

Cloudlifter CL-Z

USER Guide

Quick Start/ Introduction

The Cloudlifter Z is an inline preamplifier that operates on phantom power, but does not pass phantom power to the microphone. This makes it ideal for ribbon and dynamic microphones alike. The CL-Z uses variable resistance loading to properly bridge a microphones output impedance with the preamp. As a guide, the impedance value of the CL-Z will need to be 5-10 times (or greater) than that of the mics' output impedance to achieve full frequency response and volume.

Connections

Turn your preamp or mixer channel all the way down. The CL-Z increases the microphones' output dramatically, so start with your gain all the way down. Connect the XLR output of the CL-Z to the input of the preamp. If you are using cable runs in excess of 20 feet, connect the longer length cables from the output of the CL-Z to the preamp and the shorter run to the mic. Always use high quality, well shielded audio cables to ensure the cleanest possible signal. Connect the microphones' output to the XLR input of the CL-Z.

Input Z Control

As a starting point use the 12 o'clock position (3k ohms) with the "Z" knob, as a reference point to dial in your preferred impedance load. Most microphones will want to see a minimum of 1.5k ohms, for proper loading and full volume. We have included the lower impedance settings specifically for bridging older microphones with 30-50-ohm output transformers.

CAUTION, loading microphones with a value that is too low for the particular mics' output impedance can result in a higher noise floor and significant loss of output volume, as well as effecting the frequency response. To insure proper "Cloud lifting", make sure the impedance value of the CL-Z is high enough to hear a nice strong signal.

HPF Control

HPF - The high pass filter is variable by using the "Z" knob with the switch engaged, and is useful for controlling proximity effect and filtering very low frequencies. With the HPF engaged the low frequencies are reduced, the amount of proximity reduction and cutoff frequency is effected by the value of the "Z" setting, which is also changing the input impedance simultaneously. This is calibrated so that the frequency effected is between 60-100hz, within the range of proper loading (5-20 x that of the mics' output

Cloudlifter CL-Z USER Guide

impedance). The frequency and reduction of the lows increases as the mic is loaded down with lower values using the “Z” knob. Like wise, as the “Z” knob is turned up, the frequency of the cutoff and audible reduction of the lows decrease. Above a certain value the cutoff becomes sub-sonic and is below 20hz, therefore inaudible. This could be useful when wanting to insure that sub-sonic frequencies do not infiltrate your signal or overload your preamp. The values at which the HPF effect the signal is dependent upon the microphones’ output impedance. Microphones with very low impedances will be effected by the HPF at a lower “Z” value than microphones with higher output impedances. For example, a mic with an 600ohm transformer will cutoff 80hz at a much higher “Z” value than a mic with a 50ohm output transformer. The HPF, simply put, reduces the frequencies most effected by the input impedance loading, as set by the “Z” knob.

Output Controls

Generally speaking, the output controls will usually be set to MAX, with the input of the external preamp turned down. Slowly turn your preamp up until you reach the desired level. If the signal is too hot with the preamp all the way down, try using the MORE setting on the CL-Z, as this will provide approximately 12dB more gain than going direct, but less than the MAX position which can provide up to 25dB of additional gain. With the Cloudlifter set to MAX, you will be minimizing the influence of the preamp and dropping the noise floor by the maximum amount possible using the Cloudlifter. Use the MORE position when the output of CL-Z is too hot for the preamp, even with the gain all the way down. In that case, use the MORE position and turn up the gain until the desired level is reached. With ribbon mics and lower output dynamics (especially on softer sources), you will almost always want to use the MAX setting.

IMPORTANT NOTE:

The Cloudlifter "Z" was developed and tested using a wide variety of microphones representing the high end and low end of the industry. To get the maximum performance from your audio equipment and the "Z", it is highly recommended that a properly grounded microphone is used with well shielded cables.

Cloudlifter CL-Z
USER Guide