

# GEIGER COUNTER PRO

## QUICK START GUIDE



Thank you for purchasing a Geiger Counter Pro. Its yellow exterior holds within it millions of ways to process and distort your guitar, bass, synth, or drum machine. The GCP offers the bit-crushing and waveshaping of the original Geiger Counter, but with higher resolution processing power, more wavetables, presets, MIDI, two channels of CV and/or expression, a powerful low pass filter, and wet/dry control.

To begin, plug your favorite instrument into the Geiger Counter Pro's **INPUT**, and its **OUTPUT** into your mixer or amp. Apply power to the unit (9VDC, center negative) and hit **ACTIVATE!** Once you've explored the built-in presets, it'll be time to make your own noise.

Here's a good place to start: press the **MANUAL** button to make sure all parameters are reflected by the front panel. Place the knobs and buttons in the positions indicated in the image above, with all the buttons in the off position. Next, use the **BANK** and **TABLE** knobs to change the waveshaping function. Adjust the **GAIN** to control the character of the waveshaping. Activate the **TONE** control to change timbre, and use the **FILTER** knob to attenuate high frequencies. Roll the **SAMPLES** control down to achieve classic digital aliasing, or use **BITS** to produce spluttering fuzz and digital distortion. To activate the built-in noise gate, illuminate **PRE WT** and turn the **BITS** control past 12 to enter gate mode. To control a parameter using CV (TS cable) or an expression pedal (TRS cable), select the desired routing for **CV1** or **CV2**. Note that your expression source must pass the parameter's saved position before becoming active. Use **LEVEL** to set the preset's volume. To save your preset, press **SAVE**; while the **PRESET** display blinks, select the preset destination using the footswitches and press **SAVE** again (or press any other button to cancel).

**WMD**

# WHAT IS WAVESHAPING?

A waveshaper changes the incoming signal by mapping it to a mathematically derived shaping function. The Geiger Counter Pro contains 512 shaping functions called **WAVETABLES** (shown below). As an example of how waveshaping works, imagine a string on your guitar vibrating up and down. For every vibration, the wavetable is read back and forth, and the resulting signal is delivered to the output. Since wavetable 00 is linear, the waveshaper output is the same as the input. When you change wavetable, the output is altered drastically as your signal is translated. For instance, wavetable 22 produces a pseudo-octave effect by tripling the harmonics of the input signal. Waveshaping turns simple signals into complex textures, but sometimes the process creates harsh (and awesome) high frequency harmonics. A low-pass filter can cut down the high frequencies and restore musicality to a waveshaped signal. Hence our inclusion of a powerful filter in the Geiger Counter Pro. With its many shaping tools, the GCP lets you turn your instrument into something totally new.

## WAVETABLES

