

## Infrared Receiver Module

This module contains an infra-red receiver Integrated Circuit which decodes pulses of infra-red light for short range communications at a frequency of 38 kilohertz [kHz] (e.g. television, DVD player remote controls).

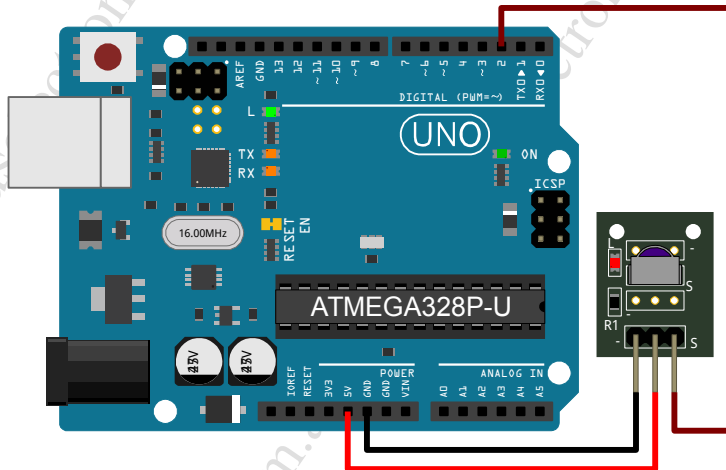
Some laptop computers also include infrared communications for short range low bandwidth data transfer.

This module can be used in conjunction with the [Infrared Transmitter Module](#) to create short range custom communication systems.

**Table 1: Infrared Receiver Module Pin Connections**

Device	Arduino	Wire	Description
-	GND	■	Ground connection.
middle	5V	■	5 Volts Direct Current power supply to infrared receiver.
S	D2	■	Data output signal from infrared receiver.

D2: can be any digital pin.



The sketch below displays the results to the Arduino Serial Monitor / Plotter:

```
#include <IRremote.h>
int pIRReceive = 2;
IRrecv irrecv ( pIRReceive );
decode_results results;
void setup () {
  Serial.begin ( 9600 );
  irrecv.enableIRIn();
}
void loop() {
  if ( irrecv.decode ( & results ) ) {
    Serial.println( results.value, HEX );
    irrecv.resume();
  }
}
```

### Module Specifications

PCB Dimensions ( H × W × D ): 19.2 × 15.5 × 1.6 millimetres [mm]  
Enclosing Dimensions ( H × W × D ): 24.3 × 15.5 × 14.6 mm  
Weight: 1.7 grams [g]  
Input Voltage: 5 Volts Direct Current

## Infrared Receiver Module...

### Module Performance

Current Draw (idle): 0.46 milliamps [mA] @ 5.06 VDC  
Current Draw (receiving): 0.94 mA @ 5.06 VDC

### Module Mounting

The module has 2 mm diameter mounting holes at the end opposite the pin connections. As the bare component leads protrude through the bottom of the Printed Circuit Board, suitable spacers and insulation must be used.

### Projects

Folder: **Modules\Optical\Infrared\_Receiver\**

- **Infrared\_Receiver\_SM**: Displays the results to the Arduino Serial Monitor / Plotter.

### Libraries

- **IRRemote**: Configures the timing for transmitting the infrared remote control codes.

# Infrared Receiver Module - Dimensions

