INSTRUCTION MANUAL Read carefully

Product Name: Sliding Gate Opener Controller
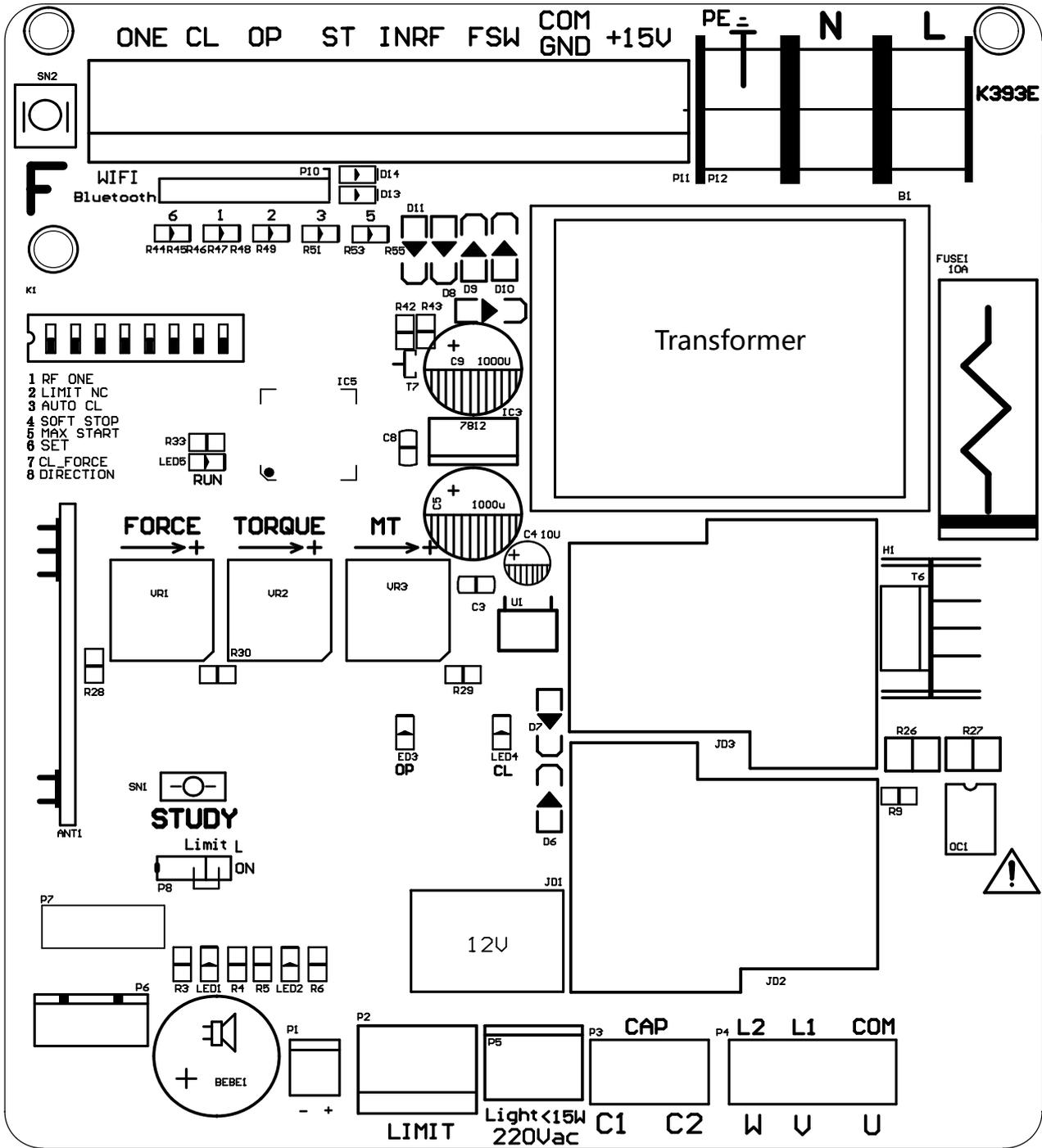**Model:** K393
Introduction Of Item Function:
In order to enable the installation and testing easier and convenient, we developed the intelligent type of self-study sliding gate opener controller. Which applied the imported micro-computer chip. It features digital control, versatile functions, safety, and simple installation and testing.

Product Features

1、The gate will slowly travel to the limit position at first operation, avoiding the inertial over-limit.

2、Anti-collision design:When the motor travel is completed,only after press the reverse button,the motor can be activated so that the over-travel can be avoided.Note: There have power-off hold function when the motor touched the limit , it will be reverse action when power on.

3、**Configuring the Hall Element, When magnets are installed, they are divided into the south and north poles (so the magnet can attract each other while being amounted). You can ignore their position. The motor would stop when it should be only if the motor movement and travel input light are same color. If the direction is wrong, you can change the direction via red dip 8.**

4、Motor time protection:Avoid long time operation of the motor when travel failure,The controller can automatically learning the motor working time, which is ten seconds longer than the traveling time without set up manually,it will automatically saved after the motor complete working several times.

5、Auto-closing function: The time can be adjusted from 1 to 250 seconds.

6、Motor force adjustment：Available.

7、Motor slow speed adjustment:Can adjust the thrust when motor running at slow speed.

8、Resistance rebound function: Can adjust the obstruction by potentiometer.

9、Top confidentiality k393 controller has remote control function, which keep the long distance and anti-interference. The code number is amount to 400 million combination and impossible to break because of using the most advanced jump coding technology, more safe and confidential than the traditional one.

(1) Working power supply 220V±10%
(2) Max. Output current: 10 A
(3) Fuse: AC220V 10A
(4) Remote distance: ＞30m
(5) Working temperature range: -25℃~+75℃, relative humidity: ＜60%, no freezing dew

Wiring Diagram

Red Dip Switch Function:

1、Remote single key   2、None   3、Auto close function   4、Soft stop function

5、Max.start force   6、Function setting   7、Resistance rebound function

8、Motor direction ,turn on this switch will change the motor and limit direction at the same time

Add And Delete Remote Control

1.Add remote control
Release your hand after press STUDY key for 1 second , then press any button on remote, finished when you hear a sound then release your hand. Repeated above operation when you need add more remote control.max. remote control you can add is 300 pieces.

2、 Delete remote control
Press STUDY key for 8 seconds, release your hand after hear a sound, delete all the remote control.

3、Remote control single key control:
when the Red Dip Switch1 in ON position ,the remote control with single key circulation mode, open -stop-close circulation

4、Remote control three keys control
when the Red Dip Switch1 in OFF position, the remote control is three keys control mode.

Function Operation

1、Remote single key control   B1 (Red DIP switch 1)
Red Dip Switch 1 in ON position，the remote control is in single key circulation mode
Red Dip Switch 1 in OFF position ,the remote control is in three keys mode

2、Motor direction conversion B2   empty   (Red DIP switch 2)

3、Auto-closing function   B3 (Red DIP switch 3)
Red Dip Switch 3 in ON position, with auto-closing function.
When motor open to the open limit,start closing time counting.
Auto Close Time setting: Turn on Red Dip Switch 3 and Red Dip 6 to ON, Press function key (F), one time one second, after setting, turn Red Dip Switch 6 to OFF, and Red Dip switch 3 still in ON position.

4、Slow speed function B4   (Red DIP switch 4)
Red Dip Switch4 in ON position with slow start and slow stop function.
For the first time need to make travel setting after installed the motor.
During setting, motor should completely installed on the door, and the door should in close position (This is very important). Turn Red DIP4 to on, and then press F key of the control board about 5 seconds, motor will auto open to open limit and then close to the limit.Setting of the limit is finished. After setting motor will have soft start and soft stop.
(Note:It can adjust the slow speed thrust by MT knob if motor thrust not enough. Motor slow position is fixed, about 20cm.)

5、Max.force starting function B5 (Red DIP switch 5)
Red Dip Switch 5 in ON position with max.force starting. If the door is heavy and can not start by soft start, it can turn on Red Dip switch 5 to on, make the door starting, but this will increase the noise from door starting.

6、Function setting B6   (Red DIP switch 6)
RED Dip Switch 6 in ON position ,can set the function of the remote single key control and auto closing time and so on ,it needs to turn to OFF after finished the setting.

7、Resistance rebound function B7 (Red DIP switch 7)
RED Dip Switch 7 in ON position with resistance rebound function.
Functional optimal adjustment scheme :Set the resistance potentiometer to minimum, then gradually increase clockwise to find a point of appropriate force. The force cant too small and too big.

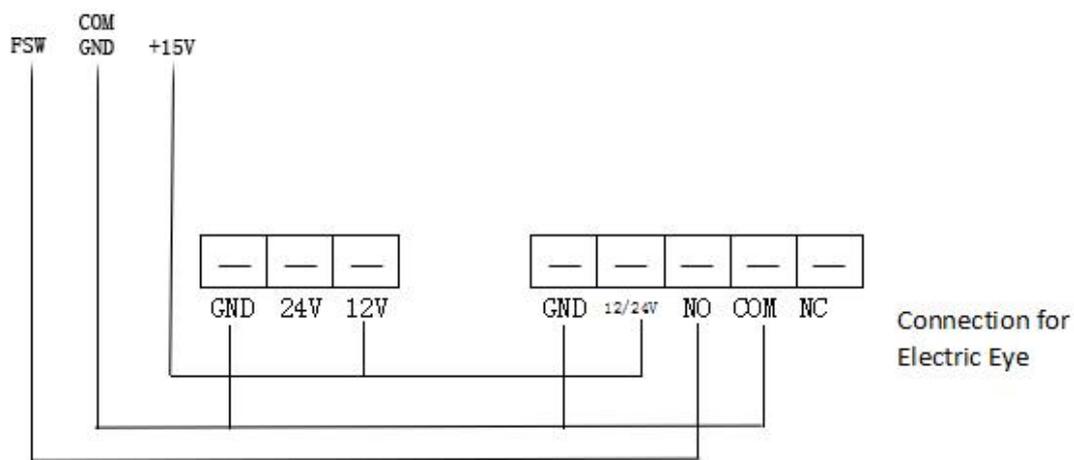**8、Motor direction conversion B8 (Red DIP switch 8)**

When the gate traveling direction and limit are in corresponding position , the gate is not in limit position and do not have movement, just turn red dip switch 8 to change the direction, others do not change.

Loop Detector

Three states of Loop detector input:

1、When the gate is closing, there is loop detector signals input. The gate will reverse to the opening position. Then the gate will close after 2 seconds delay

2、When the gate is opening, there is loop detector signals input, the motor continues to running, the gate will close after 2 seconds delay when the opening travel is over.

3、 When the motor touched the limit, and the gate will close after loop detector signal input two seconds

Usage of IR sensor


```
       COM
PSW    GND    +15V


       ┌────┬────┬────┐        ┌────┬────┬────┬────┬────┐
       │ —  │ —  │ —  │        │ —  │ —  │ —  │ —  │ —  │
       └────┴────┴────┘        └────┴────┴────┴────┴────┘
        GND  24V  12V           GND 12/24V  NO  COM  NC      Connection for
                                                            Electric Eye
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During closing, when IR sensor is interrupted, the motor will stop immediately and reverse to the opening direction.

Hidden settings of the control board

From left to right it is LED1   LED2   LED3   LED4   LED5
LED4 ON for cancel motor protection
LED2 ON for remote control lock key lock the control board
LED3 ON for pedestrian mode
LED5 ON for photocell with NC

Turn Red DIP1, Red DIP6 , Red DIP7 to ON (LED light 4 on) will cancel motor protection
(Default with this function)
Turn Red DIP2, Red DIP 6, Red DIP7 to ON (LED light 2 on)remote control lock key with lock function
Turn Red DIP3, Red DIP 6, Red DIP7 to ON (LED light3 on)with pedestrian mode function
Turn Red DIP5, Red DIP 6, Red DIP7 to ON (LED light5 on)photocell with NC (Default photocell with NO)

Restore the default settings: Turn all the Red DIP 1 to 8 to on, you will hear DIDI sound, then turn all the Red DIP 1 to 8 to off it will restore default settings.

Pay attention: all the hidden settings need to press Black F key to start the function, press Black F key again to cancel the function.Photocell NC and NO interchange can only by manual,can not by restore the default setting.

Troubleshooting Methods

Failures	Reasons	Methods
Control board No reaction	1. Is it power on	1. Check power supply
Press the remote but the gate not move	1. If the remote control coded 2. Remote control battery no power	1. Reference the manual of add remote control 2. Replace the battery with same model.
The remote distance is too short	1. The battery Power shortage 2. The same frequency interfere the remote control	1. Replace the old battery with the new battery 2. Find out the source of interference,suppress interference

Optional accessory list

Description	Specification	Quantity	Unit
Card reader	DC12V	1	PC
Video doorbell	Color, 4 or 7	1	Set
Coded remote control	With battery	1	PC
Desk-top remote control	AC220V	1	PC
Facial Recognition	DC12V	1	PC
Bluetooth/mobile open gate	DC5V	1	PC
Mobile visual open gate	DC12V	1	Set
Car bluetooth open gate	DC5V	1	PC
Vehicles automatic recognition	DC12V	1	Set
Wireless keypad	DC3V	1	PC
Ground coil	0.5*100 meter	1	volume
Laser Radar/Photocell	DC12V	1	Pair
Alarm lamp	AC220V	1	PC