

User Manual

SF1008-WP

Version: 1.0

Date: May 2019

Important Statement

Thank you for choosing our product. Before using this product, please read this user manual carefully to avoid risks of danger to the users of this product or those nearby and damaging the device. Follow these instructions to ensure that your product functions properly and completes verifications in a timely manner.

Unless authorized by our company, no group or individual shall take excerpts of or copy all or part of these instructions nor transmit the contents of these instructions by any means.

The products described in this manual may include software that is copyrighted by our company and its possible licensors. No one may copy, publish, edit, take excerpts of, decompile, decode, reverse-engineer, rent, transfer, sublicense, or otherwise infringe upon the software's copyright unless authorized by the copyright holder(s). This is subject to relevant laws prohibiting such restrictions.



As this product is regularly updated, we cannot guarantee exact consistency between the actual product and the written information in this manual. Our company claims no responsibility for any disputes that arise due to differences between the actual technical parameters and the descriptions in this document. The manual is subject to change without prior notice.

Contents

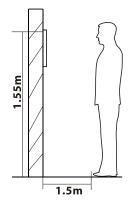
1 Notice for Use	1
1.1 Standing Position, Facial Expression and Standing Posture	1
1.2 Face Registration	2
1.3 Standby Interface	3
1.4 Virtual Keyboard	4
1.5 Verification Mode	5
1.5.1 Password Verification	5
1.5.2 Facial Verification	9
1.5.3 Combined Verification	13
2 Main Menu	14
3 User Management	16
3.1 Adding Users	16
3.2 Search for Users	19
3.3 Edit Users	20
3.4 Deleting Users	21
4 User Role	22
5 Communication Settings	25
5.1 Network Settings	25
5.2 Serial Port Settings	27
5.3 PC Connection	27
5.4 WIFI Setting	28
5.5 Cloud Server Setting	29
5.6 Wiegand Setup	30
6 System Settings	34
6.1 Date and Time	34
6.2 Access Logs Setting	35
6.3 Face Parameters	37
6.4 Factory Reset	38
6.5 Temperature Management	40
7. Personalize Settings	41
7.1 Interface Settings	41
7.2 Voice Settings	43
7.3 Bell Schedules	43
8. Data Management	46
8.1 Delete Data	46
9. Access Control	49
9.1 Access Control Options	50

9.2 Time Rule Setting	51
9.3 Holiday Settings	54
9.4 Combined Verification Settings	56
9.5 Duress Options Settings	57
10. Attendance Search	59
11. Autotest	62
12. System Information	63
13. Connect to ZKBioSecurity Software	64
13.1 Set the Communication Address	64
13.2 Add Device on the Software	65
13.3 Add Personnel on the Software	65
Statement on the Right to Privacy	
Eco-friendly Use	68

1 Notice for Use

1.1 Standing Position, Facial Expression and Standing Posture

The recommended distance



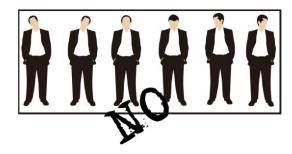
The distance between the device and a user whose height is within 1.55m-1.85m is recommended to be 1.5m. Users may slightly move forwards and backwards to improve the quality of facial images captured.

Facial expression and standing posture









Note: During enrolment and verification, please remain natural facial expression and standing posture.

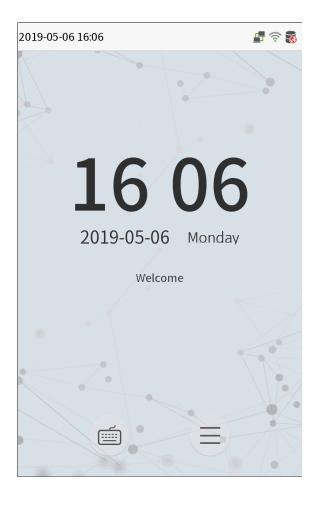
1.2 Face Registration

Try to 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 this:



1.3 Standby Interface

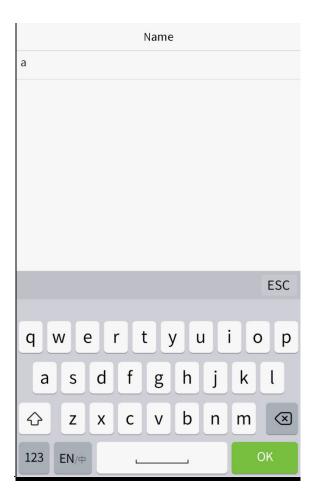
After connecting the power supply, enter the following standby interface:



Notes:

- to enter the User ID input interface.
- 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 super administrator the first time you use the device.

1.4 Virtual Keyboard



Note: The device supports the input of Chinese, English, numbers and symbols. Click [**En**] to switch to 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, virtual keyboard appears. Click [**ESC**] to exit the input.

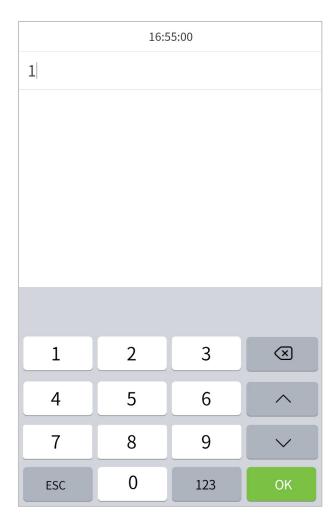
1.5 Verification Mode

1.5.1 Password Verification

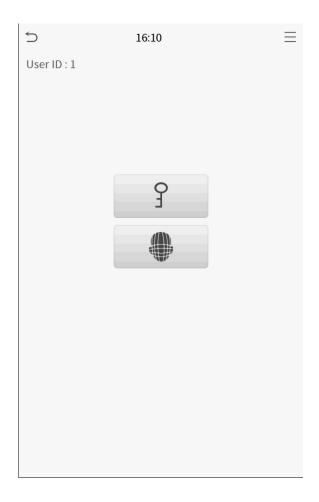
Compare the entered password with the registered User ID and password.

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

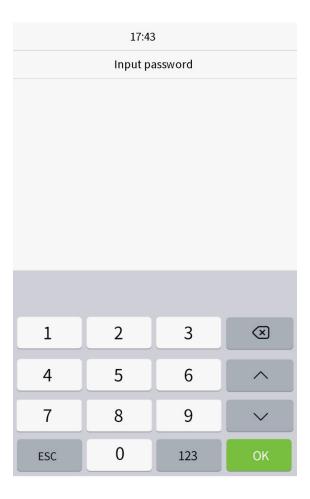
1. Input the user ID and press [OK].



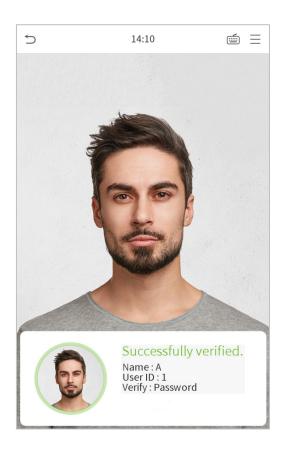
If an employee registers face in addition to password, the following screen will appear. Select the enter password verification mode.



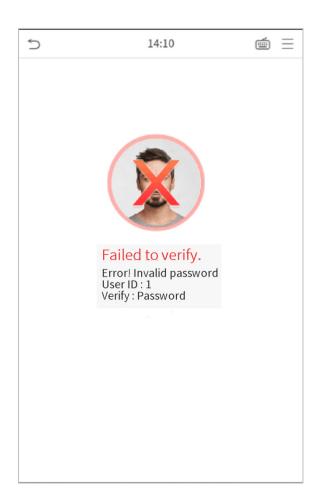
2. Input the password and press [OK].



Verification is successful.



Verification is failed.

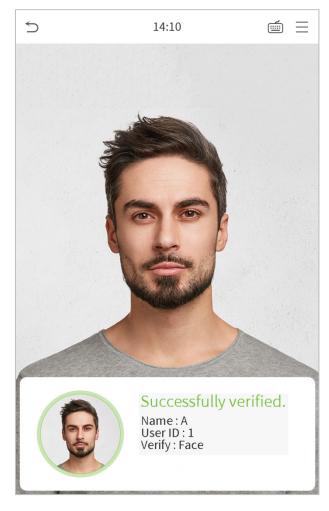


1.5.2 Facial Verification

1:N face verification

Compare the acquired facial images with all face data registered in the device. The following is the pop-up prompt box of comparison result.



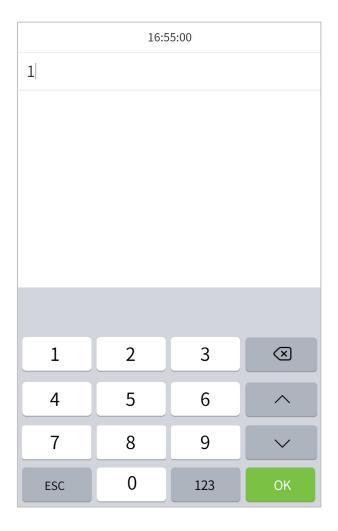


1:1 face verification

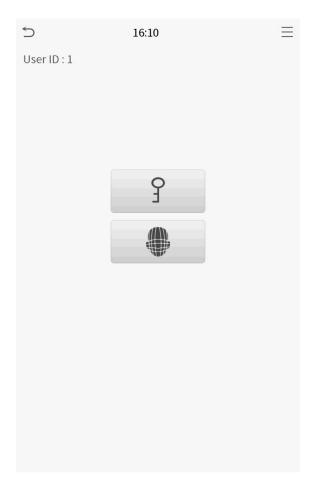
Compare the face captured by the camera with the facial template related to the entered user ID.

on the main interface and enter the 1:1 facial verification mode.

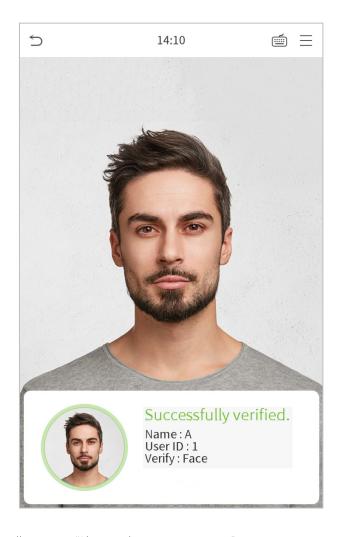
Enter the user ID and click [OK].



If an employee registers password in addition to face, the following screen will appear. Select the enter face verification mode.



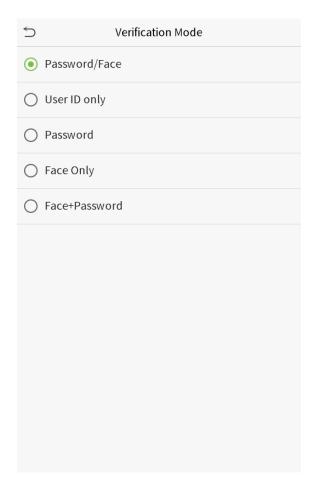
After successful verification, the prompt box "successfully verified" will appear.



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

1.5.3 Combined Verification

To increase security, this device offers the option of using multiple forms of verification methods. A total of 5 different verification combinations can be used, as shown below:



Notes:

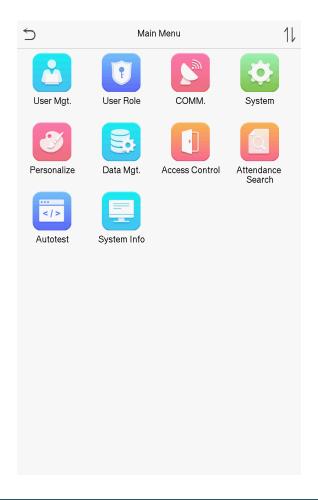
- 1) "/" means "or", and "+" means "and".
- You must register the required verification information before using the combination verification mode, otherwise the verification may fail. For example, if a user uses Face Registration but the verification mode is Face + Password, this user will never pass verification.

2 Main Menu





Press on the initial interface to enter the main menu, as shown below:



Items	Descriptions
User Mgt.	To add, edit, view, and delete basic information about a user.
User Role	To set the permission scope of the custom role and enroller, that is, the rights to operate the system.
COMM.	To set the relevant parameters of network, serial communication, PC connection, WIFI, cloud server and Wiegand.
System	To set parameters related to the system, including date & time, access records, facial templates, resetting to factory settings and temperature management.
Personalize	To customize settings of interface display, audio and bell.
Data Mgt.	To delete all relevant data in the device.
Access Control	To set the parameters of the lock and the relevant access control device.
Attendance Search	Query the specified access record, check attendance photos and blacklist photos.
Autotest	To automatically test whether each module functions properly, including the screen, audio, camera and real-time clock.

System I	nfo
----------	-----

To view data capacity, device and firmware information of the current device.

3 User Management

3.1 Adding Users

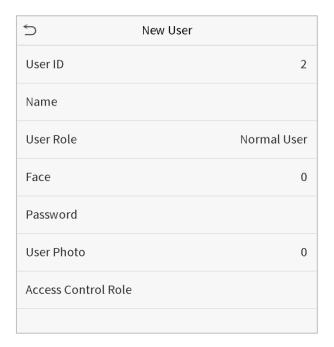
Click **User Mgt.** on the main menu.



Click New User.

Register a User ID and Name

Enter the user ID and name.



Notes:

- 1) A user name may contain 17 characters.
- 2) The user ID may contain 1-9 digits by default.
- 3) During the initial registration, you can modify your ID, which cannot be modified after registration.
- 4) If a message "The ID is already existed" pops up, you must choose another ID.

Setting the User Role

There are two types of user accounts: the **normal users** 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 authentication verifications. The administrator owns all management privileges. If a custom role is set, you can also select **custom** role permissions for the user.

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



Note: If the selected user role is the Super Admin, the user must pass 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 to 1.5 Verification Method.

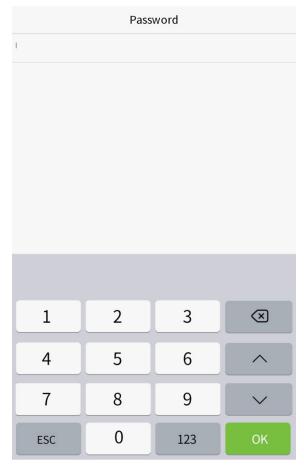
Register face

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



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

Register user photo

When a user registered with a photo passes the authentication, 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.

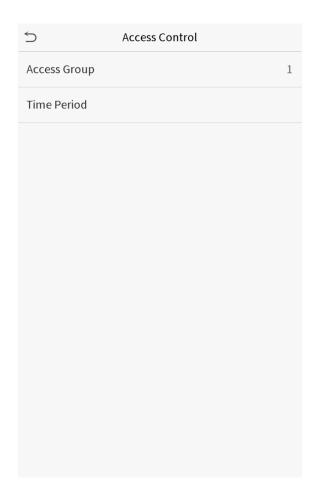
Note: While registering a face, the system will automatically capture a picture as the user photo. If you do not want to register a user photo, the system will automatically set the picture captured as the default photo.

Access Control Role

User access control sets the door unlocking rights of each person, including the group and the time period that the user belongs to.

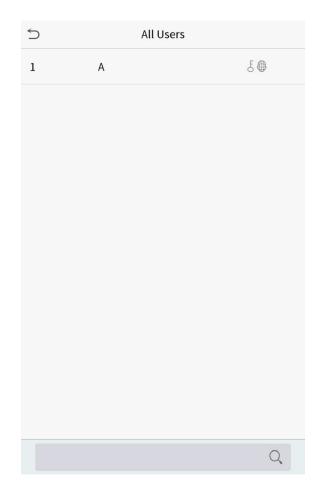
Click **Access Control Role** > **Access Group**, assign the registered users to different groups for better management. New users belong to Group 1 by default, and can be reassigned to other groups. The device supports up to 99 access control groups.

Click **Time Period**, select the time period to use.



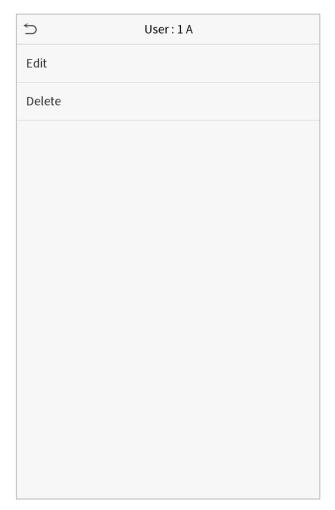
3.2 Search for Users

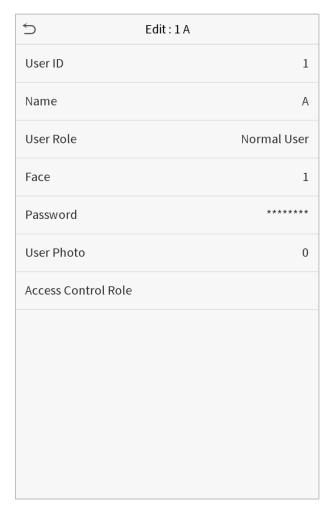
Click the search bar on the user list and enter the retrieval keyword (The keyword may be an ID, surname or full name.). The system will search for the users related to the information.



3.3 Edit Users

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





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. Operation method refers to "3.1 new users".

3.4 Deleting Users

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

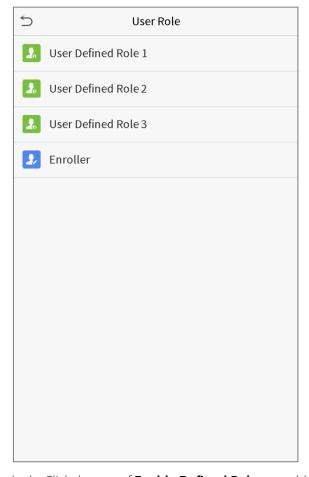
Note: If you select **Delete User**, all information of the user will be deleted.

4 User Role

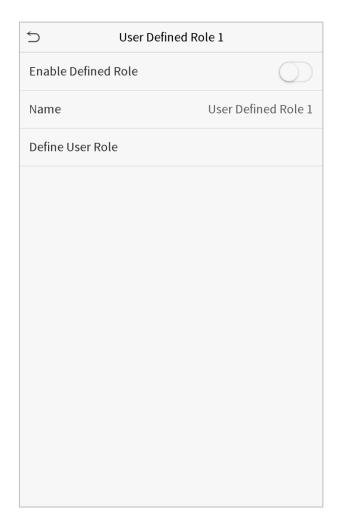
If you need to assign some specific permissions to certain users, you may edit the "User Defined Role" under the User Role menu.

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

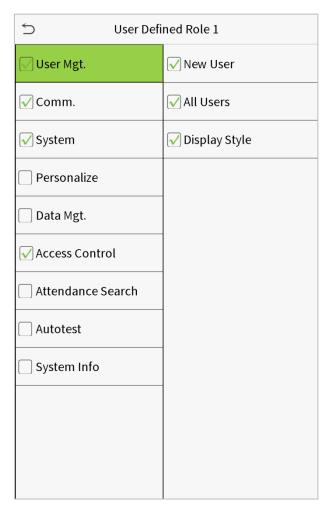
Click **User Role** on the main menu interface.



1. Click any item 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.



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



Note: During 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.

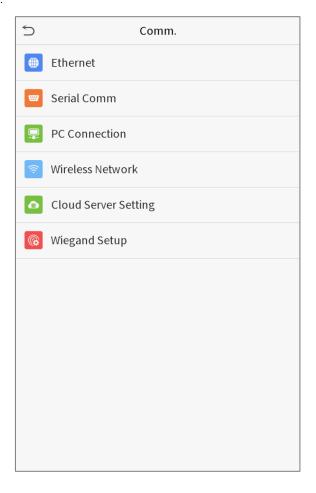


If no super administrator is registered, the device will prompt "Please register super administrator user first!" after clicking the enable bar.

5 Communication Settings

Set parameters of the network, serial communication, PC connection, WIFI, 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 network settings and ensure that the device and the PC are connecting to the same network segment.

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

5	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	
Display in Status Bar	

Item	Decriptions
IP Address	The factory default value is 192.168.1.201. Please adjust them according to the
ii Address	actual network situation.
Subnet Mask	The factory default value is 255.255.255.0. Please adjust them according to the
Subilet Mask	actual network situation.
Gateway	The factory default address is 0.0.0.0. Please adjust them according to the actual
Gateway	network situation.
DNS	The factory default address is 0.0.0.0. Please adjust them according to the actual
D143	network situation.
TCP COMM. Port	The factory default value is 4370. Please adjust them according to the actual
TCP COMM. POR	network situation.
DHCP	Dynamic Host Configuration Protocol, which is to dynamically allocate IP
DITCE	addresses for clients via server.
Display in Status Bar	To set whether to display the network icon on the status bar.

5.2 Serial Port Settings

To establish communication with the device through a serial port (RS232/RS485), you need to configure Serial Comm.

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

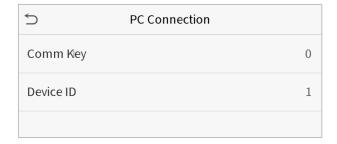


Item	Descriptions
Serial port	Select whether to use RS232 or RS485 for communication.
Baudrate	The rate of the communication with PC; there are four options of baud: 115200 (default),
	57600, 38400 and 19200.

5.3 PC Connection

To improve the security of data, please 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.

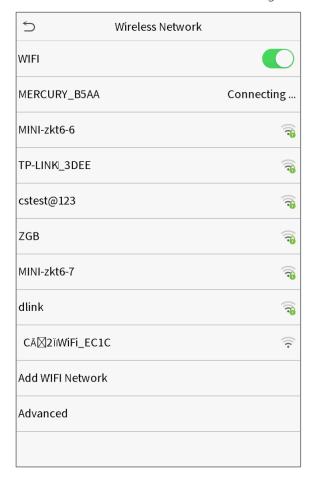
Click **PC Connection** on the Comm. Settings interface.

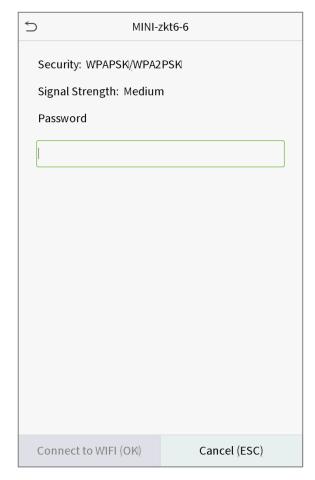


Item	Descriptions
Comm Kov	Comm Key: The default password is 0, which can changed. The Comm Key may
Comm Key	contain 1-6 digits.
	Identity number of the device, which ranges between 1 and 254. If the
Device ID	communication method is RS232/RS485, you need to input this device ID in the
	software communication interface.

5.4 WIFI Setting

Click Wireless Network on the Comm. Settings interface.



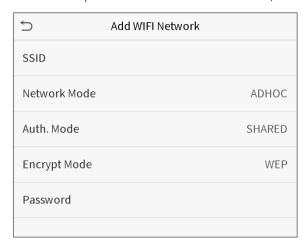


When WIFI is enabled, tap the searched network. Enter the password, and tap Connect to WIFI (OK). The connection succeeds, with icon simple displayed on the status bar.

Adding WIFI Network

If the desired Wi-Fi network is not in on the list, you can add the Wi-Fi network manually.

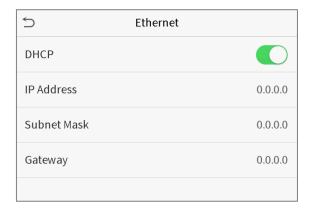
Click and Add WIFI Network. Enter the parameters of the Wi-Fi network. (The added network must exist.)



After adding, find the newly added Wi-Fi network in list and connect to it in the above way.

Advanced

This is used to set Wi-Fi network parameters.

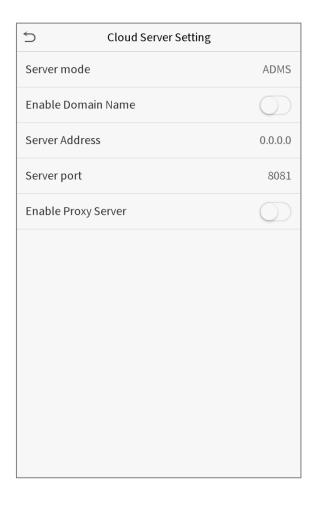


Item	Description
DHCP	Short for Dynamic Host Configuration Protocol, which involves allocating dynamic
	IP addresses to network clients.
IP Address	IP address of the Wi-Fi network.
Subnet Mask	Subnet mask of the Wi-Fi network.
Gateway	Gateway address of the Wi-Fi network.

5.5 Cloud Server Setting

This represents settings used for connecting with the ADMS server.

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

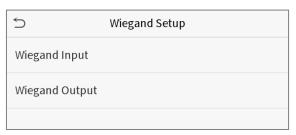


lt	em	Description
Enable Domain		When this function is enabled, the domain name mode "http://" will be
Name	Server Address	used, such as http://www.XYZ.com, while "XYZ" denotes the domain
ivallie		name when this mode is turned ON.
Disable Domain	Server Address	IP address of the ADMS server.
Name	Server Port	Port used by the ADMS server.
Enable Proxy		When you choose to enable the proxy, you need to set the IP address
Server		and port number of the proxy server.

5.6 Wiegand Setup

To set the Wiegand input and output parameters.

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



Wiegand input

Wiegand Format	
Wiegand Bits	26
Pulse Width(us)	100
Pulse Interval(us)	1000
ID Type	Badge Number

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

Definitions of various common Wiegand formats:

Wiegand Format	Definitions
Wiegand26	ECCCCCCCCCCCCCCCCC
	Consists of 26 bits of binary code. The 1st bit is the even parity bit of the 2nd to 13th bits,
	while the 26 th bit is the odd parity bit of the 14 th to 25 th bits. The 2 nd to 25 th bits are the card
	numbers.
Wiegand26a	ESSSSSSSCCCCCCCCCCCCC
	Consists of 26 bits of binary code. The 1st bit is the even parity bit of the 2nd to 13th bits,

	while the 26 th bit is the odd parity bit of the 14 th to 25 th bits. The 2 nd to 9 th bits are the site
	codes, while the 10 th to 25 th bits are the card numbers.
Wiegand34	ECCCCCCCCCCCCCCCCCCCCCCCCC
	Consists of 34 bits of binary code. The 1 st bit is the even parity bit of the 2 nd to 17 th bits,
	while the 34 th bit is the odd parity bit of the 18 th to 33 rd bits. The 2 nd to 25 th bits are the card
	numbers.
Wiegand34a	ESSSSSSCCCCCCCCCCCCCCCCCCC
	Consists of 34 bits of binary code. The 1 st bit is the even parity bit of the 2 nd to 17 th bits,
	while the 34 th bit is the odd parity bit of the 18 th to 33 rd bits. The 2 nd to 9 th bits are the site
	codes, while the 10 th to 25 th bits are the card numbers.
Wiegand36	OFFFFFFFFFFFCCCCCCCCCCCCCMME
	Consists of 36 bits of binary code. The 1 st bit is the odd parity bit of the 2 nd to 18 th bits,
	while the 36 th bit is the even parity bit of the 19 th to 35 th bits. The 2 nd to 17 th bits are the
	device codes. The 18 th to 33 rd bits are the card numbers, and the 34 th to 35 th bits are the
	manufacturer codes.
Wiegand36a	EFFFFFFFFFFFFCCCCCCCCCCCCCC
	Consists of 36 bits of binary code. The 1 st bit is the even parity bit of the 2 nd to 18 th bits,
	while the 36 th bit is the odd parity bit of the 19 th to 35 th bits. The 2 nd to 19 th bits are the
	device codes, and the 20 th to 35 th bits are the card numbers.
Wiegand37	OMMMMSSSSSSSSSSSCCCCCCCCCCCCCCCCCCCCCCC
	Consists of 37 bits of binary code. The 1st bit is the odd parity bit of the 2nd to 18th bits,
	while the 37 th bit is the even parity bit of the 19 th to 36 th bits. The 2 nd to 4 th bits are the
	manufacturer codes. The 5 th to 16 th bits are the site codes, and the 21 st to 36 th bits are the
	card numbers.
Wiegand37a	EMMMFFFFFFFSSSSSSCCCCCCCCCCCCCC
	Consists of 37 bits of binary code. The 1 st bit is the even parity bit of the 2 nd to 18 th bits,
	while the 37 th bit is the odd parity bit of the 19 th to 36 th bits. The 2 nd to 4 th bits are the
	manufacturer codes. The 5 th to 14 th bits are the device codes, and15 th to 20 th bits are the
	site codes, and the 21st to 36th bits are the card numbers.
Wiegand50	ESSSSSSSSSSSSSSCCCCCCCCCCCCCCCCCCCCCCCC
	Consists of 50 bits of binary code. The 1st bit is the even parity bit of the 2nd to 25th bits,
	while the 50 th bit is the odd parity bit of the 26 th to 49 th bits. The 2 nd to 17 th bits are the site
	codes, and the 18 th to 49 th bits are the card numbers.
"C "denotes the c	ard number; " E" denotes the even parity bit; " O" denotes the odd parity bit; "F " denotes the

"C "denotes the card number; "E" denotes the even parity bit; "O" denotes the odd parity bit; "F" denotes the facility code; " \mathbf{M} " denotes the manufacturer code; " \mathbf{P} " denotes the parity bit; and " \mathbf{S} " denotes the site code.

Wiegand output

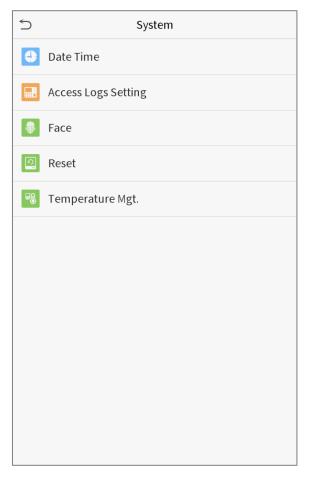
	3
Wiegand Format	
wiegand output bits	26
Failed ID	0
Site Code	0
Pulse Width(us)	100
Pulse interval(us)	1000
ID Type	Badge Number

Item	Descriptions
Wiegand Format	Values range from 26 bits, 34 bits, 36 bits, 37 bits, and 50 bits.
Wiegand output bits	After choosing the Wiegand format, you can select one of the corresponding output digits in the Wiegand format
Failed ID	If the verification is failed, the system will send the failed ID to the device and replace the card number or personnel ID with the new ones.
Site Code	It is similar to the device ID. The difference is that a site code can be set manually, and is repeatable in a different device. The valid value ranges from 0 to 256 by default.
Pulse Width(us)	The time width represents the changes of the quantity of electric charge with high-frequency capacitance regularly within a specified time.
Pulse Interval(us)	The time interval between pulses.
ID Type	Select between User ID and badge number.

6 System Settings

Set 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.



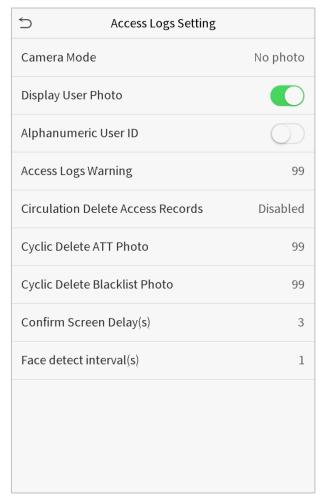
- 1. You can manually set date and time and click Confirm to save.
- 2. Click 24-Hour Time to enable or disable this format and select the date format.

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.

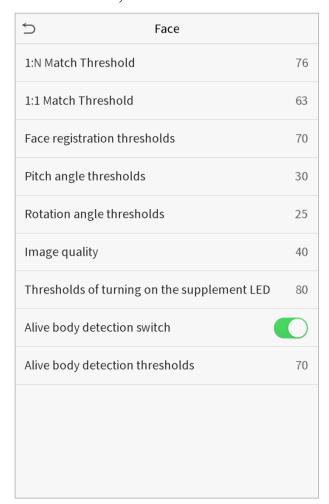


ltem	Description
	Whether to capture and save the current snapshot image during verification. There
	are 5 modes:
	No Photo: No photo is taken during user verification.
Carrage Mada	Take photo, no save: Photo is taken but is not saved during verification.
Camera Mode	Take photo and save: Photo is taken and saved during verification.
	Save on successful verification: Photo is taken and saved for each successful
	verification.
	Save on failed verification: Photo is taken and saved during each failed verification.
Display User Photo	Whether to display the user photo when the user passes verification.
Alphanumeric User ID	Whether to support letters in an User ID.

Face Detect Interval (s)	To set the facial template matching time interval as needed. Valid value: 0~9 seconds.
Delay(s)	1~9 seconds.
Confirm Screen	The length of time that the message of successful verification displays. Valid value:
Cyclic Delete Blacklist Photo	When 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.
Cyclic Delete ATT Photo	When attendance photos have reached 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.
Cyclic Delete Access Records	When access records have reached full capacity, the device will automatically delete a set value of old access records. Users may disable the function or set a valid value between 1 and 999.
Access Logs Warning	When remaining record space reaches a set value, the device will automatically display a remaining record memory warning. Users may disable the function or set a valid value between 1 and 9999.

6.3 Face Parameters

Click **Face** on the System interface.



FRR	FAR	Recom matc thresi	•
	_	1:N	1:1
High	Low	85	80
Medium	Medium	82	75
Low	High	80	70

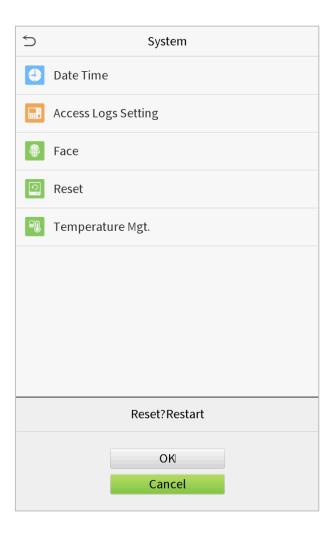
Item	Description
	Under 1:N verification mode, the verification will only be successful when the
	similarity between the acquired facial image and all registered facial templates is
1:N Match Threshold	greater than the set value. The valid value ranges from 65 to 120. The higher the
	thresholds set, the lower the misjudgment rate, the higher the rejection rate, and vice
	versa.
	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
1:1 Match Threshold	device is greater than the set value. The valid value ranges from 55 to 120. The higher
	the thresholds set, the lower the misjudgment rate, the higher the rejection rate, and
	vice versa.
Face registration	During face registration, 1:N verification is used to determine whether the user has
threshold	been registered. The current face is registered when the similarity between the
	acquired facial image and all registered facial templates is greater than the set value.

Pitch angle threshold	To limit the pitch angle of face in face recognition, the recommended threshold is 20.
Rotation angle	To limit the rotation angle of face in face recognition, the recommended threshold is
threshold	20.
	To get the quality threshold of facial images. When the value of image quality is
Image Quality	greater than the set value, the device will accept the facial images and start the
	algorithm processing, otherwise, the device will filter the facial images out.
Threshold of turning	Detect ambient light intensity. When the ambient brightness is less than the
on the supplement	threshold, the fill light is turned on; When ambient brightness is greater than this
LED	threshold, the fill light does not turn on. The default value is 80.
Alive body detection	If enabled, it will automatically detect whether there is a moving person in front of
switch	the device.
Alive body detection	Detect whether there is a moving person in front of the device to determine whether
•	face recognition is enabled. The default value is 100. The valid value ranges from 0 to
threshold	100.
Notes	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 personnel of our company.

6.4 Factory Reset

Restore the device, such as communication settings and system settings, to factory settings (Do not clear registered user data).

Click **Reset** on the System interface.

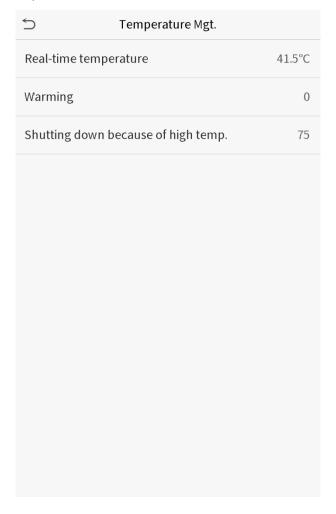


Click **OK** to reset.

6.5 Temperature Management

Terminal has built-in temperature sensor, when the temperature is too low or too high, it will trigger self-heating or shut down.

Click **Temperature Mgt.** on the System interface.

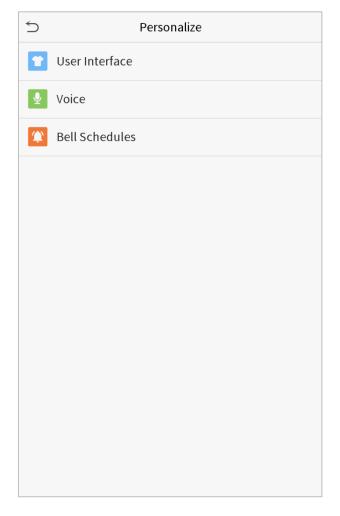


ltem	Description	
Real-time	This column shows real time inner temperature of terminal.	
temperature	This column shows real time limer temperature of tempinal.	
Low temp. to heat	Once terminal temperature is lower than set value, terminal will start self-heating, the	
	set range is 0~10(°C).	
High temp. to reset	When the terminal temperature is high than set value, it will shut down automatically	
	to protect hardware, the set range is $60\sim80$ (°C).	

7. Personalize Settings

You may customize interface settings, audio and bell.

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



7.1 Interface Settings

You can customize the display style of the main interface.

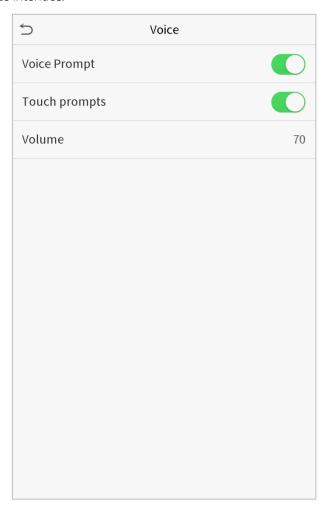
Click **User Interface** on the Personalize interface.

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

ltem	Description
Wallpaper	To select the main screen wallpaper according to your personal preference.
Language	To select the language of the device.
Menu Screen Timeout	When there is no operation, and the time exceeds the 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.
Idle Time To Slide Show (s)	When there is no operation, and the time exceeds the set value, a slide show will be played. It can be disabled, or you may set the value between 3 and 999 seconds.
Slide Show Interval (s)	This refers to the time interval switching different slide show pictures. The function can be disabled, or you may set the interval between 3 and 999 seconds.
Idle Time To Sleep (m)	If you have activated the sleep mode, when there is no operation, the device will enter 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.
Main Screen Style	To select the main screen style according to your personal preference.

7.2 Voice Settings

Click **Voice** on the Personalize interface.



Item	Description
Voice Prompt	Select whether to enable voice prompts during operating.
Touch Prompt	Select whether to enable keypad sounds.
Volume	Adjust the volume of the device; valid value: 0-100.

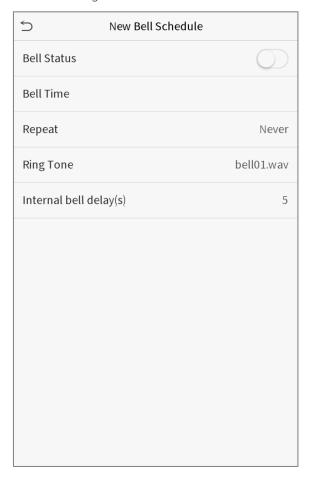
7.3 Bell Schedules

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



• Add a bell

1. Click **New Bell Schedule** to enter the adding interface:



ltem	Description
Bell Status	Set whether to enable the bell status.
Bell Time	At this time of day, the device automatically rings the bell.
Repeat	Set the repetition cycle of the bell.
Ring Tone	Select a ring tone.
Internal bell delay(s)	Set the duration of the internal bell. Valid values range from 1 to 999 seconds.

2. Back to the Bell Schedules interface, 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.

Click **Edit**, the editing method is the same as the operations of adding a bell.

Delete a bell

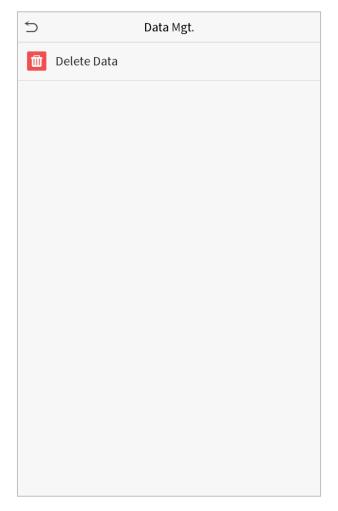
On the All Bell Schedules interface, tap the bell to be deleted.

Tap **Delete** and select [**Yes**] to delete the bell.

8. Data Management

To delete the relevant data in the device.

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



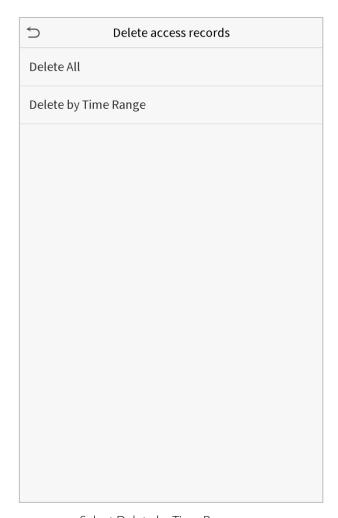
8.1 Delete Data

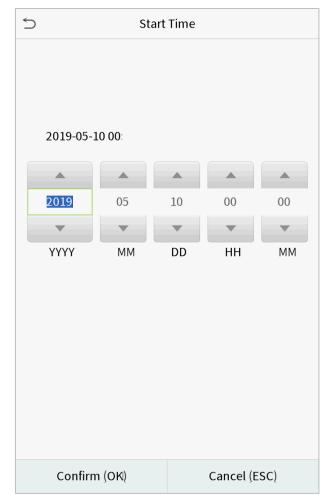
Click **Delete Data** on the Data Mgt. interface.

Delete access records	
Delete Attendance Photo	
Delete Blacklist Photo	
Delete All Data	
Delete Admin Role	
Delete Access Control	
Delete User Photo	
Delete Wallpaper	
Delete Screen Savers	

Item	Description		
Delete access	To delete access records conditionally.		
records	To delete access records conditionally.		
Delete Attendance	To delete attendance photos of designated personnel.		
Photo	To delete atternaunce protos of designated personner.		
Delete Blacklist	To delete the photos taken during verifications which are failed.		
Photo	To delete the photos taken daming vermeations which are failed.		
Delete All Data	To delete information and access records of all registered users.		
Delete Admin Role	To remove administrator privileges.		
Delete Access	To delete all access data.		
Control	To defete all access data.		
Delete User Photo	To delete all user photos in the device.		
Delete Wallpaper	To delete all wallpapers in the device.		
Delete screen	To delete the screen savers in the device.		
savers	TO delete the selection of the device.		

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





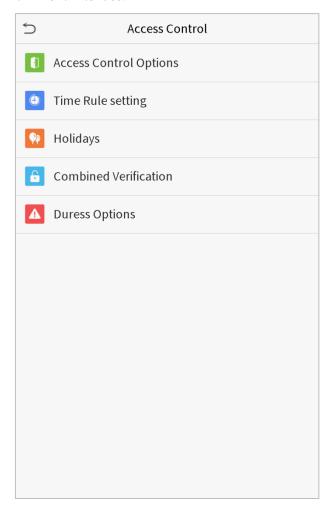
Select Delete by Time Range.

Set the time range and click OK.

9. Access Control

Access Control is used to set the schedule of door opening, locks control and other parameters settings related to access control.

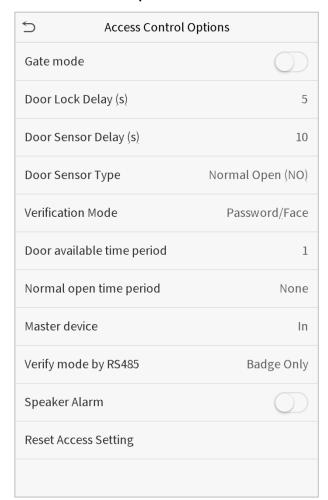
Click **Access Control** on the main menu interface.

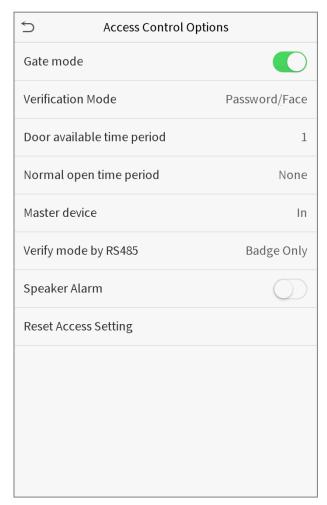


9.1 Access Control Options

To set the parameters of the control lock of the terminal and related equipment.

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





Item	Description		
Gate Mode	Whether to turn on the gate control mode or not, when set to ON, on this interface will		
	remove Door lock relay, Door sensor relay and Door sensor type function.		
Door Lock Dolay (s)	The length of time that the device controls the electric lock to be unlock. Valid value:		
Door Lock Delay (s)	1~10 seconds; 0 second represents disabling the function.		
Door Sensor Delay	If the door is not closed and locked after opening for a certain duration (Door Sensor Delay), an		
(s)	alarm will be triggered. The valid value of Door Sensor Delay ranges from 1 to 255 seconds.		
	There are three types: None, Normal Open, and Normal Closed. None means door sensor is not		
Door Sensor Type	in use; Normal Open means the door is always opened when electricity is on; Normal Closed		
	means the door is always closed when electricity is on.		
Verification Mode	The supported verification mode includes password/face, User ID only, password, face		
	only, and face + password.		
Door available	To set time period for door, so that the door is available only during this.		

time period			
Normal Open Time	Scheduled time period for "Normal Open" mode, so that the door is always unlocked		
Period	during this period.		
	When setting up the master and slave, the status of the master can be set to exit on		
Master Davies	enter.		
Master Device	Exit: The record verified on the host is the exit record.		
	Enter: The record verified on the host is the entry record.		
Verify mode by	The verification mode used when the device is used as host or slave.		
RS485	The verification mode used when the device is used as most of slave.		
Chaples Alaum	To transmit a sound alarm or disassembly alarm from the local. When the door is closed		
Speaker Alarm	or the verification is successful, the system will cancel the alarm from the local.		
Reset Access Setting	The restored access control parameters include door lock delay, door sensor delay, door		
	sensor type, verification mode, door available time period, normal open time period,		
	master device, and alarm. However, erased access control data in Data Mgt. is excluded.		

9.2 Time Rule Setting

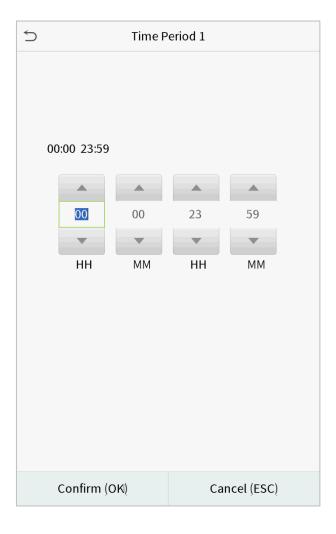
The entire system can define up to 50 time rules. Each time rule represents ten time zones, i.e. one week and 3 holidays, and each time zone is a valid time period within 24 hours per day. You may set a maximum of 3 time periods for every time zone. The relationship among these time periods is "or". When the verification time falls in any one of these time periods, the verification is valid. Each time period format of the time zone: HH MM-HH MM, which is accurate to minutes according to the 24-hour clock.

Click **Time Rule Setting** on the Access Control interface.

1. Click the grey box to input a time rule to search. Enter the number of time rule (maximum: 50 rules).

5	Time Rule[2/50]
Sunday	[00:00 23:59] [00:00 23:
Monday	[00:00 23:59] [00:00 23:
Tuesday	[00:00 23:59] [00:00 23:
Wednesday	[00:00 23:59] [00:00 23:
Thursday	[00:00 23:59] [00:00 23:
Friday	[00:00 23:59] [00:00 23:
Saturday	[00:00 23:59] [00:00 23:
holiday type 1	[00:00 23:59] [00:00 23:
holiday type 2	[00:00 23:59] [00:00 23:
holiday type 3	[00:00 23:59] [00:00 23:
	Q

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



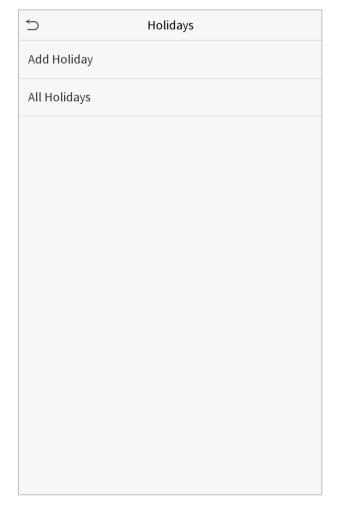
Notes:

- 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: 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 rule 1 indicates that door is open all day long.

9.3 Holiday Settings

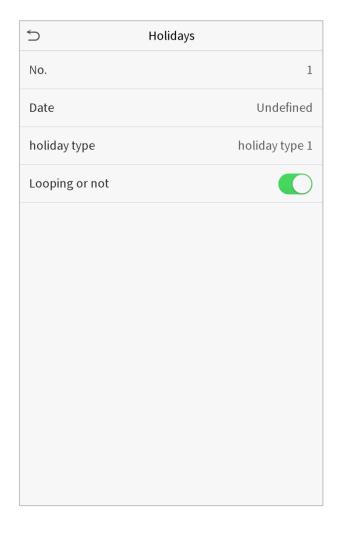
Whenever there is a holiday, you may need a special access time; but changing everyone's access time one by one is extremely cumbersome, so you can set a holiday access time which is applicable to all employees, and the user will be able to open the door during the holidays.

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



Add a New Holiday

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



Edit a Holiday

On the Holidays interface, select a holiday item to be modified. Click Edit to modify holiday parameters.

Delete a Holiday

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

9.4 Combined Verification Settings

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

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

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

5	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
	Q

Click the door-unlocking combination to be set. Click the up and down arrows to input 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), 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.

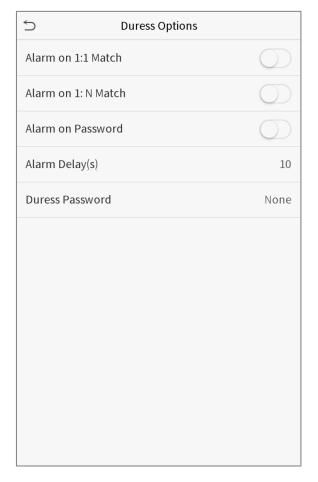
Delete a door-unlocking combination

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

9.5 Duress Options Settings

If a user activated the duress verification function with specific authentication method(s), when he/she is under coercion during authentication with such 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.

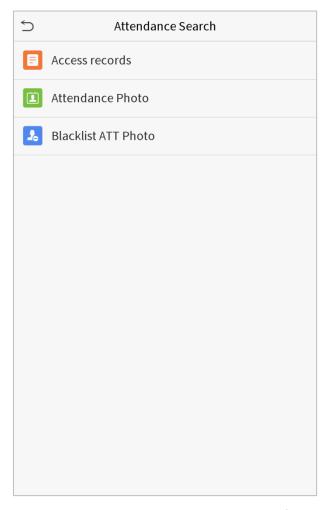


ltem	Description
Alarm on 1:1	When a user uses any fingerprint to perform the 1:1 verification, an alarm signal will be
Match	generated, otherwise there will be no alarm signal.
Alarm on 1:N	When a user uses any fingerprint to perform 1:N verification, an alarm signal will be
Match	generated, otherwise there will be no alarm signal.
Alarm on	When a user uses the password verification method, an alarm signal will be generated,
Password	otherwise there will be no alarm signal.
Alarm Delay (s)	Alarm signal will not be transmitted until the alarm delay time is elapsed. The value
	ranges from 1 to 999 seconds.
Duress Password	Set the 6-digit duress password. When the user enters this duress password for
	verification, an alarm signal will be generated.

10. Attendance Search

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

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

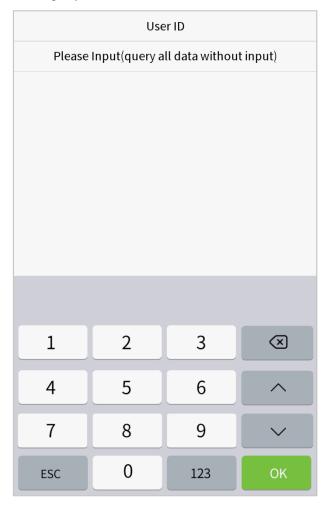


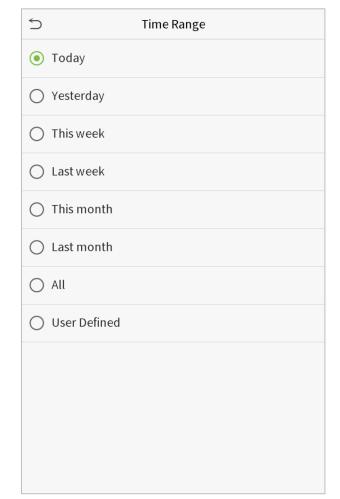
The process of searching for attendance and blacklist photos is similar to that of searching for access records. The following is an example of searching for access records.

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

want to search for records of all users, click OK without to search for. entering any user ID.

1. Enter the user ID to be searched and click OK. If you 2. Select the time range in which the records you want





3. The record search succeeds. Click the record in green to view its details.

5	Personal Record Search		
Date	User ID	Access records	
05-10		Number of Records:01	
	0	09:09	
05-09		Number of Records:02	
	1	12:25	
	0	08:53	
05-08		Number of Records:03	
	1	09:17 09:15	
	0	09:03	
05-07		Number of Records:01	
	0	16:06	
05-06		Number of Records:04	
	0	18:20 15:55	
	1	17:28 17:28	
05-05		Number of Records:01	
	0	10:12	
04-30		Number of Records:01	
	0	13:56	
04-29		Number of Records:05	
	1	10:06 10:06 10:06 10:06	
	0	08:56	
04-28		Number of Records:01	
	0	08:57	
04-27		Number of Records:06	
	0	18:00 17:58 17:57 17:56 17:44	
		17:40	

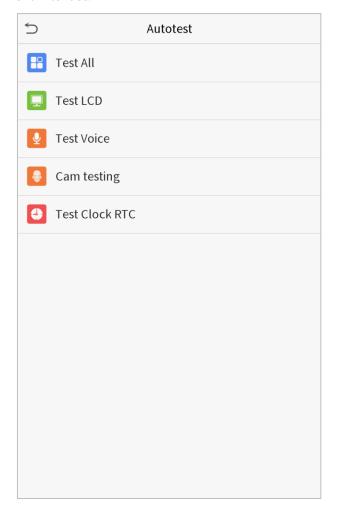
4. The below figure shows the details of the selected record.

5	Personal	Record Searc	h	
User ID	Name	Access recor	Mode	State
1	А	05-09 12:25		0
Verification	Mode: Face	Status : In		

11. Autotest

To automatically test whether all modules in the device function properly, which include the LCD, audio, camera and real-time clock (RTC).

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

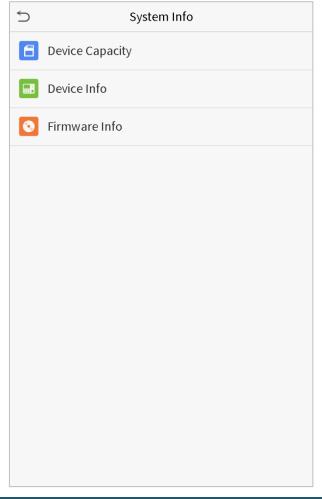


Item	Description
Test All	To automatically test whether the LCD, audio, camera and RTC are normal.
Test LCD	To automatically test the display effect of LCD screen by displaying full-color, pure white, and pure black to check whether the screen displays colors normally.
Test Voice	To automatically test whether the audio files stored in the device are complete and the voice quality is good.
Camera testing	To test if the camera functions properly by checking the pictures taken to see if they are clear enough.
Test Clock RTC	To test the RTC. The device tests whether the clock works normally and accurately with a stopwatch. Touch the screen to start counting and press it again to stop counting.

12. System Information

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

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



Item	Description
Device Capacity	Displays the current device's user storage, password and face storage, administrators, access
	records, attendance and blacklist photos, and user photos.
Device Info	Displays the device's name, serial number, MAC address, face algorithm version information,
	platform information, and manufacturer.
Firmware Info	Displays the firmware version and other version information of the device.

13. Connect to ZKBioSecurity Software

13.1 Set the Communication Address

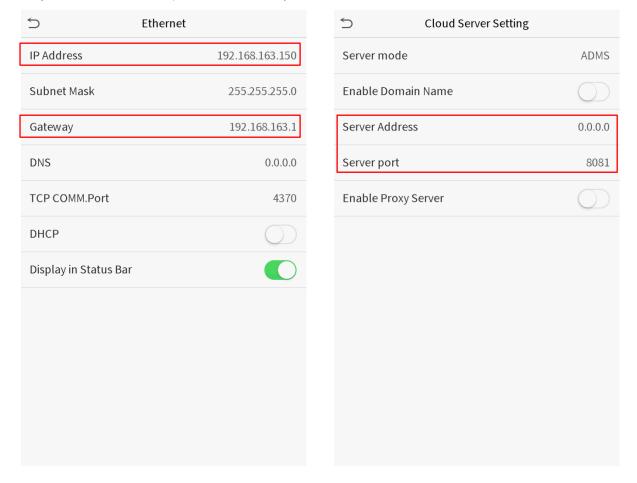
Device side

1. Click **COMM.** > **Ethernet** in the main menu to set 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)

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

Server address: Set as the IP address of ZKBioSecurity server.

Server port: Set as the service port of ZKBioSecurity (The default is 8088).



Software side

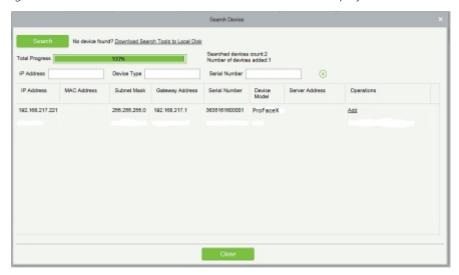
Login to ZKBioSecurity software, click **System** > **Communication** > **Communication Device** to set the adms service port, as shown in the figure below:



13.2 Add Device on the Software

Add device by searching. The process is as follows:

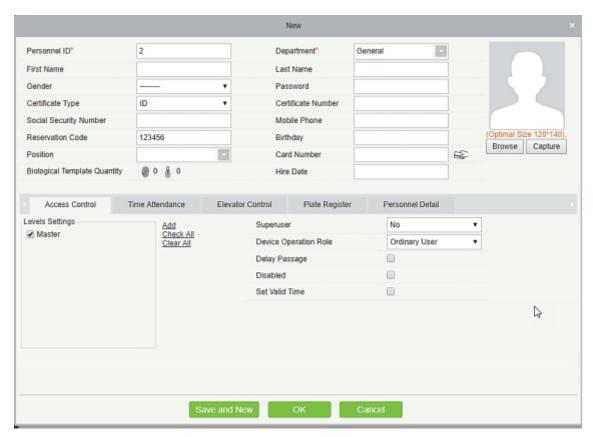
- 1) Click **Access Control** > **Device** > **Search Device**, to open the Search interface.
- 2) Click **Search**, and it will prompt [**Searching.....**].
- After searching, the list and total number of access controllers will be displayed.



4) Click **Add** after the device to complete adding.

13.3 Add Personnel on the Software

1. Click **Personnel** > **Person** > **New**:



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

Note: For other specific operations, please refer to 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:

- All of our civilian fingerprint recognition devices capture characteristics, not fingerprint images, and do not involve privacy protection.
- 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.
- 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 employer.

Our other police fingerprinting devices or development tools can capture original images of citizens' fingerprints. As to whether or not this constitutes infringement of your rights, please contact your government or the final supplier of the device. As the manufacturers of the device, we will assume no legal liability.

Note:

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

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

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

Eco-friendly Use



- This product's "eco-friendly use period" refers to the period during which this product will not leak toxic or hazardous substances, when used in accordance with the conditions in this manual.
- The eco-friendly use period indicated 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 use period is 5 years.

Hazardous or Toxic Substances and Their Quantities Hazardous/Toxic Substance/Element Component Hexavalent Polybrominated Mercury Cadmium Polybrominated Lead (Pb) diphenyl ethers Name chromium (Cd) biphenyls (PBB) (Hg) (PBDE) (Cr6+) \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc X Chip Resistor \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc X Chip capacitor X \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc Chip inductor \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc X Diode X \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc ESD component X \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc Buzzer X \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc Adapter \bigcirc \bigcirc \bigcirc X \bigcirc \bigcirc Screws

- O: indicates that the total amount of toxic content in all of the homogeneous materials is below the limit requirements specified in SJ/T 11363—2006.
- X: indicates that the total amount of toxic content in all of the homogeneous materials exceeds the limit requirements specified in SJ/T 11363—2006.

Note: 80% of this project's components are made using non-toxic, eco-friendly materials. Those which contain toxins or harmful materials or elements are included due to current economic or technical limitations which prevent their replacement with non-toxic materials or elements.