

BBC Micro:Bit CoderKit Temperature

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 Green LED
- 2 x Temperature Transistor

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.**
- Use 1 temperature transistor and insert it into the holes directly below the 3V channel. To do this first bend each outer leg out about 45 degrees. Then from about half way done the outer legs bend them so they point directly done. **See image 2.**
- Insert a red LED into the holes for channel 0 and a green LED into the holes for channel 1. **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.

- For starter code use the link <https://www.microbit.co.uk/diuhli>. This code uses temperature CoderKit to sense the air temperature and show a Red or Green LED depending on whether the temperature is above or below the determined level.

Image 1.

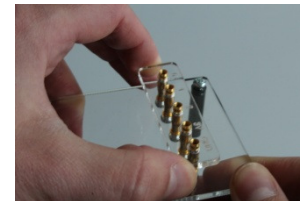


Image 2.

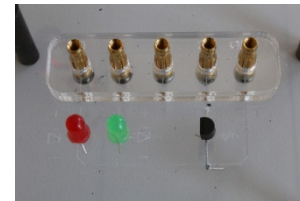


Image 3.

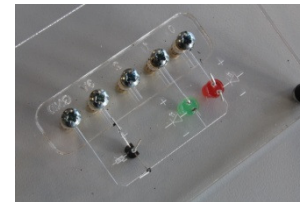


Image 4.

