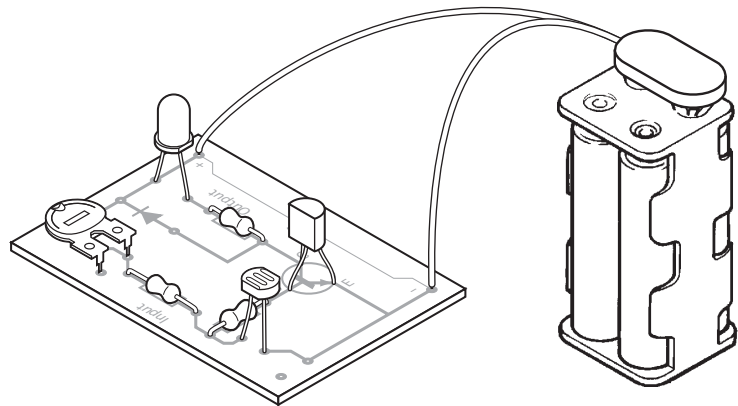


LIGHT SENSOR KIT

Code: PAC 2001 (10 pack)

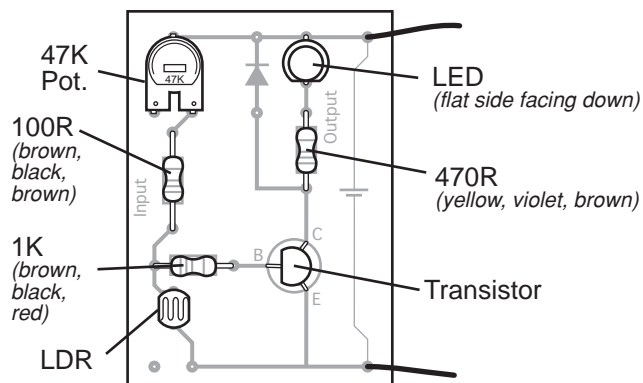
Contents:

- 10 x PCB
- 10 x BC548 transistor
- 10 x Mini-LDR
- 10 x 1K resistor
- 10 x 100R resistor
- 10 x 470R resistor
- 10 x Standard LED
- 10 x 47K potentiometer
- 10 x Battery connector



This general purpose light sensing circuit uses a mini light dependent resistor (LDR) to detect changes in the level of light. It is designed for use with a 3V - 9V battery. When the components are connected as shown below, the LED will light up when the sensor is in darkness. The sensitivity of the circuit can be set by adjusting the potentiometer.

- *In bright conditions the LDR has a low resistance and so the transistor is switched off. The LED is therefore off.*
- *In dark conditions the LDR has a high resistance and so the transistor is switched on. The LED therefore lights up.*



To make the LED light up when the sensor is in bright light the positions of the LDR and the potentiometer should be swapped. A different value potentiometer may be needed, depending on the sensitivity required.

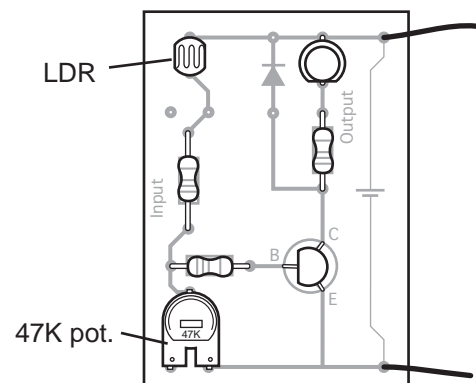
For further details please contact:

Mindsets (UK) Ltd

Tel: 01992 716052

Fax: 01992 719474

Web: www.mindsetsonline.co.uk

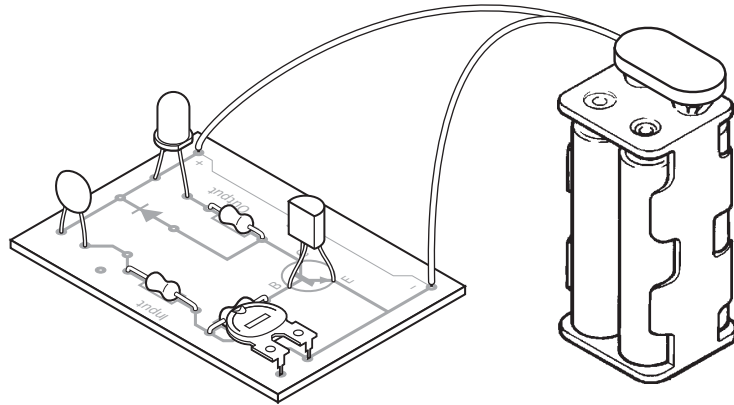


TEMPERATURE SENSOR KIT

Code: PAC 2002 (10 pack)

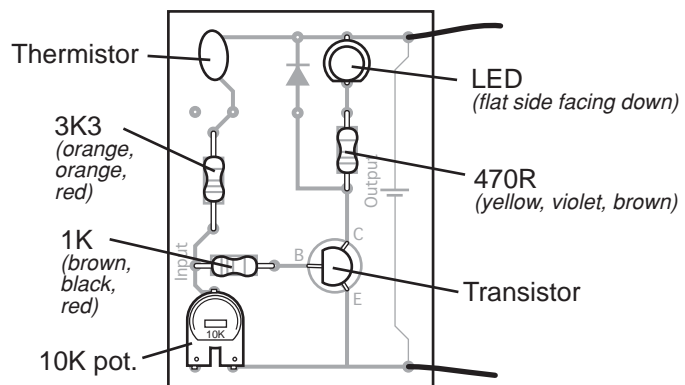
Contents:

- 10 x PCB
- 10 x BC548 transistor
- 10 x Thermistor (1K)
- 10 x 1K resistor
- 10 x 3K3 resistor
- 10 x 470R resistor
- 10 x Standard LED
- 10 x 10K potentiometer
- 10 x Battery connector



This general purpose temperature sensing circuit uses a thermistor to detect changes in temperature. It is designed for use with a 3V - 9V battery. When the components are connected as shown below, the LED will light up when the temperature rises above a set level. The sensitivity of the circuit can be set by adjusting the potentiometer.

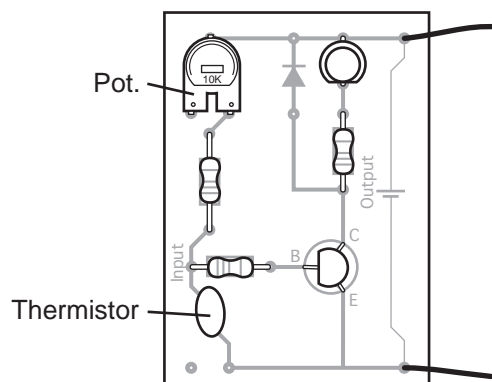
- *In cool conditions the thermistor has a high resistance and so the transistor is switched off. The LED is therefore off.*
- *In warm conditions the thermistor has a low resistance and so the transistor is switched on. The LED therefore lights up.*



To make the LED light up when the temperature drops below a set point the positions of the thermistor and the potentiometer should be swapped. A higher value potentiometer may be needed, depending on the sensitivity required.

For further details please contact:

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Tel: 01992 716052

Fax: 01992 719474

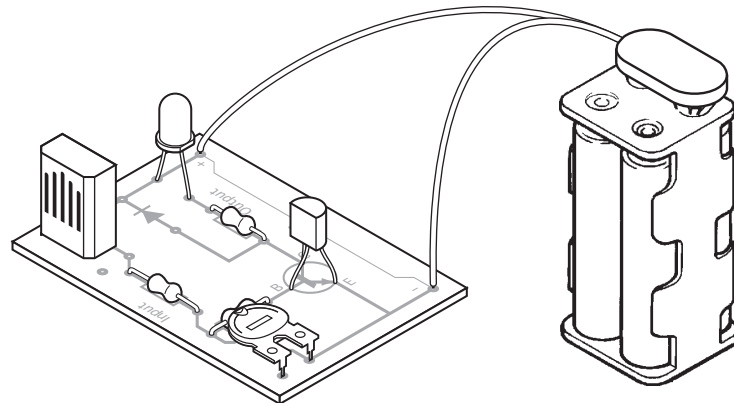
Web: www.mindsetsonline.co.uk

HUMIDITY SENSOR KIT

Code: PAC 2003 (10 pack)

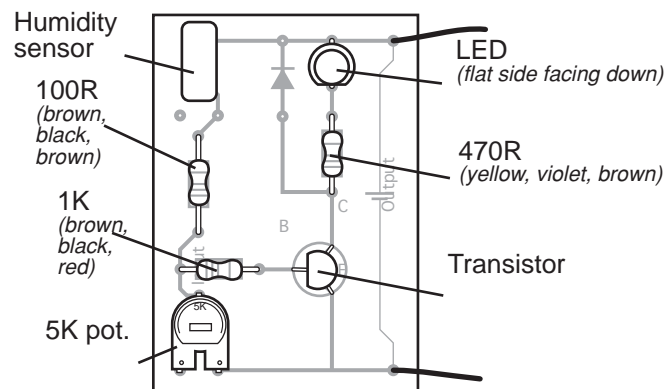
Contents:

- 10 x PCB
- 10 x BC548 transistor
- 10 x Humidity sensor
- 10 x 1K resistor
- 10 x 100R resistor
- 10 x 470R resistor
- 10 x Standard LED
- 10 x 5K potentiometer
- 10 x Battery connector

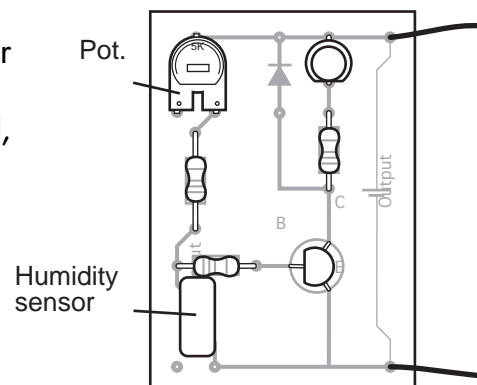


This general purpose circuit is designed to detect changes in humidity. It requires a 6V - 9V battery. When the components are connected as shown below, the LED will light up when the humidity is above a set level. (The sensitivity of the circuit can be set by adjusting the potentiometer).

- *In low humidity conditions the sensor has a high resistance and so the transistor is switched off. The LED is therefore off.*
- *In humid conditions the sensor has a low resistance and so the transistor is switched on. The LED therefore lights up.*



To make the LED light up when the humidity drops below a set level the positions of the sensor and the potentiometer should be swapped. A much higher value potentiometer will be needed, e.g. 10M.



For further details please contact:
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