≣LIFT*PRO*™

G A R A G E   D O O R   O P E R A T O R S

Installation Instructions
& **User Guide**
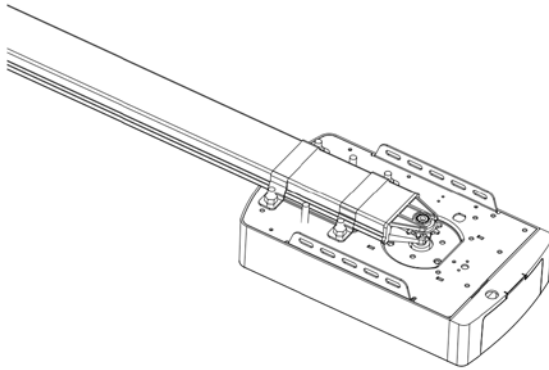
LPO0600	600N
LPO1000	1000N
LPO1200	1200N

S/N	

WARNING

Please read the manual carefully before installation and use.

The installation of your new door operator must be carried out by a qualified or licensed person.

Attempting to install or repair the door operator without suitable technical qualification may result in severe personal injury, death and / or property damage.

CONTENTS

IMPORTANT SAFETY RECOMMENDATIONS

FAILURE TO COMPLY WITH THE FOLLOWING SAFETY RECOMMENDATIONS MAY RESULT IN SERIOUS PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE.

1. Please read carefully and adhere to all safety and installation recommendations.

2. The operator is designed and manufactured to meet local regulations. The installer must be familiar with local regulations required in respect of the installation of the operator.

3. Unqualified personnel or people who do not understand health and safety standards being applicable to automatic gates and other doors, must in no circumstances carry out installations or implement systems.

4. Those who install or service the equipment without observing all the applicable safety standards will be responsible for any damage, injury, cost, expense or claim whatsoever any person suffered as a result of failure to install the system correctly and in accordance with the relevant safety standards and installation manual if directly or indirectly.

5. For additional safety we strongly recommend the inclusion of Photo Beam. Although the operator incorporates a pressure sensitive Safety Obstruction Force system, the addition of Photo Beam will greatly enhance the operating safety of an automatic garage door and provide additional peace of mind.

6. Make sure that the garage door is fully open & stationary before driving in or out of the garage.

7. Make sure the garage door is fully closed & stationary before leaving.

8. Keep hands and loose clothing off the operator and garage door all the time.

9. The Safety Obstruction System is designed to work on STATIONARY objects only.
Serious personal injury, death and / or property damage may occur if the garage door comes into contact with a moving object.

10. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

11. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

12. If the power supply cord is damaged, it must be replaced by the manufacturer, its service agent or qualified person.

WARNING: Important safety instructions.
For safety, all users and installers must follow all instructions. Save these instructions.

- Do not allow children to play with door controls. Keep remote controls away from children.
- Watch the moving door and keep people away until the door is completely opened or closed.
- Take care when operating the manual release since an open door may fall rapidly due to weak or broken springs, or being out of balance.
- Frequently examine the installation, in particular check cables, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since a fault in the installation or an incorrectly balanced door may cause injury.
- Each month check that the drive reverses when the door contacts a 50 mm high object placed on the floor. Adjust if necessary and recheck. Incorrect adjustment may present a hazard.
- Details on how to use the manual release.
- Information concerning the adjustment of the door and drive.
- Disconnect the power supply when cleaning or carrying out other maintenance.
- The installation instructions shall include details for the installation of the drive and its associated components.

1. Obstruction force adjustment
The minimum force display "1" and it can be adjusted upward. Display "5" means the maximum force.

2. Travel speed adjustment
"8" appears on the display indicates the 80% of the travel speed. Display "A" means the full speed 160mm/s or 200mm/s.

3. Reversal height adjustment
"0" appears on the display indicates the door will return to the top. Display "1~9" indicates the door will rebound to the position of the whole travel. One tenth to Nine tenth of the whole travel etc.

4. Partial open/height
"0" appears on the display indicates close the partial open function. Display "1~9" to set the different partial open position of the whole travel.

5. Transmitter button recognition function
"0" appears on the display indicates the buttons recognition function is closed. Display "1" indicates the button recognition function is open.

6. Codes memory quantity
"A" appears on the display indicates the maximum code memory quantity (50pcs). Press UP/DOWN button once, to increase or decrease quantity. The code memory quantity is set on 5pcs*N, N=1~9. (The quantity is the multiple of 5).

7. Maintenance alarm
"b" appears on the display and led light flashes 10 times quickly means the garage door and motor requie maintenance.

8. Automatic safety reverse
Automatic stop / automatic reverse are controlled by the internal circuit boards.

9. Soft start / Soft stop
Ramping speed up and down at the start and end of each cycle reduces stress on the door and operator for a longer service life, and ensures quieter operation.

10. Auto-Close
Auto-Close ensures peace of mind and keeps your house secure by automatically closing the door upon entering or exiting the garage.

11. Self learning open and close obstruction force
The amount of operator power for different stages of the door's travel is learnt during setup and is constantly re-profiled. The force measurement automatically adjustment in a suitable range.

12. Electronic limit, simple adjustment.
Limit setup can be adjusted from the control panel.

13. Extra terminal positions
Terminals available for accessories such as photo beams, additional receivers, wired or wireless wall switches, caution lights & wicket door protection devices.

14. Energy saving - LED courtesy light
3 minutes LED light delay, switching on with each cycle to illuminate your darkened garage.

15. Battery backup (optional)
Operators can be supplied with optional battery backup, allowing limited use during power failure.

16. Self-Locking gear motors
Gear motor will self-lock when power is disengaged.

17. Manual release
The manual release system can be used to operate the door at any time.

18. Transmitter technology
Rolling Code technology (7.38 x 1019 Combinations), 433.92 MHz frequency, 4 channels design to allow control of 4 different doors with one transmitter.

19. Applications
With as little as 30mm required between the ceiling and the highest point of the door travel, the operator can be flush mounted for low headroom applications.

20. Metal bottom plate, for additional strength and security.

21. Up / Down (Open/Close), operation buttons (UP / DOWN)

Open
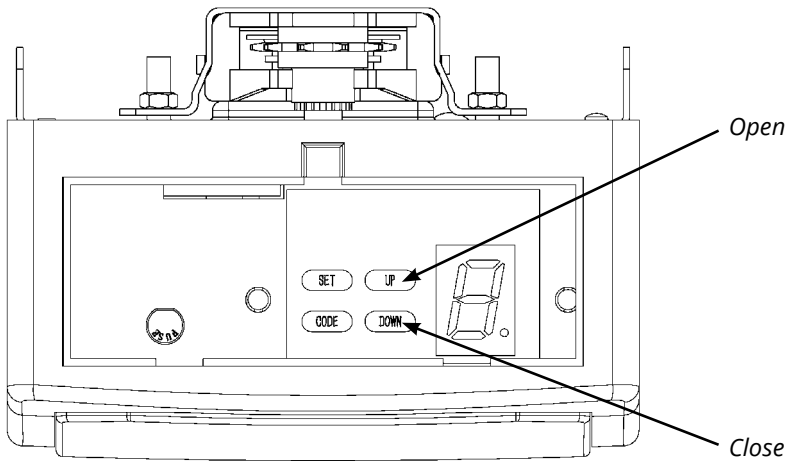
Close

PRE-INSTALLATION RECOMMENDATIONS

1. The garage door should be lifted and closed easily by hand and without much effort. A well balanced & sprung door is critical for proper installation.

2. The garage door operator can't compensate for a badly installed garage door and should not be used as a solution for a "hard to open" door.

3. If the unit is being installed on an existing door, make sure any existing locking devices are removed or warranty will be void.

4. An approved electrical outlet must be installed close to the operator installation point.

5. There should be a minimum gap of 30mm between the bottom of the chain drive rail and the top of the garage door at its closest point. (refer to Fig 1.)

Important note: For additional safety, it is strongly recommended that a Photo Electric safety beam is fitted on all installations.

30mm Minimum Clearance
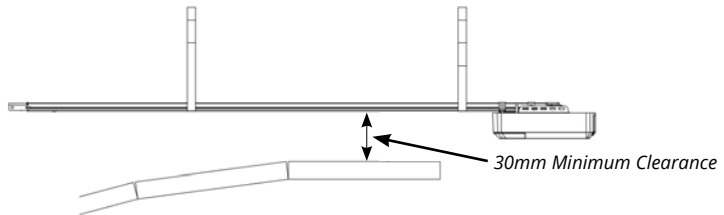
Figure 1

INSTALLATION INSTRUCTIONS

Mount Wall Bracket and Door Bracket (Fig.2)
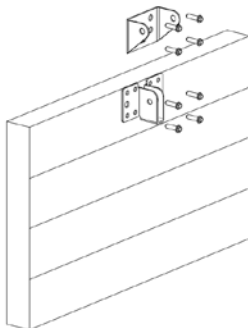
Wall Bracket - Close the garage door and measure the garage door width at the top and mark the centre. Locate and mount the wall bracket 2cm-15cm above the door on the inside wall. (Depending on the actual installation space).

Door Bracket – Fix the door bracket to a structural part of the door as close to the top edge as possible.
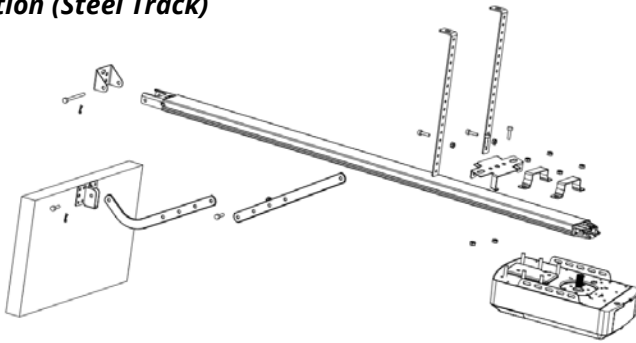
Figure 2

Installation (Steel Track)

Figure 3

STEP 1 (Fig.3)
Attach the operator head to the steel track.
Assembly the 2 "U" Hanging brackets with 6mm nuts supplied.

STEP 2 (Fig.3)
Place the steel track and operator head assembly centrally on the garage floor, with the open head furthest away from the door. Lift the front of the track up to the door bracket. Insert the pivot pin and secure it with the split pin supplied.

STEP 3 (Fig.3, Fig.4)
Lift and support the operator head (with a ladder) so it is positioned centrally and level. Fix the operator and track on the ceiling using the supplied support brackets.

WARNING: Do not allow children around the door, operator or supporting ladder serious injury and/or damage may result from failure to follow this warning.
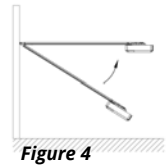
Figure 4

STEP 4 (Fig.3, Fig.5)
Connect the straight arm to the bent arm with the bolt.
Position and bolt the arms to the top edge of the door using the bolt supplied.

STEP 5
Lift the garage door until the shuttle locks into the drive chain/belt.
The operator can now be programmed.
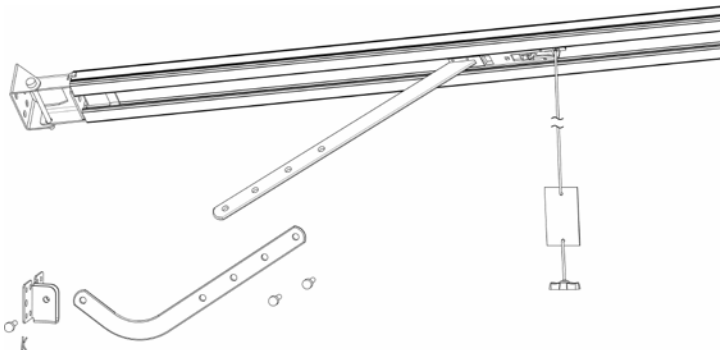
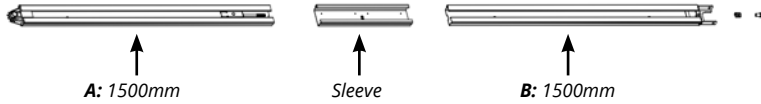**Figure 5**

Sectional Steel Track Assembly

2 Part Steel Track

A: 1500mm   Sleeve   **B:** 1500mm

Figure 6

3 Part Steel Track

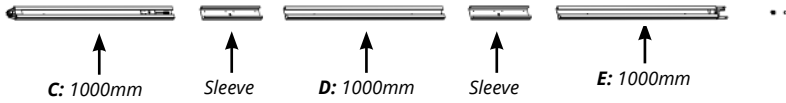**C:** 1000mm   Sleeve   **D:** 1000mm   Sleeve   **E:** 1000mm

Figure 7

1.

2-Parts Track:
As Fig.6, slide the A rail into the sleeve, slide the B rail into the sleeve.

3-Parts Track:
As Fig.7, slide the C rail into the sleeve, slide the D rail into the sleeve; slide the E rail into the sleeve.

2. Cut the plastic thread; pull the screw rod along with inner chain to the end rail position (Fig.8)
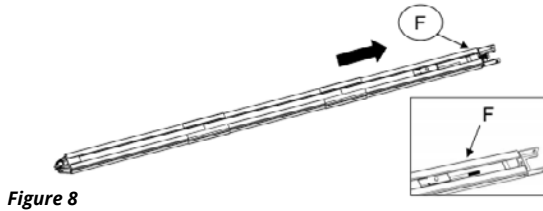
Figure 8

1. As Fig.9, release the nut & spring.

2. Tighten the nut in the correct position as shown in Fig.10. Cut the plastic tape and the plastic thread on sprocket. Rail assembly is now complete.
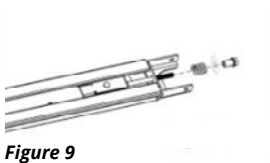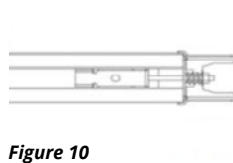
Figure 9   **Figure 10**

Battery Backup Assembly (optional)

Option 1 - Top Fixed(For Lead-acid Battery only)

STEP 1 (Fig.11)
Assemble the battery & the bracket as shown, using the screws supplied.
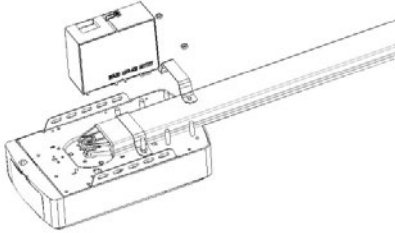
STEP 2 (Fig.12)
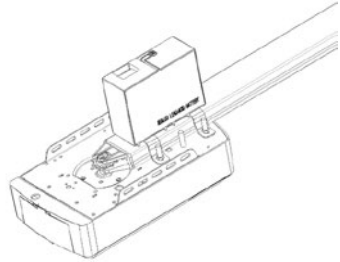Connect the battery to the operator.

Figure 11

Figure 12

Option 2 - Side Fixed (For Lead-acid & Lithium Battery)

STEP 1 (Fig.13)
Assemble the battery to the side of the operator, using the screws supplied.

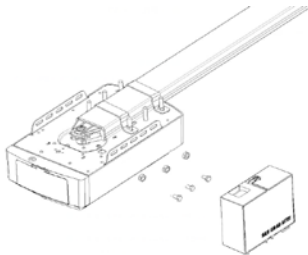**STEP 2** (Fig.14)
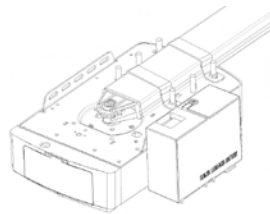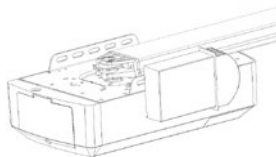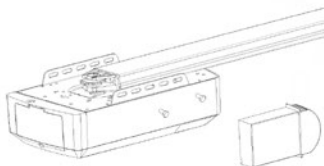Connect the battery to the operator.

Figure 13

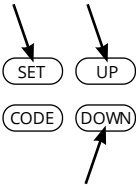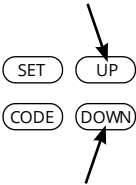**Figure 14**

Features Settings

a) Press and hold **SET** button until "1" appears on the display then release the button.
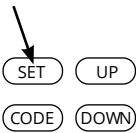
b) Press **UP / Down** button, to display "1-E" .

c) Press **SET** button to confirm the function you need to set, The system will then enter the interface to set the function.

d) In the function settings, the interface will display "0-A" with a flashing dot.

e) Press **UP / Down** button to choose the feature you need to set.

f) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

PROGRAMMING INSTRUCTIONS

Pre- Instruction for programing controller buttons

1. Short press **SET** button : When in standby, this will clear the error, alarm display, and return to normal display.

2. Short press **CODE** button :

  (In the Setting Status) **Exit the current operation and return to the standby interface.**

  When in standby, press the CODE button, A dot will be displayed in the corner.
  The system is now entering the code learning mode.

Click the button of the hand transmitter you want to use, the dot may disappear ,then press the same button again, the dot will flash and the code learning has finished.

3. Short press **UP** button : **The door will open.**

4. Short press **DOWN** button : **The door will close.**
(When the door is opening or closing, it will stop if you press any key.)

5. Long press **SET** button : **Enter function setting interface.**

6. Long press **CODE** button : Press and hold **CODE** button until a C is indicated on the display.
**All stored remotes will be deleted.**

7. Long press **UP** button : **Increase the resilience.** (Keep pressing DOWN button, after 4 seconds, it will scroll to display 0-1-2, choose the number you want. 1=increase 25%   2=increase 50%)

8. Long press **DOWN** button : **Restore Factory Settings**
Keep press **DOWN** button, after 4 seconds, it will scroll to display , then the garage door operator will restart.
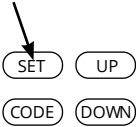
Restarting the unit will reset all settings back to factory settings, all coding needs to be completed again, except the transmitter code learning.
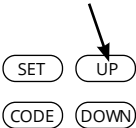
1. Programming Open & Close Limits
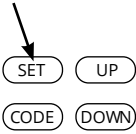
a) Press and hold **SET** button to enter this function setting until "1" appears on the display then release the button.
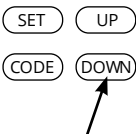
b) Press the **SET** button again. The door operator is now in Programming Mode. You will then see "n" with a dot appears on the display.

c) Press and hold the **UP** button until the door reaches the desired open position, you will see "n" without dot on the display.
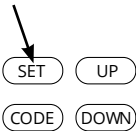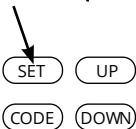
d) Press **SET** button to confirm the open position, then you will see "u" with dot on the display.

e) Next press and hold the **DOWN** button until the door reaches the desired close position, you will see "u" without dot on the display.

NOTE: For fine adjustments toggle UP & DOWN buttons.

f) Now press the **SET** button to confirm the close position, then you will see "II" on the display.

After confirm the close position, the door will now cycle open and close to set the travel limits and force sensitivity adjustments. The door is now set for normal operation.

**CAUTION: After the open and close cycle, there will be figures shown on the display (0~9), "0" indicates the doors is balanced, the smaller the figure, the better the door balance.
It is strongly recommend that this figure is smaller than the power force.**

2. Obstruction Force Adjustment
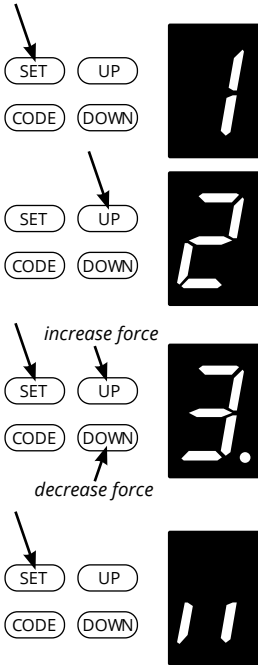
CAUTION:
The obstruction force adjustment is set automatically during programming. Normally no adjustment is necessary.

a) Press and hold **SET** Button until "1"appears on the display, next press the **UP** Button until "2" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again, The unit is now in force adjustment mode. You will see a figure "3" with a flashing dot on the display.
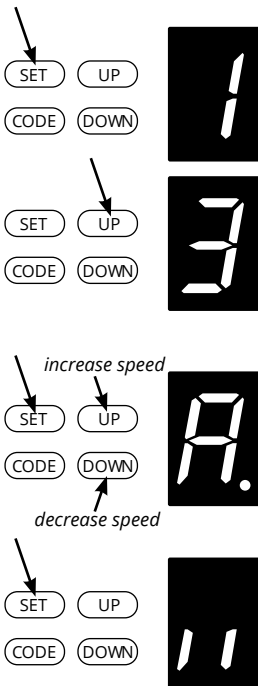
c) Press the **UP** button to increase the force setting or the **DOWN** button to decrease the force setting.

The minimum force is "1" and it can be adjusted upward. The maximum force is "5".

d) Press SET button to confirm the settings and it will return to standby status automatically and display "ll".

NOTE: The force is set on "3" as default.

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3. Travel Speed Setting

CAUTION: If you changed the speed again, it will cancel the previous travel limit. The speed adjustment function will be available only after you reset the travel limit.

a) Press and hold **SET** Button until "1"appears on the display, next press the **UP** button until "3" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again. The unit is now in speed adjustment mode. You will see a letter "A" and a flashing dot on the display.

c) Press the **UP & DOWN** button to choose the speed. Figure "8" means the 80% of the travel speed. Figure "A" means the full speed.

d) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

NOTE: The travel speed is set on full speed "A" as default.

4. Automatic Closing & Time Setting

NOTE: We recommend that Safety Photo Beams are used in any installation where the Auto Close function is enabled.
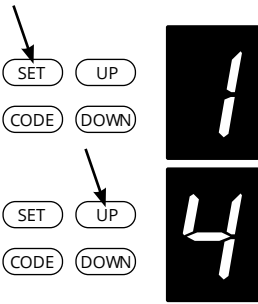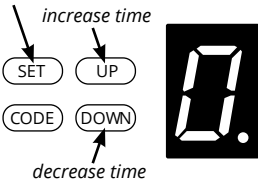
a) Press and hold **SET** Button until "1"appears on the display, next press the **UP** button until "4" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again, the unit is now in automatic close adjustment mode. You will see a figure "0" with a flashing dot on the display.

c) Press **UP / Down** button once to set the auto close time (0~9).

d) Press **UP** button to increase the time, or **DOWN** button to decrease the time.

The close time is 15second*N, N=0~9.
The maximum time is 135s. To disable Auto Close Function, set time to zero (0).

e) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

NOTE:
1.The closing time is set on "0" as standard.

2. If the Photo Cell Function is on, and the light beam is broken by the obstruction, the auto close time will stop for a while, and then continue the automatic close time again.

5. Automatic Closing Condition Setting

a) Press and hold **SET** button until "1" appears on the display, next press the UP button until "5" appears on the display to enter this function setting then release the button.
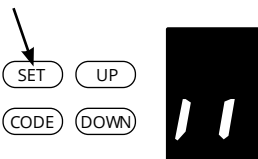
b) Press the **SET** button again. The unit is now in automatic close adjustment mode. You will see a figure "1" with a flashing dot on the display.

c) Press **UP / Down** button once to set the auto close mode.
You can choose "1" or "2".

Figure "1":
The door only can auto close while in the open limit position.

Figure "2":
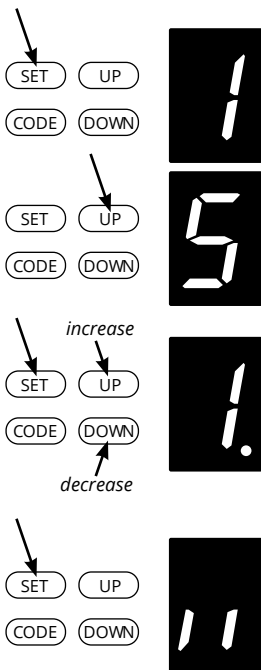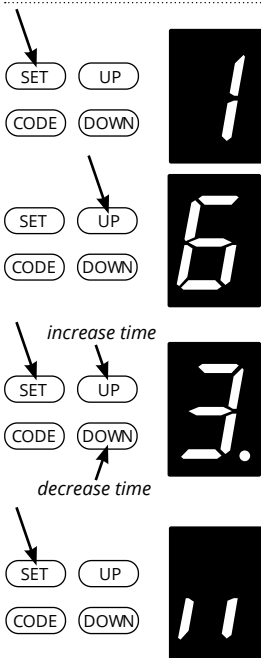**The door can auto close while the door is in any position.**

d) Press SET button to confirm the settings and it will return to standby status automatically and display "ll".

NOTES: 1. The closing mode is set on "1" as default. | **2.** The door will automatically close when stopped in its opening process, but can't automatically close when it is stopped in its closing process.

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6. LED OFF Delay Time Setting

a) Press and hold SET button until "1" appears on the display, next press the UP button until "6" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again. The unit is now in LED off delay time adjustment mode. You will see a figure "3" with a flashing dot on the display.

c) Press **UP / Down** button once to set the LED off delay time (1~9).

d) Press **UP** button to increase the time, or **DOWN** button to decrease the time.

The delay time is 1 minute*N, N=1~9.
The maximum delay time is 9 minutes.

e) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".
NOTE: The LED off delay time is set on "3" as default.

7. Reversal Height Setting

a) Press and hold **SET** Button until "1" appears on the display, next press the **UP** button until "7" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again. The unit is now in reversal height adjustment mode. You will see a figure "0" with a flashing dot on the display.
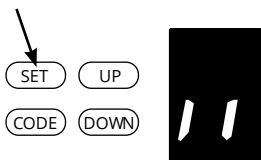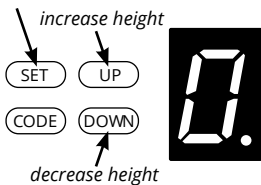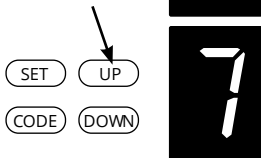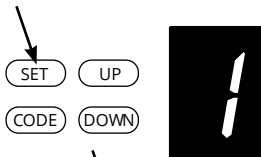
c) Press **UP / Down** button once to set the reversal height while closing (0~9).

d) Press **UP** button to increase , or **DOWN** button to decrease.

**Figure "0"** : The door will return to the open limit position.
Figure "1~9" : The door will rebound to the position of the whole travel. One tenth to Nine tenths of the whole travel etc...
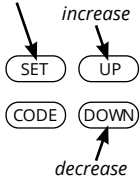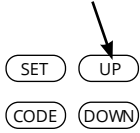
e) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

NOTE: The reversal height is set on "0" as default.

increase height

decrease height

8. Partial Open/Height Setting
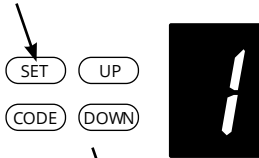
a) Press and hold **SET** Button until "1" appears on the display, next press the **UP** button until "8" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again. The unit is now in partial-open/height adjustment mode. You will see a figure "0" with a flashing dot on the display.

c) Press **UP / Down** button once to select if you want to open the partial open function or set the partial open height. (0~9).
Press **UP** button to increase , or **DOWN** button to decrease.

Figure "0" : Close the partial open function.
Figure "1~9": Set the partial open position of the whole travel.
One tenth to Nine tenths of the whole travel etc...
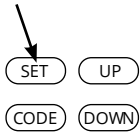
d) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

NOTES:

1. The partial open/height is set on "0" as default.

2. If you use the partial open/height function, the buttons' recognition function will be disabled.

3. Other details please refer to the Instruction manual of the remote carefully.

4. If you enabled the partial open function then disabled this function later, please note that only the coded button you have programmed can control the operator.
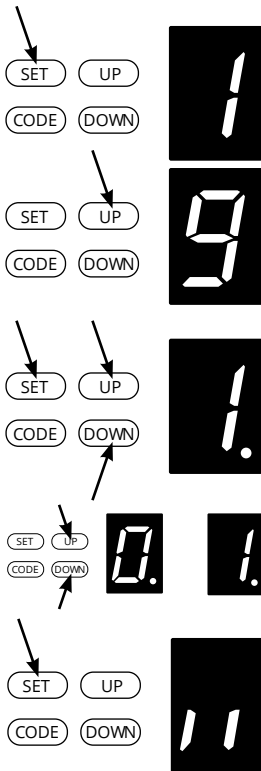
9. Transmitter Buttons Recognition Setting

a) Press and hold **SET** Button until "1" appears on the display, next press the **UP** button until "9" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again. The unit is now in button recognition function adjustment mode. You will see a figure "1" with a flashing dot on the display.

c) Press **UP / Down** button once to select if you want all the 4 buttons to control one operator, or a separate coded button can control the operator.

**Figure "0": The button recognition function is closed**. It means if you coded 1 button with 1 operator, then all the 4 buttons on the remote can control the operator. This is suitable for users who only have 1 automatic door at home.

Figure "1": The button recognition function is open. If you coded the first button with first operator, then the first button will be the only button on the remote that can control the operator. Suitable for users who have more than 1 automation doors/gates at home.

d) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

NOTES:
1. The buttons recognition is set on "1" as default.
2. After coding the hand sets, only the coded button can control the operator.
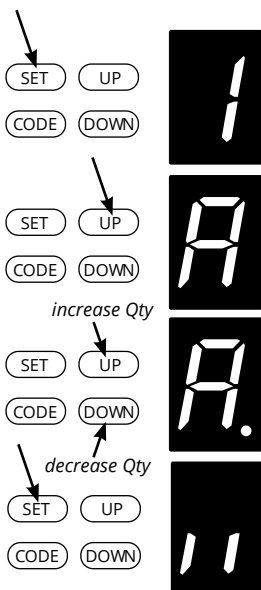
A. Codes Memory Quantity Setting

a) Press and hold **SET** Button until "1" appears on the display, next press the **UP** button until "A" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again, the unit is now in remote quantity adjustment mode. You will see a figure "A" again, but with a flashing dot on the display.

c) Press **UP / Down** button once to set the remote quantity. (A or 1~9).

d) Figure "A"means the maximum quantity 50pcs. Press **UP/DOWN** button once to increase or decrease quantity.

The remote quantity is set on 5pcs*N, N=1~9. (The quantity is the multiple of 5)

e) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".
NOTE: The remote quantity is set on "A" as default.

increase Qty

decrease Qty

B. Low Level Obstruction Override

SET | UP
CODE | DOWN

a) Press and hold **SET** Button until "1" appears on the display, next press the **UP** button until "b" appears on the display to enter this function setting then release the button.

SET | UP
CODE | DOWN

b) Press the **SET** button again. The unit is now in reversal height ignorance adjustment mode. You will see a figure "1" with a flashing dot on the display.
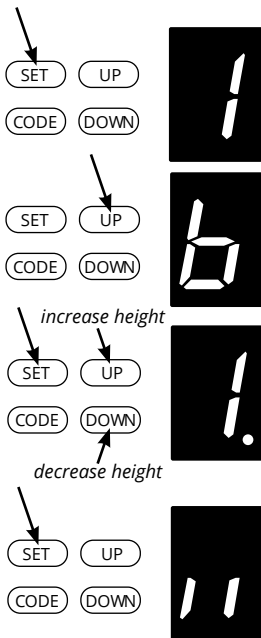
increase height

SET | UP
CODE | DOWN

c) Press UP / Down button once to set the reversal height ignorance while closing (0~9).

decrease height

d) Press UP button to increase , or DOWN button to decrease.

Figure"1~9" : The door will not return even when there are obstacles in its closing path within 1cm~9cm away from the close position. This function is more suitable for Northern Europe or areas where there is regular snow on the ground.

SET | UP
CODE | DOWN

e) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

NOTE: The reversal height is set on "1" as default.
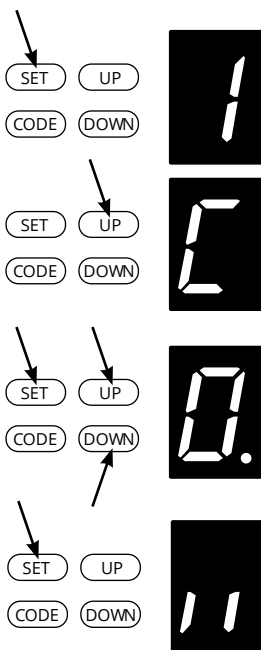
C. Wicket/Pass Door Switch Type Setting

SET | UP
CODE | DOWN

a) Press and hold **SET** Button until "1" appears on the display, next press the UP button until "C" appears on the display to enter this function setting then release the button.

SET | UP
CODE | DOWN

SET | UP
CODE | DOWN

b) Press the **SET** button again. The unit is now in the pass door switch type adjustment mode. You will see a figure "0" with a flashing dot on the display.

c) Press **UP / Down** button once to set the pass door switch type. You can choose "0" or "1" set.

Figure "0": The wicket door function is normally open.
Figure "1": The wicket door function is normally close.
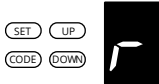
SET | UP
CODE | DOWN

e) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

**NOTE:** The pass door switch is set on "0" as default.
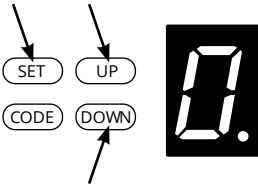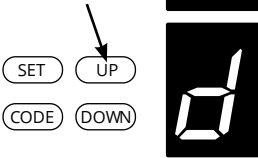
D. Photo Cell ON/OFF Setting

NOTE:
Make sure the photo cell has been correctly connected to the Normally Closed contacts on the accessory terminals of the operator.

Also note that the photo beam function must be disabled if NO photo beams are fitted, otherwise the door cannot be closed, and the LED display will show the letter "r".
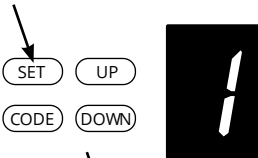
a) Press and hold **SET** Button until "1" appears on the display, next press the UP button until "d" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again. The unit is now in the photo cell ON/OFF adjustment mode. You will see a figure "0" with a flashing dot on the display.

c) Press **UP / Down** button once to set the photo cell ON/OFF switch. You can choose "0" or "1"set.

Figure "0" means, the photo cell function is closed.
Figure "1" means, the photo cell function is open.

d) Press **SET** button to confirm the set and it will be back to standby status automatically and display "ll".

NOTE: The photo cell is set on "0" as default.

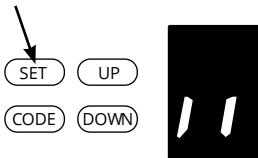## E. Maintenance Alarm
Operation Cycles Count Setting
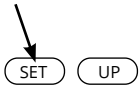
a) Press and hold **SET** Button until "1" appears on the display, next press the **UP** button until "E" appears on the display to enter this function setting then release the button.
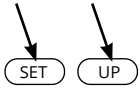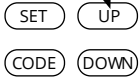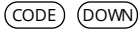
b) Press the **SET** button again. The unit is now in the maintenance alarm adjustment mode. You will see a figure "0" with a flashing dot on the display.
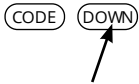
c) Press **UP / Down** button, you can select the operation cycles you need the operator to make you notice. You can choose from "1-5" set.

Figure "1":
Once garage door has operated to 1000 times, the LED light will flash 10 times quickly after the door opens. This is to make you aware that your garage door needs to be serviced.
At the same time, you will see a figure "t" appears on the display.

Figure "2":
The maintenance alarm count cycle is set on 2000 times.

Figure "3":
The maintenance alarm count cycle is set on 3000 times.

Figure "4":
The maintenance alarm count cycle is set on 4000 times.

Figure "5":
**The maintenance alarm count cycle is set on 5000 times.**
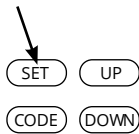
d) Press **SET** button to confirm the set and it will be back to standby status automatically and display "ll".

NOTE:
1. The operation cycles count is set on "0" as default.

2. "b" appears on display and led light flashes 10 times quickly, the door has become un-balanced, it is strongly recommend the garage doors is serviced.

3. "Check" the status and/ or "Re-learn" the travel limit after maintenance alarm cautions.

F. Open / Stop / Close Terminals

The O/S/C facility can be used for an external push button switch to operate the operator.
The switch must have voltage free normally open contacts.
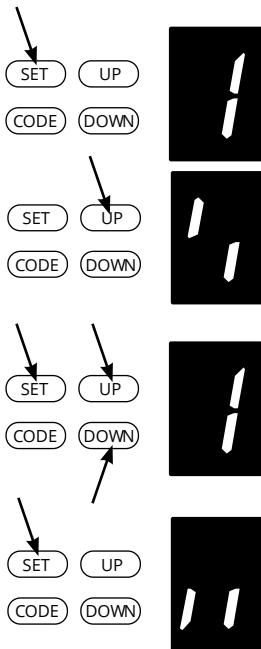
Programming Motor Reversal Function

a) Press and hold **SET** Button until "1" appears on the display, next press the UP button until "◖" appears on the display to enter this function setting then release the button.

b) Press the **SET** button again. The unit is now in the programming motor reversal function mode.

c) Press **UP / Down** button once to set the function. You can choose "0" or "1".

Figure "0": The function is closed.
Figure "1": The function is opened.

e) Press **SET** button to confirm the settings and it will return to standby status automatically and display "ll".

NOTE: The function is closed normally.
You need to reset the limits after you choose this function!

This function can be applied to side hung doors.
After you set this function, the side hung doors will open outwards. When you open the door, the trolley will move forward, when you close the door, the trolley will move backwards.

TERMINAL INTRODUCTION & APPLICATION

Photo beam connection (optional) *– Fig.15,Fig.16*

Switch control connection (optional) *– Fig.15*

Remark:
1. Flash (Caution Light) Should be less than 25W.
2. PB (External Push Button) Should be " NO".

Figure 15
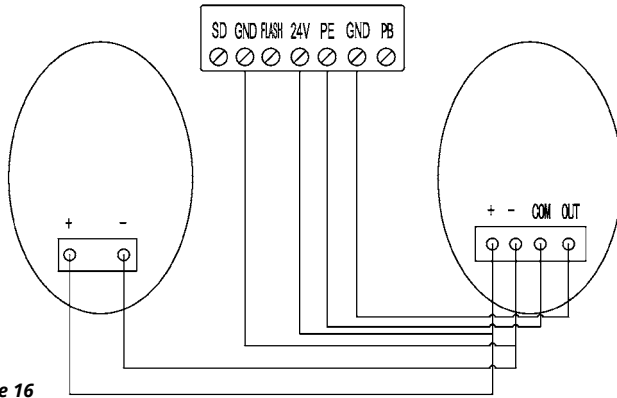
Figure 16

Other terminal introduction and application

1. The O/S/C interfaces available (Fig. 17, Fig. 18)
Add a new O/S/C button to open or close the door.

2. Flash light function (Fig. 17, Fig. 18)
There are corresponding interfaces for this function and provide 24v-35v flash light voltage. Connect the flash light with DC 24v-28v, current≤100mA. When use AC 220V power flash lights, please match an adapter, and wiring as required

3. Wicket/Pass door (SD) protection (Fig. 17, Fig. 18)
This function ensures that the door can't be opened unless the wicket/pass door is closed. The door panel won't be damaged.

Figure 17

Figure 18

MANUAL RELEASE

The operator is equipped with a manual release cord to disengage shuttle and move door by hand while holding the handle down (Fig 19). Pull on the handle to disengage the shuttle. To re-engage the door simply run operator in automatic mode or move door by hand until the trolley engages in the chain shuttle.

In some situations where secondary access is not available, it is recommended that an external release device should be fitted (Fig 20).

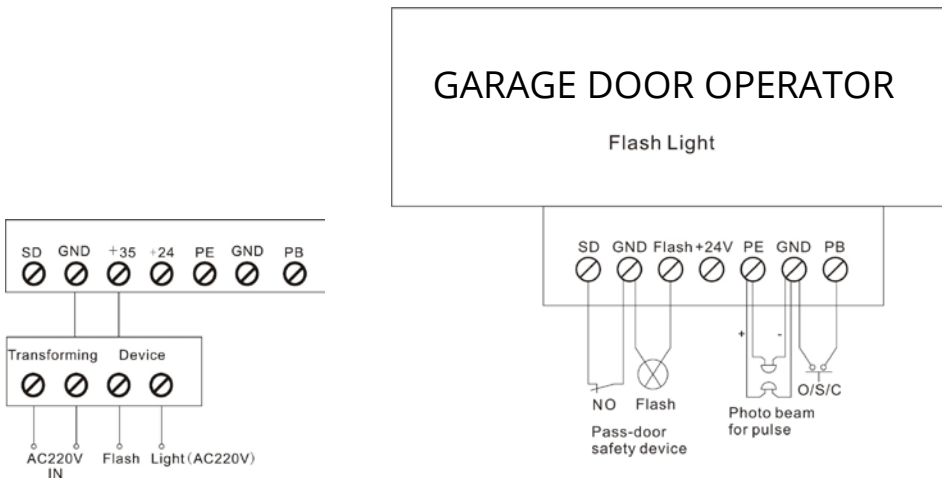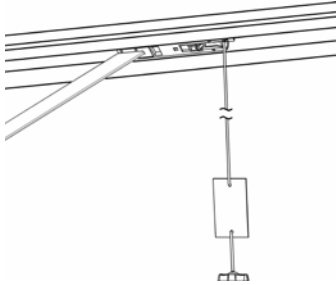

Figure 19
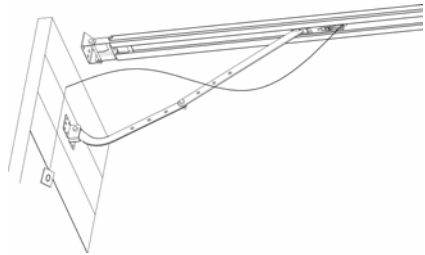
Figure 20

MAINTENANCE

1. No particular maintenance is required for the logic circuit board.
- Check the door and all working parts are in good working condition at least twice a year.
- Check the reversing sensitivity at least twice a year, and adjust if it is necessary.
- Make sure that the safety devices are working effectively (photo beams, etc.)

2. Light bulb replacing:

Notice: Make sure the power supply has been cut off before replacing the light bulb. And ensure the voltage of the new light bulb is in accordance with the local voltage and the power is within 25 Watt.

-Remove the screws on the lamp cover. Take the lamp cover away then twist off the old LED light anti-clockwise. Fix the new LED light and lamp cover.

3. Before installing a caution light, please ensure the rate is within 5 Watt.

4. Maintenance alarm function: LED light flashes 10 times quickly indicates the door is out of balance. It is strongly recommended the garage door is serviced. "Check" the status and/or " Re-learn" the travel limit after maintenance alarm.

Notice: A poorly balanced or operating door can affect the life of the automatic operator due to incorrect loads, and will void the warranty.

TECHNICAL SPECIFICATIONS

|	LPO0600	LPO1000	LPO1200
Input Voltage	220 - 240V / 110 - 127V, 50-60Hz		
Max Pull Force	600 N	1000 N	1200 N
Max Door Area	10 m^2	15 m^2	18 m^2
Max Door Weight (Balanced)	80kg	100kg	130kg
Max Door Height	2400 - 3500mm	2400 - 3500mm	2400 - 3500mm
Drive Mechanism	Chain/Belt	Chain/Belt	Chain/Belt
Opening / Closing Speed	160mm/second	160mm/second	160mm/second
LED	24V / 15pcs LED bulbs		
Limit Setting	Electronic	Electronic	Electronic
Transformer	Overload Protection Technology		
Radio Frequency	433.92MHz	433.92MHz	433.92MHz
Coding Format	Rolling Code (7.38 x 10^{19} Combinations)		
Status Display Transmitter	2X	2X	2X
Code Storage Capacity	50 Different Codes		
Caution Light Terminal	Included	Included	Included
Working Temperature	-40°C to +50°C	-40°C to +50°C	-40°C to +50°C
Safety Protection	Soft Start & Soft Stop, Photo Cell Option, Caution Light Option		
Protection Level	IP20	IP20	IP20

LPO0600
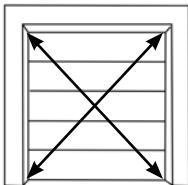
LPO1000

LPO1200

Rated Door Area:
≤10m^2
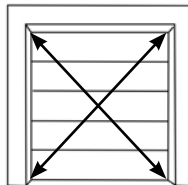
Rated Door Area:
≤15m^2
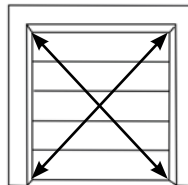
Rated Door Area:
≤18m^2
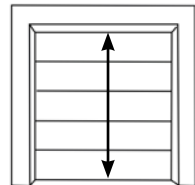
Standard Door Height
2400mm

Max Door Height
3500mm

PARTS LISTING
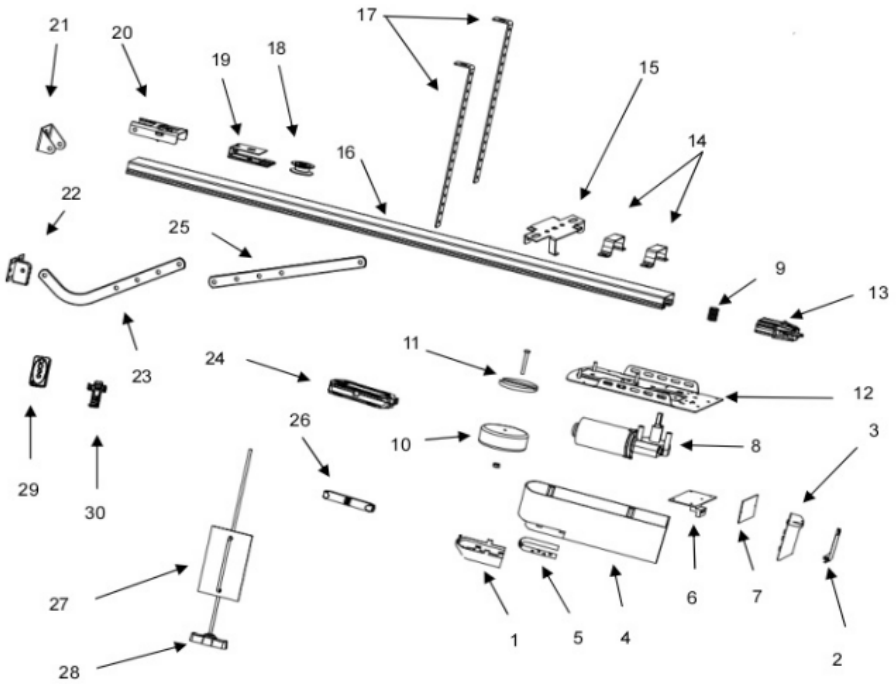
Item	Qty	Description	Item	Qty	Description
1	1	LED Cover	16	1	C Rail - Steel
2	1	Control Panel Cover - 1	17	2	Mounting Bracket
3	1	Control Panel Cover - 2	18	1	Chain Wheel
4	1	Main Cover	19	1	Wheel Bracket
5	1	LED Light	20	1	Track Ending Bracket
6	1	PCB - 1	21	1	Wall Bracket
7	1	PCB - 2	22	1	Door Bracket
8	1	DC Gear Motor	23	1	Bent Arm
9	1	Motor Shaft Sleeve	24	1	Trolley Assy
10	1	Transformer	25	1	Straight Arm
11	1	Transformer Plate	26	1	Chain / Belt Connection
12	1	Steel Boom Base	27	1	Caution Card
13	1	Sprocket Assy	28	1	Release Handle
14	2	U Hanging Bracket	29	2	Transmitter
15	1	Click Bracket	30	1	Transmitter Bracket

COMMON FAULTS & SOLUTIONS

Fault Appearance	Fault Cause	Solutions
Operator is not working. LCD screen is not bright.	1. Power supply 2. Plug wire is loose	1. Check if the motor socket is energised 2. Check fuse 3. Check if the low-voltage wire of transformer is connected to the power board 4. Check if the ribbon cable is plugged in 5. Check if there is 26V AC at the transformer low-voltage side, if there is 26V AC, replace the PCB, if not, replace the transformer
Position missing.	System error.	Re-set the limit traveling.
While learning, the digital display *0*	Travel less than 30cm or more than 9m.	Re-set the limit traveling.
Digital display *P* Operator does not work or stop working.	Insufficient voltage.	Check the power supply.
Digital display *b* LED light will flash quickly for 10 times.	The Garage door system is in poor condition and needs maintenance.	The garage door and motor need total maintenance.
Digital display *L*	The gear motor cannot self-lock properly.	Replace the gear motor.
Operator is not working. Digital display *−*	Fail to learn the up and down limit setting / Improperly learn the up and down limit setting.	Learn "UP" and "DOWN" limit traveling again follow the manual.
LED is always on.	The control panel is broken or the power supply board is broken.	Replace the control board or power board.
When remoting the door, operator stops automatically after running 10cm. Digital display *H*	Hall sensor wire is loosed or damaged.	Open the cover, check the Hall sensor wire, re-plug or replace.
Operator does not work. Hear the relay 'kaka' sound. Digital display *H*	The wire between gear motor and board is loose.	Open the cover and check the wire between gear motor and board.
Operator stops automatically after running 10cm. Digital display *h*	The wire between gear motor and board is plugged inversely.	Power off firstly, open the cover and reverse the plug wire between gear motor and board. Re-set limit traveling.
Door is opening only. Door will not close. Digital display *r*	Photo cell function has been effective without connecting any photo cell device.	Turn off the photo cell function if there is not any photo cell device connected. (Refer the instruction manual) 2. Check if the photo cell is connected correctly, or if there is any obstruction between the photo cell.
The door is fully open, automatically closes after some time. LED lights flash 4 times.	Automatic closing function is turned on.	Set the automatic closing time, or turn off the automatic closing function. (Refer the instruction manual)
When the door stops, the caution light is always on.	The power board is broken.	Replace the power board.

Fault Appearance	Fault Cause	Solutions
LED lights do not work.	1. The LED wire is not plugged 2. The LED is broken 3. The circuit board is broken	1. Check the LED wire 2. Replace the LED 3. Replace the circuit board
Door is automatically reversed to the upper limit before the door closed completely.	In operation with automatic reverse function. The door is not installed correctly. There is something is blocking the door.	1.Check the block position of the door and re-set the limit traveling. 2. Increased force number for automatic reverse.
Door automatically stops while opening.	In operation with automatic protect function when obstruction is detected. The door is not installed correctly. There is something is blocking the door.	1.Check the block position of the door and re-set the limit traveling. 2. Increased force number for automatic reverse.
The remote control cannot be used or the operational distance is short.	1. Flat battery 2. Antenna is loosed or not well extended 3. Interference around nearby	1. Replace new battery 2. Extended the antenna on the operator 3. Get rid of interference
Cannot code in the new remotes.	New remote control is not compatible with operator.	Choose our remote control only.
Digital display ▉F	Stored remote code is full.	Delete all stored codes. (Refer the instruction manual)
Standby, Digital display ▉.	Door in door function effects.	Check the door in door switch.
The operator is working while the door is not moving.	Motor shaft sleeve worn.	Replace the motor shaft sleeve.
The battery do not supply power.	1. Flat battery 2. The battery wire is plugged inversely 3. The battery wire is broken	1. Charge the battery 2. Open the cover, check "+" "-" of the battery 3. Replace the battery wire
Other abnormal issues.	External devices is not compatible with the operator.	Remove all the external devices. If the abnormal issues still exist, replace the circuit board.
Digital display ▉E	The Garage door system needs maintenance.	The garage door and motor need total maintenance.