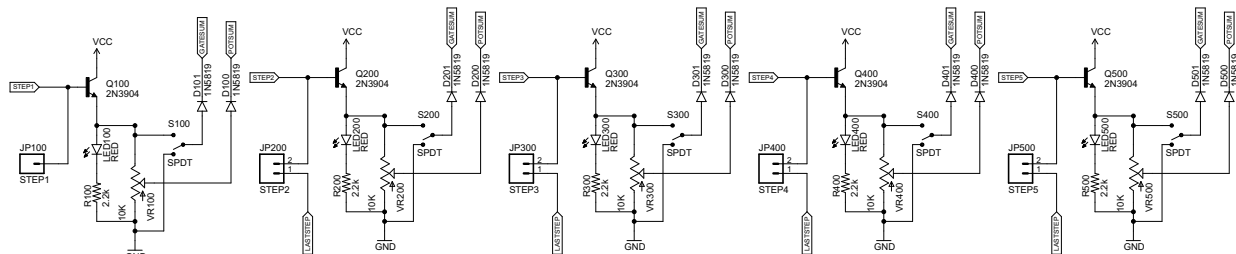
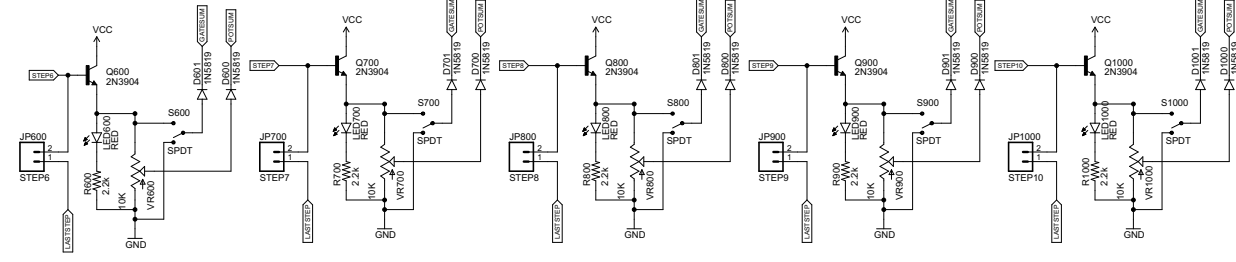


**10 steps each with LED, control voltage slider, gate switch and last step jumper**

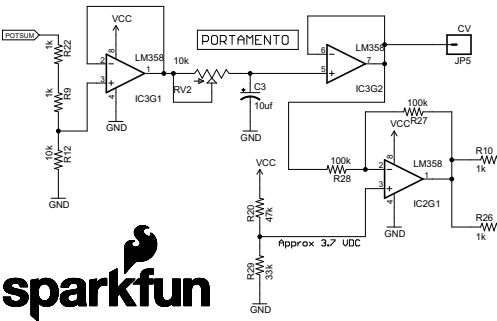


No last step jumper on first step. If it were the last step, sequence would be 0 steps long.

One step is selected at a time by the CD4017. This turns on the transistor, lighting the step LED. The slide pot and switch place the voltage on the POTSUM and GATESUM buses, respectively, each combined using a diode-or circuit.



**Control Voltage summing & glide circuit**  
IC361 scales and buffers the voltage from the slider wipers - scaled to a range that doesn't clip the opamp by getting too close to the SV rail. IC362 inverts, shifts and scales that to a range suitable to drive 555's. A 65% CV range is centered between the rails, and has an inverse voltage-to-frequency response.



**Gate output processing**  
IC461 buffers the gate switch output. IC462 adds scaled versions of the 50% step clock and running signal. The result is a stair-step waveform of clock superimposed on gate. IC262 is a comparator that trips when the stair-step waveform crosses a threshold. The threshold can be set for long or short steps. See the SPICE sims for more detailed waveforms.

