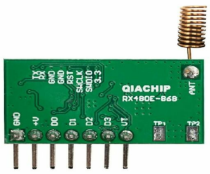

QIACHIP RX480E-868 Wireless Four Channel Decoding Receiver Module User Manual

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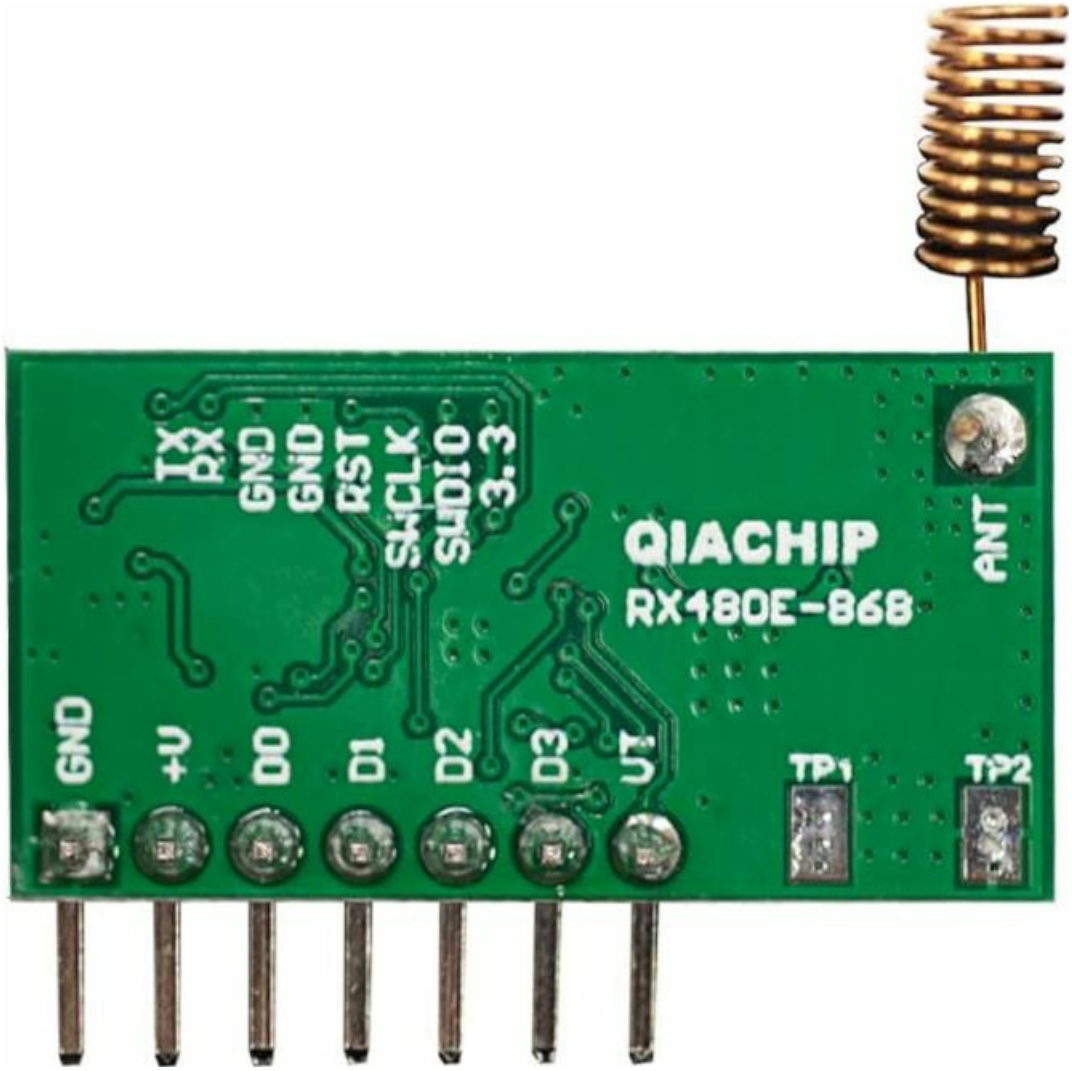


Product Specification

- **Product Name** Wireless four-channel decoding receiver module
- **Product Model** RX480E-868

Module characteristics

1. Radio Frequency Receiver Chip, commonly used in data transmission and control systems
2. It can run independently without external MCU control
3. Multichannel Transceiver@868MHz
4. Supporting FSK and bidirectional data transmission
5. The functions of interlocking, clicking and self-locking can be converted arbitrarily without jumping lines and can be stable for a long time.
6. Code learning without manual coding
7. Built-in memory, safe and reliable
8. Extra wide operating voltage
9. Distance, high reception sensitivity and anti-interference performance
10. Packet processing, including address recognition

Application

- Wireless remote control switch
- Remote motor control
- Security system
- Access control system
- Building automation and fire protection
- Streetlamp control system
- Smart home controller
- Smart agriculture
- Wireless toys

Performance Parameter

- ASK/OOK RF reception
- Working voltage: 5V – 24V
- Frequency: 868MHz
- Receiving sensitivity: – 112 dBm
- Receiving power consumption: 23mA
- Transmission power: 20dBm
- Transmission power consumption: 123mA

Parameter	Min	Typical	Max	Unit	Remarks
working voltage	5	12	24	V	
Decode pulse width	2.4k		200k	bps	
working temperature	-10		60		
Storage temperature	-20		80		
transmission distance	260	280	300	m	
Number of remote controllers that can be stored		32		PCS	

Pin Description

Default: Receive mode

NO.	Pin Name	Pin Type	Description
1	GND	P	Power supply negative input
2	+V	P	Power supply positive input (5V-24V)
3	D0	IO	High-level signal output, D0 corresponding pin of transmission mode
4	D1	IO	High-level signal output, D1 corresponding pin of transmission mode
5	D2	IO	High-level signal output, D2 corresponding pin of transmission mode
6	D3	IO	High-level signal output, D3 corresponding pin of transmission mode

Emission mode

NO.	Pin Name	Pin Type	Description
1	GND	P	Power supply negative input
2	+V	P	Power supply positive input (5V-24V)
3	D0	IO	Low-level signal input, D0 corresponding pin of reception mode
4	D1	IO	Low-level signal input, D1 corresponding pin of reception mode
5	D2	IO	Low-level signal input, D2 corresponding pin of reception mode
6	D3	IO	Low-level signal input, D3 corresponding pin of reception mode

Function description and mode setting

Receiving module

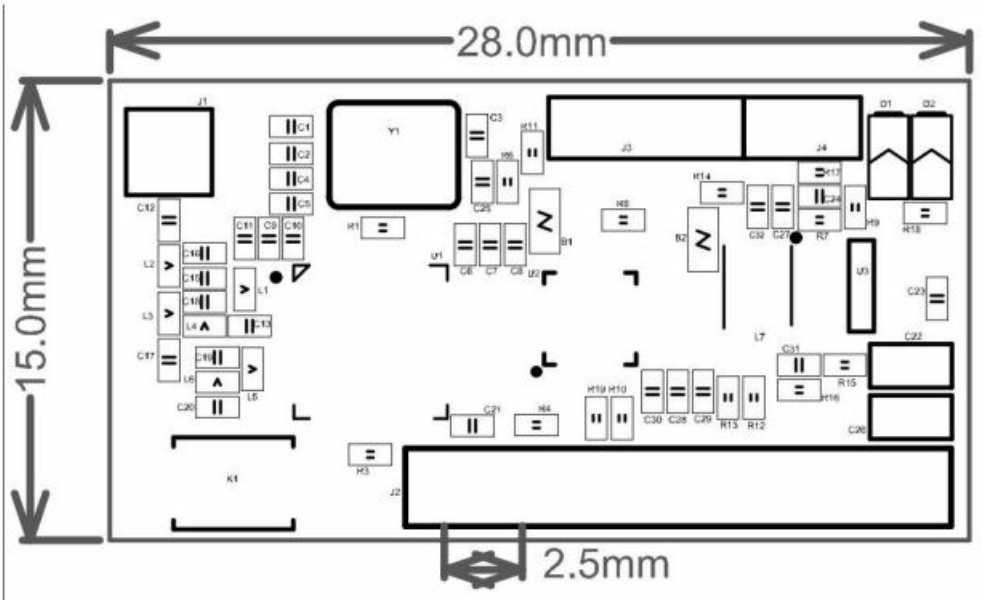
When the module is powered on and started, the red and blue LEDs will light up for configuration, and go off to represent the completion of configuration, after which if the red LED blinks twice to represent the receiving mode, the blue LED blinks twice to represent the transmitting mode.
Momentary mode: press the learning button of the receiving module once, and the red indicator will be on after flashing once. Press the key of the transmitting module to be matched, and the red indicator of the receiving module will flash 5 times, indicating that the matching is successful. After that, press and hold the button of the matched transmitting module, the output pin of the receiving module outputs high level, release the button, the corresponding pin output of the receiving module becomes low level, and each time the receiving module receives a signal, the transmitting module will receive a feedback signal, and the blue indicator will flash for 3 times and then go out. Toggle mode: press the learning button of the receiving module twice, and the red indicator will flash for 2 times and then be on normally. Press the key of the transmitting module to be matched, and the red indicator of the receiving module will flash for 5 times, indicating that the matching is successful. After that, press the key of the matched transmission mode, the output pin on the receiving module outputs high level and remains unchanged. Press the same key again, the corresponding pin output of the module becomes low level. Each time the receiving module receives a signal, the transmitting module will receive a feedback signal, and the blue indicator will flash for 3 times and then go out. Latched mode: press the learning button of the receiving module for 3 times, and the red indicator will be on after flashing for 3 times. Press the button of the transmitting module to be matched, and the red indicator of the receiving module will flash for 5 times, indicating that the matching is successful. Then, press the key of the matched transmission mode, and the corresponding output pins on the receiving module output high level, which remains unchanged, and other pins output low level. If two keys are pressed at the same time, all output pins on the receiving module output low level, which remains unchanged. Each time the receiving module receives a signal, the transmitting module will receive a feedback signal, and the blue indicator will flash three times and then go out.
Clear code reset function: after pressing the learning button of the receiving module for 8 times, the red indicator light on the receiving module flashes for 8 times and then goes out, all output pin outputs become low level, and all stored transmission module addresses on the receiving module are cleared.
Mode conversion function: after pressing the learning button of the receiving module for 5 times, the red indicator on the receiving module flashes 8 times, the module switches from the receiving mode to the transmitting mode, and the red indicator on the receiving module flashes twice, indicating that the conversion is successful.
Transmitting module

Mode conversion function: after pressing the learning button of the receiving module for 5 times, the red indicator on the receiving module flashes 8 times, the module switches from the receiving mode to the transmitting mode, and the red indicator on the receiving module flashes twice, indicating that the conversion is successful.

Transmitter Module

When the module is powered on and started, the red and blue LEDs will light up for configuration, and go off to represent the completion of configuration, after which if the red LED blinks twice to represent the receiving mode, the blue LED blinks twice to represent the transmitting mode.

Package size



Matters needing attention:

RF devices are voltage-sensitive devices. If the power supply is unstable or the ripple is large, please add a filter at the power input to ensure that the power supply voltage does not exceed the maximum working voltage of the product. This device is an electrostatic-sensitive device, and anti-static measures must be taken during transportation and use.

Make sure that the temperature does not exceed 245 °C when mounting. It is recommended not to use spring antenna with rubber in application to ensure better yield of products.

This product manual is subject to change without notice.

- **Technologists** 86-13066888971 Andy

Documents / Resources

	**QIACHIP RX480E-868 Wireless Four Channel Decoding Receiver Module** [pdf] User Manual RX480E-868 Wireless Four Channel Decoding Receiver Module, RX480E-868, Wireless Four Channel Decoding Receiver Module, Four Channel Decoding Receiver Module, Decoding Receiver Module, Receiver Module, Module

References

- **User Manual**