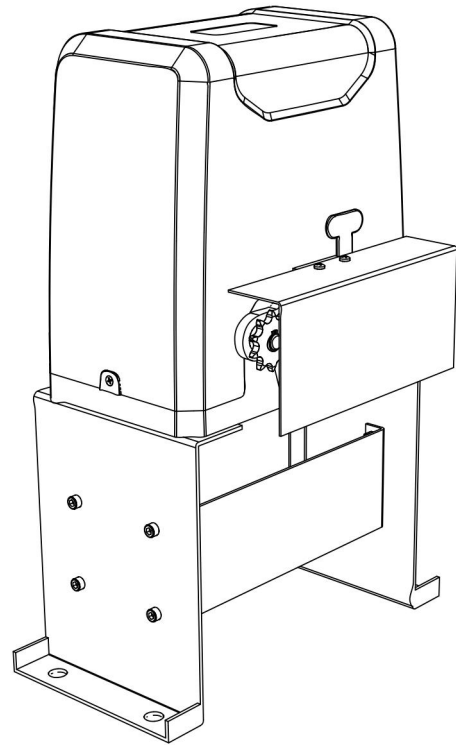
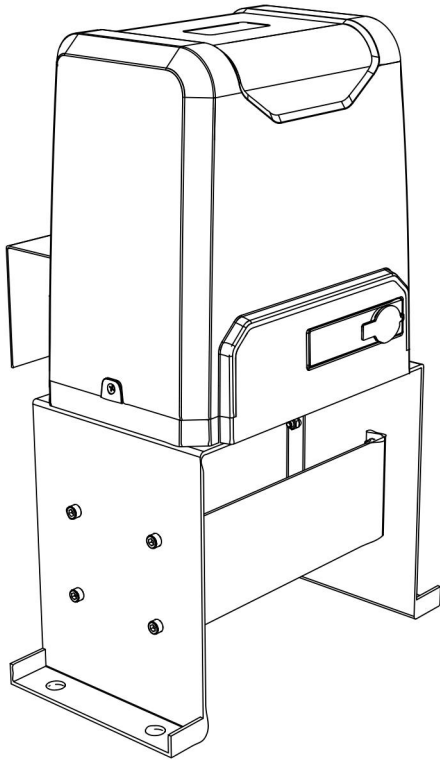


Sliding Gate Opener

User Manual

SL1000ACL/SL1500ACL



WARNING

Instructions must be read before installation. Please follow these instructions carefully, incorrect installation could affect gate operation.

When mounting and positioning this product please ensure the power cable is unplugged.

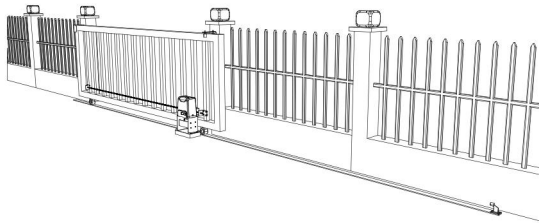
The motor cover will need to be removed to mount the motor to the mounting plate or directly to the concrete footing. Any changes to the settings on this product can only be made by a licensed electrician. This product is only powered by AC110V power supply; DC backup battery or solar power is not compatible.

CONTENTS

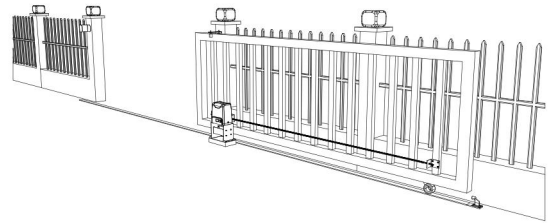
Default Setting Instruction	1
Safety Instruction	2
Parts List	3
Technical Parameters	5
Installation	5
Before You Start.....	5
Tools Required / Example Sliding Gate.....	6
Step 1 - Gate Preparation.....	6
Step 2 - Checking Manual Release.....	7
Step 3 - Removing / Installing Motor Cover.....	7
Step 4 – Motor Pad Footing.....	8
Step 5 - Fitting Mounting Base and Motor.....	8
Step 6 - Sprocket and Chain & Motor Alignment.....	10
Step 7 - Limit Switch Stops.....	11
Step 8 - Powering on.....	13
Step 9 - Testing Travel and Limit Stops.....	14
A Intelligent Control Board	15
Programming and Wiring.....	15
DIP Switch Adjustment.....	16
Potentiometer Adjustment.....	17
Terminal Instructions.....	18
Wiring to the Terminal.....	19
Connecting Infrared Photocells.....	20
Remote Control Operation.....	21
B Standard Control Board	22
Programming and Wiring.....	22
DIP Switch Adjustment.....	23
Terminal Instructions.....	24
Wiring to the Terminal.....	25
Connecting Infrared Photocells.....	26
Remote Control Operation.....	27
Maintenance	28
Troubleshooting	29
Drawing and Measurements	30

Default Setting Instruction

The gate opener will open the gate to the right-hand side as its default setting. By default, the opener mounts on the right-hand side. (Figure 1)



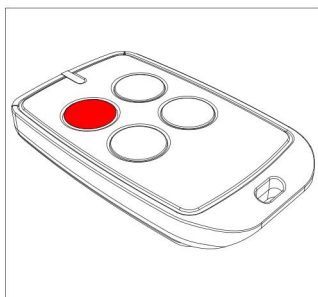
Gate in closed position



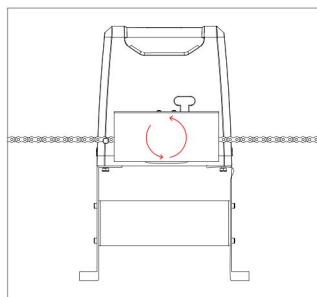
Gate in open position

Figure 1

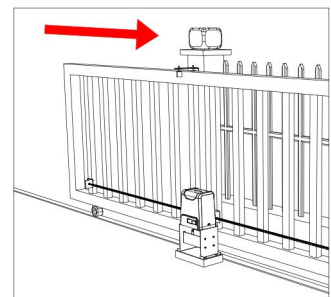
Before installation: Test the gate opener by plugging it into a power source and pressing the remote. Press the opening button, the output sprocket rotates, then press the stop button, the output sprocket stops rotating. Finally, press the closing button, the output sprocket rotates to the opposite direction. This will give you an understanding of the way how the opener moves the gate.



Press the first/top button on the remote.



Rotating output sprocket will drive the gate frame.



Then the gate will move in the set direction.

Figure 2

Note: Ensure that the gate opener is unplugged before proceeding with installation. Please keep fingers away from the motor output sprocket whilst it is turning.

If your gate needs to open from the other direction (to the left, refer to figure 3), your opener needs to be mounted on the left-hand side as shown, the relative wires need to be swapped over, please check under "Terminal Instructions" for swapping. (Factory default setting is for right-hand opening: opener mounted on the right-hand side).

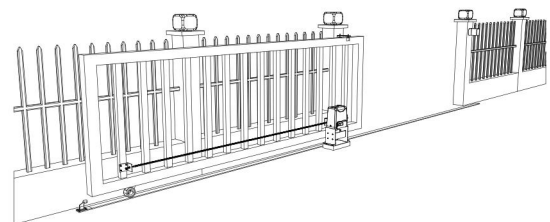
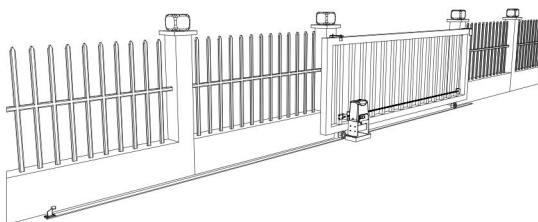


Figure 3

Any works done to the gate opener must be completed whilst the power is off, and the opener is unplugged.





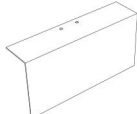

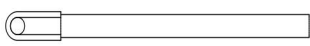
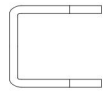


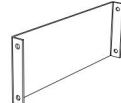
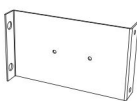
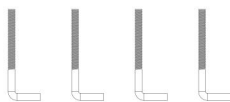
Safety Instruction

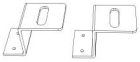





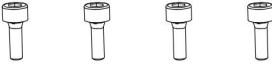

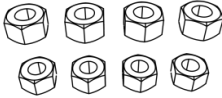


Warning: Incorrect or improper use of this product can cause damage to persons, animals or properties.

- Please ensure that the input voltage used matches with the supply voltage of gate opener.
- All modifications to wiring or electrics, and any adjustment or maintenance to input voltage must be done by a qualified electrician.
- All potential hazards and exposed pinch points of the gate must be eliminated or guarded prior to installation of this gate opener.
- Never mount any device that operates the gate opener where the user can reach over (under, around or through) the gate to operate the controls. These must be placed away from any moving range of the moving gate.
- Ensure power plug is disconnected from the power socket during installation or maintenance.
- Keep remote control and other control devices out of children's reach, in order to avoid unintentional activation.
- To ensure safety, before installing the motor, mount a Gate End Catch and a Gate Stop at each end of the rail to prevent the gate travelling off the track.
- If required, install infrared photocell to detect obstructions and prevent injury to person or damage to property.
- Instruct all users about the control systems provided and the manual opening operation in case of emergency.
- Ensure that the power cable is connected to a RCD protected weatherproof power outlet installed by a qualified electrician.
- Do not install this product in an explosive atmosphere or where there is any danger of flooding.
- This product was exclusively designed and manufactured for the use specified in the present documentation. Any other use not specified in this documentation could damage the product and be dangerous.
- Only use original parts for any maintenance or repair operation. Our company declines all responsibility with respect to the automation safety and correct operation when other supplier's components are used.
- Do not modify the automation components, unless explicitly authorized by our company.
- The user must avoid any attempt to carry out any works or repairs on this product, and should always request the assistance of qualified personnel.
- This product is suitable for use on one sliding gate only.
- Anything which is not expressly provided for in these instructions is not allowed and will void warranty.
- Dispose of all packing materials (plastic, cardboard, polystyrene etc.) according to current guidelines. Keep plastic bags and polystyrene out of children's reach.
- Save these instructions for future use.

Parts List




Parts List (standard configuration)

No.	Picture	Name	Quantity
1		Motor	1
2		Manual Release Keys	2
3		Remote Controls	2
4		Mounting Accessories Box	1
4-1		Sprocket Cover	1
4-2		Chain(Including 2 Chain Links)	6m
4-3		Tie Rod	2
4-4		Square Screw	4
4-5		Round Screw	4
4-6		Door Connecting Plate	2
4-7		Horizontal Mounting Plate	1
4-8		Vertical Mounting Plate	2
4-9		Foundation Bolts M10	4

No.	Picture	Name	Quantity
4-10		Magnetic Limit Switch Stop	2
		Magnets	2
		Hexagon Head Bolt M6X65	4
		Nut M10	4
		Flat Washer φ10	2
		Spring Washers φ10	2
4-11		Inner Hexagon Head Bolt M6X20	4
4-12		Hexagon Head Bolt M10X50	4
4-13		Nut M6	20
		Nut M8	4
		Nut M10	12
4-14		Flat Washer φ6	20
		Flat Washer φ8	4
		Flat Washer φ10	12
4-15		Spring Washers φ6	20
		Spring Washers φ8	4
		Spring Washers φ10	8

Note: Extra flat washers and spring washers are spare parts.

Parts List (optional)

No.	Picture	Name	Quantity
1		Infrared Photocell	1
2		Wireless Keypad	1
3		Alarm Lamp	1

Additional remote controls: Spare/Additional remotes for the automatic gate kit, these will need to be paired to the motor.

Infrared photocell: Detects pedestrians, vehicles and objects that cross an infrared beam and prevents the gate from closing.

Wireless keypad: Allows secure access through the gate used with a user set code.

Wired control: Allow users to control the opening and closing of the door through an external push-button.

Alarm lamp: Alerts people near the gate and users that the gate is in operation.

Technical Parameters

Model	SL1000ACL	SL1500ACL
Power Supply	110VAC/60Hz	
Motor Power	400W	550W
Gate Moving Speed	11-13m/min	
Maximum Loading Weight	1000KG	1500KG
Remote Control Distance	≥30m	
Remote Control Mode	Single button mode	
Limit Switch	Magnetic limit switch	
Working Noise	≤56dB	
Working Duty	S2, 20min	
Recording of up Remote Controls	Standard control board: 25; Intelligent control board: 40	
Remote Frequency	433.92 MHz	
Working Temperature	-20°C - +70°C	
Package Weight	22.39KG	23KG

Installation

Before You Start

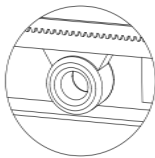
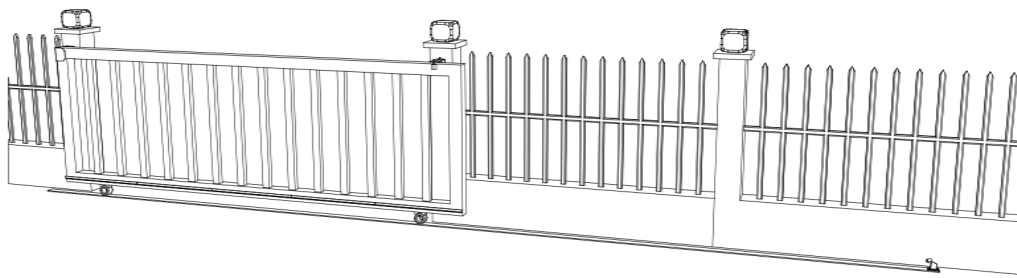
- SL1000ACL/SL1500ACL Sliding Gate Automation Kit is suitable for powering the opening and closing motion of gates up to 1000kg, 1500kg in weight, up to a length of 12m. (Standard kit contains a 6m chain, if the gate length is over 5.5m, please consider to extend the length of the chain.)
- Gate motion is achieved by the rotating output sprocket of the gate opener driving the chain fitted to the moving gate.
- The gate opener requires you to press the remote control once to open, and once again to close. This is a safety feature to ensure safe operation.
- The gate opener itself must be fitted within private property, never externally to a property's boundary.

Any works done to the gate opener must be completed whilst the power is off and the opener is unplugged. Any modifications/alterations/works to AC power components must only be completed by a licensed electrician.

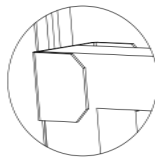
Tools Required

- Tape measure
- Level
- 12mm concrete drill and hammer (when uses expansion screws)
- Phillips head screwdriver
- Straight screwdriver

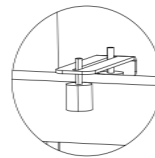
Example Sliding Gate



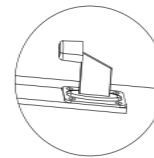
Gate Track and Track Wheels



Gate End Catch



Gate Guide Rollers



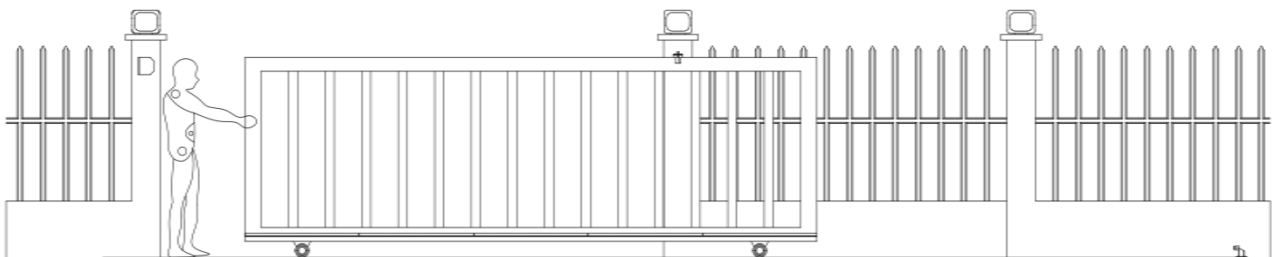
Gate Stop

Figure 4

Please ensure that the gate opener power cable is not plugged in at any stage before Step 8.

Step 1 - Gate Preparation

- Ensure that the sliding gate is correctly installed.
- The gate is horizontal and level and the gate can glide back and forth smoothly when moved by hand before installing the gate opener.
- Wheels and guide rollers should rotate easily and be free from dirt or grime.
- Track should be flat, level and firmly affixed.
- Any misalignment in the gate will affect performance of the automatic gate opener.

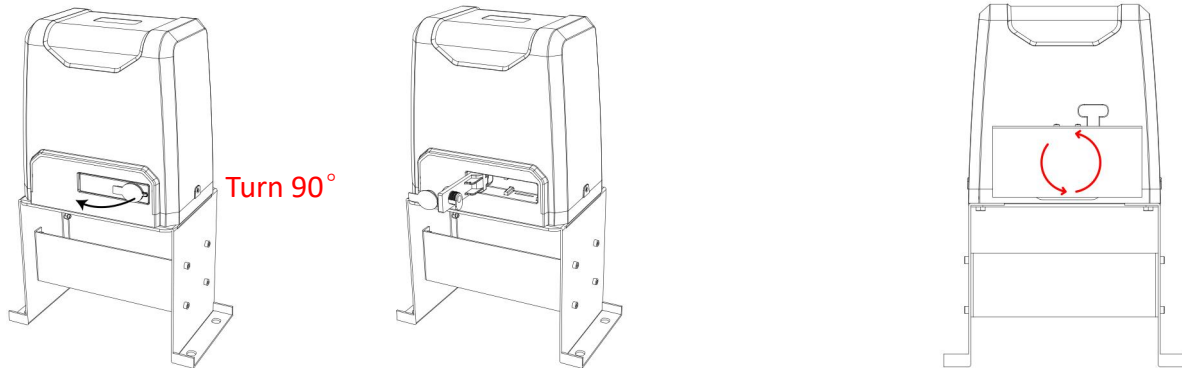


The gate should slide smoothly by hand before attempting to install the gate opener.

Figure 5

Step 2 - Checking Manual Release

- Insert the key and open the manual release bar to enable the motor get into manual mode and check that the motor output sprocket rotates freely by hand (Figure 6).



To make the motor into manual mode, insert the key and **open the manual release bar till it rotates by 90°** .

In manual mode, the sprocket can turn freely and the gate can be operated by hand.

Figure 6

Step 3 - Removing / Installing Motor Cover

- Unscrew the two cover screws located at each side of the motor cover.
- Remove the rubber grommet below the limit switch (Figure 7).

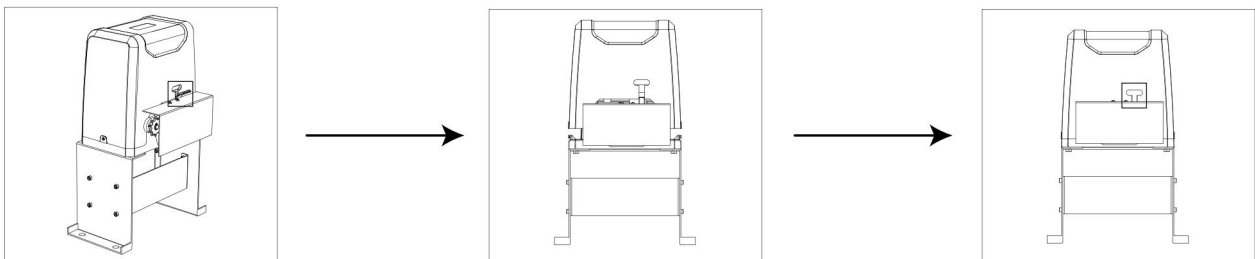


Figure 7

- Sprocket cover installation as Figure 8

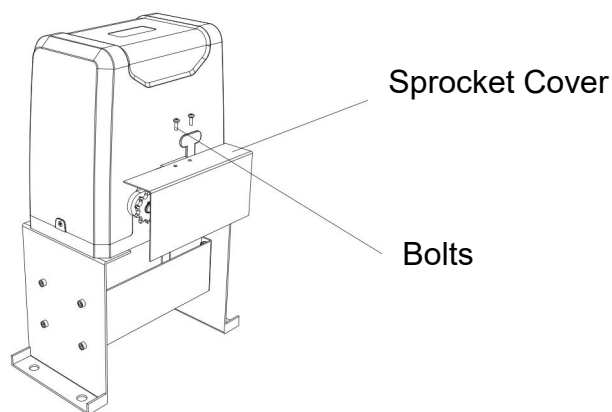
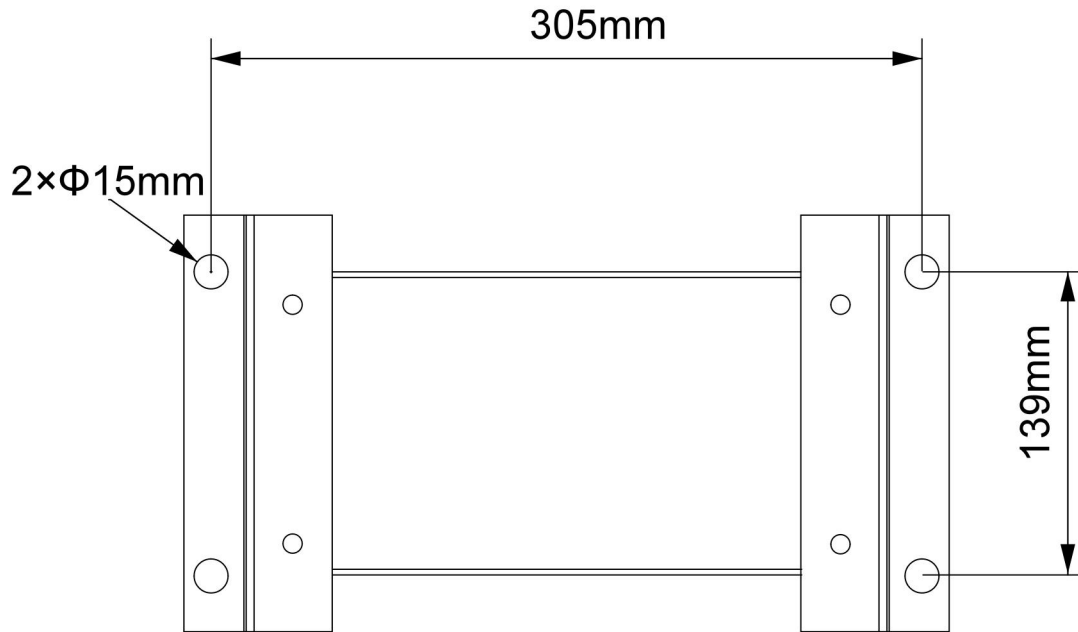


Figure 8

Please Note: the rubber grommet must be fitted back onto the motor cover once the cover has been re-fitted/replaced onto the base of the motor.

Step 4 - Motor Pad Footing

- The motor pad concrete footing requires an area of no less than 500mm long x 400mm wide and a minimum depth of 250mm (Standard requirement).
- Ensure surface is level and parallel to the driveway.



Mounting Base Dimensions

Figure 9

Step 5 - Fitting Mounting Base and Motor

- Fit anchor bolts (included in kit) or expansion bolts (should be prepared by users) according to holes in mounting base (as per Figure 9).
- Position the mounting base and fix it as per Figure 10.
- Bolt motor to its base using the M10x50 bolts with spring and flat washers provided and tighten as required.

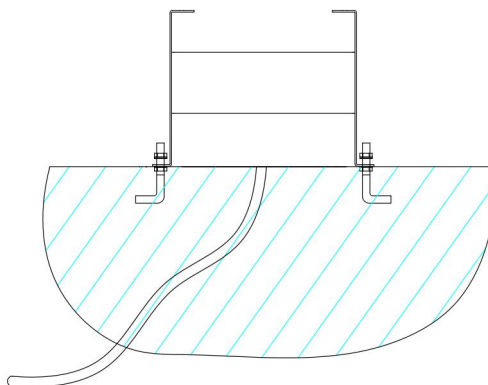


Figure 10

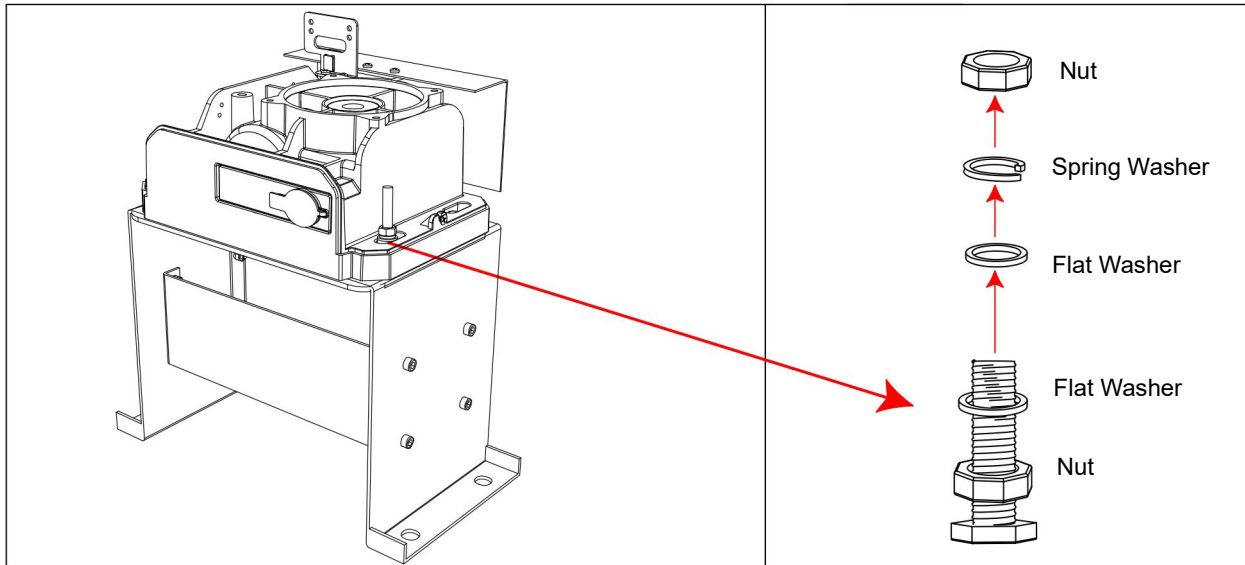
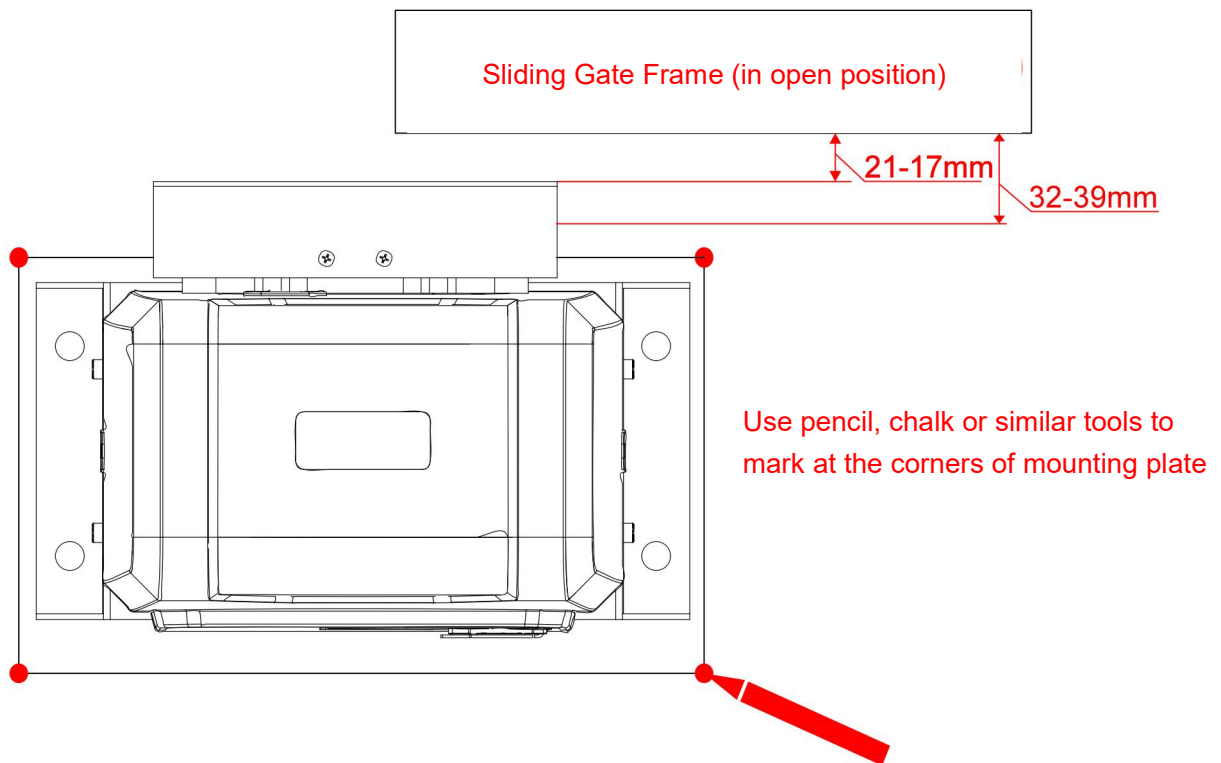


Figure 11

Fitting Motor

- Fit motor and mounting base on the concrete footing.
- Ensure the motor output sprocket and chain are correctly aligned. Sprocket and chain should be centered as much as possible.
- Take the motor away from mounting base.
- Leave a space of 30cm from the motor to end of the chain.



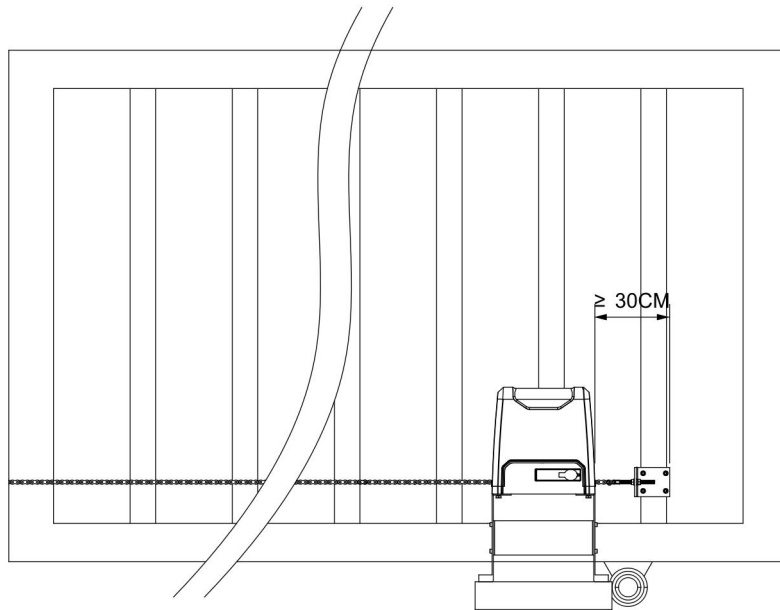


Figure 12

Step 6 - Sprocket and Chain & Motor Alignment

- Ensure output sprocket and chain are correctly aligned. Under no circumstances should the gate opener output sprocket carry any weight of the gate. It is the task of the gate castors or wheels to carry the weight of the gate.
- If the gate doesn't slide freely by hand, adjust the height of the chain accordingly until the full length of gate slides freely by hand.
- Ensure the chain is in proper tightness after installation. (refer to Figure 14)

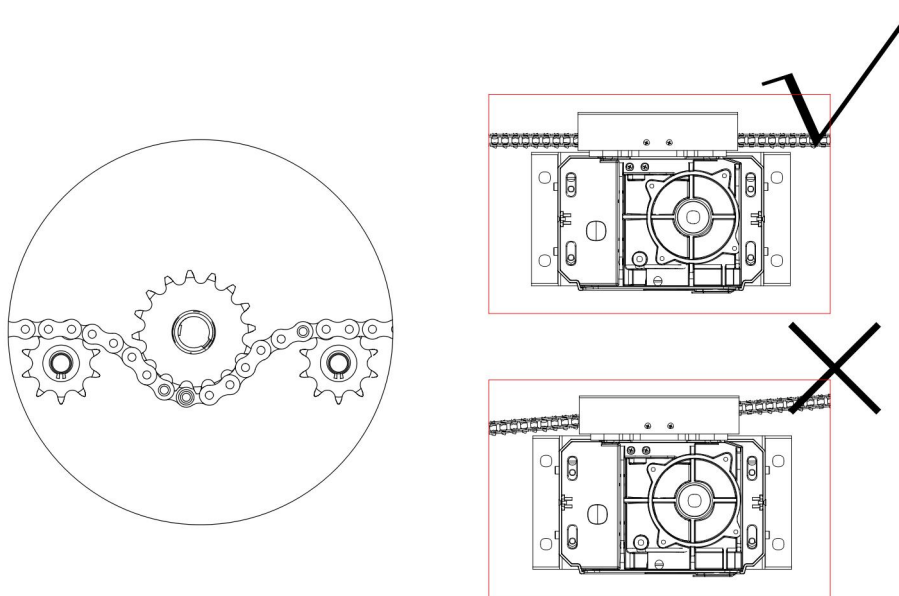


Figure 13

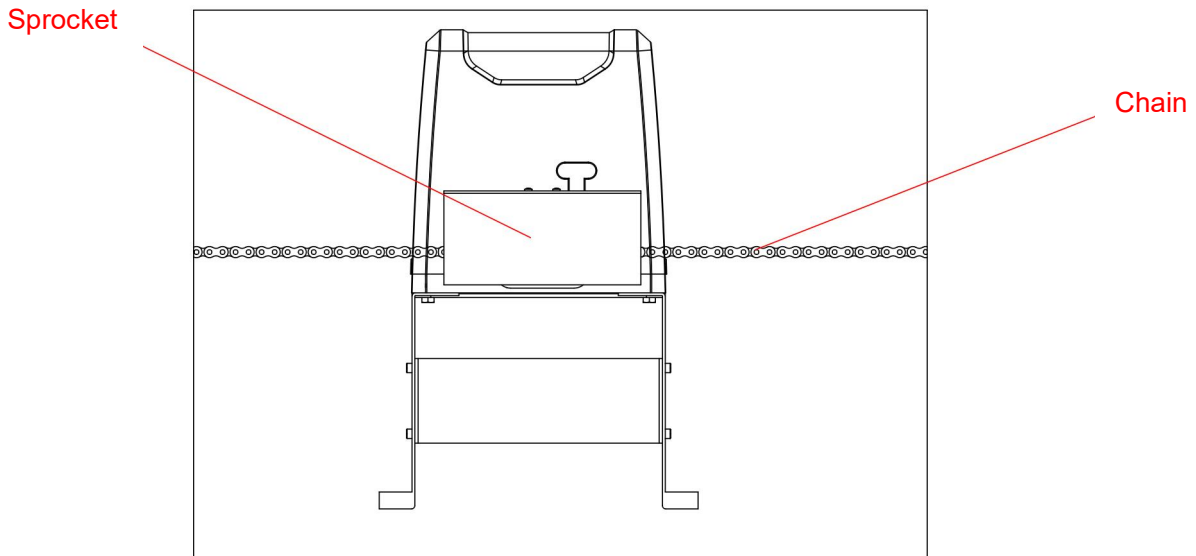
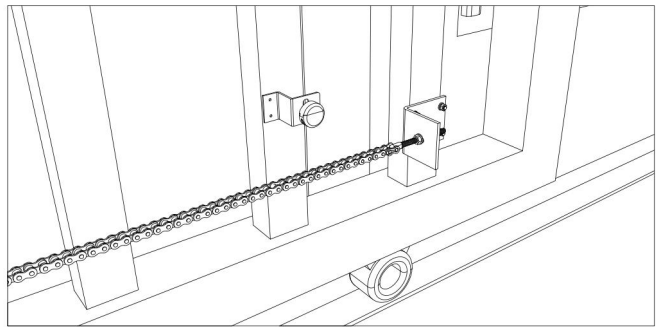


Figure 14

Step 7 - Limit Switch Stops

Included in your gate opener kit are two limit switch stops which must be fitted on your gate to ensure safe operation.

The limit switch stops are designed to set the desired opening and closing position of your gate. When the limit switch stops come into contact with the magnetic limit switch, the gate will stop moving.

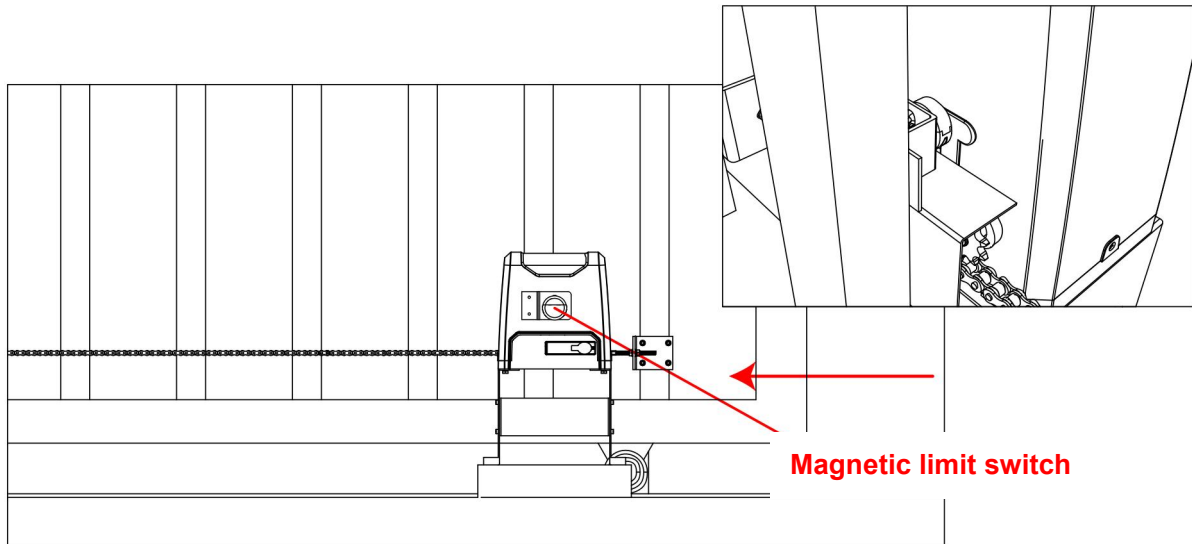


It is extremely dangerous that without or incorrect installation of the limit switch stops can cause crash of gate, damage of internal structure of the motor, moreover, the gate may slide off the guide rail.

Setting the Limit Switch Stops

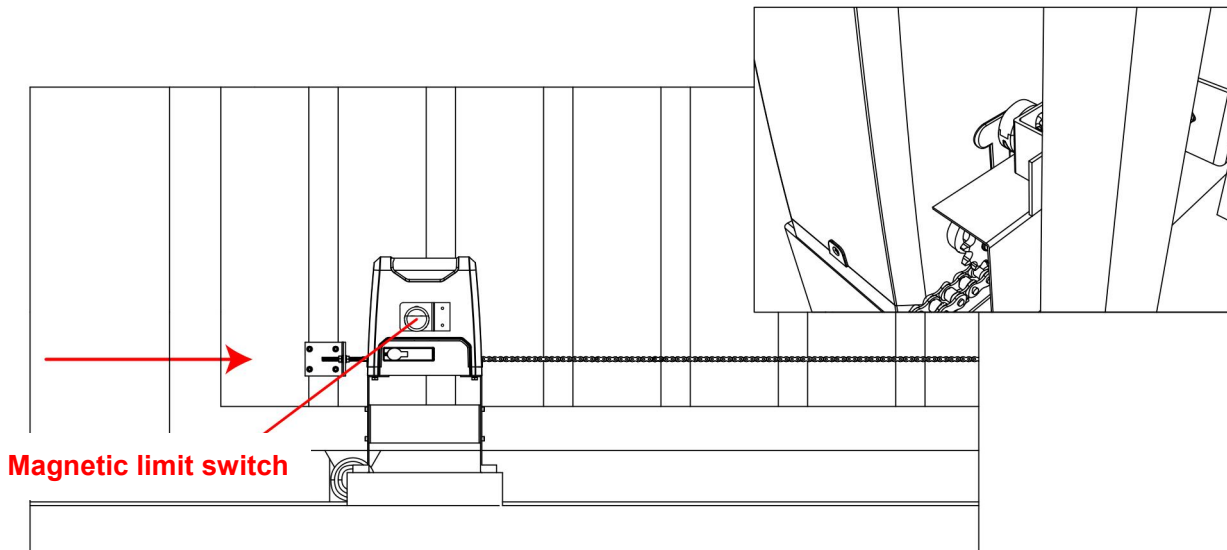
Closed Position

- Position gate 150-200mm back from the gate end catch closed position. This will help in making sure you do not slam the gate into the end stop/catch when setting the closed position under power.
- Fit limit switch stop onto the top of chain at the point where it meets the magnetic limit switch on the motor.
- Tighten locking screws of limit switch stop.

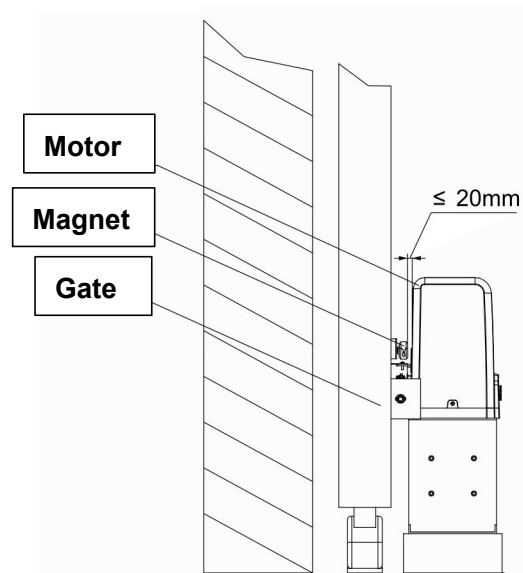
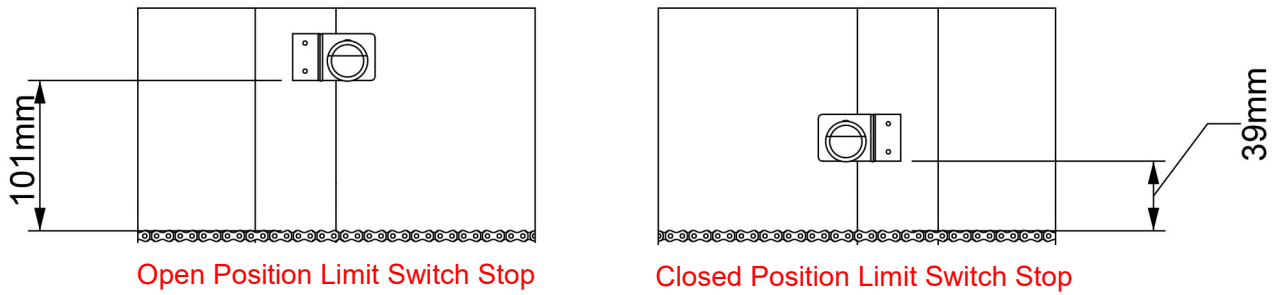


Open Position

- Position gate 150-200mm back from the gate stop open position. This will help in making sure you do not slam the gate into the end stop/catch when setting the open position under power.
- Fit limit switch stop onto the top of chain at the point where it meets the magnetic limit switch on the motor.
- Tighten locking screws of limit switch stop.



Test the magnetic limit switch stops by moving the gate manually until you hear a click, making sure contact is made with the magnetic limit switch on the motor.



To Reset: Turning the power off will reset the limit switch stop memory. Power on the gate opener again, pressing remote control or external push button switch to open and then close the gate once, then new limit switch stop setting is completed.

Step 8 - Powering on

- Ensure that the outer cover has been fitted and fastened back onto the motor base.
- Before powering up the gate opener make sure the gate can travel by hand in manual mode (key unlocked).
- Slide the gate to between the middle of the posts, approximately (see below diagrams).
- Lock the manual release spanner (key locked) in readiness for automatic mode.
- Plug the power cord into an approved RCD protected weatherproof outlet.
- Remote controls included in this kit are factory paired ready for use.

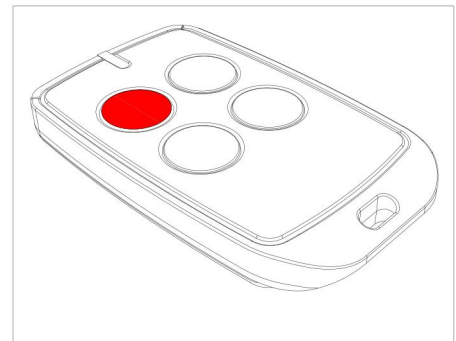
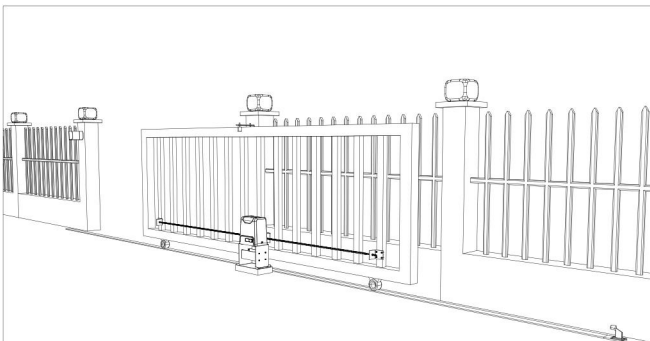


Figure 15

Step 9 - Testing Travel and Limit Stops

Testing the Closed Position

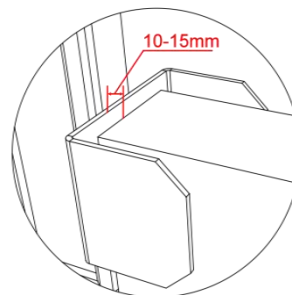
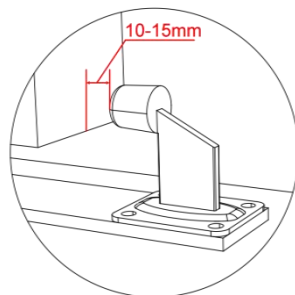
- Ensure gate opener is installed as per step 5, 6 and 7 and the sliding gate is in the middle position.
- Press remote (remotes included in kit are factory paired to the motor). The sliding gate will begin to close.
- The limit switch stop will hit the limit switch and the sliding gate will stop.
- When the gate stops, measure the distance remaining between the sliding gate and the desired closed position.
- You have now determined the closed position of the sliding gate when the limit switch stop hits the limit switch.
- Adjust the limit switch stop from the measurement you have taken to get your final gate closed position. The ideal closed final position for the gate frame is 10-15mm from closed gate end catch.

Testing the Open Position

- Press remote, the sliding gate will begin to open.
- The limit switch stop will hit the limit switch and the sliding gate will stop.
- When the gate stops, measure the distance remaining between the sliding gate and the desired open position.
- You have now determined the open position of the sliding gate when the limit switch stop hits the limit switch.
- Adjust the limit switch stops from the measurement you have taken to get your final gate open position. The ideal open final position for the gate frame is 10-15mm from the gate stop.

To Reset:

When setting new limit stop positions please ensure that you turn the power off and then on again. Turning the power off will reset the limit stop memory, allowing for new limit switch stop positions to be recognized by the motor.



Now the basic open and closed positions are set, for further setting functions and adjusting parameters, please refer to pages 15-28 in this manual.

A Intelligent Control Board

Programming and Wiring

Any works to the 110V AC must only be performed by a licensed electrician.
Ensure power is off before any modifications are made.

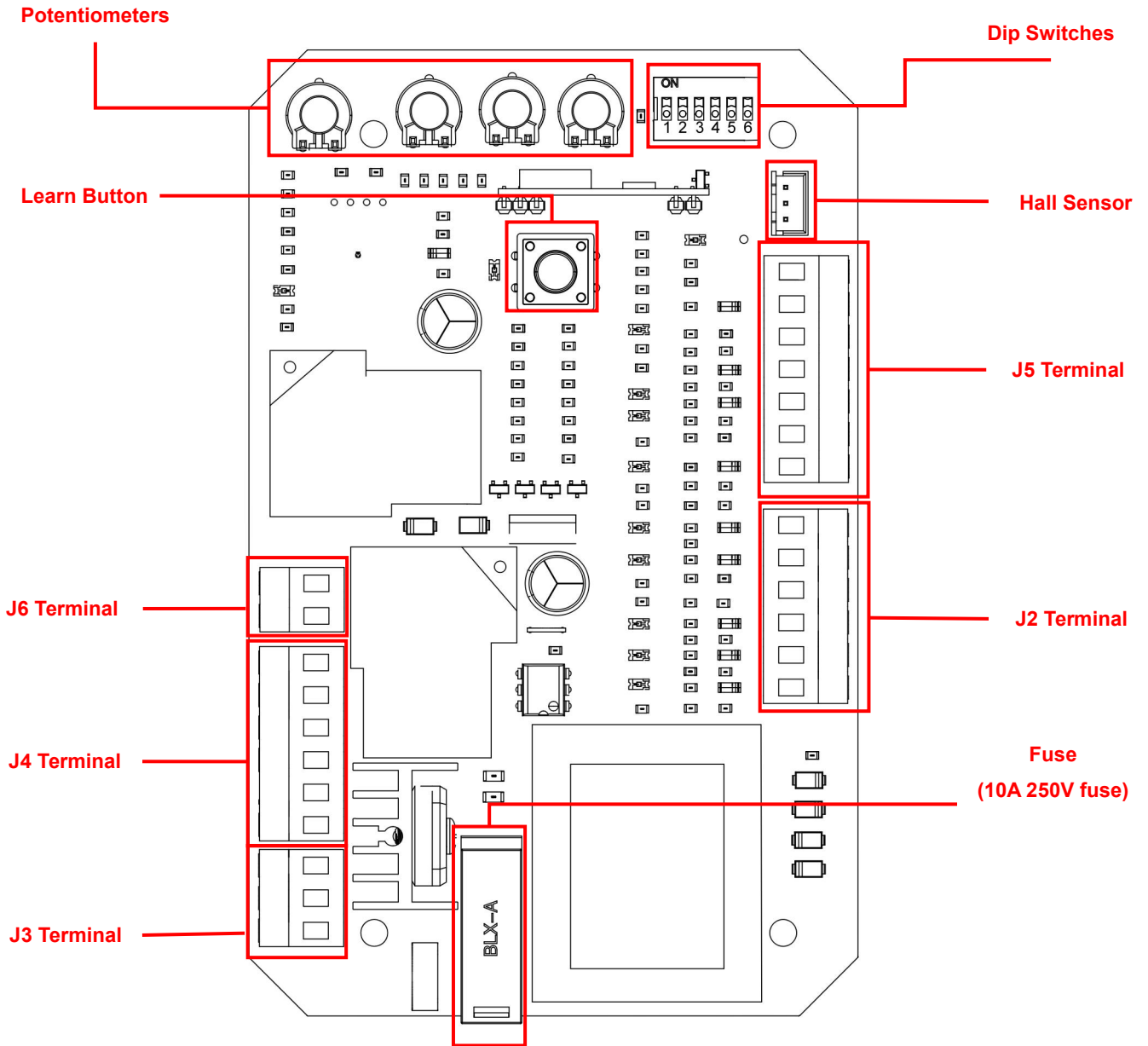


Figure 16

DIP Switch Adjustment

All changes to these settings must be completed by a licensed electrician

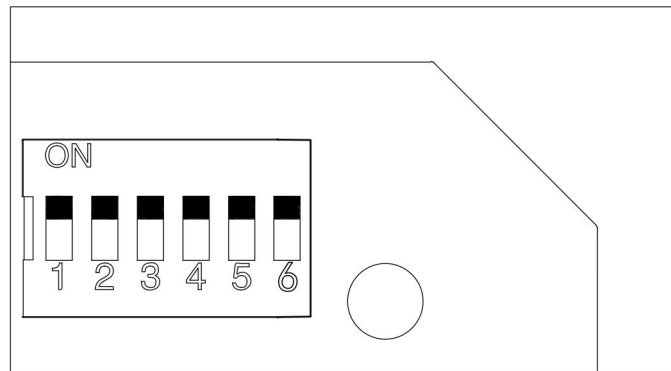


Figure 18

Number	Function	Description
1	Soft Start/Close Function	OFF–enabled ON–disabled Default position is OFF.
2	Limit Switch Setting	OFF–Normal Open ON–Normal Close Default position is OFF, this should align with limit switch and is not recommended to be modified by the users.
3	Automatic Close Time Setting	Automatic close time setting: the gate is operated to open by remote control operation and will close automatically after a few seconds delay. 3 OFF 4 ON: automatic close delay time is 12s. 3 ON 4 OFF: automatic close delay time is 24s. 3 ON 4 ON: automatic close delay time is 36s. 3 OFF 4 OFF: no automatic close function. Default setting: 3 OFF 4 OFF Disable the automatic close function.
4		
5	Auto-reverse Function	OFF-enable ON-disable Default position is OFF, this should align with the opener status and is not recommended to be modified by the users.
6 (optional)	External button switch mode setting	ON - External button switch is four button mode. OFF - External button switch is single button mode.

(optional):If your control board only has five dials, it is invalid.

Potentiometer Adjustment

All changes to these settings must be completed by a licensed electrician

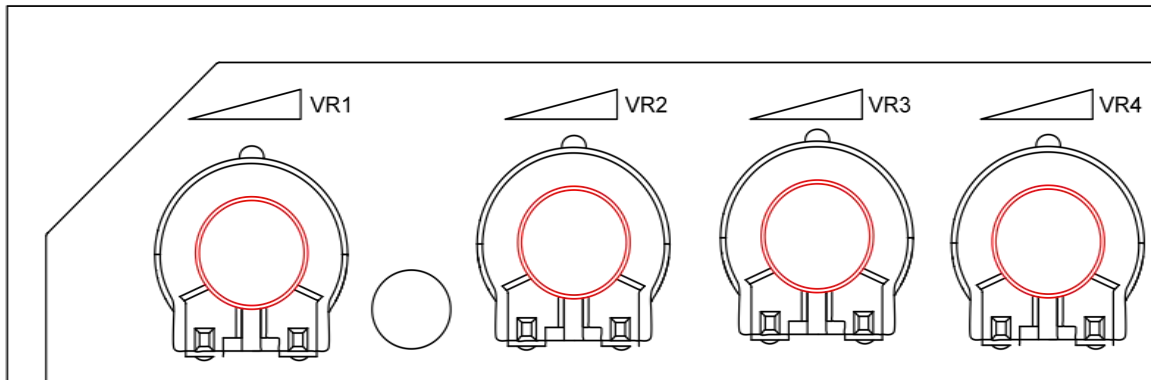


Figure 18

VR1: Stall Force Mode

Maximum = More Force = Less sensitive

Minimum = Less Force = More sensitive

When Stall Force Mode is enabled (Dip switch 5 is at OFF position), the gate opener will detect obstacles and impacts to the gate. If this is during opening, the gate will stop, if this is during closing the gate will stop, and then re-open. Rotate VR1 clockwise to increase the stall force, anti-clockwise to decrease.

For safety, we strongly recommend that Stall Force Mode is left enabled (Dip switch 5 is at the OFF position). Do not turn Dip switch 5 to the ON position.

VR2: Brake Force Adjustment

For adjusting brake force at the limit position during gate opening and closing. This should only be adjusted for heavy gates that need additional force to brake when limit switch is detected.

Rotate VR2 clockwise to increase, counter-clockwise to decrease. Default setting is at minimum.

VR3: Slow Start/Stop Width Adjustment

This switch controls how many seconds the gate opener operates at maximum speed.

Rotate VR3 clockwise to increase, rotate counter-clockwise to reduce.

When VR3 switches to minimum, slow start/stop function is disable.

VR4: Motor Output Force Adjustment

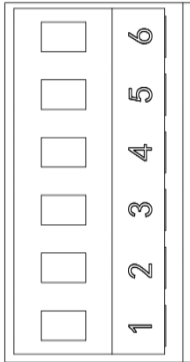
For best performance, set the torque at the lowest setting for secure use.

Rotate clockwise to increase, counter-clockwise to decrease.

Default setting is at maximum.

Terminal Instructions

All changes to these settings below must be completed by licensed electrician.



J2 Terminal (as per Figure 16):

Terminal 6: External Push Button Pedestrian Switch

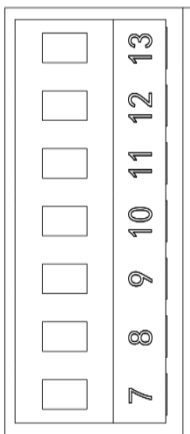
Terminal 5: External Open/Stop/Close/Stop Loop Control Push Button (Repeated Open/Stop/Close)

Terminal 4: Common Terminal for All External Control Push Button

Terminal 3: External Stop Push Button Switch.

Terminal 2: External Open Push Button Switch.

Terminal 1: External Close Push Button Switch.



J5 Terminal: Limit Switch and Accessories

Additional accessories sold separately

Terminal 13: Open Limit Switch

Terminal 12: Limit Switch Common Terminal

Terminal 11: Close Limit Switch

Terminal 10: Loop Detector Connector (Pre-wired by Factory)

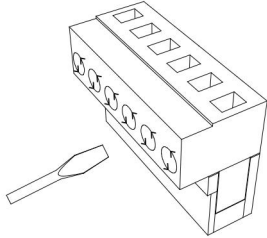
Terminal 9: Ground/Earth (GND)

Terminal 8: Photocell input (N.C.). **If no photocell is fitted, use a jumper between terminals 8 & 9.**

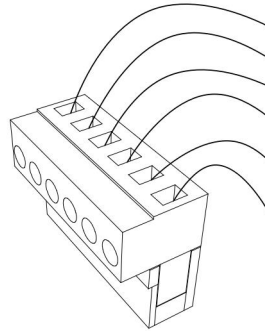
Terminal 7: Power supply for accessories (+15V)

Note: If require to change the moving direction, the wires of 11 and 13 on J5 Terminal have to be swapped with each other.

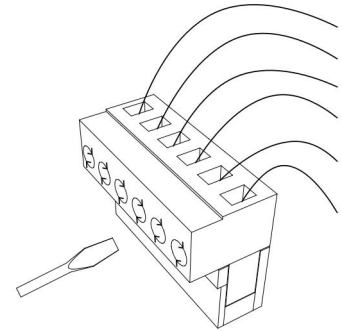
Wiring to the Terminal



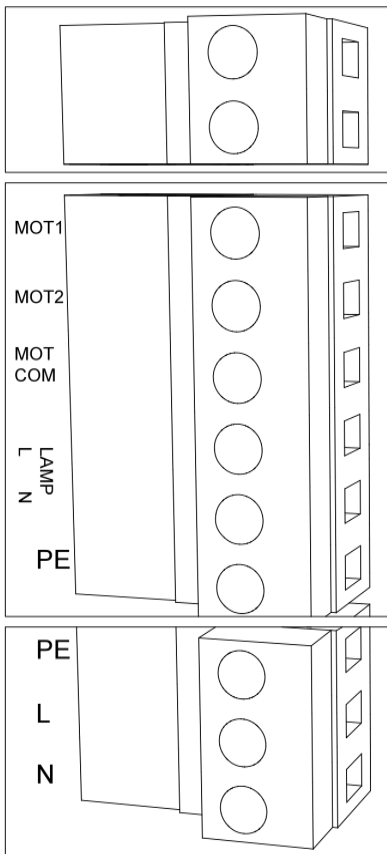
Using a screwdriver to loosen the screw on the side of the terminal.



Insert the wire into the number on the terminal that you are looking to connect to. Refer to Page 15.



Tighten with a screwdriver to secure the wire in place.



J6 Terminal:

Motor Capacitor

J4 Terminal:

MOT1: Motor Terminal, swap with MOT2 to change gate moving direction.

MOT2: Motor Terminal, swap with MOT1 to change gate moving direction.

MOTCOM: Motor Common Terminal.

LAMP (L&N): Connection for warning lamp.

PE: Motor and warning lamp earth

Note: If require to change the moving direction, not only MOT1 and MOT2 wires need to be swapped, but also the wires of 11 and 13 on J5 Terminal have to be swapped with each other.

J3 Terminal:

PE: Earth (yellow/green wire).

L: Power (brown wire).

N: Power (blue wire).

Connecting Infrared Photocells

The below steps must be completed by licensed electrician.

Highly recommend the use of infrared photocells as an additional safety feature.

While closing, if the ray of the Infrared Photocell is blocked, the gate will stop and reverse immediately, to protect user and property security. To install photocells, connect wiring as per Figure 19. You must remove the wire jumper between terminal 8 and terminal 9 on J5 (ref to Figure 20).

The distance between photocell receiver and photocell transmitter should not be less than 2 meters; otherwise, the induction effect of photocell may be affected.

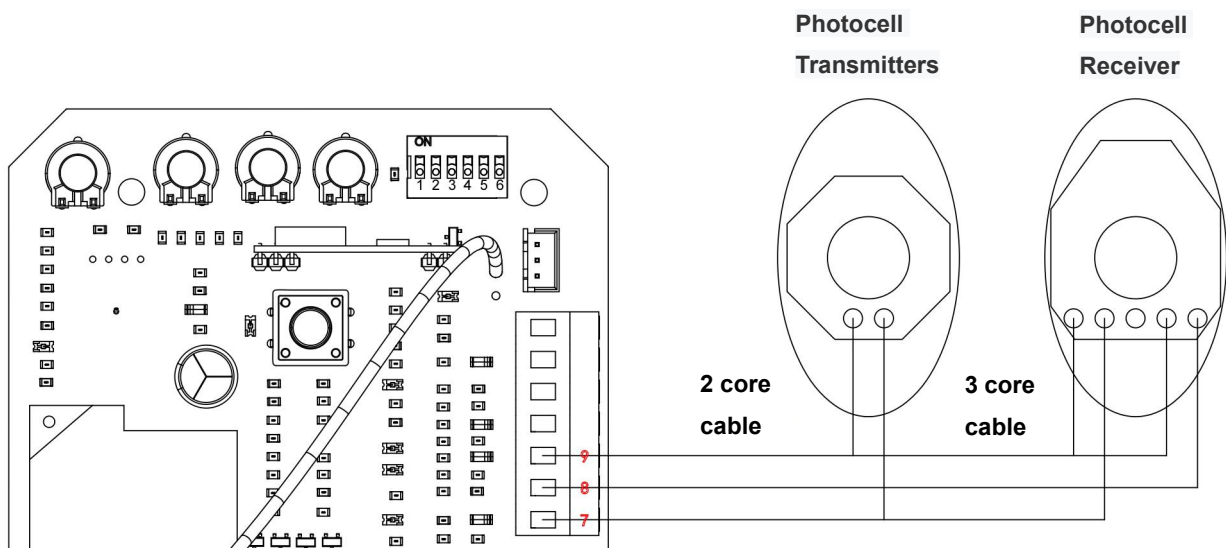
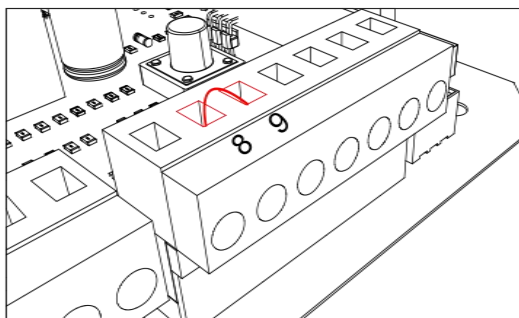


Figure 19

Before Installing Photocells



Loosen 8 and 9 ports on J5 Terminal with a screwdriver. Make sure the power is disconnected before doing so.

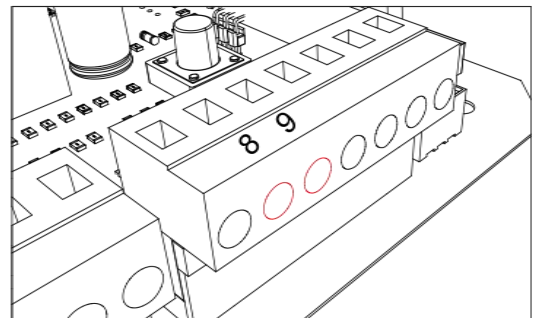


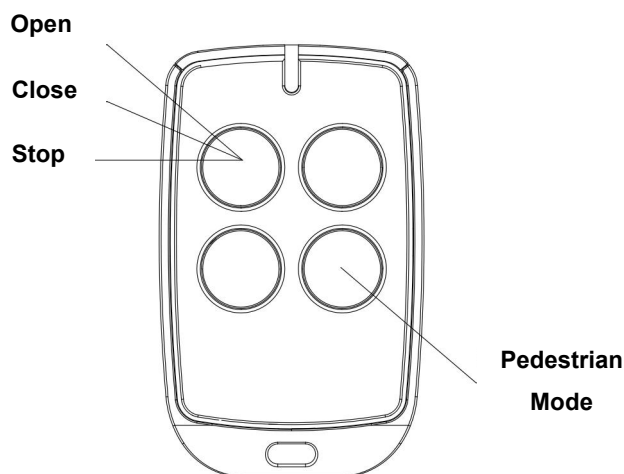
Figure 20

Remove the wire jumper Between ports 8 & 9 on J5 Terminal.

Remote Control Operation

Single button mode remote control: OPEN/CLOSE/STOP of motor are controlled by one button circularly on the remote control.

The forth button on remote control is Pedestrian Mode--press the forth button while the gate is closed, the gate will open 1m wide to allow pedestrian access.

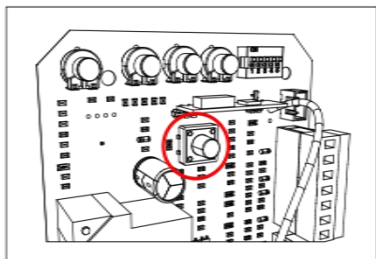


Single Button Mode Remote Control

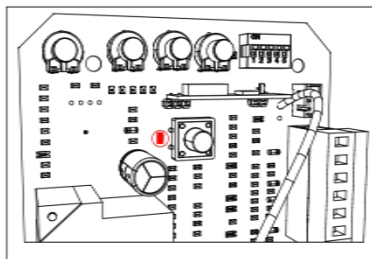
Figure 21

Remote Control Learning

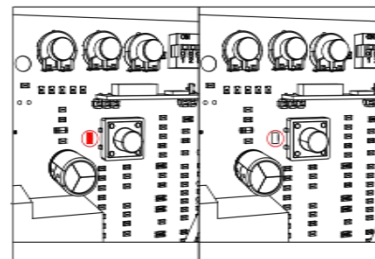
Remove motor outer cover and continue to remove the transparent PCB cover, press the button 'S1' on the control board, until the 'LEARN' indicator light turns on, then release the button. While the light is on, press the button intended to be paired on the remote control twice, the 'LEARN' indicator light will flash repeatedly and then turn off when remote control is paired. A maximum 40 remote controls can be paired to one motor.



Press and hold learning button(S1) until the Learn LED flashed on.



While the light is on, press the first button on the remote control twice



The Learn LED will flash repeatedly and then turn off, when the remotes is paired.

Clearing Remote Controls

To delete all paired remote controls, press and hold the button 'S1' till LEARN LED turns on. When the LEARN LED turns off, all previously paired remote controls will be deleted.

B Standard Control Board

Programming and Wiring

Any works to the 110V AC must only be performed by a licensed electrician.
Ensure power is off before any modifications are made.

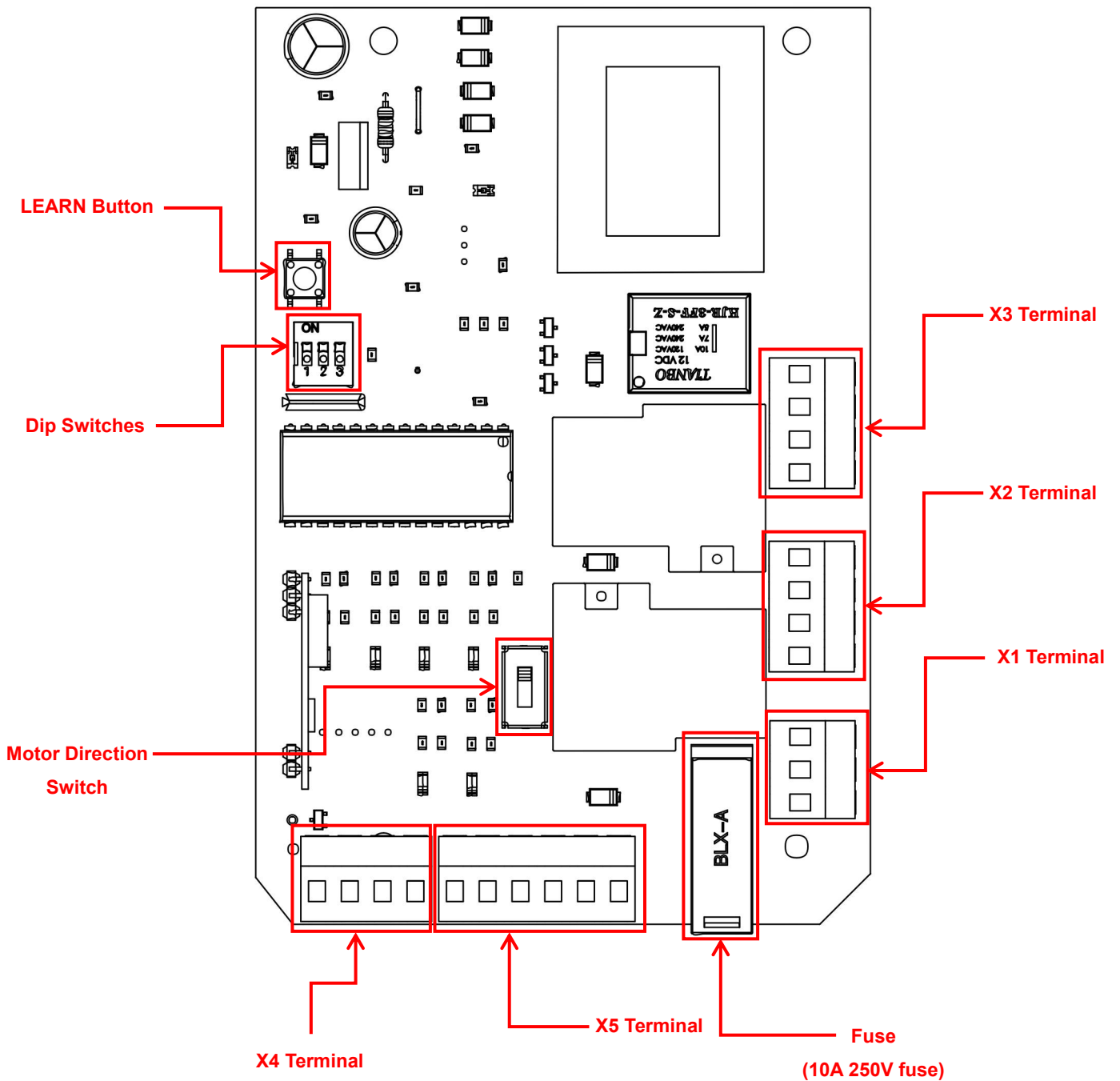


Figure 22

DIP Switch Adjustment

All changes to these settings must be completed by a licensed electrician.

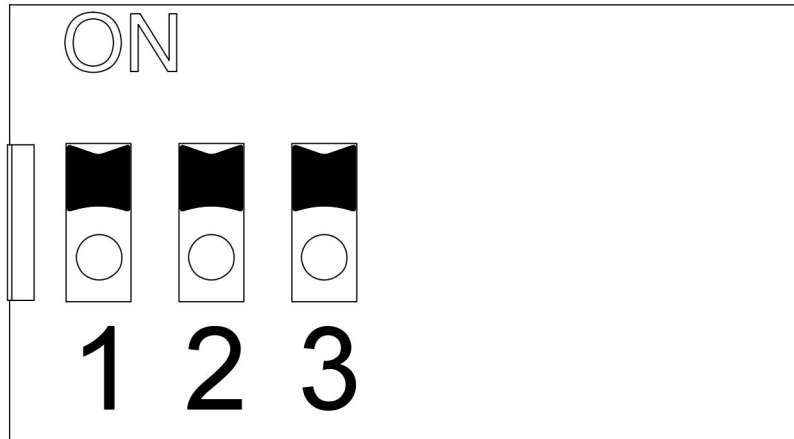
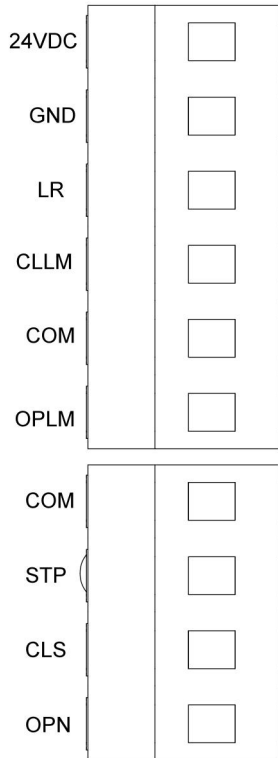


Figure 23

Number	Function	Description
1	External Push Button Switch	<p>ON-Three button switch: X4 Terminal OPN - Open, CLS - Close, STP - Stop, COM - Common Terminal</p> <p>OFF-Single button switch: CLS and COM on X4 Terminal can be used to circularly control OPEN/STOP/CLOSE/STOP of the gate opener.</p>
2	Automatic Close Time	<p>Automatic close time setting: the gate is operated to open by remote control operation and will close automatically after a few seconds delay.</p> <p>2 ON 3 OFF: automatic close delay time is 15s.</p> <p>2 OFF 3 ON: automatic close delay time is 30s.</p> <p>2 OFF 3 OFF: automatic close delay time is 45s.</p> <p>2 ON 3 ON: No automatic close function.</p> <p>Default setting: 2 ON 3 ON</p> <p>Disable the automatic close function.</p>
3		

Terminal Instructions

All changes to these settings must be completed by a licensed electrician



X5 Terminal: Limit Switch and Photocell Switch.
Additional accessories sold separately

24VDC: Positive Power Supply for Accessories +24VDC.
GND: Negative Power Supply for Accessories -GND.
LR: Photocell Input (N.C.).

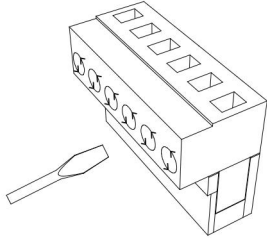
If no photocell, connect LR and GND by a jumper.

CLLM: Close Limit Switch.
COM: Limit Switch Common Terminal.
OPLM: Open Limit Switch.

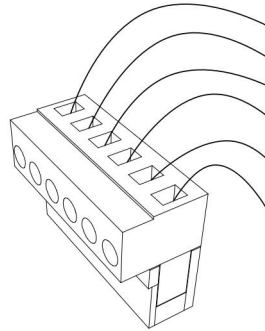
X4 Terminal: External Push Button.
COM: Common Terminal for External Push Button.
STP: External Stop Push Button Switch.
CLS: External Close Push Button Switch.
OPN: External Open Push Button Switch.

Note: If require to change the moving direction, the CLLM and OPLM on X5 Terminal have to be swapped with each other.

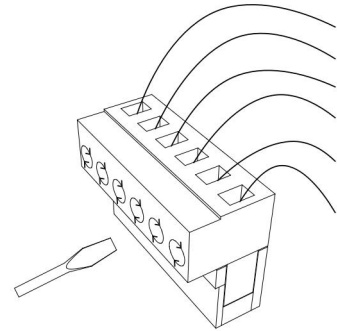
Wiring to the Terminal



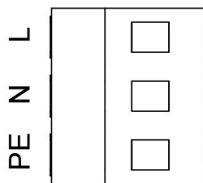
Using a screwdriver to loosen the screw on the side of the terminal.



Insert the wire into the number on the terminal that you are looking to connect to. Refer to pages 22.

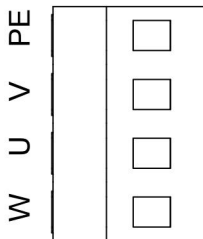


Tighten with a screwdriver to secure the wire in place.



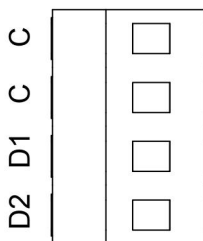
X1 Terminal:

L: Live Wire (brown wire).
N: Neural Wire (blue wire).
PE: Grounding Wire (yellow/green wire).



X2 Terminal:

PE: Earth
V: Common Terminal of Motor.
U: Motor Terminal. Switch SW1 will change gate moving direction.
W: Motor Terminal. Switch SW1 will change gate moving direction.



Note: If require to change the moving direction, not only the the switch SW1 need to be adjusted, but also CLLM and OPLM on X5 Terminal have to be swapped with each other.

X3 Terminal:

C C: Motor Capacitor
D1 D2: Connection for warning lamp(AC220V).

Connecting Infrared Photocells

The below steps must be completed by a licensed electrician.

Highly recommend the use of infrared photocells as an additional safety feature.

While closing, if the ray of the Infrared Photocell is blocked, the gate will stop and reverse immediately, to protect user and property security. To install photocells, connect wiring as per Figure 24. You must remove the wire jumper between GND and LR on X5 terminal (refer to Figure 25).

The distance between photocell receiver and photocell transmitter should not be less than 2 meters; otherwise, the induction effect of photocell may be affected.

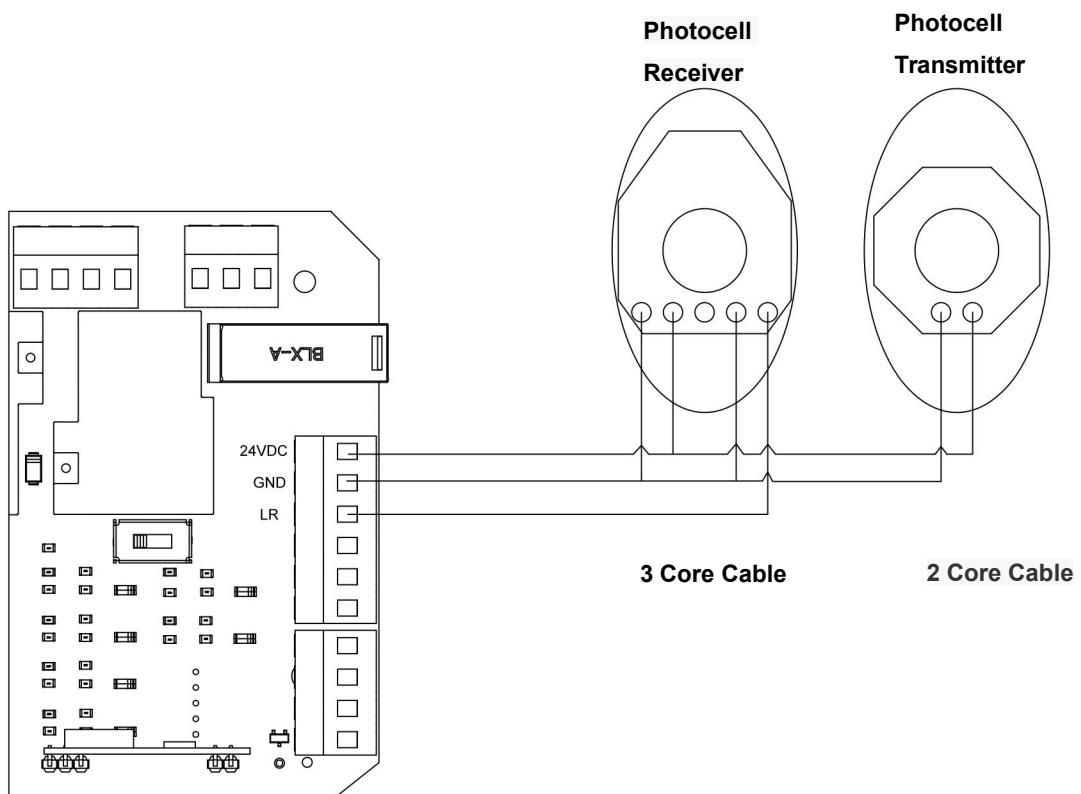
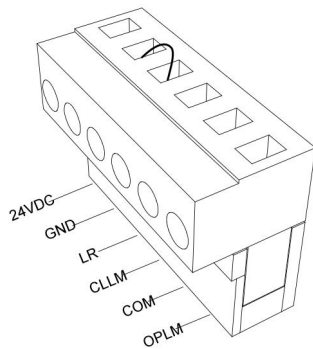
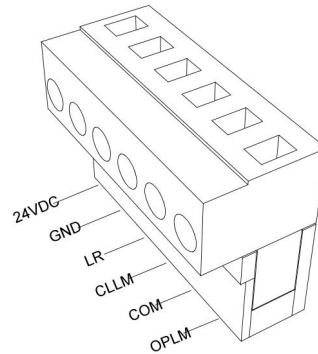


Figure 24



Loosen LR and GND on X5 Terminal with a screwdriver. Make sure the power is disconnected before doing so.

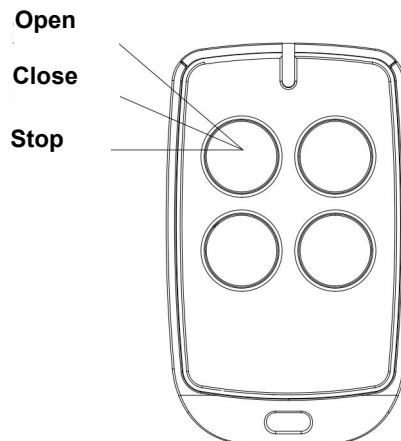


Remove the jumper wire between LR & GND on X5 Terminal.

Figure 25

Remote Control Operation

Single button mode remote control: OPEN/CLOSE/STOP of motor are controlled by one button circularly on the remote control

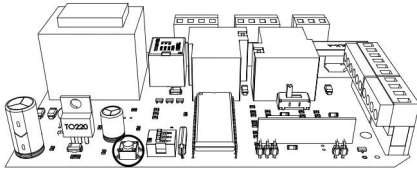


Single Button Mode Remote Control

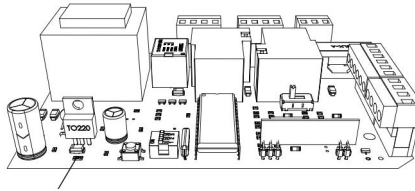
Figure 26

Remote Control Learning

Remove the motor outer cover and continue to remove the transparent PCB cover, press the button 'AN1' on the control board, until the 'LED2' indicator light turns on, then release the button. While the light is on, press the button intended to be paired on the remote control twice, the 'LED2' indicator light will flash repeatedly and then turn off when remote control is paired. A maximum 20 remote controls can be paired to one gate opener.

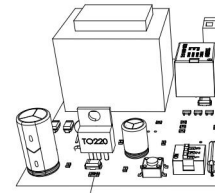


Press and hold the learn button (AN1) until 'LED2' flashes.



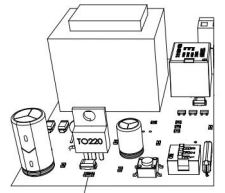
on

When the light is on, press the first button on the remote control twice.



on

The 'LED2' will flash repeatedly and then turn off. After which the remote is paired.



off

Clearing Remote Controls

To delete all paired remote controls, press and hold the button 'AN1', when the 'LED2' turns off, all previously paired remote controls will be deleted.

Maintenance

The gate should be checked every month to make sure it operates normally.

For the sake of safety, each gate is suggested to be equipped with infrared protector, and regular inspection is required.

Before installation and operation of the gate opener, please read all instructions carefully.

Our company keep the right to change the instruction without prior notice.

Troubleshooting

Any troubleshooting work below done to the motor must be completed by a licensed electrician and only whilst the power is off and the motor is unplugged!

Problem	Possible Reason	Solution
The gate cannot open or close normally, and LED does not light.	<ol style="list-style-type: none"> 1. The power supply is disconnected. 2. Fuse is blown. 3. Control board X1 terminal wrongly wired. 	<ol style="list-style-type: none"> 1. Connect the power supply. 2. Check the fuse (FU) and replace if blown. 3. Re-wiring according to user manual.
The gate can only open, but cannot close.	<ol style="list-style-type: none"> 1. Photocell wrongly wired. 2. Photocell wrongly installed. 3. Photocell is blocked by objects. 4. Sensitivity of obstacle is too high (Intelligent type). 5. Hall sensor parts damaged (Intelligent type). 	<ol style="list-style-type: none"> 1. If not connect photocell, please ensure the infrared port and GND port has a jumper wire; if connect photocell, please ensure the wiring is correct and the photocell status is N.C. 2. Ensure that the photocell mounting position can be mutually aligned. 3. Remove the obstacle. 4. Reduce the sensitivity of obstacle. 5. Replace hall sensor parts.
Remote control doesn't work.	<ol style="list-style-type: none"> 1. Battery level is too low. 2. Remote control not paired. 	<ol style="list-style-type: none"> 1. Change the battery. 2. Pair the remote control to the gate opener.
Press OPEN, CLOSE button, the gate is not moving, motor has noise.	<ol style="list-style-type: none"> 1. Capacitor damaged. 2. Capacitor is poor connected. 3. Gate moving is not smoothly 	<ol style="list-style-type: none"> 1. Change capacitor. 2. Check the capacitor wiring. 3. Adjust the motor or gate according to the actual situation.
Not stop when running to opening or closing limit switch position.	<ol style="list-style-type: none"> 1. The opening or closing limit switch is in opposite. 2. Magnetic limit switch badly installed. 	<ol style="list-style-type: none"> 1. Check whether the limit switch wiring is consistent with the motor running direction. 2. Check whether the distance and height between magnetic limit switch and motor reaches to standard requirement.
Leakage switch tripped.	Power supply cable short circuit or motor wire short circuit.	Check wiring.

Drawing and Measurements

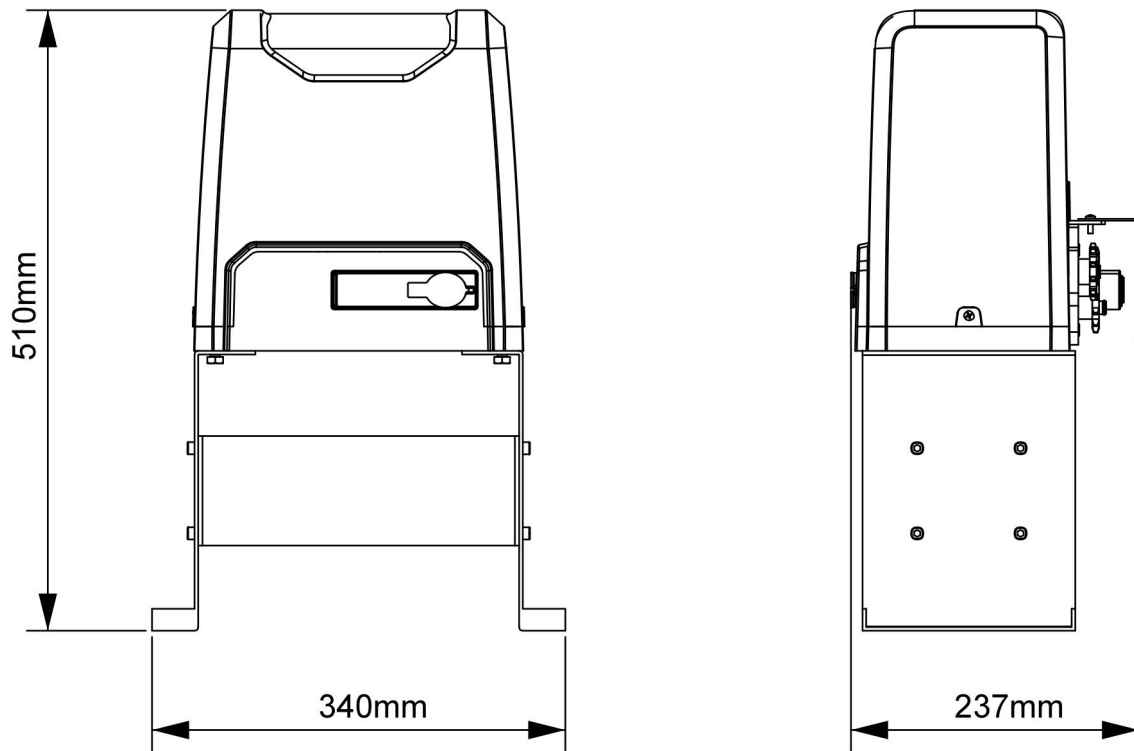


Figure 27

Warranty

Warranty Ordinance

1. To repair against this warranty card and invoice during the warranty period.
 2. Warranty period: 1 year after the date of invoice.
 3. Without unauthorized dismantling, any product broken or damage due to quality problem, we'll offer the repair service for free or replace for free.
 4. The malfunction and damaged caused by incorrect use or man fault is not covered by this warranty.
-

Maintenance Record

Check Date	Check Content	Maintained by