

INTERGLIDE



vREMOTE CONTROLLED
SLIDING GATE OPENER
SL 3PH750/1500
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 12/16 mm, so as to reduce the contact area and thereby the load.
3. Strong RCC Foundation to be provided to mount the Motor of not less than 30x25x30(D) Cm.

We offer 3 types of operators for Sliding Gate Motors.

MODEL - SL 375 / SL 750 / SL3PH750

STANRARDS PACKINGS for SI3PH750

3 Phase Gate Motor with Limit Sensors	- 1 No
Control Box with RF remotes	- 1 Set
Limit sense magnets	- 2 Nos
Release Keys	- 2 Nos



OPTIONAL ITEMS

GI Racks
Flashing Light
IR Photocell
WIFI Switch (If strong internet Available)
GSM Switch
Manual Switch from Home/ Cabin

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	SL3PH750	SL3PH1500
Allowed Gate size	2500Kg load	3500Kg load
Motor Start Current	7A	10A
Motor Speed	1400RPM at 12M/min	1400RPM at 12M/min
Motor Power	440V /3 Ph/1Hp	440V /3 Ph /2 Hp
Control Drive	Microprocessor based	Microprocessor based
Radio Transmitter	2Ch/433 Mhz	2Ch /433 Mhz
Audio/Video indication	optional	optional
Photocell /auto close	Yes	Yes
Protection Class	IP54	IP 54

WORKING PRINCIPLE:

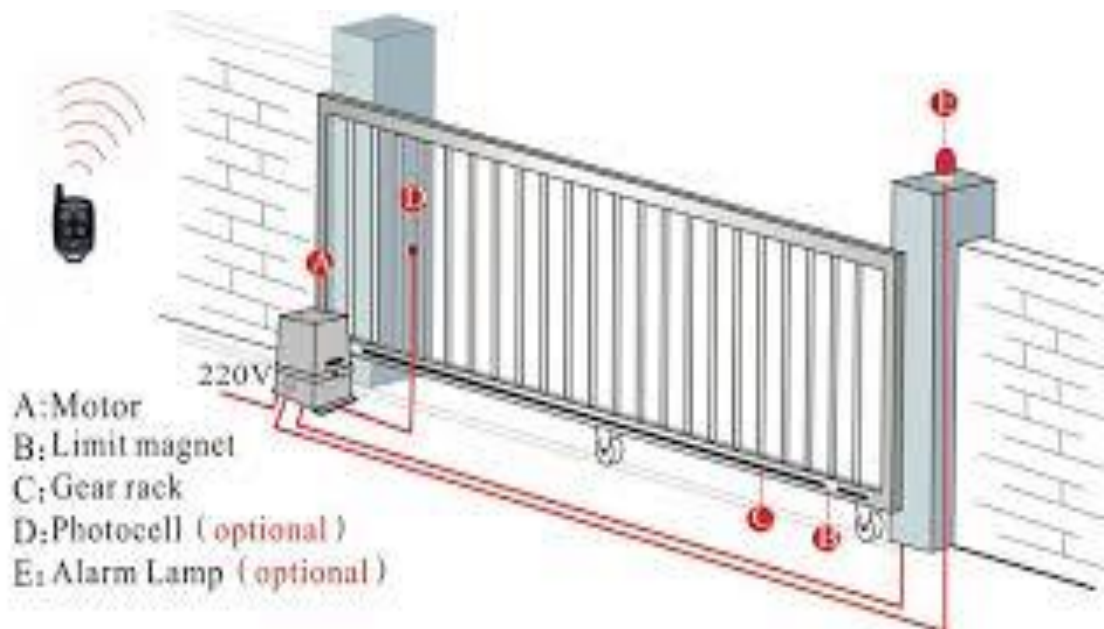
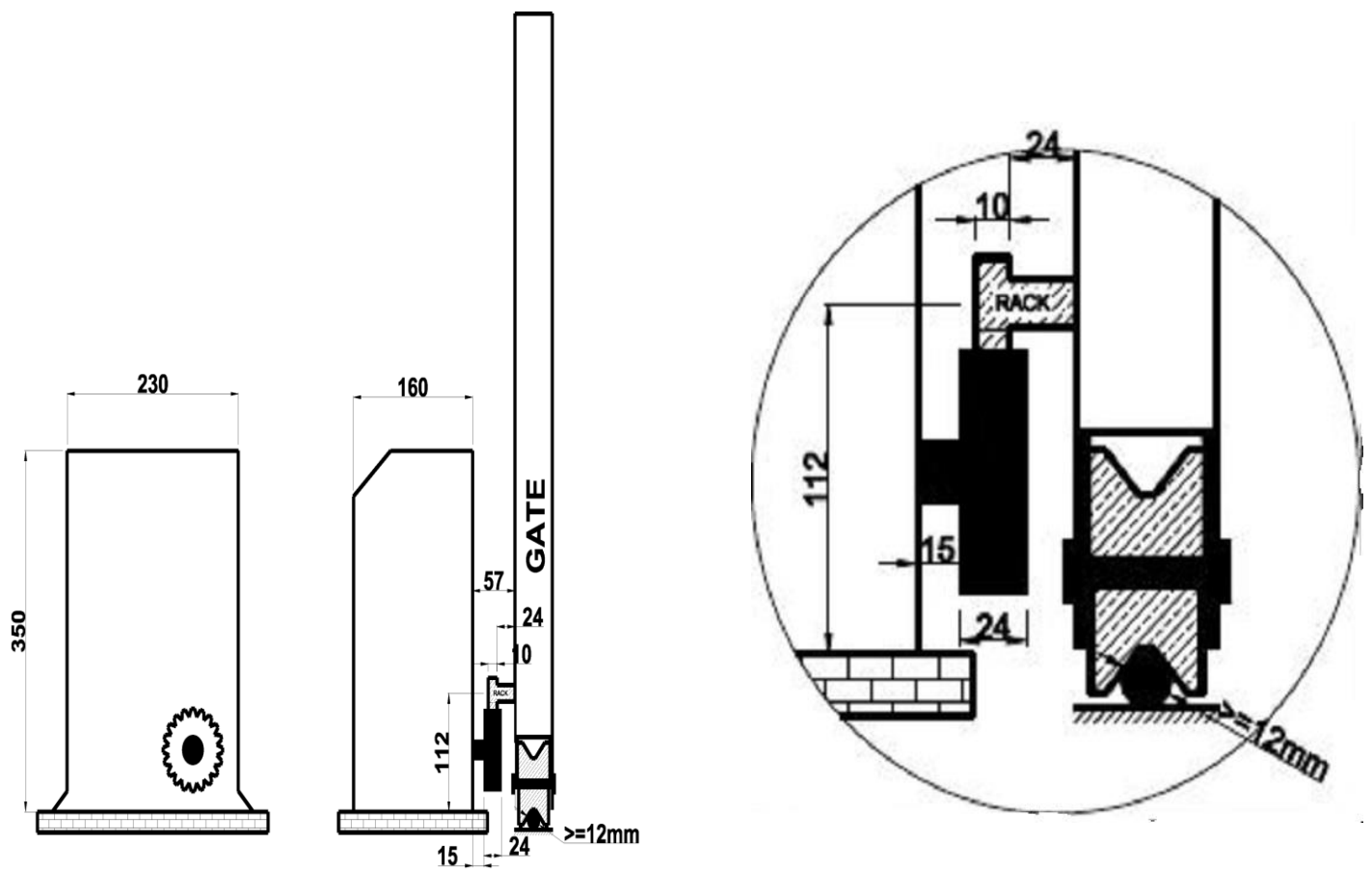
The Gate Motor mainly consists of high strength Aluminium Alloy Box, stable single-phase Copper wound Motor, a frictional overrun clutch, a worm gear reducer, a gear clutch and an output gear. During operation, the motor spindle drives both the reducer and output gear, by means of frictional overrun 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.

PRE – INSTALLATION IDEAS

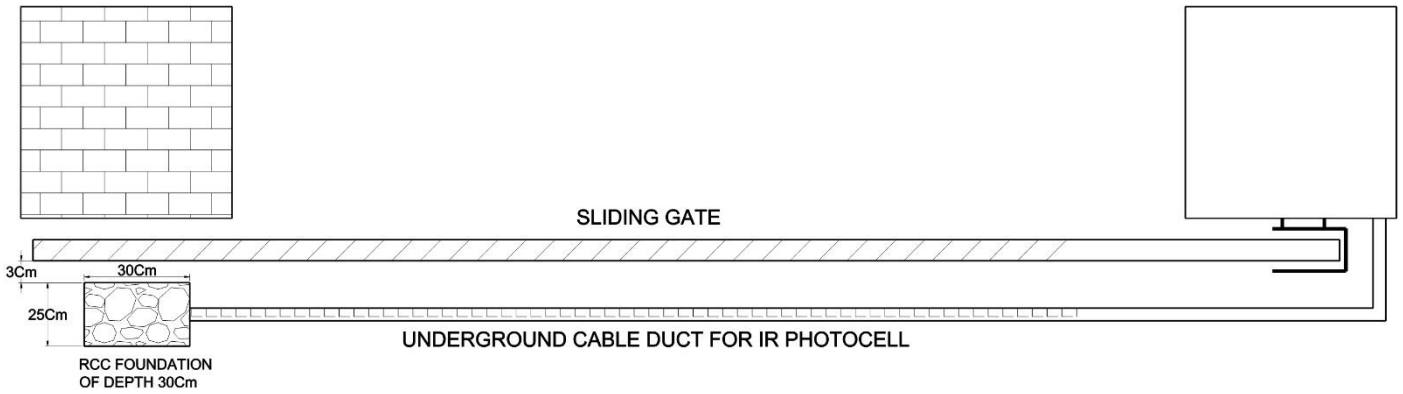
For Loaded (tight) Gates, weld Round Polish Iron Rod on the bottom rail on the pointed portion of bottom angle) This reduces the contact area and so the friction. Thereby the Load on the gate will reduce.

Also see that, the gate moves only on 2 wheels, mounted with Bearings.

Cross Sectional View of Gate & Fittings:

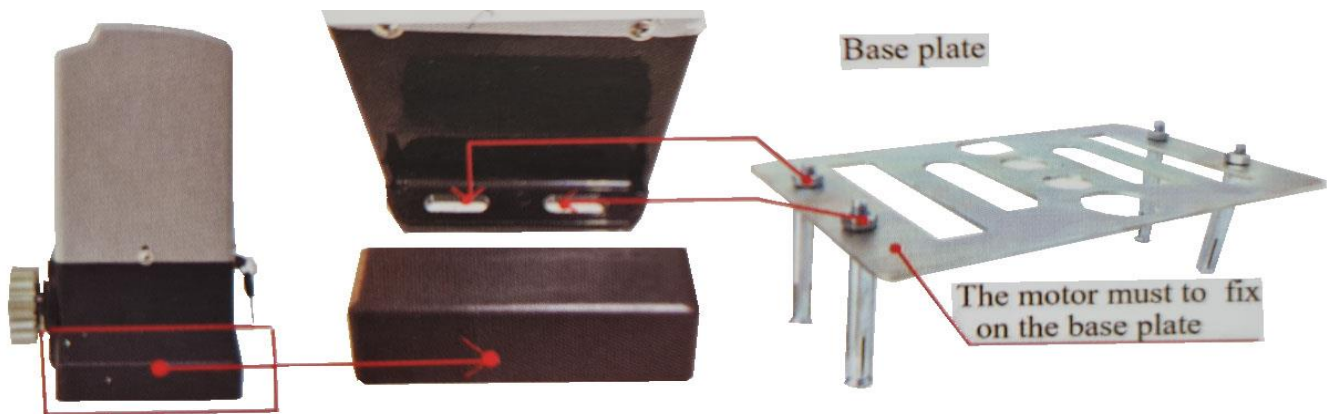


INSTALLATION LAYOUT - TOP VIEW



INSTALLATION: METAL BASE:

The gate opener should be mounted on a metal base with bolts, over the RCC Foundation, as shown below, 30 MM from the gate.



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.

This helps in doing final adjustments. See that weight of the gate is not loaded on the Gear Wheel.

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.



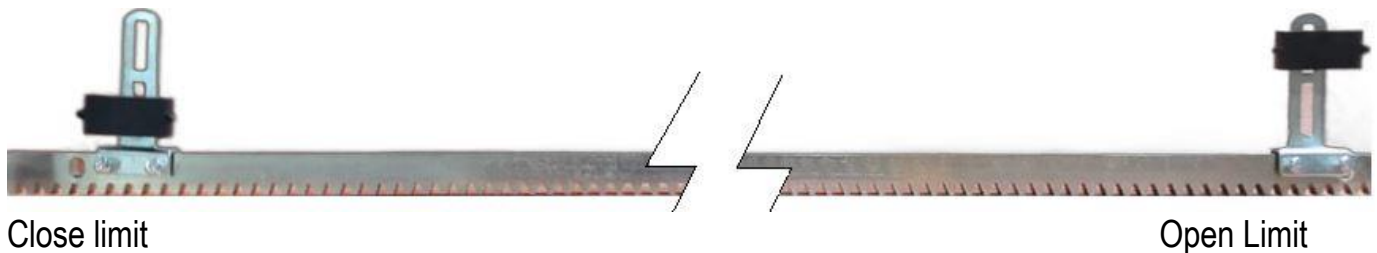
Mount the Magnetic Limit Switch

We provide contactless limit control - 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 magnets. One should be in the Upper Slot of the magnet holder, other in the Lower slot.

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.

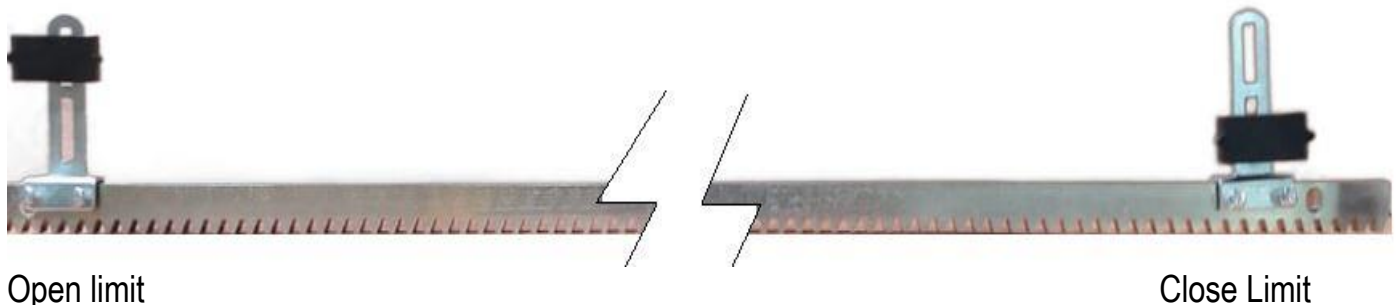
Motor is in the left side of the Entrance (view from House)

1. Flip the DIRECTION Switch in the control Board, towards left.
2. Keep the limit Magnets at both ends of the Rack, as shown.



Motor in the Right side of entrance (View from House)

1. Flip the DIRECTION Switch in the Control Board, towards Right.
2. Keep the Limit Magnets at both ends of the rack as shown.



Gear Release Keys: (Open Gate Manually)

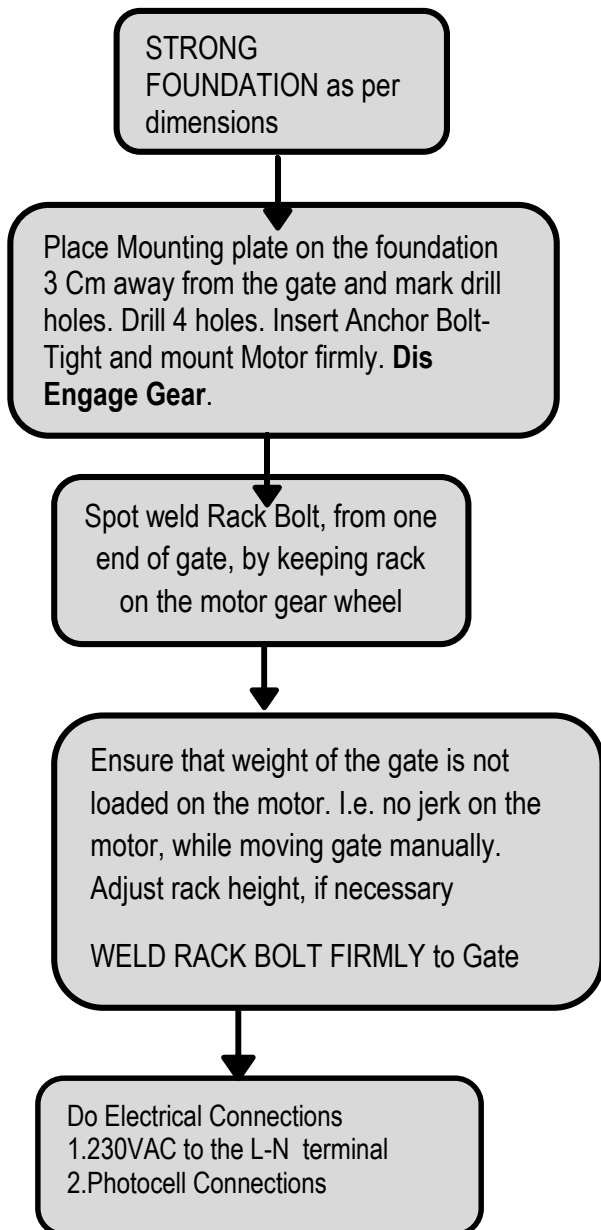
Release keys are provided to unlock the clutch. Insert and turn the keys, and pull out the flap as shown, the motor gets disengaged with the output gear, so that, the gate can be manually moved freely.

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.

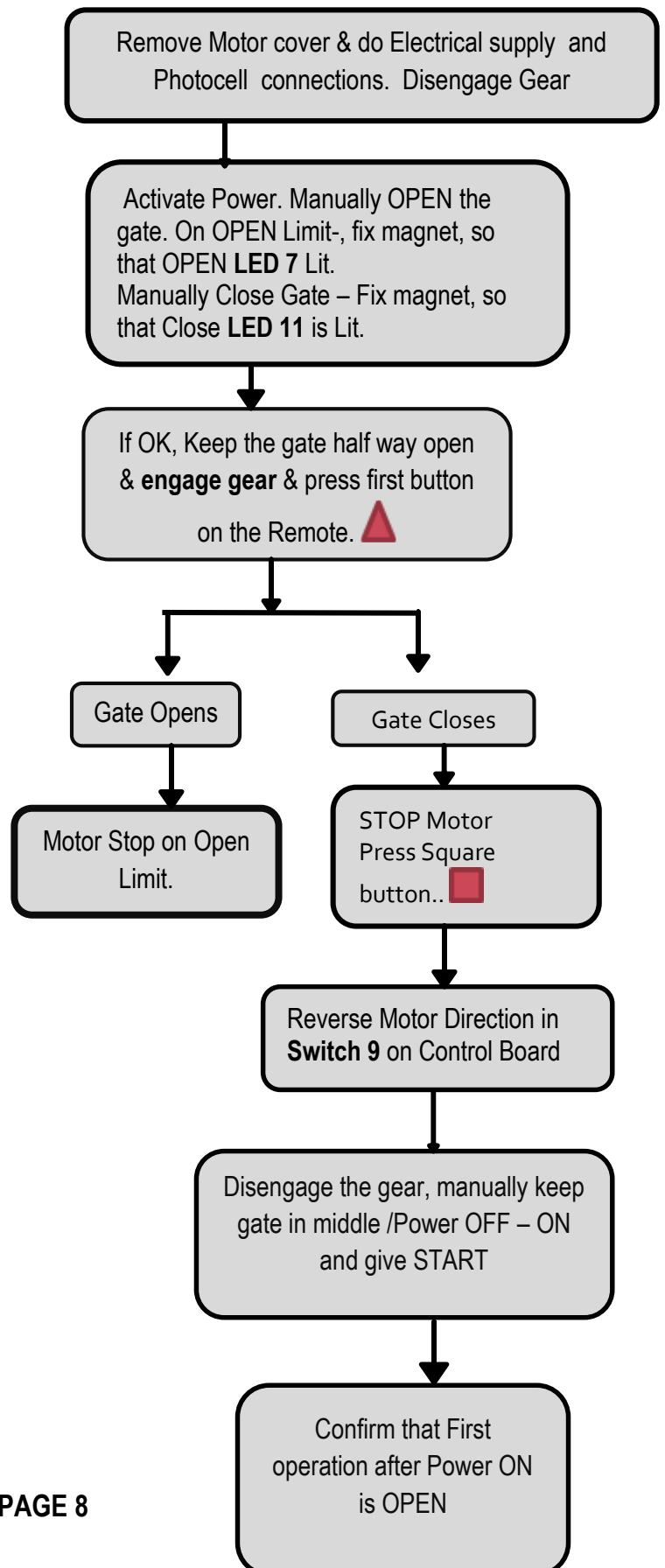


INSTALLATION FLOWCHART

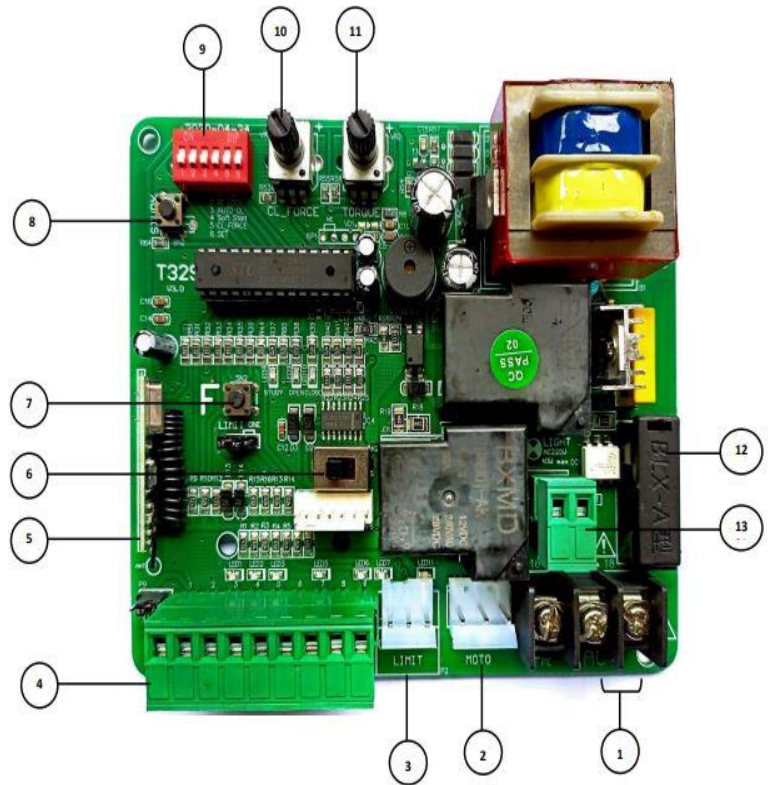
INSTALLATION



OPERATION SETTINGS



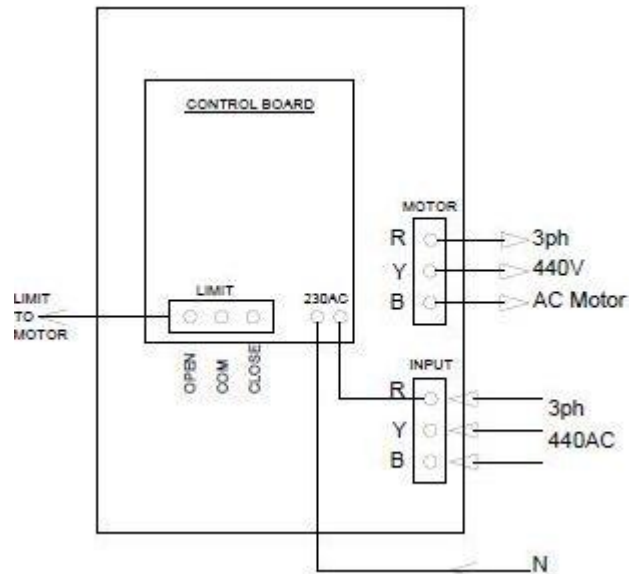
CIRCUIT LAYOUT:



1. Supply Power- AC220V – 1 Phase
2. To AC Motor (L1, COM , L2)
3. Limit Terminal. (Open limit, Common , Close Limit)
4. Accessories pin Out Torque Adjustment pot
5. RF Module. Force Adjustment Pre-set- Keep Dip Switch –B5 –ON. Adjust if needed.
B5 – OFF.
6. Direction Switch. Function Settings DIP Switches
7. Function Key- Testing Purpose - 1st Press –Motor ON, 2nd Press-Motor Off, 3rd Press-Motor Reverse, 4th – Motor Stops
8. Remote Learning button (Study)
9. DIP Switches.
10. Torque Adjustment pot. Flash light AC Supply 230VAC
11. Force adjustment pot.
12. Fuse.
13. To the Flash Light. (Common & 110/220v Line)

ACCESSORIES CONNECTION DIAGRAM

- | | |
|----------|--|
| V+ , GND | : 12V supply to power IR photocell |
| FSW | : Output signal from IR Photo cell. Any Obstruction reverses a closing Gate. |
| OP | : OPEN Command |
| CL | : CLOSE Command |
| STP | : Grounding this, will STOP the Gate |
| ONE-COM | : A Push On (Bell Switch) can be connected. Alternate action do - open – Close. |
| INFR | : Grounding this will activate STOP. |



FUNCTION DIP SWITCH SETTING & R.F.REMOTES

	OFF	ON
B1	Remote in single button control Mode	Remote in 4 button control mode
B2	Active Remote	Lock the Remote using Lock button on the remote. To unlock press
B3	Auto close OFF	Auto Close Enable. To set Delay time, keep B6 ON. Each press on Function button(F), give 1 sec delay time. Put B6 back to OFF.
B4	Turns ON Soft start function	
B5	Return on Obstruction	To increase, Keep B5-ON,adjust the Force Pre-set (5). Then keep B5 off.
B6	Normally keep OFF	For setting the parameters.

IR PHOTOCELL CONNECTIONS:

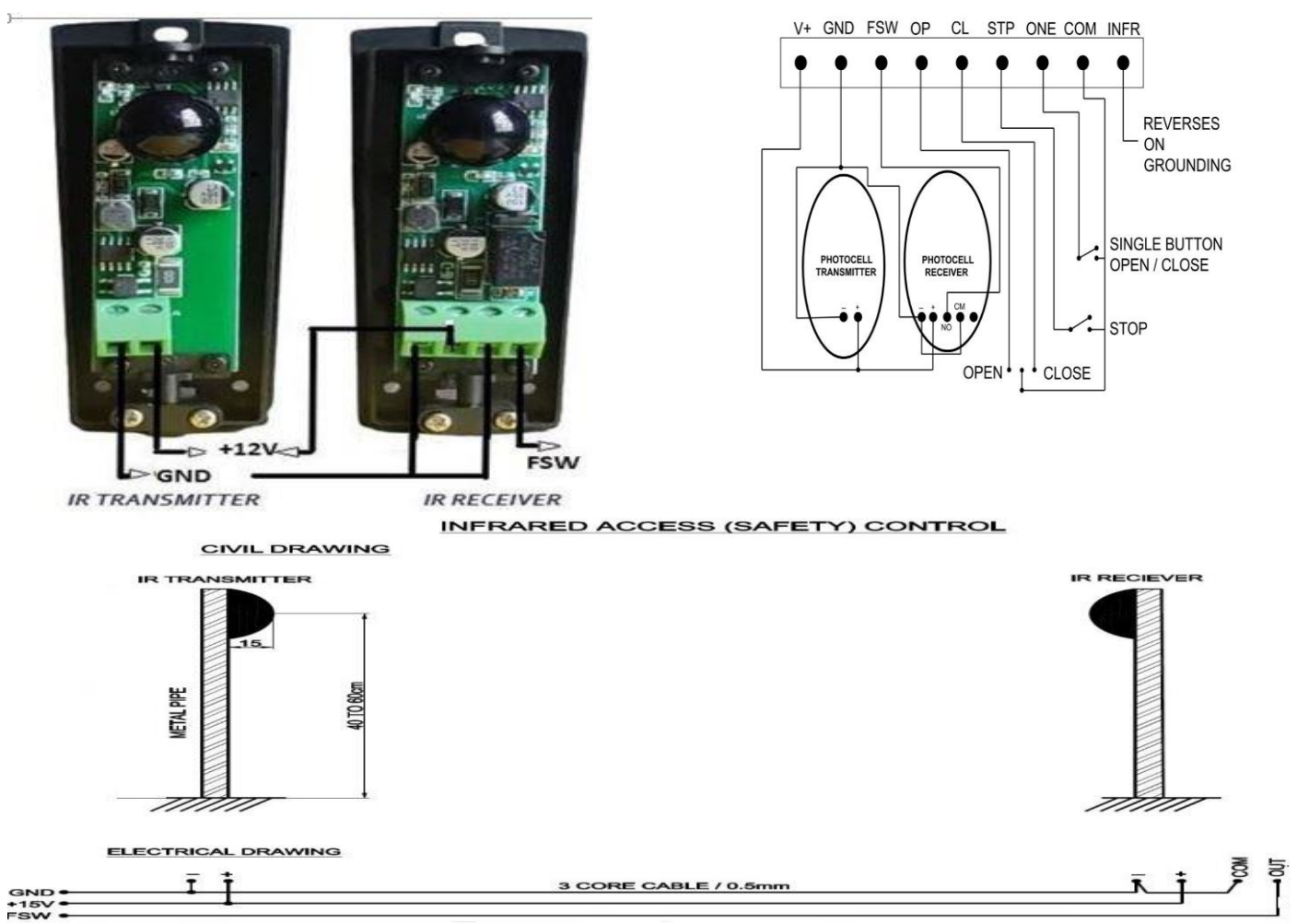
There 2 components. Transmitter and Receiver. They should be connected opposite in each pillar, facing each other, at a height of approximately 40 Cm from ground.

IR Transmitter --There are 2 connections- **GND and 12V**

IR Receiver --There are 4/5 connections in the IR Receiver. **GND,12V, NO,COM, NC.** GND Should be shorted to COM pin.. Generally IR Receiver is kept near Motor. IR Out (NO) goes to FSW of Motor control Board.

Confirm Photocell is functional:

After fixing the Infrared Photocell facing each ,approximately at a height of 40 Cm from Ground give Electrical connections. Both Transmitter and Receiver need GND and 12V connections. Same Ground to be shorted to the **COM** of Photocell. **NO** contact of the Receiver should go to FSW ,on the control board.



Power ON – Make sure that one LED lit on transmitter and two LED lit on receiver . If the Ray path is obstructed with hand, one LED on the Receiver go OFF with a TIK sound. Simultaneously LED 1 on the control board is lit.

Close the Photocell covers, firmly with o ring and screws.

WIFI Switching:

Install **TUYA or SMARTLIFE** App in your Cell phone.
Install the Wifi Module, in the Motor Control Board.
Power ON.

1. Green LED Flash Fast.
2. If not press & Hold the matching button until it Flash Fast.
3. Green Light is ON. Device online.

NET Connection:

Register account in the phone, with password.
ADD Device in the phone.
Use buttons on the cell phone to open/close gate.

Connecting more Phones:

Download TUYA or SMARTLIFE app, and register account with same password. Use option to share de



MOTOR FINAL SETTINGS:

There are 3 ways to operate the gate, from your house, without Remote.

1. Dual Switch Operation: You can use 3 wires from connectors CLOSE, OPEN and COM. Connect CL and COM to one Bell Push Switch and OP and COM to other Bell Push Switch. On press, first switch CLOSE the Gate. Second switch opens the gate.

2. Single Switch Operation: You can use 2 wires from ONE and COM to one bell push switch.

Alternate action, opens or closes the gate.

3. Wifi control (optional)

MANUAL CHECKING: ACTIVATION:

1. .

Fix Motor, Racks firmly. Tighten all related bolts firmly.

Release the Gear. Move the gate manually, to and fro.

Confirm that, gate can be moved freely, with out any jerk on the Motor. Adjust racks position , if required.

ELECTRICAL CHECKING:

1.Connect 3 Ph power (RYB) to the main control Box. Also give Neutral line to control Board.

2.Connect 3 Ph Power Out to Motor. Also connect 3 core cable from motor to control board for limit sensing.

3.3 Ph Power ON. Declutch the Motor. Manually move gate to both limits. See that, limits are sensed by corresponding LED 7 & 11.

Keep the Gate , half open

4.Engage Gear. Single press F button on the control Board. Gate Moves. First movement should be OPEN. If not change the direction and limit magnet positions, as described in Page 8.

Press ▲ (first Button) on the Remote.

See that Gate OPENS. And stop in open Limit. If the gate start Close, immediately stop the gate, by pressing ■ in the Remote.

Reverse the Motor Direction, by changing Switch 9, on the control Board.

Repeat the procedure. Dis engage gear- Motor half open- Engage gear – Power OFF- Power ON – Press ▲ (first Button) on the Remote. Gate should Opens up.

If the gate tends to stop & return in between, increase Pot 5 on the control board, keeping B5 ON, on the control Board. Keep B5 back to OFF.

Can Lit optional Light, while working. Connect 220V flash light.

FLASH LIGHT:

You may use **Common – 110/220VAC** line to **connect to the control Board.**



Frequently Asked Questions.

1	Motor doesn't work	Check POWER
1	Gate is not opening/ closing full	Grease the gate Hinges. Check the stability of mounting Clamps. Check the stability of Limit Switches.
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
6	Gate Not Moving at all (Gate Jammed)	1. Release gear of motor. Use key to unlock the RELESE Flap in the front side. Pull out the flap. 2. If not possible, loosen the rack just above the Motor Gear, and pull flap. 3. Or Pull out the flap while shaking the gate. 4. Check Magnet limit sensing. 5. See LED 7 & 11 lit on each limits. 6. Replace the Limit sensor

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
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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



INTERGLIDE AUTOCONTROLS

3 / 463A, KADAYIRUPPU P.O., KOLENCHERRY

ERNAKULAM- 682311, KERALA

PH:96560 99111

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

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