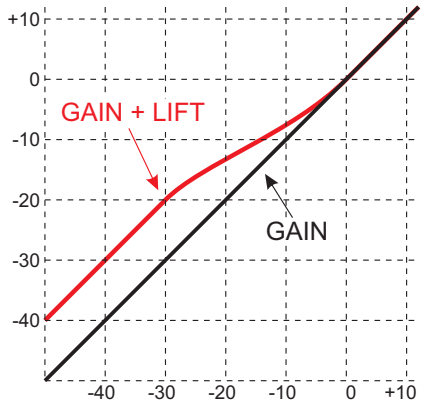
WHAT IS LIFT

LIFT is a single switch solution to recording low signal levels. Developed by Ivor Drawmer it is seamless in it's operation, LIFT is, in essence, a low level dynamic gain module which has no effect on signals above 0dB, but increases gain dynamically on levels between 0dB and -30B, up to a maximum of 10dB, and then continues to add 10dB of gain to signals below -30dB.

You may ask yourself: why would this be necessary? When recording very quiet passages the most common answer to obtain a loud enough recording is to simply add more gain, however, as this occurs throughout the entire audio level range, increasing the loud signals also, clipping and distortion can easily occur. The cleverness of the LIFT switch is that it dynamically increases only the volume of the very quiet signals below the threshold of 0dB, leaving anything above untouched, meaning that no unnecessary clipping occurs during loud passages.



If done crudely the effect would be obvious and unnatural, however the paramaters of the 1972 LIFT feature have been fixed at settings that provide as transparent, smooth and musical quality as possible, whilst making the operation as simple as a single switch press. The feature will find many uses in the studio, radio, TV sound, conferences and public address. It is of great value on piano, drum ambience as well as other types of percussion, and on all vocals including speech. Mic technique is used to compensate for vocal intensity and one can often see singers move closer to the mic during quiet passages. LIFT reduces or even eliminates the need to do this.

Please note that, just like any other gain increase, the noise floor will also be increased by 10dB, and in addition, in a live situation, acoustic feedback is more likely to occur and should be considered during sound check.

CONTACTING *DRAWMER*

We will be pleased to answer all questions to enhance your usage of ***DRAWMER*** equipment.

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1972

DUAL MIC/LINE/INST. PREAMPLIFIER

QUICK START GUIDE

Congratulations on the purchase of your 1972 Dual Mic/Line/Instr. Pre-Amplifier. This quick start guide should provide you with the very basics to get you started with integrating the 1972 into your studio. More information can be found by going to the 1972 page on the Drawmer website: **www.drawmer.com**.

DOWNLOAD MANUAL

Obtain the 1972 Operator's Manual at
https://www.drawmer.com/uploads/manuals/1972_operators_manual.pdf
or scan the code to the left using a QR scanner app on your mobile device.

PRODUCT REGISTRATION

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Features

The 1972 Dual Mic, Line & Instrument Pre-Amplifier has been developed to make it ultra easy for you to capture perfect recordings every time. The 1972 gives you the ability to record pristine audio from a variety of sources and especially makes the most of the multitude of microphones that you find in the studio, from budget to high-end dynamic and also ribbon mics.

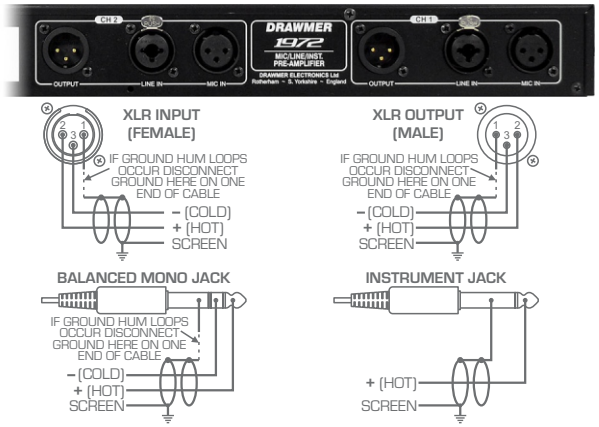
The 1972 uses the latest THAT Corporation technology in the two independent mic preamps to provide ultra clean, transparent and precise recordings, with each channel capable of 66dB of stepped gain, with an additional +/-12dB's trim at the output, and incorporates switchable mic impedance for accurate mic matching to bring out the best from any microphone used, and also provides a way to "sculpt" the sound of passive dynamic, and especially low-impedance ribbon microphones.

As well as standard features that you will find on most preamplifiers, such as phase reverse, the 1972 also has a wealth of tools that help when recording difficult sources, making it possible to get the best quality recording with ease:
Fully variable LoCut and HiCut controls have been included to allow you to tune into recordings and remove superfluous signals in the low and high frequencies, removing rumble and hiss with ease.

In addition the Shape feature allows you to bring out the bass or treble using a subtle tilt EQ.

A unique feature that has been developed by Ivor Drawmer and currently only available on the 1972 is the Lift control. Lift is essentially a low level dynamic gain module which has no effect on signals above 0dB. This makes it possible to record very quiet signals in a transparent and natural way without distortion and clipping taking place on the louder passages, and is especially effective for very dynamic signals, finding great use in recording piano, and on all vocals including speech, and for capturing ambiance.

Connector Wiring



The 1972 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.

Controls

The two channels of the 1972 are completely identical to each other, from the matching connectors on the rear to the identical front panel controls. They are also entirely independent of each other and cannot be linked.

SELECT *Instr./Line/Mic 2.4k,600 & 200 Ohm/Mic +48V*
The source select is a six position rotary switch that, as well as setting the input source, also sets the load impedance of the microphone.
When in the **INST**. position the channel takes its source from the instrument jack found on the front panel, to the right of the switch.
In the **LINE** position the signal comes via the dedicated input XLR on the rear panel. Note that the Line input has an automatic level pad of 24dB.
The remaining four positions all take their source from the dedicated microphone input on the rear panel. The first three positions set the load impedance of 200, 600 and 2.4k Ohms in order to aid the matching for a dynamic microphone.
In the **+48V Phantom Power** switch position the red LED will illuminate to indicate that 48V of d.c. voltage is being sent down the XLR cable to power the electronics of a condenser microphone.
NOTE: DO NOT ACTIVATE THE +48V SETTING UNLESS THE MICROPHONE REQUIRES IT.

INSTRUMENT INPUT
A 1/4" jack provides an instrument input stage suitable for use with active and passive guitars as well as with electronic keyboards.

PHASE REVERSE *Off - On*
Reverses the signal polarity, and is often useful when recording an instrument with more than one microphone, which would cancel each other out partially, resulting in a very thin sound. Reversing the phase of one channel would rectify this.

INPUT GAIN *0 - +66dB*
A twelve position switch adds gain in 6dB steps from 0dB to +66dB, giving total control and easy repetition. Set the level for any given source to 0dBs to provide the best volume, a LED Meter above, with settings of -20, -10, 0 & +10dBs displays this input level. This can be fine tuned later by the O/P Trim.

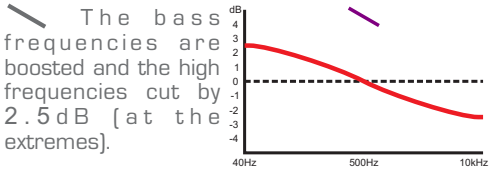
Off - On
A variable high and low pass filter can be switched in and out of the signal path via this switch. The two filters combine to help remove any extraneous noise and tune in to the required signal.

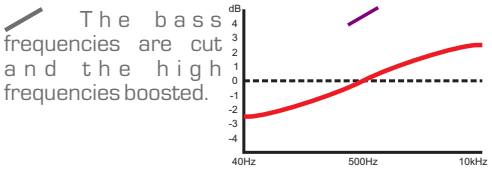
LoCUT *15 - 350Hz*
The variable high-pass filter (aka Low Cut) is used to attenuate low frequency signals that might otherwise prove troublesome, eg. traffic rumble or stage vibration, and let the higher frequencies pass.

HiCUT *1.5 - 20kHz*
The variable low-pass filter (aka High Cut) is used to attenuate high frequency signals that might not be required eg. sibilance and hiss, and let the lower frequencies pass.

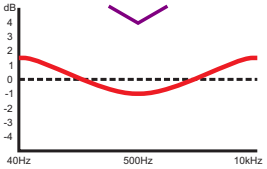
LIFT
LIFT is a single switch solution to recording low signal levels. It has no effect on signal levels above 0dB but increases gain dynamically on lower levels allowing you to capture audio that would not normally be recorded, or would require more sensitive microphones. (see rear).

SHAPE
The Shape feature is a fixed tilt equaliser whereby the signal increases and decreases by the same amount around a fixed frequency (500Hz), allowing for subtle Cut/Boost to shape the audio.





However, note that when both switches are active they interact with each other and provide a classic "smiley face" EQ curve that will boost the low and high frequencies by approximately 1.5dBs, with a slight cut in the mids of 1dB.



OUTPUT TRIM *-12dB - +12dB*
Because the Input Gain switches the volume in 6dB steps the Output Trim, being a continuous control, is used to finely adjust the output to the absolute desired level. With this combination a maximum of 72dBs of gain is achievable

VU METER
A backlit moving coil VU meter displays the level of the output signal as found at the output XLR.

+10dB Pad *VU - +10dB*
Adjusts the meter to show either normal output level, (and for those working at 'hot' output levels) VU +10dB i.e. with the switch at VU +10dB, when the VU meter reads 0dB the actual level is +10dB.