

## Unwanted Entrance Detector -

#####

```
int ir=7;
```

```
int led=8;
```

```
int x;
```

```
void setup() {
```

```
    // put your setup code here, to run once:
```

```
    Serial.begin(9600);
```

```
    pinMode (7,INPUT);
```

```
    pinMode (8,OUTPUT);
```

```
}
```

```
void loop() {
```

```
    // put your main code here, to run repeatedly:
```

```
    x = digitalRead(ir);
```

```
    Serial.println(x);
```

```
delay(100);
```

```
if(x==1)
```

```
{
```

```
    digitalWrite(8,LOW);
```

```
}
```

```
else
```

```
{
```

```
    digitalWrite(8,HIGH);
```

```
}
```

```
}
```

```
#####
```

### **MOTION DETECT (PIR) CODE -**

```
//the time we give the sensor to calibrate (10-60 secs according to the
datasheet)
int calibrationTime = 30;

//the time when the sensor outputs a low impulse
long unsigned int lowIn;

//the amount of milliseconds the sensor has to be low
//before we assume all motion has stopped
long unsigned int pause = 5000;

boolean lockLow = true;
boolean takeLowTime;

int pirPin = 7;    //the digital pin connected to the PIR sensor's output
int ledPin = 5;    //the digital pin connected to the LED output
```

```

int Buzzer = 6;    //the digital pin connected to the BUZZER output

//////////////////////////
//SETUP
void setup(){
    Serial.begin(9600);
    pinMode(pirPin, INPUT);
    pinMode(ledPin, OUTPUT);
    pinMode(Buzzer, OUTPUT);
    digitalWrite(pirPin, LOW);

    //give the sensor some time to calibrate
    Serial.print("calibrating sensor ");
    for(int i = 0; i < calibrationTime; i++){
        Serial.print(".");
        delay(1000);
    }
    Serial.println(" done");
    Serial.println("SENSOR ACTIVE");
    delay(50);
}

//////////////////////////
//LOOP
void loop(){

    if(digitalRead(pirPin) == HIGH){
        digitalWrite(ledPin, HIGH);    //the led visualizes the sensors
output pin state
        tone(Buzzer,300);
        if(lockLow){
            //makes sure we wait for a transition to LOW before any further
output is made:
            lockLow = false;
            Serial.println("---");
            Serial.print("motion detected! someones there ");
            Serial.print(millis()/1000);
            Serial.println(" sec");
            delay(20);
        }
    }
}

```

```

        takeLowTime = true;
    }

    if(digitalRead(pirPin) == LOW){
        digitalWrite(ledPin, LOW); //the led visualizes the sensors output
pin state
        noTone(Buzzer);
        if(takeLowTime){
            lowIn = millis(); //save the time of the transition from
high to LOW
            takeLowTime = false; //make sure this is only done at the
start of a LOW phase
        }
        //if the sensor is low for more than the given pause,
        //we assume that no more motion is going to happen
        if(!lockLow && millis() - lowIn > pause){
            //makes sure this block of code is only executed again after
            //a new motion sequence has been detected
            lockLow = true;
            Serial.print("so calm! no ones around "); //output
            Serial.print((millis() - pause)/1000);
            Serial.println(" sec");
            delay(10);
        }
    }
}

```

Hudai SMD LED jolanor code -

```

const int blue = 3; //set blue to pin 3

const int red = 5; //set red to pin 5

const int green = 6; //set green to pin 6

void setup() {

```

```
pinMode(blue, OUTPUT); //set blue as an output

pinMode(red, OUTPUT); //set red as an output

pinMode(green, OUTPUT); //set green as an output

}

void loop() {

    digitalWrite(blue,HIGH); //color sequence for cycling through blue, red,
green. One at a time.

    delay(1000);

    digitalWrite(blue,LOW);

    delay(1000);

    digitalWrite(red,HIGH);

    delay(1000);

    digitalWrite(red, LOW);

    delay(1000);

    digitalWrite(green, HIGH);

    delay(1000);

    digitalWrite(green, LOW);

    delay(1100);

    digitalWrite(blue, HIGH); //color sequence for purple
```

```
digitalWrite(red, HIGH);

digitalWrite(green, LOW);

delay(2000);

digitalWrite(blue, HIGH); //color sequence for turquoise

digitalWrite(green, HIGH);

digitalWrite(red, LOW);

delay(2000);

}
```