

Jasper

Garage Door Opener

24V DC Motor
For Residential Use Only



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I. General Safety Warnings And Precautions

WARNING!

Please read this instruction manual carefully before the installation of door-automated system.

This manual is exclusively for qualified installation personnel.

The manufacturer is not responsible for improper installation and failure to comply with local electrical and building regulations.

Keep all the components of the kit content and this manual for further consultation.

In this manual, please pay extra attention to the contents marked by the symbol: 

Be aware of the hazards that may exist in the procedures of installation and operation of the door-automated system.

Besides, the installation must be carried out in conformity with local standards and regulations.

If the system is correctly installed and used following all the standards and regulations, it will ensure a high degree of safety.

Make sure that the doors works properly before installing the door-automated system and confirm the doors are appropriate for the application.

Do not let children operate or play with the door-automated system.

Do not cross the path of the door-automated system when operating.

Please keep all the control devices and any other pulse generator away from children to avoid the door-automated system being activated accidentally.

Do not make any modifications to any components except that it is mentioned in this manual.

Do not try to manually open or close the doors before you release the gear motor.

If there is a failure that cannot be solved and is not mentioned in this manual, please contact qualified installation personnel.

Do not use the door-automated system before all the procedures and instructions have been carried out and thoroughly read.

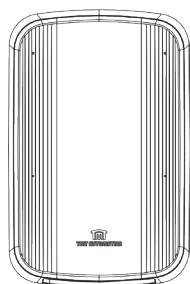
Test the door-automated system weekly and have qualified installation personnel to check and maintain the system at least every 6-month.

Install warning signs (if necessary) on the both sides of the door to warn the people in the area of potential hazards.

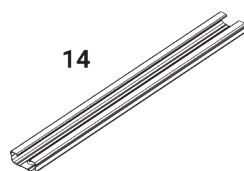
II. Kit Content

1. Kit Content

• Motors

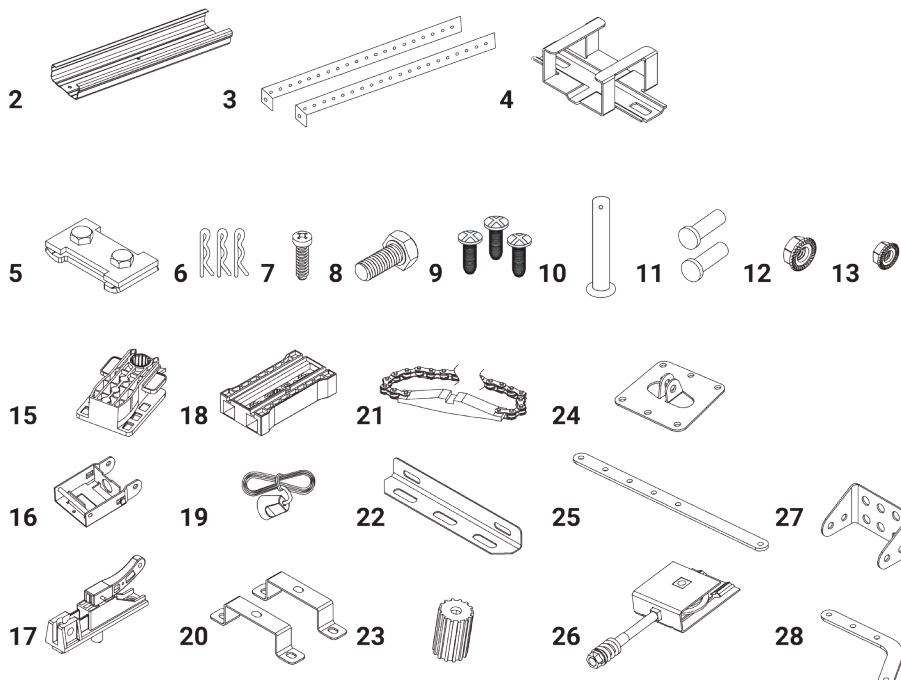


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14

• Accessories



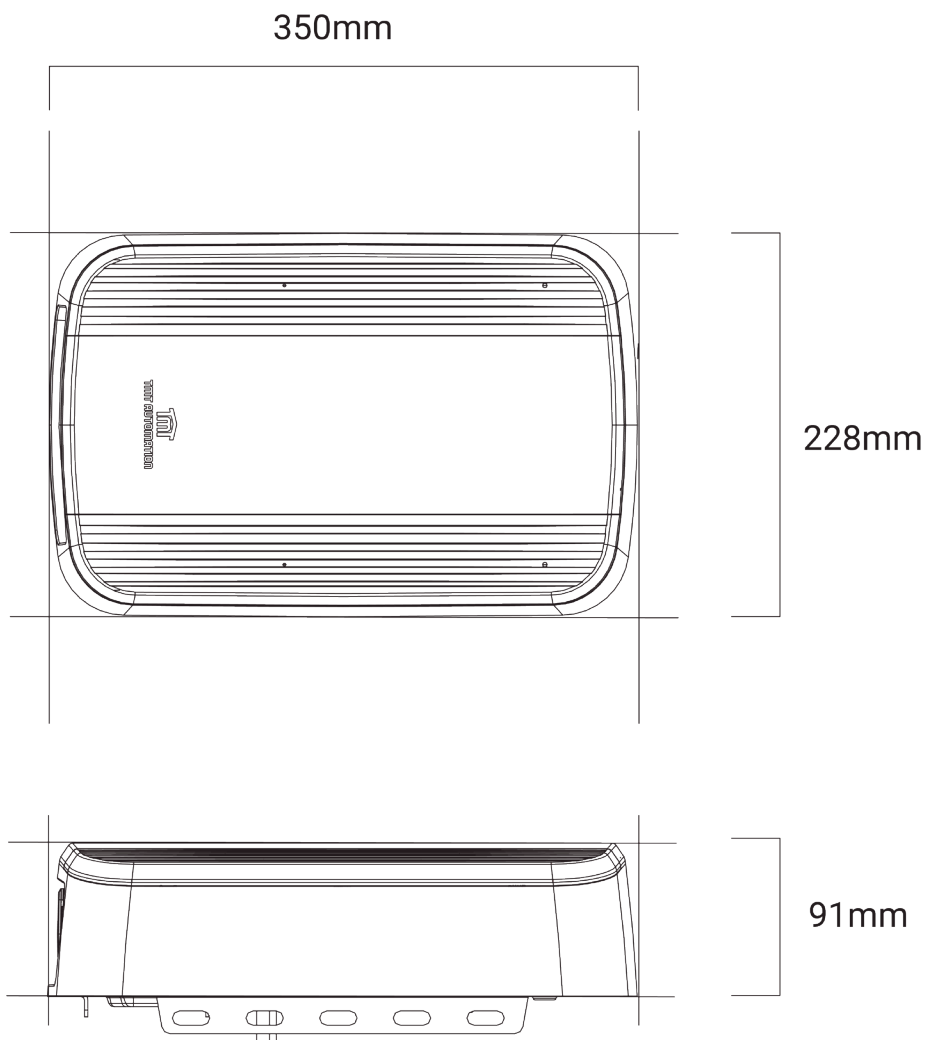
• REF

	DESCRIPTION	QUANTITY
1.	Motor	1
2.	Connecting rail	2
3.	Ceiling bracket (optional)	2
4.	Ceiling support bracket	1
5.	Blocker (optional)	1
6.	R pin	3
7.	M6 screw	4
8.	M8 bolt	2
9.	M4 screw	3
10.	Long clevis pin	1
11.	Clevis pin	2
12.	M8 nut	2
13.	M6 bolt	6
14.	Rail	3
15.	Rear pulley support	1
16.	Front hold bracket	1
17.	Outer trolley assy	1
18.	Inner trolley assy	1
19.	Release rope	1
20.	Motor hold bracket	2
21.	Chain & Mortise	1
22.	Ceiling bracket (optional)	1
23.	Transition gear	1
24.	Door bracket	1
25.	Straight arm	1
26.	Front pulley tensioner	1
27.	Header bracket	1
28.	Bent arm	1

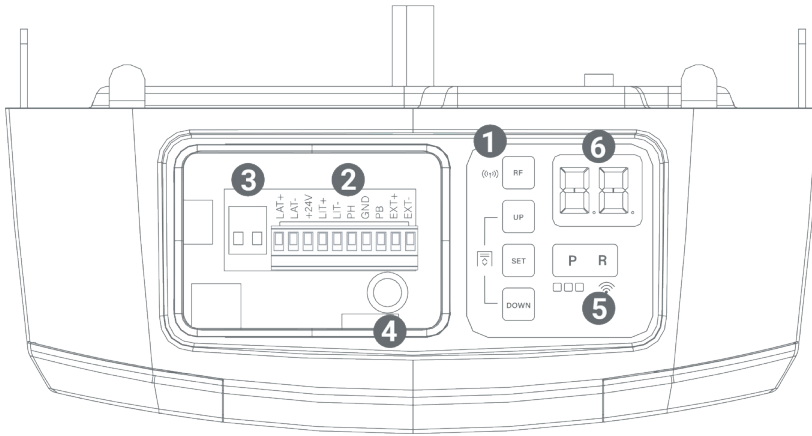
2. Specification

Model	Jasper 80	Jasper 100	Jasper 120	Jasper 150
Category	DC Garage Door Motor			
Force	800N	1000N	1200N	1500N
Max door area	10-12m ²	12-14m ²	14-16m ²	≤20m ²
Power Supply	AC 220 / 110V ; 50Hz~60Hz	AC 220 / 110V ; 50Hz~60Hz	AC 220 / 110V ; 50Hz~60Hz	AC 220 / 110V ; 50Hz~60Hz
Motor Power Supply	DC24V	DC24V	DC24V	DC30V
Power (W)	100W	120W	144W	210W
Gear type	Worm gear	Worm gear	Worm gear	Worm gear
IP Rating	IP44	IP44	IP44	IP44
Current (A)	3.3A	4.2A	6A	7A
Working temperature / Operating temperature	-20°C ~ +50°C	-20°C ~ +50°C	-20°C ~ +50°C	-20°C ~ +50°C
Dimensions (mm)	350 x 228 x 91	350 x 228 x 91	350 x 228 x 91	350 x 228 x 91
Manual release	Yes	Yes	Yes	Yes

3. Dimensions



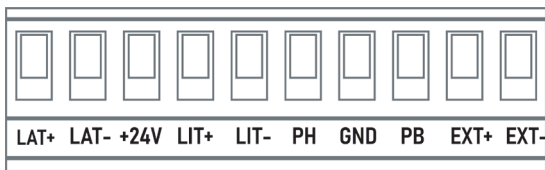
4. Control Board



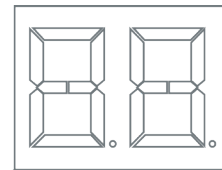
1. Operation buttons:


- Remote Function key (RF Learn)
- UP key (Up)
- Setting key (Set)
- Down key (Down)

2. Connection terminal of Optional accessories



6. LED Display

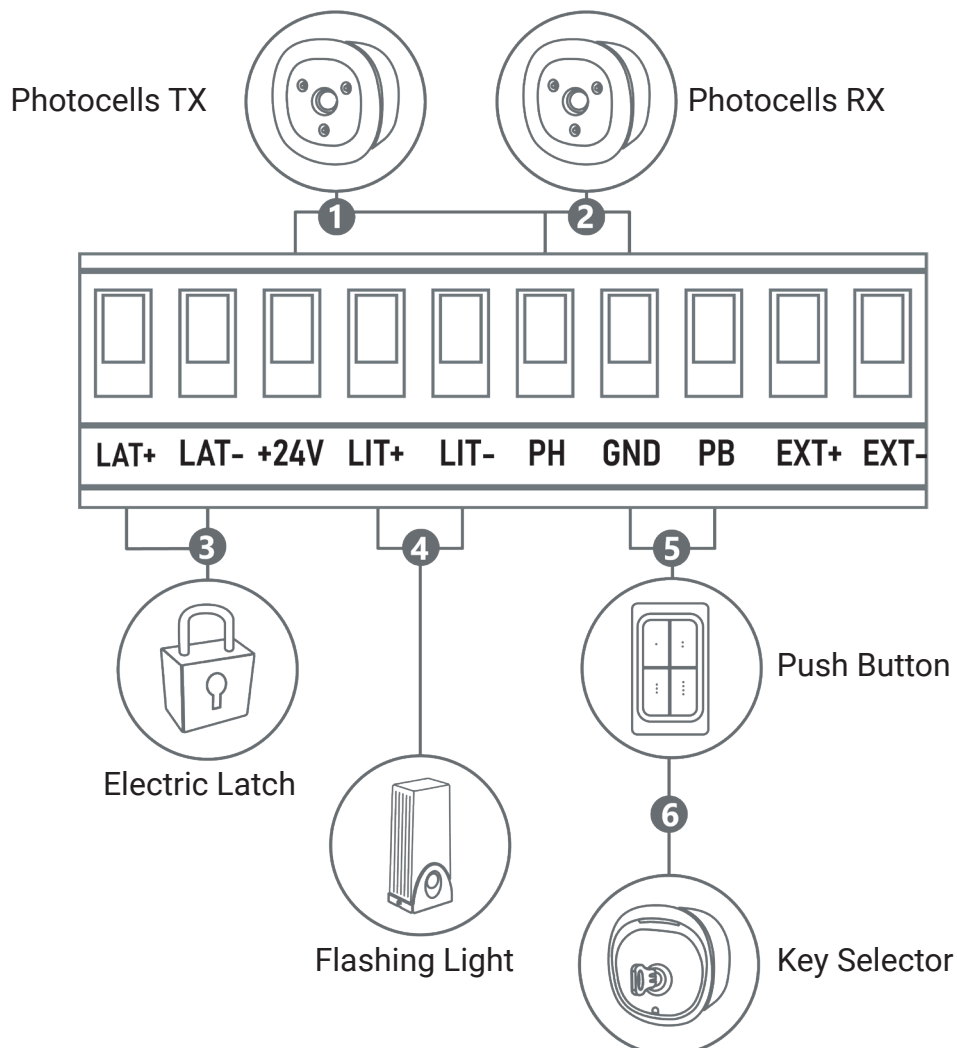


 Note: the LED will turn ON when the motor is powered

3. Battery terminal

4. Fuse

5. Wi-Fi/Bluetooth Panel (Refer to Wi-Fi/Bluetooth User Manual)



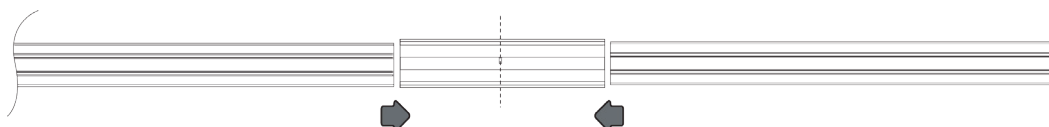
III. Installation

1. Rail Assembly(Only for 3 PCS rail; 1 PC rail is preassembled)

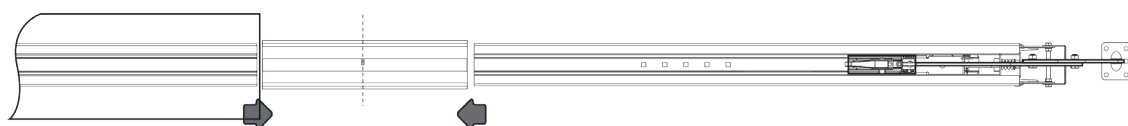
1. Fasten the 15 rear pulley support on the rear end of the 14 rail with 9 M4 screw(3 pcs).



2. Assemble the front and 2 middle rail with the junction, and make sure is located at the middle of the protruding point.



3. Assemble the back and 2 middle rail with another junction, and make sure is located at the middle of the protruding point.



Complete

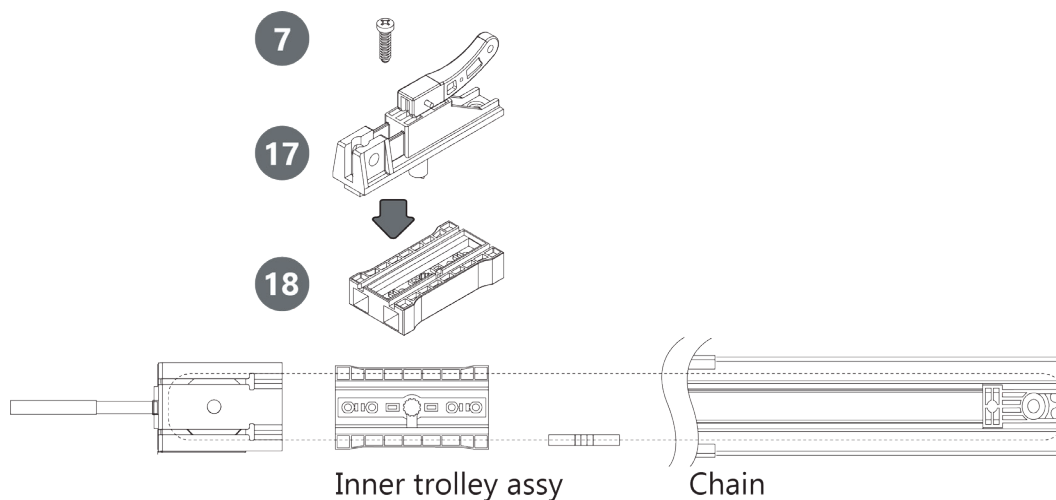


4. Put the 18 inner trolley assy in the rail track, and put the 21 chain in the rail track. Make sure the mortise part is on left side of rail.

Cross the 21 chain through the 26 front pulley tensioner, the 15 rear pulley support, and the 18 inner trolley assy.

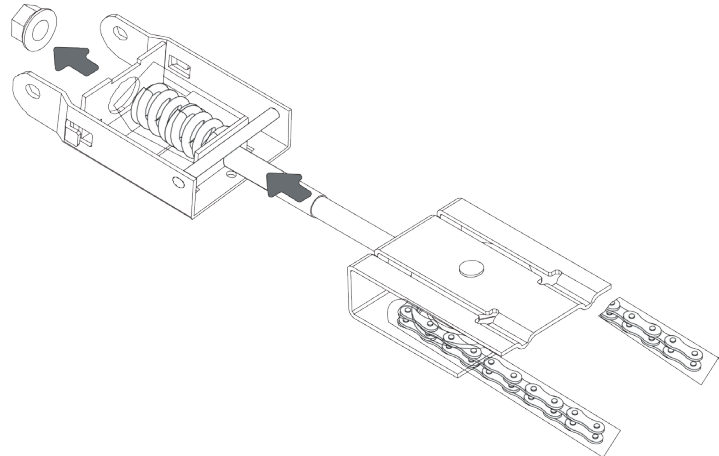
The mortise part should be placed in the front of the whole rail.

Connect the 21 chain.



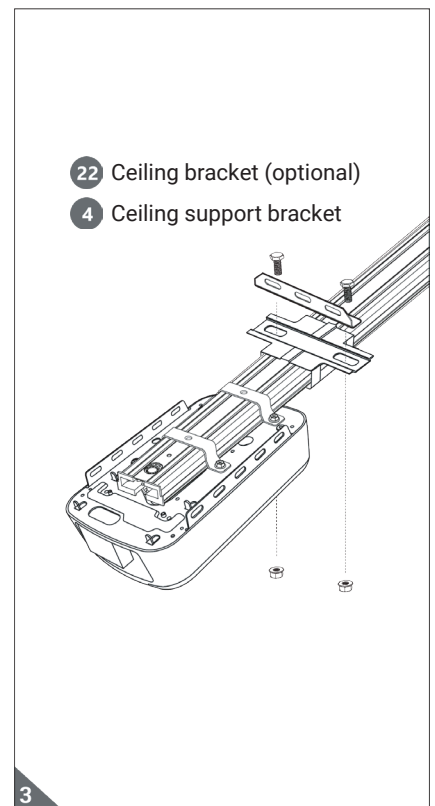
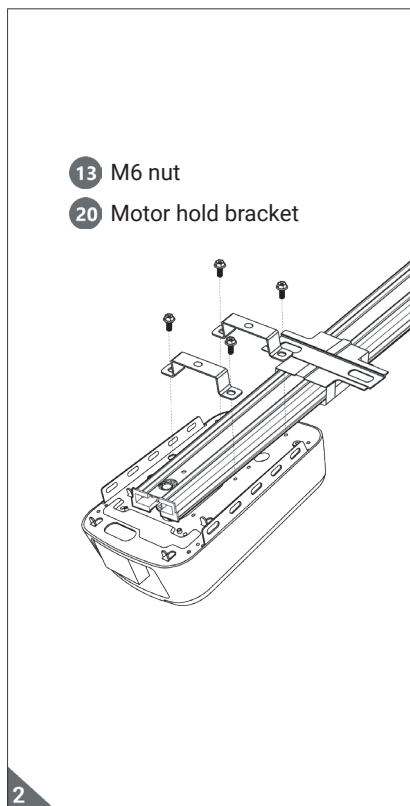
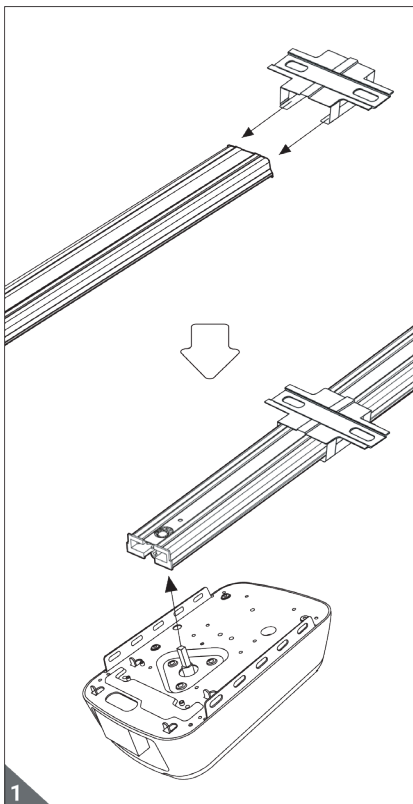
- Remove the nut and the spring in the **26** front pulley tensioner. Make sure the chain is placed in the gap of the pulley on the two sides.
Insert the **16** front hold bracket against the rail. Use the spring and the nut to adjust the tightness of the **21** chain.

- 16** Front hold bracket
- 26** Front pulley tensioner
- 21** Chain & mortise



2. Attach The Rail to The Motor

- Insert the ceiling support bracket **4** from the rear side of the rail, Connect the insertion gap of the **15** rear pulley support and **23** transition gear to the output shaft of the motor.
- Fasten the rail on the motor with **20** motor hold bracket and **13** M6 nut.
- Fasten the **4** ceiling support bracket and **22** ceiling bracket at the rear side between the motor and the rear blocker(optional).



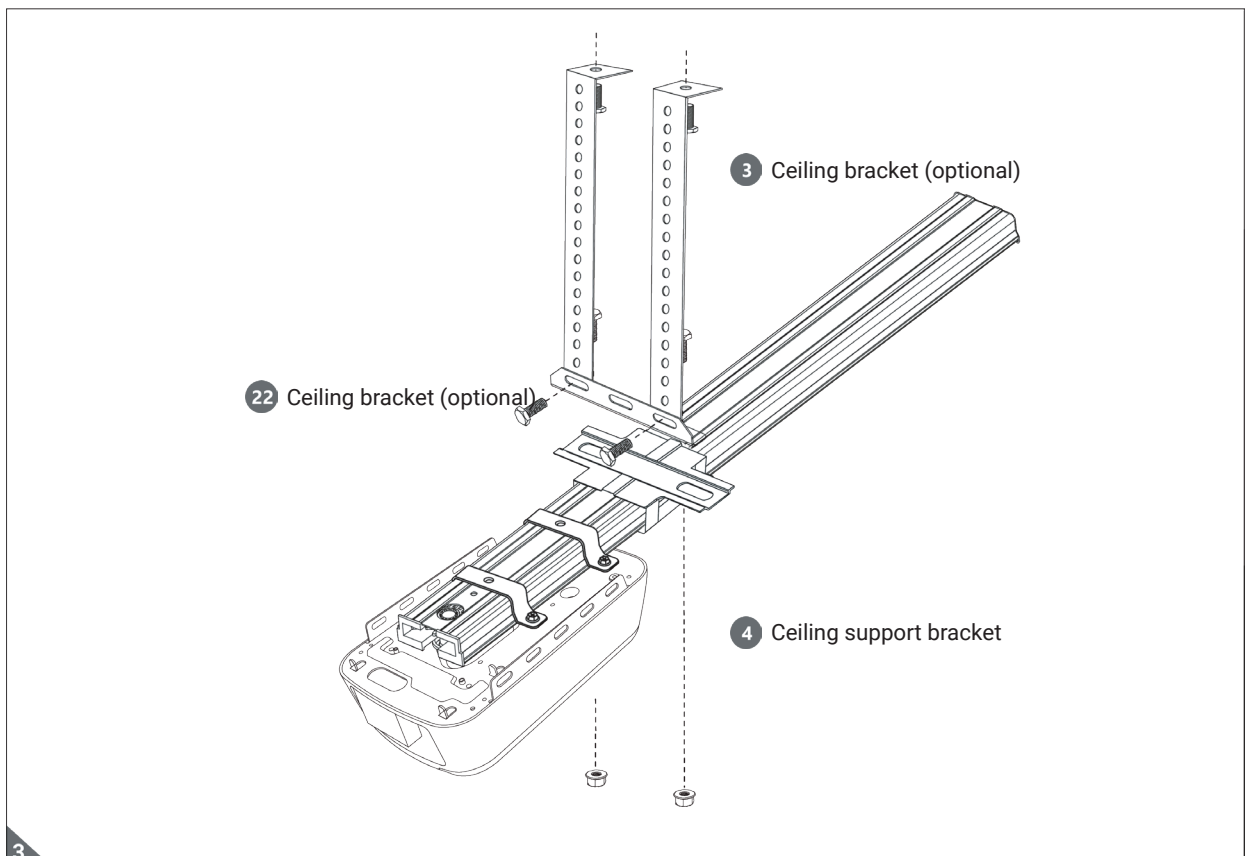
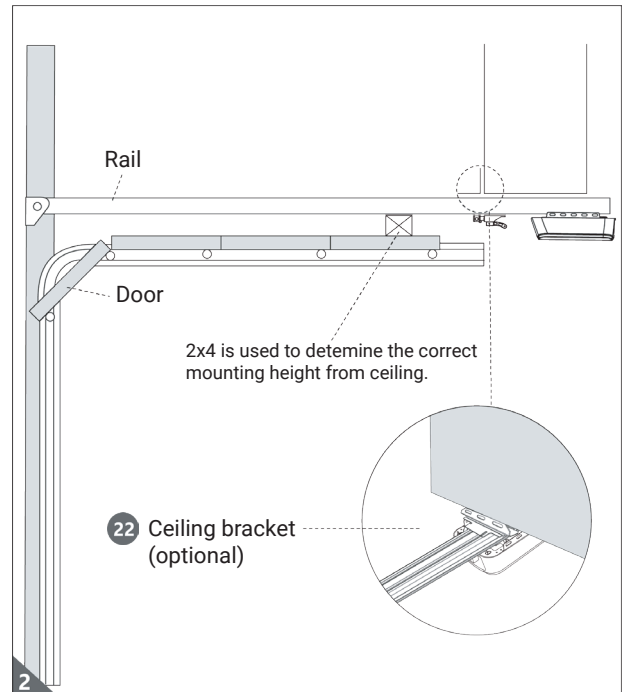
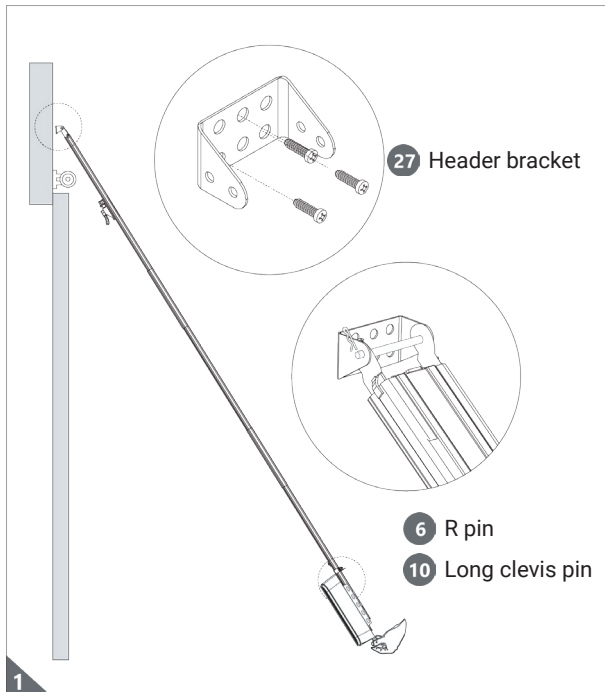
3. Attach The Rail on The Headerwall And Ceiling

1. Fasten the **27** header bracket on the wall with expansion screw(not included).

💡 It is recommended is positioned at the center of the garage door.

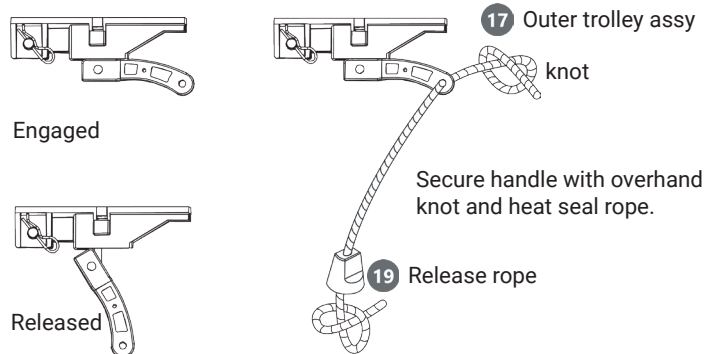
The installation height of the **27** header bracket varies from 30-50cm from the garage door.

2. Align the assembled rail front rear against the **27** header bracket.
3. Attach the fornt rail to **27** header bracket with **6** R pin and **10** long clevis pin.
4. Attach the **22** ceiling bracket on the crossbeam of ceiling with crews.



4. Connect Release Section to The Garage Door

1. Connect the **19** Release rope on the **17** Outer trolley assy.



WARNING

To prevent possible SERIOUS INJURY or DEATH from a falling garage door:

If possible, use emergency release handle to disengage trolley **ONLY** when garage door is **CLOSED**. Weak or broken springs or unbalanced door could result in an open door falling rapidly and/or unexpectedly.

NEVER use emergency release handle unless garage doorway is clear of persons and obstructions.

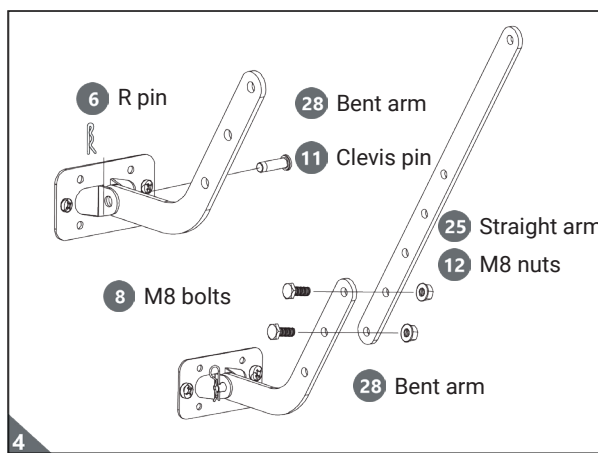
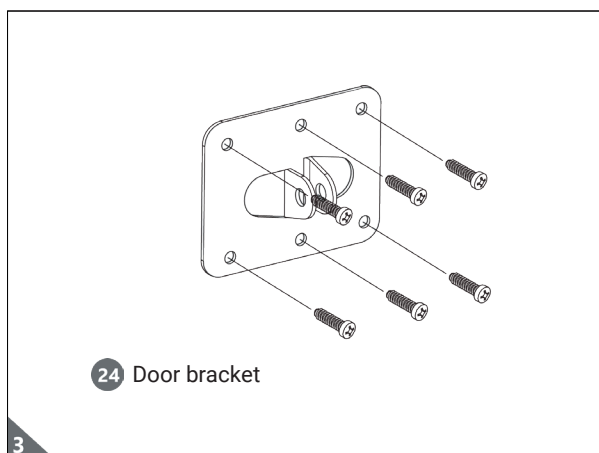
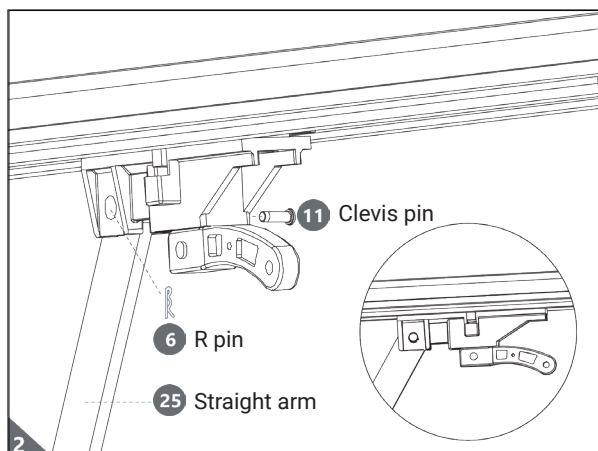
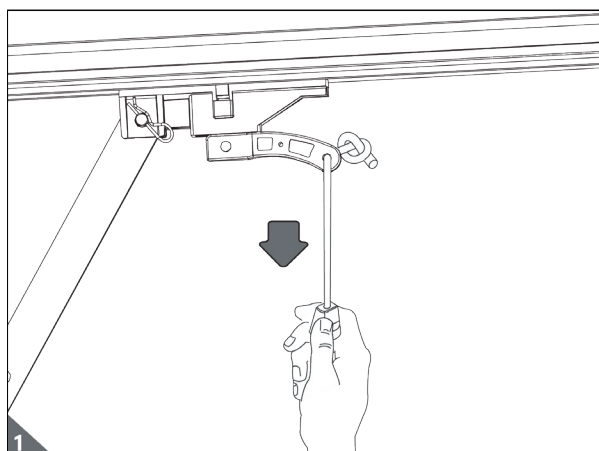
NEVER use handle to pull door open or closed. If rope knot becomes untied, you could fall.

Handle should hang 6 feet (1.5 m) above floor.

Ensure that the rope and handle clear the tops of all vehicles to avoid entanglement.

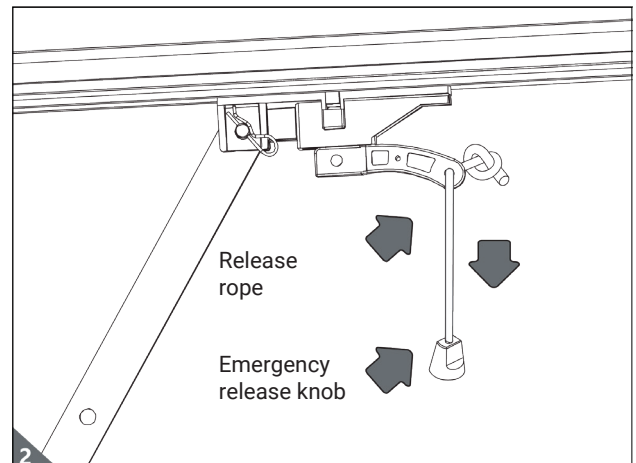
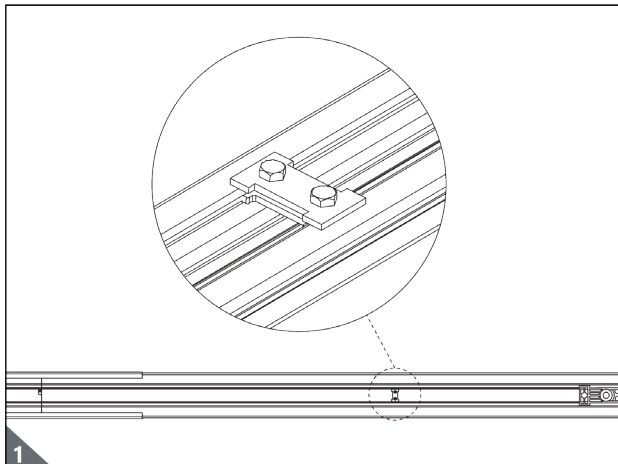
• Connect Door ARM to Trolley

1. Pull the **19** release rope to disengage the **17** outer trolley assy.
2. Connect **25** straight arm to **17** outer trolley assy.
3. Fasten the **24** door bracket on the center of the garage door.
4. Connect **28** bent arm and **25** straight arm with **8** M8 bolts and **12** M8 nuts.



5. Final Steps Before System Learning

1. Install the 5 blocker on the door opened position.
2. Attached the warning sign to the 19 release rope.



WARNING

To prevent possible SERIOUS INJURY or DEATH from electrocution or fire:

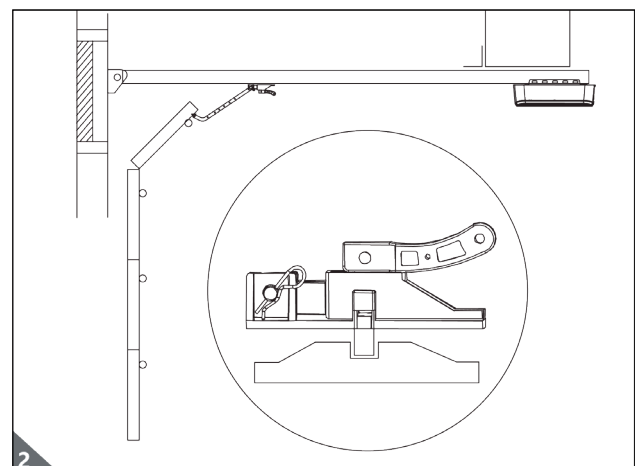
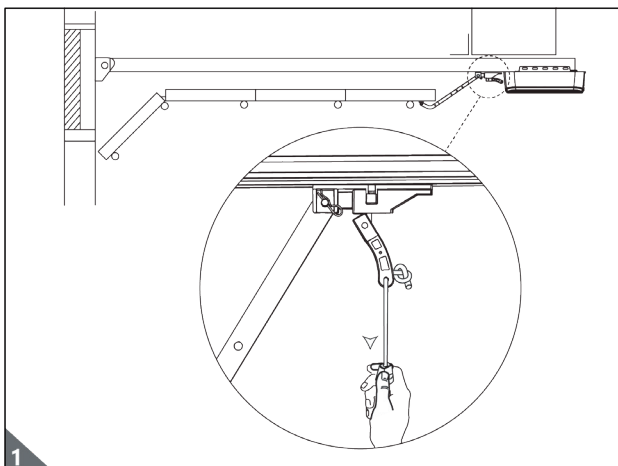
Be sure power is not connected to the opener, and disconnect power to circuit BEFORE removing cover to establish permanent wiring connection.

Garage door installation and wiring MUST be in compliance with all local electrical and building codes.

NEVER use an extension cord, 2-wire adapter, or the opener is grounded.

6. Emergency Release

1. Pull the 19 release rope to release the trolley. Make sure the trolley is disengaged. The garage door can be operated manually.
2. Before restarting the motor, manually move the garage door until the trolley is engaged.

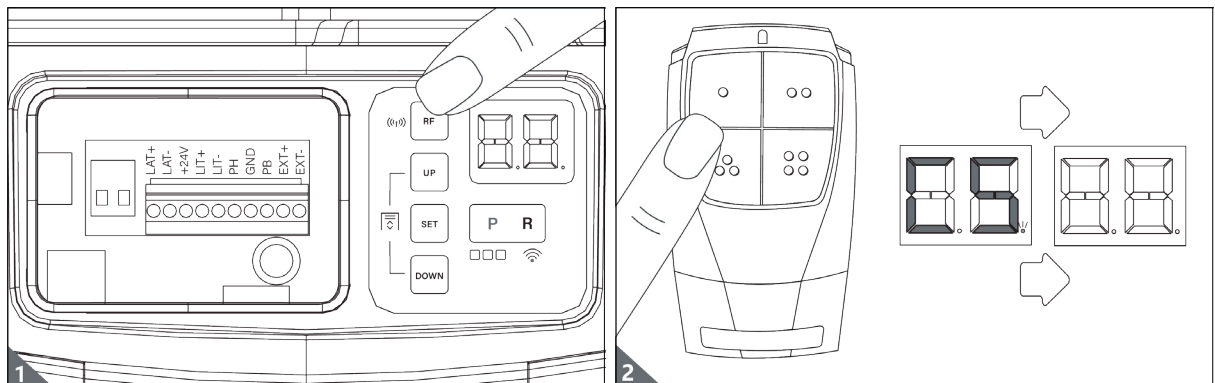


IV. Transmitter Memorizing And Erasing Process

1. Transmitter Memorizing And Erasing Process

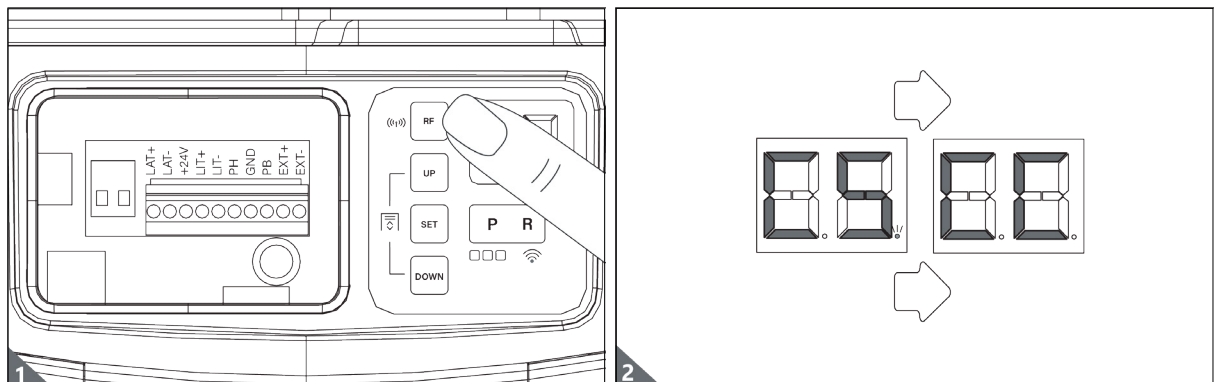
- **Transmitter Memorizing**

1. Press "RF Learn" button for 3 seconds.
2. The display will show "CS"; then press the transmitter A button within 10 seconds; the "CS" will blink three times and show "CS". After 10 seconds without any movement, "CS" will be off. The transmitter learning is completed.



2. Erasing Transmitter Memory

1. Press and hold "RF Learn" button for 10 seconds
2. The display will show "CS". When "CC" shows up, the memory is cleared.



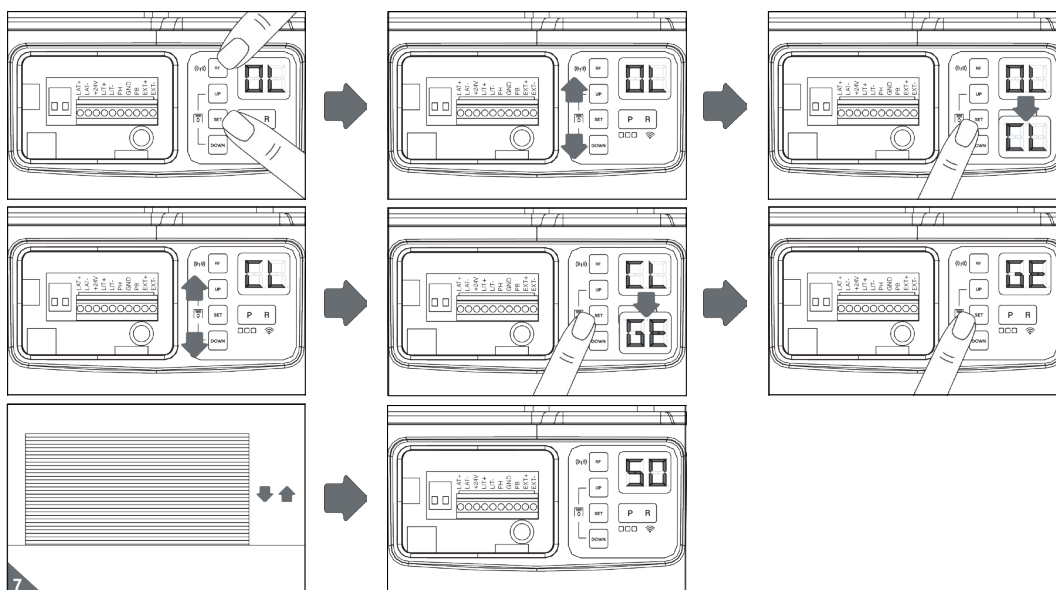
3. System Learning ,Reset Process And LED Display

• System Learning

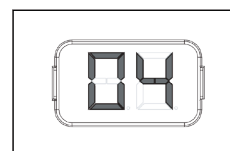
1. Press and hold « RF » and « SET » buttons 3 seconds, the LED display shows « OL » and the motor enters system learning program.
2. Set up open limit and LED display shows « OL » . Press and hold « UP » or « DOWN » button to raise or descend the door. When the door moves to the proper open position, press « SET » button.
3. Set up close limit and LED display shows « CL ». Press and hold « UP » or « DOWN » button to raise or descend the door. When the door moves to the proper close position, press « SET » button.
4. The LED display blinks « GE » continuously.
5. Press « SET » or « A » button of the transmitter to proceed operation testing. The LED display shows the operation current value in the process and memorizes overcurrent value.
6. The motor opens and closes automatically with full speed. The LED display shows « SO » while the system learning completes. The LED display shows « SF » while the system learning fails. The LED display will be off after 10 seconds.



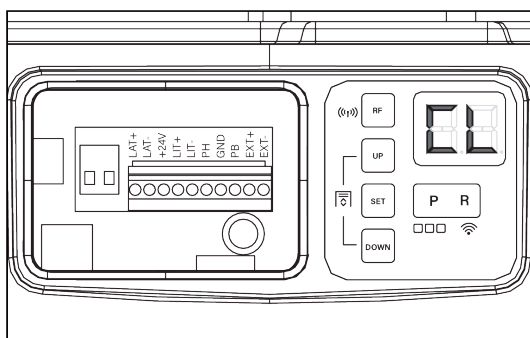
Note: The overcurrent function and flashing light function will be activated automatically after learning process complete.



Note : During the system learning procedure, the control panel will automatically detect the current consumption from each motor, indicate the resistance level of the door whiling the motor operation. If this reading increase instantly or stay in high reading, please check if any object in between of the door moving area, and contact your installer for inspection.

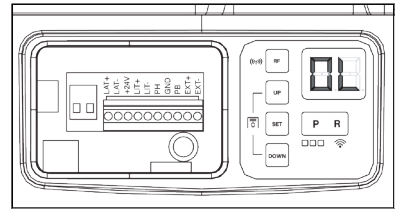
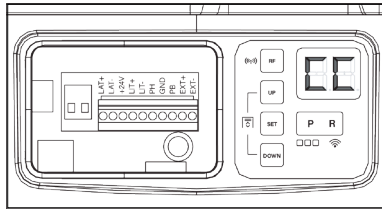
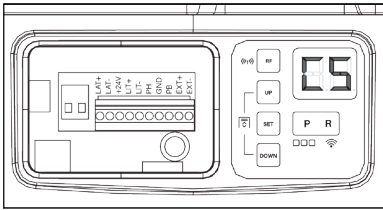


4. Restore Default Setting

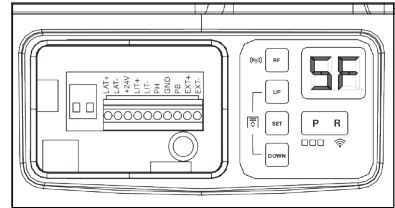
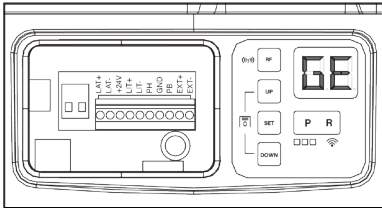
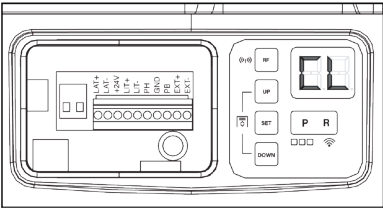


1. Press « RF » and « DOWN » buttons for 3 seconds, and the LED display shows « CL » to recover the default settings.

5. Programmable Function Indication LED



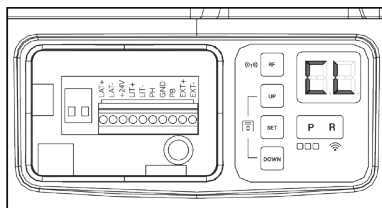
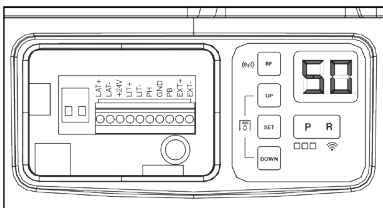
[CS] – Start transmitter learning mode. [CC] – Cleaned all studied transmitter. [OL] – Set up open limit.



[CL] – Set up close limit.

[GE] – Operation testing.

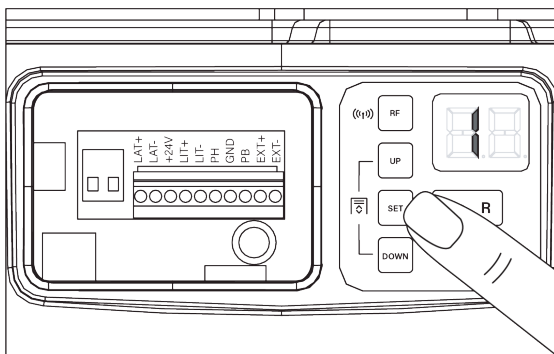
[SF] – System learning fail.



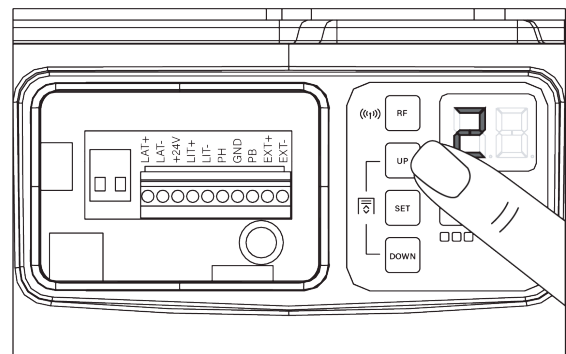
[SO] – System learning complete.

[CL] – System setting clear.

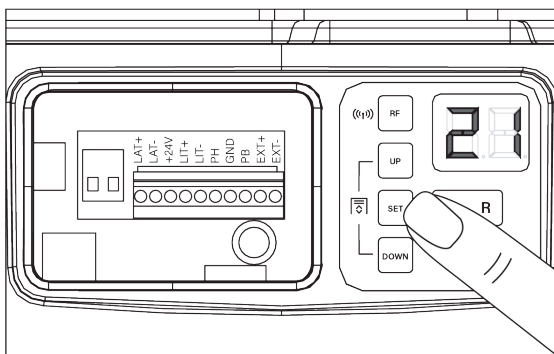
• How to set the parameter



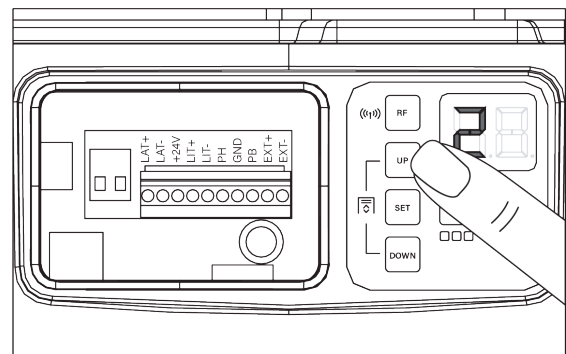
1. Press SET 3s, show 1



2. Press UP or DOWN to change the function



3. Press SET to into settings 21, Press UP or DOWN to change the settings



4. Press SET to confirm back to 2

6. Programmable Function Setting

LED disply	Definition	Function	Value	Description
1	Deceleration point (% full operation)	10	75%	The default setting is "12" The door will reverse 2cm if overcurrent occur in last 10% distance.
		11	80%	
		12	85%	
		13	90%	
		14	95%	
2	Main operation key (% full operation)	20	Function off	The default setting is "21"
		21	Button A	
		22	Button B	
		23	Button C	
		24	Button D	
3	Lighting key	30	Function off	The default setting is "32"
		31	Button A	
		32	Button B	
		33	Button C	
		34	Button D	
4	External device key	40	Function off	The default setting is "40"
		41	Button A	
		42	Button B	
		43	Button C	
		44	Button D	
5	Safety beam function mode	50	Function off	The default setting is "50 " Logic Mode refer to page 12-13
		51	Logic mode 1	
		52	Logic mode 2	
		53	Logic mode 3	
		54	Logic mode 4	
6	Alarm (Buzzer)	60	Function off	The default setting is "60"
		61	Function on	
7	Auto closing	70	Function off	The default setting is "70"
		71	5 seconds	
		72	15 seconds	
		73	30 seconds	
		74	45 seconds	
		75	60 seconds	
		76	80 seconds	
		77	120 seconds	
		78	180 seconds	

6. Programmable Function Setting

LED display	Definition	Function	Value	Description
8	Lighting	81	Function off	The default setting is "84"
		82	LED Light is on for 1 minute	
		83	LED Light is on for 2 minutes	
		84	LED Light is on for 3 minutes	
9	Electric Latch (Overcurrent Reaction)	91	Stop when overcurrent occur.	The default setting is "93"
		92	Opening Phase : Stop when overcurrent Closing Phase : Reverse 8 - 12 cm when overcurrent	
		93	Opening Phase : Stop when overcurrent Closing Phase : Reverse to the end when overcurrent	
A	Overcurrent Setting	10	Learning current add 0.4A as overcurrent	Default Setting is "70"
		20	Learning current add 0.8A as overcurrent	
		30	Learning current add 1.2A as overcurrent	
		40	Learning current add 1.6A as overcurrent	
		50	Learning current add 2.0A as overcurrent	
		60	Learning current add 2.4A as overcurrent	
		70	Learning current add 2.8A as overcurrent	
		80	Learning current add 3.2A as overcurrent	
		90	Learning current add 3.6A as overcurrent	
		99	Learning current add 4.0A as overcurrent	
C	Overcurrent setting of door opening (open limit)	C1	3A	The default setting is "C7"
		C2	4A	
		C3	5A	
		C4	6A	
		C5	7A	
		C6	8A	
		C7	9A	

LED disply	Definition	Function	Value	Description
E	Overcurrent setting of door closing (close limit)	E1	3A	The default setting is "E7"
		E2	4A	
		E3	5A	
		E4	6A	
		E5	7A	
		E6	8A	
		E7	9A	
F	Power supply for +24V terminal	F1	Continuously power supply	The default setting is "F1" Sleep mode: Power supply only when motor is operating.
		F2	Sleep mode	
H	Add remote control-open	H0	Function OFF	The default setting is "H0". Motor moving logic Open-Open-Open-Open
		H1	A Key	
		H2	B Key	
		H3	C Key	
		H4	D Key	
J	function mode PB Terminal	J1	PB (Open-Stop-Close-Stop)	The default setting is "J1" Fire Alarm Mode : * Terminal detects NO - normal operation * Terminal detects NC - Open the door and lock all the functions before returning to NO
		J2	Open Only(Open-Open-Open-Open)	
		J3	Fire Alarm Mode	
		84	LED Light is on for 3 minutes	



How to increase motor force

According to the size and weight of the door, the motor force can be adjusted accordingly

Default setting on function A is 70 for middle size door, other setting suggestion : 50 – 70 for middle size door / 80 – 99 for big size door

*** require proper spring tension of the door to keep a stable and smooth operation***

LED disply	Definition	Function	Value	Description
A	Overcurrent setting	10	Learning current add 0.4A as overcurrent	Default Setting is "70"
		20	Learning current add 0.8A as overcurrent	
		30	Learning current add 1.2A as overcurrent	
		40	Learning current add 1.6A as overcurrent	
		50	Learning current add 2.0A as overcurrent	
		60	Learning current add 2.4A as overcurrent	
		70	Learning current add 2.8A as overcurrent	
		80	Learning current add 3.2A as overcurrent	
		90	Learning current add 3.6A as overcurrent	
		99	Learning current add 4.0A as overcurrent	

7. Safety Bean Function Mode

5-1 Logic Mode 1

Door Status	Door react when photocells are triggered
Door Closed	Door no effect, Photocell remain inactive mode
Door Opened	Door stops and holds, IF auto-closing function is ON, will reload the auto-closing time countdown
Door Stop During Moving	Door stops and holds, IF auto-closing function is ON, will reload the auto-closing time countdown
Door Closing	Door stops, and wait for the next commend
Door Opening	Door stops, and wait for the next commend

5-2 Logic Mode 2

Door Status	Door react when photocells are triggered
Door Closed	Door no effect, Photocells remain inactive mode
Door Opened	Door stops and holds, IF auto-closing function is ON, will reload the auto-closing time countdown
Door Stop During Moving	Door stops and holds, IF auto-closing function is ON, will reload the auto-closing time countdown
Door Closing	Door stops, and wait for the next commend
Door Opening	No effect

5-3 Logic Mode 3

Door Status	Door react when photocells are triggered
Door Closed	Door no effect, Photocells remain inactive mode
Door Opened	Door stops and holds, IF auto-closing function is ON, will reload the auto-closing time countdown
Door Stop During Moving	Door stops and holds, IF auto-closing function is ON, will reload the auto-closing time countdown
Door Closing	Door stops, and open to fully-opened position
Door Opening	No effect

5-4 Logic Mode 4

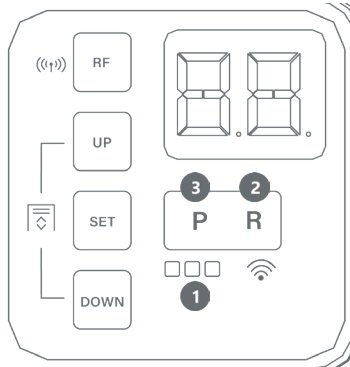
Door Status	Door react when photocells are triggered
Door Closed	Door no effect, Photocell remain inactive mode
Door Opened	Door stops and holds, IF auto-closing function is on, will reload the auto-closing time countdown
Door Stop During Moving	Door stops and holds, IF auto-closing function is on, will reload the auto-closing time countdown
Door Closing	Door stops, and open for 3 seconds
Door Opening	No effect

V. Smartphone Control With CHOW! Mobile Application

1. WiFi/Bluetooth Module Description

• Chow_Smart phone controlled door opener

Chow is a system connecting door opener to smart phones, allowing you to operate your door automation by smart phones. Chow allows multiple users to operate the door openers anywhere any time. Camera is recommended to be installed with Chow to have a view during your operation.



- 1 LED Indicator (Display is showing numbers or characters)
- 2 R Button (press to restart)
- 3 P Button

Before starting pairing

1. Press the (P) button for 5 seconds and release it.
2. Press the (R) button once to reboot the WiFi / Bluetooth module.

• LED Indications And Buttons

Return to the factory setting:

Press the (P) button for 5 seconds and press the (R) button.

The Blue LED starts to blink. The smart control module has returned to the factory setting.

BLUE LED : Blue LED is a indicator for the Bluetooth connection.

GREEN LED : Green LED is a indicator for the WiFi connection.

RED LED : Red LED blinks indicates wrong operations or system errors.

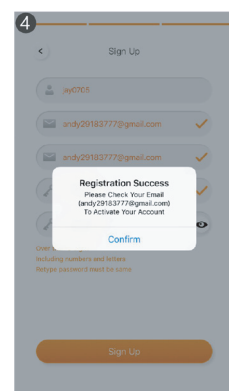
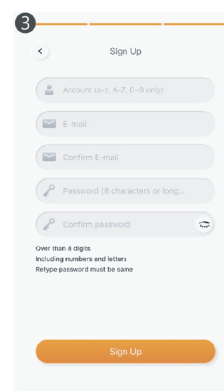
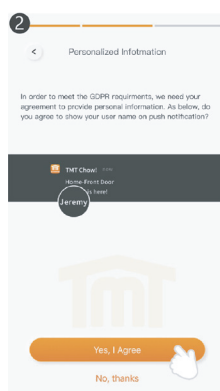
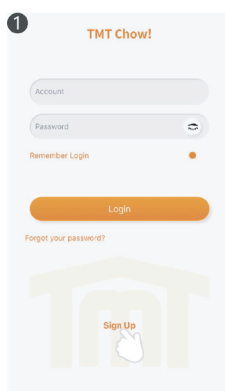
Please refer to FAQ when the Red LED is ON.

2. Apply For a New Chow! Account

1. Please scan the QR code and download the Chow! App
2. Press sign up icon and click the agree icon to continue
3. Please type the following information for registration:

- a. Email(enter twice for verification)
- b. Password(enter twice for verification)
- c. The password should have at least 1 English character and at least 8 characters in total

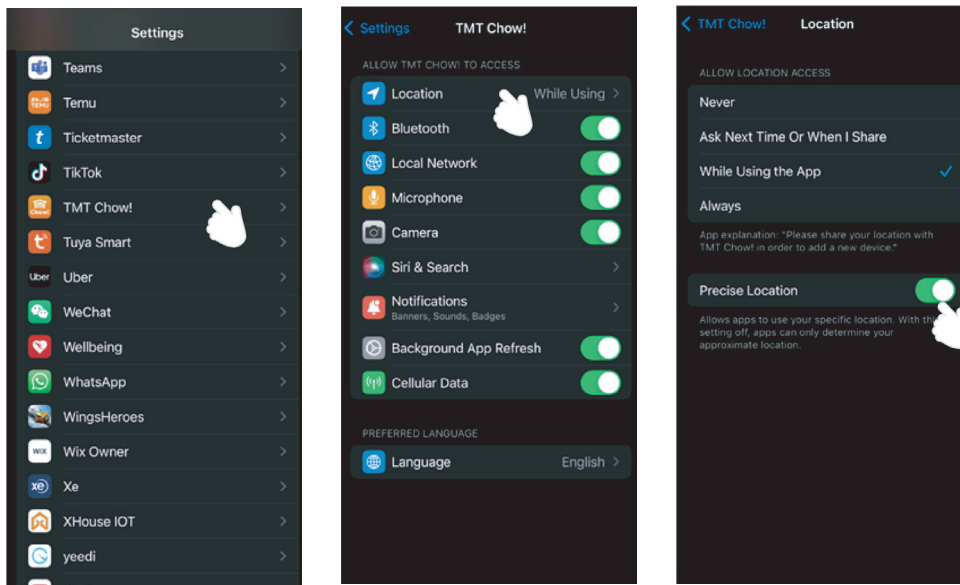
4. The system will send a link to your email when the registration succeeded.
5. Please go to your email, and click the link to activate your Chow! account.
6. Please log in your Chow! account.



- **Connect the Wifi/Bluetooth Module to the Chow! App**

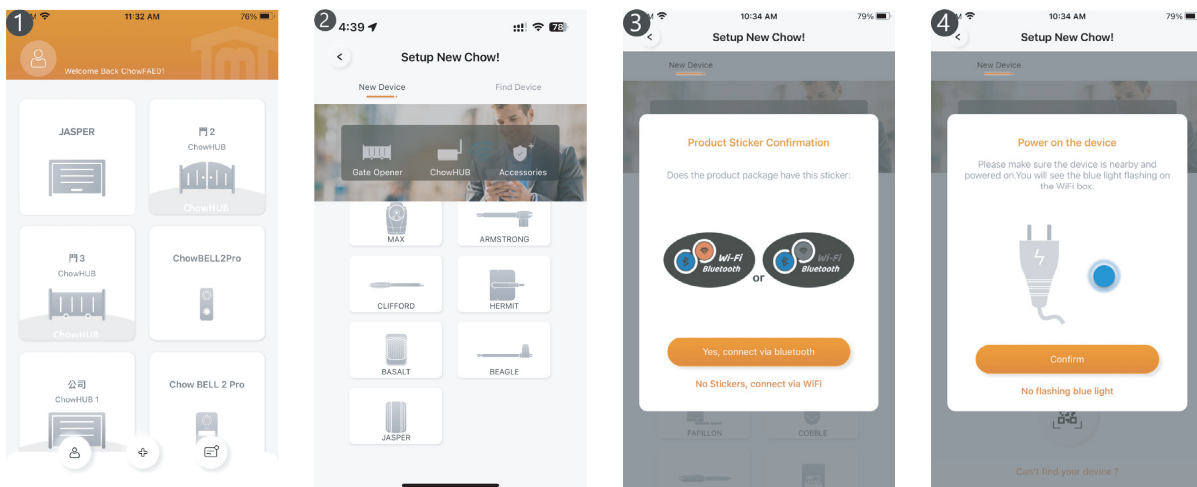
****For iPhone (IOS) need to set the Precision location function ON****

Enter iPhone setting, scroll down to find TMT Chow! App, Enter TMT Chow! App.
Enter Location, Turn on the Precision Location function.

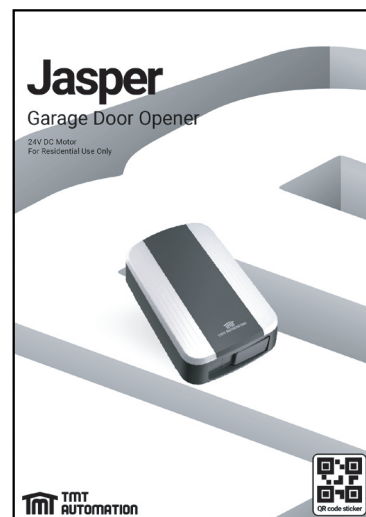
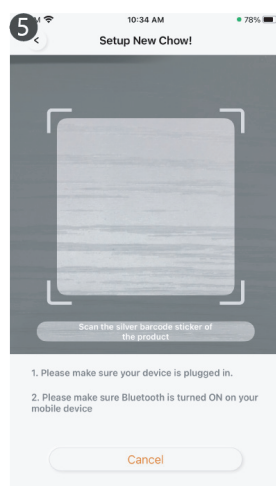


****Please turn ON the Bluetooth function of your smartphone****

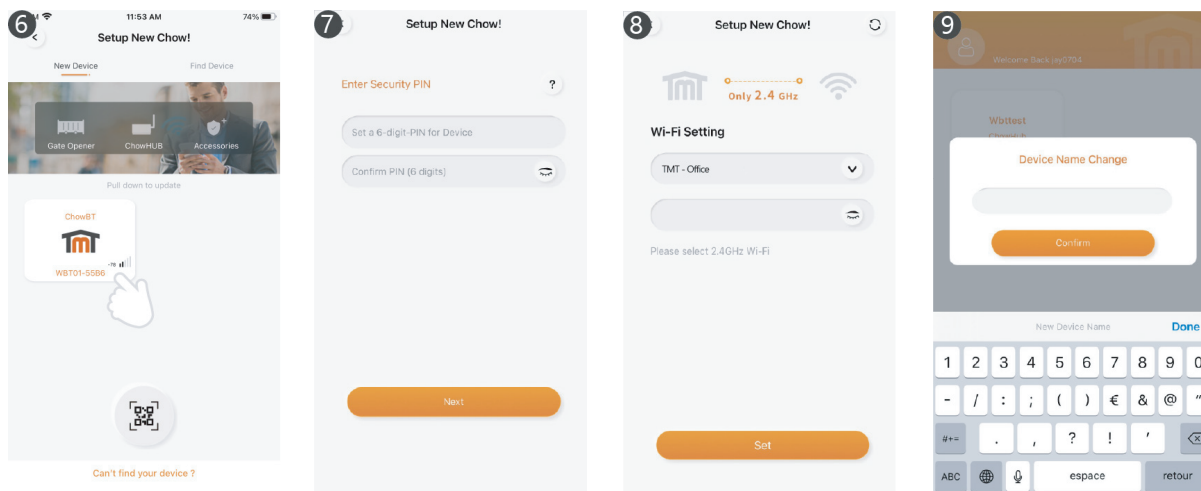
1. Tap the (+) icon to add new device.
2. Tap the type of your device to add a new device.
3. Please check if the product has the WBT sticker.
4. Please check if you power the device.



5. Scan the silver QR code sticker at front page of the manual.



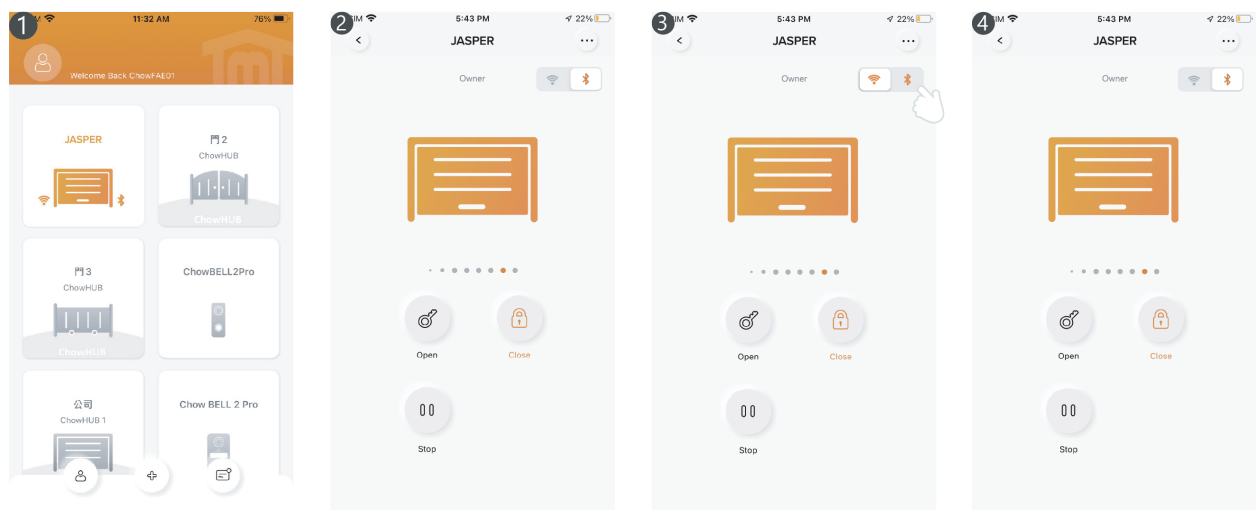
6. IF QR code scan is not available, press Cancel to find the ChowBT icon, press the icon to do the connection.
7. Set a 6 digit security PIN code by enter the same code twice .
8. Entering the correct password of your Wi-Fi.
9. After connection countdown, you can name your device.



3. Operation

1. Tap the device on your main page.
2. Tap the Open/Stop/Close to control door opener.
3. Tap the Bluetooth icon to switch to Bluetooth control mode

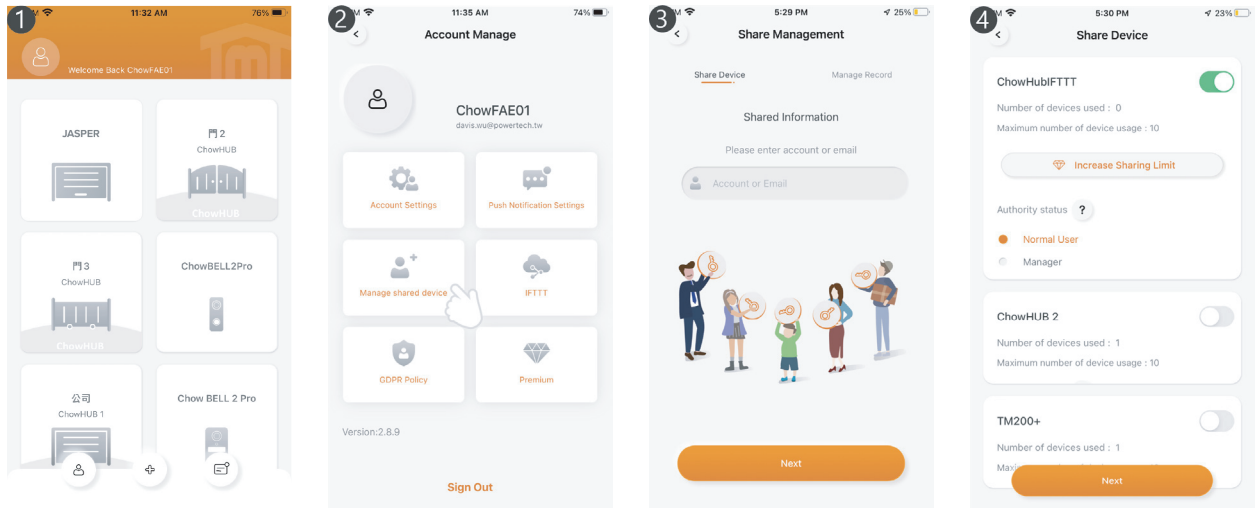
****Please turn ON the Bluetooth function of your smartphone****



Note: Only one user can access the Bluetooth control mode. Once the first user leaves this operation page, the second user can access this device.

4. Owner Shares The Device to Other Users

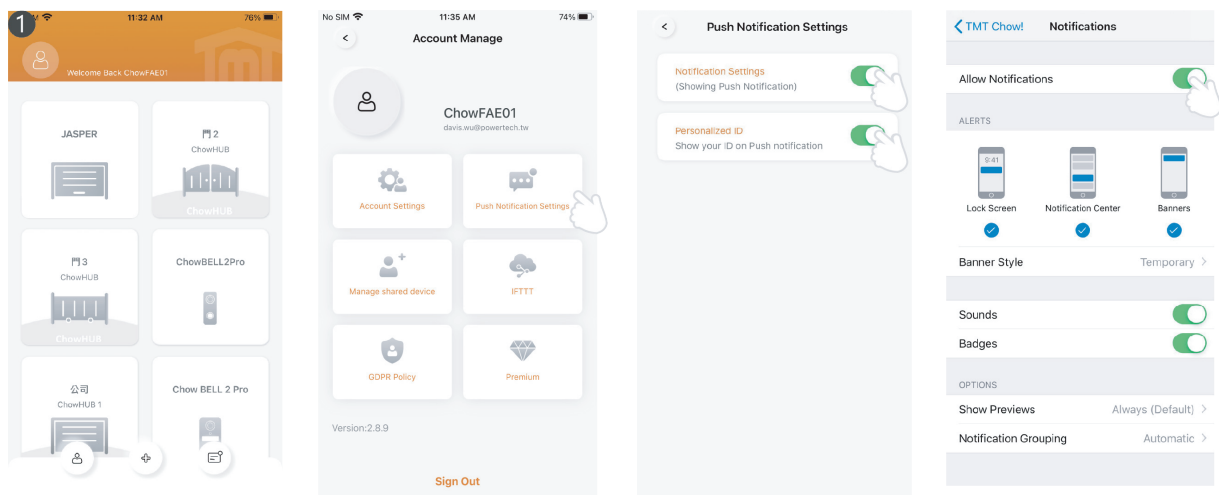
1. Press the icon on the corner to enter the account management page.
 2. Tap the manage shared device.
 3. Enter the account which you are going to share.
 4. Choose the device you are going to share and tap next.
- a. The Owner can decide the permission of device sharing. A manager can share and operate this device, but a normal user can only operate it.
- b. One device can only be shared to 10 users.



5. Push Notification

- Press the icon on the corner to enter the account management page.
Tap the push notification setting.
Turn ON the switches of the notification.

****Please go to the settings page of your smartphone,
find TMT Chow! and allow the notifications****



6. FAQ

- **Question 1** The Blue LED is NOT Blinking when pairing.
- **Answer 1** Press the (P) button for 5 seconds and press the (R) button.

- **Question 2** Blue and Green LED blinks alternatively when Connecting to Chow by the first user.
- **Answer 2** Entering a wrong password to your Wifi network.

- **Question 3** RED LED blink when Connecting to Chow by the first user.
- **Answer 3** The Wifi box cannot get a IP from the router. Please disconnect other device.

- **Question 4** RED LED blink when Enter the PIN code.
- **Answer 4** Entering the wrong PIN code. Please check with the first user.

- **Question 5** Green LED is blinking.
- **Answer 5** Wifi signal is weak. Please adjust the antenna of the Wifi box.

- **Question 6** Red LED ON.
- **Answer 6** Red LED ON indicates a system error.
Please return to the factory setting as mentioned below.

- **Question 7** Return to the factory setting.
- **Answer 7** Return to the factory setting is used when you lose your PIN code for sharing the device. After return to the factory setting, please follow the previous indications to reconnect the Chow.
 1. Tap the device icon on the main page for 3 seconds and delete the device
 2. Open the Wifi box, press the (P) button for 5 seconds and release it.
 3. Plug out the device and restart the device to reconnect.
 4. Get a new PIN code (refer to Connect the Wifi/Bluetooth Module to the Chow! App)



- **Question 8** How should I change my PIN code.
- **Answer 8** Enter the operation page of the device in Chow » Check the (Device Information)in the setting page » Tap(PIN Code Setting)



TMT

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Garage Door Opener

Jasper

24V DC Motor
For Residential Use Only

