



Denver, CO

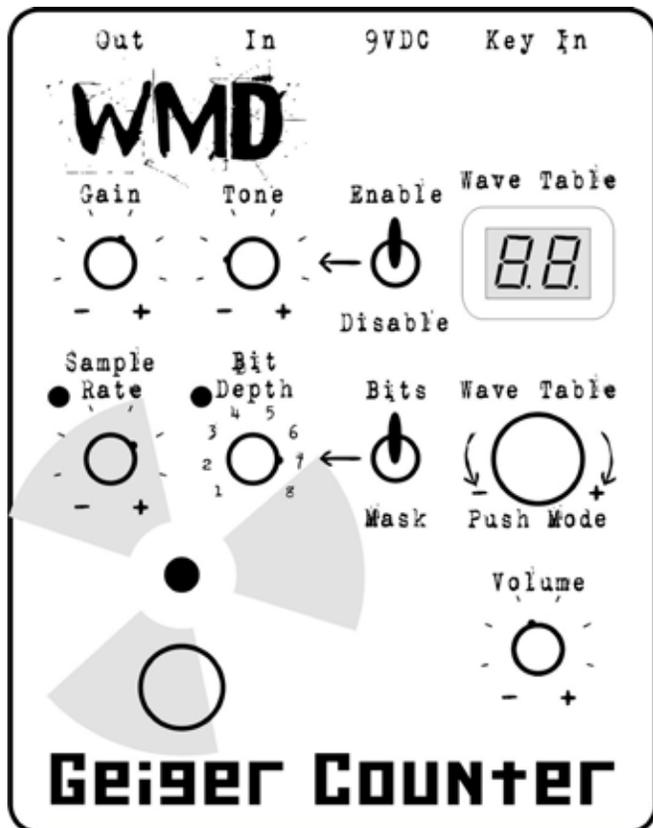
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## The WMD Geiger Counter

Thank you for purchasing your new WMD Geiger Counter and welcome to the world of digital destruction.

### Geiger Counter Features

- |                            |                              |
|----------------------------|------------------------------|
| High Gain Modern Preamp    | Dramatic Tone Control        |
| Sample Rate: 260Hz - 58kHz | Tone Disable for More Tones  |
| 1-8 Bit Depth/Mask         | 252 Wave Table Modulator     |
| Hand Wired True Bypass     | CV or Signal Level Key Input |
| Epoxy/Powder Coat Finish   | Top Quality Components       |
| Always Saves Settings      | Standard 9V Center (-) Power |



## The Controls

**Gain.** Low settings provide clean tones with no distortion at all, while high settings will brickwall your signal for great sustain. Use the Gain control as a coarse setting for getting the desired tone from the selected wave table.

**Tone.** The Geiger Counter's tone control blends muffled low-mids with chimey and clear upper mids and highs providing a very large range of sounds in junction with the Gain. All the way down and the sound is muffled and grungy with little upper harmonic content. The middle range is smooth and full bodied. The top range cuts the lows completely for only upper harmonic content. Use the Tone to fine tune the sound of the wave table.

**Tone Enable/Disable.** This switch removes the tone control from the preamp circuit. The tone control sucks some volume from the gain, and this allows the pure ultra hot signal to go directly into the Wave Table. If a very clean tone is desired, set to Disable and adjust the gain to get the right amount of breakup. For most wave tables, disabling the Tone will produce completely different sounds by brickwalling to the extremes of the tables faster.

**Sample Rate.** Controls the length of the samples your signal is converted into. Full up and the Geiger Counter samples faster than a CD. Dial it down a little and you'll lower the fidelity and frequency response, adding overtones and difference frequencies. Down a little produces some very nice chimey clean tones. Down more and higher notes disappear into difference frequencies, all the way down to 280Hz. The sample rate is sort of like a flange whammy.

The LED by the Sample Rate knob shows the key input and coarse/fine modes. When green, the Key input is active. When red, the sample rate is changed in smaller increments (fine mode), allowing for smoother adjustment for the high range of sample rates. The LED is yellow if the key input and fine mode are both active. Push the Wave Table knob to change the modes of the Bit Depth and Sample Rate LEDs.

**Bit Depth.** This controls the finer details of the signal. All up and your signal is represented by the full 8 bits. Each step down cuts the resolution in half, adding quantization error distortion, all the way down to 1 bit making a nasty square wave from a once clean tone. This produces a lo-fi gated distortion sound.

The LED by the Bit Depth knob shows the key input and post/pre wave table modes. When green, the key input is active. The Bit Depth function is available before (LED red) or after (LED off) the wave table algorithms for different sounds. Use the bit depth before wave table mode to change the response of the wave table. The LED is yellow if the key input and pre wave table modes are both active.

**Bits/Mask.** This switch controls how the Bit Depth knob works. In Bits mode, the Bit Depth knob reduces the resolution of the signal. In Mask mode, the signal is filtered through a number (0 to 255). This mode can be used to reduce noise and add gain. In pre wave table mode, it can turn off small ranges of the wave table, creating altered harmonic content from the tables. Adjust the knob to taste when in Mask mode.

**Wave Table.** This knob and display select the wave table to run your signal through. The wave table stage takes your signal and destroys it with math. This produces some incredible sounds. The wave tables are organized so that a more extreme version is typically found one up from the current one. There are 252 wave tables in all, each with different harmonic content.

The display is in HEX, displaying the numbers 0-9 and the letters A-F. Don't be alarmed, it actually makes remembering your desired wave table easier! The wave table is remembered when the pedal is turned off.

## The Key Input

The Geiger Counter's Key Input can be set to affect the Bit Depth, Sample Rate or both at the same time. Push the Wave Table knob to set the key input destination (the LEDs by the sample rate and bit depth knobs will become green when the key input is active on them). Note that if yellow, the key input is active while the Sample Rate is in fine mode, or the Bit Depth is set pre wave table.

The Key Input can take two types of signals, which are set internally by a DIP switch. Set switch 1 ON and switch 2 OFF to enable CV Mode (Control Voltage Mode). This allows a signal from 0-5VDC to control directly the Sample Rate and/or Bit Depth. Use this setting for LFO (Low Frequency Oscillator) inputs or any other CV type device. This is the most useful mode for slow sweeps.

Set switch 1 OFF and switch 2 ON to enable signal mode. This is more useful for plugging in an external sound source, like a microphone or drum machine. The gain may be adjusted by the trim pot to the left of the DIP switches. It is not recommended to have both switches ON at the same time. Happy experimenting!

## The Company

William Mathewson Devices is a Denver based company specializing in versatile audio electronics. Our products have usable knobs that typically extend beyond the "usable" range in order to encourage experimentation. We strive for studio quality sound in our pedals, meaning low noise and low distortion (only when you don't want any distortion). We strive to create pedals with strange features and settings that inspire creativity through unpredictable behavior.

## Additional Notes

**Power Adapter** - The FatMan and all other WMD pedals use the Boss style 9 Volt power adapter. These adapters have the positive (+) on the sleeve and the negative (-) on the pin.



All pedals have reverse polarity protection, but please check the power supply before plugging it in.

**Warranty** - All WMD pedals are guaranteed against defects for 1 year from date of purchase. If the pedal is deemed defective at fault of WMD, it will be repaired or replaced free of charge (shipping to be paid by buyer). If pedal is deemed damaged at fault of buyer, regular repair rates will apply.

