



GARAGE DOOR OPENER OWNER'S MANUAL

S3



Features

- ☑ Locking door when power failure: An advanced technology with patent. If power failure occurs while the door is opening, the door can be released by pulling the clutch down, then moving the door to the closing position manually, then the door can be locked. By pressing the closing button on the remote when power comes again, the door can be opened while the clutch moves to closing position. After this, normal operation is resumed.
- ☑ Rolling code: integrated circuit with specialized rolling code. No same code, high security, which can be equipped with 20 transmitters;
- ☑ Travel memory: limited journey will be kept in its mind automatically by microcomputer. You don't need to adjust it again even after the power is failure.
- ☑ Soft start & stop which can lessen the impacting to the door, and prolong the service life of it, the noise be decreased.

- ☑ Resistance protection: the opener will check and set the force of the running resistant protection which can ensure the opener has high sensitivity and adapt the running resistance fluctuation automatically even the door is under service for a long time, manual adjustment is unnecessary.
- ☑ Photo cell protector can be connected with the opener to ensure more protection. There are three work modes for option: forbidden, available or only available when closing.
- ☑ Auto closing: If the door is forgotten to close, it will be closed automatically after a while. The time can be set for 1 to 9 minutes. This function is optional.
- ☑ Burglar Alarm: the opener can be connected with alarm. It will beep in case the door is opened abnormally.
- ☑ Fault checking: the opener can check the fault and show its code on the LED screen. It is convenient for adjustment and maintenance.
- ☑ Easy operation: setting parameter will be showed on the LED, easy to be operated

Contents

1. Required tool list	1
2. Important safety instructions	1
3. Opener installation	2
3.1 Important installation instruction	2
3.2 Installation sketch map	3
3.3 Sectional rail assembling	3
3.4 Opener installation	4
3.5 Hoisting opener	4
3.6 Installation of door opening limit piece	5
4. Adjustment instruction	6
4.1 Ready status	6
4.2 Operation instruction	6
4.3 Adjusting methods	6
4.4 Advanced setting	8
4.5 Fault information	8
5. Locking door by hand	8
6. Installation instruction for the accessory	9
6.1 Photo beam installation	9
6.2 Wall button installation	9
6.3 Alarm installation	9
6.4 Back-up battery installation	10
7. Maintenance and repair	10
8. Technical data	10
9. Trouble shooting	11

1. Required tool list

No.	Name	Specification	Quantity
1	Electric drill		1
2	Ladder		1
3	Mobile wrench or socket wrench		1 set
4	Measuring tape	5m	1
5	Screw driver - Flat	2.5×100mm	1
6	Screw driver - Flat	6×200mm	1
7	Screw driver - Philips	6×200mm	2
8	Pincer		2
9	Allen key	10#、12#	1

2. Important safety instructions

WARNING – INCORRECT INSTALLATION CAN LEAD TO SEVERE INJURY FOLLOW ALL INSTALLATION INSTRUCTIONS IN THIS MANUAL AND ALWAYS DO THE FOLLOWING:

- 1) Keep garage doors properly balanced. Have a professional service person make repairs to cables, spring assemblies and other hardware.
- 2) Watch a moving door until it completely stops moving. Do not cross the path of a door in motion, and never let children play **“beat the door”**. Do not let children play near a garage door when it is opening or closing.
- 3) Never put fingers between the sections of a garage door, and teach children to keep their hands and fingers clear of section joints, hinges, tracks, springs and other door parts.
- 4) Do not let children play with transmitters or remote controls, and place these items out of reach of children.
- 5) Test the automatic reversal monthly. The garage door **MUST** reverse on contact with a 40mm high object (or a 50mm by 100mm board laid flat) on the floor. If the garage door does not reverse, adjust either the force or the limit of travel, and re-test the automatic reversal. Be careful when making adjustments because maladjustments can cause serious injury or death.
- 6) Disconnect the electrical power to the operator before making any repairs or removing the housing cover.
- 7) If possible, use the emergency release only when the door is closed. Be careful when using the release with the door open because weak or broken springs may allow the door to fall rapidly, which can cause serious injury or death.
- 8) Do not use the emergency release rope to open or close the door!
- 9) All the Entrapment Warning Label should be pasted in a prominent location.
- 10) Check the function of the operator on a monthly basis!
- 11) Please take good care of this manual after installation so as to have safety inspection and maintenance regularly according to the manual.

3. Opener Installation

3.1. Important installation instructions

In order to reduce the risk of serious injuries or death, please read and follow all instructions provided!

- 1) Install only on a properly balanced door. An improperly balanced door has the potential to inflict severe injury. Have a qualified service person make repairs to cables, spring assemblies, and other hardware before installing the opener!
- 2) Remove all ropes and remove or make inoperative all locks connected to the garage door before installing opener!
- 3) Where possible, install the operator 2.1 meters or more above the floor. For products having an emergency release, mount the emergency release approx. 1.8 meters above the floor!
- 4) Do not connect the opener to source of power until instructed to do so!
- 5) Locate the control button:
 - Within sight of door
 - At a minimum height of 1.5 meters so small children are not able to reach it
 - Away from all moving parts of the door
- 6) Install the entrapment warning label next to the control button in a prominent location. Use staple gun to secure label to surfaces to which the adhesive will not adhere. Install the Emergency Release Marking. Attach the marking on or next to the emergency release!
- 7) This operator is to be used only with residential sectional or one-piece doors!
- 8) To avoid damage to the garage door and operator, disable locks before installing and operating the operator.
- 9) Prior to installation check for and avoid any damaging of covered electrical, gas or water lines in the walls or ceilings!
- 10) The garage ceiling must be designed so that a secure fastening of the operator is guaranteed!
- 11) The installer must ensure that the operator is firmly attached to the garage structure! Do not attach to gypsum or plaster ceilings!
- 12) The enclosed emergency release rope must be installed at an easy to reach height! Check the emergency release to ensure operation with only moderate force required!
- 13) Do not use the emergency release rope to open or close the door!
- 14) Check the function of all safety devices (light beam device, emergency release, and automatic reversal)!
- 15) After installing the opener, the door must reverse when it contacts a 40mm high object (or a 50mm by 100mm board laid flat) on the floor!
- 16) The mechanical limitation device should be installed on the horizontal rail terminal of garage door's two, in order to avoid the panel slide out of the rail.
- 17) The installation and wiring must be complied with the architectural working standard and electrical rules.

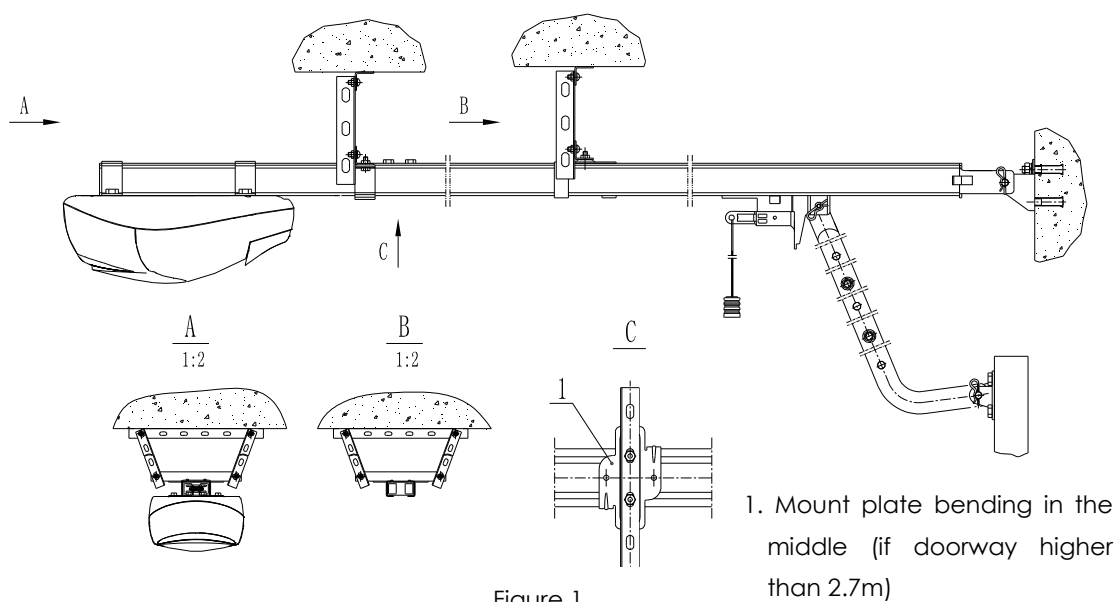
Work safely!

Always wear appropriate safety protection when using any tools!

For garages without a second access an additional emergency release is necessary, which prevents a possible lock out!

3.2. Installation sketch map

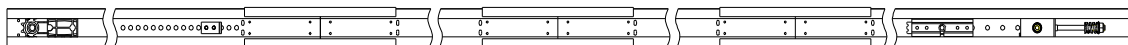
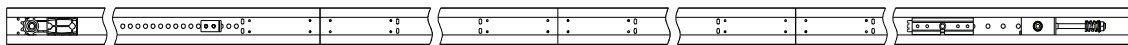
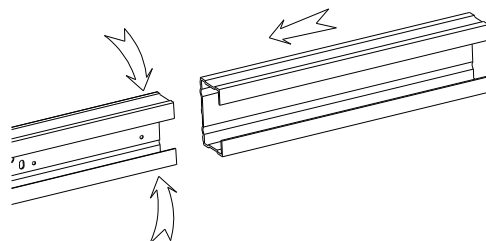
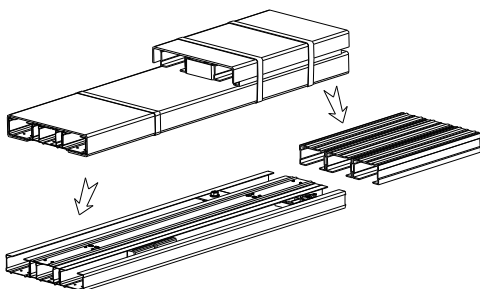
As figure 1 shows the completed installation:



3.3. Sectional rail assembling (Note: Except for integral rail)

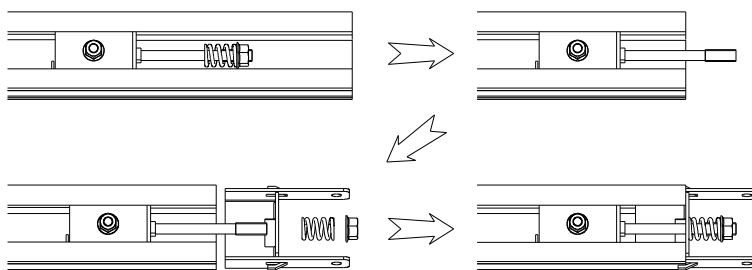
3.3.1. Rail connection

Take out the sectional rails (as shown in Figure 2), put them on the clean and flat floor (as shown in Figure 3) and put them in line. Connect the sectional rails (as shown in Figure 4), finish it as shown in Figure 5.



3.3.2. Fix chain (belt)

As shown in Figure 6, install front support of rail, adjust chain or belt in modest tension state.



3.4. Opener installation

3.4.1. Opener connection

Assemble opener as shown in Figure 7, fasten four anti-loose screw M8 × 16.

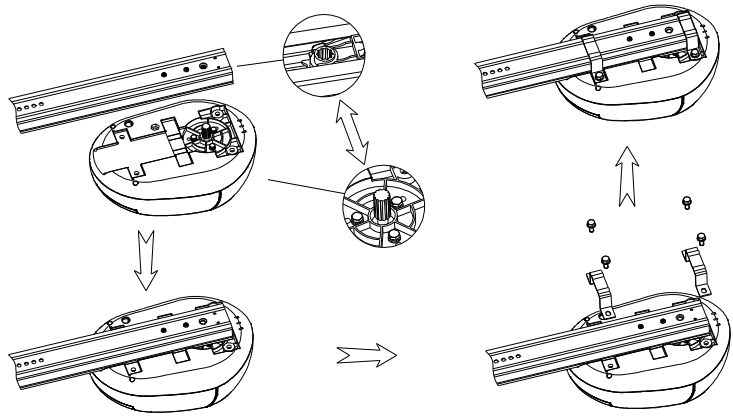


Figure 7

3.4.2. C-type slide rail assembly and clutch Cord Fixed

As shown in Figure 8, fasten the clutch rod group and back slide rail together with cross-slot Small head Screw M6x20, ensure that it is solid and reliable. Tie The rope on the clutch rod.

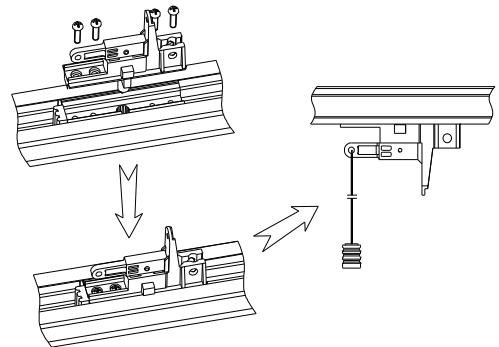


Figure 8

3.4.3. Lifting Plate Connection

Connect lifting plate as shown in Figure 9, L is about 100mm, keep bolts loose, in order to adjust the L length.

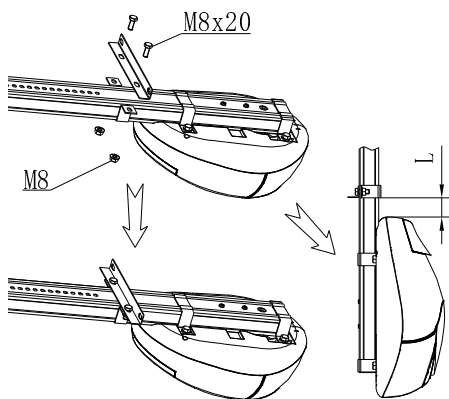


Figure 9

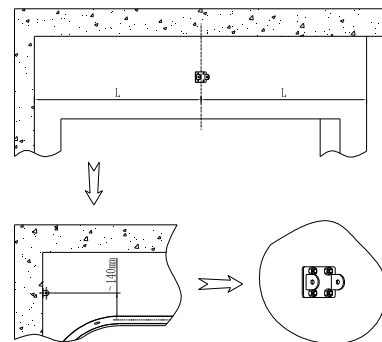


Figure 10

3.5. Hoisting opener

3.5.1. Install the front bracket

As shown in Figure 10, determine the installation location of front bracket, then fix it on the door head with bolts M8. Note: Make sure that the installation strength of front bracket.

3.5.2 Install perforated bracket

Cut out a 400-450mm matching bracket, determine its installation location as shown in Figure 11, then fix it on the ceiling with bolts M8.

Note: Make sure that the installation strength of perforated bracket.

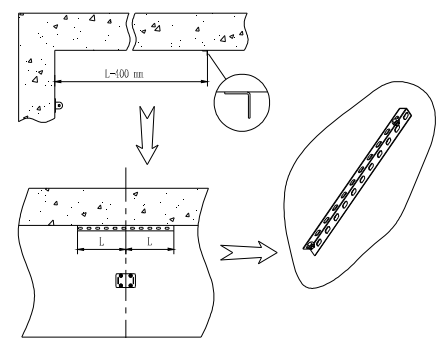


Figure 11

3.5.2. Hoisting opener

As Fig12 showing, connect the rail to the front bracket on the wall, please lift motor side of the opener to make the rail level and coincide with the lintel center line of headroom. Adjust the length of L1, and connect the perforated angle with bolts. The length of L2 can be cut according to needs.

If door height is higher than 2.7meters, in order to keep rail stable and rigid, needs to install a bracket in the middle of rail. As Fig 1 showing.

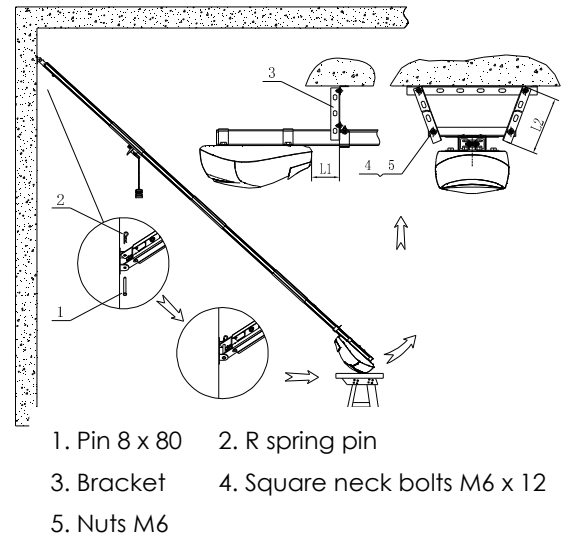


Figure 12

3.5.3. Installation of garage door bracket

Close the door, and set down the installing position of door bracket as Fig13 showing (L2= 30 – 50 mm), then fix it with self-tapping screws.

Note: If there is no correspondent support steel sheets in the door panel's center, the support board must be added to ensure the installation strength of door bracket.

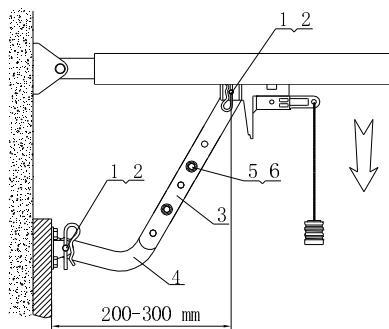


Figure 14

1. Pin 8 x 22
2. R spring pin
3. Straight drawbar
4. Bent drawbar
5. Bolts M8 x 20
6. Hexagon head with spring flange nuts M8

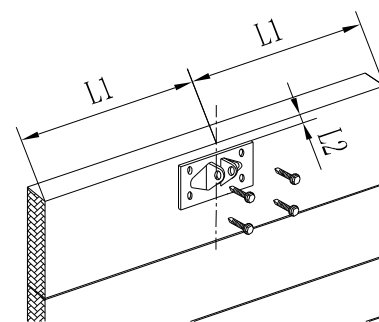


Figure 13

3.5.4. Installation of drawbar

As Fig 14 shows, respectively connect straight drawbar and clutch, bent drawbar and door bracket; then pull down the rope on clutch to release it, move the clutch base to the position showing as Fig 14, then use bolts to lock straight drawbar And bent drawbar. Adjust the length of clutch rope to make the height from the clutch handle to the ground not less than 1.8 metres.

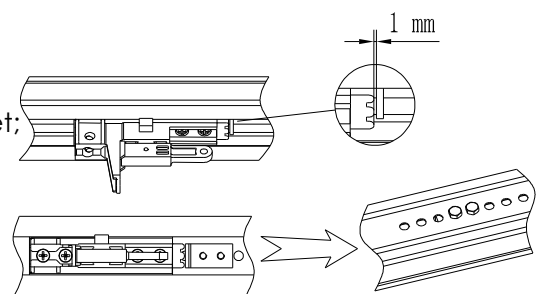


Figure 15

3.6. Installation of door opening limit piece

Manually open the door to the normal using opening height, by using bolts M6x12 to fix the limit piece at the position as Fig 15 showing and fastened them. If the installing position is not pre-drilled, please drill them yourself.

4. Adjustment instruction

Open the cover as Fig16 showing before adjusting.

4.1. Ready status

After switching on the power, the LED lights will light for 2 seconds and off. Then the opener enters ready status, the LED flashes slowly showing the door body's position. As Fig17 shows, from left to right, they are representing opening limit position, middle position, and closing limit position.

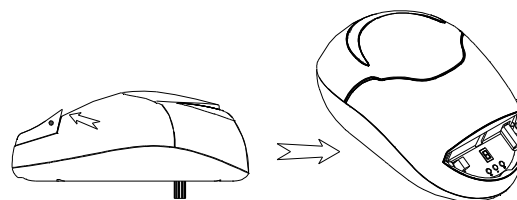


Figure 16

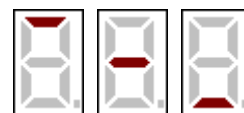


Figure 17

4.2. Operation instruction

When the transmitters are programmed into two-buttons Working model, press the open-button to open the door, press the close-button to close the door. If the door is moving, press any button to stop the door.

When the transmitters are programmed into one-button working model, only the button which was used when learning the transmitter is workable, and its working mode is circle controlling.

Button "+" on the opener can also control the door body's moving. Its working mode is one-button circle controlling. Pressing button "-" can control the lights.

4.3. Adjusting methods

4.3.1. Enter the adjusting status

In the ready status, press the "P" button until the LED shows the picture as Fig18 shows, then release the button.



Figure 18

4.3.2. Auto detect

Press the "P" button until LED shows as Fig18. Press "+", the lamp begins to flash, the Opener goes toward the opening direction automatically, stops at the mechanical open limit position, then goes automatically toward closing direction and stops at the close position. When the lamp stops flashing, the detect procedure is finished, and it exits the setting status automatically. After the detecting procedure, the garage door could be used normally.

During the auto detect, when the door is fully closed, pressing "-" button can stop opener working and set up present close position as after close position manually.

Notice:

- A) Before auto detect, please install and fix firmly the opening mechanical limit equipment at the opener guiding rail according to the maximum open height.
- B) If the photo beam is equipped, please finish installing the photo beam before Auto detect. And please don't shield the photo beam ray during auto detect.
- C) People or other pets, items are prohibited to cross or stay below the door during auto detect.

4.3.3. Close gap

Press the "P" button until LED shows as Fig19. Press "+" and "-" can adjust the close gap. After adjustment, just press "P" to confirm, If you needn't change the value, directly press "P", the system will



Figure 19

automatically enter into next step.

Value means: 0 ~ 9 - each increase or deduction of value, means the close gap increases or deducts 5mm.

4.3.4. Opening force setting

Press the "P" button until LED shows as Fig20. Press "+" and "-" can adjust the opening loading force by adjusting the value from 0 to 9. After the adjustment, just press "P" to confirm. If you needn't change the value, directly press "P", the system will automatically enter into next step.

Value meaning: 0 ~ 9 - the bigger the value is, the bigger the opening door force is, the lower the sensitivity of protection against obstacle is.



Figure 20

4.3.5. Closing force setting

Press the "P" button until LED shows as Fig21. Press "+" and "-" can adjust the closing loading force by adjusting the value from 0 to 9. After the adjustment, just press "P" to confirm. If you needn't change the value, directly press "P", the system will automatically enter into next step.

Value meaning: 0 ~ 9 - the bigger the value is, the bigger the closing door force is, the lower the sensitivity of protection against obstacle is.



Figure 21

4.3.6. Photo beam

Press the "P" button until LED shows as Fig22. Press "+" and "-" can adjust photo beam by adjusting the value from 0 to 2. After the adjustment, just press "P" to confirm. If you needn't change the value, directly press "P", the system will automatically enter into next step.

Value meaning: 0 - No photo beam; 1 - valid while closing; 2 - valid while both closing and opening.



Figure 22

4.3.7. Auto close

Press the "P" button until LED shows as Fig23. Press "+" and "-" can adjust the auto-closing time by adjusting the value from 0 to 9. After the adjustment, just press "P" to confirm. If you needn't change the value, directly press "P", the system will automatically withdraw from the settings.

Value meaning: 0 - prohibit the auto close function;

1 ~ 9 - Auto close delay time 1min~9min.



Figure 23

4.3.8. Transmitter learning and deletion

4.3.8.1. Transmitter learning

Under opener standby condition, press "-" until the LED point lights up, then release the button and press the same button on transmitter more than twice. The point will blink quickly and be off in 2 seconds. It means the learning is successful. If it is not successful, the point will be off without blinking in 2 seconds. Please refer to Fig. 24. The wireless wall switch is also programmed the same as the transmitters. Repeating this process can learn more transmitters.



Figure 24

4.3.8.2. Transmitter deletion

Under opener standby condition, press “-” for around 6 seconds until LED point lights up and then goes off, then release the button. All the transmitters are deleted.

Notice: After this process, all transmitters need to learn again.

4.4. Advanced setting

In the ready status, press “P” button till LED show the picture as Fig25 showing, then release the button.

4.4.1. Transmitter setting

When the LED turns on as Fig 25. Press “+” or “-” to set between 0 and 2. “0” stands for two buttons control; “1” stands for single button (the one learned) control; “2” stands for opening button controls the door and closing button controls the light. Press “P” to confirm the setting. If there is no need to change the setting, you can press “P” directly to enter next setting.



Figure 25

4.4.2. Auto closing setting

When the LED turns on as Fig 26. Press “+” and “-” to set between 0 and 1. “0” stands for auto closing has no relationship with photo beam; “1” stands for forbidden to use auto closing when photo beam be set as 0. Press “P” to confirm the setting. If there is no need to change the setting, you can press “P” directly to enter next setting.



Figure 26

4.4.3. Reset to factory setting

When LED turns on as Fig 27. Press “+” and “-” to set between 0 and 2. “0” stands no Reset to factory setting; “1” stands for Reset to factory setting and keep the transmitters; “2” stands for Reset to factory setting and delete the transmitters. Press “P” to confirm your setting and get out of the setting situation automatically.



Figure 27

4.5. Fault information

This opener can auto detect any errors during running, and display the error information. When error occurs, digital tube could display the error code, the radix point will also flash quickly. After 5 seconds of flashing, the error information, it will automatically recover to display normally.

- a) “1.”: means the journey setting fault.
- b) “2.”: means protection against obstacle during opening
- c) “3.”: means protection against obstacle during closing.
- d) “4.”: means ray of photo cell is shielded or photocell is damaged.
- e) “5.”: means transmitter error in learning or coding.
- f) “6.”: means the running time exceeds 100 seconds.
- g) “7.”: means speed sensor is damaged.
- h) “8.”: means DC motor is damaged.

5. Locking door manually

As shown in Fig. 28, if the door is open when the power is off, you can disconnect the clutch, pull the door to close position by hand, the door can be locked in the limitation hole of rail.

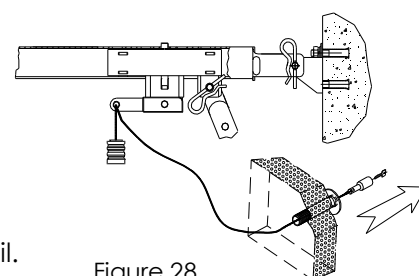


Figure 28

When the power is on, it is not necessary to open lock by hand, only operate remoter or push button directly. When the opener runs to the close position, the clutch will be connect automatically and unlock simultaneously, then the door can be opened and closed by electricity normally.

Notice: Please be gentle with clutch in case of damaging

6. Accessory installation

6.1. Photo beam installation

Photo beam is an infrared protection system. If any people or obstacle interrupts the infrared beam when the door is closing, the opener will stop working instantly and will move back to full opening position automatically.

6.1.1. Locating photo beam

As Fig. 29: Fix photo beam bracket on the left and right wall outside the vertical tracks with self-drilling or expanding screws. Then, install the photo beam inside the brackets with M6×30 screws.

Notice: The two photo beam axis should be on the same line.

Make it far from the door way as possible so as to avoid the sun shining on it.

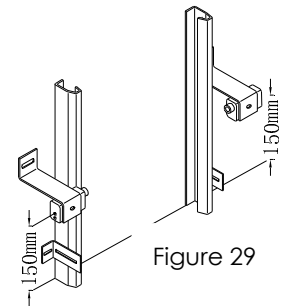


Figure 29

6.1.2. Wiring

Open opener cover as Fig. 30, then connect two wire connecting terminals of photo beam shooting part and receiving part with the two terminals in opener marked with "PHOTO".

These two signal wires can be connected optionally.

Notice: Please set photo beam as "1" or "2" in the set up manual, or the photo beam cannot work.

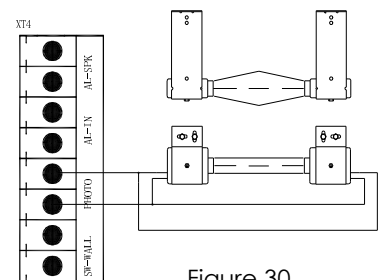


Figure 30

6.2. Wall button installation

Please refer to step 4.3.8. for programming of remote wall switch. Wall switch must be installed on the place that can clearly see the operation of the door and must be 1.3m above the ground to prevent the children from mal-operation.

Open opener cover as Fig. 31, then connect two wire connecting terminals. In the back of wall switch with the two terminals in the opener marked with "SW-WALL". Then fix the wall switch on the wall by screws.

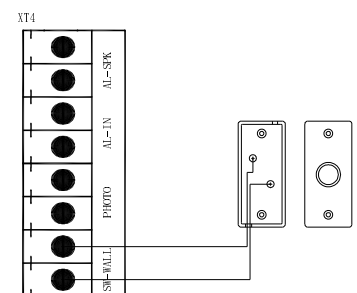


Figure 31

6.3. Alarm installation

Opener can connect with alarm. If the door is open manually when the opener is closed, the alarm will keep beeping for 1 min. Pressing wall switch or transmitter can delete beeping. Connect wires according to Fig.32 and refer to the alarm Manual about the detailed alarm installation and adjustment. Notice: Please ensure the alarm switch can be pressed when door is closed.

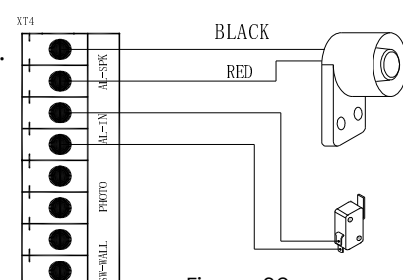


Figure 32

6.4. Back-up battery installation

Opener can connect with back-up battery (optional).
The battery can be charged by opener power. When power failure, the opener will turn to battery power supply automatically.

The battery is DC24V maintenance- free lead acid storage Battery or two DC 12V batteries. Please refer to Fig. 33

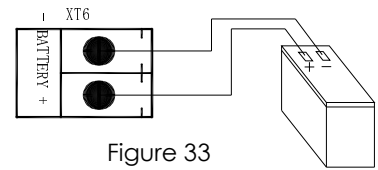


Figure 33

7. Maintenance and repair

Please inspect the automatic reversal and the door balance monthly, and adjust it if necessary.

8. Technical data

- a) Max. output power: 200 W
- b) Max. lifting force: 600 N
- c) Opening and closing speed: 160 mm/s
- d) Light: 12 V (high light LED)
- e) Motor: DC 24 V
- f) Remote control distance: 30 m
- g) Remote frequency: 433.92 MHz
- h) Transmitter amount: 100 pcs
- i) Temperature: -25°C ~ +55 °C
- j) Back-up battery: DC24V 3-7Ah maintenance- free lead acid storage battery

9. Trouble shooting

Trouble	Reason	Solution
The opener doesn't work and has no display on LED	<ul style="list-style-type: none"> •Opener is not powered on •Fuse on main control board is damaged 	<ul style="list-style-type: none"> •Switch on the power, inspect " POWER" socket •Change fuse to the same type fuse.
The opener doesn't work and the LED displays 1.	<ul style="list-style-type: none"> •Travel adjustment error 	<ul style="list-style-type: none"> •Re-adjust limit position
Door stops before it is fully up on opening cycle; LED displays 2. or 3.	<ul style="list-style-type: none"> •The closing resistance is greater than that system set load activates the barrier protection system 	<ul style="list-style-type: none"> •Inspect and adjust the door balance system
Door auto-reverses before reaching the ground on closing; LED displays 3.	<ul style="list-style-type: none"> •The closing resistance is greater than that system set load activates the barrier protection system 	<ul style="list-style-type: none"> •Inspect and adjust the door balance system •increase door closing load
The door won't run in the closing door direction, LED display 4.	<ul style="list-style-type: none"> • The light of photo beam have been shielded; •System started to use photo beam system, but it hasn't been connected. 	<ul style="list-style-type: none"> • Remove the barrier in the beam road. • Prohibit using photo beam or connect the photo beam
Opener stops after a moment of running, LED display 7.	<ul style="list-style-type: none"> • speed sensor wire is loosed • speed sensor is broken 	<ul style="list-style-type: none"> • reconnect the wires • change speed sensor
Opener cannot run, LED display 8	<ul style="list-style-type: none"> • DC motor wire is loosed • DC motor is broken • control board is broken 	<ul style="list-style-type: none"> • reconnect the wires • change DC motor • change control board
Push button can operate normally, but remote control won't	<ul style="list-style-type: none"> • The transmitter has not learned • It has no battery in the transmitter 	<ul style="list-style-type: none"> • Learn transmitter according to the manual • Change the battery of transmitter
The remote working distance is less, the brightness of indicator lamp become lower	<ul style="list-style-type: none"> •The battery power is not enough 	<ul style="list-style-type: none"> •Change the battery
Remote operates normally, but the push button work respond	<ul style="list-style-type: none"> • Push button loose or broken circuit 	<ul style="list-style-type: none"> • Inspect push button wiring

The product appearance and functions will be changed by development without further notice. This manual is for reference only, the actual item is the standard.

Distributed in New Zealand by Newfield Group

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