LDR Sensor Module Interface With Arduino

By mybotic (/member/mybotic/) in Circuits (/circuits/) > Sensors (/circuits/sensors/projects/)

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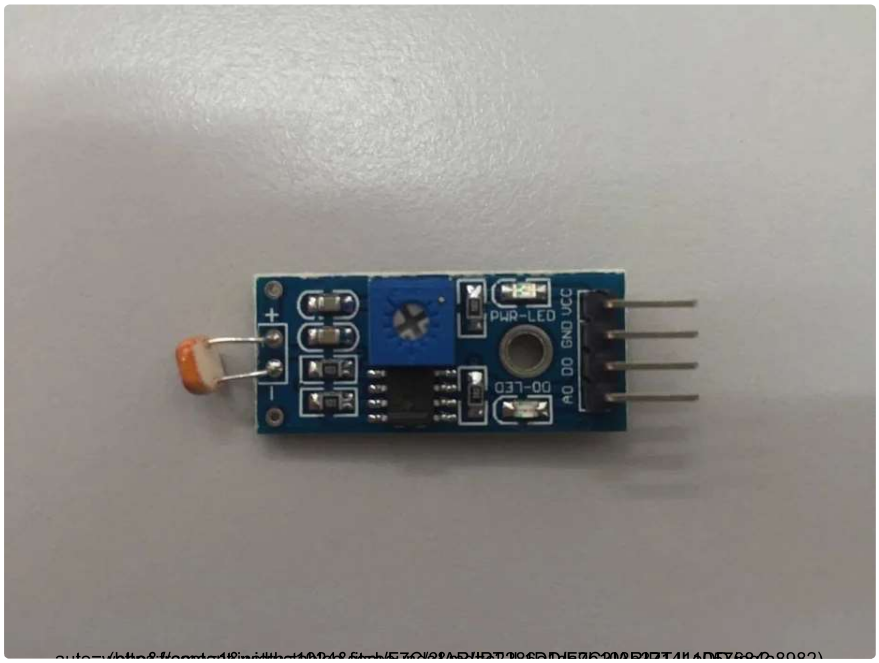

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This tutorial teaches the basics on using LDR Sensor Module.

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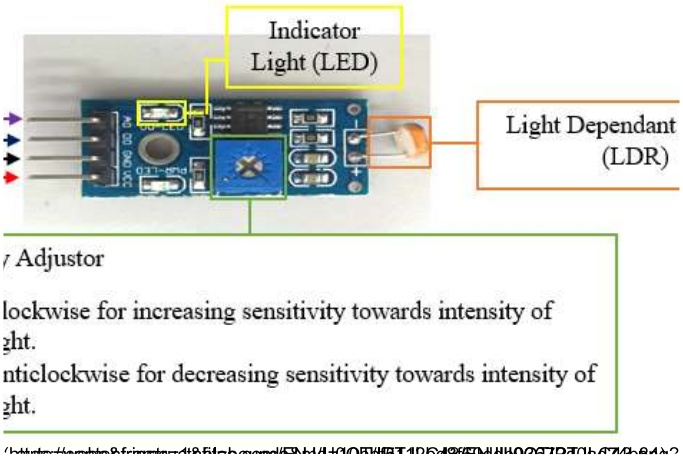
Step 1: Introduction

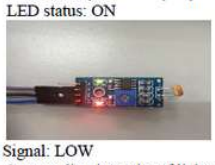
LDR sensor module is used to detect the intensity of light. It is associated with both analog output pin and digital output pin labelled as AO and DO respectively on the board. When there is light, the resistance of LDR will become low according to the intensity of light. The greater the intensity of light, the lower the resistance of LDR. The sensor has a potentiometer knob that can be adjusted to change the sensitivity of LDR towards light.

Specification:

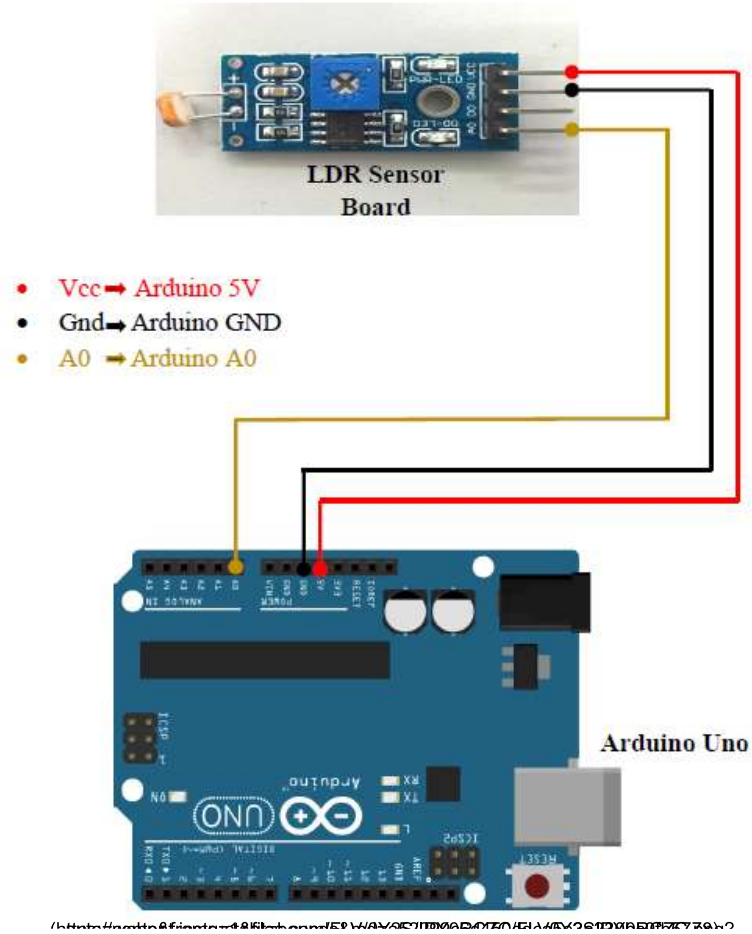
- Input Voltage: DC 3.3V to 5V
- Output: Analog and Digital
- Sensitivity adjustable

Step 2: Pin Definition



Pin	Description	Function
VCC	+3.3V~+5V	Connect to +3.3V ~ +5V
GND	0V	Connect to Ground
D0	Digital Output	1. Output Signal: HIGH • Surrounding intensity of light re level. (Set by sensitivity adjusto • LED status: ON  2. Output Signal: LOW • Surrounding intensity of light d set level. (Set by sensitivity adju • LED status: OFF 
A0	Analog Output	Analog output varies due to intensity of light

Step 3: Sample Hardware Installation (Analog Output)



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Step 4: Sample Source Code

```
void setup()

{

Serial.begin(9600);

}

void loop()

{

unsigned int AnalogValue;

AnalogValue = analogRead(A0);

Serial.println(AnalogValue);

}
```

You can also download the sample source code attached below and upload it into Arduino. After that open "Serial Monitor" to see the result.