LASER Proximity Sensor

This is LASER proximity sensor. It is used for detecting objects passing in the LASER light pass by reflecting the projected LASER. This proximity sensor (object detector) is excellent in detecting very small size objects in the detection range. This is because the LASER light ray is very focused and almost have no divergence over small distances.

The sensor is easy to use, have 3 pins: power, ground and signal. It includes LASER source, LASER detector, signal amplification (conditioning circuit). It can be used with Arduino or any other micro-controller.

Specifications

- Effective distance: 0.8m (typical) : 1.5m (max)
- Power: 2.5V ~ 5.0V
- Dimension: 47.7mm * 17.9mm

Applications

- Obstacle detection
- Pipeline counter
- Smart robot
- Obstacle-avoiding
How to Use

**In the case of using Laser sensor with Arduino:**

- VCC ↔ 3.3V ~ 5.0V
- GND ↔ ground Arduino
- DOUT ↔ Arduino (digital INPUT)

**Example Arduino code:-**

```cpp
const int laserpin = 2;
const int buzzer = 11;
int laserState = 0;

void setup() {
    pinMode(buzzer, OUTPUT);
    pinMode(laserpin, INPUT);
}

void loop() {
    laserState = digitalRead(laserpin);
    if (laserState == LOW)
    {
        digitalWrite(buzzer, HIGH);
        delay(500);
        digitalWrite(buzzer, LOW);
    }
}
```