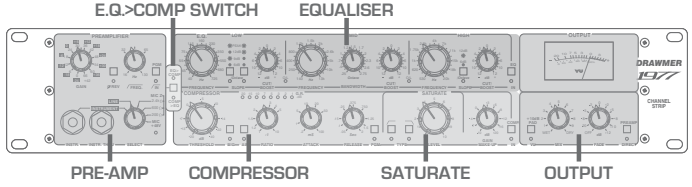
DRAWMER

Layout

Congratulations on the purchase of your Drawmer 1977, our most comprehensive channel strip to date. The 1977 front panel is populated left to right firstly with an ultra clean preamplifier which incorporates mic, line and instrument D.I. with 66dB of stepped gain, and also mic matching via switched impedance that brings out the best of every mic in your studio. In the centre of the panel is an incredibly precise three band parametric equaliser that allows for subtle fine tuning through to signal sculpting, and underneath this a silky smooth soft knee compressor which incorporates our trademark 'Big' and 'Air' features and also the ability to dial in as much warmth as you desire via the 3 types of variable harmonic saturation. A switch swaps the location of the EQ and compressor in the signal path.

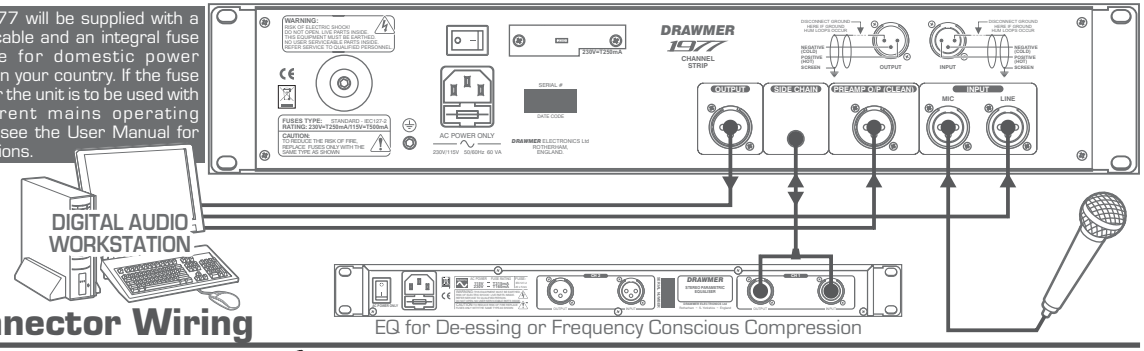
To the right of the unit comes the output section, this includes a wet/dry mix for parallel processing that allows you to easily dial in how much EQ and compression is used via a single knob, plus a fade control and large backlit VU meter to achieve perfect output levels.

The result of all these features is a modern take on vintage gear that gives you an incredible degree of control over the clarity, tone and warmth of your recordings, helping you to capture perfect audio every time.

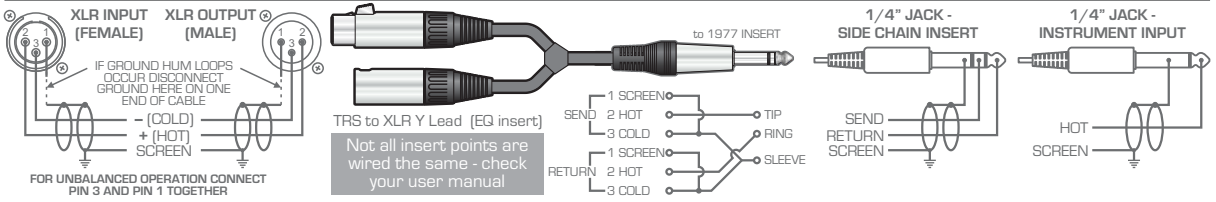


Connection

The 1977 will be supplied with a power cable and an integral fuse suitable for domestic power outlets in your country. If the fuse blows or the unit is to be used with a different mains operating voltage see the User Manual for instructions.



Connector Wiring



Controls

PREAMPLIFIER

The peamplifier section is found on the left of the 1977 front panel. A **Source Select** six position rotary switch not only selects Instrument D.I., Line or Mic sources, but also provides three settings of load impedance at 200, 600 and 2.4k Ohms to aid the matching for a dynamic microphone. In addition, +48V Phantom Power is available to power a condenser microphone. NOTE: DO NOT ACTIVATE THE +48V SETTING UNLESS THE MICROPHONE REQUIRES IT.

An **Instrument Input** is located in the bottom corner via a 1/4" jack, this is excellent for use with both active and passive guitar pickup systems as well as other instruments, such as electronic keyboards, this also has a through output that provides an unaltered instrument signal . Microphone and line inputs are found on the rear via XLR's. A twelve position switch adds **Gain** in 6dB steps from 0dB to +66dB, making it incredibly easy to have total control over levels.

The section also includes a **Phase Reverse** switch that is used should there be polarity issues, and a variable **High Pass Filter** that attenuates the audio between 16 and 130Hz at a slope of 12dB per Octave to remove rumble etc. that can be switched in or out of the signal path.

E.Q.>Comp / Comp>E.Q.

The 1977 has very comprehensive Equaliser and Compressor stages that follow the Gain stage. This switch allows the signal path to either route through the EQ first or the compressor first, as each way creates a distinctly different tonal quality, and colouration depending on the setting.

E.Q.

The 1977 has a fully parametric three band EQ located top centre of the front panel. Each band has fully variable frequency that allows you to sweep and pinpoint specific frequencies (set at LOW, 40Hz to 725Hz, MID, 140Hz to 13kHz and HIGH, 530Hz to 20kHz) and 12dB's of Cut and Boost at the frequencies set within the band. In addition, the MID Band has a fully variable Bandwidth control (0.25 to 2.75 Octaves) that allows you to either tune into problem frequencies at the narrow setting, or make more musical alterations at the wider setting.

In addition the LOW band has a Slope switch that determines how "fast" the signal is attenuated at the Low frequencies, set in dB's per octave, and at 6, 9 and 12dB's plus PEAK. 6dB being more subtle and musical, with 12dB being more "focused" but noticeable. The Peak setting adds a narrow bell shaped boost to the 12dB per octave low band filter at the knee frequency just before it rolls off. Especially useful on kick drums, it magnifies and gives extra weight to the hit whilst still filtering out any subsonic junk.

Similarly the High band also has a Slope switch that attenuates the High frequencies in much the same way as the Low slope, at 6dB or 12dB's per octave.

In between each E.Q. band is an overload LED that illuminates to indicate that the E.Q. section has too much overall gain in total and one, or a combination of the three cut/boost controls should be reduced.

A fully hardwired bypass switch toggles the E.Q. section to be active or not, and is best used for A/B comparisons, or to remove the E.Q. stage from the signal path altogether.

COMPRESSOR

A Compression section is located at the centre bottom of the 1977 front panel with familiar controls such as **Threshold, Ratio, Attack and Release,** plus a **Gain Reduction Meter,** making setup easy & intuitive, as well as an integrated **Saturation** section to add various levels of warmth.

Threshold (-40.0dB to +20dB) determines the input level above which soft knee compression takes place, whilst **Ratio** determines the amount of compression to be used: 1:1 provides no compression, 4:1 moderate & 10:1 is approaching limiting.

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