

# BT-FD101 Fast rolling door of control receiver function operation manual

## I • Receiver function

1. A transmitter can prevent copy function, the code have million sets. The receiver memorizes capacity of the 2000 transmitters.
2. Use transmitters to control receiver have two ways. One is 4-keys to control receiver. The other is 1-key ( recycle mode ) to control receiver.
3. Receiver built-in theft proof alarm function. Add a reed switch and alarm system. While rolling door is on top, press an OFF-key of transmitter, the receiver will into theft proof mode. If the rolling door is abnormal opened, will drive beeps.
4. Receiver provides 2 methods in lighter. One is added under DC24V 10W of lighter in receiver. Another is added a 24V relay to control existent lighter in garage. While rolling door is running, the lighter will brighten.
5. Protection function : the rolling door touch obstructer will up or stop while it is running.
6. Choose attached charge board and storage battery for charging in normal time. While power outage, the storage battery will supply power to work in rolling door.
7. Provide driving output in traffic signal. Add a relay that NC switch connect green light and NO switch connect red light. While the rolling door is opening or closing will show the traffic signal.
8. Set time (max to 127 seconds) to down function : the rolling door on top will count the time, after time is up, the rolling door will automatic down.

## II • Set time (max to 127 seconds)to down

1. Switch off SW3-1, SW3-2 and SW3-3 on the receiver.
2. After the rolling door on top, press OFF key of transmitter into power off mode.
3. Start set time to down – switch on SW3-2 in the receiver, then each beep 1 second, count beep for necessary downing time (max to 127 seconds). After counts necessary downing time, switch off SW3-2, receiver memory necessary downing time and stop beep.
4. Relieve downing time – switch on SW3-2 in the receiver, then each beep in 1 second. Less than 4 seconds switch off SW3-2, receiver clear the downing time and stop beep.

## III • Reset transmitter code and add transmitters

### i. Learn first transmitter code :

1. Lose power of the receiver over 15 seconds; prepare a transmitter.
2. Power on the receiver and press SW1 of receiver under 10 seconds, start beep that into learning code mode, synchronous press UP and DOWN key of transmitter under 10 seconds, after receiver got the signal will clean former code, memory this transmitter code, and stop beep and quit learning mode.

### ii. Add other transmitter code :

1. Prepare original transmitter and new transmitters.
2. Synchronous press STOP and OFF key of original transmitter, receive will beep that into add transmitter code mode.
3. Synchronous press UP and DOWN key of new transmitter under beeps 10 seconds, after receiver got the signal will memory new transmitter code. Add other

transmitters code will recount 10 seconds. If did not add transmitter code will beep and quit the learning code mode.

#### IV • Remote control receiver method by transmitter

##### i. Remote control mode by 4 keys of transmitter : (See illustration 4 in page 5)

1. Switch off SW3-3 in receiver board, 4 keys of transmitter can remote control receiver.
2. On 4 keys of transmitter mode, set SW3-1 and SW3-2 function as table :

SW3-1	SW3-2	SW3-3	FUNCTION
OFF	OFF	OFF	Press OFF key of transmitter, receiver don't accept manual switch control, and also don't accept UP and DOWN of transmitter. We called "power off mode" in this operation manual.
ON	OFF	OFF	Press OFF key of transmitter, receiver accept manual switch and transmitter control.
OFF	ON	OFF	Set necessary downing time: auto countdown.

##### ii. 1 key of transmitter remote control mode (1 key recycle mode) :

1. Switch on SW3-3 on the receiver board, 1 key of transmitter in remote control mode; receiver was coerced set power off mode.
2. SW3-1 and SW3-2 were set which key of transmitter to control receiver as table :

SW3-1	SW3-2	SW3-3	FUNCTION
ON	OFF	ON	UP key of transmitter to control receiver. (UP key recycle mode)
OFF	ON	ON	STOP key of transmitter to control receiver. (STOP key recycle mode)
ON	ON	ON	DOWN key of transmitter to control receiver. (DOWN key recycle mode)
OFF	OFF	ON	OFF key of transmitter to control receiver. (OFF key recycle mode)

3. In 1 key of transmitter mode, 4 keys of transmitter can control 4 receivers.
4. Remote control 2 receivers by 1 transmitter. One receiver adjust SW3-1 ON, SW3-2 OFF, SW3-3 OFF, can control receiver by UP and STOP and DOWN of transmitter. Another receiver adjust SW3-1 OFF, SW3-2 OFF, SW3-3 ON, can control receiver by OFF key of transmitter (recycle mode).

##### iii. Notice item :

1. Code transportation method by wireless transmit, each receivers will receive signal while set code. When shared a transmitter in public and individual guard, attention order and methods in code learning.
2. Set remote controller in individual and public guard. Prior set code learning in individual guard, then add transmitter code in public guard.
3. The first transmitter keep well in public guard, forward add transmitters need the first transmitter into the code learning mode in the receiver.

#### V • Alarm and reed switch of wiring and function

##### i. Wiring :

1. Terminal M and V connect to reed switch, set reed switch in rolling door bottom. (See illustration 6 in page 6)
2. Provide NC/NO switch of alarm output to terminal CNT5 of the receiver board, ON and OFF of NC/NO switch to control beep in alarm. (See illustration 1 in page 4)

ii. Function :

1. Theft proof mode: while rolling door is on bottom, receiver checks if have the signal of reed switch, if the receiver accepts signal will into the theft proof mode. When the rolling door was opened did not through manual switch or remote controller, receiver will drive alarm to beep until rid.
2. Rid beep: while beep in alarm, press any key of transmitter can rid beep.

## VI • Type and wiring of accessory board

i. Accessory board type :

1. Charge board – wire connect from UPS mark of the receiver board to charge board. Then wire connects from charge board to the storage battery. Receiver board charge power to the storage battery in common time. While lose power the storage battery provides power to receiver board. (See illustration 10 in page 7)
2. Traffic lights control board – connect wire from CNT4 on the receiver board to traffic lights control board that provide 2 pairs terminals, follow direction connect to green lamp and red lamp. Another two orange wires are input power on the traffic lights control board. 2 orange wires connect with adapter. Notice the receiver supply voltage is AC220V, traffic lights must use AC220V; if supply voltage is AC110V, and traffic lights must use AC110V. So traffic lights control board is according rolling door opening or closing to show traffic lights signal. While rolling door is opening will turn on the red lamp, while rolling door is closing will turn on the green lamp. (See illustration 2 in page 5)
3. Connect Interior lamp: provide terminal connect lamp. (See illustration 3 in page 5)

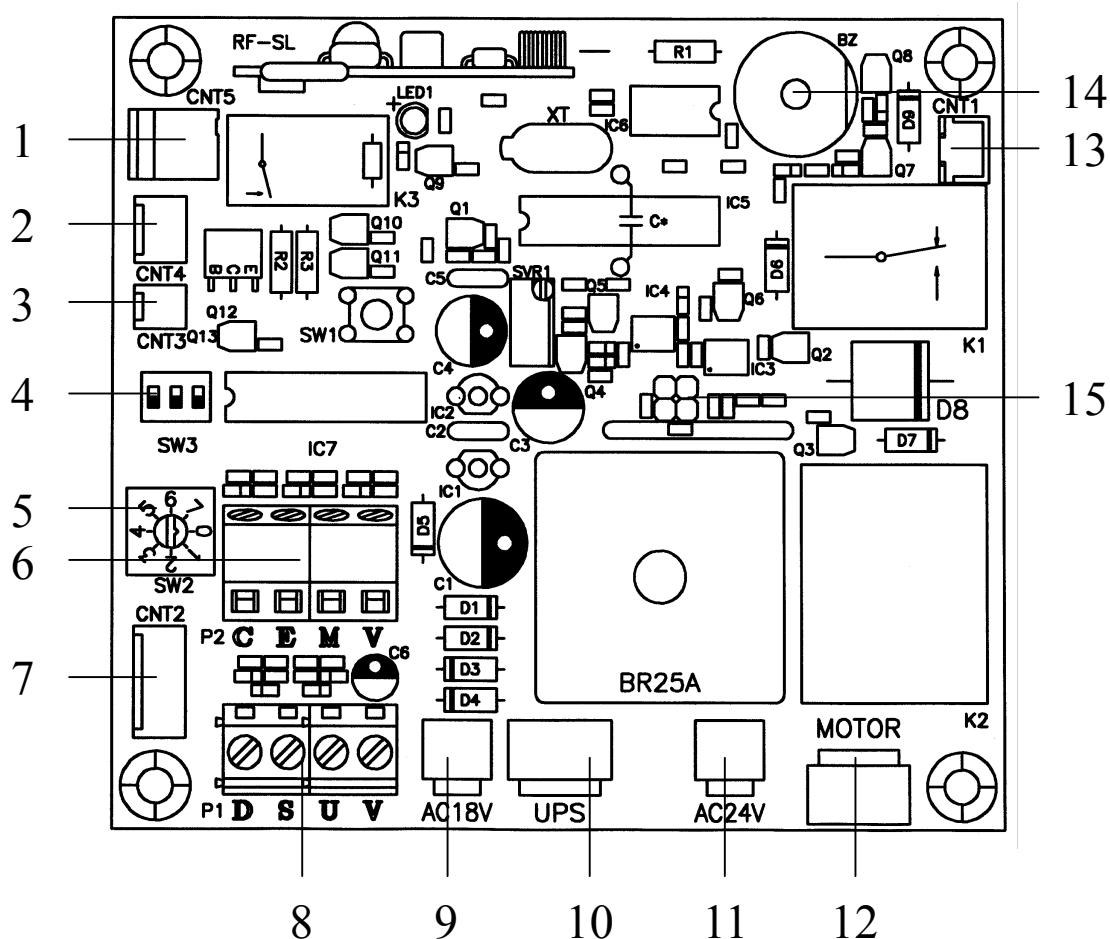
## VII • Connect wiring of inferred signal

i. Connect inferred signal :

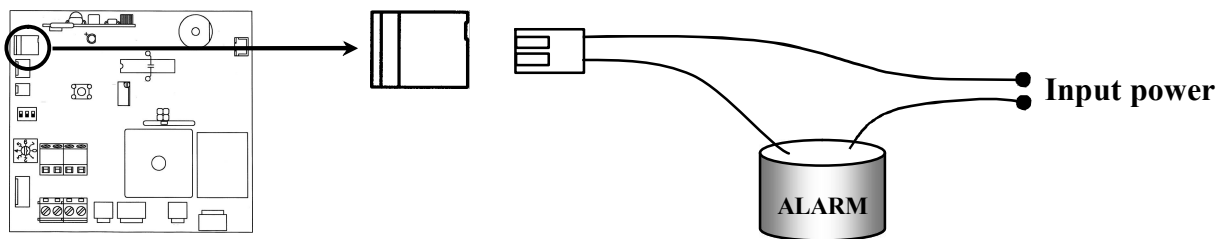
1. Purpose: while rolling door is downing or stop, if the inferred sensor detected something, the rolling door will auto up.
2. Receiver board provides E and V of terminal to connect N.O. switch of inferred sensor. (See illustration 6 in page6)



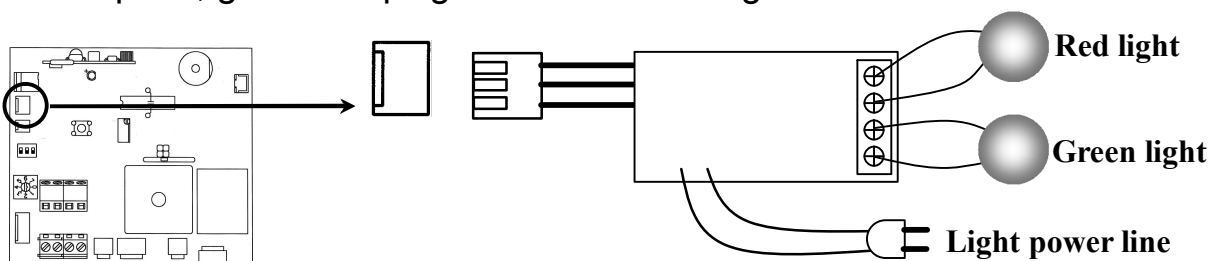
# Wires connection illustration



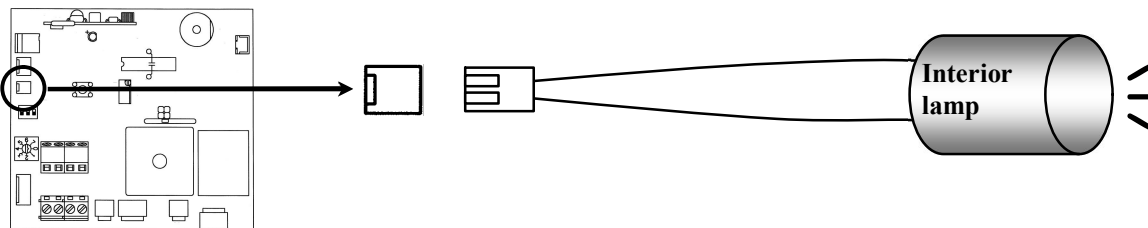
- 1 Alarm connection**—Collocate with reed switch(See illustration 6). When rolling door closed at bottom, press OFF key of transmitter, receiver enter anti-theft mode. After into anti-theft mode, if rolling door didn't open by manual switch or transmitter, receiver drove alarm to beeps.



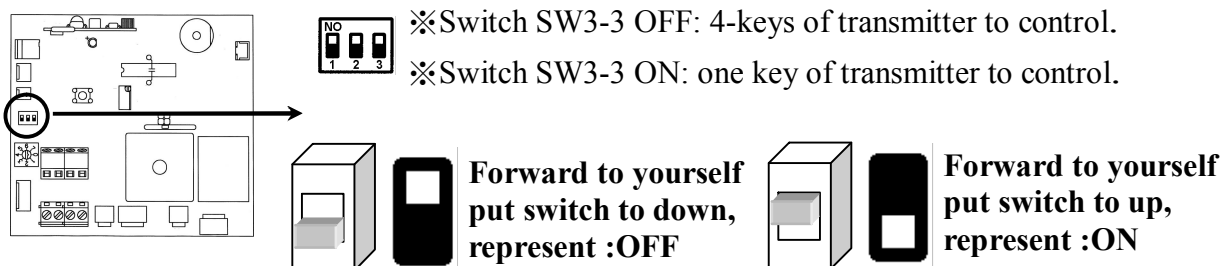
- 2 Connect traffic lights control board**—Red lamp lights on when rolling door opens, green lamp lights on when rolling door down.



- 3 Connect interior lamp(DC24V/10W output )** —Receiver makes illuminating light on when rolling door is running.



- 4 Function selected switch ( SW3 )** —setting transmitter: 4-keys control receiver or one key control receiver.



#### 4-keys control mode—

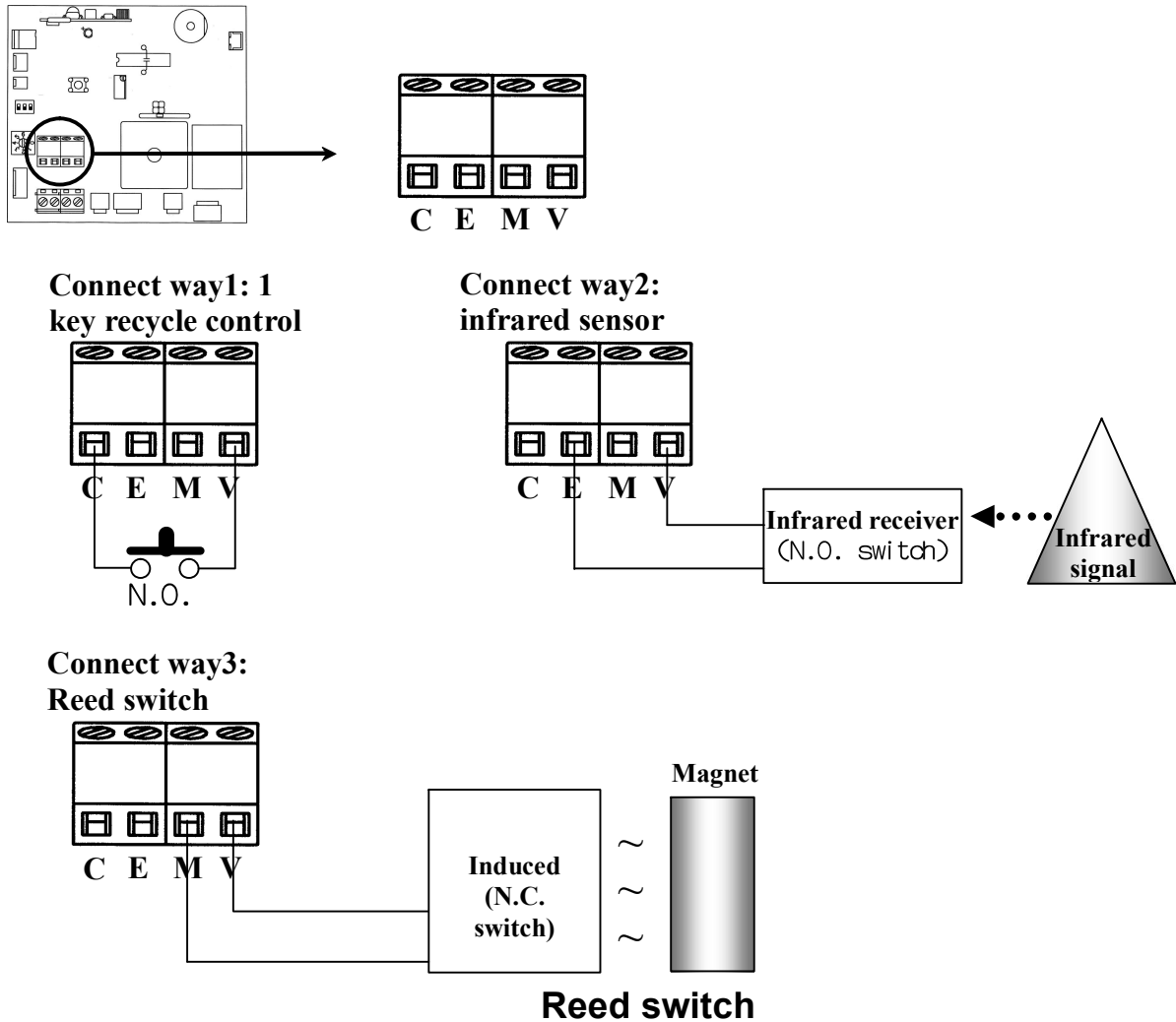
- Press OFF key of transmitter, receiver don't accept manual switch control, and also don't accept UP and DOWN of transmitter.
- Press OFF key of transmitter, receiver accept manual switch and transmitter control.
- Timing down automatically, setting time mode.

#### One key recycle control mode—

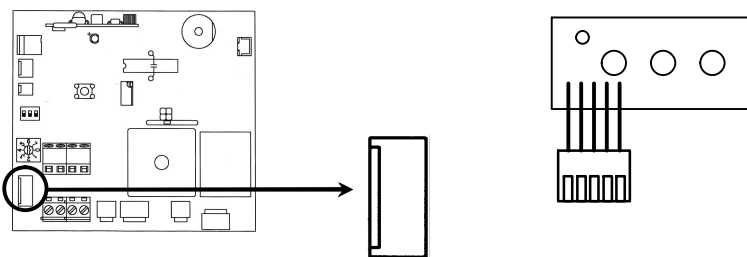
- Receiver controlled by launcher's "up" key.
- Receiver controlled by launcher's "stop" key.
- Receiver controlled by launcher's "down" key.
- Receiver controlled by launcher's "off" key.

- 5 Obstruction selected switch ( SW2 0-7 section )** —when rolling door is running and touched obstruction, it can go up or stop. This selection switch can set the obstructed strength. More value indicates bigger obstruction.

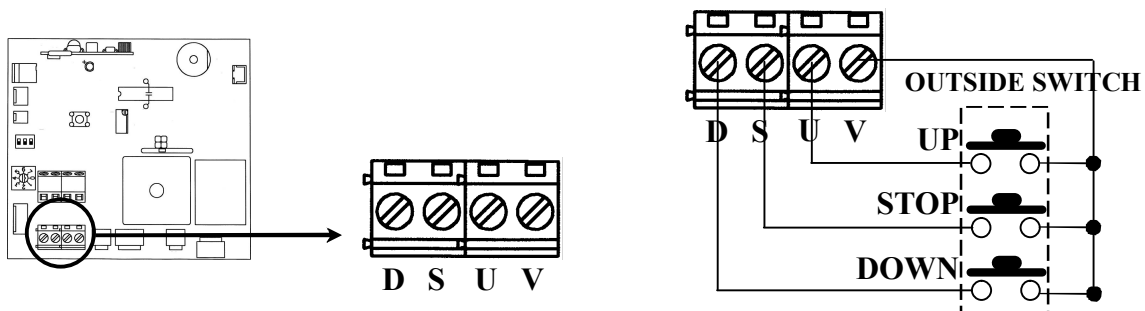
## 6 Connection of 1-key recycle control, infrared sensor, reed switch—



## 7 Connect manual switch, control board of power instruction light (Set receiver's cover in inside) —

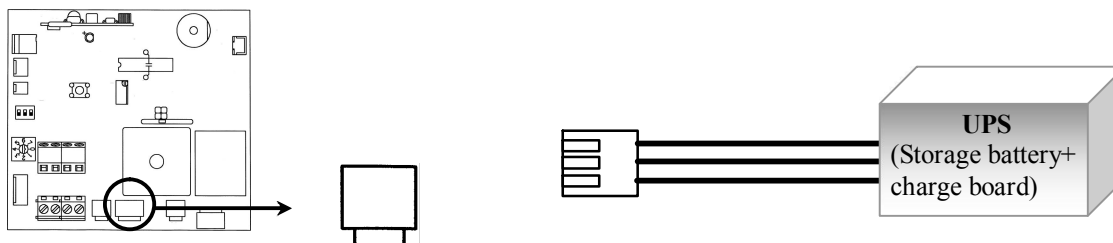


## 8 Connect manual switch in outside—If receiver at a far place, you can connect manual switch in outside.

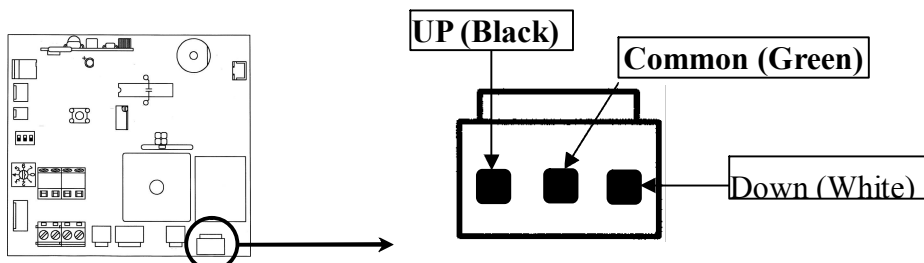


## 9 AC18V input end—AC18V output of transformer connect at this point.

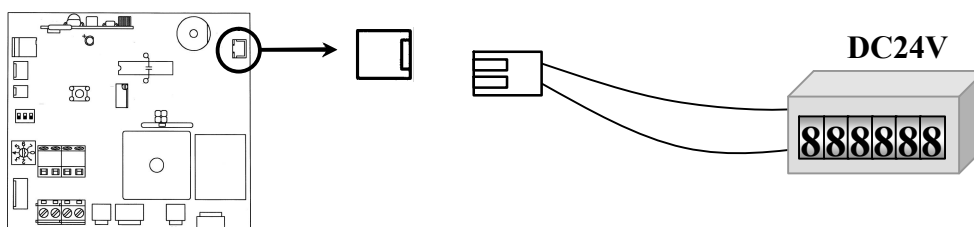
**10 UPS — UPS terminal connect to receiver board.**



**11 AC24V input end—AC24V output of transformer connect at this point.**  
**12 Connect MOTOR to receiver board.**

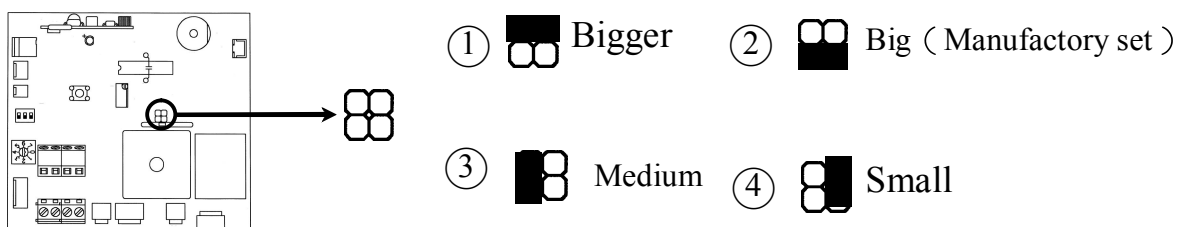


**13 Connect counter (DC24V) to receiver board—**After connected with DC24V counter, it count the number of times during rolling door is running. Count one time during motor is opening or closing.



**14 Beeper(used in setting mode selection, function setting, condition instruction)—**know when will beep, please see receiver's function operation manual.

**15 Switch of multiple magnify ( Current degree big – small, modify switch of multiple magnify ( ④ > ③ > ② > ① ) —**



EX1: Slat of roller door is more big or more heavy, load current will bigger, need modify switch of multiple magnify to next number (if switch on , turn to )

EX2: Slat of roller door is smaller or lighter, load current will smaller, need modify switch of multiple magnify to under number (if switch on , turn to )