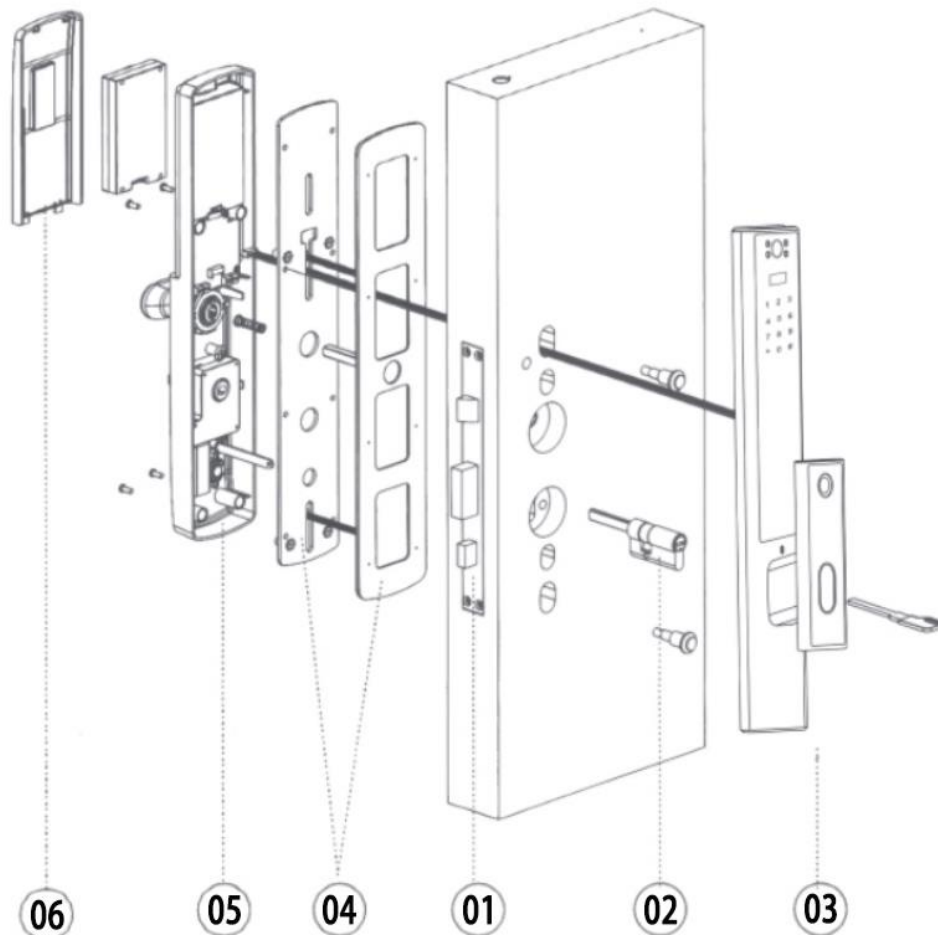


Smart Electronic Lock Instruction

Installation Diagram

Installation sequence schematic:



Step-by-step instructions for installation

1. First install the lock body, with M5 * 6 screws (4) to fix the lock body.
2. Installation of the lock cylinder, with the lock cylinder fixing screws to fix the lock cylinder, to ensure that the lock cylinder pivot copper bar toward the interior, the length of the exposed door plane 18-20MM long (Figure 2, you must install a good lock cylinder and then cut the copper bar);
3. Install the front panel.
4. Install the bottom plate (to add rubber pads), with M5 screws to fix the front panel two studs;
5. Connect the front and rear panel data lines, and then install the rear panel with good holes, and fix it with M4 screws 4 strips.
6. Install the lithium battery, cover the battery cover, installation is complete.

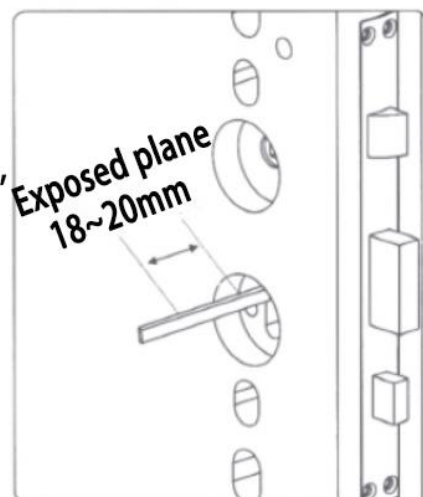
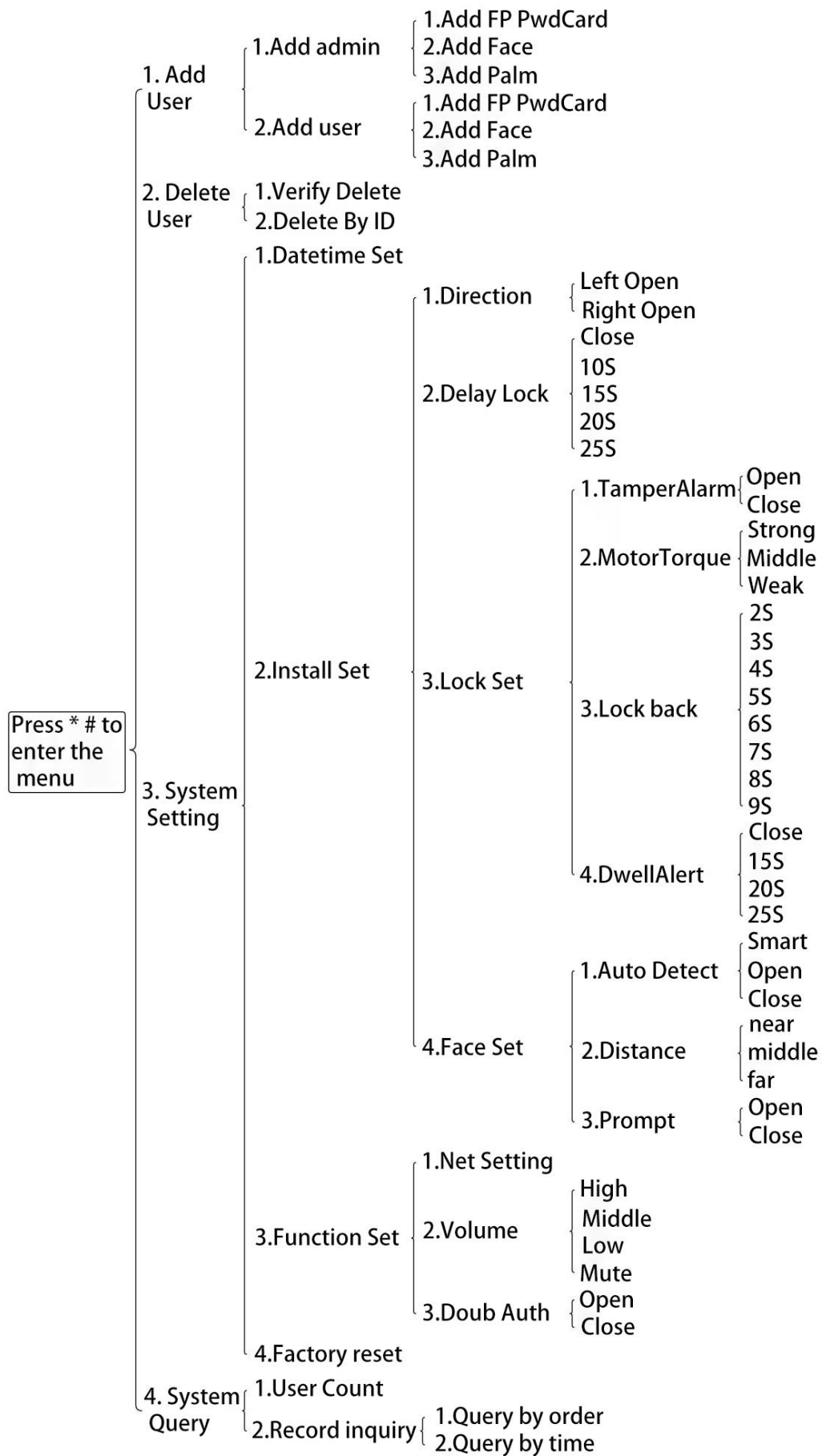


Figure 2

一、Specification Parameters

Serial Number	Parameter Name	Specification Parameters
1	False Reject Rate (FRR)	$\leq 0.1\%$
2	False recognition rate	$< 0.001\%$
3	User Capacity	Total Capacity: 250 sets Up to 100 fingerprints Up to 100 sets of passwords Up to 50 sets of facial and palmar veins
4	Working Voltage	7.0V~8.4V, Low voltage alarm voltage $6.8 \pm 0.2V$
5	Dynamic Power	$\leq 1A$ (no motor action, no playback sound)
6	Static Power Consumption	$\leq 200\mu A$ (average power consumption)
7	Verification Time	$\leq 3S$ (including the entire process of fingerprint collection, comparison, and unlocking signal output)
8	Antistatic Ability	$\geq 8KV$ (contact type) $\geq 15KV$ (non-contact type)
9	Storage Temperature	$-25^{\circ}C \sim 80^{\circ}C$
10	Operation Temperature	$-25^{\circ}C \sim 70^{\circ}C$
11	Ambient Humidity	15%RH~93%RH

二、Operating Manual



2.1 Create Administrator Password

To use it for the first time, you need to create an administrator password. The steps are as follows:

1. Wake up the screen and press {*} → {#} in sequence to enter the add interface.
2. Enter a 6-8 digit password according to the voice prompt, press the {#} key to confirm, then re-enter the same password and press the {#} key again to confirm.
3. After the system voice broadcasts "User: 000, Add Success", the settings are completed and you can enter the main menu.

Prompt: The administrator password user 000 has the highest authority and can be used to generate temporary and one-time passwords. Please keep them safe.

2.2 Add User

1. Wake up the screen, press the {*} key and then the {#} key to enter the management user information and enter the menu.
2. Press {1} **Add User** - {1} **Add admin** or {2} **Add user** to select the user type.
3. Press {1} **Add FP PwdCard**, {2} **Add Face**, or {3} **Add Palm** to select the user type.
4. Complete the corresponding input according to the voice prompt:
 - **Fingerprint:** Place the fingerprint sensor with your finger, and upon hearing 'Press again', repeat placing the same finger until complete.
 - **Password:** Enter a 6-8 digit password and press the {#} key to confirm.
 - **Face:** After hearing 'Enroll face', place the face parallel to the camera for 40-80CM and follow the prompts to enter continuously.
 - **Palm:** After hearing "Please place your palm in front of the camera", place your hand parallel to the camera 10~25CM and enter as prompted.
5. Voice broadcast "User: * * *, Add Success" indicates successful addition.

Prompt:

- **Manage user number ranges:** 000-009 (10 people in total) 。
- **Ordinary user number ranges:** 010-249 (240 people in total) 。

2.3 Delete User

2.3.1 Verify the deletion of users

1. Enter the menu, press {2} **Delete User** - {1} **Verify Delete**.
2. Select the corresponding verification method based on the user type:
 - **Fingerprint:** Place the finger to delete the fingerprint on the fingerprint sensor.
 - **Password:** Enter the password of the user to be deleted.
 - **Face:** The user to be deleted is facing the camera directly (at a distance of 40-80CM).
 - **Palm:** Place the palm to be removed in front of the camera (at a distance of 10-25CM) 。
3. After the system verification is passed, the corresponding user will be automatically deleted.

Prompt: Managing user * * *, entering the menu, the corresponding user cannot be deleted.

2.3.2 Delete users by number

1. Enter the menu, press {2} **Delete User** - {2} **Delete By ID**
2. Enter the user ID to be deleted, for example: 010.
3. If the user exists, the system voice broadcasts: "User ***, Delete Success"; If it does not exist, announces: "Delete Failure".

2.4 System Setting

2.4.1 Time Setting

1. Enter the menu, press {3} **System Setting** - {1} **Datetime Set**.
2. Enter the time in the format of 20xx year xx month xx day xx hour xx minute (e.g. January 1, 2025 0:00, enter 2501010000).
3. The system reports 'Success' to complete the setup.

2.4.2 Opening Direction

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {1} **Direction**.
2. Press {1} to switch the **Direction** to "left open" or "right open".

Prompt: The direction of opening the door is subject to the opening and closing direction of the door leaf when standing outside the door to unlock.

2.4.3 Delayed Locking

1. Enter the menu and press {3} **System Setting** - {2} **Install Set** - {2} **Delay Lock**.
2. Press {2} "**Delay Lock**" to switch the delay lock time: off, 10S, 15S, 20S, 25S.

Prompt: After turning on the delay lock, it will be automatically locked when the set time is reached after unlocking. Please close the door before the end of the delay to avoid damage to the lock body due to not closing the door.

2.4.4 Anti-prying Alarm

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {3} **Lock Set** - {1} **TamperAlarm**.
2. Press {1} to switch the **anti pry alarm** to "off" or "on".

Prompt: After opening, if the door lock is pried, the system will play an alarm sound; If the device is connected to the internet, synchronously push alarm information to the mobile phone.

2.4.5 Motor Torque

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {3} **Lock Set** - {2} **Motor Torque**.
2. Press {2} to switch the **motor torque** gear: weak, medium, strong.

Prompt: If the switch lock is difficult, it may be that the torque of the motor is insufficient, so it is recommended to adjust the torque to "strong" gear.

2.4.6 Lock Back Time

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {3} **Lock Set** - {3} **Lock back**.
2. Press {3} to switch back to **Lock back (2-9 seconds)**.

Prompt: The lock-back time is the delay time of automatic rebound reset of the lock tongue (oblique tongue) after closing the door.

2.4.7 Dwell Alert

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {3} **Lock Set** - {4} **Dwell Alert**.
2. Press {4} to switch the **Dwell Alert** time: 15S, 20S, 25S, and turn off.

Prompt: If it is detected that the alarm time of human staying reaches the set value (such as 20 seconds) within 1 minute, the system will trigger an alarm and push a message to the equipment with network distribution.

2.4.8 Human Body Induction

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {4} **Face Set** - {1} **Auto Detect**.
2. Press {1} to switch the **human body sensing mode**: on, off, and smart.

Mode Description:

- **Off**: The door lock does not activate human body sensing.
- **On**: No matter what state the door lock is in, it continues to perform human body sensing.
- **Smart**: Intelligent mode can only trigger human body sensing when the lock is closed (with the square tongue extended).

2.4.9 Sense Distance

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {4} **Face Set** - {2} **Distance**.
2. Press {2} to switch the **sensing distance** gears: near, medium, and far.

Sensing Range:

- **Near**: 50±10cm
- **Medium**: 90±20cm
- **Far**: 120±10cm。

Prompt:

- The above is the theoretical distance in the laboratory, and the actual sensing range may vary slightly due to installation environment.
- When the space is narrow, it is recommended to choose the "near" mode, and in open areas, the "far" mode can be selected to adapt to different usage scenarios.

2.4.10 Recognition Prompt

1. Enter the menu, press {3} **System Setting** - {2} **Install Set** - {4} **Face Set** - {3} **Prompt**.
2. Press {3} to switch the **recognition prompt** to "on" or "off".

Prompt: After opening, when the human body induction wakes up the door lock, the system will give a voice prompt "Please verify face".

2.4.11 Network Setting

1. Enter the menu, press {3} **System Setting** - {3} **Function Set** - {1} **Net Setting**;
2. Open the mobile app and follow the prompts on the app page to complete the distribution network operation until the lock control reports "Connected Success".

Prompt:

- The distribution network function only supports one mobile phone operation. Entering the distribution network mode again will clear the last connection data. Please operate with caution.
- If the system prompts 'not supported', it indicates a network module failure. Please ensure that the cat eye module is properly plugged in.

2.4.12 Door Lock Volume

1. Enter the menu, press {3} **System Setting** - {3} **Function Set** - {2} **Volume**.
2. Press {2} to switch volume levels: **High, Medium, Low, Quiet**.

Prompt:

- The volume can be adjusted according to the usage scenario (such as selecting "quiet" or "low" mode for quiet environments and "high" mode for noisy environments).

- In silent mode, there is no prompt sound for the switch lock, but the doorbell, alarm sound, and menu broadcast functions are normal and do not affect safety prompts.

2.4.13 Double Authentication

1. Enter the menu, press {3} **System Setting** - {3} **Function Set** - {3} **Doub Auth**.
2. Press {3} to switch **dual authentication** to 'on' or 'off'.

Prompt:

- After opening, two different users need to be continuously verified before unlocking. The system will prompt "Enter another user" after the first authentication, and the second user authentication must be completed within the specified time before unlocking.
- Suitable for scenarios with high security requirements such as finance and confidentiality, to avoid risks caused by the leakage of single user credentials.

2.4.14. Factory Reset

1. Enter the menu, press {3} **System Setting** - {4} **Factory reset**.
2. The system voice prompts "Factory reset NO (*) YES (#)". Press the # key to confirm the operation, and the system will restart and return to the initialization state.

Prompt: After resetting all user data (including fingerprints, passwords, etc.) to factory settings, please proceed with caution.

2.5 Information Query

2.5.1 Number of Users

1. Enter the menu, press {4} **System Query** - {1} **User Count**.
2. System voice broadcast: "Admin: * * *, Uers: * * *".

2.5.2 Record Query

- **Query by order**

1. Enter the menu, press {4} **System Query** - {2} **Record inquiry** - {1} **Query by order**.
2. Press the {8} key to search for the next record, and press the {2} key to search for the previous record.

Prompt: Sequential query is displayed in reverse order starting from the current latest record

- **Query by time**

1. Enter the menu, press {4} **System Query** - {2} **Record inquiry** - {2} **Query by time**.
2. Please enter the target date in the format of "20xx year xx month xx sun", and the system will display all operation records of that date.
3. Press the {8} key to search for the next record, and press the {2} key to search for the previous record.

三、Function Description

- **Factory Reset**

Long press the reset button, or press the switch lock button for 5 seconds at the same time, or enter the factory reset menu to perform the factory reset function. At this point, the system voice will prompt: "Factory

reset NO (*) YES (#) ". After pressing the # key to confirm, the system will restart and return to its initial state.

- Low Battery Alarm

When the system's battery level is below 25%, a voice message saying 'low battery' will be displayed during the unlocking process. At this time, the battery can still support about 50 unlocking operations, but please charge or replace the battery for the device in a timely manner.

- Anti Pry Alarm

When the door lock is pried, the anti pry switch triggers the alarm function. The anti pry alarm function can be turned on or off in the system menu.

- Illegal User Alarm

If the wrong unlock information is entered 3 to 5 times in a row, the system will trigger an alarm sound. After the 5th error, the system will lock for 90 seconds without any response, and will automatically unlock after the timer ends.

- USB Emergency Power Unlock

When the battery level is too low to unlock, you can connect the power bank to the front lock USB interface to supply power to the door lock, and wait for about 30 seconds before unlocking. Only for temporary unlocking, please remove the battery and charge it promptly after use.

- Virtual Password Function

When unlocking with a password, any number can be added before and after the correct password (the system only recognizes the first 16 digits) to enhance password security and prevent peeping. For example, if the correct password is "123456", you can enter "426123456745" to complete the verification.

- Shortcuts

Enter installation menu: 111#

View device activation code: 666#

Enter settings menu: *#

Enter factory menu: 888#

Query system version number: 999#

四、Factory Directive

Press **888 #** on the main interface to enter the factory menu (if a registered user, they need to enter the management user password first).

Motor rotation time after locking: Input command 7000#~7009# can be set, the range is 0ms~900ms (the last digit of the command corresponds to the time, such as 7005 # corresponding to 500ms).

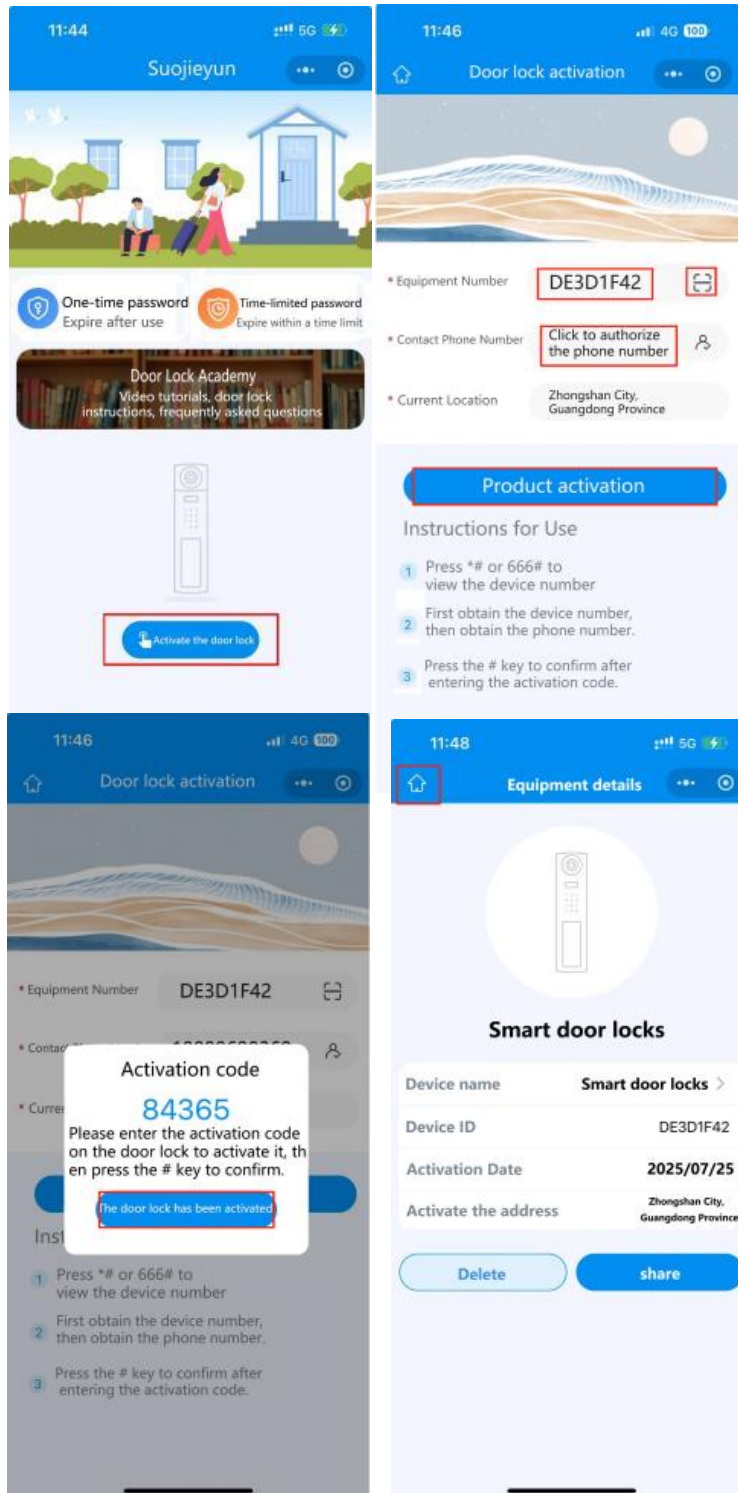
Motor rotation time after unlocking: Input commands 7100 #~7109 # to set the motor running time after unlocking, ranging from 0ms to 900ms.

Prompt:

- Non professionals are not allowed to make arbitrary adjustments, as incorrect settings may affect the normal operation of the lock body;
- This function is mainly used by installation technicians, and ordinary users do not need to operate it.

五、Door lock activation

1. Wake up the door lock, enter 666 #, and the screen will display the activation QR code.
2. Open WeChat and scan the code directly, or enter the "Lock Boundary Cloud" mini program and click on "Activate Door Lock" ->"Scan" to scan the QR code to obtain the device number.
3. Click on "Contact Phone" in the mini program to bind your phone number, and click on "Product Activation" to generate an activation code.
4. Wake up the door lock again and enter the activation code. After the lock board prompts "Success", return to the mini program and click [Confirm] to complete the activation.



六、

Temporary

Password

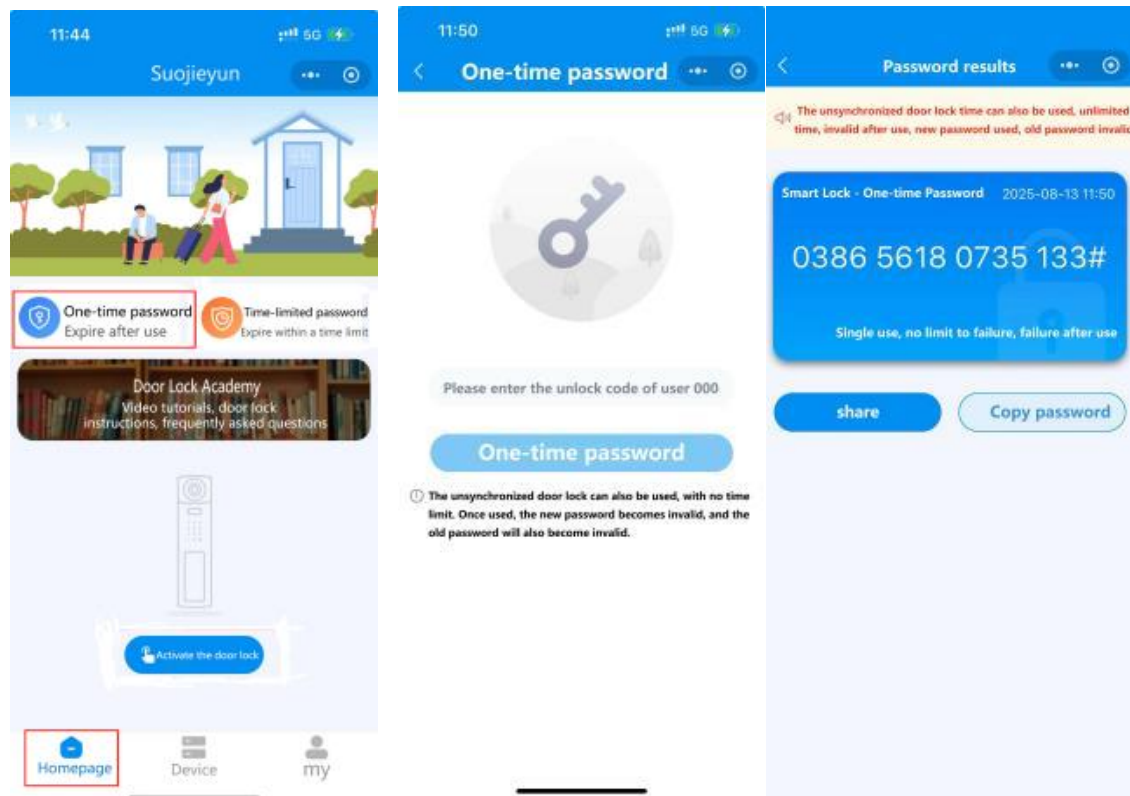
6.1 One Time Password

1. Open the "Lock Boundary Cloud" mini program and click the "One time Password" button.
2. Enter the **administrator password for user number 000**, generate a one-time password, and enter it on the lock end to unlock.

Prompt:

- No need to calibrate the door lock time, the password will immediately expire after use
- After the new password is generated or used, the old password is automatically invalidated to ensure

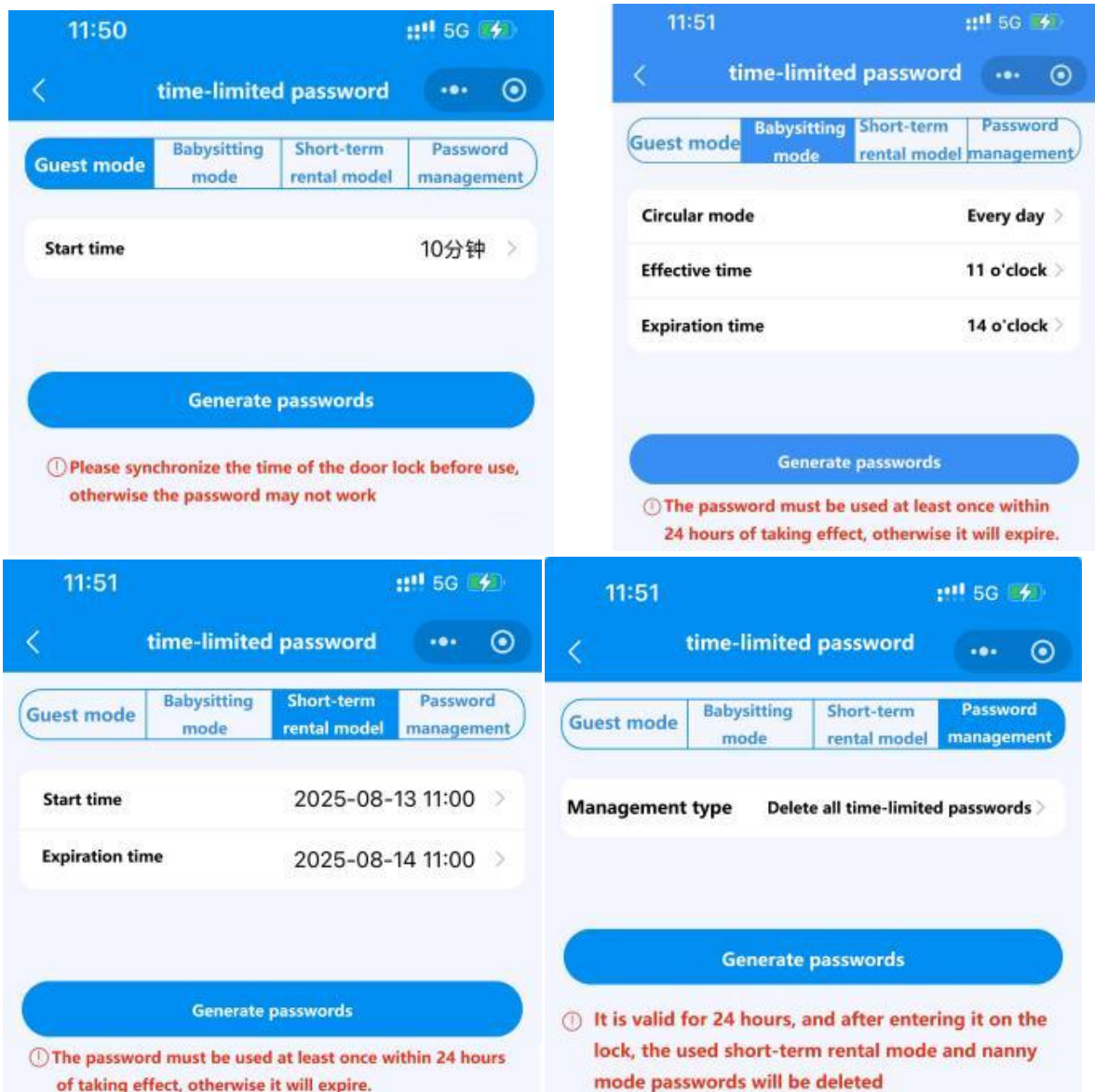
the security of single authorization.



6.2 Limited Time Password

1. Open Lock Boundary Cloud and click the **【 Limited Time Password 】** button.
2. Enter the administrator password (user 000) and select the mode:
 - **Visitor Mode**: Set a time limited password with a validity period of 1-60 minutes (calculated from the first unlocking time, expired)
 - **Nanny Mode**: Set the allowed unlocking time period every day (the expiration time must be greater than the effective time), and the password must be entered within 24 hours, otherwise it will become invalid.
 - **Short Term Rental Mode**: Set a valid password for any time period (expiration time > effective time and > current time, up to 60 days). The password must be entered within 24 hours after it takes effect, otherwise it will become invalid.
 - **Password Management**: It is possible to delete time limited passwords that have already taken effect within the lock (supporting the deletion of all or specified user passwords). After entering the generated deletion password on the lock end, a prompt of "Success" will be displayed to complete the operation. Note: Unused generated passwords cannot be deleted; If you need to batch invalidate all time limited passwords, you can delete the "User 000" administrator password and add a new administrator.

Prompt: Before using a time limited password, please calibrate the door lock time first, otherwise it will cause the generated password to be unusable.



七、Language Switching Instruction

On the main interface, press 888 # to enter the factory menu, enter the command, and press the # key to set language switching;

3000 Chinese	3001 English	3002 Traditional	3003 Russian	3004 Vietnamese
3005 Korean	3006 Arabic	3007 Portuguese	3008 French	3009 Spanish
3011 Indonesian	3012 Thai	3013 Hebrew	3014 Turkish	3015 Italian
3016 Mongolian	3017 Uzbek	3018 Kazakh	3019 Serbian	3020 Korean
3022 Japanese	3023 Persian			

八、QR codes related to installation and operation



APP Download



FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.