

PY-L DC Brushless Sliding Gate Opener



INSTALLATION MANUAL & USER GUIDE

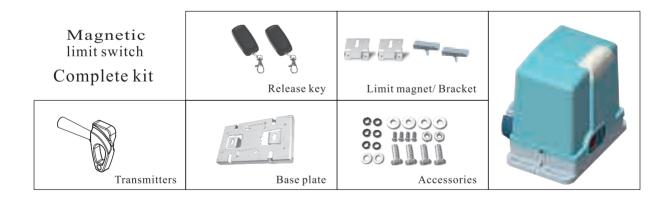
Please read carefully before installing and use

WARNING TO THE INSTEALLER AND USER

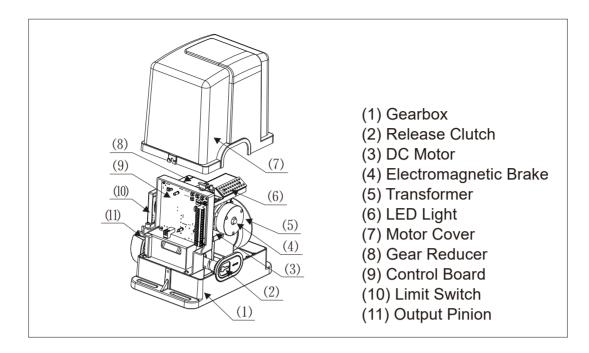
- 1) CAUTION! For personal safety it is important to follow all the instructions carefully.Incorrect installation or misuse of the product may cause serious harm to people.
- 2) Keep the instructions in a safe place for future reference.
- 3) This product was designed and manufactured strictly for the 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 installig 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 of other people to stand nera 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.
- 1 -

- 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.
- 21) Ensure that entrapment between the driven part and the surrounding fixed parts due to the opening movement of the driven part is avoided.
- 22) After installation, ensure that the mechanism is properly adjusted and that the protection system and any manual release function correctly;
- 23) Permanently fix the label concerning the manual release adjacent to its actuating member.
- 24) The drive cannot used with a driven part incorporating a wicket door.
- 25) Children should be supervised to ensure that they do not play with theappliance

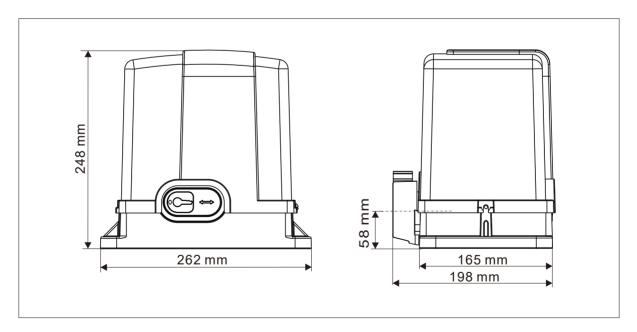
1. Introduction



1.1 Main Components -



1.2 Dimension



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

1.3 Technical Specifications _____

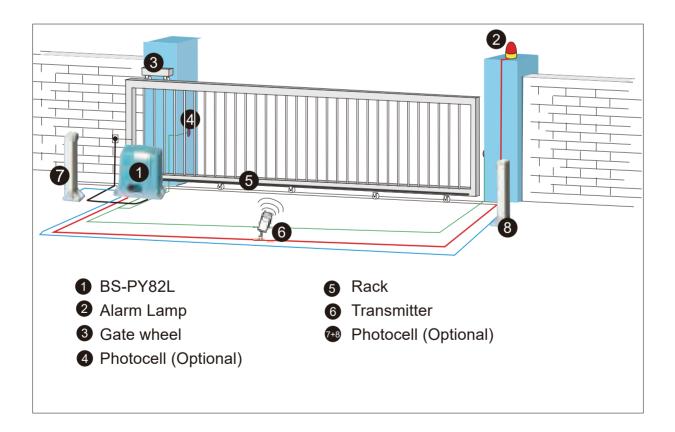
Model	BS-PY82L-120DC
Туре	DC Brushless Motor
Motor voltage	24VDC
Motor Power	120W
Output rotational speed	54r/min
Operate speed	12m/min
Max weight of gate	<1200Kg
Working temperature	-30 °C ~+60 °C
Remote range	≥30m

1.4 Feature

- 1. The eletromagnetic brake could lock the operator when power off.
- 2.In case of power failure, the gate can be opened and closed manually after release clutch.
- 3. Soft start function.
- 4. Reverse or stop when meet obstacle, the two functions is optional.
- 5.Soft stop or limit brake function is optional.
- 6.Auto close delay function.
- 7. Applicable to access control system.

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.
- * Means for disconnection must be incorporated in the fixed wiring in accordance * with the wiring rules.
- * The diameter of wire on the wall not less than 1mm², the diameter of wire that con-
- * nect to appliance not less than 0.5mm²
- * The external diameter of power line not more than 14mm, the power line should have polychloroprene sheathed cable and at least normal polychloroprene sheathed cable.

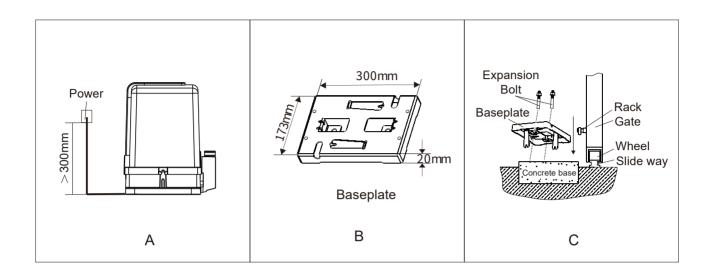


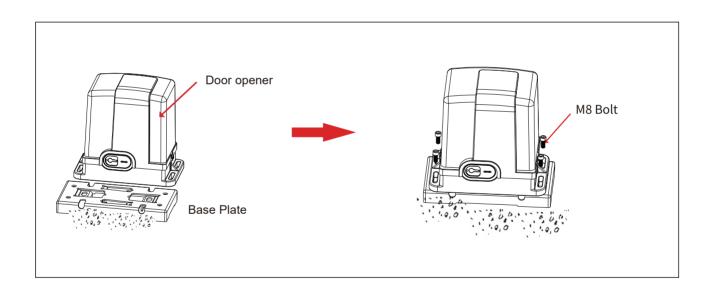
2.1 Example of a sliding gate operator installation -

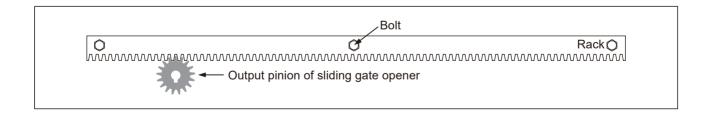
2.2 installation and adjustment

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

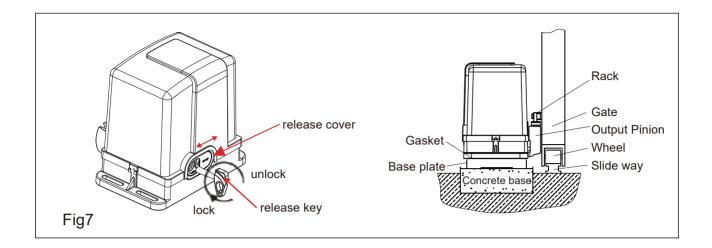
Key: Ensure baseplate on level position.



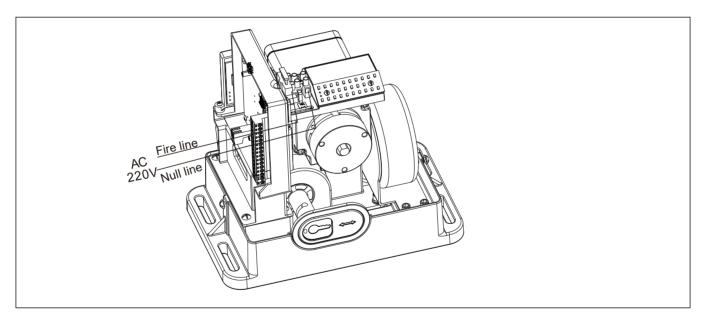




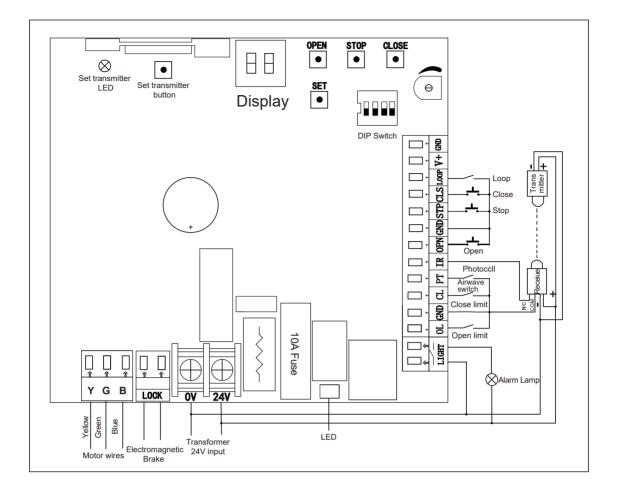
2.2.2 Before place the limit magnet on the rack, the gear box of the operator must be released asper Fig7, use the key turn clockwise to release the gear.



2.3 Power Connection



3. Control board



Function

Dip switch

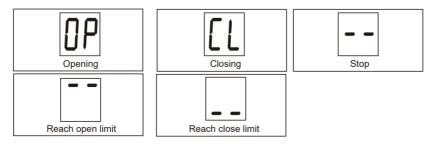


DIP1--DIP3 back up

DIP4:

- ON: Change running direction of motor, if the motor rotate in opposite direction, turn this switch.
- OFF: Default state display.

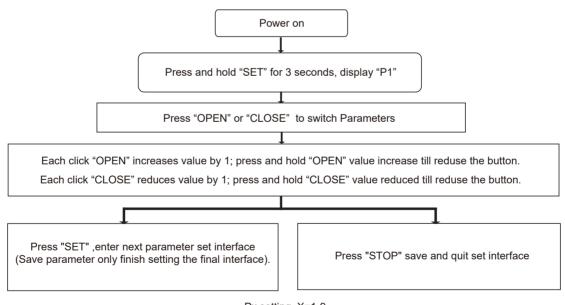
Running state display:



4. Parameters setting

No	Parameter	Description	
1	P1	Protect time for motor running,unit:second,motor will stop when over time	
2	P2	Motor speed:Lever 1 to 5 ,Min=1, Max=5	
3	P3	Motor speed when the first time after power on, lever1 to 5 ,Min=1, Max=5	
4	P4	Reduce speed distance : 0-15	
5	P5	Sensitivity of reverse when obstacle 0-50	
6	P6	Limit set : 0=Normal Open, 1=Normal Close	
7	P7	Auto close delay time: 0-99. 0=no Auto close	
8	P8	Sofe stop reduce speed 1-5, 1=Fastest, 5=Slowest	
9	P9	Sofe stop, 0=no Soft stop, 1=valid	
10	LO	Display mode. 0=Running state, for engineer only, default=0	
11	L1	Test mode for engineer only default=0	
12	L2	Brake rate for engineer only default=0	

4.1 Setting -



Px setting ,X=1-9

Mark : 1. In any state from "P1" to "L2", press "STOP " to save parameters. 2. In"L2"state, press "SET" to save parameters.

4.2 Note ____

4.2.1. Learn travel

Gate opener must relearn travel and limit position, method is: power on, operate the opener open and close one time (don't push stop,or don't active photocell),if display "YS", means learning successfully, if not, repeat learning travel.

4.2.2. Erase travel

If the factory setting travel is not match with the length of sliding gate, stop the gate, press and hold "STOP", mean while, press and hold "OPEN" together for more than 3 seconds, till alarm sound three times, display "CLR", means erase successfully, then relearn travel. Or power off, restart the opener.

4.2.3. 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.

4.2.4. Erasing transmitter's code

Erasingtransmitter 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.

5. Trouble shooting

No	Trouble	Possible Reason	Solution
1	Motor can not work	 No power supply 2. Break fuse 3. capacitor decay 4. Surpass load 5. Effected by the thermal protection 	 Check power supply Change fuse Change capacitor Check if any barrier on track Restart after 20 minutes
2	Release clutch could not release but gate does not work	1.Release handle is broken 2.Release clutch is block	1.Change a new handle
3	Motor is functional but gate doesnot work	Release clutch is unlock	Check the release clutch
4	Motor stops after opening 2s, or renerse after closing 2s	1.Obstacle or the gate is over weight 2.Reverse parameter is not proper	1.Remove obstacle, or decrease the weight of gate 2.Increase P5
5	Reverse when closing	 There is obstacle in front of gate Photocell is not triggered or damaged 	1. remove the obstacle 2. Adjust or change the photocell
6	Motor is running even when gate reaches limit position	 Limit magnet is broken Limit magnet is not installed properly The magnet pole is incorret 	 Change limit magnet Rectify limit magnet Adjust the magnet pole

Error Codes

No	Code	Meaning	Solution
1	E1	Motor operation time out	Set the running time based on actual operation
2	E2	incorret parameter setting	Control board could reset
3	E3	Motor locked rotor	Check motor wires connectors
4	E4	Motor is ressisted	Move away the obstacle or adjust the reverse level
5	E5	Potocell is triggered	Remove the object that block the photocell
6	E6	Motor current is over	Remove the obstacle orcheek the motor
7	E7	Main chip is fault	Restart or change the control board
8	EH	Hull is fault	Check the hull connectors, or change the motor

6. Maintain

1. Frequently cheek the wires connectors, especially the outter connetors.

2.Check the GND, make swire connection are as required.

3. Check carefully the power, voltage, frequency are match with request

4. Check and replace wearing parts accordingly.

