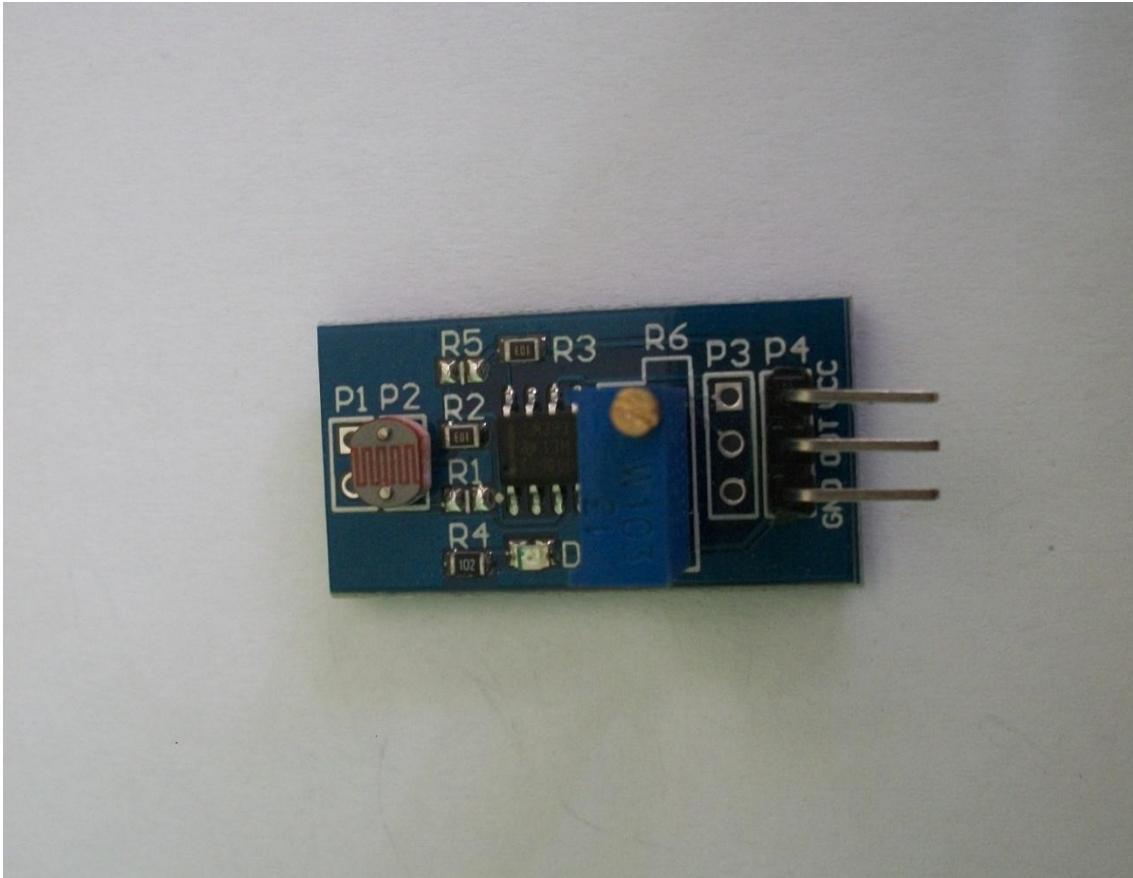


PHOTOSENSITIVE SENSOR MODULE



General Description:

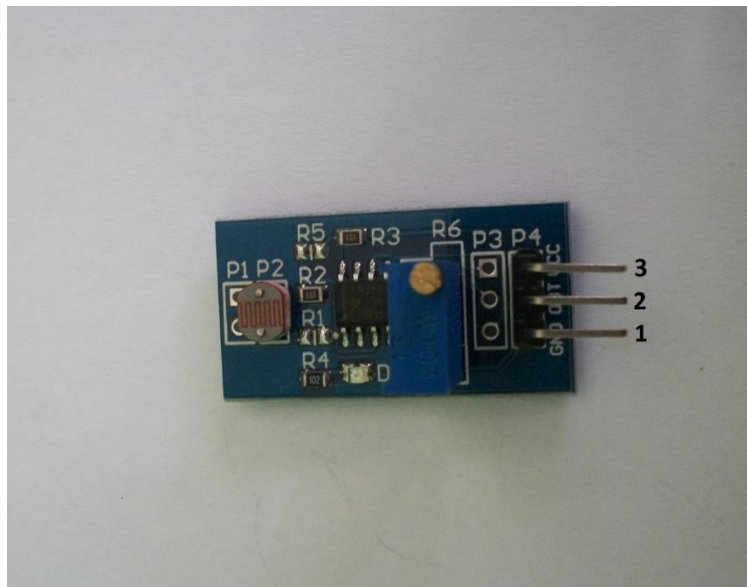
Photosensitive sensor module is the most sensitive for the environmental light intensity and it is generally used for detecting the ambient brightness and intensity of the environment. Without light intensity it will not reach the threshold resulting for low level output but, when the external environment light intensity exceeds the set threshold it will result for a high level output.

The output is directly connected with the microcontroller, for the microcontroller to detect the light level, thereby to detect environmental intensity change. Small digital

output can directly drive the relay module, which can be composed of a photoelectric switch. Small analog output, through the AD conversion, can obtain more accurate numerical value of environmental light intensity.

Specifications:

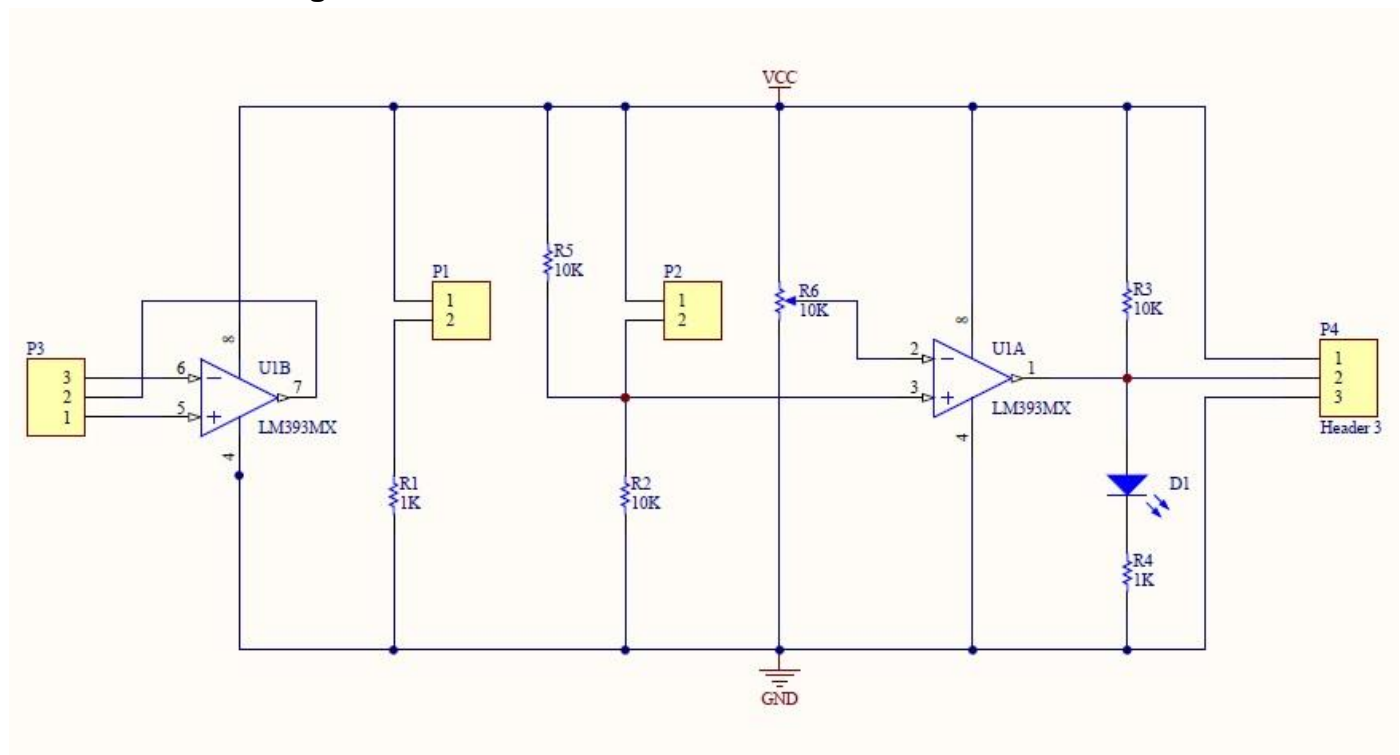
- Input Voltage: 3.3V-5V
- Output: Analog voltage form
Digital Switching form
- Main chip: LM393 Photosensitive sensor
- Output can be directly connected to the microcontroller I/O port.
- The sensitivity of the signal detection can be adjusted.
- Reserve a line voltage to compare circuit.
- PCB size: 30mm x 15mm.



Pin Configuration:

1. Ground
2. Output
3. VCC

Schematic Diagram:



How to test:

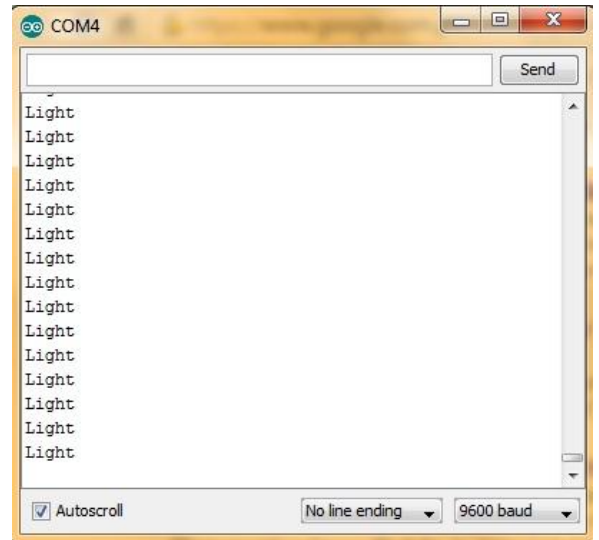
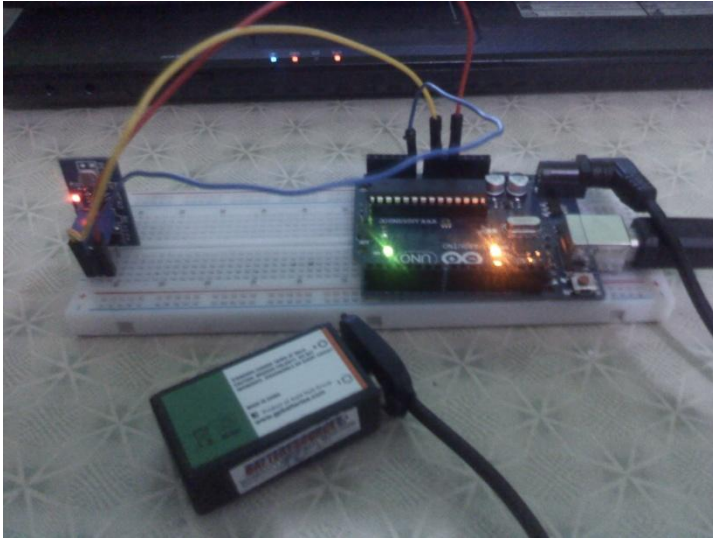
1. Connect your Arduino microcontroller to the computer.
2. Connect the VCC pin of your module to the 5V pin of your Arduino.
3. Connect the GND pin of your module to the GND pin of your Arduino.
4. Connect the Output pin of your module to the A0 pin of your Arduino.
5. Enter this program to your Arduino Integrated Development Environment (IDE):

```
void setup()  
{  
  Serial.begin(9600);  
}  
void loop()  
{  
  if (analogRead(A0) > 20) Serial.println("Light");  
  else Serial.println("Dark");  
  delay(100);  
}
```

6. Click the Upload Button
7. Lastly, click the Serial Monitor button.

Testing Result:

When the module is exposed to light:



When the module is exposed to dark:

