LETRON AUTO GATES AUSTRALIA PTY LTD



USERS INSTALLATION MANUAL

SL600 / DC Sliding Gate Opener









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 remoter 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 insight 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.

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 AC220V, 50Hz. 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.

POWER FAILURE

Gates can be moved manually by Inserting key and Allen key into motor

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

DO NOT switch on power see #4

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.
- (2) When the stoppers are secured, use the Allen keys provided to release the gear clutch and push the sliding gates <u>manually</u> to predetermine the open and close positions. Then tighten the gear clutch secure the gate positions.
- (3) Connect leads to battery and using remote press # 1 to start motor To see weather the gate slides smoothly
- (4) Connect DC wire from 12v Plug Pack to motor NOW switch on power
- (5) Adjust the position of the stoppers until the desired opening and closing Positions are met

3. Setting the 12V DC Remote Control Handset

Receiver and REMOTE CONTROL (AR1 Internal)



1. Hand set programming

Press learn button on the Receiver for 1 second (I.e.d will light) Press required button on handset (Remote) for 1 second Press learn button on Receiver for 1 second again (I.e.d will turn off the light)

Unit is now ready for use

Repeat for all handsets (Remote <u>Your unit is now ready for use.</u> <u>Enjoy!</u>



3. Sensitivity Adjustment (R20)

1. Turn the Overload Sensor clockwise (toward light) to decrease sensitivity or anticlockwise (toward heavy) to increase sensitivity.

Note: Many factors will affect where this setting that including gate weight , incline, prevailing wing conditions and desired auto reverse load .The gate may not open or close fully if the "Overload Sensor' is to its maximum 'Light' position. Conversely, the gate may not quickly auto reverse if the "Overload Sensor' is set to its maximum "Heavy' position.

4. Install Photoelectric Beams (Optional)

- 1 REMOVE the link wire from Com & PB. .
- 2 Power should then be drawn via the 12V DC
- 3 The Trigger wires should be connected to Com & PB.

5. Setting the 12V DC Remote Control Handset (GE-RCV1)

The remote control system is used for code learning

2. Connect cable as follows:

RED WIRE BLACK YELLOW OR BLUE

12V DC + 0V DC – (Ground) TRIGGER – (momentary n/o)

- 3. Hand set programming
 - Press the 'Learn' button on the receiver device for 1 second (L.E.D will light up).
 - Press the any button on the handset for 1 second.
 - Press the same button on the handset again to confirm the setting, the L.E.D on the receiver will flash approx. 10 seconds at which time the unit is then ready for use.

Repeat above steps for all handsets available. Your unit is now ready for use. Enjoy!

Letron Auto Gate (Australia) Pty. Ltd.



Sliding Gate Motor Circuit Board Wiring Diagram

Package List

A standard kit contents:

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

Technical Specifications

Input Power	240V
Power Supply	15V AC Transformer 12V DC Or Solar
Starting Current	< 4A
Duty Cycle	50%
Gate Moving Speed	12M/ Min
Gate Length	To Spec
Gate Weight	600 Kg

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.

Troubleshooting

Trouble	Possible Problem	Cause(s)	Solution(s)
Too weak to move the gate	(friction) clutch	Pressure on friction clutch is too small	Increase the pressure by adjusting the pressure screw
Motor stops when sliding gates are blocked	(friction) clutch	Pressure on friction clutch is too big	Reduce the pressure by releasing the pressure screw
Sliding gate fails to move back after opening/closing	Worm gear and worm are blocked	Worm gear and worm magnetic switch	Disintegrate clutch with the key and push gate back and re- adjust the position of magnetic switch
Remote control (Handset) not working	Battery may be flat (DC only)	Low voltage (DC only)	Replace new battery (DC only)