Dashboard Indicator Lights for the Roadster. 6-20-2013 Jim Garey

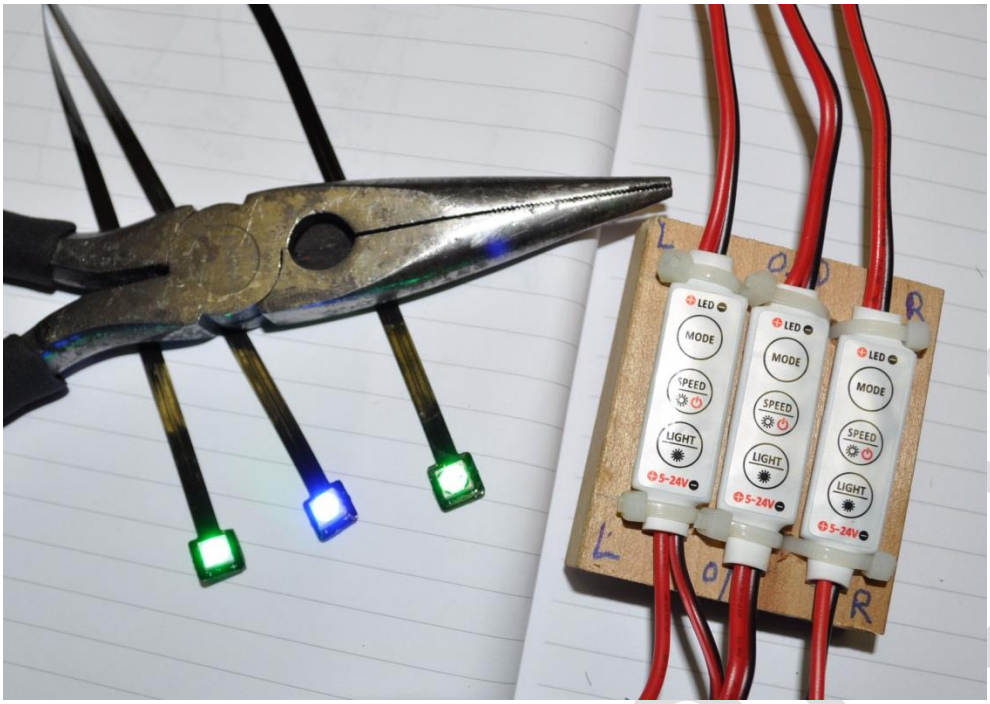
One thing I have wanted for my Roadster is a set of indicator lights on the dash to remind me of my turn signals and overdrive status. I wanted to do this without any holes or other permanent changes to the dash. I found some tiny surface mount LED lights that can be mounted directly to the dash. They are about 4mm square and about 1 mm thick. Each one comes with a small ribbon cable lead that attaches to conventional wires. The back of the LED has an adhesive pad. The LEDs are blindingly bright, so a dimmer was required. As it turns out, LEDs are best dimmed by pulse width modification that reduces current rather than voltage. The company that had the LEDs (Superbrightleds.com) also sells small suitable dimmers. Here are the parts I used:

LD1-x: Little Dot SMD LED Accent Light LD1-G: Green or LD1-B Blue ($1.99 US)

MLD-5A: MLD-5A 12 Volt DC Single Color LED : Mini LED Dimmer ($6.95 US)

I purchased two green LEDs for the turn signals, one blue LED light for the overdrive and three dimmers. I attached the three dimmers to a single piece of wood that resides in the driver's side glove box and ran their output wires to each of the LED lights. I removed the dash board trim piece and fished the ribbon cable up behind the dash and out the gap left by the trim piece and use the adhesive back to attach the LED light to the dash immediately below the trim piece after cleaning residual furniture oil with denatured alcohol. I reinforced the ribbon cable with electrical tape and replaced the trim. The unpowered LEDs themselves are a white color so stand out a bit on the dash. The ribbon cables are completely hidden by the trim. Special paint for use on glass and ceramics is available in craft shops and can be purchased in translucent colors including brown, which could be applied over the white LEDs to make them less noticeable. I have not yet done that.

My Roadster is negative earth. I ran the positive output from the left and right turn signal circuit through their dimmer and on to their respective dash LED. I ran a common negative ground to each dimmer as well. My overdrive control switch interrupts negative ground, so I ran a wire from the output of the overdrive switch to the negative input of the overdrive indicator dimmer and a positive wire from an ignition circuit. Each dimmer has three buttons. One is on/off and controls which preset mode (e.g. steady or various flashing patterns). The second button brightens the LED and the third dims it. I leave the dimmers in the "on – steady" mode and at a low brightness setting. It holds this setting through powering cycles so it only has to be accessed if I want to change the brightness of the LEDs. I have posted a short YouTube video of these indicator lights in action, as it is difficult to see how well they work in the photo.


LED
MODE
SPEED
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5-24V