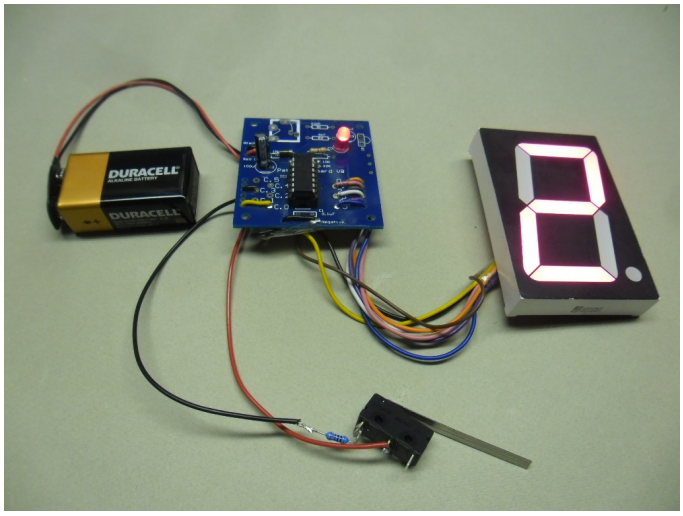
How to Build your Infrared or Switch Activated Jumbo 7 Segment Display

Pat McMahon– V1– 20/2/2016

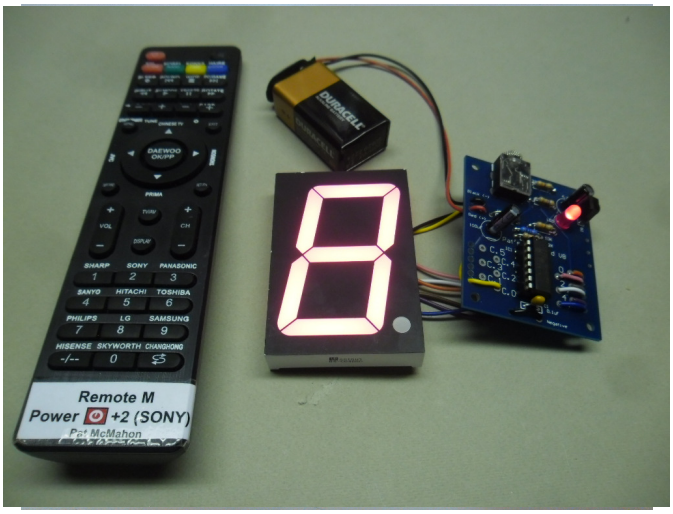
Design Brief – Using a Jumbo 7 Segment Display, build your own Infrared or Switch Activated Jumbo 7 Segment Display, to run from Pat's 14M2 Picaxe PCB.

Note– As the Jumbo 7 Segment Display needs ~8Volts before it lights up, you need to use a battery snap & a 9V battery on Pat's 14M2 Picaxe PCB, not 6V.

Switch Activated Jumbo 7 Segment Display

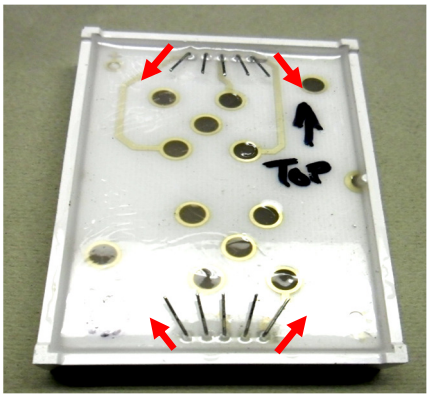


Infrared Activated Jumbo 7 Segment Display

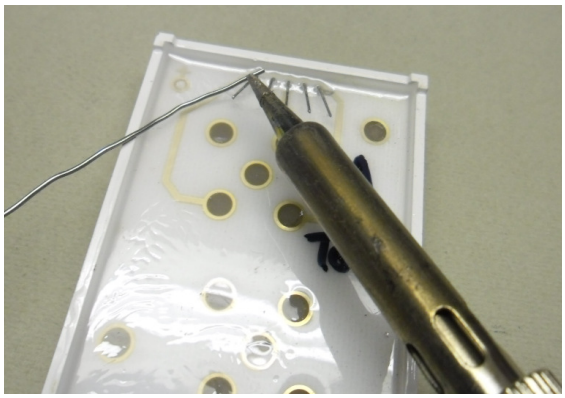


Below are some of the Production Steps, Tick off each box as you complete a task and Document it.

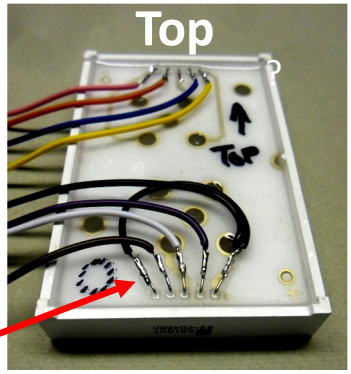
☐ **Bend 7 Seg Jumbo legs over & out to seperate.**



☐ **Tin the ends of each Leg.**

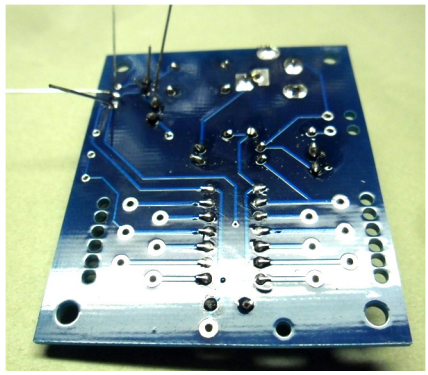


☐ **Strip,Twist,Tin and attach coloured wires as below.**

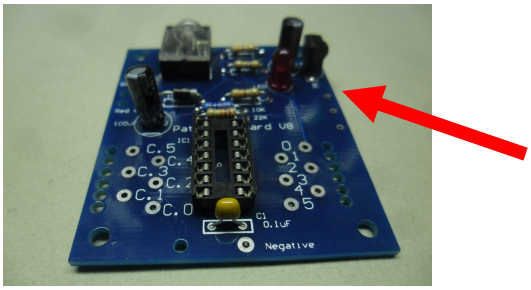


(When viewed from the back)

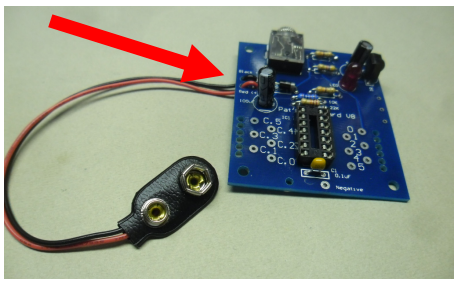
☐ **Populate Pat's 14M2 PCB and solder on back.**



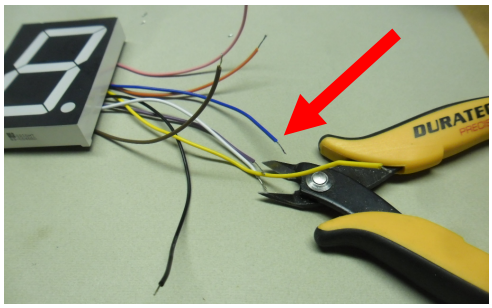
☐ **Populate (with Infrared parts if required).**



☐ **Attach a 9V Battery Snap to Pat's PCB (not 6V Battery Box).**



☐ **Tin the other ends of the coloured wires & snip.**



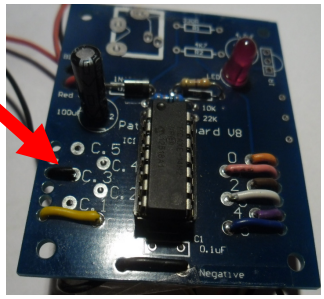
☐ **Attach wires from 7 Seg to Pat's PCB, as below.**

Note– C.3 only for switch activated.

Black (pinC.3)

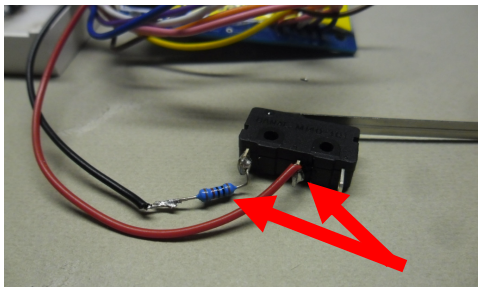
Yellow (pinC.0) g

Black(Negative)



Orange (pin0) a
Pink (pin1) b
Brown (pin2) c
White (pin3) d
Purple (pin4) e
Blue (pin5) f

☐ **If Switch Activated, attach 10K Resistor to stop Debounce**



to C (common)

Black(—) C.3

& Red (+) to

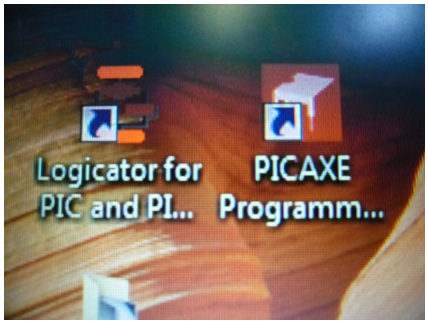
NO (normally open),

on the microswitch.

☐ **If Switch Activated, also attach another 10K Resistor,**

between the power negative(—)and the C.3, on the back of the PCB.

☐ **Program with Picaxe "Programming Editor".**



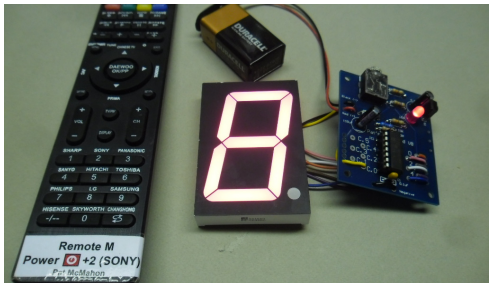
☐ **Power up the 14M2, attach your PCB and download cable to your computer & Program with the Picaxe "Programming Editor" for either your-**

1— Infrared Remote Controlled Jumbo 7 Segment Display.

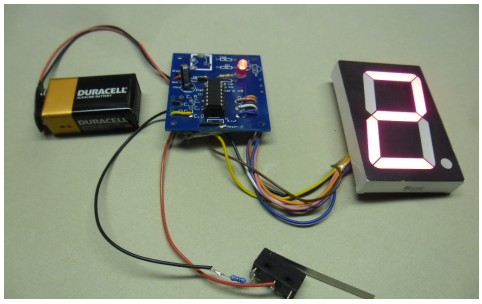
2 — Switch Activated Jumbo 7 Segment Display.

3— Or any other input device ie Light Dependant Resistor

☐ **Test with Universal Remote, if Infrared.**



☐ **Test with Micro Switch, if Switch Activated.**



Well Done!

You have successfully built , Programmed and Tested your 14M2 Picaxe Microcontroller & Jumbo 7 segment Display.