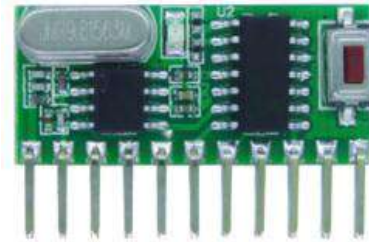**Type:** **ASK/OOK Superhet Decoding Receiver Module**

Model: **CYRM03-V3.0**

Description:

CYRM03-V3.0 is an ISM frequency band high quality super heterodyne decoding wireless data transfer receiving module. This module adapts UHF wireless communication technology and low noise large scale integrated circuit, so it has a perfect antistatic protection, high reliability and very competitive in terms of pricing and performance. It can be used in a large number of applications such as remote control garage doors, extendable doors, brake, industrial control, communications, security, home automation, GSM/GPS on-board system and etc fields. The receiving system is an ideal choice for high demand system with a complex environment.

Order Information:

Model NO.	Frequency
CYRM03-V3.0-315	315MHz
CYRM03-V3.0-433	433.92MHz

Features:

- Frequency: 315MHz/433.92MHz/ (custom frequency is available);
- High sensitivity -110dBm;
- Supply voltage: VCC= 2.6V to 5.5 V;
- 4 Channel output, self setting for Latches and Temporary Storage Mode;
- EV1527 Learning Code decoding receiving module (PT2262 Fixed Code and HCS301 Rolling Code are available).
- For EV1527, CYRM03-V3.0 can support up to 8 encoders (RC), when the encoder learning overflow (i.e. more than 8 encoders), decoder will start automatically covering and scrapping the encoder that has been studied at the earliest.
- Low power consumption: 5.0V/5.0mA@433M,5.0V/4.0mA@315M, continuously data rate to 2.4kbps（Manchester encoding）
- Good selectivity and stray radiation inhibition ability.

● Temperature range -20-70℃, It can work normal even under harsh environment.

Application

● Remote gate controls, Brake
● Remote keyless entry (RKE)
● Wireless control Curtain device
● Wireless security systems
● Wireless Industrial Control
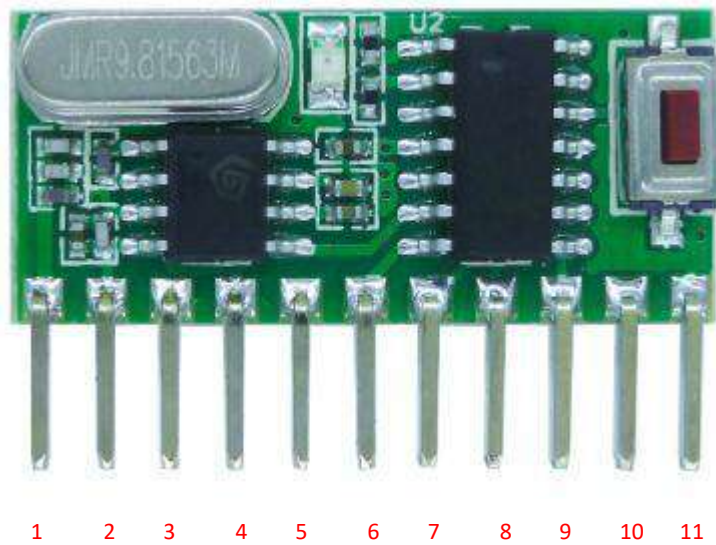● Wireless parking lot barrier

Pin Description

Figure1 CYRM03-V3.0 Shape & Pins

PIN	PIN NAME	PIN DEFINITION
1	ANT	Antenna In
2	GND	Ground
3	VT	Wireless signal indicating port
4	DATA	Wireless data testing port
5	KEY	Connect external learning button

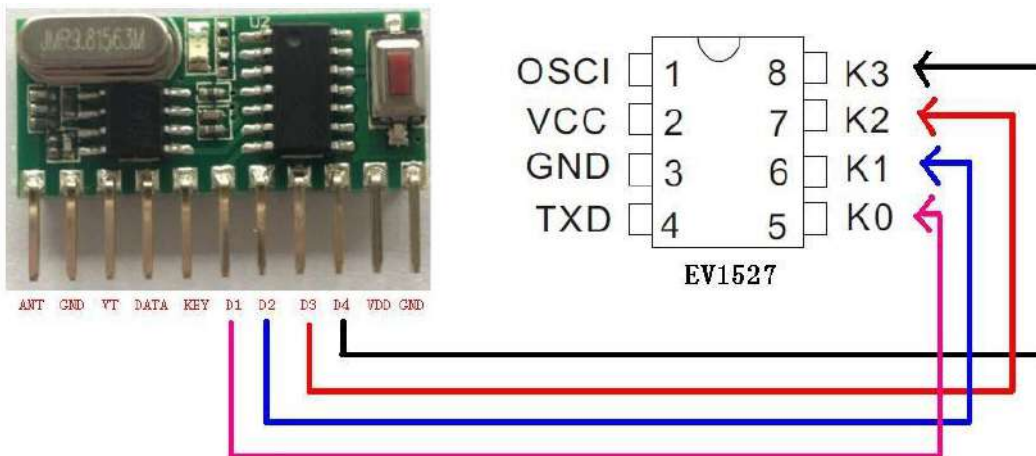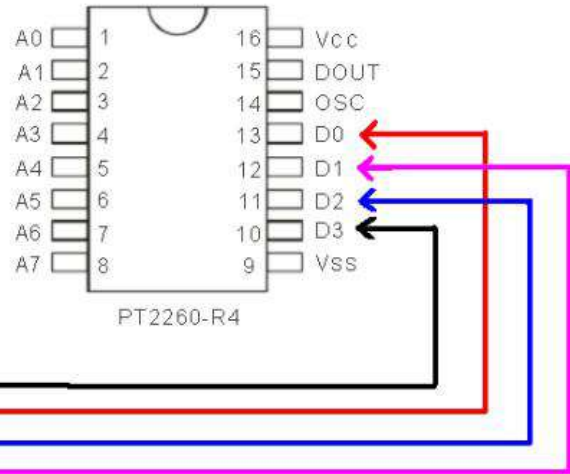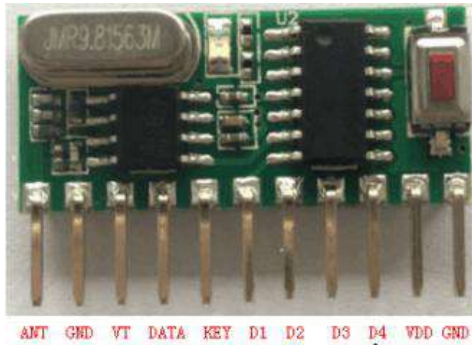| 6	D1	D1 Channel output, self setting for latches and temporary storage mode
7	D2	D2 Channel output, self setting for latches and temporary storage mode
8	D3	D3 Channel output, self setting for latches and temporary storage mode
9	D4	D4 Channel output, self setting for latches and temporary storage mode
10	VDD	Positive Power Supply
11	GND	Ground

Note: ANT pin is a 50 ohm antenna input. The length is about:
23cm for 315 MHz
17cm for 433.92 MHz

Correspondence Between CYRM03-V3.0 and EV1527/PT2260：

Learning Code

Fixed Code

Electrical Characteristics:

Condition: Temperature =25℃ Vcc=5.0V Frequency=315MHz

Parameter	Symbol	Condition	Reference Value			Unit
			Min	**Typ.**	**Max**	
Working Freq.	Fc		314.90	315.00	315.10	MHz
Modulation			ASK			
Sensitivity		50 Ohm antenna input directly/1K Kbps		-110		dBm
Receiving Bandwidth				200		KHz
Working Voltage			2.6	5.0	5.5	V
Working Current	IRC			4.0		mA
Decoding the lowest output Voltage					0.5	V
Working Temperature			-20		+70	℃

Condition: Ta=25℃ Vcc=5.0V Frequency=433.92MHz

Parameter	Symbol	Condition	Reference Value			Unit
			Min	Typ.	Max	
Working Freq.	Fc		433.82	433.92	434.02	MHz
Modulation				ASK		
Sensitivity		50 Ohm antenna input directly/1K Kbps		-110		dBm
Receiving Bandwidth				200		KHz
Working Voltage			2.6	5.0	5.5	V
Working Current	IRC			5.0		mA
Decoding the lowest output Voltage					0.5	V
Working Temperature			-20		+70	℃

CYRM03-V3.0 Super heterodyne receiver module remote control code and delete methods

(1) Learning code and clearing code
---Press learning key and release, learning indication LED on.
---Press any key on the remote control, learning indication LED flashes 3 times and then automatically off.
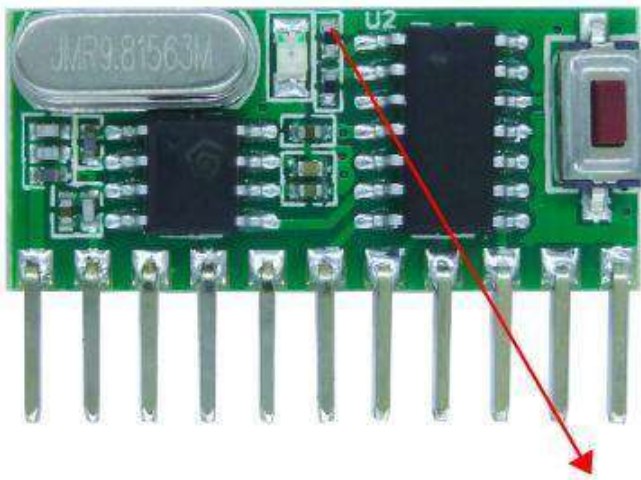---Learning process is done. Now remote control can control CYRM03-V2.0.
---If no press the remote control within 10s, learning indication LED off and drop out learning.
---Long press the learning key for 8s, learning indication LED on. After 8s, LED flashes 3 times and automatically off. Clear code successfully.

(2) Latches and Temporary Storage Mode Setting
---Latch mode: press any key on the remote, decoding module outputs high level. Release the key, decoding module keeps outputting high level. Press again the key, decoding module turns to output low level.
---Temporary mode: press any key on the remote, decoding module outputs high level. Release the key, decoding module outputs low level.

Soldering resistor is Latch mode
Remove resistor is Temporary mode

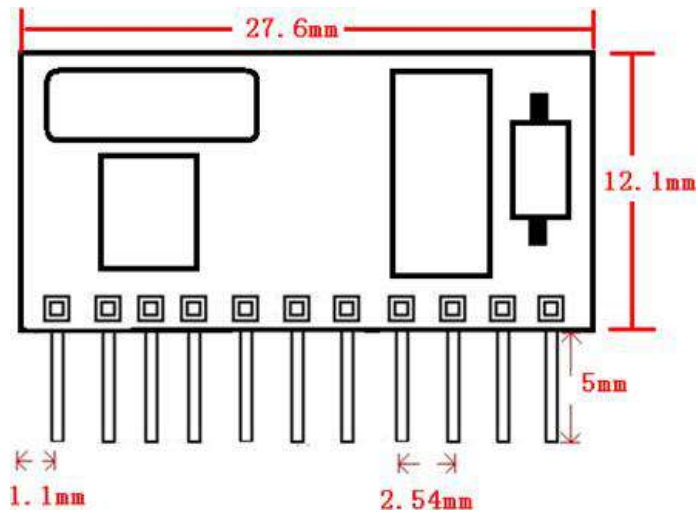## Mechanical Size: (Unit: MM)

Figure2 CYRM03-V3.0 Dimension

For more information and assistance, please contact us as follows:

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