Gravity: 315MHZ RF Receiver Module
SKU: TEL0112

Introduction

The 315MHz RF radio module is widely used in the field of vehicle Telecontrol, access control system, identification, etc. Compared with traditional wired communication, RF radio has advantage of higher flexibility and lower maintenance cost.
DFRobot 315MHz RF receiver module using SC2272-L4 low power decoder chip, with 8-bit three-state address coding switch, each one has three states: high level, low level, floating empty, so it supports up to 6,561 of the coding address. Modules can be used with SC2260, SC2262, PT2260, PT2262 and other coding chips, recommend our Remote Wireless Keyfob (315MHz)

Application

- Home Car Safety System
- Garage control
- Remote Control Toys
- Remote Control fan

Specification

- Power Supply: 3.3/5v (MAX5.5V)
- Module Interface: PH2.0-3pin
- Operating Frequency: 315MHz
- Modulation Mode: Ask
- Demodulation Mode: Superheterodyne type
- Sensitivity: Typical -108 dBi
- Transfer Rate: Maximum 9.6kbps
- Receive bandwidth: ±1.25MHz (6dB)
- Antenna Impedance: 50 ohms
- RF chip: LR480
- Decoding Chip: SC2272-L4 latch type
- Transmission Distance: 50 m (5V Power)
- Operating Temperature: 0~+70℃
- Weight: 10g

Instruction

RF modules need a corresponding remote controller to work together. Make sure the receiver and the remote control address are consistent before using. The following example is based on our Metal Remote Wireless Keyfob.

Set Receiver Module Address

315MHZ RF Receiver module has 8-bit three-state address coding switch (a0~a7), each one has three states: high level, low level, floating empty, up to 6,561 address make your device more security. Note: the default address of controller is floating empty (middle position).

Set Controller Address

This module can be used with SC2260, SC2262, PT2260, PT2262 and other coding chips. Please click here for the Address Setting.
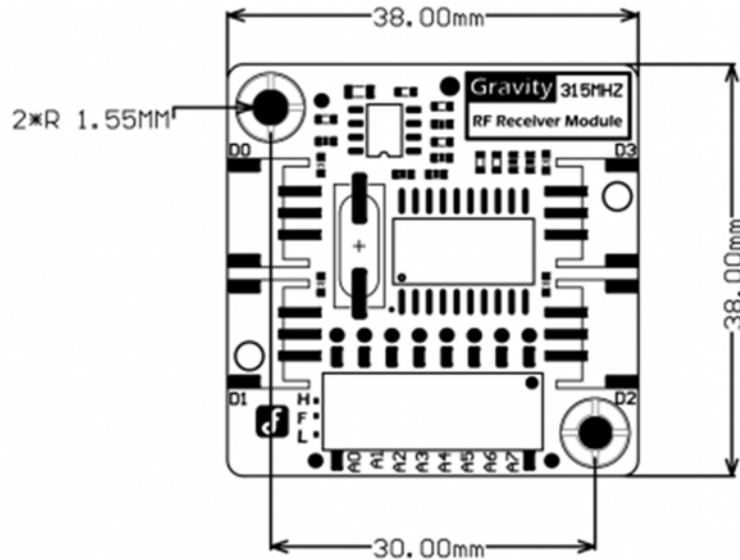
Pairing Rules

- 1.The address code must be consistent.
- 2.The shock resistance need to be matched. Refer to the following table :

PT2272/SC2272/CS5212	PT2262	PT2260	SC2260	CS5211	width
220K	1.2M	X	3.3M	1.1M	500us
270K	1.5M	X	4.3M	1.4M	650us

| 390K	2.2M	X	6.2M	2M	900us
680K	3.3M	X	9.1M	3M	1320us
820K	4.7M	1.2M	12M	4.3M	1820us

Dimension

Tutorial

SC2272-L4 is a latch decoder, the LED will light on when it receive corrsponding signal.
In this tutorial, we use Arduino UNO to read the GPIO output.

Requirements

- **Hardware**
- DFRduino UNO (or similar) x 1
- Gravity 315MHZ RF Receiver Module x1
- M-M/F-M/F-F Jumper wires

- **Software**
- Arduino IDE, Click to Download Arduino IDE from Arduino®

Connection Diagram
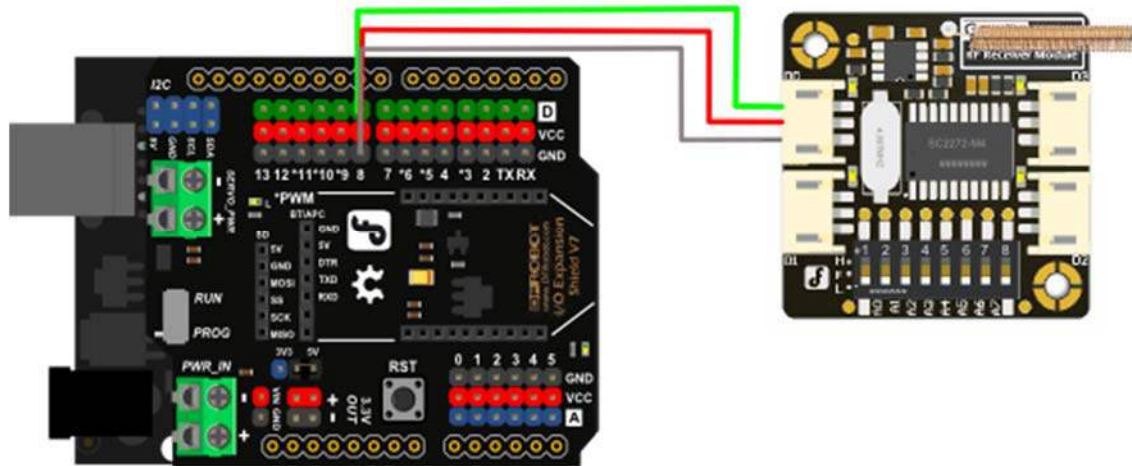
Sample Code

Do you need to install any additional libraries? Explain it here
How to install Libraries in Arduino IDE (If there is no need to install any libraries, please delete this link)

```
/*************************************************

 *Gravity 315MHZ RF Receiver Module(V1.0)

 * ****************************************************

 *   The data received from the serial print module

 *

 * @author Dongzi(1185787528@qq.com)

 * @version  V1.0

 * @date   2017-01-03

 * All above must be included in any redistribution

 * ****************************************************/

char  mou_D0=8;// define pin 8 for receive module D0

char  mou_S=13;// What is received with LED display

void setup() {

  pinMode(mou_D0, INPUT);

  pinMode( mou_S, OUTPUT);

}
```

```
void loop() {

  char mou_S0=digitalRead(mou_D0);

  if(mou_S0==HIGH)

    digitalWrite(mou_S,HIGH);

  else

    digitalWrite(mou_S,LOW);

}
```

Expected Results

The light will be on until you press the other button.