

## **Handson Technology**

**User Guide** 

### 315MHz Wireless Remote Control Kit

This is secure general purpose remote control system, which can be used for controlling many different applications. Easy to install, the receiver is connected using standard on-board screw terminals. Relay output can switch up to 10A at 230Vac. The receiver relay outputs operate when the transmitter switch is pressed. The outputs can be set to momentary, toggle, latching or time-delay operation. The system is supplied ready to 'plug n play', in addition a further 20 transmitter can be 'learnt' by the receiver.





#### **SKU: <u>AMT1002</u>**

#### A: Receiver Specifications:

- Operating Voltage: (10~14)Vdc.
- Standby Current: <5mA.
- Center Frequency: 315MHz ISM Band.
- RF Mode: Super-Heterodyne.
- Receiver Sensitivity: >115dbm.
- Modulation Mode: ASK.
- Receiving distance: (20~100)-Meter open space.
- Decoding mode: MCU software decoding.
- Switching Mode: Momentary, Toggle, Latching & Time Delay, user programmable.
- Receiver Learning: 20 Transmitters.
- Wiring Type: Screw on Terminal.
- Relay Output Configuration: SPDT (Single-Pole-Double-Throw).
- Dimension:
  - o Casing: (40x37x26)mm.
  - o Inner PCB: (35x30x18)mm.

## **B:** Transmitter Specifications:

Operating Voltage: (10~14)Vdc.Encoder Ship: EV1527 & PT2264.

• Standby Current: <5mA.

• Center Frequency: 315MHz ISM Band.

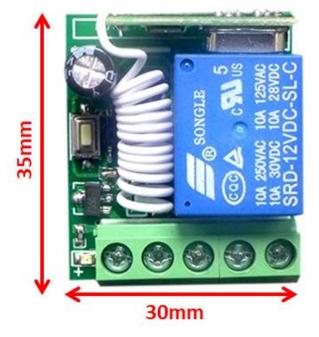
• RF Mode: Super-Heterodyne.

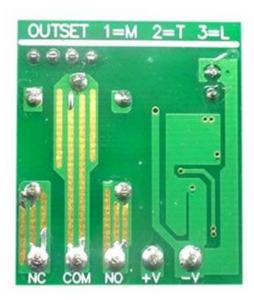
• Transmitting distance: (20~100)-Meter open space.

• Dimension: (64x40x15) mm.

## **Mechanical Dimension:**

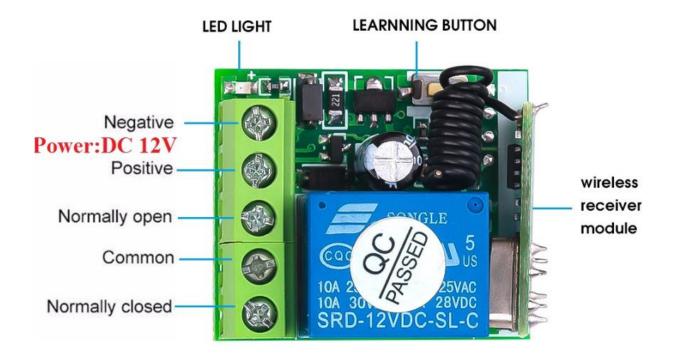
Unit: mm







#### **Functional Diagram:**



#### **Operation Mode Setting:**

This receiver can be user program in the following working modes:

- Momentary Mode,
- Toggling Mode,
- Latching Mode,
- Time Delay Mode: 5-second, 10-second, 15-second and 20-second.

**Momentary Mode**: Press and hold the button on the remote transmitter, the relay on the receiver activated. Release the button on the remote transmitter, relay on the receiver will be de-activated.

>How to Set: Press the "learning button" on the receiver board 1-time briefly, and the LED indicator light will flash. After the LED indicator on receiver board is on, press the remote transmitter button. The LED indicator on the receiver board will blink 3 times continuously, indicating transmitter successfully paired with receiver.

**Toggle Mode:** Press the button on the remote transmitter, the relay on the receiver activated. Press the same button on the remote transmitter, the relay on the receiver will be de-activated.

>How to Set: Press the "learning button" on the receiver board 2-time briefly, and the LED indicator light will flash. After the LED indicator on receiver board is on, press the remote transmitter button. The LED indicator on the receiver board will blink 3 times continuously, indicating transmitter successfully paired with receiver.

Latching Mode (Separate On and Off button): Press one button on keyfob will activated the receiver relay, press another button on keyfob will de-activate receiver relay.

>How to Set: Press the "learning button" briefly 3-times, then wait for the LED to turn on. Press first (A) button on the transmitter, the LED indicator will turn on, press another button (B) and hold until the receiver relay LED flashes rapidly to show programming complete.

#### **Time Relay Mode:**

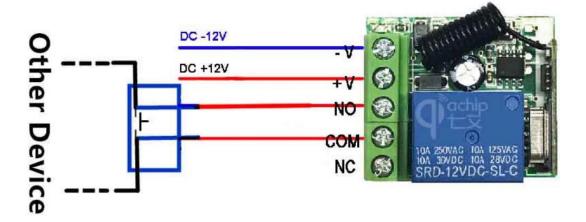
Relay 5-sec: Press the button on the remote transmitter, the relay on the receiver activated. After 5-sec, the relay on the receiver will be de-activated. Press the "learning button" on the receiver board 4-time briefly, and the LED indicator light will flash. After the LED indicator on receiver board is on, press the remote transmitter button. The LED indicator on the receiver board will blink 3 times continuously, indicating transmitter successfully paired with receiver.

Relay 10-sec: Press the button on the remote transmitter, the relay on the receiver activated. After 10-sec, the relay on the receiver will be de-activated. Press the "learning button" on the receiver board 5-time briefly, and the LED indicator light will flash. After the LED indicator on receiver board is on, press the remote transmitter button. The LED indicator on the receiver board will blink 3 times continuously, indicating transmitter successfully paired with receiver.

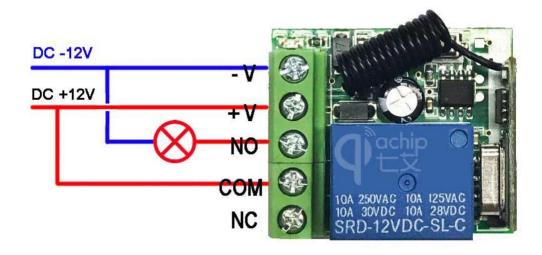
Relay 15-sec: Press the button on the remote transmitter, the relay on the receiver activated. After 15-sec, the relay on the receiver will be de-activated. Press the "learning button" on the receiver board 6-time briefly, and the LED indicator light will flash. After the LED indicator on receiver board is on, press the remote transmitter button. The LED indicator on the receiver board will blink 3 times continuously, indicating transmitter successfully paired with receiver.

**Clear All Pairing with Transmitter:** Press the "learning button" on the receiver board 8-time briefly, with LED indicator light flashing. The LED indicator on the receiver board will blink continuously and turn-off, indicating transmitter successfully un-paired with receiver. All transmitter keyfob will not be able to activate the receiver.

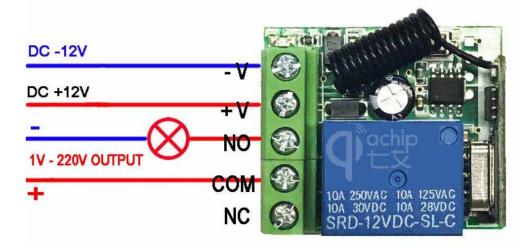
#### **Output Relay Connection:**



Auto-Gate/Garage Door Open/Close control



Shared Supply on Output Relay on 12V Supply



Separate Supply for controlling high voltage devices



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