GATEXPERT

Sliding Gate Opener
User Manual

SL500DCW

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.**

WARRANTY

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 damages caused by incorrect use or man fault is not covered by this warranty.

CONTACT US

E-mail: sales@gatexpertstore.com

- **Please fill in the order information in the form below.**
- **All personal information you provided will be only used for warranty service and kept strictly confidential.**
- **Refer to this list when contacting GATEXPERT for technical service or assistance with your automatic gate opener.**
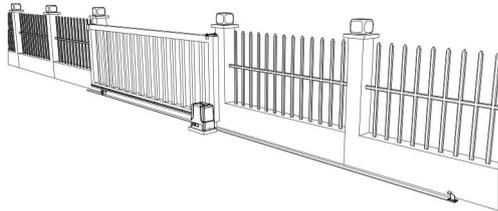
Order Number	Product Model	Purchase Date	Country / Region
Email Address			
Issue Details			

CONTENTS

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**
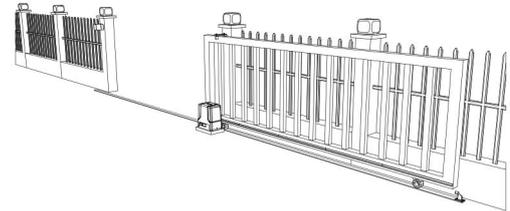
Figure 1

Before installation: Unlock the motor, output gear should be rotated easily, then slide the gate by hand.
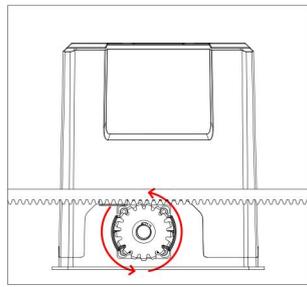
Unlock the motor, the output gear can be rotated by hand.   **Slide the gate by hand**
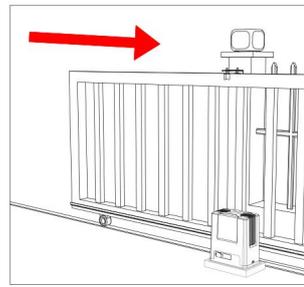
Figure 2

Note: Ensure that the gate opener is unplugged before proceeding with installation. Please keep fingers away from the motor output gear 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.
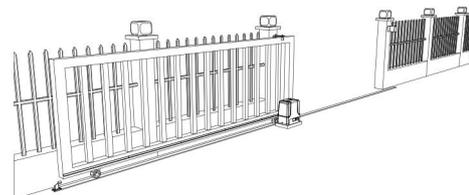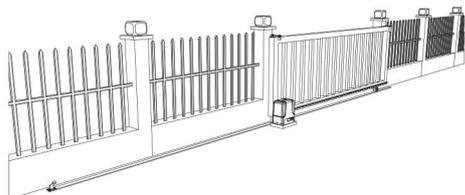
Figure 3

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.
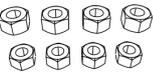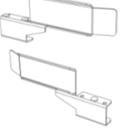·   Never mount any device that operates the gate opener where the user can reach over (under, around or through) the gate to operate the controls. These must be placed away from any moving range of the moving gate.
·   Ensure power plug is disconnected from the power socket during installation or maintenance.
·   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	Note
1		Motor	1	
2		Manual Release Keys	2	
3		Remote Controls	2	
4		Magnetic/Spring Limit Switch Accessories Box	1	
5		Anchor Bolt M8	4	
5-1		Nuts M8	8	
5-2		Flat Washers φ8	8	
5-3		Spring Washers φ8	8	
6		Lithium Battery 24V/2Ah	1	
7		Spring Limit Switch Stop	1 SET	For motor with spring limit switch
		Magnet Limit Switch Stop Mounting Screws M6X10	4	
8		Magnet Bracket	2	
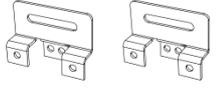
No.	Picture	Name	Quantity	Note
		Magnet Limit Switch Stop	2	For motor with magnetic limit switch
		Magnet Limit Switch Stop Mounting Screws M6X18	2	
		Nuts M8	4	
		Flat Washers φ8	2	
		Spring Washers φ8	2	

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

Parts List (optional)

No.	Picture	Name	Quantity
1		Galvanized Gear Rack	1m/pc
2		Nylon Gear Rack	1m/pc
3		Infrared Photocell	1
4		Wireless Keypad	1
5		Alarm Lamp	1
6		WIFI Module	1
7		Mounting Plate	1
8		Hexagon Head Bolt M8X40	4
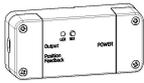
Additional remote controls: Spare/Additional remotes for the automatic gate kit, these will need to be paired to the motor.

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 gate through an external push-button.

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

WIFI module: Allows users to control the gate with mobile phone.

Technical Parameters

Model	SL500DCW
Power Supply	110VAC/60Hz; 220VAC/50Hz
Motor Power	140W
Gate Moving Speed	21-22m/min
Maximum Loading Weight	500KG
Remote Control Distance	≥30m
Remote Control Mode	Single button mode / Three button mode
Limit Switch	Magnetic limit switch/Spring limit switch
Working Noise	≤56dB
Working Duty	S1
Recording of up Remote Controls	100
Remote Frequency	433.92 MHz
Working Temperature	-20°C - +70°C
Package Weight	10KG
Battery Specification	Lithium 24V/2Ah*1pc

Installation

Before You Start

· SL500DCW Sliding Gate Automation Kit is suitable for powering the opening and closing motion of gates up to 500kg in weight, up to a length of 12m.
· Gate motion is achieved by the rotating output gear of the gate opener driving the gear rack (sold separately) 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 opener 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)
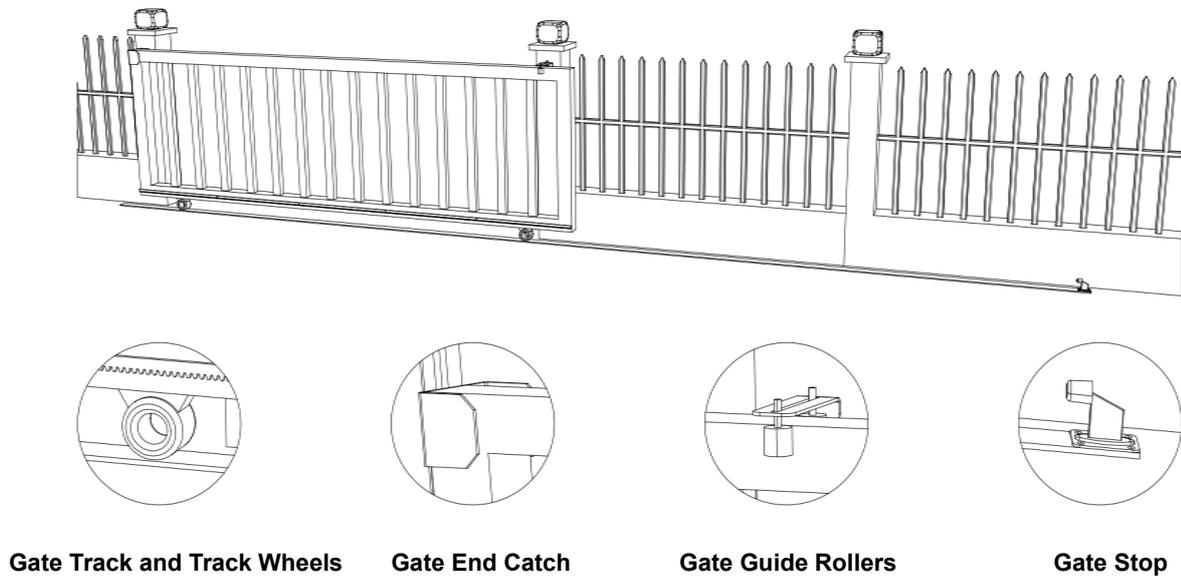· Phillips head screwdriver
· Straight screwdriver

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.
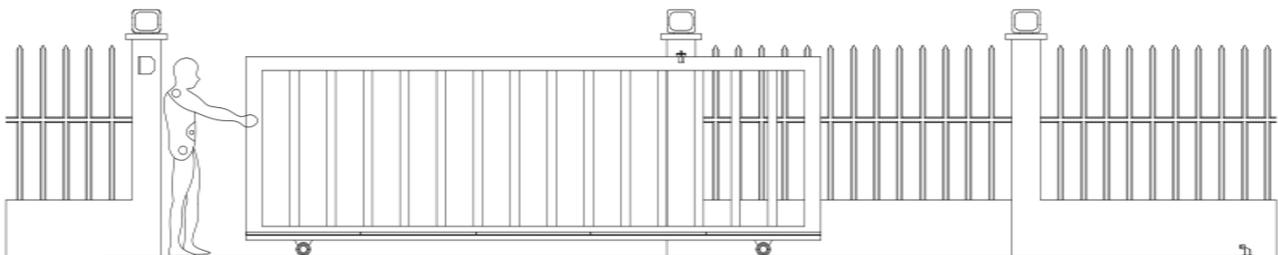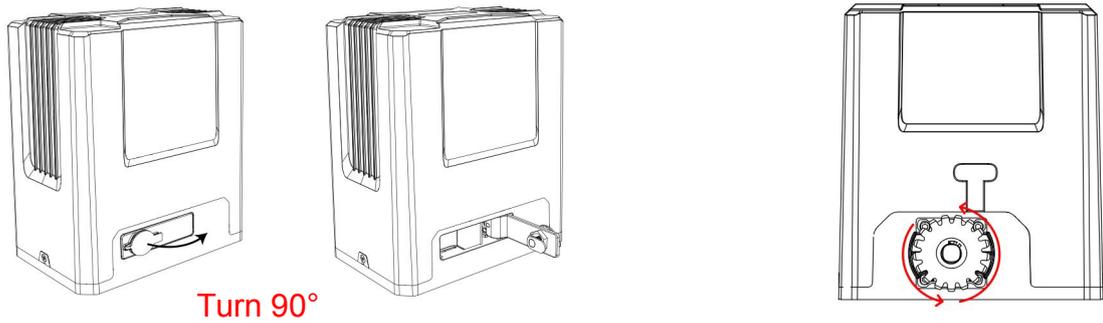

The gate should slide smoothly by hand before attempting to install the gate opener.

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 gear rotates freely by hand (Figure 6).

Turn 90°

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 gear 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.
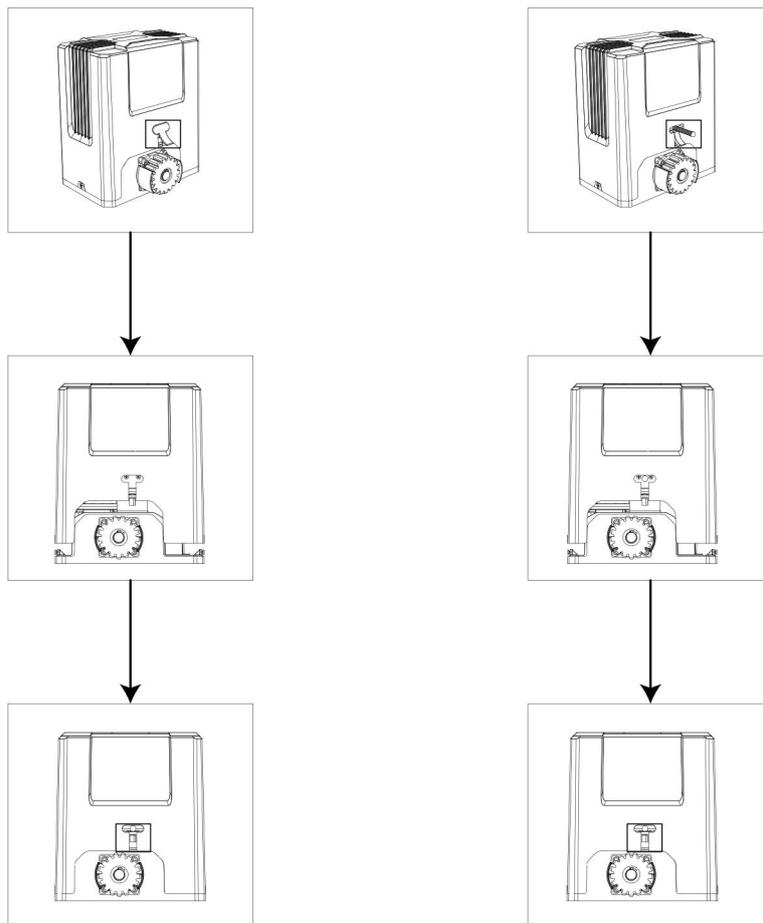·   Remove the rubber grommet below the limit switch (Figure 7).

Figure 7

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 450mm long x 300mm wide and a minimum depth of 200mm (Standard requirement).

· Ensure surface is level and parallel to the driveway.
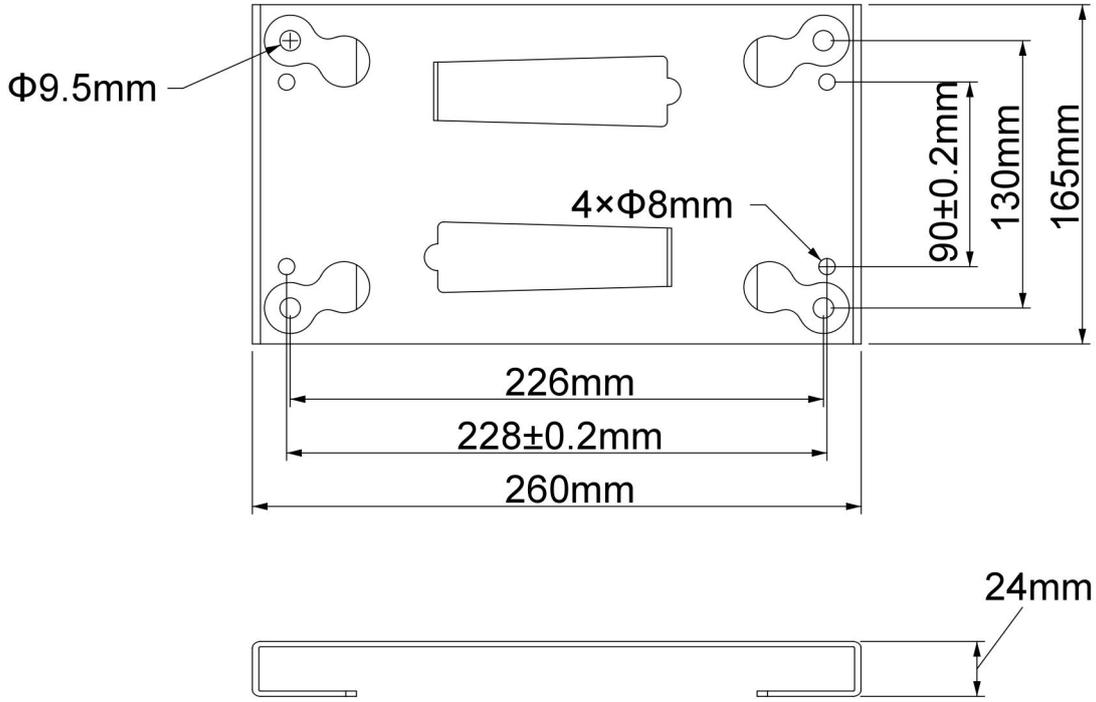
Mounting Plate Dimensions

Figure 8

Step 5 - Fitting Mounting Plate and Motor

Without Mounting Plate

· Pre embed the anchor bolts according to holes in motor base before concerting (as per Figure 9).

· After concrete hardening, bolt the motor with M8x40mm bolts, spring and flat washers provided and tighten as required. (The height can be slightly adjusted by bottom bolts as per Figure 10).

Figure 9

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The bolts and flat washer between mounting plate and motor base are

used for adjusting the height of the motor.

Figure 10

With Mounting Plate

· Pre embed the anchor bolts as per Φ10 holes in Figure 8 before concreting, after concrete hardening, place the mounting plate, fit and tighten anchor bolts.(as per figure 11).

· Bolt motor to the mounting plate using the M8 x 40mm bolts with spring and flat washers provided and tighten as required (as per figure 12).
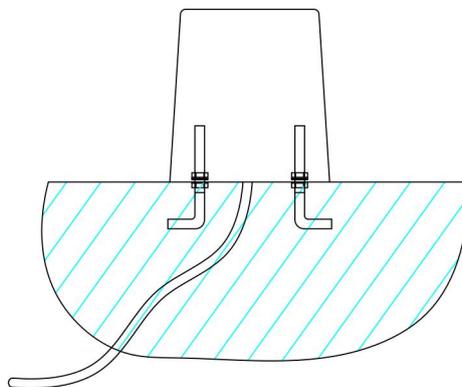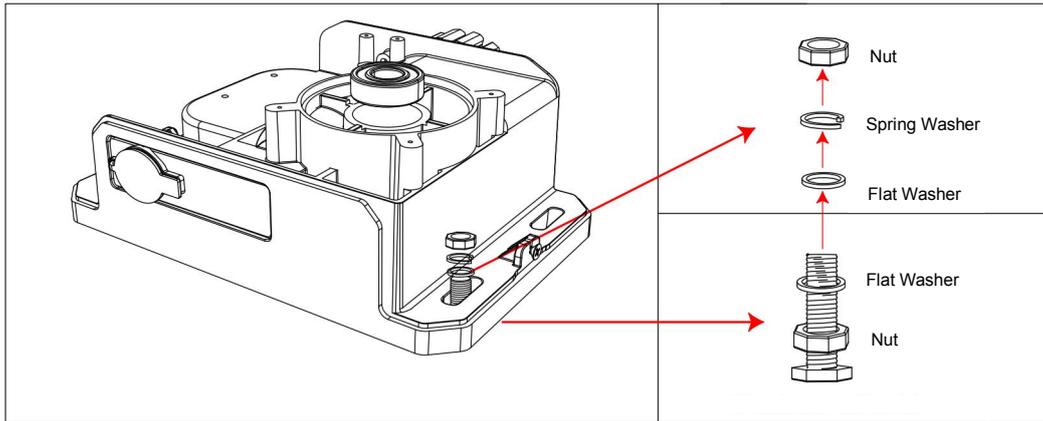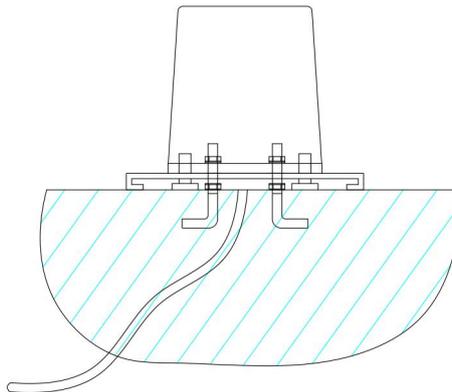

Figure 11
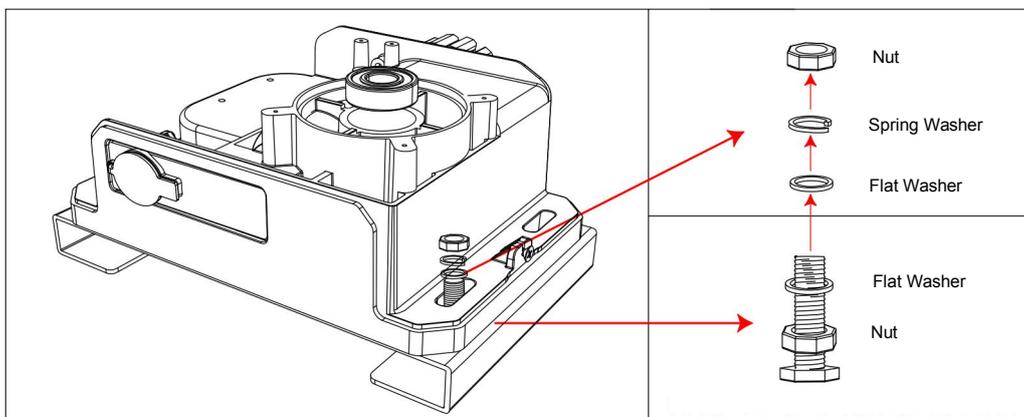
The bolts and flat washer between mounting plate and motor base are

used for adjusting the height of the motor.

Figure 12

Fitting Motor

- Fit motor and mounting plate(if with) on the concrete footing.
- Ensure the motor output gear and gear rack are correctly aligned. Gear and gear rack should be centered as much as possible.
- Take the motor away from mounting plate.
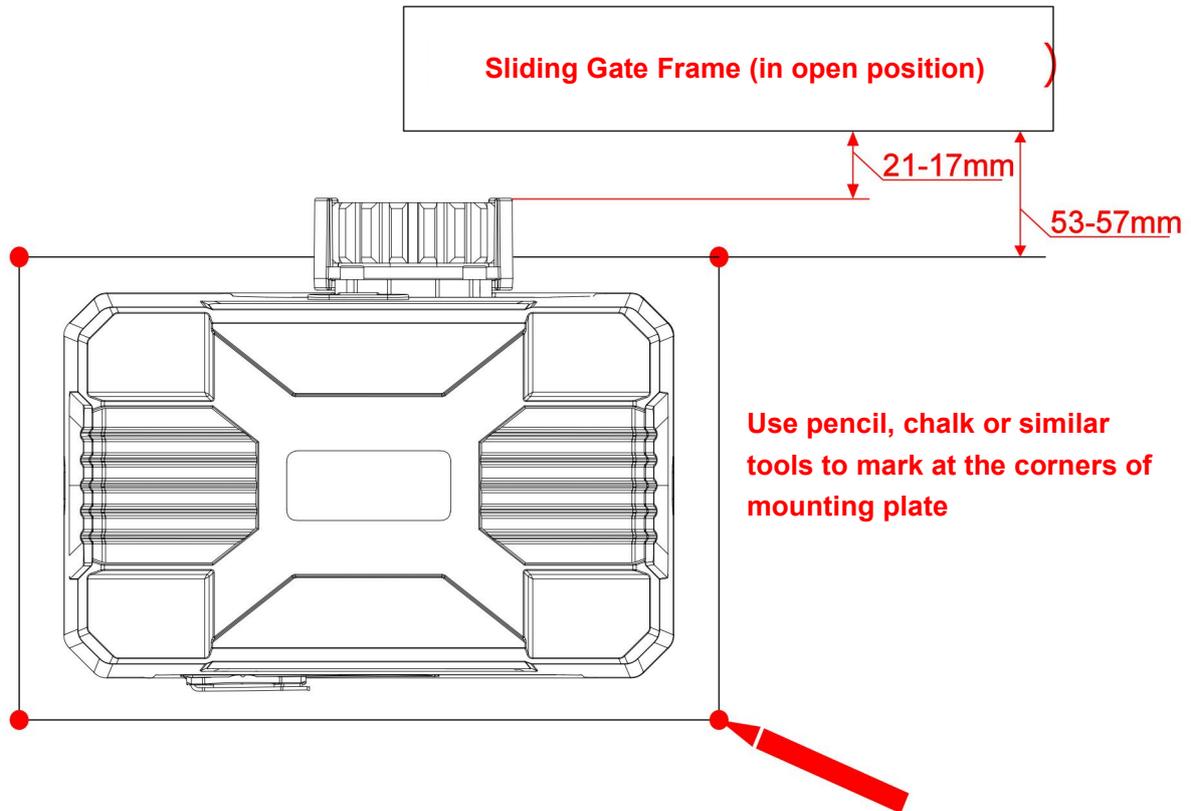
Figure 13

Step 6 - Gear Rack & Motor Alignment

- See Figure 15 for recommended gear rack mounting height.
- Ensure that the output gear has a minimum clearance of 1-2mm along the entire length of gear rack fitted to the gate (as per Figure 14)
- Ensure output gear and gear rack are correctly aligned. Under no circumstances should the gate opener output gear carry any weight of the gate. It is the task of the gate castors or wheels to carry the weight of the gate (as per Figure 14).
- If the gate doesn't slide freely by hand, adjust the height of the gear rack accordingly until the full length of gate slides freely by hand.

Figure 14

Output Gear

115mm

Figure 15

Step 7 - Limit Switch Stops

a. Spring Limit Switch Setting

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

The limit switch stops are designed to set the desired opening and closing position of

Limit travel stop

Limit travel stop mounting screws M6x18

Gear rack

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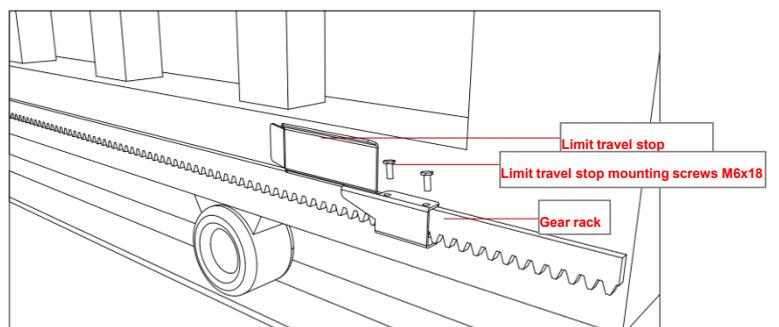
your gate. These limit switch stops are designed to come into contact with the spring/magnetic limit switch.

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.
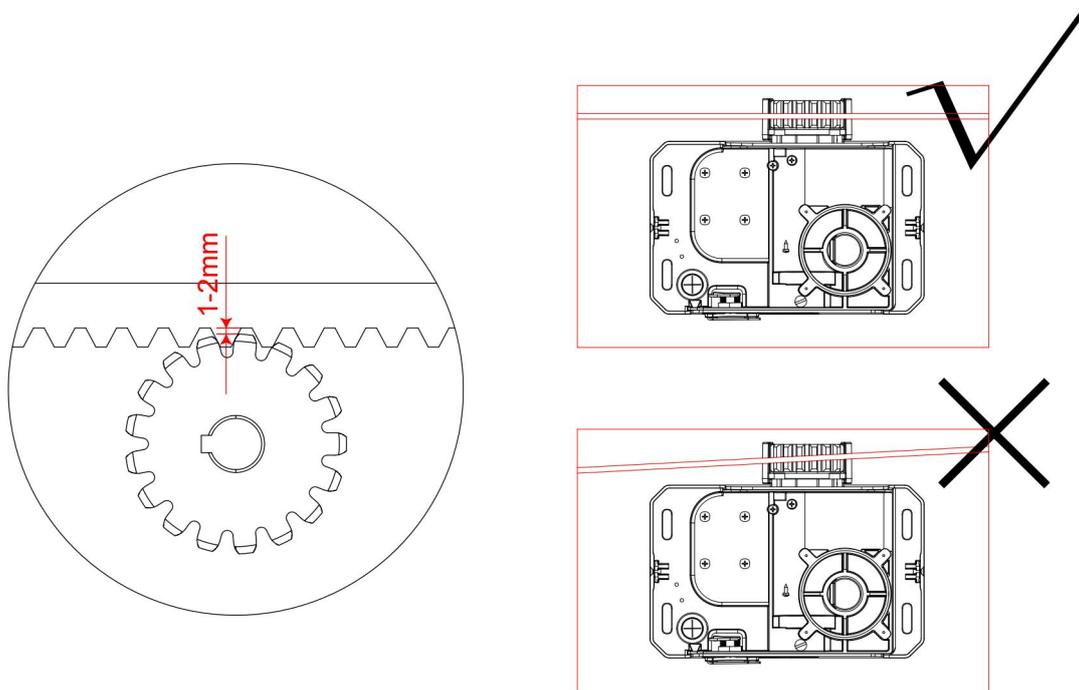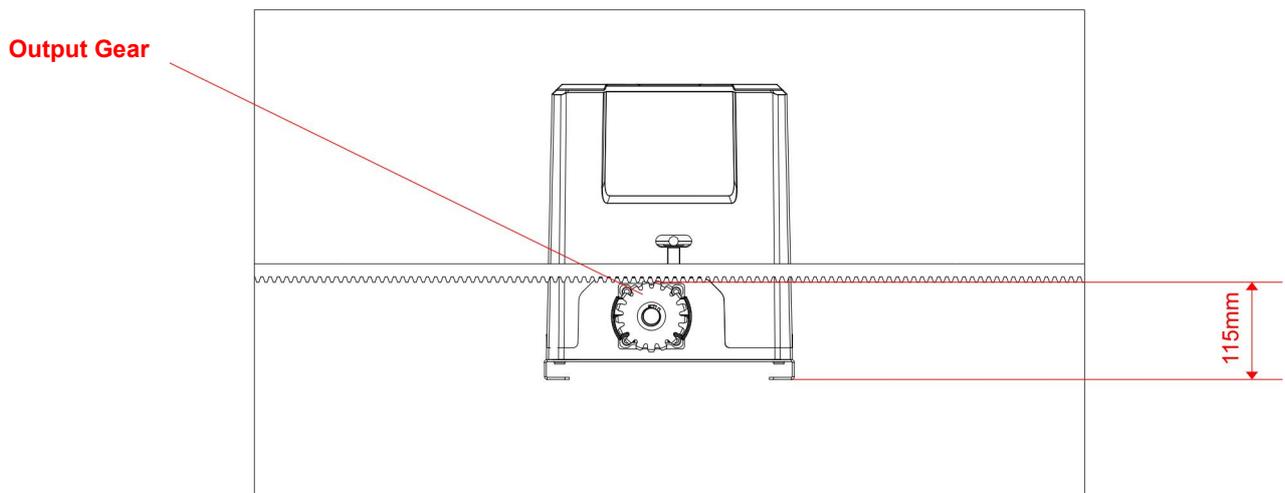
Setting the Limit Switch Stops

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 gear rack at the point where it meets the Spring/Magnetic limit switch on the motor.
· Tighten locking screws of limit switch stop.

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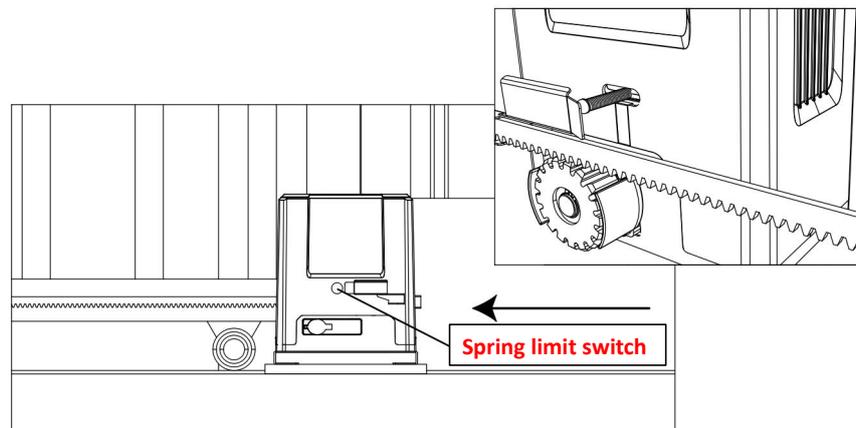
Open Position
· Position gate 150-200mm back from the gate stop open position. This will help in making sure you do not slam the gate into the end stop/catch when setting the open position under power.
· Fit limit switch stop onto the top of gear rack at the point where it meets the Spring/Magnetic limit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

The installation of spring limit switch stops is shown in figure above.

b. Magnetic Limit Switch Setting

Included in your gate opener kit are two magnet limit switch stops with two different polarities: stop in black color(N), stop in blue color(S).

These two stops must be fitted to the gear racks on your gate to ensure safe operation. Before you fitting the limit switch stops, you should install the limit switch stops on the stop brackets first. After fitting, please set on the control board to enable the gate into manual control mode(refer to page 19 "Manual Control Mode"), then operate the motor to run to its open or closed limit switch position to check if the limit switch can be well contacted.

It is extremely dangerous that bad contact between the limit switch and limit switch stops can cause crash of gate, damage of internal structure of the motor, moreover, the gate may slide off the guide rail.

Installation drawing of limit switch stop polarities for right-hand and left-hand:

Left-hand installed

Right-hand installed

Black magnet (N)   **Blue magnet (S)**   **Black magnet (N)**   **Blue magnet (S)**

M6×18   M6×18
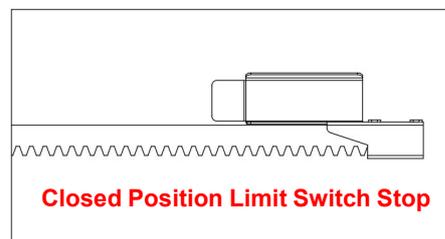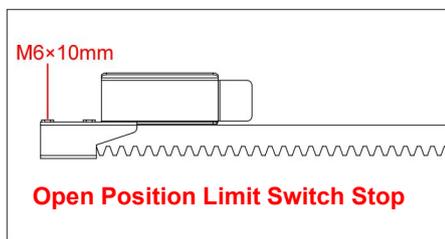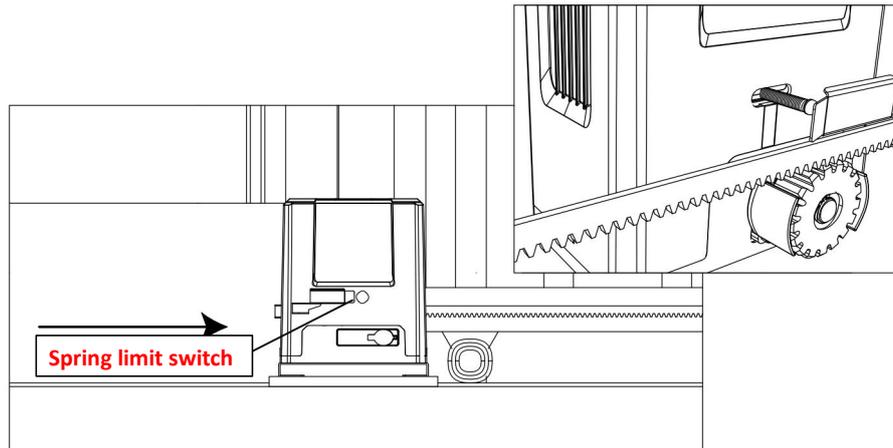
Figure 16

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 gear rack at the point where it meets the Spring/Magnetic limit switch on the motor.

·   Tighten locking screws of limit switch stop.

Magnetic limit switch

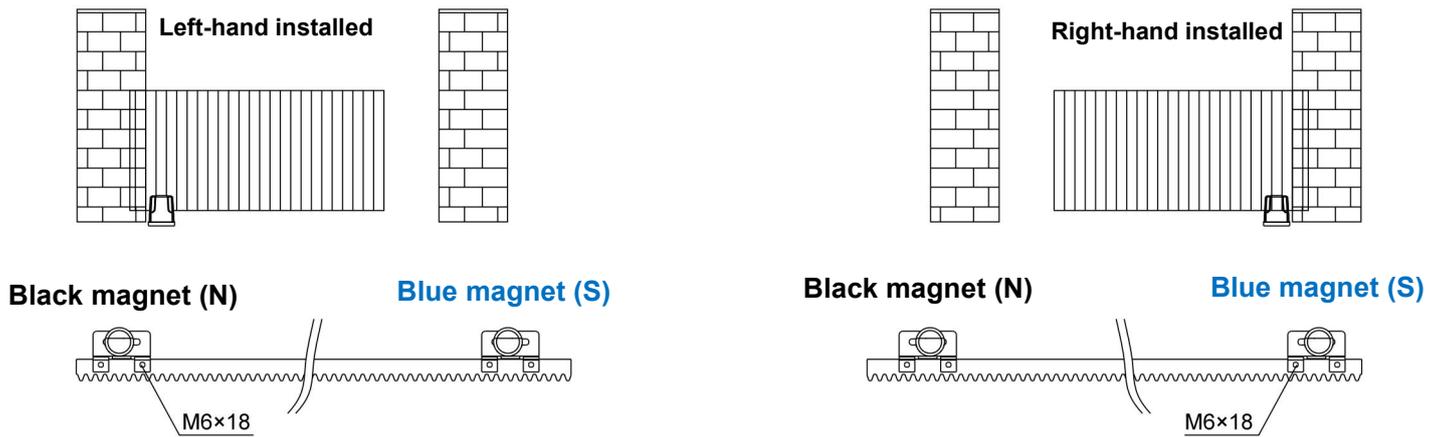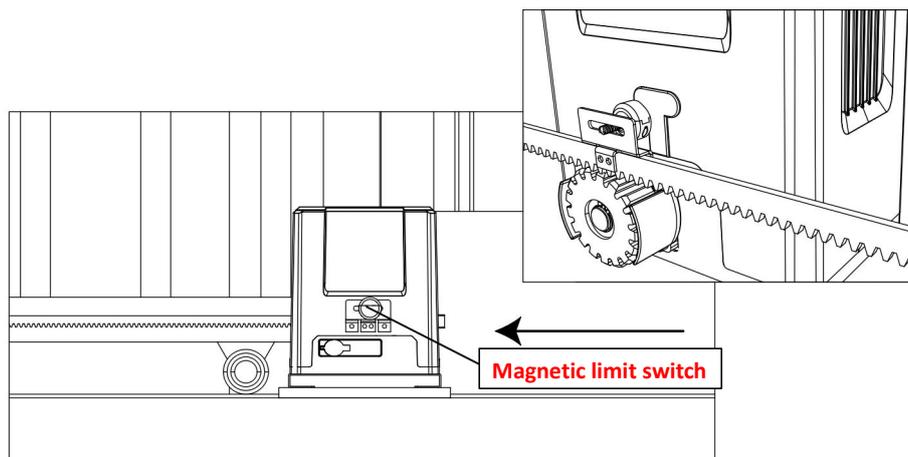## Open Position

·   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 gear rack at the point where it meets the Spring/Magnetic limit switch on the motor.

·   Tighten locking screws of limit switch stop.

Test the spring/magnetic limit switch stops by moving the gate manually until you hear a click, making sure contact is made with the spring/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.
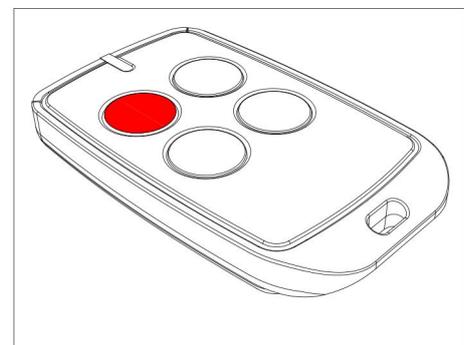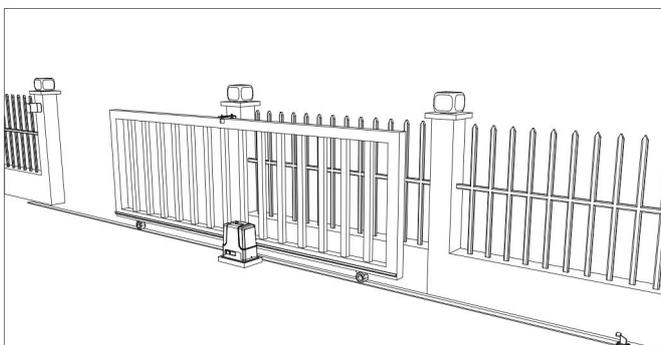
Figure 17

Step 9 - Testing Travel and Limit Stop Position

Ensure gate opener is installed as per step 4, 5 and 6 and the sliding gate is in the middle position.
Limit switch stops are correctly installed and well contacted with Spring/Magnetic limit switch.
Please refer to page 11-15 for the setting of open and closed limit switch position.
The ideal closed final position for the gate frame is 10-15mm from closed gate end catch.
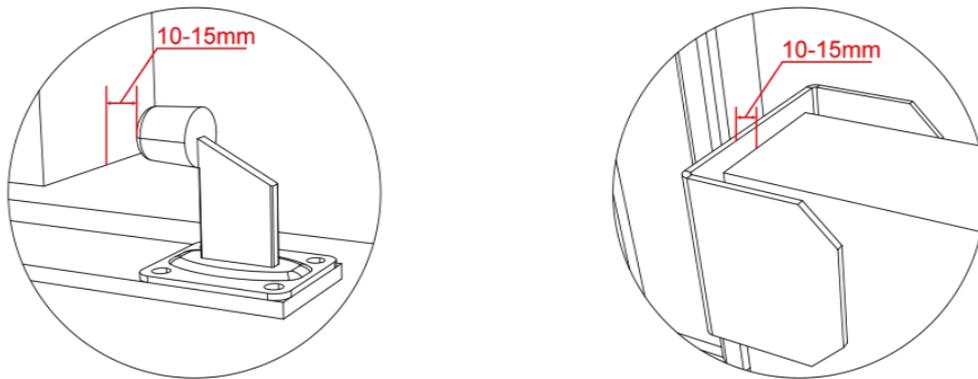
Figure 18

Now the basic open and closed positions are set, for further setting functions and adjusting parameters, please refer to pages 17-28 in this manual.

Programming and Wiring

Any works to the 110V/220V AC must only be performed by a licensed electrician.
Ensure power is off before any modifications are made.
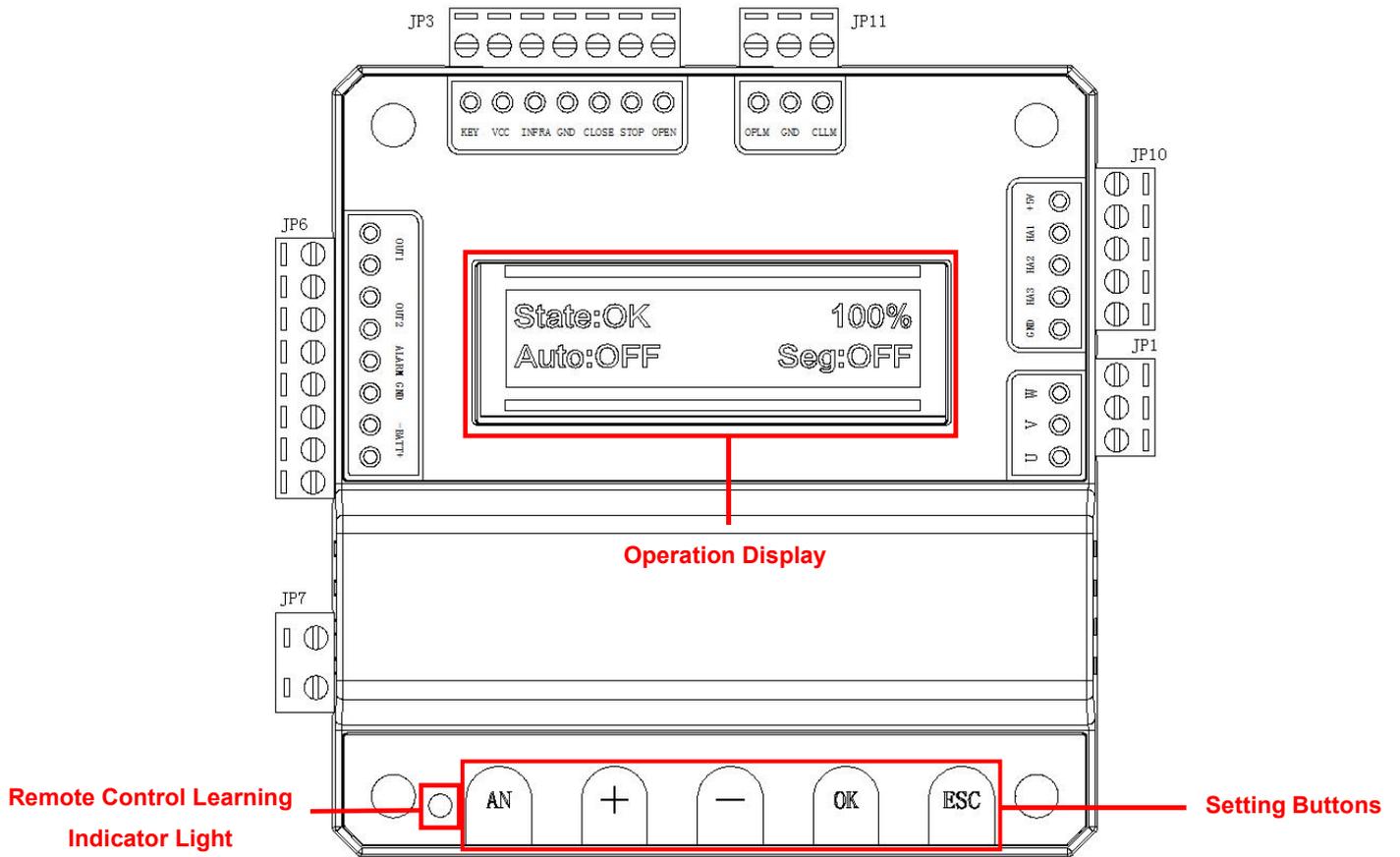
Figure 19

Terminal Instructions

All changes to these settings below must be completed by licensed electrician.
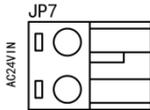
JP7 Terminal: Power Supply Input
AC24VIN: AC 24V Power Supply Input
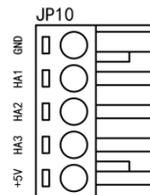
JP10 Terminal: Hall Sensor Wire
GND: Black Thin Wire
HA1: Blue Thin Wire
HA2: White Thin Wire
HA3: Green Thin Wire
+5V: Red Thin Wire
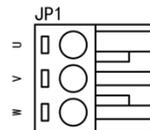
JP1 Terminal: Motor Wire
U: Green Thick Wire
V: White Thick Wire
W: Blue Thick Wire
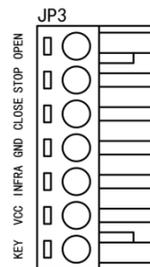
JP3 Terminal: External Push Button Input
OPEN: External Open Push Button Switch
STOP: External Stop Push Button Switch
CLOSE: External Close Push Button Switch
GND: Common Terminal for External Push Button
INFRA: Input Terminal for Photocell
VCC: Output Terminal for Power Supply
KEY: External O/S/C Push Button Switch/
Half Open Push Button Switch (Paragraph Mode)
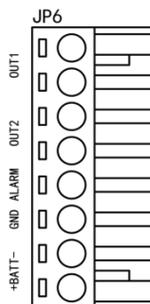
JP6 Terminal: Signal Output
OUT1: Output Terminal for Gate Opened in Place/Gate Closed in Place/Gate Meets Obstacles/Interlock
OUT2: Output Terminal for Gate Opened in Place/Gate Closed in Place/Gate Meets Obstacles/Interlock
ALARM: Alarm Lamp +12/24VDC
GND: Output Terminal for Negative
+BATT-: Battery Positive and Negative
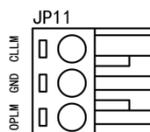
JP11 Terminal: Limit Switch Input
CLLM: Close Limit Switch
GND: Limit Switch Common Terminal
OPLM: Open Limit Switch

Operation Interface Instruction
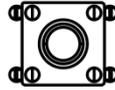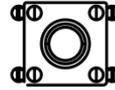
| REMOTE | UP | DOWN | OK | ESC |
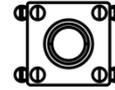
Indicator Lights:

AN/REMOTE: Remote control learning
+/UP: Flip up button/Open of travel learning
-/DOWN: Flip down button/Close of travel learning
OK: Confirm/Enter
ESC: Cancel/Exit

Initial Interface

State: OK	100%
Auto: OFF	Seg: OFF

Indicates the motor running status , the proportion of the opening length in Paragraph Mode, the automatic closing status.

Press OK to enter the menu selection interface

Setting Menu: 1.Limit Set (Set the Limit Switch) 2.Parameter (Set the Parameters) 3.Motor Select (Motor Selection) 4.Relay Set (Relay Output) 5.Input Check (Input Detection) 6.System Reset (System Reset)	Flip up/down selection OK enter ESC Exit to the initial interface

Each time when you operate the menu setting, you have to enter the above interface to go to the next operation.

Setting Travel Limits

Select 1. Limit Set in the parameter selection interface to enter the interface.

Ask whether to reset the limit, press OK to confirm reset and enter the direction recognition interface.

Limit Set			
Reset Limit?			
		OK Confirm	ESC Return

Confirm the door opening direction by +/UP button or external input button OPEN before selection, press OK, the direction is forward; press ESC, the direction is reverse.

Press Open Check			
Direction			
		OK Right direction	ESC Reverse direction

After selection, enter into the interface of setting coordinates for opening travel, press and hold +/UP buton or external input button OPEN in this interface, make the door run to the position of opening position and then release the buton to stop the operation, after confirming that the position is correct, and then press OK.

Set Open Limit

Enter the coordinate interface of closing door setting, in this interface, keep holding down the -/DOWN button or external input button CLOSE, so that the door will run to the position of closing position and then release the button to stop the operation.

Set Close Limit

After confirming the position is correct, press OK button again, the following interface will be displayed after the limit is successfully set, and return to the menu selection interface after 3 seconds.

Set Limit OK

If the following interface is displayed during travel setup

Set Limit Fall
Limit Reverse

Gate open coordinate is smaller than close coordinate: Please make sure the selection of open direction is correct, and then adjust the 2.Encoder Direct option under 3.Motor Select menu.

Set Limit Fall
Length Over Max

Travel setting is too long

Set Limit Fall
Length Under Min

Travel setting is too short

If the control baord is restored factory setting, and limit switch is going to be switched between NO(motor installed with magnetic limit switch) and NC(motor installed with spring limit switch), please go to intial interface and press "OK" button to enter into menu selection, press "-" button, the interface will display as follows:

Setting Menu
2.Parameter

Press "OK" to enter into 2. Parameter

Parameter
1.High Speed

Press "+" or "-" to select 18.Limit Enable, press " OK" to enter into the selection for NC or NO according to the limit switch installed on the motor: Magnetic limit switch select NO type; Spring limit switch selcect NC type. Press "OK" and then "ESC" to go back to menu selection interface. Press "+" to select 1.Limit Set to start travel learning steps

Parameter Setting

In the parameter selection interface select 2.Parameter to enter the interface, the following parameter selection specifications

Parameter: Flip up/down Select OK Enter ESC Exit		
1.High Speed	Motor speed during fast running 1-100% adjustment Default 100%	
2.Low Speed	Motor speed when running slowly 1-100% adjustment Default 5%	
3.Scan Speed	Motor speed of travel learning 1-100% adjustment Default 50%	
4.Dec Factor (Distance of Slow Stop)	For adjusting the distance of slow stop. Lower value=Longer distance	
5.FasDec Factor (Distance of Slow Stop after Halfway Stop)	For adjusting the distance of slow stop after halfway stop. Lower value=Longer distance During this slow stop running, if user press stop button on remote control or external push button, the motor will stop immediately.	
6.Infra Mode (Infrared Photocell Type)	NO - Normally open (default) NC - Normally close	
7.Alarm Mode	In Running - Always on while motor is running (default). Not Close - Always on until gate is closed.	
12.Auto CLS Time (Automatic Close Time)	For setting the time of gate automaticlly close 0-99 Seconds 0=Disable automatic close(default)	
13.Remote Mode	Single Key (default) Three Key	
14.Block Mode	For setting the reaction of gate meeting obstacles. Stop - Gate will stop after meeting obstacles (default). Back - Gate will reverse after meeting obstacles.	
15.Block Current	0-25A - Resistance Current Setting Default 8A	
16.Scan Current	0-25A - Resistance Current Setting Default 4A	
17.Current Time	Motor block time setting (Default 100ms setting, don't modify)	
18.Limit Enable	Enable - Limit function enable (default) Disable - Limit function disable	
19.Intrl Length (Don't use temporary)		
20.Salta Set (Saltatory current)	1.Salta Enable - Saltatory current detection function enable/disable	Disable (default) Enable - Used for the need for more sensitive blocking adjustment, the general default setting can be set, when the motor's instantaneous current sudden change, it is considered

	2.Sample Time - Current Sample Time	Saltatory Current Detection Duration Default 0.45 seconds
	3.Salta Up - Open Door Saltatory Trigger Value 0.01-2.50A	Default 0.8A When the door opens with a change of 0.8A, it is considered meeting obstacles.
	4.Salta Down - Close Door Saltatory Trigger Value	Default 0.8A When the door closes with a change of 0.8A, it is considered meeting obstacles.
21.Segment Set	1.Segment Enable	OFF Disable (By default) ON Enable
	2.Half Open Length	0-100% adjustable By default 50%
	3.Open Length of Pedestrian	0-100% adjustable By default 10%

Motor Selection

Select **3. Motor Select** in the parameter selection interface to enter the interface.

Motor Select			
1.Motor Type			
2.Encoder Direct			
Down	Up	OK	ESC

In the menu **2.Encoder Direct** interface: this menu is used to change the encoder detection direction, when the travel setting occurs **Limit Reverse** error adjustment, change the current option to change the encoder detection direction.

Encoder Direct：			
	CCW INC		
	CW INC		
Down	Up	OK	ESC

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Output Selection

Select **4.Relay Set** in the parameter selection interface to enter the interface.

Relay Set:	**Flip up/down Select OK Enter ESC Exit**
1.Out1	Output 1
2.Out2	Output 2

Select to enter the OUT1 menu

Out1 Set:	**Flip up/down Select OK Enter ESC Exit**
None	No output on OUT1 port
Arrival Open	Out1 port is open in place signal output
Arrival Close	Out1 port is closed in place signal output
Block	Out1 port is a blocked signal output
Interlock	Out1 port is interlock signal output

Select to enter the OUT1 menu

Out2 Set:	**Flip up/down Select OK Enter ESC Exit**
None	No output on OUT2 port
Arrival Open	Out2 port is open in place signal output
Arrival Close	Out2 port is closed in place signal output
Block	Out2 port is a blocked signal output
Interlock	Out2 port is interlock signal output

Input Signal Detection

Select **5.Input Check** in the parameter selection interface to enter the interface.

O0 C0 S0		I0 K0	
RF0000		UL0 DL0	
			ESC

Corresponding to the relavant signal input in this interface, the display status will change when the signal is input.

Open key input——O0 to O1

Close key input——C0 to C1

Stop key input——S0 to S1

Infrared signal short NC——I1

Infrared signal disconnect NO——I0

Single cycle input——K0 to K1

RF0000 indicates 4 buttons of the remote control.

Opening limit hardware input——UL0 to UL1

Closing limit hardware input——DL0 to DL1

System Reset

Select 6.System Reset in the parameter selection interface to enter the interface.

System Reset:			
Press OK Reset:			
		OK	ESC

Pressing OK to confirm will reset the system and restore the factory settings. Note: Motor type will not be reset.

Tips: The above is all the content of the menu settings. When the newly installed opener you use it, you can use it normally by setting the travel limit without setting other parameters. If the parameters are set, you can use it normally without setting the travel.

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 open immediately, to protect user and property security. To install photocells, connect wiring as per Figure 21. You must remove the wire jumper between terminal INFRA and terminal GND on JP3 (ref to Figure 20). Please note Figure 21 gives the reference of NO type, to connect with a NC type photocell, please change the wire on NO terminal to NC terminal on photocell receiver, and refer to parameter setting(page 22) to modify 6.Infra Mode to NC. The distance between photocell receiver and photocell transmitter should not be less than 2 meters; otherwise, the induction effect of photocell may be affected.
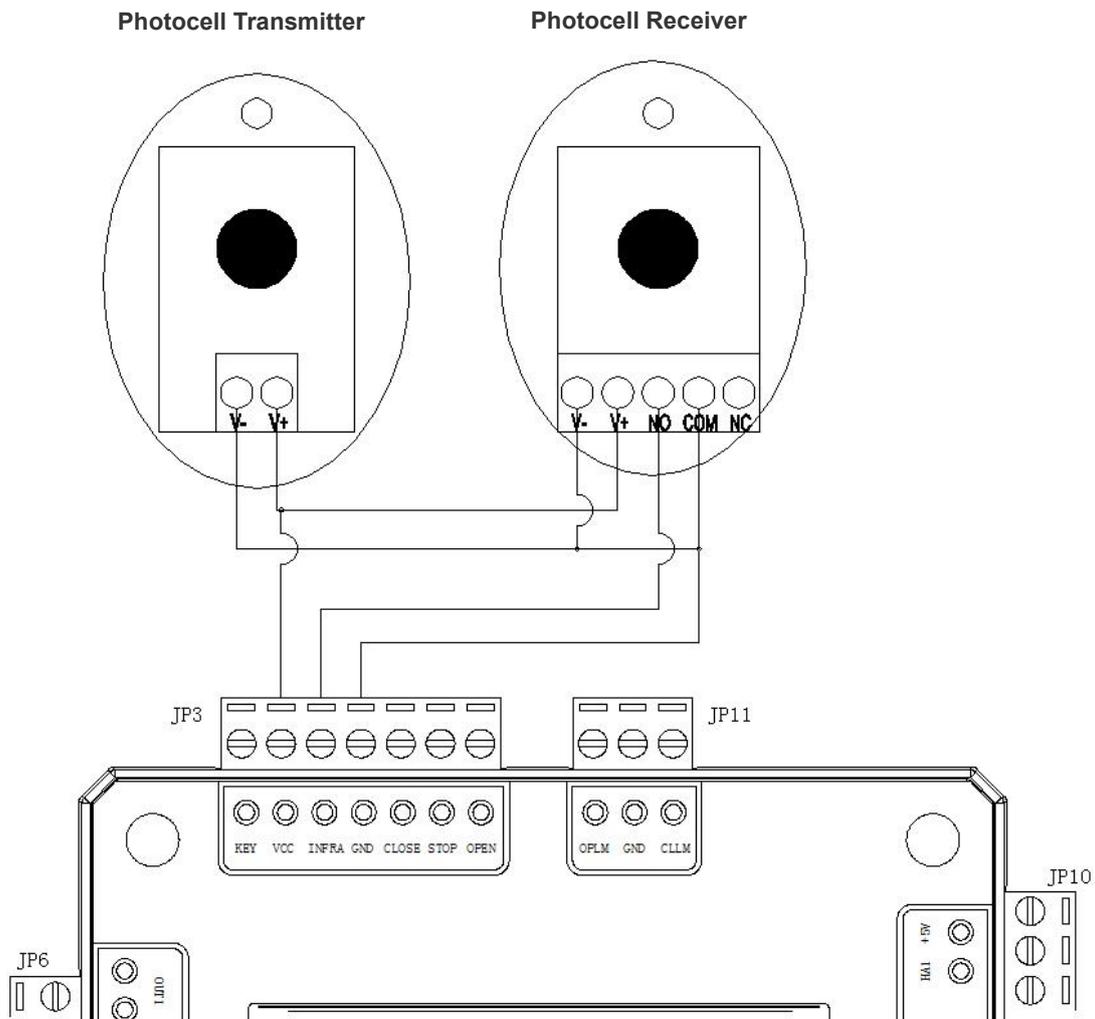

Figure 20

Connecting WIFI Modules

POWER wire to 220VAC.

Outper wire to KEY and GND on JP3 terminal.

Position & Feedback wire to OUT1 and OUT2 on JP6 terminal. Please note OUT1 and OUT2 should be set to Arrival Close(refer to page 24 output selection - relay output setting).
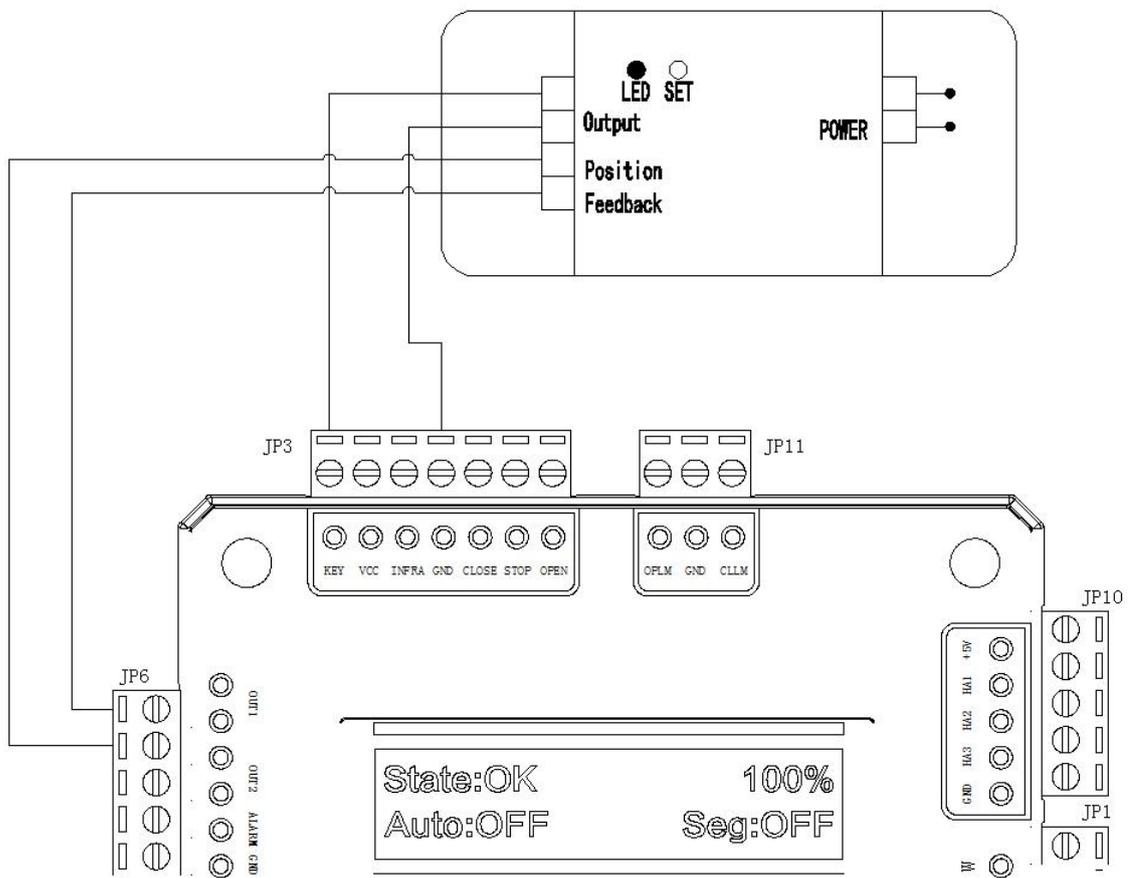

Figure 21

Remote Control Management

Remote Control Learning

Press the button 'AN' on the control board, until the LED light on the receiver turns on, then release the button. While the light is on, press the button intended to be paired on the remote control twice, the LED light will flash repeatedly for six times and then turn off when remote control is paired. A maximum 100 remote controls can be paired to one motor.

Clearing Remote Controls

To delete all paired remote controls, press and hold the button AN for 6 seconds till the LED turns off, all previously paired remote controls will be deleted.

Remote Control Operation

Three button mode remote control: OPEN/CLOSE/STOP of motor are controlled by three buttons separately on the remote control.

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.

Three Button Mode Remote Control   **Single Button Mode Remote Control**

Open   Close   Open

                                                       Close

                                                       Stop

Stop   Pedestrian   Pedestrian
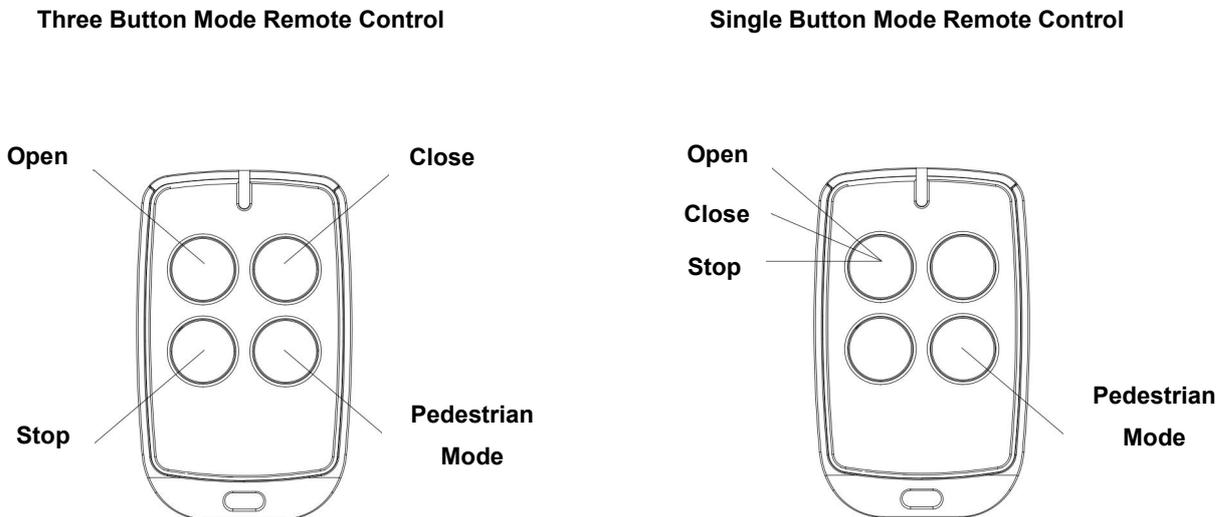   Mode   Mode

Figure 22

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!

Error Code	Description	Possible Reason	Solution	Action
CONTROLLER ERROR	Drive Board Failure	Damage to key components of the drive board	1. Check whether the control board is short-circuited 2. Contact the manufacturer for maintenance	After triggering, the motor stops, the screen returns to the main page and flashes to show the abnormality. Recovery after exclusion
OVER CURRENT	Motor overcurrent	1.Motor short circuit 2.Driving board line failure	1. Check whether the motor is short-connected 2.Contact factory for repair	After triggering, the motor stops, the screen returns to the main page and flashes to show the abnormality. Automatically reset after 10s, or manually reset by any key.
OVER_LOAD	Motor overload	Motor load is too heavy, the current exceeds 25A	Reduce the load	After triggering, the motor stops, the screen returns to the main page and flashes to show the abnormality. Automatically reset after 10s, or manually reset by any key.
HALL ERROR	Hall abnormality	1.Hall wire not connected 2.Hall wiring disconnected 3.Motor hall fault	1.Check if motor is connected 2.Replace the motor	After triggering, the motor stops, the screen returns to the main page and flashes to show the abnormality. Automatically reset after connecting the motor hall wire.
VOLTAGE LOW	Supply voltage too low	Input power supply voltage lower than 12V	Check power output voltage	After triggering, the motor stops, the screen returns to the main page and

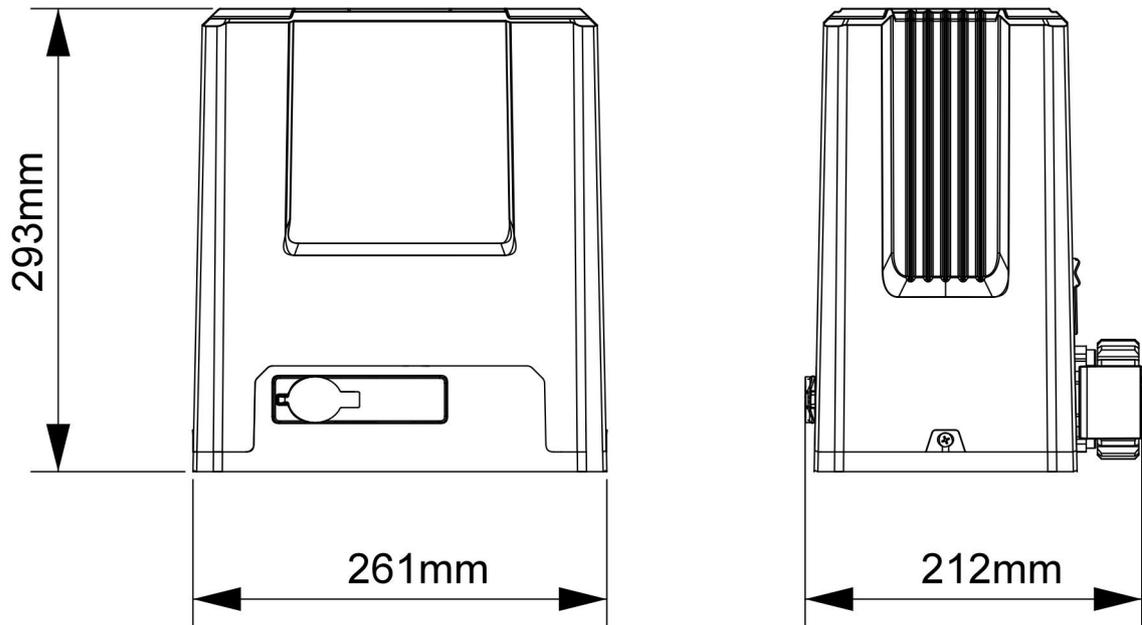|				
				flashes to show the abnormality. Reset after the power supply voltage is higher than 12V.
VOLTAGE HIGH	Supply voltage too high	Input power supply voltage is higher than 36V	Check power supply output voltage	After triggering, the motor stops, the screen returns to the main page and flashes to show abnormality. Reset after the power supply voltage is lower than 36V.
OVER TEMPER	Driver board component overheat	Temperature of drive board components exceeds 85°C	Wait for the temperature of the drive board components to fall below 80°C	After the trigger, the motor stops, the screen returns to the main page and flashes to show the abnormality. Reset when the temperature of the driver board components is lower than 80℃.
LIMIT ERROR	Limit Abnormal	1. Limit not set 2.Limit detection failure	Reset the limit	After triggering, the screen flashes to show abnormality. Clear after reset limit.
Black Screen	Power supply abnormality	1.Fuse broken 2.Control board power supply failure	1.Check fuse 2.Contact factory for repair	The control board display does not light up or the power lamp does not light up after power on.

Drawing and Measurements

Figure 23