

# 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

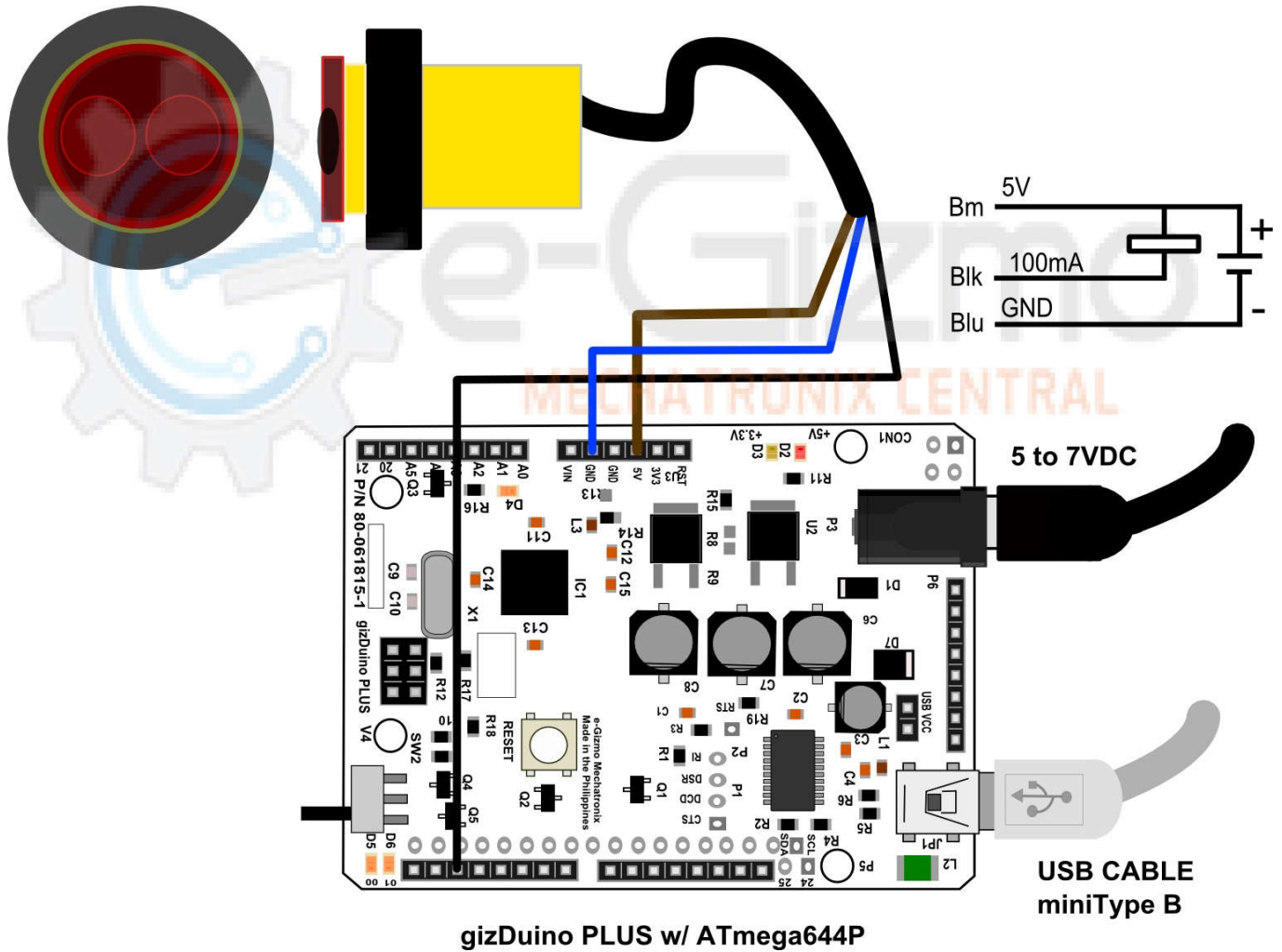


Figure 1. Sample connections

```

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

```