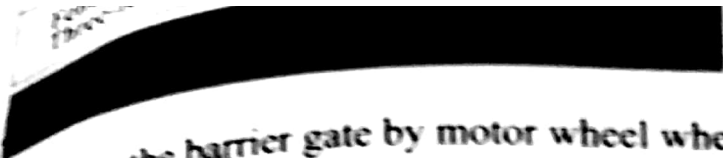


- 
- 3.1. Open the barrier gate by motor wheel when power off and automatic reset when power on.
  - 3.2. Balanced boom running with a motor transmission of cranks and shafts.
  - 3.3. Remote control to operate the barrier gate.
  - 3.4. Auto-reverse when boom meets obstruction (only for barrier using digital limit device)
  - 3.5. Infrared photocells interface is available (need to install photocell device).
  - 3.6. Loop detector interface is available (need to install loop detector) .
  - 3.7. Well-integrated with car parking system equipments, with wire control (must be dry contact signal).
  - 3.8. Interface for traffic light, dry contact output (traffic light must be less than 10A)
  - 3.9. Offering signal of limit status for car parking system (output COM, NC, NO).
  - 3.10. Auto-closing function (adjustable from 3s to 30s, factory default off this function).

number.

### **7.3. Electrical diagram explanations and instructions**

All the electrical connections are done before delivery and please do not change it randomly. The necessity is to connect the power and grounding connection. Explanations and instructions for the main functions and interfaces as following (from left to right):

7.3.1. Up limit/down limit relay output interface: this interface is for up limit (or down limit) relay (no power, switch signal) output, systems can get the signal of boom position from this interface.

7.3.2. Infrared photocell and loop detector interface: the left 2 interfaces is for DC12V power output, can provide power (current less than 1A) for photocell; the right 3 interfaces are photocell signal input, loop detector signal input, and COM. The dry contact signal NO and COM on the receiver part of the photocell, connecting to "Photocell signal input" and "COM" interfaces of the control board. The dry contact signal NO and COM on the output part of loop detector, connecting to "Loop detector signal input" and "COM" interfaces of the control board.

7.3.3. Wire control input interface: This interface is dry contact input. When boom UP (or DOWN, or STOP) connect with "COM", control board will response accordingly. User can use this interface to connect IC card system or parking system, and also can connect button switch to control the barrier.

7.3.4. R&G light interface: this interface is no power, same as switch, "COM" need to connect with corresponding power of the R&G light. When boom falling down to horizontal position, red light will keep lighting; when boom lifting up the vertical position, green light will keep lighting. During the boom falling down or lifting up, the red and green light will light alternately.

#### 7.3.5. Function Setting

##### 7.3.5.1. DIP switch Setting:



DIP switch 1: Limit type selection

"ON": blade limit

"OFF": digital limit

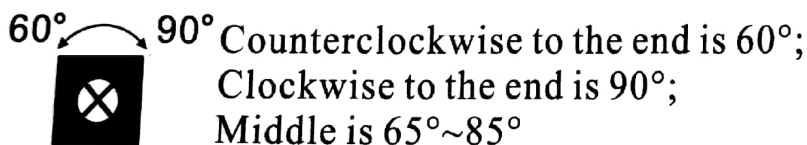
DIP switch 2: Buffer function switch for boom UP/DOWN

"ON": buffer function is closed

"OFF": buffer function is open

**(Note: For 3s barrier gate, it's better to open the buffer function)**

##### 7.3.5.2. Up angle adjusting



Counterclockwise to the end is 60°;

Clockwise to the end is 90°;

Middle is 65°~85°

##### 7.3.5.3. Auto-closing setting

Power off firstly, keep pressing "SET" button, then power on. When the function indicator is on, the auto-closing function is off; When the function indicator shines, the auto-closing function is on. The times it shines is the time for auto-closing.

**Turning on auto-closing function:** Press the "UP" button (of the remote controller), then the auto-closing time is 3 seconds, every time you press "UP" button, the time will add by one second, and the max auto-closing time is 30s.

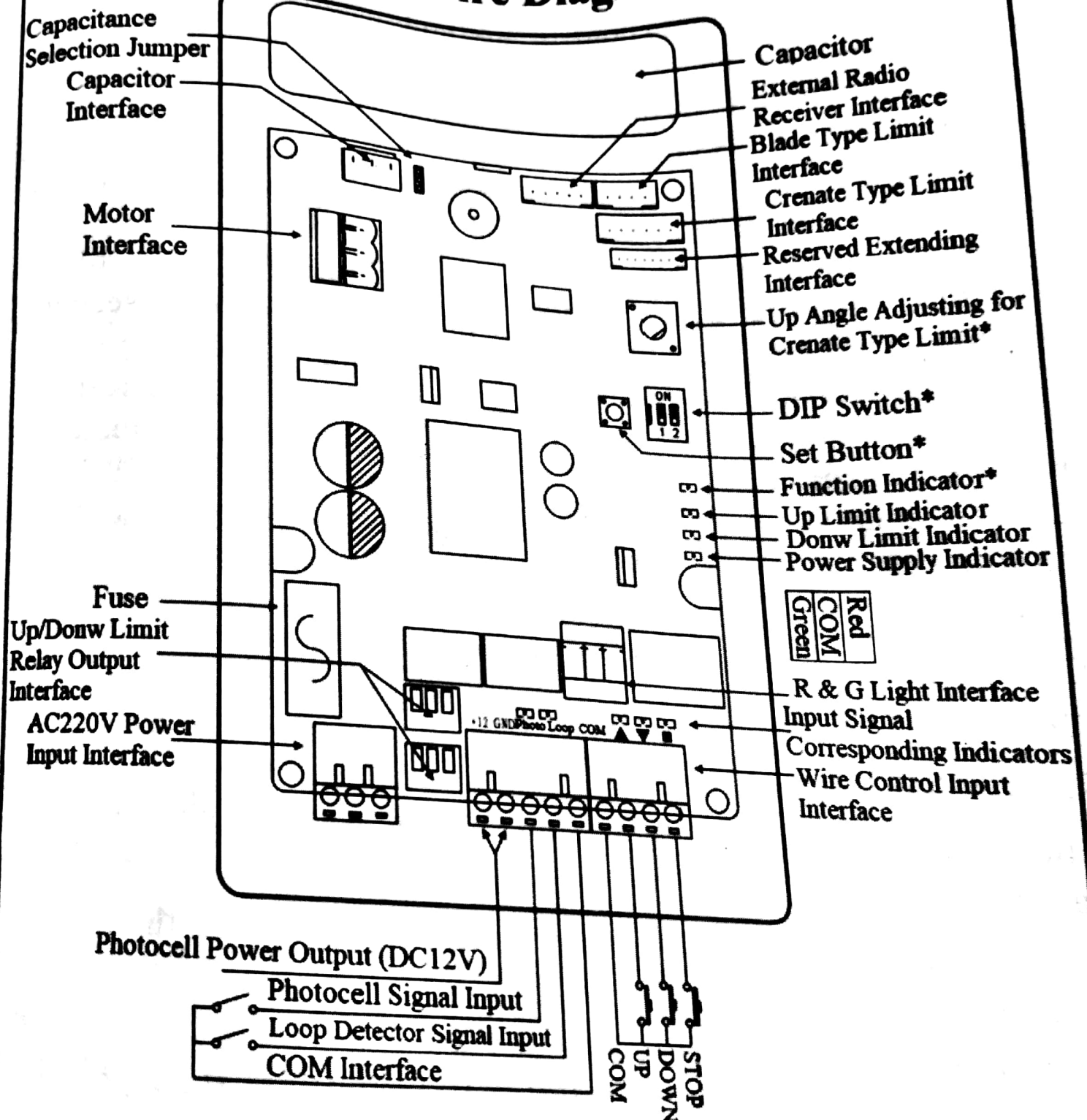
**Turning off auto-closing function:** Press the "STOP" button (of the remote controller). When the function indicator is on, it means the auto-closing function is off.

**Auto-closing time definition:** Press the "DOWN" button (of the remote controller), then check the indicator. The times it shines means the auto-closing time.

Loosen the "SET" button and the program will be saved.

**(Note: During setting, please keep pressing, and don't loosen "SET" button)**

# DZJ2.X Wire Diagram



20191115

## **7.4. Remote Control Coding**

Two types of remote control, multi frequencies for choice. If need to add or change remote control, methods as following:

### **7.4.1. Learning type**

Learning method 1: Before connect power to the barrier gate, keep pressing button "STOP"; then connect to power, after about 6 seconds, LED of receiver from lighting to flashing 4 times then off. That means learning well. (during learning, please don't loose the button, or you need to relearn)

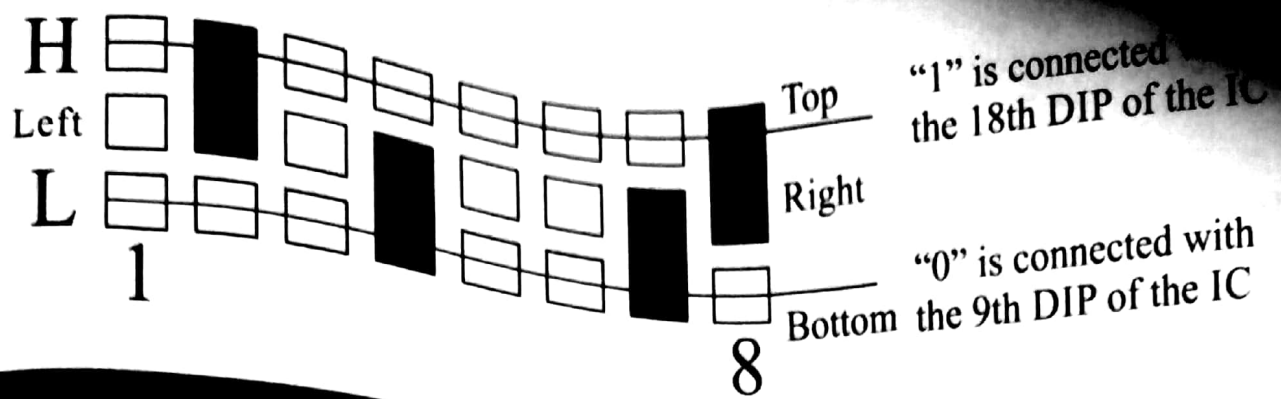
Learning method 2: Press button "UP" and "STOP" of the learning well remote controller at the same time for 4 seconds, LED of receiver keep lighting means going to learning status; during 3 seconds, pressing button "STOP" of the not learning remote controller for 2 seconds (or press 2 times continuously), LED of receiver flash 4 times. That means learning well. If the remote controller doesn't receive any effective signal, it will quit learning status.

Clear the code: when power on, make short circuit on the receiver mould until the LED goes out.

### **7.4.2. Fixed type**

The code of remote controller and remote receiver should be the same.

Coding method: open the remote controller, take out the battery, there is dial plate, the direction is from right to left. The solder between middle port and top port is state "1". The solder between middle part and bottom port is state "0". Empty is state "X". The code mark below is 10XX0X1X (Warning: please take out the battery before coding!)



## **8.1. Motor works but there is no reaction on the barrier arm.**

- 8.1.1. Check up the power supply and the fuse.
- 8.1.2. Check if the remote controller matches the radio receiver; or check up the battery inside and then change it if it is lack of power.
- 8.1.3. Check whether there is disturbance or not.
- 8.1.4. Check up the condition of photocell and loop detector.

## **8.2. The barrier arm rise up automatically when falling down at 45 degree.**

- 8.2.1. If using digital limit, please check DIP "3s/6s switch button", whether the DIP is same as the speed of the barrier.

## **8.3. Barrier arm stop after moving a little when falling down or rising up.**

- 8.3.1. Check up if the limit switch interface is connected well.

## **8.4. Barrier arm is not in vertical or horizontal limit position.**

- 8.4.1. For Blade type limit, check up the photo electricity limit switch.
- 8.4.2. Check up DIP of up angle is adjusted to the end.
- 8.4.3. Check up the connection rod, and vertical and horizontal position of the barrier arm. (Refer to Page 7)

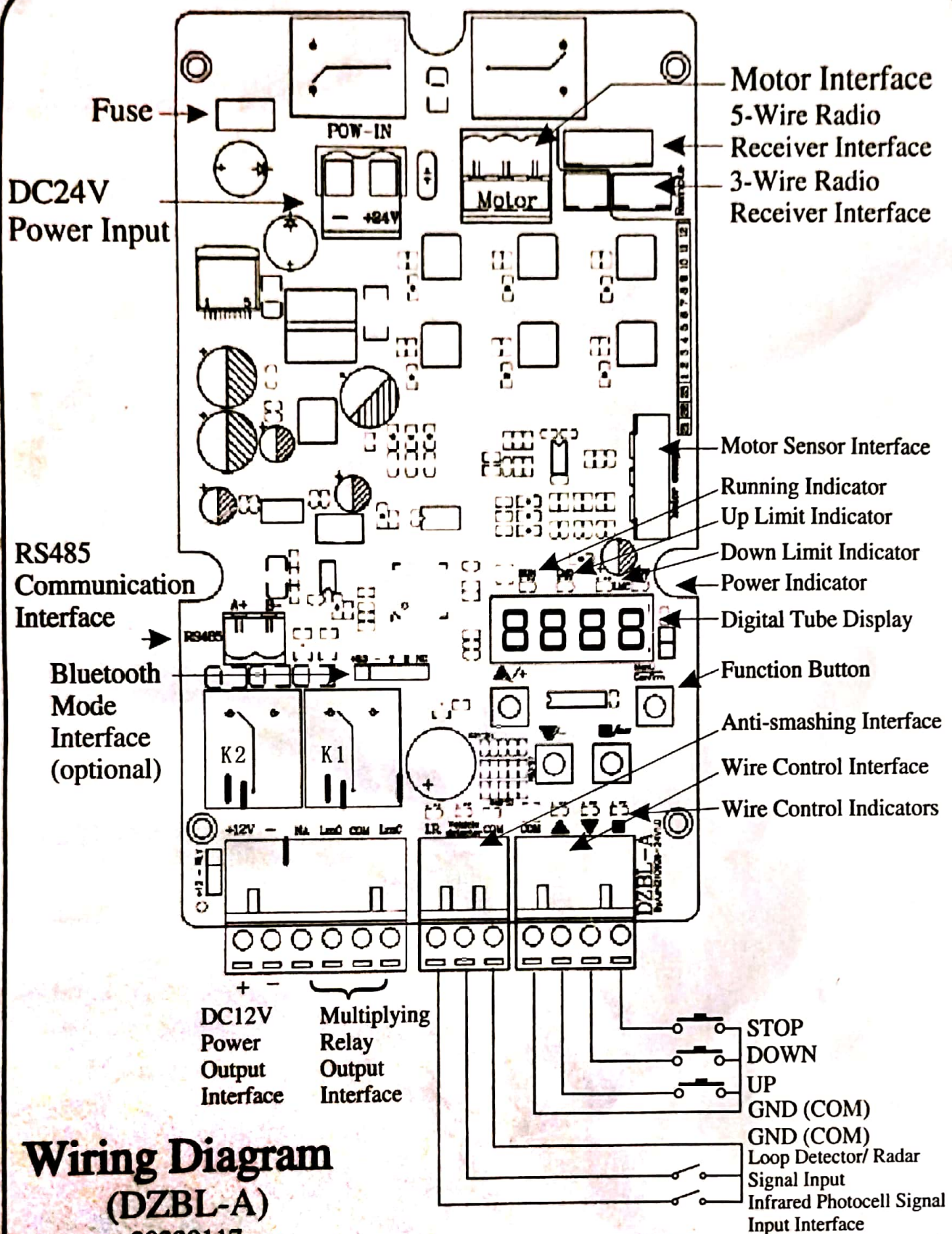
## **8.5. Barrier Boom falling down well, but barrier boom rising up is not well.**

- 8.5.1. Adjust the balance spring again.

## **8.6. For dual speed barrier, using 6s speed and well balanced, then changed to 3s speed, the motor blocked.**

- 8.6.1. If changing the speed, need to fine readjust the vertical and horizontal position.





F-00 Boom up speed  
F-01 Boom down speed  
F-02 Boom up deceleration position  
F-03 Boom down deceleration position  
F-04 Low speed running angle for boom up

F-05 Low speed running angle for boom down  
F-06 End speed for boom up  
F-07 End speed for boom down  
F-08 Horizontal position adjustment  
F-09 Vertical position adjustment  
F-10 Delay auto-closing time

F-13 Power-on self-learning speed  
F-14 Remote controller learning  
F-15 Sensitivity of auto-reversing on obstruction