

How to Build your own Jumbo 7 Segment Display Basketball Counter

Pat McMahon– V1– 1/5/2017

Design Brief– Using a Jumbo 7 Segment Display, build your own Lever Switch Activated Jumbo 7 Segment Display Basketball Counter, to run from Pat’s 14M2 Picaxe PCB.

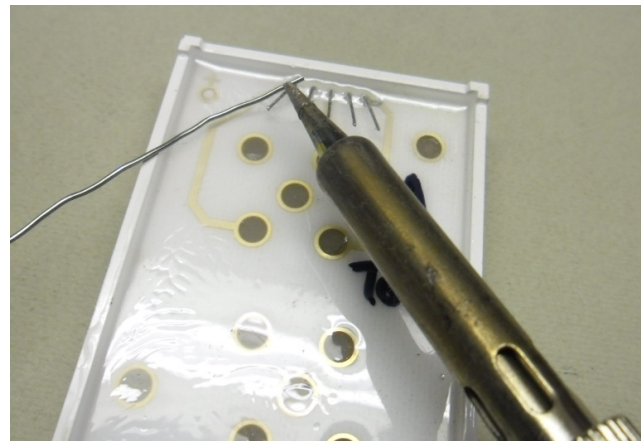
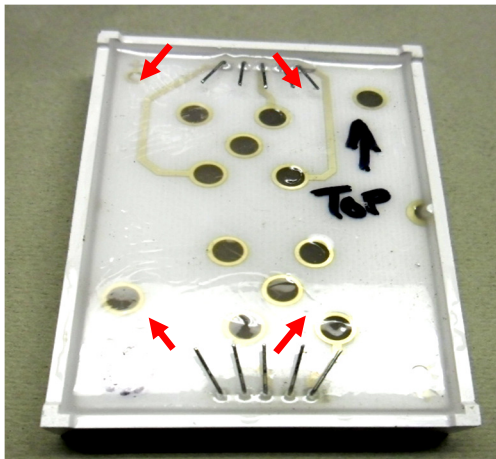
Note– As the Jumbo 7 Segment Display needs ~8Volts before it lights up, you need to use a battery snap & a 9V battery on Pat’s 14M2 Picaxe PCB, not 6V.

Jumbo 7 Segment Display basketball Counter

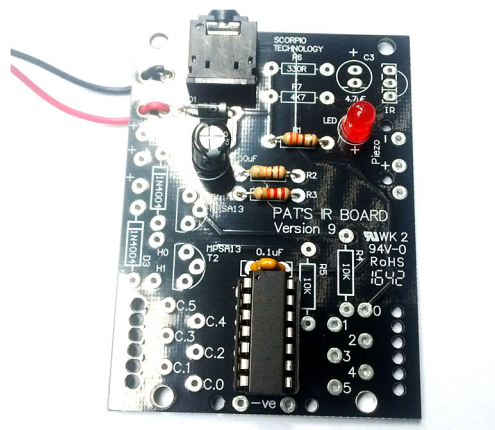
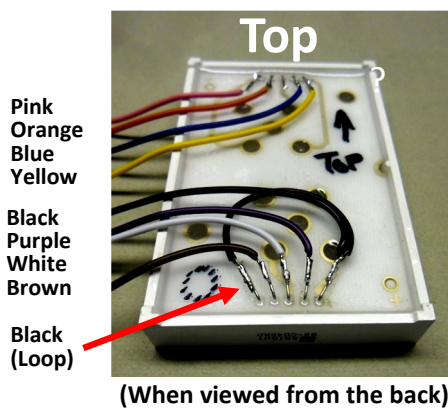


Below are some of the Production Steps, Tick off each box as you complete a task and Document it.

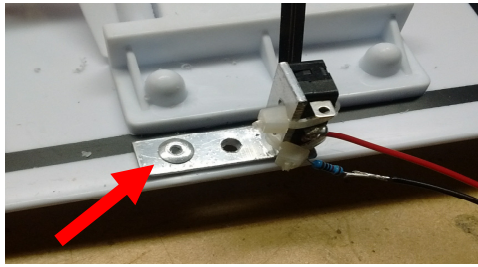
- Bend 7 Segment Jumbo legs over & out to separate. Tin the ends of each Leg.



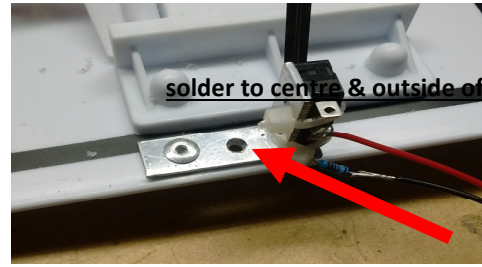
- Strip, Twist, Tin and attach coloured wires as below. Populate Pat’s 14M2 PCB and solder on back.



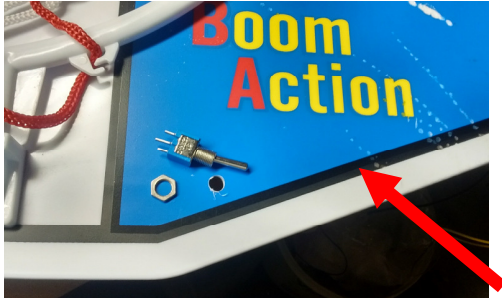
- Position the microswitch under the Ring, drill one only 3.2mm hole and pop rivet it to the backboard.



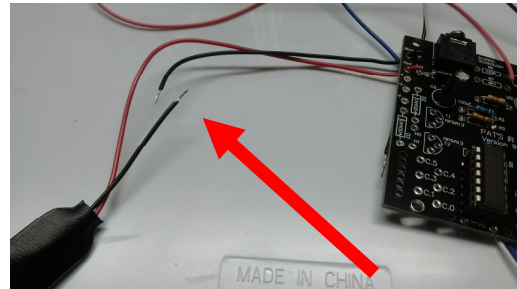
- Drill the second 3.2 mm hole and insert the second pop rivet.



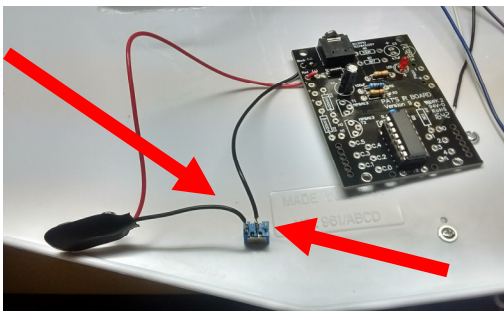
- Drill a 6.5 mm hole for the on-off switch.



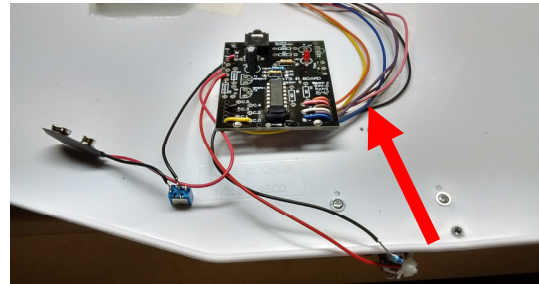
- Cut the black negative battery snap wire.



- Solder cut wire to centre & outside of switch posts.



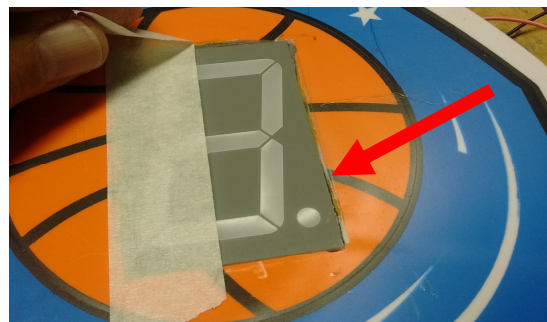
- Carefully File inside the marked rectangle, until the Jumbo Display fits snugly in the hole.



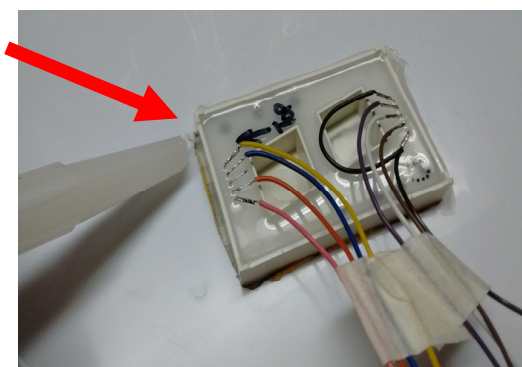
- Place Masking tape on the front of the hole.



- Insert the Jumbo Display from the back, decimal point down



- Using Silicone or a Glue Gun to fix the Display.



- Use M2 x 12 screws or cable ties to fix the lever micro-switch to the Aluminium Angle bracket.



- Purchase a Plastic backed Basketball Backboard & Ball.



- Decide where you want your Jumbo Display.



- Mark with a pencil around the outside of Display.



- Carefully Drill inside the 4 corners with 6mm Drill.



- Using a Coping or Jigsaw, carefully cut inside the line.



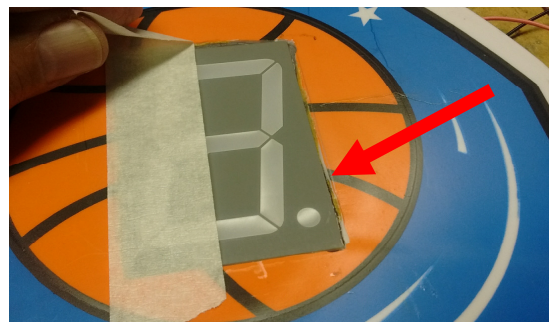
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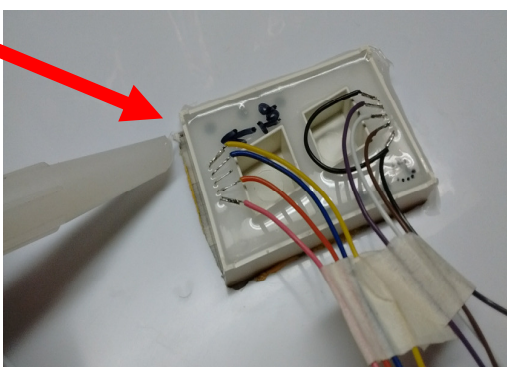
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