



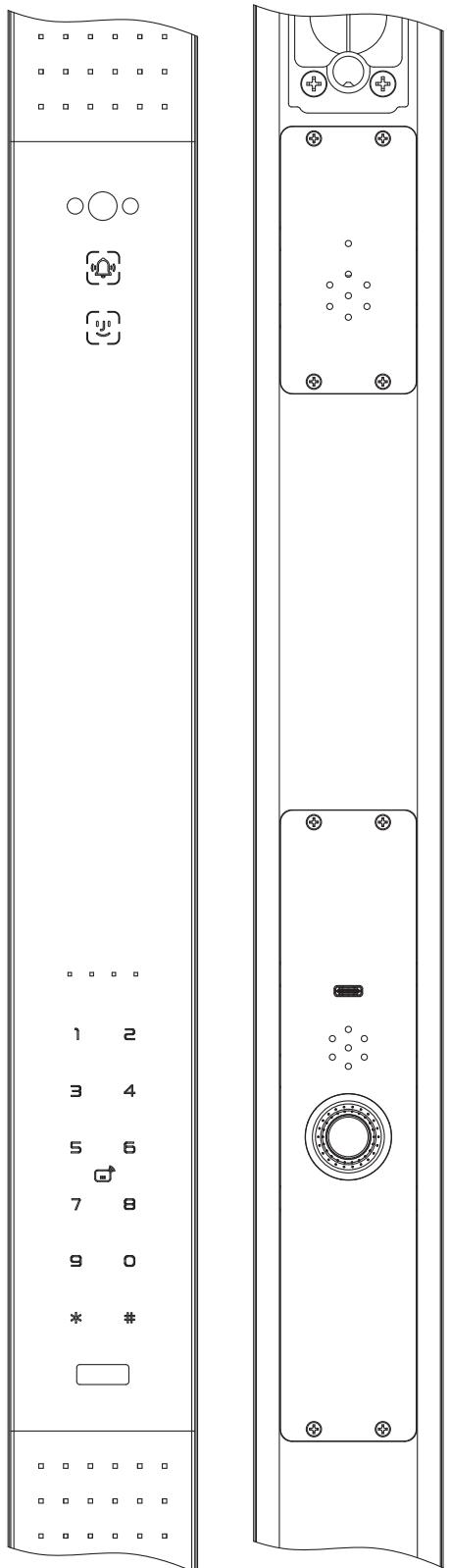
# PRODUCT INSTRUCTIONS

**ML**

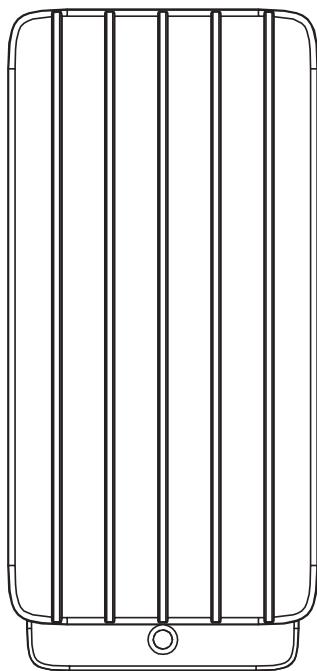
# PRODUCT COMPONENTS

01

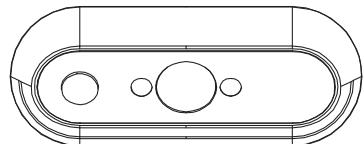
# MF-SMART DOOR SYSTEM //



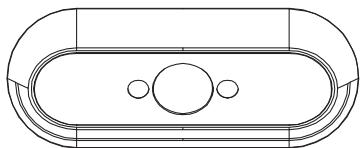
FRONT PANEL



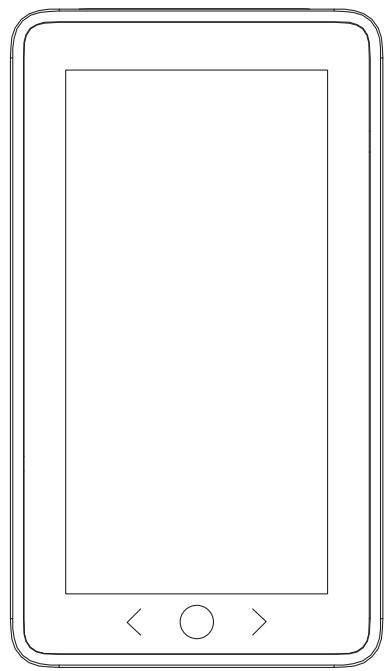
BACK PANEL



TOP CAMERA

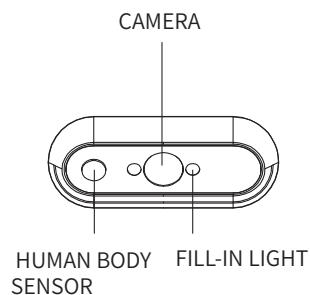


INDOOR CAMERA  
(IF ANY)

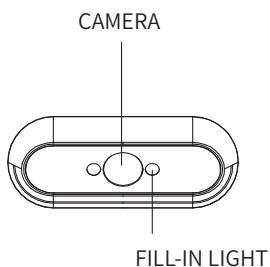


SCREEN

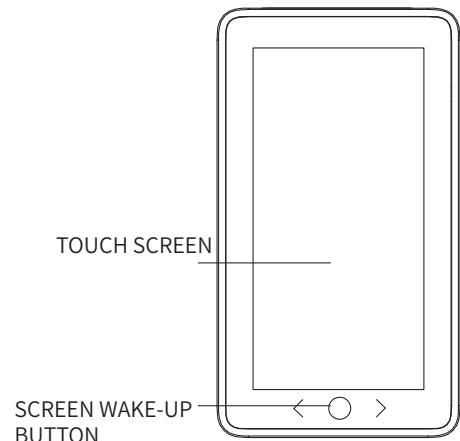
# FUNCTION



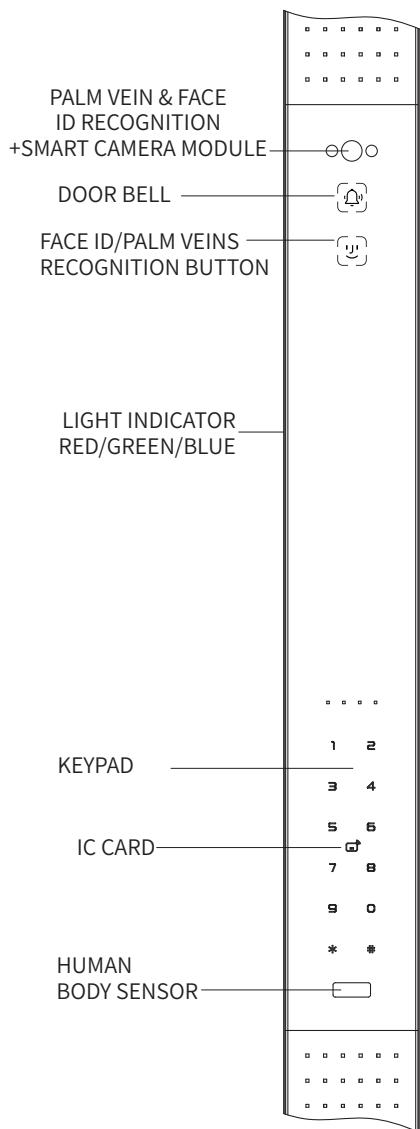
TOP CAMERA



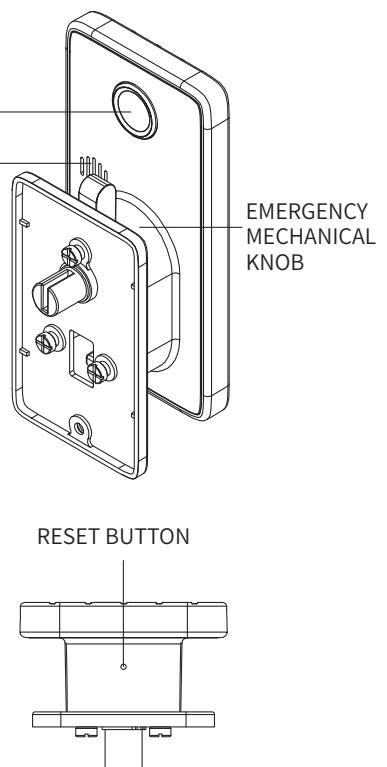
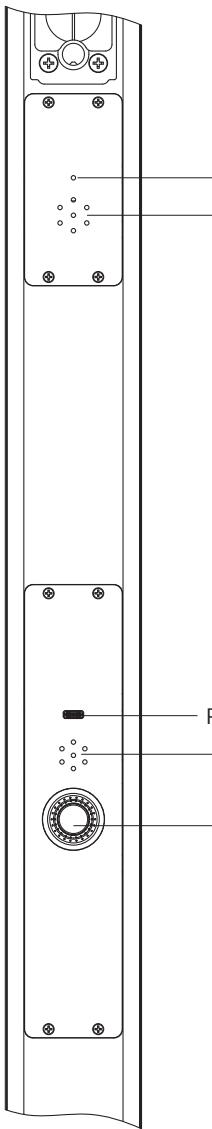
INDOOR CAMERA  
(IF ANY)



SCREEN

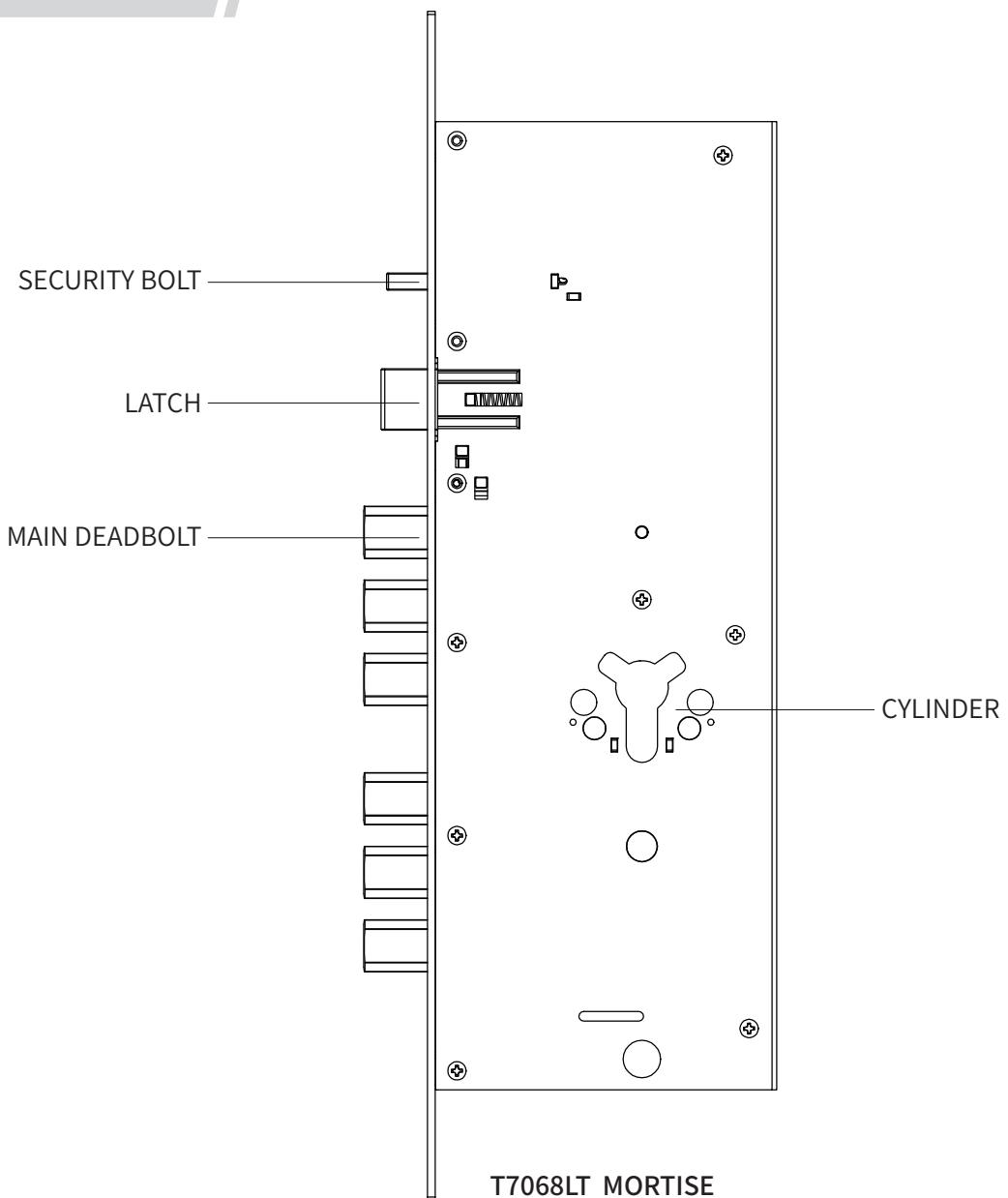


FRONT PANEL

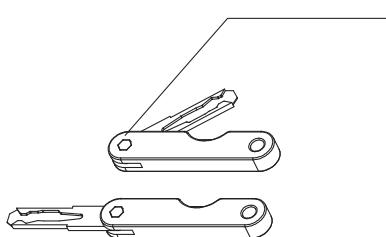


BACK PANEL

# FUNCTIONS //



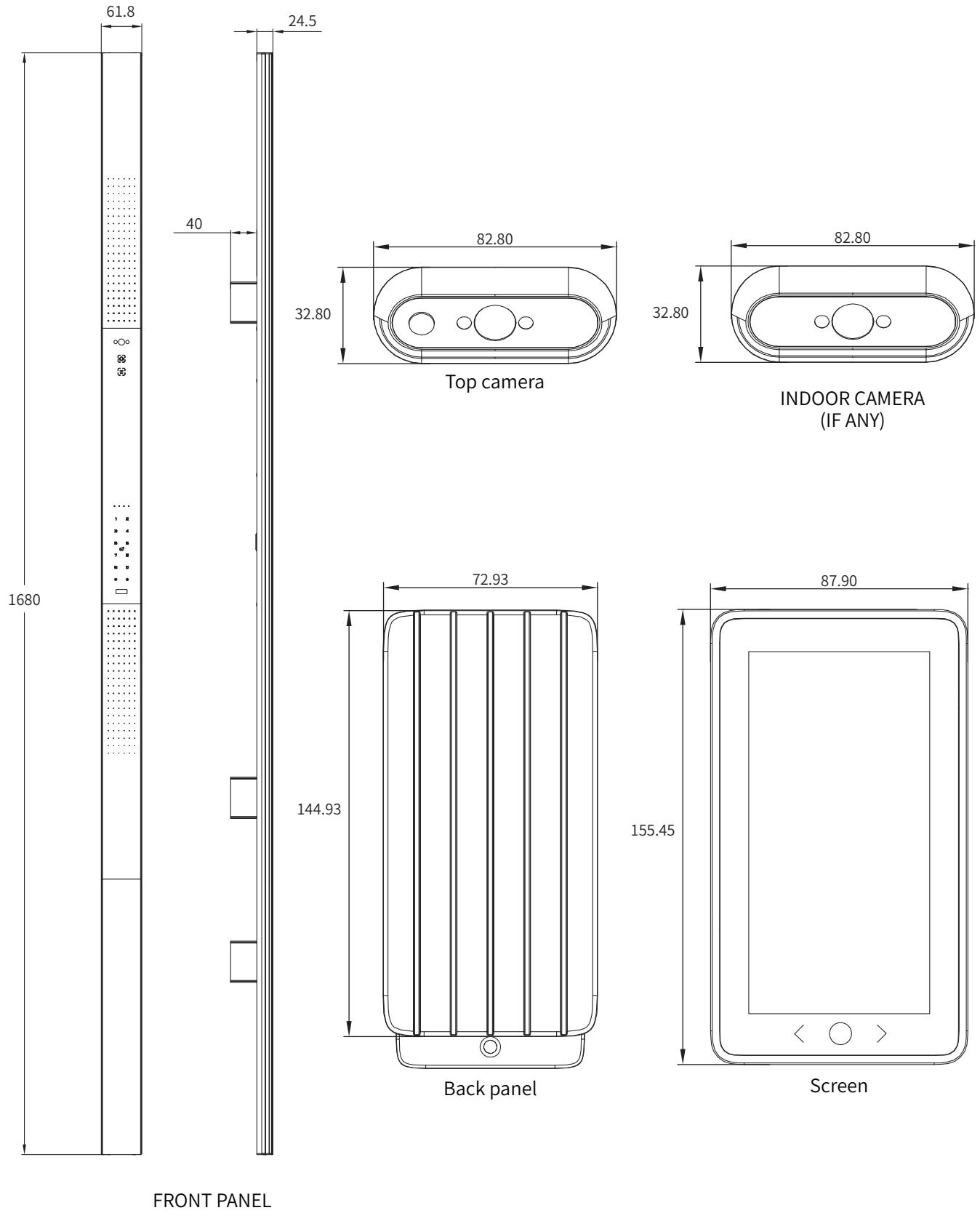
FOLDABLE  
MECHANICAL KEY



FOLDABLE MECHANICAL KEY

MASTER KEY (BLACK) QTY:2  
(FOR DAILY USE)

# PRODUCT ASSEMBLY DIMENSIONS //

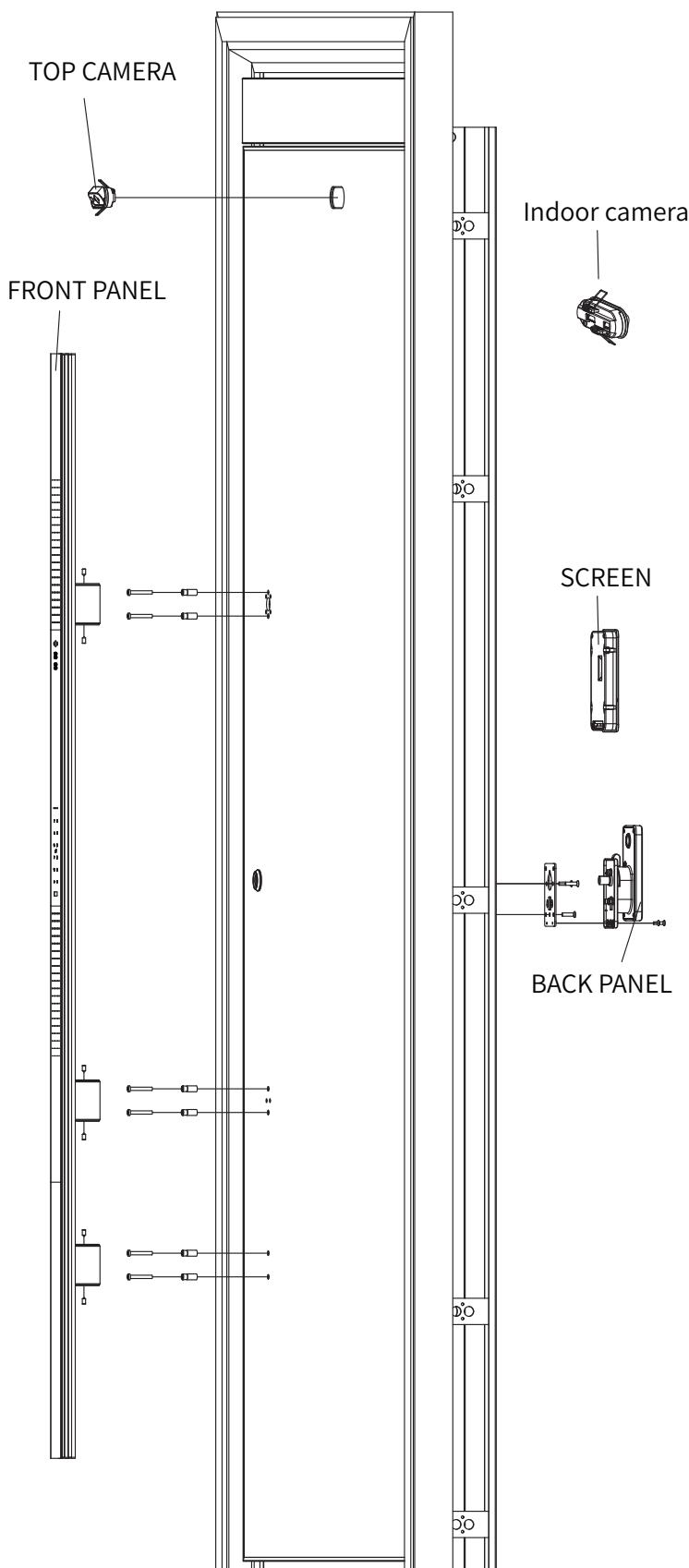


FRONT PANEL

# PRODUCT INSTALLATION INSTRUCTION



# INSTALLATION STEPS //



## Installation steps:

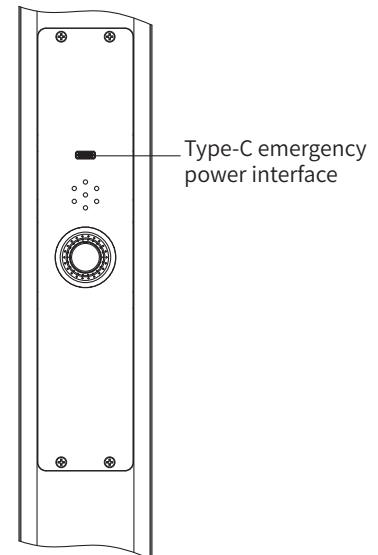
1. Insert the four connecting wires with serial numbers ①②③④ into the lock body, extend the connecting wires from the corresponding door openings, and then fix the mortise on the door.
2. Connect the top camera, Indoor camera, front camera, lock body, screen, front panel, and back panel with corresponding cables as shown in the diagram.
3. The installation order is: lock body, Indoor camera, top camera, front camera, front handle, rear handle. Connect the wires as required and tighten the screws to secure.
4. The screen assembly is fixed to the door with four claws. When installing, fold the claws in reverse so that they can be inserted into the door hole, and then push them to the innermost side of the door to hang the screen assembly firmly.
5. After installing all parts, check whether the handle is loose and whether lock can be unlocked and locked normally by the mechanical key. After confirming that everything is correct, install the lithium battery for power-on test.

# PRODUCT INSTRUCTIONS



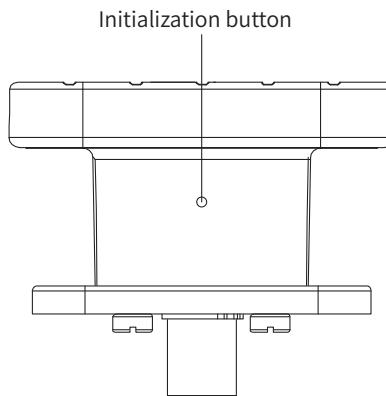
# EMERGENCY POWER SUPPLY AND SYSTEM RESTART METHOD //

1. If the circuit fails, you can unlock it with the key and then push/pull the door open;
2. If the battery is dead, you can use the Type-C power cord (powered by a power bank) to plug into the emergency power port on the top of the front panel, and then open the door in the normal way;
3. If the system freezes, you can use the Type-C power cord (powered by a power bank) to plug into the emergency power port on the top of the front panel to restart the system



Front panel bottom

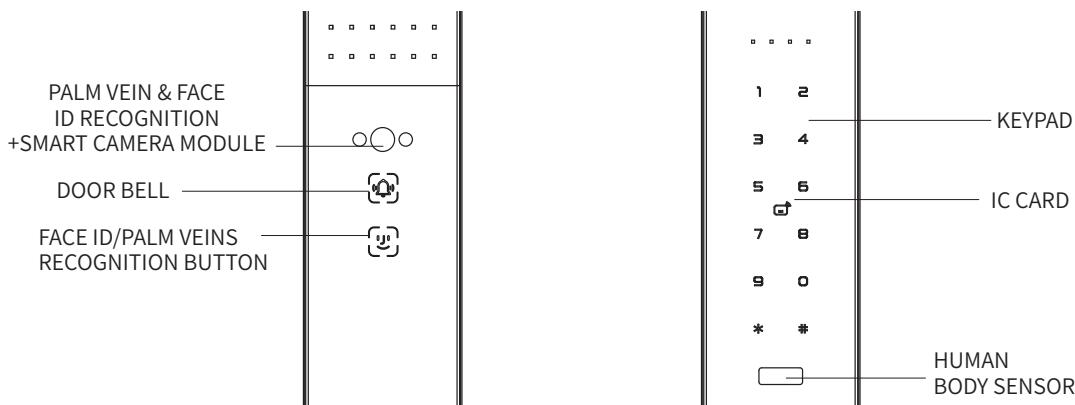
## FACTORY RESET //



back panel bottom

If you forget the administrator password, you can use a small cylindrical object such as a paper clip to insert it into the initialization button hole while the power is on. Press and hold the button for more than 3 seconds, and the indicator light will turn green with a "beep". At this time, the speaker will announce "Factory reset successful"

# KEYBOARD OPERATION INSTRUCTIONS //



## THE COLOR OF THE LIGHT AND ITS MEANING //

### Door lock status light

Green: After the door lock is successfully verified, the door lock status indicator is green on (blinking twice)

Red: When the door lock verification fails, the door lock status indicator is red (blinking twice), indicating failure.

### Low battery status indicator

Red: When the door lock system wakes up, the system automatically detects the battery voltage. When the battery voltage is too low, the indicator flashes red twice, and the voice prompts notice that the battery is insufficient, please replace the battery in time.

### The system locks status indicator

Red: Within 5 minutes, the cumulative error of all unlocking method is 3 times, the smart lock is forced to sleep for 90 seconds, and the light prompts.

### Restore the factory setting status indicator

Green: After the door lock system is cleared, the door lock indicator is green (blinking twice), indicating that the system has been cleared, and the voice message is displayed indicating that the system is successfully restored to factory defaults.

### Face/palm vein recognition status indicator

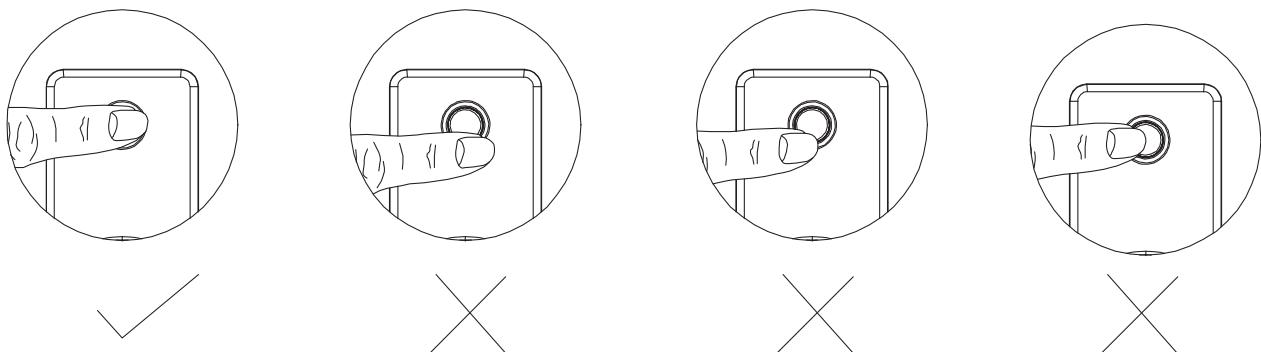
On/Off: Click

On/Off: Click to enable the recognition manually

Blinking blue: Being identified

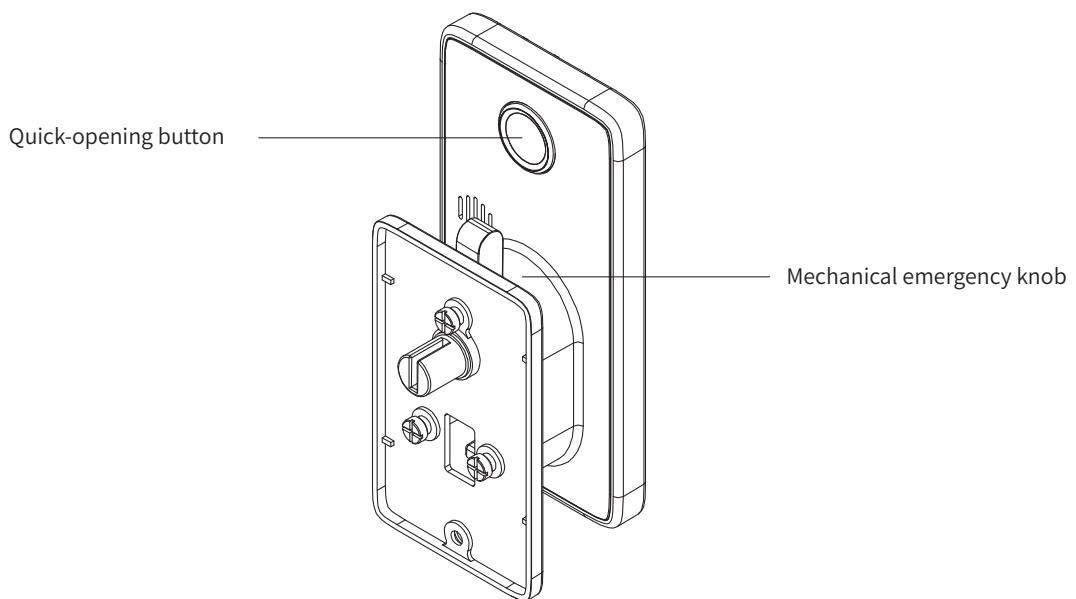
# FINGERPRINT ACQUISITION METHOD //

When verifying the fingerprint, the finger should be correctly placed above the fingerprint sensor, and the finger should be able to cover at least 3/4 of the area of the fingerprint sensor.



When fingerprint verification is carried out, the finger should be correctly placed in the fingerprint collection area, the fingerprint sensor has a self-learning function, and the position of the finger on the sensor can be constantly changed during use, so that the sensor can collect the finger texture as much as possible.

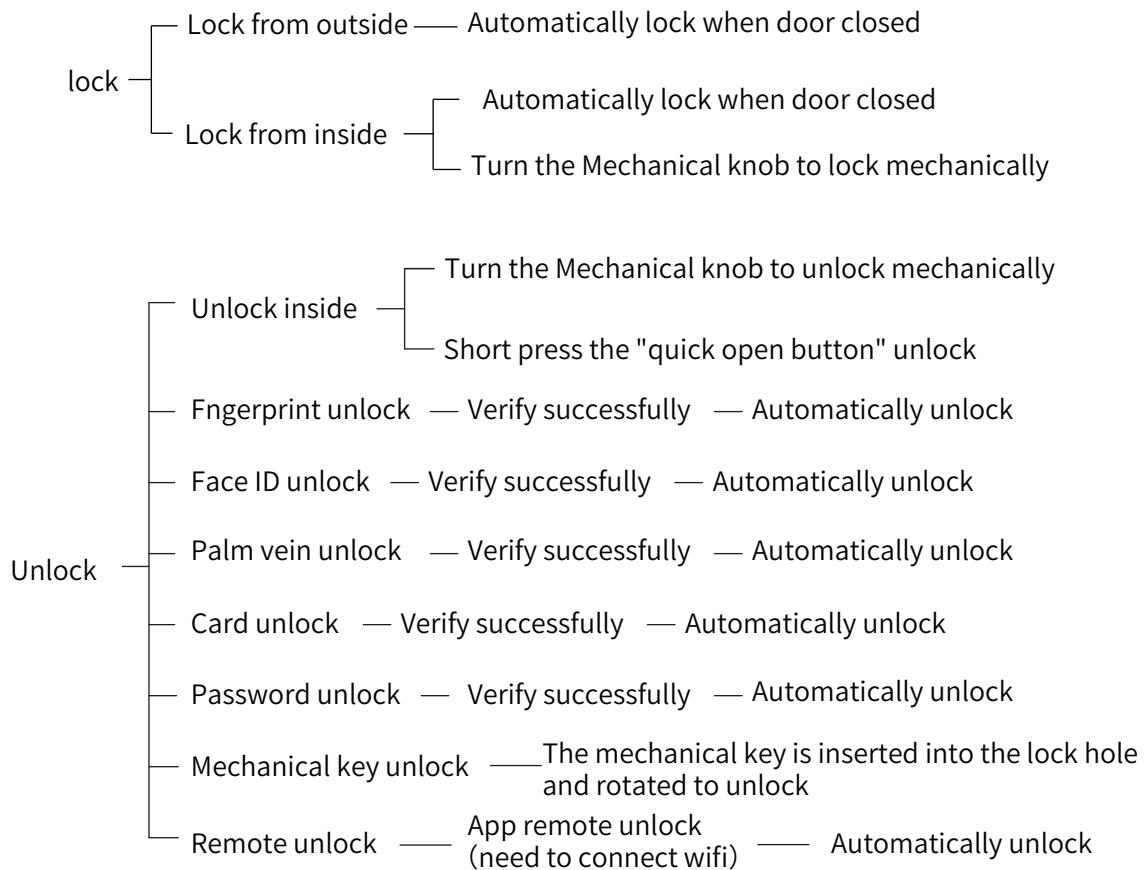
# QUICK OPENING/EMERGENCY OPENING MODE //



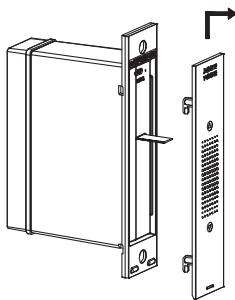
1. First, short press the "quick open button", the green light flashing and can quickly unlock the door.
2. Second, when the electronic failure or low power, you can turn the knob to unlock/lock; Turn the mechanical emergency knob in the direction of the hinge to open the door, and turn the door in the direction of the lock latch.

Note: When the child lock is opened, it is necessary to press the "quick open button" twice within 1 second to open the door.

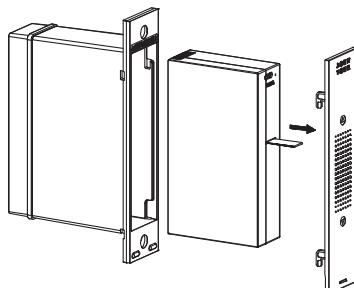
# THE WAY TO LOCK AND OPEN THE DOOR //



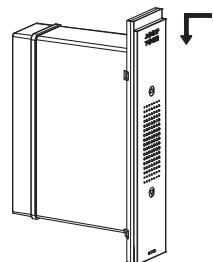
# BATTERY REPLACEMENT //



Open the battery cover by pushing it upward as instructed by the icon



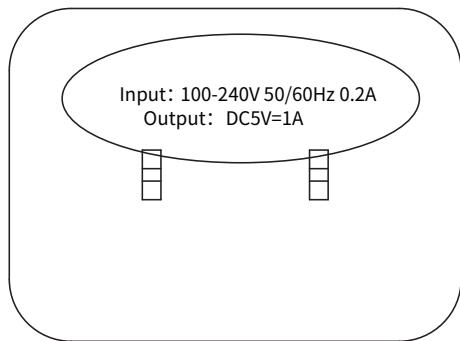
Remove the old battery and replace it with a new one



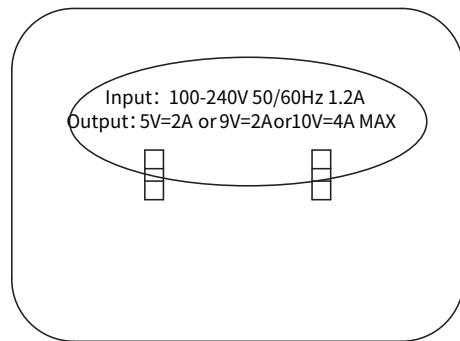
Close the cover of the battery box and fasten it down

Note: Factory standard: delivered with 1 rechargeable lithium battery.

# LITHIUM BATTERY CHARGING MANUAL



Ordinary charger



Fast charger

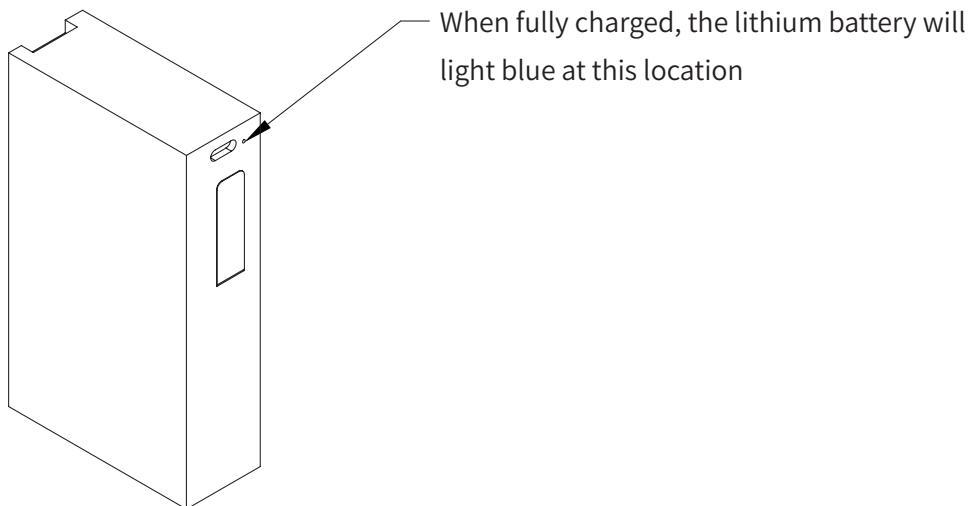
The output current of the ordinary charger is generally about 1 amp (A),

The output current of the fast charger is generally above 2 amps (A).

When the message "Replace the battery in time when the battery is insufficient" is displayed on the lock end, charge the lithium battery in time and use a power cable with a Type-C port. When charging lithium batteries, pay attention to whether the charger is an ordinary charger or a fast charger;

When using an ordinary charger, charge normally until the blue light of the lithium battery is on;

When using a fast charger, you may encounter a blue light on the lithium battery for five to ten minutes of normal charging. At this time, the battery is virtual, and you need to pull out the charger again and let it stand for five to ten minutes to plug it in and charge it again



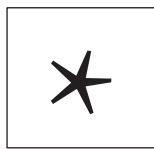
Note: If you encounter battery quality problems, please contact customer service, do not replace the miscellaneous brand battery, do not open the battery without authority, and unplug the plug in time after full charge to avoid overcharging

**Fast charge is not supported!**

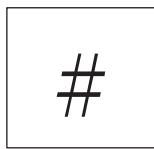
# PRODUCT OPERATION PROCESS



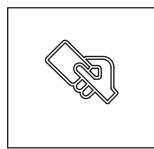
# ICON DESCRIPTION



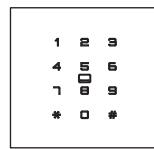
double click “\*”



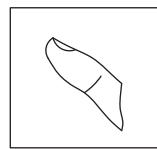
double click “#”



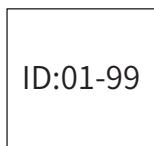
card swiping



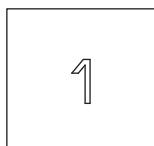
password



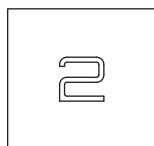
fingerprint



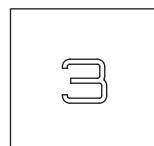
user ID number



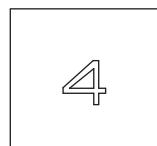
Keypad “1”



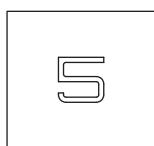
Keypad “2”



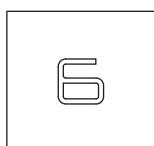
Keypad “3”



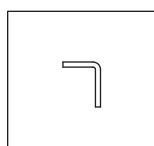
Keypad “4”



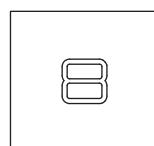
Keypad “5”



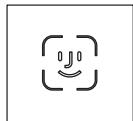
Keypad “6”



Keypad “7”



Keypad “8”



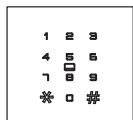
## Face/palm vein recognition

Click to enable face/palm vein recognition



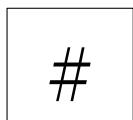
## Doorbell

Click the doorbell button to trigger the doorbell sound, and a "ding dong" sound will be heard from the back panel inside the door.

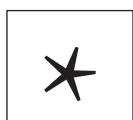


Return/quit please press “\*”

Confirm please press “#”



Double-click “#” to enter the setup mode



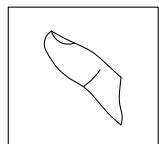
Double-click “\*” to open/close mute mode

# DEMO MODE DESCRIPTION

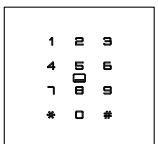
When the door is installed and powered on for the first time, the system is in factory status. At this time, the door lock system does not have any data to open the door. Touch the button and make a selection according to the voice prompt. You can experience and become familiar with the process of opening the door according to the voice prompt.

## Operation Tips:

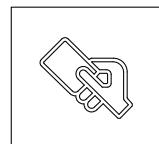
Touching for wake up  
Verify fingerprint



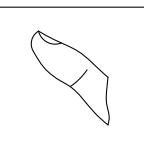
Touching for wake up  
Verify password



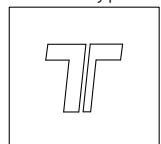
Touching for wake up  
Verify IC card



Screen off  
Verify fingerprint



Touching for wake up  
the screen and verify face id  
Touching for wake up the  
screen and verify palm vein



Voice prompt: Do Re Mi (sound)

**Light prompt:** Success: The indicator light is green (flashes twice)

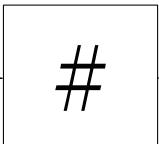
## SETUP MODE DESCRIPTION

## Operation Tips:

Register Admin  
Touching for wake up

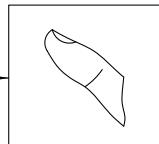
---

double-click "#"



Please enter the administrator's fingerprint.

Enter 6-8 digits



Please put in your finger,  
or press # to skip fingerprint entry.  
Please remove your finger and put it in again.  
Please remove your finger and put it in again.  
Fingerprint entry is successful.

Please enter a 6 to 8 digit password,  
press # to confirm.  
Please enter again, press # to confirm.  
Password entry is successful

### Voice prompt:

```

graph LR
    A[Put the IC card close to the recognition area] --> B[Face registration.  
Press "#" to confirm.  
Press "*" to exit.]
    B --> C[Palm vein registration.  
Press "#" to confirm.  
Press "*" to exit.]
    C --> D[Administrator registration is completed]
    C --> E[Press "#"]
    C --> F[Press "*"]
    E --> G[Administrator registration is completed]
    F --> G
    
```

Put the IC card close to the recognition area

Please swipe your IC card or press "#" directly. Skip IC card entry. One "Beep" sound. IC card entry is successful.

Face registration. Press "#" to confirm. Press "\*" to exit.

Palm vein registration. Press "#" to confirm. Press "\*" to exit.

Administrator registration is completed

Press "#"

Administrator registration is completed

Press "\*"

1 2 3  
4 5 6  
7 8 9  
\* 0 #

Please keep. Palm vein registration is successful. Administrator registration is completed.

# SETUP MODE DESCRIPTION //

When registering the administrator password for the first time, the program defaults to the administrator ID number 01;

When registering the administrator information initially, you must register a password. If the fingerprint is successfully entered but skip the password entry, the administrator user registration will fail. Exit the system settings directly and return to the demonstration mode;

Please remember the administrator password. If you forget it, double-click the “#” to enter the setting mode, verify the administrator's fingerprint, and press 01 to register a new administrator information; or clear the system and re-enter.

1. In the permission verification mode, press 01 to enter the administrator registration process. Register a new administrator information, and the original administrator information will be overwritten. If you press # to skip, the original administrator information will be used.

2. Press the back panel initialization button to clear the system and re-enter .

## **Introduction to face/palm vein recognition module**

Using a 3D binocular bionic camera, based on the human eye triangulation positioning principle, the binocular camera simulates the human eye, obtains three-dimensional data, and performs 3D modeling, achieving a high-precision error recognition rate of one in a million. It can effectively intercept attacks such as photos, videos, silicone avatars, plaster avatars, PE avatars, etc. made of various materials.

## **Face Registration Notes**

Please note that you need to remove the protective film of the face/palm vein module before use, otherwise, recognition may fail.

Do not have anyone standing behind you when using it, otherwise, recognition may fail and you will need to re-verify.

Best applicable height: 1.4m ~ 2.3m Recognition distance: 30cm ~ 100cm Recognition speed: < 1.2S

## **How to use face recognition**

1. After turning on the automatic face verification function, when a person approaches the door lock (the human body detection range is (60-80cm)), the door lock will be automatically awakened to start verification.

2. When the automatic face verification function is turned off, you need to manually click the button to enable recognition.

3. The automatic face verification function will not be enabled within 6 seconds after the door is locked. After 6 seconds, if the person leaves and walks out of the proximity sensing range, the automatic verification function can be enabled normally when the person returns to the door lock.

## **Palm vein registration notes**

When registering, keep your palm as naturally open as possible and aim your palm at the module camera. The best distance is 10cm to 35cm.

When the registration distance is too short, the recognition success rate may be reduced. In this case, it is recommended to re-register.

Identification distance: 10cm ~ 35cm Identification speed: <1.3S

## **How to use palm vein recognition**

1. After turning on the automatic verification function, when a person approaches the door lock (the human body detection range is (60-80cm)), the door lock will be automatically awakened for verification.

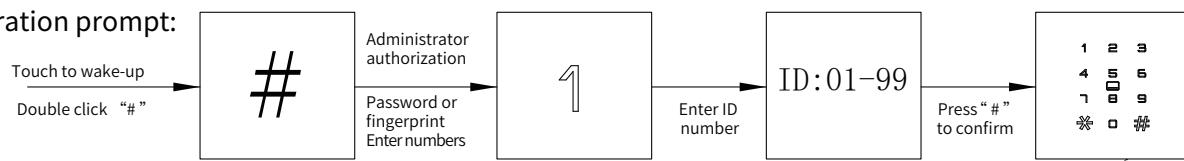
2. When the automatic verification function is turned off, you need to manually click the button to enable recognition.

3. The automatic verification will not be turned on within 6 seconds after the door is locked; after 6 seconds, when the person leaves and walks out of the proximity sensing range, the automatic verification can be turned on normally when the person returns to the door lock.

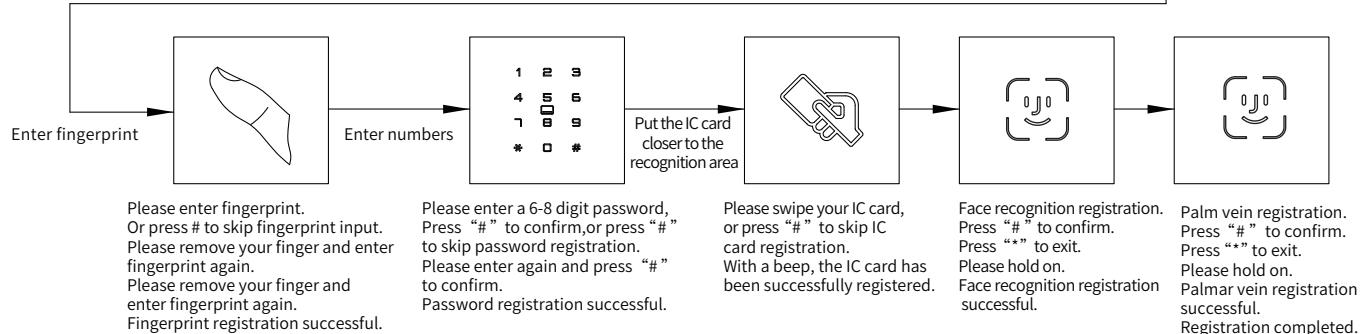
**Registration capacity:** facial information + palm vein information, total 50pcs

# USER REGISTRATION

## Operation prompt:



## Voice prompt:

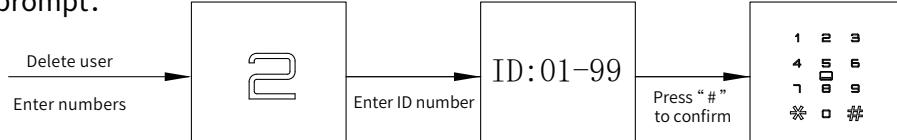


Attention: When registering, you can directly press "#" to skip. Afterwards, you cannot add fingerprint, password, card, face, and palm vein information for registering this ID. You need to delete the user with this ID again and follow the system prompts to register again.

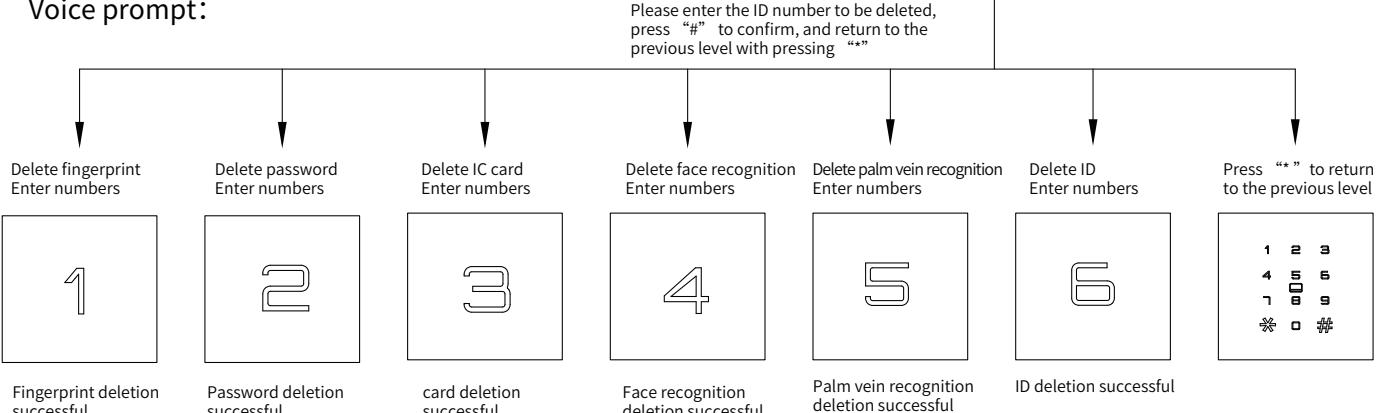
After successful registration, it will automatically return to the first level of broadcast content and users can continue to operate. If it expires (about 30 seconds), it will automatically exit and turn off the screen. When registering, entering 01 will prompt that this ID number has been registered. Press # to continue registration and overwrite the original administrator information;

# USER DELETION

## Operation prompt:



## Voice prompt:

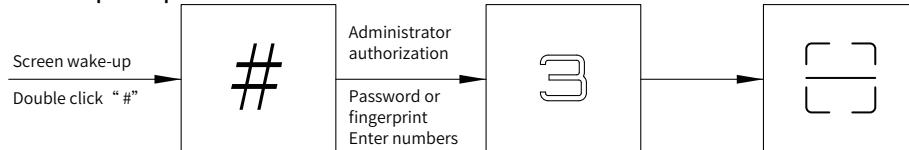


Attention: After successful deletion, it will automatically return to the previous level of broadcast content and users can continue to operate. If it expires (30s), it will automatically exit and turn off the screen. When deleting, entering 01 will prompt deletion failure. When the battery level is low, the face/palm vein recognition module will turn off and cannot delete face/palm vein information.

# DEVICE CONNECT NETWORK //

## ◆ Scenario 1: The device is not connected to the network

Operation prompt:

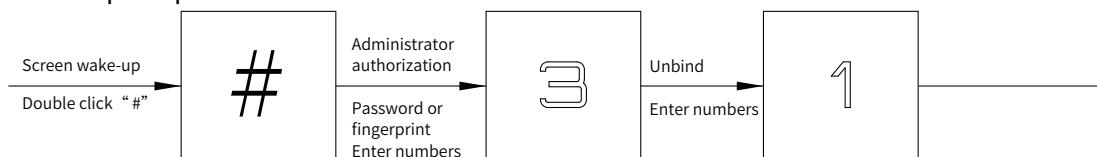


Voice prompt:

Device is connecting network  
Press "\*" to exit

## ◆ Scenario 2: The device is already connected to the network

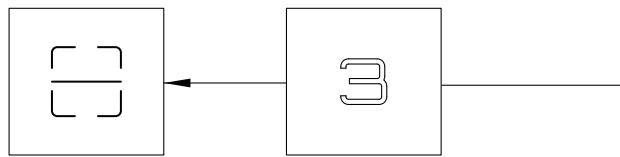
Operation prompt:



Voice prompt:

The device has been bound  
Press "1" to unbind

Device connect network  
Enter numbers



Device is connecting to the network  
Press "\*" to exit

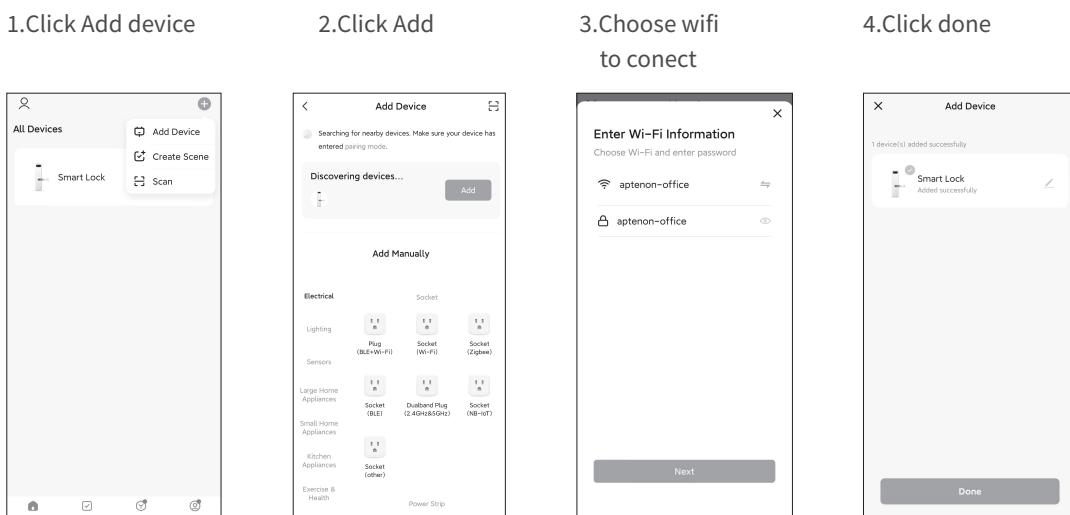
Note:

Please download "Tuya" App from the App stores before using this function.

1. Turn on "Tuya" App and phone's bluetooth.
2. Click "Add device"
3. Waiting for adding device.

## Tuya APP network setting, after device in blinding state.

1.Click Add device



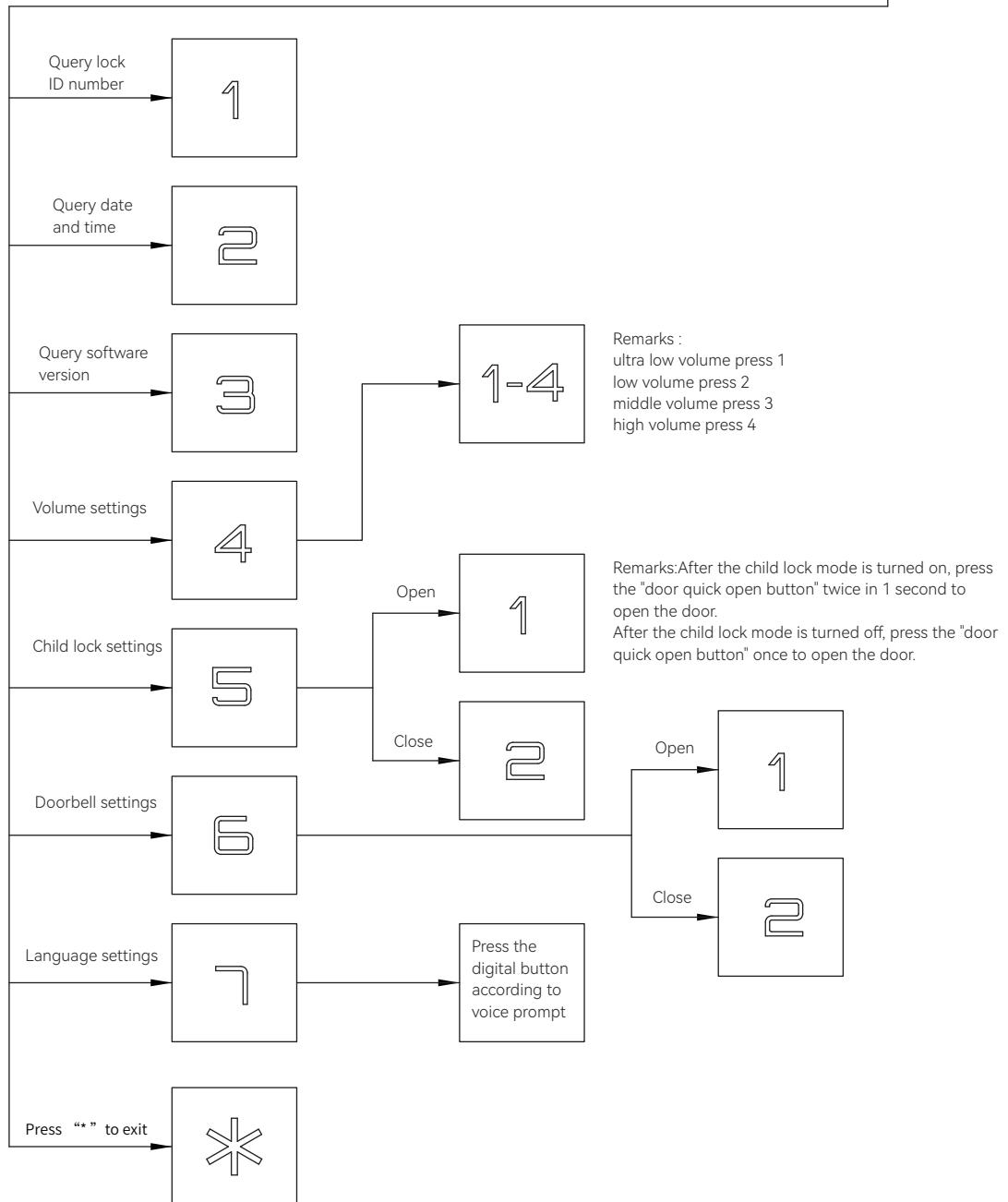
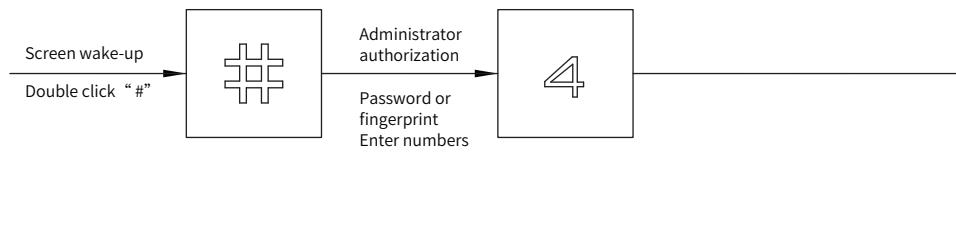
2.Click Add

3.Choose wifi  
to conect

4.Click done

# SYSTEM SETTING //

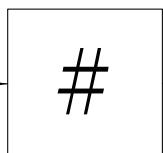
Operation prompt:



# ERROR TRIAL SETTING //

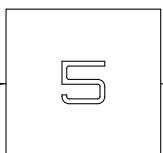
Operation prompt:

Screen wake-up  
Double click “#”

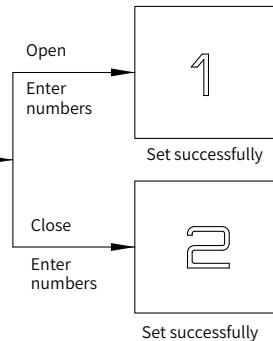


Administrator authorization.

Password or  
fingerprint.  
Enter numbers.



To enable, please press “1”  
To close, please press “2”  
Press “\*” to exit



Voice prompt: Please press 5 for error trial setting

Light prompt: The indicator light is green (flashing twice continuously)

Attention: If error trial is enabled, all verification errors within 5 minutes will be recorded in the cumulative number of anti cracking errors. Turn off error trial, and the number of error trial attempts will not be added to the cumulative number of anti cracking errors

Within 5 minutes, if there are 5 consecutive verification errors using the fingerprint, card or password method, the lock will be forced to sleep for 90 seconds. Within 5 minutes, if there are 3 consecutive verification errors using face or palm vein recognition methods, the system will be forced to sleep for 90 seconds.

# TIME AND DATE SETTING //

Operation prompt:

Screen wake-up  
Double click “#”



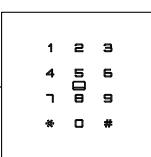
Administrator  
authorization.

Password or  
fingerprint.  
Enter numbers.

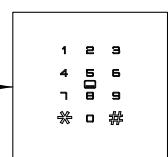


Please press 6 to set the date and time

Enter the number  
xxxxyear xx month  
xx day xx hour xx  
minute



Press “#”  
to confirm



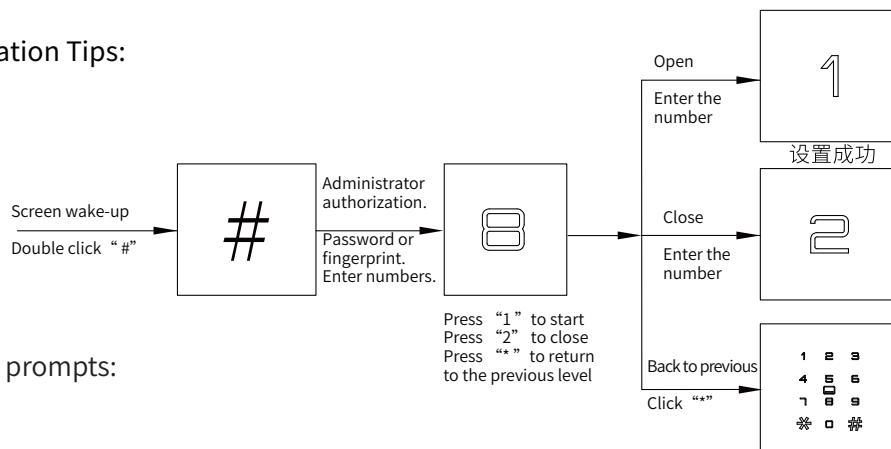
Please enter four digits for the year,  
two digits for the month, two digits  
for the day, two digits for the hour  
and two digits for the minute in  
sequence and press # to confirm.  
Press \* to return to the previous level.

Set successfully on xx month  
xx day xx hour xx minute xxxx year

Voice prompt:

# AUTOMATIC FACE VERIFICATION SETTINGS //

## Operation Tips:



## Voice prompts:

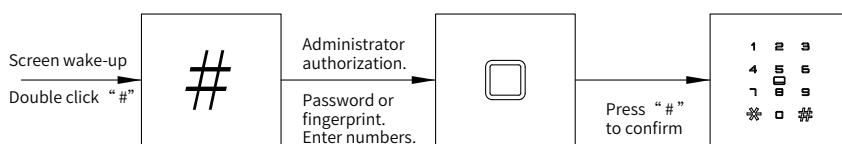
Note: Automatic face/palm vein verification settings are enabled by turning on the automatic verification option in the menu for distance sensing. This needs to be enabled under the conditions of the tongue being punched out (locked state) and the non-device management interface.

If face/palm vein recognition is successful, the door lock will open; if it fails, an alarm will sound and the door lock will not open.

When face/palm vein recognition is automatically enabled, since the product uses infrared light to detect the human body, there will be a certain measurement error for clothes of different colors and different materials. The human body detection range is (60-80cm), and the maximum distance between corridors is 120cm (when the corridor width is less than 120cm, the sensing device will be triggered for a long time).

# FACTORY RESET //

## Operation Tips:



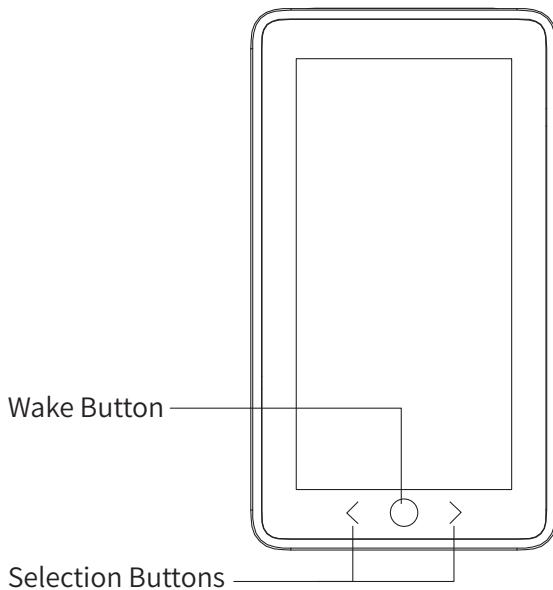
## Voice prompts:

To restore factory settings, press 8.  
This function will delete all door opening data. Please operate with caution.  
Press # to confirm and press '\*' to return to the previous level.

Finger vein initialization successful  
Factory reset successful

Light prompt: The indicator light is green (flashes twice)

# SCREEN FUNCTION DESCRIPTION //



**Wake Button:** Click the middle button to wake the screen; long press to enter screen settings.

**Selection Buttons:** Press “<” “>” to navigate.

## Screen Settings — Camera

Click the wake button to activate the screen, then click again to switch between different camera views.

## Screen Settings — Record

View captured images and recordings on the screen.

Note: An SD card must be inserted to save photos and videos.

## Screen Settings — Settings — Record Mode

Photo Mode: Takes a snapshot when someone rings the doorbell.

Video Mode: Records a 10-second video when someone rings the doorbell.

Note: Captures are triggered by doorbell presses, loitering, forced unlocking (ID 35-40), or multiple failed verification attempts.

## Screen Settings — Settings — Doorbell Answering Mode

Manually: Requires manually waking the screen when the doorbell rings.

Automatically: Automatically wakes the screen when the doorbell rings.

## Screen Settings — Settings — Auto Off

The screen will automatically turn off after 10s / 15s / 20s of inactivity.

## Screen Settings — Settings — Language

Choose between 简体中文, 繁體中文, English.

## Screen Settings — Settings — Format

Format the storage card.

# PRODUCT USAGE NOTES

05

# PRODUCT USAGE NOTES

- ① This product has certain requirements for the use environment. Please use it within the specified technical range. Long-term overload and over-standard use will shorten the service life of the lock. This product is a door lock. Please keep your fingers clean when using this product; do a good job of dust protection during decoration, clean it in time, and avoid long-term accumulation of dust on the surface of the lock; please do a good job of waterproof protection when installed outdoors, and avoid exposing this product to the sun for a long time.
- ② After using the fingerprint collection window for a period of time, there will be dirt on the surface, which may affect normal use. You can wipe the fingerprint collection window with a soft cotton cloth. The fingerprint head and display screen are fragile glass items. Do not knock or touch them with hard objects.
- ③ When the fingerprint lock wakes up, a warning will be issued when the voltage is insufficient. The red indicator light flashes twice, and the voice prompts "low power, please replace the battery in time". If the lithium battery is not charged in time, the system will be out of power and cannot operate. At this time, you can use a power bank (5V output mobile power supply) with a Type-C interface. The power cord is connected to the emergency power port. Please charge immediately after opening the door lock (if you encounter battery quality problems, please contact customer service, do not replace miscellaneous batteries, do not disassemble the battery without authorization, and unplug the plug in time after it is fully charged to avoid overcharging).
- ④ The door lock handle is a necessary auxiliary tool for opening the door. Do not hang heavy objects on the door lock handle to avoid affecting the normal use of the lock. (Applicable to smart locks with handles)
- ⑤ Please choose professional workers to install the door lock and operate according to the installation standards provided by our company. Do not disassemble the door lock privately, and protect the relevant sealing signs to avoid unnecessary trouble during warranty.
- ⑥ After the door lock is installed and debugged, please register the administrator's fingerprint as soon as possible and put the mechanical key to a third party outside the door for safekeeping. When other means such as fingerprint, password, card and face recognition cannot open the door, the mechanical key can be used to open the door.

# FINGERPRINT LOCK DAILY MAINTENANCE TIPS

As we all know, the biggest features of fingerprint locks are safety and convenience! You no longer need to carry keys when you go out, because your fingers are the keys, so more and more people are using fingerprint locks. However, improper use or improper maintenance of a fingerprint lock will greatly shorten its service life. So how should you maintain a fingerprint lock in daily life?

- ① When collecting fingerprints, the strength of your fingers should be moderate. Do not use your "strong Vajra Finger" if the fingerprint cannot be collected. At this time, your fingerprints may be too dry. Try taking a few breaths on your fingers to make them moister.
- ② Because the fingerprint collection window has been used for a long time, there will be dirt on the surface, which may affect normal use. At this time, you can wipe it with a soft cloth.
- ③ The fingerprint lock panel must not come into contact with corrosive substances, otherwise the surface coating will be damaged, and your fingerprint lock will be "broken"; when cleaning, please use a clean soft dry cloth to wipe it, and be careful not to use anything with metal particles. Wipe it with other objects to avoid scratching the surface of the fingerprint lock.
- ④ Isn't it convenient to hang objects from the handle? But it's too casual, because the handle is a key part of opening and closing the door lock, and its flexibility directly affects the use of the fingerprint lock. (Applicable to smart locks with handles)
- ⑤ Please do not apply strong pressure or knock on the LCD screen (products with display screen).
- ⑥ Do not collide or knock the casing with hard objects to prevent damage to the surface coating or indirect impact on the internal electronic parts of the fingerprint lock.
- ⑦ Do not use substances containing alcohol, gasoline, thinner or other flammable substances to clean or maintain this lock.
- ⑧ For fingerprint locks with a sliding cover, please do not pull the sliding cover outwards, push and close with moderate force, and use the sliding cover correctly.
- ⑨ Waterproof protection. Fingerprint locks are electronic products. Although some manufacturers provide waterproof protection, please try to avoid contact with water or other liquids, or immerse them in water or other liquids. If the case comes into contact with liquid or salt spray, wipe it dry with a soft, absorbent cloth.
- ⑩ Please use high-quality AA alkaline batteries. Once you find that the battery is low, please replace the batteries in time. When replacing, it is recommended to replace eight batteries at the same time. This can also avoid the trouble of using external batteries to unlock. If you go out for a long time, remember to replace the battery with a new one to prevent battery damage and battery fluid from corroding the internal circuit!
- ⑪ If the fingerprint lock has been used for more than half a year, please open the battery cover and check the battery to prevent battery leakage from corroding the fingerprint lock circuit board (especially during the rainy season, humid air will be a hidden danger to any home appliances, please check and maintain it in time, use your home appliances correctly), if you find that the battery is oxidized, please replace it with a new one of good quality!
- ⑫ Fingerprint locks with spare keys. Remember to put the keys in a place other than home such as your car or office in case you need them urgently.
- ⑬ When entering fingerprints, it is recommended to write down the code to avoid forgetting the code when you need to delete a fingerprint and clearing the fingerprint lock.
- ⑭ The most basic ways to open a smart lock are fingerprint opening and password opening. Although most people will choose the most convenient fingerprint to open the door, it is recommended to set several sets of passwords at the same time to prevent the fingerprint from being broken. The password can open the door in an emergency, and there are When a guest arrives or is in an emergency, you can tell the password to open the door in an emergency, and then delete the password afterwards.
- ⑮ Do not disassemble or disassemble without permission. Fingerprint locks basically have sophisticated electronic components built into them. Disassembly by non-professionals may damage the internal components or cause other serious consequences. If you suspect there is a problem with the fingerprint lock, it is best to consult a professional or contact the seller directly for on-site repairs.

# MAIN FUNCTION INTRODUCTION //

## User ID hierarchical management

- ① Management user (01): Not only can the door be opened, but also the internal data information of the lock can be managed. Under special circumstances, the administrator user has the highest authority. It is recommended that the household head or leadership use this level of function.
- ② Ordinary user (02-99): Can only perform door opening operations and cannot view or modify door lock data. This level of function is recommended for family children or company employees.
- ③ Hijacking users (35-40): Can perform door opening operations normally and report hijacking alarm messages to the mini program/APP at the same time. This function is suitable for emergency scenarios.

## Multi-function keys

During function operation: "\*" is the exit and return key, and "#" is the confirmation key.

## System reset function

If the system crashes, you can use the power cord with Type-C interface (power bank power supply) to plug into the emergency power interface under the outer panel to restart the system.

## Password anti-peeping function

When entering the password to unlock, you can enter any number before or after the correct password (the total length does not exceed 20 digits), and press the "#" key to confirm the verification and unlock.

## Emergency power function

If the battery is out of power, you can use the power cord with Type-C interface (power bank power supply) to plug into the emergency power interface under the outer panel, and then open the door in the normal way.

## Low voltage alarm function

When the voltage is lower than 6.8V, the alarm sounds to remind the user to replace the battery in time.

## Password cracking prevention function

Turn on the fingerprint trial and error function, and verify the fingerprint card incorrectly 3 times within five minutes, the system will be forced to sleep for 90 seconds, and follow the light prompts. The number of verification errors for face recognition and palm vein recognition functions is calculated separately. If there are 3 errors in total, the system will be forced to sleep.

## Hijack alarm function

When the registered user ID is 35-40, the system defines it as a hijacked user. The hijacked user can perform normal door opening operations, report hijacking alarm messages to the mini program/APP, and capture pictures/videos.

## System information query function

Query the date and time, machine code, and software version information in an emergency.

- ① When an administrator is on site, he or she can use the administrator's fingerprint or password to verify and enter the system settings. After entering the submenu, select the factory reset option. After confirmation, all door data can be deleted.
- ② When the administrator's door opening data cannot be obtained, you can use the clear button behind the door to press and hold for 3-6 seconds to set the door lock to the factory state.

# MAIN FUNCTION INTRODUCTION

## ▪ Volume setting function

The door lock volume can be set and divided into four levels.

## ▪ Internet of Things functionality

The door lock device can be bound through the mobile phone. After binding, the door lock information can be set and viewed on the mobile phone.

## ▪ Child lock function

The child lock function is used to prevent children from accidentally opening the door. In the child lock mode, to open the door, you need to press the quick-open button twice within 1 second to open the door, and the interval between the two presses must be less than 0.5s.

## ▪ Front and rear panels match

Method 1: When waking up, it reminds "Please press the clear key on the rear panel to match the communication between the front and rear panels." Press the clear key on the rear panel until the green light on the front panel lights up. After hearing a "beep", release the button. When the "Binding successful" - "Fingerprint initialization successful" - "Restore to factory settings successful" will complete automatic matching.

Method 2: Press the clear button on the rear panel, press and hold for 6-9 seconds, hear two beeps, release the button, and the voice prompts "Binding successful", that is, matching is completed.

## ▪ Doorbell function

When the doorbell button above the front panel is lightly pressed, a "ding-dong" sounds from the rear panel inside the door to remind residents that someone is visiting.

## ▪ Face recognition function

Normally, you can use the fingerprint card method to open the door, which saves power. If necessary, click the face recognition button after waking up to enable face recognition verification to open the door.

## ▪ Palm vein recognition function

Utilize the uniqueness of palm veins to identify personnel, non-contact identification, safe, fast and efficient.

## Function explanation:

1. Lighting instructions: All operations are accompanied by voice or light instructions. 2. After the first administrator registers, the demo mode will not be available.
3. This lock is a green energy-saving product. After stopping operation for about 15 seconds, the system will return to the initial sleep and energy-saving state of use mode. Touch the button to wake up the system.
4. User instructions: All users of this lock are represented by ID numbers. When registering a user, you must first enter the ID number. Each ID number corresponds to a fingerprint, password or card. The administrator can delete the designated user later.
5. All users of this lock are divided into two levels of authority management. The administrator has the highest level of management authority, and the default ID program is 01; ordinary users have no management authority, and the ID range is 02~99; users of the same level have equal rights. Permissions, the administrator's fingerprint and password are the highest management permissions.
6. Password opening instructions: When verifying the password, there is no need to enter the ID number, directly enter the 6-8 digit password, and press # to confirm. For example: ID is 02 and password is 123456. To open the door, directly enter the password: "123456" and then press the "#" key to press the handle or push and pull the door directly.
7. When the system starts, double-click the "#" key to verify that it enters the setting mode, listen to the voice prompts to operate, press the "#" key to confirm, or press the "\*" key to exit/return.

# COMMON FAULT ANALYSIS AND TROUBLESHOOTING METHODS OF FINGERPRINT LOCKS

Fault name	Fault characteristics	Fault cause and solution
New lock cannot register fingerprint.	For newly purchased products, fingerprints cannot be registered.	<p>1. In the factory state, there is no fingerprint in the memory, and any fingerprint can be registered. If the fingerprint has been registered internally, you need to clear the fingerprint before you can register it. For details, please refer to the "Manual Clear Function" operating instructions.</p> <p>2. The fingerprint is dry, the fingerprint is seriously damaged, or the fingerprint is placed at the wrong angle.</p>
When unlocking using fingerprint verification, the lock cannot be unlocked.	Outside the door, use fingerprint verification to unlock. When you hear the "beep" sound, press the lock immediately. When you hear the "beep" sound, press the lock immediately (applicable to smart locks with handles).	<p>1. The sound prompt for normal unlocking is "--Da! Di! Di! Dang! Di!" The single "di" sound is just the sound of the motor reaction. The motor is not rotating at this time, so of course it is not possible to press the handle immediately. open the door.</p> <p>2. The correct way to unlock the lock is: after pressing the fingerprint to confirm, the sound prompt will be "Beep!" and after about 1 second, you will hear "Da! Beep! Dang! Beep!" At this time, press the handle to open the door.</p>
	Outside the door, after the fingerprint verification or password is passed, press the handle, the handle will idle and cannot be unlocked (applicable to smart locks with handles).	<p>1. The outer handle may be drooping too much. Lift the handle to a horizontal position and then verify the fingerprint or password to unlock;</p> <p>2. If the above method does not work, please contact your local dealer.</p>
Jamming occurs when using the key to open the lock.	When using a key to unlock, the key gets stuck on the second turn.	<p>1. Immediately turn the key around 60 degrees, stop when the key encounters elastic resistance, and then unlock;</p> <p>2. If you need to adjust the length of the sky and ground poles, please contact your dealer.</p>
Fingerprint cannot pass verification.	<p>1. When using fingerprint verification to unlock the door, the fingerprint cannot pass.</p> <p>2. When registering the fingerprint, the fingerprint cannot pass the verification.</p>	<p>1. When using fingerprint verification to unlock the door, the fingerprint cannot pass.</p> <p>2. When registering the fingerprint, the fingerprint cannot pass the verification. 1. Maybe the fingerprint has not been registered. Please choose a registered fingerprint for verification; 2. The location of the fingerprint is too different from the location when the fingerprint is registered;</p> <p>3. The fingerprint is too dry, moisten the fingerprint and try again;</p> <p>4. The fingerprint is seriously damaged, choose a more complete fingerprint and try again;</p> <p>5. Since each fingerprint needs to be entered three times continuously during registration, the fingerprint placement strength must be basically the same each time to pass normally, so please pay attention to the location and strength of the fingerprint placement;</p> <p>6. If you find that the fingerprint texture is not clear or obvious, please use a clear and obvious fingerprint to register or use a password instead.</p>
Palm vein cannot pass verification.	<p>1. When using fingerprint verification to unlock the door, the fingerprint cannot pass.</p> <p>2. When registering the fingerprint, the fingerprint cannot pass the verification</p>	<p>1. The position of the palm during verification is too different from the position during registration. It is recommended to use the palm (not the fingers) to face the camera;</p> <p>2. During verification, the angle between the palm and the camera is too different from the registered angle. It is recommended to tilt the palm slightly forward/backwards;</p> <p>3. The distance between the palm and the camera is too short during registration. It should be kept at an optimal distance of 10cm~35cm. If necessary, re-register and enter the palm veins.</p>
When using password verification to unlock the door, the password cannot be passed.	When using password verification to unlock the door, the password cannot pass.	<p>1. The password is wrong, please re-enter the correct password;</p> <p>2. If you forget your password, please use fingerprint/card verification to unlock or key to unlock;</p> <p>3. If you forget your password and need to reset a new password, you must delete the original ID number, then select the original fingerprint ID number, re-register the fingerprint and add a new password.</p>
The battery is low.	The voice prompts that the battery is low. Please replace the battery. There is also a light prompt.	When encountering this situation, it means that the battery is low and can be used 100 times. The user is prompted to prepare to replace the battery. It is best to replace the battery immediately.
Crash.	During normal operation, the execution cannot be continued, which is called "crash".	During normal operation, the execution cannot be continued, which is called "crash". Use the powered USB cable to directly plug into the power interface on the front panel to trigger the fingerprint lock to restart. If it still cannot be used normally after restarting, please use the key to unlock the lock first, and then try again. Contact your dealer.
When the lock is unlocked, the sliding door is too heavy or too light.	The gap between the door frame and the door on the side close to the lock is not adjusted correctly (the gap is too small and it is heavy when opening and closing the door).	Adjust the gap between the deadbolt panel and the door frame patch to keep the gap at 3 to 5mm.