

INTERGLIDE



REMOTE
CONTROLLED
SLIDING GATE OPENER
SL 375 / 750/ 3PH750
OWNERS MANUAL & SERVICE BOOK



INSTRUCTIONS

PRE-INSTALLATION:

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. INTERGLIDE accepts no responsibility due to improper use of the automatic machine (opener) or use other than that indicated.
5. Do not install the machine in an area subject to explosion hazard. Inflammable gasses or fumes are a serious safety hazard.
6. We will not accept responsibility if the rules of good workmanship are disregarded in installing the closing elements to be motorized, 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. photocell, 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. INTERGLIDE 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.
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"
12. Do not allow children or other people to stand near to 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 person.

SITE INSPECTION

Before begin to install the Automatic System, please check following.

1. The gate must run smoothly throughout the length, and there must be no friction between moving parts and fixed parts, other than usual.
2. Recommend the customer to run the gate on Round Polish Rod of 10 or 12MM, so as to reduce the contact area and thereby the friction.
3. Strong RCC Foundation to be provided to mount the Motor.

We offer 3 types of operators for Sliding Gate Motors.

MODEL - SL 600 / SL 1200 / SL3PH750

STANRARDS PACKINGS

<i>Gate Motor with Control board</i>	- 1 No
<i>Mounting Brackets</i>	- 1 Sets
<i>Limit sense magnets</i>	- 2 Nos
<i>Remote transmitter</i>	- 2 Nos
<i>Release Keys</i>	- 2 Nos
<i>GI Metal Rack of 30x10x1000MM</i>	- 4Nos



OPTIONAL ITEMS

Flashing Light

IR Photocell

- 1 Set

GSM Switch

Manual Switch from Home

FEATURES:

Gate Motor: Motor with gear assembly to open / close the gate. It contains the control board and its power supply.

Remote Transmitter: This is hand held remote switch to signal open/close operation. Range of the transmitter without any obstruction is approximately 60Mtrs.

Release Keys: This key is used to release the motor mechanism to the gate in case of any malfunction of the gate or during power failure.

Photocell: Any obstruction while closing, reverses the gate.

Flashing Light: LED flashes, while working.

SPECIFICATIONS:

MODEL	SL375	SL750	SL3PH750
Allowed Gate size	500Kg/4Mtr	1000Kg/4Mtr	2000 Kg/4 Mtr
Motor Start Current	7A	10A	6A
Motor Speed	1400RPM at 12M/min	1400RPM at 12M/min	12 M/ min
Motor Power	220VAC / 375W	220VAC / 750W	220VAC/3Ph /750W
Control Drive	Microprocessor based	Microprocessor based	Microprocessor based
Radio Transmitter	2Ch/433 Mhz	2Ch /433 Mhz	2Ch 433 Mhz
Audio/Video indication	optional	optional	Optional
Photocell /auto close	Yes	Yes	Yes
Protection Class	IP54	IP 54	IP54

WORKING PRINCIPLE:

The Gate Motor mainly consists of high strength Aluminium Alloy Box, stable single-phase Copper wound Motor, a frictional overrun clutch, a worm gear reducer, a gear clutch and an output gear.

During operation, the motor spindle drives both the reducer and output gear, by means of frictional overrun clutch, and the output gear then push the racks, mounted on the gate to move the gate horizontally, so that the gate can be opened and closed in the energized state.

Gear Release Keys: (Open Gate Manually)

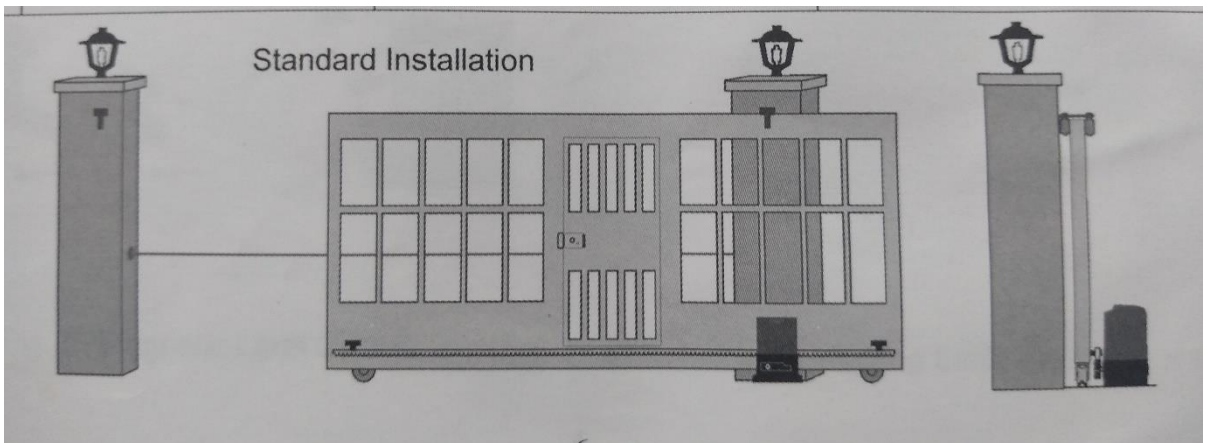
Release keys are provided to unlock the clutch. Insert and turn the keys, and pull out the flap as shown, the motor gets disengaged with the output gear, so that, the gate can be manually moved freely.

Once this is closed, the motor engages with the gears and can be moved only with electric power.

Generally, no additional lock is required to lock the gear, when it is fully closed.

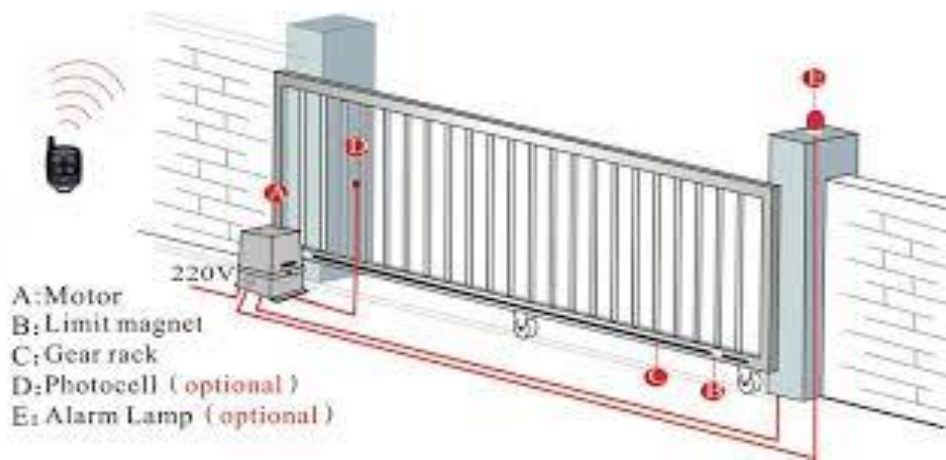
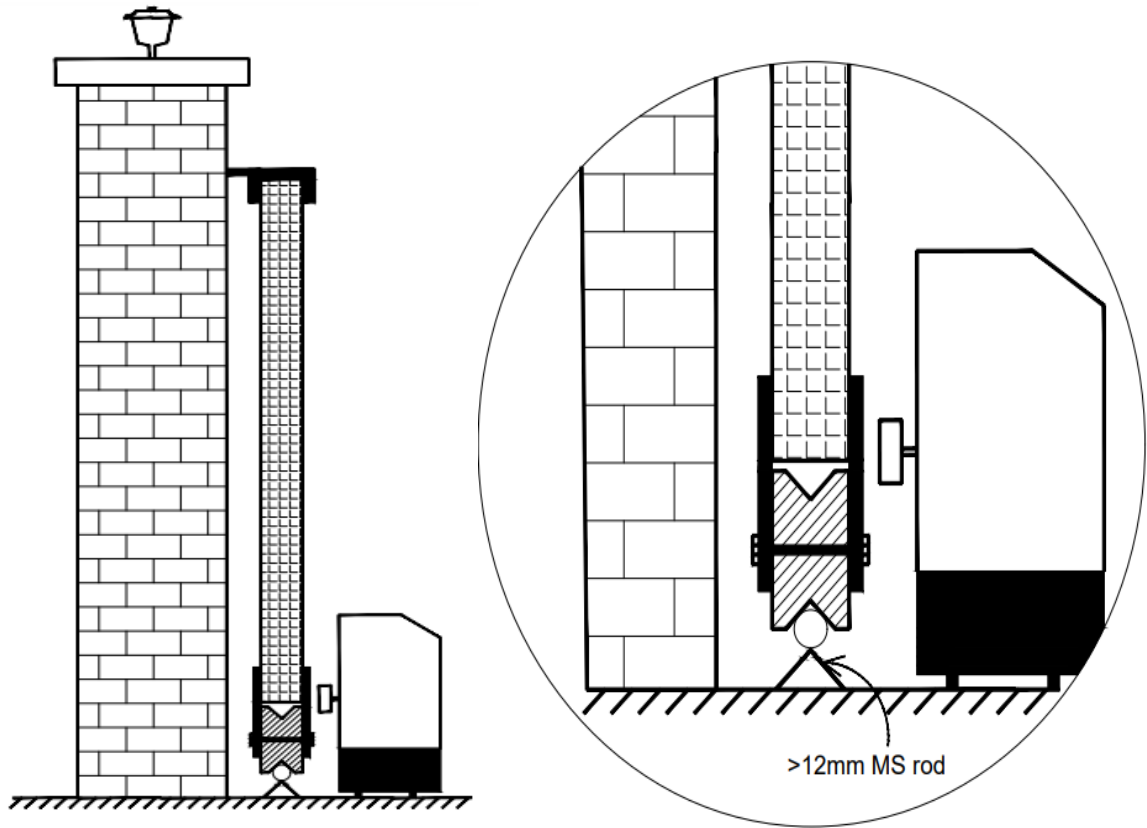


PRE – INSTALLATION IDEAS

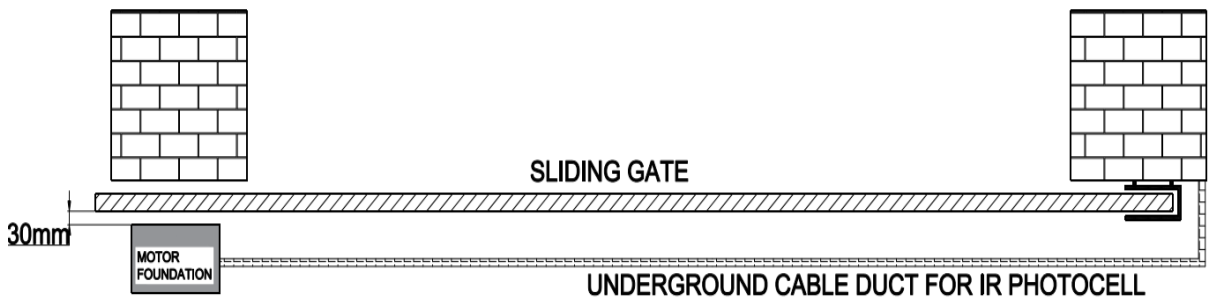


For Loaded (tight) Gates, weld Round Polish Iron Rod on the bottom rail on the pointed portion of bottom angle) This reduces the contact area and so the friction. Thereby the Load on the gate will go half.

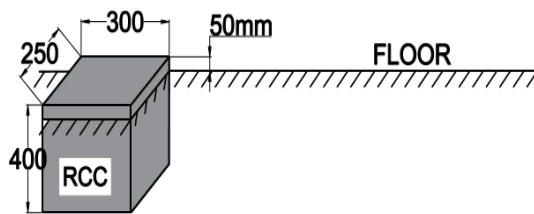
CROSS SECTIONAL VIEW:



SLIDING GATE MOTOR LAYOUT

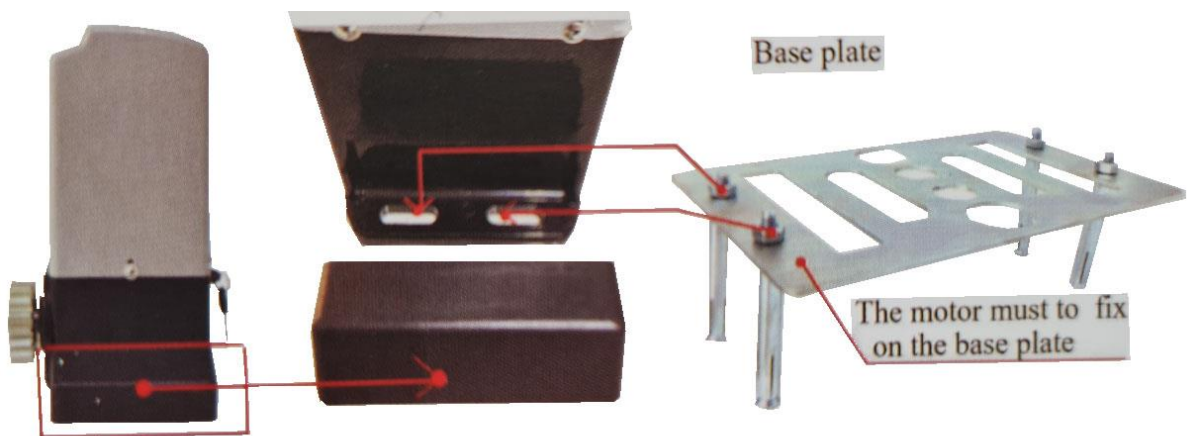


CIVIL WORKS



INSTALLATION: METAL BASE:

The gate opener should be mounted on a metal base with bolts, over the RCC Foundation, as shown below.



Mount the Rack

There are 3 Bolts to be attached to each rack. Tight the bolt in the middle of Rack slotted hole, as shown below.

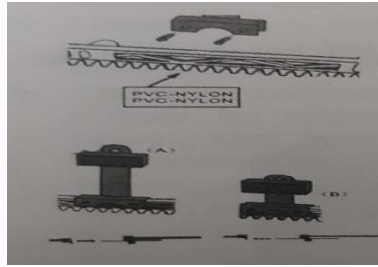
The easiest way to install a rack is to place it on the gear teeth of the opener first.

Release the gear. Slowly move the Gate to an end, so as to tack each rack on to the gate. Make sure that the teeth of the rack are perfectly engaged to the gear.

Ensure that the weight of the gate is not loaded in the motor, throughout the rack length.

To verify, manually move the gate and there should not be any jerk on Motor.

Adjust Rack Bolt for perfect matching.



Mount the Magnetic Limit Switch

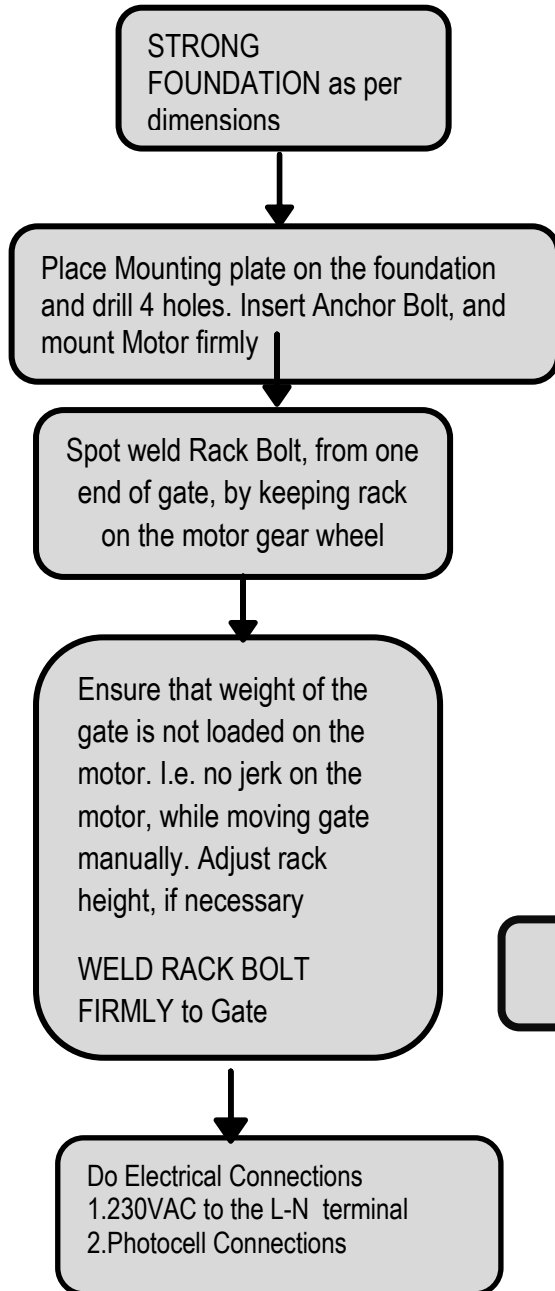
Generally, we provide contactless limit, magnetic Reed Switch. Magnetic Sensor is mounted in the Motor cabinet. The given magnets should be mounted at the Ends of the racks, and are termed as Open Limit and Close Limit.

Open Limit magnet should be fixed on the rack corresponding to the motor, when the gate is in open status. Close Limit magnet should be fixed on the rack corresponding to the motor, when the gate is in Close status. Mind that, you should give an allowance for deceleration.

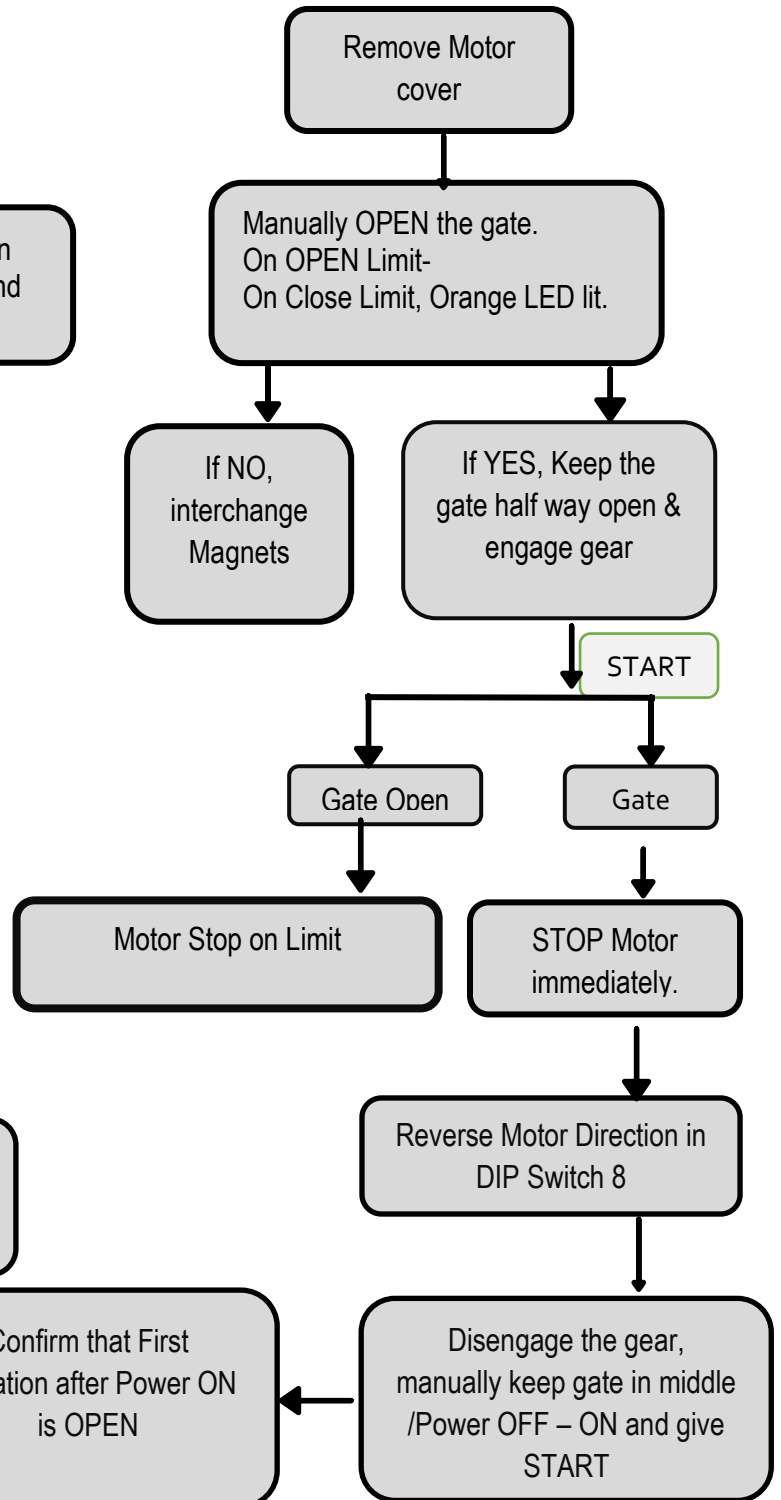
Though both magnets look same, technically they are different. One is used to sense OPEN Limit and other, Close limit.

INSTALLATION FLOWCHART

INSTALLATION



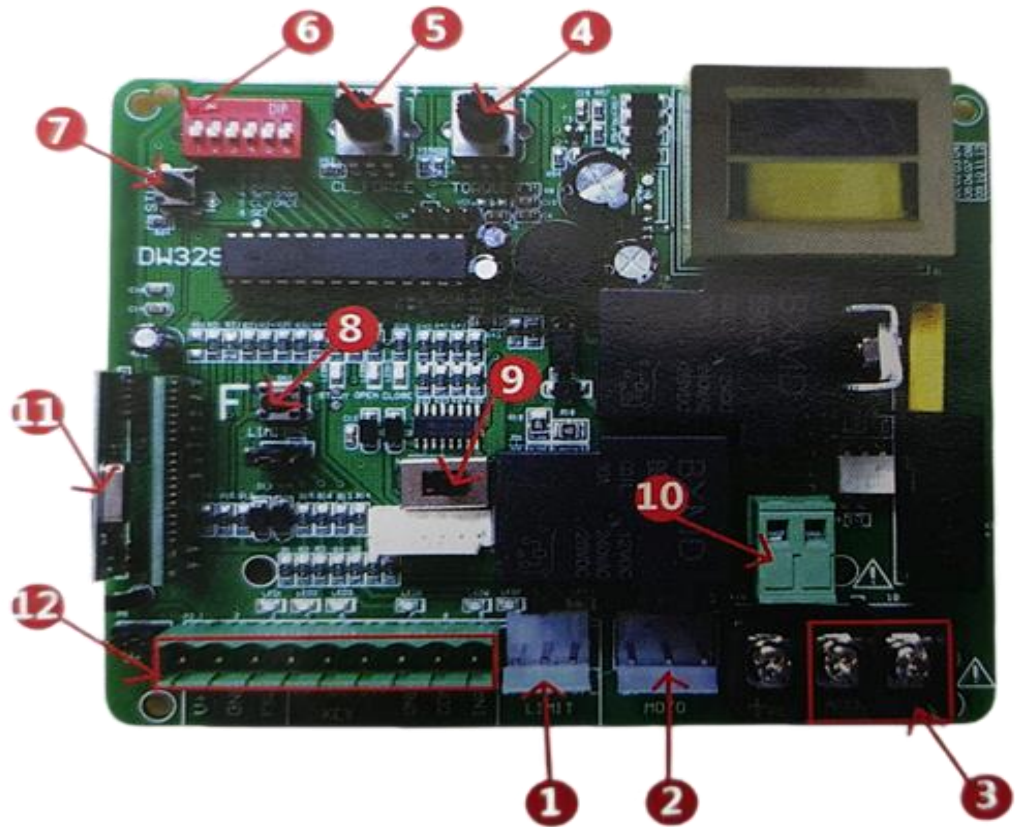
OPERATION SETTINGS



MOTOR SETTINGS:

1. Switching on the power every time and the first operation, the gate should go open limit position slowly, prevent rush out of the limit due to the inertia.
2. Anti-rush out stroke design: When the gate reaches the stroke, can only press the opposite direction button, the motor can move to prevent rush out the stroke.
3. High security: SL Series has remote control function, sensitive, remote control, long distance, strong anti-interference, and use of the most advanced encoding and decoding technology, it has higher security and confidentiality compared to the traditional remote control used in the market.
4. Motor time protection: To prevent the motor from running for a long time when the stroke is out of order, the controller will learn the motor running time automatically without artificial setting. 10 seconds more than the time in stroke, the motor is saved automatically after several round trips.
5. Automatic closing function: time can be adjusted from 1 to 250 seconds.
6. **Motor strength Pre-set** adjustment: can adjust operation strength of the motor (TORQUE)
7. **Slow speed adjustment of motor**: can adjust the thrust of motor at slow speed operation. (MT)
8. **Resistance return function**: can adjust the resistance through the potentiometer. (FORCE)
9. If the direction is opposite, just change the direction by switching the DIP Switch 8.

CIRCUIT LAYOUT:



1

1. Limit line (Open, Common , Close)
2. AC Motor line (L1, COM , L2)
3. Supply Power- AC220V – 1 Phase
4. Torque Adjustment pot
5. Force Adjustment pot.
6. Function Settings DIP Switch

DIP SWITCH	ON	OFF
B1	Remote in single button control Mode	Remote in 4 button control mode
B2	Locking the Remote	Empty
B3	Auto close Enable	Auto Close Disable
B4	Turns ON Soft start function	
B5	Max starting force	
B6	Function Setting	Normally keep OFF

7. Remote Learning key

8. Manual cycling switch for testing - Open – Close – Open
9. Adjust Motor Direction.
10. Flash light AC Supply.
11. Receiving Module of Remote.
12. Optional accessories Diagram:
 - 1.

Time setting: Only DIP SWITCH 3 and 6 are in the ON position. Press F, press once represent 1 second. After setting, dial the dial code 6 to the OFF position. dial code 3 remains unchanged.

4.B4 - Slow function

When DIP SWITCH 4 is in the ON position, turn on the slow function. This function is automatic learning and judgment, no need to set manually. When the gate is switching on the power, to operate the remote control in the normal way, the gate will reach the limit position slowly, then press the reverse button on the remote control, the gate will go fast then slow to the limit position, then press the remote control to go back and forth 2 times, the setting is completed if you hear a tick, it is best not to have stopped operating in the setup process.

Note: In the slow process, if the thrust of motor is not enough, the slow speed thrust potentiometer (MT) can be adjusted to adjust the strength. The slow position of the gate is fixed about 20 cm.

5. B5 -Maximum force start function

When DIP SWITCH 5 is in the ON position, turn on maximum force start function. When the gate is heavy, and soft start does not work. Dial the dial code 5 to the ON position and make the gate to start, but this will increase the start noise of the gate.

6.B6 - Function setting

In ON position, it can set for remote single control button, automatic Closing time etc. after setting is completed, it must be turned OFF.

7.B7 - Resistance return function

When DIP SWITCH 7 is in the ON position, turn on resistance return function.

Optimal function adjustment method: When the gate can open and close normally, turn on the function, perform the gate closing action, adjust the resistance potentiometer (FORCE) during the gate closing process at counter clockwise, make the gate to stop and return automatically, this time is a critical point that the gate meet resistance and return, you can add a point at clockwise as critical point of meet resistance. If you found that this setting is still strong during actual measurement, adjust the TORQUE properly at counter clockwise, make the gate meet resistance become appropriate.

8.B8 - Motor Direction

In the case of the gate running direction correspond to the limit position. but the gate is not in the limit position and it has no action, it is only necessary to DIP SWITCH 8 to change.

IR PHOTOCCELL CONNECTIONS:

There 2 components. Transmitter and Receiver. They should be connected opposite in each pillar, facing each other.

Connections:

IR Transmitter:

There are 2 connections. +15V and GND

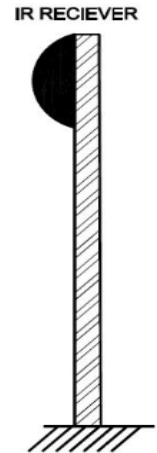
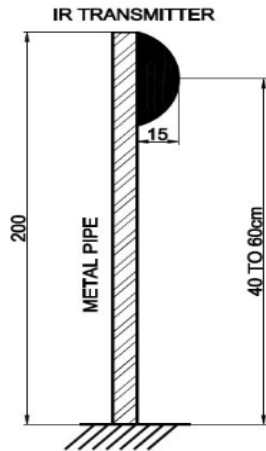
IR Receiver

There are 4 pins in the IR Receiver. +15V, GND, COM, IR out. GND should be connected to the COM. Generally, IR Receiver is connected near the motor pillar.

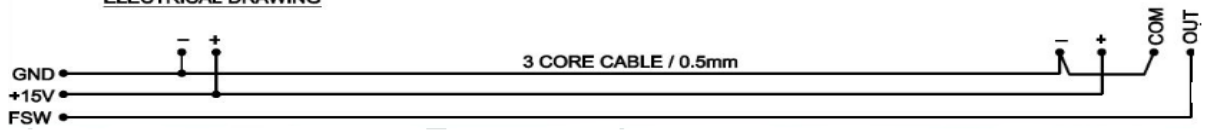
IR Out goes to FSW.

INFRARED ACCESS (SAFETY) CONTROL

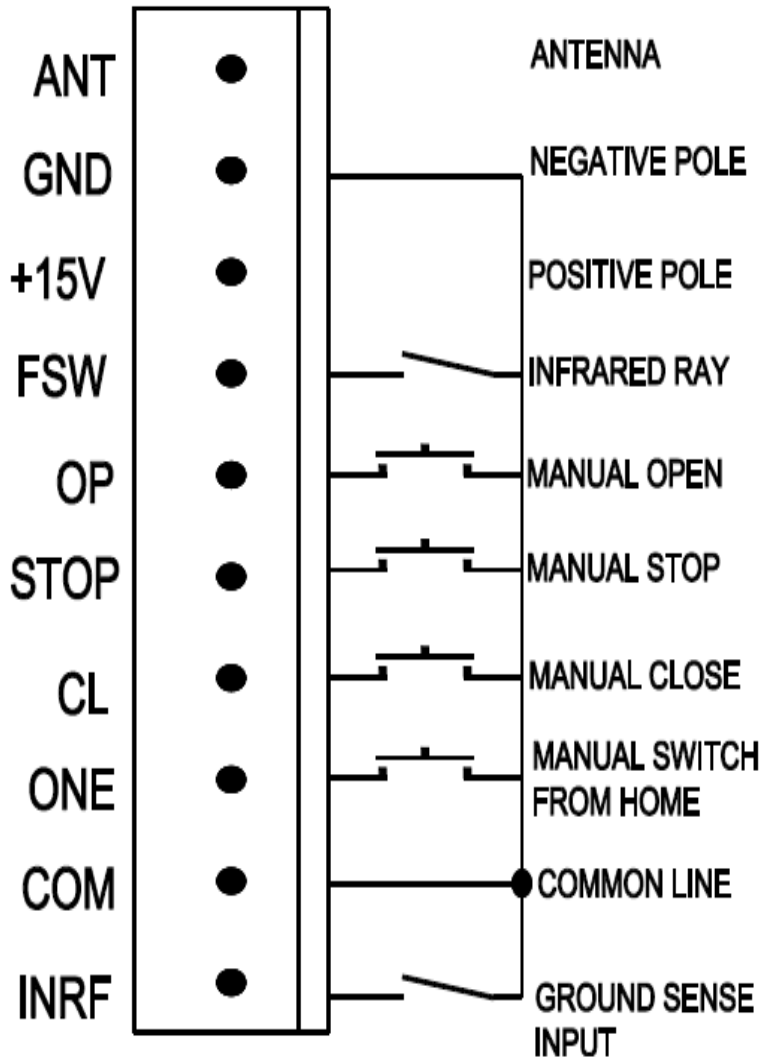
CIVIL DRAWING



ELECTRICAL DRAWING



TERMINALS & Connections



INRF-When closing the gate, if there is a ground sense signal input, the gate will reverse to the open position, then delay 2 seconds to perform the gate closing action.

ONE- Alternate single button Open / Close activation.

CL – Individual Closing command.

OP - Individual OPEN Command.

FSW- Input from IR Photocell. Normally OPEN. If connected to GND, interrupted.

Light- 230V AC Powered light.

RF REMOTE CONTROL:

Learn Code: Press LEARN button for 2 seconds and release, then press and hold any button on the remote control. Learning is completed if you hear a tick. Repeat the operation for up to 300 remote controllers.

Erase code: Press the STUDY button and hold on about 8 seconds, then release after you hear a tick, it completes the elimination of the matched transmitter.

Single/four Button Operation:

When **DIP Switch 1** is in the ON position, the remote control is in single-button cycle. i.e. Open/Stop/Close/Stop.

When **DIP Switch 1** is in the OFF position, remote control is in four-button control mode. That is open, close, STOP and lock. When the lock function is enabled, press the stop button to unlock.

Frequently Asked Questions.

1	Gate is not opening/ closing full	Grease the gate Hinges. Check the stability of mounting Clamps
2	Remote control not responding	Check for light in the remote. If mild replace the battery on the Remote- 12v alkaline. The life of the battery is expected to be one year.
3	Gate not responding to remote/ manual switch	Check Power and battery connection and condition. Call service
4	Any maintenance required	No, except keep the hinges clean and frequently lubricate.
5	No Response from System	This could be due to power /battery failure or Machine damage. Un- clutch both Motor Arm as shown in picture above. And move the gate manually open. Call for service

WARRANTY
Scope & Limits

INTERGLIDE offers following warranty in respect of **AUTOMATION SYSTEM** supplied by us.

Every possible care and precaution have been taken to ensure quality in respect of the material and workmanship of the system supplied by us.

INTERGLIDE warrants the original purchaser of **AUTO GATE SYSTEM** for a period of

1	2	3
---	---	---

Years from the date of purchase, the product shall be free of defects in material and workmanship under normal use.

During the warranty period INTERGLIDE shall, as its option repair or replace any defective part / product at your site, free of any charge.

No claim for repair will be entertained, unless the customer produces original OWNER's MANUAL

Warranty is not applicable in situation where

Unauthorized repair/ replacement has been carried out
Shifting / reinstallation of the system
Damage due to mishandling or no proper maintenance.
Periodic maintenance not taken care.

WARNING: Auto Gate System cannot prevent burglary. It is a supporting security system at your easy reach.

Name of Customer Address & Phone No	
Bill No & Date of Purchase	
Machine Model	

Seal
Sig



**INTER
GLIDE**

INTERGLIDE AUTOCONTROLS
3 / 463A, KADAYIRUPPU P.O., KOLENCHERRY
ERNAKULAM- 682311, KERALA

HO: 94/201, 3rd Cross, Sivaji street
T Nagar, Chennai- 600 002

Visit- www.interglide.in Mail- info@interglide.in, interglideindia@gmail.com

AN ISO 9001:2015 & Udyog Aadhar Certified Company