User Manual

ARMATURA CONNECT App

Copyright © 2022 ARMATURA LLC. All rights reserved.

Trademark

ARMATURA is a registered trademark of ARMATURA LLC. Other trademarks involved in this manual are owned by their respective owners.

Disclaimer

This manual contains information on the operation and maintenance of the Armatura equipment. The copyright in all the documents, drawings, etc. in relation to the Armatura supplied equipment vests in and is the property of Armatura. The contents hereof should not be used or shared by the receiver with any third party without express written permission of Armatura.

The contents of this manual must be read as a whole before starting the operation and maintenance of the supplied equipment. If any of the content(s) of the manual seems unclear or incomplete, please contact Armatura before starting the operation and maintenance of the said equipment.

It is an essential pre-requisite for the satisfactory operation and maintenance that the operating and maintenance personnel are fully familiar with the design and that the said personnel have received thorough training in operating and maintaining the machine/unit/ equipment. It is further essential for the safe operation of the machine/unit/ equipment that personnel has read, understood and followed the safety instructions contained in the manual.

In case of any conflict between terms and conditions of this manual and the contract specifications, drawings, instruction sheets or any other contract-related documents, the contract conditions/documents shall prevail. The contract specific conditions/documents shall apply in priority.

Armatura offers no warranty, guarantee or representation regarding the completeness of any information contained in this manual or any of the amendments made thereto. Armatura does not extend the warranty of any kind, including, without limitation, any warranty of design, merchantability or fitness for a particular purpose.

Armatura does not assume responsibility for any errors or omissions in the information or documents which are referenced by or linked to this manual. The entire risk as to the results and performance obtained from using the information is assumed by the user.

Armatura in no event shall be liable to the user or any third party for any incidental, consequential, indirect, special, or exemplary damages, including, without limitation, loss of business, loss of profits, business interruption, loss of business information or any pecuniary loss, arising out of, in connection with, or relating to the use of the information contained in or referenced by this manual, even if Armatura has been advised of the possibility of such damages.

This manual and the information contained therein may include technical, other inaccuracies or typographical errors. Armatura periodically changes the information herein which will be incorporated into new additions/amendments to the manual. Armatura reserves the right to add, delete, amend or modify the information contained in the manual from time to time in the form of circulars, letters, notes, etc. for better operation and safety of the machine/unit/ equipment. The said additions or amendments are meant for improvement/better operations of the machine/unit/equipment and such amendments shall not give any right to claim any compensation or damages under any circumstances.

Armatura shall in no way be responsible (i) in case the machine/unit/equipment malfunctions due to any non-compliance of the instructions contained in this manual (ii) in case of operation of the machine/unit/equipment beyond the rate limits (iii) in case of operation of the machine and equipment in conditions different from the prescribed conditions of the manual.

The product will be updated from time to time without prior notice. The latest operation procedures and relevant documents are available on http://www.armatura.us.

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

Armatura LLC. Co., Ltd.

Address: 190 Bluegrass Valley Parkway Alpharetta, GA 30005 USA

Phone: +1-650-4556863

For business related queries, please write to us at: sales@armatura.us.

To know more about our global branches, visit www.armatura.us.

About the Manual

This manual introduces the operations of **ARMATURA CONNECT App**.

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

Features and parameters with ★ are not available in all devices.

Table of Contents

1 Introduction

1.1 Purpose

This document provides an overview of the ARMATURA Reader Management Solution. Procedure for registering customers and assigning installers with the Armatura Credential Management System ("ACMS") and providing information to customers and integrators:

■ Download and install the ARMATURA CONNECT mobile app.

■ Register and authenticate the ARMATURA CONNECT app on a mobile device.

■ Enroll Integrators and issue Mobile Credentials in the ACMS portal.

■ Change configurations for supported Explorer Series Outdoor Multi-tech Smart readers.

■ Update firmware for supported Explorer Series Outdoor Multi-tech Smart readers.

■ The supported Explorer Series Outdoor Multi-tech Smart readers are connected to the controller through RS485 or Wiegand.

1.2 Intended Audience

This document is intended for personnel performing the following roles:

■ **Integrator:** the Systems Integrator performs the following tasks:

   ■ Carrying out compatibility checks for the reader and ARMATURA CONNECT App.

   ■ Self-registration within the ARMATURA CONNECT App.

   ■ Assigning readers to their company.

   ■ Performing reader configuration changes and firmware upgrades.

   ■ Reader configuration update testing.

1.3 ARMATURA Reader Management Solution Overview

The ARMATURA Reader Management solution streamlines management of BLE capable readers in the field.
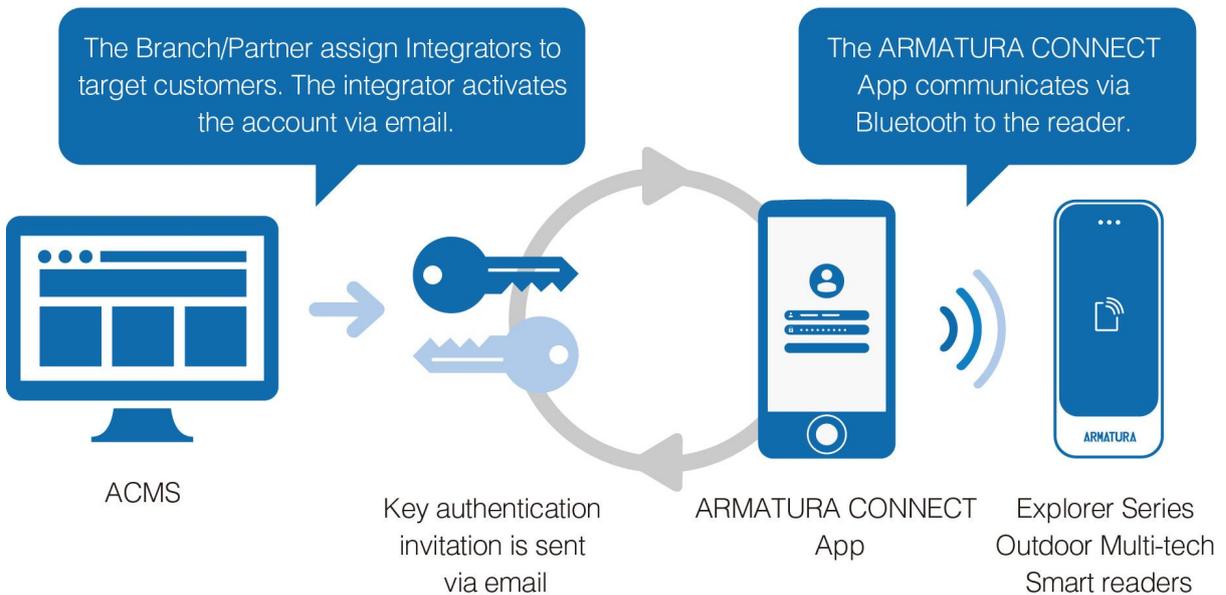
Integrators can easily adjust certain configuration settings such as audio/visual settings, BLE read range settings, upgrade firmware, check reader status & more.

The main components of the ARMATURA Reader Management solution are:

ARMATURA CONNECT Application: Mobile app which connects via Bluetooth, to a reader for configuration changes, firmware upgrades and reader status.

Armatura Credential Management System: ACMS facilitates integrators to use the ARMATURA CONNECT app with EP Series readers. The ACMS can be used by customers & integrators to manage & issue credentials.

Controller: The supported EP Series readers are connected to the controller through RS-485 or Wiegand.

The Branch/Partner assign Integrators to target customers. The integrator activates the account via email.

The ARMATURA CONNECT App communicates via Bluetooth to the reader.

ACMS

Key authentication invitation is sent via email

ARMATURA CONNECT App

Explorer Series Outdoor Multi-tech Smart readers

2 *ARMATURA CONNECT APP*

This section provides the required steps and procedures to be performed by the integrator in order to install, register, and activate the ARMATURA CONNECT App on a mobile device. The section also provides information on the functionality of ARMATURA CONNECT App.

2.1 Download And Install The App

1. Ensure your mobile device is connected to the internet via a mobile or Wi-Fi network.

2. On your mobile device open the Google Play (Android) or Apple (iOS) store.

3. Search for **ARMATURA CONNECT**.

4. Download and install the app on your mobile device.

ARMATURA CONNECT

2.2 Log Into The App

After the account activation process is complete, you can log in to the ARMATURA CONNECT App with your account and password.
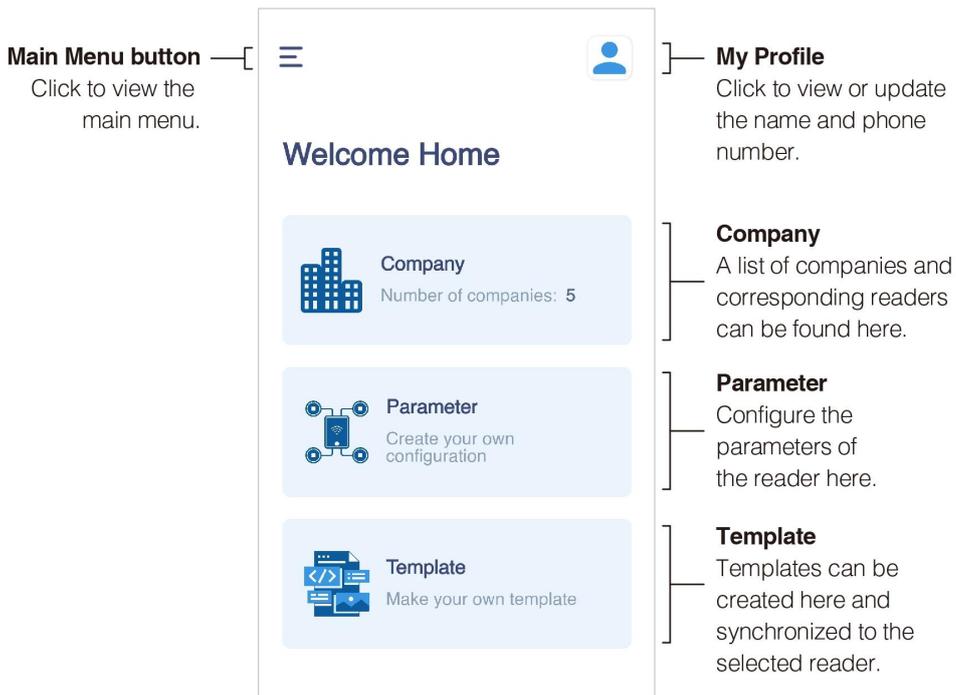
1. Enter the account and the password. Click **Sign In** to log into the app. The password is set when the account was activated.

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.
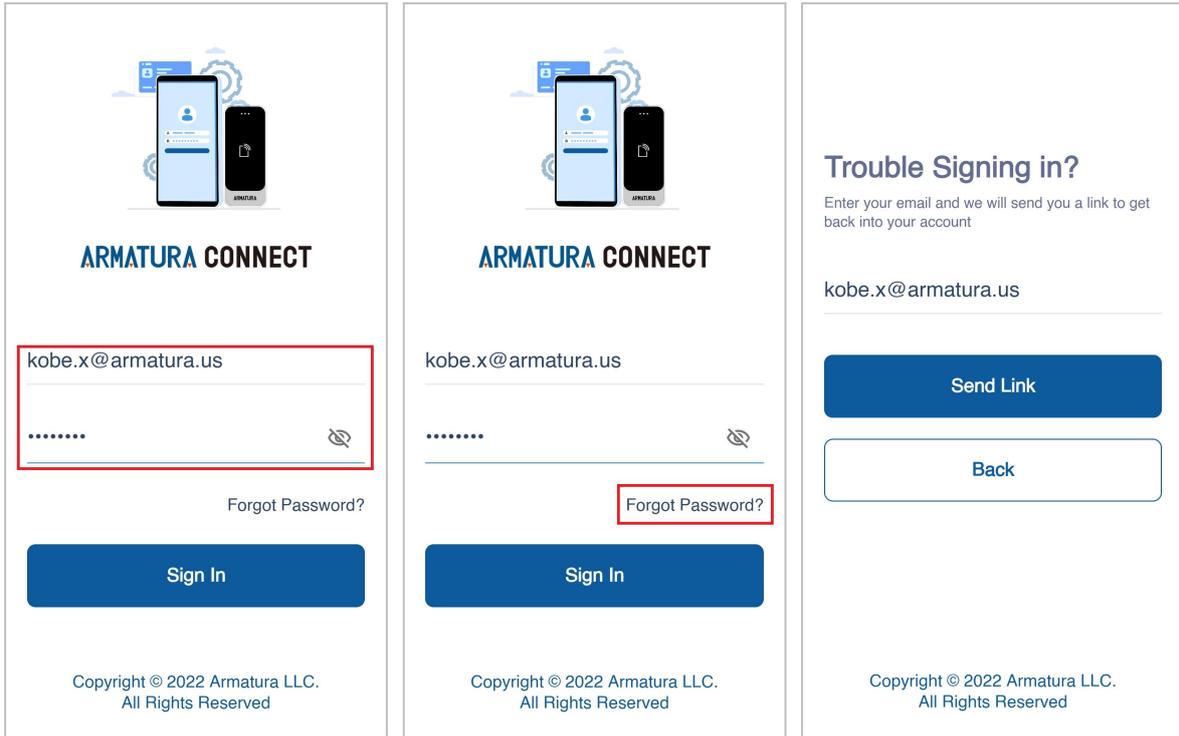
Remark: Please refer to the *ACMS User Manual* for instructions on how to obtain an account and password.
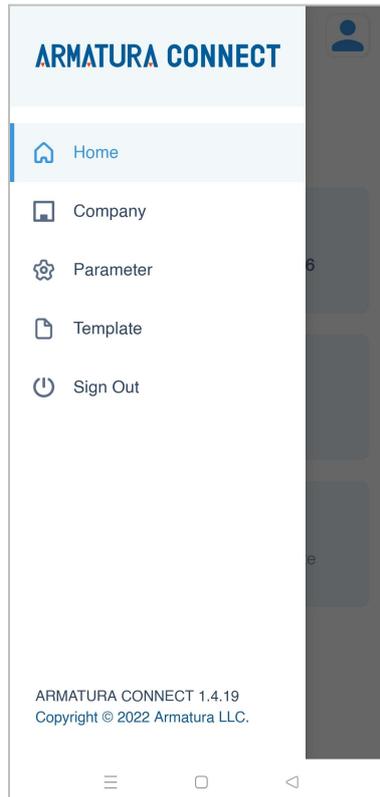
2.3 Home Screen Layout

After successfully logging in, you will enter the home screen

Main Menu button
Click to view the main menu.

My Profile
Click to view or update the name and phone number.

Company
A list of companies and corresponding readers can be found here.

Parameter
Configure the parameters of the reader here.

Template
Templates can be created here and synchronized to the selected reader.

2.4 App Menu Items

The following provides a description of the menu options available in the app.

1. Open the ARMATURA CONNECT App on your mobile device.

2. Click ☰ to access the menu options.

ARMATURA CONNECT

⌂ Home

▢ Company

⚙ Parameter

▢ Template

⏻ Sign Out

ARMATURA CONNECT 1.4.19
Copyright © 2022 Armatura LLC.

Function Description:

Menu	Descriptions
Home	Displays the Home screen.
Company	Displays the list of companies assigned to integrators. And the readers assigned to the company.
Parameter	Search and set parameters of the reader.
Template	When a template is created it can be applied to multiple readers that require the same configuration.
Sign Out	Log out of the current account.

2.4.1 Company Settings

This function is convenient for viewing the list of authorized companies and the corresponding readers under each company. Here you can set the parameters of the readers that have been assigned to this company.

### 2.4.1.1 View The Company List
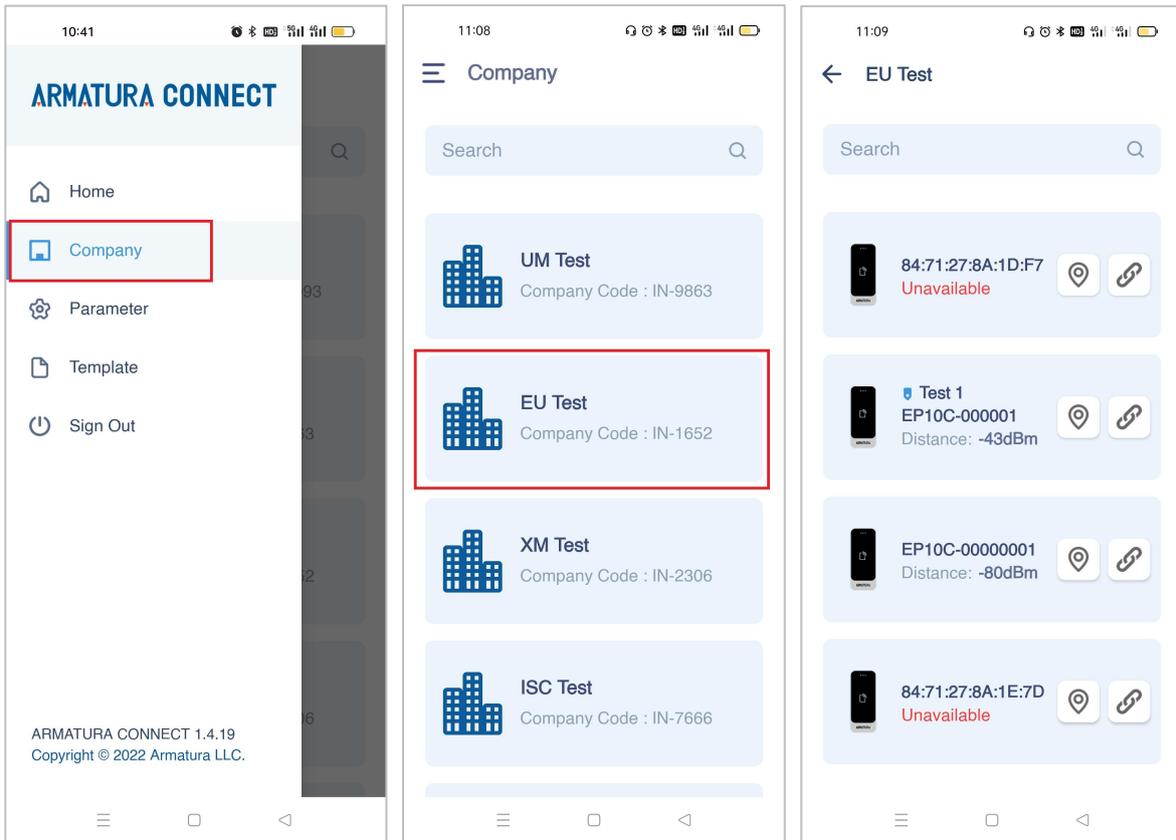
1. Click ≡ > **Company** to enter the company list screen. It will display a list of companies assigned to integrators.

2. Select a company to enter the reader list. In the reader list, you can view the information of the reader, such as the reader name, operating status and distance, etc.

2.4.2 Parameter Settings

This function is mainly used by the integrator to search for the reader, set the relevant parameters of the reader, and assign the reader to the company.

After you select the reader and enter the reader parameter setting interface, you can view the reader information, configure parameters, update the firmware and reboot the reader.
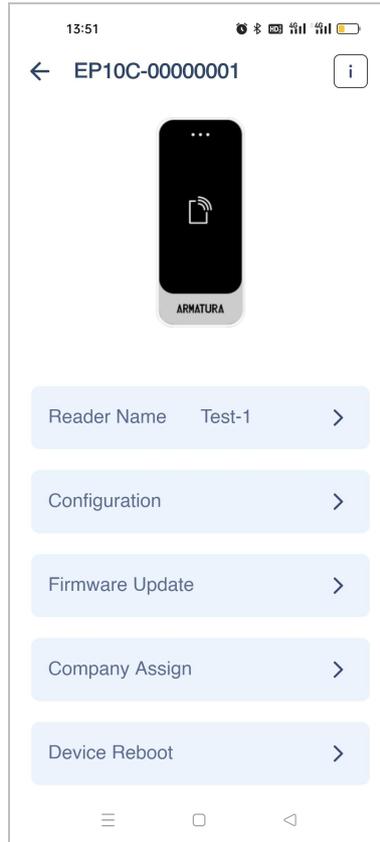
Function Description:

Menu	Descriptions
Reader Name	Set the name of the reader as required.
Configuration	Configure the reader parameters, including communication, function, ISO14443A UID output, mobile credentials, 125kHz, 13.59MHz, visual & audio, keypad and QR.
Firmware Update	Displays the current firmware information, click **Offine Update** to upgrade the firmware.
Commpany Assign	Assign the current reader to the company and click **Assign** to complete.
Device Reboot	Click **Device Reboot** to reboot the reader. Click **OK** to confirm.

2.4.2.1 View The Reader Information

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 reader. All searched readers will be displayed in the list.

3. Click ⊙ to confirm your reader.

4. Click 🔗 to enter the reader parameter setting screen. Here you can set the relevant parameters of the reader.

5. Click ⓘ to view reader information, including device name, company, S/N, firmware, module firmware, microchip firmware, BLE firmware and BLE MAC. As shown in the following figure.
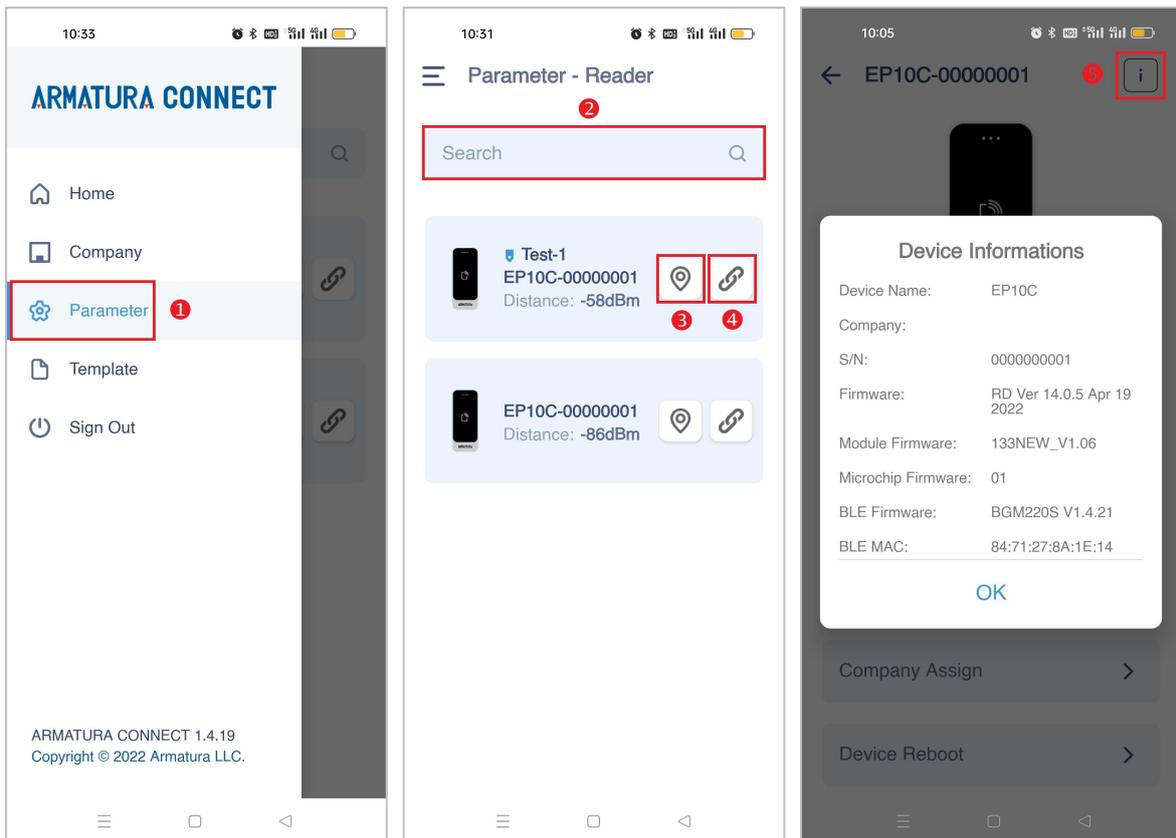
2.4.2.2 Configure The Reader Parameters

Search your reader on the **Parameter-Reader** screen and select it, then click 🔗 to enter the reader parameter setting interface. Then you can operate the following steps.

Modify the reader name
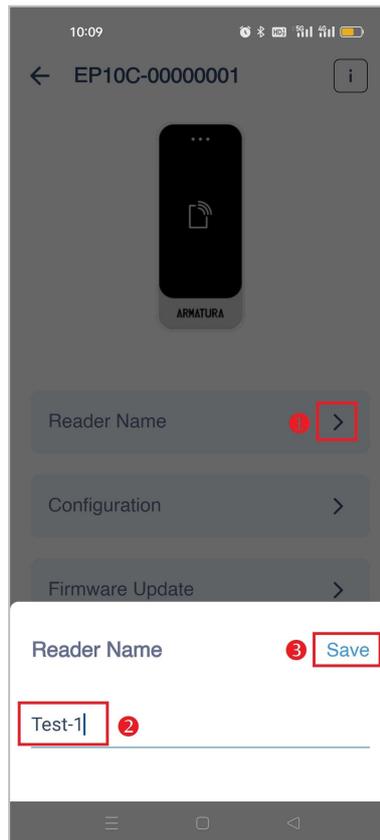
1. Click ❯ of the Reader Name item to open the edit window.

2. To enter the new reader name.

3. Click **Save** to save and exit when finished.

Configuration the reader parameters
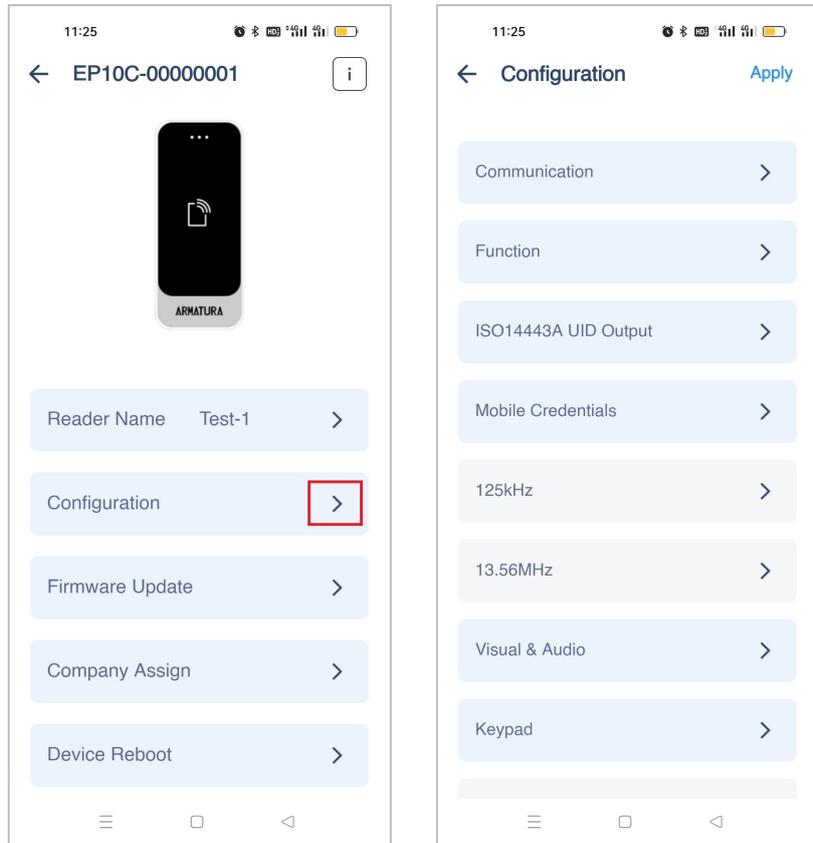
1. Click ❯ of the **Configuration** item to open the configuration setting interface.

2. To configure the reader parameters. The details are shown in the table below.

Function Description:

Menu	Descriptions
Communication	Set the communication type of the reader, there are two options: OSDP (via RS-485) and Wiegand.
Function	▪ **Tamper Alarm:** Enable/disable the tamper alarm function. ▪ **Card Detect Timeout:** The amount of time taken to detect card verification. Valid value: 5 to 10 seconds.
ISO14443A UID Output	To set the format of ISO14443A UID output, Wiegand and RAW are optional. ▪ **UID Output:** Choice of RAW or Wiegand.

	When selecting Wiegand format, the following parameters need to be set: ■ **Wiegand:** Select the corresponding output bit digits of the Wiegand format, including 26 bits, 34 bits and 37 bits. ■ **MSB/LSB:** Set the significant bit. MSB: Most Significant Bit. LSB: least significant bit. When selecting RAW format, the following parameters need to be set: ■ **Length:** Valid bytes are 0 to 8.
Mobile Credentials	Set up the communication method for mobile credentials, includes two types: BLE (Bluetooth Low Energy) and NFC (Near Field Communication). **BLE:** Includes three modes card mode, express mode and remote mode. ■ **Card Mode:** The adjustment range is 0 to 50 centimeters. ■ **Express Mode:** The adjustment range is 0 to 1000 centimeters. ■ **Remote Mode:** The adjustment range is 0 to 1000 centimeters. **NFC:** Enable/Disable the NFC function.
125kHz	Set the relevant parameters of the 125kHz RFID card.
13.59MHz	Set the relevant parameters of the 13.59MHz RFID card.
Visual & Audio	Customize the LED display effect and volume of the reader. **Video:** Includes settings for the following parameters. ■ **Boot Up Successfully:** Set the time and color of the LED display after a successful boot. The time can be set to none, 1s, 2s and 3s, and 7 colors are available. ■ **Wiegand Idle:** Set the idle time and color of the reader in the Wiegand mode. The time can be set to none and ∞, and 7 colors are available. ■ **Controller Not Connected:** The time and color of the LED display when the reader is not connected to the controller. The time can be set to none and ∞, and 7 colors are available. ■ **Card Detect:** The time and color of the LED display when the card is detected. The time can be set to none,1s, 2s and 3s, and 7 colors are available.

	▪ **Tamper Alarm:** The time can be set to none, 1s, 2s, 3s, 4s and ∞, and 7 colors are available.
	▪ **Card Swipe Timeout:** When swiping the card time operation to set the time, the time and color of the LED display. The time can be set to none, 1s, 2s, 3s and 4s, and 7 colors are available.
	Audio: Adjust the volume of the reader; valid values are: 0, 30, 60, and 100.
Keypad	Set keypad mode, with Password(4Bit) and Wiegand 26 Output optional. Applies only to readers equipped with a keyboard. The product actually purchased by the user shall prevail.
QR	Set the QR mode as RAW, Armatura ID or Atlas ZKey. Applies only to readers equipped with QR code reader.

Company Assign

This function is used to assign the reader to the company. The Bluetooth function of the mobile device needs to be turned on before operation.
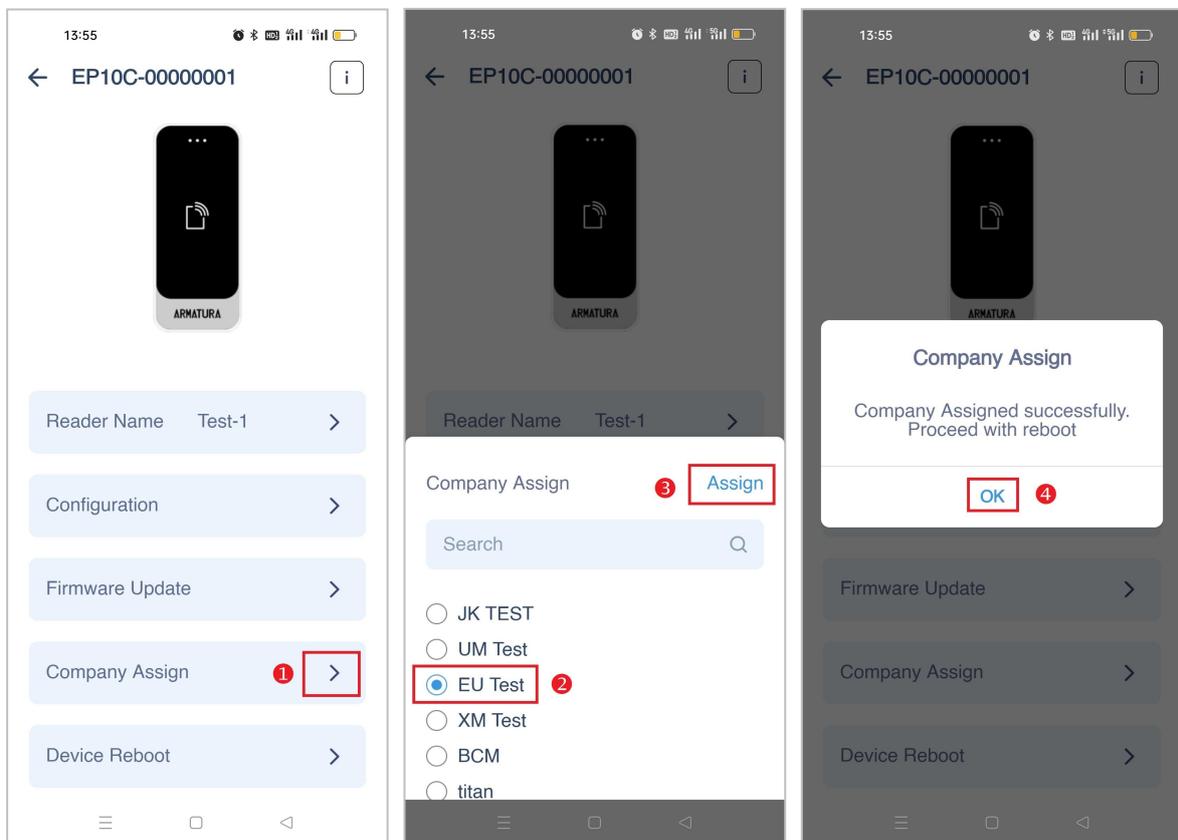
1. Click [>] of the **Company Assign** item to open the setting interface. And the Assignment window will pop up. Select the company and click **Assign** to assign the reader to the selected company.

2. Click **OK** when prompted that the assignment is successful.

3. After completing the above steps, please wait for the reader to reboot. **Note:** After each configuration of the reader parameters, the reader will reboot.

Firmware Update
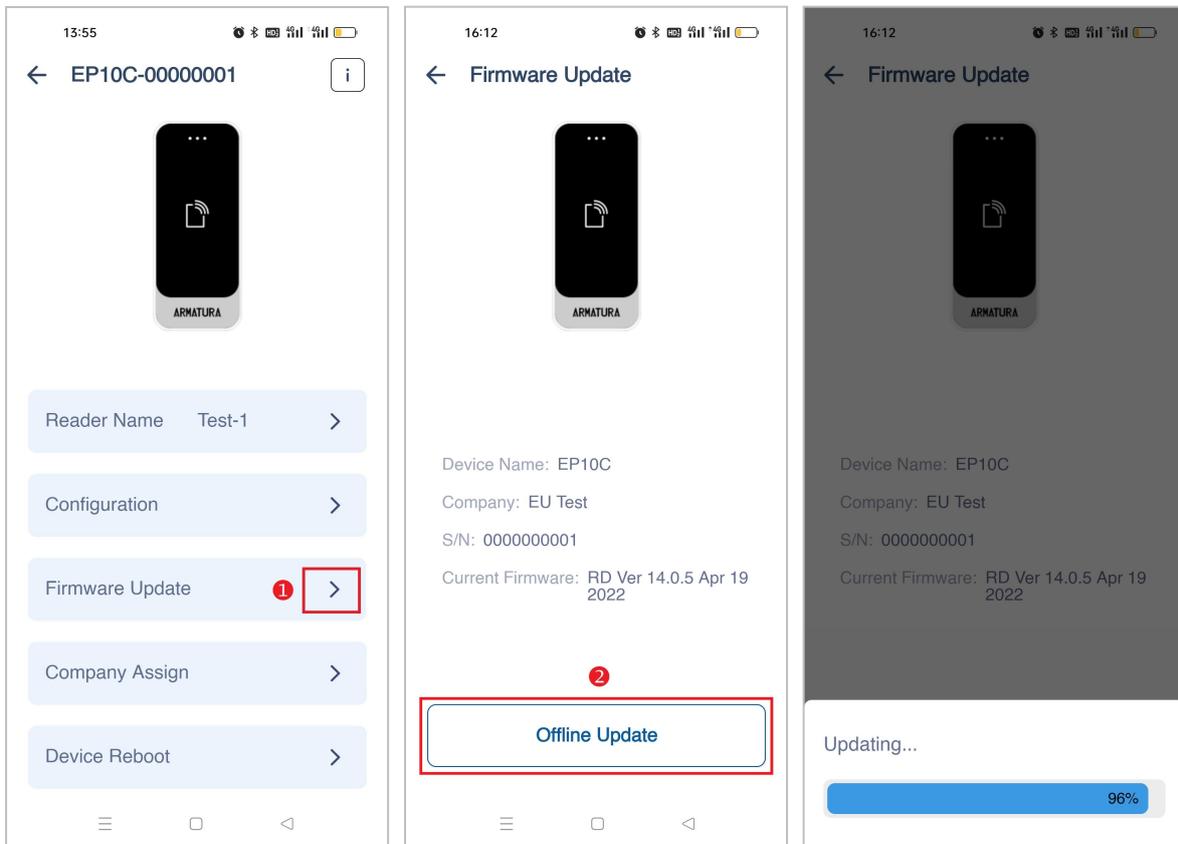
1. Click [>] of the **Firmware Update** item to open the update setting interface. Here you can view the current firmware information.

2. Click **Offline Update** to upgrade the firmware.

Device Reboot
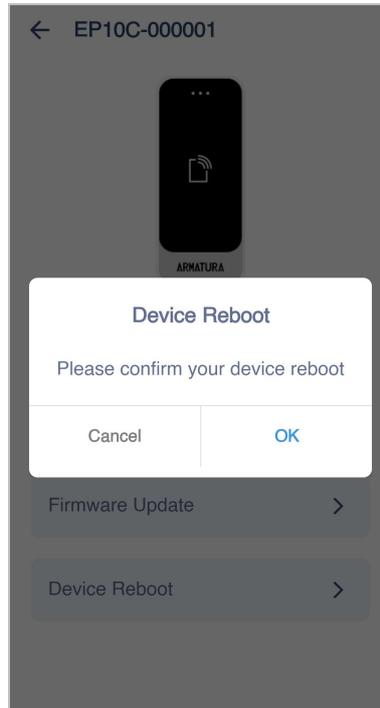
Click **Device Reboot** to reboot the reader. Click **OK** to confirm.

2.4.3 Template Settings

When a template is created it can be applied to multiple readers that require the same configuration.

2.4.3.1 Create a New Template

1. Click ☰ > **Template** to enter the template setting screen.

2. Click ✛ to add a new template. Select the reader type you want to set up in the product list.

3. After setting the parameters, click **Save** to save and exit to the previous menu.
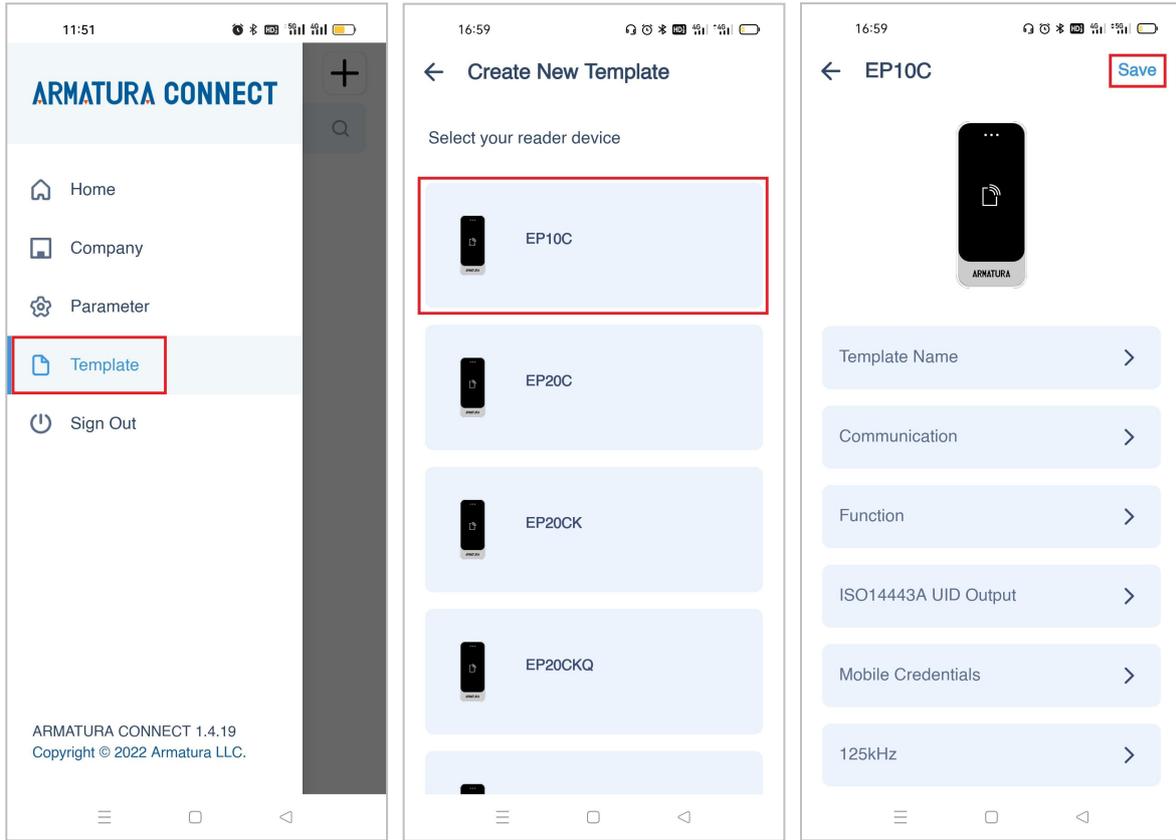
2.4.3.2 Edit Template

After setting the template, you can select the template and click ✏ to edit it. The method of editing a template is the same as that of adding a new one, and will not be repeated here. **Note that added templates cannot be deleted.**

2.4.3.3 Apply The Template To The Reader

When you need to set multiple readers that require the same configuration, you can apply the set template to these readers at one time.

1. Select the template in the template list and click **Apply** to apply the template.

2. Click **Yes** in the pop-up window to confirm the application.

3. In the list of active readers, select the reader that needs to be configured.
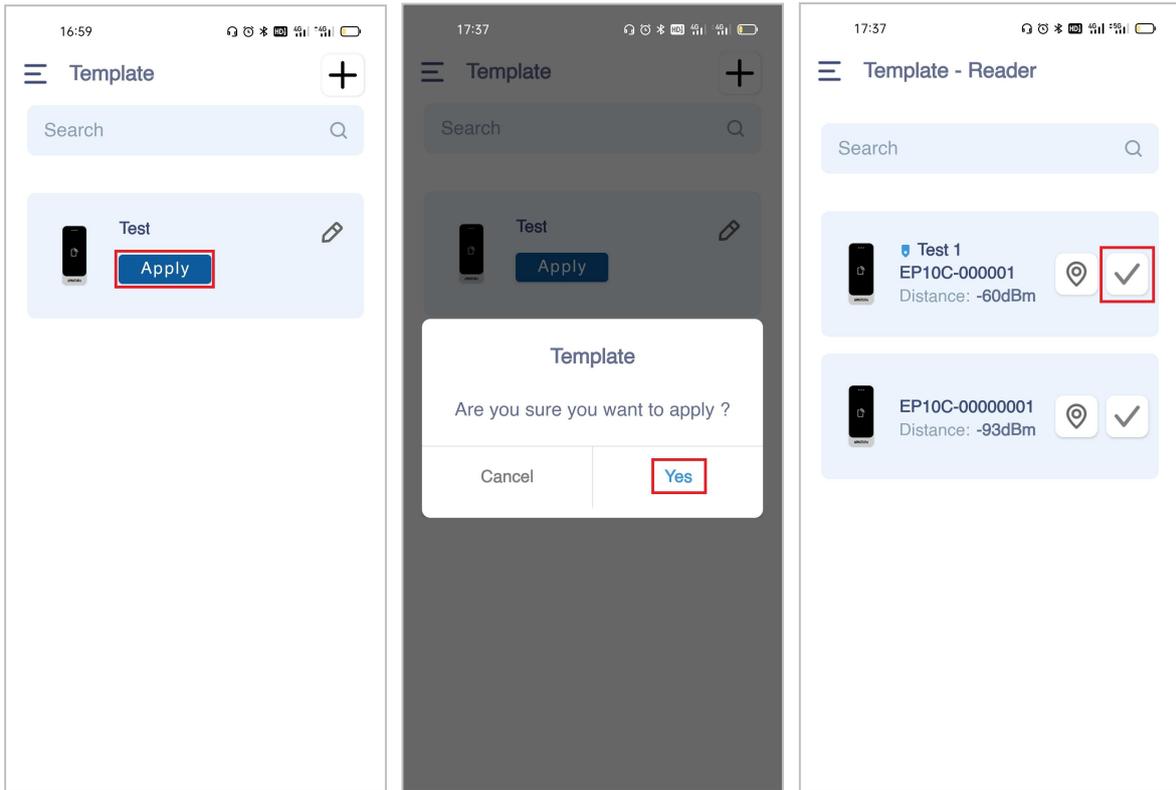
2.4.4 Sign Out

Click ☰ > **Sign Out** to sign out of the current account.
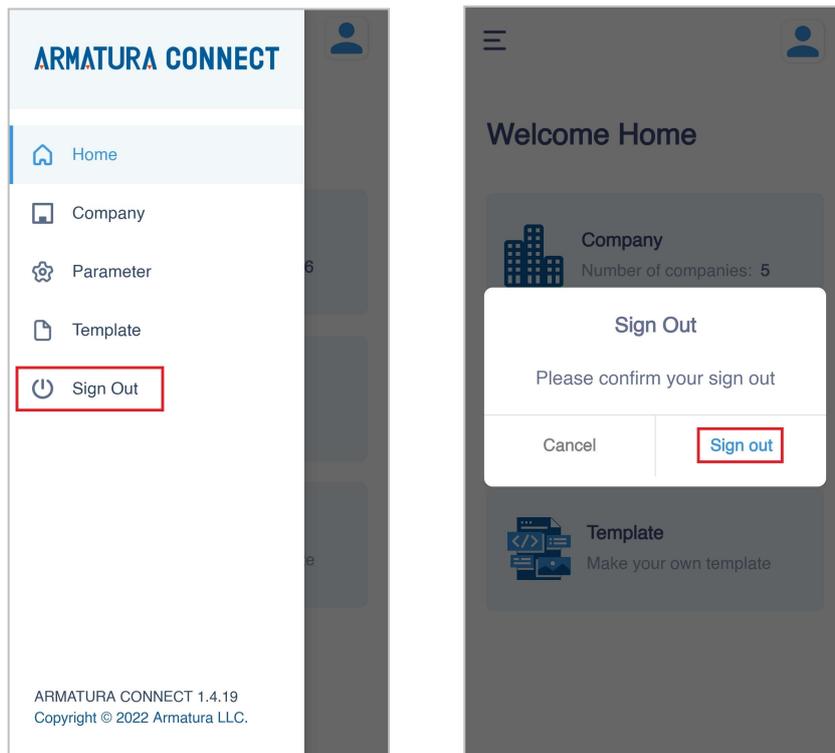
3 *Basic App Functionality*

This section provides steps and procedures for basic application functionality.

3.1 Search The Reader

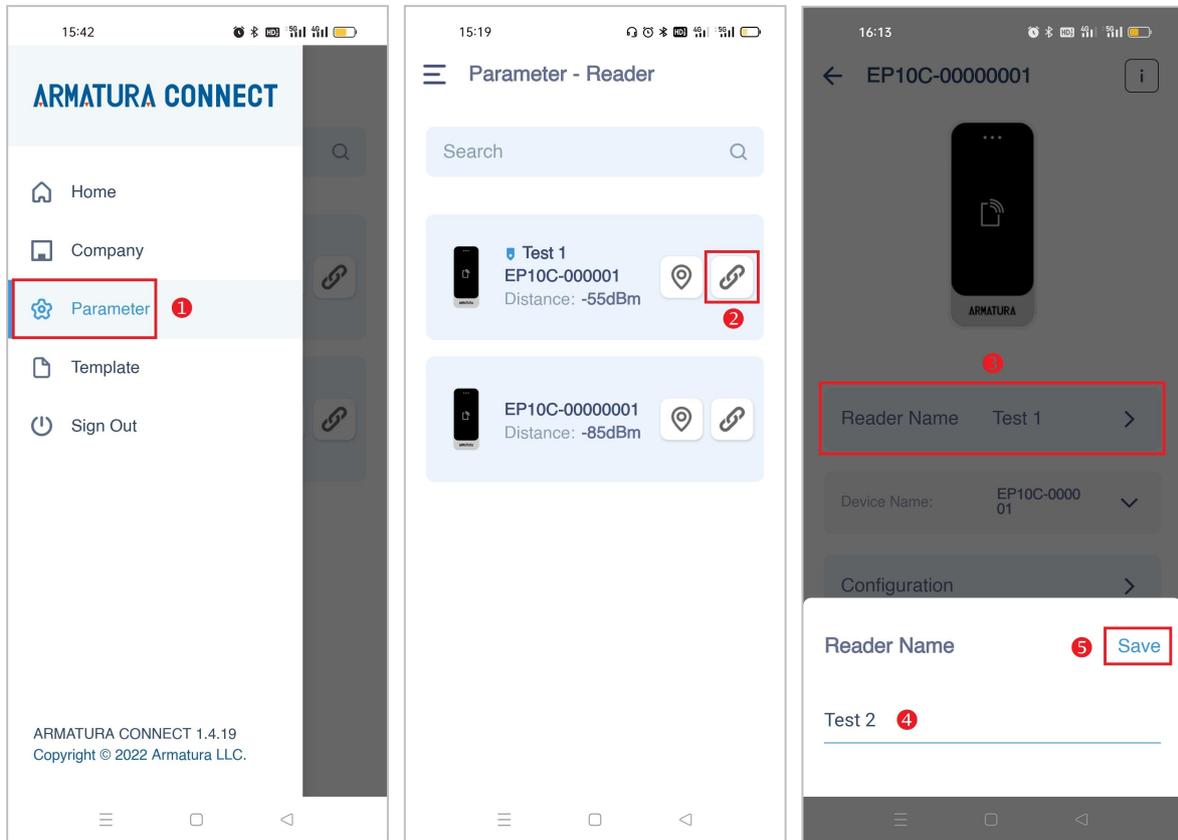Please turn on the Bluetooth function of the mobile device before operating.

1. Click ☰ > **Parameter** to enter the **Parameter - Reader** setting screen.

2. If the readers are not displayed, swipe down to refresh the screen. All found readers will be displayed in the list.

3. Or enter the reader name and click 🔍 to search for a specific reader.
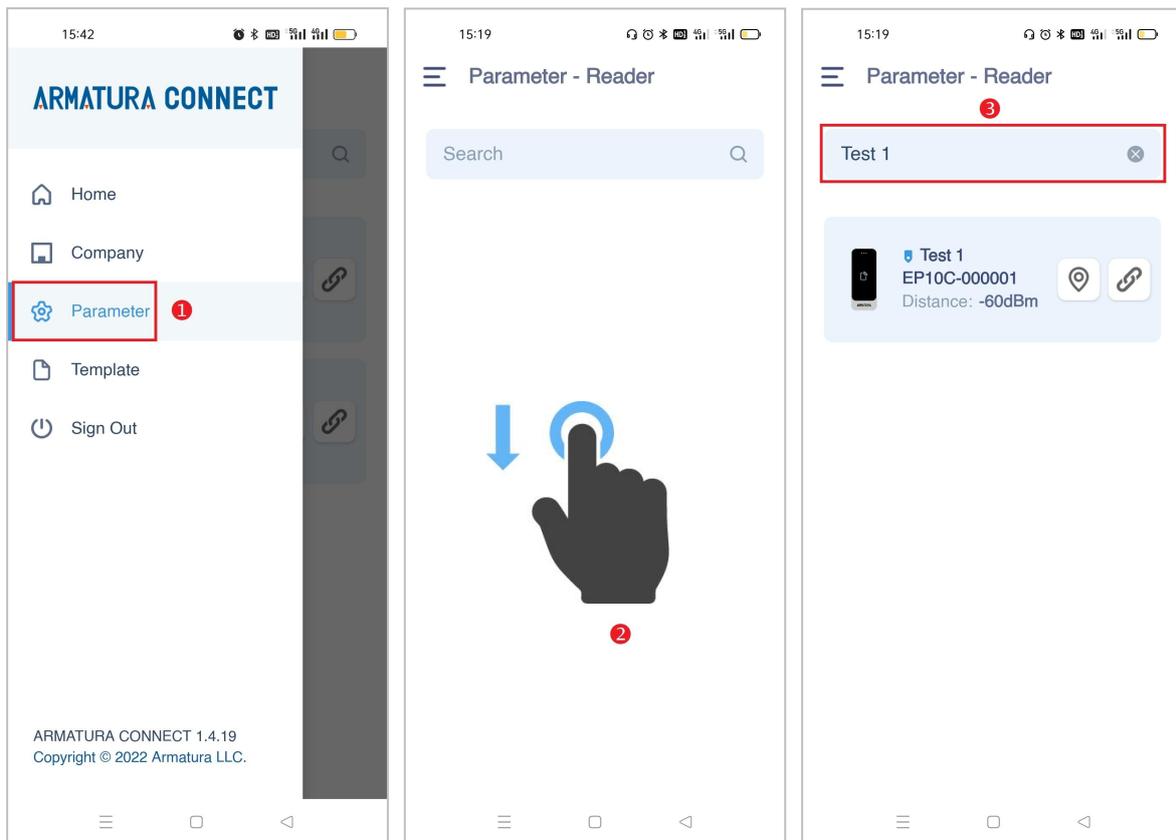
3.2 Change The Reader Name

The integrator can customize the reader name. This custom reader name is visible from within any other integrators ARMATURA CONNECT App.
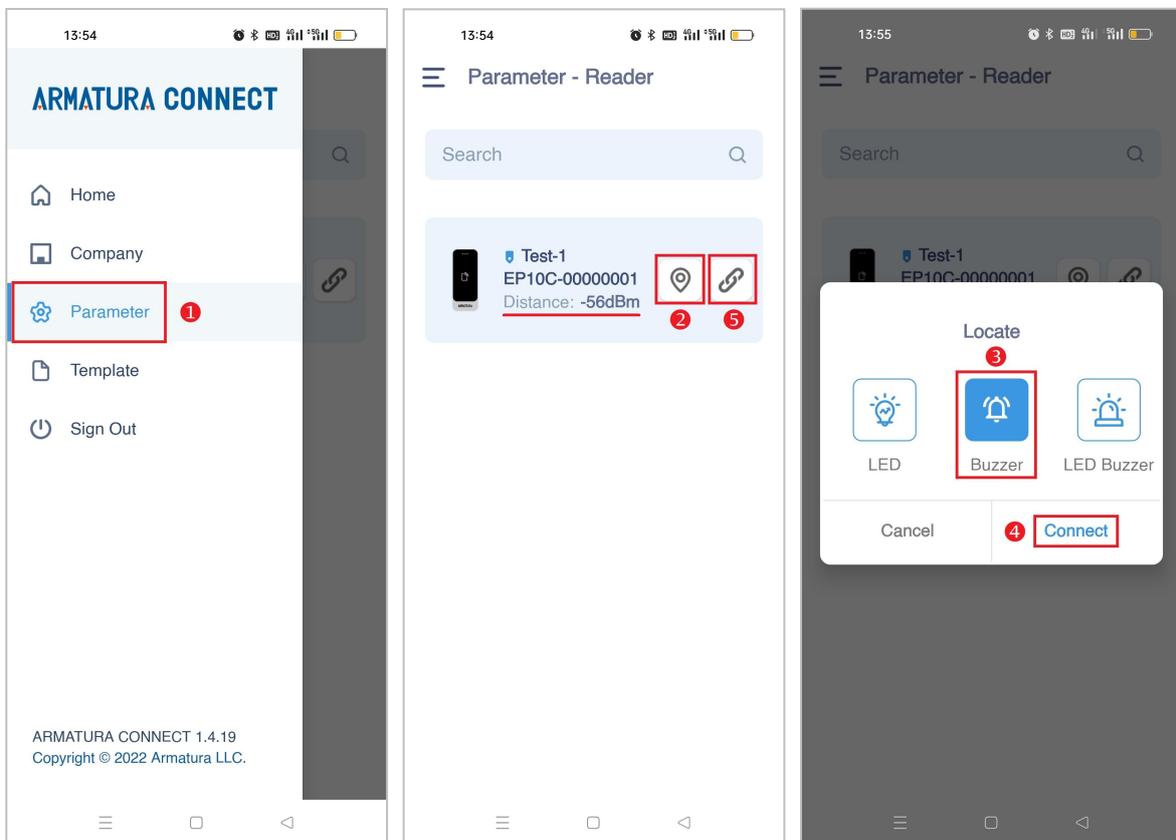
1. Click ☰ > **Parameter** to enter the **Parameter - Reader** setting screen.

2. Click **Connect** or 🔗 to enter the reader parameter setting screen.

3. Click **Reader Name** to open the setting window.

4. Enter the reader name. And then click **Save** to save the settings and exit to the previous menu.

3.3 Assign The Reader To A Company

Please turn on the Bluetooth function of the mobile device before operating.

1. Click ☰ > **Parameter** to enter the **Parameter - Reader** setting screen.

2. If the readers are not displayed, swipe down to refresh the screen. All searched readers will be displayed in the list.

3. Place your mobile device close to the reader, then find the closest reader in the list and click 📍 in the pop-up window. Click 🔔 in the pop-up window, and confirm your current reader according to the reader prompt.

4. Click **Connect** or 🔗 to enter the reader parameter setting screen.

5. Click **Company Assign** and the Assignment window will pop up. Select the company and click **Assign** to assign the reader to the selected company.

6. Click **OK** when prompted that the assignment is successful.

7. After completing the above steps, please wait for the reader to reboot. **Note:** After each configuration of the reader parameters, the reader will reboot.
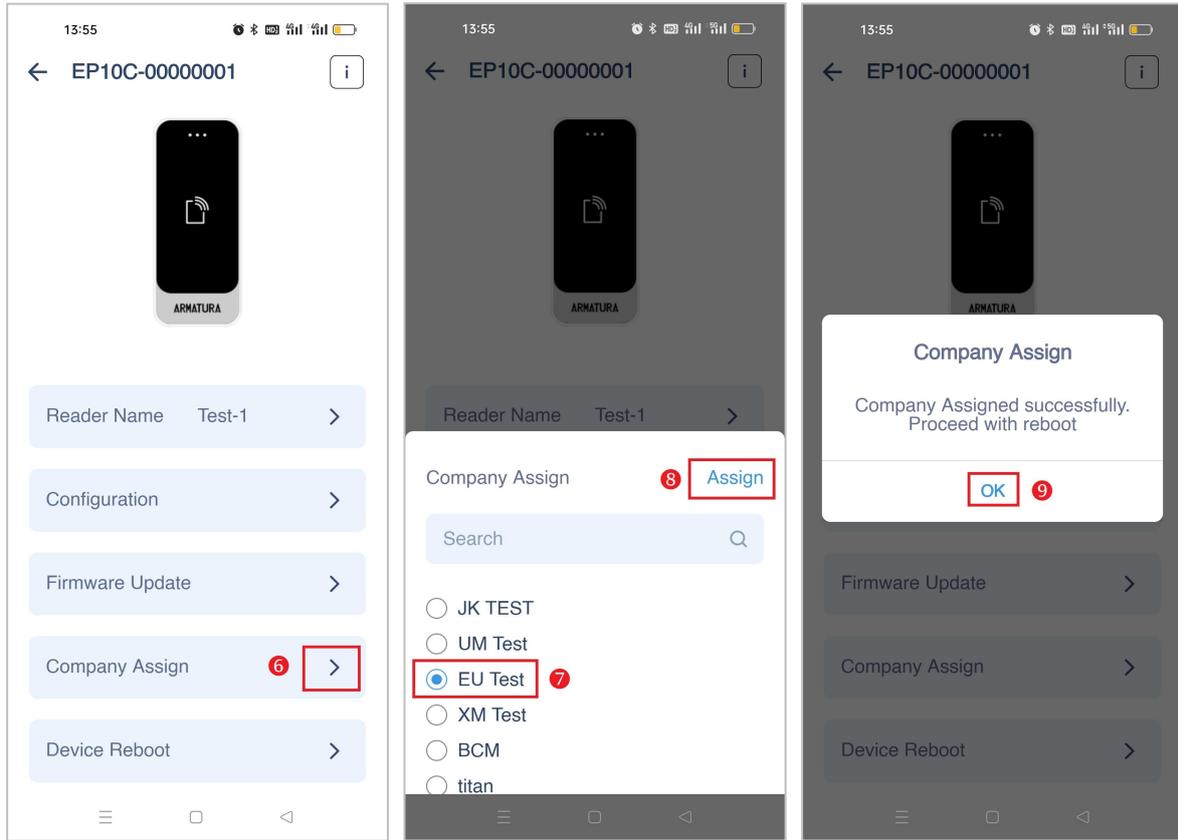
3.4 Audio & Visual Settings

1. Click ☰ > **Parameter** to enter the **Parameter - Reader** setting screen.

2. Click **Connect** or 🔗 to enter the reader parameter setting screen.

3. Click **Configuration** > **Visual & Audio** to enter the setting screen.

4. Select the option to be set in the visual list. Select a time and a color and click **Save**. There are a total of 7 colors to choose from, and each option is best set to a different color for easy identification.

5. Adjust the reader's volume in the audio bar; valid values are: 0, 30, 60, and 100.

6. Click **Save** to save the settings and exit to the previous menu.
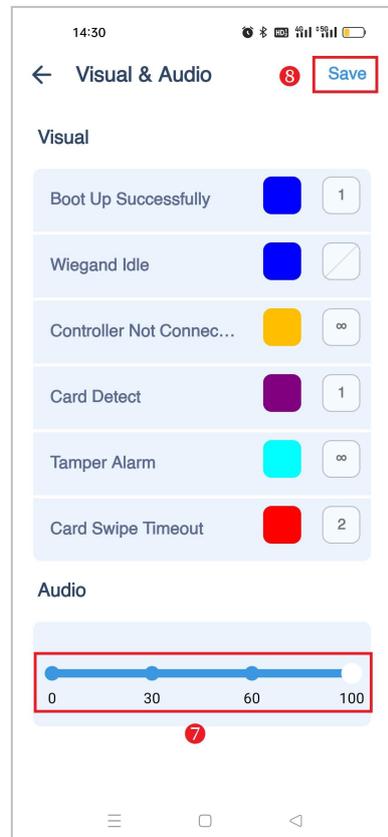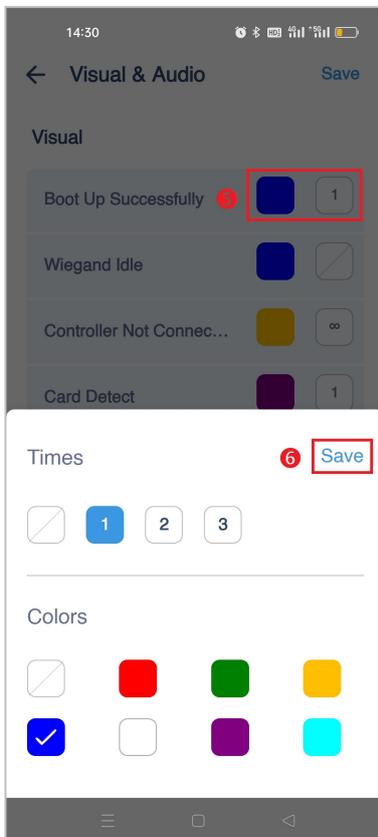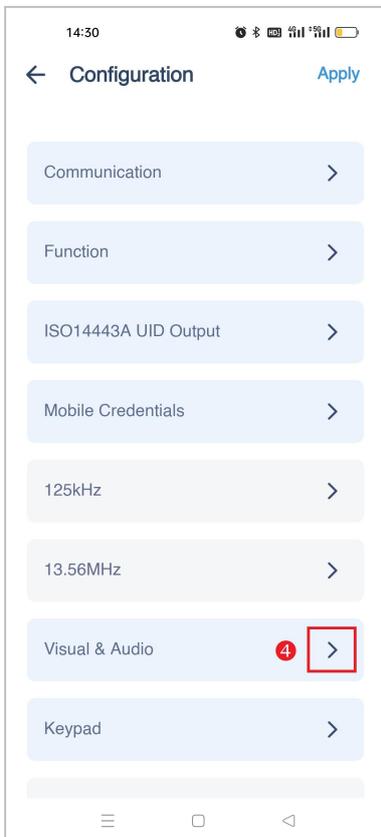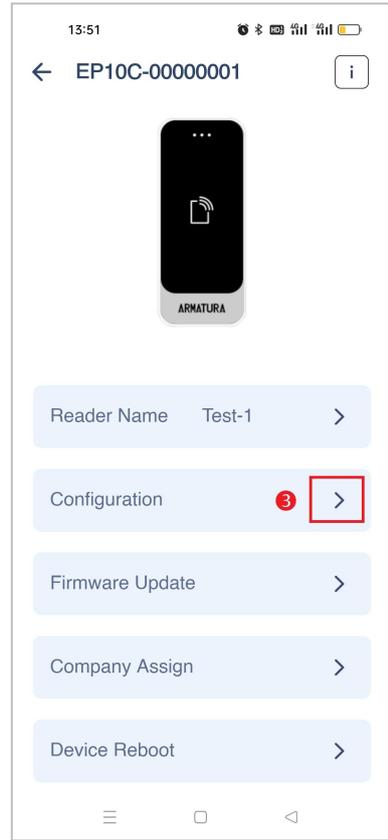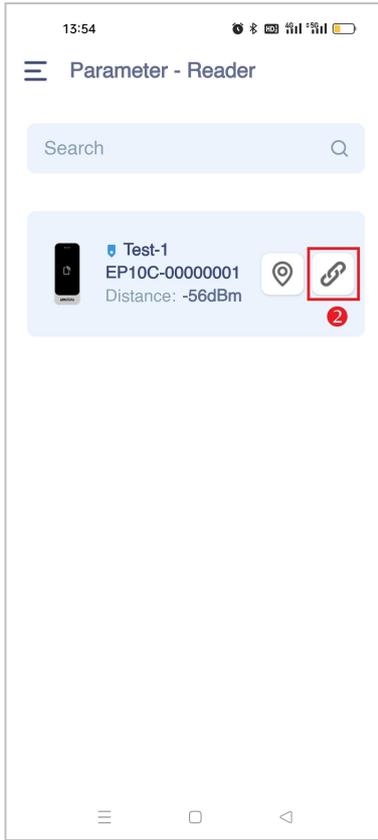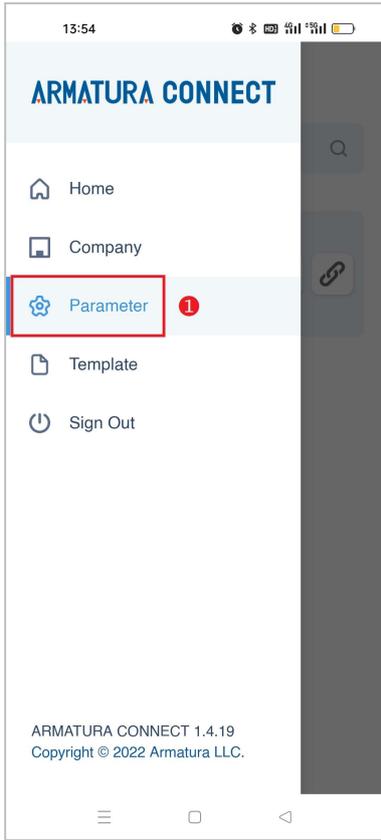
3.5 Communication Settings

The supported EP Series readers are connected to the controller through OSDP (via RS-485) or Wiegand.

1. Before setting the parameters, make sure that the reader is connected to the controller according to the OSDP (via RS-485) or Wiegand wiring in Figure 1.
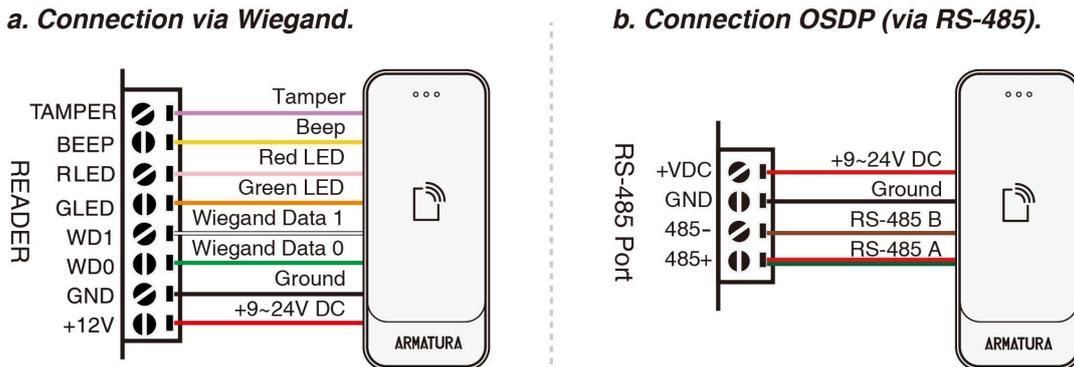
*a. Connection via Wiegand.*   *b. Connection OSDP (via RS-485).*

Figure 1 Controller and reader OSDP (via RS-485) and Wiegand wiring diagram

2. In the reader parameter setting interface, click **Configuration** > **Communication** to enter the setting screen.

3. Click **Communication Type** to enter the setting screen. You can choose the appropriate communication type to carry out OSDP (via RS-485) or Wiegand connection with the controller according to your needs.

4. Click **Save** to save the settings and exit to the previous menu.

Remark:

When communicating with the device through the OSDP (via RS-485) serial port, please consider the baud rate and addressing points below:

- *The baud rate at which the data is communicated with reader, there are 6 options of baud rate: 115200, 57600, 38400, 19200, 9600 (default) and 4800.*

- *The higher the baud rate, the faster the communication speed, but also the 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 would be more reliable.*

- *You need to set the RS-485 address, the default is 0.*

---
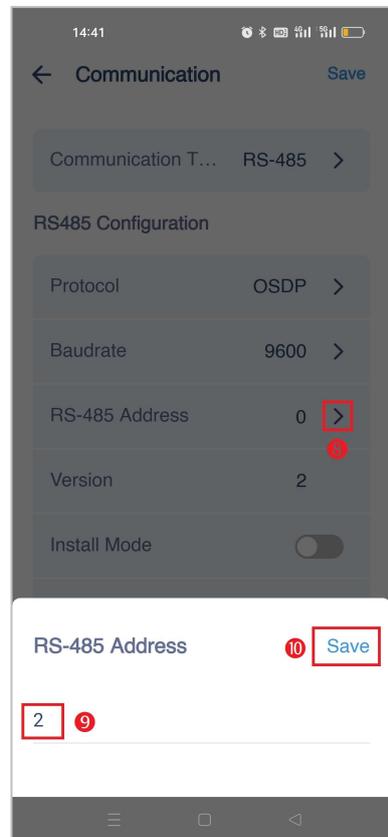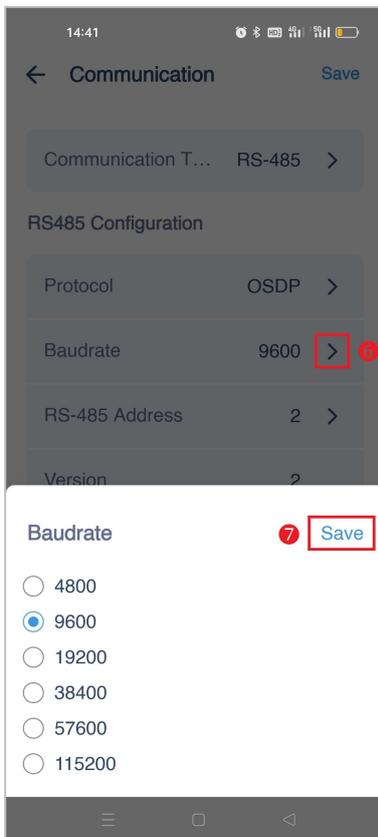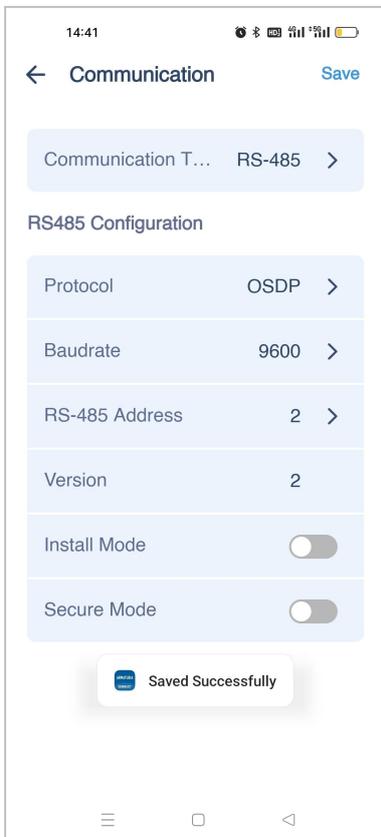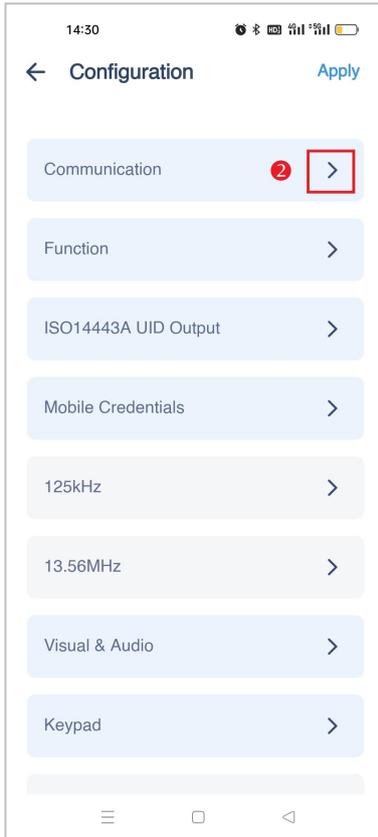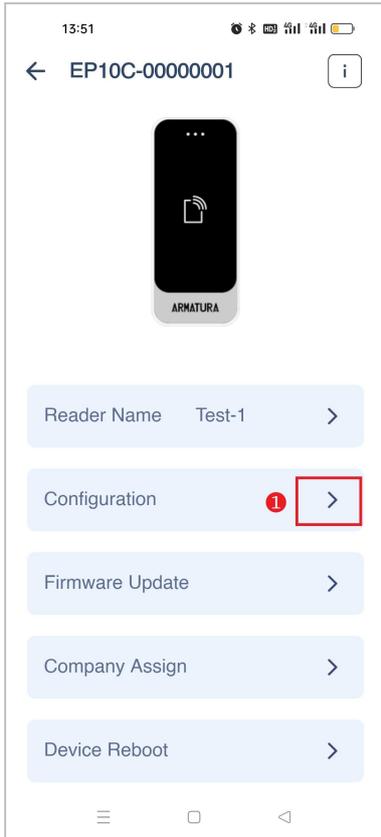
4 *Appendix*

Privacy Policy

Notice:

To help you better use the products and services of Armatura LLC, hereinafter referred to 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. <u>If you do not agree to the relevant agreement or any of its terms, you must stop using our products and services.</u>

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.

ARMATURA