

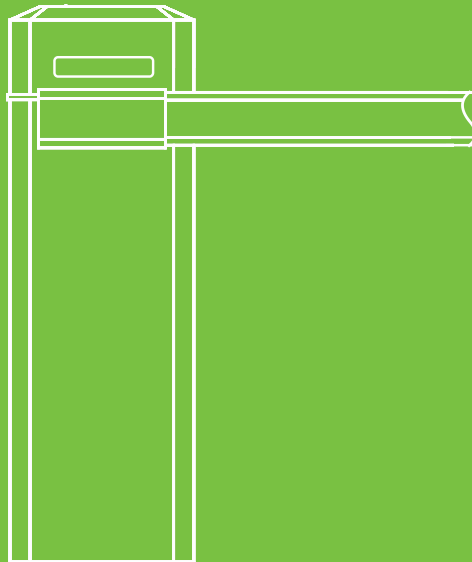
# USER MANUAL

## Automated Vehicular Boom Gate

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Version: 1.0

Date: March, 2015





## Automatic Gates are not for Pedestrians!

Automatic gate openers are designed for vehicular traffic. They are powerful, accordingly, direct all pedestrian traffic to a separate walk-through gate.

1. Please power off before starting the installation, operation or maintenance.
2. The equipment shall be connected to the ground (earth), and an earth leakage breaker is necessary on the power supply.
3. We suggest to use the cable type of <HAR> with minimum section of 2.0mm<sup>2</sup>.
4. Do not change the original inside wiring.
5. In case of the power is failed, please power off first, then open the door and rotate the handle on the motor manually to open the boom completely.
6. Keep the automatic control (for example remote control) out of reach of children. The control system must be installed at a minimum height of 1.5m from the ground.
7. Use transmitters or button only where you can see the boom gate clearly.
8. Never open the cover of the cabinet when the equipment is working.
9. Do not permit children to play on or around the boom gate.

# 1 Technical Specifications

AC Series

Power supply: 220V/50Hz

Motor's power: 90W/220VAC

Motor's rotation: 2800r/min

Time for up / down: 2s (for 1m ~ 3m) 6s (for 4m ~ 6m)

Max Boom's length: 6m

## 2 Installing and Adjusting

### 1) Install the equipment on the ground

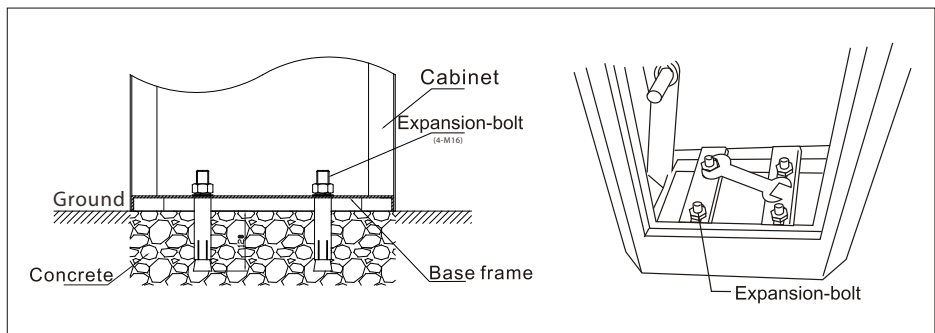


Fig.1

### 2) Install the Boom (Fig.2)

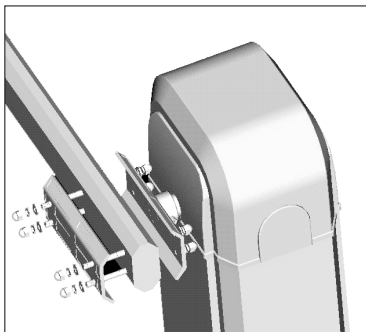


Fig2

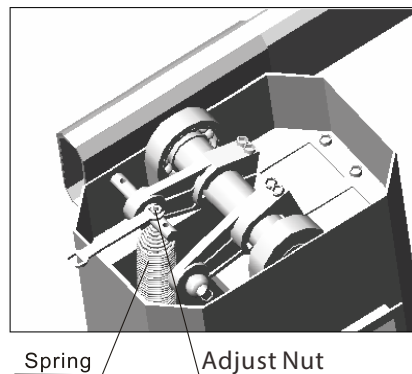


Fig3

### 3) Adjust the limit position (Fig.3 and Fig.4)

The factory setting is ok, suggest you that do not change it in normally.

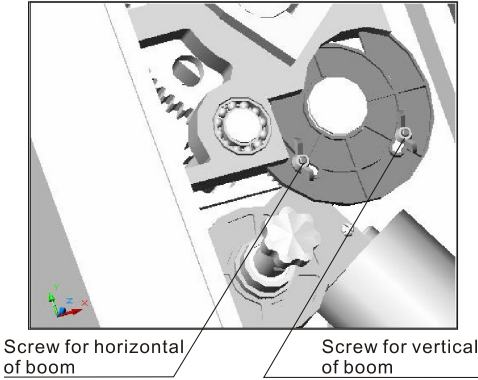


Fig.4

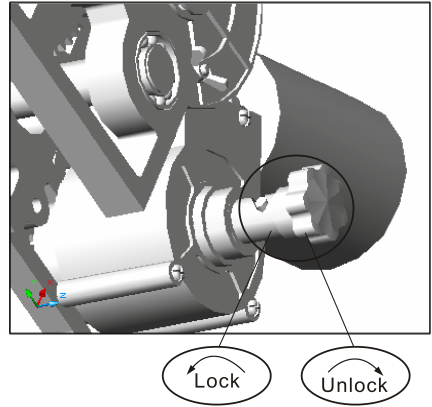
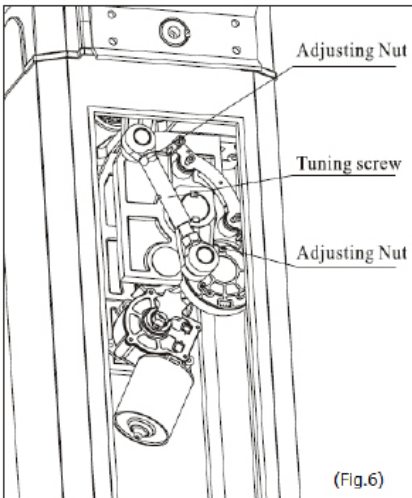


Fig.5

### 3 Quick Release Function (Fig.5)

Push and turn the button to UNLOCK, then you can put the boom to horizontal or vertical manually when power off; turn the button to LOCK so that the equipment is driven by electricity when power on.

### 4 Adjust the Vertical and Horizontal Line of the Boom



- 1) Loose the Adjust Nuts.
- 2) Adjust the Tuning Screw and see the boom, if the Boom is parallel to the ground when it is closed, tighten the Adjust Nuts.



**Adjust the balance of the spring with boom**

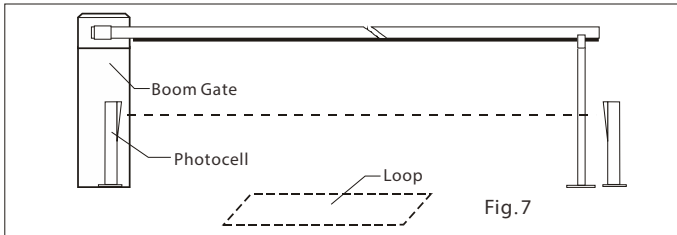
The springs have been already adjusted to balance with the boom. If the length of boom need to be changed, springs should be re-adjusted.

Table of spring quantity and size with boom's length

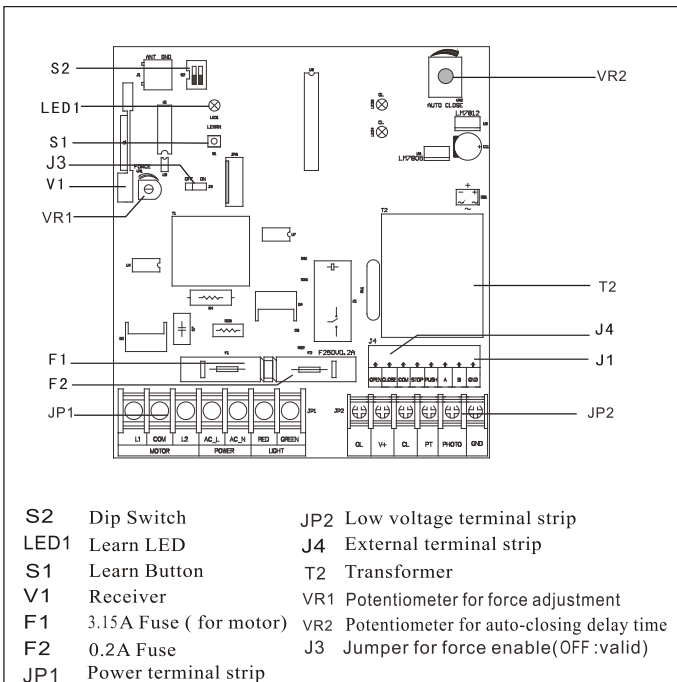
Model	Boom Length	Quantity of Spring	The size of Spring
Boom Gate	3m ~ 4m	1	Φ5mm * 440mm
	4.5m	1	Φ6mm * 440mm
	5m	2	Φ5mm * 440mm
	6m	3	Φ5mm * 440mm

## 5 Electrical Safety Equipment (Fig.7)

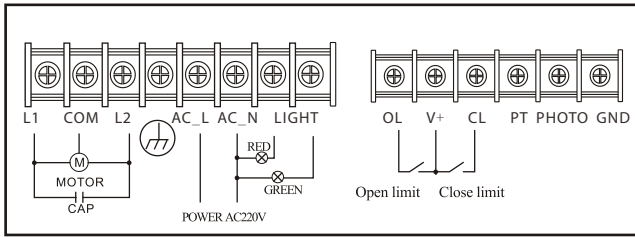
- The Boom Gate limit switch, motor and control unit are already connected up.
- Only the photocell, the loop detector and the supply voltage have to be connected up in installation.



## 6 General Diagram



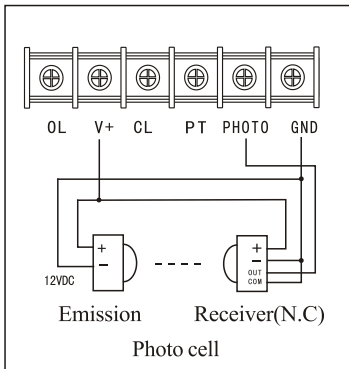
# 1) Diagram



## 2) Safety Opening (3 options)

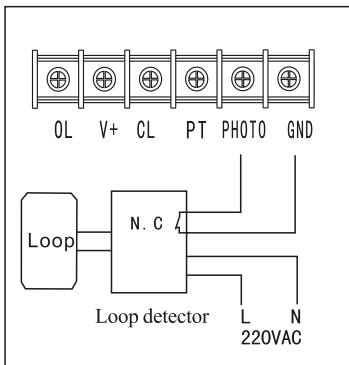
### a) Photocell (N.C.)

- When the boom gate is closed, if the infrared ray is shut off the boom gate opens instantly.
- When the boom gate is opened, if the infrared ray is shut off, the boom gate keeps OPEN status.



### b) Loop Detector (N.C.)

- When the boom gate is closed, if a car is in the range of loop, the boom gate opens instantly.
- When the boom gate is opened, if a car is in the range of loop, the boom gate keeps OPEN status.

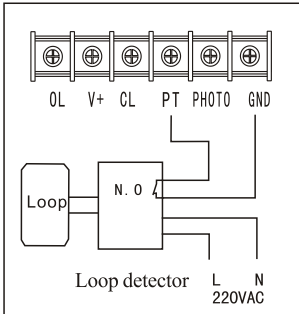


Note: If Auto-closing function is valid, when the obstacle pass through the sensor range, the boom gate will close automatically after delay time. The delay time can be adjusted from 1s to 99s.

### c) Loop Detector (N.O.)

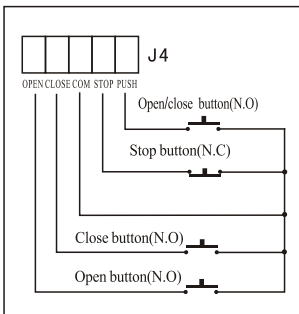
(DIP1 should be OFF)

- if a car is in the range of sensor, the boom gate keeps OPEN status.
- When a car passes through the range of sensor, the boom gate closes instantly.

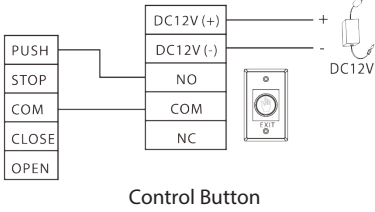


### 3) External Terminal

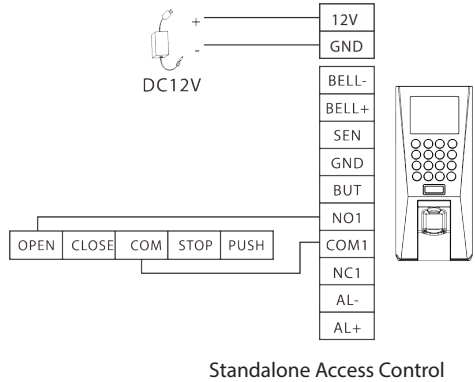
- When the Access Control System is used, it must be connected with OPEN and COM.
- The working mode if "PUSH" is the same as the transmitter, single button in STEP-BY-STEP when it is open status, press button to close, when it is closed status, press button to open. When opening, the button is ignored. When closing, press button to open instantly.



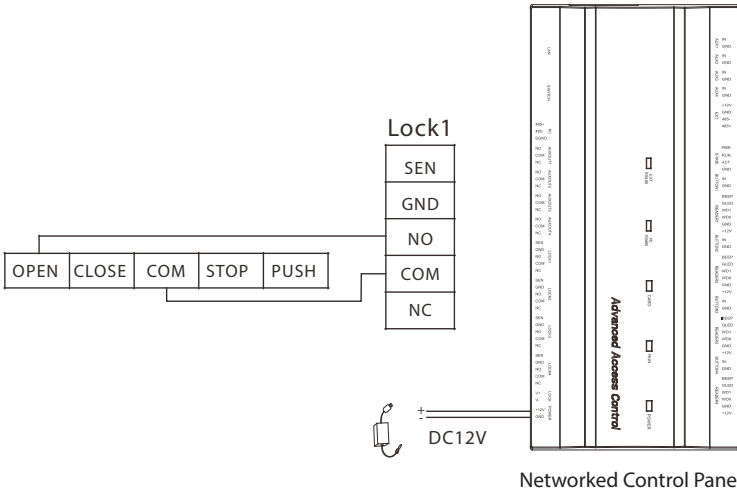
### a) Connect to Control Button



### b) Connect to Standalone Access Control



### c) Connect to Access Control Panel



## 4) DIP Switch Setup



#### DIP1

ON: Auto-closing is valid, the delay time is adjustable when rotating potentiometer VR2; clockwise rotation for longer and anticlockwise rotation for shorter, the range is from 1 second to 99 seconds.

OFF: Auto-closing is cancelled.

#### DIP2

ON: The red light is ON when running.

OFF: The red light is ON when closing and closed; the green light is ON when opened.



## 5) Transmitter

### Transmitter's code setting

Press "LEARN BUTTON", the "LEARN LED" is lighted up, then press the button which you choose on the transmitter till the "LEARN LED" is flashed and gone out, and the transmitter is coded. Other transmitters can be coded as this way.

### Clearing the transmitter's code

Press "LEARN BUTTON" and hold on to make the "LEARN LED" lighted up till go out, and all the codes of transmitters which had been learned are cleared.

## 7 Checklist

NO.	Description	Quantity	Note
1	Barrier	1	
2	Arm	1	
3	Bracket for arm	1	To install the arm
4	Boom Support	1	Optional for arm over 3m
5	Control Panel with Up/Stop/Down button on the Box	1	Inside the Cabinet
6	Mechanical Key	2	To open the cabinet
7	Transmitter	2	To control the barrier remotely
8	Stud	4	
9	Screw Nut (M10)	8	
10	Flat Gasket	8	
11	Spring Washer	6	
12	Clamp	2	To fix the cabinet and the base frame
13	Expansion Bolt (M16*150)	4	Optional for arm over 3m
14	Expansion Bolt (M10*100)	4	
15	Air Switch	1	
16	User Manual	1	