

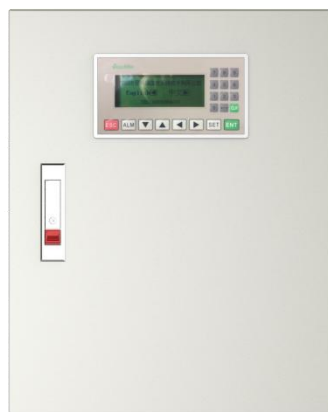
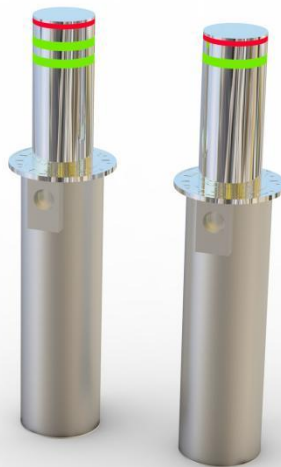


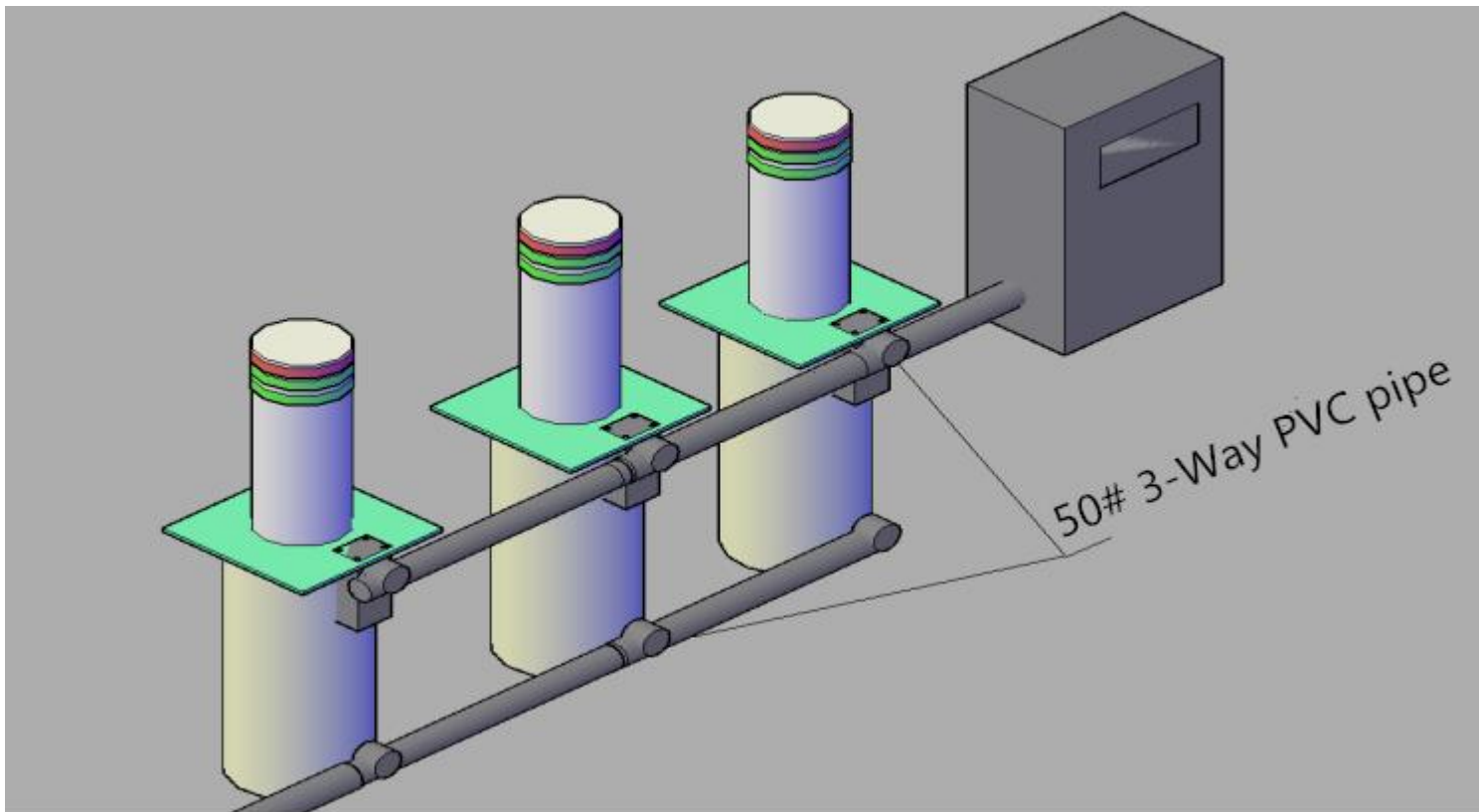
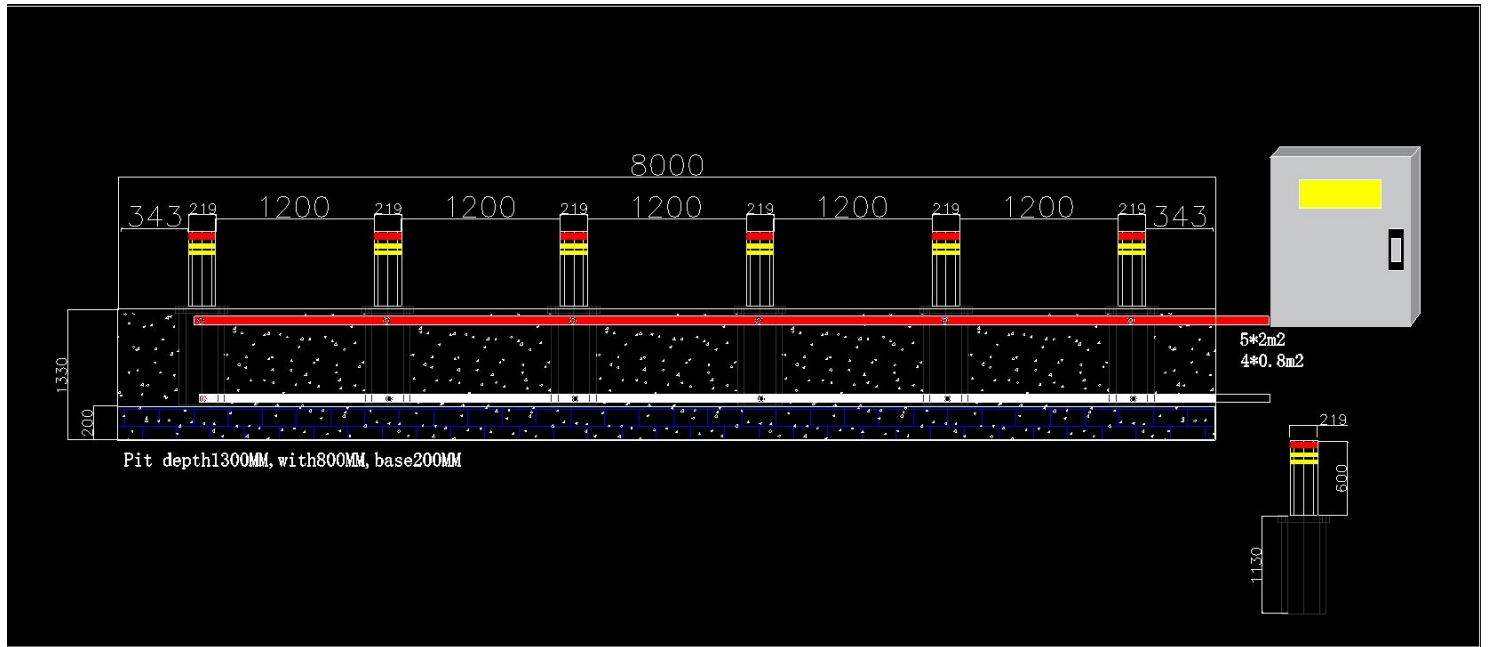
Automatic Rising Bollard Installation Manual

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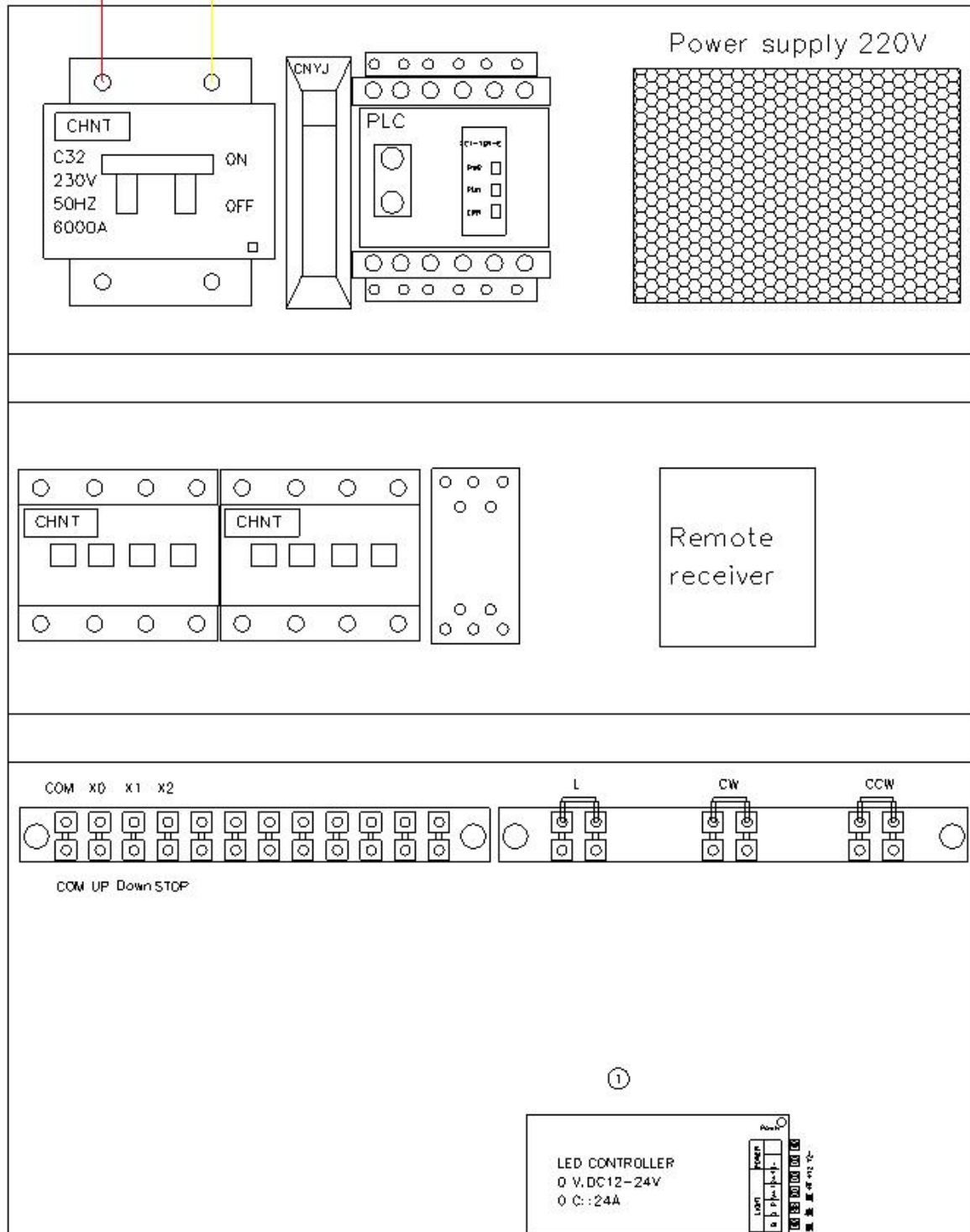
1, Component







1-1PLC Controller

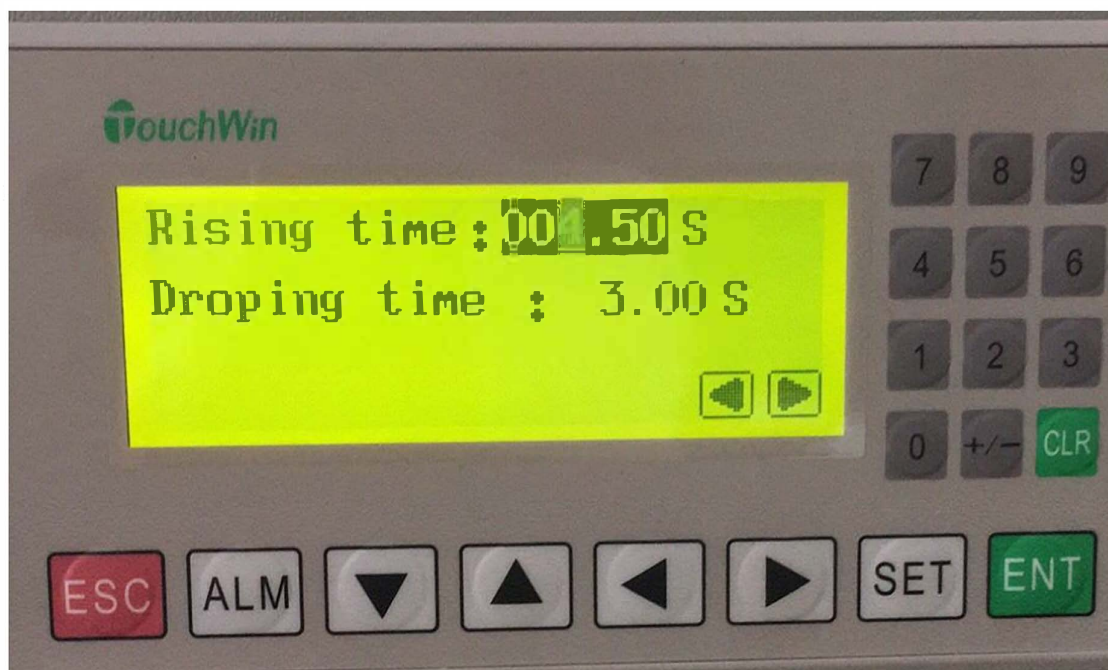


- LED display



Note: Company information can be modified per client`s request







Description of keyboard

ESC:Exit ALM:Alarm Set:Setting ENT: Enter CLR: Clear
 ▼ :Down ▲: Up ►: Right ◀: Left

If you need to adjust the UP or Down time, you can set it on the keyboard.

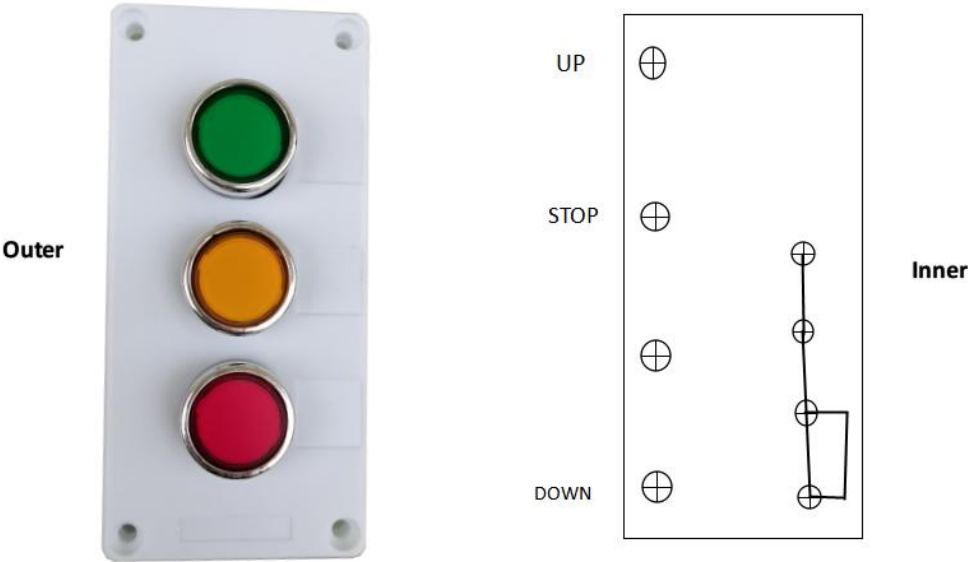
After powered on, press “►” button then the screen will show Rising Time and Dropping Time setting . You can input Rising Time on numerical keyboard, then press ENT. Input Dropping Time on the numerical keyboard, press ESC to exit.

Generally, we already set the up and down time before delivery, no need to verify.

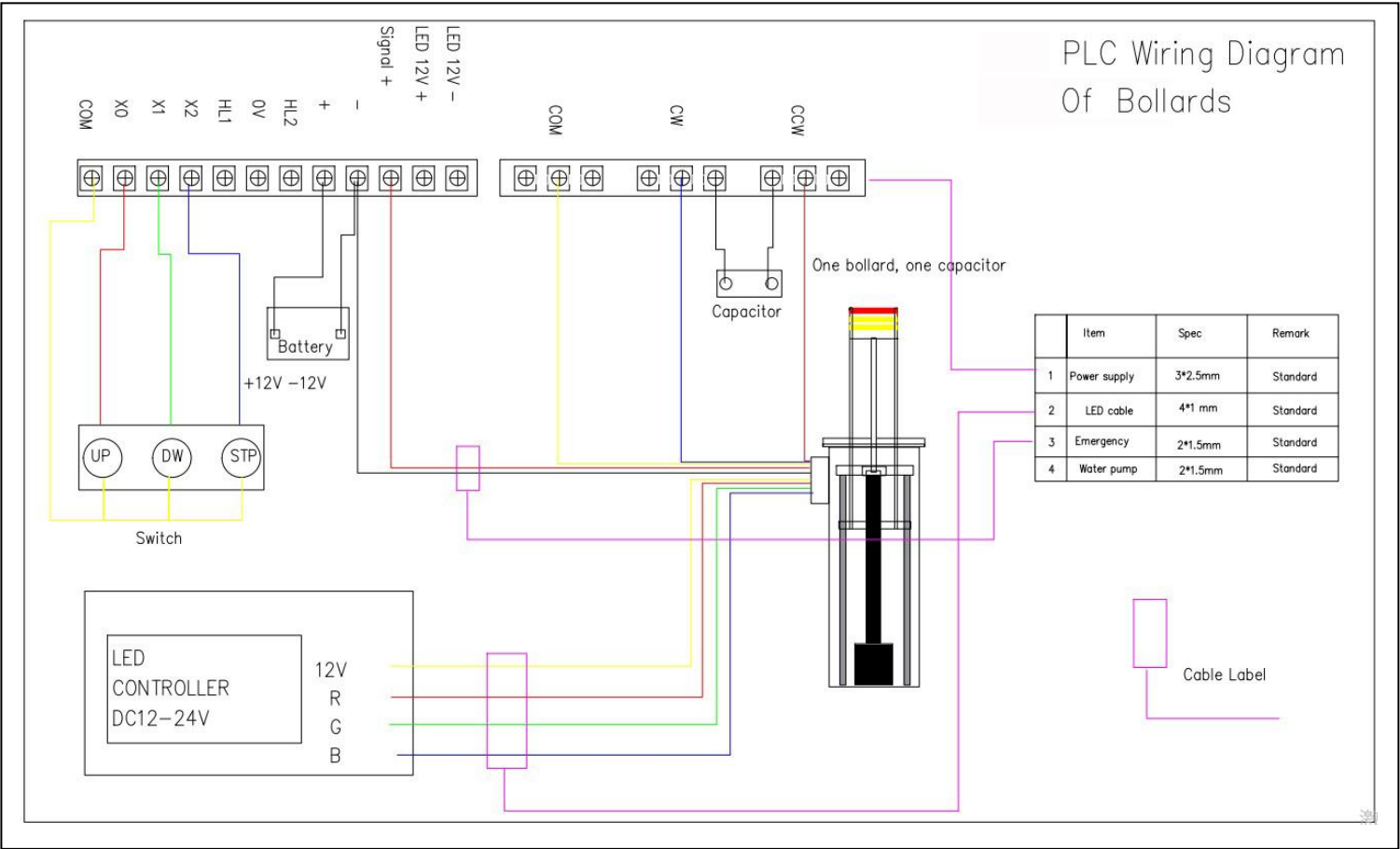
There is”Up,Down, Stop”button on the keyboard. You can control the equipment with those buttons.

“Reset Number” is encrypted function set by our factory. Client cannot use this function.

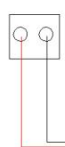
● Manual Button



● Wiring Diagram



L I N



4, Installation Steps



Step 1: According to the construction drawings given by the manufacturer, dig the groove trough, lay the foundation, and do the drainage; ensuring that the 220V power supply is connected to the construction site; pre-bury the required pipes and wires.

After determining the location and size to be installed, cut the road and dig the pit.



Step 2: Layout the concrete base at the location of where you place the bollards

- Make the steel structure then put in the pit. How many level to be put is up to you.
- Fill in the concrete. The concrete specification should be more than C30.
- Leave the concrete base to dry for 2days.



Step 3: Place in the bollards in the pit

After the concrete is dry, place the automatic bollards into the pit. Aligning the the bollards level by horizontal line, so that the bollards is flush with the ground. All bollards should be in same horizontal level. Use the ϕ 50 PVC pipe to connect the drain holes of the automatic bollards to the sewer or the well that has been prepared.

NOTE: The full height of the basement is 200mm. In case the bollards is above the ground level,when you do the basement, please make it to be around 190mm. After placed the bollards, you can adjust the basement to make the bollard flushed with the ground.

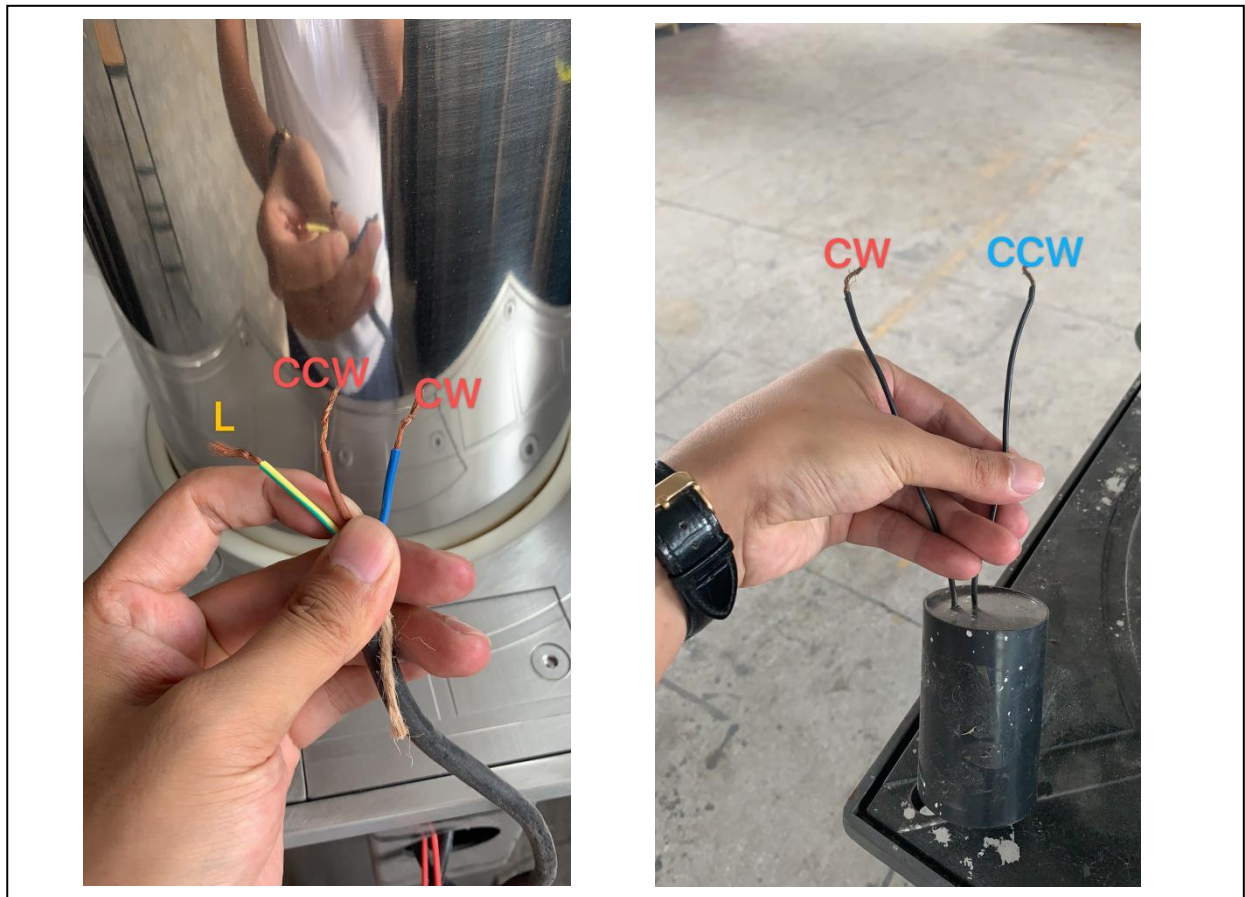


Step 4: Fix in the concrete or asphalt to fix the bollards.

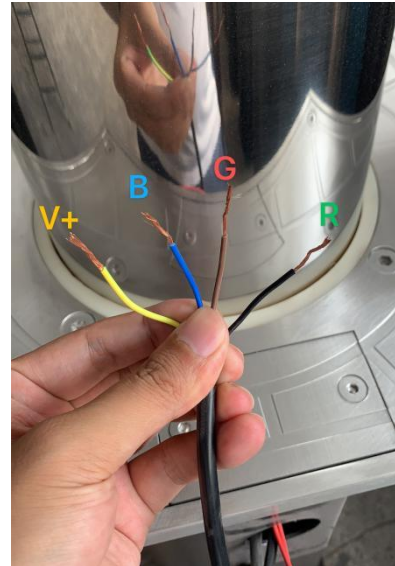
Note: Please cover the bollards with some protective film. Do not let concrete and sand or other objects penetrate into the bollards body! If some big object penetrates into the casing of the bollards, it will affect the operating of the bollards. It may get stuck or cannot be up and down fully. Please pay attention to that.

Step 5: Do the wiring and test the bollards

Fix the control box and turn the air switch to OFF. Connect the single phase 220V power supply to the control box A and B with a 2* 2.5m² cable. Each bollard is connected to the controller's L, CW, and CWW with a 3*4m² wire (If less than 6pcs bollard, 2.5m² is ok). L is the COM terminal, CW is Up, and CWW is Down. CW and CWW are connected by capacitors. How many bollards are controlled by one controller, and how many capacitors will be connected with CW and CWW.
(NOTE: Protect the cables with the PVC pipe)



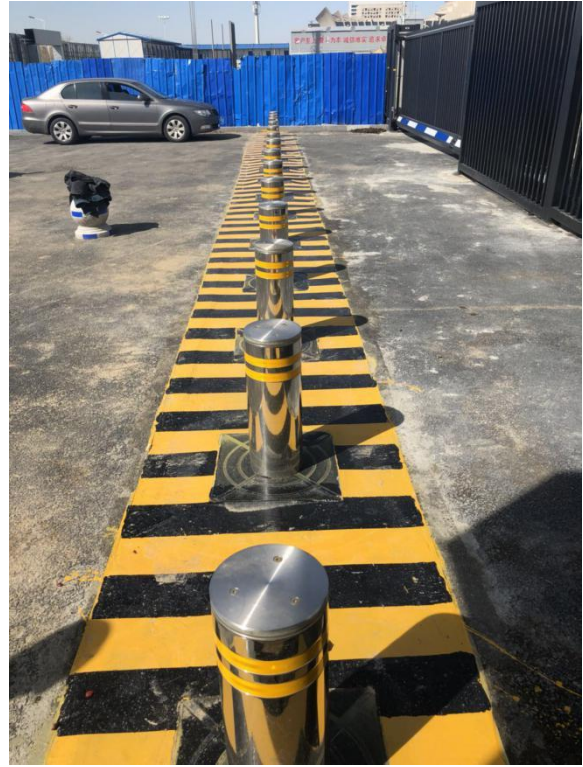
If bollards come with LED light, please connect the LED light with the LED controller.



There is a LED light remote control. You can change the LED light with this remote, also you can turn it off or on by this remote.



Step 6: Power on and turn the air switch ON. Set the up and down time on the control box settings keyboard. Test with wireless remote control.



Step 7: If the bollards work well, fill the concrete to fully fix bollards. After the concrete dry, you can also paint the surface of the road so it will be easier to be notice.



Step 8: Debug the manual dropping function.

Connect the battery to control box. Two red cables of the bollards connect to battery negative, signal positive.

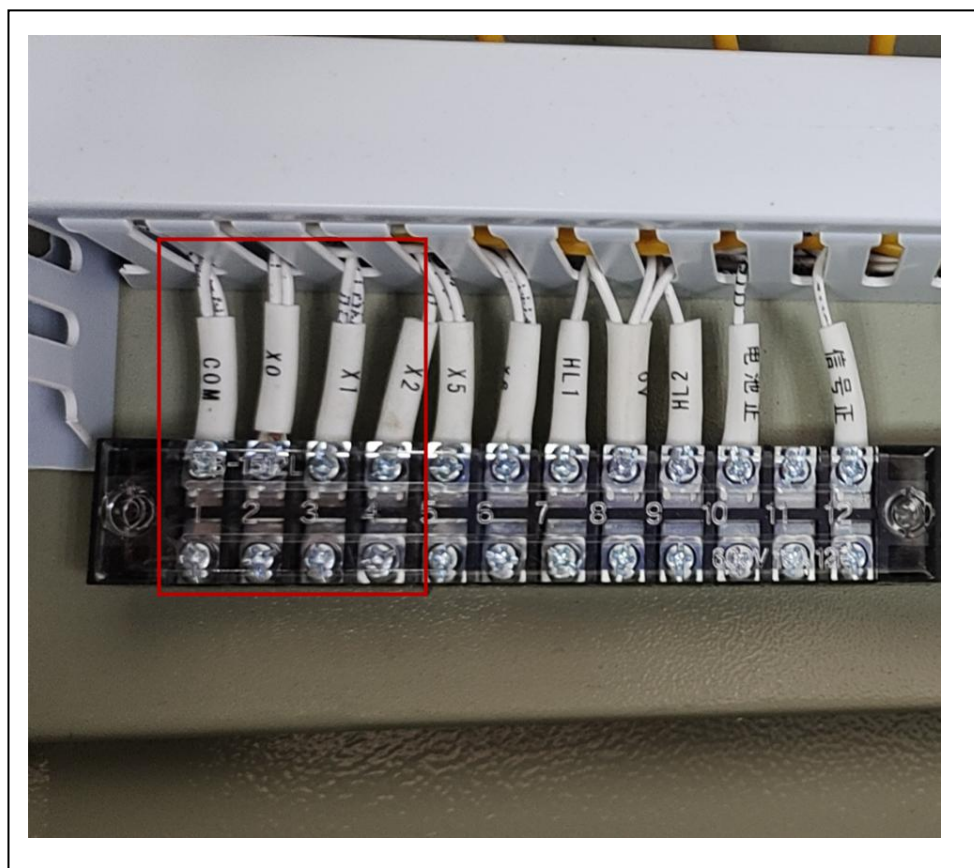
Use another cable to connect the battery with the battery positive and battery negative of controller. The battery has no positive and negative.



Once the wiring down, press the green button on the control box. The bollards should drop down automatically.



Step 7: The COM, X0, X1, and X2 of control box are respectively connected with the COM, Up, Down and stop of the manual button by a 4-core 1 square line. Test the manual button.



5, Cautions

- Wiring: Wiring must be carefully fixed. It must be fully waterproof
- Draining: The bottom of the bollards must be drained
- Routine cleaning is needed to prevent dust and sand go inside the bollards

7. Troubleshooting

- ✧ The control box always trips

The wiring may be damaged or influent, and it is necessary to check the wiring in time.

- ✧ The remote control fails

If the wireless remote control fails, but the manual button works fine, you can try to replace the battery of the remote. If the battery is replaced but still not working, maybe that the receiver is faulty. Please contact us to replace the receiver.

- ✧ The bollards are lowering automatically when rising.

If the bollards in the raised state automatically descends, then the problem may be on the mechanism or the Pressure maintaining valve.

The mechanism has less oil or it is damaged: The solution is to unfix the screws on the bollard flange panel and pull the internal mechanism up to add hydraulic oil. If the fault still occurs after adding the hydraulic oil, you need to contact the us to replace the mechanism.

The pressure valve cannot keep pressure. This may be caused by the problem of the rubber circle. So it is releasing pressure. Please contact us to replace the valve.

- ✧ The LED light is malfunction

If all the LEDs on the bollards are not on, this maybe the wiring problem. Please check the wiring.

If only one of the LED is not on, that means the LED strip is broken.

- ✧ The bollards cannot fully up or down

If the bollards are not operating for a while, there may be dust and sand penetrated

inside the bollard. So, the it is running slowly. After pre-set 3s, it will stop in half-way. You need to do the cleaning.

✧ After using for one year, the operation noise get louder

It means that you need to do the maintenance now. Pull up the bollard tube from the casing and brush the lubricating oil on the navigation rods.