

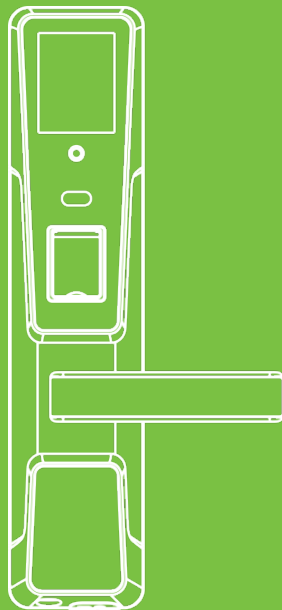
# USER MANUAL

## ZM100 Smart Lock

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Version: 1.0

Date: September 2018



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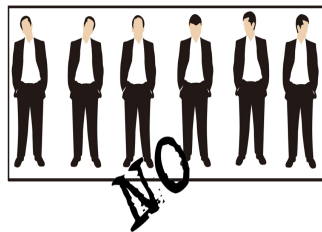
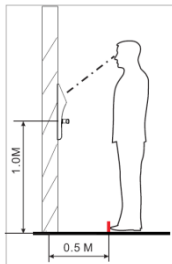
# Read Before Use

## Safety Cautions

1. New lock cannot unlock with ANY verification. Please register one administrator at least first, if there is no any administrator, registration for normal users is not allowed.
2. The lock is equipped with mechanical keys for manually unlocking. Please keep the mechanical keys in a safe place.
3. Please replace the battery once the lock prompts "Low Battery". Please use the original charger to charge.
4. It's forbidden to remove the battery, if you need to replace with newly-bought battery, please operate under the guidance of professional technique person.
5. Without any operation, the lock will power off automatically within 10 seconds.
6. Keep your fingers, screen and camera clean when using this lock.

## Position and Gesture

If the user height is 1.35-1.80m, the height from handle centerline to ground is 1m.

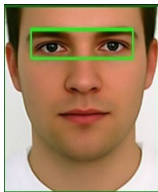


## Facial Expression

During enrollment and verification, keep the facial expression natural. Do not use exaggerated expressions (such as staring, grinning, and wagging tongue).

## Eyes Position

During registration and verification, it is required to adjust your upper body to fit your eyes into the green frame on the screen.



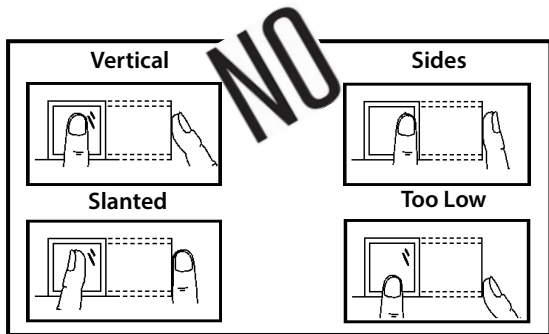
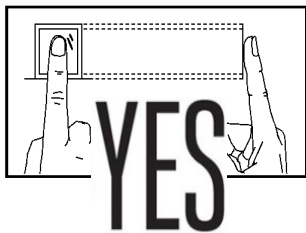
## Method for Using the Touch Screen


Click the touch screen with your finger pulp and keep your fingers and screen clean during use.



## Method for Pressing Fingerprint

Recommended fingers: The index finger, middle finger or ring finger; avoid using the thumb and little finger (because they're usually clumsy during pressing). Press with your finger right on the fingerprint gathering window, with the fingerprint's center aligning to the center of the gathering window as much as possible.



 **Note:** Please use the correct method of pressing fingerprint for registration and verification. Our company does not undertake the responsibility for the lowered verification performance caused by user's improper operation. The rights to final interpretation and amendment are reserved.



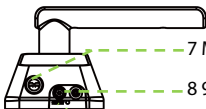
# Structure

## Front



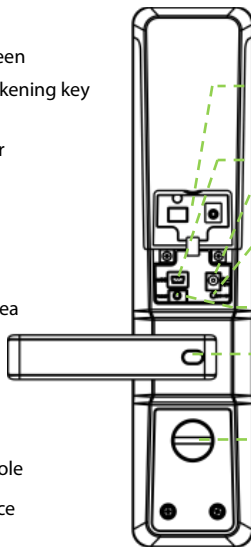
- 1 2.8 Inch Color Screen
- 2 Touch-screen awakening key
- 3 Camera
- 4 Fingerprint Sensor
- 5 Handle
- 6 Card Detection Area

## Bottom



- 7 Mechanical Key Hole
- 8 9V battery Interface
- 9 Restart key

## Back





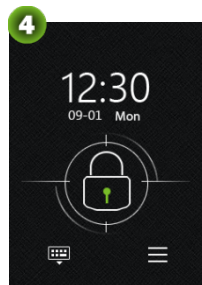
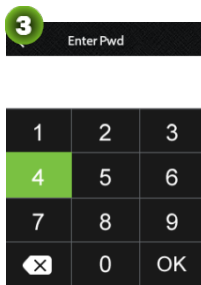
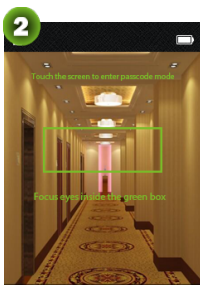
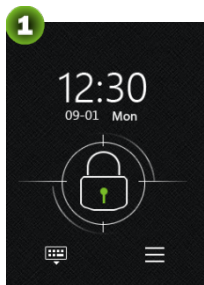
- 10 Silicon cover (Please use tweezers or screwdrivers to open)
- 11 USB patch cord interface
- 12 Charging interface
- 13 Charging indicator (red indicates being charged, and green indicates fully charged)
- 14 Reset key
- 15 Anti-cat's eye key (optional)
- 16 Manual Knob

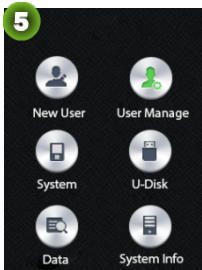
# Add and Manage User



## To Enter Main Menu

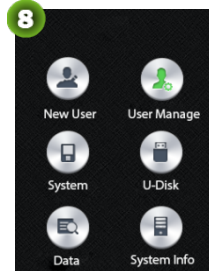
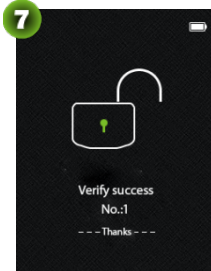
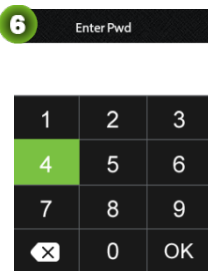
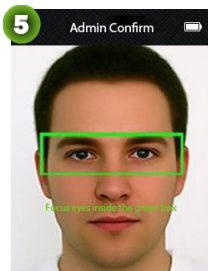
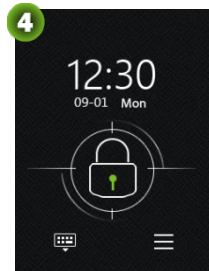
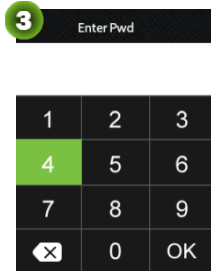
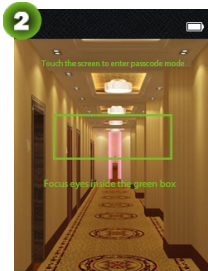
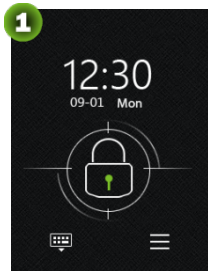
➤ When no administrator is registered in the device, the process of entering Main Menu is as follows:

- ① Press the touch-screen awakening key to access the main page.
- ② Enter "face recognition" screen automatically.
- ③ Click the screen to enter "password verification".
- ④ Click the return key  to enter the main screen.
- ⑤ Click the menu key  to access Main Menu.



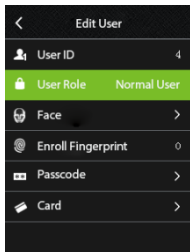


- When an administrator is registered in the device, identity verification is needed for entering Main Menu. The process is as follows:
- ① Press the touch-screen awakening key to access the main page.
  - ② Enter "face recognition" screen automatically.
  - ③ Click the screen to enter "password verification".
  - ④ Click the return key  to enter the main screen.
  - ⑤ Click the menu key  to enter "admin confirm", then verified by the admin (face / password / card).
  - ⑥ After the verification is successful, the system displays a success prompt and automatically enters Main Menu.



# Enroll User

<b>User No.</b>	The number of a new user. 1-65535 is supported by default. The number cannot be modified after the user is registered.	
<b>User Role</b>	Normal user	A normal user can perform only comparison and unlocking
	Administrator	Unable to register the super administrator Unable to modify the rights of super administrator Unable to perform data query Unable to access the Advanced Options Unable to upload user data and update the firmware
	Super administrator	All operations are available
	A user is a normal user by default	

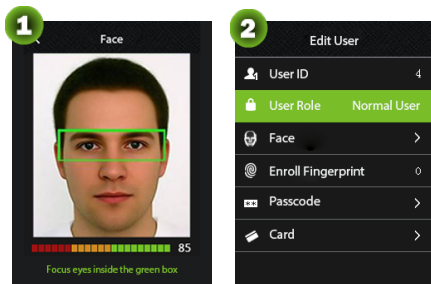


## **Note:**

- ✧ After registering the information of a new user, you must press the touch-screen awakening key, and click [OK] on the page displayed for saving. If you click [Cancel], all registered information will not be saved.
- ✧ The first registered user must be a super administrator. If the first user is an administrator or a normal user, the system displays the prompt "The first registered user must be a super administrator. Do you want to set this user as a super administrator? Click [OK] to set the user as a super administrator."

## Registering Face [Main Menu > New User > Face]


- ① Please focus eyes inside the green box, adjust the positions of the eyes by moving them up and down and left and right. There is a progress bar at the bottom of the page.
- ② After the face is successfully registered, the system automatically goes to the New User page. You can register other methods.

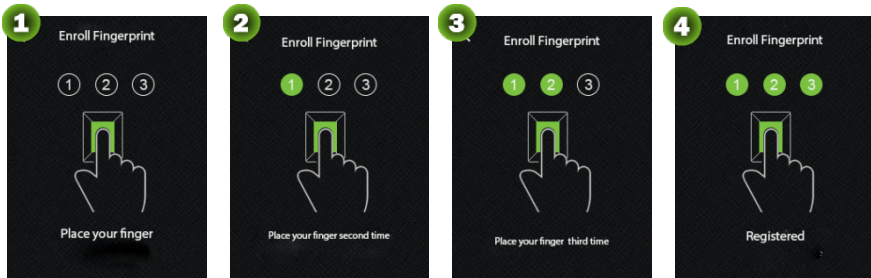


## Enrolling fingerprints [Main Menu > New User > Enroll Fingerprint]

- ① Please place a finger on the fingerprint scanner.
- ② When "Place your finger second time" is displayed on the screen, move your finger away, and place the finger; so on and so forth.

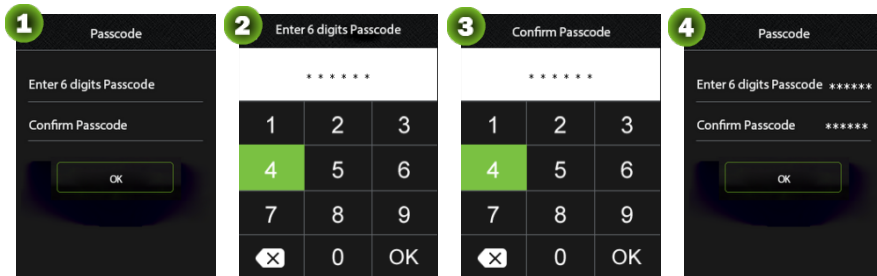
③ After the fingers are successfully registered for three times, the system automatically goes to the New User page. You can register other methods.

 **Note:** You should not register the same finger repeatedly; otherwise, the system displays the prompt "The fingerprint already exists. Please try again."




## Registering Passcode (Main Menu > New User > Passcode)

- ① Click the [Enter 6 digits Passcode] column, enter the passcode, and click [OK].
- ② Click the Confirm Passcode column, enter the passcode again for confirmation, and then click [OK].
- ③ Click OK to return to the New User page. You can register other methods.

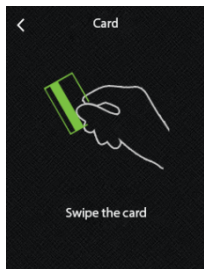


 **Note:**

- ❖ The passcode length must be 6 digits. If there are less than 6 digits, the prompt "input length error" is displayed. When there are more than 6 digits, the prompt "input error" is displayed.
- ❖ The passcodes registered by different users must be different; otherwise, the system displays the prompt "duplicate passcode".
- ❖ If the two passcodes entered are different, the system displays the prompt "The input passcodes are inconsistent".
- ❖ If you enter an incorrect passcode, you can click the backspace key  to clear the passcode, and enter it again.



## Registering Card [Main Menu > New User > Card]

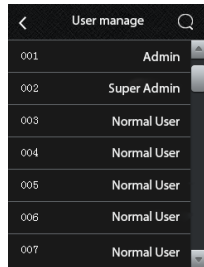


Place a card at the card swiping area. After you hear a beep, the system automatically returns to the New User page. Click [Save].

### **Note:**

- ✧ If the card has been registered, the system displays the prompt "Card has been registered".
- ✧ Supported card types include RF cards, ID cards, and NFCs.

## User Manage




### **Modifying user information**

Modify the rights and identification methods of registered users.

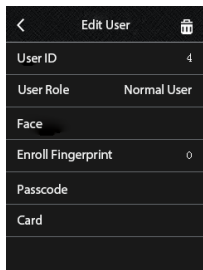
### **Deleting user information**


Delete a user.

 **Note:** If a user is not in the list, you can click the up/down triangle on the scrolling bar on the right for query, or directly drag the scrolling bar for query.

## Modifying User Information [Main Menu > User Manage]


- ① Click a user to be modified, and access the User Information page.
- ② Click [Rights] to modify user rights. Click [Face] to register face again. Click Enroll Fingerprint to register fingerprints again. Click [Passcode] to register passcodes again. Click [Card] to register cards again. For the registration processes, see the [New User](#).
- ③ After the modification is completed, you must press the touch-screen awakening key, and click [OK] on the page displayed for saving. If you click [Cancel], the modification will be discarded.



 **Note:** An administrator can modify the rights of the administrator and normal users. A super administrator can modify the rights of all users.

## Deleting User Information [Main Menu > User Manage]

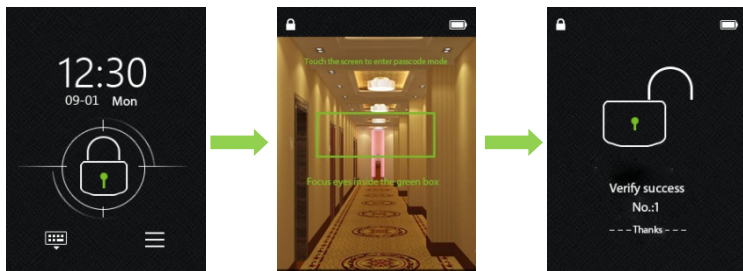
### Be cautious in deleting data!

- ① Click a user to be modified, and access the User Information page.
- ② Click the deletion icon  on the upper right corner to delete the user.

# Quick Operation Guide

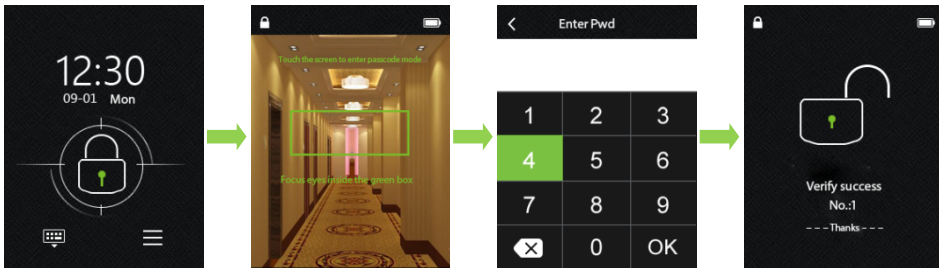
## Unlocking by Face

Press the touch-screen awakening key. The system automatically enters "face recognition". After the recognition is successful, the lock is unlocked.



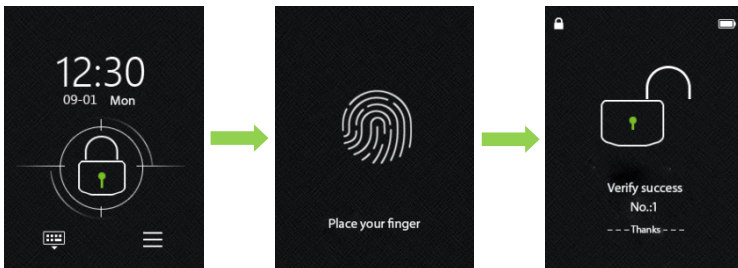
## Unlocking by passcode

Press the touch-screen awakening key. The system automatically enters "face recognition". Click the screen to enter "passcode verification", and enter the 6-digit passcode. After the recognition is successful, the lock is unlocked.



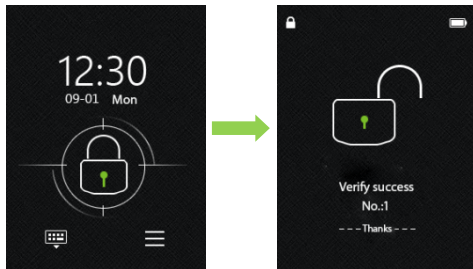
## Unlocking by fingerprint

Press the touch-screen awakening key, place your fingerprint on the fingerprint scanner to recognize it. If the recognition is successful, the lock is unlocked.



## Unlocking by card


Place the card at the card swiping area. After the recognition is successful, the lock is unlocked.




## Time/Date [Main Menu > System> Time/Date]

- ① Click the Date column to input values (year. month. day) in the input box. If the input format is correct, "" at the lower right corner will automatically change to [OK] at this time, click [OK] to save the setting.
- ② Click the Time column to input values in the input box. If the input format is correct, ":" at the lower right corner will automatically change to [OK]. At this time, click [OK] to save the setting.
- ③ Click the Time Format column to set the time format, including YY-MM-DD, YY/MM/DD, YY.MM.DD, YYYY-MM-DD, MM-DD and MM/DD.


# USB Disk Management

<b>Downloading record data</b>	Download all unlocking records.
<b>Downloading user data</b>	Download all user data, including the ID, facial template, fingerprint, passcode, and card number.
<b>Uploading user data</b>	Upload user data, including the ID, name, facial template, fingerprint, passcode, and card number.
<b>Upgrading firmware</b>	Upgrade the firmware. <b>Be cautious in using this function.</b>
 <b>Note:</b> <ul style="list-style-type: none"><li>✧ When performing the preceding operations, insert the USB disk correctly. Use the USB data cable delivered with the product for connection.</li><li>✧ If no USB disk is inserted or the USB disk is improperly inserted, the system displays the prompt "no USB disk detected" when you click Download Record Data.</li><li>✧ Only a super administrator can upload user data and upgrade the firmware.</li></ul>	


## Downloading all records [Main Menu > USB Disk Management > Download Record Data]

Click Download All Records, and click [OK] to download all unlocking records. After the downloading is completed, the  **1\_UData** directory appears on the USB disk.

## Downloading/Uploading User Data [Main Menu > USB Disk Management > Download/Upload User Data]

The operations of downloading/uploading user data are the same as those of downloading record data. When the downloading is successful, the  **1\_UData** directory appears on the USB disk. When uploading the user data, check whether corresponding user data is available on the USB disk.

## Upgrading Firmware [Main Menu >> USB Disk Management > Firmware Upgrade]

The operations of upgrading the firmware are the same as those of downloading record data. Before the upgrade, check whether the corresponding upgrade file  **emfw** is available on the USB disk. Users are not recommended to upgrade the firmware. If you really need to upgrade the firmware, please do it under the guidance of the manufacturer.

## Data Management

<b>Deleting all records</b>	Delete all unlocking records.
<b>Deleting all users</b>	Delete all user information, including the employee ID, face, fingerprint, card, and passcode.
<b>Clearing management rights</b>	Restore all administrator rights to those of a normal user, including the rights of a super administrator.
<b>Querying records</b>	Query unlocking records.


### Querying alarms

When the illegal alarm setting is enabled, you can query the information (photo and time) of persons operating illegally when the illegal verification times exceed the preset value.  
The maximum capacity of photos is 10. New and old photos are displayed in an alternating and circulating manner.



**Note:** The preceding operations can be performed only by a super administrator.

### Querying Records [Main Menu > Data Management > Record Query]

- ① Set the start and end dates, and click Query to display all unlocking records within the set period.
- ② Click the query icon  at the upper right corner, input the user No. whose records need to be queried on the page displayed, and then click [OK].



#### **Note:**

- ✧ The methods for setting the start and end dates are the same for setting the time. For details, see [Time/Date \(Main Menu > System > Time/Date\)](#).
- ✧ "Record Query - 20": the value here indicates the number of records that already exist.
- ✧ Records are displayed as "user No. - recognition method ...Date/Time".

### Querying Alarms [Main Menu > Data Management > Alarm Query]

Click Previous or Next to view the alarm records. After the query is completed, the system displays the prompt "Data has been queried completely".



## System Information

Click the Device Capacity column to check all capacity information. Click the Device Information column to check the device information.

<b>Device Capacity</b>	Users registered 2/100	The number of users registered/The total capacity of users
	Passcodes registered 2/100	The number of passcodes registered / The total capacity of passcodes
	Administrators registered 1/100	The number of administrators registered / The total capacity of administrators
	Cards registered 2/100	The number of cards registered / The total capacity of cards
	Faces registered 2/100	The number of faces registered / The total capacity of faces
	Fingerprints registered 2/100	The number of fingerprints registered / The total capacity of fingerprints
	Records 10/30000	The number of unlocking records / The total capacity of records

<b>Device Information</b>	Device Name
	Manufacturer
	Serial number
	Face algorithm
	Fingerprint algorithm
	Firmware version
	Factory date

# Other Functions

## Normal Open [Main Menu > System > Operate Setting]

Click the [Normal Open] column, enable/disable normal open functions. It is off by default.

## [Operate Alarm] & [Error Times] [Main Menu > System > Operate Setting]

Click the [Operate Alarm] column to enable/disable the operation alarm function. It is off by default. Click [Error Times] column to set the times of illegal verification. You can choose [Off] (disable the prompt about illegal verification), 4, 6, 8, 10 or 12.



### Note:


When the times of recognition failure exceed the preset value, unlocking is forbidden and the screen is closed automatically. When you press the touch-screen awakening key again, the picture of recognition failure is displayed.

## [AutoLock Time] [Main Menu > System > Operate Setting]

Click the [AutoLock Time] column to set the duration of automatic locking. You can choose 4, 6, 8, 10, 12 or 14 seconds.

## [Verify Mode] [Main Menu > System > Operate Setting> Verify Mode]

[Verify Mode]	Common verification	All users can unlock the lock after successful verification.
	Verification only by administrators	Only administrators can unlock the lock after successful verification.
	Dual verifications	Combined recognitions. The lock can be unlocked after any two verification modes are successful.

 **Note:** Combined recognitions can be performed when dual verifications are selected. Combined recognitions comprise passcode & face, card & passcode, card & face, face & fingerprint, passcode & fingerprint, and card & fingerprint. When the first recognition mode is successful, the system enters the second recognition mode immediately. The two recognition modes are performed in a random order.

## Initialization Setting

Initialize user data. Press the touch-screen awakening key, and hold the reset key for 5 seconds. The lock initialization is completed.

## Restart Key

When the system runs abnormally or is blocked in special cases, you can press the Restart key to restart the device for recovery.

## Advanced Settings [Main Menu > System > Advanced Settings]

This option can be operated only by a super administrator.

- ✧ Click the Face column to enable or disable the face recognition function. It is enabled by default. If it is disabled, face recognition cannot be performed.
- ✧ Click the Fingerprint column to enable or disable the fingerprint recognition function. It is enabled by default. If it is disabled, fingerprint registration cannot be performed and the fingerprint indicator is not on.

## Restoring Factory Settings [Main Menu > System > Advanced Settings]

Restore all parameters of the lock to the factory default values, but user data is retained. This operation can be performed only by a super administrator.

## USB Disk Connection

Connect the USB disk patch cord delivered with the product to the USB disk patch cord interface of the lock, and then insert the USB disk into the USB interface of the patch cord.

## Low Power Alarm

When the battery power is low, the device will generate four alarm sounds after being started. On the face recognition page, the system displays "Low battery power. Please change the battery as soon as possible". In this case, you cannot access Main Menu.

## Emergency Power Supply

If the lock cannot be normally used during low power, you can use the 9 V emergency power supply, as shown in the following figure. Since the temporary external power supply must be pressed manually, you cannot access Main Menu to avoid data loss caused by unstable voltage.

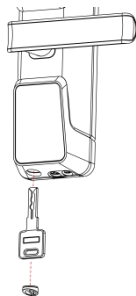


# Mechanical key

Door opening method: Remove the silicon plug in the key hole, insert the key into the key hole, rotate left or right 90 degrees, and then press the handle down to unlock the lock.

## Note:

- ✧ Do not press the handle before rotating the key.
- ✧ The AB keys are designed to ensure the property security of owners.
  - The A key is designed for installation and commissioning. After the installation is completed, the owner claims the A key after acceptance, insert the B key into the lock core, and rotate it 90 degrees. Then, the A key loses effect automatically.
  - The B key is wrapped in a plastic package. Except the owner, others cannot open the package, which ensures the property security of the owner.



**Special tip: The owner cannot use the B key for unlocking before using the lock.**

