# electro-harmonix

# **KNOCKOUT**

## **Attack Equalizer**

Congratulations on your purchase of the Electro-Harmonix **KNOCKOUT ATTACK EQUALIZER!** The Knockout is one of the most specific and powerful tonal adjustment systems that you will ever use. What does that mean exactly? The KNOCKOUT consists of one Low-Pass filter, one High-Pass filter and a direct dry signal... each with its own knob. When combined they yield a very specific and focused tonal sculpture. Extreme and very specific adjustments are not only simple to set up but also yield a very rich and defined tone that cannot be obtained from an amplifier or much more complex equalizing systems. The curves of the filters were specifically selected for their musical value. They may be used independently to reinforce a specific area but their real value can be heard when all three are used together. Get ready for the professional sound that you have been waiting for.

### - CONTROLS -

**LOW Knob** –The LOW knob is a volume control for the low or bass frequencies. The further you turn the LOW knob clockwise, the louder the low frequencies will be. The LOW knob controls the output volume from the Knockout's 7-Pole Low-Pass Filter. The low pass filter has a fixed cutoff frequency of 85 Hz. The LOW knob is responsible for contouring the bottom end in relation to the total sound.

**DRY Knob** – The DRY knob is a volume control for the signal present at the Input Jack. The output volume of the dry signal will increase as this knob is rotated clockwise. Use the DRY knob in conjunction with the LOW and HIGH knobs to create your tone.

**HIGH Knob** – The HIGH Knob is a volume control for the high or treble frequencies. The further you turn the HIGH knob clockwise, the louder the treble frequencies will be. The HIGH knob controls the output volume from the Knockout's 6-Pole High-Pass Filter. The high pass filter has a fixed cutoff frequency of 6.5kHz. The HIGH knob is responsible for contouring the high end to the total sound.

**STATUS LED** – This LED indicates the current state of the unit. When the LED is lit up, the box is in effect mode. When the LED is off, the box is in TRUE BYPASS mode.

**INPUT Jack** – This 1/4" jack is the audio input to the KNOCKOUT. The input impedance presented at the Input Jack is 390 k $\Omega$ .

**OUTPUT Jack** – This ¼" jack is the output signal that is sent to your amplifier, another pedal or to your recording setup.

#### - OPERATION NOTES -

The KNOCKOUT was designed to work with any Instrument level signal from any instrument or voice. The simplicity of the setup is brilliant. It is basically a balancing act, which revolves around the Dry signal. Both the LOW and the High knobs deal with radical amounts of gain. The Dry signal is like the mediator between both filters. Each element is critical to the overall sound. It pays to experiment in you search for the right setup for each situation. You will come across many interesting textures that you may want to write down and store for recall. Remember that there is a value in each pot. The **DRY**, **LOW** and **HIGH** elements may each be used independently or in any combination. With the KNOCKOUT, a little adjustment goes a long way.

Power, from the internal 9-volt battery or external battery eliminator, is activated by plugging into the input. The input cable should be removed when the unit is not in use to avoid running down the battery.

The optional 9V power supply from Electro-Harmonix is **US96DC-200BI** (same as used by Boss ™ & Ibanez™). **9.6 volts/DC 200ma**. The barrel connector on the front of the Knockout is for the 9-volt battery eliminator capable of delivering a minimum of 50 mA of current at 9VDC. The inner ring of the 9-volt battery eliminator must be negative, the outer ring positive. The unit's battery may be left in or taken out when the eliminator is in use.