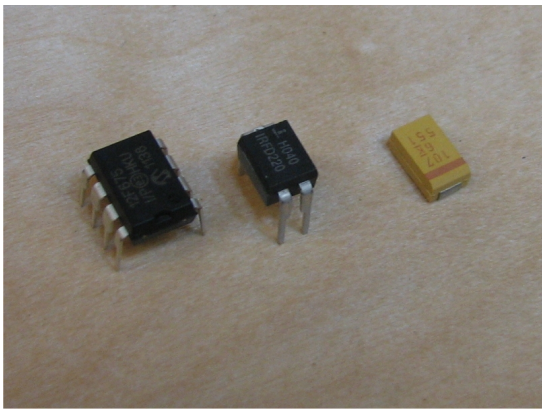
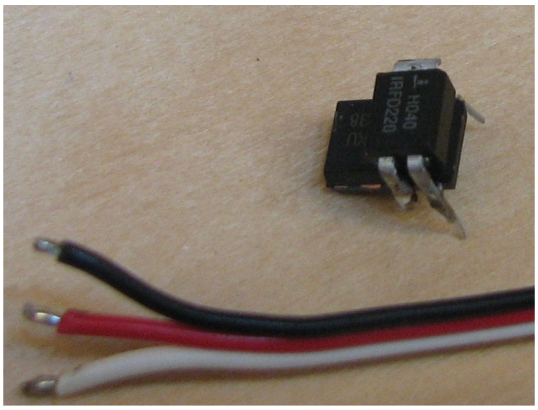
Channel Switch for driving a Period Escapement from the S/C Emulation Encoder setup:

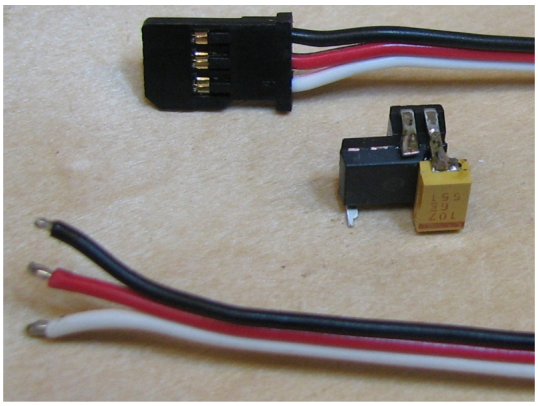
You'll have read on the S/C forums that the luddites are rejecting servos in favour of clockwork escapements, so I made a few channel-switches this afternoon during a quiet spell.
After I'd done three, I though maybe it might be of interest to show how they're made.
The idea is to make it as small & light as possible, whilst positively switching a typical escapement coil. We start with the bits - a pre-programmed PIC, an IRFD220, a 100uF SMT tantalum capacitor, and a servo lead:



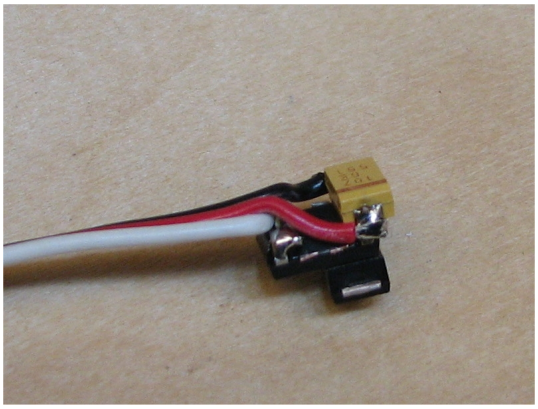
We prepare the servo lead by stripping & tinning, and solder the FET onto the PIC, piggy-back style, after removing all redundant pins from the PIC (2,3,5 & 6). No insects were harmed during the making of these switches:



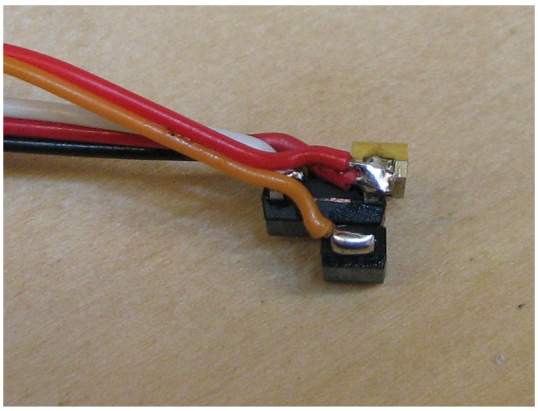
Next the 100uF surface-mount capacitor is soldered between the PIC power pins 1 & 8 - its an exact fit:



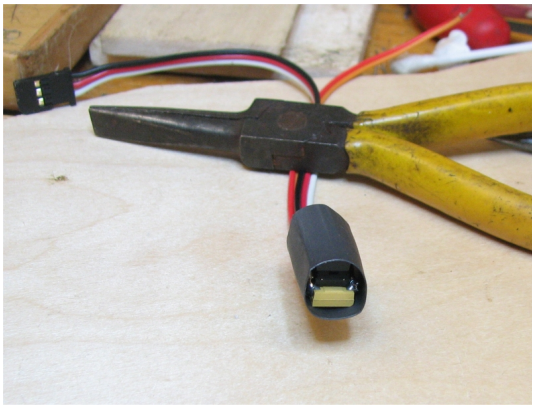
The input lead is added next, pos to pos, neg to neg, signal to PIC pin 4:



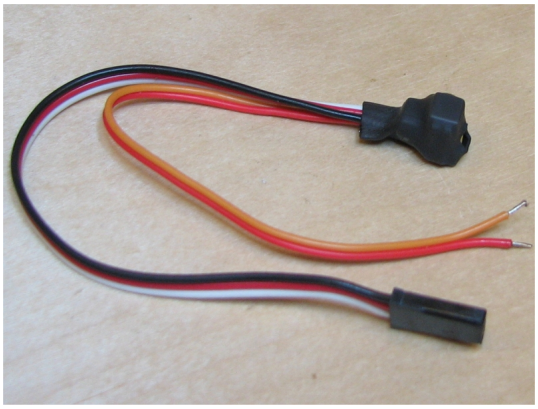
Followed by the output lead, only two wires, between the pos and the FET drain:



then we slip on a sleeve of heatshrink:



and shrink it down using the trusty Weller Pyro-Pen, one of my most undowithoutable tools:



And so here we have another channel-switch, tested on the Elmic Conquest & good to go.