123RFID Mobile Application for iOS

User Guide

ZEBRA

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About this Guide

This guide provides information about the 123RFID Mobile Application for iOS.

Notational Conventions

The following conventions are used in this document:

- **Bold** text is used to highlight the following:
  - Dialog box, window, and screen names
  - Dropdown list and list box names
  - Checkbox and radio button names
  - Icons on a screen
  - Key names on a keypad
  - Button names on a screen
- Bullets (•) indicate:
  - Action items
  - List of alternatives
  - Lists of required steps that are not necessarily sequential.
- Sequential lists (for example, those that describe step-by-step procedures) appear as numbered lists.

Icon Conventions

The documentation set is designed to give the reader more visual clues. The following visual indicators are used throughout the documentation set.

NOTE: The text here indicates information that is supplemental for the user to know and that is not required to complete a task.

IMPORTANT: The text here indicates information that is important for the user to know.

CAUTION: If the precaution is not heeded, the user could receive a minor or moderate injury.

WARNING: If danger is not avoided, the user CAN be seriously injured or killed.

DANGER: If danger is not avoided, the user WILL be seriously injured or killed.

Service Information

If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: zebra.com/support.

When contacting support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software type and version number

Zebra responds to calls by email, telephone, or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your Zebra business product from a Zebra business partner, contact that business partner for support.

123RFID Mobile Application for iOS

This document describes the enhanced version of the 123RFID Mobile Application for iOS, which demonstrates the device's capability and tag operation functionality.

This application is also available as part of App Store at: apps.apple.com/lk/app/123rfidmobile/id996761433.

Overview

This application runs on iOS mobile devices and demonstrates capability and tag operation functionality.

The application allows for navigating to all screens at any time, however, some actions are not permitted while the device is charging. These actions include any operation that involves Tag reading or writing (for example, Rapid Read, Inventory, Locate Tag, etc.).

Navigate to all screens when the inventory/locate operation is in progress. When the operation is in progress, the device displays Operation in Progress if additional operations are initiated.

Installing the 123RFID Mobile Application for iOS

Install the 123RFID Mobile Application on the mobile computer from zebra.com/support or from the App Store. The procedure to install the software on an iOS device depends on the iOS version.

Using the Application

You can use this application for RFID operations.

1. Launch the 123RFID Mobile Application for iOS on the mobile device.
2. From the Readers list, tap on the available device to connect and view the Rapid Read screen.
3. Tap **Settings** > **RFID** > **Advanced Reader Options** > **Antenna**.

NOTE: By default, the Power Level is set to 27.0 dbm. However, it displays as 270 dbm because the value used is in units of tens of dbm. Japan units are set to a different default Power Level depending on the SKU type.

4. Tap **Back** and select **Regulatory** to set the region in which the device is operating.

Navigating 123RFID Mobile

Navigate using the **Home** screen, menu, or bottom navigation bar. Switch between the **Inventory** screen and the **Locate** screen, or the **Inventory** screen and the **Rapid Read** screen with a single tap of the appropriate icon.

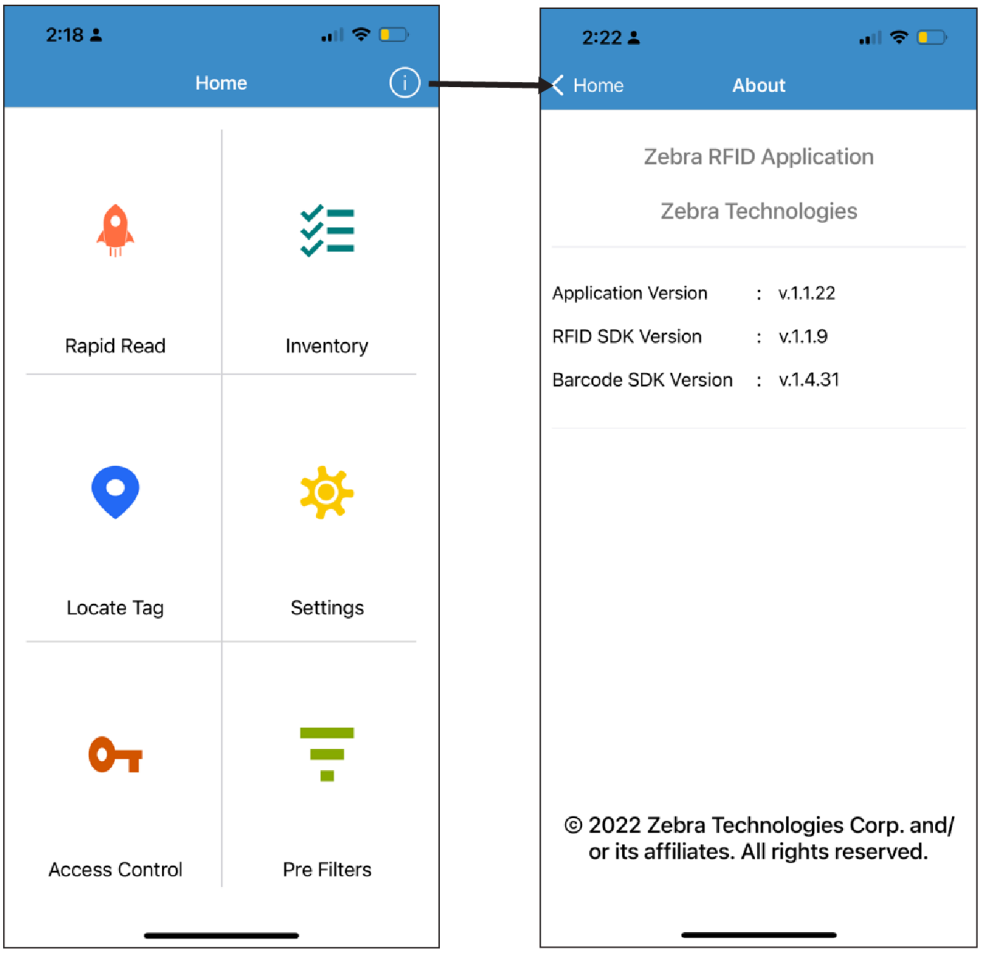
To exit the application, on the confirmation screen, tap **Back**, and then click **OK**.

Home Screen

The Home screen of the 123RFID mobile application for iOS with the home menu options as follows:

- Rapid Read
- Inventory
- Locate Tag
- Settings
- Access Control
- Pre Filters
- About

Figure 1 Home Screen



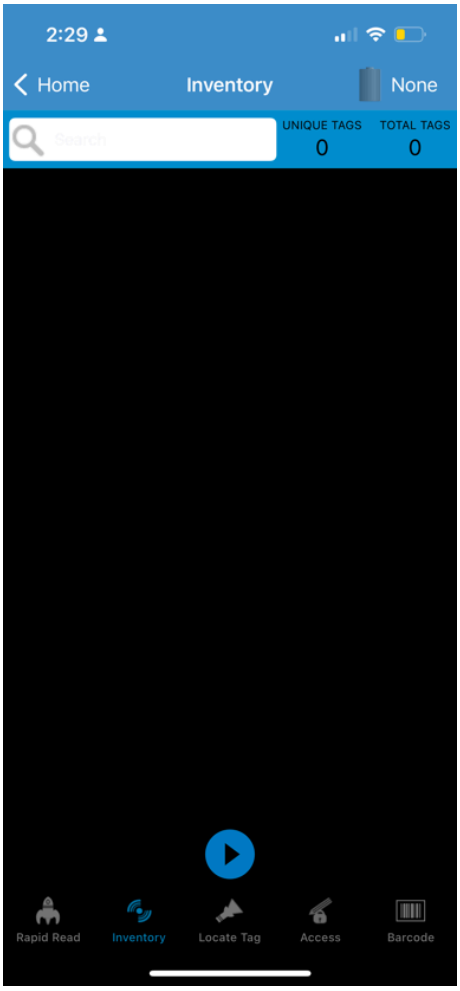
Tab Bar

Select one of the menu items (except Settings) on the home page, and the Tab bar displays at the bottom of the screen.

The Tab bar includes:

- Rapid Read
- Inventory
- Locate Tag
- Access
- Barcode

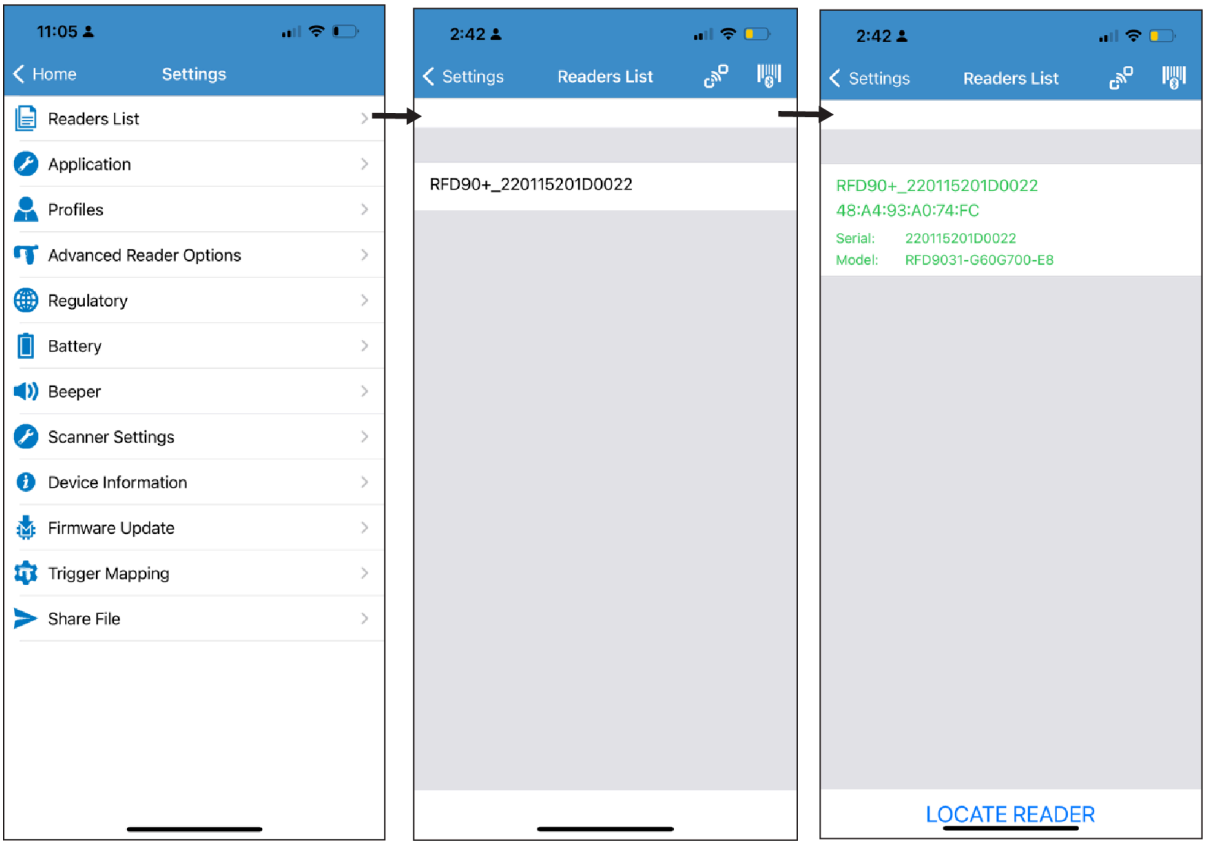
Figure 2 Tab Bar



Readers List

The Readers list displays connected readers and available readers. The readers will display in the **Readers List** after being paired in the Bluetooth settings of the iOS device.

Figure 3 Readers List; Available Readers; Connected Readers



- **Available Readers** - Lists the already paired devices that the user can choose to connect from. Available options include:
  - Connect
  - View reader details for an available reader
- **Connected Readers** - Lists the readers that are already connected and ready for use. The Disconnect option is available to disconnect any connected reader.

NOTE: You can only connect to one device at a time. The model name and description are displayed under the reader name after connecting.

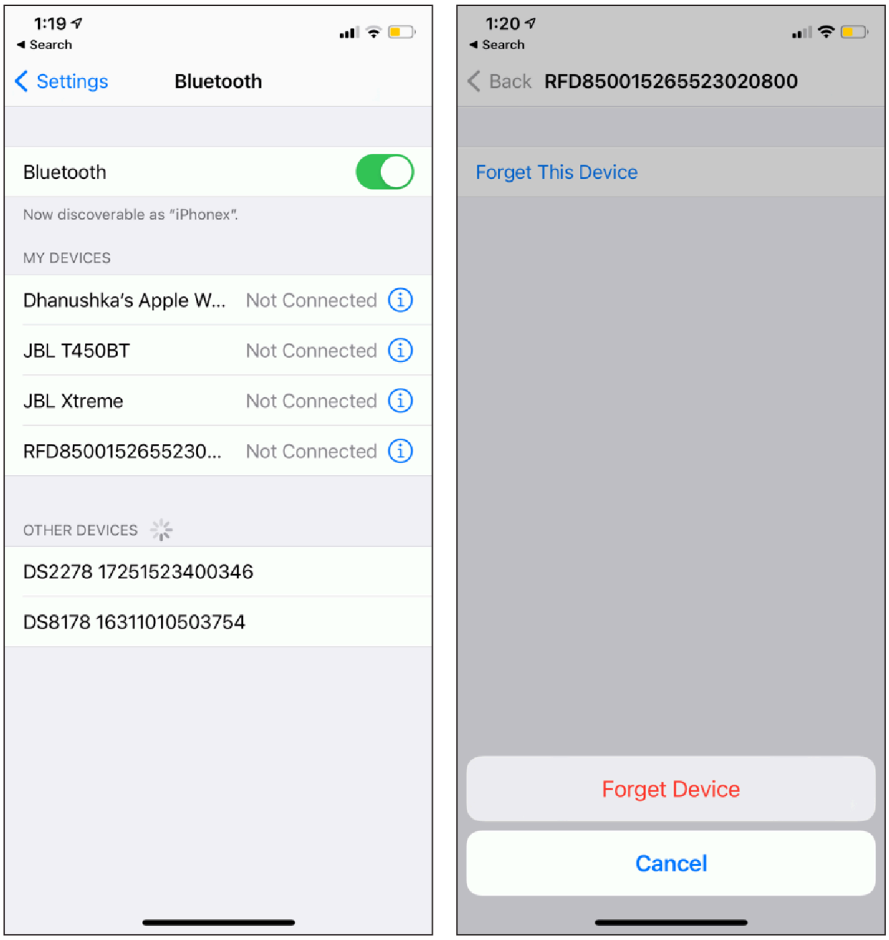
Pairing a Device

Pairing by Scan provides a faster way to connect to the MFI scanner. This solution provides pairing with an MFI scanner inside the sample application. By using the camera view in the iPhone's inbuilt camera, scan the device barcode image to get the serial number and try to connect with that device.

Unpairing a Device

Before continuing with the following steps, unpair the RFD8500/RFD40+ device (the device that you want to pair) from the Bluetooth settings.

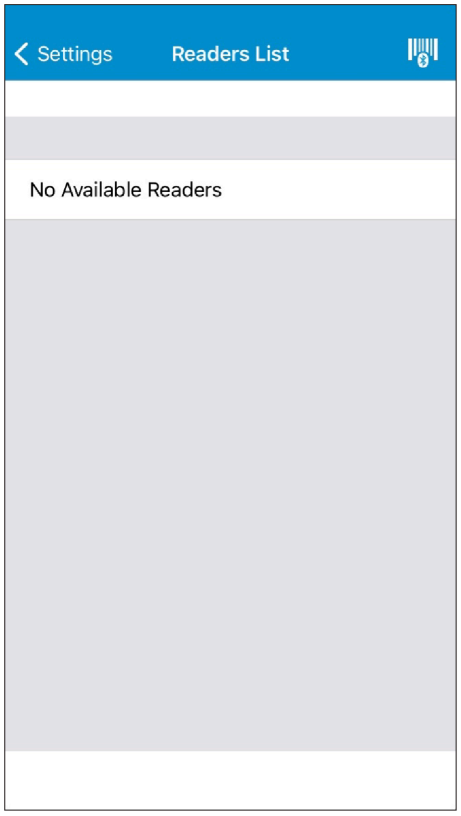
Figure 4 Bluetooth



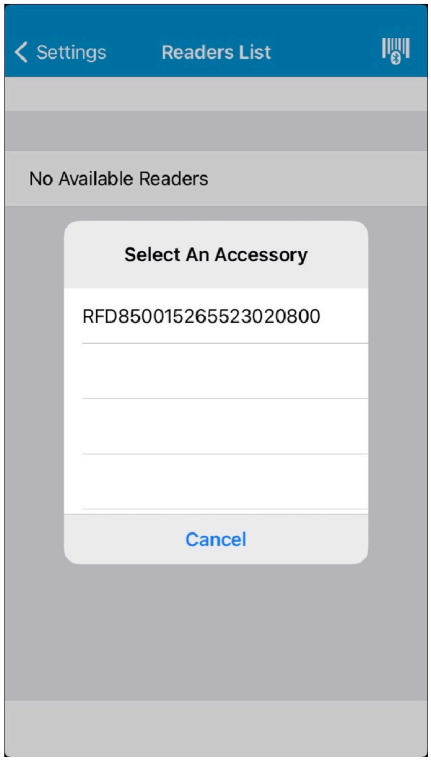
Pairing the RFD8500

1. From the Home screen, go to **Settings** > **Readers List**.

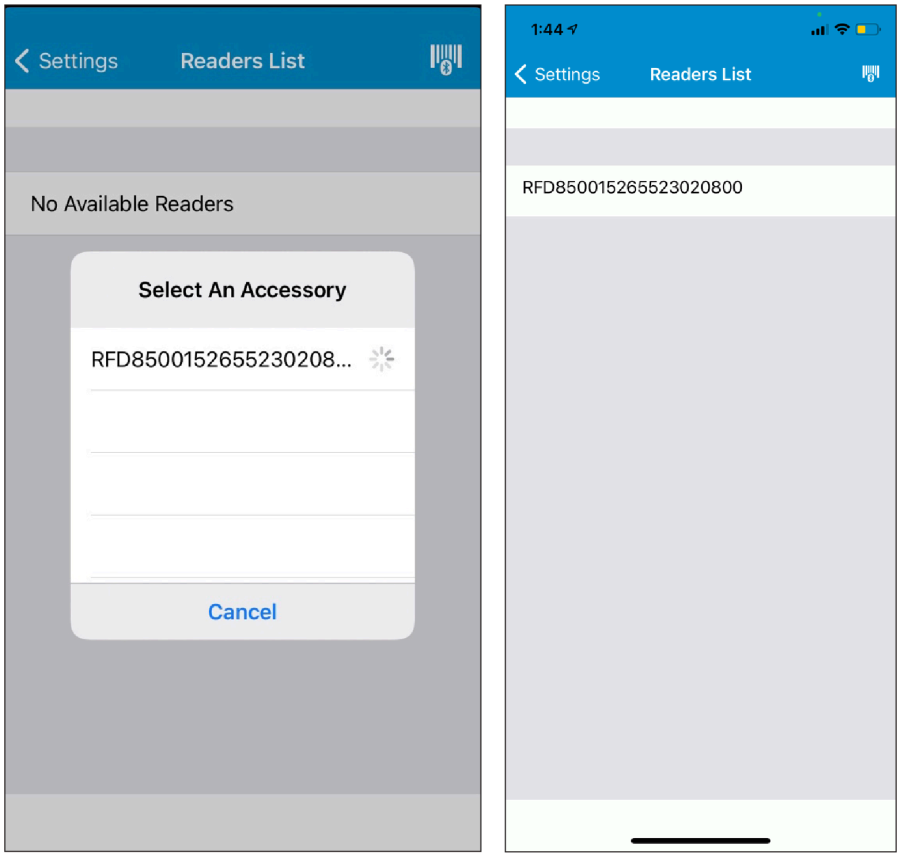
2. Tap the pairing by scan icon in the navigation bar's right corner, and the camera view will display.



3. In the camera view mode, scan the device's barcode. Before scanning, ensure that the RFD8500 Bluetooth indicator LED blinks, indicating the device is discoverable. Otherwise, the device will not display in the picker list.



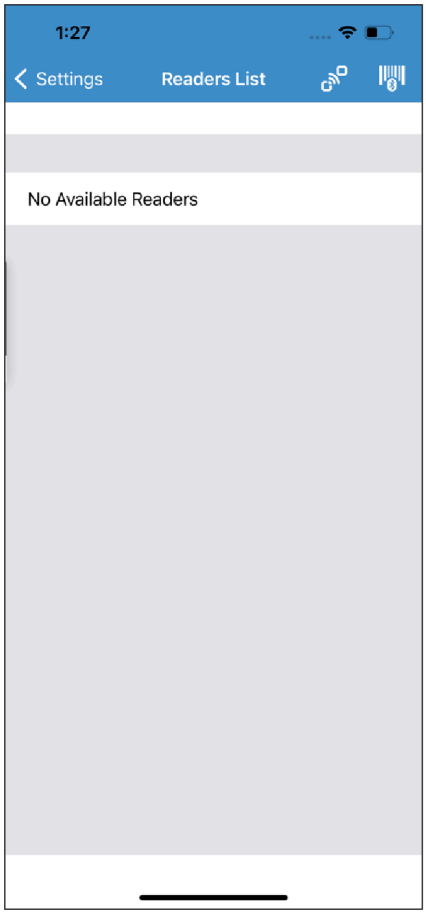
4. Select the device you want to pair, and press the RFD8500 trigger to pair when the Bluetooth LED starts flashing fast. When the device is successfully paired, you will hear a beep.



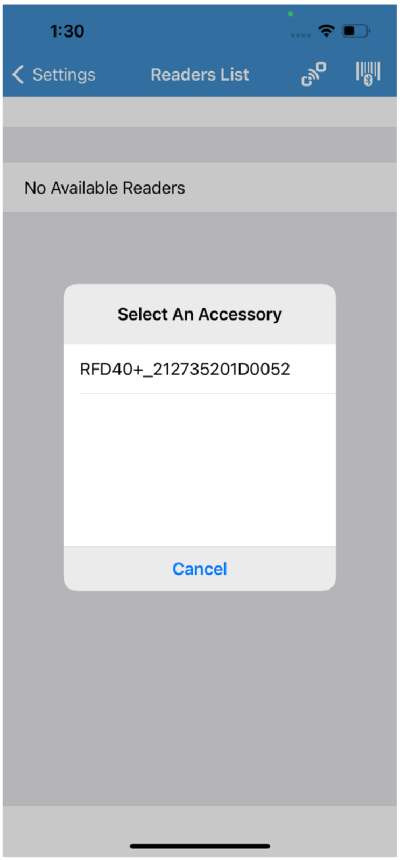
Pairing the RFD40+

1. From the Home screen, go to **Settings** > **Readers List**.

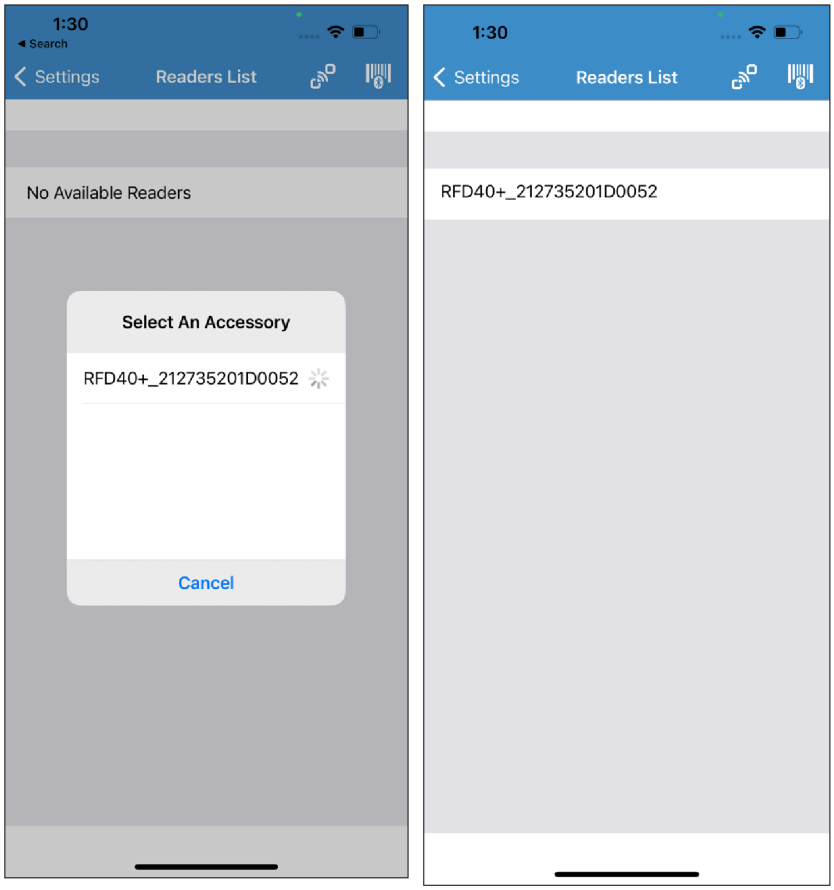
2. Tap the pairing by scan icon in the navigation bar's right corner, and the camera view will display.



3. In the camera view mode, scan the device's barcode. Before scanning, ensure that the RFD40+ Bluetooth indicator LED blinks, indicating the device is discoverable. Otherwise, the device will not display in the picker list.



4. Select the device you want to pair and press the RFD40+ trigger to pair when the Bluetooth LED starts flashing fast. When the device is successfully paired, you will hear a beep.

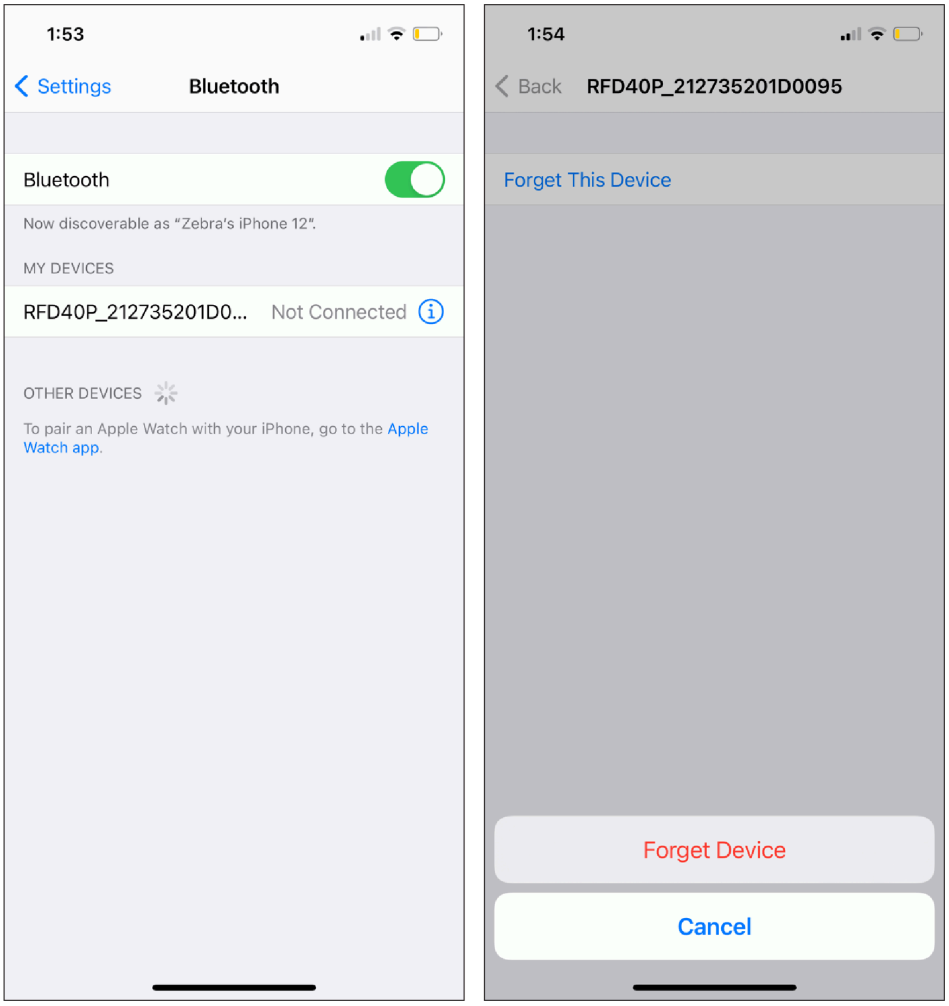


Setting Up the NFC-Based Tap to Pair

Pairing by Tap provides a faster way to connect to the MFI scanner. This solution provides pairing with an MFI scanner inside the sample application. By using the NFC in the iPhone's inbuilt NFC reader, tap the device's NFC tag to get the serial number from the NDEF records and try to connect with that device.

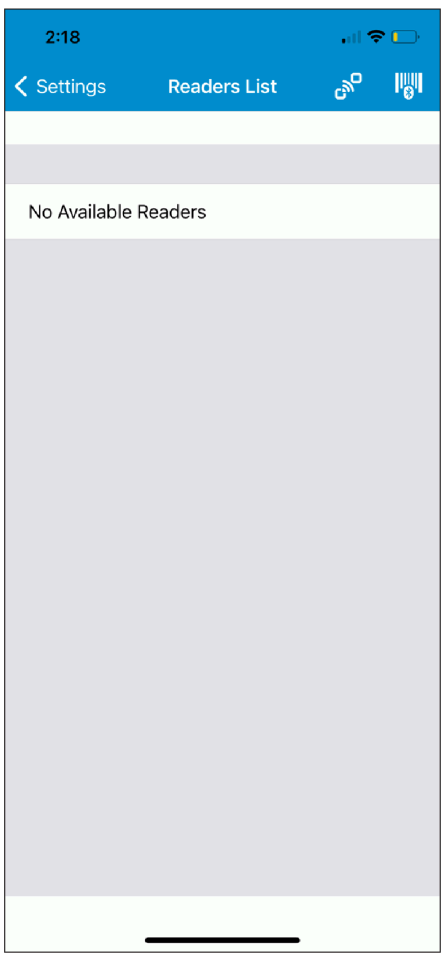
Before starting the NFC-based pairing, unpair the device that you want to pair from the Bluetooth settings. (For example, RFD40P_XXX...X)

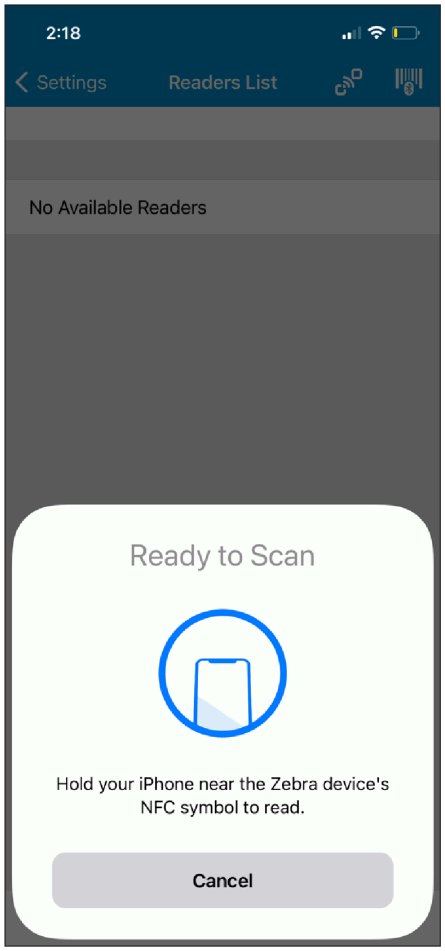
Figure 5 Unpairing Device



1. From the Home screen, go to **Settings** > **Readers List**.

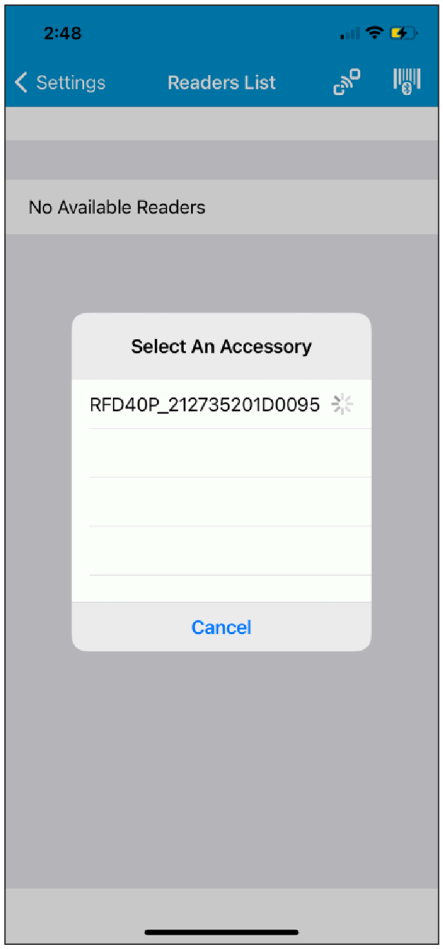
2. Tap the NFC icon in the navigation bar's right corner, and the NFC reader view will display.

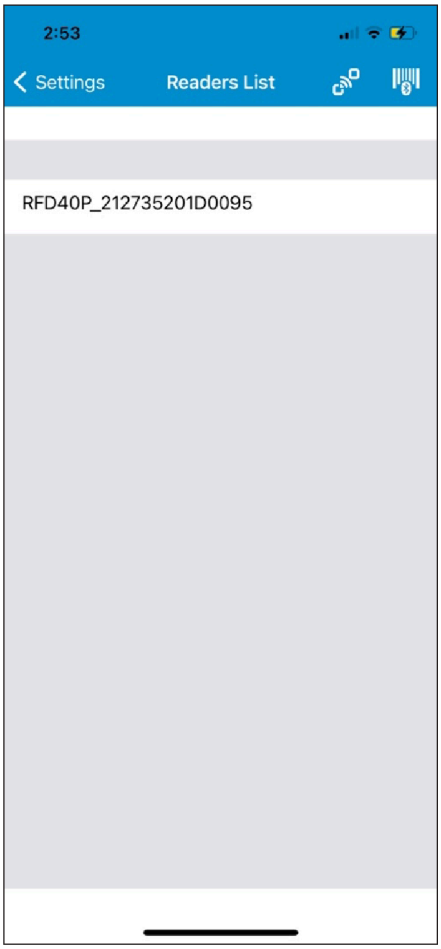




3. In the NFC Ready to Scan view mode, hold your iPhone near the Zebra device's NFC symbol to read. Ensure that the RFD40+ Bluetooth indicator LED blinks, indicating the device is discoverable. Otherwise, the device will not display in the picker list.

4. Select the device you want to pair. You will get a beep sound when it is paired successfully.

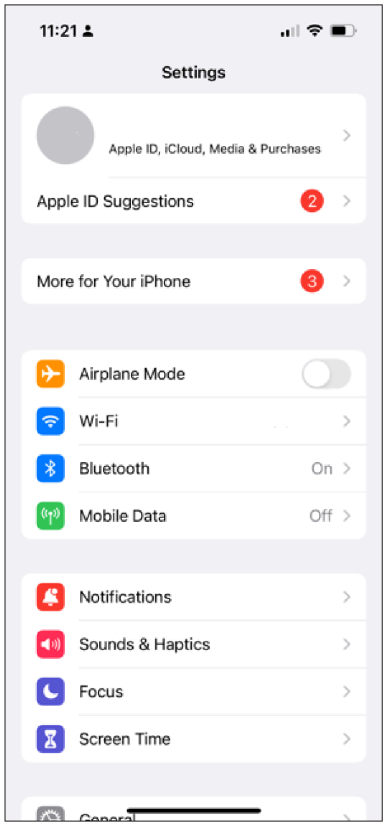




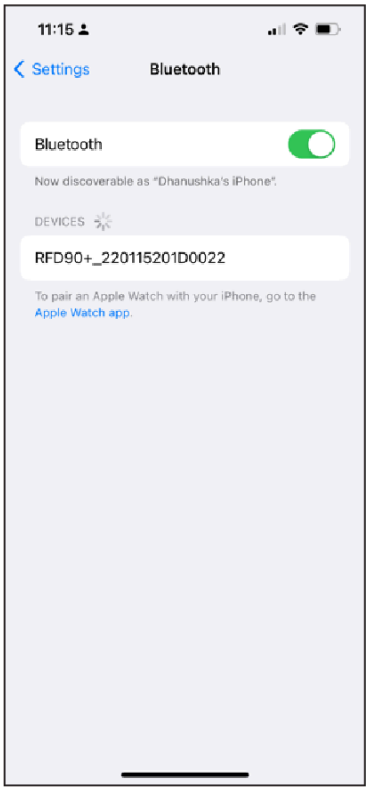
Manually Pairing a Device

If you do not use the Scan and Pair, Tap and Pair methods to pair the reader, you can pair it manually.

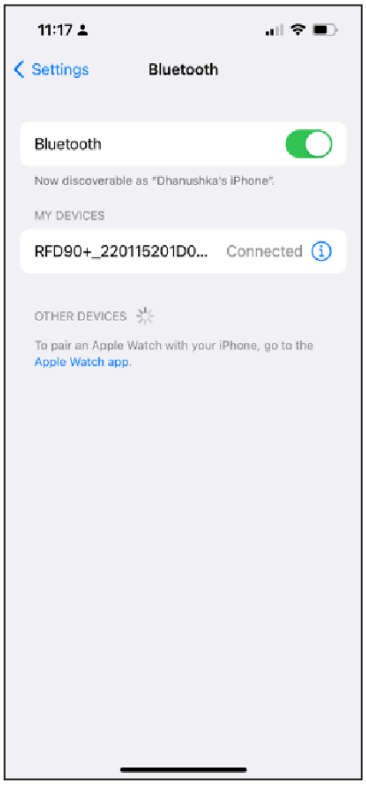
1. Go to the Settings in the iOS device and select **Bluetooth**.

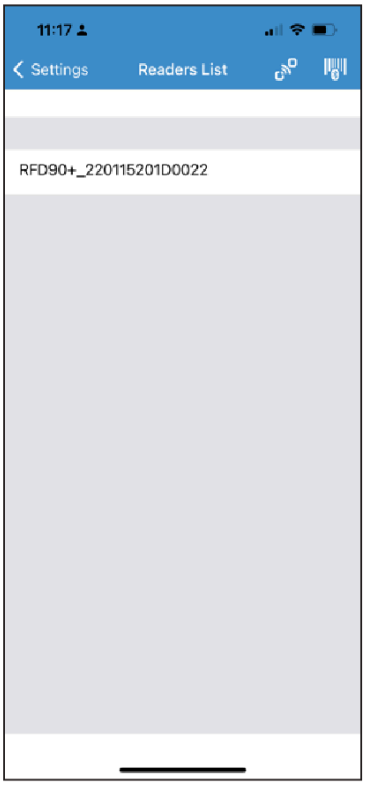


2. Enable the Bluetooth.



3. Select the Reader.





RFID Operations

Access RFID operations for the following:

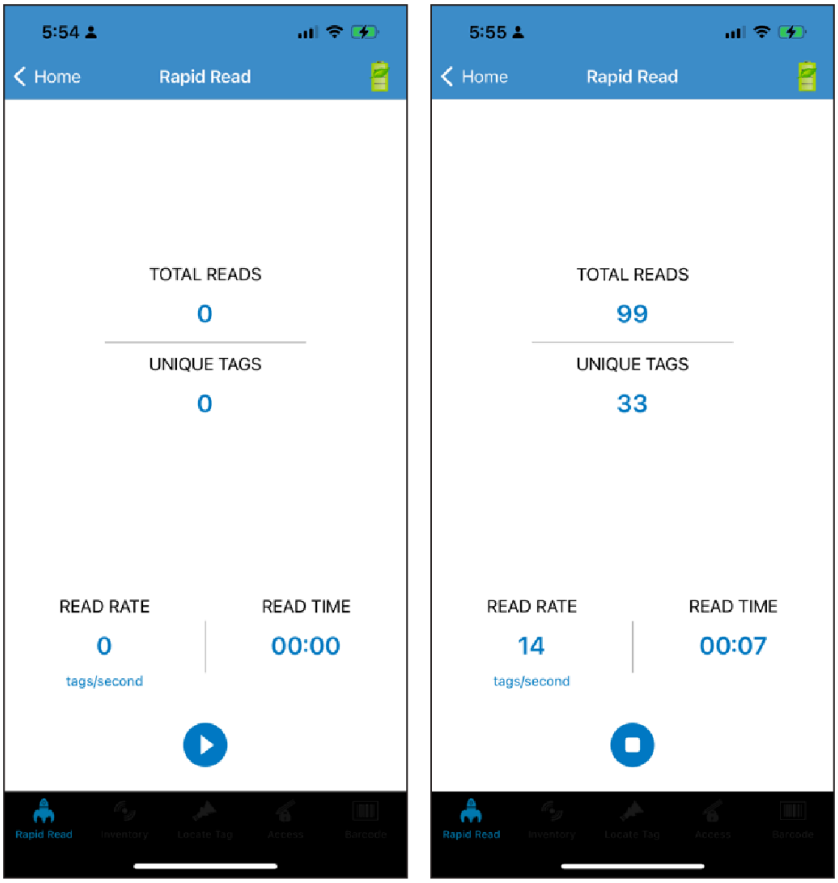
- Rapid Read - Displays a view of the inventory operation on the reader, including total reads, unique tag count, tag read rate, and read time.
- Inventory - Displays tag details when tag reading begins.
- Locate Tag - Locates a single tag or multiple tags. Accessed from the Inventory screen.
- Tag Write - Allows you to write data to specified tags. Accessed from the Inventory screen.
- Pre Filters - Allows you to set filters for tag data. Accessed from the Inventory screen.
- RFID Settings - Allows you to configure specific reader and antenna settings. Accessed from the Rapid Read and Inventory screens, as well as from Settings.

Rapid Read

The Rapid Read screen displays the following data:

- Total Reads
- Unique tag count
- Read time (mm:ss)
- Tag read rate (tags/sec).

Figure 6 Rapid Read

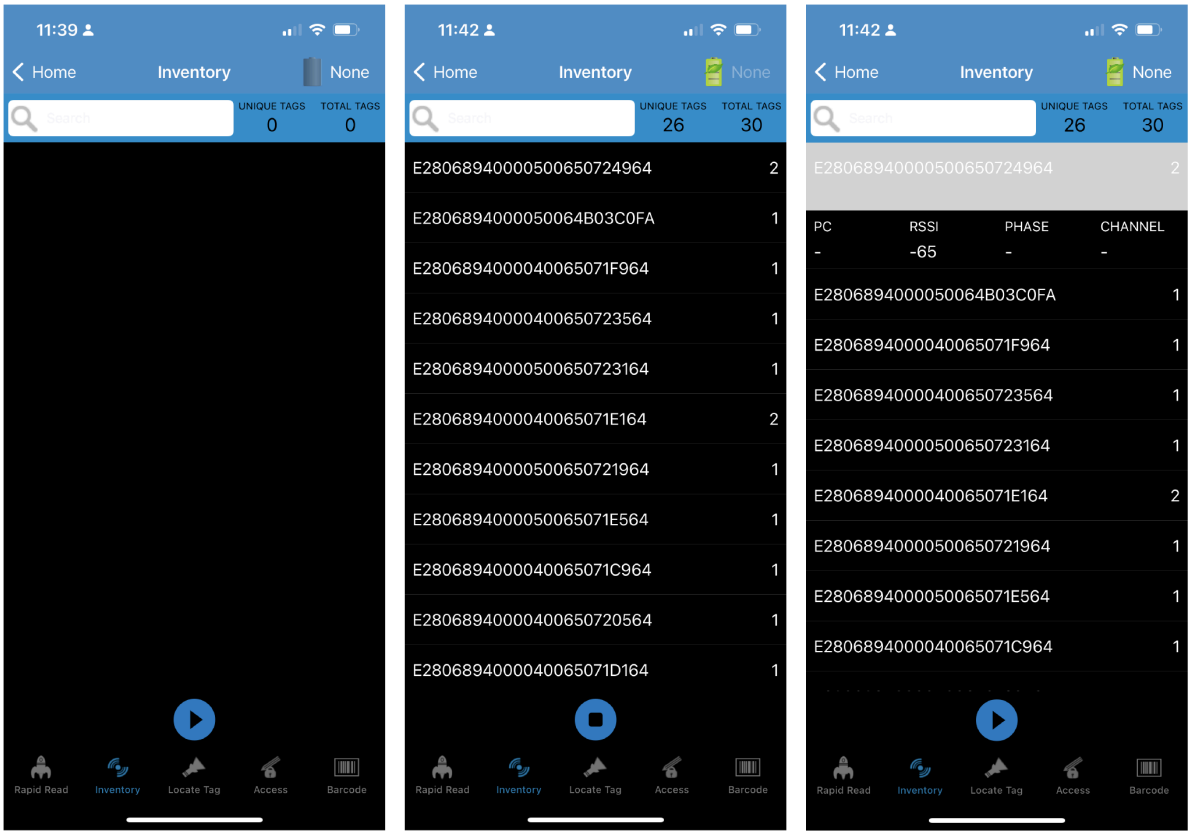


The Rapid Read and Inventory screens present two different views of the inventory operation on the reader. The Start/Stop functionality can be used interchangeably on both screens. For example, when operation starts on the Rapid Read screen and you navigate to the Inventory screen, the button available on the Inventory screen is Stop. The same is true when the operation starts on the Inventory screen. During the rapid read process, you can navigate to the Inventory screen to view tag details along with tag counts for each tag. The statistics displayed are maintained on the Rapid Read and Inventory screens regardless of the screen used to start the process.

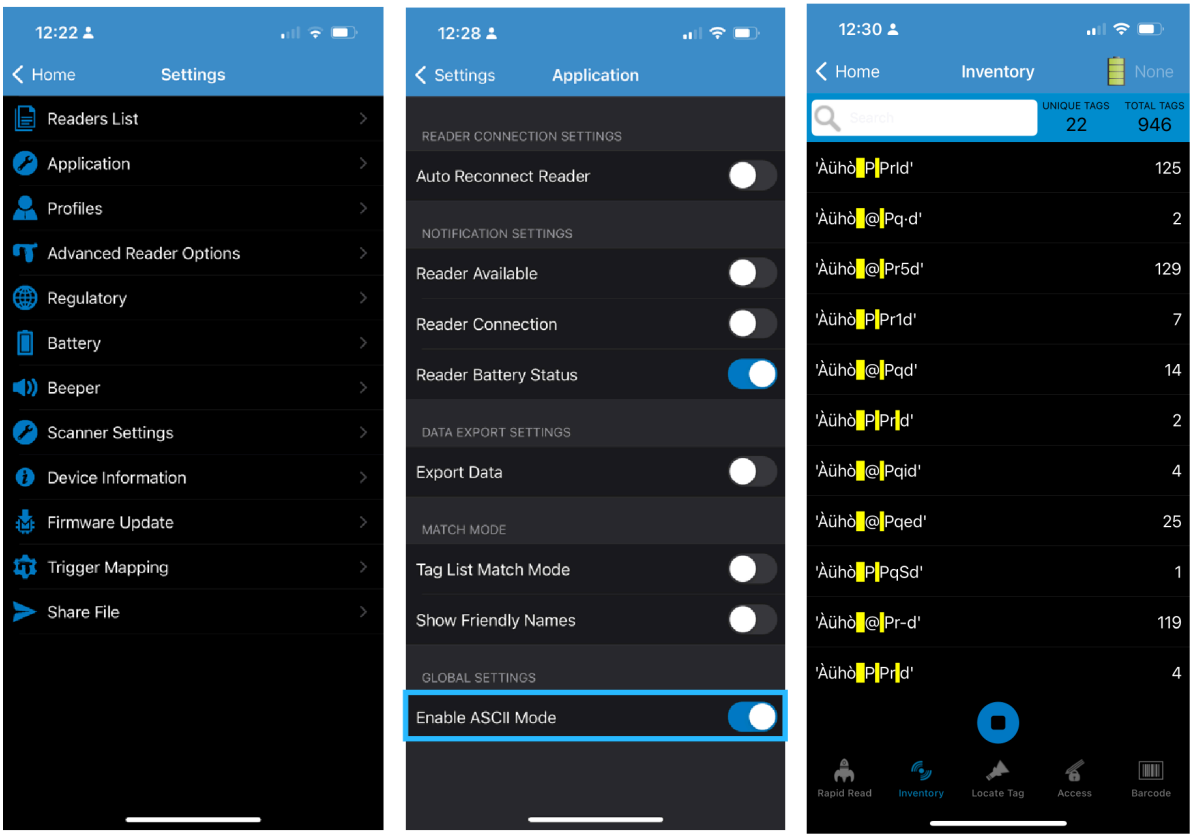
Inventory

Once the tags begin reading, the tag details populate the Inventory screen. Tag reading is started and stopped on this screen as well as on the Rapid Read screen. When the process starts, tag information displays on the screen. The scan trigger on the device can also start and stop the inventory operation. Press the trigger to start, continue to hold, and release to stop.

Figure 7 Inventory Screens



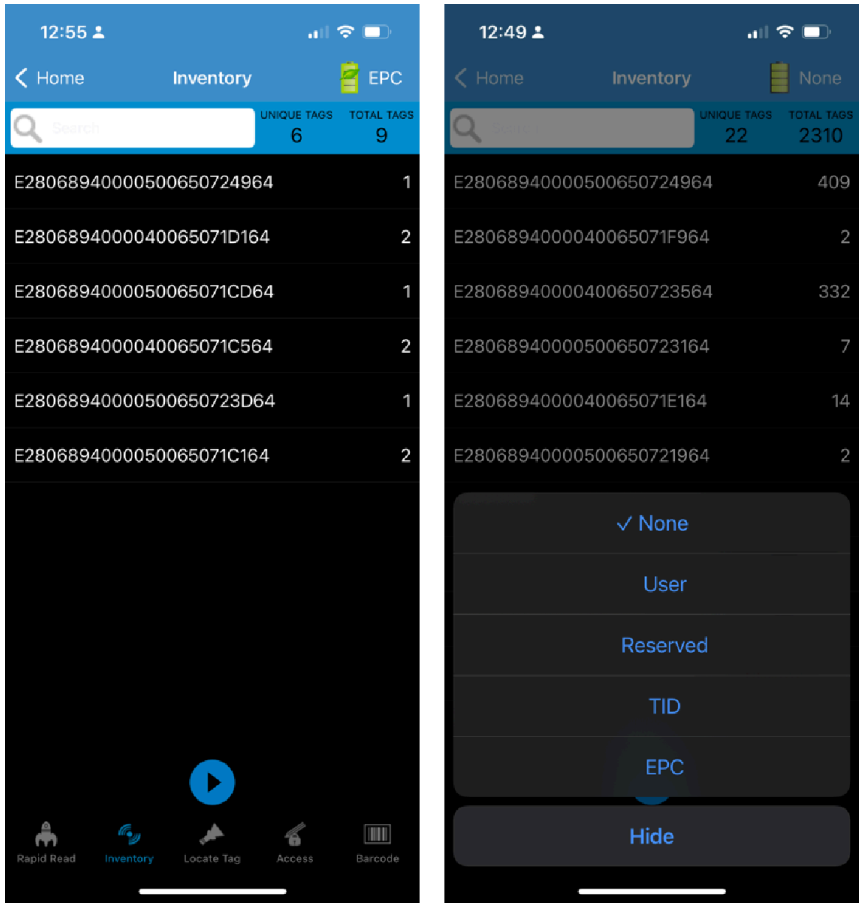
NOTE: When the tag does not have printable ASCII data when in ASCII mode, a yellow highlighted background displays on the Inventory screen.



Memory Bank

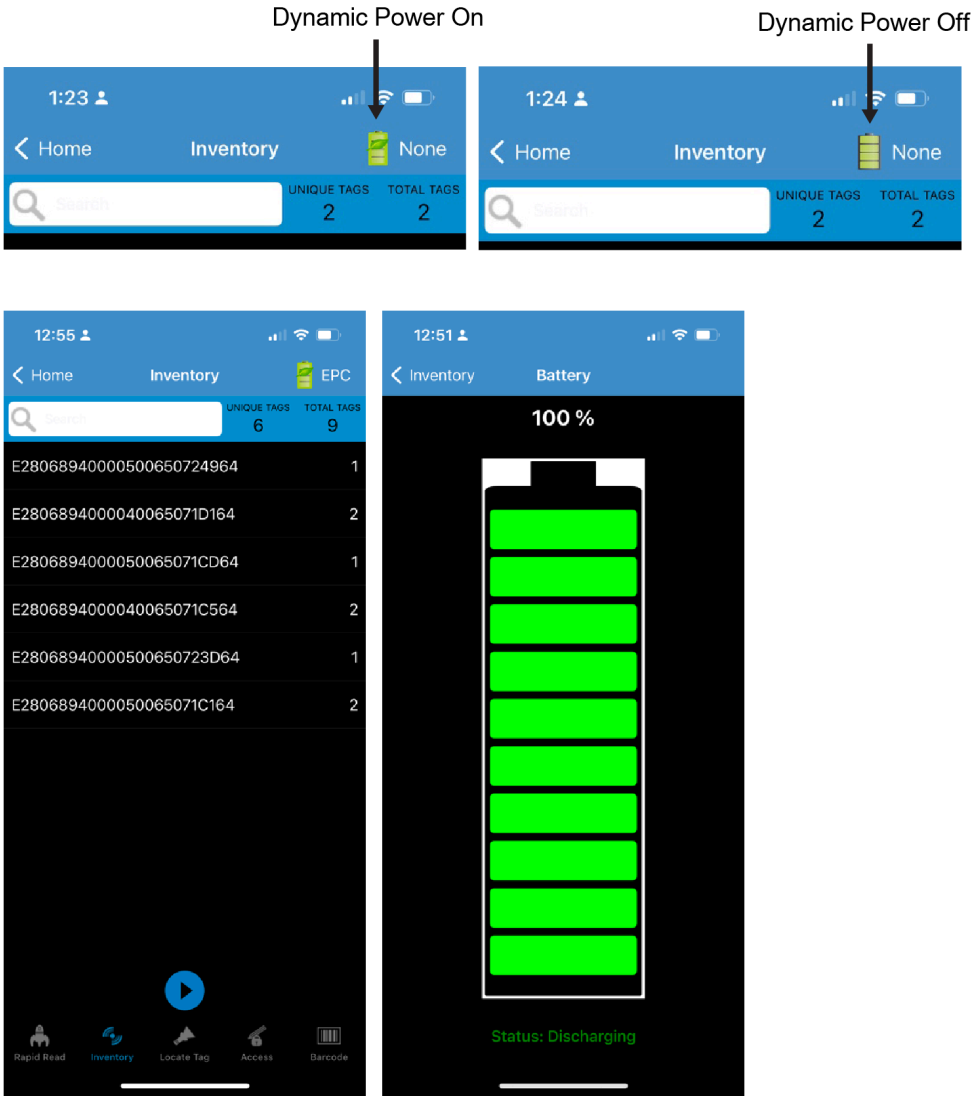
Tap Memory Bank to select one of the following memory bank options from the action sheet menu:

- None - Defaults to EPC.
- User - Allows reading user memory bank data when the tag is inventoried.
- Reserved - Allows reading reserved memory bank data when the tag is inventoried.
- TID - Allows reading TID memory bank data when the tag is inventoried.
- EPC - Allows reading EPC memory bank data when the tag is inventoried. When the next inventory operation starts, the details from the selected memory bank displays. This menu is inactive if there is an ongoing operation on the connected reader.
- Default Display - None.


12:55
Home
Inventory
EPC
UNIQUE TAGS
6
TOTAL TAGS
9
E28068940000500650724964 1
E28068940000400650 71D164 2
E28068940000500650 71CD64 1
E28068940000400650 71C564 2
E28068940000500650723D64 1
E28068940000500650 71C164 2
Rapid Read
Inventory
Locate Tag
Access
Barcode
12:49
Home
Inventory
None
UNIQUE TAGS
22
TOTAL TAGS
2310
E28068940000500650724964 409
E28068940000400650 71F964 2
E28068940000400650723564 332
E28068940000500650723164 7
E28068940000400650 71E164 14
E28068940000500650721964 2
✓ None
User
Reserved
TID
EPC
Hide

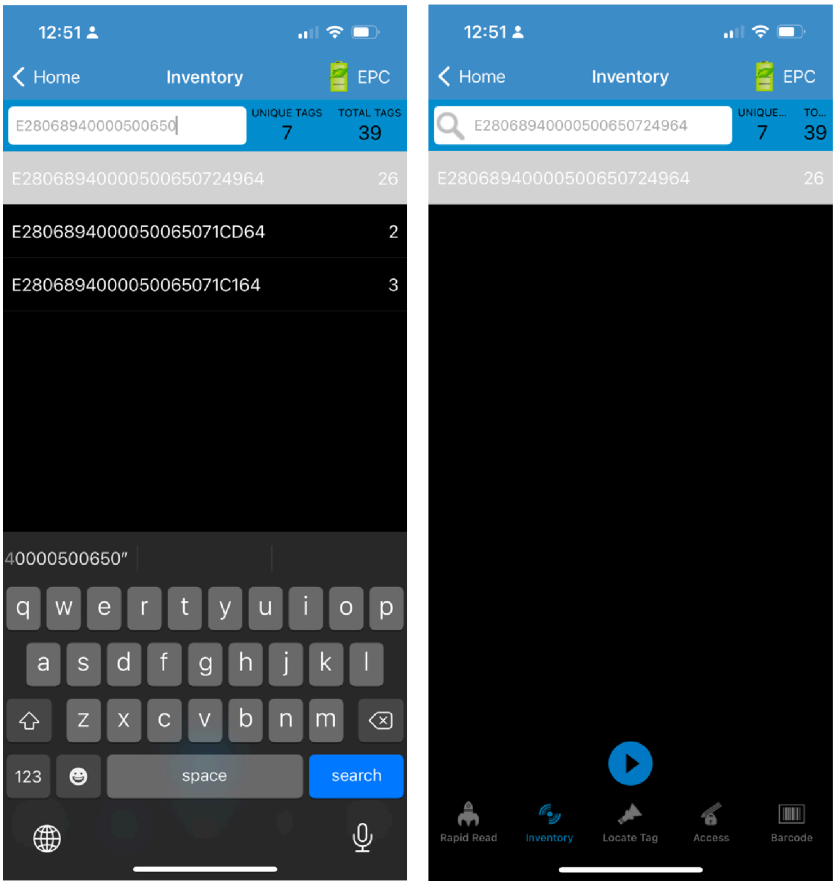
Power Management

The icon indicates if Dynamic Power is on. Tap the Power Management icon to open the Battery Status screen. See Power Management for an option to enable Dynamic Power Optimization (DPO) in the reader.



Search a Tag

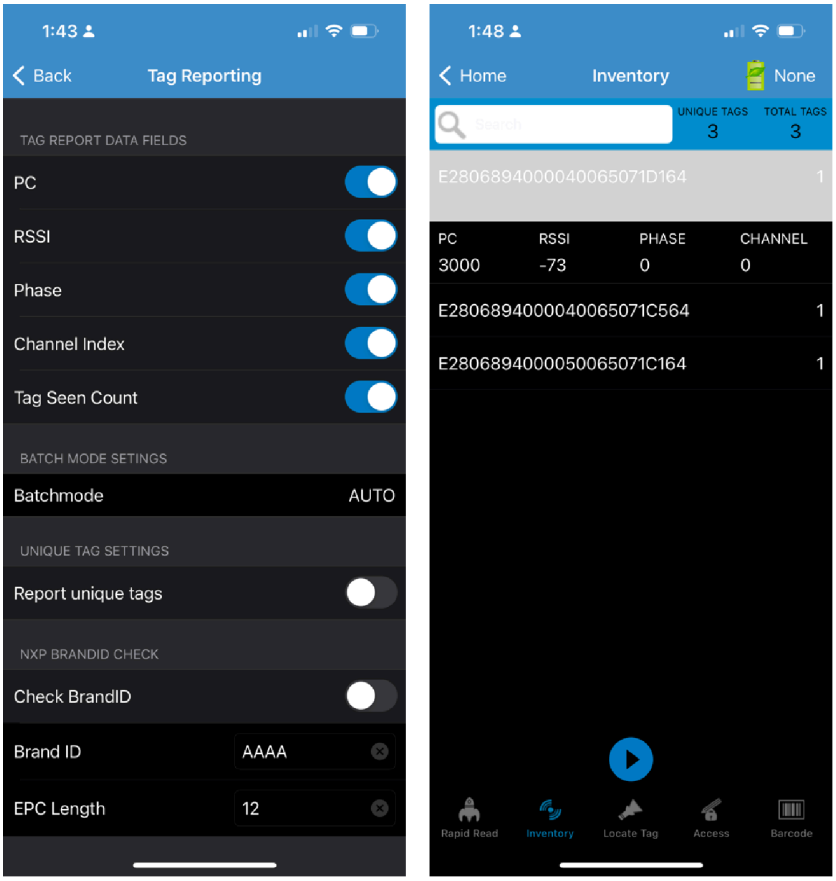
Tap the Search icon and enter a tag ID. Tags that match the entry display in the content area.



Content Area (Select a Tag)

Expanded tag detail can only display when the inventory operation is stopped. Memory bank data is shown only when the inventory is complete.

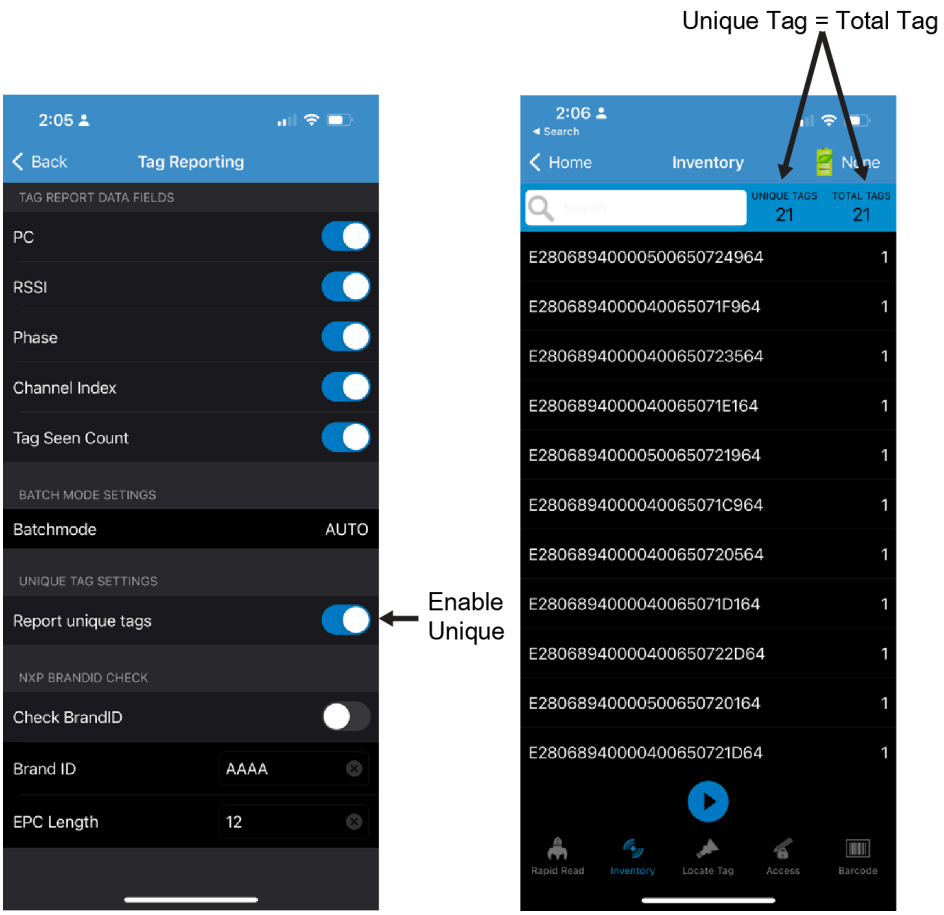
The tags displayed in this area are based on the option selected from **Home** > **Settings** > **Advanced Reader Options** > **Tag Reporting**. Tap the tag ID to expand details about the tag. Tap the tag ID again to collapse details.



Unique Tag Reporting

When Report Unique Tags is enabled on the Tag Reporting screen, the reader reports only unique tags based on the options below.

- The tag count cannot be greater than one because the unique tags are only reported one time.
- When the Matching option is not selected, the list displays unique and total reads. The tag count cannot be greater than one because the unique tags are only reported one time.



NXP BrandID Check

When the Check BrandID is enabled on the Tag Reporting screen, the reader reports only tags based on the brand options below.

- Brand ID
- EPC Length

After enabling the Check BrandID settings, you can start the inventory. If the tag has a matching brand ID, the inventory list displays tag data in blue.

Locate Tag

Use Locate Tag to locate a single tag or multiple tags (Multi Tag). From the Inventory screen, tap and select **Locate Tag**.

Locating a Single Tag

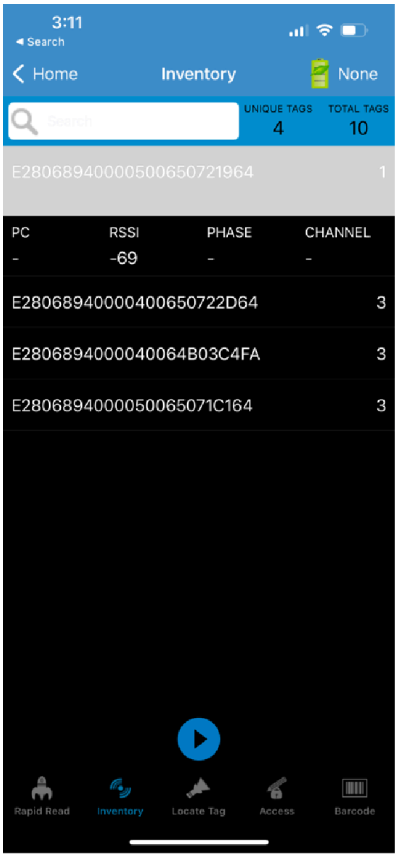
To locate a single tag:

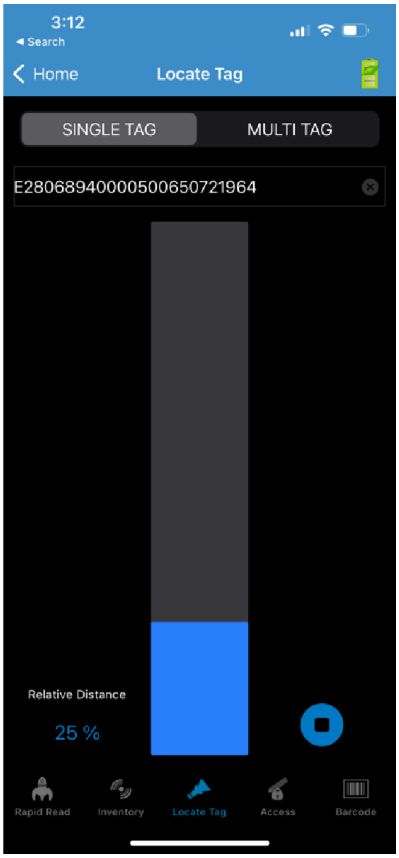
1. Tap **Locate Tag** from the Home or Menu screen.
2. Enter the Tag ID in the text area or select a tag from the Inventory screen to pre-populate the Tag ID to search.
3. Tap **Start** to start the locate tag operation.
4. Tap **Stop** to stop the locate tag operation.

NOTE: The scan trigger on the device can also start and stop the locate tag operation. Press the trigger to start, continue to hold, and release to stop.

The Locate Tag screen displays a color bar graph showing the proximity % (relative distance) of the tag. The % gives the relative distance, for example, from 0% to 100% where the tag is very far or very close respectively.

Progressing to another screen does not halt the operation until Stop is selected. However, attempting to make changes or perform another operation while the locate tag operation is in process results in an error.

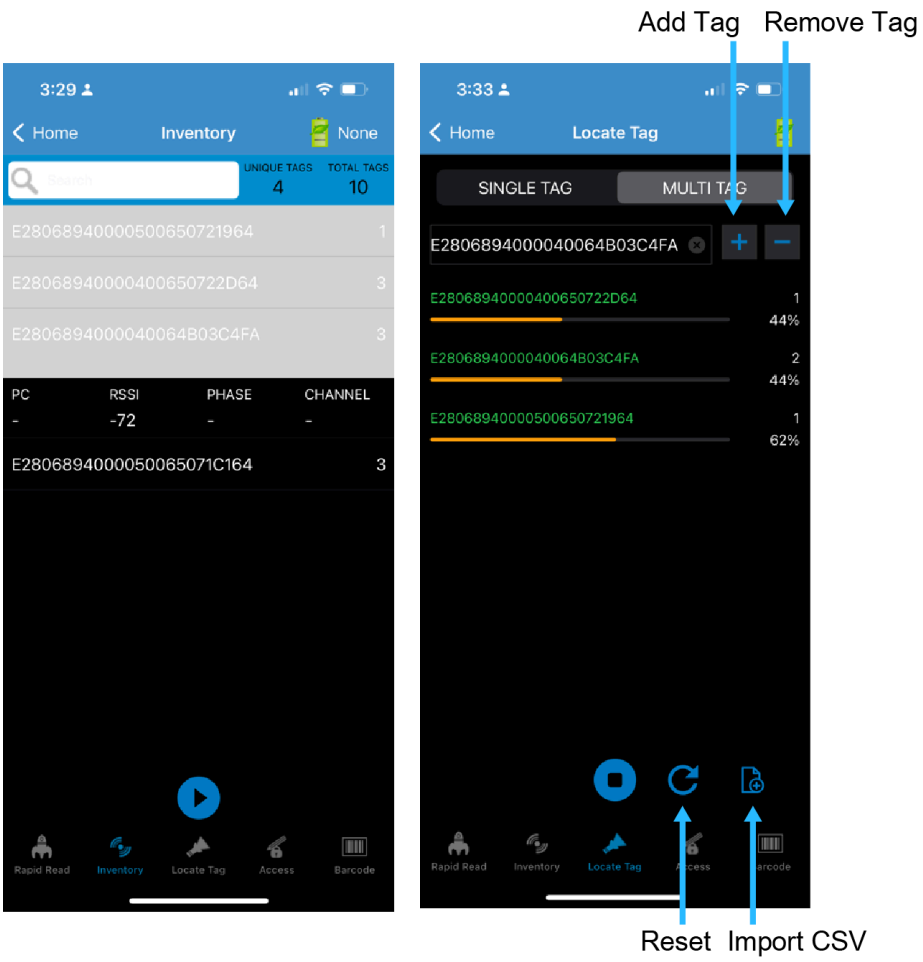




Locating Multiple Tags

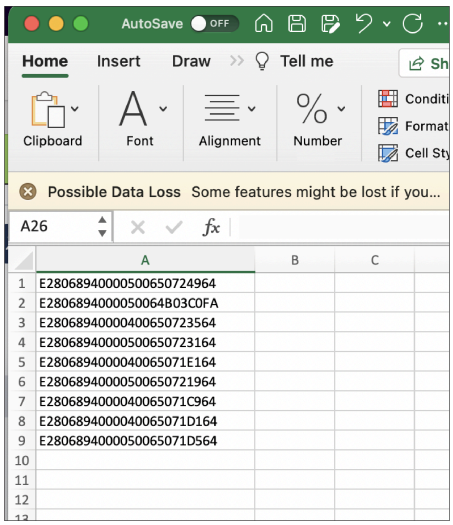
Locate multiple tags by importing a CSV file or selecting multiple tags from the Inventory screen.

Selecting multiple tags from the Inventory screen

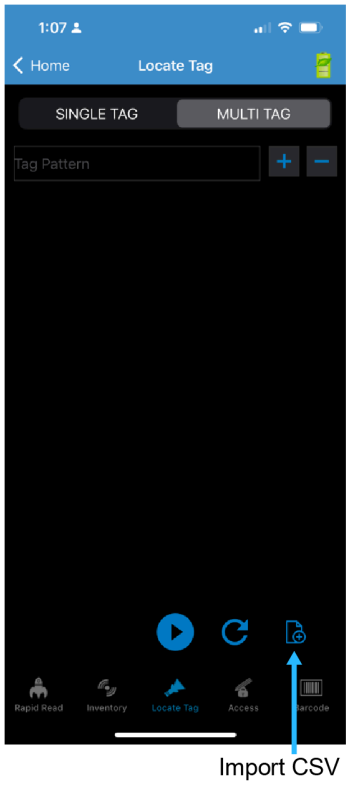


Selecting multiple tags from a CSV file

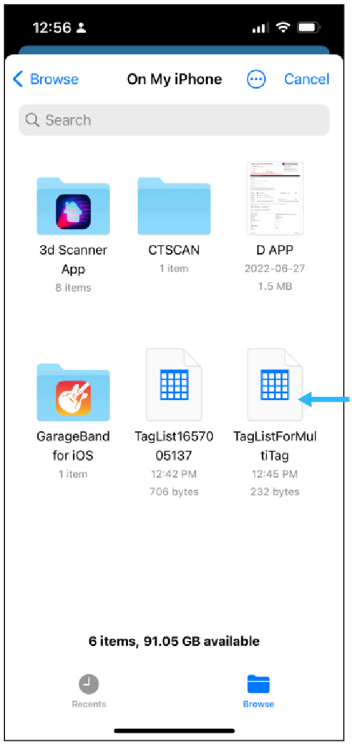
1. List the tags you want to perform the multiple tags in a CSV file. Copy this file into the iOS device.



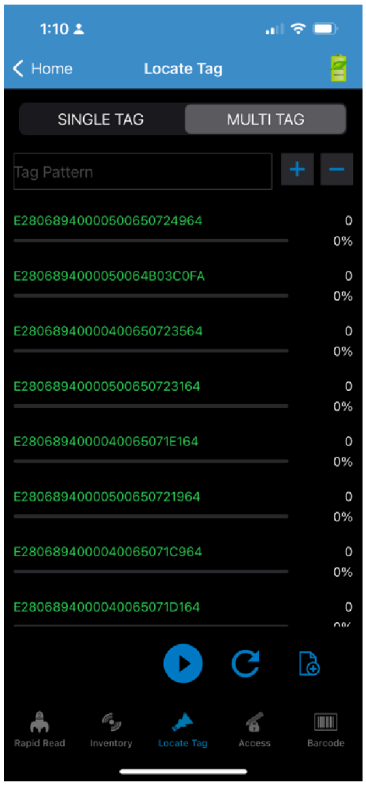
2. Go to the inventory page and navigate to the Multi-Tag page. Tap the **Import CSV** icon and select the CSV file.

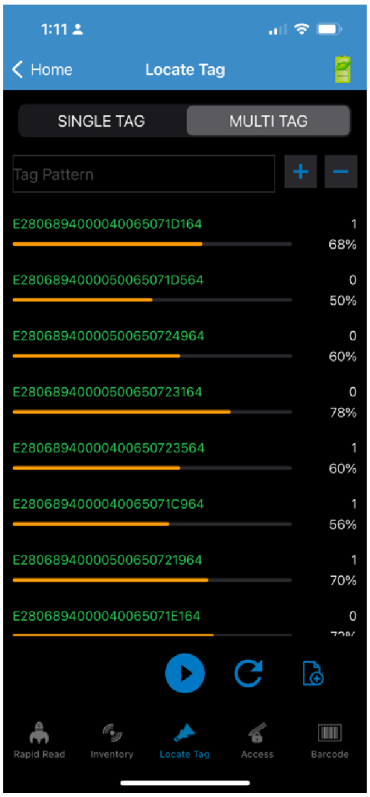


Import CSV



Tags in CSV file



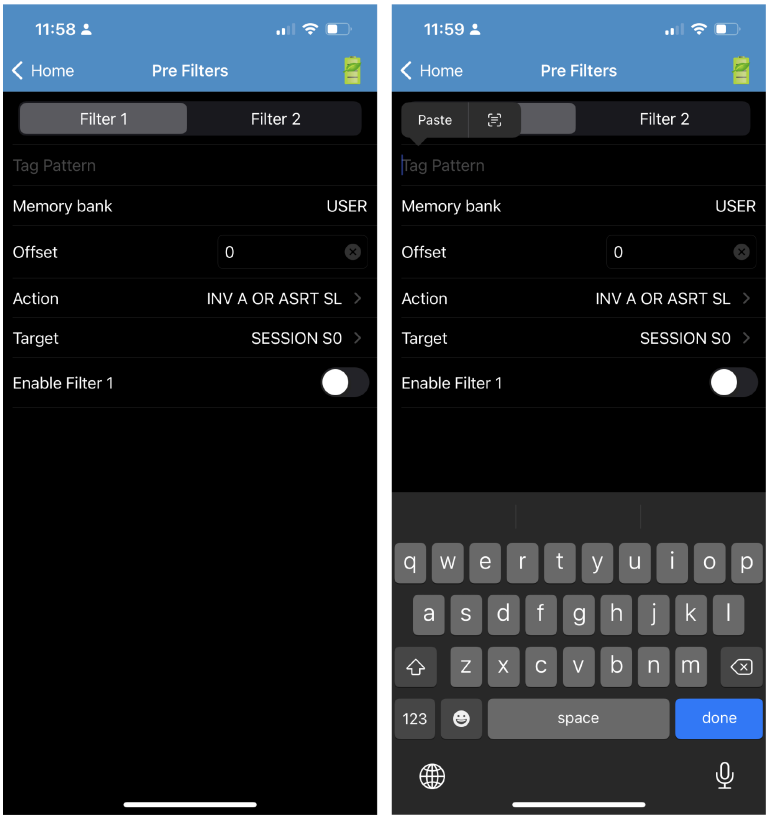


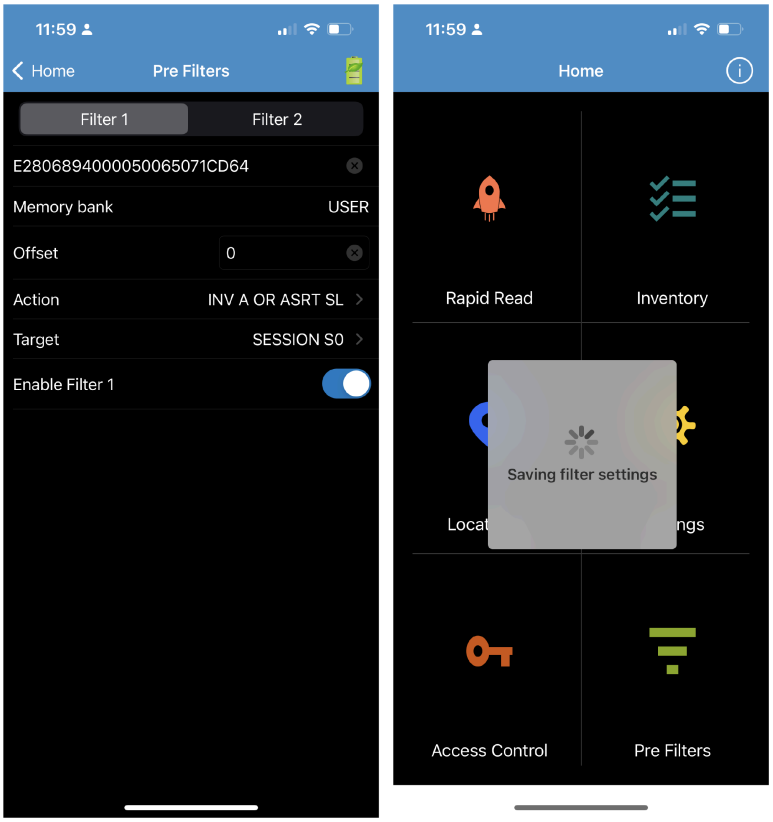
Setting Pre Filters

To set a pre filter, set the following properties.

1. Memory Bank: EPC, TID, and USER.
2. Offset (words): Offset in the memory bank is specified in words.
3. Select non matching TAGs: Inventory shows tags which are not matching with Tag pattern entered.
4. Action:
   - INV A NOT INV B or ASRT_SL_NOT_DSRT_SL
   - INV A or ASRT SL
   - NOT INV B or NOT DSRT SL
   - INV A2BB2A NOT INV A or NEG SL NOT ASRT SL
   - INV B NOT INV A or DSRT SL NOT ASRT SL
   - INV B or DSRT SL
   - NOT INV A or NOT ASRT SL
   - NOT INV A2BB2A or NOT NEG SL
5. Target: SESSION S0, SESSION S1, SESSION S2, SESSION S3 and SL FLAG.

NOTE: Up to two pre filters can be enabled.





Tag Access Operation

Select Access Control on the Home screen to enter the Access Control page.

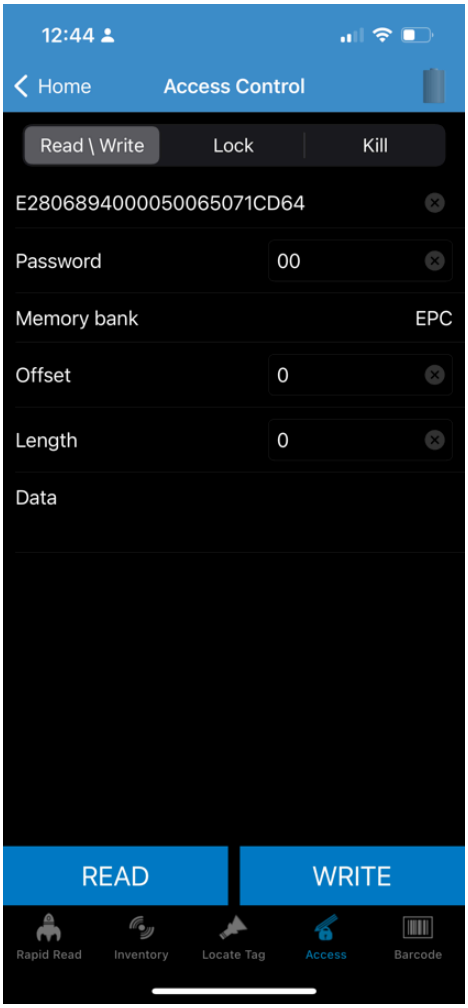
Read/Write

The Tag Pattern area is automatically filled in when a tag is selected in the Inventory screen. The Read/Write access operation is simplified with offset and length fields are hidden.

Memory Bank options now have extended menu options to choose directly the interested area of memory bank. This avoids typing of offset and length etc.

Read/Write options are:

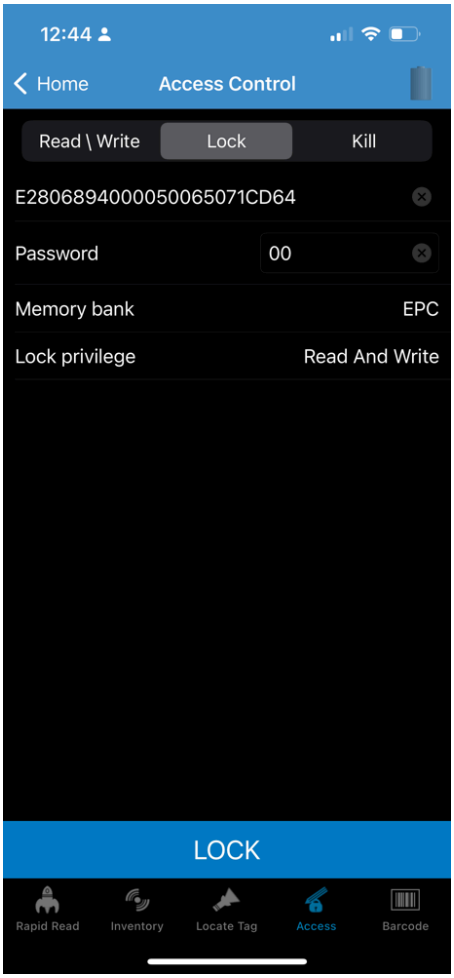
- Tag ID and Password values are in hex. Tag ID is edited.
- Memory Bank options - EPC, TID, USER, PC and CRC, Access Password, Kill Password.
- Offset and Length values are in 16-bit words. This is only available after tapping the Advanced Options icon. To toggle visibility, tap Advanced Options again.
- Access operation screen maintains the edited tag ID.



Lock

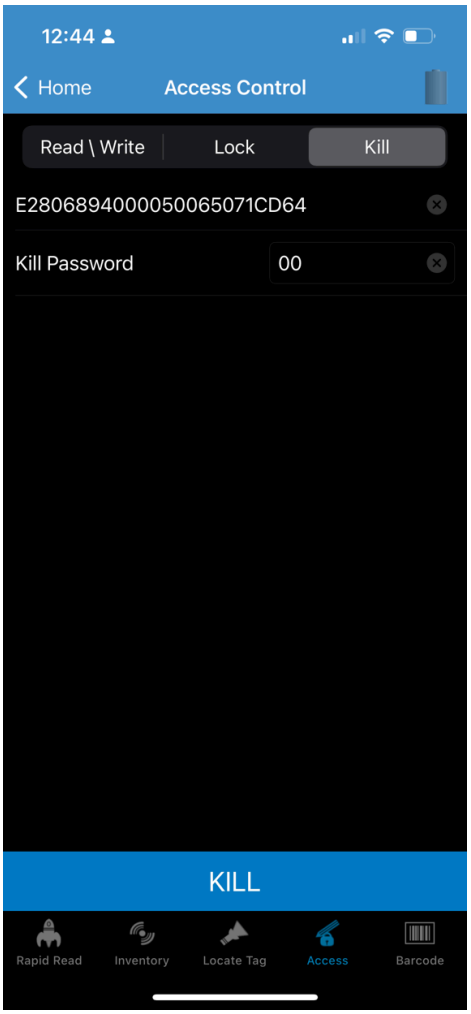
Lock privilege options are as follows:

- Read and Write
- Permanent Lock
- Permanent Unlock
- Unlock


12:44
Home
Access Control
Read \ Write
Lock
Kill
E2806894000050065071CD64
Password
00
Memory bank
EPC
Lock privilege
Read And Write
LOCK
Rapid Read
Inventory
Locate Tag
Access
Barcode

Kill

This option permanently renders the tag unusable. A kill password must be provided.

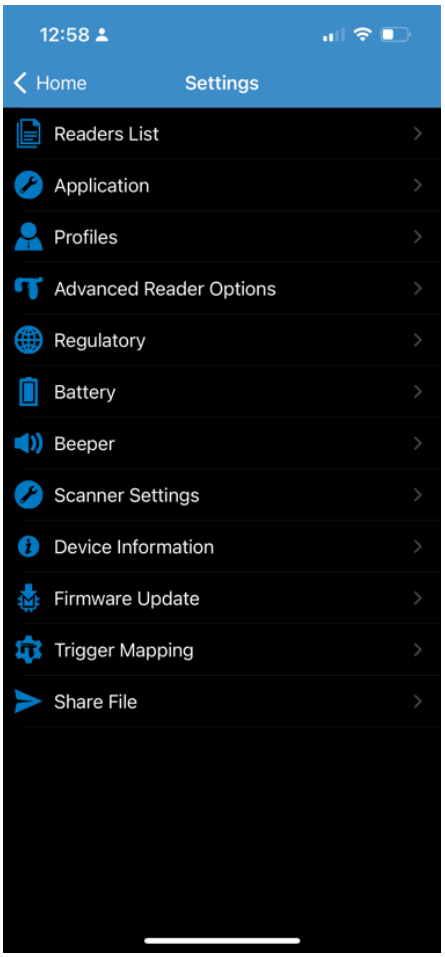


Settings

The Settings page includes the following options.

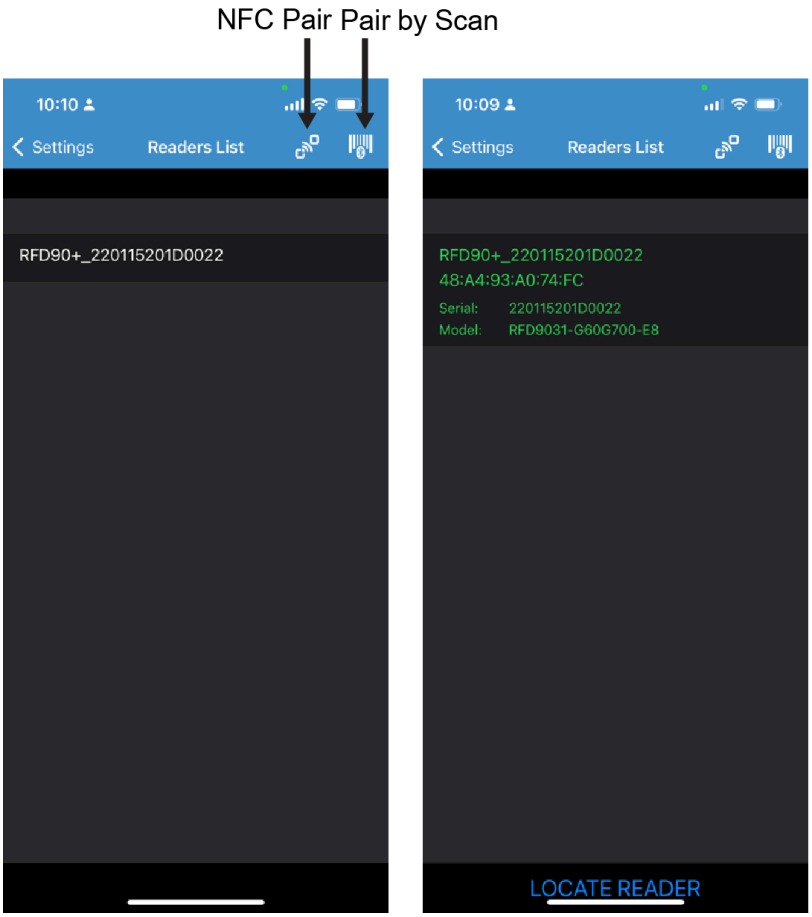
1. Reader List: To display the reader list
2. Application: To display application settings
3. Profiles: To display the list of profiles
4. Advanced Reader Options: To set advanced reader options (Antenna, Singulation Control, Start/Stop Trigger, Tag Reporting, Save Configuration, Power Management)
5. Regulatory: To set regulatory options
6. Battery: To display the battery power level
7. Beeper: To set beeper options
8. Scanner Settings: To access Scan Settings

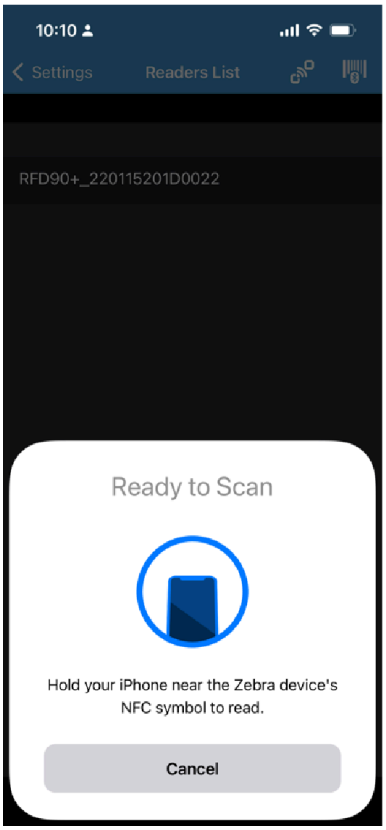
9. Device Information: View information such as friendly name, serial number, and RFID/scan settings.
10. Firmware Update: Update the firmware on the reader
11. Trigger Mapping: Change the mapping for the upper and lower trigger and designate the Upper Trigger for RFID decode and the Lower Trigger for Host Scan or the Upper Trigger for Host Scan and the Lower Trigger for RFID decode.
12. Share File: Share a file with a paired device



Readers List

The Readers list screen shows the available devices to connect.



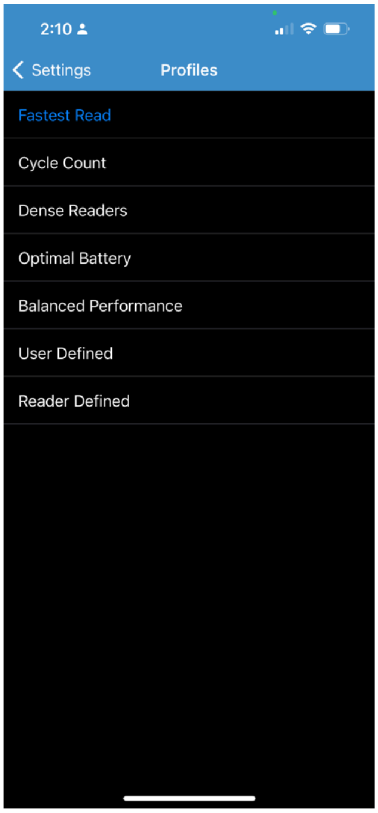


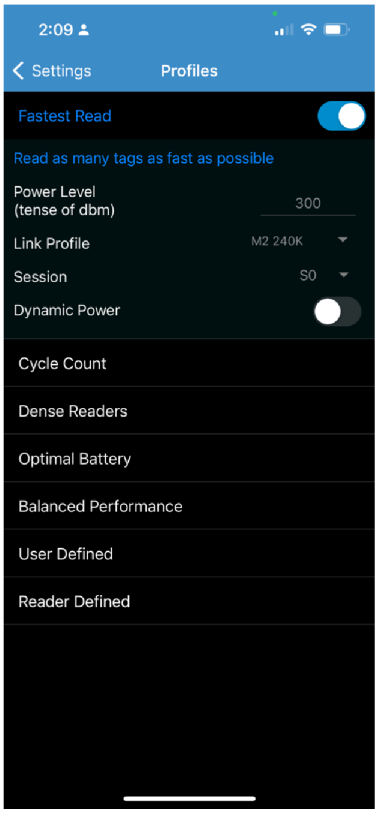
Profiles

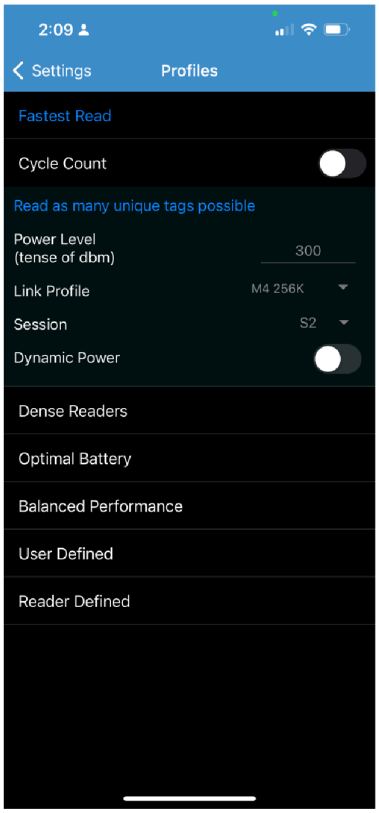
To display the list of profiles, tap **Settings** > **Profiles**.

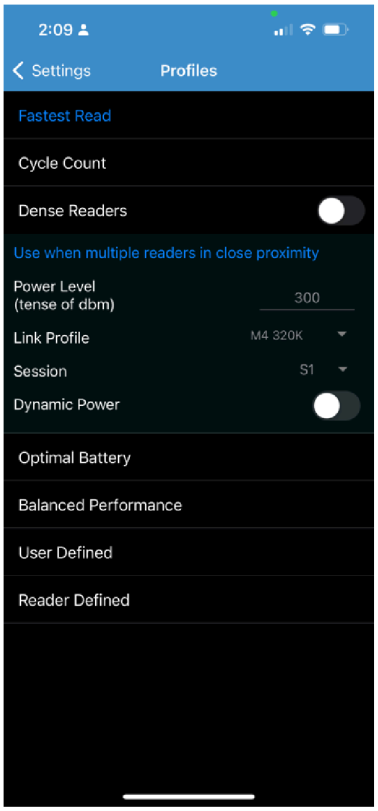
- The currently selected profile is highlighted in Blue.
- Tap profile item to expand the profile and view applicable configurations.
- Profiles can be selected or disabled by using the slider switch to the right of the profile name.

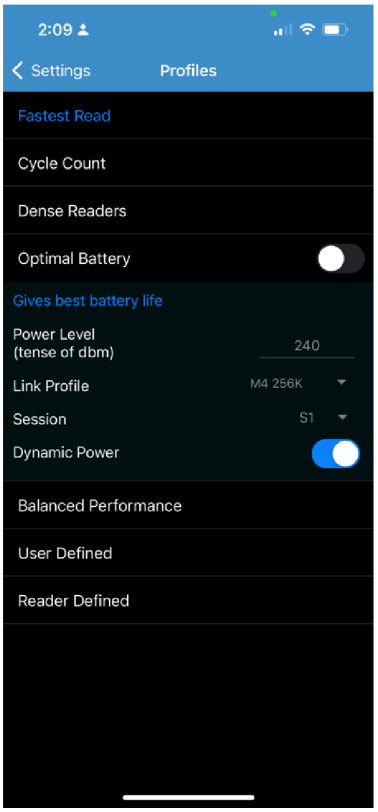
NOTE: If Power Level, Link Profile, Session, or Dynamic Power are modified from each respective screen, then the currently selected profile changes to User Defined profile and profile item values are modified with the same values.

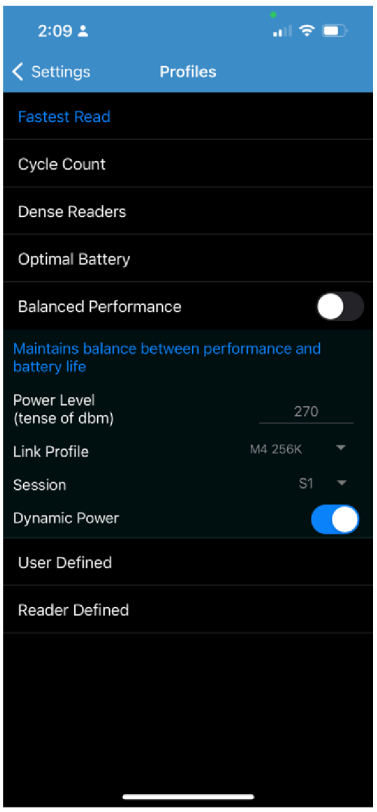

2:10
Settings
Profiles
Fastest Read
Cycle Count
Dense Readers
Optimal Battery
Balanced Performance
User Defined
Reader Defined

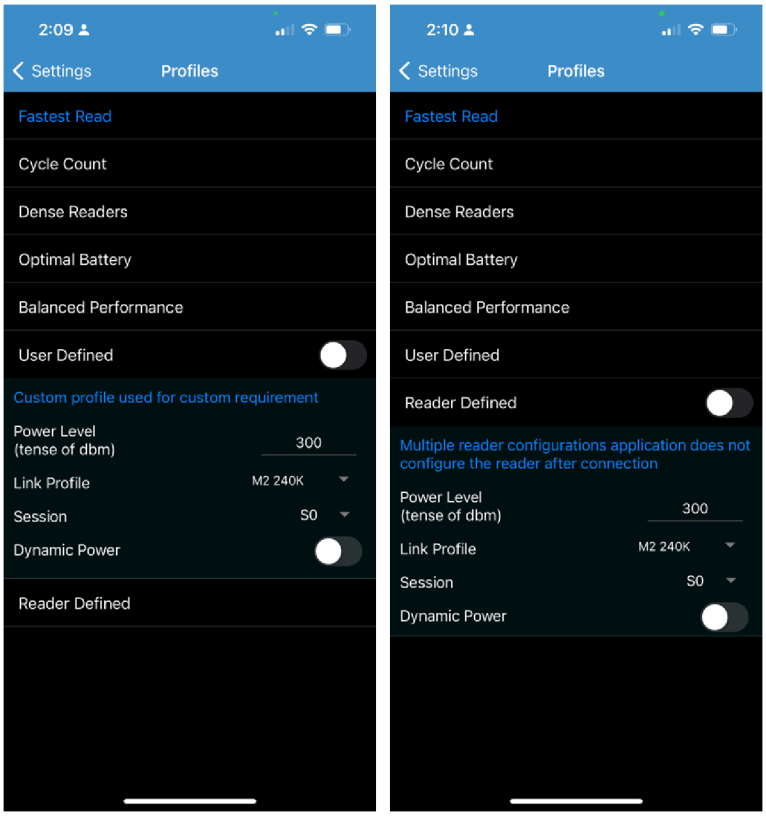

2:09
Settings
Profiles
Fastest Read
Read as many tags as fast as possible
Power Level (tense of dbm)
300
Link Profile
M2 240K
Session
S0
Dynamic Power
Cycle Count
Dense Readers
Optimal Battery
Balanced Performance
User Defined
Reader Defined


2:09
Settings
Profiles
Fastest Read
Cycle Count
Read as many unique tags possible
Power Level (tense of dbm)
300
Link Profile
M4 256K
Session
S2
Dynamic Power
Dense Readers
Optimal Battery
Balanced Performance
User Defined
Reader Defined


2:09
Settings
Profiles
Fastest Read
Cycle Count
Dense Readers
Use when multiple readers in close proximity
Power Level (tense of dbm)
300
Link Profile
M4 320K
Session
S1
Dynamic Power
Optimal Battery
Balanced Performance
User Defined
Reader Defined


2:09
Settings
Profiles
Fastest Read
Cycle Count
Dense Readers
Optimal Battery
Gives best battery life
Power Level (tense of dbm)
240
Link Profile
M4 256K
Session
S1
Dynamic Power
Balanced Performance
User Defined
Reader Defined

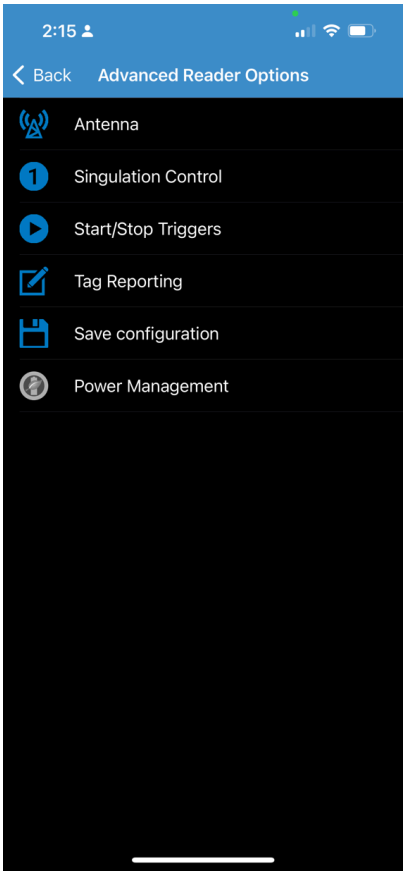

2:09
Settings
Profiles
Fastest Read
Cycle Count
Dense Readers
Optimal Battery
Balanced Performance
Maintains balance between performance and battery life
Power Level (tense of dbm)
270
Link Profile
M4 256K
Session
S1
Dynamic Power
User Defined
Reader Defined



Advanced Reader Options

The Advanced Reader Options include:

- Antenna
- Singulation Control
- Start/Stop Triggers
- Tag Reporting
- Save Configuration
- Power Management



Antenna

The Antenna screen displays the following:

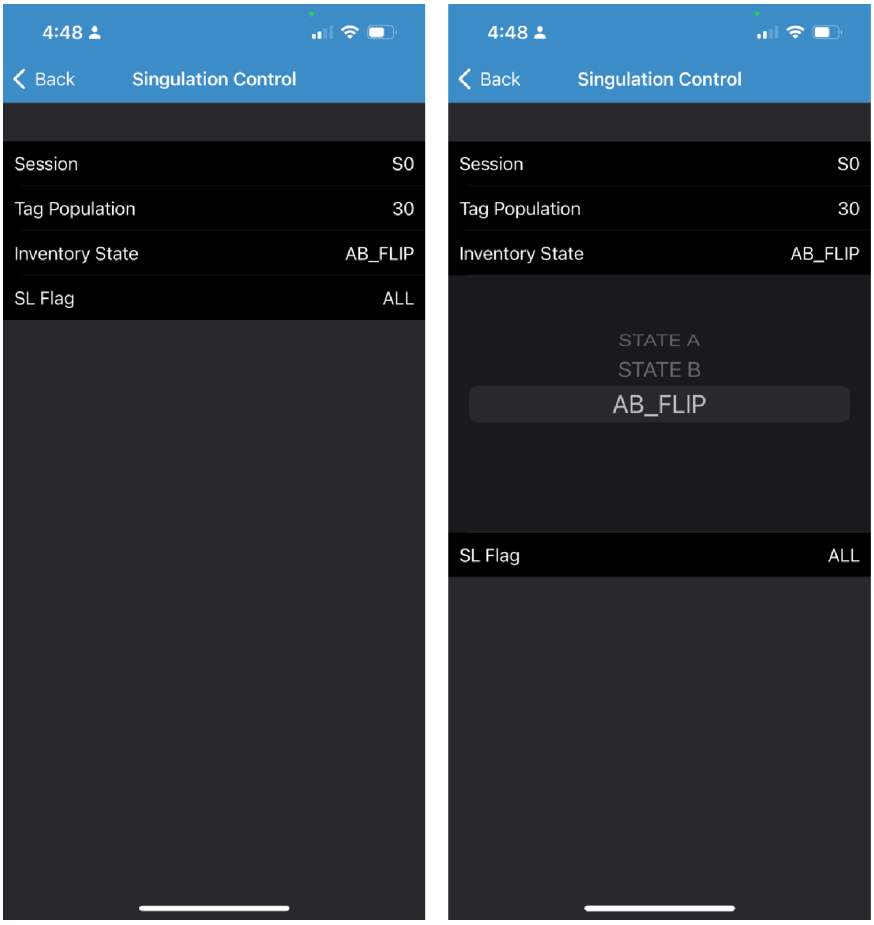
- Power Level - Displays the current selection and a text box for available power levels (as reported by the device). The default setting is 27.0 dBm (shown as 270; the value displayed is in units of tens of dBm). Japan units are set to a different default power level depending on the SKU type. The minimum power level when DPO is enabled is 3.1 dBm. When DPO is disabled, the minimum power level is 0 dBm.
- Link Profile - Displays the current selection and includes a drop-down list of available link profiles (reported by the device). Link Profile display format is as follows: Return link bit data rate in bis per second (for example 60000 -> 60 Kbs); Miller Value (for example MV_4 -> Miller 4); thus profile name M4 240K (240K becomes BLF) modulation type (PR ASK is the only one supported).
- PIE value has no units and is either 1500 or 2000 minimum.
- Tari applicable Tari value in thousands of microseconds (for example 6250 -> 6.25 microseconds).

NOTE: By default, the fastest read profile is selected and configures the reader for the maximum power level allowed based on the read profile. However, the dBm can be limited due to the regulatory requirements of the specified region in which the sled is being used.

Singulation Control

To view or configure the singulation control settings for each antenna.

- Session - The drop-down list includes the available session options (S0, S1, S2, S3).
- Tag Population - A numeric value of the estimated number of tags in the Field of View (FOV). Values shown are 30, 100, 200, 300, 400, 500, 600.
- Inventory State - State A, State B, AB Flip.
- SL flag - ALL, DEASSERTED, ASSERTED.

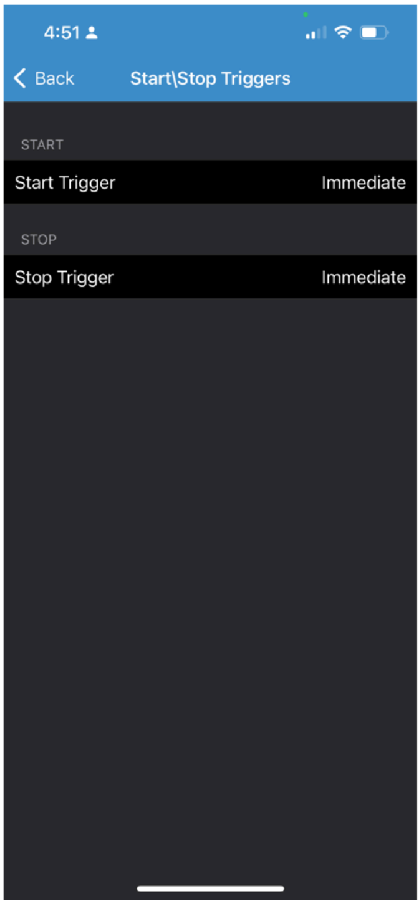


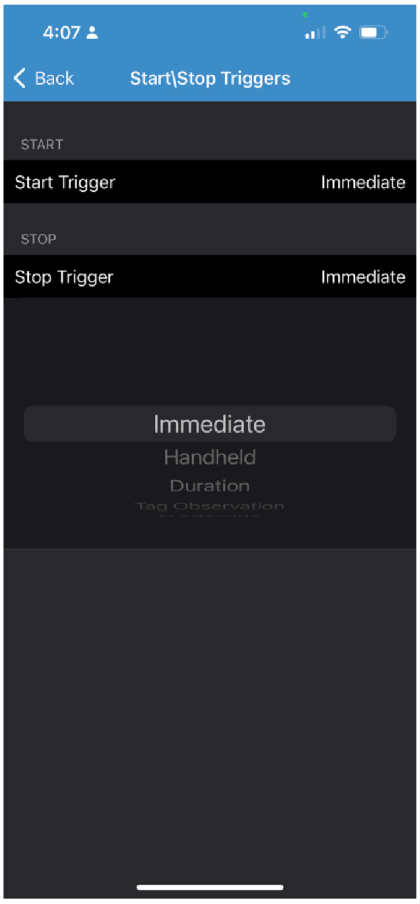
Start/Stop Trigger

The Start Trigger Periodic displays the Period input box (in milliseconds). The Stop Trigger Duration, Tag Observation and N attempts display numeric value input boxes.

All time entries are in milliseconds. All the required details for saving triggers to the reader must be entered or the application does not save the trigger settings to the reader. Required input for Start/Stop Trigger settings are as follows:

- Start Trigger
  - Immediate(default)
  - Handheld - Select either the Trigger Pressed or Trigger Released check box.
  - Periodic - Enter the period of time in milliseconds.
- Stop Trigger
  - Immediate(default)
  - Hand-held - Select either the Trigger Pressed or Trigger Released check box along with Timeout in milliseconds.
  - Duration - Enter the duration in milliseconds.
  - Tag Observation - Enter the tag count along with timeout in milliseconds.
  - N Attempts - Enter the number of attempts along with timeout in milliseconds.



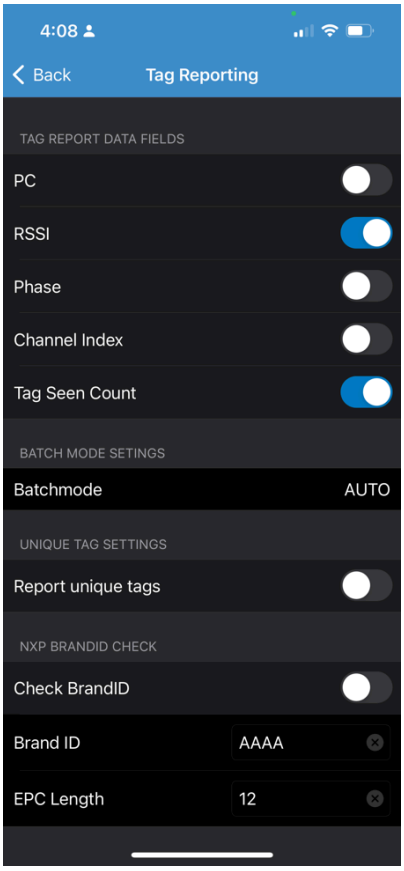


Tag Reporting

The Tag Reporting screen options include:

- Channel Index - Select to indicate whether or not the Regulatory Channel Index is reported as part of the Tag Data.
- Tag Seen Count - Select to indicate whether or not the Tag Seen Count is reported as part of the Tag Data.
- Report Unique Tags - When this option is enabled, the reader reports only unique tag reads. The Unique Tag reporting feature can be enabled when using Tag List Match mode.
- Check BrandID - Check box to enable the Brand ID option.
- Brand ID - Perform NXP BrandID check (supported only on NXP U-Code 8 and above tags that supports this functionality). Brand ID check can be initiated by enabling BrandID. Reader performs an inventory operation with additional verification on whether or not the tag inventoried matches the BrandID and reports.
- EPC Length - The EPC length provided will consider the length of EPC data to be matched for Brand ID tags from offset 0.
- PC - Select to allow reporting the PC as part of the Tag Data.
- RSSI - Selection indicates whether or not the Received Signal Strength Indication (RSSI) is reported as part of the Tag Data.

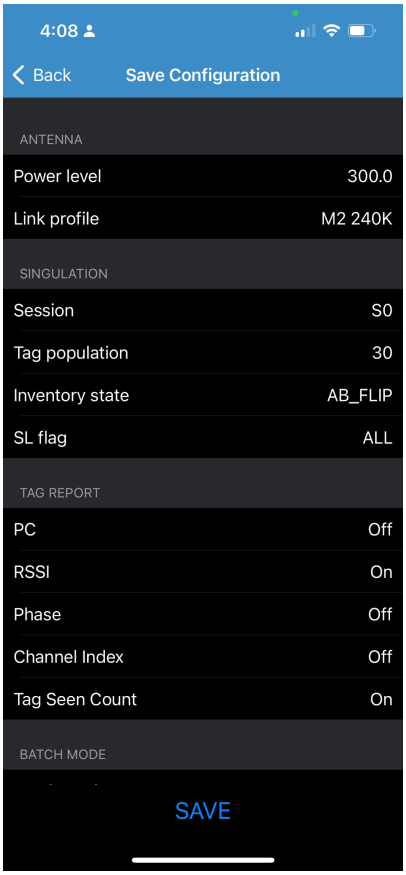
- Phase - Select to indicate whether or not the Phase is reported as part of the Tag Data.



Save Configuration

The Save configuration is used to save the settings and displays the current settings on the device.

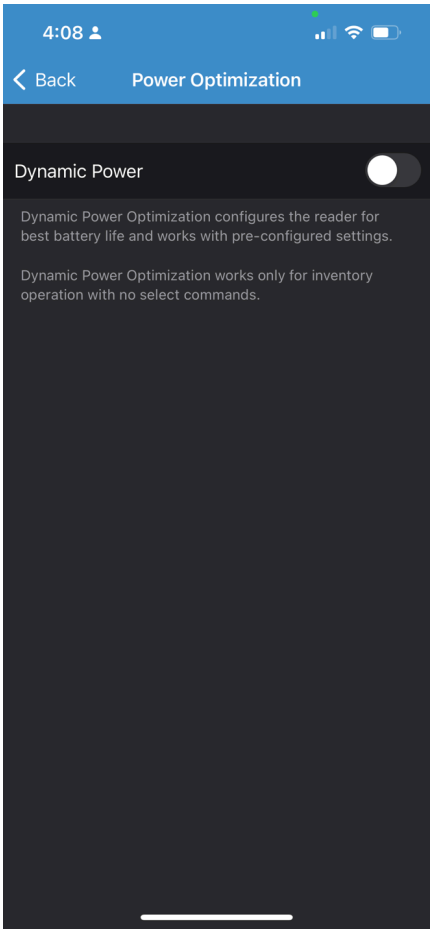
The settings are saved on the device until a reset to factory defaults is performed on the unit (see Settings on page 41). The Tag Pattern form field is automatically populated with tag data when a tag is selected from the Inventory screen.



Power Management

This screen provides an option to enable Dynamic Power Optimization (DPO) in the reader. Enabling DPO enhances battery life during inventory operations.

If Dynamic Power is On, a green battery icon appears in the title bar of the application. Tapping on this opens the Battery Status screen.



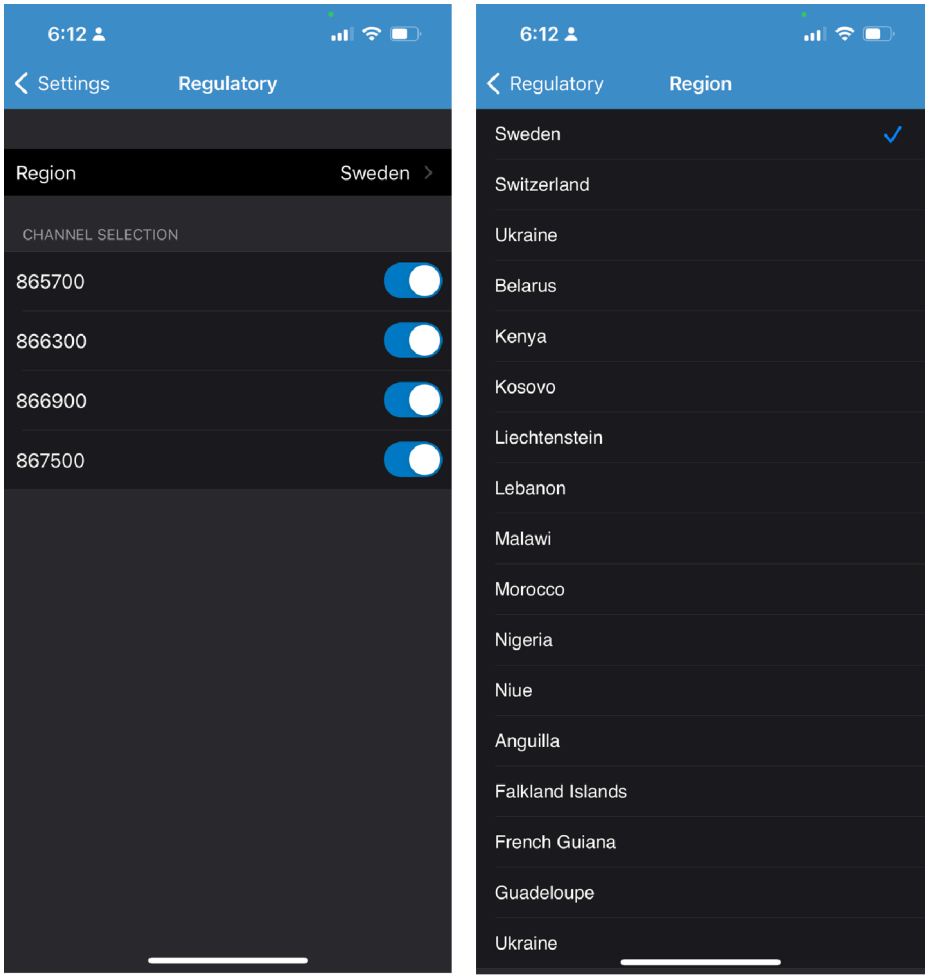
Regulatory

This setting provides the option to set the regulatory options.

1. From the bottom navigation bar, tap **Settings** > **Regulatory**.

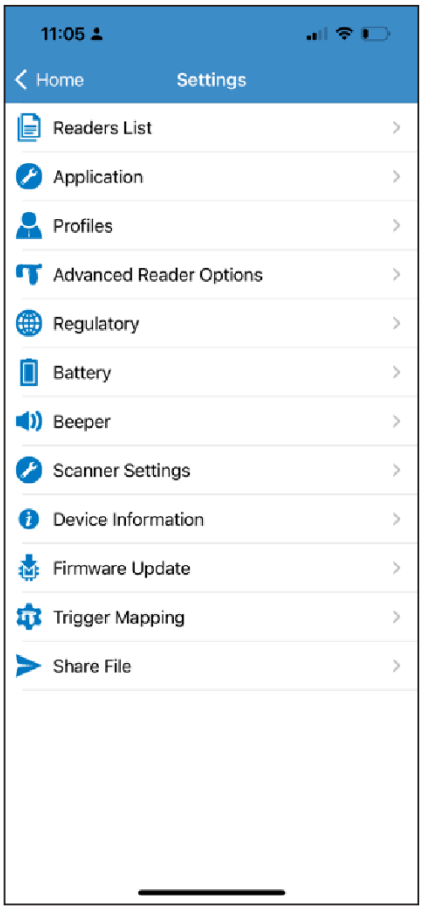
WARNING: Select only the country in which you are using the reader.

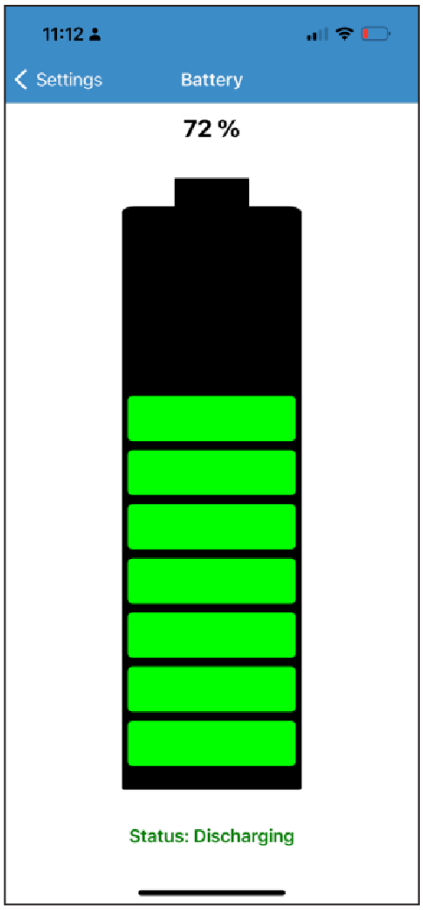
2. Select the region from the drop-down list.



Battery Status

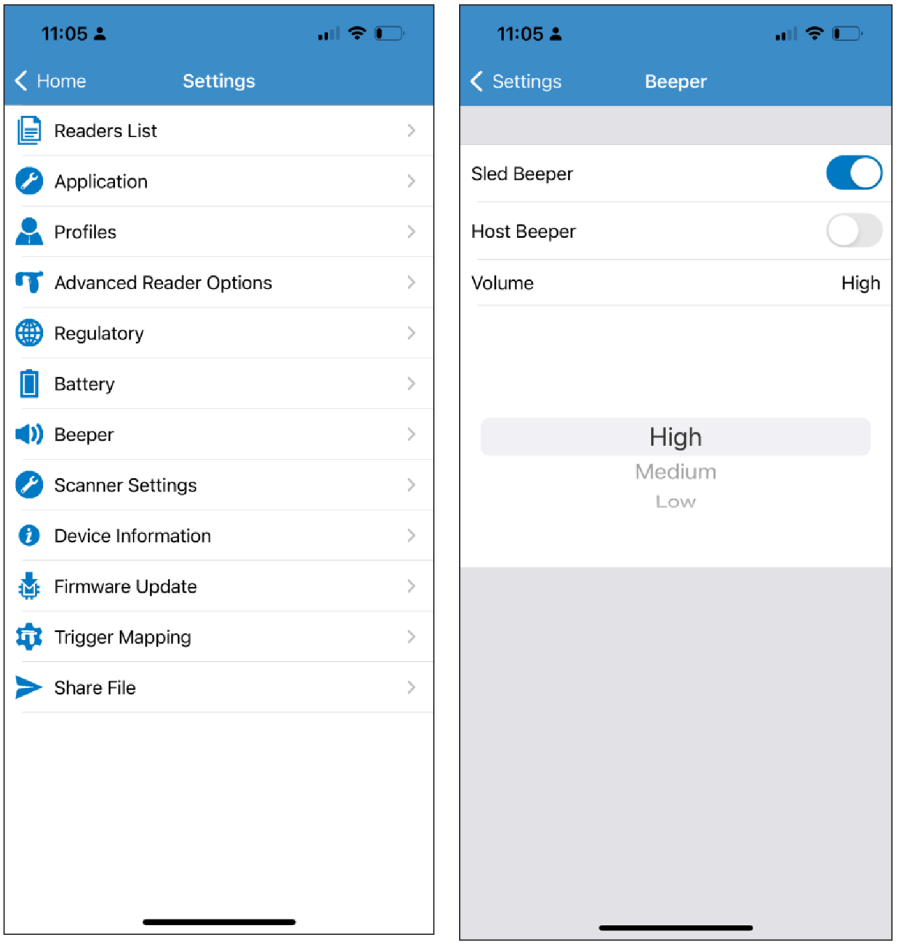
An active RFID reader could send an asynchronous notification regarding the battery status. The SDK will inform the application about the received asynchronous battery status even if the application has subscribed for events of this type. The SDK also provides the ability to cause a particular active RFID reader to send information about the current battery status immediately. The following images show both requesting and processing of asynchronous battery status-related notifications.


11:05
Home
Settings
Readers List
Application
Profiles
Advanced Reader Options
Regulatory
Battery
Beeper
Scanner Settings
Device Information
Firmware Update
Trigger Mapping
Share File


11:12
Settings
Battery
72 %
Status: Discharging

Beeper Settings

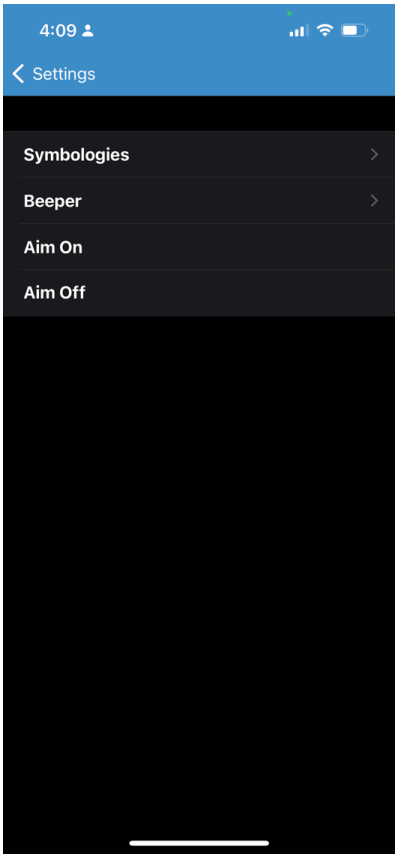
The SDK provides the ability to configure a beeper of a particular active RFID reader. The beeper could be configured to one of the predefined volumes (low, medium, high) or be disabled.



Scanner Settings

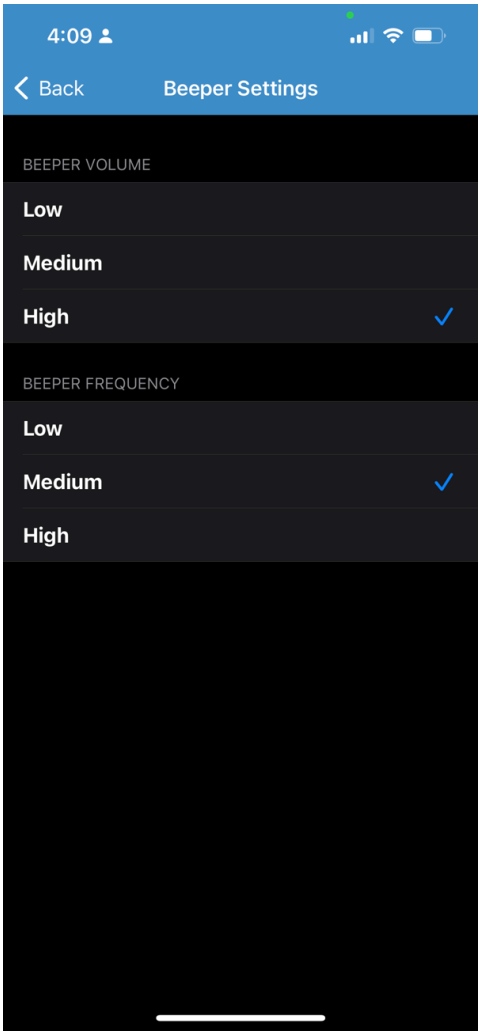
Scan Settings options include:

- Beeper - Allow user to change the beeper volume. Provides the option to change the scanner beeper volume to high, medium, or low.
- Symbologies - Allow user to select/enable specific barcode types. Supported symbologies include UPC-A, UPC-E, UPC-E1, EAN-8/JAN8, EAN-13/JAN13, Bookland EAN, Code 128, GS1- 128, Code 39, Code 93, Code 11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, Code 32, Data Matrix, PDF417, ISBN, UCC Coupon Extended Code, ISSN EAN, ISBT 128, Trioptic Code 39, Matrix 2 of 5, GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded, MicroPDF417, Maxicode, QR Code, Aztec, Han Xin Code, Australian Post, US PLANET, Netherlands KIX, UK Postal, Japan Post, MicroQR, Composite C, Composite AB, TLC39.
- Aim On/Off - Provides an aimer light that can be switched on or off.


4:09
Settings
Symbologies
Beeper
Aim On
Aim Off

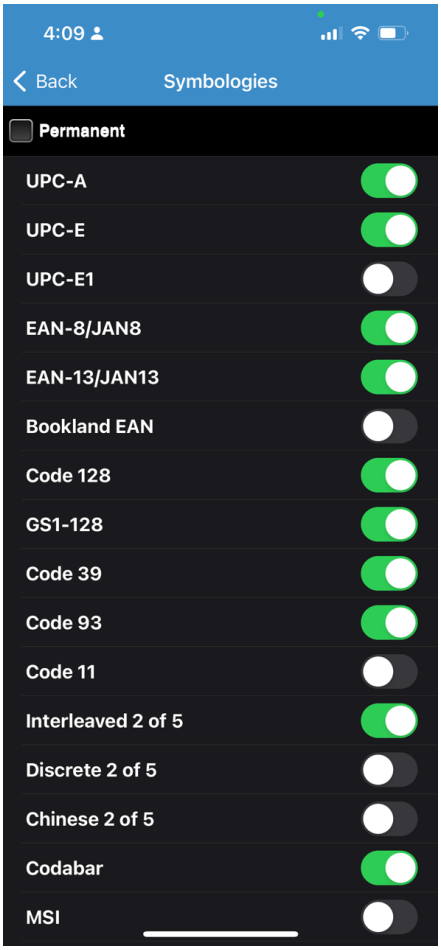
Beeper

This setting provides the option to change the scanner beeper volume to high, medium, or low.



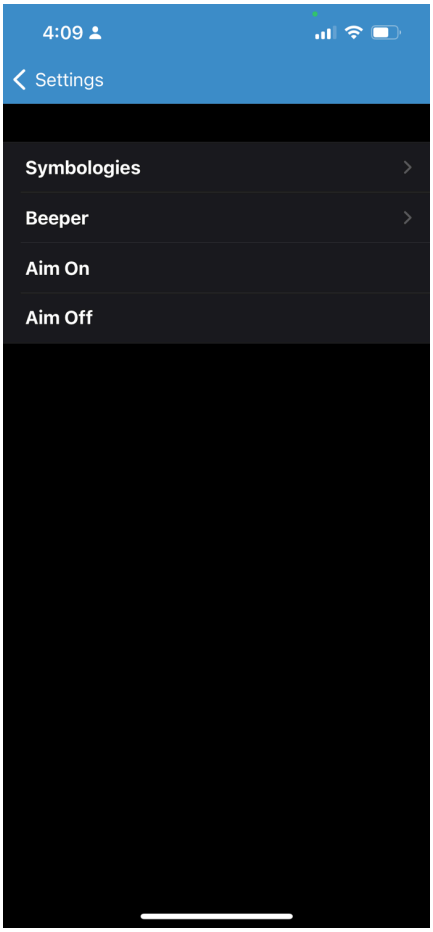
Symbologies

This setting allows users to select/enable specific barcode types.



Aim On/Off

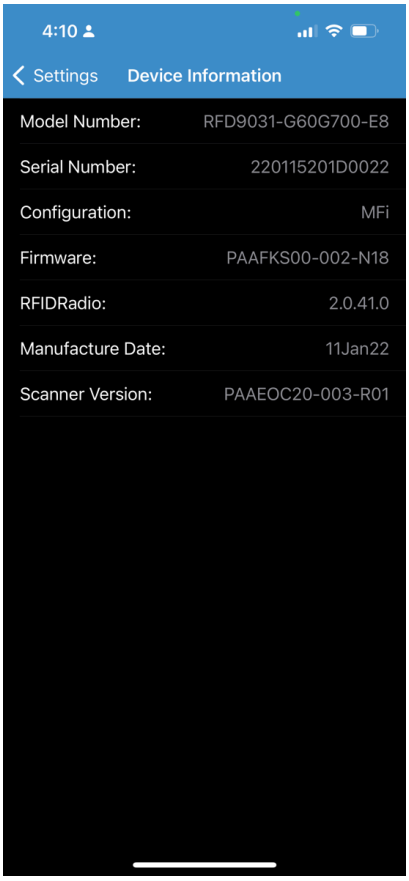
This setting provides an aimer light that can be switched on or off.



Device Information

The Device Information displays the following:

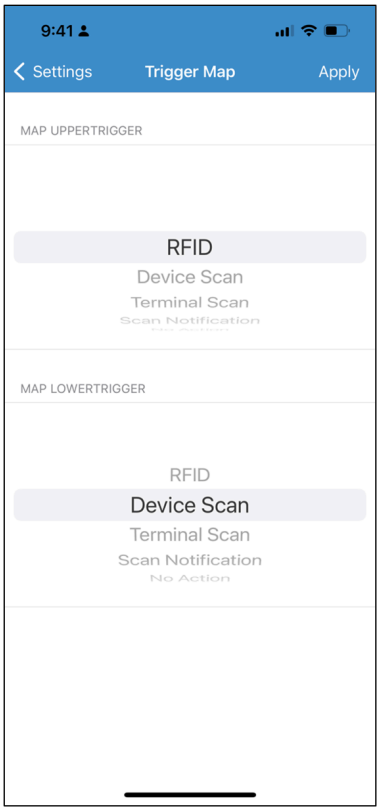
- Model Number
- Serial Number
- Configuration
- Firmware
- RFID Radio
- Manufacture Date
- Scanner Version



Trigger Mapping

To change the mapping for the upper and lower trigger.

- Upper trigger: Use the upper trigger for RFID and Scanning operations
- Lower trigger: Use the lower trigger for RFID and Scanning operations
- Available options include:
  - RFID
  - Device Scan
  - Terminal Scan
  - Scan Notification
  - No Action

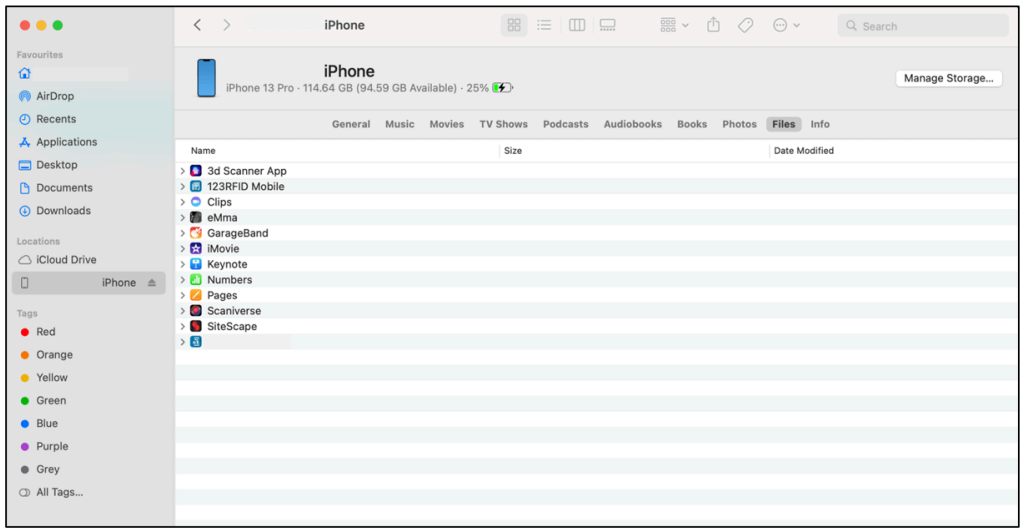


Firmware Update

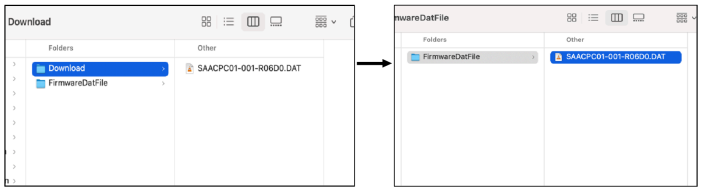
To perform a firmware update in the 123RFID mobile application for iOS, you need a firmware file in ".dat" format.

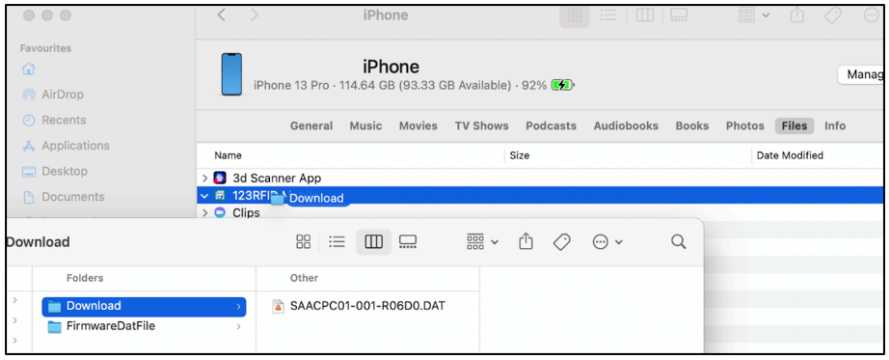
Updating Firmware

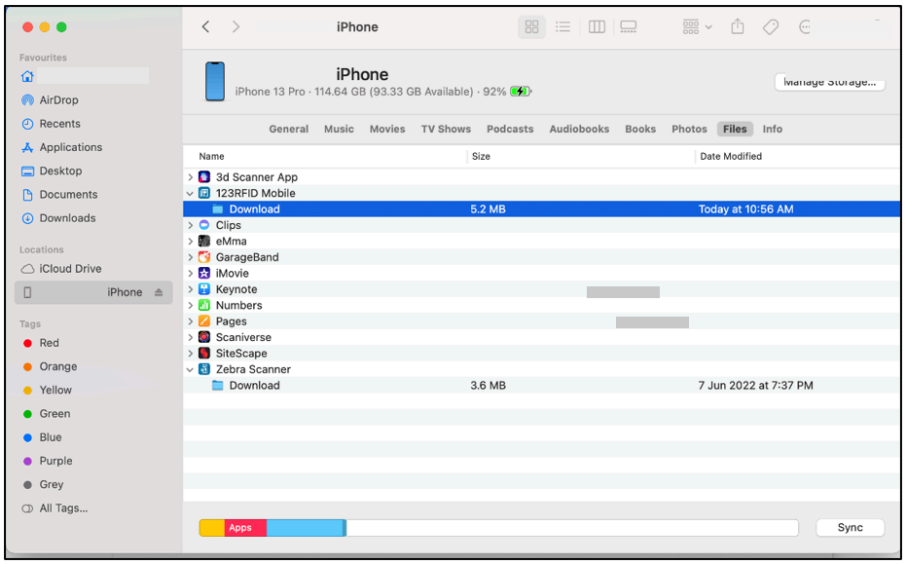
1. Open Finder on Mac and select the **Files** tab.



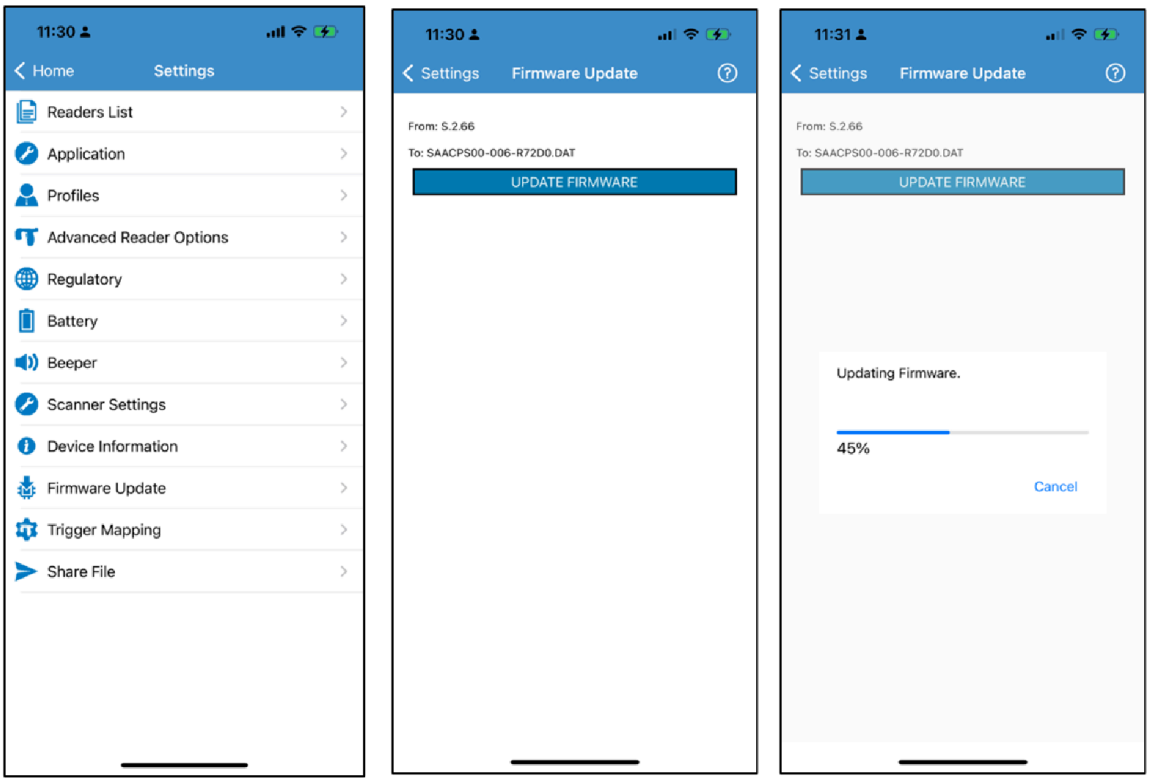
2. Create the **Download** folder on Mac and add the firmware file into that folder. Drag and drop the **Download** folder into the **123RFID Mobile** application in the finder.







3. Navigate to the Firmware Update screen in the **123RFID Mobile** application and tap **Update Firmware**.

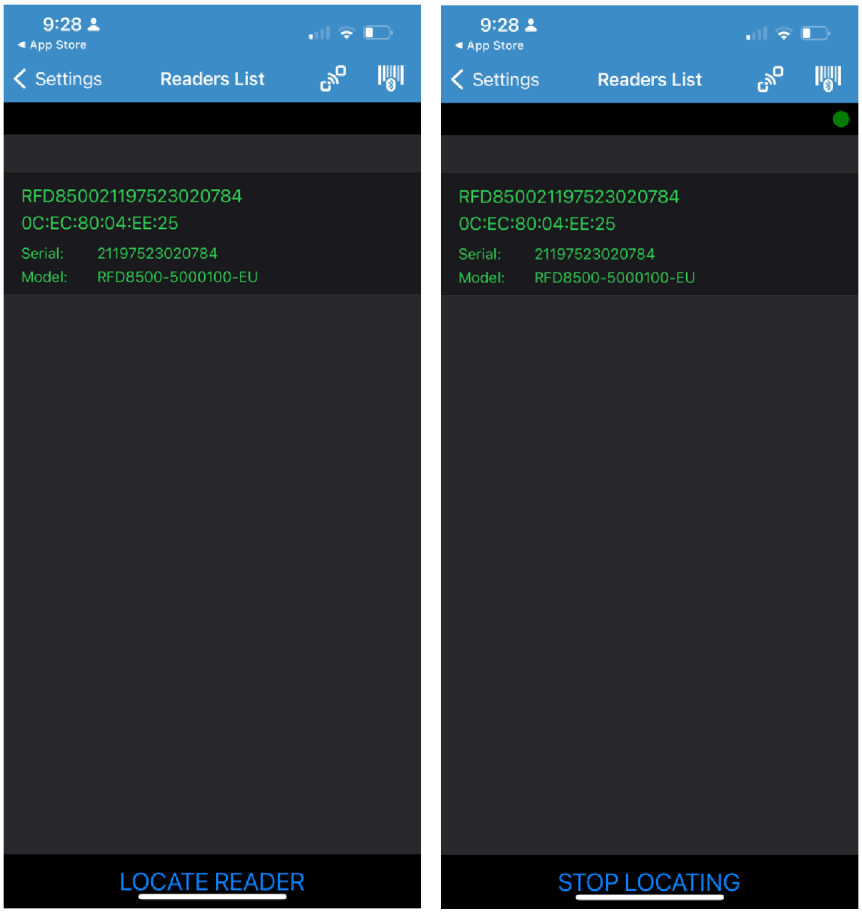


Locating a Reader

To find a reader to connect:

1. Go to the Reader list page.

2. Connect the reader and tap the **Locate Reader** button. You can hear a beep sound from the reader.



NOTE: Make sure your reader is enabled for the beep.

Batch Mode

When the RFID reader is configured to operate in batch mode, it can read RFID tag data without being connected to a host device.

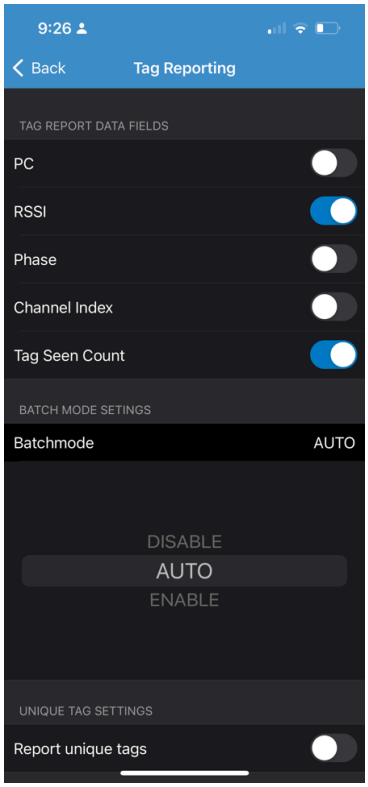
Mode	Description
BATCH_MODE.DISABLE	Tags are reported in real-time as they are inventoried. No data is preserved if the application disconnects.
BATCH_MODE.ENABLE	Tags are stored in an internal database maintained in the reader and are not returned to the host in real-time. While in batch mode, the reader will continue to perform inventory even if disconnected from the host.
BATCH_MODE.AUTO	Tags are reported in real-time while the application running in the inventory is still connected. If the reader is disconnected, the tag data is stored in an internal database maintained in the reader. The inventory must be stopped to retrieve the stored tags, and the reader will get the stored tag data.

NOTE: To test the batch mode, you can exit the 123RFID Mobile iOS application when starting an inventory (Do not press stop).

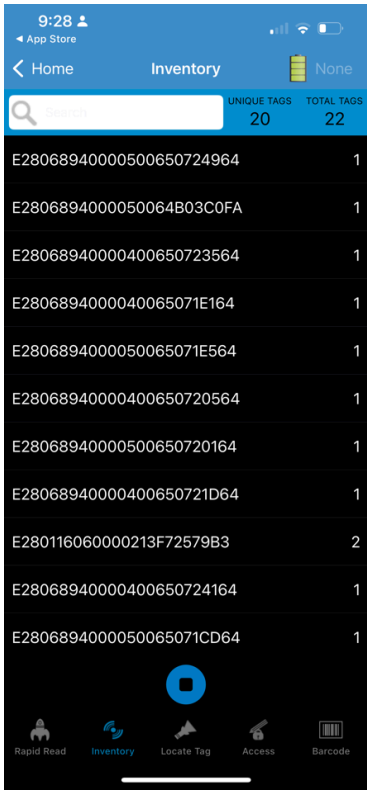
Setting Batch Mode to Auto

This setting sets the batch mode to auto.

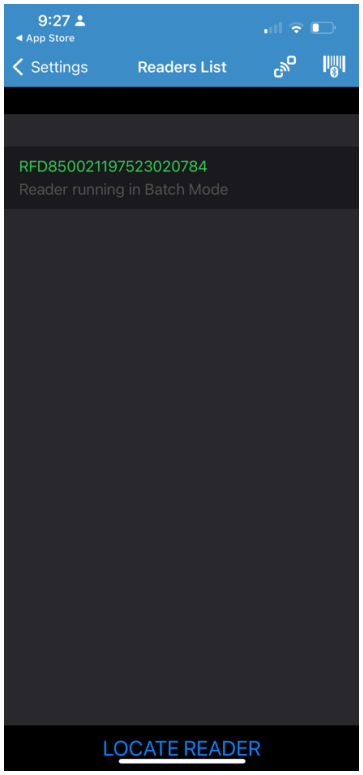
1. Set the batch mode to auto.



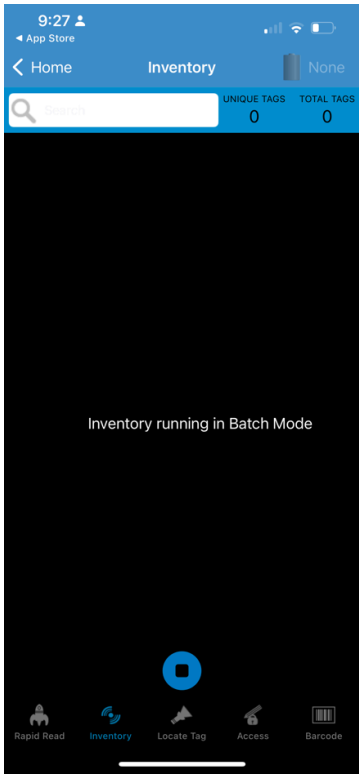
2. Start the Inventory and exit the application.



3. Connect to the reader (after Bluetooth is out of range).



4. Go to the Inventory screen and tap **Stop**.

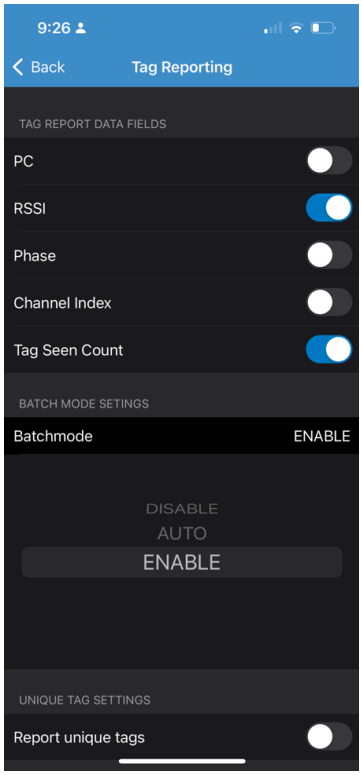


5. The application displays tags read when Bluetooth is out of range.

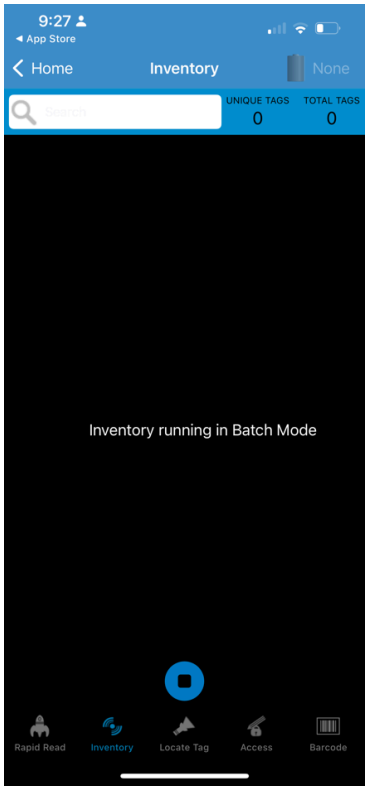
Enabling Batch Mode

This setting enables the batch mode.

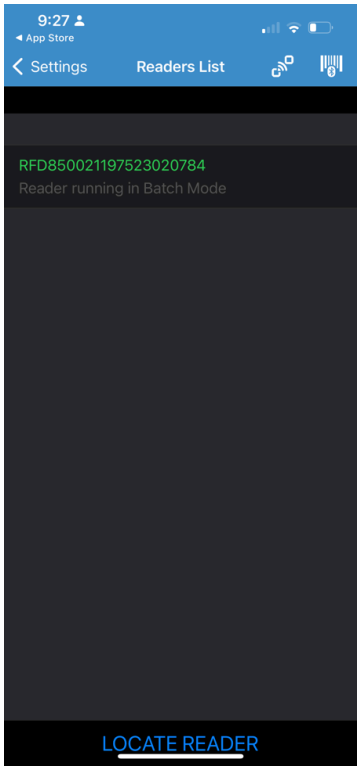
1. Set the batch mode to enable.



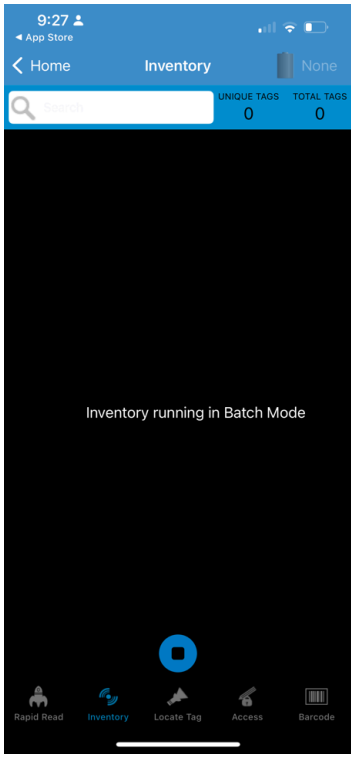
2. Start the Inventory and exit the application.



3. Connect to the reader (after Bluetooth is out of range).



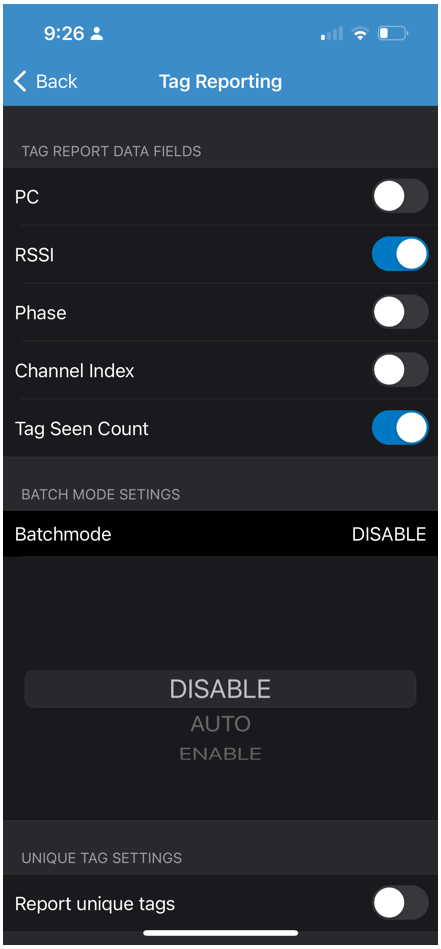
4. Go to the Inventory screen and tap **Stop**.



5. The application displays tags read when Bluetooth is out of range.

Disabling Batch Mode

Tags are reported in real-time as they are inventoried. No data is preserved if the application disconnects.



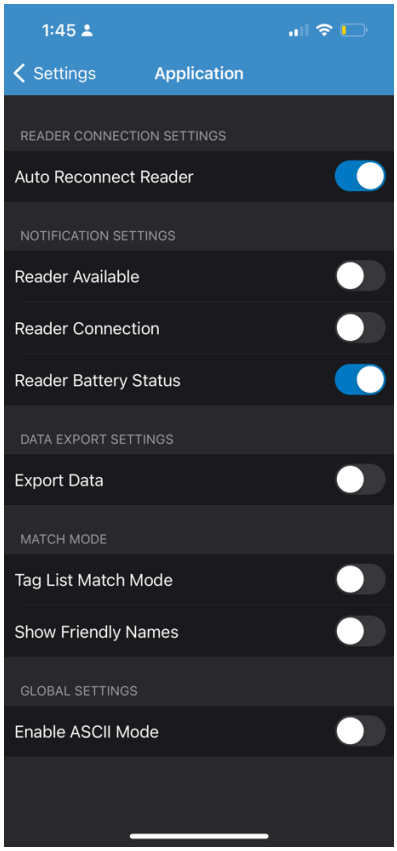
Auto Reconnect

If the option is enabled, the SDK automatically establishes a communication session with the last active RFID reader that had unexpectedly disappeared after the RFID reader was recognized as available.

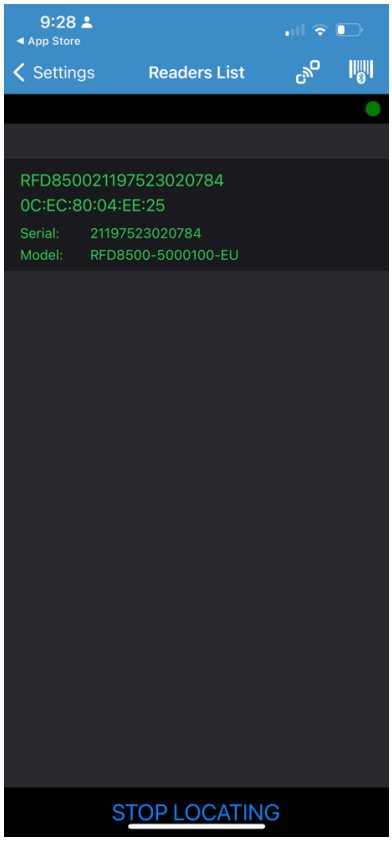
Enabling Auto Reconnect

This setting enables the auto reconnect.

1. Enable the Auto Reconnect Reader.



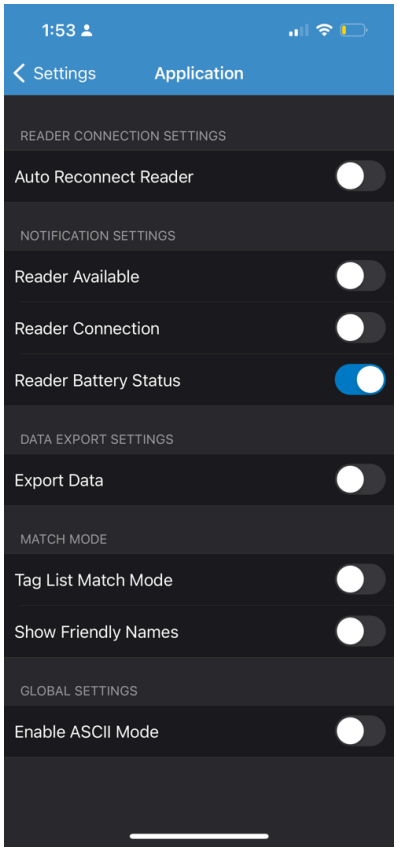
2. Exit the application and go to the Readers list. The reader automatically connects.



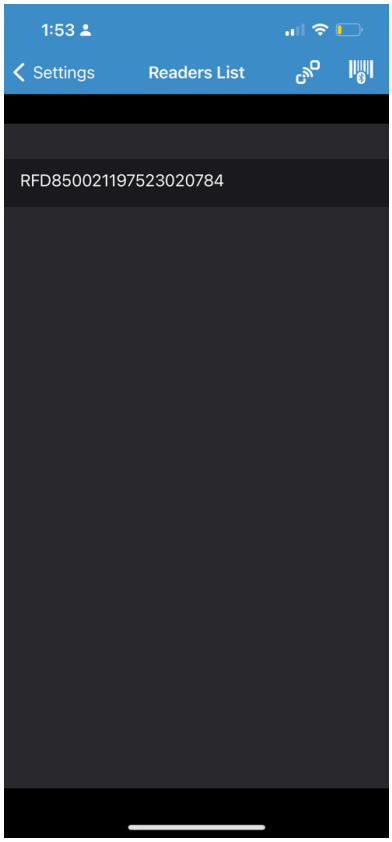
Disabling Auto Reconnect

This setting turns off the auto reconnect.

1. Disable the Auto Reconnect Reader.



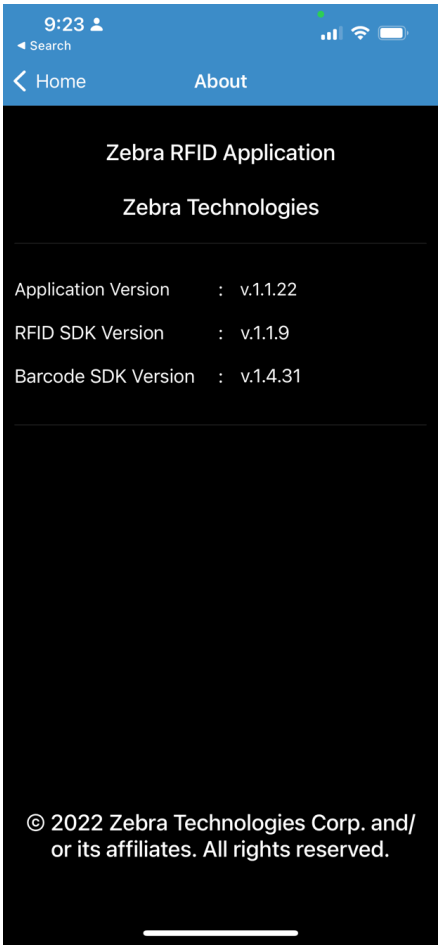
2. Exit the application and go to the Readers list. Connect the reader manually.



About

This screen displays:

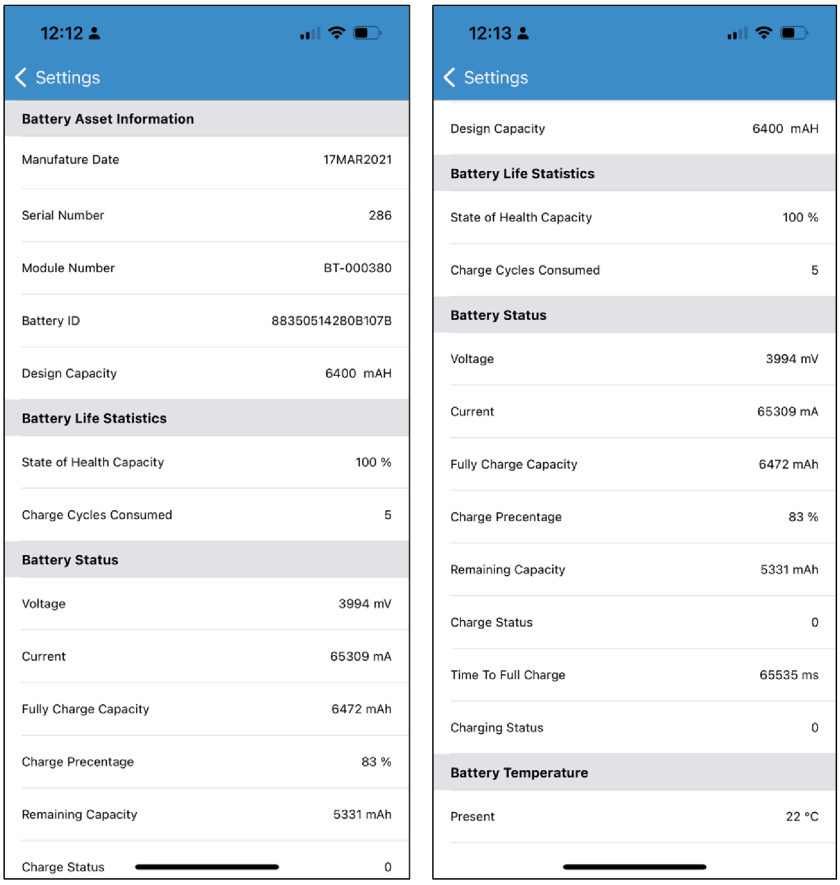
- Application Version
- RFID SDK Version
- Barcode SDK Version



Battery Support

This screen displays the Battery details. Go to **Settings > Get Battery Status**. The following screen will display.

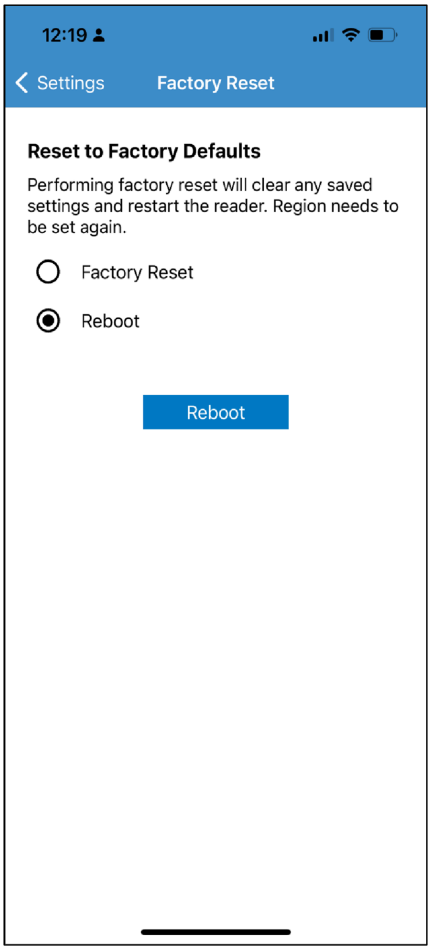
NOTE: This feature is not supported for RFD 8500.



Factory Reset

Performing a factory reset clears any saved settings and restarts the reader. The region needs to be set again.

Go to **Settings** > **Factory Reset**. The following screen will display.


12:19
Settings
Factory Reset
Reset to Factory Defaults
Performing factory reset will clear any saved settings and restart the reader. Region needs to be set again.
Factory Reset
Reboot
Reboot