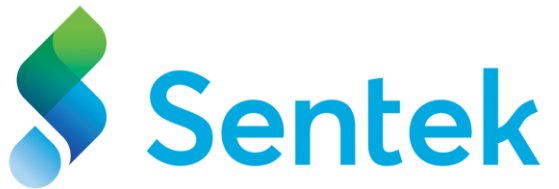# Sentek Connect for IOS Users

Date: 04/02/2022
Version:1.2

Sentek

Overview of Sentek Connect

Sentek supplies an iPhone App on the App Store. To communicate with the Sentek Bluetooth probe, this App must be downloaded to your iPhone or tablet.

The App requires a 9.0 version or later. It is compatible with iPhone, iPad, and iPod touch.

Getting Started

This chapter provides information about how to obtain the Sentek Connect for iOS application and how to log in. It also provides an overview of the interface, including a list of icons.

Sentek

1. Download Sentek Connect App

- Open **App Store** app on your phone or tablet by tapping the app icon.

- Type **Sentek Connect** to download the application.

- Once the App is installed, you can see the **Sentek Connect** icon on your phone screen.
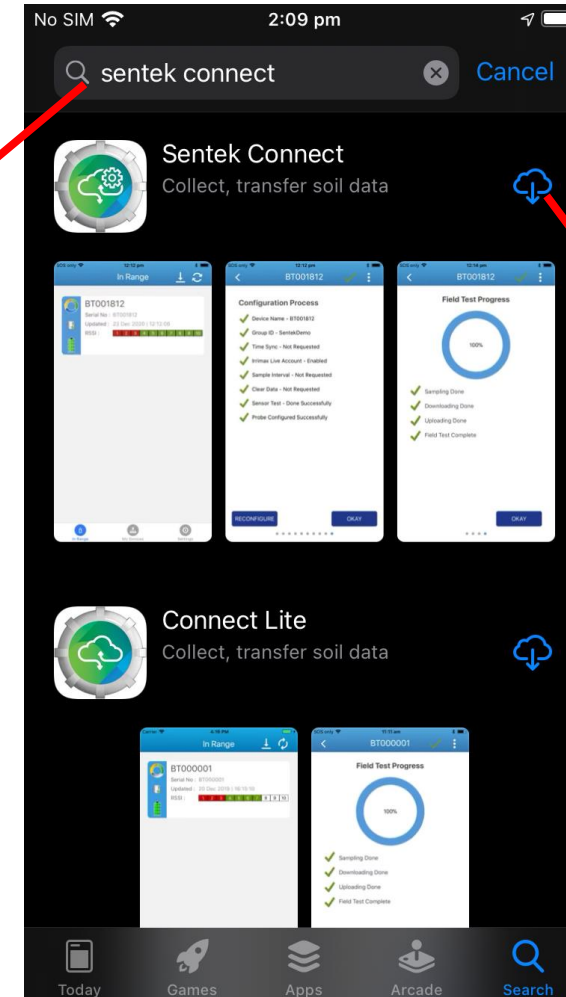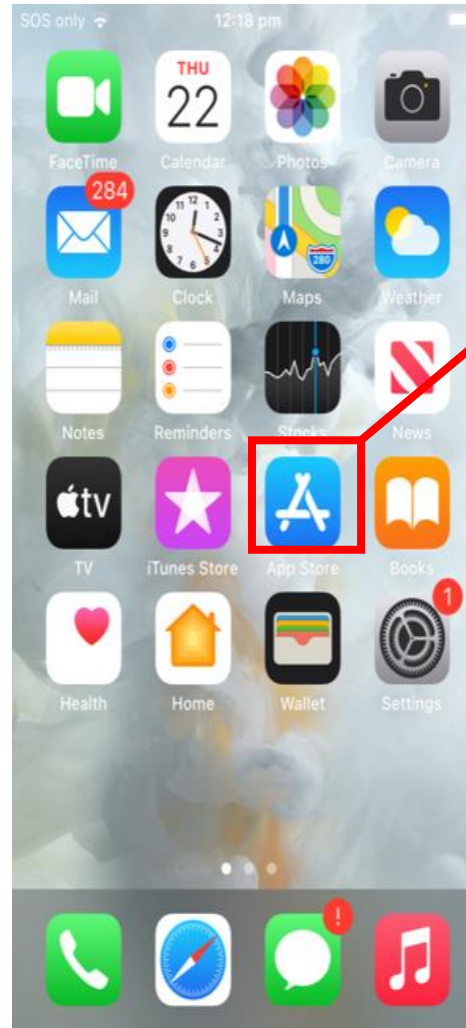
Installing Sentek Connect for IOS Devices
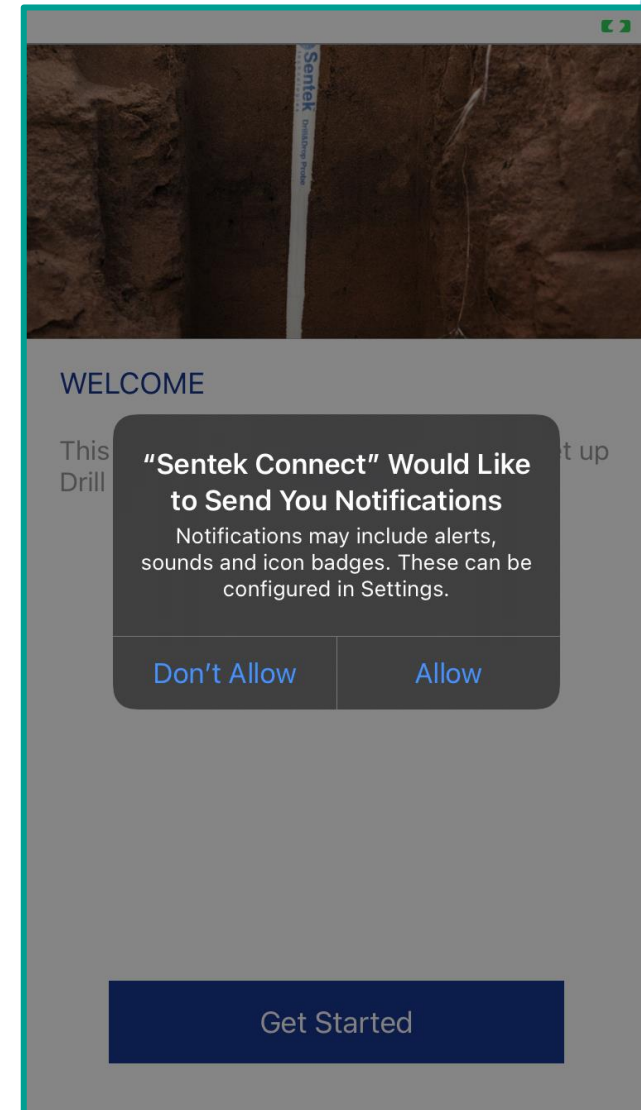
1. Installation Steps

First Time Install - When the Sentek Connect app starts for the first time, the introductory wizard will guide you through the necessary steps to set up the app with your IrriMAX Live account and Group ID.

Once configured, the app turns your mobile device into a gateway and management platform for the wireless Drill & Drop probes, later to be added.

Permissions

Notifications - This permission needs to be allowed for the app to be able to send when you notification to store sampled data from probes on your mobile device.

Next , Click **Get Started** button to move to the next screen.

WELCOME

This ... t up Drill

"Sentek Connect" Would Like to Send You Notifications
Notifications may include alerts, sounds and icon badges. These can be configured in Settings.

Don't Allow   Allow

Get Started

2. Installation Steps

Adding an IrriMAX Live account lite/full Version

Your probe comes with a subscription to the IrriMAX Live platform, accessible from any device connected to the internet.

Enter your username and password for IrriMAX Live as supplied.
After tapping **'Add'**, the wizard will verify the account details by briefly establishing a connection to IrriMAX Live.

Note: Selecting skip will default the app to the lite version. However, you can change the change to the full or lite version by going **About** screen.

(For more information refer *to page slide 11*)

ADD:
IrriMAX Live Account

Please enter account details of your IrriMAX Live Account.

Next

SOS only   3:35 pm

ADD:
IrriMAX Live Account

Add IrriMAX Account

Please Enter your account details to setup IrriMAX Live account.

Selecting skip will default the app to the lite version.

IrriMAX Live

Username

Password

Add   Skip

Next

3. Installation Steps

Create your group ID

The Group ID is the primary level of security preventing accidental access to a probe or a probe group, from un-authorised people. Only an app that includes this Group ID can see the Probe.

Group IDs can be created at any time but Group IDs need to be set up before a probe is added to this group. Also after a probe had been assigned to a specific Group ID, the standard Sentek Connect app allows for easy switching probes to other groups listed in the Group ID list.

4. Installation Steps

Unscrew the top cap anti-clockwise and Insert the battery in its holder. Mind the polarity, with the positive terminal pointing up. Re-seat the top cap and tighten, making sure the seal and surfaces are clean.

Any dirt on the seal could allow moisture to enter the battery compartment.

New Look

STEP TWO:
Add the Battery

Unscrew the top cap of the probe.

Insert the supplied battery into the compartment.
Ensure the polarity is correct.

Next

5. Installation Steps

Sentek

If you have a probe ready to be set up and added to a Group ID, keep the distance between your mobile device and the probe within five meters.

After confirmation of **STEP FOUR**, the app will go to the In Range ' page to list any new non-configured probes found.

Your probe should advertise itself with its serial number in bold. Also, the nearest probe will indicate the highest measured signal strength (RSSI) and be placed at the top of the list.

Click **GO TO APP**

STEP THREE:
Make sure your mobile device and probe can connect

Check that the probe is no more than 5 metres(15 feet) away from your mobile device.

Next

STEP FOUR:
Identify your probe

Identify the probe using the serial number on the probe and match it with the serial number displayed on the screen.
Please select the identified probe to continue

BT000001
Serial No : BT000001
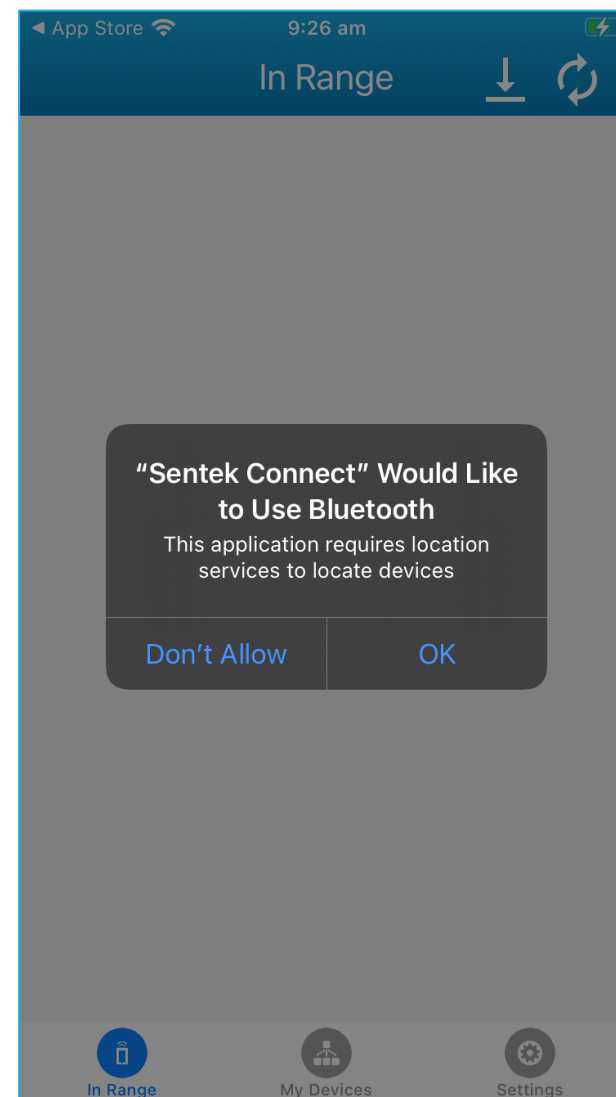Updated : 03 Oct 2019 | 16:52:21
RSSI : 1 2 3 4 5 6 7 8 9 10

Next

Introduction Complete

☑ Location Access

☑ Irrimax Account

☑ Group ID

☑ Battery

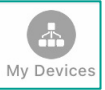☑ Within Range

☑ Serial Number

GO TO APP

Allow the app to access your location on your IOS devices.

Click OK

2. Main Screen
In Range

Serial .No	Description
	Global Download Button -This will download data, if available, from all probes within range that are displayed in the In Range list. The data will be stored on the mobile device until uploaded to IrriMAX Live via Wi-Fi or the mobile network if chosen.
	The rotating circle icon start (rotating) or stop (not rotating) the scanning of each probes status, A new scan is automatically started whenever changing to the In Range view.
In Range	In Range is the main screen wherein you can see the current status of each probe which is connected to your App.
My Devices	The Devices option shows all probes that have ever been connected to this App.
Settings	Settings gives you the flexibility to customise your probe settings.
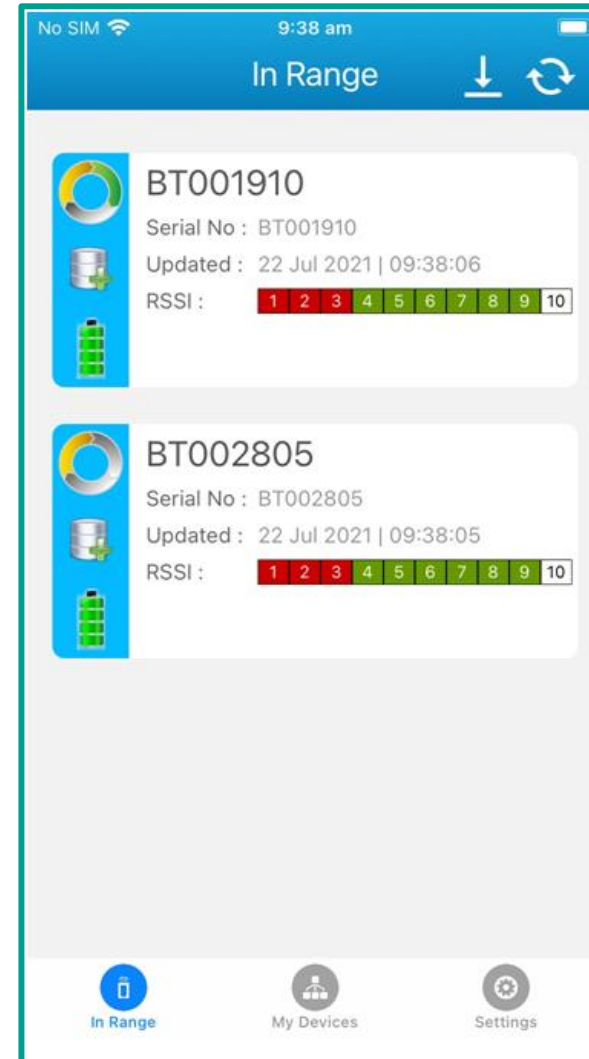
My Devices

Swipe left or tapping the Devices option shows all probes that have ever been connected to this App. It shows the most recent status and number of days since the last successful download.

The sorting works by grouping probes into three groups which are group sorted in order shown.

The sort mechanism prioritises the devices that need to be downloaded at the top, while putting those they haven't been downloaded for a considerable time at the bottom. The devices in between are those that have been downloaded and are then sorted by uploaded time, but that is typically the same as downloaded time when Auto Upload is enabled.

Tap to Upload

My Devices

BTDEMO12

None

BT001023

Upload Complete. 2021-08-06 14:24

lchur0

Upload Complete. 2021-08-06 14:27

BT002129

Pending Enable

BT001087

None

4.Settings

This section describes the options available to you for customising the probe settings.
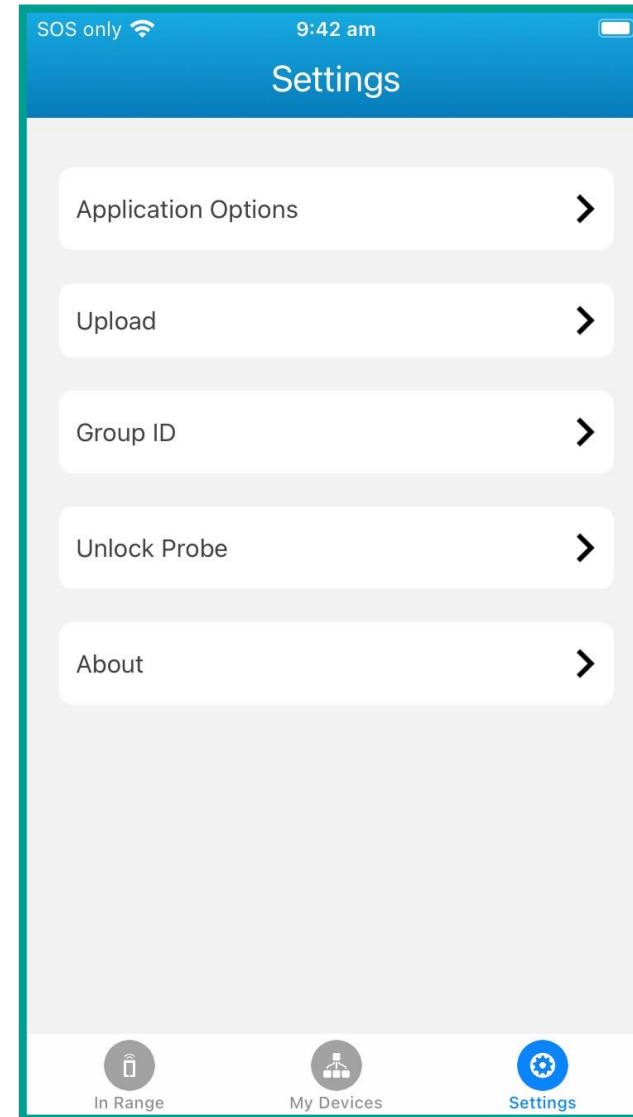
Manage your Application

This chapter describes settings for administering and maintaining your Sentek Connect App.

Sentek

In Range

In Range

Progress icon

Yellow

To start with once your Probe connection is established to the App. You can see the yellow colour indicating the probe is available.

Yellow + Green

Next, once the probe is connected and configured the icon turn to yellow+ green.

Yellow + Green + Blue

Now your probe is all set for uploading the files . And the icon into yellow +green blue.

Yellow Again

Once you decommission the Probe, until you don't configure it the icon remains in a connected state.

This displays the current status of the probe.

In Range

Once the Sentek Connect App is installed, you can view all the probes to which this App currently has access (matching Group ID). They are displayed in Probe Sort Order (see Settings).

Also, in the bottom of the screen you can view other options like **My Devices** tab and **Settings** tab.

With the standard IOS header you can see the download icon, and the rotating icon which is actively scanning probes.

This displays the status of the probe:

- Background colour:
  - **White** - active and accessible
  - **Yellow** - probe will remain Unlocked for 7 days
  - **Grey** - visible but not accessible (*Show device from all groups* is Enabled)

- **Probe name**: Default is serial number, but it may be changed during probe configuring e.g., farm field name or crop name

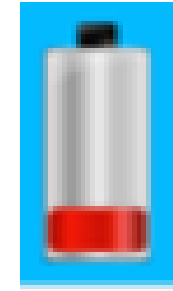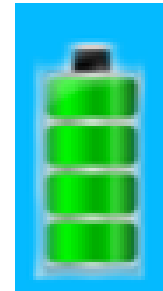More information on the **In Range** in next slides…
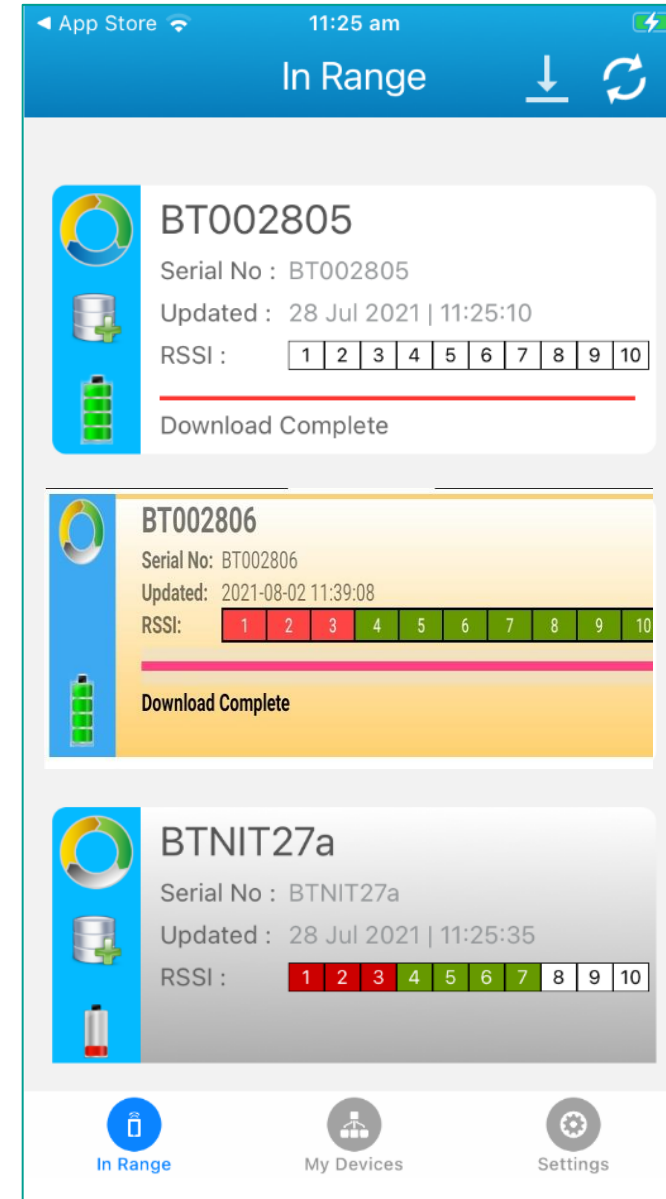
White

Yellow

Grey

In Range

Database : Status indicating probe has new data to download.
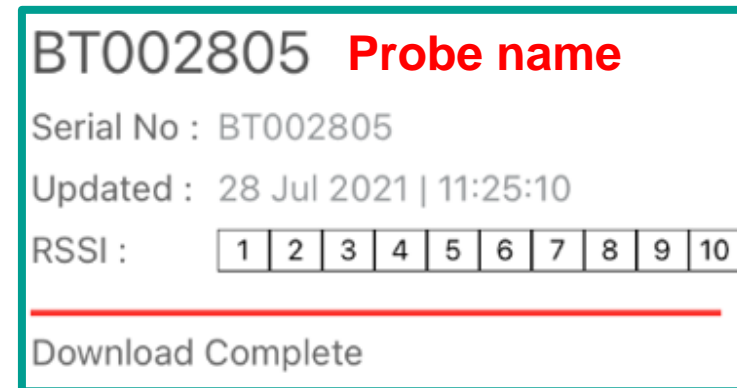

Probe Battery capacity: 4 **Green** bars fully operational, 2 **Orange** bars battery marginal (change battery soon), 1 **Red** bar samples not being taken (change battery immediately).

In Range

- **Probe name:** By default it is your serial number, but it may be changed during probe configuring e.g. farm field name or crop name

- **Serial Number**: This number is assigned during the manufacture. It matches the serial number printed on the top of the cap and internal label.

- For example you can see the serial number.

| BT002805 | **Probe name** |
| Serial No : BT002805 |
| Updated : 28 Jul 2021 | 11:25:10 |
| RSSI : | 1 2 3 4 5 6 7 8 9 10 |
| Download Complete |

- **Updated**: It shows the date and time of when the probe was last seen during scanning.

- **RSSI:** (Received Signal Strength Indicator): This is the probes signal strength as detected by the App. Closer probes have a higher signal strength

- **Progress Bar** : The Progress bar shows you the progress on download or upload of the data.

In Range

RSSI (Received Signal Strength Indicator): The value is 1 through 10 or db's when Advanced User is enabled (see Settings).

Probes that are close to the App device display higher numbers or lower -db. RSSI in red is marginal and communication may fail.
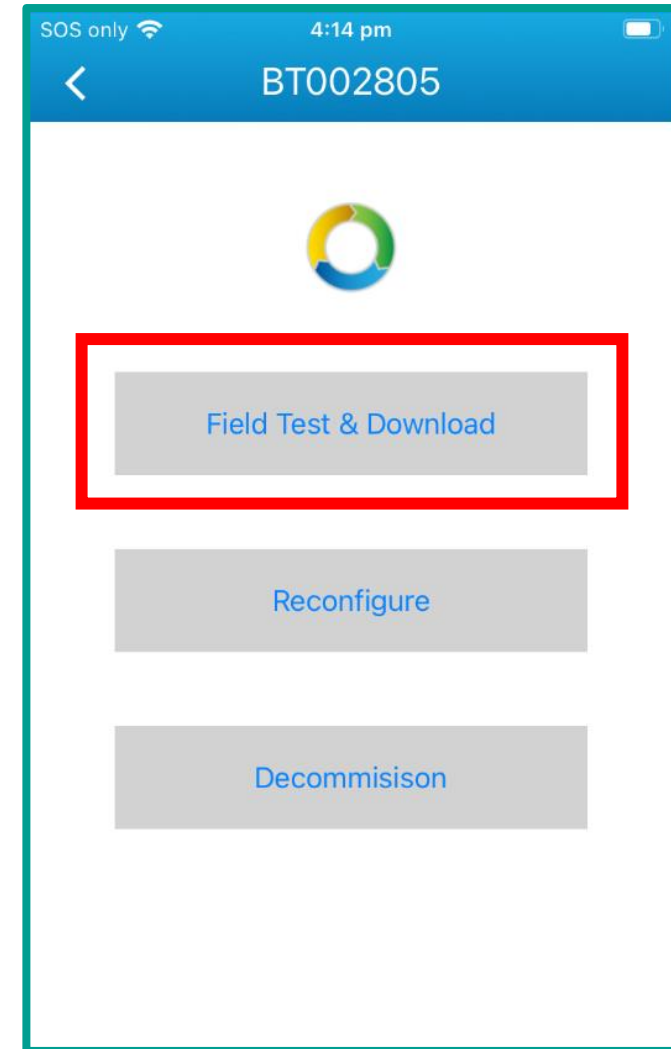
Field Test & Download

Tap Field Test & Download

Before the Field Test commences with downloading and uploading data from the probe, it will show you the live readings.

You can swipe left/right to step through the various sensor readings.
(*Moisture, Temperature, and Salinity*) .

Field Test & Download

Time Sync

This option synchronises the probe time with the clock on your mobile device.

It allow the App to set the probe time to the App time (Sync or skip).

Sensor Sampling

Field Test Progress

As each step is completed a tick (**Green**) or cross (**Red**) shows if the step was successful or failed.

Click **OKAY.**
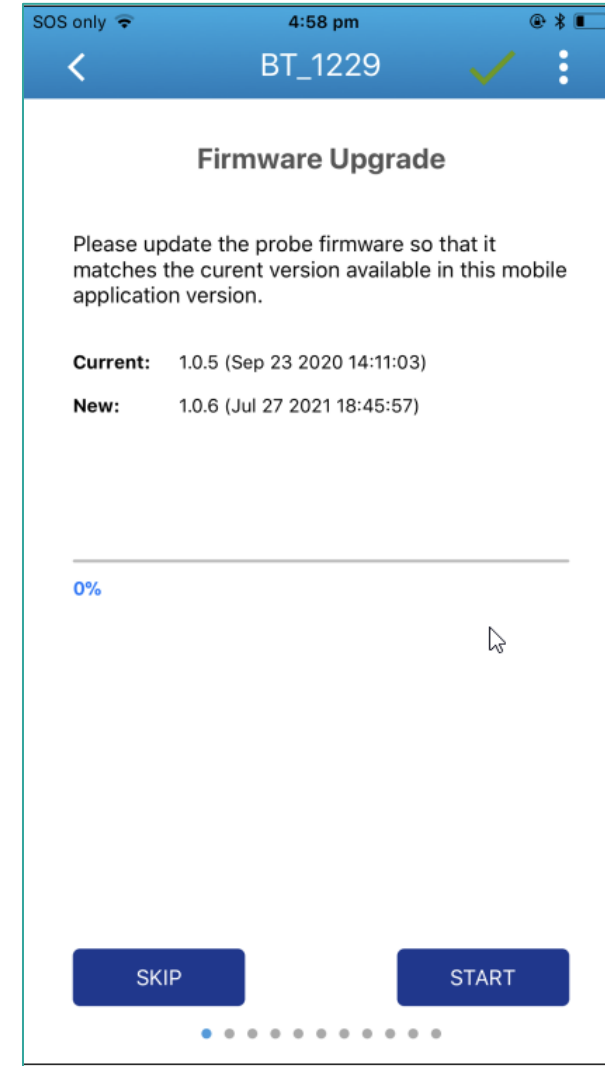
Reconfigure

Sentek
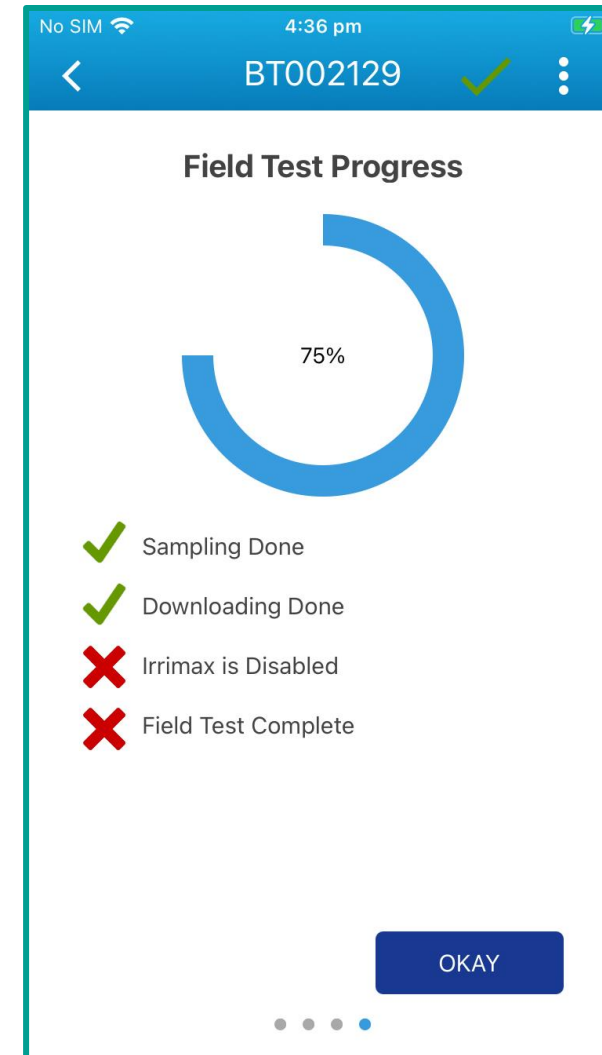
Update the Firmware

The App contains a copy of the most recent firmware and if this version is different to the firmware in the probe you will be prompted to update the probe firmware to this version.
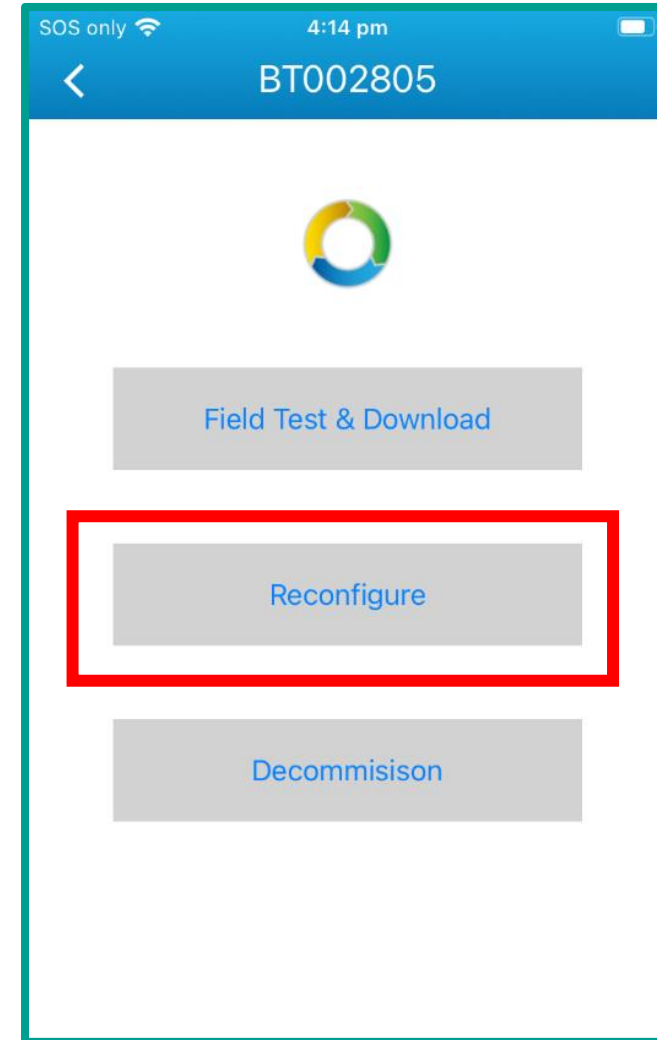
Click **Start** to upgrade the new firmware.

Reconfigure

Reconfiguring a probe can be used for managing probes that have been re-deployed or need settings changed e.g sample rate, Group ID, probe name etc.

Reconfigure

Probe Name: Default is serial number, alternatively the farm field location or unique crop identifier e.g. South paddock or Potato1.

- Probe name is alpha numeric and underscore and is 16 characters maximum.

Note : The probe name is the IrriMAX Live probe name, within in the IrriMAX Live account of the username.

Click **NEXT**.

Reconfigure

Sentek

Group ID

This is a level of privacy (only those knowing the Group ID can see the probe.

Initially "Public/None" is the default and available to any user.

Unless you want Group ID None/Public, you should add a new group ID using **Settings** before setting the Group ID for this probe.

Note: It is recommended you or your distributor selects a **Group ID** unique to you or to each of their customers.
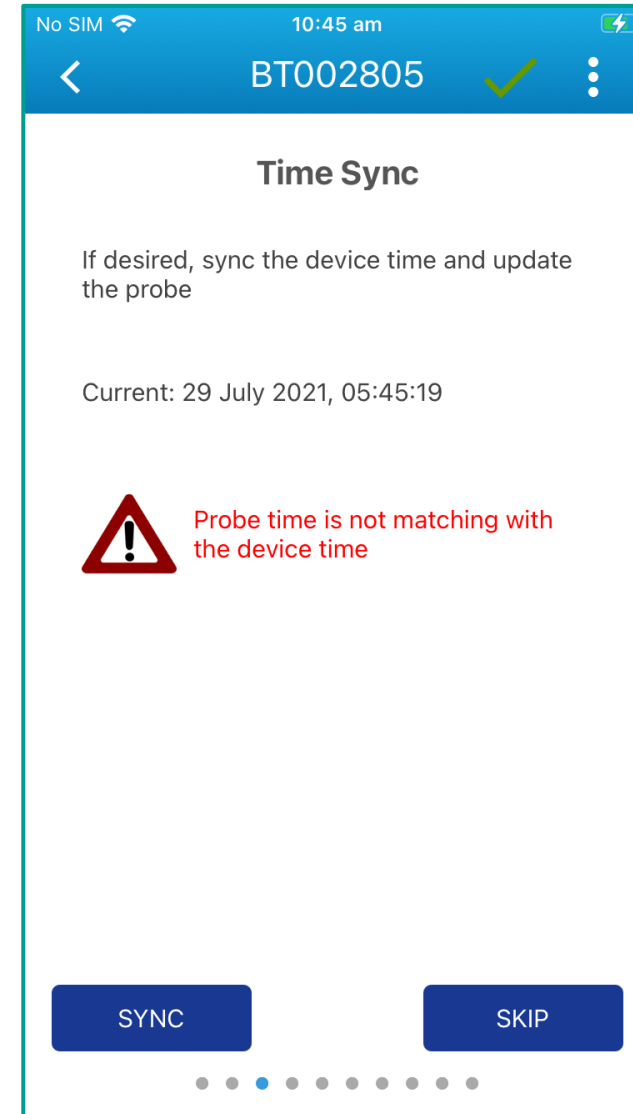
Reconfigure

Time Sync

This option synchronises the probe time with the clock on your mobile device.

It allow the App to set the probe time to the App time (Sync or skip).

Reconfigure

IrriMAX Live

In this step you can associate a probe with an IrriMAX Live account. This way the IrriMAX Live platform identifies which account the uploaded data belongs to.

If this option is disabled, the probe samples can only be downloaded to the mobile device and will not be uploaded to IrriMAX Live.

Reconfigure

Sample Interval

For a reasonable battery life it is recommended to set 15 minute sampling. Battery life will be reduced with intervals less than 15 minutes.

However, you can change the **Current** interval to **Suggested** ones between 1 minute and 12 hours.

Higher sampling rates will give more detail about small changes but it puts more demand on the probe's battery.

Note: only for full screen .

Reconfigure

Clear Data

It is recommended to **Clear Data** because often test samples are taken while the probe is not installed in the ground, it is recommended to ensures the data is clear without any invalid air/water values.

If the probe has been moved to a new location it may be appropriate to upload the last of data for the previous location.

Alternatively, some users may elect to set the start date on the IrriMAX Live Probe.

Click **NO/YES.**
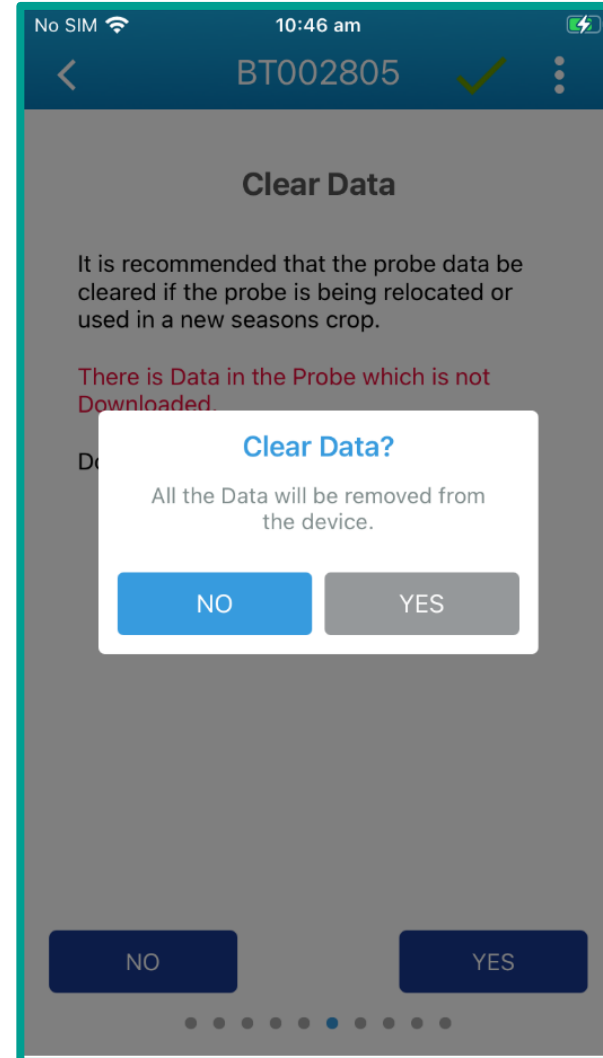
Reconfigure

Sensor Sampling

You can swipe to move between sensor types or tap the headings. The sensor type background changes to colour while the sensors are being sampled.

Reconfigure

Sentek

Configuration Process

Final configuration progress is shown. There is a tick against successful step and a cross against steps that need attention.

Click **OKAY**

Decommission

Sentek

Decommission

Decommissioning is normally used before the probe is moved to another location.

It sets the sample interval to 0, preventing unwanted sampling. The probe must be reconfigured for the next location.

Click **Done**.
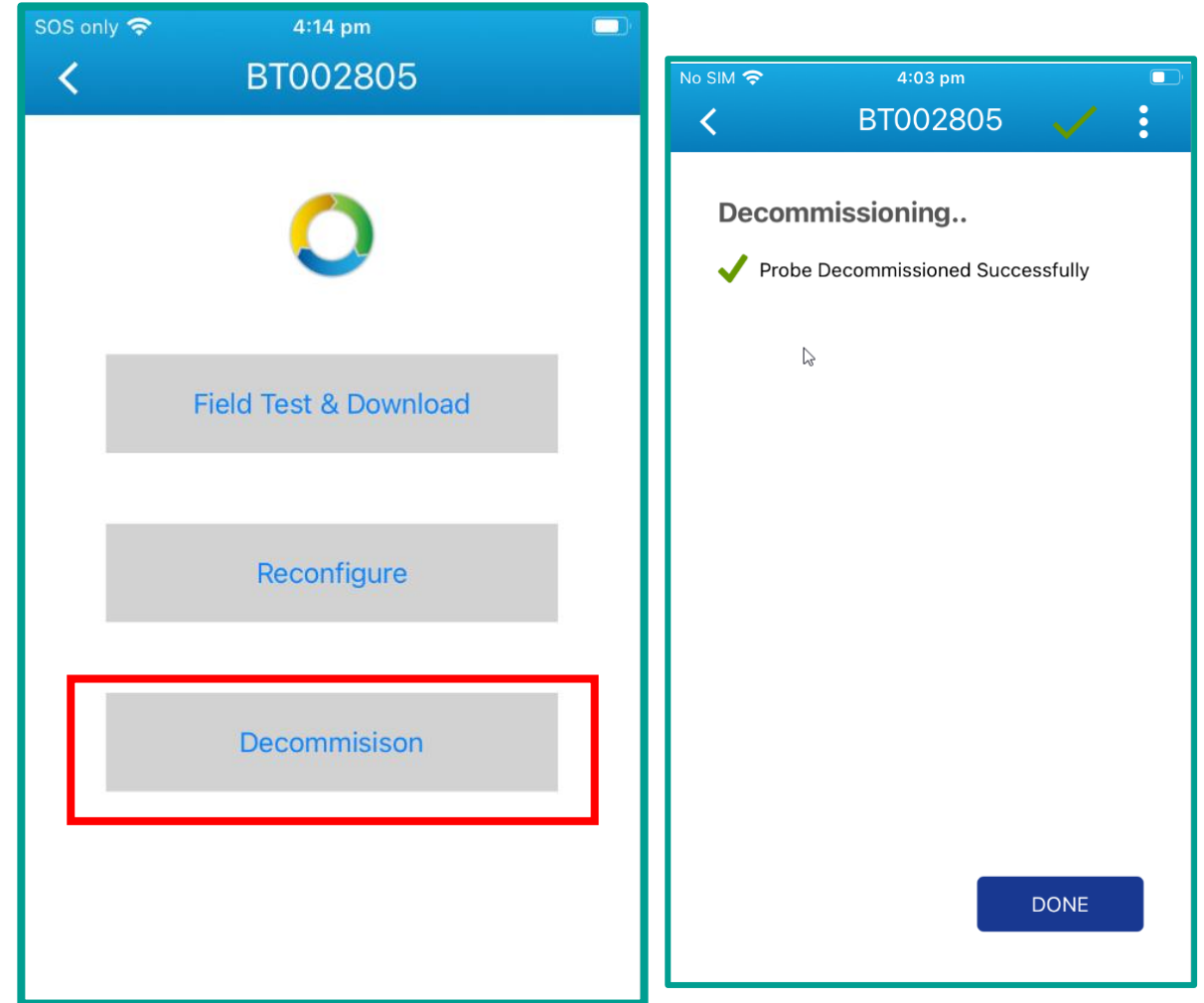
My Devices

My Devices

Tap the **My Devices** option to see all probes that have ever been connected to this App. It shows the most recent status and number of days since the last successful download.

The sorting works by grouping probes into three groups which are group sorted in order displayed.

a)　Those that haven't been downloaded within 10 days (Sorted by downloaded time oldest to newest)

b)　Those that have been downloaded within 10 days (Sorted by upload time newest to oldest)

c)　Those that haven't been download for over 10 days. (Sorted newest to oldest)

The sort mechanism prioritises the devices that need to be downloaded at the top, while putting those they haven't been downloaded for a considerable time at the bottom. The devices in between are those that have been downloaded and are then sorted by uploaded time, but that is typically the same as downloaded time when Auto Upload is enabled.

My Devices

BTDEMO12

None

BT001023

Upload Complete. 2021-08-06 14:24

lchur0

Upload Complete. 2021-08-06 14:27

BT002129

Pending Enable

BT001087

None

Sentek

Settings

5. Application Options

The detailed functionality of the Application .

- **Probe Discover period in seconds**

You can reduce or speed up time for waiting to find a single device. However a longer time allows more chance of finding more devices, but may reduce mobile device battery charge.

Recommended discovery period - Default 30 seconds.

- **Date Out of Sync Warning**

The default is 1 minute. The probe date and time may lose a few seconds a day, so this option allows a bit of flexibility.

Note The probe does not automatically adjust for "Daylight Saving", so this warning will appear when the App device changes to "Daylight Saving".

Probe Sort Order

If you want the closest probe to be at the top of the probe list choose "Sort by Signal". If you have many probes (e.g. distributor setting up many probes in their office) "Sort by name" may be appropriate, to prevent scanned probe order jumping around. The "No Sort" adds new probes at the bottom of the list.

No SIM   10:10 am

Application Options

Probe Discovery period in seconds
30

Date Out of Sync Warning
1 Minute

Probe Sort Order
Sort By Signal

Enable Advanced User

Units
Metric

In Range   My Devices   Settings
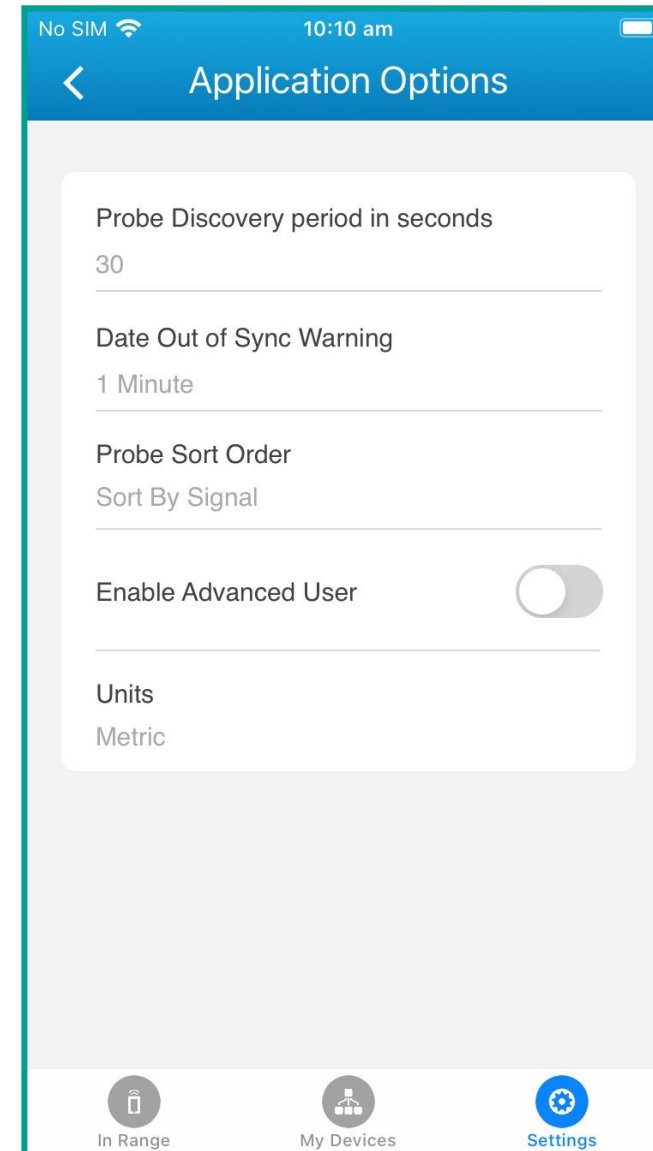
Enable Advanced User

When you disable the **RSSI field** which show the signal strength from **1 to 10**, and when enable the **Enable Advanced User** but for more technical signal strength is in "db".
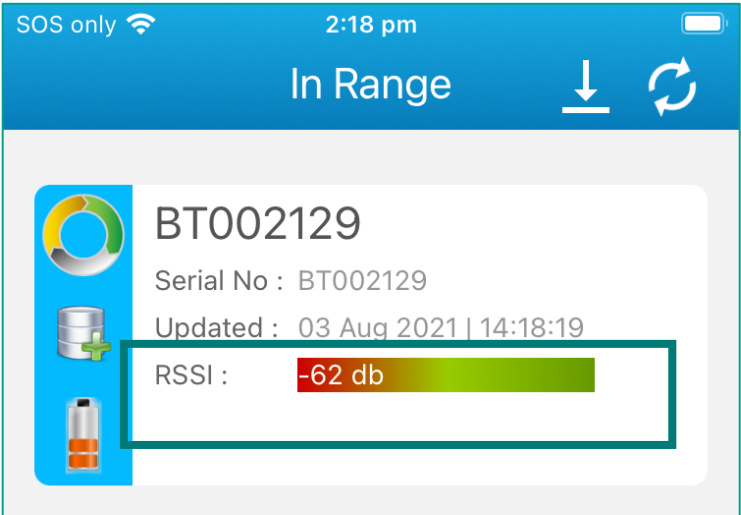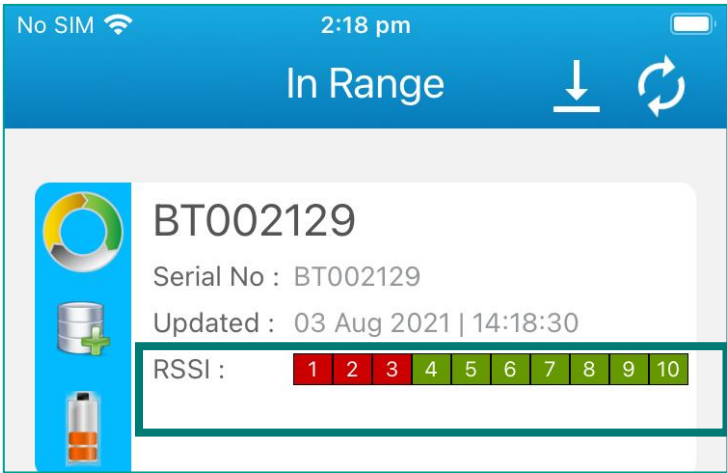
Units

This option changes the displayed units in Sensor Test. The default is Metric.

Metric

• Sensor depths are shown in cm, Moisture readings are shown in mm (mm per 100mm), and Temperature readings are shown in Degrees Centigrade.

Imperial

• Sensor depths are shown in inches, Moisture readings are shown in inches (inches per 4 inches), and Temperature readings are shown in Fahrenheit.

8. Upload

To receive Upload notification on your phone . You can enable the **Enable Upload Progress Notification**.
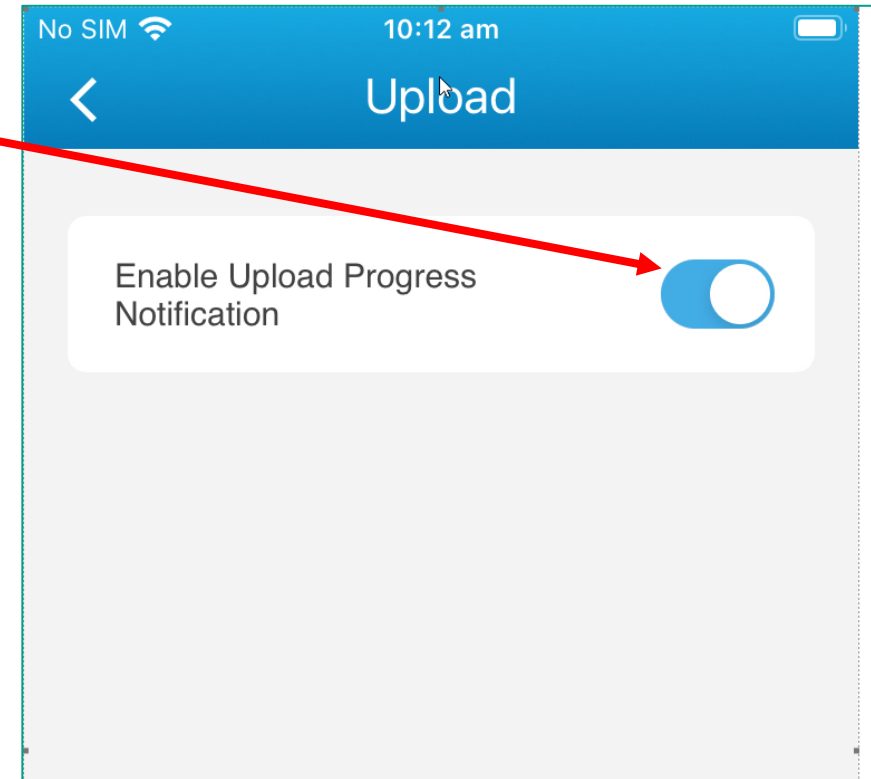
9. Group ID

Show public devices – This option will show all probes and devices found during a discovery that have not been assigned to a Group ID.

Show devices from all group- This option will show any probe or device in the vicinity that are assigned to an unknown Group ID (not listed in the Group ID list on your mobile device).

Group ID List -

The Group ID is the primary level of security preventing accidental access to the probe from un-authorised people. Only an App that includes this Group ID can access the Probe details.

For example, even though you will be able to see foreign probes in the scanned tab, you will not be able to download data from them or change their settings. Only public probes or ones assigned to a listed Group ID can be managed.
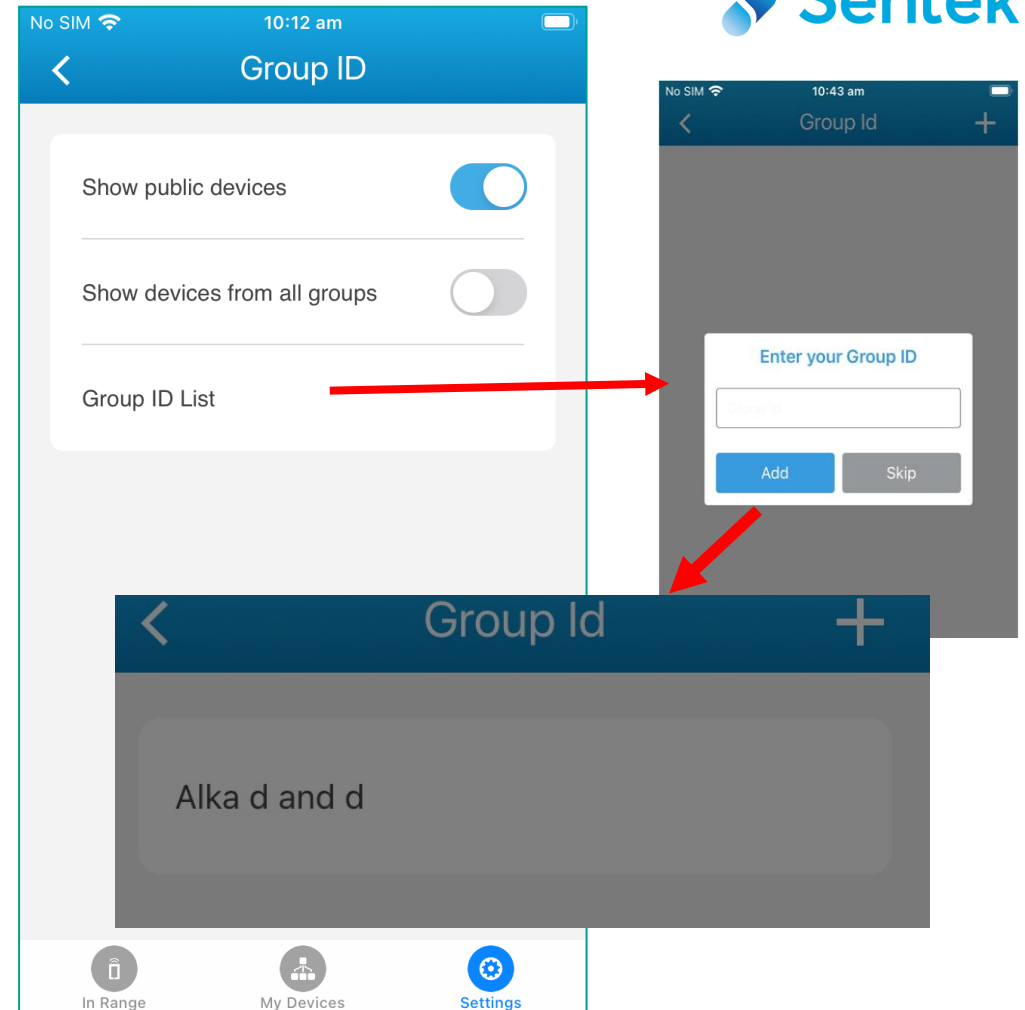
10. Unlock Probe

This function allows you to unlock probes that are assigned to an unknown owner ID. A situation like this would prevent an owner to set up the probe for a new site.

In case like these please to unlock a probe, contact Technical Support and provide them with the probe Serial number.

You can get the probe serial number from the top of the top cap, the label inside the probe top cap or the Probe summary display on an App that can display the probe summary. (*displayed in the image below.*)

An unlock code is valid for **8 days only** which is been generated.
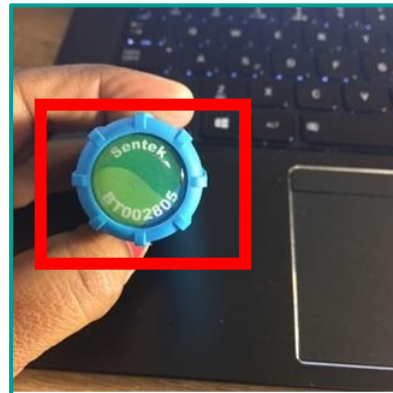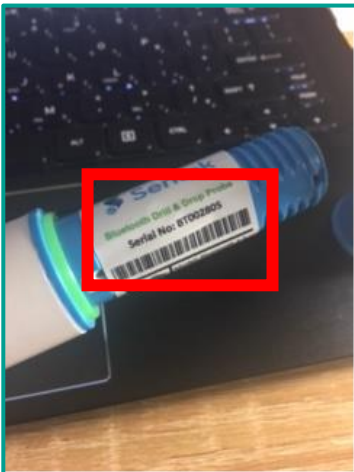
Serial number

No SIM   4:22 pm

Unlock Probe

Add the Serial Number and Unlock code to Unlock Device for limited period.

BT002129

e8d231231c9af4f8

BT002129 is Unlocked for 8 days.

Unlock Device

In Range   My Devices   Settings

Note : Once you receive the unlock code it remains valid up to 8 days, (from the time your receive).

Ensure to use it in the given time span or the code expires and you need to request for a new code.

11. About

You can also change to the full or lite version on the About screen.

1. Click "Sentek Connect" (**full version**) link and you will be directed to a new screen.

2. If you select skip it will default the app to Lite version.

In order to know about the version you are using, you can go to **Settings** > **About**

About

The "Sentek Connect" Application works with Sentek Drill & Drop Bluetooth probes. The app allows probe sensor data to be downloaded to your phone or tablet, and then uploaded to IrriMAX Live. The app is also used to manage probe configuration and testing.

Privacy Policy

Application Version: 1.0.6(13)
Release Version
Build Date: Jan 11 2022 08:36:56

1

About

Add IrriMAX Account

Please Enter your account details to setup IrriMAX Live account.

Selecting skip will default the app to the lite version.

IrriMAX Live

Username

Password

2

Add   Skip

About

The "Sentek Connect - Lite" Application works with Sentek Drill & Drop Bluetooth probes. The app allows probe sensor data to be downloaded to your phone or tablet, and then uploaded to IrriMAX Live. The app is also used for testing the probe.

Privacy Policy

Application Version: 1.0.6(13)
Release Version
Build Date: Jan 11 2022 08:36:56

3

Lite Version

Sentek

1. Difference between IrriMax Live full and Lite version

Sentek

IrriMaX Live full and Lite comes with almost the same functionality, however, In the Lite version you cannot reconfigure the app, and decommissioning option is excluded, you need to contact the distributor to complete these actions.
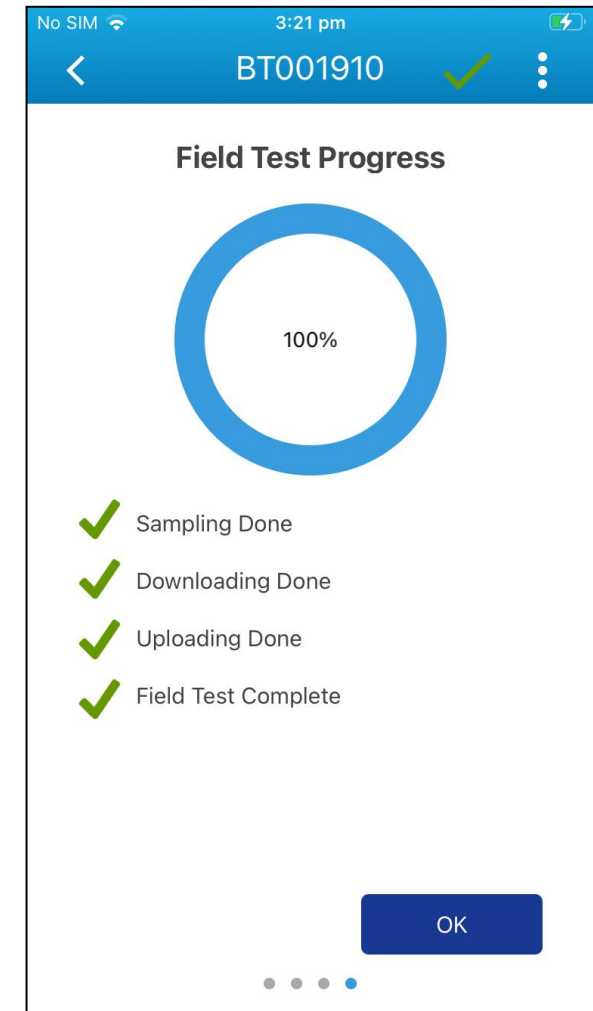
Key Feature- Lite version includes the following.

- Application Setting option

- Can Download the files

- Upload the files

- Add Group ID

- Unlock the Probe

- Turn Probe Off

Note: Reconfigure and Decommission comes only with Full version of the App.

No SIM 3:21 pm

< BT001910 ✓ ⋮

Field Test Progress

100%

✓ Sampling Done

✓ Downloading Done

✓ Uploading Done

✓ Field Test Complete

OK

2. Incomplete Field Test – Lite Version

If you can't complete the test progress, check the firmware version on your App.

- Open the Settings screen > About.
- Check the Application Version and the Release Version "Build Date"

For example ⟶

Application Version: 1.0.6(13)
Release Version
Build Date: Jan 11 2022 08:36:56

It is advisable to update the probe firmware to optimise the performance and it enhances the performance of the current version.

In case you don't get the prompt for upgrading the firmware, please contact your distributor to get the firmware upgraded. Also, ensure the probe is reconfigured once the firmware is updated.
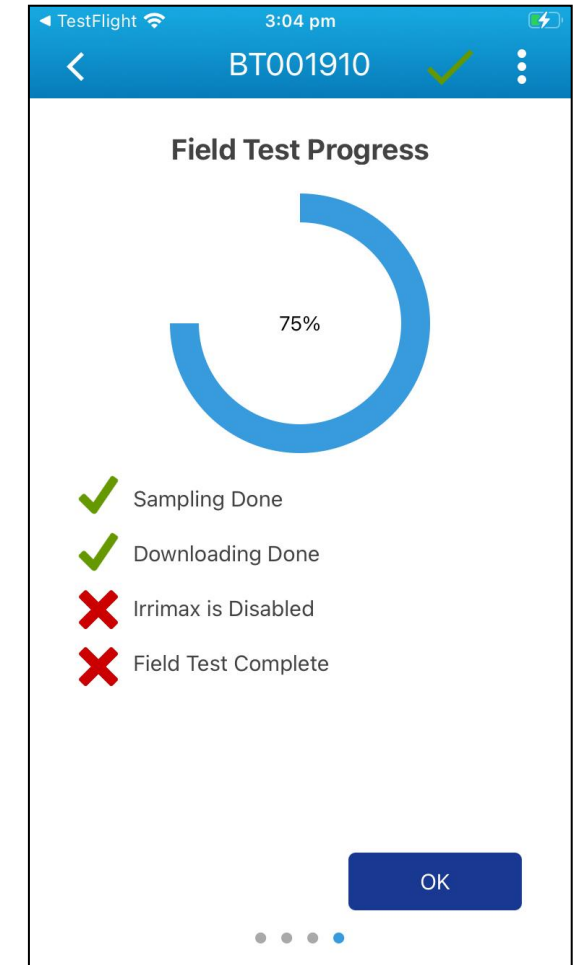
Tips and Tricks to

In case of following scenarios

Reboot Your Phone

- If your application starts acting up or if you feel its running slowly, please go ahead and reboot your phone.

Refresh your Phone

- If you are unable to find your Probe in **In Range** screen, try to swipe down your phone screen. If this trick don't work please contact Sentek Support for assistance.

Terminology

Sentek Connect	Bluetooth enabled device – probe, dongle or other future product.
RSSI	RSSI stands for Received Signal Strength Indicator. It is an estimated measure of power level that an RF client device is receiving from a transmitting device.