ARMATURA

User Manual

OmniAC20

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Version: 2.3

English

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If there is any issue related to the product, please contact us.

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About the Manual

This manual introduces the operations of OmniAC20.

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

Table of Contents

Data Security Statement

ARMATURA, as a smart product supplier, may also need to know and collect some of your personal information in order to better assist you in using ARMATURA's goods and services, and will treat your privacy carefully by developing a Privacy Policy.

Please read and understand completely all the privacy protection policy regulations and key points that appear on the device before using ARMATURA products.

As a product user, you must comply with applicable laws and regulations related to personal data protection when collecting, storing, and using personal data, including but not limited to taking protective measures for personal data, such as performing reasonable rights management for devices, strengthening the physical security of device application scenarios, and so on.

Safety Measures

The below instructions intend to ensure that the user can use the product correctly to avoid danger or property loss. The following precautions are to keep users safe and prevent any damage. Please read carefully before installation.

⚠Noncompliance with instructions could lead to product damage or physical injury (may even cause death).

1. Read, follow, and retain instructions - All safety and operational instructions must be properly read and followed before bringing the device into service.
2. Do not ignore warnings - Adhere to all warnings on the unit and in the operating instructions.
3. Accessories - Use only manufacturer-recommended or product-sold accessories. Please do not use any other components other than manufacturer suggested materials.
4. Precautions for the installation – Do not place this device on an unstable stand or frame. It may fall and cause serious injury to persons and damage to the device.
5. Service - Do not try to service this unit yourself. Opening or removing covers may expose you to hazardous voltages or other hazards.
6. Damage requiring service - Disconnect the system from the Mains AC or DC power source and refer service personnel under the following conditions:
   - When cord or connection control is affected.
   - When the liquid spilled, or an item dropped into the system.
   - If exposed to water or due to inclement weather (rain, snow, and more).
   - If the system is not operating normally, under operating instructions.

   Just change controls defined in operating instructions. Improper adjustment of the controls may result in damage and involve a qualified technician to return the device to normal operation.

   And do not connect multiple devices to one power adapter as adapter overload can cause over-heat or fire hazard.
7. Replacement parts - When replacement parts are needed, service technicians must only use replacement parts

provided by the supplier. Unauthorized substitutes can result in a burn, shock, or other hazards.

8. Safety check - On completion of service or repair work on the unit, ask the service technician to perform safety checks to ensure proper operation of the device.
9. Power sources - Operate the system only from the label's power source form. If the sort of power supply to use is unclear, call your dealer.
10. Lightning - Can install external lightning conductors to protect against electrical storms. It stops power-ups from destroying the system.

Recommended installing the devices in areas with limited access.

Electrical Safety

- Before connecting an external cable to the device, complete grounding properly, and set up surge protection; otherwise, static electricity will damage the mainboard.
- Make sure that the power has been disconnected before you wire, install, or dismantle the device.
- Ensure that the signal connected to the device is a weak-current (switch) signal; otherwise, components of the device will get damaged.
- Ensure that the standard voltage applicable in your country or region is applied. If you are not sure about the endorsed standard voltage, please consult your local electric power company. Power mismatch may cause a short circuit or device damage.
- In the case of power supply damage, return the device to the professional technical personnel or your dealer for handling.
- To avoid interference, keep the device far from high electromagnetic radiation devices, such as generators (including electric generators), radios, televisions, (especially CRT) monitors, or speakers.

Operation Safety

- If smoke, odor, or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- Transportation and other unpredictable causes may damage the device hardware. Check whether the device has any intense damage before installation.
- If the device has major defects that you cannot solve, contact your dealer as soon as possible.
- Dust, moisture, and abrupt temperature changes can affect the device's service life. You are advised not to keep the device under such conditions.
- Do not keep the device in a place that vibrates. Handle the device with care. Do not place heavy objects on top of the device.
- Do not apply rosin, alcohol, benzene, pesticides, and other volatile substances that may damage the device enclosure. Clean the device accessories with a piece of soft cloth or a small amount of cleaning agent.
- If you have any technical questions regarding usage, contact certified or experienced technical personnel.

Note:

- Make sure whether the positive polarity and negative polarity of the DC 12V power supply is connected correctly. A reverse connection may damage the device. It is not advisable to connect the AC 24V power supply to the DC 12V input port.
- Make sure to connect the wires following the positive polarity and negative polarity shown on the device's nameplate.
- The warranty service does not cover accidental damage, damage caused by mis-operation, and damage due to independent installation or repair of the product by the user.

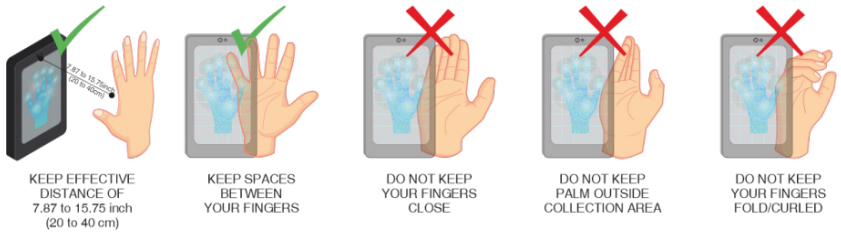
1 Instruction for Use

Before getting into the device features and functions, it is recommended to be familiar with the below fundamentals.

1.1 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.

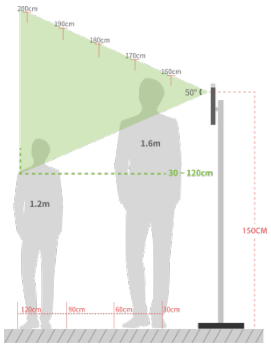


Note:

1. Place your palm within 7.87 to 15.75 inch (20 to 40 cm) of the device.
2. Place your palm in the palm collection area, such that the palm is placed parallel to the device.
3. Make sure to keep space between your fingers.
4. Please avoid direct sunlight when using the palm function outdoors. According to laboratory test, the palm recognition effect is best when the light intensity is not more than 10,000 lux.

1.2 Standing Position, Facial Expression and Standing Posture

The Recommended Distance



The distance between the device and a user whose height is in a range of 59.06 to 72.83inch (150 to 185cm) is recommended to be 11.81 to 78.74inch (30 to 200cm). Users may slightly move forward or backward to improve the character of facial images captured.

Recommended Standing Posture and Facial Expression

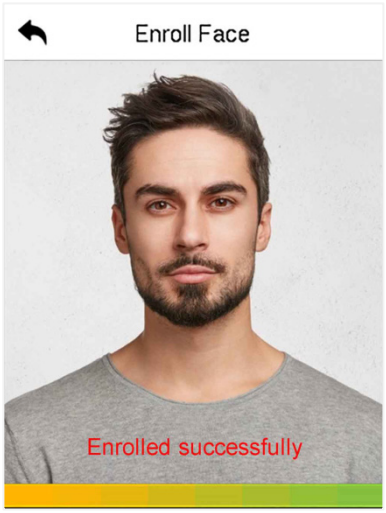
Facial Expression

Standing Posture

Note: Please keep your facial expression and standing posture natural while enrolment or verification.

1.3 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 screen looks like this:



Face registration and authentication methods

Instructions to Authenticate a Face

- When registering a face, maintain a distance of 15.75 to 31.5inch (40 to 80cm) between the device and the face.
- Be careful not to change the facial expression. (smiling, drawn, wink, etc.)
- If you do not follow the instructions on the screen, the face registration may take a longer time or may fail.
- Be careful to not cover the eyes or eyebrows.
- Do not wear hats, masks, sunglasses, or eyeglasses.
- Be careful to not display two faces on the screen. Register only one person at a time.

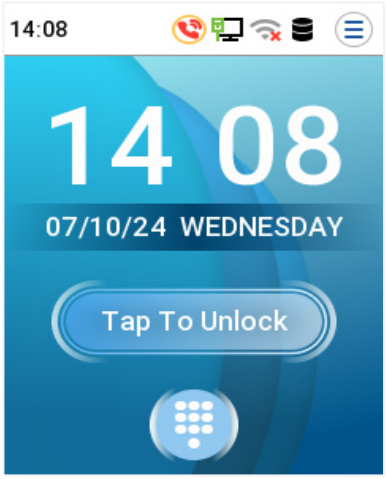
- It is recommended for a user wearing glasses to register both faces with and without glasses.

Instructions to Authenticate a Face

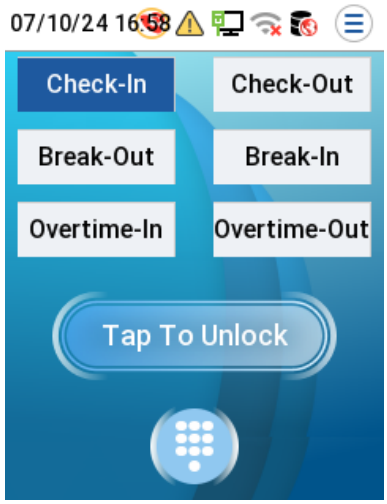
- Ensure that the face appears inside the detection area displayed on the device screen.
- If eyeglasses have been changed, authentication may fail. If the face without glasses has been registered, authenticate the face without glasses. If only the face with glasses has been registered, authenticate the face with the previously worn glasses again.
- If a part of the face is covered with a hat, a mask, an eye patch, or sunglasses authentication may fail. Do not cover the face, allow the device to recognize both the eyebrows and the face.

1.4 Standby Interface

After connecting the power supply, the following standby interface is displayed:



- Tap  to enter the User ID input interface.
- Tap  to wake up the camera for auto-identification.
- When there is no super administrator registered in the device, tap  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 the first time you use the device.
- Visitors tap  to make a call and the phone will ring.
- The punch state options can also be displayed and used directly on the standby interface. Tap anywhere on the screen apart from the icons, and six shortcut keys appears on the screen, as shown in the figure below:



- Tap the corresponding punch state key to select your current punch state, which is displayed in blue. Please refer to "Shortcut Key Mappings" for the specific operation method.

Note: The device type needs to be set as T&A PUSH, and the punch state options are off by default and need to select other mode options in the "Punch State Option" to get the punch state options on the standby screen.

1.5 Virtual Keyboard

Note: The device supports the input in English language, numbers, and symbols.

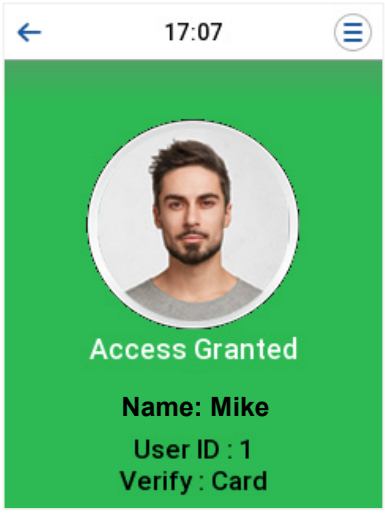
- Tap [**EN**] to switch to the numeric keyboard.
- Tap [**123**] to switch to the symbolic keyboard.
- Tap [**@#&**] to return to the English keyboard.
- Tap [ ] to exit the virtual keyboard.

1.6 Verification Mode

1.6.1 QR Code Verification

Static QR Code: In this verification mode, the device compares the QR code image collected by the QR code collector with all the QR code data available in the device.

Dynamic QR Code: Tap [**Credentials**] on the ARMATURA ID App, and a QR code will appear, which includes employee ID and card number information. The QR code can replace a physical card on a specific device to achieve contactless authentication. Please refer to the Use of the Mobile Credentials.

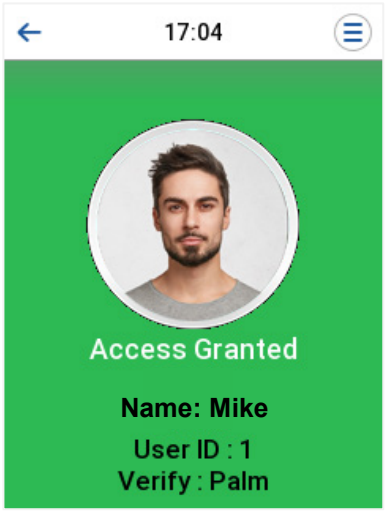


1.6.2 Palm Verification

1:N Palm Verification Mode

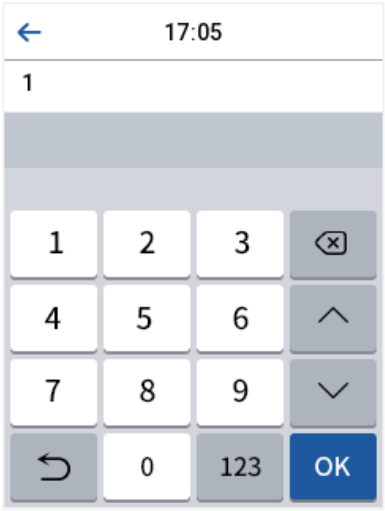
In this verification mode, the device compares the palm image collected by the palm collector with all the palm data in the device.

The device automatically distinguishes between the palm and the face verification mode as the user places his/her palm in the scanning area. Then the palm image is collected by the palm collector, and the device matches the collected palm image with all the registered palm and returns an output.



1:1 Palm Verification Mode

Tap the button on the main screen to enter 1:1 palm verification mode and input the user ID and tap OK, as shown in image below.



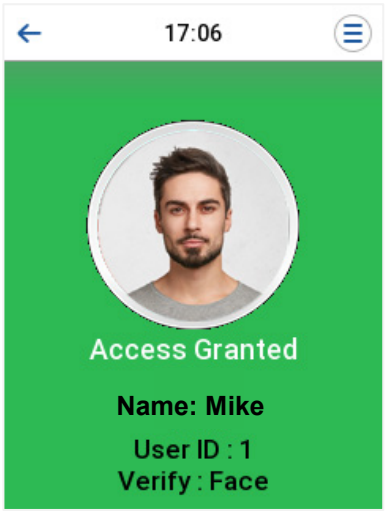
If an employee registers a face, password and card in addition to the palm, the following screen will appear. Select the icon to enter palm verification mode.

1.6.3 Facial Verification

1:N Facial Verification Mode

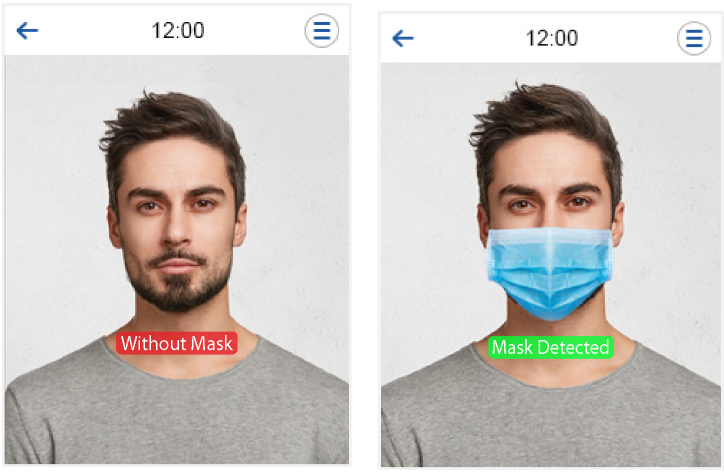
1. Conventional Verification

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



2. Enable Mask Detection

When the user enables the **Mask Detection** function, the device identifies whether the user is wearing a mask while verification or not. The comparison result prompt interface's pop-ups are listed below.

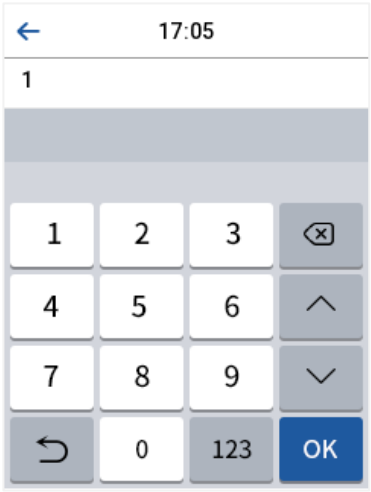


1:1 Facial Verification Mode

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

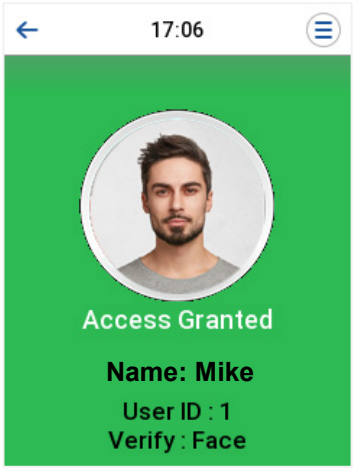
Tap on the main interface and enter the 1:1 facial verification mode.

Enter the user ID and tap **OK**.



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

After successful verification, the prompt box displays "**Access Granted**", as shown below:

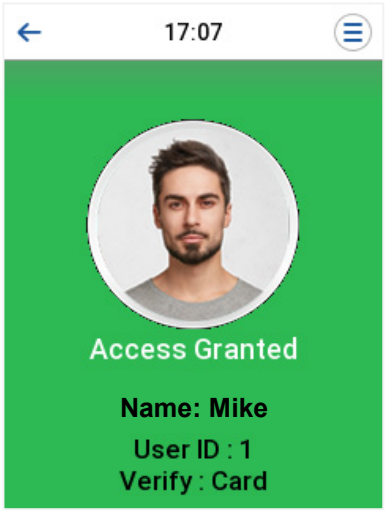


If the verification is failed, it prompts "**Unregistered person**".

1.6.4 Card Verification

1: N Card Verification Mode

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 Mode

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.

Tap on the main interface and enter the 1:1 card verification mode.

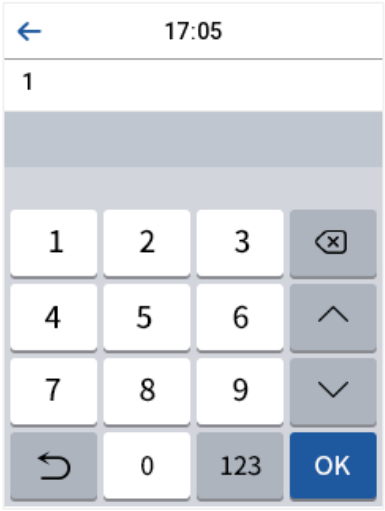
Enter the user ID and tap **OK**.

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

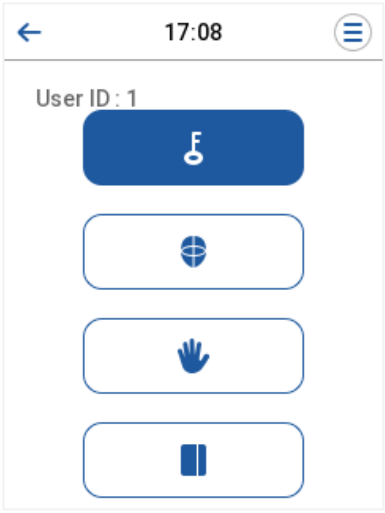
1.6.5 Password Verification

The device compares the entered password with the registered password of the given User ID.

Tap the button on the main screen to enter the 1:1 password verification mode. Then, input the user ID and tap OK.



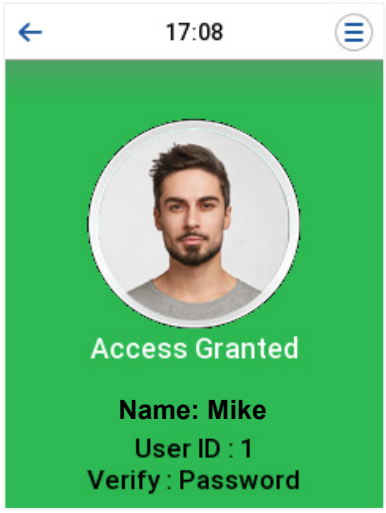
If an employee registers a palm, face and card in addition to the password, the following screen will appear. Select the icon to enter password verification mode.



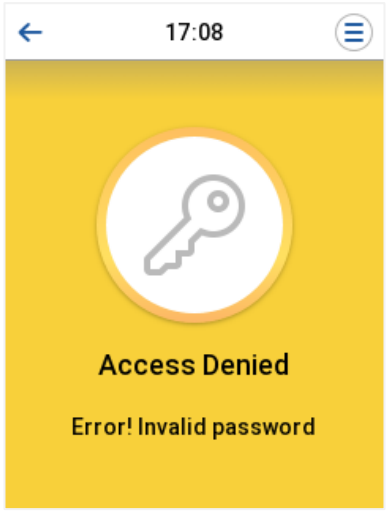
Input the password and tap OK.

Below are the display screens after entering a correct password and a wrong password, respectively.

Verification is successful:



Verification is failed:

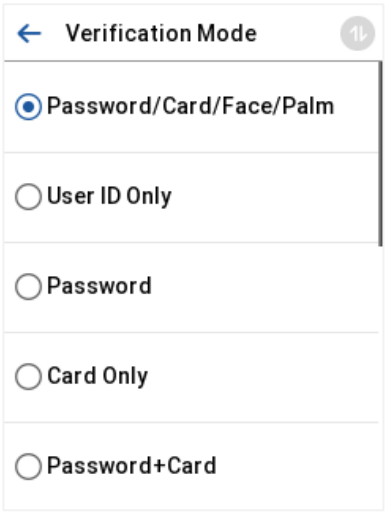


1.6.6 Combined Verification

This device allows you to use a variety of verification methods to increase security. There are a total of 12 distinct verification combinations that can be implemented, as listed below:

Combined Verification Symbol Definition

Symbol	Definition	Explanation
/	or	This method compares the entered verification of a person with the related verification template previously stored to that Personnel ID in the Device.
+	and	This method compares the entered verification of a person with all the verification templates previously stored to that Personnel ID in the Device.

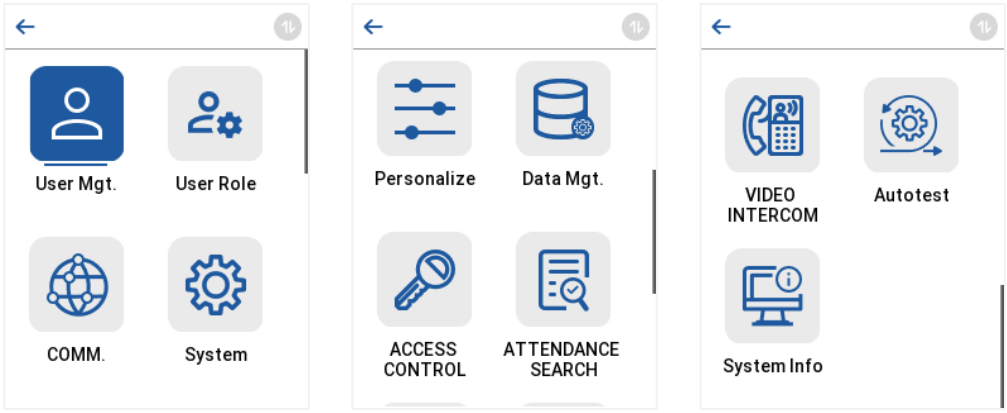


Procedure to set for Combined Verification Mode

- Combined verification requires personnel to register all the different verification methods. Otherwise, employees will not be able to successfully verify the combined verification process.
- For instance, when an employee has registered only for the face data, but the Device verification mode is set as “Face + Password”, the employee will not be able to complete the verification process successfully.
- This is because the Device compares the face template of the person with the registered verification template (both the Face and the Password) previously stored to that Personnel ID in the Device.
- But as the employee has registered only the Face but not the Password, the verification will not get completed and the Device displays “Access Denied”.

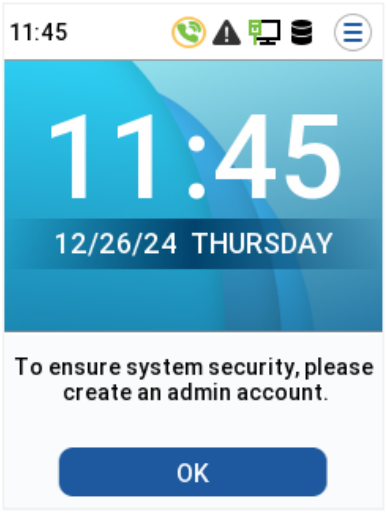
2 Main Menu

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



Menu	Description
User Mgt.	To Add, Edit, View, and Delete information of a User.
User Role	To set the permission scope of the custom role and enroller for the users, that is, the rights to operate the system.
COMM.	To set the relevant parameters of Network, Serial Comm., PC Connection, Wi-Fi, Cloud Server, Wiegand and Network Diagnosis.
System	To set the parameters related to the system, including Date Time, Tap-To-Unlock, Attendance/Access Logs, Facial and Palm templates, QR Code, Card Management, Doorbell Settings, resetting to factory settings, Security Settings, Device Type Setting and Health Protection.
Personalize	To customize settings of User Interface, Voice, Bell Schedules, Punch State Options and Shortcut Key Mappings settings.
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 including options like Time Schedule, Holiday Settings, Access Groups, Combine Verification, Anti-passback Setup, and Duress Option Settings.
Attendance Search	To query the specified Event Logs, check Attendance Photos and Blocklist Attendance Photos.
Video Intercom	To set the parameters related to the SIP.
Autotest	To automatically test whether each module functions properly, including the screen, audio, microphone, camera, real-time clock and Card.
System Info	To view Privacy Policy, Data Capacity and Device and Firmware information of the current device.

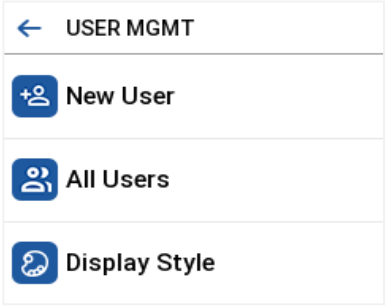
Note: When users use the product for the first time, they should operate it after setting administrator privileges. Tap **User Mgt.** to add an administrator or edit user permissions as a super administrator. If the product does not have an administrator setting, the system will show an administrator setting command prompt every time you enter the device menu.



3 User Management

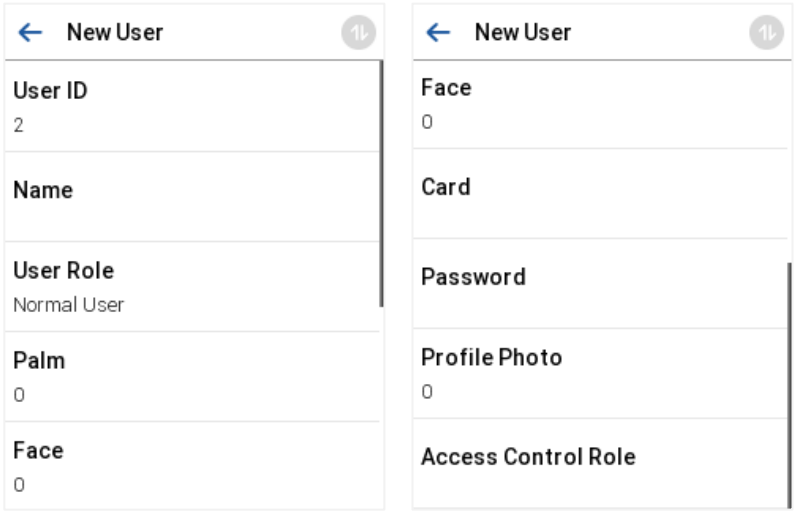
3.1 User Registration

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



3.1.1 Register a User ID and Name

Tap **New User** and enter the **User ID** and **Name**.



Note:

1. A name can take up to 34 characters.
2. The user ID may contain 1-9 digits by default.
3. During the initial registration, you can modify your ID but not after the registration.
4. If the message "**Duplicated!**" appears, you must choose a different User ID because the one you entered already exists.

3.1.2 User Role

On the New User interface, tap on **User Role** to set the user's duty as either **Normal User or Super Admin**.

- **Super Admin:** The Super Administrator owns all management privileges in the Device.

- **Normal User:** If the Super Admin is registered already in the device, then the Normal Users will not have the privilege to manage the system and can only access authentic verifications.
- **User Defined Roles:** The Normal User can also be assigned custom roles with User Defined Role. The user can be permitted to access several menu options as required.

Note: If the selected user role is the Super Admin, then 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.

3.1.3 Palm

Tap **Palm** in the **New User** interface to enter the palm registration page.

- Support registration of two palms, select the palm to be enrolled.
- Please place your palm inside the guiding box and keep it still while registering.
- A progress bar shows up while registering the palm and a "**successfully registered**" is displayed as the progress bar completes.
- If the palm is registered already then, the "**Palm repeated**" message shows up. The registration interface is as follows:

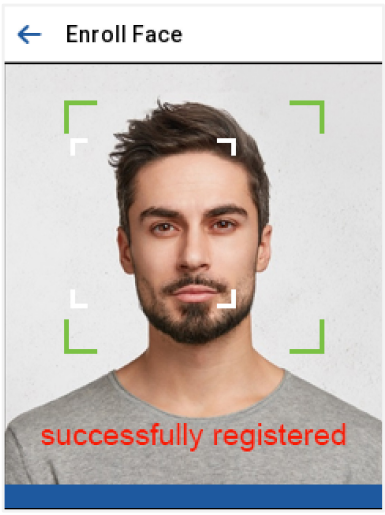
3.1.4 Face

Tap **Face** in the **New User** interface to enter the face registration page.

- Please face towards the camera and place yourself in such a way that your face image fits inside the white guiding box and stays still during face registration.
- A progress bar shows up while registering the face and then "**Successfully registered**" message is displayed as

the progress bar completes.

- If the face is registered already then, the "**Duplicated Face**" message shows up. The registration interface is as follows:

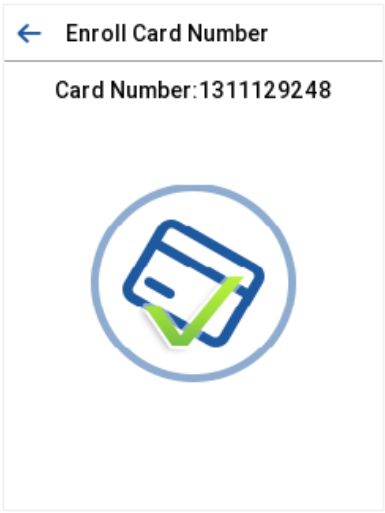


3.1.5 Card

Enroll Card

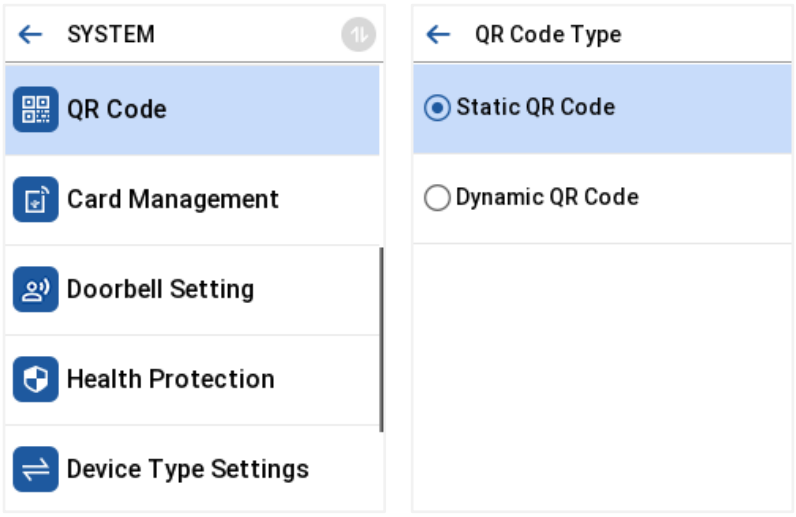
Tap **Card** in the **New User** interface to enter the card registration page.

- Swipe the card underneath the card reading area on the Card interface. The registration of the card will be successful.
- If the card has already been registered, the message "**Error! Card already enrolled**" appears. The registration interface looks like this:



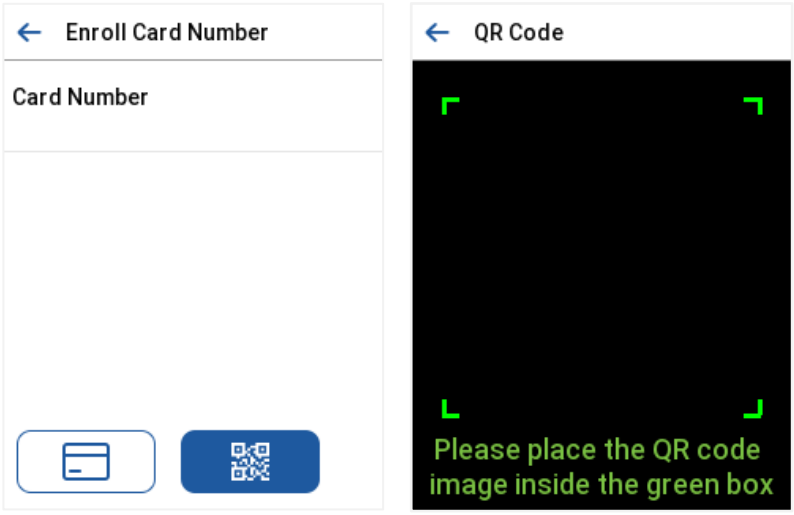
Enroll QR Code

Enable **QR Code Mode** in the **System** interface and select the **QR Code Type** as needed in the QR Code page.



Tap **Card** in the **New User** interface to enter the card registration page.

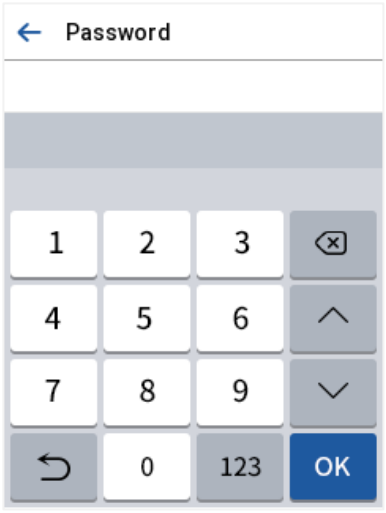
- On the Card interface, show the QR code in front of the camera. The QR code registration will be successful.
- If the QR code is registered already, then the "**Error! Card already enrolled.**" message shows up. The registration interface is as follows:



3.1.6 Password

Tap **Password** in the **New User** interface to enter the password registration page.

- On the Password interface, enter the required password and re-enter to confirm it and tap **OK**.
- If the re-entered password is different from the initially entered password, then the device prompts the message as "**Password does not match!**", where the user needs to re-confirm the password again.
- The password may contain 1 to 8 digits by default.



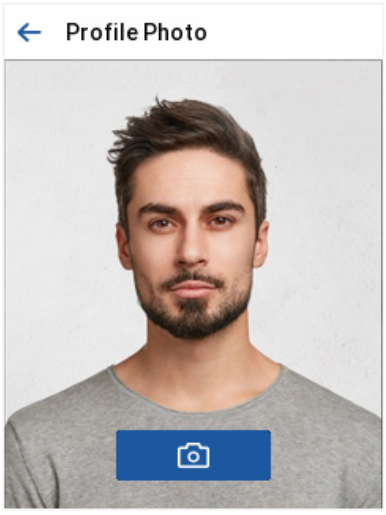
3.1.7 Profile Photo

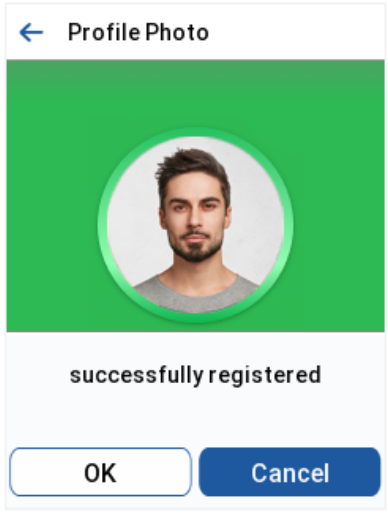
Tap **Profile Photo** in the **New User** interface to enter the profile photo registration page.

- When a user registered with a photo passes the authentication, the registered photo will be displayed.
- Tap **Profile Photo**, the device's camera will open, then tap the camera icon to take a photo. The captured photo is displayed on the top left corner of the screen and the camera opens up again to take a new photo, after taking the initial photo.

Note:

1. While registering a face, the system automatically captures a photo as the user photo. If you do not register a user photo, the system automatically sets the photo captured while registration as the default photo.
2. This function needs to be enabled in **System > Access Logs Settings/Attendance > Display User Photo**.

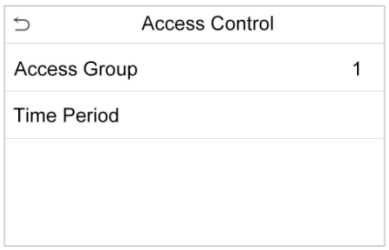




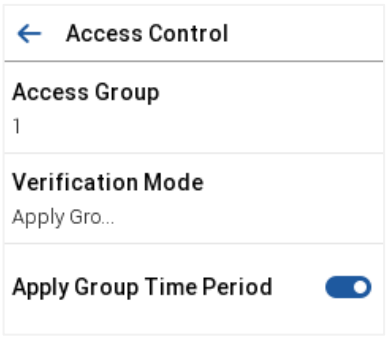
3.1.8 Access Control Role

The **Access Control Role** sets the door access privilege for each user. It includes the access group, verification mode and it facilitates setting the group access time period.

Access Control Terminal:



Time Attendance Terminal:

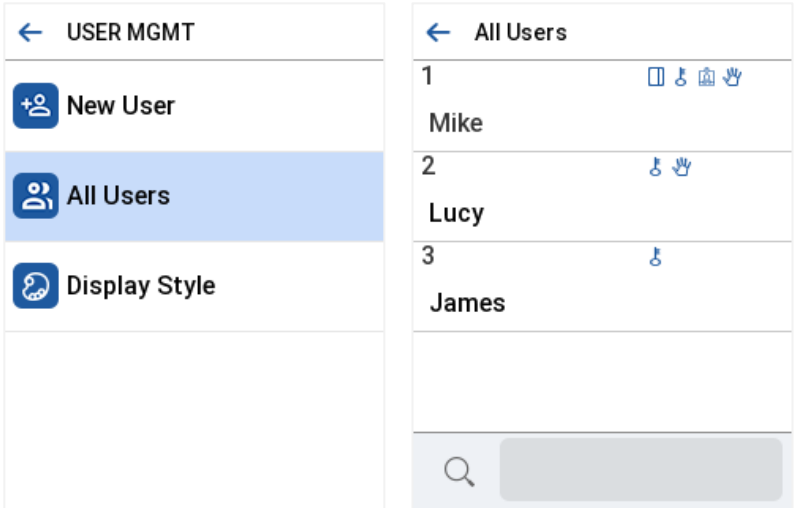


- Tap **Access Control Role** > **Access Group** to assign the registered users to different groups for better management. New users belong to Group 1 by default and can be reassigned to other groups. The device supports up to 99 Access Control groups.
- Tap **Time Period**, to select the time to use.
- Select verification mode for the user, tap **Access Control Role > Verification Mode**.
- Select whether to apply the group time period for this user. It is enabled by default. If the group time period is not applied, you need to set the unlocking time for this user. The time period of this user does not affect the time period of any other member in this group. To set the unlocking time for this user, tap **Apply Group Time Period > Time Period 1**. Enter the Time Period number and tap **OK**. 50 time periods can be set in the device and three time periods can be set for each user. For details, see Time Schedule Settings.

3.2 Search User

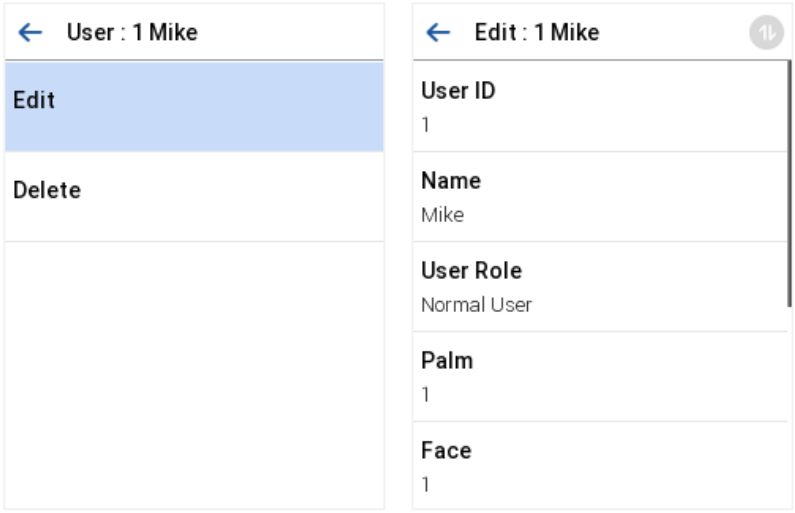
On the **Main Menu**, tap **User Mgt.**, and then tap **All Users** to search a User.

- On the **All-Users** interface, tap on the search bar on the user's list to enter the required retrieval keyword (where the keyword may be the user ID, surname, or full name) and the system will search for the related user information.



3.3 Edit User

On the **All-Users** interface, tap on the required user from the list and tap **Edit** to edit the user information.



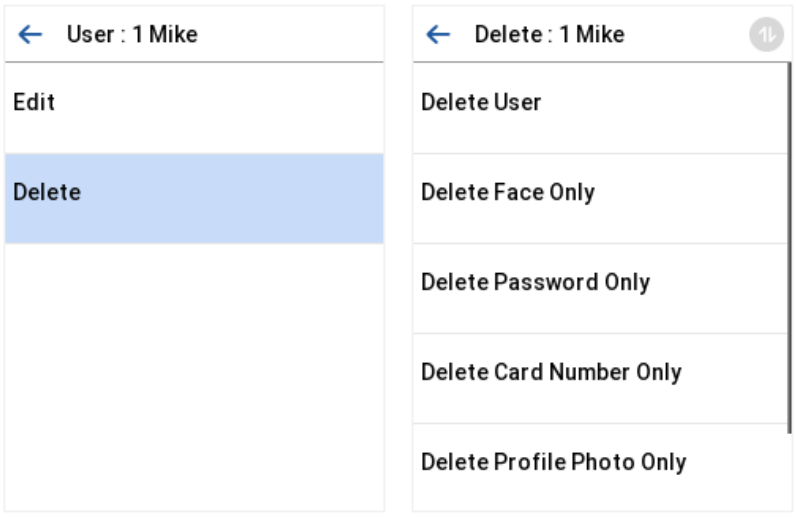
Note: The process of editing the user information is the same as adding a new user, except that the User ID cannot be modified while editing a user. The process in detail refers to "User Management".

3.4 Delete User

On the **All-Users** interface, tap on the required user from the list and tap **Delete** to delete the user or specific user information from the device. On the **Delete** interface, tap on the required operation, and then tap **OK** to confirm the deletion.

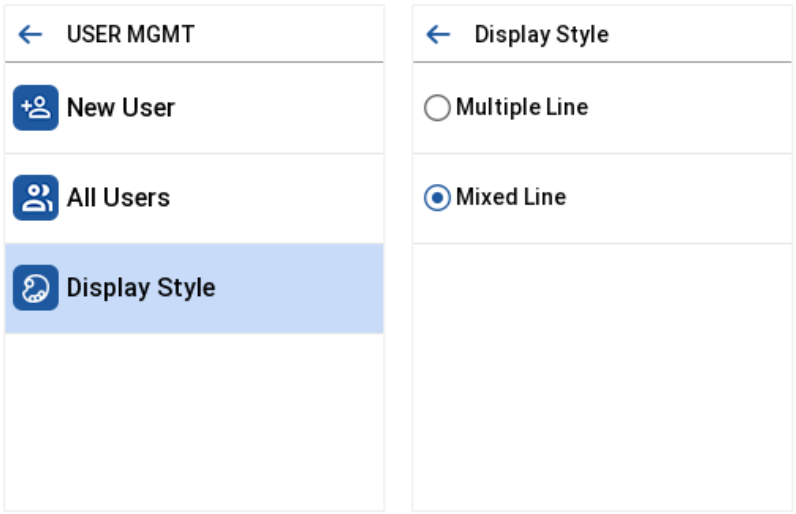
Delete Operations

- **Delete User:** Deletes all the user information (deletes the selected User as a whole) from the Device.
- **Delete Face Only:** Deletes the face information of the selected user.
- **Delete Password Only:** Deletes the password information of the selected user.
- **Delete Card Only:** Deletes the card information of the selected user.
- **Delete Profile Photo Only:** Deletes the profile photo of the selected user.
- **Delete Palm Only:** Deletes the palm information of the selected user.



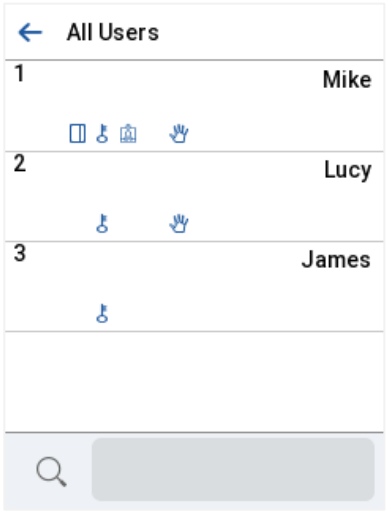
3.5 Display Style

On the **Main Menu**, tap **User Mgt.**, and then tap **Display Style** to enter Display Style setting interface.

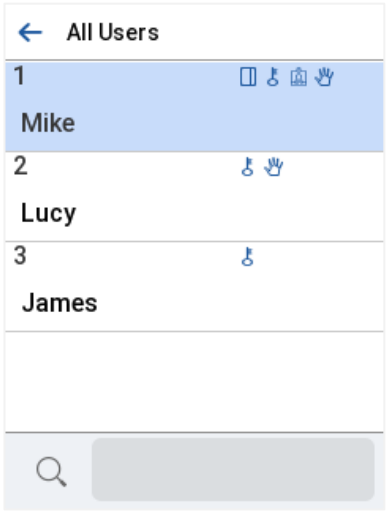


All the Display Styles are shown as below:

Multiple Line:



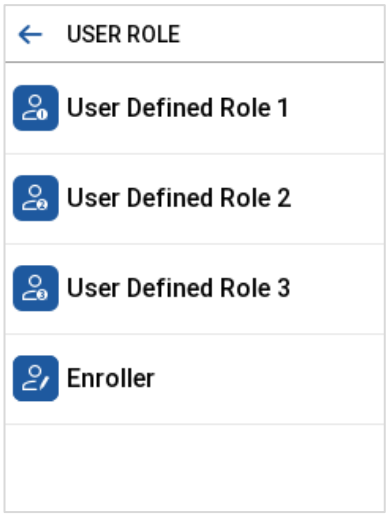
Mixed Line:



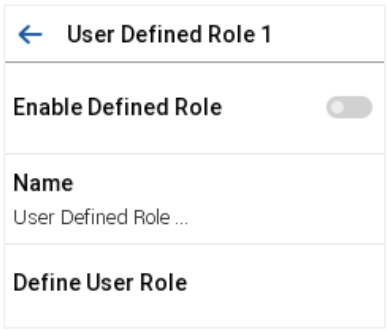
4 User Role

User Role facilitates to assign some specific permissions to certain users, based on the requirement.

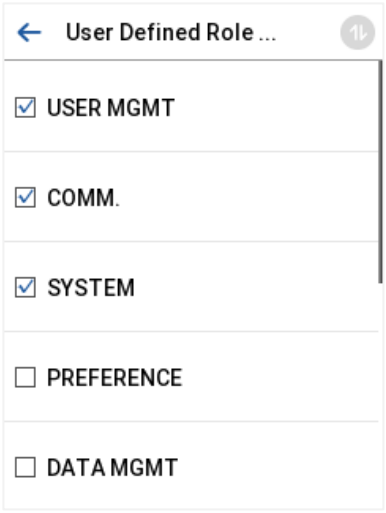
- On the **Main** menu, tap **User Role**, and then tap on the **User Defined Role** to set the user defined permissions.
- The permission scope of the custom role can be set up into 3 roles, that is, the custom operating scope of the menu functions of the user.



- On the **User Defined Role** interface, toggle **Enable Defined Role** to enable or disable the user defined role.
- Tap on **Name** and enter the custom name of the role.



- Then, by tapping on Define User Role, select the required privileges for the new role, and then tap the Return button.
- During privilege assignment, the main menu function names will be displayed on the left and its sub-menus will be listed on the right.
- First tap on the required **Main Menu** function name, and then select its required sub-menus from the list.

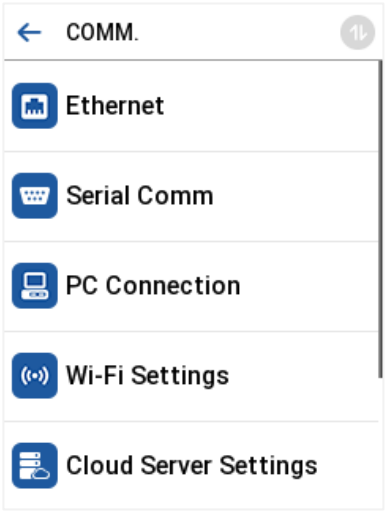


Note: If the User Role is enabled for the Device, tap on **User Mgt. > New User > User Role** to assign the created roles to the required users. But if there is no super administrator registered in the Device, then the device will prompt "**Please enroll super admin first!**" when enabling the User Role function.

5 Communication Settings

Communication Settings are used to set the parameters of the Network, Serial Comm, PC Connection, Wi-Fi, Cloud Server, Wiegand and Network Diagnosis.

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 connect to the same network segment.

Tap **Ethernet** on the **COMM.** Settings interface to configure the settings.

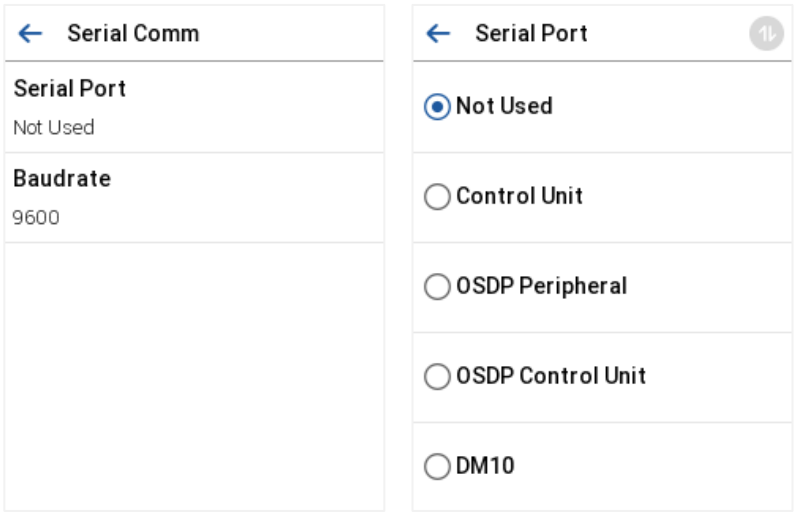
Function Name	Description
IP Address	The default IP address is 192.168.1.201. It can be modified according to the network availability.

Subnet Mask	The default Subnet Mask is 255.255.255.0. It can be modified according to the network availability.
Gateway	The Default Gateway address is 0.0.0.0. It can be modified according to the network availability.
DNS	The default DNS address is 0.0.0.0. It can be modified according to the network availability.
TCP COMM. Port	The default TCP COMM Port value is 4370. It can be modified according to the network availability.
DHCP	Dynamic Host Configuration Protocol dynamically allocates IP addresses for clients via server.
Display in Status Bar	Toggle to set whether to display the network icon on the status bar.

5.2 Serial Comm

Serial Comm function establishes communication with the device through a serial port (Control Unit/ OSDP Unit/DM10).

Tap **Serial Comm.** on the **COMM.** Settings interface.

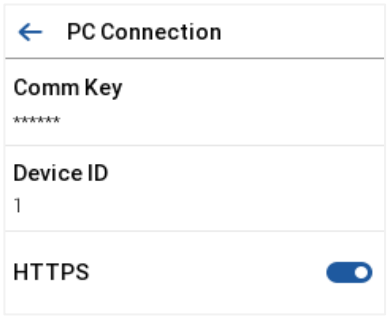


Function Name	Description
Serial Port	**Not Used:** No communication with the device through the serial port. **Control Unit:** When RS485 is used as the function of "Control Unit", it can be connected to a card reader. **OSDP Peripheral:** Communicate with the device through the OSDP output. **OSDP Control Unit:** Communicate with the device through the OSDP output. **DM10:** When RS485 is used as the function of "DM10", it can be connected to DM10 to control the lock relay.
Baud Rate	There are 5 baud rate options at which the data communicates with PC. They are: 115200 (default), 57600, 38400, 19200 and 9600. The higher the baud rate, the faster is the communication speed, but also less reliable. Hence, a higher baud rate can be used when the communication distance is short; when the communication distance is long, choosing a lower baud rate is more reliable.

5.3 PC Connection

Comm Key facilitates to improve the security of the data by setting up the communication between the device and the PC. Once the Comm Key is set, a password is required to connect the device to the PC software.

Tap **PC Connection** on the **COMM.** Settings interface to configure the communication settings.



Function Name	Description
Comm Key	The Comm Key must be 6 digits.
Device ID	The identity number of the device, which ranges between 1 and 254. If the communication method is RS232/RS485, you need to input this device ID in the software communication interface.
HTTPS	To increase the security of software access, users can enable the HTTPS protocol to create a secure and encrypted network transmission and assure the security of sent data through identity authentication and encrypted communication. This function is enabled by default. This function can be enabled or disabled through the menu interface, and when changing the HTTPS status, the device will display a security prompt and restart.

5.4 Wi-Fi Settings

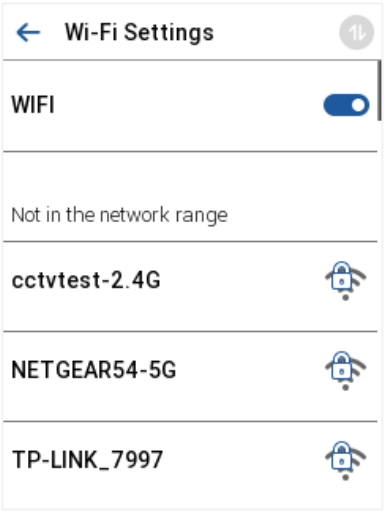
The device provides a Wi-Fi module, which can be built-in within the device module or can be externally connected.

The Wi-Fi module enables data transmission via Wi-Fi (Wireless Fidelity) and establishes a wireless network environment. Wi-Fi is enabled by default in the device. If you don't need to use the Wi-Fi network, you can toggle the Wi-Fi to disable the button.

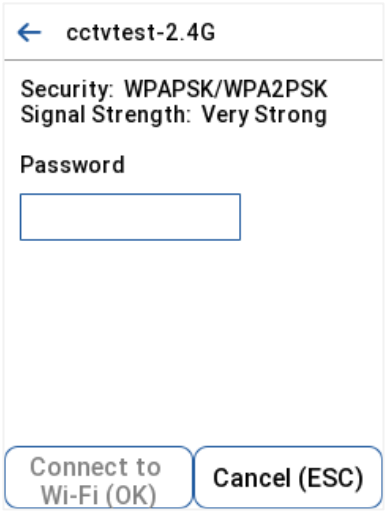
Tap **Wi-Fi Settings** on the **COMM.** Settings interface to configure the Wi-Fi settings.

Searching the Wi-Fi Network

- WIFI is enabled in the device by default. Toggle the button to enable or disable WIFI.
- Once the Wi-Fi is turned on, the device will search for the available Wi-Fi within the network range.
- Tap on the required Wi-Fi name from the available list and input the correct password in the password interface, and then tap **Connect to Wi-Fi (OK)**.



WIFI Enabled: Tap on the required network from the searched network list.



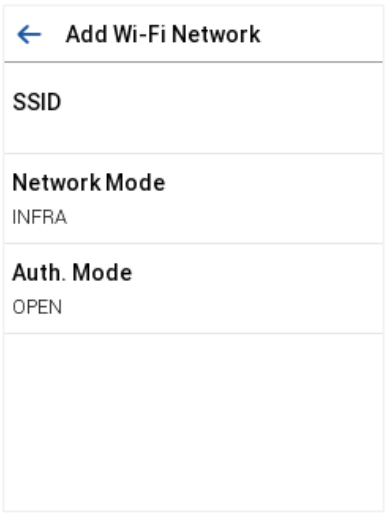
Tap on the password field to enter the password and tap on **Connect to Wi-Fi (OK).**

- When the Wi-Fi is connected successfully, the initial interface will display the Wi-Fi logo.

Adding Wi-Fi Network Manually

The Wi-Fi can also be added manually if the required Wi-Fi does not show on the list.

Tap on **Add Wi-Fi Network** to add the Wi-Fi manually.

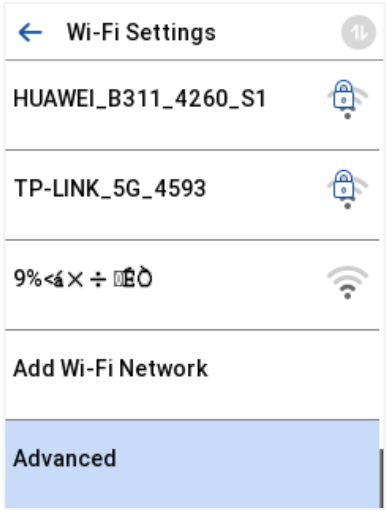


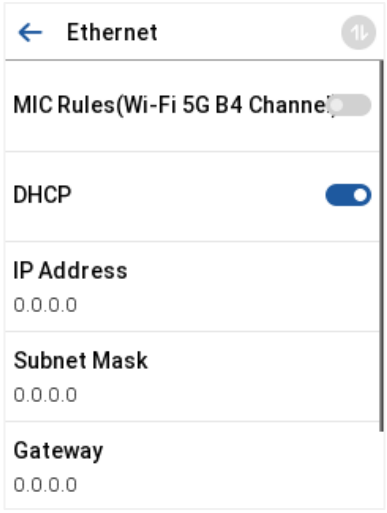
On this interface, enter the Wi-Fi network parameters. (The added network must exist.)

Note: After successfully adding the Wi-Fi manually, follow the same process to search for the added Wi-Fi name.

Advanced Setting

On the **Wi-Fi Settings** interface, tap on **Advanced** to set the relevant parameters as required.





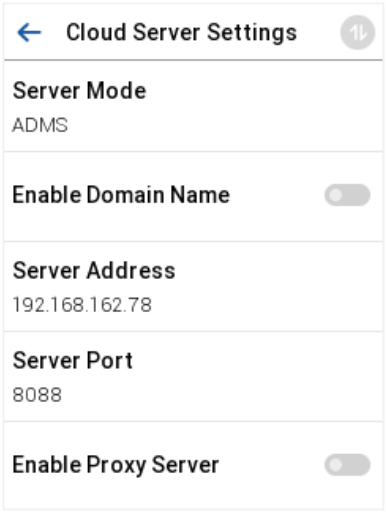
Function Name	Description
MIC Rules	Select whether to enable the Japan MIC rules.
DHCP	Dynamic Host Configuration Protocol (DHCP) dynamically allocates IP addresses to network clients. If the DHCP is enabled, then the IP cannot be set manually.
IP Address	The IP address for the Wi-Fi network, the default is 0.0.0.0. It can be modified according to the network availability.
Subnet Mask	The default Subnet Mask of the Wi-Fi network is 255.255.255.0. It can be modified according to

	the network availability.
Gateway	The Default Gateway address is 0.0.0.0. It can be modified according to the network availability.
DNS	The default DNS address is 0.0.0.0. It can be modified according to the network availability.

5.5 Cloud Server Setting

This represents the settings used for connecting the ADMS server.

Tap **Cloud Server Setting** on the **COMM.** Settings interface.

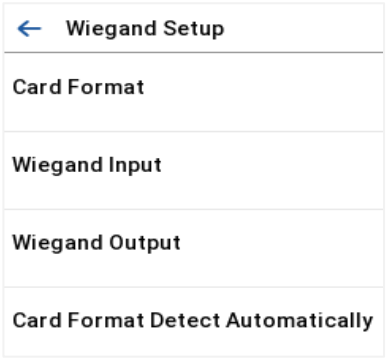


Function Name	Description	
Enable Domain Name	Server Address	When this function is enabled, the domain name mode "https://..." will be used, such as https://armatura.one:8088.
Disable Domain Name	Server Address	IP address of the ADMS server.
	Server Port	Port used by the ADMS server.
Enable Proxy Server	When you choose to enable the proxy, you need to set the IP address and port number of the proxy server.	

5.6 Wiegand Setup

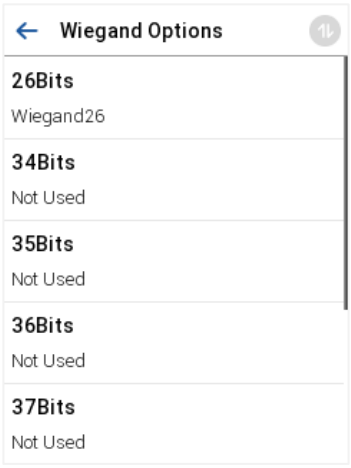
The menu is used to set the Wiegand Input & Output parameters, Card Format and Custom Card Format.

Tap **Wiegand Setup** on the **COMM.** Settings interface to set up the Wiegand input and output parameters.

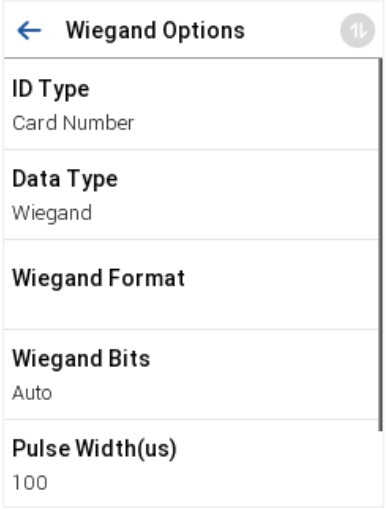


Card Format

Set the card format for this device. Support 26 bits, 34 bits, 35 bits, 36 bits, 37 bits, 48 bits, 50 bits, and 66bits.



Wiegand Input



Function Name	Description
ID Type	Select between the User ID and card number.
Data Type	Select between the Wiegand and Raw.
Wiegand Format	Values range from 26 bits, 34 bits, 35 bits, 36 bits, 37 bits, 48 bits, 50 bits, and 66Bits.

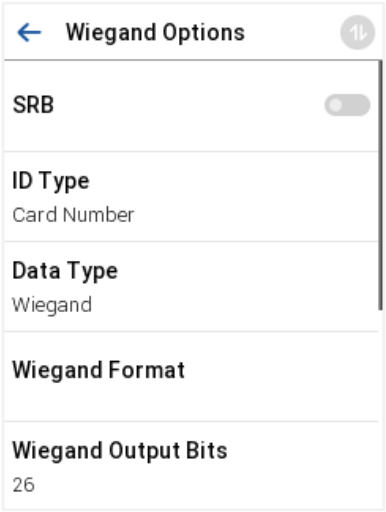
Wiegand Bits	The number of bits of the Wiegand data.
Pulse Width(us)	The value of the pulse width sent by Wiegand is 100 microseconds by default, which can be adjusted within the range of 20 to 400 microseconds.
Pulse Interval(us)	The default value is 1000 microseconds and can be adjusted within the range of 200 to 20000 microseconds.

Various Common Wiegand Format Description:

Wiegand Format	Description
Wiegand26	ECCCCCCCCCCCCCCCCCCCCCCCCO It consists of 26 bits of binary code. The 1st bit is the even parity bit of the 2nd to 13th bits, while the 26th bit is the odd parity bit of the 14th to 25th bits. The 2nd to 25th bits is the card numbers.
Wiegand26a	ESSSSSSSSCCCCCCCCCCCCCCCCO It consists of 26 bits of binary code. The 1st bit is the even parity bit of the 2nd to 13th bits, while the 26th bit is the odd parity bit of the 14th to 25th bits. The 2nd to 9th bits is the site codes, while the 10th to 25th bits are the card numbers.
Wiegand34	ECCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCO It consists of 34 bits of binary code. The 1st bit is the even parity bit of the 2nd to 17th bits, while the 34th bit is the odd parity bit of the 18th to 33rd bits. The 2nd to 25th bits is the card numbers.
Wiegand34a	ESSSSSSSSCCCCCCCCCCCCCCCCCCCCCCCCO It consists of 34 bits of binary code. The 1st bit is the even parity bit of the 2nd to 17th bits, while the 34th bit is the odd parity bit of the 18th to 33rd bits. The 2nd to 9th bits is the site codes, while the 10th to 25th bits are the card numbers.
Wiegand36	OFFFFFFFFFFFFFFFFCCCCCCCCCCCCCCCCMME It consists of 36 bits of binary code. The 1st bit is the odd parity bit of the 2nd to 18th bits, while the 36th bit is the even parity bit of the 19th to 35th bits. The 2nd to 17th bits is the device codes. The 18th to 33rd bits is the card numbers, and the 34th to 35th bits are the manufacturer codes.
Wiegand36a	EFFFFFFFFFFFFFFFFFCCCCCCCCCCCCCCCCO It consists of 36 bits of binary code. The 1st bit is the even parity bit of the 2nd to 18th bits, while the 36th bit is the odd parity bit of the 19th to 35th bits. The 2nd to 19th bits is the device codes, and the 20th to 35th bits are the card numbers.
Wiegand37	OMMMMSSSSSSSSSSSCCCCCCCCCCCCCCCCCCCE It consists of 37 bits of binary code. The 1st bit is the odd parity bit of the 2nd to 18th bits, while the 37th bit is the even parity bit of the 19th to 36th bits. The 2nd to 4th bits is the manufacturer codes. The 5th to 16th bits is the site codes, and the 21st to 36th bits are the card numbers.
Wiegand37a	EMMMFFFFFFFFFSSSSSSCCCCCCCCCCCCCCCCO It consists of 37 bits of binary code. The 1st bit is the even parity bit of the 2nd to 18th bits, while the 37th bit is the odd parity bit of the 19th to 36th bits. The 2nd to 4th bits is the manufacturer codes.

	The 5th to 14th bits is the device codes, and15th to 20th bits are the site codes, and the 21st to 36th bits are the card numbers.
Wiegand50	ESSSSSSSSSSSSSSSCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCO It consists of 50 bits of binary code. The 1st bit is the even parity bit of the 2nd to 25th bits, while the 50th bit is the odd parity bit of the 26th to 49th bits. The 2nd to 17th bits is the site codes, and the 18th to 49th bits are the card numbers.
"C" denotes the card number; "E" denotes the even parity bit; "O" denotes the odd parity bit. "F" denotes the facility code; "M" denotes the manufacturer code; "P" denotes the parity bit; and "S" denotes the site code.	

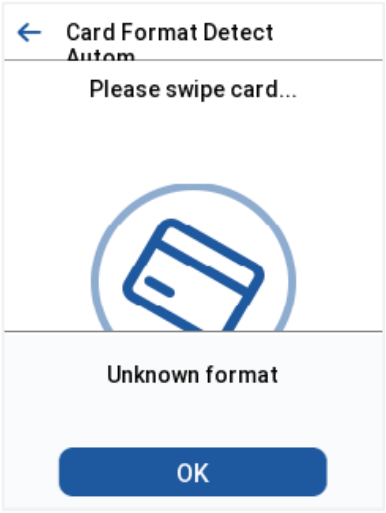
Wiegand Output



Function Name	Description
SRB	When SRB is enabled, the lock is controlled by the SRB to prevent the lock from being opened due to device removal.
ID Type	The default selection is card number.
Data Type	Select between the Wiegand and Raw.
Wiegand Format	Values range from 26 bits, 34 bits, 35 bits, 36 bits, 37 bits, 48 bits, 50 bits, and 66Bits
Wiegand Output Bits	After selecting the required Wiegand format, select the corresponding output bit digits from the Wiegand format.
Failed ID	If the verification fails, the system will send the failed ID to the device and replace the card number or personnel ID with the new one.
Site Code	It is similar to the device ID. The difference is that a site code can be set manually and is repeatable on a different device. The valid value ranges from 0 to 256 by default.
Pulse Width(us)	Pulse width refers to the duration of the signal's high state during transmission.
Pulse Interval(us)	The time interval between pulses.

Card Format Detect Automatically

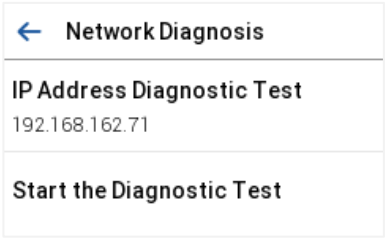
Detect the card format name, Wiegand bits, Site code, card number, even parity and odd parity.



5.7 Network Diagnosis

It helps to set the network diagnosis parameters.

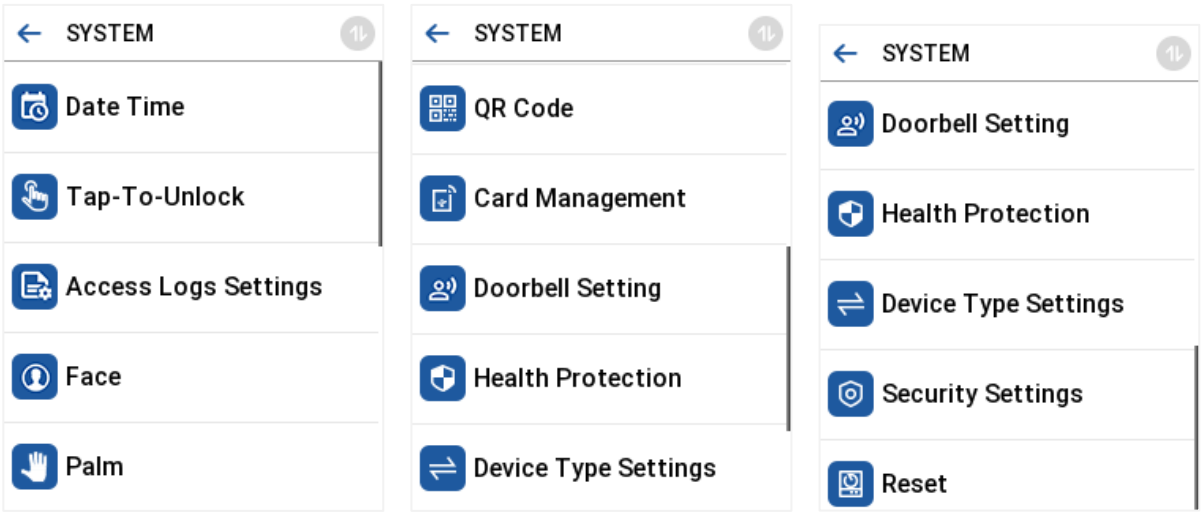
Tap **Network Diagnosis** on the **COMM.** Settings interface. Enter the IP address that needs to be diagnosed and tap **Start the Diagnostic Test** to check whether the network can connect to the device.



6 System Settings

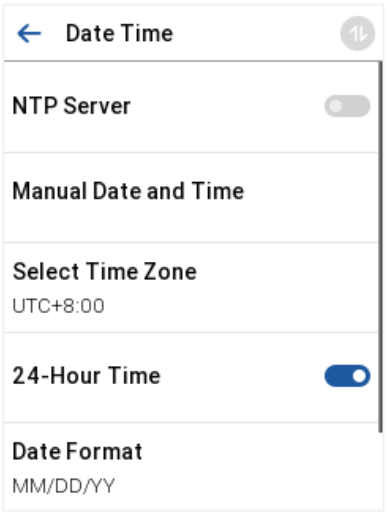
It helps to set related system parameters to optimize the accessibility of the device.

Tap **System** on the **Main Menu** interface to get into its menu options.

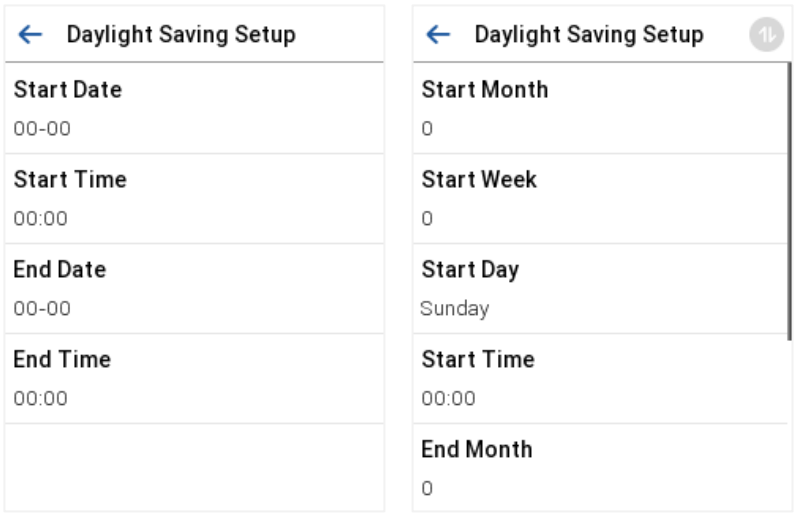


6.1 Date and Time

Tap **Date Time** on the **System** interface to set the date and time.



- Tap **NTP Server** to enable automatic time synchronization based on the service address you enter.
- Tap **Manual Date and Time** to manually set the date and time and then tap to **Confirm** and save.
- Tap **Select Time Zone** to manually select the time zone where the device is located.
- Enable or disable this format by tapping 24-Hour Time. If enabled, then select the **Date Format** to set the date.
- Tap **Daylight Saving Time** to enable or disable the function. If enabled, tap **Daylight Saving Mode** to select a daylight-saving mode and then tap **Daylight Saving Setup** to set the switch time.



Date Mode Week Mode

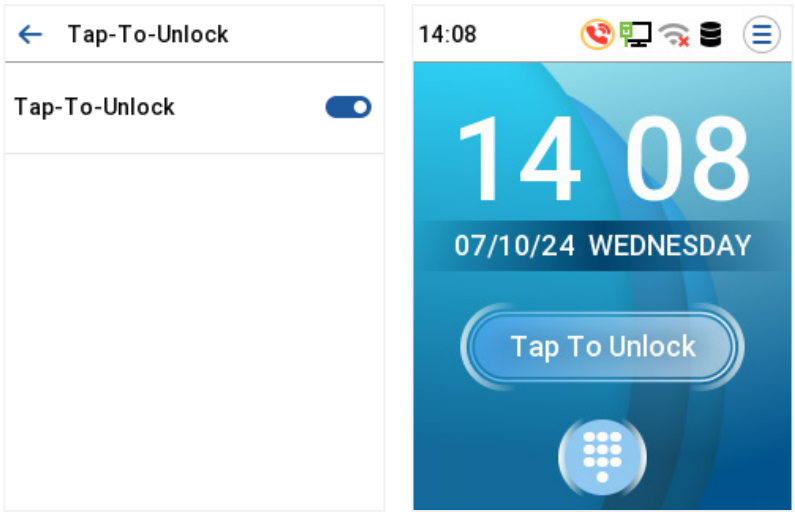
- When restoring the factory settings, the time (24-hour) and date format (YYYY-MM-DD) can be restored, but the device date and time cannot be restored.

Note: For example, if a user sets the time of the device (18:35 on March 15, 2020) to 18:30 on January 1, 2021. After restoring the factory settings, the time of the device will remain at 18:30 on January 1, 2021.

6.2 Tap-To-Unlock

Enable **Tap-To-Unlock**, and it will take effect after the device restarts. After the function takes effect, it will turn off the sensing function of camera auto-identification, and only touching the device screen can wake up the camera for auto-identification.

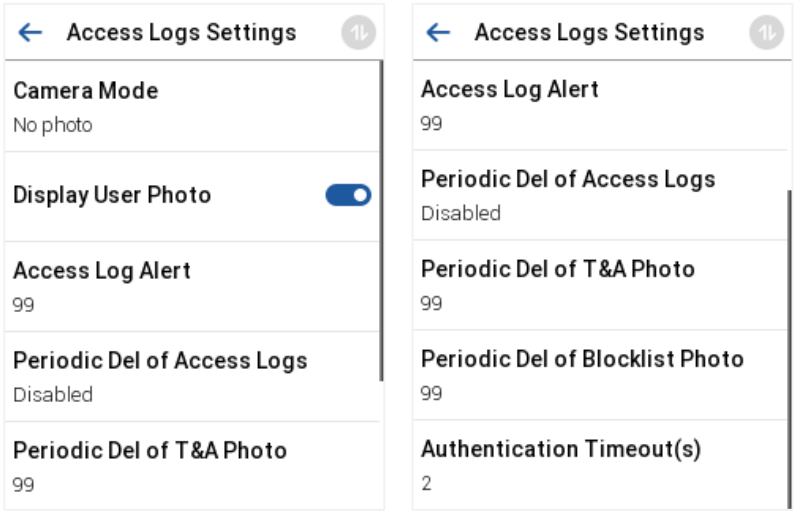
Tap **Tap-To-Unlock** on the System interface to enable this function.



6.3 Access Logs Settings & Attendance

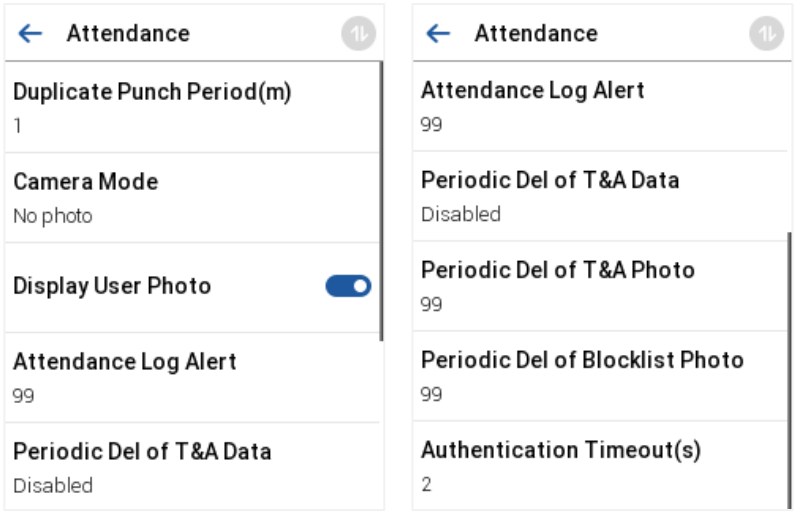
Tap **Access Logs Settings/Attendance** on the **System** interface.

Access Control Terminal:



Function Name	Description
Camera Mode	Whether to capture and save the current snapshot image during verification. There are 5 modes: **No photo:** No photo is taken during user verification. **Take photo, no save:** Photo is taken but is not saved during verification. **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 will be taken and saved only for each failed verification.
Display User Photo	Whether to display the user photo when the user passes the verification.
Access Log Alert	When the record space of the attendance access reaches the maximum threshold value, the device automatically displays the memory space warning. Users may disable the function or set a valid value between 1 and 9999.
Periodic Del of Access Logs	When access logs reach its maximum capacity, the device automatically deletes a set of old access logs. Users may disable the function or set a valid value between 1 and 999.
Periodic Del of T&A Photo	When attendance photos have reached full capacity, the device will automatically delete a set of old attendance photos. Users may disable the function or set a valid value between 1 and 99.
Periodic Del of Blocklist Photo	When block listed photos have reached full capacity, the device will automatically delete a set of old blocks listed photos. Users may disable the function or set a valid value between 1 and 99.
Authentication Timeout(s)	The amount of time taken to display a successful verification message. Valid value: 1 to 9 seconds.

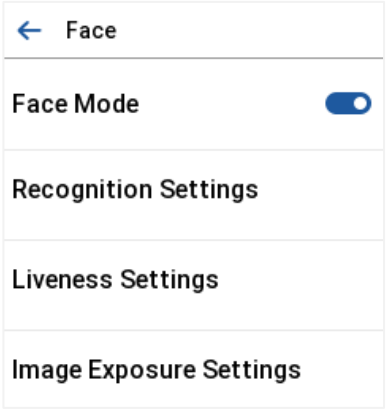
Time Attendance Terminal:



Function Name	Description
Duplicate Punch Period(m)	Within a set time period (unit: minutes), the duplicated attendance record will not be reserved (value ranges from 1 to 999999 minutes).
Camera Mode	Whether to capture and save the current snapshot image during verification. There are 5 modes: **No photo:** No photo is taken during user verification. **Take photo, no save:** Photo is taken but is not saved during verification. **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 will be taken and saved only for each failed verification.
Display User Photo	Whether to display the user photo when the user passes the verification.
Attendance Log Alert	When the record space of the attendance reaches the maximum threshold value, the device automatically displays the memory space warning. Users may disable the function or set a valid value between 1 and 9999.
Periodic Del of T&A Data	When attendance records reach its maximum storage capacity, the device automatically deletes a set of old attendance records. Users may disable the function or set a valid value between 1 and 999.
Periodic Del of T&A Photo	When attendance photos reach its maximum storage capacity, the device automatically deletes a set of old attendance photos. Users may disable the function or set a valid value between 1 and 99.
Periodic Del of Blocklist Photo	When block listed photos reach its maximum storage capacity, the device automatically deletes a set of old blocks listed photos. Users may disable the function or set a valid value between 1 and 99.
Authentication Timeout(s)	The amount of time taken to display a successful verification message. Valid value: 1~9 seconds.

6.4 Face Parameters

Tap **Face** on the **System** interface to go to the Face parameter settings.



Function Name	Description
Face Mode	Whether to enable face function, when disable, the face feature is hidden and facial registration is not supported, nor is facial recognition (even if the person has previously registered a face).
Recognition Settings	**1: N Threshold:** Used to compare the similarity between the collected facial images and all registered facial templates in the device, with higher values being more stringent. The valid value ranges from 0 to 100. The higher the thresholds, the lower the misjudgment rate and higher is the rejection rate, and vice versa. It is recommended to set the default value of 88.
	1:1 Threshold: Used to verify whether the current face is consistent with the face template bound to the input user ID or other personal identifiers (such as card numbers). The higher the value, the higher the requirement for similarity and the stronger the security, but the user experience may be slightly affected. The valid value ranges from 0 to 100. The higher the thresholds, the lower the misjudgment rate and the higher is the rejection rate, and vice versa. It is recommended to set the default value of 80.
	Minimum Face Size: The minimum face size is used to limit the face size recognized by the device, thereby eliminating background interference or misjudgment. This parameter is usually related to the distance from the camera to the face. This value can also be interpreted as the face comparison distance. The farther the individual is, the smaller the face, and the smaller number of pixels of the face obtained by the algorithm. Therefore, adjusting this parameter can adjust the farthest comparison of distance of faces. When the value is 0, the face comparison distance is not limited.
	Occlusion ratio: It is the proportion of the obscured part of the face to the whole face, if the value is big, more obscured can pass the live detection, if the value is small, there may be a big beard these people can't pass the live. It is a parameter used for anti-counterfeiting, such as taking photos and real people together to deceive the anti-counterfeiting detection.
	Recognition Interval(s): After the interval identifying is clicked (selected), for example, if the comparison interval is set to 5 seconds, then the face recognition will verify the face every 5 seconds. Valid value: 0 to 9 seconds. 0 means continuous identifying, 1 to 9 means identifying at

	intervals.	
	Identifying Mode	**Tracking Identification:** The same face can only be recognized once. To recognize it again, you must leave the face recognition area and re-enter it before it can be recognized again.
Liveness Settings	**Single-lens Liveness:** It uses visible light images to detect spoofing attempts and assess whether the biometric source sample provided is of a real person (a live human being) or a false representation. **Single-lens Liveness Threshold:** It facilitates judging whether the captured visible image is of a real person (a live human being). The larger the value, the better the anti-spoofing performance using visible light. **Dual-lens Liveness:** It uses near-infrared spectra imaging to identify and prevent fake photos and video attacks. **Dual-lens Liveness Threshold:** It is convenient to judge whether the near-infrared spectral imaging is a fake photo and video. The larger the value, the better the anti-spoofing performance of near-infrared spectral imaging. *Note:* Single-lens Liveness and Dual-lens Liveness are mutually exclusive options. Enabling Single-lens Liveness will automatically disable Dual-lens Liveness, and vice versa. When the option is turned on or off, the device reboots automatically to execute the function.	
Image Exposure Settings	**Face AE:** Face Auto Exposure, when the face is in front of the camera in Face AE mode, the brightness of the face area increases, while other areas become darker. **Anti-flicker Mode:** It helps to reduce flicker when the device's screen flashes at the same frequency as the light.	

Note:

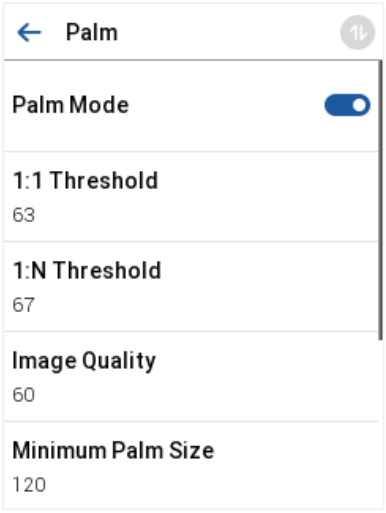
1. Improper adjustment of the exposure and quality parameters may severely affect the performance of the device. Please adjust the exposure parameter only under the guidance of the after-sales service personnel of our company.
2. Recognition Interval and Tracking Identification are mutually exclusive options. Enabling Tracking Identification will automatically disable Recognition Interval, and vice versa.

Process to modify the Facial Recognition Accuracy

- On the **System** interface, tap on **Face** > **Liveness Settings** and then toggle to enable Single-lens Liveness and Dual-lens Liveness to set the liveness settings.
- Then, on the **Main Menu**, tap **Autotest** > **Test Camera** and perform the face test.
- Tap three times for the scores on the left upper corner of the screen, and the red rectangular box appears to start adjusting the mode.
- Keep one arm distance between the device and the face. It is recommended not to move the face in a wide range.

6.5 Palm Parameters

Tap **Palm** on the **System** interface to go to the palm parameter settings.

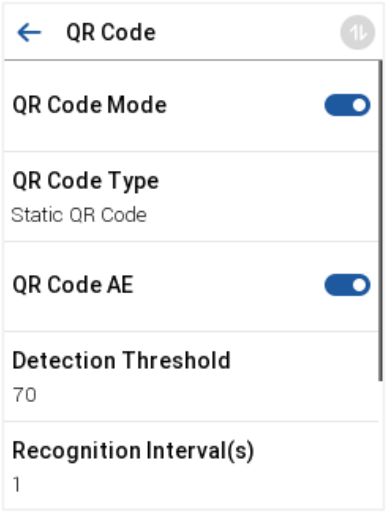


Function Name	Description
Palm Mode	Whether to enable palm function, when disable, the palm feature is hidden and palm registration is not supported, nor is palm recognition (even if the person has previously registered the palm).
1:1 Threshold	Used to verify whether the current palm is consistent with the palm template bound to the input user ID or other personal identification (such as card number). The higher the value, the higher the requirement for similarity and the stronger the security, but the user experience may be slightly affected.
1:N Threshold	Used to compare the similarity between the collected palm images and all registered palm templates in the device, with higher values being more stringent.
Image Quality	Image quality for palm registration and comparison. The higher the value, the clearer the image requires.
Minimum Palm Size	The minimum palm size is used to limit the palm size recognized by the device, thereby eliminating background interference or misjudgment. This parameter is usually related to the distance from the camera to the palm. This value can be understood as the palm comparison distance. The farther the person is, the smaller the palm is, and the smaller the palm pixel will be obtained by the algorithm. Therefore, adjusting this parameter can adjust the furthest comparison distance of palms. When the value is 0, the palm comparison distance is not limited.
Palm AE	Palm Auto Exposure, when the palm is in front of the camera in Palm AE mode, the brightness of the palm area increases, while other areas become darker.

Live Detection	It detects the spoof attempt using visible light images to determine if the provided biometric source sample is of a real person (a live human being) or a false representation.
Recognition Interval(s)	After the interval identifying is clicked (selected), for example, if the comparison interval is set to 5 seconds, then the palm recognition will verify the palm every 5 seconds. Valid value: 0 to 9 seconds. 0 means continuous identifying, 1 to 9 means identifying at intervals.

6.6 QR Code

Tap **QR Code** on the **System** interface.

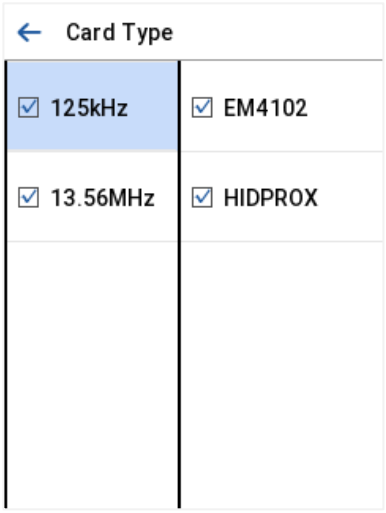


Function Name	Description
QR Code Mode	Whether to enable QR Code function, when disable, the QR Code feature is hidden and QR Code registration is not supported, nor is QR Code recognition (even if the person has previously registered the QR Code).
QR Code Type	Select the mode of QR Code. Static and Dynamic are supported. Note: When enroll QR Code, you need to adjust to static QR type.
QR Code AE	When the QR code is in front of the camera, the brightness of the QR code area increases, while other areas become darker.
Detection Threshold	It is convenient to judge whether the near-infrared spectral imaging is fake photo and video. The larger the value, the better the anti-spoofing performance of near-infrared spectral imaging.
Recognition Interval(s)	After the interval identifying is clicked (selected), for example, if the comparison interval is set to 5 seconds, then the QR Code recognition will verify the QE Code every 5 seconds. Valid value: 0 to 9 seconds. 0 means continuous identifying, 1 to 9 means identifying at intervals.

Width of QR code scanning area	Adjust the width of the QR code scanning area of the device, valid values are 50 to 720, default value is 512.
Height of QR code scanning area	Adjust the height of the QR code scanning area of the device, valid values are 50 to 1280, default value is 512.

6.7 Card Management

Tap **Card Management** on the **System** interface.



- During card management, the main menu card type will be displayed on the left and its sub-menus will be listed on the right.
- First tap on the required card type, and then select its required sub-menus from the list.

Best plug'n play and high-performance full NFC solution, a full NFC controller solution with integrated firmware and NCI interface designed for contactless communication at 13.56 MHz. It is compatible with NFC forum requirements.

Designed based on learnings from previous NXP NFC device generation. It is the ideal solution for rapidly integrating NFC technology in any application, especially those running O/S environment like Linux and Android, reducing Bill of Material (BOM) size and cost, thanks to:

- Full NFC forum compliancy with small form factor antenna.
- Embedded NFC firmware providing all NFC protocols as pre-integrated feature.
- Direct connection to the main host or microcontroller, by I^2C-bus physical and NCI protocol.
- Ultra-low power consumption in polling loop mode.
- Highly efficient integrated power management unit (PMU) allowing direct supply from a battery.

Embeds a new generation RF contactless front-end supporting various transmission modes according to NFCIP-1 and NFCIP-2, ISO/IEC 14443, ISO/IEC 15693, MIFARE Classic IC-based card and FeliCa card specifications. It embeds an ARM Cortex-MO microcontroller core loaded with the integrated firmware supporting the NCI 1.0 host communication.

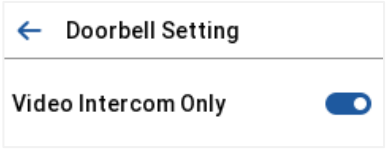
It also allows to provide a higher output power by supplying the transmitter output stage from 3.0 V to 4.75 V.

The contactless front-end design brings a major performance step-up with on one hand a higher sensitivity and on the other hand the capability to work in active load modulation communication enabling the support of small antenna form factor.

For contactless card functionality, the device can act autonomously if previously configured by the host in such a manner. Device integrated firmware provides an easy integration and validation cycle as all the NFC real-time constraints, protocols and device discovery (polling loop) are being taken care internally. In a few NCI commands, host SW can configure the device to notify for card or peer detection and start communicating with them.

6.8 Doorbell Setting

Tap **Doorbell Setting** on the **System** interface to set the doorbell.



Function Name	Description
Video Intercom Only	When enabled, the doorbell icon will be displayed in the standby interface, and video intercom will also appear in the main menu interface, which allows you to set the video intercom.

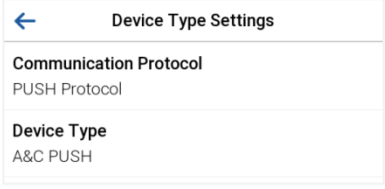
6.9 Health Protection

Tap **Health Protection** on the **System** interface to configure the **Health Protection** settings.

Function Name	Description
Enable Mask Detection	To enable or disable the mask detection function. When enabled, the device will identify whether the user is wearing a mask or not during verification.

6.10 Device Type Setting

Tap **Device Type Setting** on the **System** interface to configure the Device Type Setting settings.

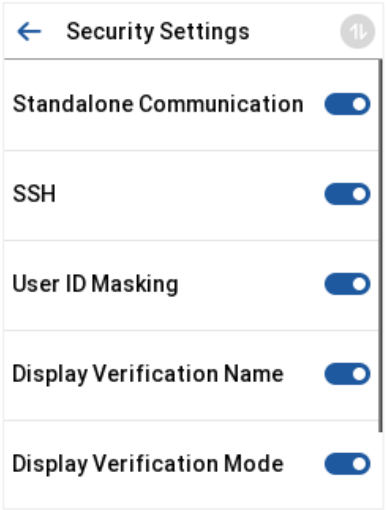


Function Name	Description
Communication Protocol	Set the PUSH protocol.
Device Type	Set the device as an access control terminal or attendance terminal.

Note: After changing the device type, the device will delete all the data and restart, and some functions will be adjusted accordingly.

6.11 Security Settings

Tap **Security Settings** on the **System** interface.



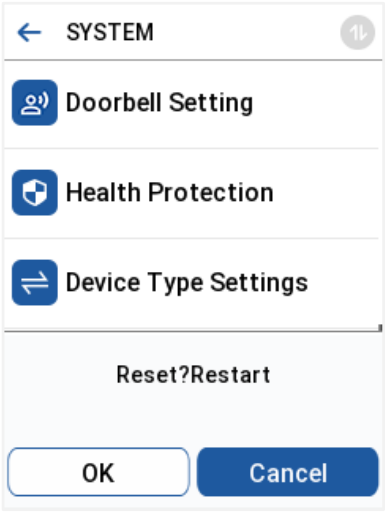
Function Name	Description
Standalone Communication	By default, this function is disabled. This function can be enabled or disabled via the menu interface. When it is switched on, a security prompt appears, and the device will restart after you confirm.
SSH	The device does not support the Telnet feature, hence SSH is typically used for remote debugging. By default, SSH is enabled. The menu interface allows you to enable and disable SSH. When enabled, there will be a security prompt, but the device will not need to be restarted after confirmation.
User ID Masking	After enabled, the User ID will be partially displayed after the personnel verification result (only the User ID with more than 2 digits supports the masking display), and it is enabled by default.
Display Verification Name	After enabled, the user's name will be displayed after the personnel verification result. The verification result will not display the name when this option is disabled.

Display Verification Mode	After enabled, the personnel verification result will show the user's verification mode. The verification result will not display the mode when this option is disabled.
Save Photo as Template	After disabling this function, face re-registration is required after an algorithm upgrade.

6.12 Factory Reset

The Factory Reset function restores the device settings such as communication settings and system settings, to the default factory settings (this function does not clear registered user data).

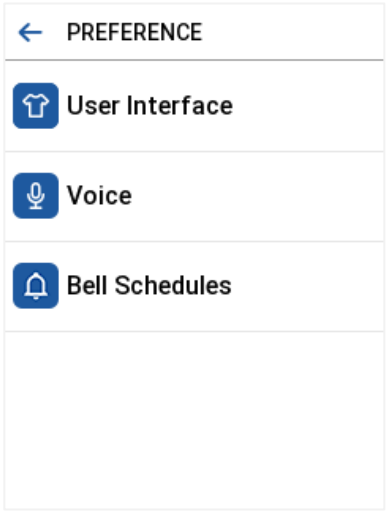
Tap **Reset** on the **System** interface and then tap **OK** to restore the default factory settings.



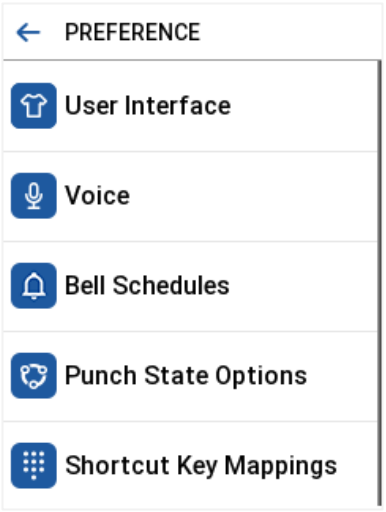
7 Personalize Settings

Tap **Personalize** the **Main Menu** interface to customize interface settings, voice, bell, punch state options, and shortcut key mappings.

Access Control Terminal:

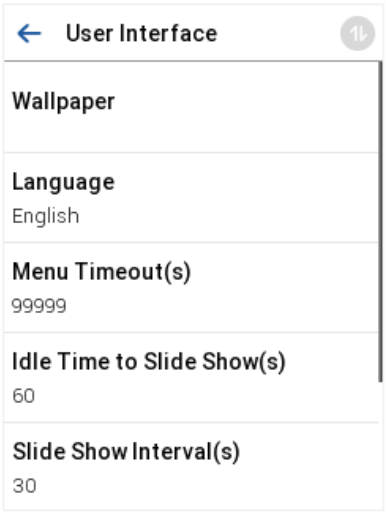


Time Attendance Terminal:



7.1 Interface Settings

Tap **User Interface** on the **Personalize** interface to customize the display style of the main interface.

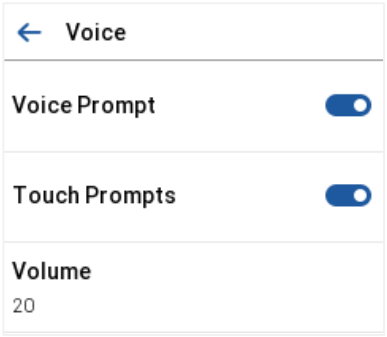


Function Name	Description
Wallpaper	It helps to select the main screen wallpaper according to the user preference.
Language	It helps to select the language of the device.
Menu Timeout (s)	When there is no operation, and the time exceeds the set value, the device automatically goes back to the initial interface. The function can either be disabled or set the required 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 is displayed. The function can be disabled, or you may set the value between 3 and 999 seconds.
Slide Show Interval (s)	It is the time interval in switching between 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 the sleep mode is activated, and when there is no operation in the device, then the device will enter standby mode. This function can be disabled or set a value within 1-999 minutes.
Main Screen Style	The style of the main screen can be selected according to the user preference.

7.2 Voice Settings

Tap **Voice** on the **Personalize** interface to configure the voice settings.



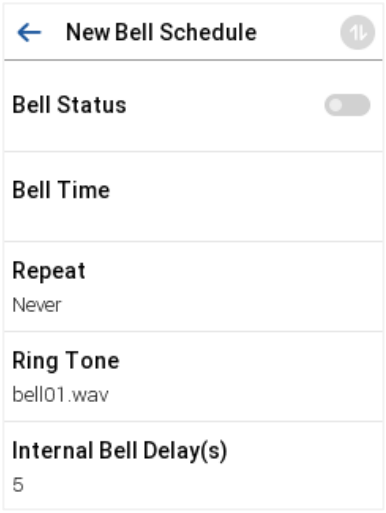
Function Name	Description
Voice Prompt	Toggle to enable or disable the voice prompts during function operations.
Touch Prompts	Toggle to enable or disable the keypad sounds.
Volume	Adjust the volume of the device which can be set between 0-100.

7.3 Bell Schedules

Tap **Bell Schedules** on the **Personalize** interface to configure the Bell settings.

New Bell Schedule

Tap **New Bell Schedule** on the **Bell Schedule** interface to add a new bell schedule.



Function Name	Description
Bell Status	Toggle to enable or disable the bell status.
Bell Time	Once the required time is set, the device automatically triggers to ring the bell during that time.
Repeat	Set the required number of counts to repeat the scheduled bell.
Ring Tone	Select a ringtone.
Internal Bell Delay(s)	Set the replay time of the internal bell. Valid values range from 1 to 999 seconds.

All Bell Schedules

Once the bell is scheduled, on the **Bell Schedules** interface, tap **All Bell Schedules** to view the newly scheduled bell.

Edit the Scheduled Bell

On the **All Bell Schedules** interface, tap on the required bell schedule, and tap **Edit** to edit the selected bell schedule. The editing method is the same as the operations of adding a new bell schedule.

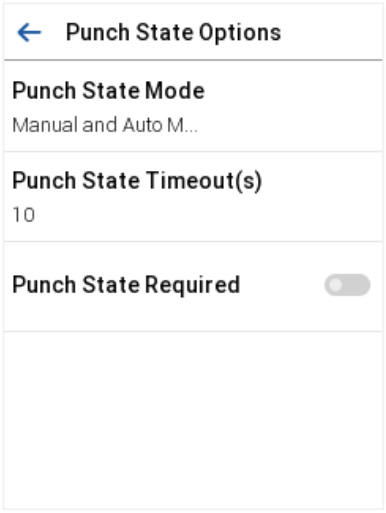
Delete a Bell

On the **All Bell Schedules** interface, tap the required bell schedule, tap **Delete**, and then tap **Yes** to delete the selected bell.

7.4 Punch States Options

Tap **Punch States Options** on the **Personalize** interface to configure the punch state settings.

Note: This function only for Time Attendance Terminal.



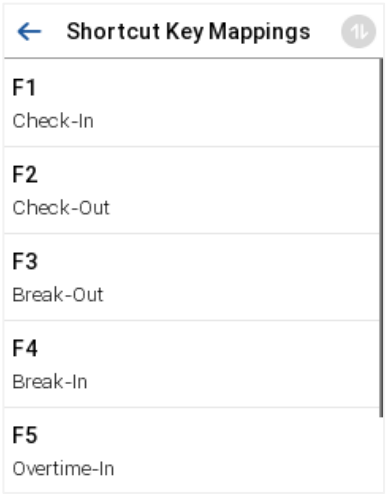
Function Name	Description
Punch State Mode	**Off:** Disable the punch state function. Therefore, the punch state key set under Shortcut Key Mappings menu will become invalid. **Manual Mode:** Switch the punch state key manually, and the punch state key will disappear after Punch State Timeout. **Auto Mode:** The punch state key will automatically switch to a specific punch status according to the predefined time schedule which can be set in the Shortcut Key Mappings. **Manual and Auto Mode:** The main interface will display the auto-switch punch state key. However, the users will still be able to select alternative that is the manual attendance status. After timeout, the manual switching punch state key will become auto-switch punch state key. **Manual Fixed Mode:** After the punch state key is set manually to a particular punch status, the function will remain unchanged until it is being manually switched again. **Fixed Mode:** Only the manually fixed punch state key will be shown. Users cannot change the status by tapping any other keys.
Punch State Timeout（s）	It is the amount of time for which the punch state is displayed. The value ranges from 5~999 seconds.
Punch State Required	To choose whether an attendance state needs to be selected during verification.

7.5 Shortcut Key Mappings

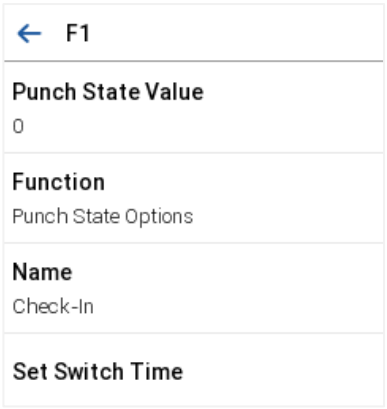
Users may define shortcut keys for attendance status and for functional keys which will be defined on the main interface. So, on the main interface, when the shortcut keys are taped, the corresponding attendance status or the function interface will be displayed directly.

Note: This function only for Time Attendance Terminal.

Tap **Shortcut Key Mappings** on the **Personalize** interface to set the required shortcut keys.



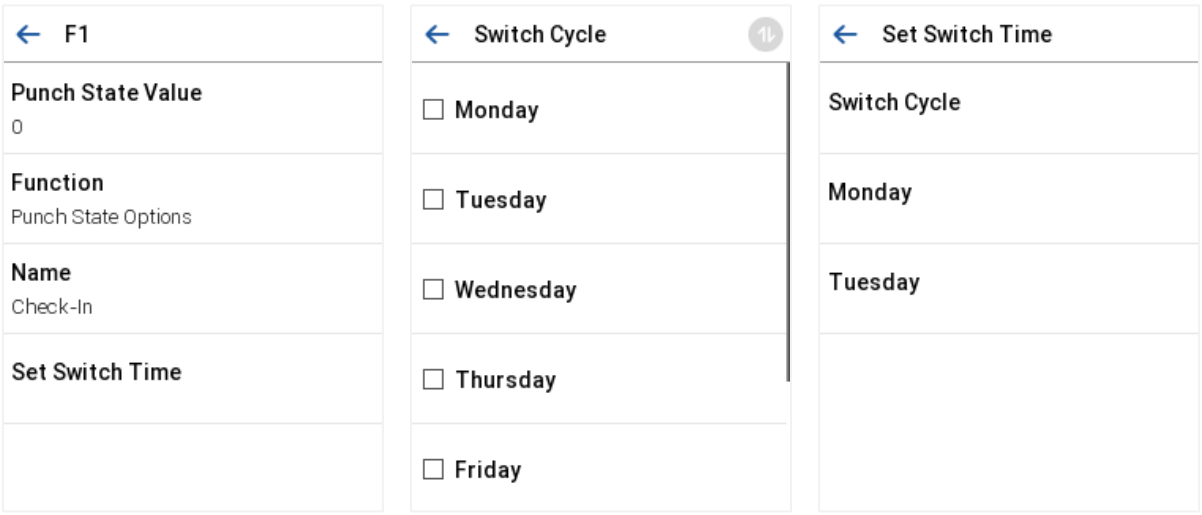
- On the **Shortcut Key Mappings** interface, tap on the required shortcut key to configure the shortcut key settings.
- On the **Shortcut Key** (that is "F1") interface, tap **function** to set the functional process of the shortcut key either as punch state key or function key.
- If the Shortcut key is defined as a function key (such as New user, All users, etc.), the configuration is completed as shown in the image below.



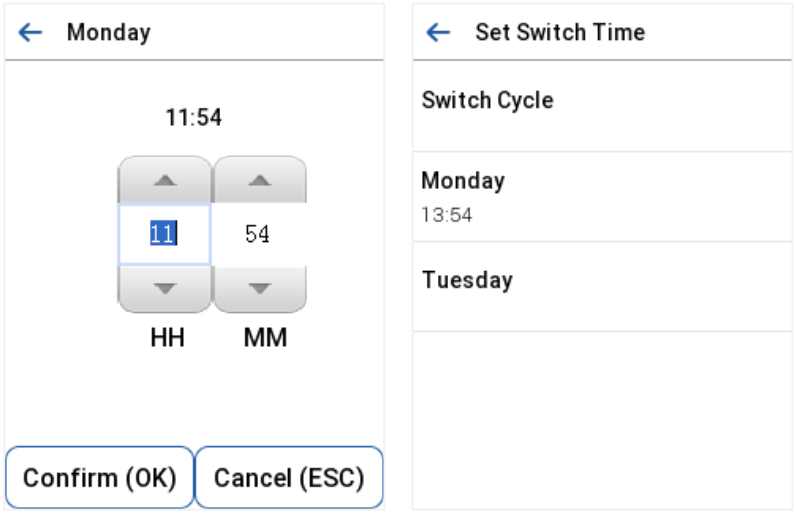
- If the Shortcut key is set as a punch state key (such as check in, check out, etc.), then it is required to set the punch state value (valid value 0~250), name.

Set the Switch Time

- The switch time is set in accordance with the punch state options.
- When the **Punch State Mode** is set to **Auto Mode**, the switch time should be set.
- On the **Shortcut Key** interface, tap **Set Switch Time** to set the switch time.
- On the **Switch Cycle** interface, select the switch cycle (Monday, Tuesday, etc.) as shown in the image below.



- Once the Switch cycle is selected, set the switch time for each day, and tap OK to confirm, as shown in the image below.



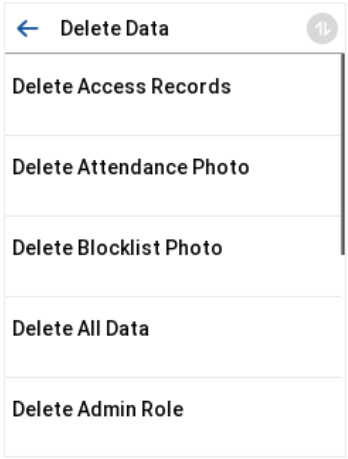
Note: When the function is set to Undefined, the device will not enable the punch state key.

8 Data Management

On the **Main Menu**, tap **Data Mgt.** to delete the relevant data in the device.

8.1 Delete Data

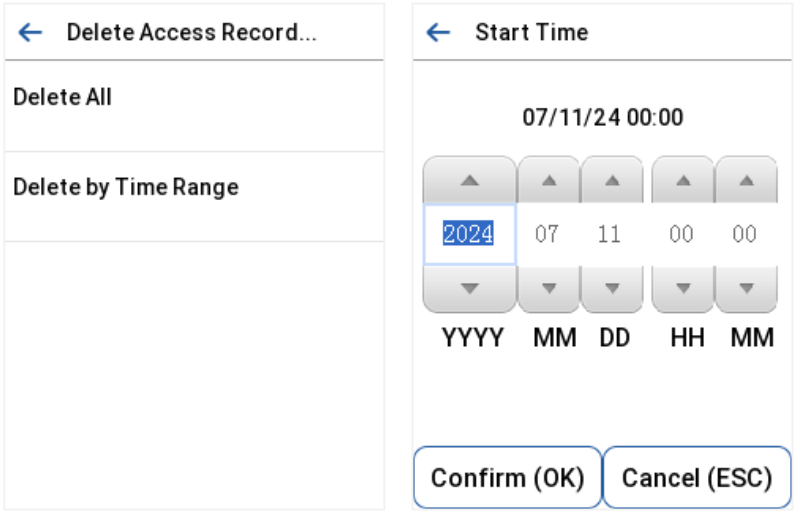
Tap **Delete Data** on the **Data Mgt.** interface to delete the required data.



Function Name	Description
Delete Access Records/Delete Attendance Data	To delete attendance data/access records conditionally.
Delete Attendance Photo	To delete the attendance photos of designated personnel.
Delete Blocklist Photo	To delete the photos taken during failed verifications.
Delete All Data	To delete the information and access records of all registered users.
Delete Admin Role	To remove all the administrator privileges.
Delete Access Control	To delete all the access data.
Delete User Photo Templates	To delete all the user photo templates on the device.
Delete Profile Photo	To delete all the profile photos on the device.
Delete Wallpaper	To delete all the wallpapers in the device.

Delete Screen Savers	To delete all the screen savers in the device.

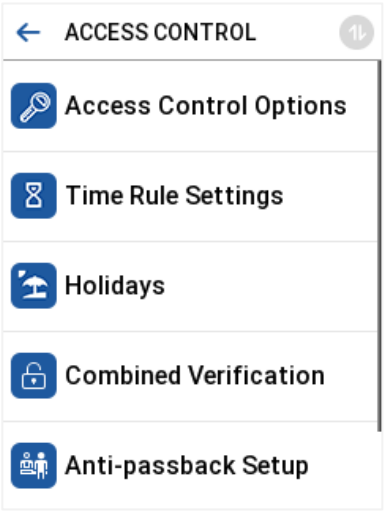
The user may select **Delete All** or **Delete by Time Range** when deleting the access records/attendance data, attendance photos or block listed photos. Selecting **Delete by Time Range**, you need to set a specific time range to delete all data within a specific period.



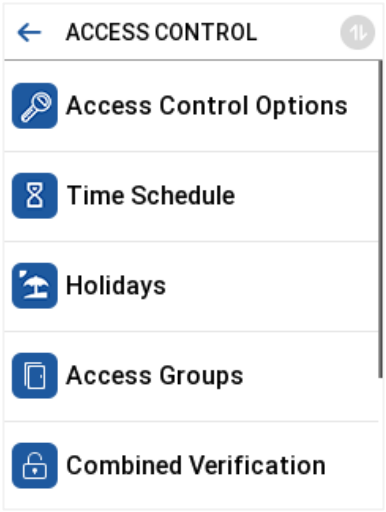
9 Access Control

On the **Main Menu**, tap **Access Control** to set the schedule of the door opening, locks control and to configure other parameters settings related to access control.

Access Control Terminal:



Time Attendance Terminal:



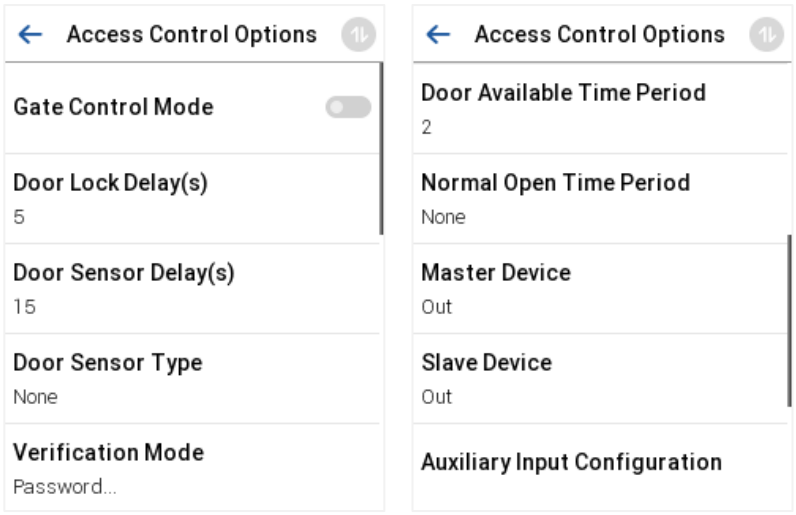
To gain access, the registered user must meet the following conditions:

- The relevant door's current unlock time should be within any valid time zone of the user's time period.
- The corresponding user's group must be already set in the door unlock combination (and if there are other groups, being set in the same access combo, then the verification of those group's members is also required to unlock the door).
- In default settings, new users are allocated into the first group with the default group time zone, where the access combo is "1" and is set in unlock state by default.

9.1 Access Control Options

Tap **Access Control Options** on the **Access Control** interface to set the parameters of the control lock of the terminal and related equipment.

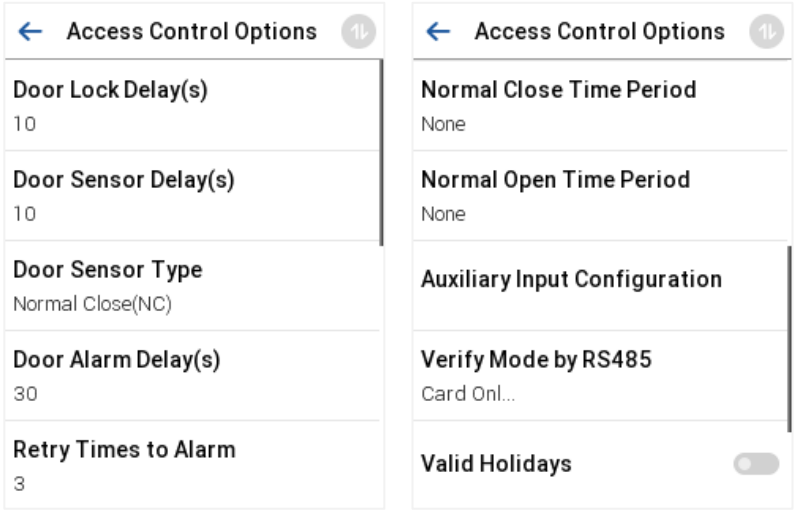
Access Control Terminal:



Function Name	Description
Gate Control Mode	It toggles between ON or OFF switch to get into gate control mode or not. When set to ON, the interface removes the Door lock relay, Door sensor relay, and Door sensor type options.
Door Lock Delay (s)	The length of time that the device controls the electric lock to be in unlock state. Valid value: 0~99 seconds.
Door Sensor Delay (s)	If the door is not locked and is left open for a certain duration (Door Sensor Delay), an alarm will be triggered. The valid value of Door Sensor Delay ranges from 1 to 255 seconds.
Door Sensor Type	There are three Sensor types: **None**, **Normal Open**, and **Normal Closed**. **None:** It means the door sensor is not in use. **Normally Open (NO):** It means the door is always left open when electric power is on. **Normally Closed (NC):** It means the door is always left closed when electric power is on.
Verification Mode	The supported verification mode includes Password/Card/Face/Palm, User ID Only, Password, Card only, Password + Card, Password/Card, Face Only, Face + Password, Face + Card, Palm, Palm + Card, Palm +Face.
Door Available Time Period	It sets the timing for the door so that the door is accessible only during that period.
Normal Open Time Period	It is the scheduled time-period for “Normal Open” mode so that the door is always open during this period.

Master Device	While configuring the master and slave devices, you may set the state of the master as **Out** or **In**. **Out:** A record of verification on the master device is a check-out record. **In:** A record of verification on the master device is a check-in record.
Slave Device	While configuring the master and slave devices, you may set the state of the slave as **Out** or **In**. **Out:** A record of verification on the slave device is a check-out record. **In:** A record of verification on the slave device is a check-in record.
Auxiliary Input Configuration	Sets the door unlock time period and auxiliary output type of the auxiliary terminal device. Auxiliary output types include None, Trigger door open, Trigger Alarm, Trigger door open and Alarm.
Verify Mode by RS485	The verification mode is used when the device is used either as a host or secondary. The supported verification mode includes Card only, and Card + Password.
Speaker Alarm	It transmits a sound alarm or disassembly alarm from the local. When the door is closed or the verification is successful, the system cancels the alarm from the local.
Reset Access Setting	The access control reset parameters include door lock delay, door sensor delay, door sensor type, verification mode, door available time period, normal open time period, alarm and so on. However, erased access control data in Data Mgt. is excluded.

Time Attendance Terminal:



Function Name	Description
Door Lock Delay (s)	The length of time that the device controls the electric lock to be in unlock state. Valid value: 0~10 seconds.
Door Sensor Delay (s)	If the door is not locked and is left open for a certain duration (Door Sensor Delay), an alarm will be triggered. The valid value of Door Sensor Delay ranges from 1 to 255 seconds.

Door Sensor Type	There are three Sensor types: None, Normal Open, and Normal Closed. **Normally Open (NO):** It means the door is always left open when electric power is on. **Normally Closed (NC):** It means the door is always left closed when electric power is on. **None:** It means the door sensor is not in use.
Door Alarm Delay (s)	When the state of the door sensor is inconsistent with the door sensor type, an alarm will be triggered after a specified time period, i.e. the Door Alarm Delay. The valid value ranges from 1 to 999 seconds.
Retry Times to Alarm	When the number of failed verifications reaches the set value (value ranges from 1 to 9 times), an alarm will be triggered. If the set value is None, the alarm will not be triggered after failed verification.
Normal Close Time Period	To set time period for Normally Closed mode, so that no one can access during this period.
Normal Open Time Period	It is the scheduled time-period for “Normal Open” mode so that the door is always open during this period.
Auxiliary Input Configuration	Sets the door unlock time period and auxiliary output type of the auxiliary terminal device. Auxiliary output types include None, Trigger door open, Trigger Alarm, Trigger door open and Alarm.
Verify Mode by RS485	The verification mode is used when the device is used either as a host or secondary. The supported verification mode includes Card only, and Card + Password.
Valid Holidays	To set if Normal Close Time Period or Normal Open Time Period settings are valid in set holiday time period. Choose [ON] to enable the set Normal Close or Normal Open time period in holiday.
Speaker Alarm	It transmits a sound alarm or disassembly alarm from the local. When the door is closed or the verification is successful, the system cancels the alarm from the local.
Reset Access Setting	The access control reset parameters include door lock delay, door sensor delay, door sensor type, verification mode, door available time period, normal open time period, alarm and so on. However, erased access control data in Data Mgt. is excluded.

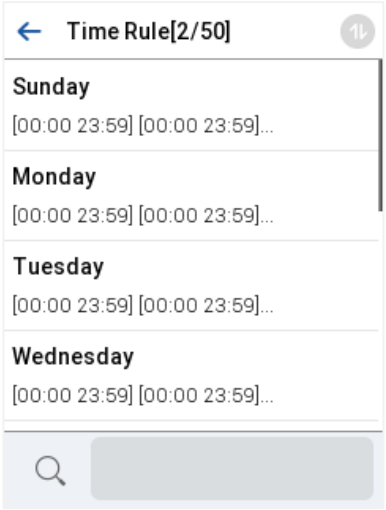
9.2 Time Rule Settings/Time Schedule

Tap **Time Rule Settings/Time Schedule** on the Access Control interface to configure the time settings.

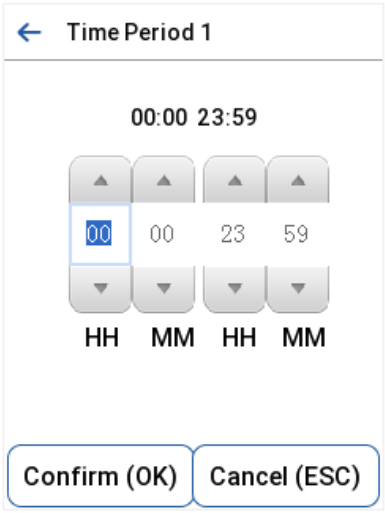
- The entire system can define up to 50 Time Rules.
- Each time-period represents **10** Time Zones, i.e., **1** week and **3** holidays, and each time zone is a standard 24-hour period per day and the user can only verify within the valid time-period.

- One can set a maximum of 3 time periods for every time zone. The relationship among these time-periods is "**OR**". Thus, when the verification time falls in any one of these time-periods, the verification is valid.
- The Time Zone format of each time-period is **HH MM-HH MM**, which is accurate to minutes according to the 24-hour clock.

Tap the grey box to search the required Time Rule and specify the required Time Rule number (maximum up to 50 rules).



On the selected Time Rule number interface, tap on the required day (that is Monday, Tuesday, etc.) to set the time.



Specify the start and the end time, and then tap **OK**.

Note:

1. The door is inaccessible for the whole day when the End Time occurs before the Start Time (such as **23:57~23:56**).
2. It is the time interval for valid access when the End Time occurs after the Start Time (such as **08:00~23:59**).
3. The door is accessible for the whole day when the End Time occurs after the Start Time (such that Start Time is **00:00** and End Time is **23:59**).
4. The default Time Rule 1 indicates that the door is open all day long.

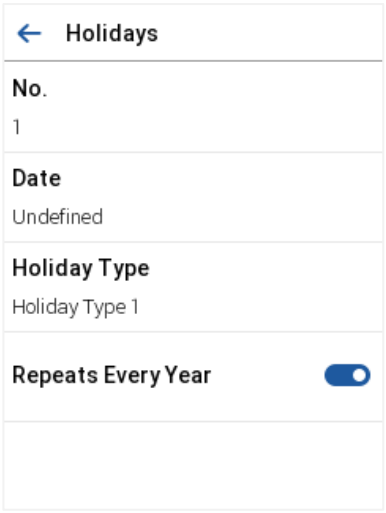
9.3 Holidays

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

Tap **Holidays** on the **Access Control** interface to set the holiday access.

Add a New Holiday

Tap **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. Tap **Edit** to modify holiday parameters.

Delete a Holiday

On the **Holidays** interface, select a holiday item to be deleted and tap **Delete**. Tap **OK** to confirm the deletion. After deletion, this holiday does not display on the **All Holidays** interface.

9.4 Access Groups

Grouping is to manage users in groups, only for time attendance terminal.

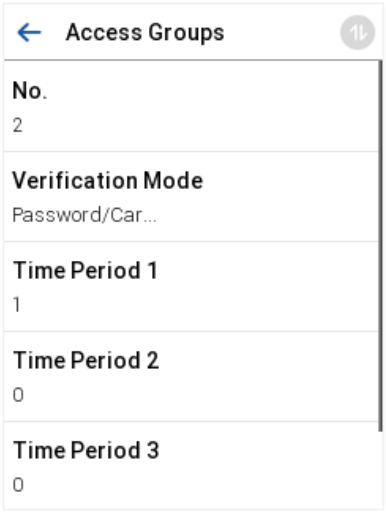
The default time zone for group members is the group time zone, while users can set their personal time zone. When the group verification mode and the user verification mode overlap, the user verification mode takes priority. Each group can set a maximum of 3 time zones; as long as one of them is valid, the group can be successfully verified. The

newly enrolled user is assigned to Access Group 1 by default but can be assigned to another access group.

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

Add a New Holiday

Tap **New Group** on the Access Group interface.



- The system has a default access group numbered 1, which cannot be deleted but can be modified.
- A number cannot be modified again after being set.
- When the holiday is set to be valid, the personnel in a group can open the door only when group time period overlaps with the holiday time period.
- When the holiday is set to be invalid, the access control time of the personnel in this group is not affected by holidays.

Edit Group

On the **All Group** interface, tap to select the access group item to be modified. Tap **Edit** to modify group parameters.

Delete a Group

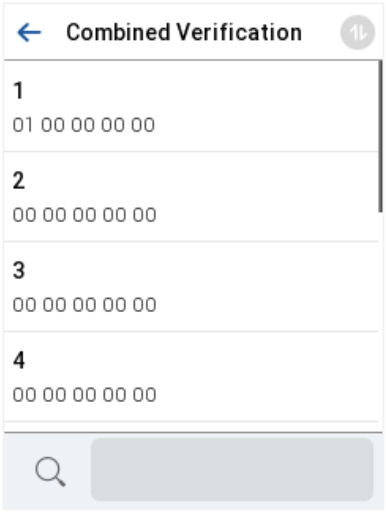
On the **All Group** interface, select an access group item to be deleted and tap **Delete**. After deletion, this group does not display on the All Group interface.

9.5 Combined Verification

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 $0 \leqslant N \leqslant 5$ and the number of members N may all belong to one access group or may belong to five different access groups.

Tap **Combined Verification** on the **Access Control** interface to configure the combined verification setting.



On the combined verification interface, tap the Door-unlock combination to be set, and tap the **up** and **down** arrows to input the combination number, and then tap **OK**.

For Example:

- If the **Door-unlock combination 1** is set as (**01 03 05 06 08**). It indicates that the unlock combination 1 consists of 5 people and all the 5 individuals are from 5 groups, namely, AC Group 1, AC Group 3, AC Group 5, AC Group 6, and AC Group 8, respectively.
- If the **Door-unlock combination 2** is set as (**02 02 04 04 07**). It indicates that the unlock 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.
- If the **Door-unlock combination 3** is set as (**09 09 09 09 09**). It indicates that there are 5 people in this combination; all of which are from AC Group 9.
- If the **Door-unlock combination 4** is set as (**03 05 08 00 00**). It indicates that the unlock combination 4 consists of only 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.

Note: To delete the door-unlock combination, set all Door-unlock combinations to 0.

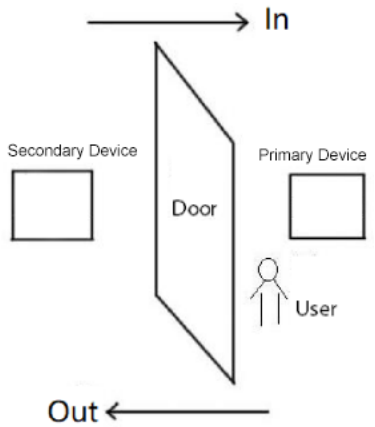
9.6 Anti-passback Setup

A user may be followed by some person(s) to enter the door without verification, resulting in a security breach. So, to avoid such situations, the Anti-passback option was developed. Once it is enabled, the check-in and check-out record must occur alternatively to open the door to represent a consistent pattern.

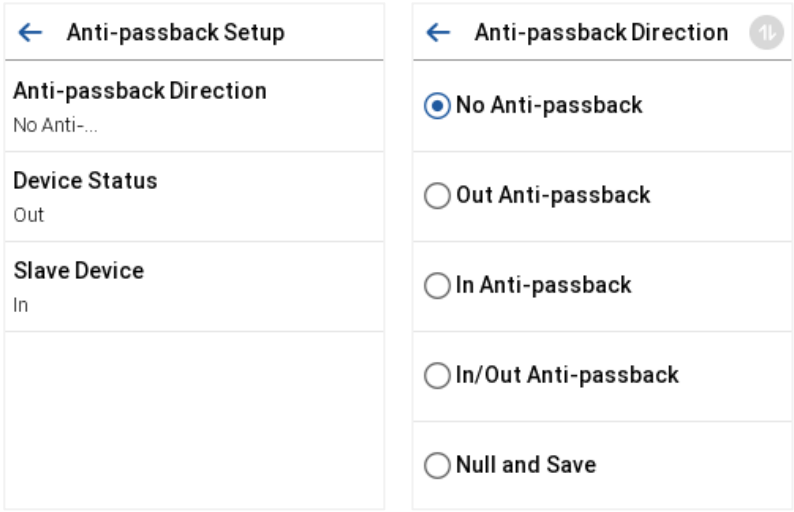
This function requires two devices to work together:

One device is installed on the indoor side of the door (primary device), and the other one is installed on the outdoor side of the door (the secondary device). The two devices communicate via the Wiegand signal. The Wiegand format

and Output type (User ID/Card Number) adopted by the primary device and secondary device must be consistent.



Tap **Anti-passback Setup** on the **Access Control** interface.



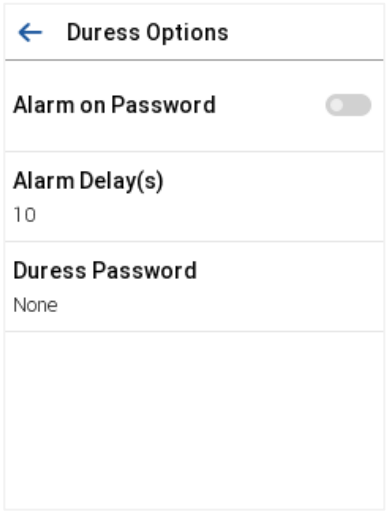
Function Name	Description
Anti-passback Direction	**No Anti-passback:** The Anti-Passback function is disabled, which means successful verification through either the primary device or secondary device can unlock the door. The attendance state is not saved in this option. **Out Anti-passback:** The user can check-out only if the last record is a check-in record otherwise an alarm is raised. However, the user can check-in freely. **In Anti-Passback:** The user can check-in again only if the last record is a check-out record otherwise an alarm is raised. However, the user can check-out freely. **In/Out Anti-passback:** In this case, a user can check-in only if the last record is a check-out or the user can check-out only if the last record is a check-in otherwise the alarm is triggered.
Device Status	Set the device to in/out/none. **Note:** This function only for Time Attendance Terminal.
Slave Device	Set the slave device to in/out/none. **Note:** This function only for Time Attendance Terminal.

9.7 Duress Options Settings

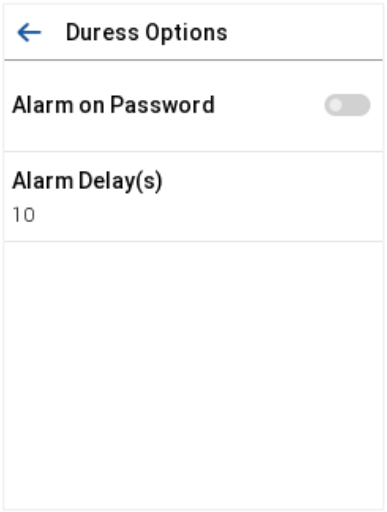
Once a user activates the duress verification function with a specific authentication method(s), and when he/she is under coercion and authenticates using duress verification, the device unlocks the door as usual. At the same time, a signal is sent to trigger the alarm as well.

On the **Access Control** interface, tap **Duress Options** to configure the duress settings.

Access Control Terminal:



Time Attendance Terminal:



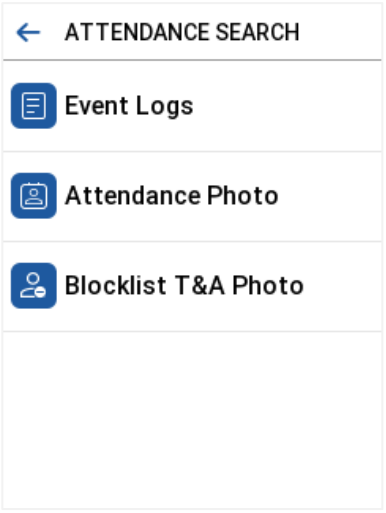
Function Name	Description
Alarm on Password	When a user uses the password verification method, an alarm signal will be generated, otherwise there will be no alarm signal.
Alarm Delay (s)	Alarm signal will not be transmitted until the alarm delay time is elapsed. The value ranges from 1 to 999 seconds.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

10 Attendance Search

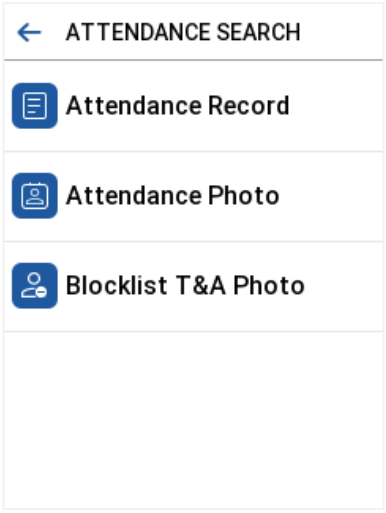
Once the identity of a user is verified, the access record is saved in the device. This function enables users to check their event logs.

Select **Attendance Search** on the **Main Menu** interface to search for the required event Logs.

Access Control Terminal:



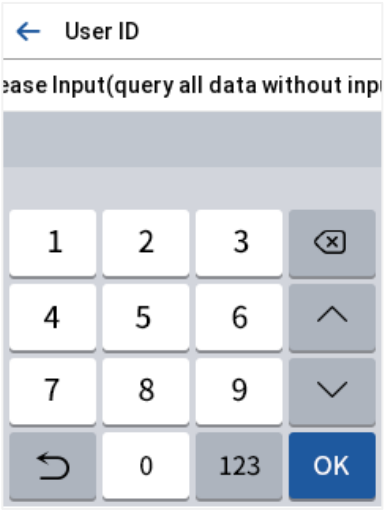
Time Attendance Terminal:



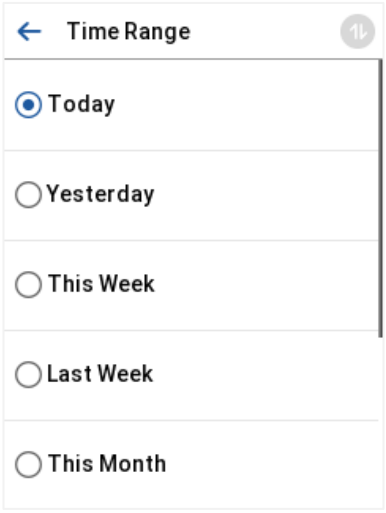
The process of searching for attendance and blocklist photos is similar to that of searching for event logs. The following is an example of searching for event logs.

On the **Attendance Search** interface, tap **Event Logs/Attendance Record** to search for the required record.

1. Enter the user ID to be searched and tap **OK**. If you want to search for records of all users, tap **OK** without entering any user ID.

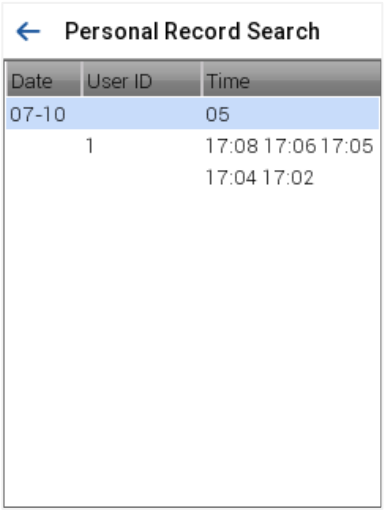


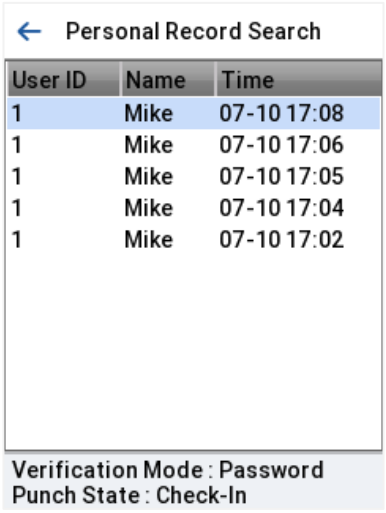
2. Select the time range in which the records need to be searched.



3. Once the record search completes. Tap the record highlighted in green to view its details.

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

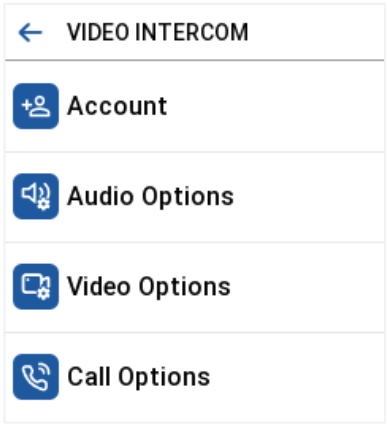




11 Video Intercom

Tap **Video Intercom** on the main menu interface to get into its menu options.

Note: This function needs to be enabled in **System > Doorbell Setting > Video Intercom Only**. And it needs to be used in conjunction with the Armatura One software. For more specific operations, please refer to 15 Video Intercom.



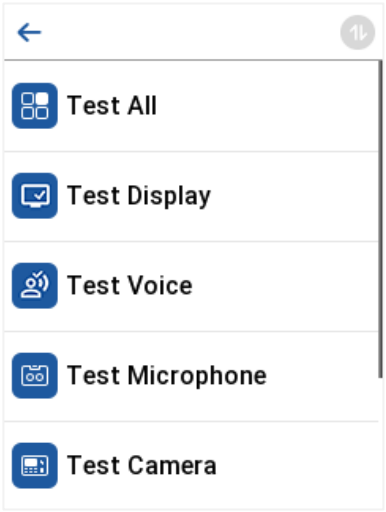
Function Name	Description	
Account	SIP Server	Select whether to enable the SIP server. After enabling, it is necessary to set the server address, user name, verify ID, Password.
	Server Address	Enter the server address.
	User Name	Enter the username of server.
	Verify ID	Enter the verify ID of server.
	Password	Enter the password of server.
	Transport Protocol	Set the transport protocol between the device and indoor station.
	Verify TLS certificate	Select whether to enable the verify TLS certificate.
Audio Options	**Echo Cancellation:** Select whether to enable the echo cancellation. It is used to eliminate echoes caused by sound returning from the speaker to the microphone during a call. **Encoder:** Select the audio encoder for intercom. Both PCMU and PCMA provide better voice quality, but they take up more bandwidth, requiring 64kbps.	
Video Options	**Video Resolution:** Select the video resolution of the intercom. **Video Frame Rate:** Refers to the number of frames per second of the intercom video display, the	

	larger the value the smoother, the device defaults to 25Hz, does not support modification. **Video Code Stream:** Select the video code stream of the intercom, the larger the value, the higher the picture and sound quality of the video, and the greater the network requirements. **Encoder:** Whether to enable H264 Encoder.	
Call Options	Calling Delay(s)	Set the time of call, valid value 30 to 60 seconds.
	Talking Delay(s)	Set the time of intercom, valid value 60 to 120 seconds.
	Mode	Select the mode of the call, which supports direct dial and directory.
	Auto Answer	When dials the device successfully, it is automatically connected within the set answer time.
	Organization Search	Organization search is a user management method provided by video intercom that allows users to tag video intercom personnel into different categories for better management and location. Through Organization Search, users can find video intercom personnel they need to contact more easily and improve communication efficiency.
	Organization Input Method	Select the input method to use organization search, which supports both alphabet and number methods.

12 Autotest

To automatically test whether all modules in the device function properly, which include the LCD, Audio, microphone, Camera, real-time clock (RTC), and HID Config.

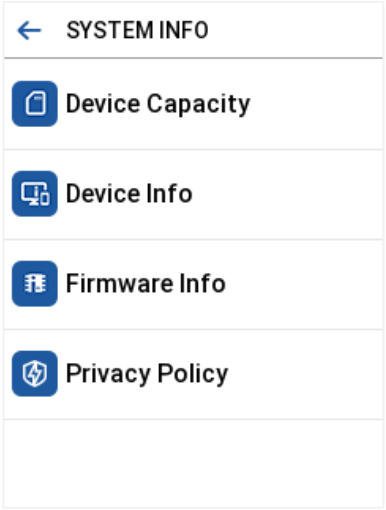
Tap **Autotest** on the main menu interface.



Function Name	Description
Test All	To automatically test whether the LCD, Voice, Camera and Real-Time Clock (RTC) are normal.
Test Display	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.
Test Microphone	To test if the microphone is working properly by speaking into the microphone.
Test Camera	To test if the camera functions properly by checking the pictures taken to see if they are clear enough.
Test HID Config	To test if the card is working properly by swiping into the card reading area.
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 tap it again to stop counting.

13 System Information

On the **Main Menu**, tap **System Info** to view the storage status, the version information of the device, firmware information and the privacy policy.



Function Name	Description
Device Capacity	Displays the current device's user storage, password, palm, face and card storage, administrators, access/attendance records, attendance and blocklist photos, and Profile photos.
Device Info	Displays the device's name, serial number, MAC address, face and palm algorithm, platform information, MCU Version, card module version, Manufacturer, and manufacture date.
Firmware Info	Displays the firmware version and other version information of the device.
Privacy Policy	The privacy policy control will appear when the gadget turns on for the first time. After tapping "**Read and Accept**," the customer can use the product regularly. Tap **System Info -> Privacy Policy** to view the content of the privacy policy. The privacy policy's content does not allow for U disc export. **Note:** The current privacy policy's text is only available in Simplified Chinese/English. However, translation of other multi-language content is underway, with more iterations.

14 Connecting to ACMS★

ACMS (Armatura Credential Management System) facilitates integrators to use the ARMATURA CONNECT APP with OmniAC20. The ACMS can be used by customers & integrators to manage & issue credentials.

14.1 ARMATURA CONNECT

14.1.1 Download and Install the APP

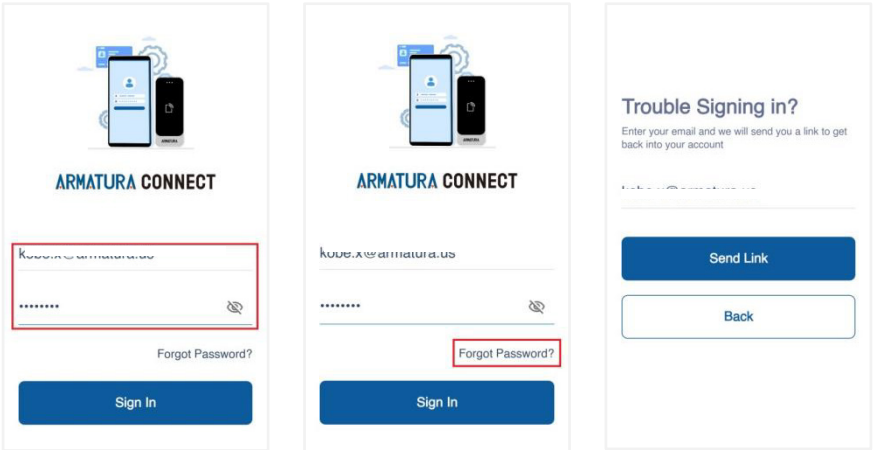
1. Ensure your mobile device is connected to the internet via a mobile or Wi-Fi network.
2. Search for the ARMATURA CONNECT APP in the Apple APP Store (for iOS devices), Google Play Store (for Android devices) or scan the QR code below to download the APP on your mobile phone.

iOS Android

14.1.2 Log In the APP

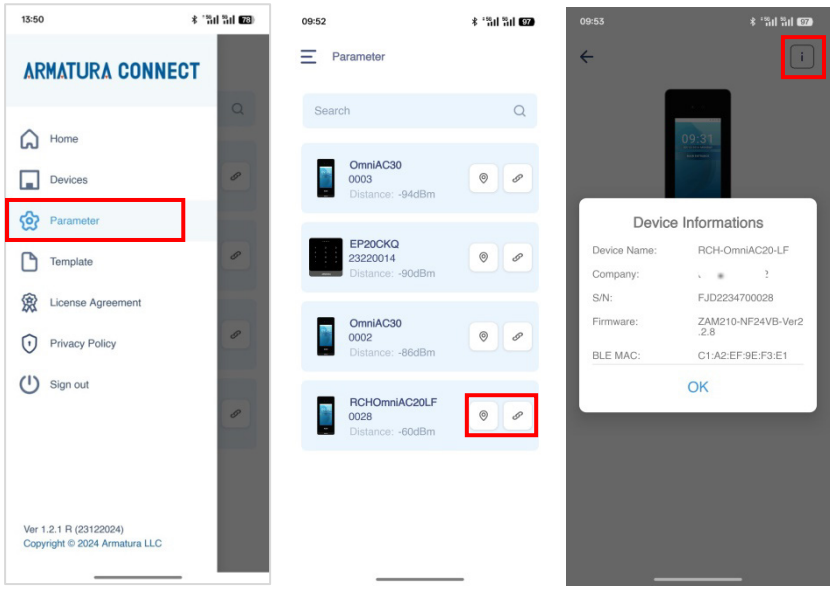
After the account activation process is complete, you can log in to the ARMATURA CONNECT APP with your account and password.

1. Enter the account and the password. Click **Sign In** to log into the ARMATURA CONNECT APP. The password is set when the account was activated.
2. If you have forgotten your login password, tap **Forgot Password?**. Enter your email address and tap **Send Link**. Your password will be reset through the ACMS mailbox.



14.1.3 Bind Device

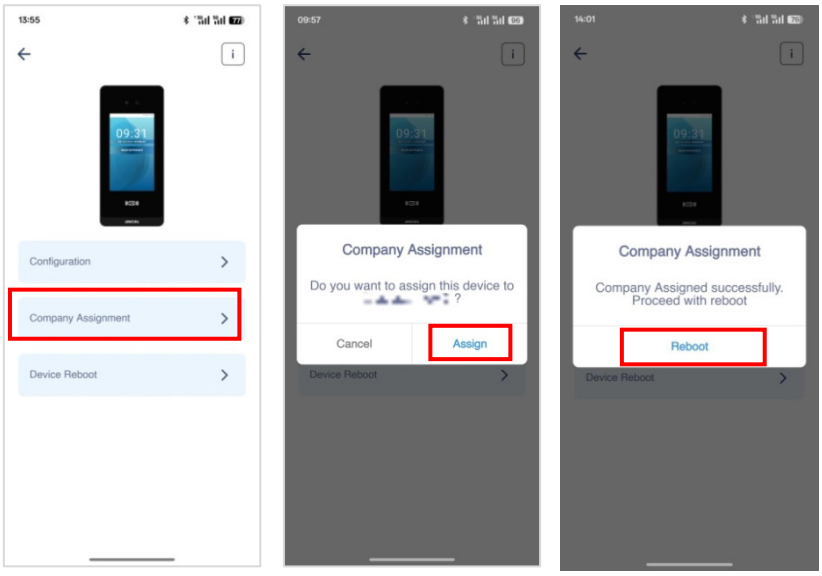
1. Click ☰ > **Parameter** to enter the parameter setting screen.
2. Turn on the Bluetooth function of the mobile device, and click 🔍 to search for the device. All searched devices will be displayed in the list.
3. Click 📍 to confirm your device.
4. Click 🔗 to enter the device parameter setting screen. Here you can set the relevant parameters of the device.



14.1.4 Company Assign

This function is used to assign the device to the company. The Bluetooth function of the mobile device needs to be turned on before operation.

1. Click **Company Assignment** and the Assignment window will pop up. Click **Assign** to assign the device to the current company.
2. Click **Reboot** when prompted that the assignment is successful.
3. After completing the above steps, please wait for the device to reboot.



After the device configuration is complete, employees of the company can use the mobile credentials to operate on the Armatura ID APP.

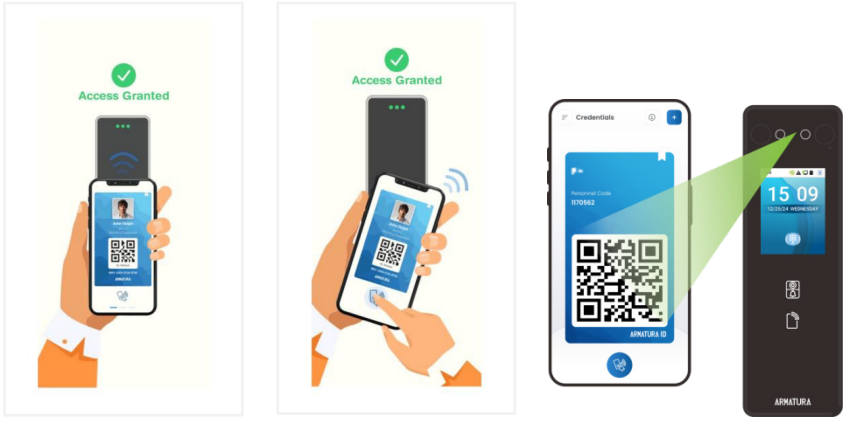
14.2 ARMATURA ID

ARMATURA ID allows end users to use their mobile devices (smartphones) to securely and conveniently enter the workplace by extending access control capabilities to smart devices.

When the user approaches the OmniAC20, the following interaction modes can be performed through their mobile device to access:

- **Card Mode:** When using this mode, the end user's mobile device is brought very close to, or touching the reader (a similar user experience to using a physical credential).
- **Remote Mode:** This mode allows end users to use mobile devices to perform remote control within the set range.
- **QR Code Mode:** This mode allows end users to swipe the QR code on the mobile phone on the OmniAC20.

Note: The effective distance of Card Mode is 0 to 20 inches (0 to 50 centimeters). The effective distance of Remote Mode is 0 to 394 inches (0 to 1000 centimeters).



Card Mode Remote Mode QR Code Mode

14.2.1 Download the ARMATURA ID APP

Ensure the mobile device is connected to the internet (either via mobile data network or Wi-Fi) during device registration and Mobile ID delivery. Both Android and iOS versions are available, please download the APP according to the following instructions.

1. Search for the ARMATURA ID APP in the Apple APP Store (for iOS devices), Google Play Store (for Android devices) or scan the QR code below to download the APP on your mobile phone.

iOS

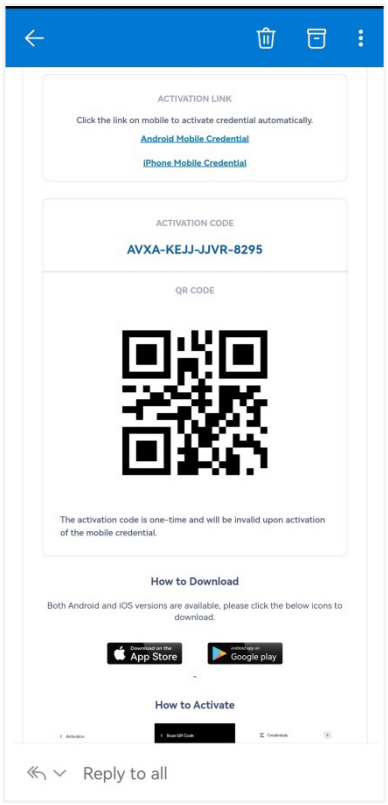
Android

2. You can also download the APP by clicking on the store icons in the activation code email sent by the server mailbox Armatura Credential Management System.

14.2.2 Activate the Credentials

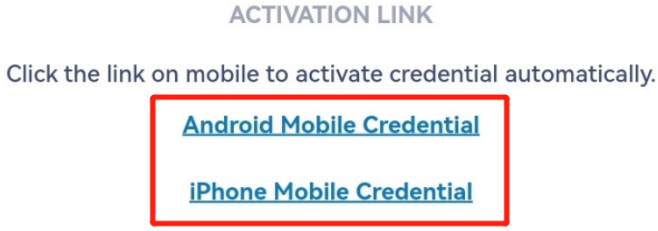
After completing the installation of the APP, you first need to activate the credentials. There are three ways to activate the credentials: click the activation link to activate automatically, enter the activation code to activate, and scan the QR code to activate. The specific operation steps are as follows.

First, please open the activation code email sent by Armatura Credential Management System. It is sent by the site administrator of your company via ACMS.



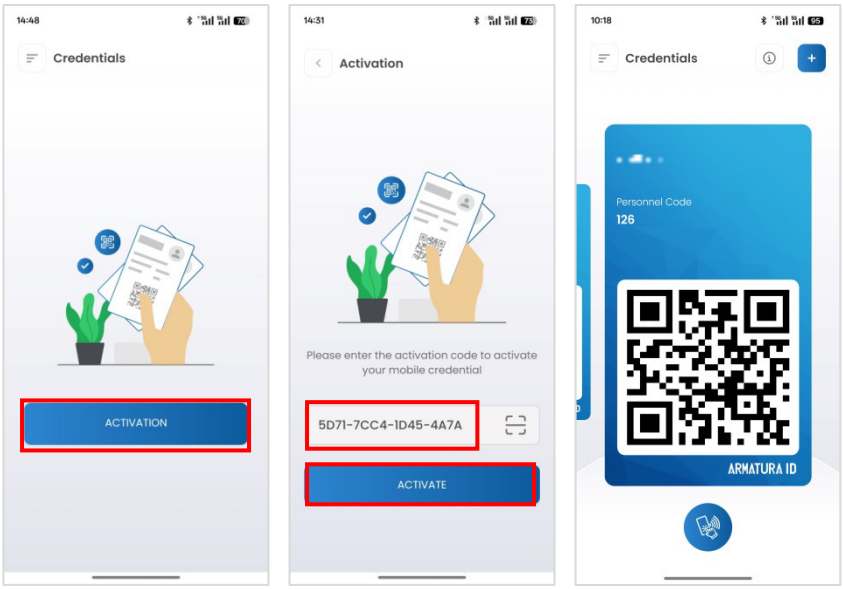
Click the Activation Link to Activate

Click the link on mobile to activate credential automatically. Follow the prompts.



Enter the Activation Code to Activate

1. Open the ARMATURA ID APP and enter the Credentials interface. Click **ACTIVATION**.
2. Manually enter the activation code from the email in the input field.
3. Click **ACTIVATE** on the Activation interface.
4. A mobile credential will be displayed after successful activation.

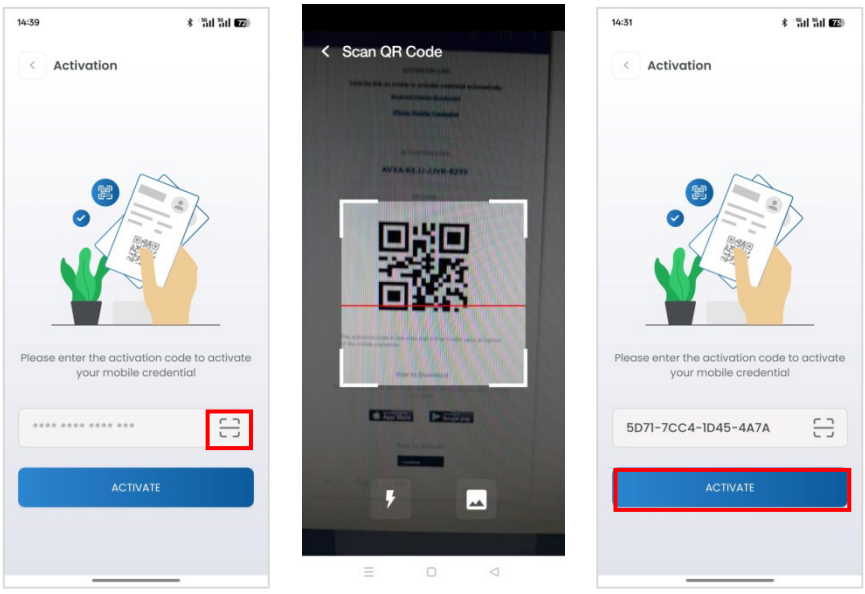


Scan the QR Code to Activate

1. Open the ARMATURA ID APP and enter the Credentials interface. Click **ACTIVATION**.
2. Click ⛶ to scan the QR code on the email. And the system will automatically enter the activation code.
3. Then click **ACTIVATE** to activate the credential.
4. A mobile credential will be displayed after successful activation.

Note:

1. Please turn on the Bluetooth function of your mobile phone before scanning.
2. In order to allow access for users' devices, the site administrators need to assign devices under their company beforehand.

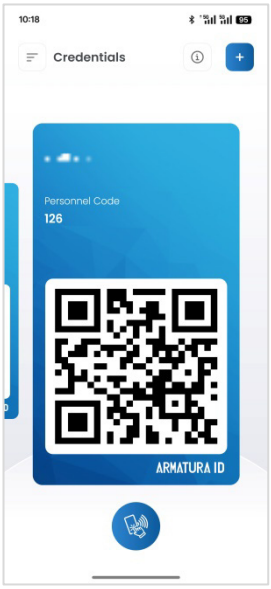


14.2.3 Use of the Mobile Credentials

The end users can swipe their cards through **QR code**, **NFC** and **Bluetooth**.

Swipe the card through QR code

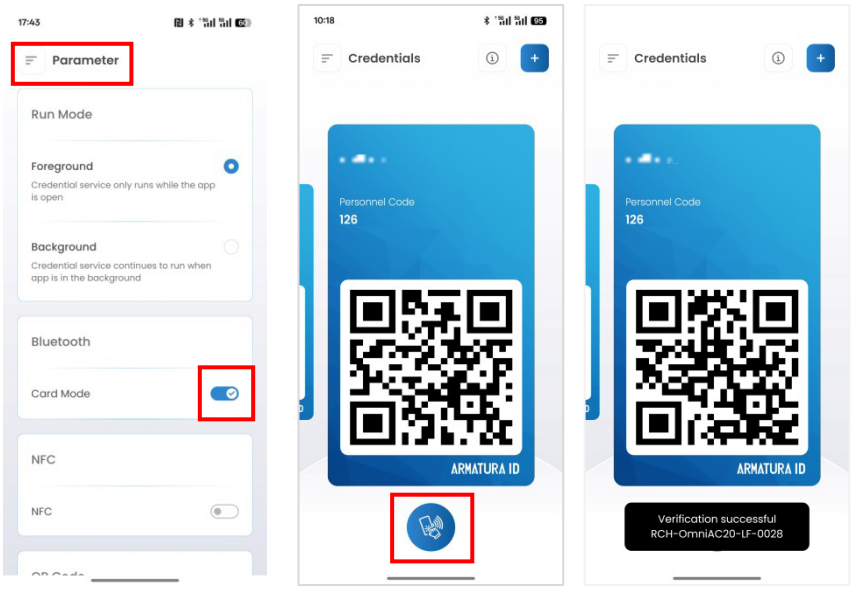
The dynamic QR code can be seen directly on the card. You just need to swipe the QR code on your mobile phone on the OmniAC20 to open the door.



Swipe the card through Bluetooth

Card mode functions requires the end user to hold the mobile device close to the card reader to swipe the card. Remote mode functions like a remote control. With the remote mode, you don't need to swipe the card on the reader, just get close to the reader within the effective range.

1. Turn on the **Bluetooth** functions on your mobile phone.
2. Click **Parameters** on the **Main Menu** screen to enter the parameter setting interface.
3. Click of the **Card Mode** to enable the function.
4. Then you can swipe the card with the mobile phone close to the reader, or click of the card to swipe the card remotely within the set range.



Note: For other specific operations, please refer to *Armatura CONNECT User Manual* and *Armatura ID User Manual*.

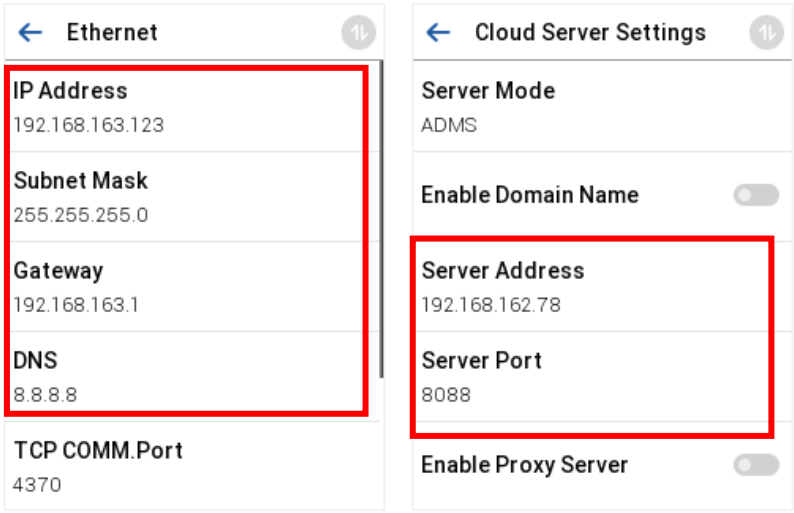
15 Video Intercom

The video intercom feature needs to be used in conjunction with the Armatura One server and the Armatura ICS mobile APP.

15.1 Connect to Armatura One Software

Device Side

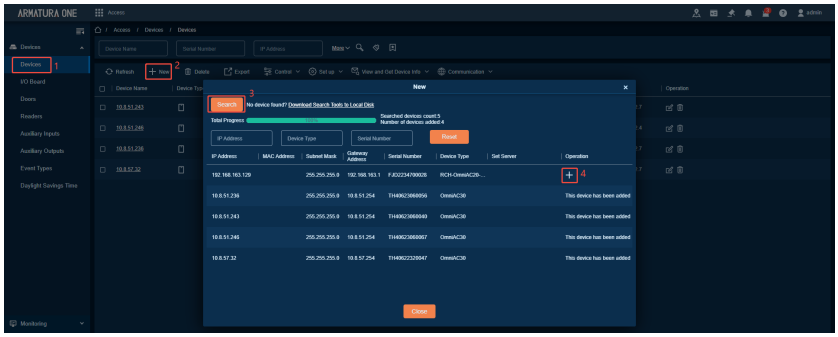
1. Tap **COMM. > Ethernet** in the main menu to set the IP address and gateway of the device.
   Note: Please ensure that the IP address is in the same network segment as the server address and can communicate with the Armatura One server.
2. In the main menu, tap **COMM. > Cloud Server Settings** to set the server address and server port.
   Server Address: Set the IP address as of Armatura One server.
   Server Port: Set the server port as of Armatura One.



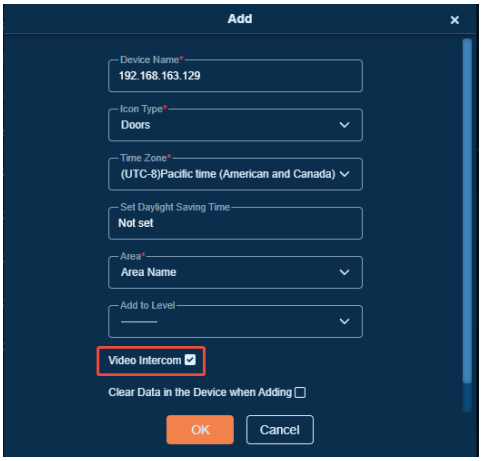
Software Side

Login to Armatura One software, add the device by searching. The process is as follows:

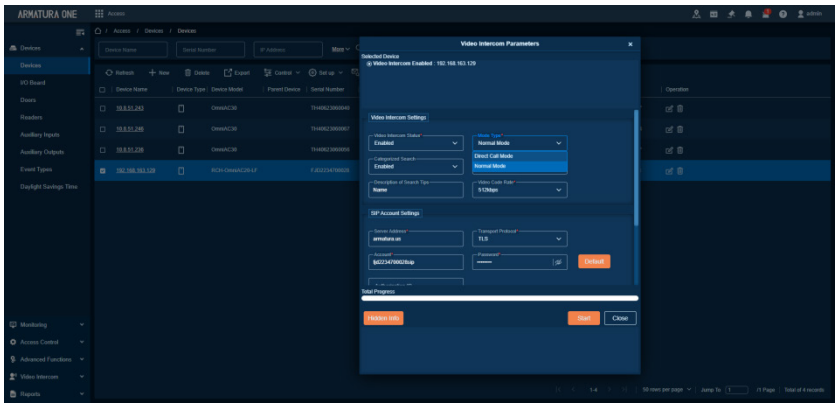
1. Click **Access > Device > Device > +New**, to open the search interface in the software.
2. Click **Search**, and it will prompt searching…….
3. After searching, the list and total number of access controllers will be displayed.



4. Click **+** in operation column, a new window will pop-up. Set the Device Name, Icon Type, Time Zone, Area, Add to Level, and enable Video Intercom, finally click **OK** to add the device.

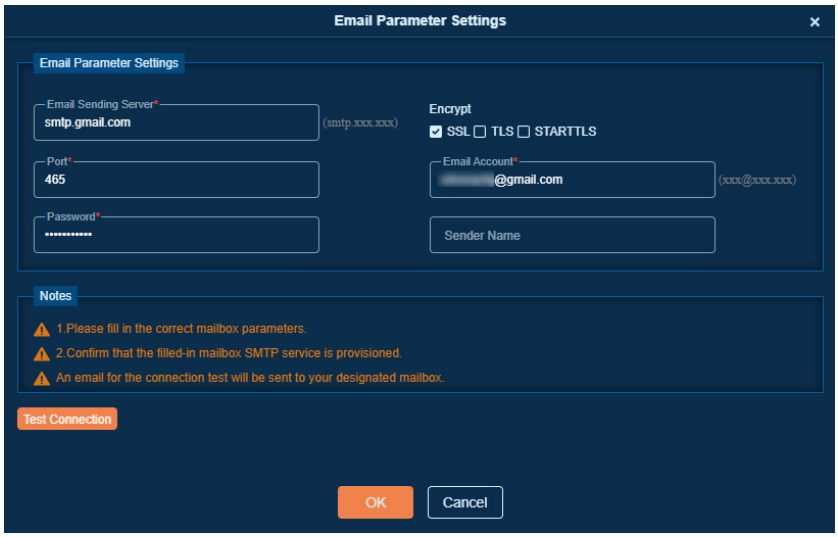


5. The video intercom mode is Direct Call Mode by default. You can switch to Normal Mode in **Set up > Video Intercom Parameters**.



15.2 Set up Email SMTP Service

1. Set up email functionality from Armatura One server for users. In the Armatura One software, click **System > Integrations > E-mail Management > Email Parameter Settings**.



2. In the **[Email Parameter Settings]** interface, configure the necessary parameters for the SMTP server.

The field description is as follows:

[Email Sending Server]: the format is **[smtp.xxxx.xxx]**. If you are using Gmail, please fill in [smtp.gmail.com].

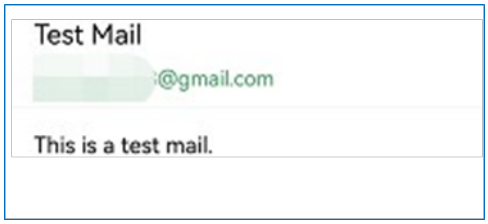
[Port]: the available options are **[SSL:465]** or **[TLS:587]**. If you are using Gmail, please select [SSL:465].

[Email Account]: please enter the email address that you used to generate the app password.

[Password]: please enter the app password.

[Sender Name]: feel free to set a name of your choice. The system will use this name to send emails in the future.

3. Click on the **[Test Connection]** button to perform a test. The system will send a test email to your email, please do not reply.

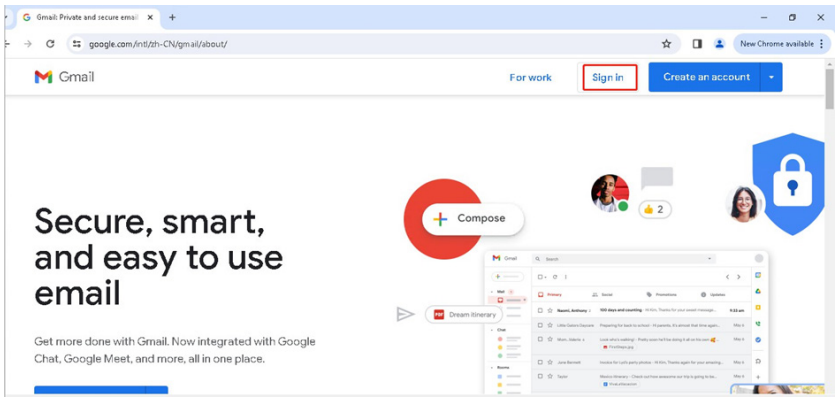


4. Once the system prompt success, you can click on the **[OK]** button to complete the email parameter setup process.

App Password Setup (Take Gmail as an example)

Step 1: Log in to Your Gmail Email Account

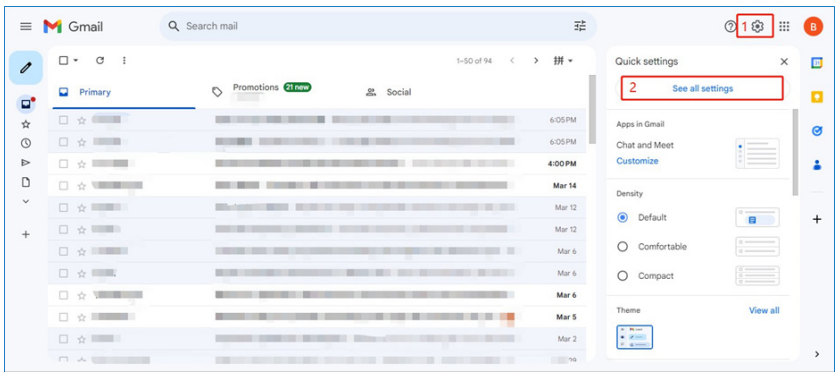
1. Open a web browser and go to the Gmail website (www.gmail.com).
2. On the Gmail login page, locate the sign-in section.



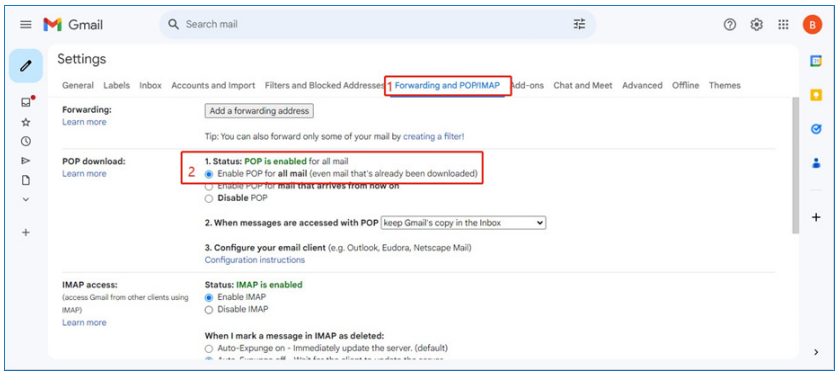
3. Enter your Gmail email address in the provided field.
4. Click on the **[Next]** button.
5. On the next page, enter your password associated with your Gmail account.
6. Click on the **[Sign In]** button.

Step 2: Generate an App Password

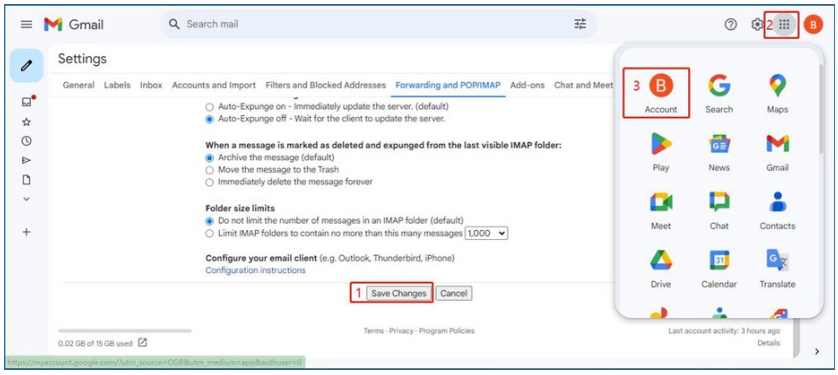
1. Click on Setting icon and then click **[See all settings]**.



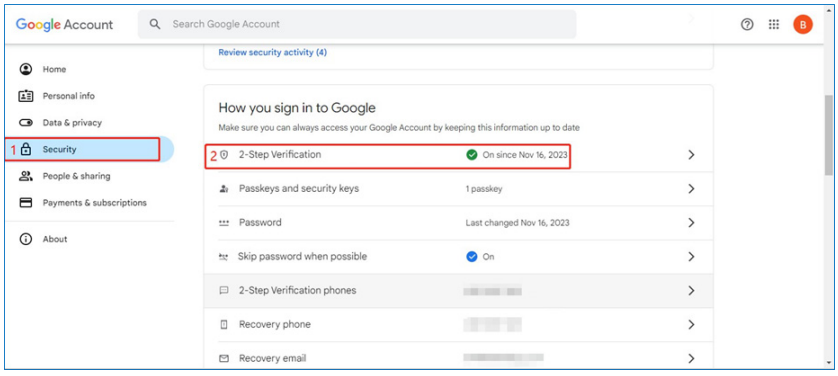
2. Select the **Forwarding and POP/IMAP**, then enable the POP for all mail.



3. After enabling all services set **[save changes]** and then click on the menu  icon and select the **[Account]**.

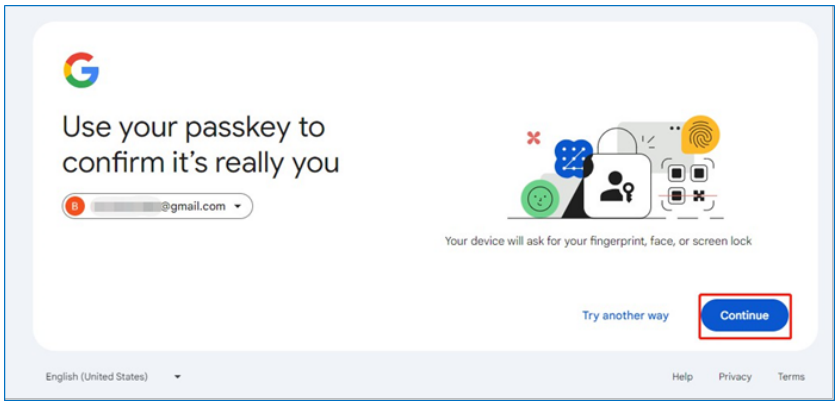


4. In Account, select the **[Security]> [2-Step Verification]**.

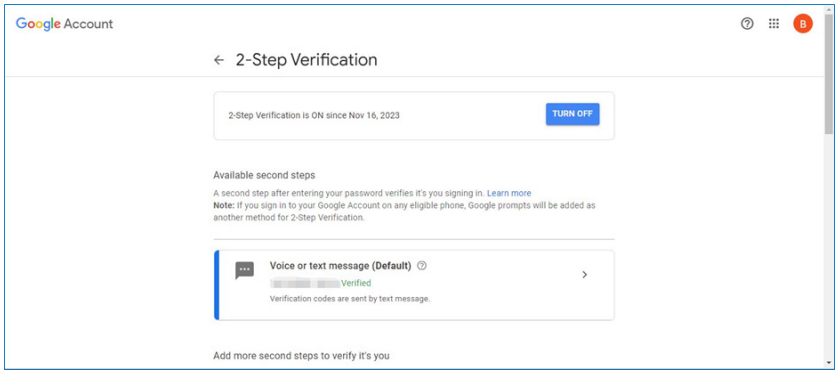


5. In the new interface, click on **[Continue]** to start the Google Two-Step Verification process.

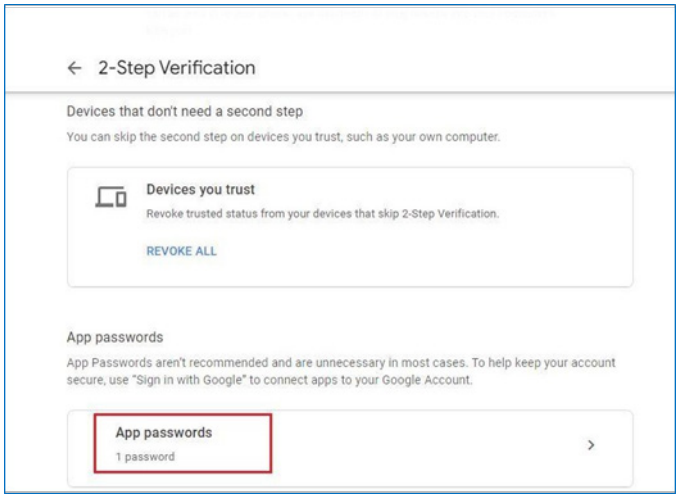
6. You can choose to receive a verification code via a text message or a phone call to your registered mobile number. The code will be sent to you, and you can enter it during the Google Two-Step Verification process.



7. Once you enter the correct verification code, Google will verify it and grant you access to your account.

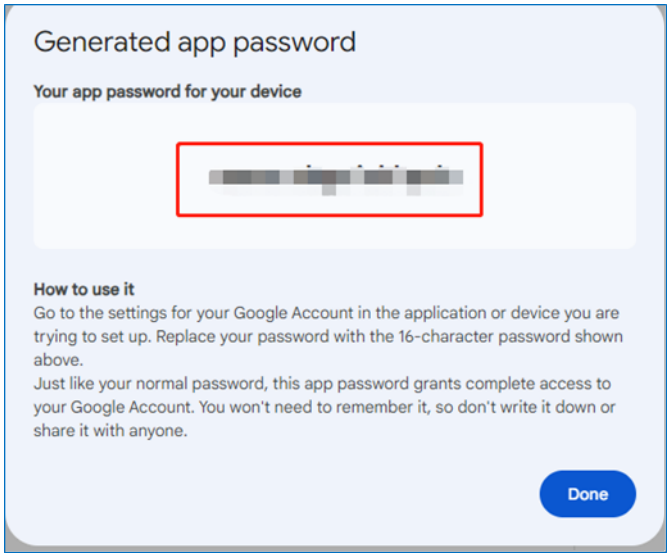


8. Once the 2-Step Verification is done, you can find the **[App Passwords]** below.



9. Click on **[App passwords]** and fill the application name to generate the password to use it on SMTP services.

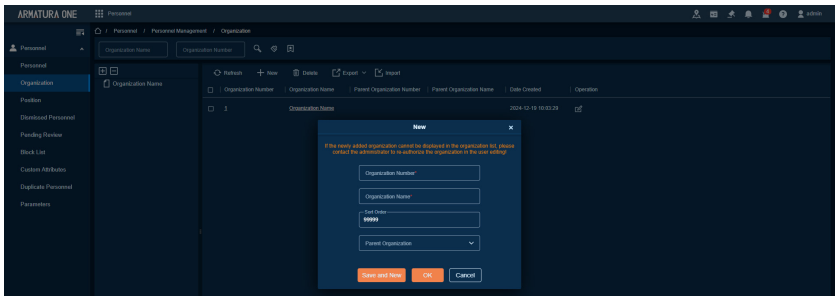
10. Copy the App password, it will be used in the subsequent Armatura ONE SMTP service configuration process.



15.3 Add Personnel on the Software

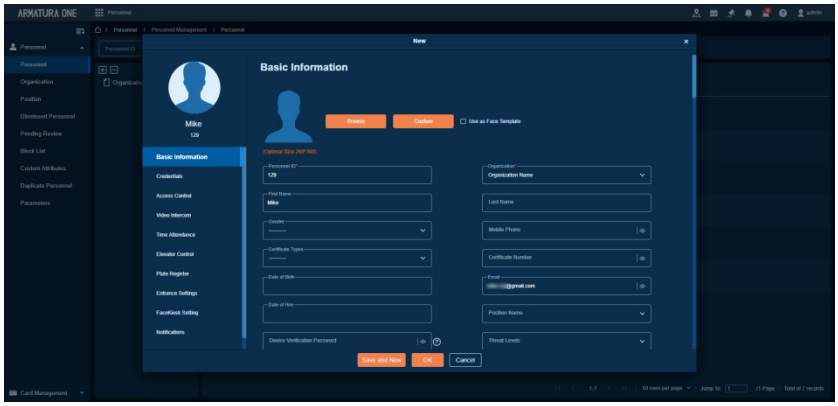
Add the Organization

Click **Personnel > Personnel > Organization > +New** on the Armatura One.

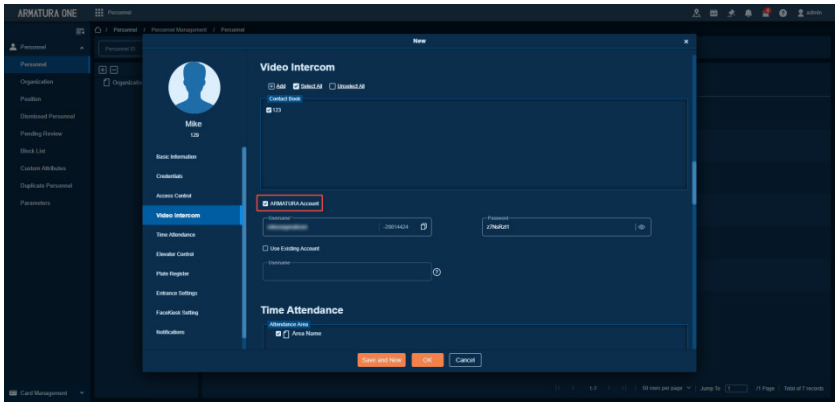


Add the Personnel

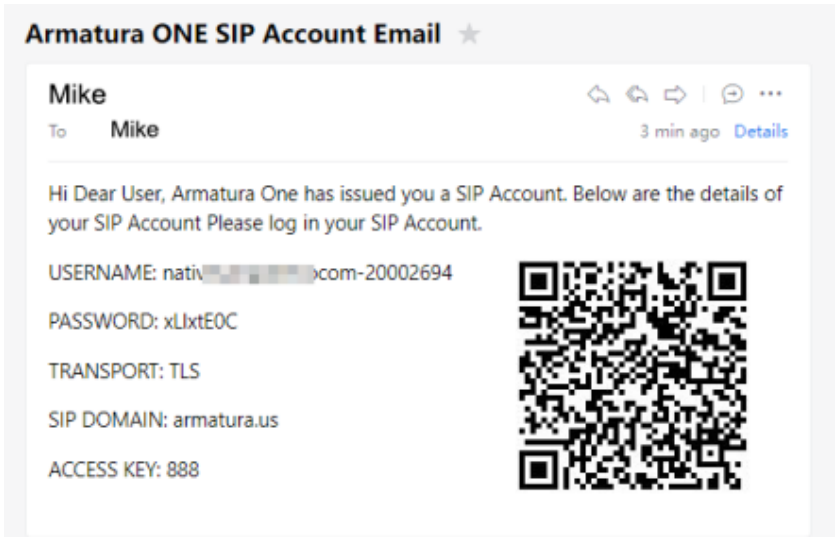
1. Click **Personnel > Personnel > Personnel > +New** and enter information about the person in the **Basic information** pop-up.



2. On the current page, click **ARMATURA Account** on the left side to enable intercom function for the changed user. After clicking **Save and New**, the system will automatically send a message to the new user.

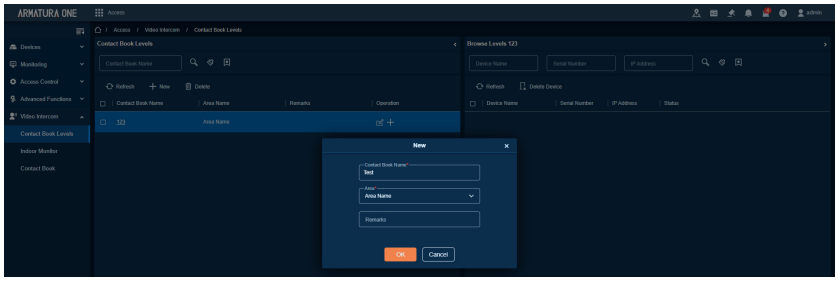


3. At this point, the user's e-mail address will receive the account number and password for the video intercom.

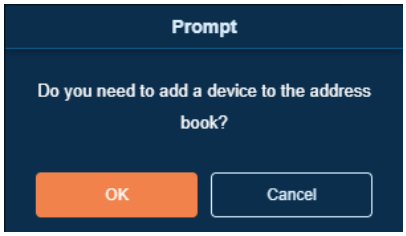


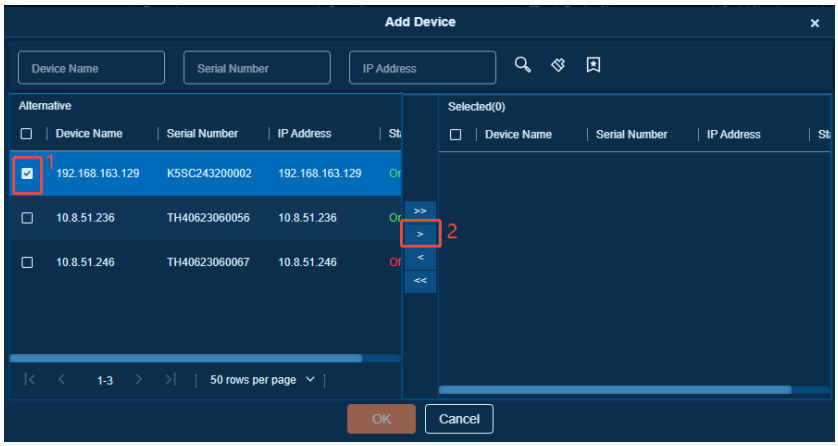
15.4 Configure Contact Book for the Device

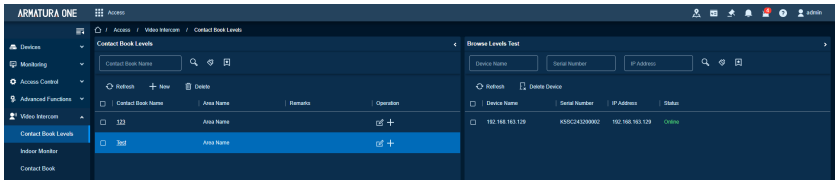
1. On Armatura One, click **Access > Video intercom > Contact Book Levels > +New**, enter the contact book name. Finally, click **OK**.



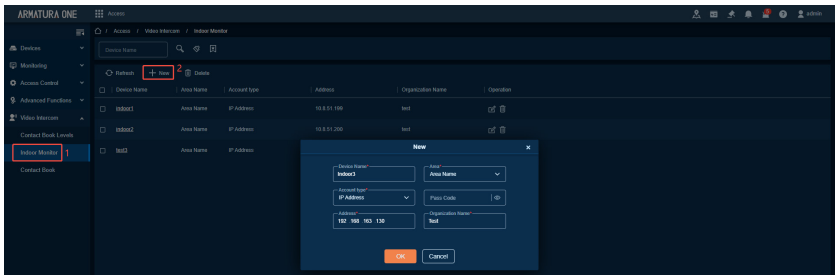
2. On the pop-up page, click **OK** and then select the device you just added.



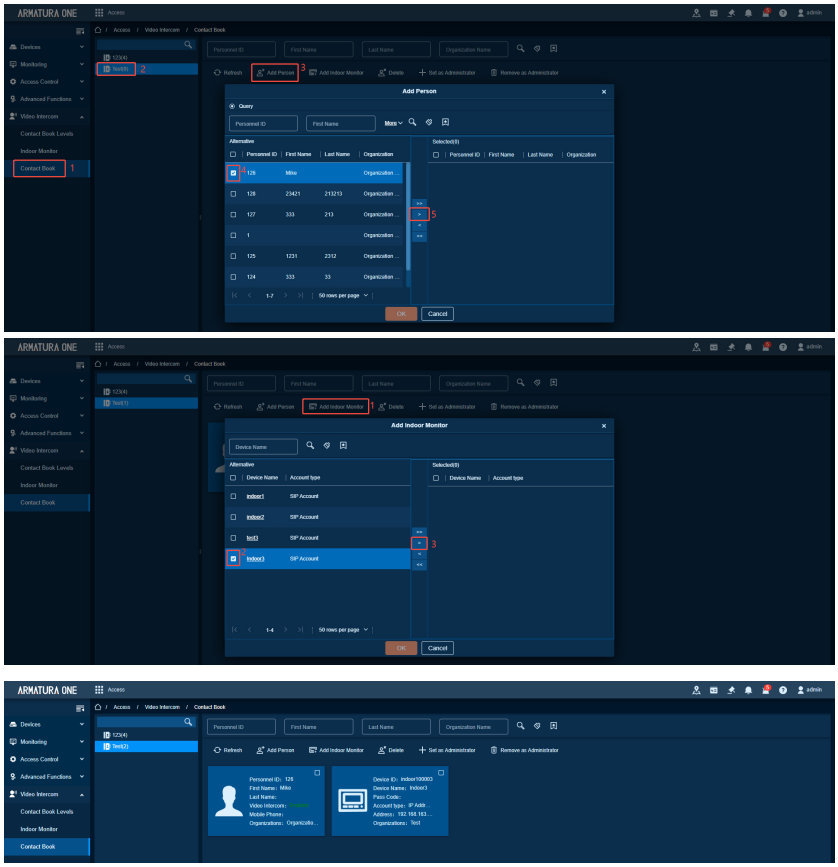




3. Click **Indoor Monitor > +New** on the current page. You can manually enter the IP Address or SIP Account of the indoor monitor to add the indoor monitor.



4. Click **Contact Book** on the current page to assign video intercom personnel and indoor monitors to the created contact book levels. Personnel and indoor monitors are automatically sent down to the device.



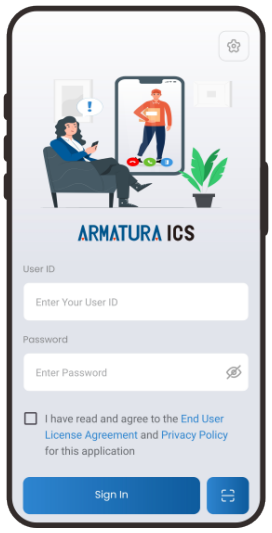
15.5 Download and Login the APP

1. Ensure your mobile device is connected to the internet via a mobile or Wi-Fi network.
2. Search for the ARMATURA ICS APP in the Apple APP Store (for iOS devices), Google Play Store (for Android devices) or scan the QR code below to download the APP on your mobile phone.

iOS

Android

3. Users can manually enter their video intercom account and password on the ARMATURA ICS APP, or they can choose to scan the code to log in.

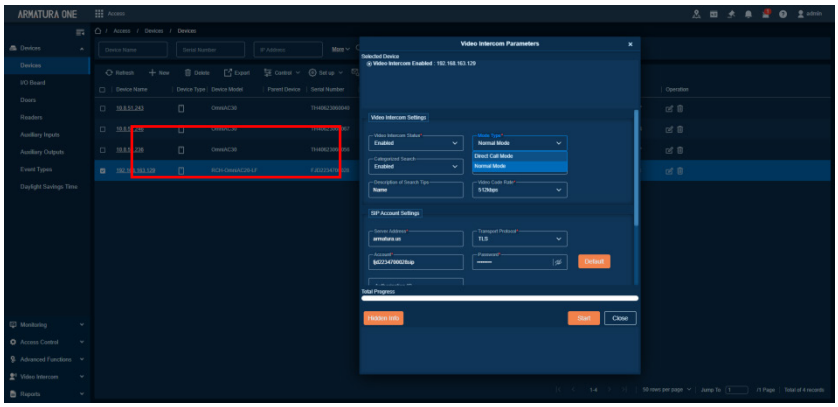


15.6 Device Call the Phone/Indoor Monitor

15.6.1 Normal Mode with Categorization Search Enabled

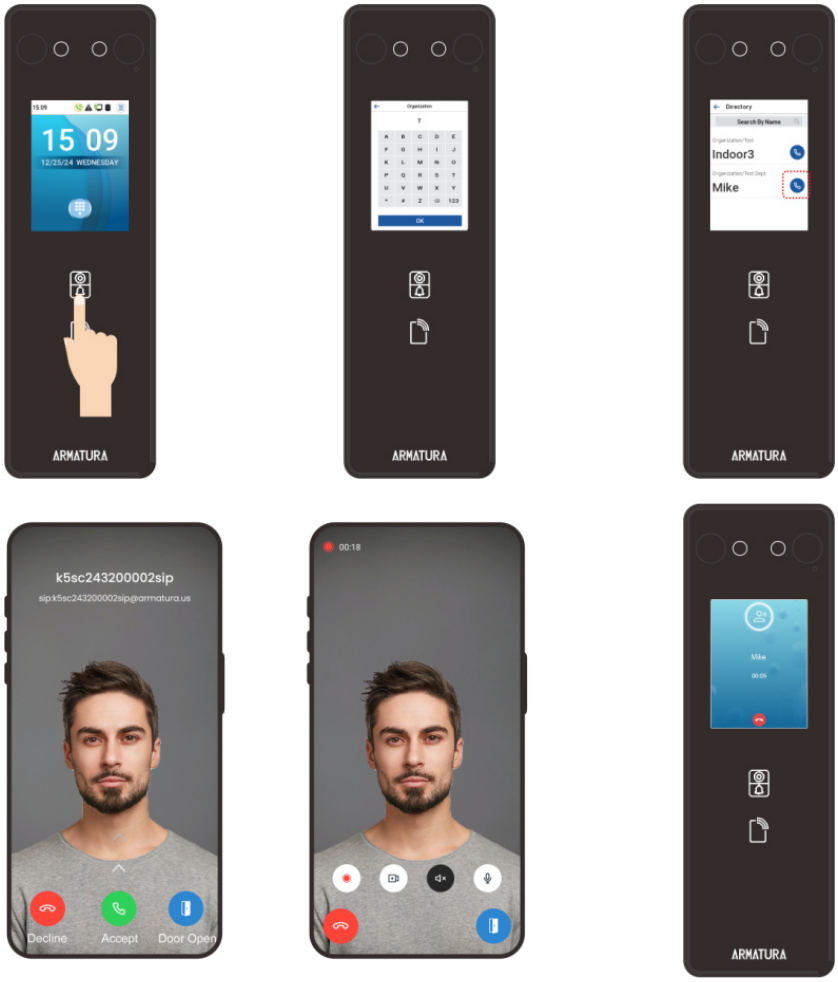
This mode supports entering numbers, organizations, and names for calling.

1. Click **Access > Device > Device > Set up > Video Intercom Parameters > Mode Type > Normal Mode**, and set the Categorization search as **Enabled**.



2. In the standby screen of the device, tap the button, enter the organization number or name in the pop-up screen. This manual takes inputting the name as an example for illustration, input the organization name, click **OK**, the device will show all the personnel and indoor monitors of the organization, click the icon behind the personnel to carry out video intercom.

Device call the phone:



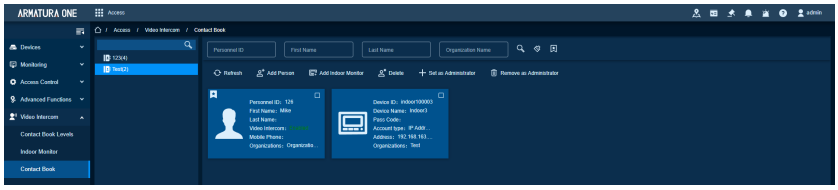
Device call the indoor monitor:

15.6.2 Direct Call Mode

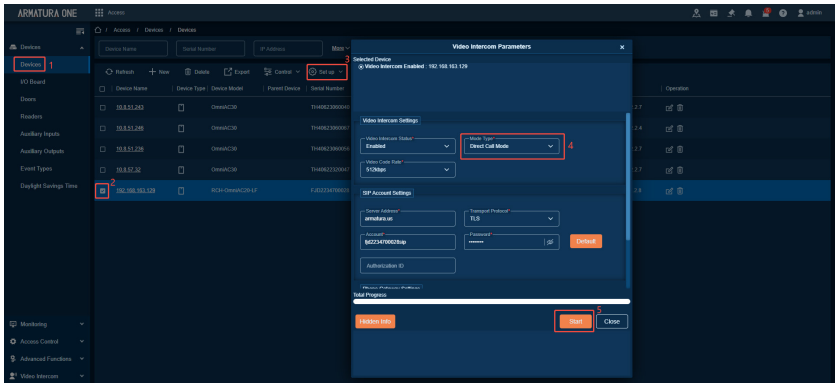
No need to enter a number or organization and name, etc. on the device, tap  to call directly. The person or indoor monitor needs to be set as an administrator on Armatura One.

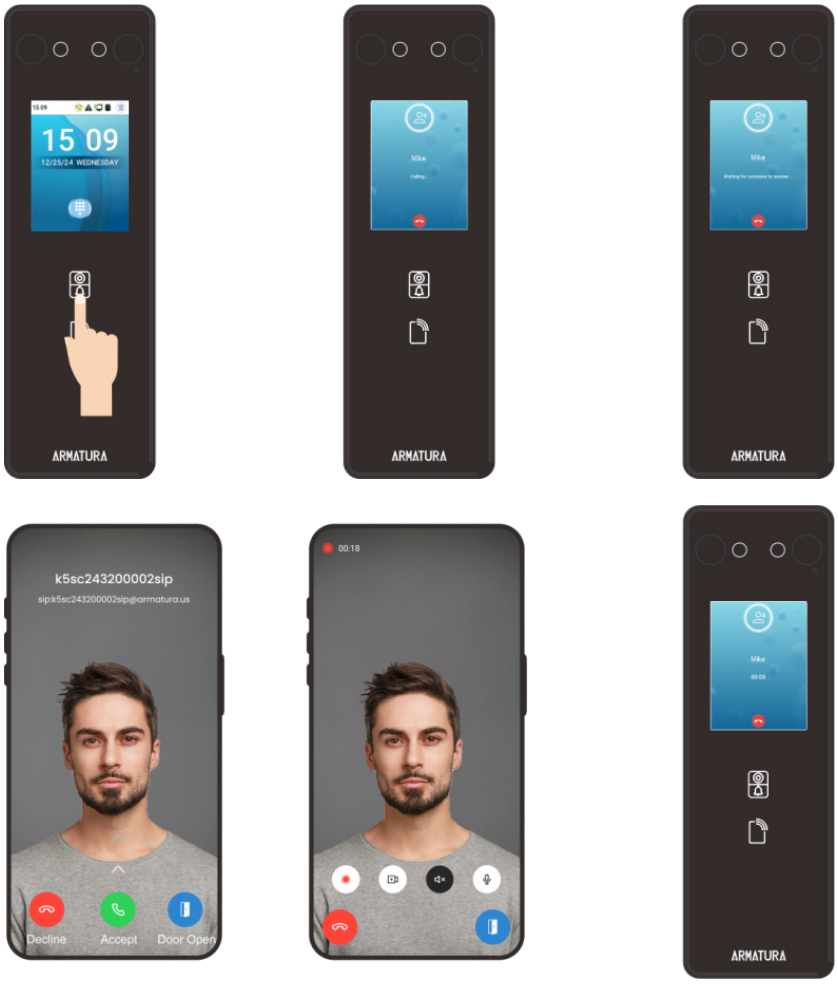
1. Click **Access > Video Intercom > Contact Book**, select the person or indoor monitor and click **Set As Administrator**.

   Note: An address book only supports marking one administrator.



2. Then change the calling mode of the device to direct call, click **Access > Device > Device > Set up > Video Intercom Parameters > Mode Type > Direct Call Mode.**





15.7 Phone Call the Device

After the device calling the phone, the device will be automatically saved in the Armatura ICS App, click on the icon behind the device to perform video intercom with the device.

ARMATURA ICS APP

Function Name	Description
	Dialing key.
	It is the Hang up key. After hanging up, immediately end the current call.
	It is the answer key, the user can tap to answer the current call. After answering, enter the window during the call, and turn on audio and video by default.
	It is the Remote Open key, used to open the door remotely. The default lock drive time is 5 seconds.
	Record video button, support to record current screen.
	Turning it off prevents you from seeing the live feed captured by the device's camera.
	Speaker key, turn on to receive sound from the device.
	Microphone key, turn on for voice intercom.

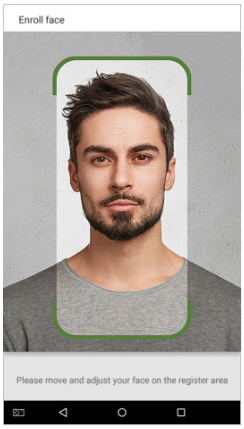
Device

Function Name	Description
	It is the Hang up key. After hanging up, immediately end the current call.

Appendix 1

Requirements of Live Collection and Registration of Visible Light Face Templates

1. It is recommended to perform registration in an indoor environment with an appropriate light source without underexposure or overexposure.
2. Do not shoot towards outdoor light sources like door or window or other strong light sources.
3. Dark-color apparels which are different from the background color are recommended for registration.
4. Please show your face and forehead, and do not cover your face and eyebrows with your hair.
5. It is recommended to show a plain facial expression. Smile is acceptable, but do not close your eyes, or incline your head to any orientation. Two images are required for persons with eyeglasses, one image with eyeglasses and one other without.
6. Do not wear accessories like scarf or mask that may cover your mouth or chin.
7. Please face right towards the capturing device, and locate your face in the image capturing area as shown in Image 1.
8. Do not include more than one face in the capturing area.
9. 19.69 to 31.5inch (50 to 80cm) is recommended for capturing distance adjustable subject to body height.



Requirements for Visible Light Digital Face Image Data

Digital photo should be straightly edged, colored, half-portrayed with only one person, and the person should be uncharted and not in uniform. Persons who wear eyeglasses should remain to put on eyeglasses for photo capturing.

- **Eye Distance**

200 pixels or above are recommended with no less than 115 pixels of distance.

- **Facial Expression**

Plain face or smile with eyes naturally open are recommended.

- **Gesture and Angel**

Horizontal rotating angle should not exceed ±10°, elevation should not exceed ±10°, and depression angle should not exceed ±10°.

- **Accessories**

Masks and colored eyeglasses are not allowed. The frame of the eyeglasses should not shield eyes and should not reflect light. For persons with thick eyeglasses frame, it is recommended to capture two images, one with eyeglasses and the other one without.

- **Face**

Complete face with clear contour, real scale, evenly distributed light, and no shadow.

- **Image Format**

Should be in BMP, JPG or JPEG.

- **Data Requirement**

Should comply with the following requirements:

1. White background with dark-colored apparel.
2. 24bit true color mode.
3. JPG format compressed image with not more than 20kb size.
4. Definition rate between 358 x 441 to 1080 x 1920.
5. The vertical scale of head and body should be 2:1.
6. The photo should include the captured person's shoulders at the same horizontal level.
7. The captured person should be eyes-open and with clearly seen iris.
8. Plain face or smile is preferred, showing teeth is not preferred.
9. The captured person should be clearly seen, natural in color, and without image obvious twist, no shadow, light spot or reflection in face or background, and appropriate contrast and lightness level.

Appendix 2

Privacy Policy

Notice:

To help you better use the products and services of Armatura LLC, and its affiliates, hereinafter referred as "we", "our", or "us", the smart service provider, we consistently collect your personal information. Since we understand the importance of your personal information, we took your privacy sincerely and we have formulated this privacy policy to protect your personal information. We have listed the privacy policies below to precisely understand the data and privacy protection measures related to our smart products and services.

Before using our products and services, please read carefully and understand all the rules and provisions of this Privacy Policy. If you do not agree to the relevant agreement or any of its terms, you must stop using our products and services.

I. Collected Information

To ensure the normal product operation and help the service improvement, we will collect the information voluntarily provided by you or provided as authorized by you during registration and use or generated as a result of your use of services.

1. **User Registration Information: At your first registration, the feature template (Fingerprint template/Face template/Palm template)** will be saved on the device according to the device type you have selected to verify the unique similarity between you and the User ID you have registered. You can optionally enter your Name and Code. The above information is necessary for you to use our products. If you do not provide such information, you cannot use some features of the product regularly.
2. **Product information:** According to the product model and your granted permission when you install and use our services, the related information of the product on which our services are used will be collected when the product is connected to the software, including the Product Model, Firmware Version Number, Product Serial Number, and Product Capacity Information. **When you connect your product to the software, please carefully read the privacy policy for the specific software.**

II. Product Security and Management

1. When you use our products for the first time, you shall set the Administrator privilege before performing specific operations. Otherwise, you will be frequently reminded to set the Administrator privilege when you enter the main menu interface. **If you still do not set the Administrator privilege after receiving the system prompt, you should be aware of the possible security risk (for example, the data may be manually modified).**

2. All the functions of displaying the biometric information are disabled in our products by default. You can choose Menu > System Settings to set whether to display the biometric information. If you enable these functions, we assume that you are aware of the personal privacy security risks specified in the privacy policy.

3. Only your user ID is displayed by default. You can set whether to display other user verification information

(such as Name, Department, Photo, etc.) under the Administrator privilege. **If you choose to display such information, we assume that you are aware of the potential security risks (for example, your photo will be displayed on the device interface).**

4. The camera function is disabled in our products by default. If you want to enable this function to take pictures of yourself for attendance recording or take pictures of strangers for access control, the product will enable the prompt tone of the camera. **Once you enable this function, we assume that you are aware of the potential security risks.**

5. All the data collected by our products is encrypted using the AES 256 algorithm. All the data uploaded by the Administrator to our products are automatically encrypted using the AES 256 algorithm and stored securely. If the Administrator downloads data from our products, we assume that you need to process the data and you have known the potential security risk. In such a case, you shall take the responsibility for storing the data. You shall know that some data cannot be downloaded for sake of data security.

6. All the personal information in our products can be queried, modified, or deleted. If you no longer use our products, please clear your personal data.

III. How we handle personal information of minors

Our products, website and services are mainly designed for adults. Without consent of parents or guardians, minors shall not create their own account. If you are a minor, it is recommended that you ask your parents or guardian to read this Policy carefully, and only use our services or information provided by us with consent of your parents or guardian.

We will only use or disclose personal information of minors collected with their parents' or guardians' consent if and to the extent that such use or disclosure is permitted by law or we have obtained their parents' or guardians' explicit consent, and such use or disclosure is for the purpose of protecting minors.

Upon noticing that we have collected personal information of minors without the prior consent from verifiable parents, we will delete such information as soon as possible.

IV. Others

You can visit www.armatura.us to learn more about how we collect, use, and securely store your personal information. To keep pace with the rapid development of technology, adjustment of business operations, and to cope with customer needs, we will constantly deliberate and optimize our privacy protection measures and policies. Welcome to visit our official website at any time to learn our latest privacy policy.

Eco-friendly Operation

The product's "eco-friendly operational period" refers to the time 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	○	○	○	×	○	○

This table is prepared in accordance with the provisions of SJ/T 11364.

○ indicates that the total amount of toxic content in all the homogeneous materials is below the limit as specified in GB/T 26572.

× indicates that the total amount of toxic content in all the homogeneous materials exceeds the limit as specified in GB/T 26572.

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.

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

The device shall automatically discontinue transmission in cases of absence of information to transmit, or operational failure. Then it will scan the available radio signals. If this signal is connected before, it will be automatically connected, otherwise manual connections will be necessary.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 7.9 inches between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

EU Declaration of Conformity (CE)

I. Restrictions or Requirements in following countries: In door use only.

	ES	LU	RO	CZ	FR	HU	BG	EE

II. Accessories Included:

Name	Number	Name	Number
Magnet	x1	Backplate	x1
Back Cover	x1	AC/DC Charger	x1
Connection Cable	X6	PET Silicone Protective Film	x1
Diode	x1	ID Thin Card	x1
TM3 *4 Screw	x1	White Rubber Plug	X2
805 Screwdriver 2*75(One-way)	x1	Phillips Screw	X2

III. This device offers the following frequency bands in EU areas only and with the following maximum radio-frequency power:

- 2.4GHz Wi-Fi: < 20 dBm
- 5GHz Wi-Fi (Band 1/2/3): < 20 dBm
- 5.8GHz Wi-Fi (Band 4): < 14 dBm
- RFID (125kHz): < 42 dBμ A/m at 10 m
- RFID (13.56MHz): < 42 dBμ A/m at 10 m

IV. MPE use distance statement:

This equipment should be installed and operated with minimum distance 7.9 inches between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

V. Operating temperature: -10°C to 45°C

VI. Altitude during operation: ⩽5000m

VII. WEEE Notice:

Correctly dispose of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle responsibly to promote the sustainable reuse of material resources. To safely recycle your device, please use return and collection systems or contact the retailer where the device was originally purchased.

For more information, contact us at the following contact information.

Armatura LLC
190 Bluegrass Valley Parkway, Alpharetta, GA, 30005, USA

Hereby, Armatura LLC declares that the radio equipment type OmniAC20 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: https://armatura.us/.

CE

JRL (JAPAN RADIO LAW)(MIC)

5GHz product for indoor use only! **電波法により 5GHz 帯は屋内使用に限ります。**

- CH36, CH40, CH44, CH48 (5180MHz ~ 5240MHz)
- CH149, CH153, CH157, CH161, CH165 (5745MHz ~ 5825MHz)

ARMATURA

ARMATURA LLC www.armatura.us E-mail:sales@armatura.us