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1、 Packing list

Name	Logo	Function	Qty
Motor Unit		Providing control and actuation functions	1
Remote control		Remote controlling	2
User Manual		Installation & application guide	1
Curved Door Arm		Towing the main door	1
Porous Flat Iron		Fixing and supporting the guide rail	2
Fix Firmware		To fix guiderail and wall	1
Active Firmware		To fix guiderail firmly	1
Door Connector		Connecting between the door and the curved door arm	1
U-shaped Connector		Connecting between the motor unit into the guide rail	3
φ8x80 Clevis Pin		Fixing the guide rail with the wall	1
φ8x20 Clevis Pin		Connecting the door and the curved door arm	1
R Clip		Use with the long and short Clevis pins	2
M8x12 Bolt with Nut		Fixing the connection between the motor unit and the guide rail	4
M8x25 Bolt with Nut		Connecting between the curved door arm and the straight door arm	2
M6x25 Self threading Screw		Fixing the door connector into the door	6
M6x20 Bolt with Nut		Applying with the u-shaped connector	2
Guide Rail		Motion guiding	1

2、 Introduction

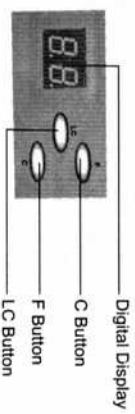
This new series of BEIDI door openers is specially designed with artificial intelligence technology. It possesses a double MCU and a separated receiver and control system. With the use of anti ENI chips, HALL electronic code computing, it provides extremely accurate positioning, never shifting and high repeatability features, as well as high anti-interference, stability and remote control function. It comes with many advanced features and completed functions. Fully function with intelligent system not only makes it over many similar products in Mainland, but also comparable to international standards.

3、 Features and functions

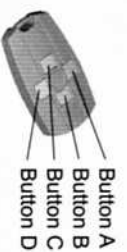
1. Each time it is switched on, there will be "H" (representing door-auto-closing function de-activated) or "h" (representing door-auto-closing function activated) flashing in the digital display. It shows the system functions normally.
2. Functions solely set by a single button - easy for operation.
3. Safety reversal system: Whenever the door hits an obstruction, it reverses to the top.
4. It will stop opening if there is any binding or sticking.
5. The sensitivity for stop opening and closing the door can be adjusted manually.
6. Remote control function facilitates controlling.
7. Power failure protection: Auto adjustment in door upper and lower limits when it is out of power.
8. Auto illumination (3 minutes): The illumination light will light for 3 minutes after the last command sent by the user.
9. With Microchip's transmitter rolling code technology and its high Q value, it provides extremely high security and stability.
10. Auto error correction: The error generated during the door movement will be automatically corrected by the system.
11. 9 levels for door-auto-closing system: In an open door, the time for door closing can be adjusted. Illumination light will flash for 10 seconds before the door is closed under the door-auto-closing function.
12. When the door is closing, digital display shows "O", which should be rotating clockwise. On the other hand, when the door is opening, digital display shows also "O" which should be, however rotating anti-clockwise. If they are mixed up, it shows there is wrong connection in positive and negative terminals in power.
13. If the system receives no digital impulse signal, it stops to protect itself.
14. Whenever the infrared sensor detects an object: When the door is closing, it stops and reverses. When the door is opening, it stops.

4、 Components

4-1 Motor Unit

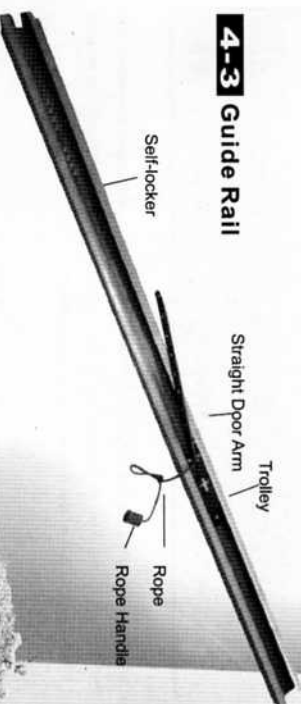


4-2 Remote control



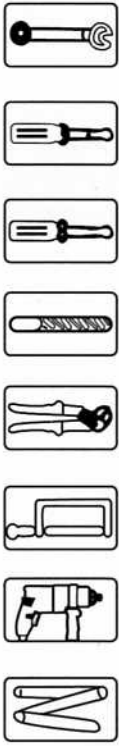
Remarks:
Button A B C D can be use individually, when you set the initial button to match code, then can control by that button, factory initial setting is button A, button B C D as back up button, they can be match to other 3 opener, means 1 transmitter can control 4 opener

4-3 Guide Rail



5、Installation

5-1 Necessary tools



5-2 Components checking

5-2-1、Be sure all the parts are as stated in the Packing List.

5-2-2、Identify the type and height of the garage door.

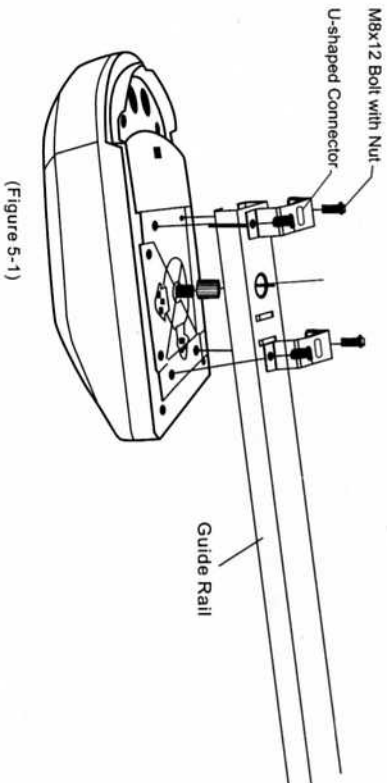
Details areas as follows:

Slider model	Slider specification (mm)	Packing size (mm)	Door lifting height (mm)	Weight (kg)
BD-280	2850 * 72 * 34	2855 * 75 * 38	< 2000	6.5
BD-300	3050 * 72 * 34	3055 * 75 * 38	< 2200	7
BD-330	3350 * 72 * 34	3355 * 75 * 38	< 2500	7.7
BD-360	3650 * 72 * 34	3655 * 75 * 58	< 2800	8.4
BD-390	3950 * 72 * 34	3955 * 75 * 38	< 3100	9.1
BD-420	4250 * 72 * 34	4255 * 75 * 38	< 3400	9.8

Remarks: It is possible to mount the motor unit in horizontal direction if space is limited. The total length of installation will be decreased by 160mm from that of the standard (in vertical direction). The raised height of the door remains unchanged.

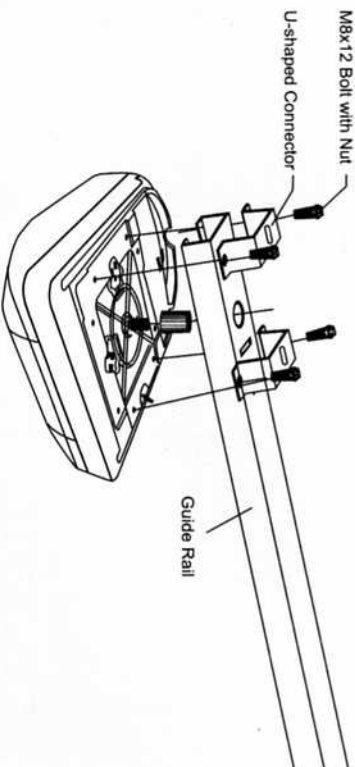
5-3 Assembling the motor unit with the guide rail

5-3-1 Standard installation (see figure 5-1)



(Figure 5-1)

5-3-2 Horizontal installation (see figure 5-2)



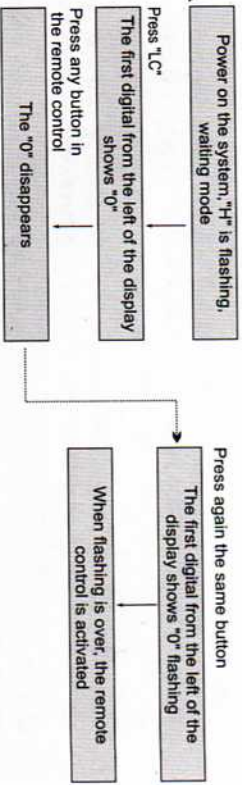
7. Adjustment (must read before use)

- * All the settings and parameters of the system can be changed through the three buttons "F", "LC", and "C" (F: Function Button; LC: Learn Code Button; C: Confirm Button). The setting status can be viewed on the digital display.
- * In the menu, use "F" to change values, "LC" to have code learnt by the system and "C" to confirm and save.
- * While setting procedures in the menu, if there is no input from "F" or "C" for 30 seconds, it ends and exits the setting. Values saved before are reserved.
- * All the saved data cannot be erased. It remains unchanged even the power is off, unless the "default" is set through the following procedures.

7-1 Standard setting procedures:

This program shows procedures for remote control activation/deactivation; travel limits setting; sensitivity adjustment (reverse force); Door-auto-closing system. User can set those in a step by step, one by one manner, or pick whichever first in particular.

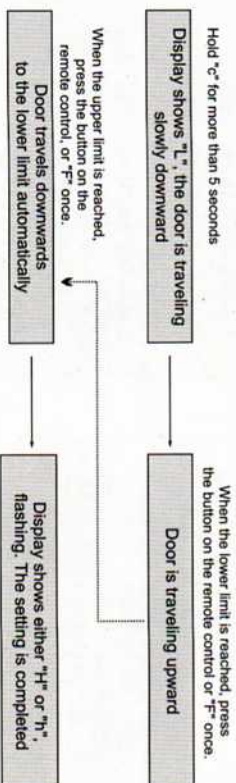
7-1-1 Remote control activation



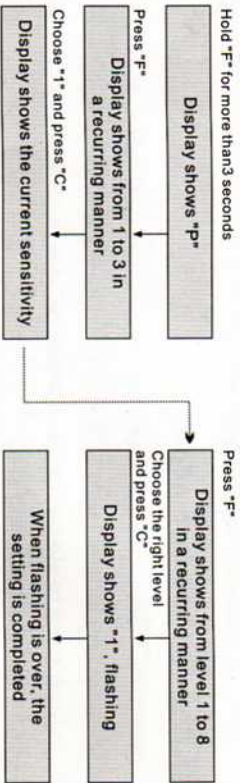
Remarks: a. If there is more than one remote control needs activation, repeat the procedures above for every of them.
b. For deactivation, hold "LC" for more than 10 seconds. It is done when the "0" in the left of the display disappears.

7-1-2 Travel limits settings (up and down travel limits)

Remarks: If the door reverses when closing but there is no visible interference to travel cycle, it shows the down sensitivity is set too high. Please read below "3 Sensitivity adjustment", and decrease the sensitivity level accordingly. If the force during the door travel cycle is found to be too high, increase the sensitivity level accordingly!!!



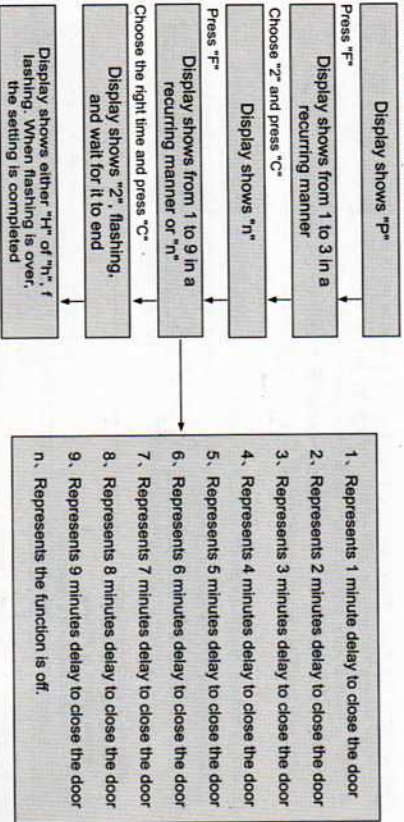
7-1-3 Sensitivity adjustment (level 4 by default pre-set)



Attention: a. While setting procedures in the menu, if there is no input from "F" or "C" for 30 seconds, it ends and exits the setting. Values saved before are reserved.
b. There are totally 8 levels in sensitivity (represented by 1-8). The higher the level, the higher the sensitivity. If the sensitivity level is set too high, it affects the stability of the travel cycle (the door is easily stopped or reversed). If it is too hard to stop the door during its travel, increase the sensitivity level accordingly. If the reverse of door movement is always the case in the absence of interference, decrease the sensitivity level accordingly.

7-1-4 9 levels door-auto-closing system (off by default pre-set)

Hold "F" for more than 3 seconds



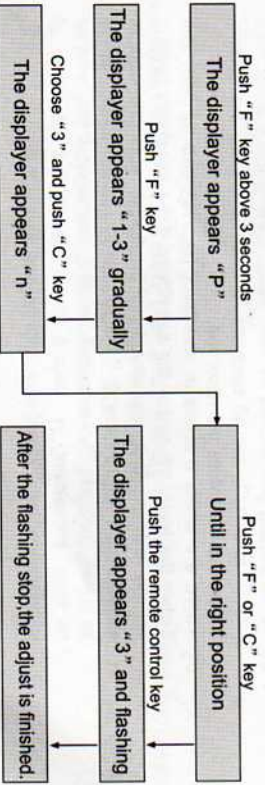
- Remarks:** a. If the function is on, "h" will be flashing in the display. If the function is off, "H" will be flashing in the display instead.
b. While setting procedures in the menu, if there is no input from "F" or "C" for 30 seconds, it ends and exits the setting. Values saved before are reserved.

7-1-5 Route micro-adjust

In order to operate the route micro-adjust function well, new extra micro-adjust function can let you learn and operate it easily and quickly.

After learning the route operation, if the door's situation is still not ideal, please operate by the following step:

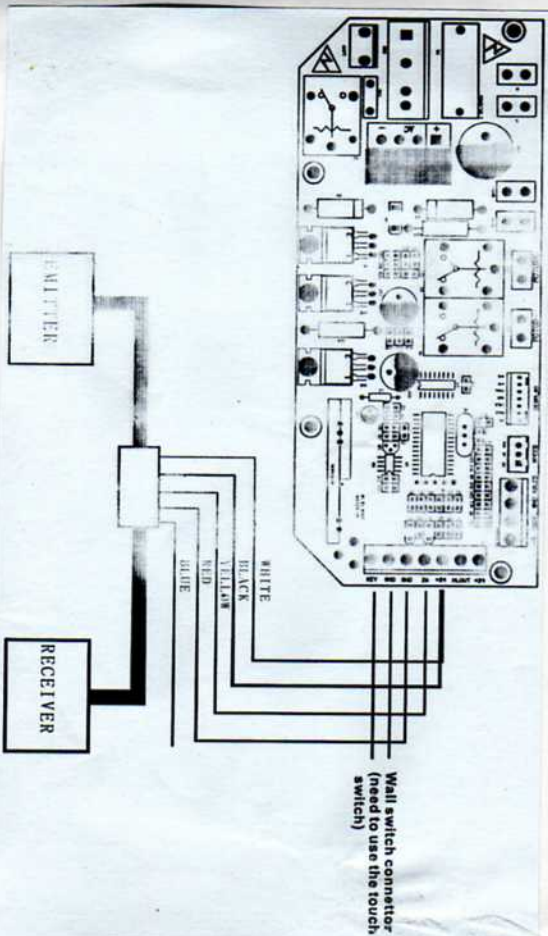
1. Make the door in the closed position



7-1-6 FUNCTION 4 KEYBOARD LOCK PASSWORD RECOVER FUNCTION (DETAILS PLEASE SEE THE MANUAL)

8、Accessories installation and usage

8-1 Install with photoelectricity switch and wall switch



8-2 External power supply for backup

- 8-2-1. Connect the positive pole and negative pole of the external power supply (DC24V) to the UPS socket accordingly. (pay attention if they are reversed)

9、Specifications

Operating voltage: 180-250V, 50Hz	Power consumption: 70W 24V DC
Illumination power: 25W	On off speed: 140MM/S
Life time: >40000 times	Remote control distance: 30M
Machinery noise: <60dB	Operating temperature: -35℃—70℃
Maximum pulling force: 800N	Remote control frequency: 433MHz
Economic mode: less than 5W in power consumption	

10、 User guide

10-1 Usage

- 10-1-1、 Remote: User can control the door open, stop, shut and repeated operated.
- 10-1-2、 Manual: Under power failure or maintenance conditions, by pulling the rope handle from the trolley and moving against the door, user can open and close the door manually.
- 10-1-3、 Self-locking: For a power failure during operation, manually close the door and achieve self-locking. User can unlock it either electrically or manually. (please refer to the use of trolley section)

10-2



Attention

- 10-2-1、 After installation of the door, it is a must to check the status of torsion spring balance system, and pulley under operation. Make sure the door is well balanced and moving smoothly, as well as all the other parts.
- 10-2-2、 Check periodically (twice a year) the balance system, and grease the track system. After certain period of time of use, if the door movement is not preferable, try re-set the door opening and door closing forces. (decrease the door opening/closing position suitably)
- 10-2-3、 When the power returns after a power failure during operation, user can make use of the remote control to start the system. The door will find its position automatically.
- 10-2-4、
 - a. If the door is crashed, please call trained door systems technicians or supplier. Do not fix yourself to prevent accident.
 - b. When operating or using remote control, it is important the system is in the user's line of sight. This is to prevent family or pet from getting hurt.
 - c. Keep the remote control out of reach of children to avoid accident.

11、 Troubleshooting

Problem	Cause	Solution
There is buzzing sound coming from the chain	The chain is loosened, sagged	Tighten the screw at one end of the rail
Motor spins without driving the chain	Crack in the collar due to improper use	Open the machinery and replace the collar
Remote distance is too short	Out of battery	Replace the battery of same model
No signal in the digital display	Power unavailable	Verify there is power supply to the machinery
	Fuse broken by excessive current	Open the motor unit and replace the fuse of same model
Travel limits cannot be set The motor moves once but stops after it is turn on	"HALL" Component out-of-work or loosen of the connect wire	Please check the "HALL" component or connect wire
The door cannot be opened or closed or moved	Disorder in program settings	Reset the system from the manual accordingly
No response from the door	Remote controller is not yet activated	Refer to the manual and activate the controller
While the door is opening or closing, it stops or reverses	The door is blocked during its travel	Remove any obstruction or check if the spring tension loses its balance
Under remote controlling, the chain cannot drive the door into motion	The trolley was not closed and attached to the rail	Refer to the manual and close the trolley
During operation, there is chirping sound in the rail	The system is used over a period of time. There is no lubrication between the rail and the trolley	Add limited amount of grease onto the track system especially the contact place between the rail and the trolley.

※、 It is prohibited for any non-specialist to touch any connection or component on the control board. This is to prevent any accident which may happen as a result.