**RB-See-185**

Seeedstudio Grove Infrared Receiver

Grove - Infrared Receiver

Introduction

The Infrared Receiver is used to receive infrared signals and also used for remote control detection. There is a IR detector on the Infrared Receiver which is used to get the infrared light emitted by the Infrared Emitter. The IR detector have a demodulator inside that looks for modulated IR at 38 KHz. The Infrared Receiver can receive signals well within 10 meters. If more than 10 meters , the receiver may not get the signals. We often use the two Groves-the Infrared Receiver and the Grove - Infrared Emitter to work together.
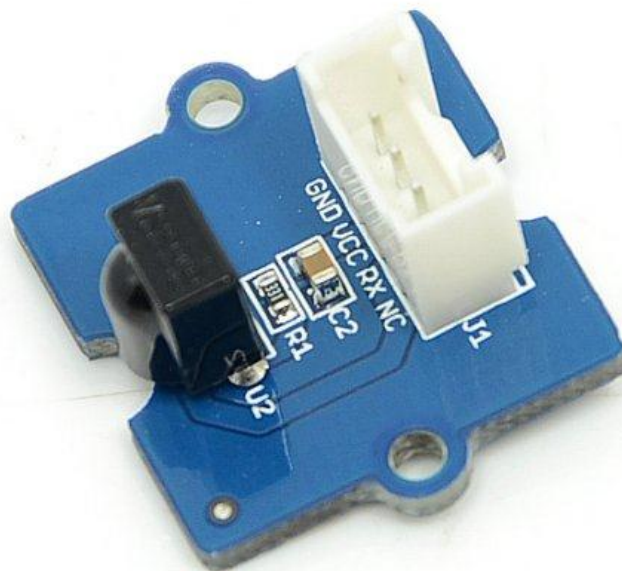
Features:

- Grove compatible interface.
- Supports 3.3V and 5V supply voltages.

Application Ideas

- Remote Control of robots, relays or other things

Mechanic Dimensions

- 20mm by 24mm

Usage

Hardware Installation

Connect the Transmitter module to Digital I/O 10 of the Grove - Base Shield on the receiving arduino.

Programming

The demo below is the IRrecvDemo.pde example provided by the IRremote library.

Download IRremote.zip and unpack into arduino/hardware/libraries in your arduino installation.

```
/*
 * IRremote: IRrecvDemo - demonstrates receiving IR codes with IRrecv
 * An IR detector/demodulator must be connected to the input RECV_PIN.
 * Version 0.1 July, 2009
 * Copyright 2009 Ken Shirriff
 * http://arcfn.com
 */

#include <IRremote.h>

int RECV_PIN = 11;
```

```
IRrecv irrecv(RECV_PIN);


decode_results results;


void setup()

{

  Serial.begin(9600);

  irrecv.enableIRIn(); // Start the receiver

}


void loop() {

  if (irrecv.decode(&results)) {

    Serial.println(results.value, HEX);

    irrecv.resume(); // Receive the next value

  }

}
```