
User's Installation Manual PowerGater 2

(MOT002)

Sliding Gate Motor

- AUTOMATIC OBSTRUCT
- PHOTO ELECTRIC BEAM
- ROLLING CODE SYSTEM
- AUTO CLOSE DOOR
- SOLAR COMPATIBLE
(DC ONLY)



Model – MOT002

Installation Instructions

&

Owners Manual

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WARRANTY

The warranty of this product commences from the date of purchase. The warranty is one year. Three months warranty on Remote Control.

Invoice must retain for warranty to be honoured. The warranty is a Back to Base Warranty that covers defects of materials to the unit under normal and correct use.

The unit must correctly install. If the gate is not open freely in a manual mode, damage may occur and void your warranty.

If problem arises within the warranty period, the customer must contact the supplier to rectify the problem.

It is the customers' responsibility to engage in periodic maintenance and check loose wiring, gate movement in manual mode, greasing hinges, solar panel surface kept clean, loose bolts etc. The maintenance of the opener should be check every six months.

Failure to maintain the opener may result in your warranty being invalid. The warranty does not cover damage by insects, water, battery, fuses, storm damage, improper use or undue force.

For a long life of the opener, periodic maintenance is highly recommended.



IMPORTANT SAFETY WARNINGS - Please read these important safety warnings before installing or using this product

- Never let children operate or play with the controls.
- Keep the remote control away from the children.
- Do not operate the sliding gate unless the gate is in full view and free from objects such as cars, children or people.
- Always keep the moving gate in sight and away from any objects until it's completely opened/closed.
- No one should cross a moving gate.
- Do not disengage the slider gate motor to manual operation with anyone or any other objects, including motor vehicles, within the doorway.
- The slider gate must be well balanced. Sticking or binding gates can falsely trigger the obstruction sensing of the unit.
- All maintenance should be carried out by qualified personnel.
- Regularly test the slider gate motor to ensure that the obstruction sensor unit is operating properly.
- The slider gate motor has an electronic obstruction system that provides safe and reliable operation. It's however a legal requirement in some countries to also install a photo-electric sensor across the door way, please check this requirement with your local distributor. However, it's recommended to install this photo-electric sensor for all units.

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Features

Your automatic Slider Gate Motor has many features which you will appreciate. The components and materials used in its control board are of the latest technology and highest quality.

The motor is used to drive a sliding gate, with the moving speed of 12 meters per minute. This gate-operator is powered by AC15V. It is featured with powerful starting strength, capable of overload at short time. When it's overloaded, it's protected electrically and mechanically.

In case of power failure, a key can be used to release the motor and move the gates manually. Following lists some of its key features.

OPERATION

To operate the slider door simply press the remote control handset or the wall mounted switch for two seconds and the door will automatically open/close.

The gate can be stopped during on opening or closing cycle by pressing the remote control handset or wall switch. The next actuation will move the gate in the opposite direction.

SAFETY OBSTRUCTION REVERSE

While the gate is performing closing cycle and it should hit an obstacle or be restricted in some manner, it will automatically reverse.

The amount of force the gate should encounter before reversing is adjustable.

The gate will automatically stop if restricted whilst opening. The Safety Obstruction Forces should be checked at least once a month.

SECURITY CODE STORE

The Sliding Gate Motor uses state of the Microchip® technology in storing your Slider Code Transmitter Security Code.

Up to 20 different transmitters can be stored in the non-volatile memory device.

To store any code simply press the LEARN button on the motor and press the transmitter button twice. The codes can be deleted at any time.

Security is enhanced because the fixed and encrypted sections combined increase the number of combinations to 7.38×10^9 . There is no Dip switch on the motor which can be visually seen and copied.

OPEN AND CLOSE DRIVE BUTTON

Another feature developed to aid in the installation of the Slider Gate Motor is the O/S/C Button. This button is used to help set the open and close limit positions. A quicker time setting and a more precise limit position can be achieved using this system.

AUTO CLOSE MODE

The Slider Gate Motor can be programmed to automatically close at a selected period (eg. thirty seconds) after the door has opened. ***A photo-electric beam must be installed if this mode is selected.***

PHOTO ELECTRIC BEAM

The Sliding Gate Motor has an input for a Photo-Electric Beam to be connected for extra safety protection.

SOLAR COMPATIBLE

This device is able to use 12V DC, 24V DC or 12V solar panel to operate.

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Package List

A standard kit contents:

ITEM	QUANTITY
Sliding Gate Motor	1
Battery (12VDC 7aH)	1
Transformer	1
Emergency Release Keys	2
Installation Instructions	1
Limit Switch Brackets	2
Remote Control Handset	2
Gear Rack	4 metres
Photo-electric Beam	Optional (recommended)

Technical Specifications

Power supply: 15V AC Transformer or 12V Solar

Starting current: < 4A

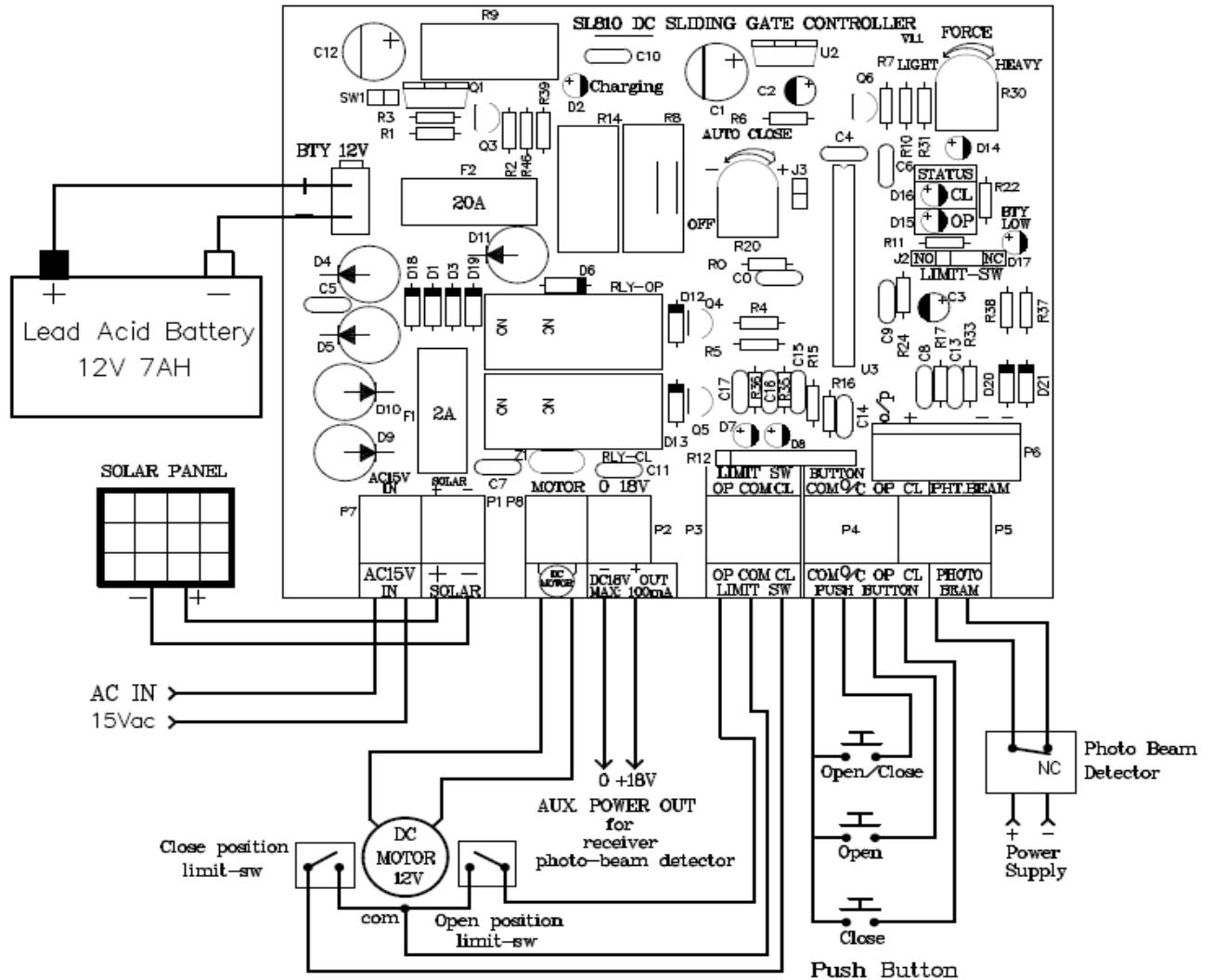
Gate moving speed: 12M/Min

Gate Length: 5m (max)

Net weight: 15kg (including spare - parts)

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Installation Procedure



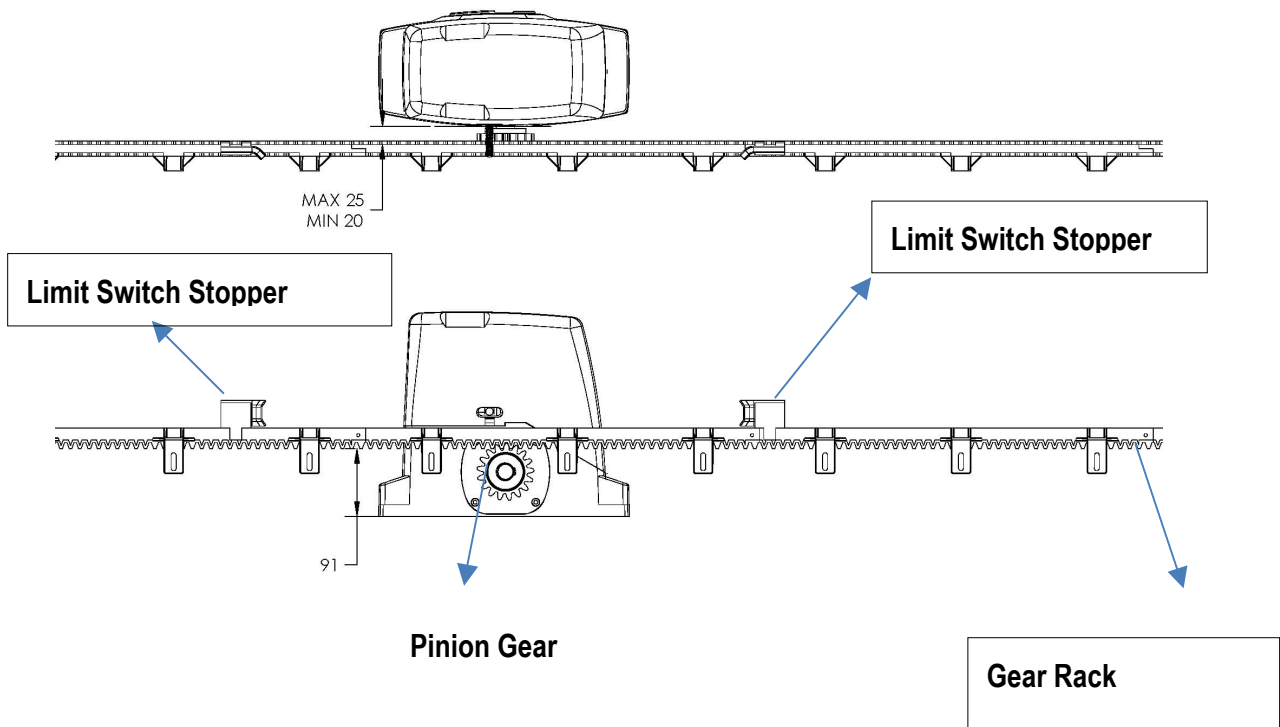
Note: DO NOT switch on the power until the following 3 steps have completed successfully.

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1. Installing the Gate Motor and Racks

- (1) Safely secure the Drive Motor onto a stable concrete slab/ground.
- (2) Mount the required lengths of the Racks to the gate.
- (3) Adjust the position of the racks so that the racks can be engaged correctly with the Pinion gear. Ensure that the Racks do not rest on the pinion gear and that it leaves an allowance of 2mm between the racks and pinion gear.

2. Installing the Limit Switch Stopper



The Limit Switch Stopper is used to control the positions of the gates.

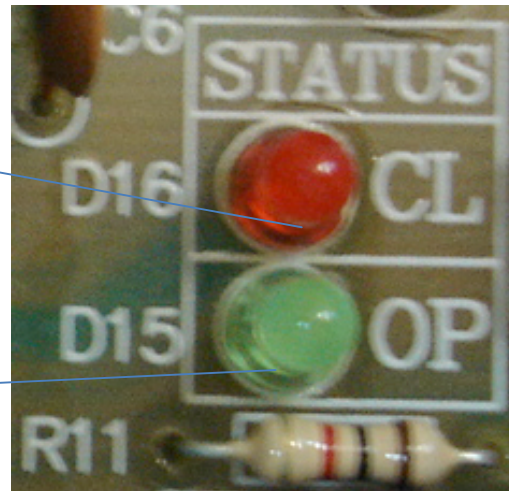
- (1) Screw the open and close Limit Switch Stoppers onto the gear racks. When the stoppers are secured, use the keys provided to release the gear clutch and push the sliding gates manually to predetermine the open and close positions. Then engage the gear clutch secure the gate positions. (Refer to QUICK MANUAL RELEASE OPERATION)
- (2) Switch on the power and start the motor to see whether the gates slide smoothly.
- (3) Adjust the position of the stoppers until the desired opening and closing positions of are met.

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3. Confirm the Close and Open LED

When the door
Close the Red light
should be on

When the door
Open the Green
light should be on



4. Force Adjustment (sensitivity)

Because of the obstruction sensing function of this Gate Opener, sensitivity adjustment may be required to allow for the effect of weather conditions (such as windy locations). Increasing TORQUE will decrease the sensitivity of the system.

The torque supplied to each motor can be adjusted independently (for situations where gate sizes or conditions vary). Turn dials anti clockwise to increase sensitivity. Turn dials clockwise to increase motor torque if the gates reverse due to weather variables.

When an obstruction is detected, the Gate Openers will reverse (when closing) or stop (when opening).

Please note – Heavy Gates may not open or close fully when the Torque dial is in the minimum position.

If the gates close and open itself, the force adjustment is not right. Increase the force adjustment.



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5. Auto Close

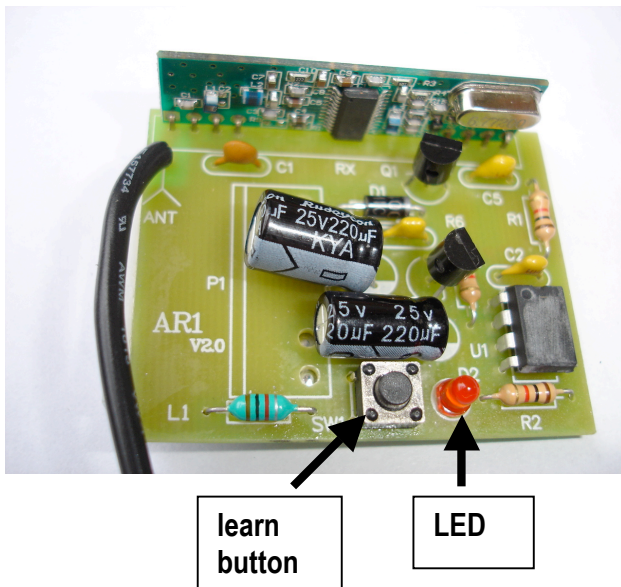


Factory default is set to 0 sec. This can be increased up to approx 60sec by turning the dial clockwise. When using the auto-close function, it is recommended that a photoelectric beam (PE Cells) be installed to avoid accidental damage to property and personal injury.

To enable auto close
Remove this Jumper J3

3. Setting the 12V DC Remote Control Handset

Receiver and REMOTE CONTROL (AR1 Internal)



Hand set programming

Press learn button on the Receiver for 1 second (LED will light)

Press required button on handset (Remote) for 1 second

Press learn button on Receiver for 1 second again (LED will turn off the light)

Unit is now ready for use

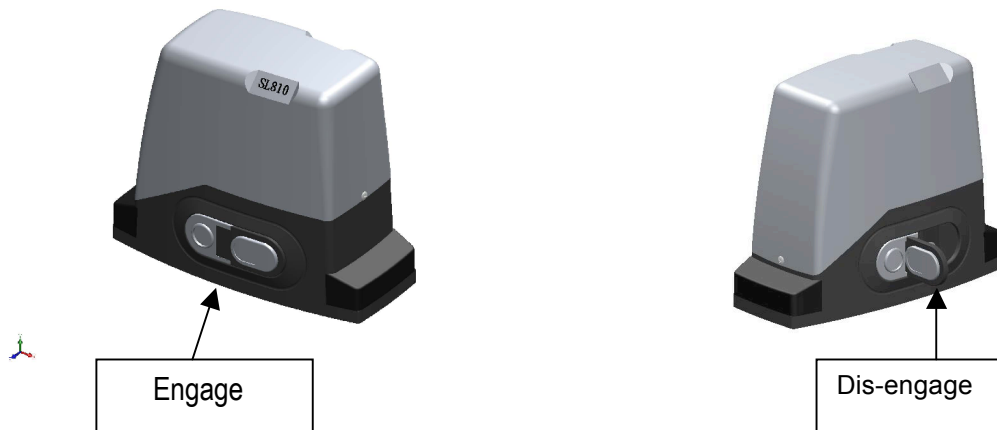
Repeat for all handsets (Remote)

Your unit is now ready for use.

Enjoy!


QUICK MANUAL RELEASE OPERATION


Disconnect battery before use!



Manual operation

In case of power failure use manual release key to open or close gate manually, use the release key as follow:

 Fit the release key in the lock.

 Turn the key and pull the release lever 90° to release the clutch. (Note: Do not exceed 90°, be careful not to use too much force, otherwise the release lever will be damaged.)

Maintenance

- All maintenance should be carried out by qualified personnel.
- Clean and lubricate any moving components.
- In case of rust, use some grease on it.
- Ensure that the slider gate is always well balanced.
- Ensure there are not binding / sticking of the gates which can falsely trigger the obstruction sensing unit.
- Regularly test the slider gate motor to ensure that the obstruction sensor unit is operating properly.
- Spare parts can be purchased directly from our factory.

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Troubleshooting

Problem	Possible cause	Solution
Handset(remote control) doesn't work or has too short-a range	Handset battery may be flat Handset may not be coded to the Receiver Board Receiver antenna not be fully extended Radio interference may be affecting your Receiver	Replace Battery Code Handset (see Section 15) Extend Aerial Remove any possible external interference e.g. Baby Monitor
The gate doesn't open or close	Power source may not be connected. Back up battery may be exhausted after prolong power failure	Ensure the transformer is connected to the circuited board Ensure the battery is connected to the circuited board
The gate re-opens or stops during operation	Sensitivity may be set too light (Motor may need more torque) Gate may be obstructed Photoelectric cells- Safety Beams(where fitted) may be dirty	Increase motor torque Check for obstruction Clean and check PE cells
The gate auto opens rather than auto closes Open green led is on, but gate is close Close red led is on but gate is open	Motor & Limit switch may be wired I reverse	Change motor on the circuit board & re-adjust Limit switch
The motor spins but the gate doesn't open	The manual release may not be engaged.	Ensure the manual release are properly engaged and tighten onto the gear

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