

A Single LogiSwitch NoBounce IC Eliminated a User's Nagging Switch Bounce Problems

The Problem

Carl is an electronics hobbyist whose project was to build a true binary clock and calendar. The design included six pushbuttons to set the year, month, day, day of week, hours, and minutes. The clock worked perfectly except for the pushbutton setup that was compromised by dreaded switch bounce.

Carl didn't want to clutter his clean design by having to add multi-component discrete switch bounce solutions for each of his six switches. He looked at competitive ICs, but they all required multiple external components per channel. Carl was about ready to give up when he discovered the LogiSwitch LS10 series of NoBounce™ ICs.

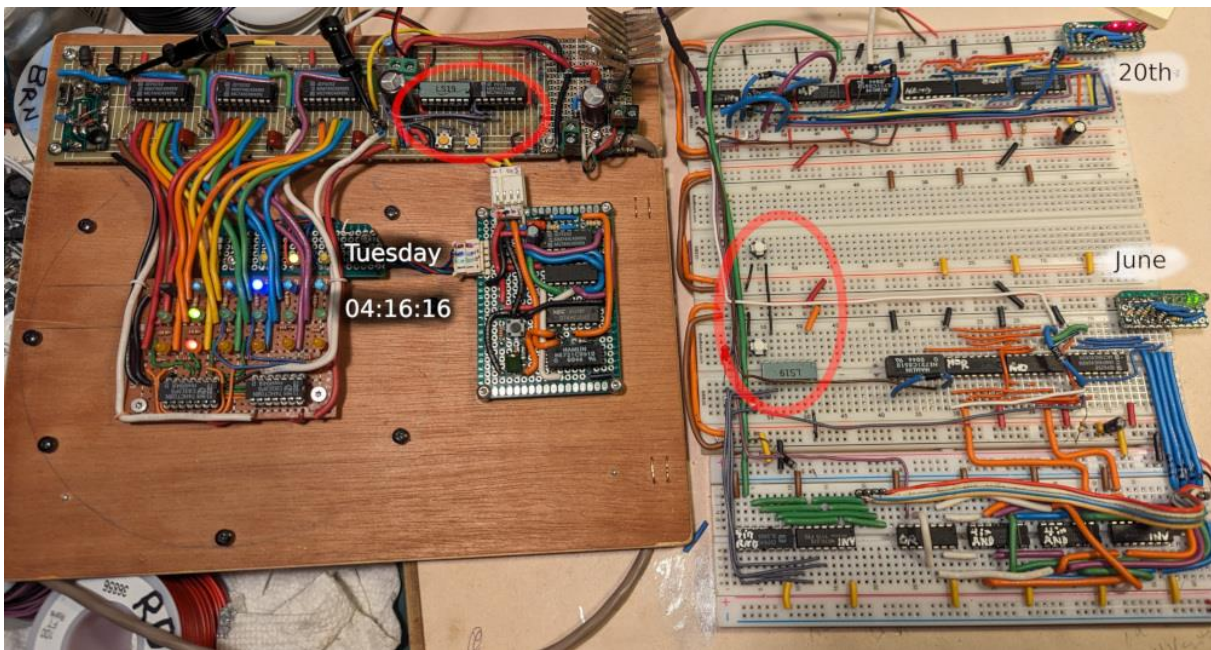
The Solution

"You asked me to let you know how my LS19s worked. In a word, PERFECTLY. Quite amazing, to be honest. I have already hardwired one into my main binary clock prototype, I'm using a second device on the calendar part, which is still on breadboards, and I couldn't be more pleased with their performance."

"As both of these designs are counting high pulses, I did need to run the LS19 outputs through an inverter, but that's cheap and easy, and the two chips (each giving me six channels of debounce) still take up less space than the hardware solution I had been using for only two channels."

“I have a little test rig I was using to literally count the bounces of the various switches I have while I was trying to get to a reliable hardware solution and, like your descriptions, some of them scored well over a hundred bounces per cycle. I tried the worst of them with the LS19 in the path and got one pulse every single time for every single one. I am beyond impressed and am a convert for life.”

“Thanks, and keep up the great work!”



Binary Clock and Calendar Breadboard

About LogiSwitch

LogiSwitch was founded in 2016 by Mike Pelkey, a serial inventor and entrepreneur who has a long engineering career in industrial automation. LogiSwitch’s NoBounce line of ICs and switches is a result of Mike’s 40+ year career in electronic design engineering where he developed switch bounce solutions for automation applications.