

**SAFETY GUIDELINES**

**CAUTION:** To reduce the risk of electrical shock, do not remove the cover. Do not expose this appliance to rain or moisture. There are no user-serviceable parts inside. Please refer servicing to qualified personnel only.

**Keep These Instructions:** Please retain all safety and operating instructions for future reference.

**Heat:** This product should be situated away from other heat sources such as fire, high heat emitting devices, heaters, etc.

**Grounding and Polarization:** Never defeat the product’s power grounding means.

**Power-Cord Protection:** Power supply cords should not be connected or placed in a fashion that could allow possible exposure to damage. Take care to avoid wear and tear, rubbing, squashing, etc.

**Cleaning:** The product should be cleaned only with a soft cloth. Do not use any harsh chemicals or corrosive products on the unit.

**Inactivity:** The power cord of the product should be unplugged from the outlet when left unused for a long period of time.

**Service requirement:** Service should be performed only by qualified service personnel. The user should not attempt to service this product.

**INTRODUCTION**

Congratulations on your purchase of the MXL MPAC-01! This state-of-the-art microphone preamp/compressor is designed for today’s recording equipment and will enhance your recordings by adding rich, tonal quality and precise signal control. The MXL MPAC-01 is a single-channel preamp, meaning it operates with one microphone. Before you get started, please take a moment to read through this manual so you can make the most out of your new purchase.

**What Does A Mic Preamp Do?**

A preamp is a critical component in the signal chain of any recording system. In a typical recording set up, your preamp/compressor will connect to a mixer, an A/D converter, computer audio interface, or a recording device. Microphones output a low-level signal that is not strong enough to record without some kind of amplification. This is where your preamp comes in by adding gain (or volume) to the low-level signal (called a “mic-level” signal). Once the preamplifier (or “pre”) boosts the mic-level signal, it can be sent to your recording device.

**What Does A Compressor Do?**

Also an important tool in audio engineering, a compressor is an audio circuit that automatically adjusts or “compresses” the audio signal level for a more consistent dynamic range. A compressor accomplishes this by decreasing the volume when the source is louder than a set threshold.

**INSTALLATION**

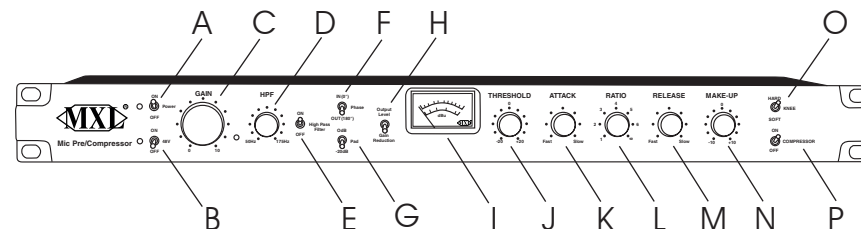
The package includes the MXL MPAC-01 preamp/compressor, power supply and this manual. Carefully examine the packaging for any signs of physical damage, which may have occurred in transit. If the unit is damaged, contact the retailer where you purchased the unit.

The MXL MPAC-01 is a standard 1RU rack-mount sized unit that can be rack-mounted or placed on a desk or other working surface.

**MAIN POWER**

The MXL MPAC-01 comes with an external power supply. Connect the power supply to the main power input located on the rear of the unit. Only use the power supply included with the product. If you lose or damage the power supply, contact MXL to inquire about replacing the power supply.

**FRONT PANEL**



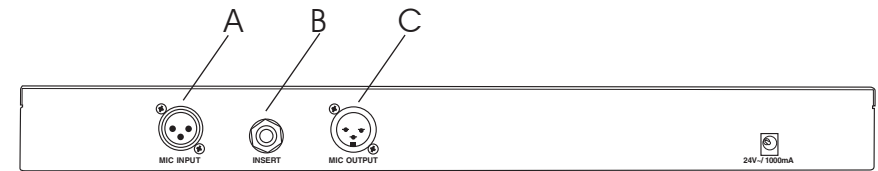
**A. On/Off Switch:** When the power is turned on, the power indicator LED will illuminate.

**B. On/Off 48V:** The MXL MPAC-01 supplies +48V DC phantom power for condenser and active dynamic/ribbon mics. Consult your microphone’s user manual to see if phantom power is needed to power it. It’s best to have phantom power turned off when connecting microphones to the MXL MPAC-01. Be sure to turn down or mute the output when engaging or disengaging phantom power.

**C. Gain Control Knob:** Use the Gain control knob to set volume. The gain range is infinity to 60dB. Full counterclockwise is the minimum gain position; full clockwise is maximum gain.

- D. HPF Knob:** A High Pass Filter is designed to let high frequencies pass while attenuating lower frequencies. Use this control knob to minimize unwanted low frequency sounds. The cut-off frequency is variable from 50Hz to 175Hz with a set slope of 12dB/octave.
- E. High Pass Filter On/Off:** Engage or disengage the high pass filter.
- F. Phase Switch:** In (0°) – Out (180°): The Phase switch allows you to invert the polarity of the microphone input signal 180°.
- G. Pad Switch:** Use this switch to attenuate or reduce the microphone’s input signal by 20dB.
- H. Output Level/Gain Reduction Switch:** The meter on the front of the Preamp/Compressor can display either the output level or the amount of gain reduction when the compressor is engaged.
- I. dBu Meter:** This meter shows the output level from -5 to 22dBu and the amount of gain reduction from 0-24dBu.
- J. Threshold Control Knob:** The threshold control sets the point at which the compressor circuit will act on the input signal. When the input goes above the threshold, the signal will be reduced. Turning this control counterclockwise lowers the threshold. Turning this control clockwise raises the threshold.
- K. Attack Control Knob:** This knob controls the length of time it takes for the compressor to reduce the volume to the level set by the compression ratio. Turning the knob counterclockwise will make the compressor react faster and turning the knob clockwise will slow down the reaction time.
- L. Ratio Control Knob:** Determines the input/output ratio for signals above the threshold.
- M. Release Control Knob:** Determines how long it takes for the sound to return to the normal output level after the input signal has returned below the threshold.
- N. Make-up Control Knob:** This knob sets the output volume of the compressed signal. Since compressing a signal makes it quieter, use the Make-up Control Knob to restore the signal to its original volume.
- O. Knee - Hard/Soft:** This switch will control whether the bend in the response curve is a sharp angle or has a rounded edge.
- P. Compressor On/Off:** Bypasses the compressor.

**BACK PANEL**



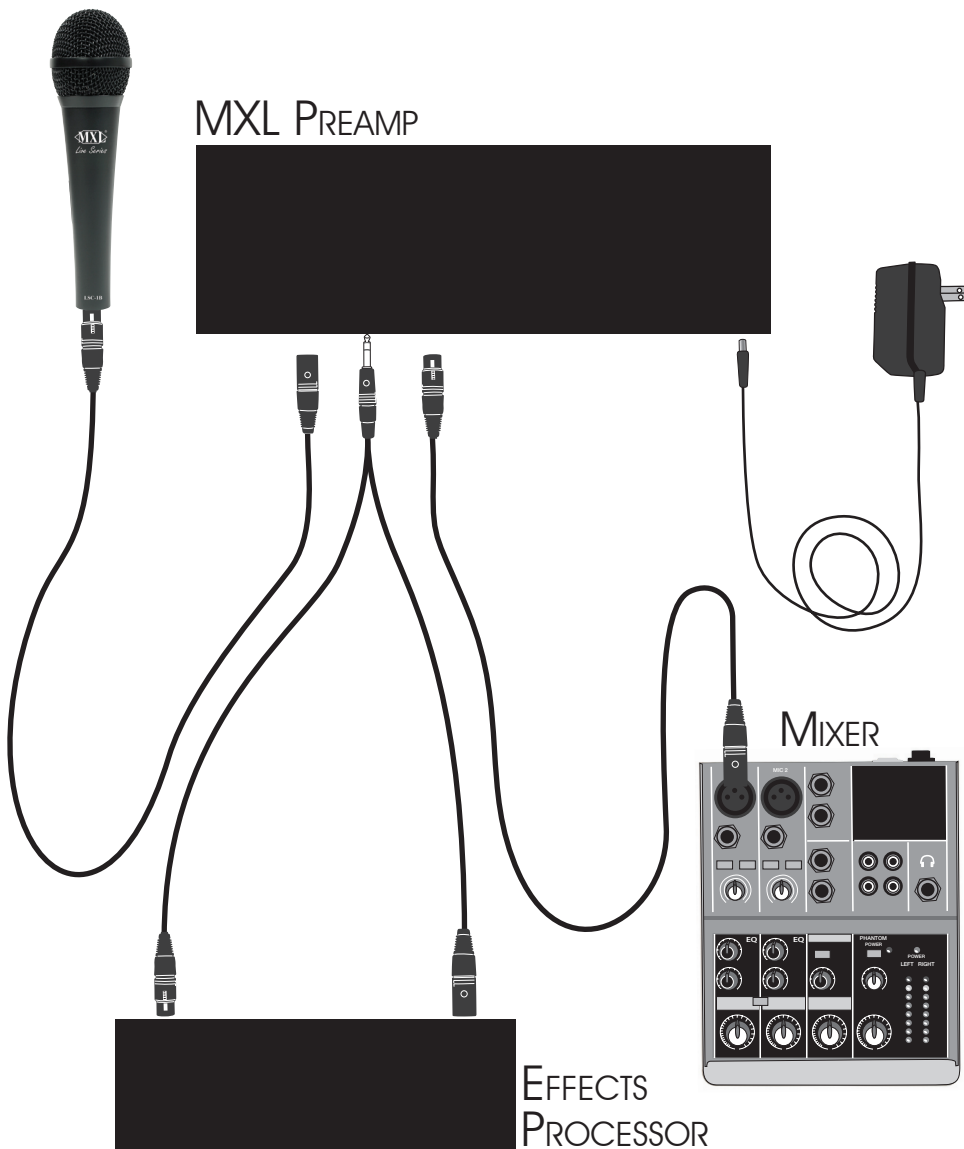
- A. Mic Input:** Balanced 3-pin XLR cable (sold separately) plugs directly to your microphone
- B. Insert:** This 1/4" jack is intended for auxiliary devices like reverb, delay, voice boxes, etc. The insert jack comes before the compressor circuit so you can send a dry signal for processing or input a line level signal to the preamp for compression. T=Send R=Return S=Ground
- C. Mic Output:** Balanced 3-pin XLR cable (sold separately). Plug the output signal (Balanced line level) into your recording device.

[Note: The microphone cable can have a profound effect on the sound quality. Even the finest microphones will sound poor if the interconnect cable allows noise to enter, or causes distortion and loss of information. Use only the best microphone cable your budget will allow. We recommend Mogami cable for the best results.]

**General Use**

The MXL MPAC-01 is a microphone preamplifier and compressor for use when recording or mixing vocals and instruments. To use the MXL MPAC-01 as a mic preamplifier only, simply switch the Compressor On/Off switch.

**Typical Audio Recording Set Up Using a Pre-Amp/Compressor**



Whether you're a season audio professional or just starting out, remember that recording and mixing is a creative process and it will take time and a lot of experimentation before you find the "sweet spot." There are many good audio recording resources, both online and in print, to help you learn. Enjoy your MXL MPAC-01!

**MXL MPAC-01 SPECIFICATIONS**

<b>Input/Output:</b>	Balanced XLR
<b>Input impedance:</b>	15K ohms
<b>Max output:</b>	20dB
<b>HPF Switch:</b>	Variable from 50Hz - 175Hz
<b>Frequency Response:</b>	20Hz -20kHz
<b>Phantom Power:</b>	48Volts
<b>Max gain:</b>	60dB
<b>Adjustable Threshold:</b>	-20dB to +20dB
<b>Adjustable Makeup Gain:</b>	-10dB to +10dB
<b>Knee:</b>	Hard/Soft
<b>Adjustable Ratio:</b>	1:1, 2:1, 3:1, 4:1, 5:1, 9:1, ∞:1
<b>Phase:</b>	0°/ 180°
<b>Pad:</b>	0dB/-20dB
<b>Illuminated VU Meter:</b>	Output/Gain Reduction
<b>Insert Jack:</b>	T=Send, R=Return, S=Ground

**Warranty**

Marshall products are guaranteed against defects in material and workmanship for three years from date of purchase. Should you encounter any problem with this unit, promptly contact the company you purchased it from for assistance. The original dated sales receipt will be necessary for any warranty claim. Do not send any unit directly to us without prior authorization from our service department! Warranty coverage is limited to repair or replacement (at our option) of the MPAC-01 and does not cover incidental damages due to use of this unit, nor damage caused by accidental misuse of this product.