

E18-D80NK Long Range Adjustable IR Sensor



Adjustable Infrared sensor switch manual is an IR distance switch with adjustable range of 3cm to 80cm (up to 2.6ft). Useful for robot interaction, collision detection and proximity applications. Compatible in all gizDuino boards microcontroller.

Features:

Guard mode: Reverse polarity protection

Material: Plastic

Appearance: Threaded cylindrical

Ambient temperature: -25 to 70 deg C

Brown: +5V, **Black:** Signal, **Blue:** GND

Output: 1 - No detection

0 - Object detected

General Specifications:

Input Supply Voltage: 5VDC

Load current: 100mA

Sensing range: 3cm to 80 cm adjustable

Sensing object: Translucency, opaque

Output operation: Normally Open (O)

Output DC: three-wire system (NPN)

Model No.: E18-D80NK-N

Diameter: 18mm

Length: 45mm

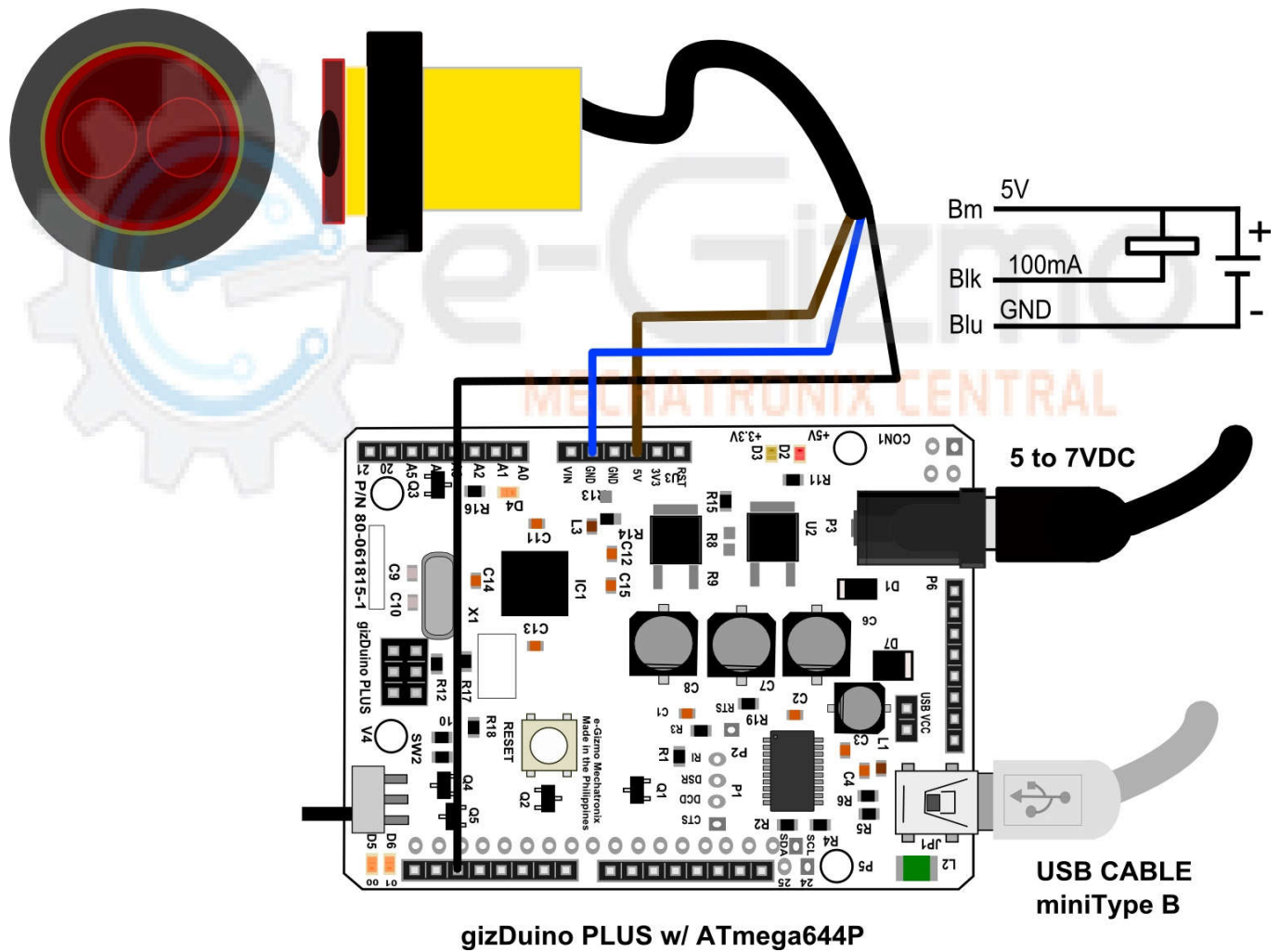


Figure 1. Sample connections

```
//*****//  
//      E18-D80NK Long Range      //  
//      Adjustable IR sensor      //  
//                                  //  
//      This sample sketch is reading the      //  
//      digital signal output of IR sensor and      //  
//      displaying the results data in serial monitor      //  
//                                  //  
//      Codes by:      //  
//      e-Gizmo Mechatronics Central      //  
//      Taft, Manila, Philippines      //  
//      http://www.egizmo.com      //  
//      October 12,2016      //  
//*****//
```

Upload this code to the gizDuino PLUS
Microcontroller, then Open the Serial Monitor
to see the results.

```
//LED ANODE CONNECTED TO DIGITAL PIN 13  
int LEDPIN = 13;
```

```
//INFRARED PROXIMITY SENSOR SWITCH CONNECTED TO DIGITAL PIN 2  
int INPUTPIN = 2;
```

```
//THIS VARIABLE WILL READ THE VALUE FROM THE SENSOR  
int VAL = 0;
```

```
void setup()  
{  
  Serial.begin(9600);  
  pinMode(LEDPIN, OUTPUT); //LED SET AS OUTPUT  
  pinMode(INPUTPIN, INPUT); //IR SENSOR AS INPUT  
}
```

```
void loop()  
{  
  // READ THE INPUT VALUE  
  VAL = digitalRead(INPUTPIN);  
  //CHECK THE INPUT IS HIGH  
  if (VAL == HIGH)  
  {  
    digitalWrite(LEDPIN, LOW); //LED IS OFF  
    Serial.println(VAL);  
  }  
  else  
  {  
    digitalWrite(LEDPIN, HIGH); //LED IS TURNED ON  
    Serial.println(VAL);  
  }  
  delay(500);  
}
```