

# User Manual

## FaceDepot-7BL

Date: 2020

Doc Version: 1.1

English

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.



For further details, please visit our Company's website  
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If there is any issue related to the product, please contact us.

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## About the Company

ZKTeco is one of the world's largest manufacturer of RFID and Biometric (Fingerprint, Facial, Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

## About the Manual

This manual introduces the operations of FaceDepot-7BL Product.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

## Document Conventions

Conventions used in this manual are listed below:

### GUI Conventions

For Software	
Convention	Description
<b>Bold font</b>	Used to identify software interface names e.g. <b>OK, Confirm, Cancel</b>
>	Multi-level menus are separated by these brackets. For example, File > Create > Folder.
For Device	
Convention	Description
<>	Button or key names for devices. For example, press <OK>
[]	Window names, menu items, data table, and field names are inside square brackets. For example, pop up the [New User] window
/	Multi-level menus are separated by forwarding slashes. For example, [File/Create/Folder].

### Symbols

Convention	Description
	This implies about the notice or pays attention to, in the manual
	The general information which helps in performing the operations faster
	The information which is significant
	Care taken to avoid danger or mistakes
	The statement or event that warns of something or that serves as a cautionary example.

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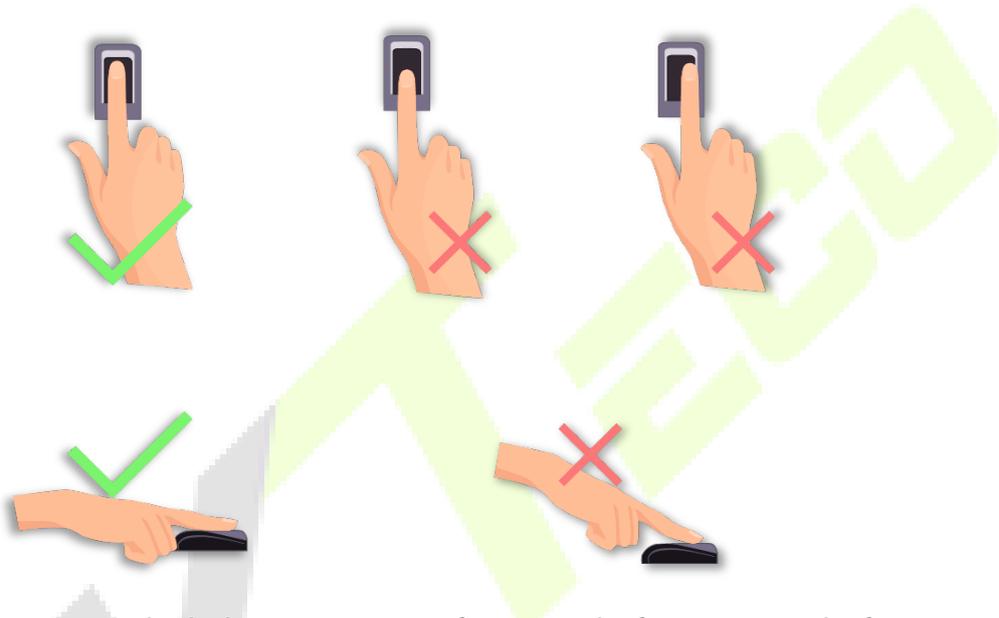
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## 1 Instructions to use

### 1.1 Finger Positioning★

**Recommended fingers:** Index, middle, or ring finger. Avoid using the thumb or little finger, as they are difficult to press accurately on the fingerprint reader.

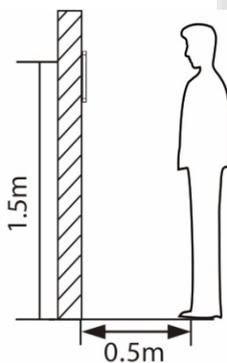
Press your finger on the fingerprint reader. Ensure that the center of your finger is aligned with the fingerprint reader.



**Note:** Please use the correct method when pressing your fingers on the fingerprint reader for registration and identification. Our company will assume no liability for recognition issues that may result from incorrect usage of the product. We reserve the right of final interpretation and modification concerning this point.

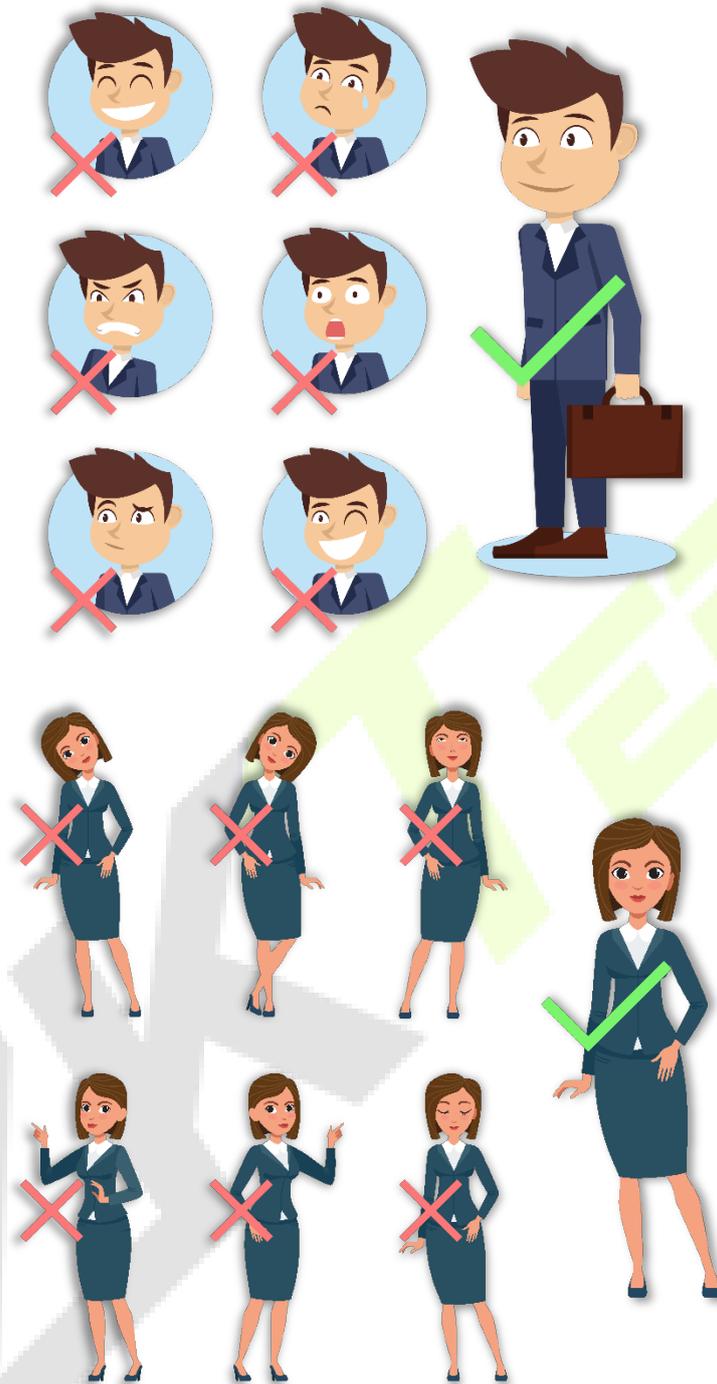
### 1.2 Standing Position, Posture and Facial Expression

#### **Recommended distance**



The distance between the device and a user whose height is within 1.4m-1.8m is recommended to be 0.5m. Users may slightly move forwards and backwards to improve the quality of facial images captured.

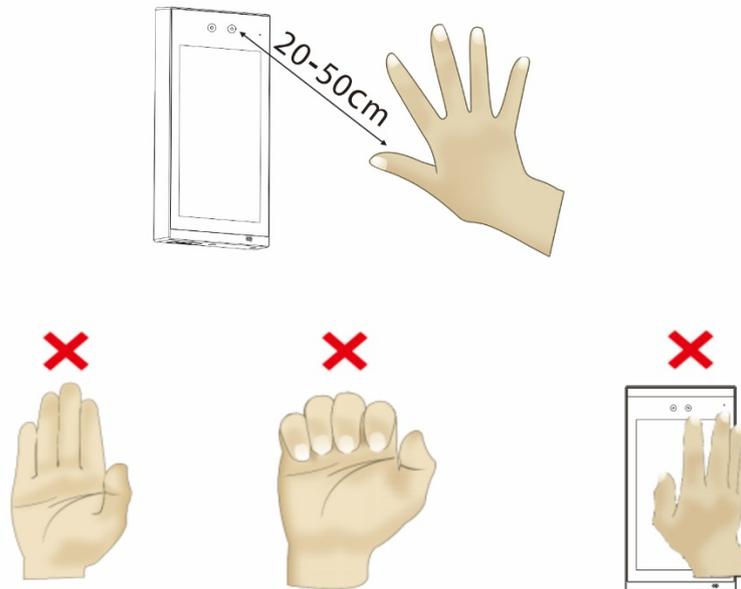
**Facial expression and standing posture**



**Note:** During enrollment and verification, please remain natural with facial expression and standing posture.

### 1.3 Palm registration

Place your palm in the palm multi-mode collection area, such that the palm is placed parallel to the device. Make sure to keep space between your fingers.



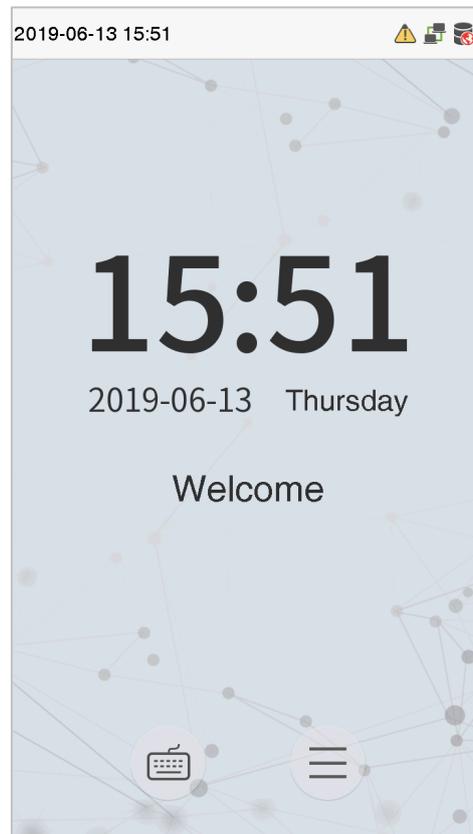
### 1.4 Face Registration

Keep the face in the center of the screen during registration. Please face the camera and stay still during face registration. The page looks like the following image:



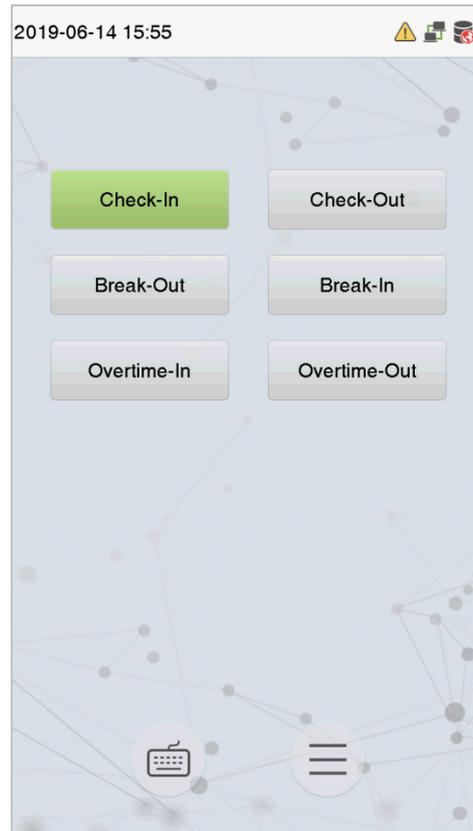
## 1.5 Standby Interface

After connecting the power supply, the standby interface will be displayed as shown below:



### Notes:

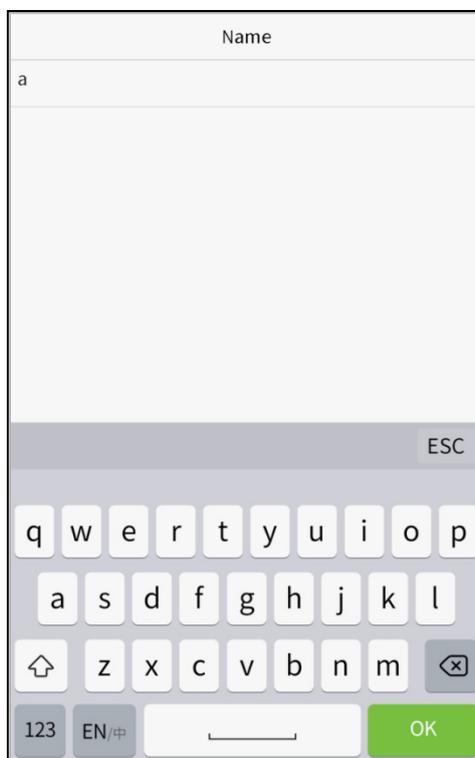
1. Click  to open the User verification interface.
2. When there is no super administrator set in the device, click  to enter the menu. After setting the super administrator, it requires the super administrator's verification before entering the menu operation. For the security of the device, it is recommended to register a super administrator for the first time you use the device.
3. ★The punch states can be switched directly by using the screen shortcut keys. Click anywhere on the screen without icons, and six shortcut keys appear, as shown in the figure below:



Press the corresponding shortcut key to select the current attendance state, which is shown in green. Please refer [7.5 Shortcut Key Mappings](#) for specific operations.

## 1.6 Virtual Keyboard

The virtual keyboard will be displayed as shown below:



**Note:** The device supports the input of English, numbers, and symbols. Click **[En]** to switch to the English keyboard. Press **[123]** to switch to the numeric and symbolic keyboard and click **[ABC]** to return to the alphabetic keyboard. Click the input box, the virtual keyboard appears. Click **[ESC]** to exit the input box.

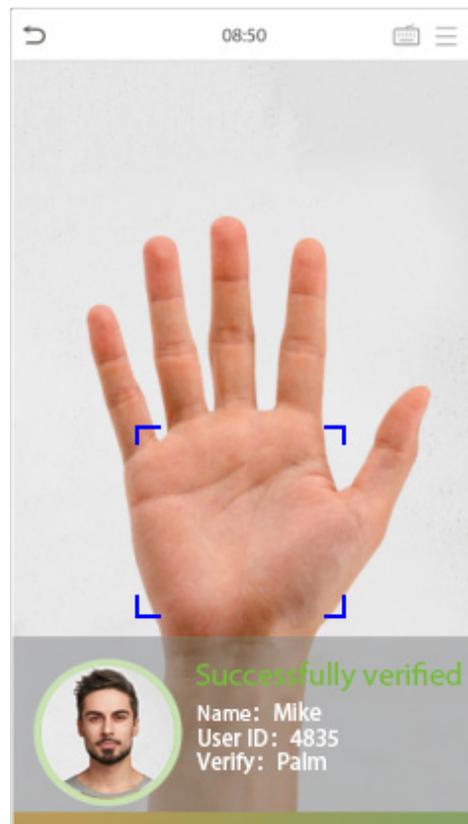
## 1.7 Verification Modes

### 1.7.1 Palm Verification

#### **1: N Palm Verification mode**

This verification mode compares the palm image collected by the palm collector with all the palm data in the device.

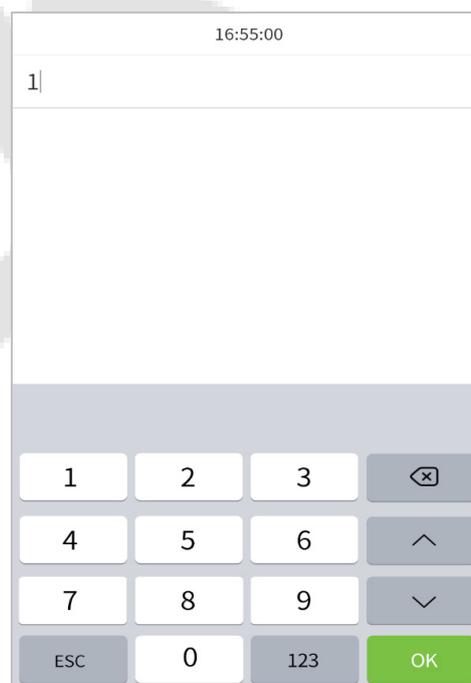
The device will automatically distinguish between the palm and the face verification mode. Place the palm in the palm collector area, and the device will automatically detect the palm verification mode.



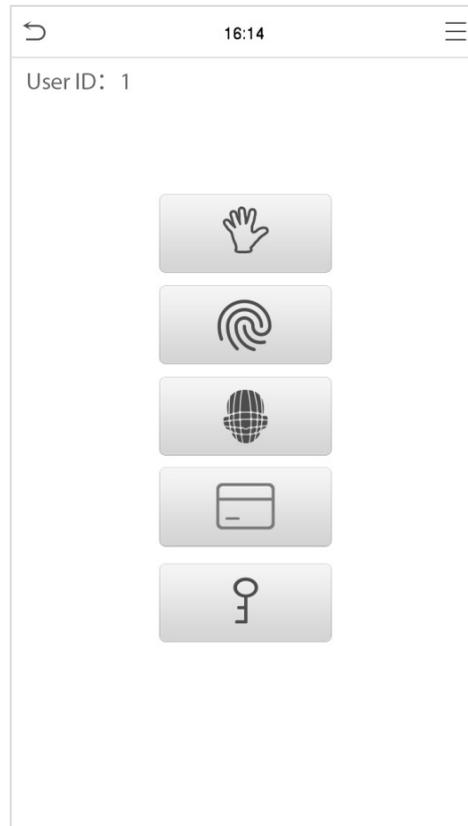
### **1: 1 Palm Verification mode**

Click the  button on the main screen to open 1:1 palm verification mode.

Enter the user ID and press **[OK]**.



If the user has registered the fingerprint, face, card number and password in addition to his/her palm, and the verification method is set to palm/ fingerprint/ face/ badge/ password verification, the following screen will appear. Select the palm icon  to open the palm verification mode.



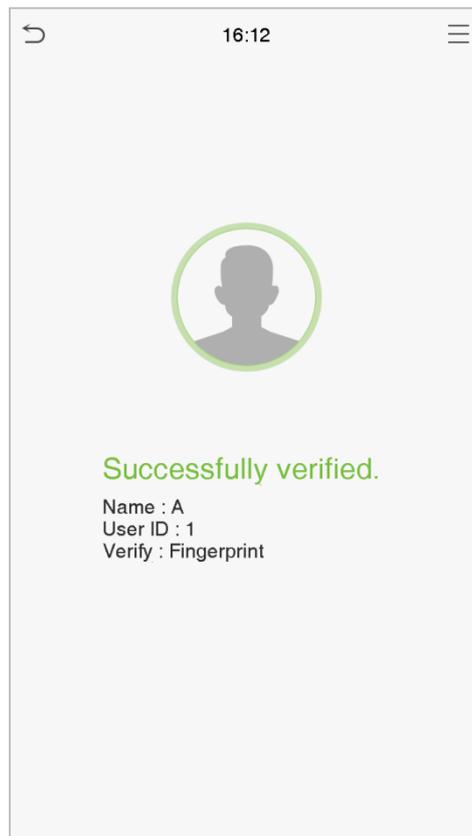
## 1.7.2 Fingerprint Verification★

### **1: N Fingerprint Verification mode**

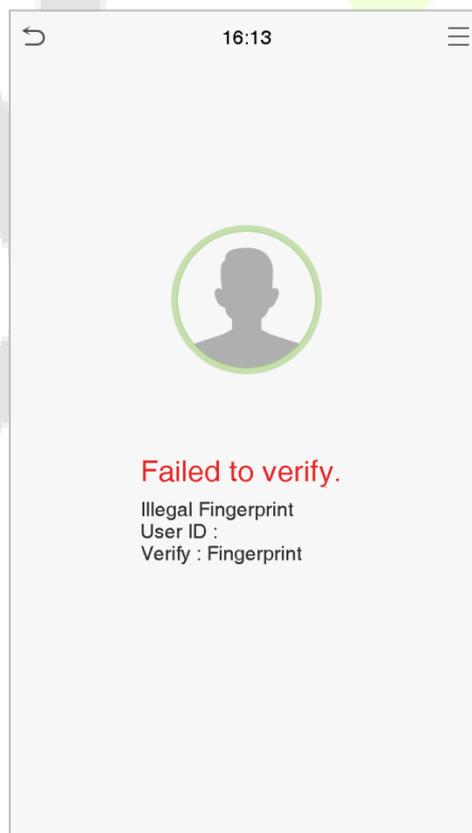
The 1:N Fingerprint Verification mode compares the fingerprint that is being pressed on the fingerprint reader with all of the fingerprint data that is stored in the device.

The device will enter the fingerprint authentication mode when a user presses his/her finger onto the fingerprint scanner. Please follow the instructions to place your finger on the sensor. For details, please refer [1.1 Finger Positioning](#).

**Successful Verification:**



**Failed Verification:**



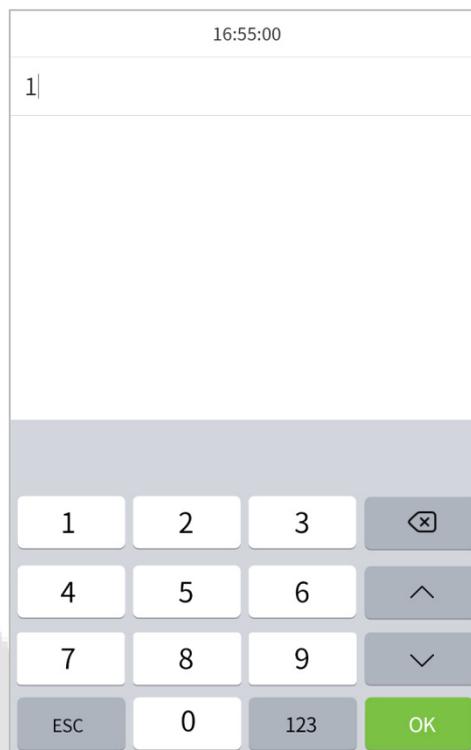
## **1: 1 Fingerprint Verification mode**

The 1:1 Fingerprint verification mode compares the fingerprint that is being pressed on the fingerprint reader with the fingerprints that are linked to User ID input via the virtual keyboard.

Users may try verifying their identities with 1:1 verification mode when they cannot gain access with 1: N authentication method.

Click the  button on the main screen to open the 1:1 fingerprint verification mode.

1. Enter the User ID and press **[OK]**.



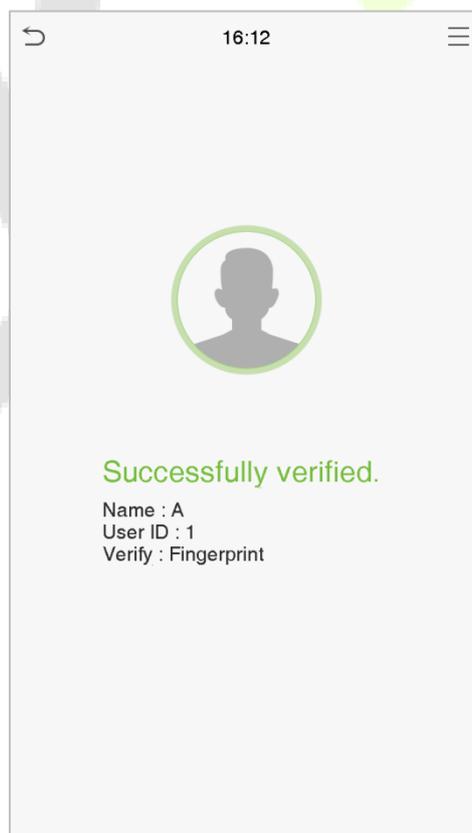
If the user has registered the palm, face, card number and password in addition to his/her fingerprint, and the verification method is set to palm/ fingerprint/ face/ badge/ password verification, the following

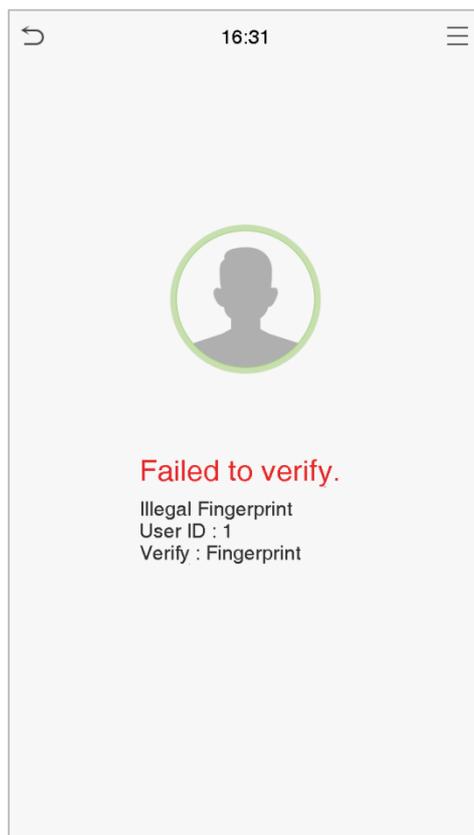
screen will appear. Select the fingerprint icon  to enter fingerprint verification mode.



- 2. Press the fingerprint to verify.

**Successful Verification:**

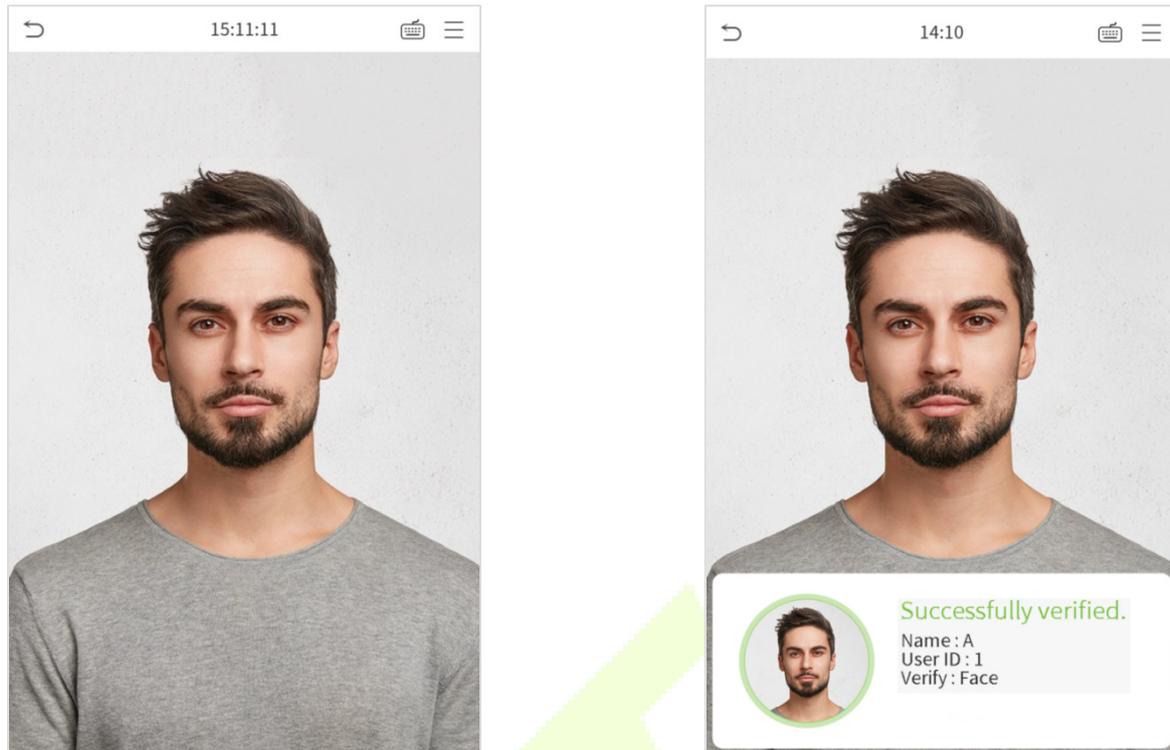


**Failed Verification:**

### 1.7.3 Facial Verification

#### **1:N Facial Verification**

The 1:N Facial Verification mode compares the acquired facial images with all face data registered in the device. The following is the pop-up prompt box of the comparison result.

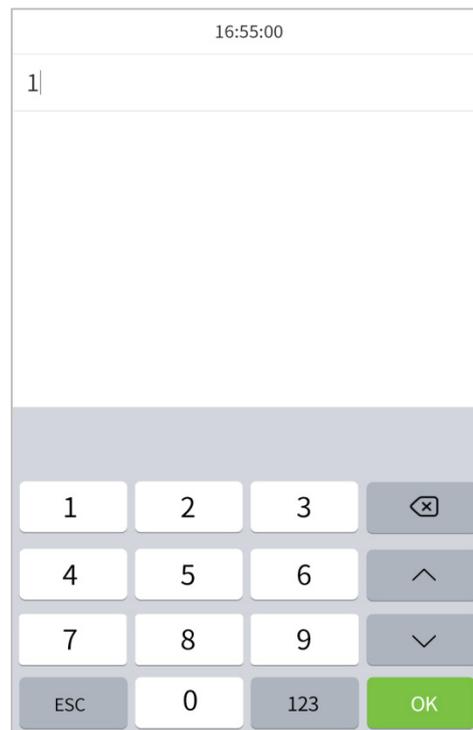


### **1:1 Facial Verification**

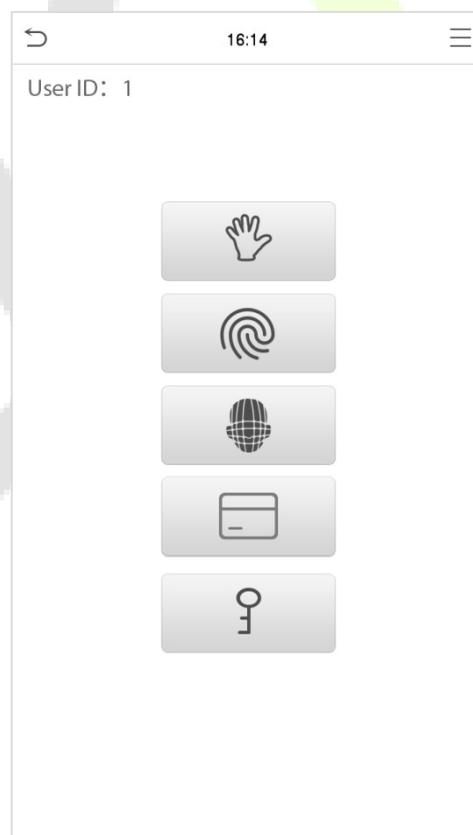
The 1:1 Facial Verification mode compares the face captured by the camera with the facial template related to the entered user ID.

Press  on the main interface to open the 1:1 facial verification mode.

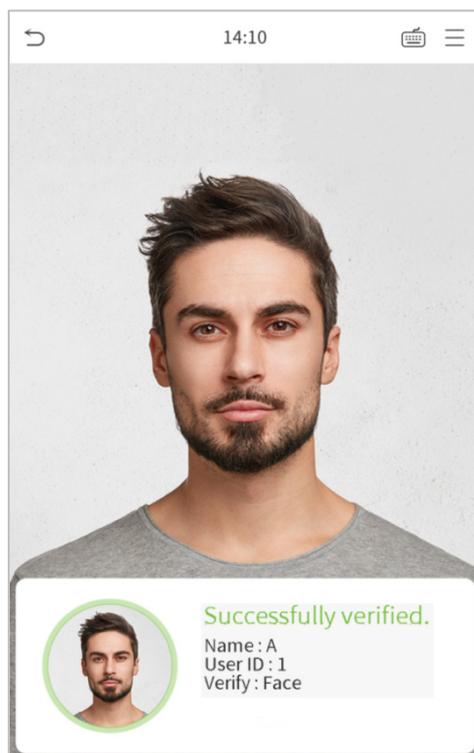
Enter the user ID and click **[OK]**.



If an employee registers palm, fingerprint, card number and password in addition to the face, the following screen will appear. Select the  icon to enter the face verification mode.



After successful verification, the prompt "successfully verified" will appear.

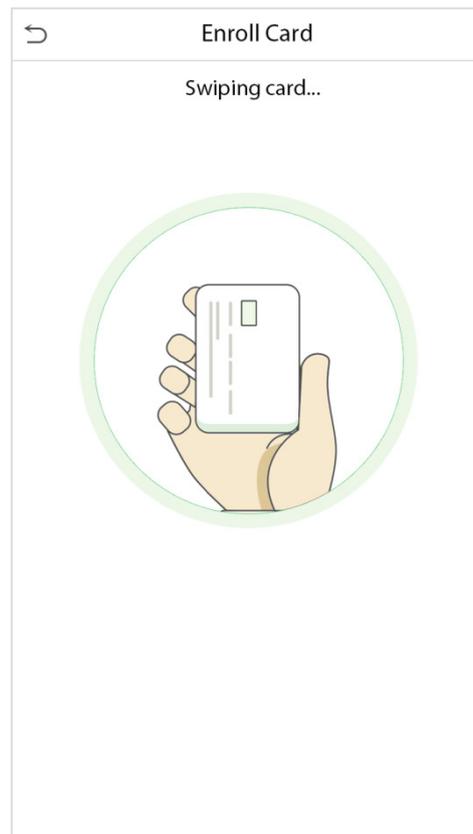


If the verification is failed, it will prompt "Please adjust your position!".

## 1.7.4 Card Verification ★

### **1:N Card Verification**

The 1:N Card Verification mode compares the card number in the card induction area with all the card number data registered in the device; The following is the card verification screen.

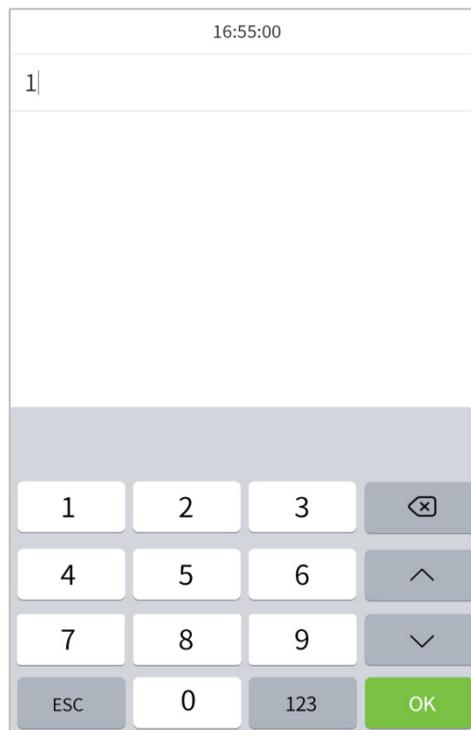


### **1:1 Card Verification**

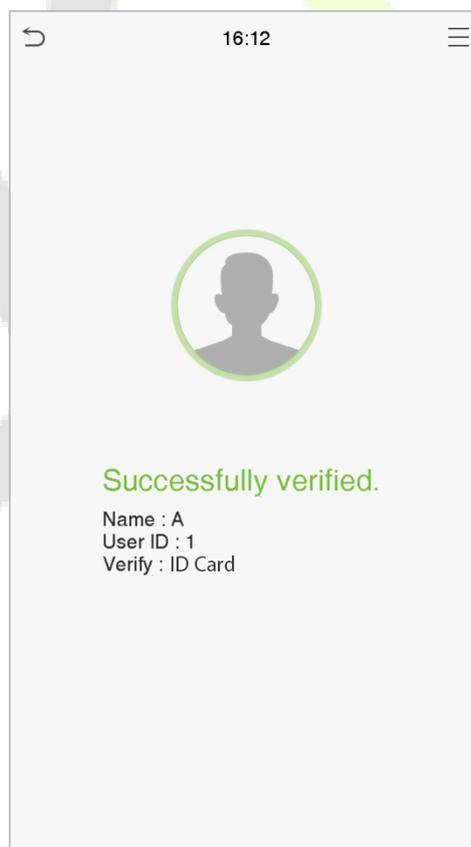
The 1:1 Card Verification mode compares the card number in the card induction area with the number associated with the employee's User ID registered in the device.

Press  on the main interface to open the 1:1 card verification mode.

Enter the user ID and click **[OK]**.



If an employee registers palm, fingerprint, face, and password in addition to the card, the following screen will appear. Select the  icon to open the card verification mode.

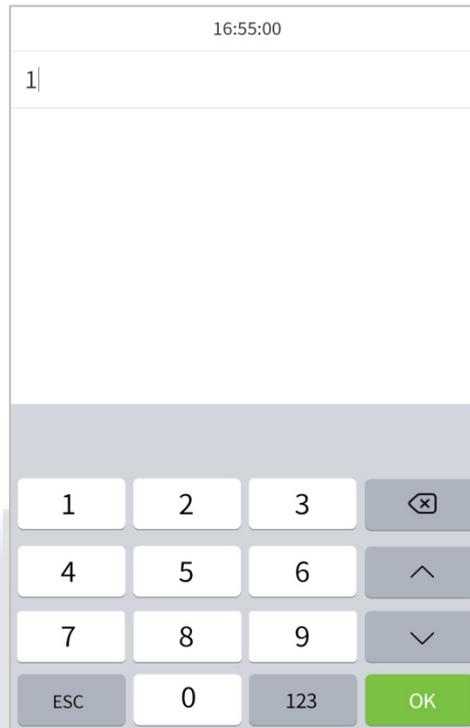


## 1.7.5 Password Verification

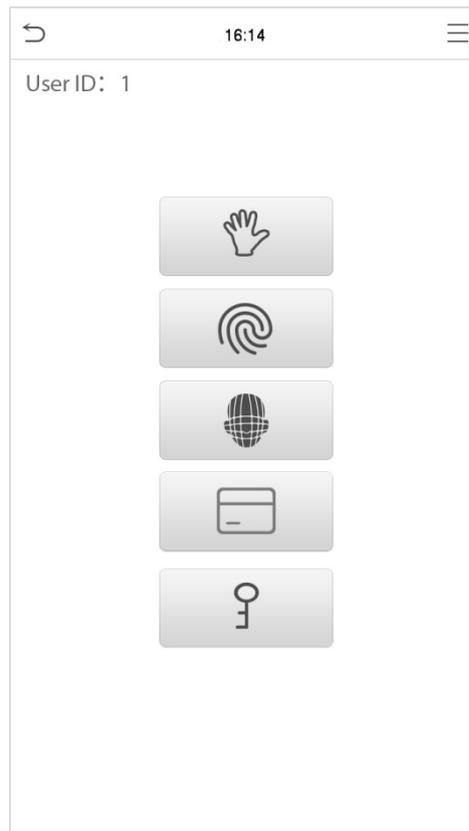
The Password Verification mode compares the entered password with the registered User ID and password.

Click the  button on the main screen to open the 1:1 password verification mode.

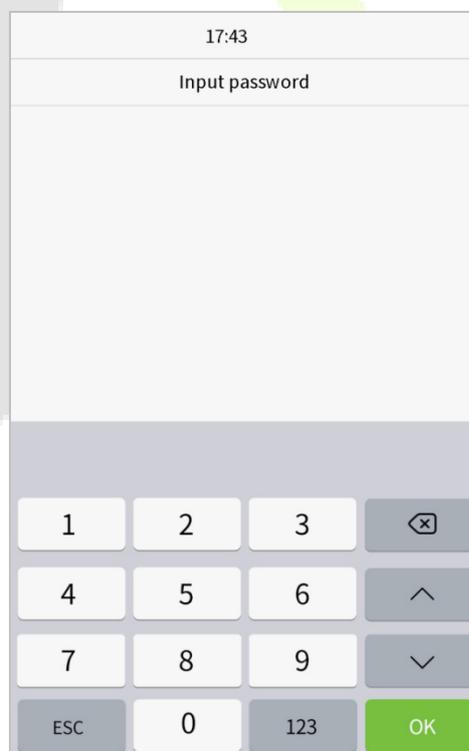
1. Enter the User ID and press **[OK]**.



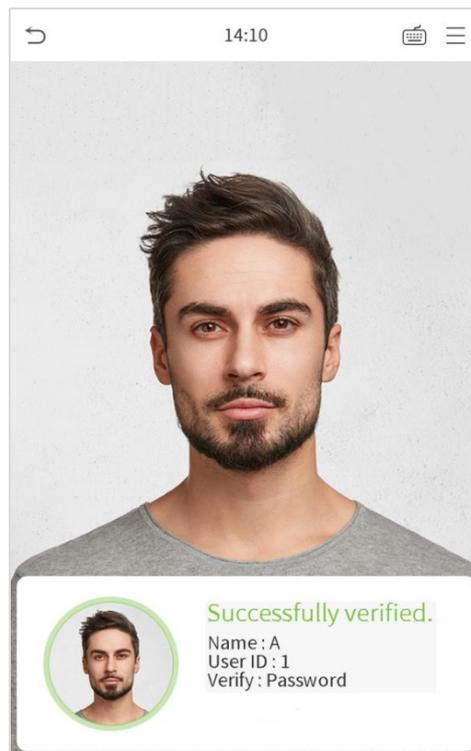
If an employee registers palm, fingerprint, face and card number in addition to the password, the following screen will appear. Select the  icon to open the password verification mode.



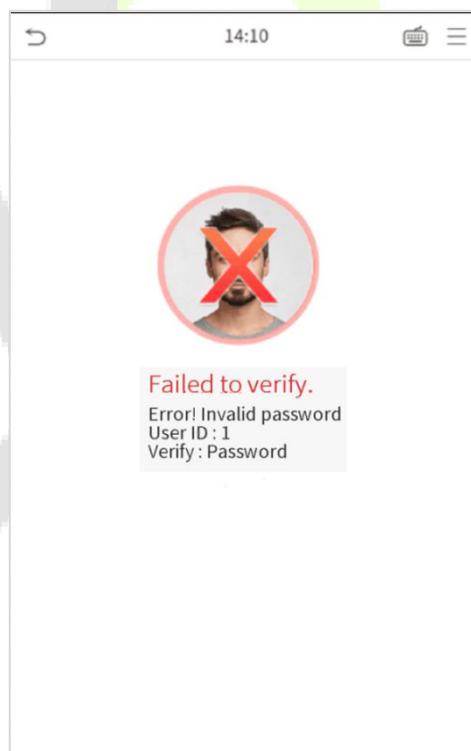
2. Enter the password and press **[OK]**.



**Successful Verification:**

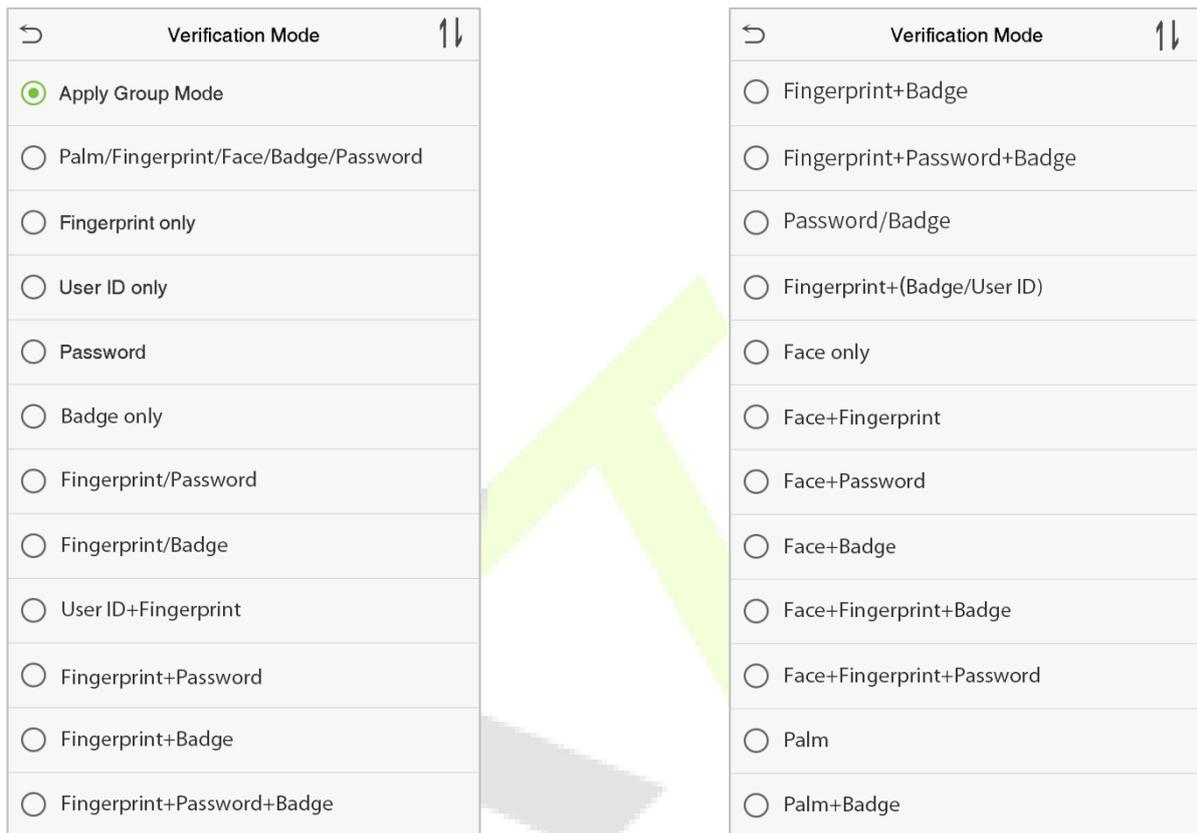


**Failed Verification:**



## 1.7.6 Combined Verification

To meet the needs of some access control occasions with high security and in consideration of the diversity of access control, the device provides a wide range of verification modes, which can be combined as required for individual users and user groups. The device supports 21 combinations of verification modes, as shown in the following figure.

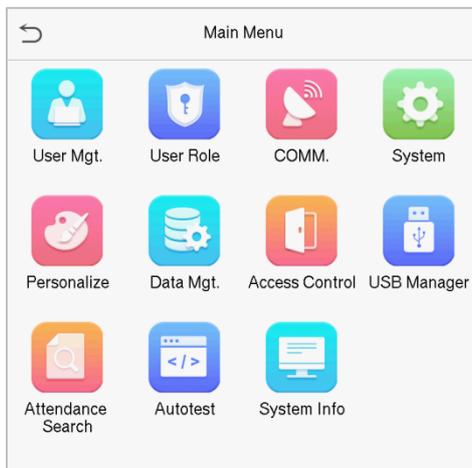


### Notes:

1. "/" means "or", and "+" means "and".
2. You must register the required verification information before using the combination verification mode, otherwise, the verification may fail. For example, if a user uses Face Registration but the verification mode is Face + Password, the user verification will be failed.

## 2 Main Menu

Press  on the Home Screen to open the main menu, as shown below:



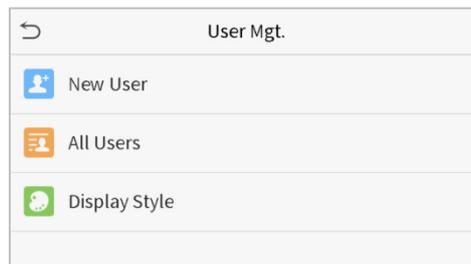
Feature	Description
<b>User Mgt.</b>	To add, edit, view, and delete basic information about a user.
<b>User Role</b>	To set the permission scope of the custom role and enroller, that is, the rights to operate the system.
<b>COMM.</b>	To set the relevant parameters of Network, PC connection, Cloud server, and Wiegand.
<b>System</b>	To set the parameters related to the system, including Date & Time, Access records, Palm, Face, Fingerprint parameters, reset to factory and USB upgrade.
<b>Personalize</b>	This includes user Interface, voice, bell, punch state options, and shortcut key mappings settings.
<b>Data Mgt.</b>	To delete all the relevant data in the device.
<b>Access Control</b>	To set the parameters of the lock and the relevant access control device.
<b>USB Manager</b>	To upload or download the specific data from a USB drive.
<b>Attendance Search</b>	Query the specified access record, check attendance photos and blacklist photos.
<b>Autotest</b>	To automatically test whether each module functions properly, including the LCD, voice, fingerprint sensor, camera, and real-time clock.
<b>System Info</b>	To view data capacity, device and firmware information of the current device.

## 3 User Management

The User Management function enables to add and manage users in the device.

### 3.1 Adding Users

Click **User Mgt.** on the main menu.



Click **New User**.

#### **Register a User ID and Name**

Enter the User ID and Name.

New User	
User ID	3
Name	
User Role	Normal User
Palm	0
Fingerprint	0
Face	0
Badge	
Password	
User Photo	0
Access Control Role	

**Notes:**

1. A Username may contain up to 17 characters.
2. The User ID may contain 1 to 9 digits by default.
3. During the initial registration, you can modify your ID, which cannot be modified after registration.
4. If a message "Duplicated ID" pops up, you must choose another ID.

**Setting the User Role**

There are two types of user accounts: the **normal user** and the **super admin**. If there is already a registered administrator, the normal users have no rights to manage the system and may only access the authentication verifications. The Administrator owns all the management privileges. If a custom role is set, you can also select **user-defined role** permissions for the user.

Click **User Role** to select Normal User or Super Admin.



User Role	
<input checked="" type="radio"/>	Normal User
<input type="radio"/>	User Defined Role 1
<input type="radio"/>	Super Admin

**Note:** If the selected user role is the Super Admin, the user must validate the identity authentication to access the main menu. The authentication is based on the authentication method(s) that the super administrator has registered. Please refer [1.7 Verification Method](#).

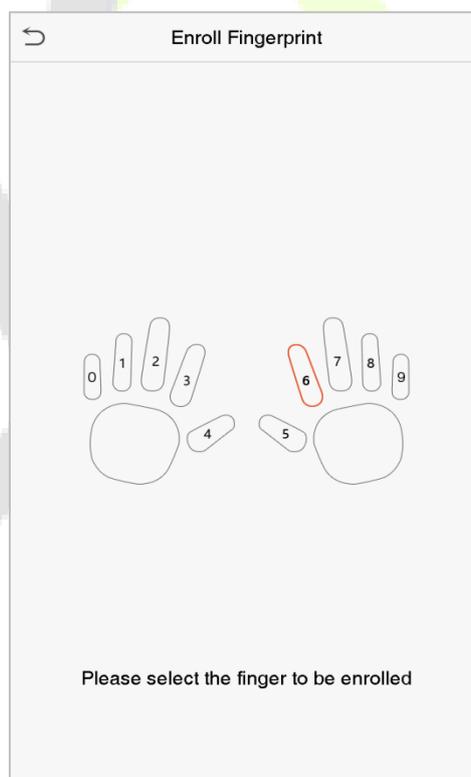
**Register palm**

Click **Palm** to enter the palm registration page. Select the palm to be enrolled.

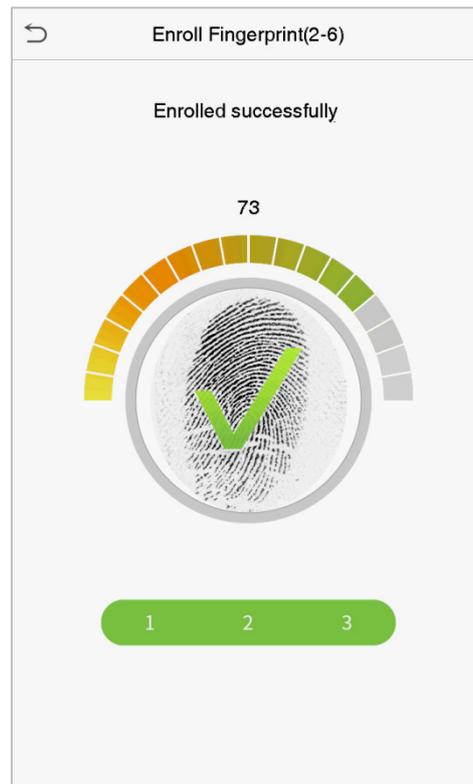


### **Register fingerprint**★

Click **Fingerprint** to enter the fingerprint registration page. Select the finger to be enrolled.

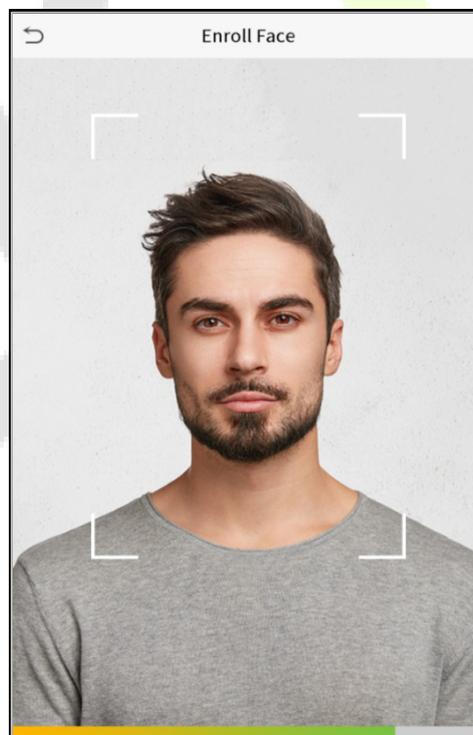


Press the same finger consecutively until the success message appears.



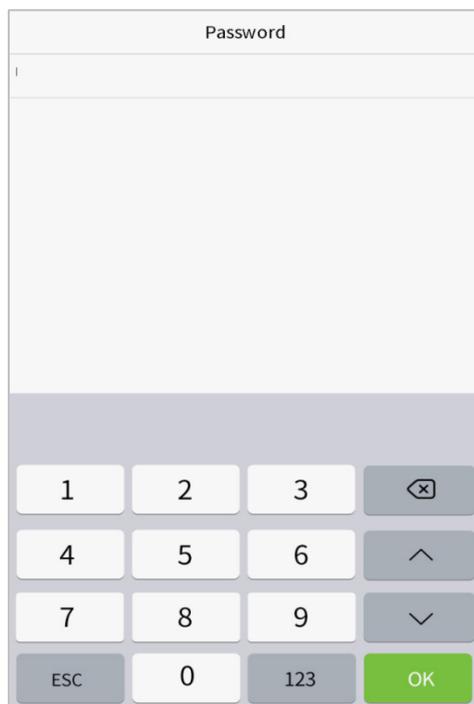
### **Register face**

Click **Face** to open the face registration page. Please face the camera and stay still during face registration. The registration interface is as follows:



### **Register password**

Click **Password** to open the password registration page. Enter a password and re-enter it. Click **OK**. If the two entered passwords are different, the prompt "Password does not match" will appear.

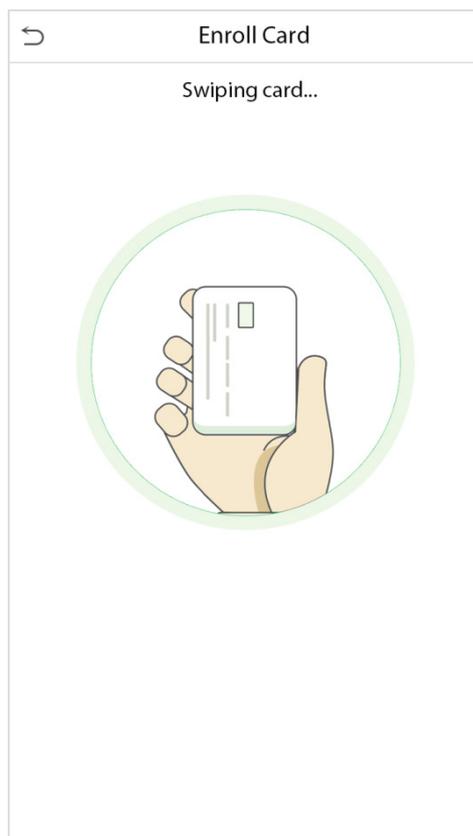


The image shows a mobile application interface for password registration. At the top, there is a header bar with the text "Password". Below the header is a large, empty text input field. At the bottom of the screen is a numeric keypad with the following buttons: a row with "1", "2", "3", and a backspace key; a row with "4", "5", "6", and an up arrow key; a row with "7", "8", "9", and a down arrow key; and a bottom row with "ESC", "0", "123", and a green "OK" button.

**Note:** The password may contain one to eight digits by default.

### **Register ID card★**

Press your **badge** close underneath the fingerprint collector. The badge number registration will be successful.



### **Register user photo**

When a user's verification is successful, the registered photo will be displayed.

Click **User Photo**, click the camera icon to take a photo. The system will return to the New User interface after taking a photo.

**Note:** While registering a face, the system will automatically capture a picture as the user photo. If you do not want to register a user photo, the system will automatically set the picture captured as the default photo.

### **Access Control Role**

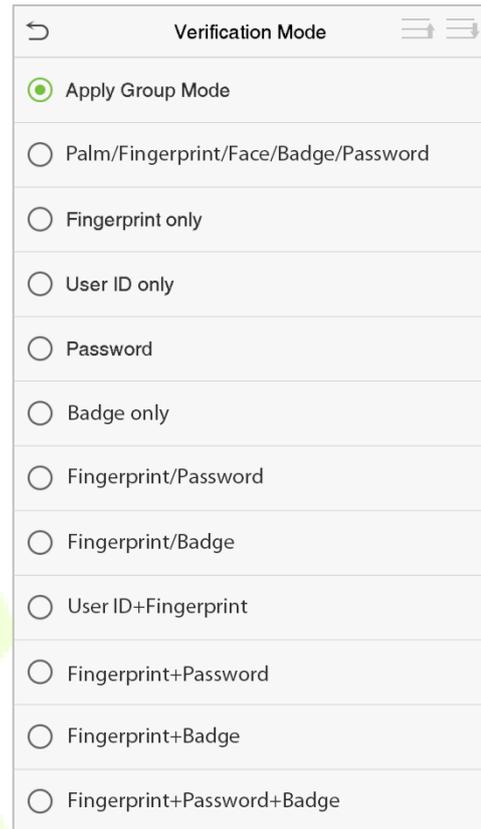
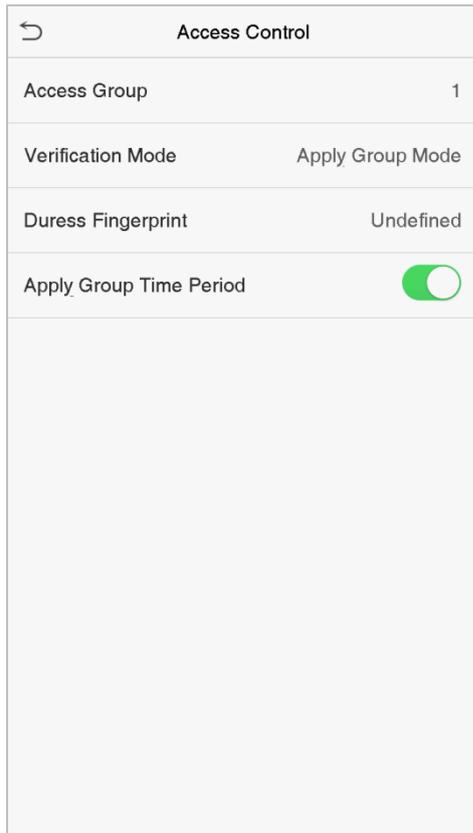
The user access control role sets the door unlocking rights of each person, including the group that the user belongs to, the verification mode, duress fingerprint and whether to apply the group time period.

Click **Access Control Role > Access Group**, assign the registered users to different groups for better management. The new users belong to Group 1 by default and can be reassigned to other groups. The device supports up to 99 access control groups.

Select verification mode for the user, click **Access Control Role > Verification Mode**.

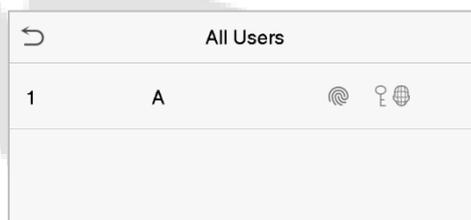
**Duress Fingerprint:** The user may specify one or more fingerprints that have been registered as a duress fingerprint(s). When press the finger corresponding to the duress fingerprint on the sensor and the verification is successful, the system will immediately generate a duress alarm.

Similarly, select whether to apply the group time period.



### 3.2 Search for Users

Click the search bar on the user list and enter the retrieval keyword (The keyword may be an ID, surname or full name.). The system will search for the users related to the information.



### 3.3 Edit Users

Choose a user from the list and click **Edit** to open the edit user interface:

User: 1 A	
Edit	
Delete	

Edit: 1 A	
User ID	1
Name	A
User Role	Normal User
Palm	1
Fingerprint	1
Face	1
Password	*****
User Photo	0
Access Control Role	

**Note:** The operation of editing a user is the same as that of adding a user, except that the user ID cannot be modified when editing a user. Refer "[3.1 Adding users](#)" for further operations.

### 3.4 Deleting Users

Select a user from the list and click **Delete** to enter the delete user interface. Select the user information to be deleted and click **OK**.

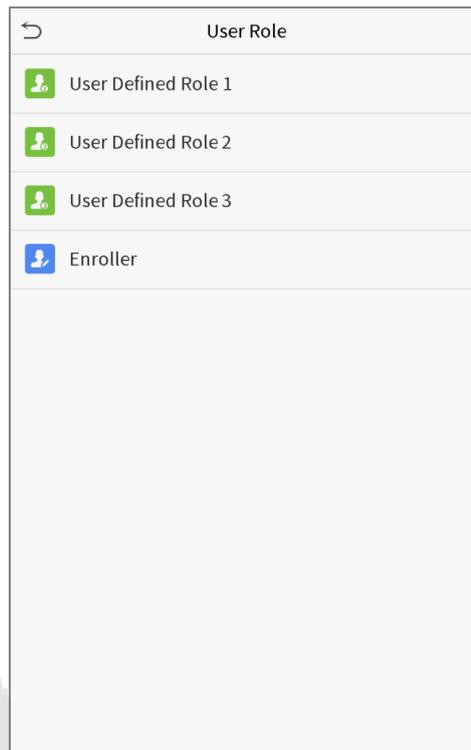
**Note:** If you select **Delete User**, all information of the user will be deleted.

## 4 User Role

If you need to assign some specific permissions to certain users, you may edit the “User Defined Role” in the **User Role** menu.

You may set the permission scope of the custom role (up to 3 roles) and an enroller, that is, the permission scope of the operation menu.

Click **User Role** on the main menu interface.



1. Click any option to set a defined role. Click the row of **Enable Defined Role** to enable this defined role. Click **Name** and enter the name of the role.

←
User Defined Role 1

Enable Defined Role

Name User Defined Role 1

Define User Role

2. Click **Define User Role** to assign privileges to the role. Once the privilege assignment is completed, click **Return**.

←
User Defined Role 1

<input checked="" type="checkbox"/> User Mgt.	<input checked="" type="checkbox"/> New User
<input checked="" type="checkbox"/> Comm.	<input checked="" type="checkbox"/> All Users
<input checked="" type="checkbox"/> System	<input checked="" type="checkbox"/> Display Style
<input type="checkbox"/> Personalize	
<input type="checkbox"/> Data Mgt.	
<input checked="" type="checkbox"/> Access Control	
<input type="checkbox"/> USB Manager	
<input type="checkbox"/> Attendance Search	
<input type="checkbox"/> Autotest	
<input type="checkbox"/> System Info	

**Note:** During the privilege assignment, the main menu is on the left and its sub-menus are on the right. You only need to select the features in sub-menus. If the device has a role enabled, you may assign the roles you set to users by clicking **User Mgt. > New User > User Role**.

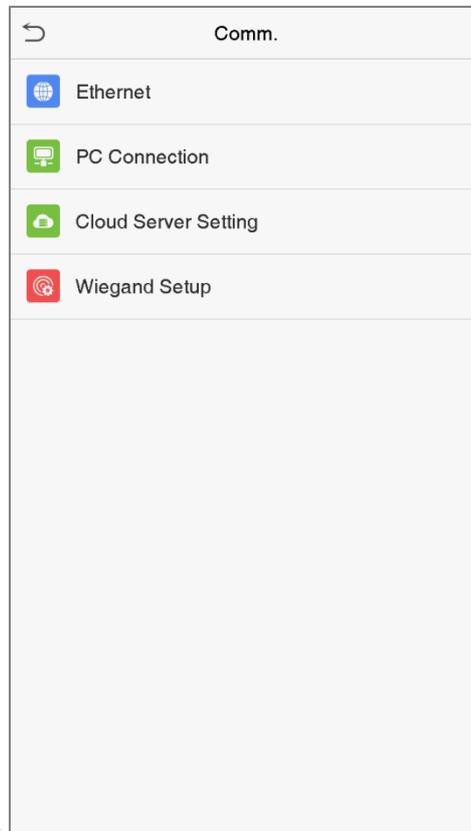
User Role	
<input checked="" type="radio"/>	Normal User
<input type="radio"/>	User Defined Role 1
<input type="radio"/>	Super Admin

If no super administrator is registered, the device will prompt "Please enroll super admin first!" after clicking the enable bar.

## 5 Communication Settings

The Communication Settings set the parameters of the Network, PC connection, Cloud server, and Wiegand.

Tap **COMM.** on the main menu.



### 5.1 Network Settings

When the device needs to communicate with a PC over the Ethernet, you need to configure the network settings and ensure that the device and the PC are connected to the same network segment.

Click **Ethernet** on the Comm. Settings interface.

Ethernet	
IP Address	192.168.163.150
Subnet Mask	255.255.255.0
Gateway	192.168.163.1
DNS	0.0.0.0
TCP COMM.Port	4370
DHCP	<input type="checkbox"/>
Display in Status Bar	<input checked="" type="checkbox"/>

Feature	Description
<b>IP Address</b>	The factory default value is 192.168.1.201. Please adjust them according to the actual network settings.
<b>Subnet Mask</b>	The factory default value is 255.255.255.0. Please adjust them according to the actual network settings.
<b>Gateway</b>	The factory default address is 0.0.0.0. Please adjust them according to the actual network settings.
<b>DNS</b>	The factory default address is 0.0.0.0. Please adjust them according to the actual network settings.
<b>TCP COMM. Port</b>	The factory default value is 4370. Please adjust them according to the actual network settings.
<b>DHCP</b>	Dynamic Host Configuration Protocol, which is to dynamically allocate the IP addresses for clients via server.
<b>Display in Status Bar</b>	To set whether to display the network icon on the status bar.

## 5.2 PC Connection

To improve the security of data, set a Comm Key for communication between the device and the PC.

If a Comm Key is set, this connection password must be entered before the device can be connected to the PC software.

Click **PC Connection** on the Comm. Settings interface.

PC Connection	
Comm Key	0
Device ID	1

Feature	Description
<b>Comm Key</b>	Comm Key: The default password is 0, which can be changed. The Comm Key may contain 1-6 digits.
<b>Device ID</b>	The identity number of the device, which ranges between 1 and 254. If the communication method is RS232/RS485, you need to enter this device ID in the software communication interface.

## 5.3 Cloud Server Setting

This represents settings used for connecting the ADMS server.

Click **Cloud Server Setting** on the Comm. Settings interface.

Cloud Server Setting	
Server mode	ADMS
Enable Domain Name	<input type="checkbox"/>
Server Address	0.0.0.0
Server port	8081
Enable Proxy Server	<input type="checkbox"/>

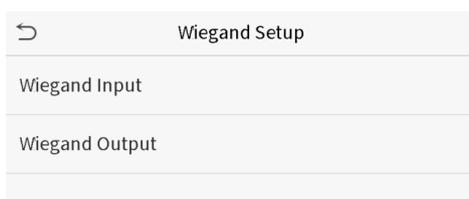
Feature	Description	
<b>Enable Domain Name</b>	When this function is enabled, the domain name mode "http://..." will be used, such as http://www.XYZ.com, while "XYZ" denotes the domain name when this mode is turned ON.	
<b>Disable Domain</b>	<b>Server Address</b>	IP address of the ADMS server.
	<b>Server Port</b>	Port used by the ADMS server.

<b>Name</b>	
<b>Enable Proxy Server</b>	When you choose to enable the proxy, you need to set the IP address and port number of the proxy server.

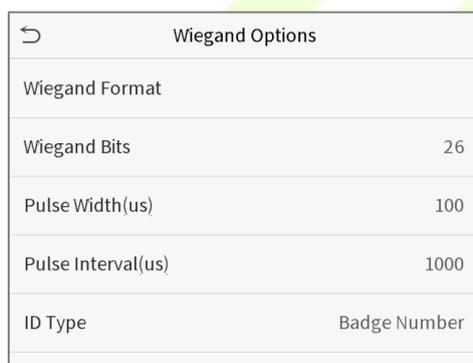
## 5.4 Wiegand Setup

This feature sets the Wiegand input and output parameters.

Click **Wiegand Setup** on the Comm. Settings interface.



### Wiegand input



Feature	Description
<b>Wiegand Format</b>	Values range from 26 bits, 34 bits, 36 bits, 37 bits, and 50 bits.
<b>Wiegand Bits</b>	Number of bits of Wiegand data.
<b>Pulse Width(us)</b>	The value of the pulse width sent by the Wiegand data is 100 microseconds by default, which can be adjusted within the range of 20 to 100 microseconds.
<b>Pulse Interval(us)</b>	The default value is 1000 microseconds, which can be adjusted within the range of 200 to 20000 microseconds.
<b>ID Type</b>	Selects between the User ID and badge number.

**Definitions of various common Wiegand formats:**

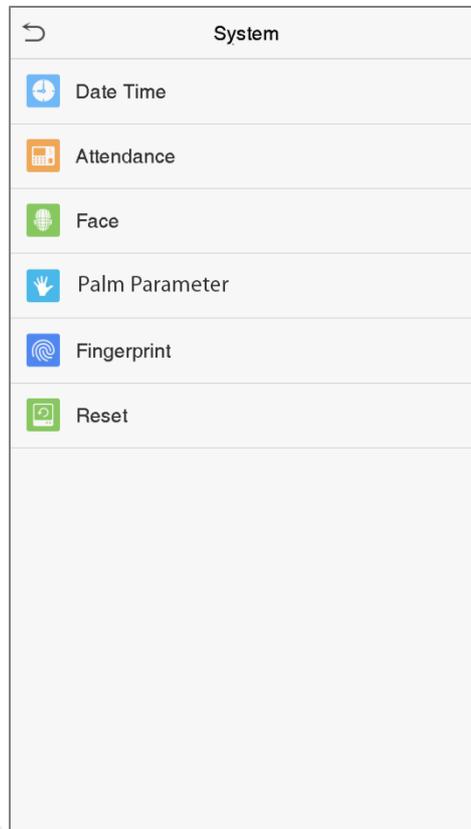
Wiegand Format	Definition
Wiegand26	<p>ECCCCCCCCCCCCCCCCCCCCCCCCCO</p> <p>Consists of 26 bits of binary code. The 1<sup>st</sup> bit is the even parity bit of the 2<sup>nd</sup> to 13<sup>th</sup> bits, while the 26<sup>th</sup> bit is the odd parity bit of the 14<sup>th</sup> to 25<sup>th</sup> bits. The 2<sup>nd</sup> to 25<sup>th</sup> bits are the card numbers.</p>
Wiegand26a	<p>ESSSSSSSSCCCCCCCCCCCCCCCCCO</p> <p>Consists of 26 bits of binary code. The 1<sup>st</sup> bit is the even parity bit of the 2<sup>nd</sup> to 13<sup>th</sup> bits, while the 26<sup>th</sup> bit is the odd parity bit of the 14<sup>th</sup> to 25<sup>th</sup> bits. The 2<sup>nd</sup> to 9<sup>th</sup> bits are the site codes, while the 10<sup>th</sup> to 25<sup>th</sup> bits are the card numbers.</p>
Wiegand34	<p>ECCCCCCCCCCCCCCCCCCCCCCCCCCCCCO</p> <p>Consists of 34 bits of binary code. The 1<sup>st</sup> bit is the even parity bit of the 2<sup>nd</sup> to 17<sup>th</sup> bits, while the 34<sup>th</sup> bit is the odd parity bit of the 18<sup>th</sup> to 33<sup>rd</sup> bits. The 2<sup>nd</sup> to 25<sup>th</sup> bits are the card numbers.</p>
Wiegand34a	<p>ESSSSSSSSCCCCCCCCCCCCCCCCCCCCCO</p> <p>Consists of 34 bits of binary code. The 1<sup>st</sup> bit is the even parity bit of the 2<sup>nd</sup> to 17<sup>th</sup> bits, while the 34<sup>th</sup> bit is the odd parity bit of the 18<sup>th</sup> to 33<sup>rd</sup> bits. The 2<sup>nd</sup> to 9<sup>th</sup> bits are the site codes, while the 10<sup>th</sup> to 25<sup>th</sup> bits are the card numbers.</p>
Wiegand36	<p>OFFFFFFFFFCCCCCCCCCCCCCCCCMME</p> <p>Consists of 36 bits of binary code. The 1<sup>st</sup> bit is the odd parity bit of the 2<sup>nd</sup> to 18<sup>th</sup> bits, while the 36<sup>th</sup> bit is the even parity bit of the 19<sup>th</sup> to 35<sup>th</sup> bits. The 2<sup>nd</sup> to 17<sup>th</sup> bits are the device codes. The 18<sup>th</sup> to 33<sup>rd</sup> bits are the card numbers, and the 34<sup>th</sup> to 35<sup>th</sup> bits are the manufacturer codes.</p>
Wiegand36a	<p>EFFFFFFFFFCCCCCCCCCCCCCCCCCO</p> <p>Consists of 36 bits of binary code. The 1<sup>st</sup> bit is the even parity bit of the 2<sup>nd</sup> to 18<sup>th</sup> bits, while the 36<sup>th</sup> bit is the odd parity bit of the 19<sup>th</sup> to 35<sup>th</sup> bits. The 2<sup>nd</sup> to 19<sup>th</sup> bits are the device codes, and the 20<sup>th</sup> to 35<sup>th</sup> bits are the card numbers.</p>
Wiegand37	<p>OMMMMSSSSSSSSSSSSCCCCCCCCCCCCCCE</p> <p>Consists of 37 bits of binary code. The 1<sup>st</sup> bit is the odd parity bit of the 2<sup>nd</sup> to 18<sup>th</sup> bits, while the 37<sup>th</sup> bit is the even parity bit of the 19<sup>th</sup> to 36<sup>th</sup> bits. The 2<sup>nd</sup> to 4<sup>th</sup> bits are the manufacturer codes. The 5<sup>th</sup> to 16<sup>th</sup> bits are the site codes, and the 21<sup>st</sup> to 36<sup>th</sup> bits are the card numbers.</p>
Wiegand37a	<p>EMMMFFFFFFFSSSSSSCCCCCCCCCCCCCCE</p> <p>Consists of 37 bits of binary code. The 1<sup>st</sup> bit is the even parity bit of the 2<sup>nd</sup> to 18<sup>th</sup> bits, while the 37<sup>th</sup> bit is the odd parity bit of the 19<sup>th</sup> to 36<sup>th</sup> bits. The 2<sup>nd</sup> to 4<sup>th</sup> bits are the manufacturer codes. The 5<sup>th</sup> to 14<sup>th</sup> bits are the device codes, and 15<sup>th</sup> to 20<sup>th</sup> bits are the site codes, and the 21<sup>st</sup> to 36<sup>th</sup> bits are the card numbers.</p>



## 6 System Settings

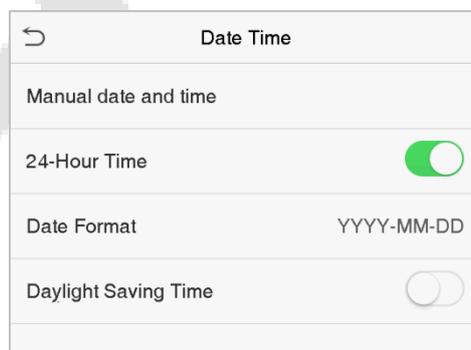
The System settings set the related system parameters to optimize the performance of the device.

Click **System** on the main menu interface.



### 6.1 Date and Time

Click **Date Time** on the System interface.



1. You can manually set the date and time and click **Confirm** to save.
2. Click 24-Hour Time to enable or disable this format and select the date format.

- Click Daylight Saving Time to enable or disable the function. If enabled, select a daylight-saving mode and set the switch time.

Daylight Saving Setup	
Start Month	1
Start Week	1
Start Day	Sunday
Start Time	00:00
End Month	1
End Week	1
End Day	Sunday
End Time	00:00

Week mode

Daylight Saving Setup	
Start Date	00-00
Start Time	00:00
End Date	00-00
End Time	00:00

Date mode

When restoring the factory settings, the time (24-hour) and date format (YYYY-MM-DD) can be restored, but the device date and time cannot be restored.

**Note:** For example, the user sets the time of the device (18:35 on March 15, 2019) to 18:30 on January 1, 2020. After restoring the factory settings, the time of the equipment will remain 18:30 on January 1, 2020.

## 6.2 Access Logs Setting

Click **Access Logs Setting** on the System interface.

Attendance	
Duplicate Punch Period(m)	None
Camera Mode	No photo
Display User Photo	<input checked="" type="checkbox"/>
Alphanumeric User ID	<input type="checkbox"/>
Attendance Log Alert	99
Cyclic Delete ATT Data	Disabled
Cyclic Delete ATT Photo	99
Cyclic Delete Blacklist Photo	99
Confirm Screen Delay(s)	3
Face detect interval(s)	1

Feature	Description
<b>Duplicate Punch Period (m)</b>	Within this time range, the attendance record of the same person will not be saved for more than once; the valid time range is 1 to 999999 minutes.
<b>Camera Mode</b>	Decides whether to capture and save the current snapshot image during verification. There are 5 modes: <b>No Photo:</b> No photo will be taken during user verification. <b>Take photo, no save:</b> Photo will be taken but will be not saved during verification. <b>Take photo and save:</b> Photo will be taken and saved during verification. <b>Save on successful verification:</b> Photo will be taken and saved for each successful verification. <b>Save on failed verification:</b> Photo will be taken and saved for each failed verification.
<b>Display User Photo</b>	Display the user photo when the user verification is successful.
<b>Alphanumeric User ID</b>	Decides whether to support letters in a User ID.

<b>Attendance Log Alert/ Access Logs Warning</b>	When the remaining memory space reaches a predefined value, the device will automatically display a record memory warning. Users may disable the function or set a valid value between 1 and 9999.
<b>Cyclic Delete ATT Data/Access Records</b>	When the attendance/access records have reached the full capacity, the device will automatically delete a set value of old attendance/access records. Users may disable the function or set a valid value between 1 and 999.
<b>Cyclic Delete ATT Photo</b>	When the attendance photos have reached the full capacity, the device will automatically delete a set value of old attendance photos. Users may disable the function or set a valid value between 1 and 99.
<b>Cyclic Delete Blacklist Photo</b>	When the blacklisted photos have reached full capacity, the device will automatically delete a set value of old blacklisted photos. Users may disable the function or set a valid value between 1 and 99.
<b>Confirm Screen Delay(s)</b>	The time length to display the message of successful verification. The valid range is 1 to 9 seconds.
<b>Face Detect Interval (s)</b>	To set the facial template matching time interval as needed. The valid value range is 0 to 9 seconds.

### 6.3 Face Parameters

Click **Face** on the System interface.

Face	
1:N Match Threshold	76
1:1 Match Threshold	63
Face enrollment threshold	70
Face pitch angle	35
Face rotation angle	25
Image quality	40
LED light triggered threshold	80
Motion Detection Sensitivity	4
Live detection	<input type="checkbox"/>
Live detection threshold	70

FRR	FAR	Recommended matching thresholds	
		1:N	1:1
<b>High</b>	Low	85	80
<b>Medium</b>	Medium	82	75
<b>Low</b>	High	80	70

Feature	Description
<b>1:N Match Threshold</b>	<p>Under 1:N verification mode, the verification will only be successful when the similarity between the acquired facial image and all registered facial templates is greater than the set value.</p> <p>The valid value ranges from 65 to 120. The higher the thresholds, the lower the misjudgment rate, the higher the rejection rate, and vice versa. The value 75 is recommended.</p>
<b>1:1 Match Threshold</b>	<p>Under 1:1 verification mode, the verification will only be successful when the similarity between the acquired facial image and the facial templates enrolled in the device is greater than the set value.</p> <p>The valid value ranges from 55 to 120. The higher the thresholds, the lower the misjudgment rate, the higher the rejection rate, and vice versa. The value 63 is recommended.</p>
<b>Face Enrollment Threshold</b>	<p>During face enrollment, 1:N comparison is used to determine whether the user has already registered before.</p> <p>When the similarity between the acquired facial image and all registered facial templates is greater than this threshold, it indicates that the face has already been registered.</p>
<b>Face Pitch Angle</b>	<p>The pitch angle is the tolerance of a face for facial registration and comparison.</p> <p>If a face's pitch angle exceeds this set value, it will be filtered by the algorithm, i.e. ignored by the terminal thus no registration and comparison interface will be triggered.</p>
<b>Face Rotation Angle</b>	<p>The rotation angle is the tolerance of a face for facial template registration and comparison.</p> <p>If a face's rotation angle exceeds this set value, it will be filtered by the algorithm, i.e. ignored by the terminal thus no registration and comparison interface will be triggered.</p>
<b>Image Quality</b>	<p>It defines the Image quality for facial registration and comparison. The higher the value, the clearer the image.</p>
<b>LED Light Triggered Threshold</b>	<p>This value controls the on and off states of the LED light. The larger the value, the more frequently the LED light will be turned on.</p>
<b>Motion Detection Sensitivity</b>	<p>A measurement of the amount of change in a camera's field of view that qualifies as potential motion detection that wakes up the terminal from standby to the comparison interface. The larger the value, the more sensitive the system would be, i.e. if a larger value is set, the comparison interface can be easily and frequently triggered.</p>
<b>Live Detection</b>	<p>Detecting a spoof attempt by determining whether the source of a biometric sample is a live human being or a fake representation using visible light images.</p>
<b>Live Detection Threshold</b>	<p>Helping to judge whether the visible image comes from an alive body. The larger the value, the better the visible light anti-spoofing performance.</p>

<b>Notes</b>	Improper adjustment of the exposure and quality parameters may severely affect the performance of the device. Please adjust the exposure parameter only under the guidance of the after-sales service technician of our company.
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## 6.4 Palm Parameters

Click **Palm** on the System interface.

Palm Parameter	
Palm 1:1 Matching Threshold	576
Palm 1:N Matching Threshold	576

Feature	Description
<b>Palm 1:1 Matching Threshold</b>	Under 1:1 Verification Method, only when the similarity between the verifying palm and the user’s registered palm is greater than this value, the verification will be successful.
<b>Palm 1:N Matching Threshold</b>	Under 1:N Verification Method, only when the similarity between the verifying palm and all registered palm is greater than this value, the verification will be successful.

## 6.5 Fingerprint Parameters★

Click **Fingerprint** on the System interface.

Fingerprint	
1:1 Match Threshold	15
1:N Match Threshold	35
FP Sensor Sensitivity	Low
1:1 Retry Times	3
Fingerprint Image	Always show

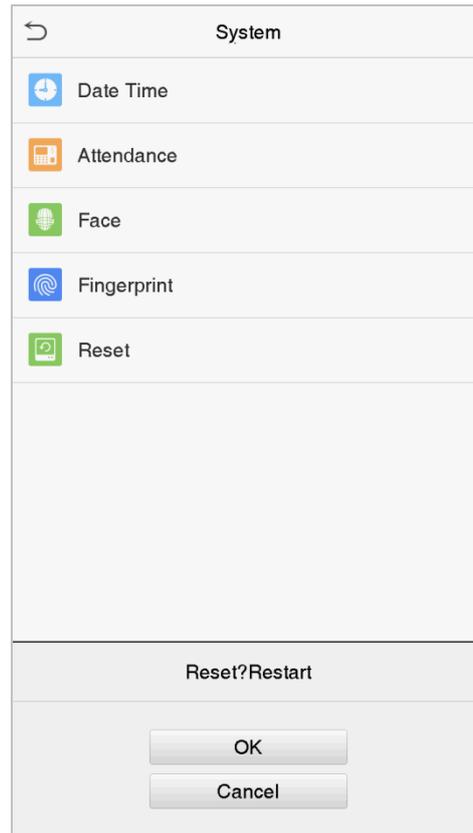
FRR	FAR	Recommended matching thresholds	
		1:N	1:1
High	Low	45	25
Medium	Medium	35	15
Low	High	25	10

Feature	Descriptions
<b>1:1 Match Threshold</b>	Under the 1:1 verification method, the verification will only be successful when the similarity between the acquired fingerprint data and the fingerprint template associated with the entered user ID enrolled in the device is greater than the set value.
<b>1:N Match Threshold</b>	Under the 1:N verification method, the verification will only be successful when the similarity between the acquired fingerprint data and the fingerprint templates enrolled in the device is greater than the set value.
<b>FP Sensor Sensitivity</b>	Sets the sensibility of fingerprint acquisition. It is recommended to use the default level " <b>Medium</b> ". When the environment is dry, resulting in slow fingerprint detection, you can set the level to " <b>High</b> " to raise the sensibility; when the environment is humid, making it hard to identify the fingerprint, you can set the level to " <b>Low</b> ".
<b>1:1 Retry Times</b>	In 1:1 Verification, users might forget the registered fingerprint, or press the finger improperly. To reduce the process of re-entering user ID, retry is allowed.
<b>Fingerprint Image</b>	<p>To set whether to display the fingerprint image on the screen during fingerprint enrollment or verification. Four options are available:</p> <p><b>Show for enroll:</b> Displays the fingerprint image on the screen only during enrollment.</p> <p><b>Show for match:</b> Displays the fingerprint image on the screen only during verification.</p> <p><b>Always show:</b> Displays the fingerprint image on the screen during enrollment and verification.</p> <p><b>None:</b> The fingerprint image will not be displayed.</p>

## 6.6 Factory Reset

This feature restores the device parameters, such as communication settings and system settings, to factory settings (will not clear registered user data).

Click **Reset** on the System interface.



Click **OK** to reset.

## 6.7 USB Upgrade

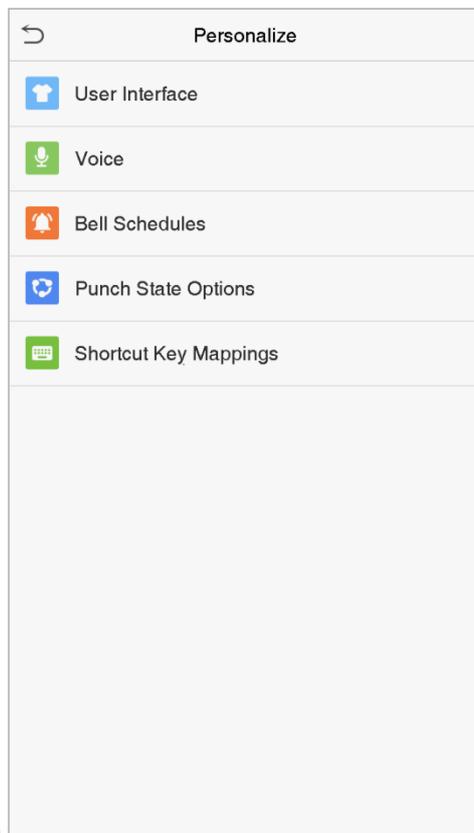
Click **USB Upgrade** on the System interface.

The device's firmware program can be upgraded with the upgrade file in a USB drive. Before conducting this operation, please ensure that the USB drive contains the correct upgrade file and is properly inserted into the device.

## 7 Personalize Settings

You may customize the interface settings such as voice, bell, punch state options, and shortcut key mappings.

Click **Personalize** on the main menu interface.



### 7.1 Interface Settings

You can customize the display style of the main interface.

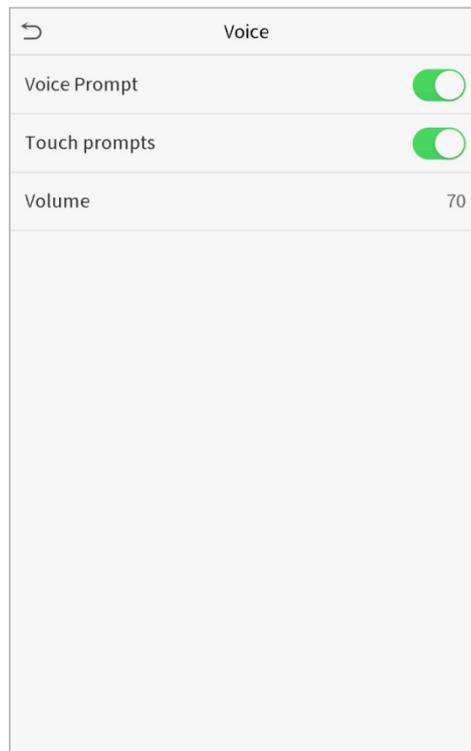
Click **User Interface** on the Personalize interface.

User Interface	
Wallpaper	
Language	English
Menu Screen Timeout(s)	99999
Idle Time To Slide Show(s)	60
Slide Show Interval(s)	30
Idle Time To Sleep(m)	Disabled
Main Screen Style	Style 1

Feature	Description
<b>Wallpaper</b>	Selects the main screen wallpaper according to your personal preference.
<b>Language</b>	Selects the language of the device.
<b>Menu Screen Timeout (s)</b>	When there is no operation, and the time exceeds the pre-set value, the device will automatically go back to the initial interface. You can disable the function or set the value between 60 and 99999 seconds.
<b>Idle Time To Slide Show (s)</b>	When there is no operation, and the time exceeds the pre-set value, a slide show will be played. It can be disabled, or you may set the value between 3 and 999 seconds.
<b>Slide Show Interval (s)</b>	This refers to the time interval to switch between different slide show images. The function can be disabled, or you may set the time interval between 3 and 999 seconds.
<b>Idle Time to Sleep (m)</b>	If you have activated the sleep mode, when there is no operation, the device will enter the standby mode. Press any key or finger to resume normal working mode. You can disable this function or set a value within 1-999 minutes.
<b>Main Screen Style</b>	Selects the main screen style according to your personal preference.

## 7.2 Voice Settings

Click **Voice** on the Personalize interface.



Feature	Description
<b>Voice Prompt</b>	Selects whether to enable voice prompts during operating.
<b>Touch Prompt</b>	Selects whether to enable keypad sounds.
<b>Volume</b>	Adjusts the volume of the device. The valid range is 0-100.

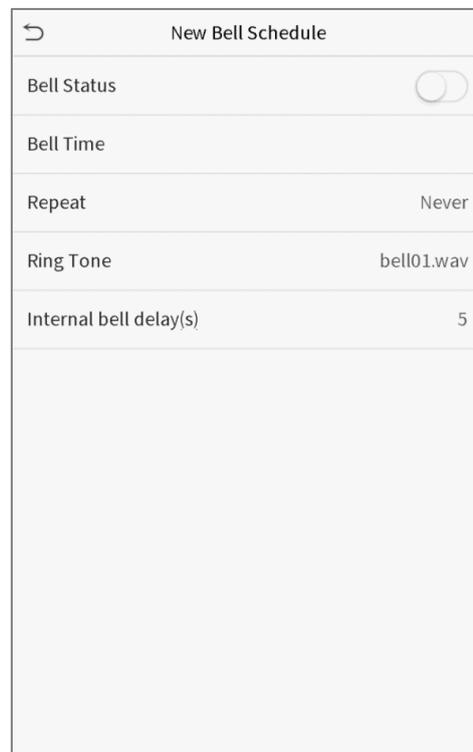
## 7.3 Bell Schedules

Click **Bell Schedules** on the Personalize interface.



## **Add a bell**

1. Click **New Bell Schedule** to open the add interface.



New Bell Schedule	
Bell Status	<input type="checkbox"/>
Bell Time	
Repeat	Never
Ring Tone	bell01.wav
Internal bell delay(s)	5

Feature	Description
<b>Bell Status</b>	Sets whether to enable the bell status.
<b>Bell Time</b>	At this time of day, the device automatically rings the bell.
<b>Repeat</b>	Sets the repetition cycle of the bell.
<b>Ring Tone</b>	Selects a ring tone.
<b>Internal bell delay(s)</b>	Sets the duration of the internal bell. The valid value ranges from 1 to 999 seconds.

2. Click **All Bell Schedules** to view the newly added bell.

## **Edit a bell**

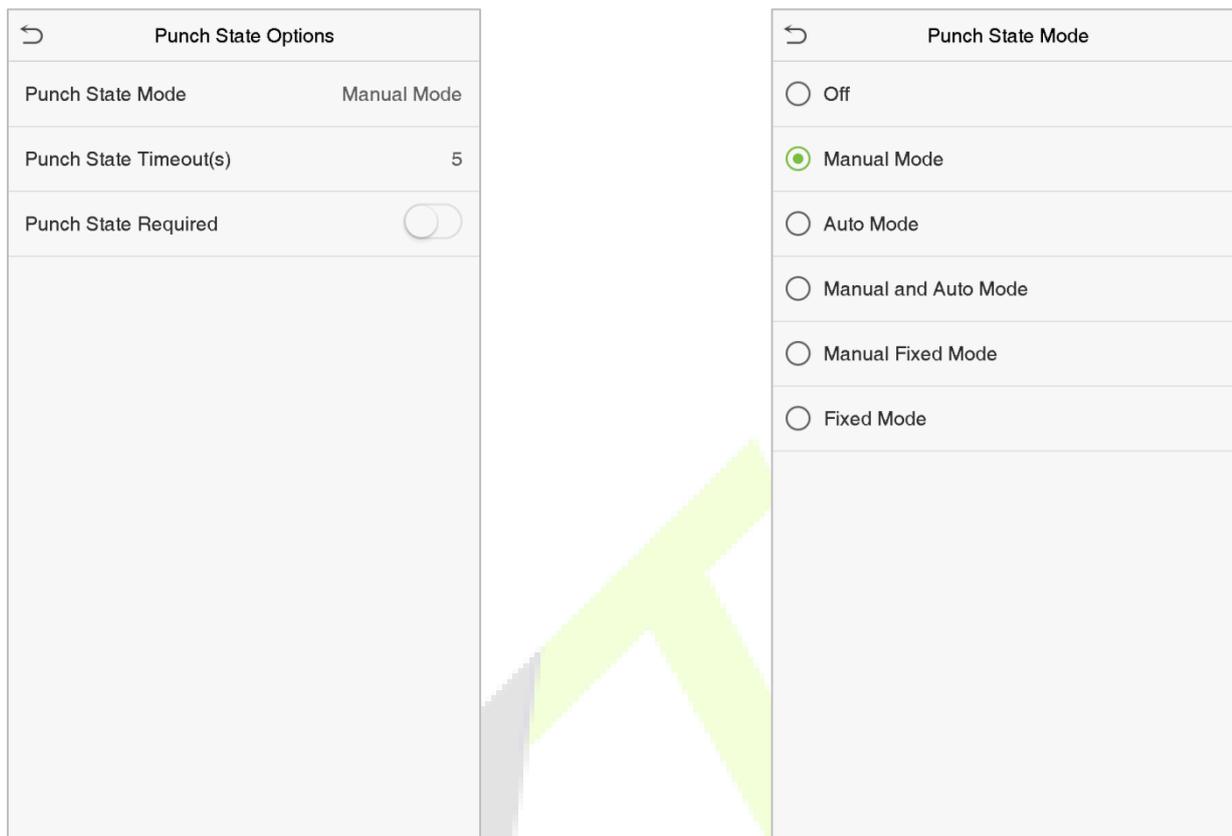
On the All Bell Schedules interface, tap the bell to be edited and click **Edit**. The editing method is the same as the operations of adding a bell.

## **Delete a bell**

On the All Bell Schedules interface, tap the bell to be deleted and click **Delete**, and select **Yes** to delete the bell.

## 7.4 Punch State Options

Click **Punch State Options** on the Personalize interface.



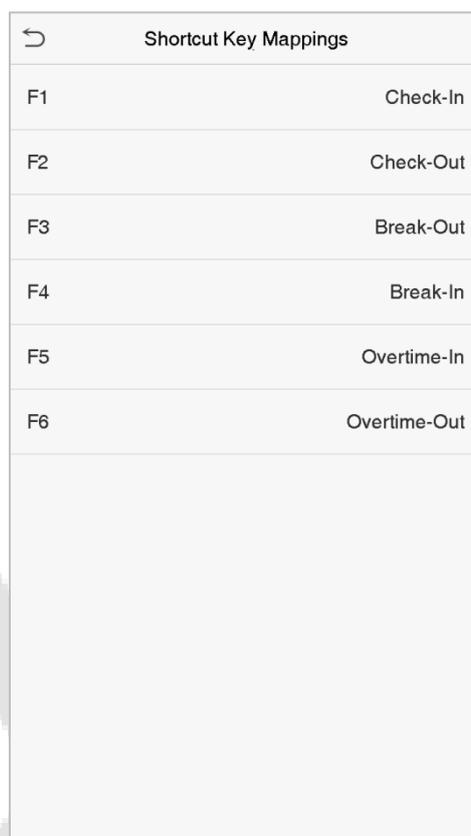
Feature	Description
<p><b>Punch State Mode</b></p>	<p>Selects a punch state mode, which can be:</p> <p><b>Off:</b> Disables the punch state key function. The punch state key set under the Shortcut Key Mappings menu will not work.</p> <p><b>Manual Mode:</b> Switches the punch state key manually; the attendance status will be automatically reset after the timeout.</p> <p><b>Auto Mode:</b> The punch state key will switch to a specified status according to the predefined schedule set under Shortcut Key Mappings.</p> <p><b>Manual and Auto Mode:</b> The main interface will display the auto-switch punch state key. However, users can still select alternative attendance statuses. After the timeout, the manually switching punch state key will become an auto-switch punch state key.</p> <p><b>Manual Fixed Mode:</b> After the punch state key is manually switched, the punch state key will remain unchanged until being manually switched again.</p> <p><b>Fixed Mode:</b> Only the fixed punch state key will be shown. The users cannot change their status by pressing other keys.</p>

<b>Punch State Timeout (s)</b>	The time duration for time out, i.e. remaining inactive in the main menu.
<b>Punch State Required</b>	Specifies whether an attendance status must be selected during verification.

## 7.5 Shortcut Key Mappings

Users may define shortcuts for attendance status or functional keys. On the main interface, when the shortcut keys are pressed, the corresponding attendance status or function interface will be displayed quickly.

Click **Shortcut Key Mappings** on the Personalize interface.



Shortcut Key Mappings	
F1	Check-In
F2	Check-Out
F3	Break-Out
F4	Break-In
F5	Overtime-In
F6	Overtime-Out

1. Click the shortcut key to enter the shortcut key setting interface, and select the **function** as punch state key or function key (such as new user, all users, etc.), as shown in the figure below:

F1	
Punch State Value	0
Function	Punch State Options
Name	Check-In
Set Switch Time	

F1	
Function	New User

- If the key is defined as a function key, the setting is completed; If set to a punch state key, set the punch state value (valid value 0~250), the name and switch time.

### How to set the switch time

The switch time is used in conjunction with the **punch state options**. When the **punch state mode** is set to **auto mode**, the switch time should be set. Select the switching period and set the switch time every day, as shown in the figure below:

Switch Cycle	
<input checked="" type="checkbox"/>	Monday
<input checked="" type="checkbox"/>	Tuesday
<input checked="" type="checkbox"/>	Wednesday
<input checked="" type="checkbox"/>	Thursday
<input checked="" type="checkbox"/>	Friday
<input type="checkbox"/>	Saturday
<input type="checkbox"/>	Sunday

Set Switch Time	
Switch Cycle	Monday Tuesday W...
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Monday

13:55

13 55

HH MM

Confirm (OK) Cancel (ESC)

Set Switch Time

Switch Cycle Monday Tuesday W...

Monday	08:00
Tuesday	
Wednesday	
Thursday	
Friday	

**Note:** When the function is set to undefine, the device will not enable the punch state key.

## 8 Data Management

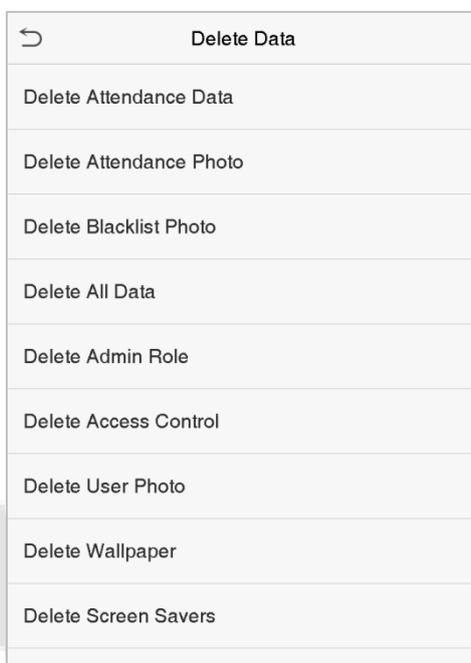
The Data Management function is used to delete the relevant data in the device.

Click **Data Mgt.** on the main menu interface.



### 8.1 Delete Data

Click **Delete Data** on the Data Mgt. interface.

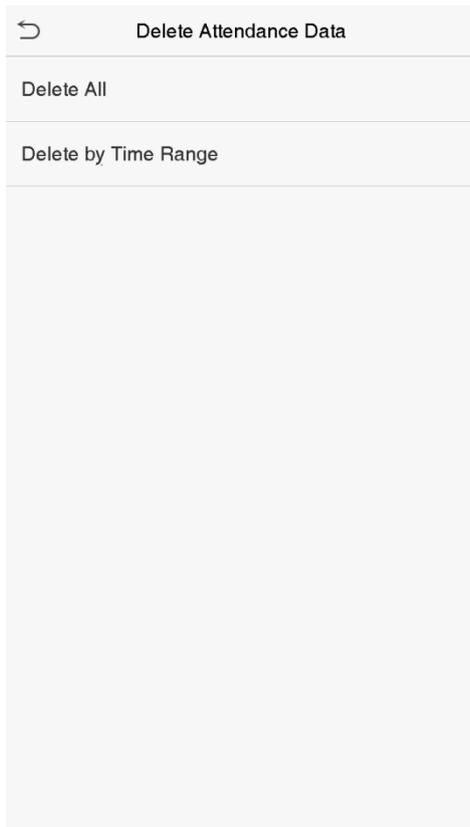


Feature	Description
<b>Delete Attendance Data/Access Records</b>	Deletes the attendance data/access records conditionally.
<b>Delete Attendance Photo</b>	Deletes the attendance photos of the designated personnel.
<b>Delete Blacklist Photo</b>	Deletes the photos taken during verifications which are failed.
<b>Delete All Data</b>	Deletes the information and attendance logs/access records of all the registered users.
<b>Delete Admin Role</b>	Removes administrator privileges.
<b>Delete Access Control</b>	Deletes all the access data.

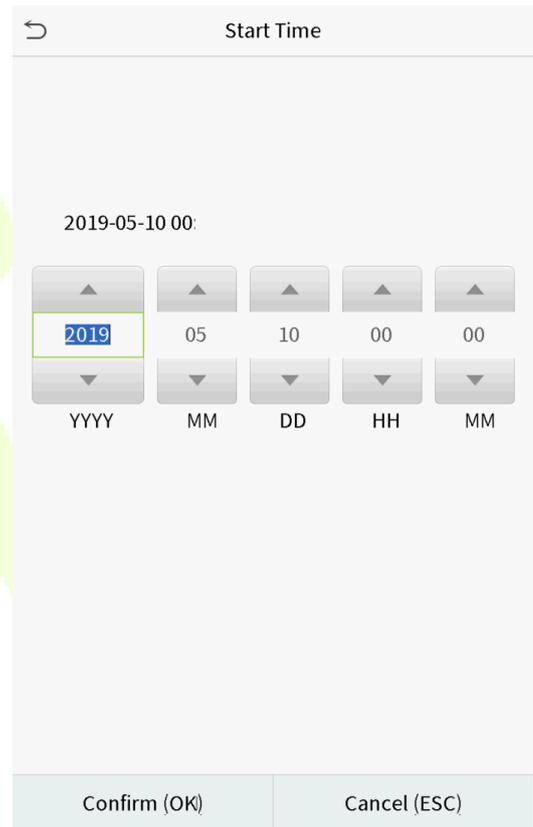
<b>Delete User Photo</b>	Deletes all the user photos in the device.
<b>Delete Wallpaper</b>	Deletes all the wallpapers in the device.
<b>Delete screen savers</b>	Deletes all the screen savers in the device.

**Note:** When deleting the attendance data/access records, attendance photos or blacklisted photos, you may select Delete All or Delete by Time Range. If you select Delete by Time Range, you need to set a specific time range to delete all the data with the period.

Select Delete by Time Range.



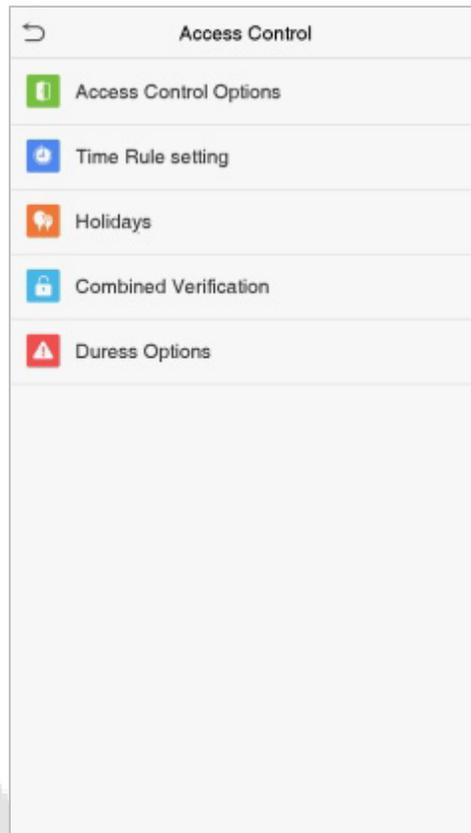
Set the time range and click OK.



## 9 Access Control

The Access Control function is used to schedule the door opening time, locks control and other parameter settings related to access control.

Click **Access Control** on the main menu interface.



**To obtain access, the following criteria's must be satisfied:**

1. The current door unlock time should be within any valid time zone of the user time period.
2. The user's group must be in the door unlock combination (when there are other groups in the same access combination, the verification of members of those groups are also required to unlock the door).

In default settings, the new users are allocated into the first group with the default group time zone and access combination as "1" and set to an unlocking state.

## 9.1 Access Control Options

To set the parameters of the access control, click **Access Control Options** on the Access Control interface.

Access Control Options	
Door Lock Delay (s)	10
Door Sensor Delay (s)	10
Door Sensor Type	Normal Close (NC)
Door Alarm Delay(s)	30
Retry Times To Alarm	3
Normal close time period	None
Normal open time period	None
Auxiliary input configuration	
Valid holidays	<input type="checkbox"/>
Speaker Alarm	<input type="checkbox"/>
Reset Access Setting	

Feature	Description
<b>Gate control mode★</b>	This feature decides whether to turn on the gate control mode or not. When set to ON, this interface will remove the Door lock relay, Door sensor relay, and Door sensor type function.
<b>Door Lock Delay (s)</b>	The length of time that the device controls the electric lock to be unlocked. The valid time range is 1 to 10 seconds; 0 second represents that the function is disabled.
<b>Door Sensor Delay (s)</b>	If the door is not closed and locked after opening for a certain duration (Door Sensor Delay), an alarm will be triggered. The valid range of Door Sensor Delay is 1 to 255 seconds.
<b>Door Sensor Type</b>	There are three types: None, Normal Open, and Normal Close. None means the door sensor is not in use; Normal Open means the door is always opened when electricity is on; Normal Close means the door is always closed when electricity is on.
<b>Door Alarm Delay (s)</b>	When the state of the door sensor is inconsistent with that of the door sensor type, an alarm will be triggered after a specific time period, i.e. the Door Alarm Delay. The valid value ranges from 1 to 999 seconds. 0 indicates an immediate alarm.

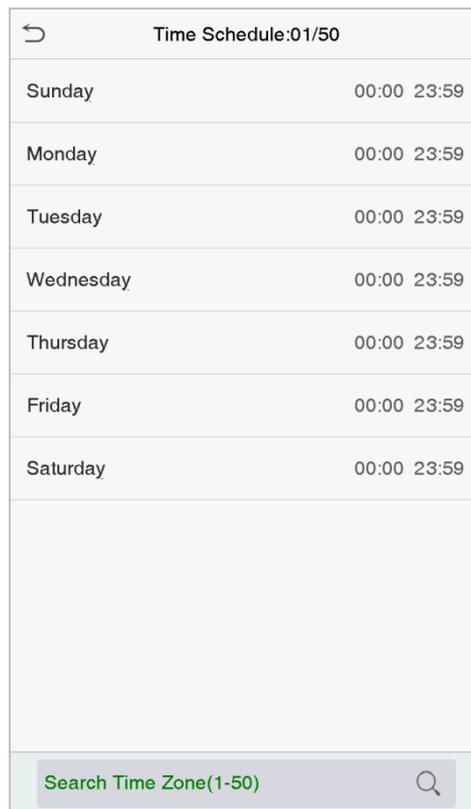
<b>Retry Times to Alarm</b>	When the number of failed verifications reaches a predefined value, which ranges from 1 to 9 times, an alarm will be triggered. If the value is set as "None", the alarm will never be triggered due to failed verifications.
<b>Door available time period★</b>	This function sets the time period for the door so that the door is available only during this time period.
<b>Normal Close Time Period</b>	Time period is scheduled for the "Normal Close" mode so that no one can gain access during this period.
<b>Normal Open Time Period</b>	Time period is scheduled for the "Normal Open" mode so that the door is always unlocked during this period.
<b>Master device★</b>	When setting up the Master and Slave, the status of the master can be set to out or in. <b>Out:</b> The record verified on the host is the exit record. <b>In:</b> The record verified on the host is the entry record.
<b>Auxiliary input configuration</b>	Set the door unlock time period and auxiliary output type of the auxiliary device. Auxiliary output types include None, Trigger door open, Trigger Alarm, Trigger door open and Alarm.
<b>Valid holidays</b>	To set if Normal Close Period or Normal Open Period settings are valid during the holiday time period. Choose ON to enable the functions during a holiday.
<b>Speaker Alarm</b>	To transmit a sound alarm or disable the alarm from the local. When the door is closed or the verification is successful, the system will cancel the alarm from the local.
<b>Reset Access Setting</b>	The restored access control parameters include door lock delay, door sensor delay, door sensor type, normal close time period, normal open time period, auxiliary input configuration and alarm. However, the access control data in Data Mgt. is excluded.

## 9.2 Time Schedule

The entire system can define up to 50 time periods. Each time period represents seven time zones, i.e. one week, and each time zone is a valid time period within 24 hours per day. User can only verify within the valid time period. Each time zone format of the time period is HH MM-HH MM, which is accurate to minutes according to the 24-hour clock.

Click **Time Schedule** on the Access Control interface.

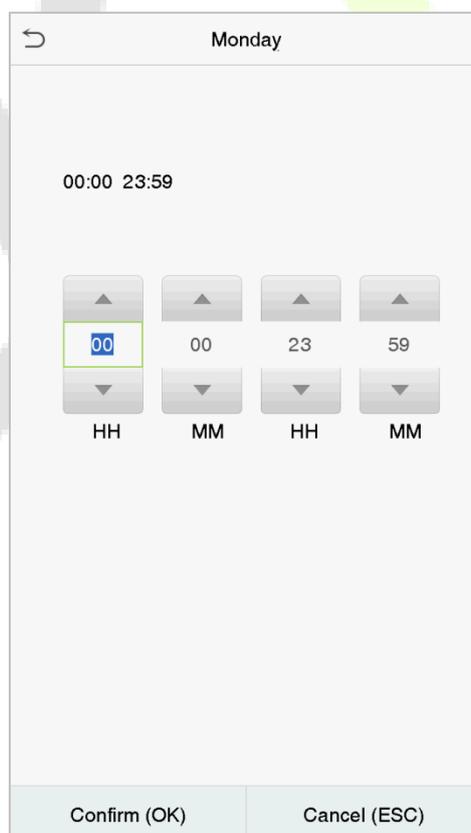
1. Click the grey box to search for a time zone. Enter the number of time zone (maximum: 50 zones).



Day	Start Time	End Time
Sunday	00:00	23:59
Monday	00:00	23:59
Tuesday	00:00	23:59
Wednesday	00:00	23:59
Thursday	00:00	23:59
Friday	00:00	23:59
Saturday	00:00	23:59

Search Time Zone(1-50) 🔍

2. Click the date on which time zone settings is required. Enter the starting and ending time, and then press **OK**.



Monday

00:00 23:59

▲	▲	▲	▲
00	00	23	59
▼	▼	▼	▼
HH	MM	HH	MM

Confirm (OK)      Cancel (ESC)

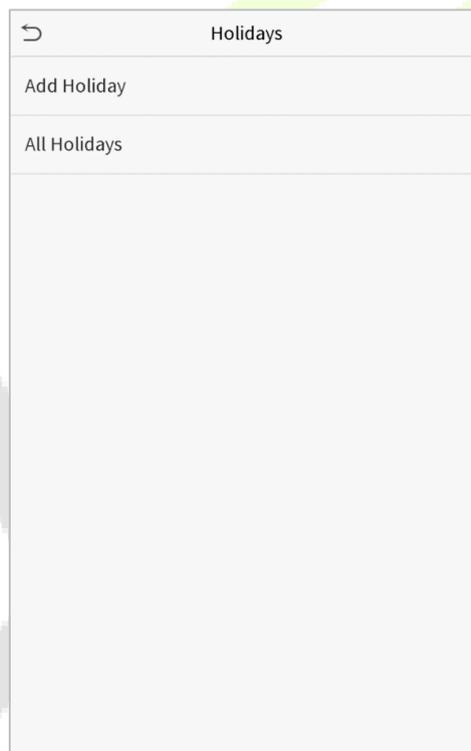
**Notes:**

1. When the ending time is earlier than the starting time, such as 23:57~23:56, it indicates that access is prohibited all day; when the ending time is later than the starting time, such as 00:00~23:59, it indicates that the interval is valid.
2. The effective time period to unlock the door is open all day (00:00~23:59) or when the ending time is later than the starting time, such as 08:00~23:59.
3. The default time zone 1 indicates that the door is open all day long.

## 9.3 Holiday Settings

Whenever there is a holiday, you may need a special access time; but changing everyone's access time one by one is extremely cumbersome. So, you can set a holiday access time which applies to all the employees, and the user will be able to open the door during the holidays.

Click **Holidays** on the Access Control interface.



### **Add a New Holiday**

Click **Add Holiday** on the Holidays interface and set the holiday parameters.

Holidays	
No.	1
Start Date	Undefined
End Date	Undefined
Time Period	1

### **Edit a Holiday**

On the Holiday interface, select a holiday to be modified. Click **Edit** to modify the holiday parameters.

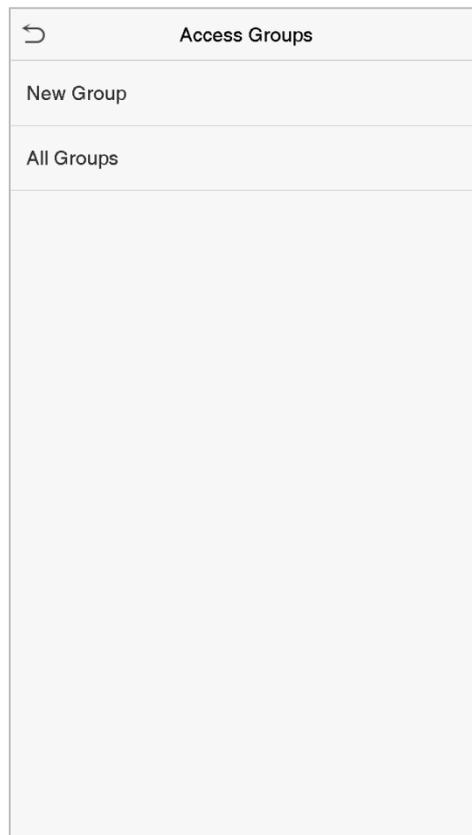
### **Delete a Holiday**

On the Holidays interface, select a holiday to be deleted and click **Delete**. Click **OK** to confirm the deletion. After deletion, this holiday is no longer displayed on All Holidays interface.

## **9.4 Access Groups**

The Access Groups easily manage the users in different access groups. The Access Group settings such as access time zones are applicable to all the members in the group by default. However, users may manually set the time zones as needed. User authentication takes precedence over group authentication when the group authentication modes overlap with the individual authentication methods. Each group can set a maximum of three time zones. By default, newly enrolled users are assigned to Access Group 1; they can also be assigned to other access groups.

Click **Access Groups** on the Access Control interface.



## **Add a New Group**

Click **New Group** on the Access Groups interface and set the access group parameters.

Access Groups	
No.	2
Verification Mode	Password/Fingerprin...
Time Period 1	1
Time Period 2	0
Time Period 3	0
Include Holidays	<input type="checkbox"/>

### **Note:**

1. There is a default access group numbered 1, which cannot be deleted but can be modified.
2. A number cannot be modified after being set.
3. When the holiday is set to be valid, personnel in a group may only open the door when the group time zone overlaps with the holiday time period.
4. When the holiday is set to be invalid, the access control time of the personnel in a group is not affected during holidays.

## **Edit a Group**

On the **All Groups** interface, select the access group item to be modified. Click **Edit** and modify the access group parameters.

## **Delete a Group**

On the **All Groups** interface, select the access group item to be deleted and click **Delete**. Click OK to confirm the deletion. The deleted access group is no longer displayed in All Groups.

## 9.5 Combined Verification Settings

Access groups are arranged into different door-unlocking combinations to achieve multiple verifications and strengthen security.

In a door-unlocking combination, the range of the combined number  $N$  is  $0 \leq N \leq 5$ , and the number of members  $N$  may all belong to one access group or may belong to five different access groups.

Click **Combined Verification** on the Access Control interface.

Combined Verification	
1	01 02 00 00 00
2	00 00 00 00 00
3	00 00 00 00 00
4	00 00 00 00 00
5	00 00 00 00 00
6	00 00 00 00 00
7	00 00 00 00 00
8	00 00 00 00 00
9	00 00 00 00 00
10	00 00 00 00 00
<input type="text"/>	

Click the door-unlocking combination to be set. Click the up and down arrows to enter the combination number, then press **OK**.

### Examples:

The door-unlocking combination 1 is set as (01 03 05 06 08), indicating that the unlocking combination 1 consists of 5 people, and the 5 individuals are from 5 groups, namely, access control group 1 (AC group 1), AC group 3, AC group 5, AC group 6, and AC group 8, respectively.

The door-unlocking combination 2 is set as (02 02 04 04 07), indicating that the unlocking combination 2 consists of 5 people; the first two are from AC group 2, the next two are from AC group 4, and the last person is from AC group 7.

The door-unlocking combination 3 is set as (09 09 09 09 09), indicating that there are 5 people in this combination; all of which are from AC group 9.

The door-unlocking combination 4 is set as (03 05 08 00 00), indicating that the unlocking combination 4 consists of three people. The first person is from AC group 3, the second person is from AC group 5, and the third person is from AC group 8.

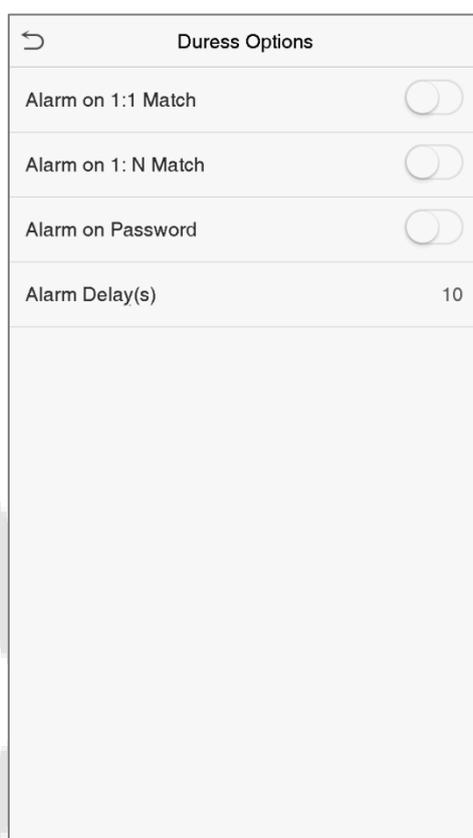
### Delete a door-unlocking combination

Set all the group number as 0 if you want to delete the door-unlocking combinations.

## 9.6 Duress Options Settings

If a user activated the duress verification function with a specific authentication method(s), when he/she is under threat during authentication with such a method, the device will unlock the door as usual, but at the same time, a signal will be sent to trigger the alarm.

Click **Duress Options** on the Access Control interface.



Feature	Description
<b>Alarm on 1:1 Match</b>	When a user uses any fingerprint to perform the 1:1 verification, an alarm signal will be generated, otherwise, there will be no alarm signal.
<b>Alarm on 1:N Match</b>	When a user uses any fingerprint to perform 1:N verification, an alarm signal will be generated, otherwise, there will be no alarm signal.
<b>Alarm on Password</b>	When a user uses the password verification method, an alarm signal will be generated, otherwise, there will be no alarm signal.

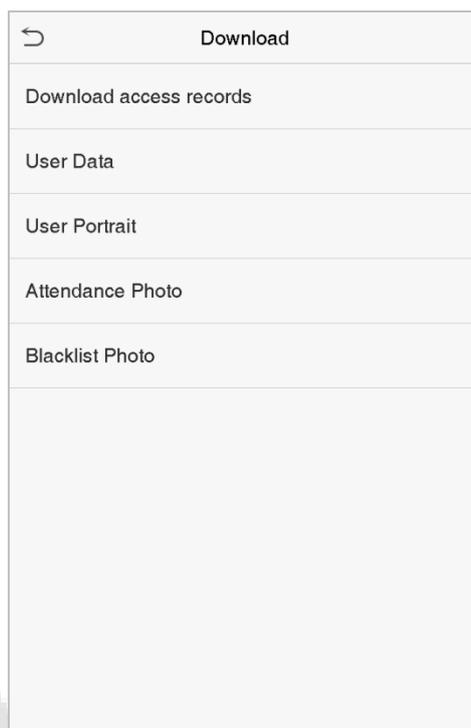
<b>Alarm Delay (s)</b>	Alarm signal will not be transmitted until the alarm delay time is elapsed. The value ranges from 1 to 999 seconds.
<b>Duress Password★</b>	Initially, the user sets the 6-digit duress password. When the user enters this duress password for verification, an alarm signal will be generated.



## 10 USB Manager

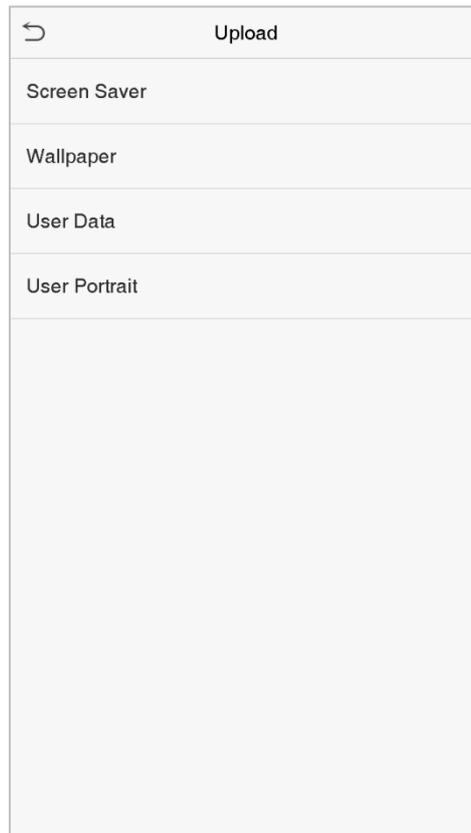
You can download the user information, access data and other data to a USB drive for further processing. Before uploading or downloading data from or to the USB drive, insert the USB drive into the USB slot first. Click the **USB Manager** on the main menu interface.

### 10.1 Download



Feature	Description
<b>Download access records</b>	Downloads the access data within a specified time period or all the data to a USB drive
<b>User Data</b>	Downloads all the user information from the device to a USB drive
<b>User Portrait</b>	Downloads all the user images from the device to a USB drive
<b>Attendance Photo</b>	Downloads the attendance photos stored in the device within a specified time period or all the attendance photos from the device to a USB drive. The default image format is JPG
<b>Blacklist Photo</b>	Downloads the blacklisted photos taken after failed verifications within a specified time period or all the pictures taken after failed verifications from the device to a USB drive

## 10.2 Upload

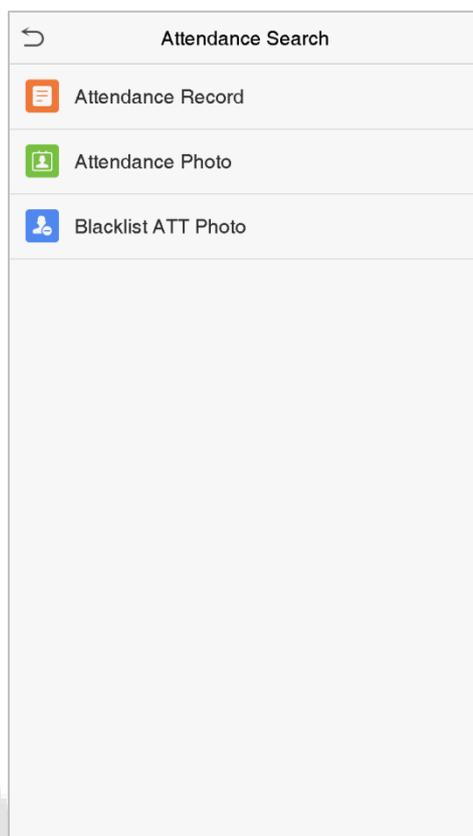


Feature	Description
<b>Screen Saver</b>	Uploads a screen saver from a USB drive to the device. Before uploading, you may select <b>Upload selected picture</b> or <b>Upload all pictures</b> .
<b>Wallpaper</b>	Uploads a wallpaper from a USB drive to the device. Before uploading, you may select <b>Upload selected picture</b> or <b>Upload all pictures</b> . The images will be displayed on the screen after manual settings.
<b>User Data</b>	Uploads all the user information from a USB drive to the device.
<b>User Portrait</b>	Uploads a JPG picture named with a user ID from a USB drive to the device. Before uploading, you may select <b>Upload Current Picture</b> or <b>Upload All Pictures</b> .

## 11 Attendance Search

When the identity of a user is verified, the attendance record will be saved in the device. This function enables users to check their attendance records.

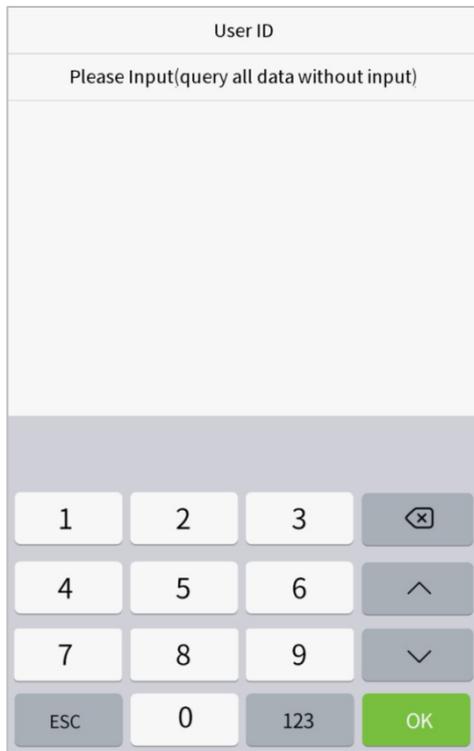
Click **Attendance Search** on the main menu interface.



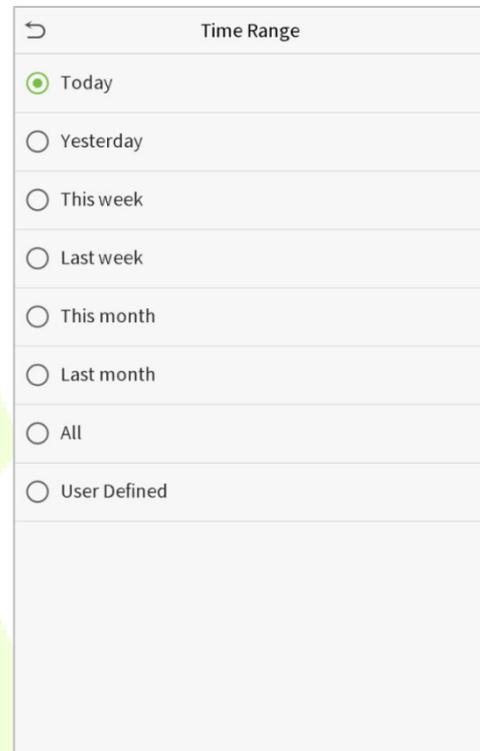
The process of searching attendance and blacklist photos is similar to search the access records. The following is an example of searching for access records.

On the Attendance Search interface, click **Access Records**.

1. Enter the user ID to be searched and click **OK**.  
Select the time range in which the records you want to search for.
2. If you want to search the records of all users, click OK without entering any user ID.



The screenshot shows a mobile interface for entering a User ID. At the top, there is a header labeled "User ID". Below the header, the text "Please Input(query all data without input)" is displayed. The main area is a large, empty text input field. At the bottom, there is a numeric keypad with buttons for digits 1 through 9, 0, and a green "OK" button. There are also buttons for "ESC", "123", and navigation arrows (back, forward, and a clear button).



The screenshot shows a mobile interface for selecting a Time Range. At the top, there is a header labeled "Time Range". Below the header, there is a list of radio button options: "Today", "Yesterday", "This week", "Last week", "This month", "Last month", "All", and "User Defined". The "Today" option is selected, indicated by a green dot. There is a back arrow button at the top left of the screen.

3. Click the record list in green to view its details.

4. The below figure shows the details of the selected record.

Personal Record Search		
Date	User ID	Attendance
06-14		Number of Records:12
	1	16:40 16:40 16:40 16:40 16:40 16:40 16:40 16:36 16:30 16:12 16:10 16:10
06-12		Number of Records:20
	1	14:43 14:43 14:43 14:43 14:43 14:43 14:43 14:43 14:43 14:43 14:43 14:43 14:15 14:08 14:08 14:07 13:58 13:58 13:58 13:54
06-11		Number of Records:06
	1	19:39 18:36 18:36 18:36 18:36 17:14

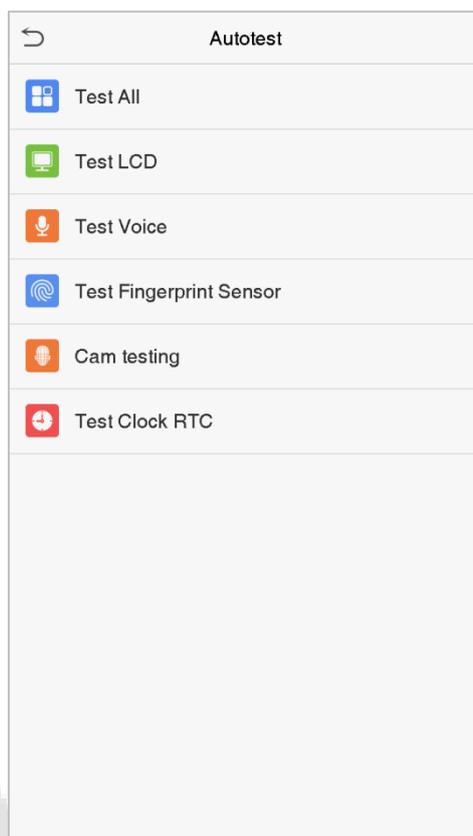
Personal Record Search				
User ID	Name	Attendance	Mode	State
1	A	06-11 19:39	15	1
1	A	06-11 18:36	15	255
1	A	06-11 18:36	15	255
1	A	06-11 18:36	15	255
1	A	06-11 18:36	15	1
1	A	06-11 17:14	1	1

Verification Mode : Face    Punch State : Check-Out

## 12 Autotest

The Autotest feature is used to automatically test whether all the modules in the device function properly, including LCD, Voice, Fingerprint sensor★, Camera and real-time clock (RTC).

Click **Autotest** on the main menu interface.

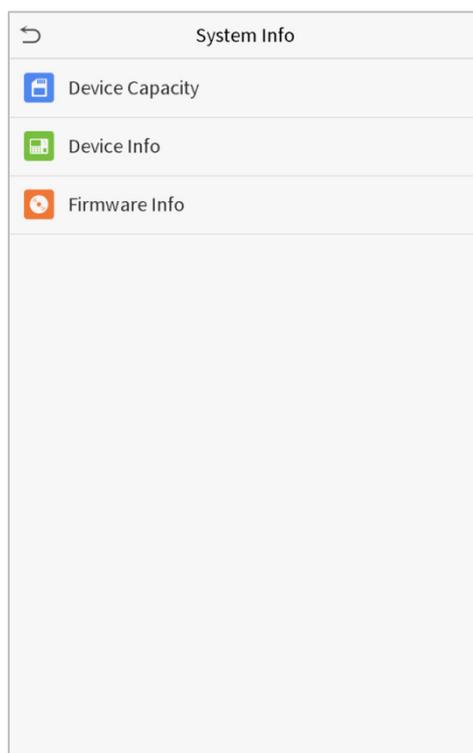


Feature	Description
<b>Test All</b>	To automatically test whether the LCD, Audio, Camera, and RTC are normal.
<b>Test LCD</b>	To automatically test the display effect of LCD screen by displaying full-color, pure white, and pure black to check whether the screen displays the colors normally.
<b>Test Voice</b>	To automatically test whether the audio files stored in the device are complete and the voice quality is good.
<b>Test Fingerprint Sensor★</b>	To test the fingerprint sensor by pressing a finger on the scanner to check if the acquired fingerprint image is clear. When you are pressing a finger on the scanner, the fingerprint image will display on the screen.
<b>Camera testing</b>	To test if the camera functions properly by checking the pictures taken to see if they are clear enough.
<b>Test Clock RTC</b>	To test whether the clock works normally and accurately with a stopwatch. Touch the screen to start counting and press it again to stop counting.

## 13 System Information

In the system information option, you can view the storage status, version information of the device, and so on.

Click **System Info** on the main menu interface.



Feature	Description
<b>Device Capacity</b>	Displays the current device's user storage, palm, password, fingerprint★ and face storage, Administrator details, Access records, attendance and blacklist photos, and user photos.
<b>Device Info</b>	Displays the Device's name, Serial number, MAC address, Face algorithm version information, Platform information, and manufacturer details.
<b>Firmware Info</b>	Displays the firmware version and other version information of the device.

## 14 Connection to ZKBioSecurity Software

### 14.1 Set the Communication Address

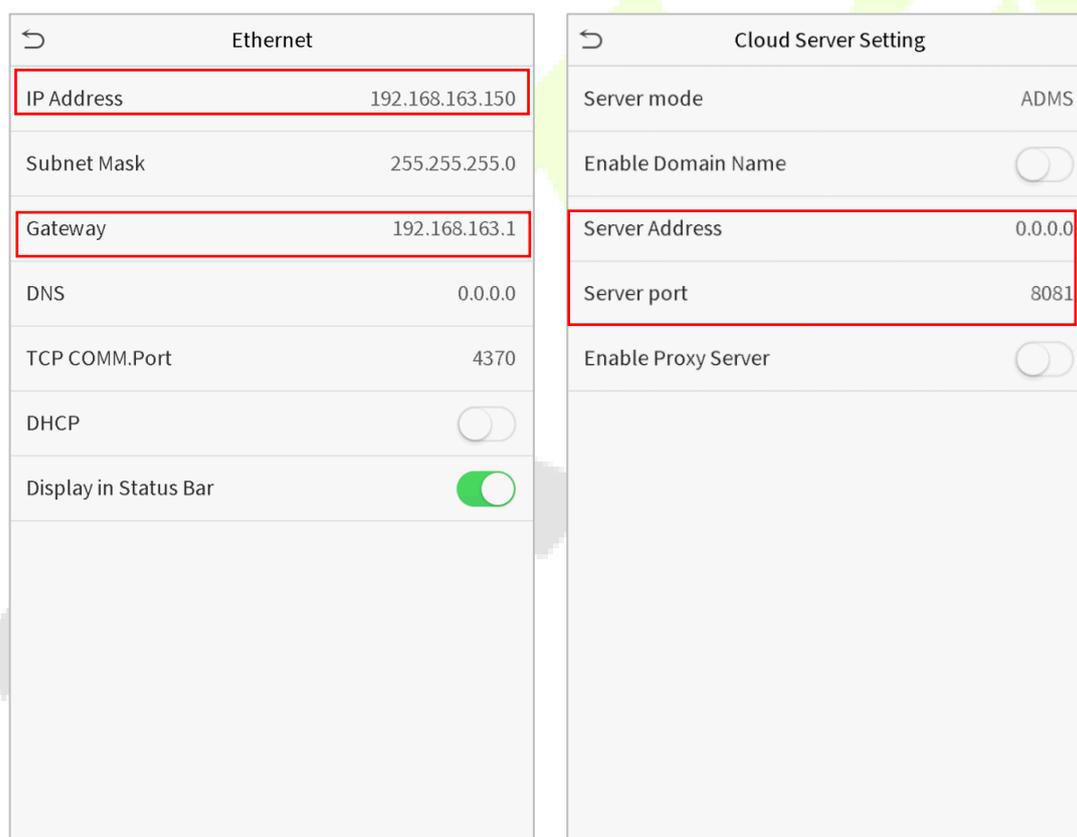
#### In Device

Click **COMM.** > **Ethernet** in the main menu to set the IP address and Gateway of the device. (**Note:** The IP address should be able to communicate with the ZKBioSecurity Server, preferably in the same network segment with the Server address)

In the main menu, click **COMM.** > **Cloud Server Setting** to set the Server address and Server port.

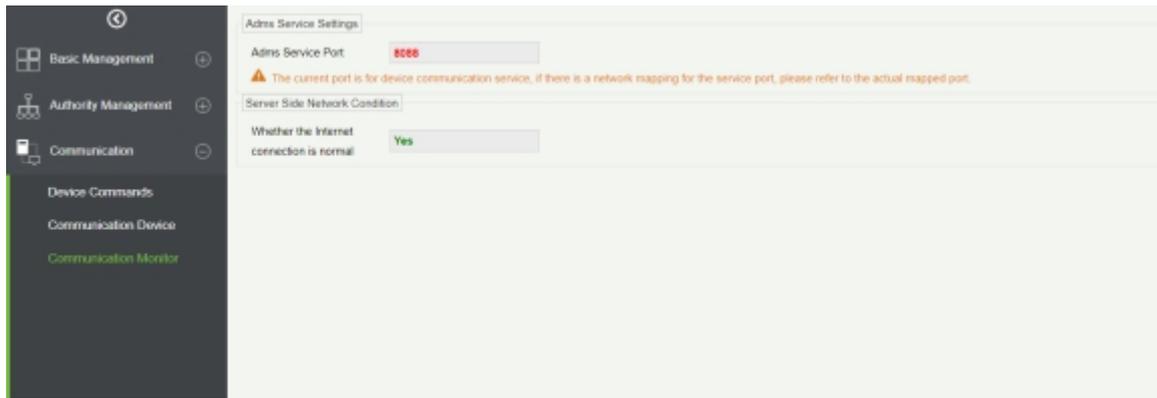
**Server Address:** Set the IP address of the ZKBioSecurity Server.

**Server Port:** Set the Server port of ZKBioSecurity (The default is 8088).



#### In Software

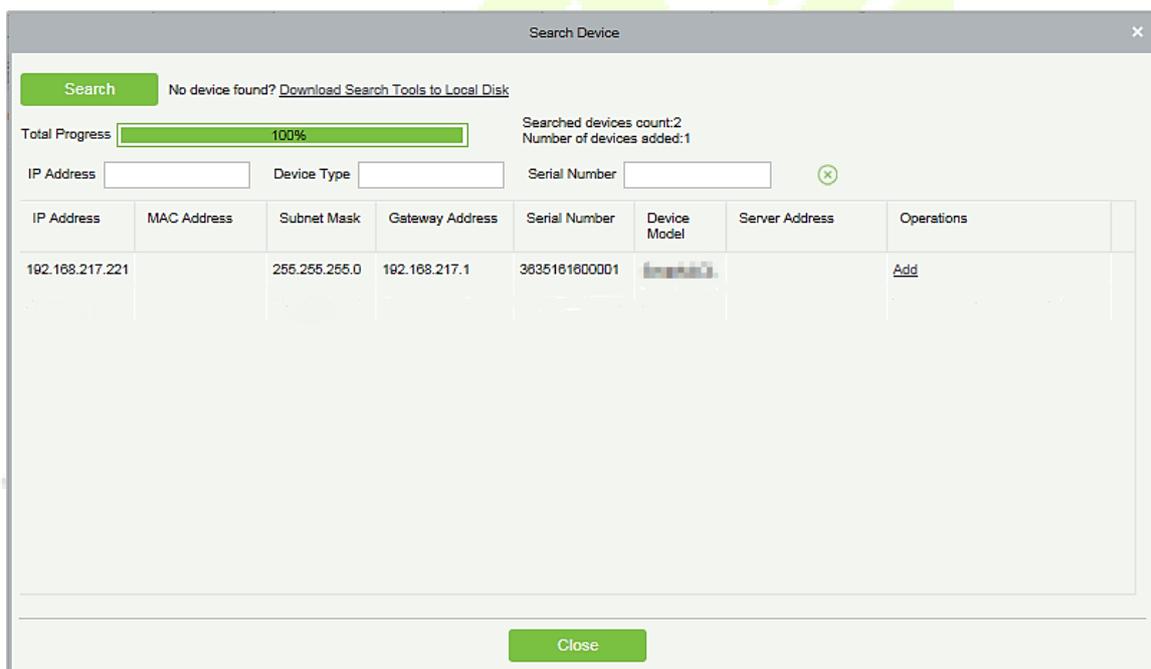
Login to ZKBioSecurity software, click **System** > **Communication** > **Communication Device** to set the ADMS service port, as shown in the figure below:



## 14.2 Add a Device to the Software

You can add a device by the searching process. The procedure is as follows:

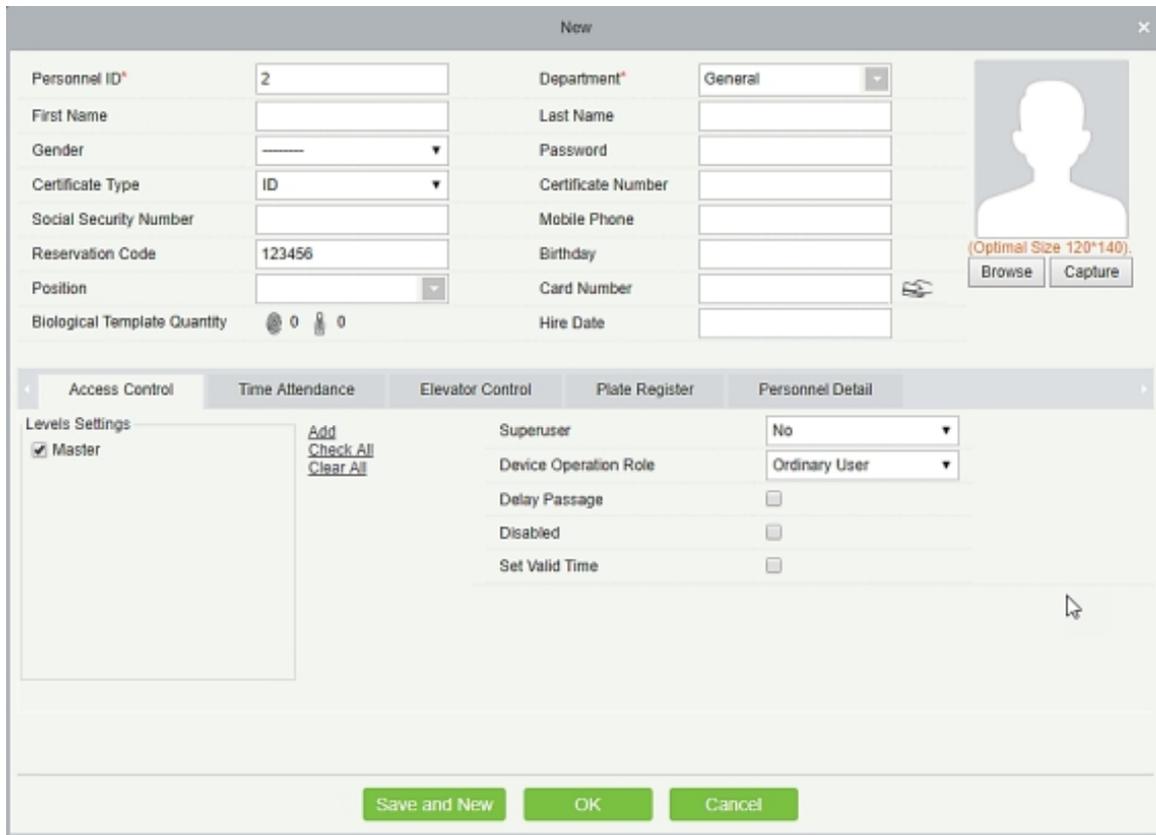
1. Click **Access Control** > **Device** > **Search Device** to open the Search interface.
2. Click **Search**, and it will prompt [**Searching.....**].
3. After searching, the list and the total number of access controllers will be displayed.



4. Click **Add** to add the required device.

## 14.3 Add Personnel on the Software

1. Click **Personnel** > **Person** > **New** to add new personnel.



The screenshot shows a 'New' personnel form with the following fields and options:

Personnel ID*	2	Department*	General
First Name		Last Name	
Gender	-----	Password	
Certificate Type	ID	Certificate Number	
Social Security Number		Mobile Phone	
Reservation Code	123456	Birthday	
Position		Card Number	
Biological Template Quantity	0 0	Hire Date	

Below the form, there are tabs for 'Access Control', 'Time Attendance', 'Elevator Control', 'Plate Register', and 'Personnel Detail'. The 'Personnel Detail' tab is active, showing:

- Levels Settings:  Master
- Buttons: Add, Check All, Clear All
- Superuser: No
- Device Operation Role: Ordinary User
- Delay Passage:
- Disabled:
- Set Valid Time:

At the bottom, there are three buttons: 'Save and New', 'OK', and 'Cancel'. A 'Browse' button is also visible next to the 'Capture' button for the profile picture.

2. After setting all the parameters, click **OK**.

**Note:** For other specific operations, please refer *ZKBioSecurity User Manual*.

## **Statement on the Right to Privacy**

### **Dear Customers:**

Thank you for choosing this hybrid biometric recognition product, which was designed and manufactured by ZKTeco. As a world-renowned provider of core biometric recognition technologies, we are constantly developing and researching new products, and strive to follow the privacy laws of each country in which our products are sold.

### **We Declare That:**

1. All our civilian fingerprint recognition devices capture only characteristics, not fingerprint images, and do not involve privacy protection.
2. None of the fingerprint characteristics that we capture can be used to reconstruct an image of the original fingerprint, and do not involve privacy protection.
3. As the provider of this device, we will assume no direct or indirect responsibility for any consequences that may result from your use of this device.
4. If you would like to dispute human rights or privacy issues concerning your use of our product, please directly contact your dealer.

Our other law-enforcement fingerprint devices or development tools can capture the original images of citizen's fingerprints. As to whether or not this constitutes an infringement of your rights, please contact your Government or the final supplier of the device. As the manufacturer of the device, we will assume no legal liability.

### **Note:**

The Chinese law includes the following provisions on the personal freedom of its citizens:

1. There shall be no illegal arrest, detention, search, or infringement of persons.
2. Personal dignity is related to personal freedom and shall not be infringed upon.
3. A citizen's house may not be infringed upon.
4. A citizen's right to communication and the confidentiality of that communication is protected by the law.

As a final point, we would like to further emphasize that biometric recognition is an advanced technology that will be certainly used in E-commerce, Banking, Insurance, Judicial, and other sectors in the future. Every year the world is subjected to major losses due to the insecure nature of passwords. The Biometric products serve to protect your identity in high-security environments.

## Eco-friendly Operation



The product's "eco-friendly operational period" refers to the time period during which this product will not discharge any toxic or hazardous substances when used in accordance with the prerequisites in this manual.

The eco-friendly operational period specified for this product does not include batteries or other components that are easily worn down and must be periodically replaced. The battery's eco-friendly operational period is 5 years.

### Hazardous or Toxic substances and their quantities

Component Name	Hazardous/Toxic Substance/Element					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr6+)	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Chip Resistor	×	○	○	○	○	○
Chip Capacitor	×	○	○	○	○	○
Chip Inductor	×	○	○	○	○	○
Diode	×	○	○	○	○	○
ESD component	×	○	○	○	○	○
Buzzer	×	○	○	○	○	○
Adapter	×	○	○	○	○	○
Screws	○	○	○	×	○	○

○ indicates that the total amount of toxic content in all the homogeneous materials is below the limit as specified in SJ/T 11363—2006.

× indicates that the total amount of toxic content in all the homogeneous materials exceeds the limit as specified in SJ/T 11363—2006.

**Note:** 80% of this product's components are manufactured using non-toxic and eco-friendly materials. The components which contain toxins or harmful elements are included due to the current economic or technical limitations which prevent their replacement with non-toxic materials or elements.

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