

BBC Micro:Bit CoderKit Traffic Lights

Included

- 1 x Acrylic Board
- 2 x Acrylic Spacers
 - 1 x Labelled
 - 1 x Plane
- 5 x Connectors and Screws
- 4 x Legs
- 2 x Red LED
- 2 x Yellow LED
- 2 x Green LED

Needed

- BBC Micro:bit
- Conductive Paint
- Wire cutters

Assembly

- Attach the legs to the acrylic board using the four corner holes. The track lines of the acrylic board should be on the bottom.
- Screw the connectors through the 5 holes in a line. **See image 1.**
- Place the spacers on top of the connectors. **See image 1.**
- Insert a red LED through the holes on the 0 channel. Make sure the anode (+) and cathode (-) are inserted the correct way around with the anode closest to the connector. **See image 2.**
- Repeat with a yellow LED on channel 1 and a green LED on channel 2. **See image 2.**
- Use the wire cutters to trim excess wire from the bottom of the LEDs. Leave roughly 3mm of wire below the acrylic.
- Bend the wire along the line of the track marks to secure the LEDs. **See image 3.**
- Use the conductive paint to create the circuit map on the bottom of the acrylic board by following the track lines. The ideal paint width is 3mm - 4mm wide. **See image 4.**
- Leave to dry for at least 2 hours. For best results leave for 24 hours.

- Attach the BBC micro:bit and begin coding. Example code can be downloaded from our website at the following link <https://sciencscope.uk/product/microbit-coderkit-four-board-set/>. This code will demonstrate a traffic light sequence using the LEDs and the BBC micro:bit LED matrix.

Image 1.

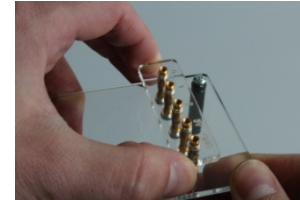


Image 2.

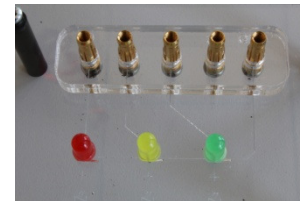


Image 3.

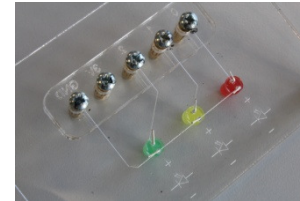


Image 4.

