Light Sensor with Analog and Digital Output

A Light Sensor with Analog and Digital output available where it is very easy to use. It amplifies the value of the light from 0 to 1023, the more brighter light it will give lower numbers. Typically used in outdoor, for automatic switch ON/OFF of your LED lights to saved energy, security alarm with the use of laser point through the photoresistor. Compatible in all gizDuino boards and other MCU.

Specifications:

Input Voltage: 5V DC
Output Signal: Analog (0 to 1023) and Digital (0 or 1)
On-board IC: LM393
PCB Dimensions: 15 mm x 31 mm

Wiring Connections:

GizduinoV to Light sensor

+5V	**VCC**
GND	**GND**
D4	**DO**
A0	**AO**

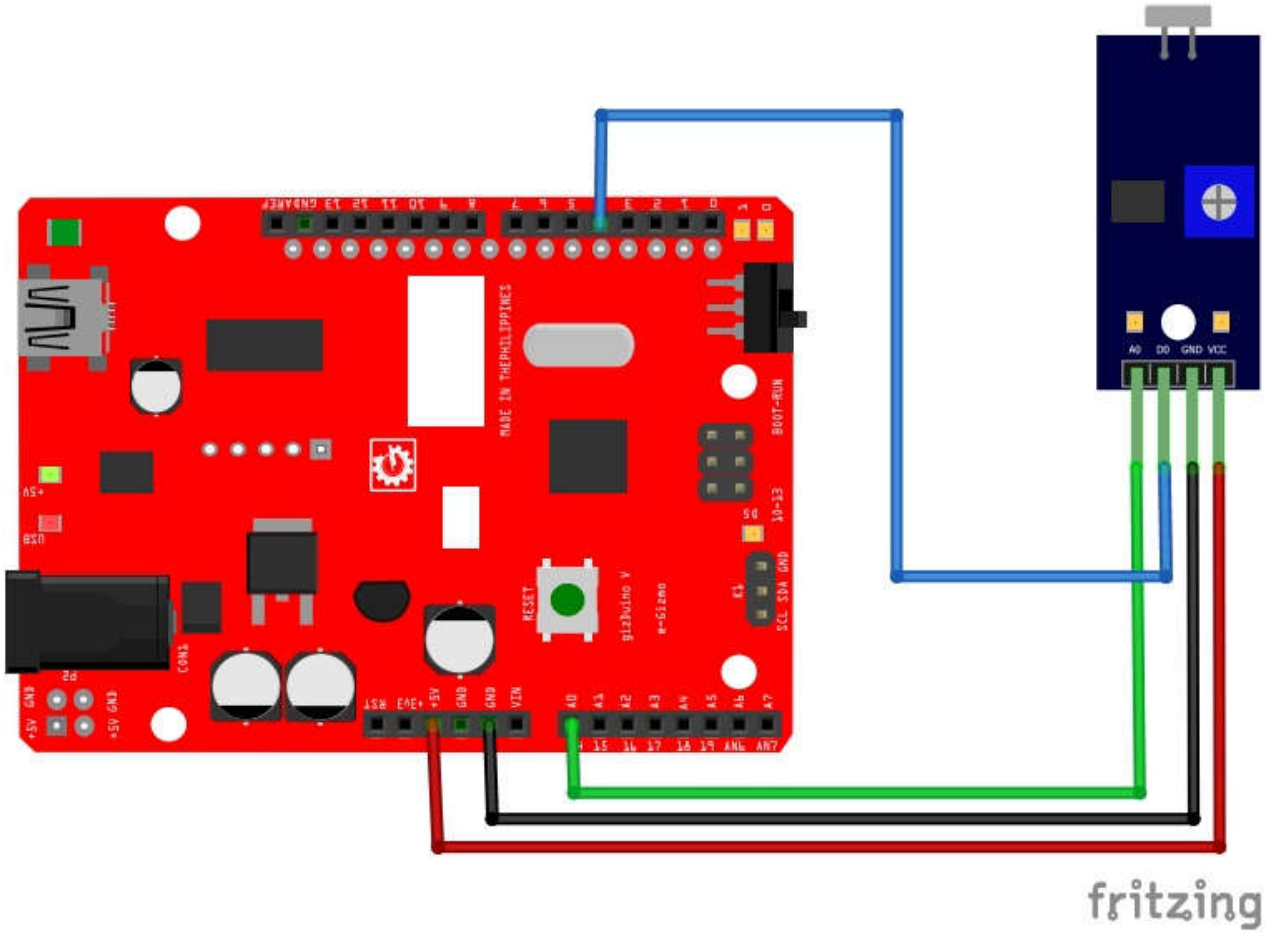

Figure 1. Sample Wiring Diagram with GizDuino V ATmega328P.

```
//*******************************************//
//          Light sensor with                //
//       Analog and Digital output           //
//                                           //
//    This is a sample sketch for reading    //
// the analog and digital output signal      //
// and print the data in Serial Monitor.     //
//                                           //
//                Codes by:                  //
//      e-Gizmo Mechatronix Central          //
//        http://www.e-gizmo.net             //
//          Novemver 5, 2017                 //
//*******************************************//

int digitalLightSensorPin = 4;    // select the Digital input pin for the Light Sensor
int analogLightSensorPin = A0;    // select the input pin for the Light Sensor
int analogSensorValue = 0;  // variable to store the Analog value coming from the sensor
int digitalSensorValue = 0;  // variable to store the Digital value coming from the sensor

void setup() {
  //Initialize the Serial output
  Serial.begin(9600);

  //Declare MicrophonePin as an Input
  pinMode(digitalLightSensorPin, INPUT);
  pinMode(analogLightSensorPin, INPUT);
}

void loop() {
  // read the value from the sensor:
  analogSensorValue = analogRead(analogLightSensorPin);
  digitalSensorValue = digitalRead(digitalLightSensorPin);

  //Print out display to the serial monitor
  Serial.print("Digital Reading: ");
  Serial.print(digitalSensorValue);
  Serial.print(", Analog Reading: ");
  Serial.println(analogSensorValue);

  delay(100); //Delay for stability
}
```

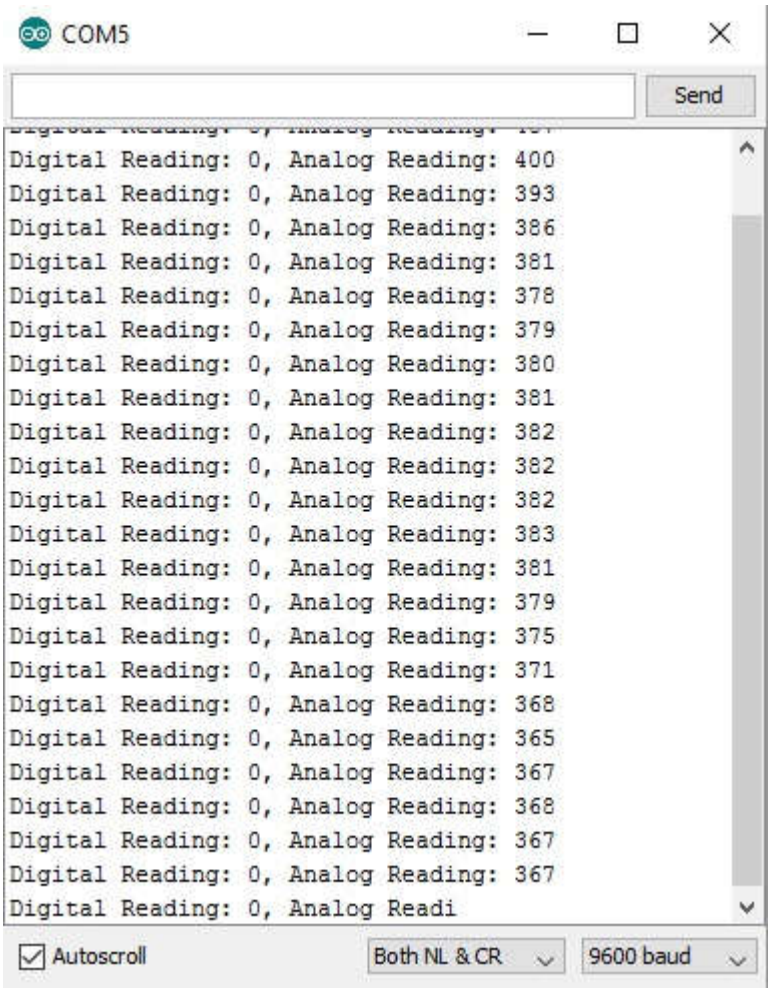

Figure 2. On the Serial monitor you can see the output of the Light sensor.