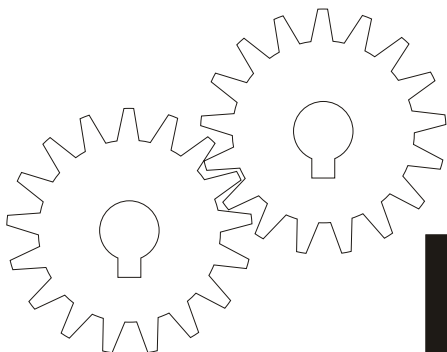


# SLIDING GATE OPERATOR **INSTRUCTION**









SM ACM ID 1800B/2500B









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

[www.smartpower.co.in](http://www.smartpower.co.in)

# 1. Introduction

 <p>Transmitters</p>	 <p>Release key</p>	 <p>Limit stopper</p>	 <p>Mechanical Limit</p>
	 <p>Base plate</p>	 <p>Accessories</p>	

 <p>Transmitters</p>	 <p>Release key</p>	 <p>Limit magnet/ Bracket</p>	 <p>Magnetic Limit</p>
	 <p>Base plate</p>	 <p>Accessories</p>	

## 1.1 Dimension

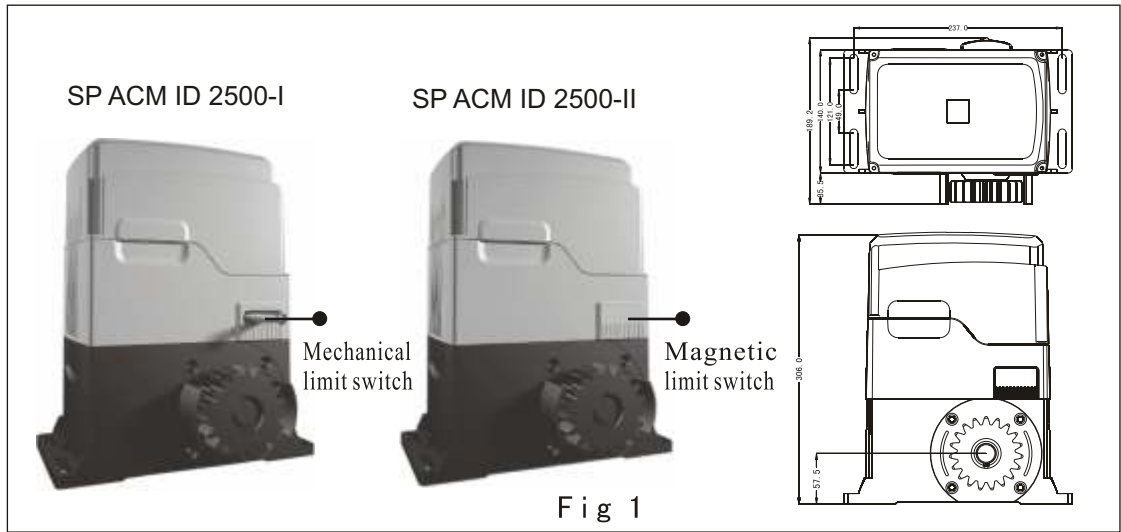


Fig 1

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

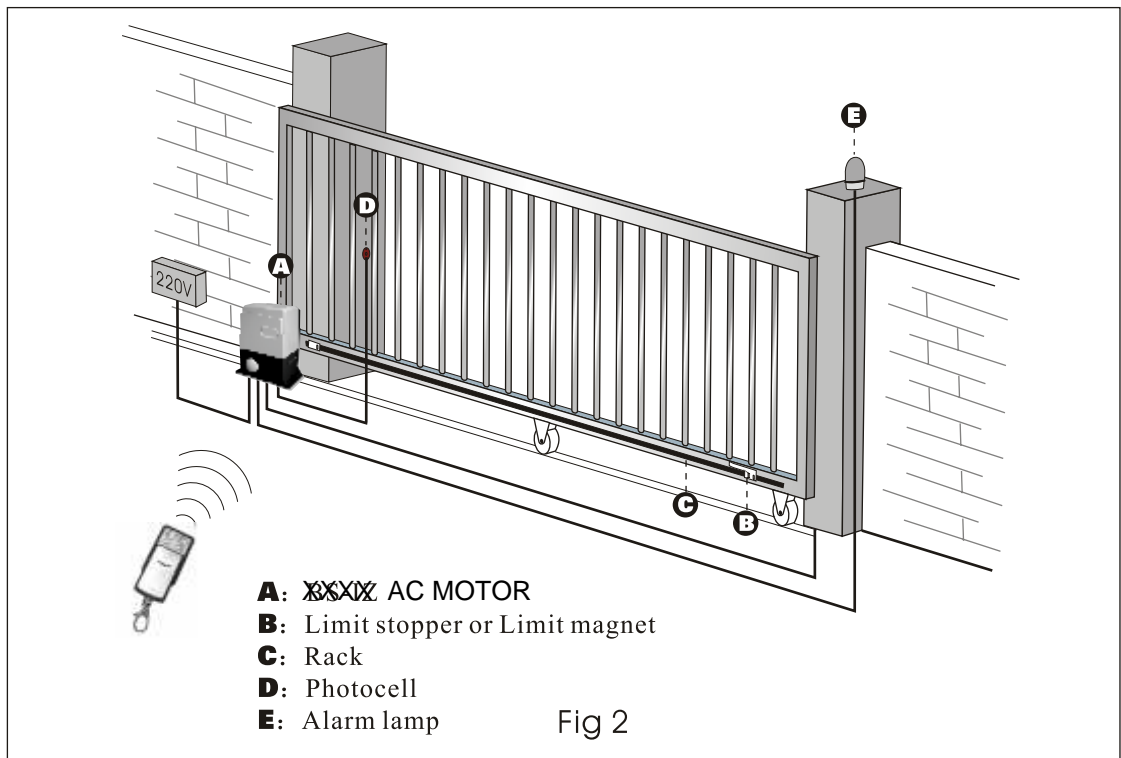
## 1.2 Technical Specifications

Model	SP ACM ID 1800B	SP ACM ID 2500 B
Power supply	220 V AC / 50Hz	
Motor power	650 W	1000W
Absorbed current	3A	
Motor rotational speed	1400r/min	
Thermal protection on motor winding	120°C	
Ambient temperature	-20°C ~ 55°C	
Max weight of gate	≤ 1000 Kg	≤ 1500kg

## 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.

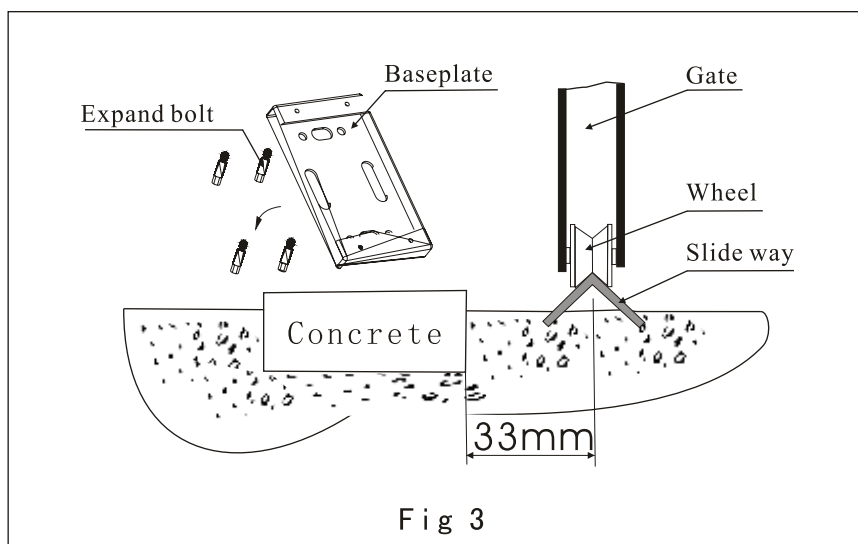
## 2.1 Example of a sliding gate operator installed



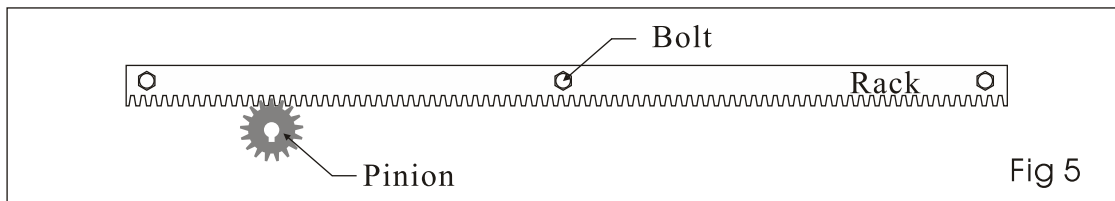
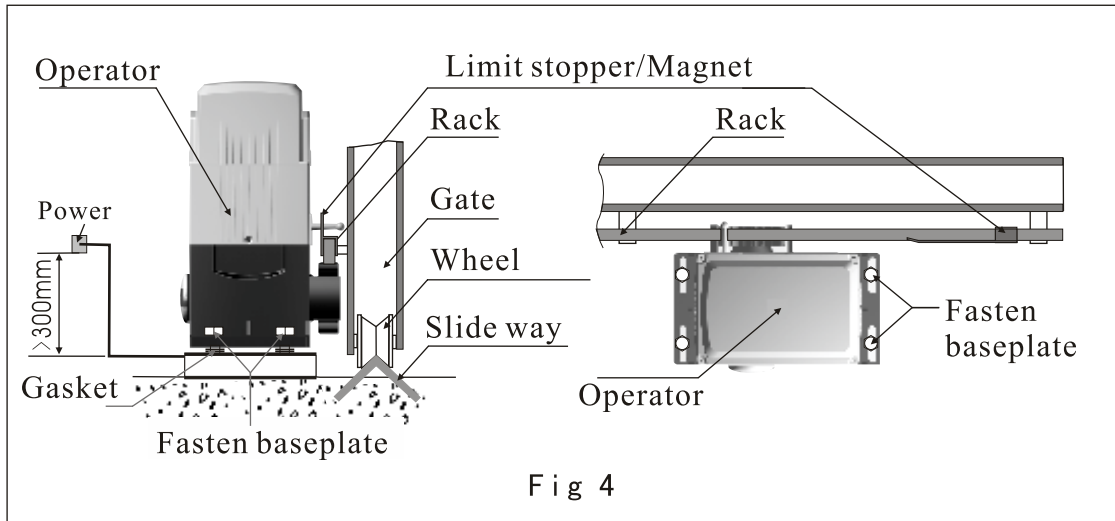
## 2.2 Installation and adjustment

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

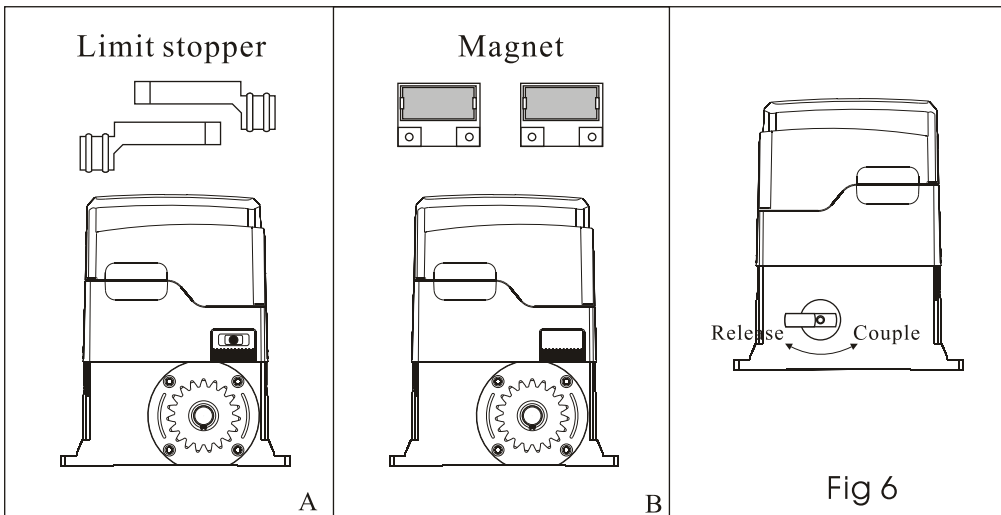
**Key: Ensure baseplate on level position.**



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



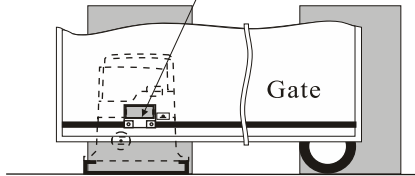
Before place the limit stopper or magnet on the rack, the gear box of the operator must be released. As per Fig 6A or fig 6B, Use the key turn clockwise to release the gear.



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.

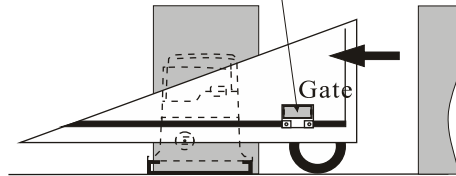
When the Operator is installed on Left Side.

Close Limit stopper or Magnet

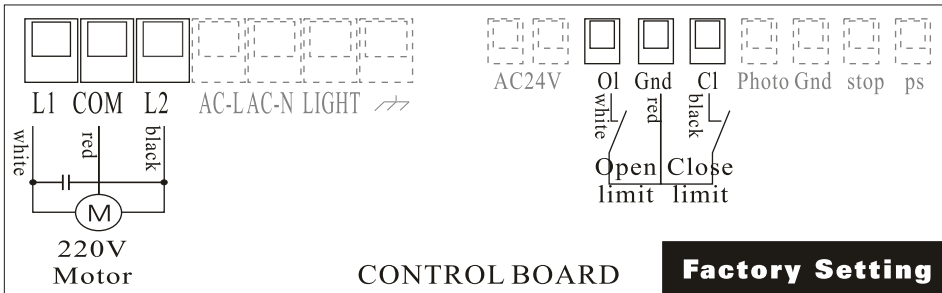


Closed state

Open Limit stopper or Magnet

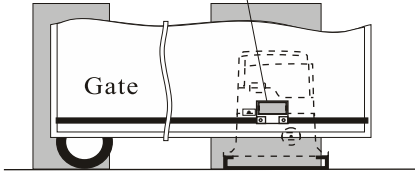


Open state



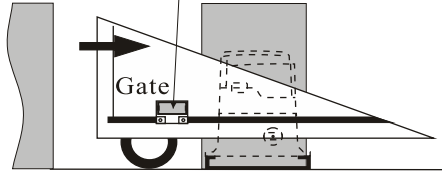
When the Operator is installed on Right Side.

Close Limit stopper or Magnet



Closed state

Open Limit stopper or Magnet



Open state

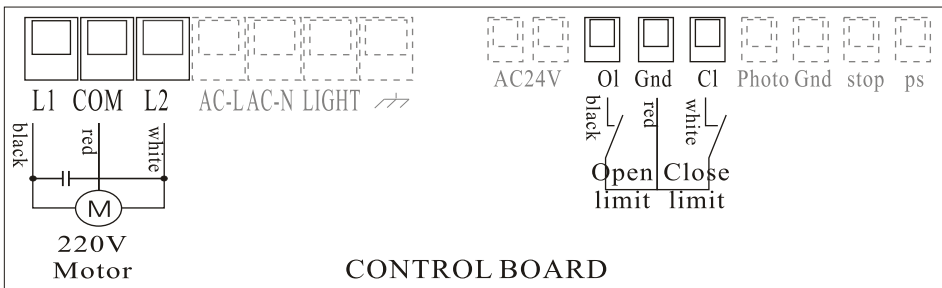
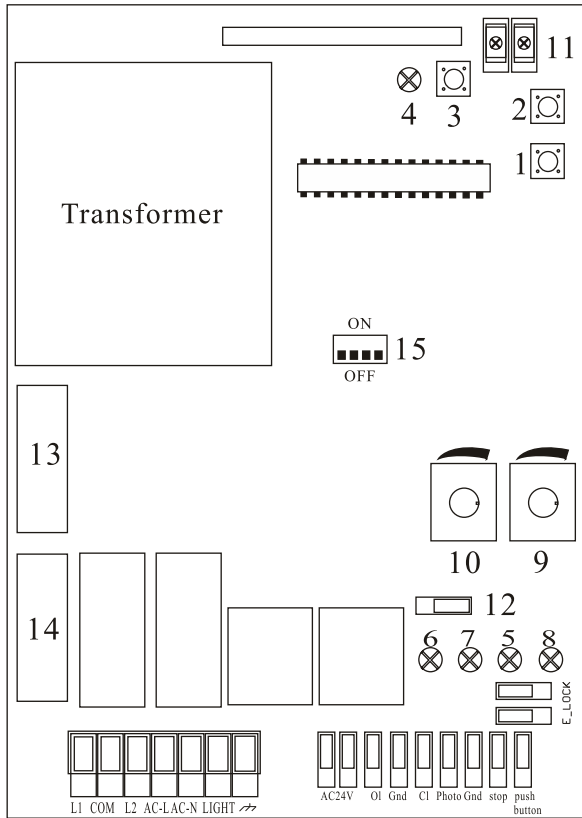


Fig 7

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

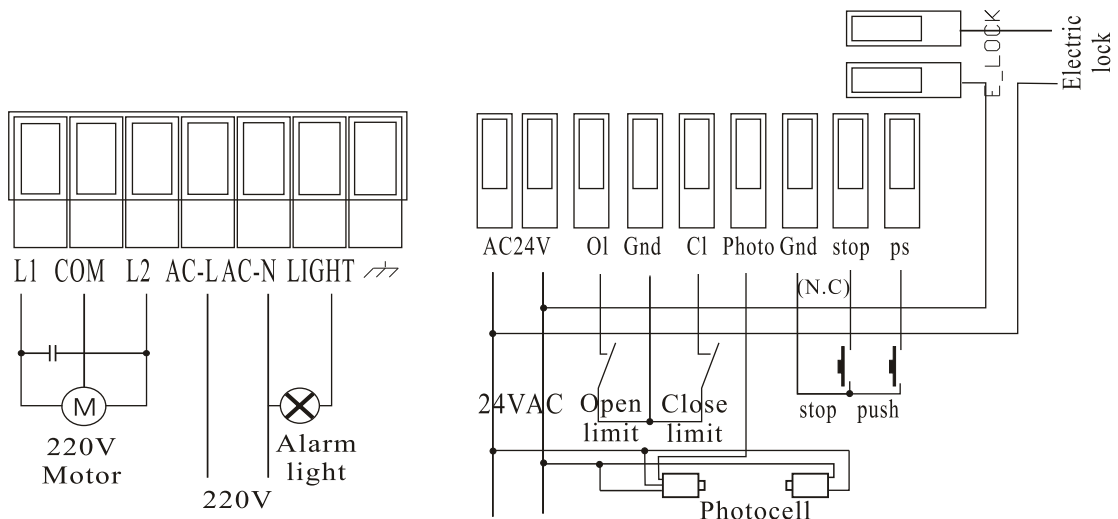
# 3. Control Board

## 3.1 Layout of PCB and Definition



1. P1: Set running time
2. P2: Set auto-Closing delay time
3. S1: Set transmitter
4. LED1: Set transmitter LED
5. LED2: Running state LED
6. LED3: Open limit LED
7. LED4: Close limit LED
8. LED5: Power LED
9. VR1: — —
10. VR2: Adjust resistance of obstacle
11. J3: Termingl for Antenna
12. J4: Jumper for reverse function  
(ON: valid)
13. F1: Fuse for transformer (0.2A)
14. F2: Fuse for motor (10A)
15. S4: DIP switch for function choice

## 3.2 Diagram



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### 3.3 Set running time: \_\_\_\_\_

After finish the installing and connecting, Power on, and Press "**P1**" 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 "**P1**" when the gate open and close to the right limit points.

DIP3: ON, Soft stop

DIP4: ON, Soft start

### 3.4 Set Auto-closing delay time: \_\_\_\_\_

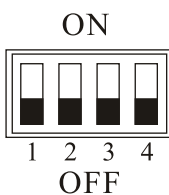
When the motor is stand-by, Press "**P2**" for 3 second, LED2 lighten, time-counter starts, then Press "**P2**" again after the need delay time. LED2 is out , delay time is set.

DIP1: ON, Auto-closing

### 3.5 Set Reverse function: \_\_\_\_\_

Try to adjust VR2 again and again till the sensitivity is exact to reverse when the running gate meets obstacle.

### 3.6 DIP switch programming \_\_\_\_\_



DIP1:

ON: Auto-closing is valid

OFF: Auto-closing is invalid

DIP2:

ON: When the gate is running to close, press button on transmitter, the gate open immediately

OFF: Single button control and "Step-by-Step" mode carry out "Open-Stop-Close-Stop-Open"

DIP3:

ON: soft stop

OFF: No Soft stop

DIP4:

ON: soft start

OFF: No Soft start



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### 3.7 Transmitter's code setting

Press "LEARN BUTTON", the "LEARN LED" light, then, press the button which you choose on the transmitter till the "LEARN LED" flash and go out, Now, the transmitter is coded. Other transmitters can be coded as this way

**Specification maybe changed without a prior notification.**

### 3.8 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.

## 4. Trouble Shooting

Number	Trouble	Cause	Shooting
1	motor can not work	*No power supply *Break fuse * capacitor decay *Surpass load *Effected by the thermal protection	*Check power supply *Change fuse *Change capacitor *Check if any barrier on track *Restart after 20 minutes
2	Can open (close) but can not close (open)	*Position of limit switch is not correct *Limit switch is damaged *whether L1\COM\L2 wires are connected wrong *Magnetic-steel dropped and position isn't right	*Adjust position *Change limit switch *Connect correctly according to wiring diagram *Re-adjust magnetic-steel position
3	can not locate accurately	*Distance of limit switch is too large * limit switch is *whether COM、CLOSE、OPEN were connected *magnetic-steel' s position is wrong	* Adjust position of limit switch *Change limit switch *Connect correctly according to wiring diagram *Re-adjust the position
4	Release device	*Operating handle is broken * Worm gears are jammed	*Change the handle *Rotate the pinion
5	Push the "open" button but the gate close	* whether L1\L2 wires are connected wrong	*Connect correctly according to wiring diagram
6	Motor can turn but can not work	* Compression spring of clutch is dead * Gear box is released	* Change the spring * Couple the worm gear

For Video Installation demo visit us at -[www.youtube.com/user/smartpowerautogates/](http://www.youtube.com/user/smartpowerautogates/)