HID[®] Amico™ VL35LF

Biometric Reader User Guide

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What's new

Date	Description	Revision
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A complete list of revisions is available in Revision history.



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Section 01 Introduction





1.1 Document purpose

This document provides procedures for administrators to set up HID® Amico™ VL35LF and for operators to carry out tasks associated with enrollment and credential/biometric data management.

1.2 Intended audience

This document is for users with the following roles:

- · HID Amico administrator: set up and configure the HID Amico reader
- HID Amico operators: install and configure network detected HID Amico readers, enroll people in the system, and add credentials and biometric data

1.3 Interaction with the reader

Use the touchscreen to configure all settings of the HID Amico VL35LF reader by accessing the administration menu. Alternatively, connect the reader to a network, or directly to a PC via an Ethernet cable, and configure the device through the web interface.

1.3.1 To access the on-screen administration menu

Tap **Menu** on the touchscreen. The reader does not require any authentication to access the menu before administrators are enrolled.

Note: It is recommended to enroll an administrator before starting reader operation.

1.3.2 To access the web interface

- Use a web browser to navigate to the default http://192.168.0.129 (or the custom address if you have changed it).
 The login screen is displayed.
- 2. Log in using the credentials set during the HID Amico reader set up.



1.4 Home screen

The home screen displays the current date and time and uses that information to record identification attempts in the access log, which displays the results of the identification attempt (unidentified, authorized, or unauthorized). The **1.4.1 Status bar** is shown at the top of the screen, and the **1.5 Main menu** button is shown at the bottom of the screen.



Note: The home screen can be customized to add buttons or logos.

1.4.1 Status bar



The status bar displays status, operation, and use of the reader.

Icon	Description
Operation status	Flashing under normal operation. A solid icon indicates a problem.
Network	Indicates the reader is connected to the network.
Alarm	Indicates when an alarm has been triggered.
Door .	Indicates that the door is open.
	Note: If there is no door sensor installed, this icon indicates that the relay is open.



1.4.2 Standard command buttons

The following buttons may be displayed on all screens.

Button	Function
Back	Return to the previous screen.
Exit	Return to the home screen.
OK	Save any changes made and return to the previous screen.
Add	Add users, departments, or schedules.
More	Tap for extra menu items.
Remove	Remove users, biometrics, cards, or panic fingers.

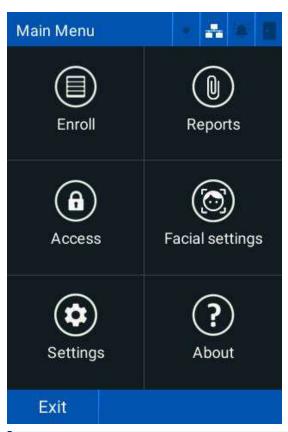


1.5 Main menu

Tap Menu on the home screen to access the Main Menu.

- Enroll users, departments, and schedules see 2.3 Enrollment
- View reports see 3.1 Reports
- Access settings see 4.1 Access
- Facial settings see 5.1 Facial settings
- Additional settings see 6.3 Alarms
- About see 6.11 About

Log in using your biometrics, card, or password. The main menu is displayed if an administrator logs in.



Note: If you do not have an administrator account, an Administrator Identify yourself message is displayed.



1.6 Text editing screen

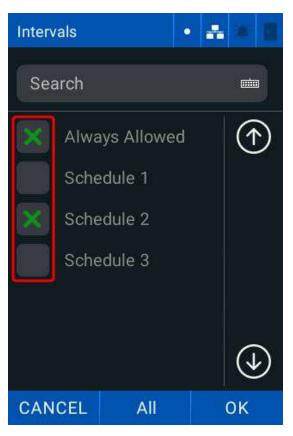
Edit the text field when the keypad (iii) is displayed.





1.7 Options box

Tap the checkboxes to select multiple options in a list.



Section 02 Enroll and manage users





2.1 User enrollment

The enrollment process includes:

- Enrollment of a unique identification code (ID)
- · Enrollment of identification factors (for example, biometric templates, card, or password)
- Assign users with additional data such as names, departments, schedules or administrator privileges (optional)

Users are associated with the **Standard** department by default. You can associate the user with another department or schedule.

Note: A user must be associated with a department or schedule to access any areas controlled by a reader.

2.1.1 User attributes

Each user can have the following attributes:

Attribute	Description
ID	A unique numerical value (15 digits maximum).
Name (optional)	A user name helps facilitate identification for reports and user lists. This field is blank by default.
Departments	Associates a group of users with common schedules simultaneously.
Photo	Photo assigned to a user's biometric template during enrollment.
Proximity card	Proximity card(s) assigned to a user.
Password	A numeric password to identify a user.
	Note: A password is a non-unique number and can be used by multiple users with different IDs.
PIN	A unique numeric password to authenticate a user.
Privilege level	Administrator, or normal user.
Schedules	Allows user access for a defined time period(s).
Registration number (optional)	A number for recording purposes only.
	Note: Registration is not a method of user identification within HID Amico. You can use it to keep your own external record of users.
Opening timeout	A custom for each user.

Note: Manage users through both the HID Amico reader touchscreen and the web interface.



2.2 User verification

The HID Amico reader has four forms of identification:

- · Facial biometrics: detects the users face
- · Proximity card: detects the users card
- · Password: validates the users ID and password
- QR Code: scans a QR Code (in numeric or alphanumeric format)

Registered HID Amico users have two privilege levels:

- · Ordinary user: normal user of the system that can only identify themselves
- · Administrator: full access to the reader

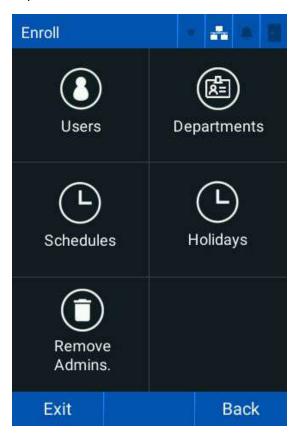
No users are enrolled on the reader by default, and access to the main menu is available to all users.

Note: It is recommended to enroll an administrator before starting reader operation.

2.3 Enrollment

The registration screen allows you to add, remove, and edit user data.

Tap Menu > Enroll.

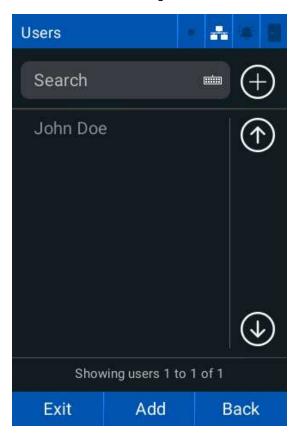




2.4 Users

The **Users** menu allows you to:

- · Search for users
- · Enroll new users
- · Edit or remove existing users



2.4.1 Search for a user

- 1. Tap Menu > Enroll > Users.
- 2. Tap Search and enter the user name or user ID.
- 3. Tap Confirm.

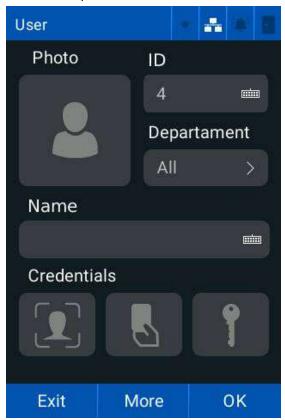
Note: HID Amico associates each user with a single person for access where the reader is installed.

Important: While possible, it is not recommended to associate more than one person with a single user (sharing the ID and access password, or registering multiple cards held by different people). This harms the consistency of the data recorded in the access and alarm reports.



2.4.2 Register new users

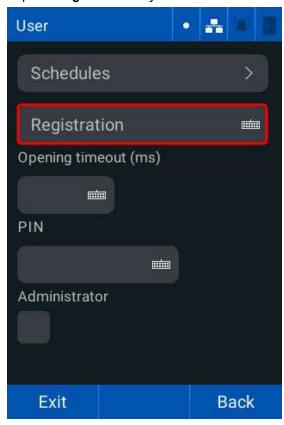
- 1. Tap Menu > Enroll > Users.
- 2. Tap Add.
- 3. Enter the required ID and Name.



- 4. Tap **Department** and tap the required departments you want to associate the user with.
- 5. Tap the **Photo** icon and follow the on screen-prompts to assign a photo. See **B.1 Face capture best practices** for more information. Tap **More** to continue.



6. Tap the **Registration** keyboard and enter a unique user registration number.



- 7. Tap the **Opening timeout (ms)** keyboard and enter the required time a user has to open the door after a user identification.
- 8. Tap the **Pin** keyboard and enter the required security key.
- 9. Tap the **Administrator** checkbox to make the user an administrator.
- 10. Tap Back to return to the previous screen and tap OK.

Note: The user is automatically linked to the schedules of their associated departments.



2.4.3 Credential enrollment

The Advanced Options screen allows you to:

- · Assign a facial biometric to a user
- · Assign a card to a user

2.4.4 Enroll facial biometrics

- 1. Tap Menu > Enroll > Users.
- 2. Tap the button. The **Facial Registration** screen is displayed.
- 3. Position your face an appropriate distance from the reader and wait for the identification process.

Note:

- If your face is too close or poorly framed, a message prompts you to reposition your face.
- The registered face must be unique for each user. If a face is already registered with a different user, an error message is displayed and the registration is not carried out.
- 4. Position yourself correctly and tap Take Photo. Follow the on-screen prompts to register the image.

Note:

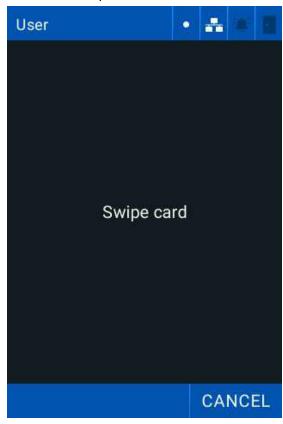
- Tap **Back** to cancel the registration.
- If the reader is in **Template on Card** mode, you will be required to save the template to a Seos® card.

Note: The facial registration process can also be initiated via the web interface.



2.4.5 Enroll a card

- 1. Tap Menu > Enroll > Users.
- 2. Tap the button.
- 3. Hold the card up to the reader.



4. If successful, a Card number successfully registered! message is displayed.

Note:

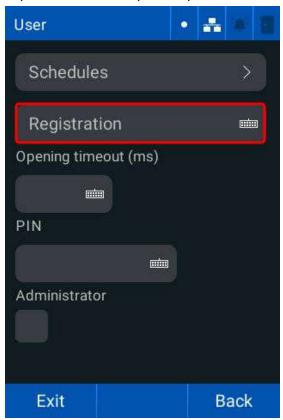
- If the card is already registered, a **Card already registered** message is displayed.
- If the card cannot be read the operation will time out and return to the previous screen.
- 5. Tap **OK**.



2.4.6 Schedules

This allows you to link a user to one or more schedules:

- 1. Tap Menu > Enroll > Users > More.
- 2. Tap **Schedules** and tap the required schedules.



- 3. Tap Back.
- 4. Tap **OK**.

2.4.7 Edit a user

- 1. Tap Menu > Enroll > Users.
- 2. Tap the required user.
- 3. Tap the required data field and make the required changes.

Note: To delete specific attributes of a user, tap Remove and tap the required attributes you want to delete.

4. Tap **OK**.



2.4.8 Delete a user

- 1. Tap Menu > Enroll > Users.
- 2. Tap the required user.
- 3. Tap Remove and select User from the data list.

Important: You cannot recover any user data after they are deleted. Access logs are available, but only the ID number will be visible.

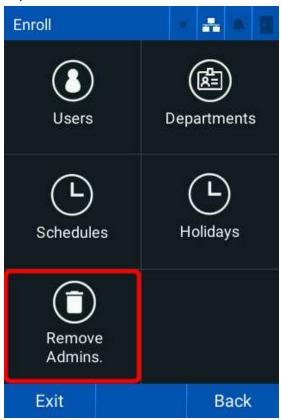
- 4. Tap **OK**.
- 5. Tap **OK** to remove the selected data.

2.4.9 Delete administrators

Note: Only registered reader administrators can access the main menu.

To delete an administrator from the reader:

- 1. Tap Menu > Enroll.
- 2. Tap Remove Admins.



Important: Deleting an administrator cannot be reversed. The main menu becomes accessible to all users until an administrator is registered to the reader.

3. Tap **OK** to remove all administrators.

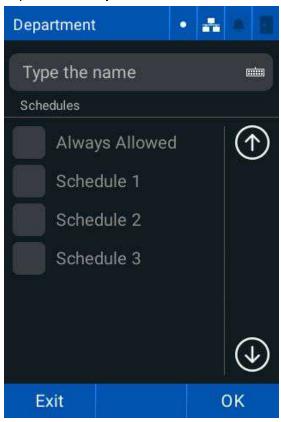


2.5 Departments

The **Departments** screen allows you to associate users with multiple departments and inherit all the schedules of the departments they are associated with. Departments associate groups of users with common schedules.

2.5.1 Create a department

- 1. Tap Menu > Enroll > Departments.
- 2. Tap Add. The Department Creation screen is displayed.



- 3. Enter a department name.
- 4. Tap **OK**.

Note: You can assign a schedule to the department.

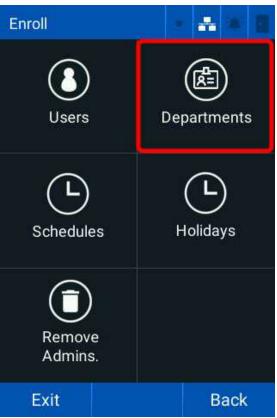
5. Tap \mathbf{OK} to save the department.



2.5.2 Associate a schedule with a department

You can associate multiple schedules with a single department. Department-linked schedules are applied to users belonging to that department.

1. Tap Menu > Enroll > Departments.



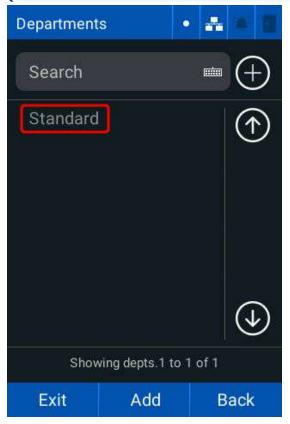
- 2. Enter the name of the **Department** in the search bar and tap the required schedules.
- 3. Tap **OK**.
- 4. Tap **OK** to save the department.



2.5.3 Associate a user to one or more departments

- 1. Tap Menu > Enroll > Users.
- 2. Tap the required user.
- 3. Tap the **Departments** drop-down menu and tap the required departments.

Note: You can enter the name of the department into the **Search** bar.



4. Tap **OK**.



2.5.4 Edit a department

- 1. Tap Menu > Enroll > Departments.
- 2. Tap the required department.
- 3. Tap the required data field and make the required changes.

Note: The Standard department name cannot be changed.

2.5.5 Delete a department

- 1. Tap Menu > Enroll > Departments.
- 2. Tap the required department.
- 3. Tap Delete.

Important: The 'Standard' department cannot be deleted.

Caution: When a department is deleted, all schedules linked to users in the department will no longer be associated with the users.

4. Tap **OK**.



2.6 Schedules

Allows you to determine the time intervals that a specific user or members of a department can be authorized by the reader.

Schedules are defined by:

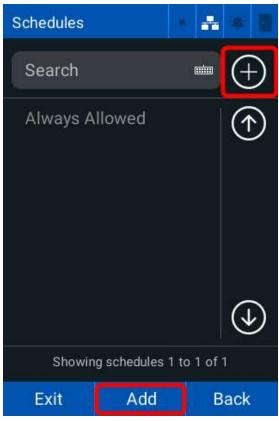
- Name: give schedules a unique name to avoid duplication. Naming the schedule is mandatory.
- Intervals: contains a time interval (for example, 08:00 to 18:00) and the days of the week that the interval is valid

Note:

- · Each schedule can have more than one interval
- · The reader grants access in all intervals of the schedule linked to the user

2.6.1 Create a schedule

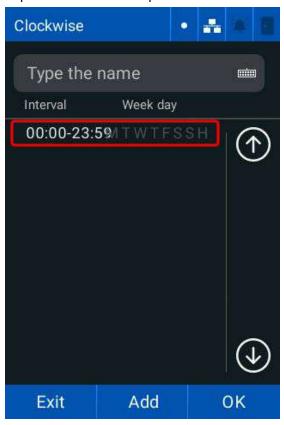
- 1. Tap Menu > Enroll > Schedules.
- 2. Tap Add.



3. Enter the required **Name** of the schedule.



4. Tap the schedule and tap Edit.



5. Enter the required **Start** and **End** times of the interval and tap the **Days of the week** that the interval is valid.

Note: Valid weekdays are displayed in white and invalid weekdays are displayed in gray.

6. Tap **OK**.

Note:

- Repeat the procedure to add more schedules as necessary.
- Holiday types can be associated with valid weekday intervals. See 2.7 Holidays for more information.
- 7. Tap **OK** then tap **OK** to save the schedule.



2.6.2 Assign Schedules to a new user

New users do not have a schedule assigned by default so access is always granted. To restrict the users access to specific time periods, you must assign a schedule to the required user.

- 1. Tap Menu > Enroll > Users > Add.
- 2. Enter the required information and tap More.
- 3. Tap the Schedules drop-down list.
- 4. Tap the required schedules.
- 5. Tap **OK**.
- 6. Tap Back.
- 7. Tap **OK**, then tap **OK** to save the user.

2.6.3 Assign Schedules to an existing user

New users do not have a schedule assigned by default so access is always granted. To restrict the users access to specific time periods, you must assign a schedule to the required user.

- 1. Tap Menu > Enroll > Users.
- 2. Tap the required user.
- 3. Tap More.
- 4. Tap the Schedules drop-down list.
- 5. Tap the required schedules.
- 6. Tap **OK**.
- 7. Tap Back.
- 8. Tap **OK**, then tap **OK** to save the user.

2.6.4 Edit a schedule

Note: The Always Released time cannot be edited.

- 1. Tap Menu > Enroll > Schedules.
- 2. Tap the required schedule.
- 3. Tap the required fields and tap Edit.
- 4. Make the required changes.
- 5. Tap **OK** then tap **OK** to save.

2.6.5 Delete a schedule

- 1. Tap Menu > Enroll > Schedules.
- 2. Tap the required schedule.
- 3. Tap Remove.
- 4. Tap Remove.
- 5. Tap **OK** to remove the schedule.

Important: All users linked to the schedule will lose access to the controlled area at the intervals specified by the schedule.



2.7 Holidays

Allows you to reference special dates when creating breaks. All registered holidays are visible on the **Holidays** page. The holiday type allows you to define the type of holiday, for example, national holidays, local holidays, or personal holidays.

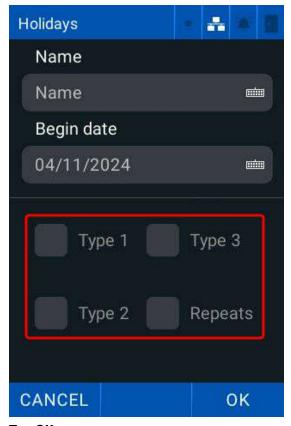
Note: Holiday types are defined during integration.

Holidays are defined by:

- Name: give holidays a unique name to avoid duplication. Naming the holiday is mandatory.
- · Start date: indicates the start date associated with the holiday
- Type 1: indicates that the holiday is type 1
- Type 2: indicates that the holiday is type 2
- Type 3: indicates that the holiday is type 3
- · Repeats: indicates that the holiday repeats

2.7.1 Create a holiday

- 1. Tap Menu > Enroll > Holidays.
- 2. Tap the Add icon.
- 3. Enter the holiday Name and enter a Start Date.
- 4. Tap the required Holiday Type and tap Repeats if required.



5. Tap **OK**.



2.7.2 Edit a holiday

- 1. Tap Menu > Enroll > Holidays.
- 2. Tap the required **Holiday**.
- 3. Tap the required fields and make the required changes.
- 4. Tap **OK** to save the changes.

2.7.3 Delete a holiday

- 1. Tap Menu > Enroll > Holidays.
- 2. Tap the required Holiday.
- 3. Tap Remove.
- 4. Tap **OK**.

Section 03 Reports

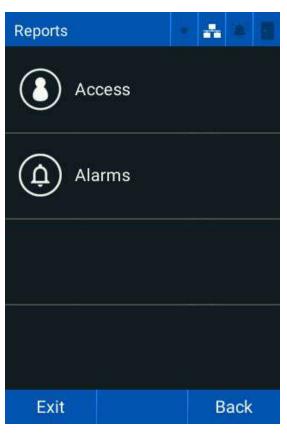




3.1 Reports

The **Reports** screen allows you to list the access and alarms chronologically, from specific time intervals.

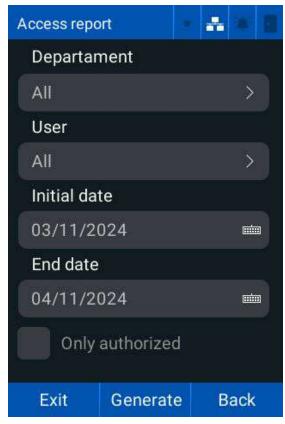
Tap **Menu** > **Reports**. The **Reports** screen is displayed.





3.1.1 Access report

1. Tap Menu > Reports > Access. The Access report screen is displayed.



- 2. Tap **Department** and select the required departments to include in the report. Tap **OK**.
- 3. Tap **User** and select the required users to include in the report. Tap **OK**.
- 4. Tap the **Initial date** keyboard and enter the required start date.
- 5. Tap the **End date** keyboard and enter the required end date.
- 6. Tap Only authorized to only display authorized access events.



7. Tap **Generate** to view the report.

Note:

- The report is displayed in reverse chronological order.
- A green user name denotes access was granted, a red user name denotes that access was denied.

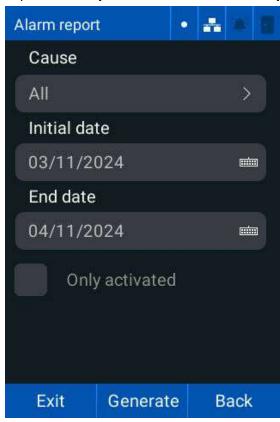


8. Tap Exit.



3.1.2 Alarm reporting

1. Tap Menu > Reports > Alarms. The Alarm report screen is displayed.



- 2. Tap Cause and tap the required alarm triggers to include in the report. Tap OK.
- 3. Tap the **Initial date** keyboard and enter the required start date.
- 4. Tap the End date keyboard and enter the required end date.
- 5. Tap **Only activated** to only display triggered alarms.
- 6. Tap Generate to view the report. The reports screen is displayed.

Note:

- The report is displayed in reverse chronological order.
- A green alarm denotes access was granted, a red alarm denotes that access was denied.
- 7. Tap **Exit**.

Section 04 Configure Access settings



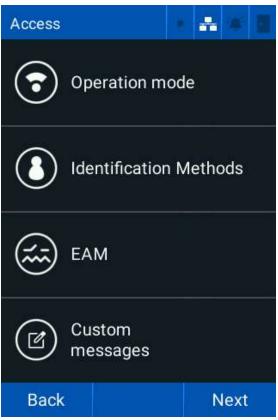


4.1 Access

You can configure the following **Access** settings:

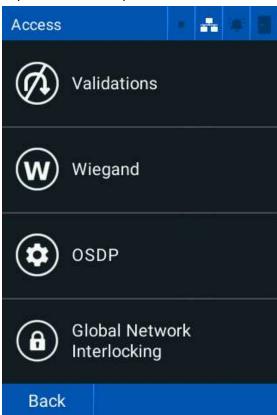
Setting	Description
Operating mode	Choose between Standalone and Online mode.
Identification Methods	Choose which methods of identification are enabled on the reader.
External Access Module (EAM)	Allows you to configure the properties of an external access module.
Validations	Configure the Anti-passback settings.
Wiegand	Configure the input and output settings for Wiegand transmission.
OSDP	Configure the reader as a peripheral device for reading and transmitting information to a control panel.
Global Network Interlocking	Configure two readers to connect and control a single area by keeping one of the connected doors always closed. For example, a quarantine zone.

1. Tap Menu > Access. The Access screen is displayed.





2. Tap **Next** for more options.





4.2 Operation mode

HID Amico has two operating modes:

- Standalone (default): All information required to identify and authorize access is stored in the HID Amico readers local database. For example, user enrollment, biometrics templates, cards, departments, schedules, and access rules.
- **Online**: The reader identifies the user in its local database when identification is initiated. Access authorization is done through a connected server, which processes the access rules and grants or denies authorization.

4.2.1 To change the operation mode

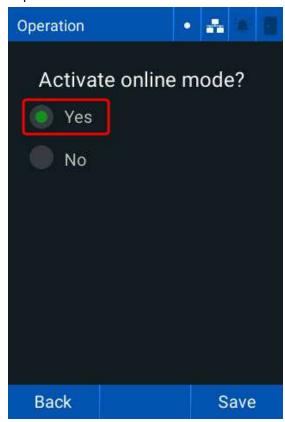
1. Tap Menu > Access > Operation Mode. The current operating mode is displayed.



2. Tap Reconfig.



3. Tap Yes to select online mode.

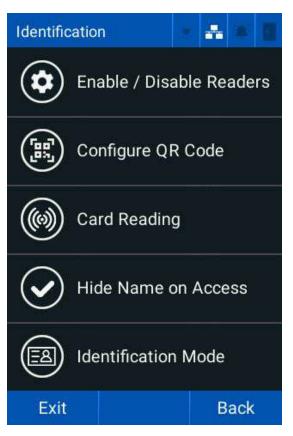


- 4. Tap **Save**.
- 5. Tap **OK** to make the changes.



4.3 Identification methods

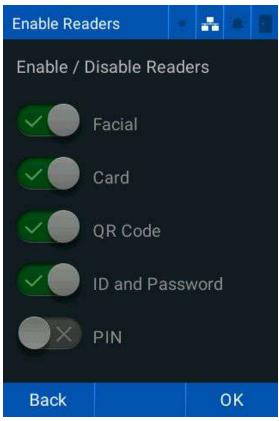
Tap Menu > Access > Identification Methods. The Identification screen is displayed.





4.3.1 Enable/disable reader identification methods

 Tap Menu > Access > Identification Methods > Enable / Disable readers. The Enable Readers screen is displayed.



- 2. Tap the required identification method toggles to enable/disable them:
 - Facial: starts the face identification process when a person is detected by the camera.
 - Card: starts the card identification process when a card is presented to the reader.
 - QR Code: starts the QR code identification process when a QR code is detected by the camera.
 - ID and Password: identifies the user from the ID and password entered on the touchscreen.
 - PIN: identifies the user from the PIN entered on the touchscreen.

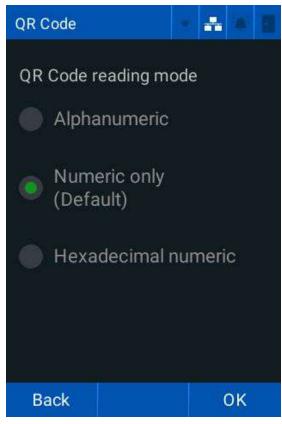
Note:

- ID and Password, and PIN cannot be enabled together.
- Face, Card, QR Code, and ID and Password are enabled by default.
- Tap the center of the home screen to display the keypad to enter a Password or a PIN.



4.3.2 QR Codes

1. Tap Menu > Access > Identification Methods > Configure QR Code. The QR Code screen is displayed.



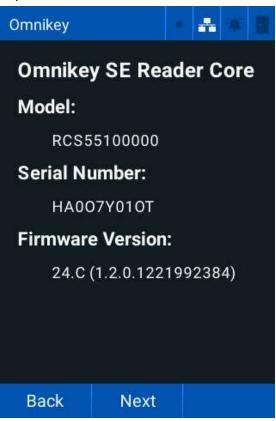
- 2. Tap the required **QR Code reading mode**:
 - Alphanumeric (default): accepts alphanumeric characters as the QR Code. The QR Code is saved as a qrcodes
 object.
 - Numeric Only (default): the QR Code must be 64-bit numeric. The QR Code is saved as a cards object.
 - **Hexadecimal numeric**: the QR Code must be 64-bit hexadecimal numeric. The QR Code is engraved as a **cards** type object.



4.3.3 Card reading

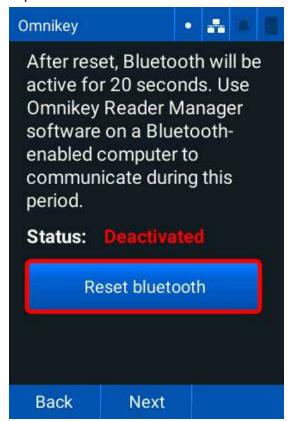
The OMNIKEY® Reader Core module parameters can be configured independently via Bluetooth LE connection with the OMNIKEY Reader Manager application. The communication channel is disabled by default. To temporarily open the communication channel:

1. Tap Menu > Access > Identification Methods > Card Reading. The Omnikey SE Reader Core screen is displayed.





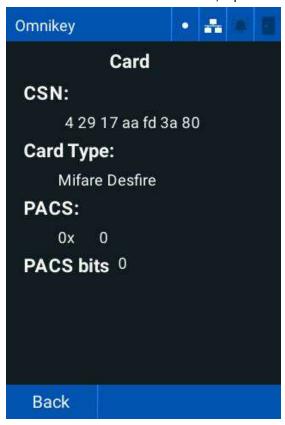
2. Tap Next > Reset bluetooth.



Note: See 4.4 Set Elite and MOB keys for more information.



3. Once the connection is established, tap Next. The card screen is displayed.



4. Hold the card up to the reader to verify the card details.

Note:

The location of each antenna for the supported credentials are:

- 13.56 MHz below the screen
- LF 125 kHz above the screen



4.4 Set Elite and MOB keys

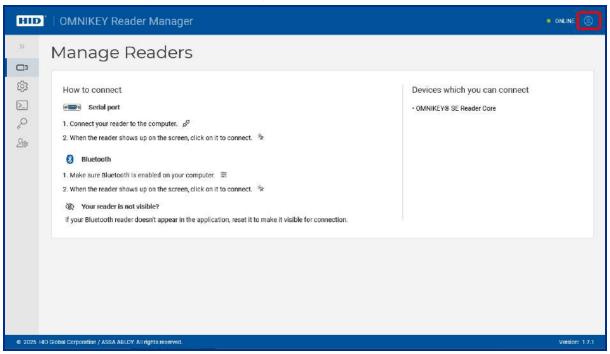
Download the OMNIKEY Reader Manager app (Microsoft Windows only) to load Elite (ICE) and MOB keys. Search the Microsoft Store for "OMNIKEY Reader Manager".

Note:

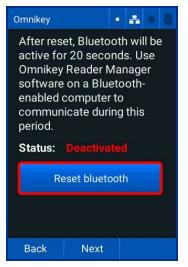
- ICE and MOB keys can only be loaded using a Bluetooth LE connection.
- You must have an active HID Origo™ Reader Technician account with ICE and MOB keys assigned.
- 1. Open OMNIKEY Reader Manager.

Note: Make sure Bluetooth is enabled on your computer via Windows System Settings.

2. Click the User icon to log in to your HID Origo Reader Technician account.

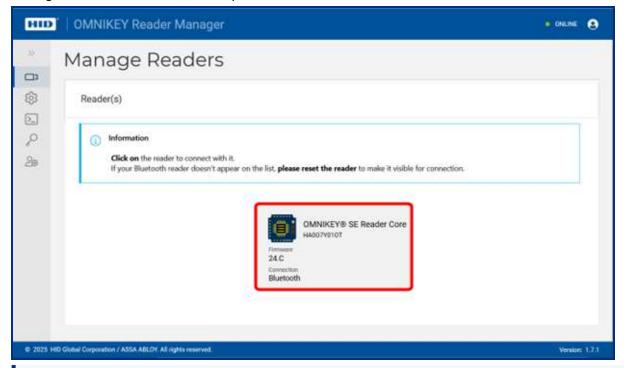


3. On the HID Amico reader, tap Menu > Access > Identification Methods > Card Reading > Next > Reset bluetooth.





4. Once the reset is complete, communication between the HID Amico reader and OMNIKEY Reader Manager must be established within 20 seconds. If successful, the HID Amico reader will be visible on the OMNIKEY Reader Manager screen. Double click the required reader.



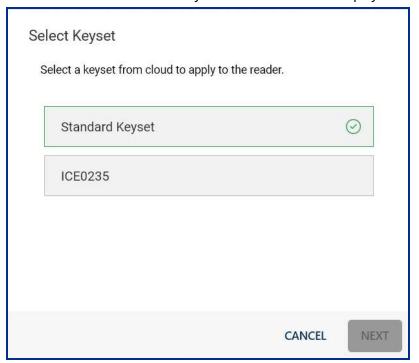
Note: Repeat steps 3 and 4 if the connection times out.

- 5. Click the Key Management icon in the left-hand menu.
- 6. Select the required reader to change its keyset. The current reader keyset is displayed.





7. Click **UPDATE**. The available keysets for the reader are displayed.

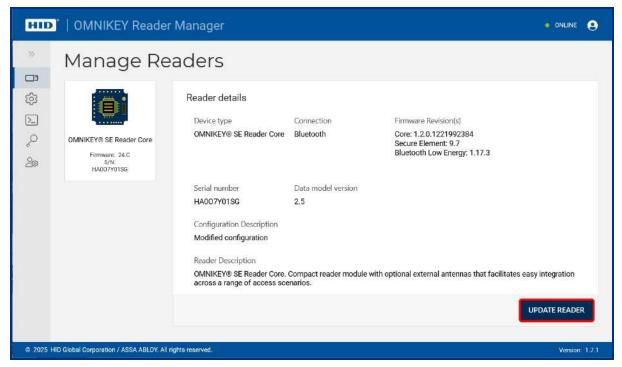


8. Select the required keyset and click **NEXT**. Secure messages are generated in the cloud and uploaded to the reader. This process can take several seconds.



4.4.1 OMNIKEY Reader Core firmware update

- 1. Connect to the required device. See 4.4 Set Elite and MOB keys
- 2. Click UPDATE READER.

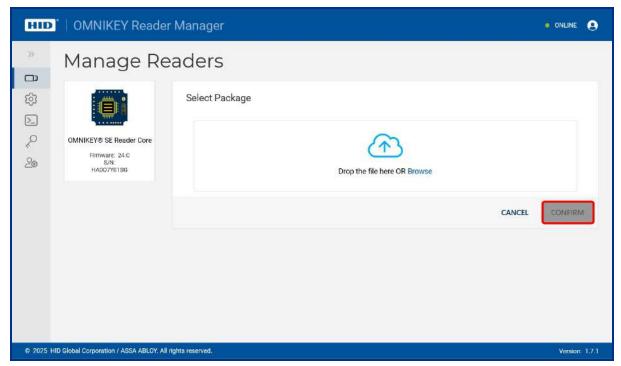


3. Select the required firmware update file.

Note: The update package (.orfi) can contain firmware updates for one or more readers.

4. Click CONFIRM.





5. Click **UPDATE READER**. The update progress is displayed.



4.5 Hide name on access

This allows you to hide the name of the user during an identification event. This prevents a personal name being displayed on the reader screen to help avoid identity theft.

Tap Menu > Access > Identification Methods > Hide Name on Access to hide the user name on access.

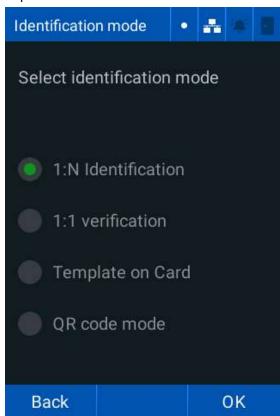


4.6 Identification mode

This allows you to manage the required level of reader authentication.

Mode	Description
1:N	Single factor authentication. The reader requires a single form of identification to grant access, for example, Card , Face , Pin , or Password .
1:1	Two factor authentication. The reader requires two forms of identification to grant access, for example, a combination of a Card and Face .
Template on card	Extracts multiple information stored on a card, such as User ID and Template on card .
QR Code	The camera reads a QR code to grant access to the user. Facial recognition is not available in QR Code mode.

1. Tap Menu > Access > Identification Methods > Identification Mode.



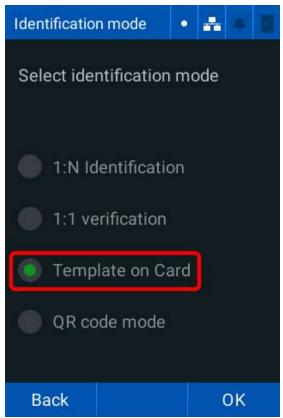
2. Tap the required **Identification mode**.



4.6.1 Enable Template on card

For **Template on card** mode, the user's record and biometric template, is stored on a card instead of the reader's local database.

1. Tap Menu > Access > Identification Methods > Identification Mode > Template on Card.



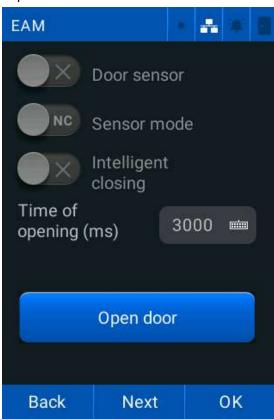
2. Tap OK to save.

In **Template on Card** mode, the user must hold their card up to the reader. The reader extracts the face template from the card and matches it to the user standing in front of the reader.



4.7 External Access Module

1. Tap Menu > Access > EAM. The EAM screen is displayed.



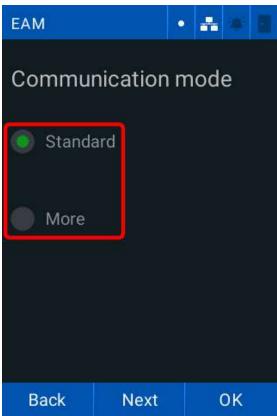
- 2. Tap the **Door sensor** toggle to activate/deactivate the door sensor.
- 3. Tap the Sensor mode toggle to set the sensor to Normally Open (NO) or Normally Closed (NC).
- 4. Tap the Intelligent closing toggle to set the relay to close when the door sensor opens.
- 5. Tap the Time of opening (ms) keyboard and enter the duration (milliseconds) that the EAM relay is open.

Note: Tap Open door to manually open the door relay.

6. Tap Next.

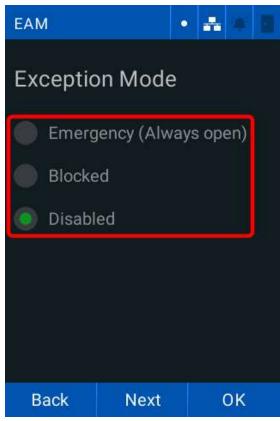


- 7. Tap the required **Communication mode**:
 - Standard: the EAM can communicate with any reader.
 - More: the EAM only communicates with the reader that configured it.





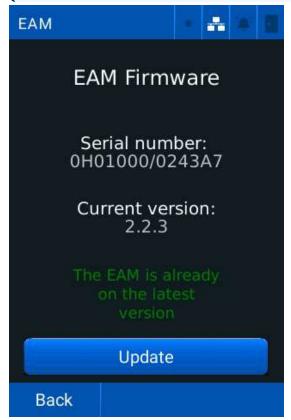
- 8. Tap Next and tap the required Exception Mode.
 - Emergency: in the case of an emergency, the doors are kept unlocked. This must be set manually.
 - Blocked: in the case of a lockdown, the doors are kept locked. This must be set manually.
 - Disabled: no exceptions are made. Access control continues as normal.





9. Tap Next and tap Update to update the EAM firmware version.

Note: Tap Back to return to the previous screen if the EAM firmware is up to date.



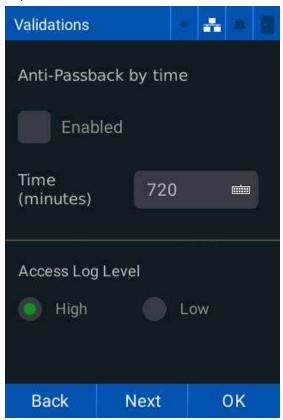
10. Tap **OK**.



4.8 Validations

The **Validations** screen allows you to configure the **Anti-Passback** settings. Anti-passback stops a user entering a location multiple times in a certain time period. To set the time a user must wait before they are granted access:

1. Tap Menu > Access > Next > Validations. The Validations screen is displayed.



- 2. Tap Enabled to enable Anti-Passback by time.
- 3. Tap the Time (minutes) keyboard to set the time in minutes.
- 4. Tap the required Access Log Level:
 - High: reader records all access attempts.
 - Low: reader does not log failed access attempts.
- 5. Tap Next to continue.
- 6. Tap the required **Clear expired users** option:
 - All: deletes all users with an expired End date.
 - Visitors: deletes only visitors with an expired End date.
 - Disable: does not delete any expired users.

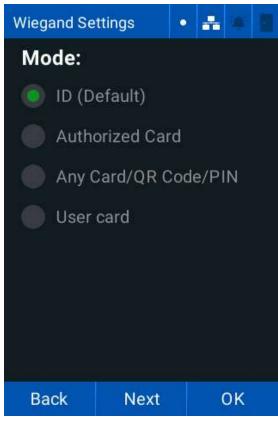
Note: The End date must be set for expired users to be removed.

7. Tap **OK**.



4.9 Wiegand

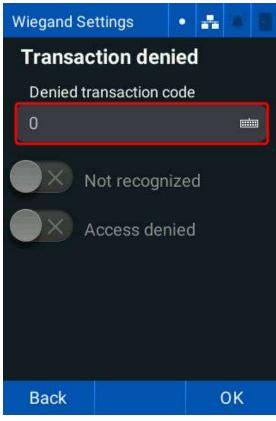
1. Tap Menu > Access > Next > Wiegand. The Wiegand Settings screen is displayed.



- 2. Tap the required Identification Mode:
 - ID (default): transmits the user ID over Wiegand
 - Authorized Card: transmits the authorized card information over Wiegand
 - · Any Card/QR Code/PIN: transmits the card information over Wiegand, whether the card is authorized or not
 - User card: transmits only user card information over Wiegand, after a facial recognition
- 3. Tap Next and tap the required Wiegand format:
 - Manual a custom Wiegand format defined in the web interface.
 - CSN mifare (32 bits)
 - C1K (35 bits)
 - W37 (10304)
 - W42
 - W56
 - W66
 - W26
 - W34
 - W37 (10302)
 - W40
 - C1K (48 bits)
 - W64
- 4. Tap Next.



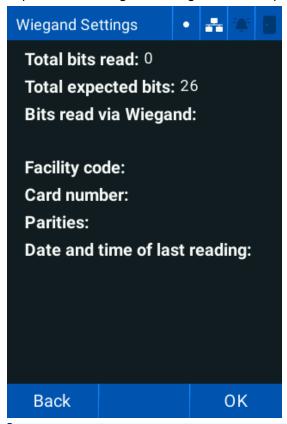
5. Tap the **Denied transaction code** keyboard and enter the required code to create an unidentified event log.



- 6. Tap the **Not recognized** toggle to enable/disable not recognized event logs.
- 7. Tap the Access denied toggle to enable/disable access denied event logs.



8. Tap Next. The Wiegand Debug screen is displayed.



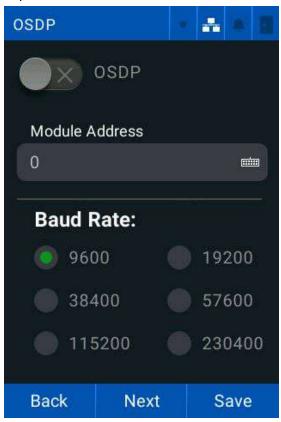
Note: This screen verifies the data received by the readers Wiegand input interface.

9. Tap **OK**.



4.10 OSDP

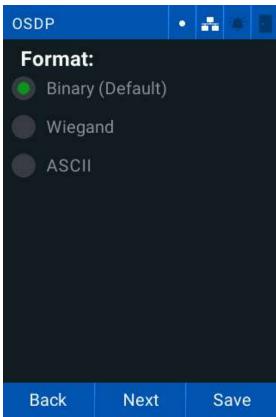
1. Tap Menu > Access > Next > OSDP. The OSDP screen is displayed.



- 2. Tap the **OSDP** toggle to enable/disable the OSDP protocol.
- 3. Tap the **Module Address** keyboard and enter the required address.
- 4. Tap the required Baud Rate to set the communication speed of the RS-485 bus for the OSDP protocol.
- 5. Tap Next to continue.



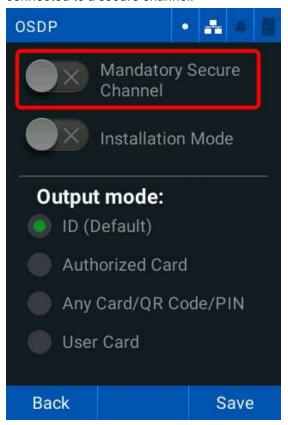
- 6. Tap the required Format.
 - Binary: reads directly from the card
 - Wiegand: reads Wiegand formats
 - ASCII: reads text representation of data



7. Tap the required **Size** if Wiegand is selected. Tap **Next** to continue.



8. Tap the **Mandatory Secure Channel** toggle to enable/disable it. This configures the reader to only work when connected to a secure channel.



9. Tap the Installation Mode toggle to enable/disable the on-screen message displaying the installation mode.

Note: You must wait for the mandatory OSDP activation to restart before Installation Mode is enabled.

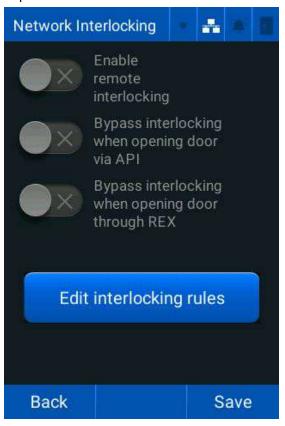
- 10. Tap the required Output mode.
- 11. Tap Save.
- 12. Tap **OK** to restart the reader.



4.11 Global network interlocking

This allows you to configure two readers to control a single area. One door always remains locked, for example a quarantine zone.

1. Tap Menu > Access > Next > Global Network Interlocking. The Network Interlocking screen is displayed.



- 2. Tap the Enable remote interlocking toggle to enable/disable remote interlocking.
- 3. Tap the **Bypass interlocking when opening door via API** toggle to enable/disable bypassing the interlock when opening a door via the API.
- 4. Tap the **Bypass interlocking when opening door through REX** toggle to enable/disable bypassing the interlock when opening a door via a request to exit button.
- 5. Tap Save.



4.11.1 To add an interlock

- 1. Tap Menu > Access > Next > Global Network Interlocking.
- 2. Tap the Add icon.

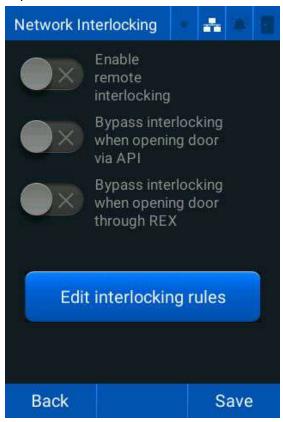


- 3. Tap the Rule Name keyboard and enter the required name.
- 4. Tap the Remote Device IP keyboard and enter the required name.
- 5. Tap the **Remote Device Login** keyboard and enter the required login.
- 6. Tap the **Remote Device Password** keyboard and enter the required password.
- 7. Tap the **Enable rule** toggle to enable the interlocking rule.
- 8. Tap **Test connection** to test the connection between the two readers.
- 9. Tap **OK**.



4.11.2 Edit interlocking rules

1. Tap Menu > Access > Next > Global Network Interlocking. The Network Interlocking screen is displayed.



- 2. Tap Edit interlocking rules.
- 3. Tap the required data fields and make the required changes.
- 4. Tap **OK**.
- 5. Tap Save.

Section 05 Facial settings

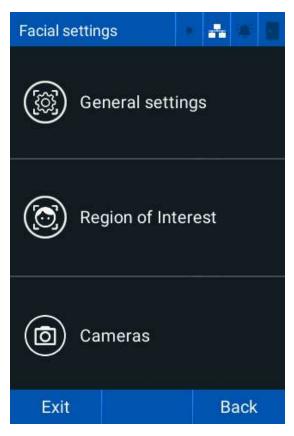




5.1 Facial settings

The Facial Settings screen allows you to adjust all camera, video, and face ID criteria settings.

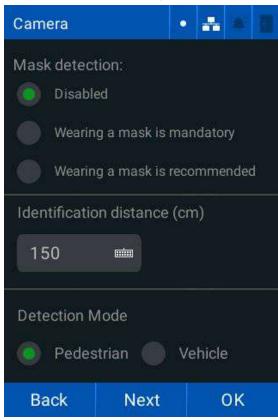
Tap Menu > Facial Settings. The Facial Settings screen is displayed.





5.2 General settings

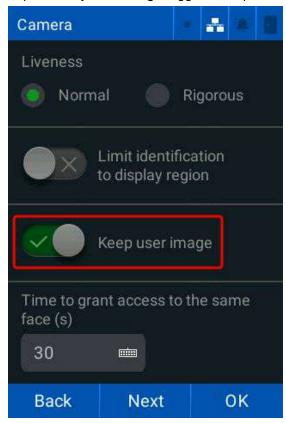
1. Tap Menu > Facial settings > General settings. The Camera screen is displayed.



- 2. Tap the required **Mask detection** setting:
 - Disabled
 - · Wearing a mask is mandatory
 - · Wearing a mask is recommended
- 3. Tap the Identification distance (cm) keyboard and enter the required distance in centimeters.
- 4. Tap the required **Detection Mode**:
 - Pedestrian
 - Vehicle
- 5. Tap Next to continue.
- 6. Tap the required Liveness mode:
 - Normal (default): normal environments
 - Rigorous: environments with poor lighting
- 7. Tap the Limit identification to display region toggle to only identify faces in the region of interest.



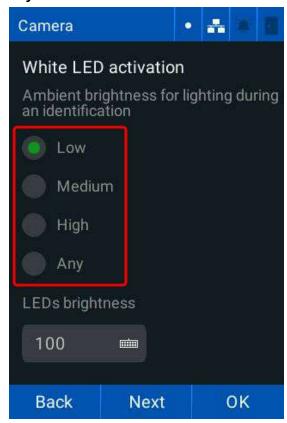
8. Tap the **Keep user image** toggle to keep/remove user photos after enrollment.



9. Tap the **Time to grant access to the same face (s)** keyboard and enter the duration a user must wait to be identified after their last facial identification. Tap **Next** to continue.



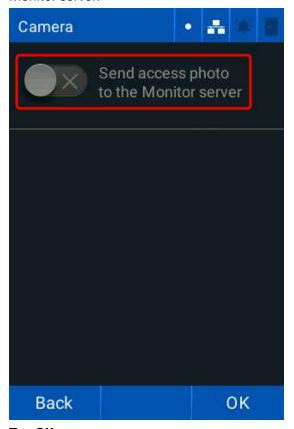
- 10. Tap the required White LED activation brightness.
 - Low
 - Medium
 - High
 - Any



11. Tap the **LEDs brightness** keyboard to enter the required LED brightness (1-100). Tap **Next** to continue.



12. Tap **Send access photo to the Monitor server** toggle to send the access photo of the identified user to the Monitor server.



13. Tap **OK**.

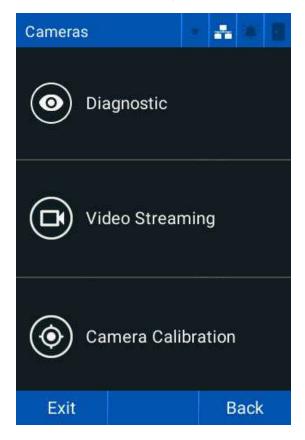
5.2.1 Region of interest

- 1. Tap Menu > Facial settings > Region of Interest. The Region of Interest adjustment screen is displayed.
- 2. Make the required adjustments:
 - Vertical Image Shift: moves the camera up or down
 - Zoom: zooms in or out
- 3. Tap Confirm.



5.3 Cameras

Tap Menu > Facial settings > Cameras. The Cameras screen is displayed.



5.3.1 Diagnostics

- 1. Tap Menu > Facial settings > Cameras > Diagnostic.
- 2. Tap White LEDs to test that the white LEDs are operating.
- 3. Tap IR LEDs to test that the infrared LEDs are operating.
- 4. Tap Infrared/Colored to alternate between the infrared camera and color camera.
- 5. Tap **Back** to return to the previous menu.

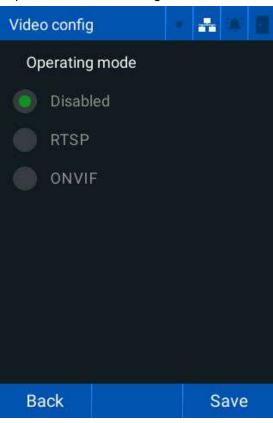


5.3.2 Video streaming

This allows you to configure the reader to stream video from the camera via RTSP, or ONVIF protocols.

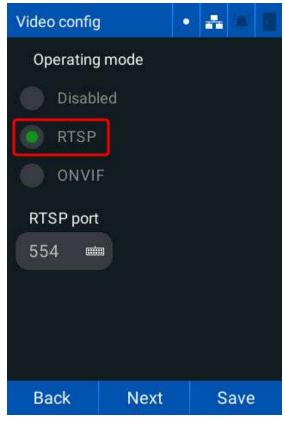
RTSP

1. Tap Menu > Facial settings > Cameras > Video Streaming. The Video config screen is displayed.

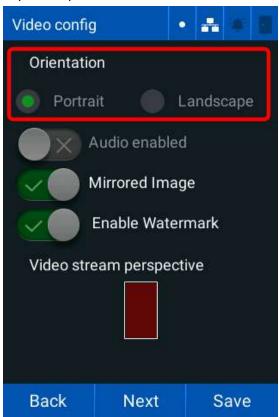




2. Tap RTSP.

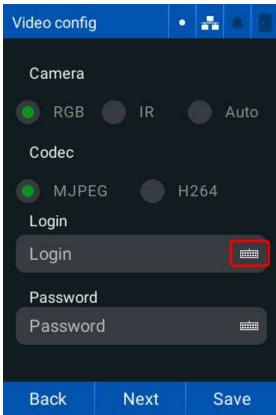


- 3. Tap the RTSP Port keyboard and enter the required port (554 by default). Tap Next to continue.
- 4. Tap the required video **Orientation**.





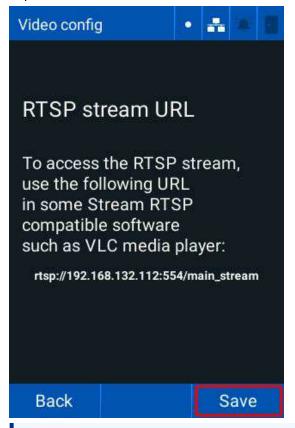
- 5. Tap the Mirrored Image toggle to flip the image horizontally.
- 6. Tap the **Enable Watermark** toggle to enable/disable the watermark that appears on the facial recognition screen. Tap **Next** to continue.
- 7. Tap the required Camera Configuration:
 - RGB (default)
 - IR (InfraRed)
 - Auto
- 8. Tap the required Codec:
 - MJPEG (default)
 - H264
- 9. Tap the **Login** keyboard and enter the required login.



10. Tap the Password keyboard and enter the required password. Tap Next to continue.



11. Tap Save to use the RTSP stream URL with compatible software (VLC media player or Windows media player).



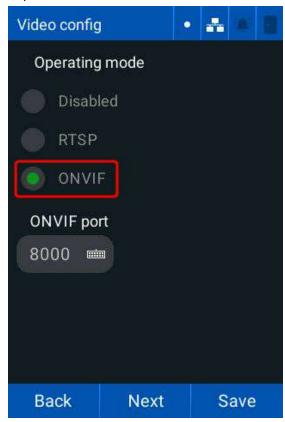
Note: Copy and save the URL in a safe place.

12. Restart the reader for the configuration changes to take effect. See 6.10 Restart for more information.



ONVIF streaming

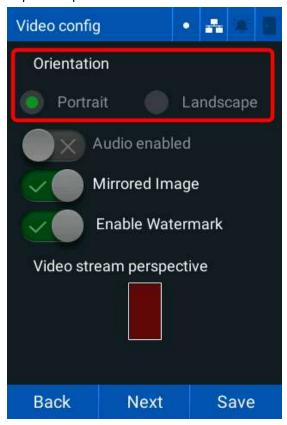
- 1. Tap Menu > Facial settings > Cameras > Video Streaming. The Video config screen is displayed.
- 2. Tap ONVIF.



3. Tap the ONVIF Port keyboard and enter the required port (8000 by default). Tap Next to continue.



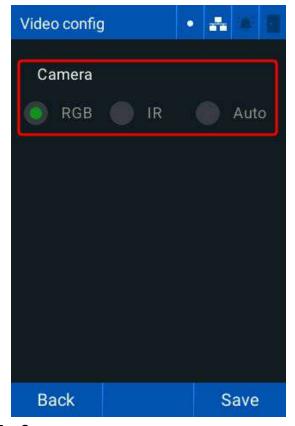
4. Tap the required **Orientation**.



- 5. Tap the **Mirrored Image** toggle to flip the image horizontally.
- 6. Tap the **Enable Watermark** toggle to enable/disable the watermark that appears on the facial recognition screen. Tap **Next** to continue.



- 7. Tap the required Camera Configuration:
 - RGB (default)
 - IR (InfraRed)
 - Auto



- 8. Tap Save.
- 9. Restart the reader for the configuration changes to take effect. See **6.10 Restart** for more information.

Note:

- · ONVIF uses the default credentials:
 - · Login admin
 - Password admin
- · ONVIF streaming only works if RTSP is active and operating correctly.

Validate the ONVIF Streaming using the ONVIF Device Manager.

5.3.3 Camera calibration

This allows you to calibrate the camera.

- 1. Tap Menu > Facial Settings > Cameras > Camera Calibration.
- 2. Tap Start calibration and follow the on-screen prompts.

Settings 06



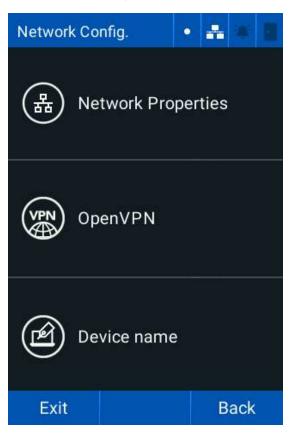


6.1 Network settings

The HID Amico can connect to a network via an Ethernet cable (10/100Mbps), using the TCP/IP protocol with the reader in **Online** mode. Configure the IP address, the subnet mask, and the gateway of the reader to access the web interface.

You can configure the native Wiegand inputs and outputs to work with the Wiegand 26 protocol (standard).

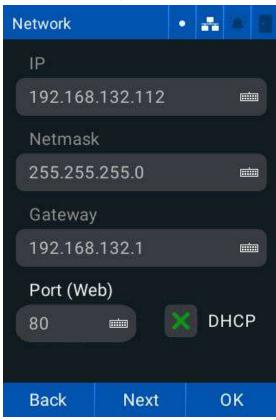
Tap Menu > Settings > Network. The Network settings menu is displayed.





6.1.1 Network properties

1. Tap Menu > Settings > Network > Network Properties. The Network screen is displayed.



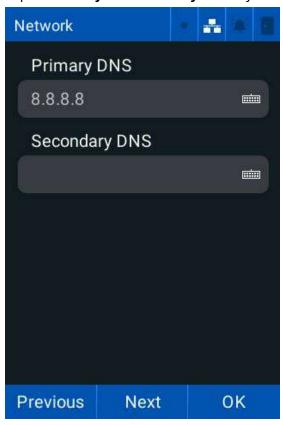
- 2. Tap the IP keyboard and enter the required static reader IP address.
- 3. Tap the Netmask keyboard and enter the required Netmask.
- 4. Tap the Gateway keyboard and enter the required network gateway IP address.
- 5. Tap the Port (Web) keyboard and enter the required network port.
- 6. Tap the **DHCP** checkbox to enable/disable the DHCP protocol for network configuration.

Note: The **IP**, **Netmask**, and **Gateway** settings are configured automatically. They cannot be changed when the **DHCP** protocol is enabled.

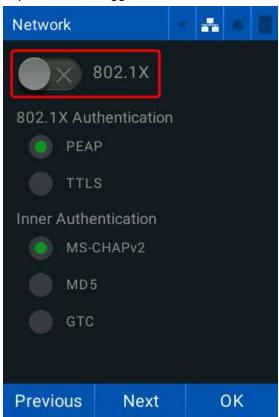
7. Tap Next to continue.



8. Tap the **Primary** and **Secondary** DNS keyboards and enter the required DNS server information.

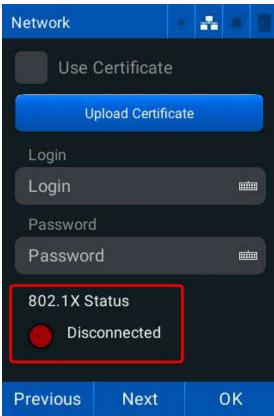


- 9. Tap Next to continue.
- 10. Tap the 802.1X toggle to enable/disable the 802.1X protocol.





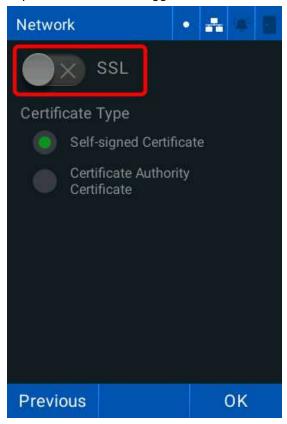
- 11. Tap the required 802.1X Authentication option:
 - PEAP
 - TTLS
- 12. Tap the required Inner Authentication option:
 - MS-CHAPv2
 - MD5
 - GTC
- 13. Tap Next to continue.
- 14. Tap the **Login** keyboard and enter the required login.
- 15. Tap the **Password** keyboard and enter the required password.
- 16. The 802.1X status is displayed at the bottom of the screen. See A.1 802.1X status for more information.



17. Tap Next to continue.



18. Tap the SSL Protocol toggle to enable/disable the SSL protocol.

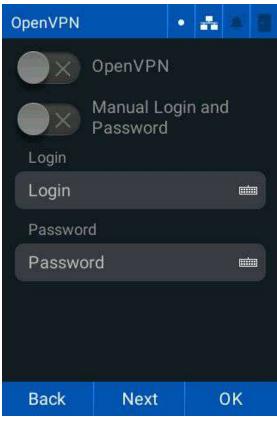


19. Tap **OK** to save the network settings.



6.1.2 OpenVPN

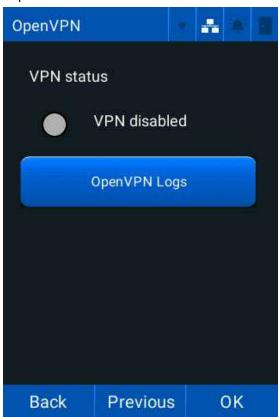
1. Tap Menu > Settings > Network > OpenVPN. The OpenVPN screen is displayed.



- 2. Tap the **OpenVPN** toggle to enable/disable OpenVPN.
- 3. Tap the Manual Login and Password toggle to enable/disable the manual login.
- 4. Tap the **Login** keyboard and enter the required login.
- 5. Tap the **Password** keyboard and enter the required password.



6. Tap Next to continue. The VPN Status screen is displayed.



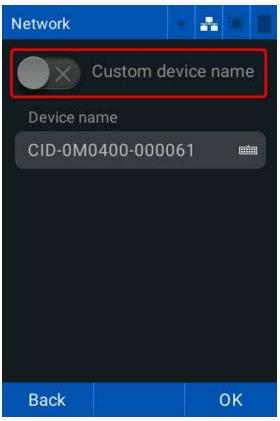
Status	Description
Green	Reader connected to OpenVPN
Grey	OpenVPN disabled or failed security protocol.
Red	Reader authentication failure.

7. Tap **OK**.



6.1.3 Reader name

- 1. Tap Menu > Settings > Network > Device name.
- 2. Tap the **Custom device name** toggle to enable/disable the option to change the reader name.



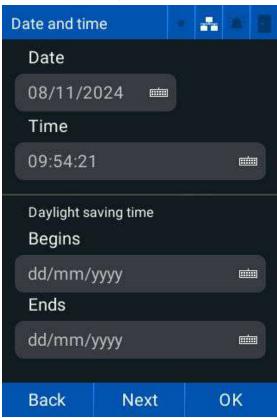
- 3. Tap the **Device name** keyboard and enter the required reader name.
- 4. Tap **OK**.



6.2 Date and time

The **Date and time** screen allows you to configure the Network Time Protocol (NTP) to synchronize the readers clocks on the network which allows all events, transactions, and reader logs to be recorded consistently.

1. Tap Menu > Settings > Date and time. The Date and time screen is displayed.



- 2. Tap the **Date** keyboard and enter the required date.
- 3. Tap the **Time** keyboard and enter the required time.
- 4. Tap the Daylight saving time Begins keyboard and enter the required start date.
- 5. Tap the Daylight saving time Ends keyboard and enter the required end date.
- 6. Tap Next to continue.
- 7. Tap the NTP toggle to enable/disable the Network Time Protocol.



8. Tap the **Server** keyboards and enter the required server addresses.

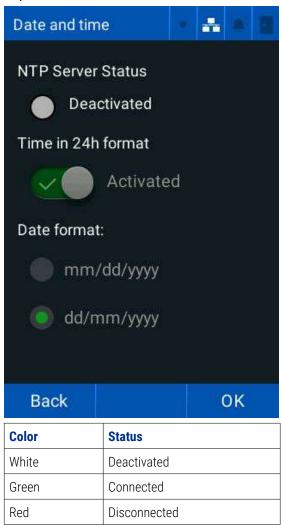


Note: Server 2 is optional.

9. Select the required **Time zone** from the drop-down list.



10. Tap Next to continue. The NTP Server Status is displayed.



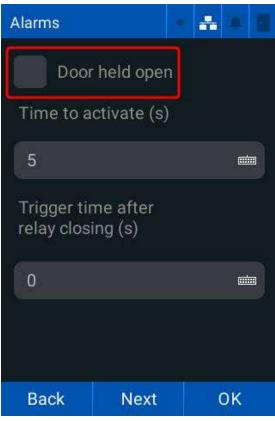
- 11. Tap the Time in 24h format toggle to alternate between 24 hour clock or 12 hour clock.
- 12. Tap the required **Date format**.
- 13. Tap **OK** to save the date and time settings.



6.3 Alarms

6.3.1 Internal alarms

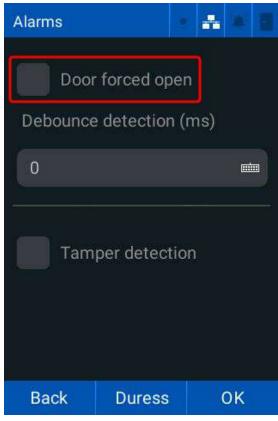
- 1. Tap Menu > Settings > Alarms > Internal alarms.
- 2. Tap the **Door held open** checkbox to enable/disable the detection of an open door.



- 3. Tap the **Time to activate (s)** keyboard and enter the required time (seconds) for the alarm to trigger after sensor activation.
- 4. Tap the **Trigger time after relay closing (s)** keyboard and enter the required time in seconds that the alarm is triggered if the door is kept open.
- 5. Tap Next to continue.



6. Tap the **Door forced open** checkbox to enable/disable the detection of a break-in.



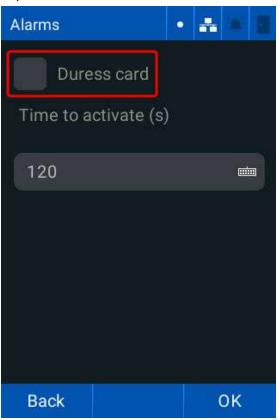
- 7. Tap the **Debounce detection (ms)** keyboard and enter the required time (milliseconds) for a break-in detection alarm.
- 8. Tap the **Tamper detection** checkbox to enable/disable the reader tamper sensor.
- 9. Tap **OK** to save.



6.3.2 Duress settings

Allows you to set a panic alarm, triggered by holding a card next to the reader for a configured amount of time.

- 1. Tap Menu > Settings > Alarms > Internal Alarms > Next > Duress. The Duress Alarm screen is displayed.
- 2. Tap the **Duress card** checkbox to enable/disable the alarm.

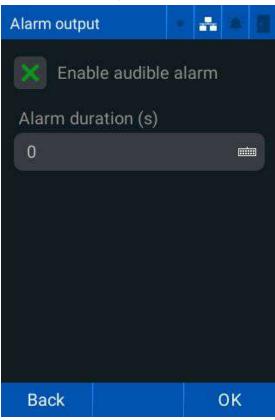


- 3. Tap the **Time to activate (s)** keyboard and enter the required time (seconds) the card must be held to the reader.
- 4. Tap **OK**.



6.3.3 Alarm output

1. Tap Menu > Settings > Alarm > Alarm Output. The Alarm Output screen is displayed.



- 2. Tap the **Enable audible alarm** checkbox to enable/disable the audible alarm.
- 3. Tap the Alarm duration (s) keyboard and enter the required time (seconds) to trigger the audible alarm.
- 4. Tap **OK**.



6.4 Language settings

1. Tap Menu > Settings > Languages. The Language screen is displayed.



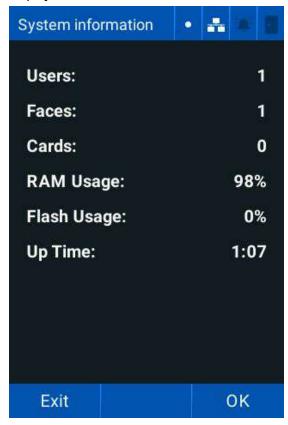
2. Tap the required Language.



6.5 System information

The **System information** screen allows you to see the reader and system information.

1. Tap Menu > Settings > General settings > System > System information. The System information screen is displayed.



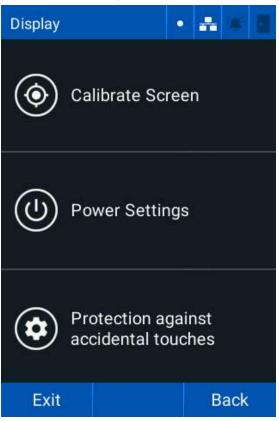
2. Tap **OK**.



6.6 Display

The **Display** screen allows you to configure the power settings and calibrate the screen.

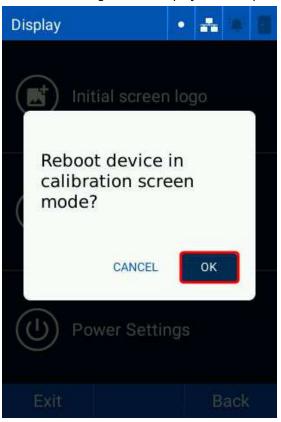
1. Tap Menu > Settings > General settings > System > Display. The Display screen is displayed.





6.6.1 Display calibration

- 1. Tap Menu > Settings > General settings > System > Display > Calibrate Screen.
- 2. Read the message that is displayed and tap **OK**.



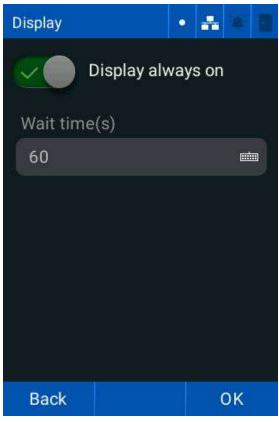
3. The reader will reboot in calibration mode. Tap the marks on the screen and wait for the reader to calibrate.



6.6.2 Power settings

The **Display** screen allows you to configure the readers power saving settings.

1. Tap Menu > Settings > General settings > System > Display > Power Settings. The Display screen is displayed.



- 2. Tap the **Display always on** toggle to enable/disable the display always on mode.
- 3. If the **Display always on** mode is disabled, tap the **Wait time (s)** keyboard and enter the required time before the screen turns off when idle.

6.6.3 Protection against accidental touches

This allows you to configure the duration that user must tap and hold the Menu button to access the menu.

- 1. Tap the Protection activated toggle to enable/disable protection against accidental touches.
- 2. Tap the Touch duration (s) keyboard and set the duration the user is required to tap and hold the Menu button.
- 3. Tap OK to save.

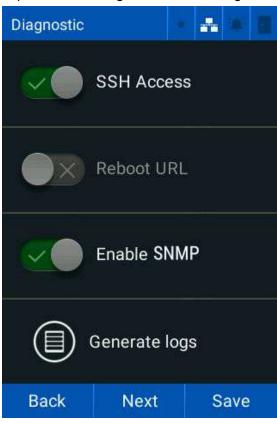


6.7 Diagnostics

The **Diagnostic** screen allows you to configure reader diagnosis and general report settings.

Caution: The following features can cause the reader to reboot or be accessed remotely. Only use them for support if your reader has issues.

1. Tap Menu > Settings > General settings > Diagnostic. The Diagnostic screen is displayed.

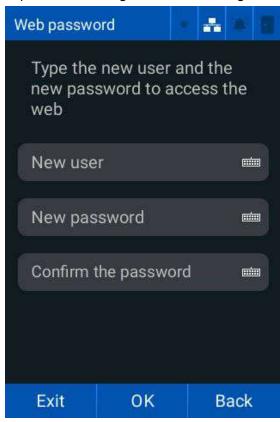


- 2. Tap the SSH Access toggle to enable/disable access via SSH.
- 3. Tap the Reboot URL toggle to enable/disable restarting the reader without a valid session.
- 4. Tap Save.



6.8 Modify user name and web password

1. Tap Menu > Settings > General settings > Change web password. The Web password screen is displayed.



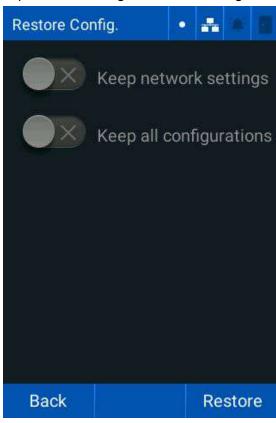
- 2. Tap the **New user** keyboard and enter the required user name.
- 3. Tap the New password keyboard and enter the required password.
- 4. Tap the **Confirm the password** keyboard and confirm the new password.
- 5. Tap **OK**.



6.9 Restore settings

The **Restore Configuration** screen allows you to restore the reader to default settings.

1. Tap Menu > Settings > General settings > Restore Configuration. The Restore Configuration screen is displayed.



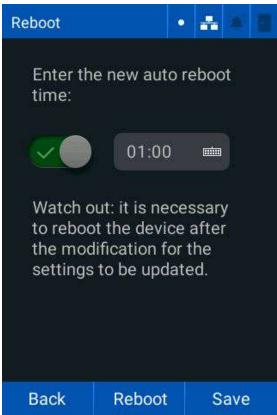
- 2. Tap the **Keep network settings** toggle to keep/remove the network settings.
- 3. Tap the **Keep all configurations** toggle to keep/remove all configurations.
- 4. Tap Restore.



6.10 Restart

The Reboot screen allows you to configure an automatic restart time for the reader, or restart the system immediately.

1. Tap Menu > Settings > General settings > Reboot. The Reboot screen is displayed.



- 2. Tap the Automatic reboot time toggle to enable/disable the automatic restart time.
- 3. Tap the Automatic reboot time keyboard and enter the required restart time.

Note: Tap Reboot to restart the reader immediately.



6.11 About

The **About** screen allows you to view the reader information, update the reader firmware, and view the terms and conditions of use.

1. Tap Menu > About. The About screen is displayed.



2. Tap Back to return to the main menu.



6.11.1 Legal information

1. Tap Menu > About > Legal Information. The Legal Information screen is displayed.



2. Scan the **QR Code** for more information.

Note: Enter the URL into a web browser if you cannot scan the code.

3. Tap **Exit** to return to the main menu.



6.11.2 Firmware update

This allows you to update the reader firmware version.

Important: It is recommended to keep the reader firmware up to date. Check regularly for new firmware versions.

- 1. Tap Menu > About. The About screen is displayed.
- 2. Tap Firmware update.



3. The reader searches for new firmware versions and notifies you if a new version is available. Follow the on-screen instructions if a new firmware version is found.

Section 07 Technical specifications





7.1 Technical specifications

Features	Description
LCD type	3.5" TFT color LCD display with capacitive touchscreen
CPU	1.5 GHz quad-core processor
Audio feedback	Buzzer
Visual feedback	Multicolor LED indicator / illuminator
Operating temperature	-20°C to 50°C 0% ~ 80%, non-condensing
Camera	Two 1080p full HD cameras (visible light and infrared light)
RTSP	Supported
Tamper	Supported
Dimensions mm (W \times H \times D)	86 × 142 × 26 (terminal) and 52 × 52 × 22 (EAM)
Weight	343g (device), 540g (boxed)
Power	12VDC 2A or PoE
Power consumption	400mA @ 12V idle, maximum 600mA @ 12V
PoE	802.3af PoE (802.3at/PoE+ and 802.3bt/PoE++ compatible)
IP Rating	IP65
Certifications	CE, FCC, CB, IC, UKCA, ANATEL, RoHS
Warranty	12 months
Authentication distance	Up to 3m
Mounting height	1.40m
Matching speed	Within 0.2 seconds
Throughput	30 persons per min 1:N
Live face detection (Anti-spoofing)	Presentation attack detection supported
Minimum Light Level	Complete darkness
HF (13.56 MHz)	Seos® iCLASS®, iCLASS SE™, ISO 14443A (MIFARE) CSN, ISO 14443B CSN, DESFIRE EV1/2/3 ***
LF (125 kHz)	HID PROX®
Mobile (2.4GHz)	Bluetooth LE
Template on card	Seos Secure Identity Object™ (SIO)
Typical RF read range	Seos 0.4in (1cm), iCLASS 2.36in (6cm), Prox 1.57in (4cm)
Keypad (PIN)	Supported on TFT LCD
QR	Static (ISO/IEC 18004:2015) and dynamic (6238 TOTP) QR Supported
Max. user	200,000
Max credential	Face: 10,000 / PIN 200,000 / Card: 200,000
Event log capacity	200,000



Features	Description
Ethernet	1 native 10/100Mbps Ethernet port
RS-485	1 RS-485 port for communication with the external access control module or OSDP
RS-485 Protocol	OSDP v2 compliant
USB	USB 2.0 available through a USB C connector in the back of the product (service only)
Relay	1x NO/NC, max. 30VAC / 5A (EAM)
1/0	1x Door Sensor, 1x Pushbutton (EAM)
Wiegand	1x Input, 1x Output (EAM)

AppendixA

802.1X Status





A.1 802.1X status

Status	Description
Initializing	Authentication process is initializing
Disconnected	802.1X authentication is disabled, or cannot connect to the authenticator or authenticator server.
Connecting	The reader is connecting to the authenticator and authentication server.
Authenticating	The authentication process is running.
Authenticated	The reader has been authenticated on the network.
Aborting	The authentication process is being aborted.
Detained	The reader authentication failed.
Forcibly authorizing	The 802.1X authentication process is disabled and the reader network port is authorized without performing the authentication process.
Forcibly deauthorizing	The reader network port is not authorized. Any authentication attempt is ignored.
Restarting	The reader is restarting.
Unknown 802.1X status	An internal error prevented the reader from booting correctly.

Appendix B

Face capture best practices





B.1 Face capture - best practices

Accurate user identification relies on correct face registration. Follow the best practices to ensure correct facial registration:

1. Environment

- Lighting ensure good, even lighting. Avoid very bright or low-light environments.
- Background use a white or neutral color background. Avoid complex or colorful backgrounds.

2. Positioning

- Distance between 60cm and 150cm from the reader
- · Centering position the face in the center of the frame
- · Angle the face should be straight and looking directly at the camera

3. Taking the photo

- **Resolution** the face should cover at least 160px from ear to ear. Do not resize the image or change its aspect ratio.
- Format PNG. (JPEG can be used with a quality factor of 95 or higher).
- . Number of faces only one face must be present in the image
- Accessories no masks, hats, helmets or sunglasses. Spectacles are acceptable if no reflections are visible in the lenses.
- Facial expressions the face must be in a neutral expression

B.2 Image examples

Correct image examples

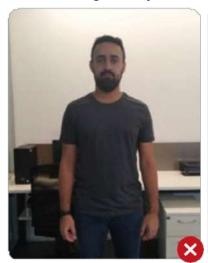






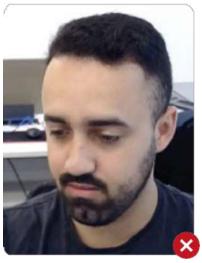


Incorrect image examples

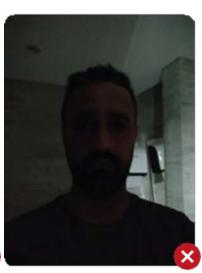






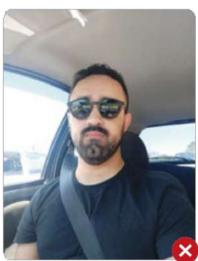














Revision history

Date	Description	Revision
April 2025	Initial release.	A.0



hidglobal.com

For technical support, please visit: https://support.hidglobal.com

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