



Shenzhen C&D Electronics Co ., Ltd.
Huizhou C&D Industry Co., Ltd.

Specification

Part.NO:RF204A/B

Version History

Version	Changes description	Date	Prepared by	Checked by	Approved by
A/0	Draft	2015-12-29	Lynn		



Shenzhen C&D Electronics Co ., Ltd.

Huizhou C&D Industry Co., Ltd.

File Name: RF204A/B specification

Ver: A/0

File NO.: TC-PD-RF204A/B-0001

Date: 29/12-2015

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3.Introduction

3.1. Production Definition

RF204A / B is composed of a transmitter and a receiver module consisting of intelligent curtain control products (transmitter is remote control). It's rolling code and Frequency is 315MHZ.

3.2. Design

Product name	Design
RF204A Transmitter	HCS301
RF204B Controller	SYN500R/PIC16F630

3.3. Electrical Character

Item	Transmitter (TX model)		Receiver(RX model)	
1	RF Modulation	OOK	RF Modulation	OOK
2	Frequency point	315MHz	Frequency point	315MHz
3	Radio output power	$\leq +10\text{dBm}$	Radio sensitivity	-109dBm
4	Transmit distance	100 M	Receive distance	$\leq 100\text{M}$
5	Working Current	$\leq 20\text{mA}$	Working Current	7-8mA
6	Standby Current	$\leq 1\mu\text{A}$	Idle power	<10dBm
7	Ta	0°C-40°C	Ta	0°C-50°C
8	Keyboard	With P+R	Tc	Max 80°C
9	Power supply	23A 12V*1pcs	Power supply	3.3V-5V
10	Keyboard lifetime	≥ 100000 times	Relay lifetime	≥ 100000 times
11	Outline size	125*48.8*16.5mm	Outline size	35*22*1.0mm



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4. Product Picture

4.1. Transmitter(Remote control)



Picture 1. Transmitter



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5. Transmitter Function Requirement

5.1. Button Function

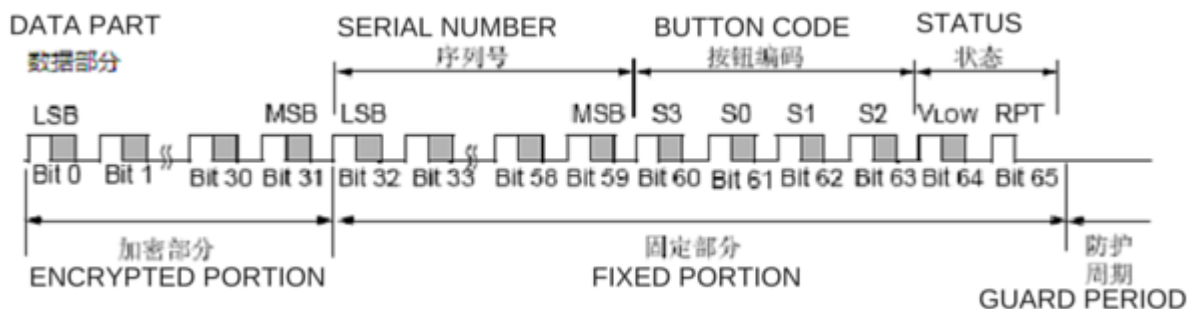
Item	Buttons	Code	Command Function Description
1	Open	/	D3 = 1
2	Close	/	D1 = 1
3	Stop	/	D2 = 1


5.2. 315MHZ Transmitter Encoding Rules

$T_E = 400\mu s$



数据头部分 DATA HEADER PART



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6. Product Function

6.1. Learning way and steps

A. Pressing receiver module 'learning' button once, LED Light up then extinguish(when release).It's now in learning mode(Learning Mode lasts for 35 seconds).

B. Pressing any button of Transmitter intended to be paired. The receiver module LED will light up for one second then extinguish(means it has successfully received the data).

C. After successfully received the data, if the receiver module LED light up for 2 second then extinguish to confirm that the transmitter is now paired. If The receiver module LED flash three times to confirm that is unpaired.

6.2.Clearing memory

If you want all transmitter not working. Should be power off and re-up electricity. On the receiver module, press the 'Learning' button for 8 seconds. LED on receiver module will extinguish. Receiver module will clean out delete the memory message.

6.3. Pairing failed

Learning Mode lasts for 35 seconds; if no signal is received from a transmitter during this time then the receiver module will automatically exit learning mode without pairing the device. If during learning mode the LED does not flash to confirm, this means that the receiver module's memory is FULL and no further remote control may be paired with it unless one of the existing remote controls is first unpaired. If you wants to pair, you need to press the 'Learning' button of receiver module for 8 seconds, LED on receiver module will extinguish. Receiver module will clean out delete the memory message.

6.4. Number of paired controller and transmitter

Receiver module can pair with up to10 transmitter at any one time.



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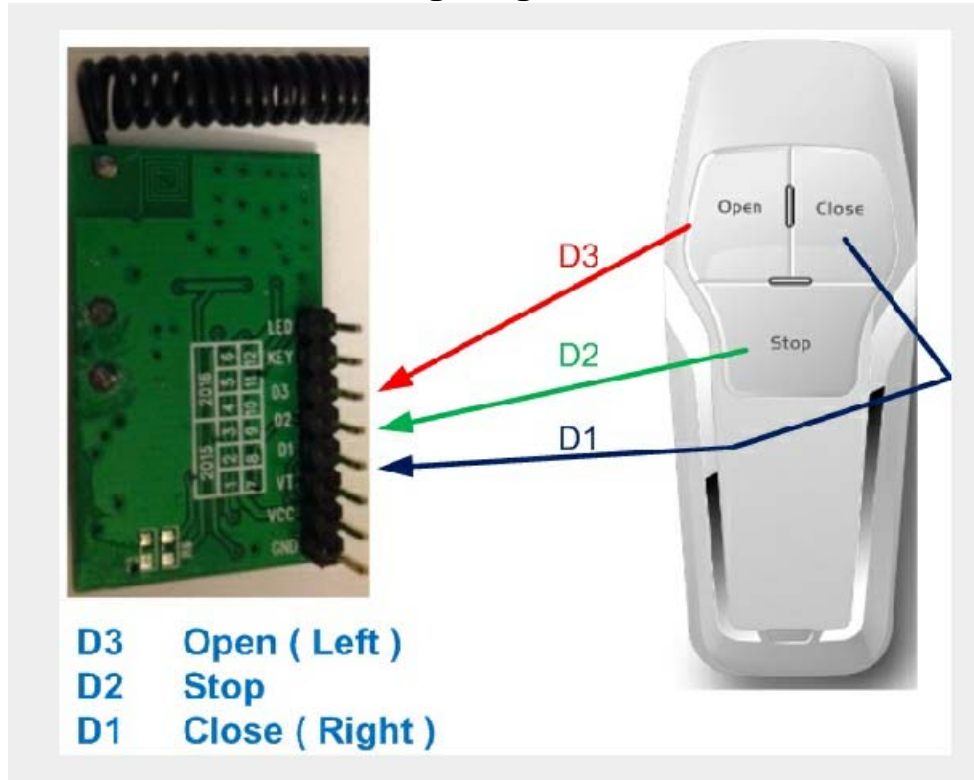
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6.5. Receiver module wiring diagram



Picture 4.Receiver module wiring diagram

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7、FCC STATEMENT

§ 15.19 Labelling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

§ 15.21 Information to user.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

§ 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help