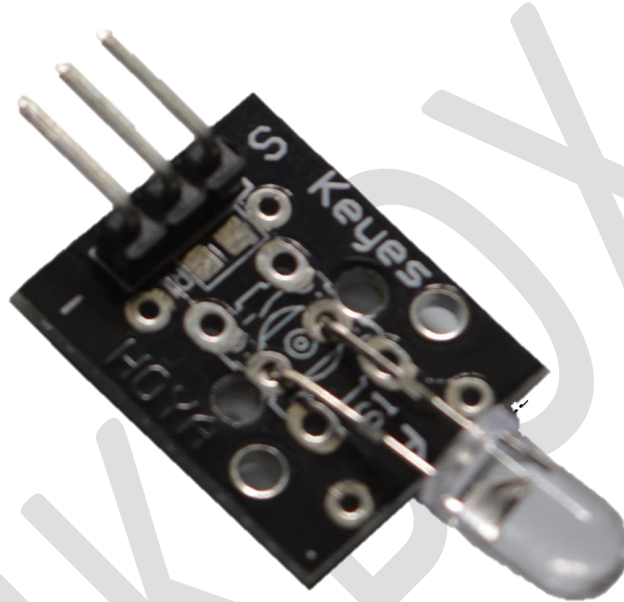


# Keyes

## Infrared Transmitter Module



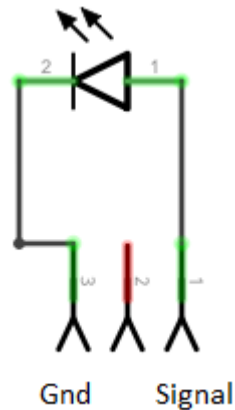
### General Description

An infrared emitter, or IR emitter, is a source of light energy in the infrared spectrum. It is a light emitting diode (LED) that is used in order to transmit infrared signals from a remote control.

### Specification

- Supply Voltage: 2.7V to 5.5V
- Supply Current : 1.5mA
- Operating Temperature: -25°C to 85°C
- Frequency: 37.9KHZ
- Transmitting Angle: Very Wide

## Schematic



## Using IR Transmitter

You need:

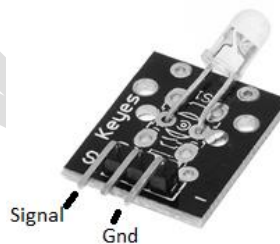
2 Arduino

Keys IR Transmitter Module

Connecting Wires

Keys IR Receiver Module

1. Connect the Keys IR Transmitter Module to your arduino by following the pin connections shown below.



2. Download [IRremote library](#) and extract it to library folder in your Arduino directory.
3. For the transmitter, enter this sketch to your Arduino IDE then click upload. You can also find this at RFID library examples. This program will display the hex equivalent of the button pressed on a remote.

```
#include <IRremote.h>

IRsend irsend;

void setup() {
}
```

```

void loop() {
  irsend.sendSony(0x68B92, 20);
  delay(100);
  irsend.sendSony(0x68B92, 20);
  delay(100);
  irsend.sendSony(0x68B92, 20);
  delay(3000);
}

```

4. For the receiver, get another Arduino and upload this code:

```

#include <IRremote.h>

const int RECV_PIN = 11;

IRrecv irrecv(RECV_PIN);

decode_results results;

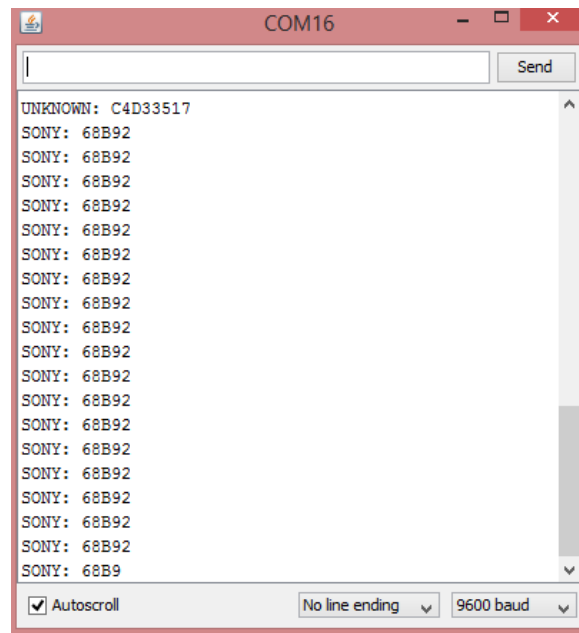
void setup()
{
  Serial.begin(9600);
  irrecv.enableIRIn(); // Start the receiver
  irrecv.blink13(true);
}

void loop() {
  if (irrecv.decode(&results)) {
    if (results.decode_type == NEC) {
      Serial.print("NEC: ");
    } else if (results.decode_type == SONY) {
      Serial.print("SONY: ");
    } else if (results.decode_type == RC5) {
      Serial.print("RC5: ");
    } else if (results.decode_type == RC6) {
      Serial.print("RC6: ");
    } else if (results.decode_type == UNKNOWN) {
      Serial.print("UNKNOWN: ");
    }
    Serial.println(results.value, HEX);
    irrecv.resume(); // Receive the next value
  }
}

```

5. Open Serial Monitor and see the results.

## Results



## Actual Setup

