

E18-D80NK Long Range Adjustable IR Sensor

Technical Manual Rev 1r0



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

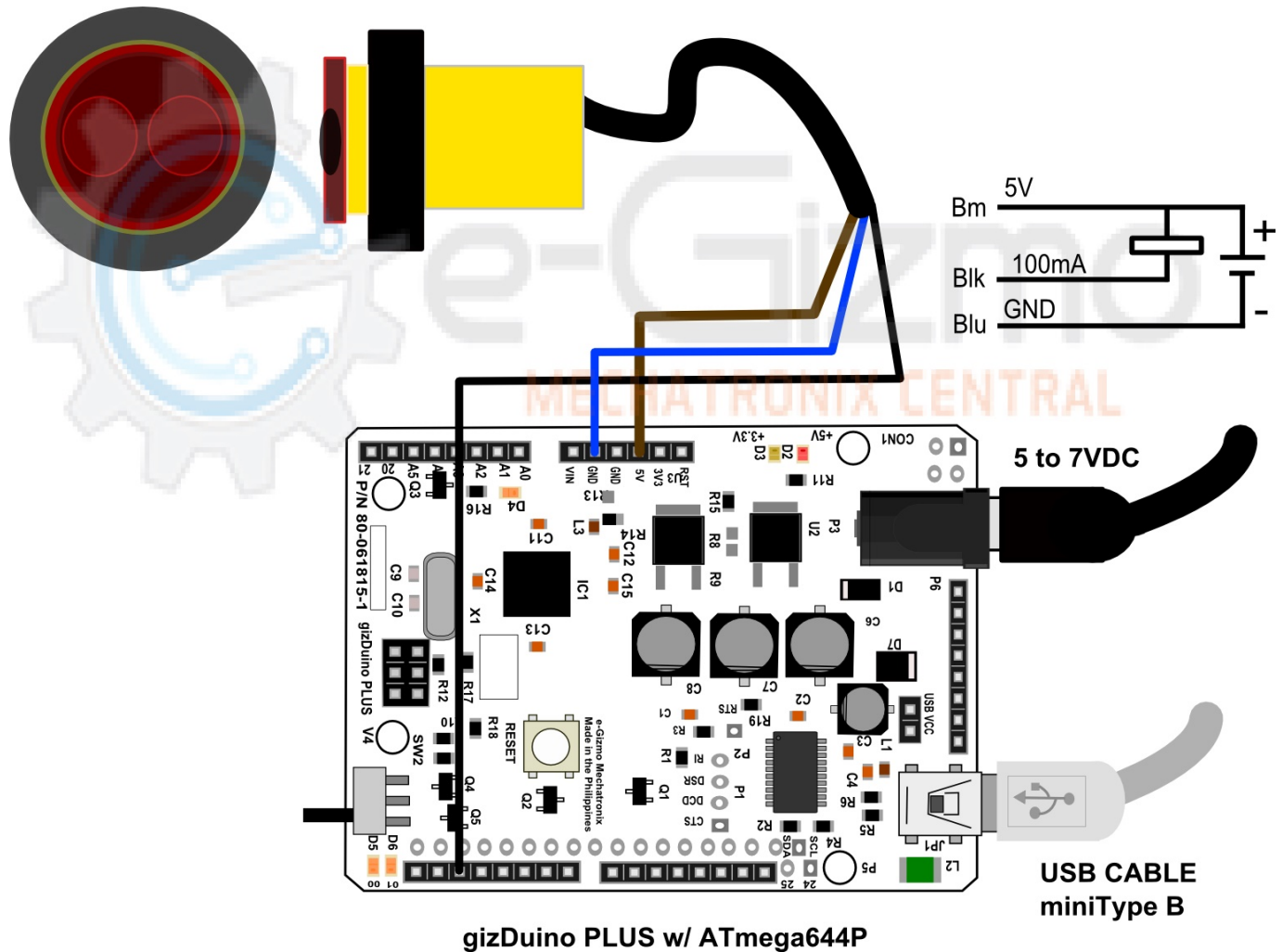


Figure 1. Sample connections

```

//*****//
//      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);
}

```