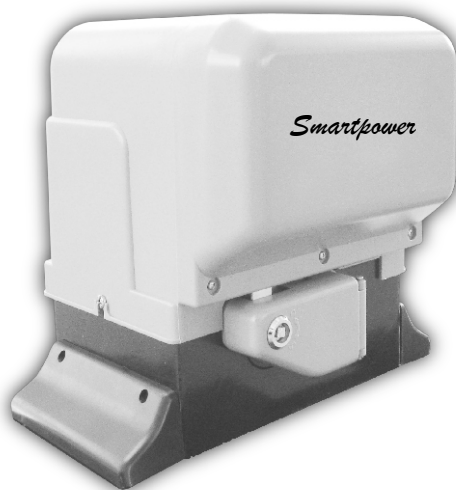


SLIDING GATE OPERATOR **INSTRUCTION**



Smartpower Sliding Gate Motor

SP ACM SG 800B

www.smartpower.co.in



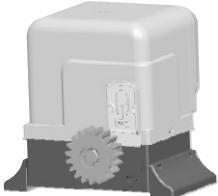

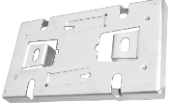

**PLEASE READ THE MANUAL CAREFULLY
BEFORE INSTALL AND USE**



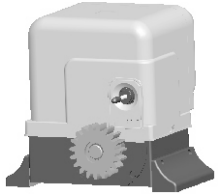

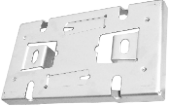

WARNING TO THE INSTALLER AND USER

- 1) CAUTION! For personal safety it is important to follow all the instructions carefully. Incorrect installation or misuse of the product may cause serious harm to people .
- 2) Keep the instructions in a safe place for future reference.
- 3) This product was designed and manufactured strictly for the use indicated in this document. Any other usage not expressly indicated in this Document, may damage the product and/or be a source of danger.
- 4) BS accepts no responsibility due to improper use of the automatic machine (opener) or use other than that intended.
- 5) Do not install the machine in an area subject to explosion hazard. Inflammable gasses or fumes are a serious safety hazard.
- 6) BS will not accept responsibility if the rules of good workmanship are disregarded in installing the closing elements to be motorised, if any deformation occurs during use of the said elements.
- 7) Before carrying out any work on the system, turn off the electricity supply.
- 8) The safety devices (e.g. photocells, sensitive edges, etc...) may be used to prevent any potential risk in dangerous areas where the moving mechanism is located , such as crushing, dragging, or shearing.
- 9) BS accepts no responsibility regarding safety and correct operation of the machine, should components made by manufacturers other than we be used in the system.
- 10) Do not make any alterations to the components of the automatic machine (opener and accessory).
- 11) The installer must supply full information regarding operation manual of the system in the event of any emergency and provide the system user with the "INSTRUCTION" included with the product.
- 12) Do not allow children or other people to stand near any moving part of the opener or door construction while in operation.
- 13) Keep transmitters away from children to prevent the machine from being activated accidentally.
- 14) The user must refrain from attempting to repair or adjust the system personally and should only contact professional personnel .
- 15) Frequently examine the installation, in particular check cables, springs and mountings for signs of wear, damage or imbalance .Do not use if repair or adjustment is needed since a fault in installation or an incorrectly balanced door may cause injury.

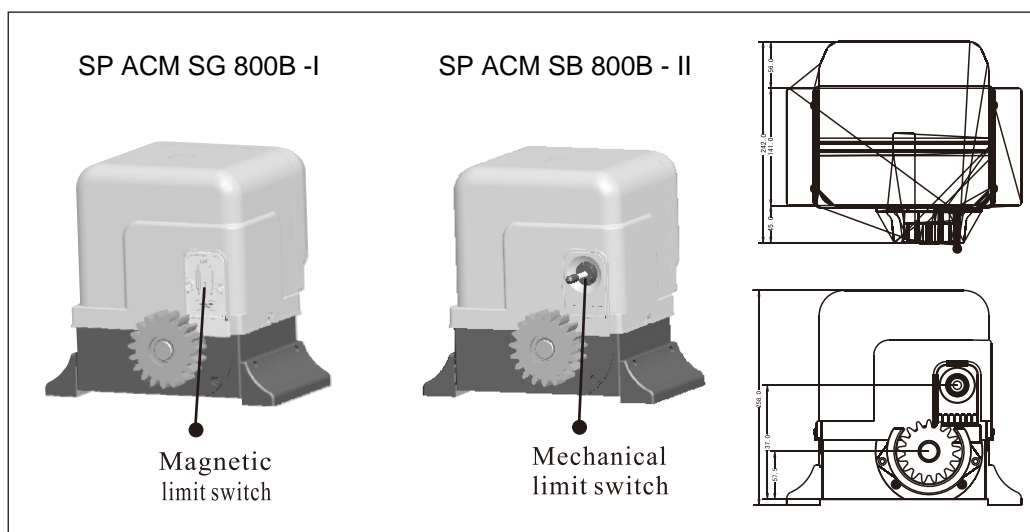
- 16) This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- 17) If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- 18) Disconnect the supply when cleaning or other maintenance is being carried out, if the appliance is automatically controlled.
- 19) The temperature range marked on the drive should be suitable for the location.
- 20) The electrical cord plug must plug in indoor outlet or waterproof cover outlet

1. Instruction

BS-CAN-I Complete kit	 Release key	 Limit stopper	 BS-CAN-I
 Transmitters	 Base plate	 Accessories	

BS-CAN-II Complete kit	 Release key	 Limit magnet/ Bracket	 BS-CAN-II
 Transmitters	 Base plate	 Accessories	

1.1 Dimension



- * Built-in control board.
- * Terminals for Push button, Photocell, Alarm lamp.
- * Auto-closing is available, time delay is adjustable.

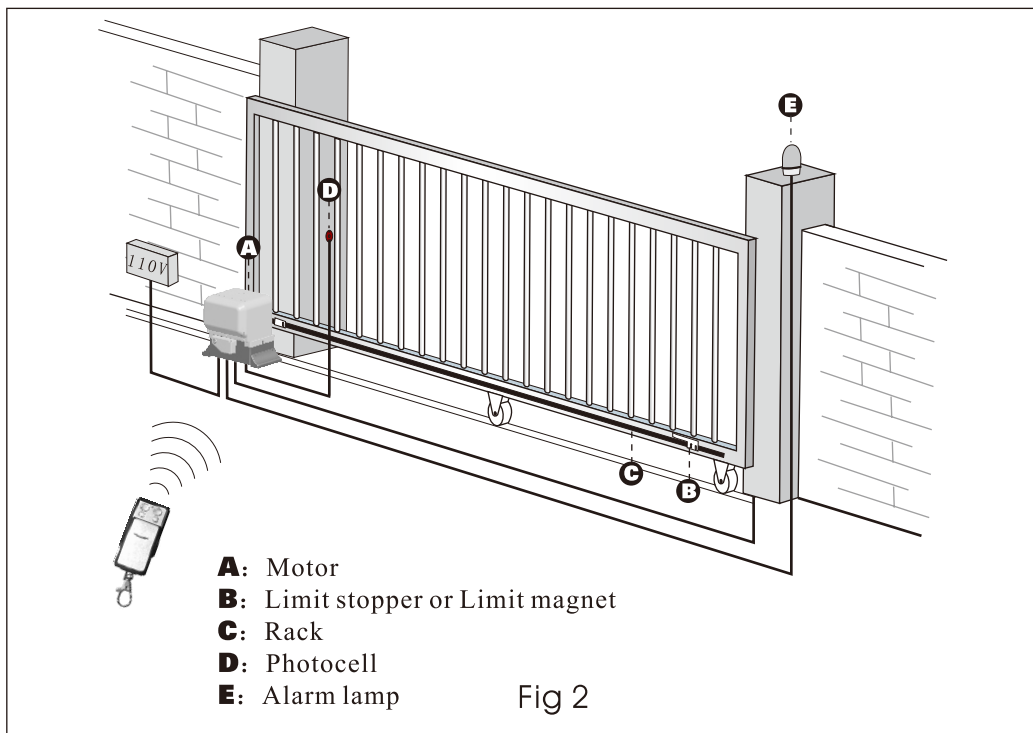
1.2 Technical Specifications

Model	SP ACM SG 800B
Description	AC MOTOR
Power supply	230V/110V 50/60Hz
Power of Motor	280W
Current	5A /8A
Motor rotational speed	1400r/min
Max weight of gate	≤800kg
Thermal protection on motor winding	120℃
Working environment	-20℃~55℃

2.Installation

- * Before using the machine, check power supply, grounding, voltage, etc.
- * Check whether it is connected according to the demand of wiring diagram.
- * The gate should be pulled easily and smoothly manually when the worm gears are released .
- * The worm gears will be coupled before power on.
- * The product must be installed by professional person.

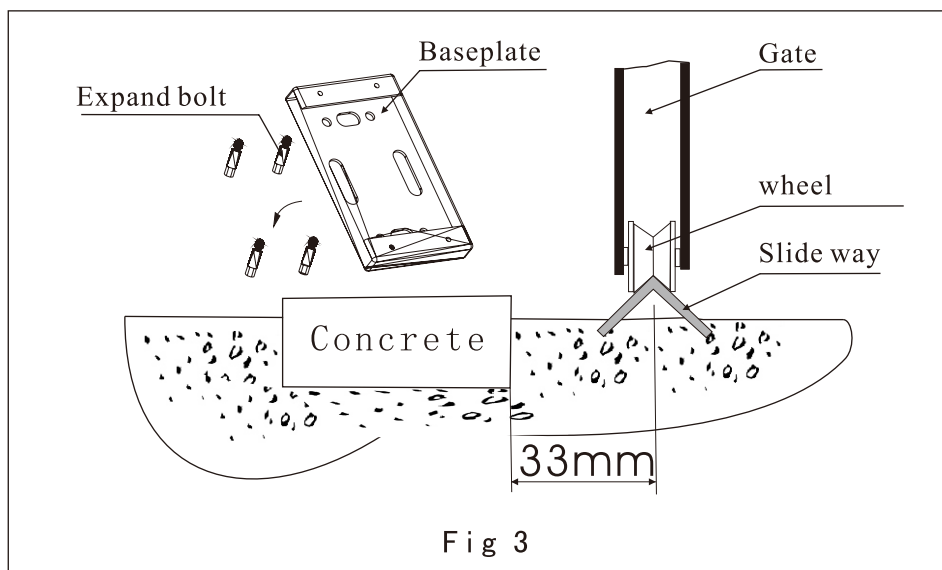
2.1 Example of an installed automatic sliding gate



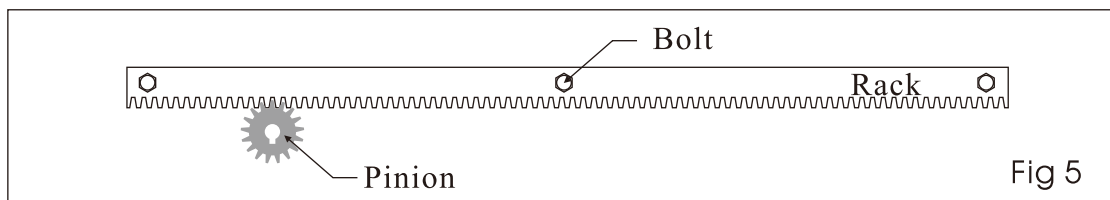
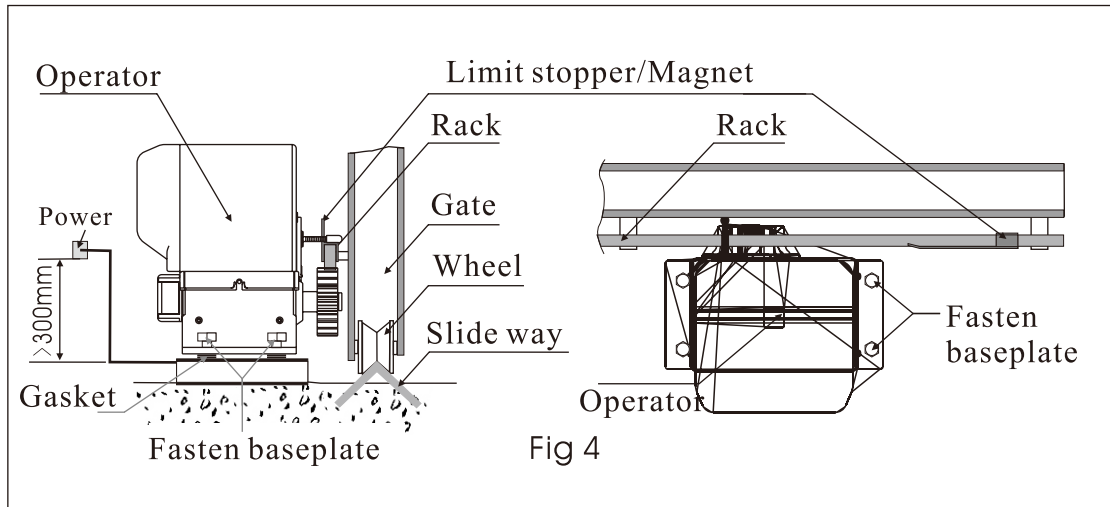
2.2 Installation and adjustment

2.2.1 Install baseplate on the ground, then, fasten the sliding motor on the baseplate.

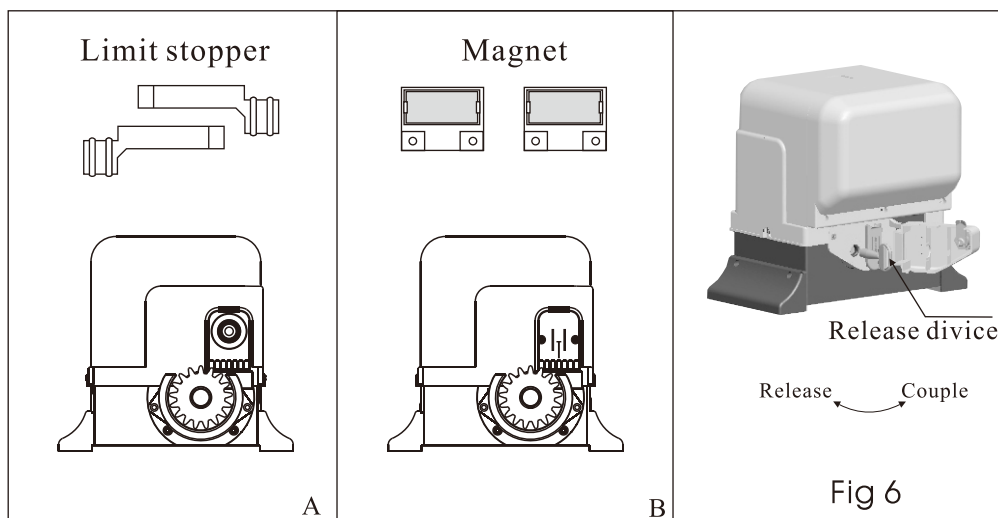
Key: Ensure baseplate on level position.



2.2.2 Install the limit stopper or limit magnet at proper position on the steel rack.

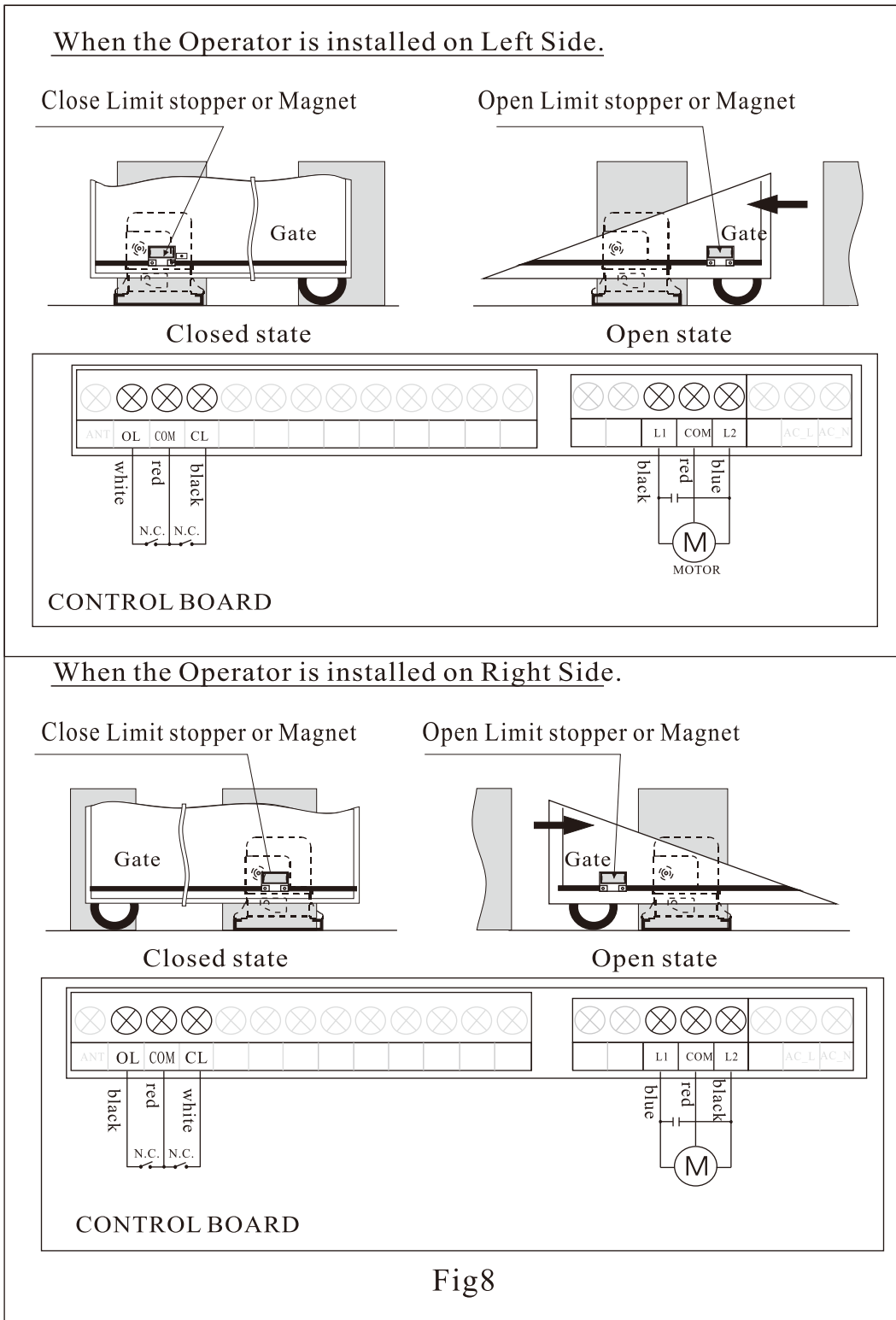


Before place the limit stopper or magnet on the rack, the gear box of the operator must be released. As per Fig 6A or fig 6B, Use the key turn clockwise to release the gear.



Move the gate manually to the open limit and close limit, mark the points on the Rack, then, fix the limit Stoppers or Magnets at the limit points on the Rack.

2.2.3 SP ACM SG 800B Motor Layout



NOTE: Magnet must be 10mm~20mm space from the operator, and must be same height with the Magnetic switch inside of the Operator.

3. Layout of PCB and wiring diagram

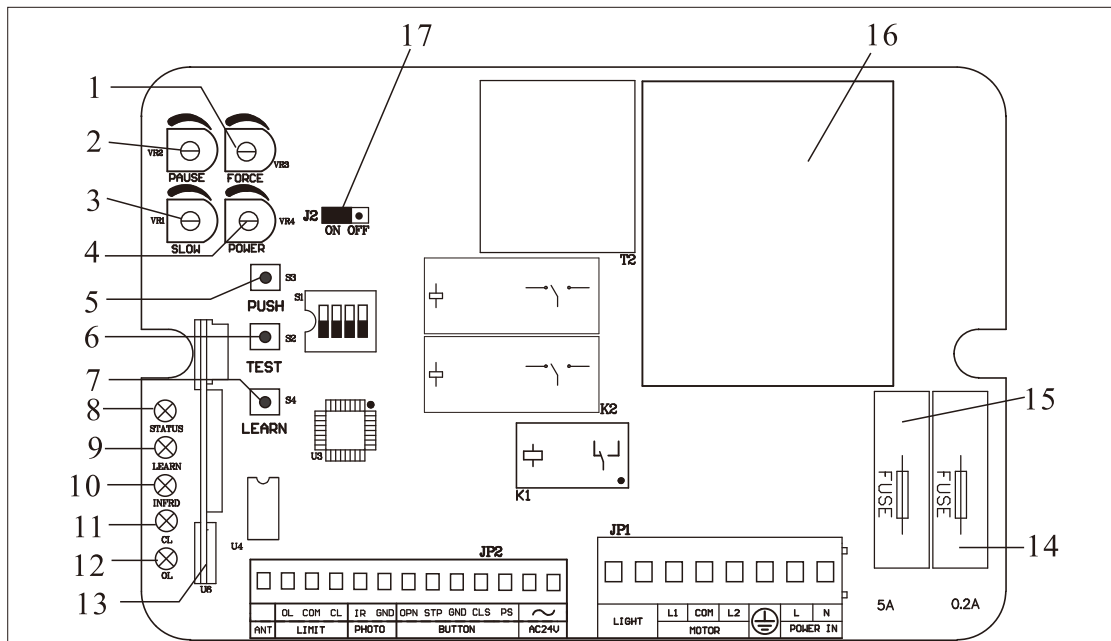


Fig10

- | | |
|-----------------------------------|--|
| 1.VR3:Trimmer of resistance force | 10.Photocell LED(N.C.) |
| 2.VR2:Trimmer of pausing time | 11.Close limit LED(N.C.) |
| 3.VR1:Trimmer of slowing power | 12.Open limit LED(N.C.) |
| 4.VR4:Trimmer of power regulation | 13.Receiver |
| 5.Push button | 14.Fuse(0.2A) |
| 6.Test button | 15.Fuse(5A/220V, 8A/110V) |
| 7.Learn button | 16.Transformer |
| 8.Status LED(Flash on running) | 17.Jumper for reverse function(ON:valid, |
| 9.Learn LED | OFF:invalid) |

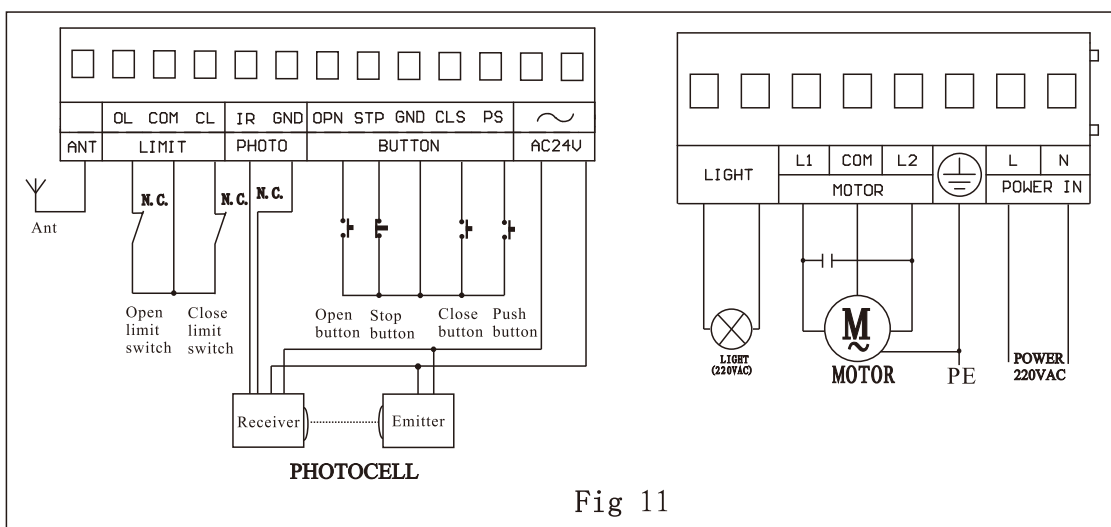










Fig 11

Dip-switch set up

	Enable auto close		Disable auto close
	Enable soft start		Disable soft start
	Enable soft stop		Disable soft stop
	Step by step mode		No use



VR1

VR1: Trimmer of power adjustment during soft stop.



VR2

VR2: Trimmer of pausing time for Auto-closing at Open Limit.



VR3

VR3: Trimmer of resistance force.



VR4

VR4: Trimmer of motor power adjustment.

Running time programming

After finish the installing and connecting, Power on, and Press "Test" for 3 second, the gate will open and close at the limit point one cycle, the running time is remembered by the control system.

If no limit stopper or limit magnet on the rack, you also can press "Test" when the gate open and close to the right limit points.

Transmitter's code setting

1.Learning a button on transmitter for step by step operation:

Sortly press “LEARN”button on control board,“LEARN”LED light on,then press and hold the required button on transmitter till the “Learn” LED flashes and goes out.

2.Learning a button on transmitter for opening operation:

Sortly press “LEARN”button twice on control board,“LEARN”LED flashes twice,then press another button on transmitter till the “LEARN” LED flashes and goes out.

■ This way,more transmitters can be learned.

Erasing the transmitter's code

Erasing transmitter codes: Press" LEARN " button and hold on to make the "LEARN" LED light till go out. Now, all codes of transmitters which had been learnt are cleared.

Trouble Shooting

Number	Trouble	Cause	Shooting
1	motor can not work	*No power supply *Break fuse *Motor is damaged	*Check power supply *Change fuse *Change the motor
2	Can open but can not close	*Photocell is not connected properly *Photocell team is block off. *Photocell is broken.	*Connect the photocell properly *Clear out obstacle *Change a new device
3	Can open (close) but can not close (open)	*Position of limit switch is not correct *Limit switch is damaged	*Adjust position *Change limit switch
4	can not locate accurately	*Distance of limit switch is too large *Limit switch is wrong *Magnetic- steel's position is wrong	*Adjust position of limit switch *Change limit switch *Re-adjust the position
5	Release device	*Operating handle is broken *Worm gears are jammed	*Change the handle *Rotate the pinion
6	Push the “open” button but the gate close	*(DC)Whether “+MOTOR-” wires are connected wrong *(AC)Whether “L1” and “L2” wires are connected wrong	*Connect correctly according to wiring diagram
7	Motor can turn but can not work	*Clutch is released *Compression spring of clutch is dead	* Use the key to couple the clutch *Change the spring