MANUAL PULSE GENERATOR

This a simple “step and direction” generator that operates from a SPDT, center-off, momentary switch. The circuit generates a single step pulse when the switch is pushed. If the switch is held on for longer than 5 seconds, then the circuit outputs an un-accelerated step pulse frequency.

R1, C1 sets the 5 second delay. Change either to change this time period. For instance, 1 Meg and 1 uF generates a 1 second delay. R2, C2 sets the step pulse frequency. Change C2 to change the frequency range. R3, C3 differentiates these pulses so that they are 10 uS wide.