Switch Debouncer - Contributed by Eric Black

All physical switches experience a phenomenon sometimes called “bounce.” Bounce results from a variety of factors like kinetic rebound, capacitance and electron travel time. Bounce is most easily visualized as an oscillation at switch time as shown in figure 1. This effect can cause logic circuits to interpret each oscillation to be counted as an actual movement of the switch. This is not the desired result.

The circuit in figure 2 shows one of the simplest ways to debounce a switch.