Face Recognition Smart Door Lock With Security Camera Monitor

Instruction Manual

MODPF-30Pro-LK.10
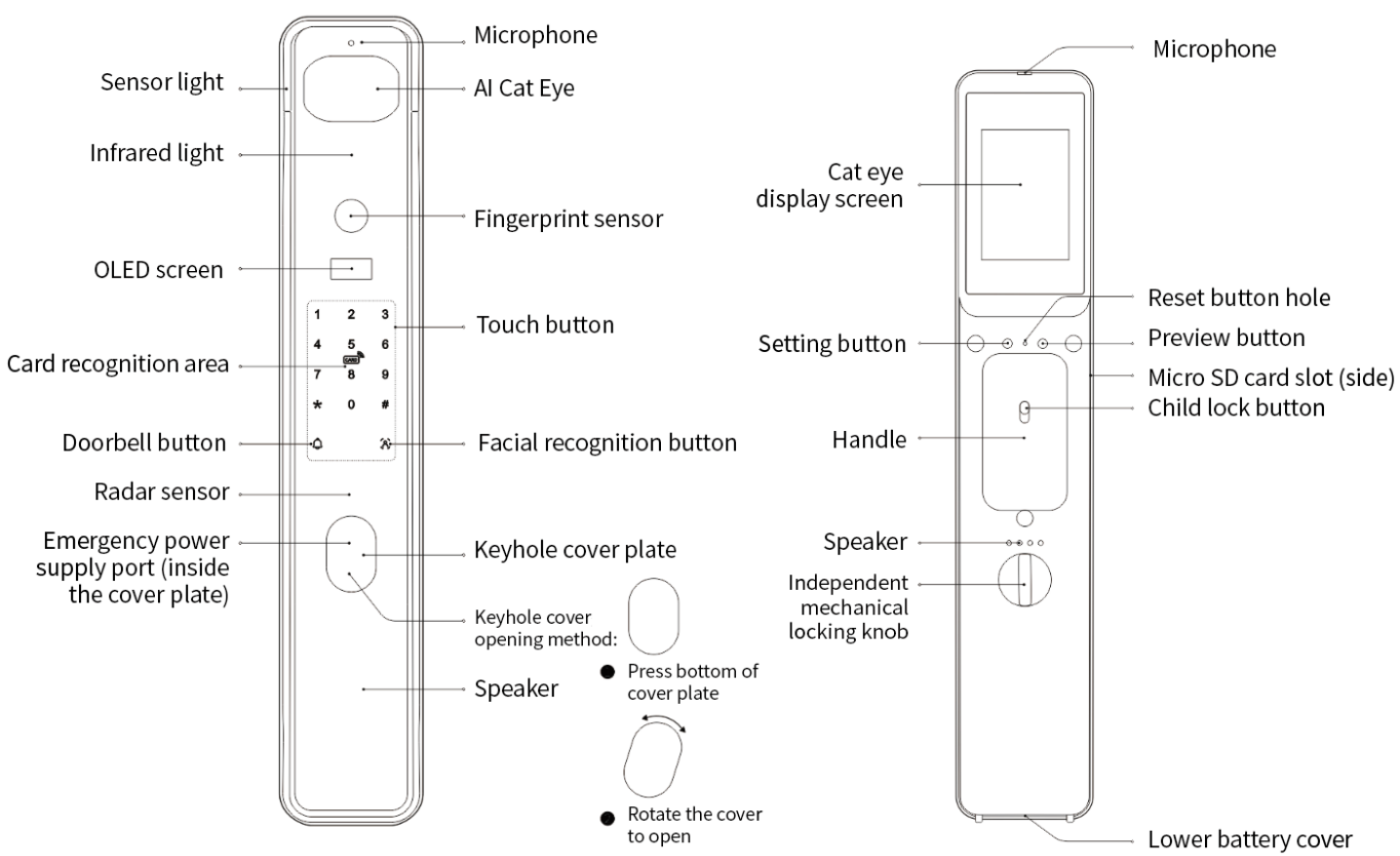
◇◆ Overview

Face Recognition Smart Door Lock With Security Camera Monitor (hereinafter referred to as the "product" or "device") is an IoT smart door lock that supports multiple unlocking methods such as facial recognition, fingerprint, password, NFC, and mechanical key. Realize face verification to unlock through dual spectral binocular face recognition technology; Cat eye and human face 2-in-1, supporting 1080P full-color images; Implemented the capture and alarm of abnormal door lock status; doorbell with touch button, capable of one click calling, remote real-time push video, and two-way voice intercom functions.

◇◆ Appearance

Left unit labels:
- Microphone
- Sensor light
- AI Cat Eye
- Infrared light
- Fingerprint sensor
- OLED screen
- Touch button
- Card recognition area
- Doorbell button
- Facial recognition button
- Radar sensor
- Emergency power supply port (inside the cover plate)
- Keyhole cover plate
- Speaker
- Keyhole cover opening method:
  ● Press bottom of cover plate
  ● Rotate the cover to open

Right unit labels:
- Microphone
- Cat eye display screen
- Reset button hole
- Preview button
- Setting button
- Micro SD card slot (side)
- Child lock button
- Handle
- Speaker
- Independent mechanical locking knob
- Lower battery cover

◇◆ Technical Data

Item	Parameter
Communication protocol	Link protocol: Buspro, Zigbee and KNX
Lock cylinder type	Class C
Lock body type	Fully automatic lock body, default standard lock body
Unlocking method	Face recognition / fingerprint / password / proximity card / mechanical key / temporary password / dual authentication / mobile app

Door handedness	Left / right hand / upwards
Password	Virtual Password: Supports up to 32 bits (including correct password) / Temporary Password: Supports
Key capacity	Human face capacity: 100 Fingerprint capacity: 100 Password capacity: 100 Proximity card capacity: 100
Face recognition	Facial recognition: Binocular facial recognition Facial recognition lens specifications: 2 million pixels, 1/2.8 sensor, 2.8mm lens, no ICR, using a single pass filter Facial camera resolution: 1080P @20fps Facial recognition speed: algorithm detection+recognition:<1s; Full process (from wake-up to recognition): 2.3s" Facial recognition height: height of 0.7m~2m can be recognized Support facial anti-spoofing Automatic facial recognition: Upon radar detection, automatic facial recognition will be performed within 2 seconds
Inner panel screen	3.5-inch TFT true color screen
Video resolution	1080P
Field of view angle	Horizontal: 69.9; Vertical: 129.4; Diagonal: 160
Night vision	Full-color night vision
Power	40W
Fingerprint reader	Fingerprint reader type: Semiconductor Fingerprint reader resolution: 160*160 Fingerprint reader speed:<1s
Proximity card recognition speed	<1s
Radar sensitivity	3 levels, default 1.5m
WiFi	IEEE 802.11b/g/n
Local storage	Support Micro SD card
Handle	Quick handle+electronic unlock (long press preview button for 3 seconds)
Child lock	Support
Lock	Mechanical lock
Anti hijacking	Support fingerprint and password anti hijacking
Alarm	Anti disassembly alarm / low battery alarm / anti test opening lock (password and card verification fail 3 times in a row within 5 minutes, fingerprint verification fails 5 times in a row, system lock for 3 minutes) / Stay detection
Safety design	Anti black box, anti peephole unlocking
Working power supply	Dual power supply linkage: 7750mAh lithium battery (7.4V~1.55A), 5000mAh lithium battery (7.4V~1A)
Emergency supply	Type C
Working temperature	-25℃~70℃
Working relative humidity	＜93%

◇◆ Specifications

Item	Parameter
Dimensions	427*73*61mm（Front panel）；421*73*74mm（Back panel）
Net weight	3kg
Lock body size	24mm*240mm (Other door frame specifications can be adapted by replacing the strike plate)
Door width	40mm-120mm
Doorbell	Digital doorbell
Endurance	8-12 months
Housing material	Aluminum alloy
Iron hook	Not support
Big lock	Not support
Installation	Suitable for iron and wooden doors
IP degree(compliant with EN 60529)	IP52

◇◆ Safety Precaution

1. The NFC technology used in this product meets the technical requirements of Class C general micro power devices in the "Catalogue and Technical Requirements for Micro Power Short Range Wireless Transmission Devices", and is used for data transmission applications. Please refer to the relevant content in the product manual for instructions on how to use the integrated antenna, controling, adjusting, and switching;

2. It is not allowed to change the usage scene or conditions, expand the transmission frequency range, increase the transmission power (including installing additional RF power amplifiers), or change the transmission antenna without authorization;

3. It shall not cause harmful interference to other legitimate radio stations, nor shall it provide protection against harmful interference;

4. It should withstand interference from industrial, scientific, and medical (ISM) application device that radiates radio frequency energy or other legitimate radio stations;

5. If harmful interference occurs to other legitimate radio stations (stations), the use should be immediately stopped and measures should be taken to eliminate the interference before continuing to use;

6. The use of micro power device in aircraft and in electromagnetic environment protection areas designated in accordance with laws, regulations, relevant national provisions, and standards, such as radio observatories, meteorological radar stations,

satellite earth stations (including measurement and control, ranging, reception, navigation stations), military and civilian radio stations (stations), airports, etc., shall comply with the regulations of electromagnetic environment protection and relevant industry regulatory authorities;

7. It is prohibited to use various model remote controllers within a radius of 5000 meters from the center point of the airport runway;

8. The operating temperature of micro power devices is -25 ° C~+70 ° C. The power supply of lithium battery is 7.4V DC/2A, and the power supply of type C is 5V DC/2A.
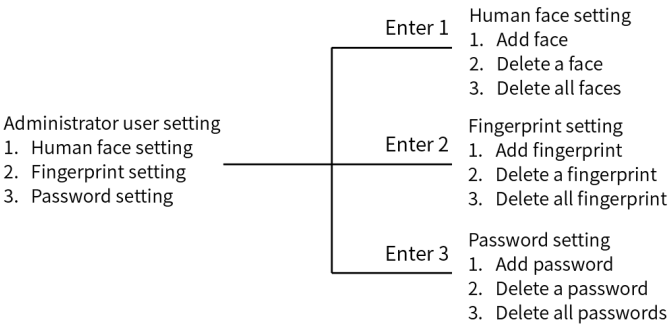
◇◆ Operation

1. First use

- Please open the upper and lower battery covers separately and insert the lithium battery.
- Please remove the protective sticker from the outer lock and keep the surface of the camera clean.
- When powered on for the first time, a voice prompt will remind the user to set a administrator password. Please set your face, fingerprint, or password as the administrator password before using it.
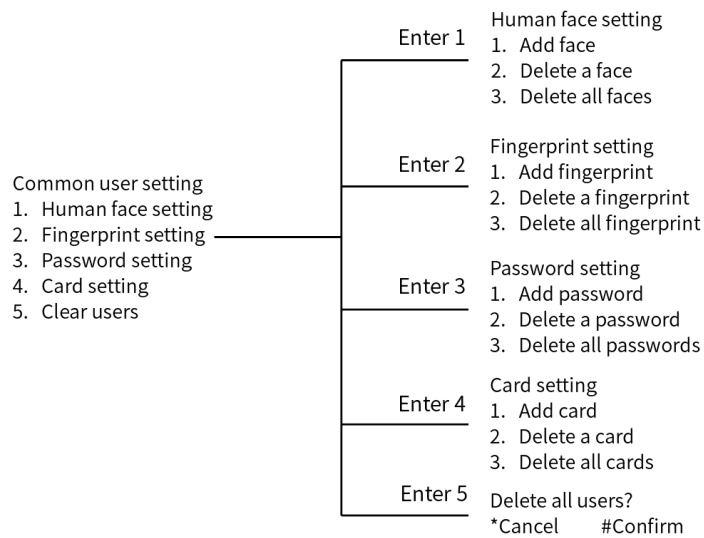
2. Local setting

2.1. Administrator verification:

2.1.1: Long press the settings button for 3 seconds to enter the administrator registration page. After verifying the administrator's identity, you can perform administrator user settings and common user settings.

2.1.2: Press 1 to enter administrator user settings, and press 2 to common regular user settings. The specific menu is as follows:

Administrator user setting		Human face setting
1. Human face setting	Enter 1	1. Add face
2. Fingerprint setting		2. Delete a face
3. Password setting		3. Delete all faces
	Enter 2	Fingerprint setting
		1. Add fingerprint
		2. Delete a fingerprint
		3. Delete all fingerprint
	Enter 3	Password setting
		1. Add password
		2. Delete a password
		3. Delete all passwords

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                                              Human face setting
                                    Enter 1   1.  Add face
                                              2.  Delete a face
                                              3.  Delete all faces

                                              Fingerprint setting
                                    Enter 2   1.  Add fingerprint
                                              2.  Delete a fingerprint
    Common user setting                       3.  Delete all fingerprint
    1.  Human face setting
    2.  Fingerprint setting                   Password setting
    3.  Password setting          Enter 3     1.  Add password
    4.  Card setting                          2.  Delete a password
    5.  Clear users                           3.  Delete all passwords

                                              Card setting
                                    Enter 4   1.  Add card
                                              2.  Delete a card
                                              3.  Delete all cards

                                    Enter 5   Delete all users?
                                              *Cancel      #Confirm
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2.2. Restore factory settings

Function	Operation procedure
Restore factory settings	If you forget your password, you can open the internal lock back cover, press the reset button with a needle for 5 seconds, and confirm by short pressing the setting key according to the voice prompt.

3. Daily use

3.1 Unlocking function

Function	Operation procedure
Human face unlock	Step 1: After facial recognition, stand 0.5m in front of the door, face the door lock, and start facial recognition; Step 2: After successful verification, push or pull the handle to open the door.
Fingerprint unlock	Step 1: Lightly press the finger in the recognition area; Step 2: After successful verification, push or pull the handle to open the door.
Password unlock	Step 1: Enter the password and press the # key to confirm; Step 2: After successful verification, push or pull the handle to open the door.

NFC card unlock	Step 1: Place the NFC card that has already been added into the card sensing area; Step 2: After successful verification, push or pull the handle to open the door.
Emergency key unlock (including emergency power charging)	Step 1: Press under the cover plate; Step 2: Lift it up and then pry it downwards; Step 3: Insert the key and rotate it to unlock. Step 4: Type-C emergency power supply can be plugged in through a portable power bank.
Indoor unlock	Step 1: Move the child lock button upwards and see the green symbol; Step 2: Push or pull the handle to open the door.
Independent mechanical lock	After mechanical locking from indoors, the door can only be opened from indoors.
Switch child lock	Step 1: Move the child lock button up and see the green symbol to close the child lock; Step 2: Move the child lock button down and see the red mark to unlock the child lock.

3.2 Other operations

Function	Operation procedure
Lithium battery charging (upper battery)	Step 1: Push the upper battery cover outward and open it upwards; Step 2: Hold the battery pull rope and pull it up to remove the battery; Step 3: Use a Type-C charging cable to charge. The blue indicator light indicates that the battery is fully charged. In the 5V/2A charging state, it takes about 13 hours to fully charge the battery.
Lithium battery charging (lower battery)	Step 1: Move the toggle button to the left and open the lower battery cover downwards; Step 2: Hold the battery pull rope and pull down to remove the battery; Step 3: Use the Type-C charging cable to charge. The blue indicator light indicates that the battery is fully charged. In the 5V/2A charging state, the battery can be fully charged after about 13 hours.
Insert micro SD card	Step 1: Pull out the silicone plug to the right and rotate it to open; Step 2: Press the Micro SD card and insert the silicone plug back to complete the installation.

4. Alarm function

Function	Triggering condition
Forced demolition alarm	When the alarm lock is forcibly removed, the lock will sound an alarm for 60 seconds.
System blocked after failed attempts	Blocking conditions: If password and card verification failed 3 times in a row within 5 minutes, fingerprint verification failed 5 times in a row, the system will be blocked for 3 minutes.
Low battery alarm	When the battery is low, automatic facial recognition no longer works. You need to touch the numeric keypad and manually press the facial recognition button before unlocking with your face.

◇◆ Packing List

- Front panel * 1
- Back panel * 1
- Automated lock body * 1
- Emergency key * 2
- Installation accessories package * 1
- Lithium battery * 2
- Installation template * 1
- NFC card * 2
- Type-C cable * 1

◇◆ Warranty

In the following cases, HDL regards the user as giving up the relevant services promised under the warranty and the user shall bear the corresponding responsibility and shall not be entitled to the free warranty:

- Failure of the device caused by force majeure factors.
- The user has placed the device in a transportation or use environment that does not comply with the statements in the product instructions or technical manuals.
- Unauthorized disassembly of the product by the user.
- Promises not made officially by HDL to the user that are beyond the scope of the warranty are the responsibility of the promisor.

HDL reserves the right to update or change the product without prior notice to the user, please visit the HDL website for answers to your questions and the latest product information.

The final interpretation right of the warranty regulations belongs to HDL.

◇◆ Copyright Statement

Update History:

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	January 2, 2025

◇◆ Technical Support

E-mail: hdltickets@hdlautomation.com

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