Fingerprint Lock User Manual

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About This Manual

This manual introduces the fingerprint lock interface and menu operations. For the fingerprint lock installation, see the animated installation instructions.



Our products are subject to update from time to time, so our company will neither make a commitment to guarantee the consistency between the actual products and this document, nor assume any responsibility for any dispute arising out of the discrepancy between the actual technical parameters and this manual. This document is subject to change without prior notice.

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1. Instruction for Use

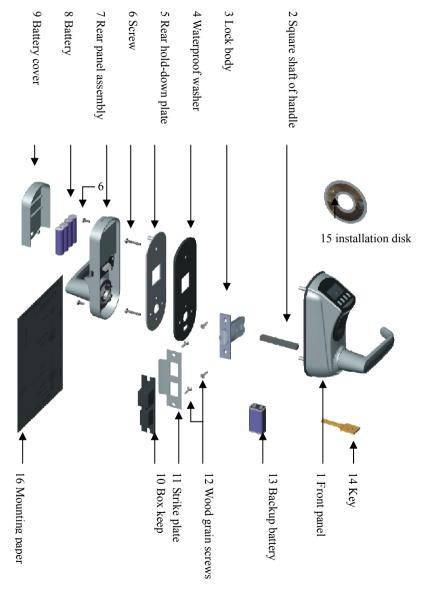
Functions marked with "\(\psi\)" in this manual are only supported by specific product or customized product and will be marked below.

1.1 Functions Introduction

- By leveraging the perfect combination of biometrics and cryptography, our fingerprint locks ensure double security through the fingerprint plus password unlocking feature.
- The state-of-the-art Organic LED (OLED) display affords crisp bright readouts
 and makes our fingerprint locks intuitive and easy to use. You can simply use
 our fingerprint locks with ease after following the operation instructions for
 once.
- 3. Support setting of classified privileges for super administrators, administrators and ordinary users.
- 4. Support deletion of all or the specified registered data.
- 5. Support firmware upgrade, uploading/downloading of user information and unlocking records through a USB pen drive.
- 6. Support offline browse of unlocking records.
- Support accurate display of time and date with annual deviation less than two minutes.
- 8. Support temporary supply of backup batteries.
- 9. You can set the fingerprint locks to be in the Normally Open (NO) state in special cases.
- 10. Support display of the battery charge level and generate low voltage alarms.
- 11. Feature an electric clutch handle design which helps effectively prevent the fingerprint lock failure caused by damage to the internal structure as a result of the forced destruction of the handle.

- 12. Single latch lock (support both 60mm and 70mm locks) of American standard supports deadbolt lock either.
- 13. The max user capacity is 500 fingerprints. The max unlocking record is 30000 logs.
- 14. Unlock mode: fingerprint, password, mechanical key.

1.2 List of Installation Accessories



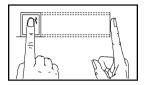
List of Installation Accessories

SN	Name	Quantity	Unit	Remarks
01	Front panel assembly	1	Set	
02	Square shaft of handle	2	PCS	One need to select base on the door thickness
03	Lock body	1	Set	Single latch lock
04	Waterproof washer	2	PCS	Including the one on the front panel assembly
05	Rear hold-down plate	1	PCS	
06	Screw	6	PCS	Two of screws need to select base on the door thickness
07	Rear panel assembly	1	Set	
08	Batteries	4	PCS	Four pieces of alkaline AA batteries
09	Battery cover	1	PCS	
10	Box keep	1	PCS	
11	Strike plate	1	Set	
12	Wood grain screws	4	PCS	
13	Backup battery	1	PCS	9V
14	Key	2	PCS	
15	Installation disk	1	PCS	
16	Mounting paper	1	PCS	

1.3 Fingerprint Press Introduction

Enroll fingerprint by pressing index finger, middle finger or ring finger (thumb and little finger are clumsy).

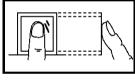
1) Proper press:



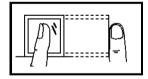
Make finger center pressed on the sensor window.

2) Improper press:

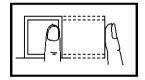




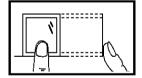
Slant



Too lean



Too downward





Please adopt the correct way to place the finger to avoid improper operation led to the identification performance degradation.

1.4 Installation Requirements

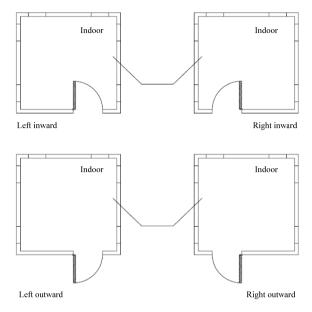
1.4.1 Precautions

- 1. The fingerprint lock is applicable to doors of 35–70 mm in thickness. Be sure to list your special requirements or remarks for fingerprint locks to be installed on doors in excess of 70 mm in thickness before placing an order.
- 2. Before ordering or installation of single latch lock, please confirm the corresponding accessories.

Single latch lock:



3. Please confirm the door opening directions. Assume you are standing outside and facing a door and then there are four door opening directions: Left inward, left outward, right inward and right outward. Left inward/outward means the door swings inward/outward with hinges on the left; right inward/outward means the door swings inward/outward with hinges on the right, as shown in the following figure:



- 4. Ensure the central point of the handle is about 1 meter above the floor.
- 5. Ensure all the accessories installed on the right position.
- 6. Please follow the animated instructions to install fingerprint locks.

Recommended Tools:

You may need the following tools while following the instructions to install fingerprint locks:

- A ruler.
- A marker pen.
- A drilling tool.
- A cross screwdriver.

1.4.2 Use Backup Battery

The fingerprint lock supports temporary use of external DC power for fingerprint or password matching and unlocking, but when connected with an external battery, the fingerprint lock cannot provide such special functions as enrollment, deletion and setting, so as to prevent data loss as a result of power instability.

As shown in the figure below, connect a 9V battery to the two access points at the bottom of a fingerprint lock, regardless of polarities.



If you power off a fingerprint lock without closing the lock during the use of external power, the lock cylinder will not automatically return to its original position. That is, the fingerprint lock remains in NO state. To solve this problem, you can replace the battery and then verify to open the lock once to have the lock cylinder back position.

1.4.3 Backup (Emergency) Mechanical Key



1. Remove the screw from the lock handle, and take off the handle.



2. Insert the key, turn to right or left 180° to unlock the door.

1.4.4 Convert of Unlock Direction



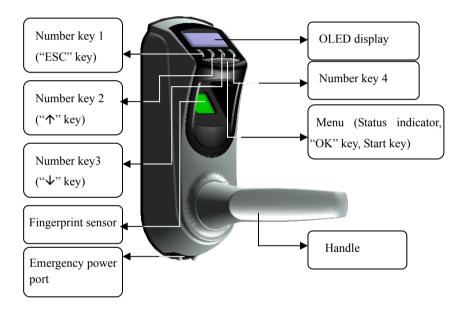
1. Remove the screw of handle, then take off the handle and rotate 180°.

2. Reload the handle and fix it with screws.

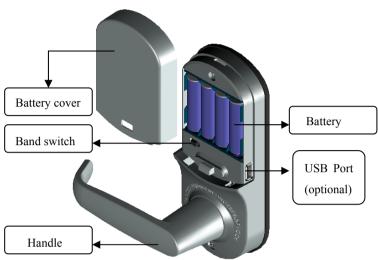
Note: In converting of unlock direction, you just need to rotate the lock body 180° entirely.

1.5 Front and Rear Views

Front view:



Rear view:



Number key 1: Press this key to exit current operation, press and hold this key to power off the fingerprint lock. The number key "1" doubles as ESC key.

Number key 2: This key is used to manually increase (when held this key, the display values will rapidly increase) the setup value or navigate among menu options. The number key "2" doubles as ↑ key.

Number key 3: This key is used to manually decrease (when held this key, the display values will rapidly decrease) the setup value or navigate among menu options. The number key "3" doubles as Ψ key.

Menu key (Status indicator): This key can be used to start the fingerprint lock; press and hold this key for three seconds on the initial interface to open the main menu; this key also doubles as the confirmation **OK** key. The green LED indicator blinks when the fingerprint lock operates properly and the red LED indicator is on for three seconds if an error occurs. The green LED indicator is on for three seconds

when an operation succeeds.

Band switch: If you cannot access the menu options due to the loss of administrators for some reason, proceed as follows: Press and hold the **Menu** key for three seconds to display the administrator verification, and then turn the **Band** switch at the rear of the lock to the left or right to open up the menu as a super administrator

OLED display: The black-and-white OLED display features white graphics or text against a black background.

Fingerprint sensor: You can only collect or match fingerprints by pressing your finger(s) at the fingerprint sensor when the light in the fingerprint sensor window goes on; otherwise nothing happens when you press your finger(s) at the fingerprint sensor.

Note: When you cannot power off the fingerprint lock due to the exception of program, press and hold the ESC key to power off and then restart the fingerprint lock. It is not recommended to power off the fingerprint lock by pressing and holding the ESC key when the fingerprint lock operates normally.

Emergency interfaces:

Keyhole: You can use a mechanical key for emergency door opening.

Temporary external power interface: You can adopt an external backup battery to open the lock in the event of unlocking failure due to insufficient power supply of the fingerprint lock.

USB port (optional):

The USB port is used for firmware upgrade, uploading/downloading of user

12

information and unlocking records through a USB pen drive. Only some models have USB port options.

1.6 Precautions

- 1. We strongly recommend you to enroll at least one administrator after installing the fingerprint lock. You must at least enroll one administrator before enrolling ordinary users.
- 2. Do not remove batteries when matching, enrolling or deleting fingerprints because the sudden power-down may result in data loss of fingerprint locks. Prior to removing batteries, make sure the fingerprint lock is not in working state.
- 3. It is recommended to replace the fingerprint lock batteries at least once every six months to avoid damaging the circuit due to the battery leakage. Do not use batteries with poor quality.
- 4.. When installing a fingerprint lock, connect the plug to the socket properly. Improper connection may lead to fingerprint lock failure.

1.7 User Privileges

The user privileges are classified into three types: Super administrator, administrators and ordinary users.

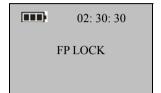
Super administrators: Refer to users who have access to all system functions and modify all system settings.

Administrators: Refer to who have access to all operations except performing advanced settings and enrolling super administrators.

Ordinary users: Refer to all users other than the super administrators and administrators. Ordinary users only have access to the fingerprint matching and unlocking functions.

1.8 Time Setting

You need to set the correct date and time on first use of a fingerprint lock in the following steps:



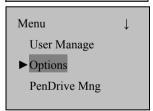
 Power on the fingerprint lock by pressing the Menu key to open up the initial interface, as shown in the figure on the left.

Note: The "IIII" icon on the initial interface is the battery icon indicating how much charge remains. On the top right corner of the initial interface, the display alternates between date and time every 5 seconds.

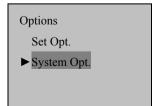
Admin Affirm

FP LOCK

2) Press and hold the **Menu** key for three seconds to access the menu interface. The administrator verify and enter the step 3). If no administrator exist, please turn to step 3) directly.



3) Press **2** to select "Options." and then press **Menu**.



4) Press **3** to select "System Opt." and then press **Menu.**

System Opt. ↓
Date Time
Language English
Dev Num

5) Press Menu to select "Date Time".

YYYY-MM-DD 24H 2009-01-01 9: 34: 29 ESC OK

6) To modify date or time, press 2/3 to move the cursor to the desired option, and then press 2/3 again to enter correct date or time. Press Menu. to save your settings.

Note: You can set the date between January 1st 2003 and December 31st 2032. To set the date beyond this range, you need to consult our commercial representatives or pre-sales technical support engineers.

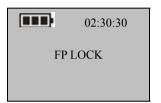
1.9 Operation Overtime

In any user operation state, the default overtime value is 5 seconds, after 5 seconds the lock power off automatically.

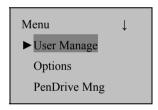
2. Enrollment and Verification

2.1 Enroll an Administrator

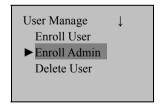
If the fingerprint lock has no administrator, you must at least enroll one administrator before enrolling ordinary users. To enroll an administrator, proceed as follows:



1) Power on the fingerprint lock by pressing the **Menu** key to open up the initial interface. Press and hold the **Menu** key to display the menu interface.



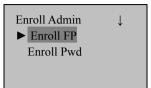
2) Press **Menu** to display the user management interface



3) Press **3** to select "Enroll Admin" and then press **Menu**.

After that, the enrolled administrator can perform fingerprint and password enrollment, the operation as follows.

2.1.1 Enroll a Fingerprint



4) Enter "Enroll Admin" interface according to the operation in <u>2.1 Enroll an Administrator</u> step 1), 2), 3). Press **3** to select "Enroll FP" and then press **Menu**.



5) Press 2/3 to select "Admin Accredit", and then select "Supervisor" (Super administrator) or "Admin" (Administrator). Press **Menu** to confirm your selection.

Enroll FP
New Enroll?

ESC OK

6) Press Menu to continue.

New Enroll

UserID 00001

ESC OK

7) The system by default assigns unused user IDs from 00001 and you may also manually enter an unused user ID.

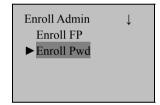
New Enroll 00001-0 Place Finger... ESC/EXIT 8) Press the same finger on the fingerprint sensor three consecutive times by adopting the proper finger placement mode. For details, see <u>1.3</u> Fingerprint Press Introduction.

New Enroll 00001-0 ESC OK(Save)

9) The system will prompt to save the enrollment information after enrollment successful. If the enrollment fails, the system will prompt if re-enroll fingerprint. The system returns to the "New Enroll" interface upon successful enrollment. You can continue or exit the fingerprint enrollment.

Note: The last digit in "00001–0" refers to the fingerprint count. "0" refers to the first fingerprint, "1" refers to the second fingerprint and so on and so forth.

2.1.2 Enroll a Password



- 4) Enter "Enroll Admin" interface according to the operation in 2.1 Enroll an Administrator step 1), 2),
- 3). Press **3** to select "Enroll Pwd" and then press **Menu**.

Admin Accredit
Supervisor
ESC OK

5) Press 2/3 to select "Admin Accredit", and then select "Supervisor" (Super administrator) or "Admin" (Administrator). Press **Menu** to confirm your selection.

Enroll FP
New Enroll?
ESC OK

6) Press Menu to continue.

New Enroll

UserID 00001

ESC OK

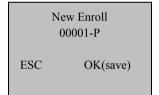
7) The system by default assigns unused user IDs from 00001 and you may also manually enter an unused user ID.



8) Input a password by pressing the number keys and press **Menu** to confirm your input.



9) Input the password again by pressing the number keys and press **Menu** to confirm your input.



10) Press **Menu** to save the enrolled data, after successful password enrollment, the green light on 3 seconds. If it's failed, the red light on 3 seconds to prompt re-enroll it. After enrollment, the password enroll procedure finished.

Note: A password consists of 6 to 10 digits. You can enroll only one password for each user ID and repeated passwords are forbidden; otherwise, the system will prompt "Password Error".

2.2 Enroll an Ordinary User

An administrator can enroll another administrator, or enroll ordinary users, with

operation steps as follows:



1) Power on the fingerprint lock by pressing the **Menu** key to open up the initial interface.

Admin Confirm

FP LOCK

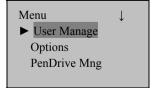
2) Press and hold the **Menu** key to access the menu. The system prompt for administrator confirmation. Enter the administrator password or match your fingerprint once. Skip to step 4) if verification succeeds; otherwise, proceed to step 3.



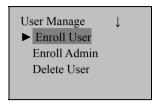
3) The system displays the prompt "Error Pwd." on the screen and return to the "Admin Affirm" interface for re-verification. The following menu interface is displayed upon successful verification.



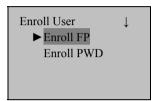
Or the system displays the prompt "Please Try Agn" on the screen and return to the "Admin Affirm" interface for re-verification. The following menu interface is displayed upon successful verification.



4) Press **MENU** to display the user management interface.



5) Press 3 to select "Enroll User" and then press MENU.

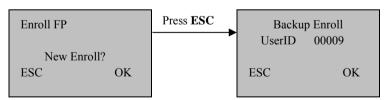


6) Enter the user enrollment interface.

After that, the enrolled administrator can perform fingerprint and password enrollment. The rest operation steps are basically the same with those of administrator enrollment. For details, see 2.1 Enroll an Administrator.

2.3 Backup Enrollment

On the "New Enroll?" interface of <u>2.2 Enroll an Ordinary User</u>, if you press **ESC** to cancel new enrollment, then the "Backup Enroll" interface will be displayed, as shown in the following figure:

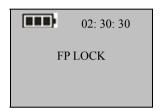


The backup enrollment steps are basically consistent with the new enrollment steps except that "Backup Enroll" instead of "New Enroll" is displayed on the top of the interface.

Note:

- (1) It is a wise choice to enroll fingerprints of at least two different fingers for long-standing users.
- (2) If you wish to modify the password after finishing password enrollment, you can replace the original password with the password entered in backup enrollment.

2.4 User Verification and Set NO Status



1) Press the **Menu** key to display the initial interface. The fingerprint sensor is in active state. Press your finger with enrolled fingerprint or enter your password (press **Menu** after entering password).



2) The device will prompt password error and return to administrator affirm interface until verification successful. And after that the device enter the menu.



Or prompt fingerprint error and return to administrator affirm interface until verification successful, And after that the device enter the menu

Note: You can only match fingerprints when the fingerprint lock is in non-NO state.



3) Your ID number will be displayed on the screen upon successful verification and then you can hear the unlocking sound. Rotate the handle of the fingerprint lock within 4 seconds to open the door.

Note: When setting the NO option to "YES" (See 3.1.5 Normal Open Setting), If fingerprint or password verification is unsuccessful, the system will display a prompt "Please press your finger again" or "Password error". The parameters "Illegal Cnt." and "Illegal Alarm" are set by the administrator. The system will generate an alarm after the illegal operations reach the specified value. For details, see 3.1.1 Operate Alarm Setting and 3.1.2 Illegal Times.

Note: If the value of the parameter "Illegal Cnt." is larger than 6 because you fail to verify your fingerprint or password 6 consecutive times, the system will automatically power off.

2.5 Delete User Information

Warn: In deleting user information process, it is strictly prohibited to disconnect the power supply, to prevent delete other data by mistake!!!

The operation as follows:

02:30:30

FP LOCK

1) Power on the fingerprint lock by pressing the **Menu** key to open up the initial interface.

Admin Affirm

FP LOCK

2) Enter the administrator password or match your fingerprint once. Skip to step 4) if verification succeeds; otherwise, proceed to step 3).



Password Error

3) The system displays the prompt "Error Pwd." on the screen and return to the "Admin Affirm" interface for re-verification. The following menu interface is displayed upon successful verification.



Press Finger Again

Or the fingerprint is error and return to the "Admin Affirm" interface for re-verification. Enter the menu upon successful verification.

Menu

► User Manage Options PenDrive Mng 4) Press Menu to enter the user management interface.

Menu
►Enroll User
Enroll Admin
Delete User

5) Press **3** to select "Delete User", and then press **Menu**.

Delete User

Enroll ID 00002 ESC OK 6) Press 2/3 to select the desired delete ID number, and then press **Menu** to confirm.

Delete fingerprint 00002—0

ESC OK

In deleting user fingerprint:

7) If you want delete fingerprint of specific ID number, press **Menu** to confirm.

Delete password 00002—P

ESC OK

In deleting user password:

8) Delete ID number, please press **Menu**.

Del User 00002

ESC OK

9) Confirm the deletion of the user. Press Menu to confirm finally. Otherwise press 1 (ESC) to turn back to "User management" interface.

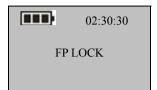
Del User Delete! ESC OK

10) Press **Menu** to finish the user deletion,. User can restart the power, then verify the fingerprint that have been deleted, to check whether it or not.

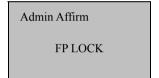
Note: The Administrator (include super administrator) can only delete ordinary user. If you need to delete the administrator ID, please enter the "Adv Option" in "Options" menu, select "Clr admin pri", and return to "Delete user" option in user management menu to delete this user ID.

3. Lock Function and Settings

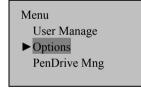
3.1 Operation Settings



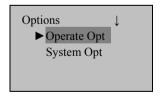
1) Press **Menu** and the device power on, enter the initial interface. Long press **Menu** to enter menu.



2) Input administrator password or press the administrator fingerprint.

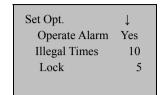


3) Press **3** to select "Options", another press **Menu** to enter the menu.



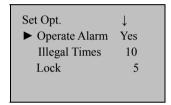
4) Select "Operate Opt", and press **Menu** to enter the menu.

The operate options include Operate Alarm, Illegal Times., Lock, Verify Mode, Normal Open.



3.1.1 Operate Alarm Setting

It is used to set if the operation failure trigger the alarm.

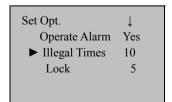


Operate the step 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Operate Alarm". Press **Menu** to enter the modify state, press **2/3** to select Yes/No, after modification, press **Menu** to save and quit.

3.1.2 Illegal Times

This parameter is used to set the consecutive operation failure count. An invalid operation alarm will be generated when the consecutive failure count exceeds the threshold.

Note: The failure count is cumulated when the fingerprint lock is started next time. If the number of cumulative failures exceeds the threshold, the fingerprint lock will generate an invalid operation alarm; otherwise, the failure count will no longer be accumulated after successful unlocking.



Operate the step 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Illegal Times". Press **Menu** to enter the modify state, press 2/3 to set the value (the value by default is 10, the permit range is 3~99), after

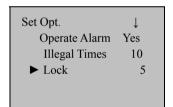
modification, press Menu to save and quit.

If the number of cumulative failures exceeds the threshold, the fingerprint lock will automatically power off. After device restart the fingerprint lock will generate an invalid operation alarm of buzzer sound. About 30 seconds it will power off automatically.

3.1.3 Lock Setting

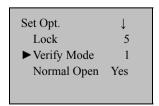
This parameter is used to set the duration from successful matching to unlocking.

Note: The unit of quantity and the maximum value of this parameter here are standard configurations. If you need larger parameter values, please consult our commercial representatives or pre-sales technical support engineers.



Operate the step 1), 2), 3), 4) in <u>3.1 Operation</u> settings, enter the operation menu and select "Lock". Press **Menu** to enter the modify state, press **2/3** to set the value (the value by default is 5, the permit range is $3\sim15$), after modification, press **Menu** to save and quit.

3.1.4 Verify Mode Setting



Operate the step 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Verify Mode". Press **Menu** to enter the modify state, press **2/3** to set the value. There are 3 optional values 0, 1, and 2 that represent different matching modes, and the default value is 1. Press **Menu** to save and quit

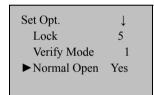
Verify Mode 0: Only the administrator can open the lock, while the unlocking function is disabled for ordinary users.

Verify Mode 1: This is a default matching mode. Users can open the lock by successfully matching their fingerprints only once.

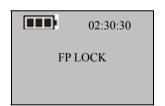
Verify Mode 2: This is a dual verification mode. The administrator can open the lock by successfully matching his/her fingerprint only once, but an ordinary user has to pass the verification in any two matching modes by using the same ID.

3.1.5 Normal Open Setting

It is used to set the lock always in NO state.



1) Operate the step 1), 2), 3), 4) in <u>3.1 Operation settings</u>, enter the operation menu and select "Normal Open". Press **Menu** to enter the modify state, press **2/3** to select Yes/No, after modification, press **Menu** to save and quit.



2) In the start interface verify the fingerprint (the finger press please refer to 1.3 Fingerprint Press Introduction) and unlock.



3) Prompt if you select NO state, and press **Menu** to save.

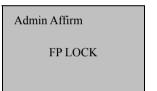


4) After successful setting, the screen display as left figure. That indicate the setting is success, and the buzzer sound 3 times for prompt.



5) To disable the NO function, power on the system and press **Menu** in the "Normal Open" interface. Then the system closes the lock and automatically powers off.

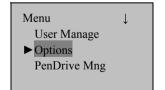
3.2 Language Settings



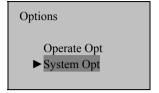
1) Press **Menu** and the device power on, enter the initial interface. Long press **Menu** to enter menu.



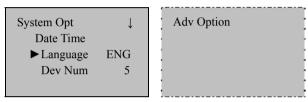
 Enter the administrator password or match your fingerprint once. Enter the next step after successful verification.



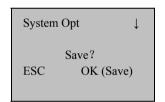
3) Press **3** to select "Options", and press **Menu** to enter the menu.



4) Press 3 to select "System Opt", and press Menu to enter the menu.



5) In "Language Option" menu, press 3 to select the language, and press Menu to enter modification state. Press 2/3 to select "ENG" or "SCH", then press Menu to quit modification state, press 1 (ESC) to enter save interface.



6) Press Menu to save settings, and it will take effect after device restart.

Note: Language selection is a non-standard function. If you need this function, please consult our commercial representatives or pre-sales technical support engineers.

3.3 Advanced Settings

Note: Only super administrator has the right to perform advanced settings.

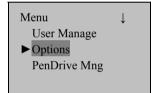


1) Press **Menu** and the device power on, enter the initial interface. Long press **Menu** to enter the menu..

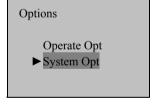
Admin Affirm

FP LOCK

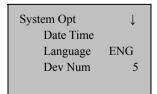
 Enter the administrator password or match your fingerprint once. Enter the next step after successful verification.



3) Press 3 to select "Options", and press Menu.



4) Press 3 to select "System Opt", and press Menu.



► Adv Option

Adv Options ↓
Reset Opts
Del Logs
Clear All Data

5) Select "Adv Options" under the System Opt menu, and then press **Menu** to enter the advanced option interface.

Clear Admin Pri

The advanced options include Reset Options, Delete Logs, Clear All Data and Clear Administrator Privilege. Press 2/3 to select the desired option, and then press **Menu** to enter the menu. Select the items and press **Menu** to execute the corresponding operation. After operation it return to "Advanced options" menu. If you press 1 (ESC) and quit, it return to the advanced option interface without any operation.

Reset Options: This parameter is used to restore the fingerprint lock to factory defaults.

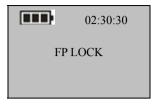
Delete Logs: This parameter is used to delete all the verification records from a memory chip.

Clear All Data: This parameter is used to delete all the enrolled fingerprint images, passwords and records.

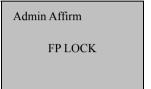
Clear Administrator Privilege: This parameter is used to change an administrator into an ordinary user. This function shall be used with caution. It is recommended to register at least one new administrator in time after clearing the priority of an administrator

3.4 Browse System Information

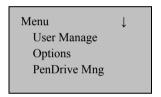
Users can browse all the system information, including the enrolled fingerprint counts, enrolled user, and device information. The operation as follows.



1) Press **Menu** and the device power on, enter the initial interface. Long press **Menu** to enter menu.

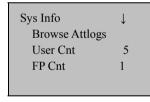


2) Enter the administrator password or match your fingerprint once. Enter the next step after successful verification.



3) Press **3** to select "Options", and press **Menu** to enter the menu.





Log	85	Ē
Admin Cnt	2	į
Pwd Usr	3	Ě
Free Space Info		į
Dev Info		Ē
		ŀ.

User Cnt: The number of enrolled user which can verify and unlock the FP Lock.

FP Cnt: The number of enrolled user fingerprint.

Log: The number of verification record in the FP Lock.

Admin Cnt: The number of enrolled administrator with management privilege (add user, delete user, etc.)

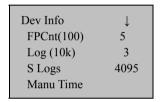
Pwd Usr: The number of enrolled user password.

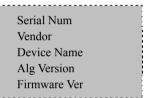
Free Space Info: Press 2/3 to select "Free space information", and press Menu to

see the detail.

Free Space I	nfo
FP Cnt	499
Log	29915
S Logs	4095

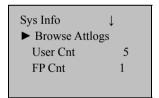
Dev Info: Press 2/3 to select "Device information", and press **Menu** to see the details as follows:



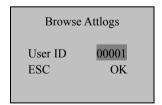


3.5 Browse Logs

The fingerprint lock supports the offline browsing of unlocking logs, which facilitates users to check whether there is any exceptional unlocking in time.

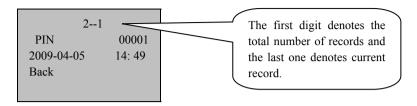


4) Operate according to <u>3.4 Brwose System Information</u> step 1), 2), 3), and enter the operation interface.

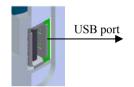


5) Press **3** to select "Browse Attlogs", shown as left pictures..

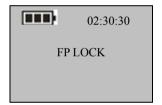
6) Press **2/3** to select the desired enrolled ID number, and press **Menu** to confirm the date and time of attlogs.



3.6 USB Pen Drive Management (Optional)



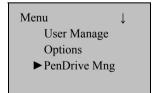
1) Insert a USB pen drive into the USB port.



2) Press **Menu** to power on, and enter the initial interface.



3) Long press **Menu**, input administrator password or press finger and verify to enter the next step.



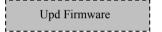
4) Press 3 to select "PenDrive Mng", and press **Menu** to enter the next step.



5) The device prompt "PenDrive Mng", press **Menu** to enter the management interface.



6) Press **Menu** to enter the next interface.



1. Download Attendance Logs



- 1) Press **2/3** to select "Dwn AttLog" and then press **Menu**. When download completes, the left interface is displayed.
- 2) Press 1 (ESC) to return to the initial interface and then remove the USB pen drive. Now the USB pen drive stores two files: **X_attlog.dat** (attendance logs) and **X_user.dat** (Where "X" denotes that the device No.).

Tip: If the download succeeds, a prompt "Copy Data Suc" will pop up. If the system displays the prompt "Plug Pen Drive?", please check whether the USB pen drive is plugged in properly.

2. Download User Data

User data downloading is similar to the downloading of attendance logs. Enter the "PenDrive Mng" menu according to the procedure steps of 1), 2), 3), 4), 5), 6) of <u>3.6</u> <u>USB PenDrive Management</u>. Press **2/3** to select "DwnLoad User", the files **user.dat** (user information) and **template.dat** (fingerprint template) will be concurrently downloaded to the USB pen drive.

3. Upload User Data

Upload user data is similar to the downloading of attendance logs. Enter the "PenDrive Mng" menu according to the procedure steps of 1), 2), 3), 4), 5), 6) of <u>3.6</u>

<u>USB PenDrive Management</u>. Press **2/3** to select "UpLoad User" and then press **Menu**. The files **user.dat** (user information) and **template.dat** (fingerprint template) stored in the USB pen drive will be concurrently uploaded to the fingerprint lock.

Tip: When uploading user information, If a user ID is already exist in the fingerprint lock, the new uploaded will overwrite the exist user data; otherwise, the new user data will be directly added.

4. Upgrade Firmware

You can select "Upd Firmware" to upgrade the firmware of a fingerprint lock through the upgrade files in the USB pen drive.

Note: If you need firmware upgrade files, please contact our technical support engineers. Generally it is not recommended to upgrade the firmware.

Tip: Please do not perform invalid operations (for example, insert or remove the USB pen drive in a frequent manner or during upload/download) on the USB pen drive, because it may result in system instability. It is recommended to keep the door open during the use of the USB pen drive.

4. Conventions on Other Functions

4.1 Routine Operation Indications

User operation success indication:

The buzzer sounds once and the green LED indicator is solid on for 3 seconds.

User operation failure indication:

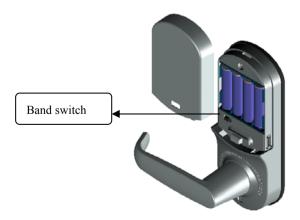
The buzzer sounds short tone twice and the red LED indicator is solid on for 3 seconds

Warning indication:

The buzzer sounds short tone five times intermittently.

4.2 Administrator Loss Prevention

To avoid the menu operation failure as a result of loss of administrator, you may take the following measures: Press and hold the **Menu** key for 3 seconds to display the administrator verification interface. Then move the band switch on the rear of the fingerprint lock to the left or right. Now you can access the menus as super administrator for management and operation.



4.3 Battery Low Voltage Protection

Low Voltage Protection: When the battery meter stays at one bar, the system prompts you to replace the battery and the battery icon starts flashing. If you press and hold the Menu key, the system prompts you that you cannot access menus. In addition, the menus are also inaccessible during use of external power so as to prevent data loss caused by power instability. When the battery meter stays less than one bar, the battery shuts off automatically.

4.4 Program Automatically Exit and Power off

- The fingerprint lock powers off automatically upon successful matching and unlocking.
- The fingerprint lock powers off automatically when you set **Yes** for the "Normal Open" option upon successful matching and unlocking, and set as normal open state.
- The fingerprint lock powers off automatically when the number of illegal operations exceeds the threshold. And after restart, the fingerprint lock powers off automatically when an alarm is triggered for 30 seconds.
- The fingerprint lock powers off automatically when the supply voltage is lower than level-3 detection voltage.
- The fingerprint lock powers off automatically if there is no keystroke within 10 seconds on the initial interface.

5. Appendix: Technical Specifications

- Screen: OLED display;
- **Sensor:** Optics sensor without coating;
- **Capacity:** 500 fingerprint images; 100 passwords; 500 users;
- Verification mode: Fingerprint, password, Fingerprint plus password, matching;
- > Record capacity: 30000;
- Communication Mode: USB Flash Disk;
- **Resolution:** 500 DPI;
- \triangleright **Identification speed:** \leq 2 seconds;
- False acceptance rate: $\leq 0.0001\%$;
- False rejection rate: $\leq 1\%$;
- **Power:** Four AA batteries; working voltage: 4.8V–6V;
- **Locking times:** ≥ 4000 (Four NANFU alkaline batteries);
- > **Temperature:** -10–55°C;
- **Humidity:** 10%–95%.

5. Appendix: Technical Specifications
This document is subject to change without prior notice.
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