

# Light Sensor

It is possible to use an LDR (Light Dependent Resistor) as a switch (or input as it should be called). Attach an LDR to terminal B. 4. and the + & - terminals on the Igloo as shown.

Open the Blockly software and copy the code shown on the right and send the code to the Igloo via the USB cable.

The LED built on to the Igloo will switch on as soon as it becomes dark. As soon as it is light again the LED will go off.

You can change the moment the LED switches on by altering the analogue value in the Blockly code from 0 to 255. **150**

How would you change the code to make the LED switch on if it is light and off if it is dark?  
Could you also add a buzzer to come on as well?

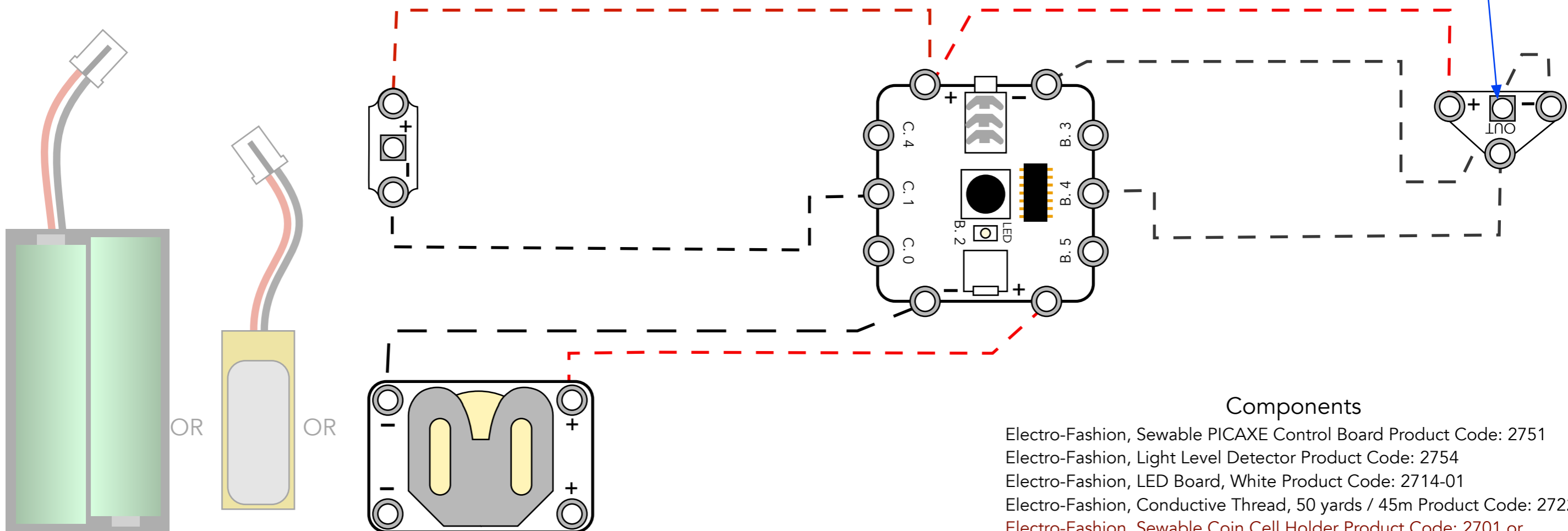
```

start
forever
do
  read analogue B.4 to varA
  if varA < 240
  then
    turn output C.1 off
  else
    turn output C.1 on
  pause for 500 ms

```

**NOTE**

An LDR is a light sensor that changes its resistance based on the amount of light falling onto the sensor



**Components**

- Electro-Fashion, Sewable PICAXE Control Board Product Code: 2751
- Electro-Fashion, Light Level Detector Product Code: 2754
- Electro-Fashion, LED Board, White Product Code: 2714-01
- Electro-Fashion, Conductive Thread, 50 yards / 45m Product Code: 2722
- Electro-Fashion, Sewable Coin Cell Holder Product Code: 2701 or
- E-Textiles Polymer Lithium Ion Battery Product Code: 2223 or
- 2x AA Battery Box with Switch and Connector Product Code: 2268

You can use different types of battery. It depends on how much space you have available to store a battery. For modeling your design it is easier to just use normal AA batteries.

