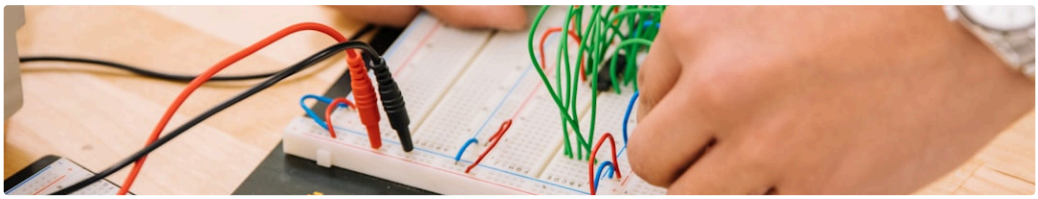


🦢 User Manual

Table of Contents

Introduction

QiQuac Mobile (QQM) provides a modern visual interface to complement a live QiQuac (QQ) measurement. Connecting to the QQ by Bluetooth, it can capture the same data, plot ECT values, and perform calculations in real time, as well as post-processing. Further, it can sync projects with the user's Salt Portal (SP) allowing the export of data to the appropriate station.

This document will detail how to use the app properly.

Note: The app is connected to the production server of the Salt Portal for the released version on Google Play store, i.e. exports or logins will go to the production server. However, the staging server of the Salt Portal could be connected to any beta version or under-developing version.

Installation

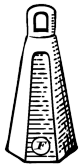
Google Play store:

TestFlight:

APK (Android only):

As of the time of writing, QiQuac Mobile is not available on the Android nor iOS app stores. Releases are currently available for download in this Google Drive folder as an APK file (Android only).

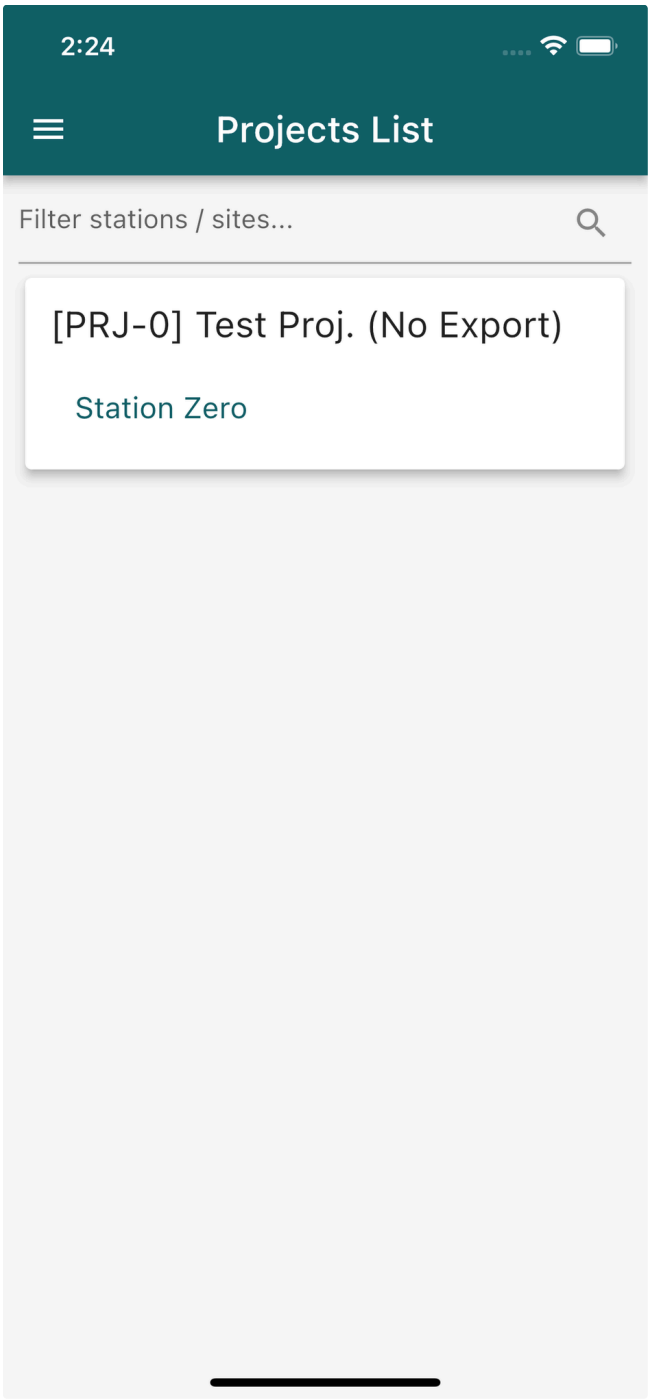
From an Android device, clicking on the APK will take you through the installation process



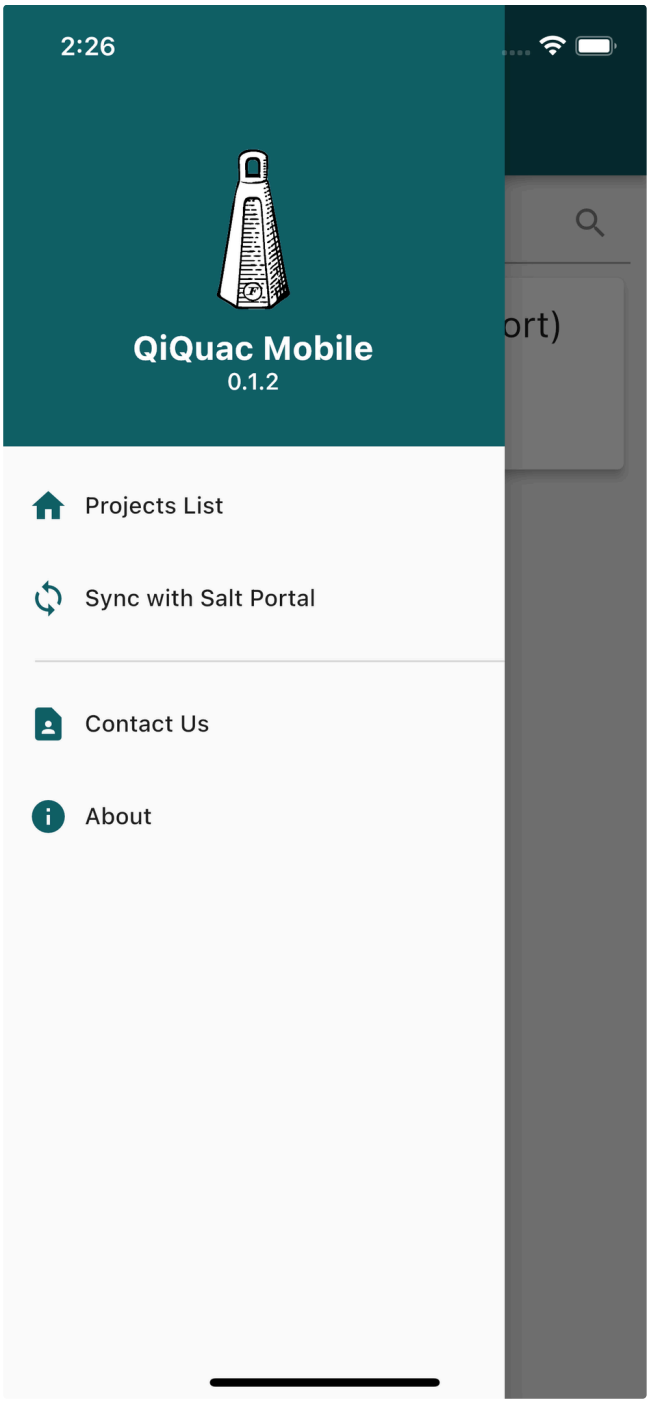
QiQuac Mobile
App Icon

Getting Started

On first open, you will be taken to the Projects List screen. There will be no projects available as you have not been signed in. You will want to sign in before making any measurements as those will not be uploadable unless you move them (feature coming soon).



Projects List page (home)

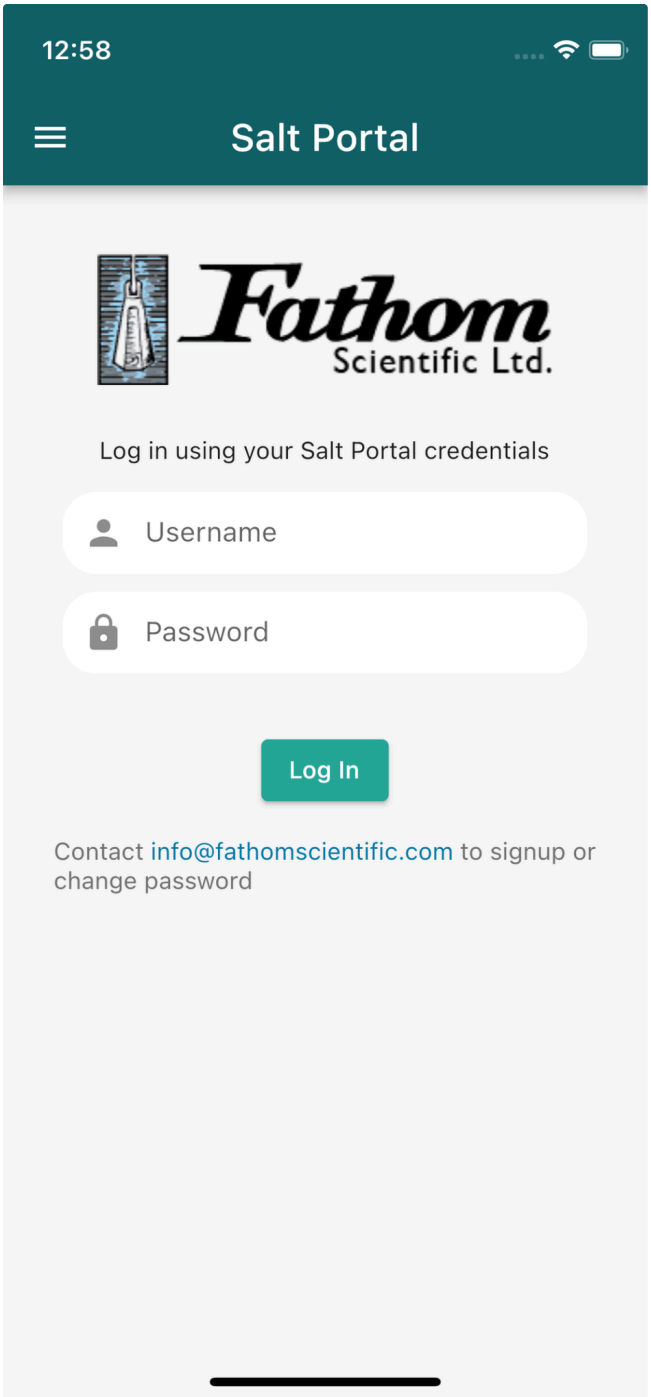


Navigation Menu

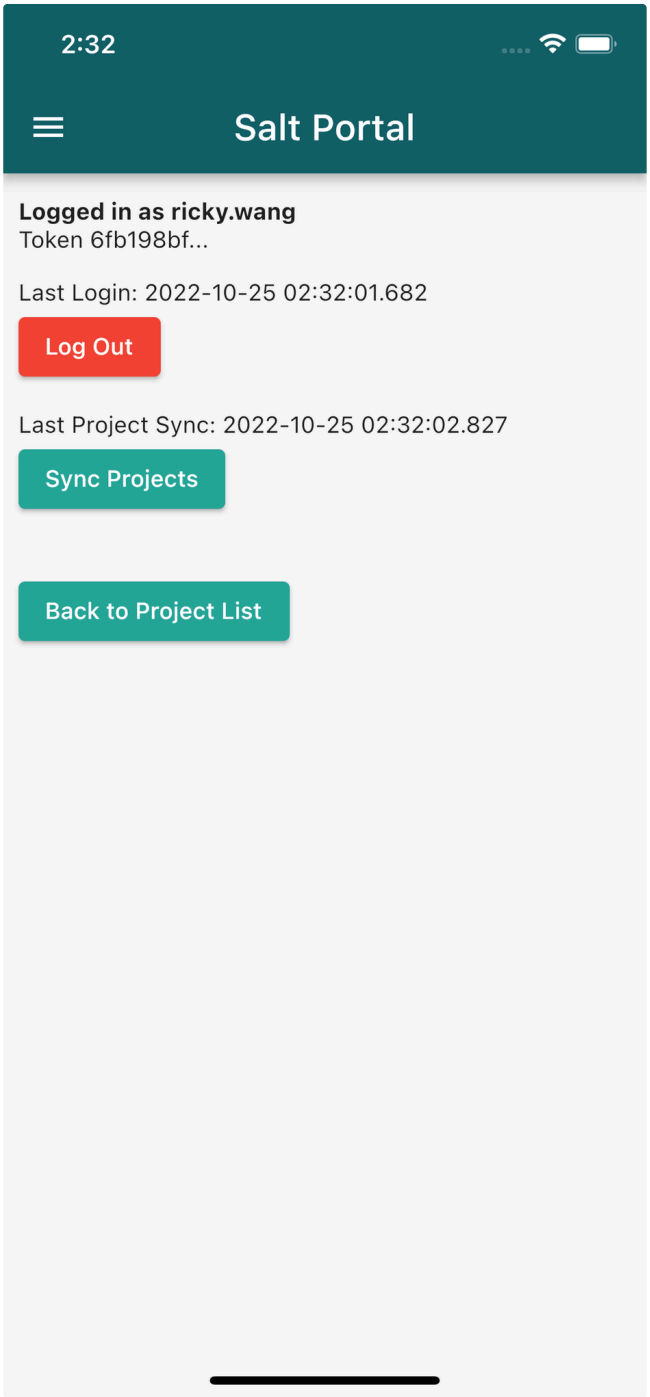
To sign in, open the navigation menu and click **Sync with Salt Portal** to be taken to the login page. Enter the same user and password you would for the Salt Portal.

After successful sign-in, there will be a small wait as QQM loads in your SP projects and stations.

Note: This does not download data into the app – QQM uses its own local database and only exports to SP; it does not import from it apart from project / station data.



Log in Page using SP credentials

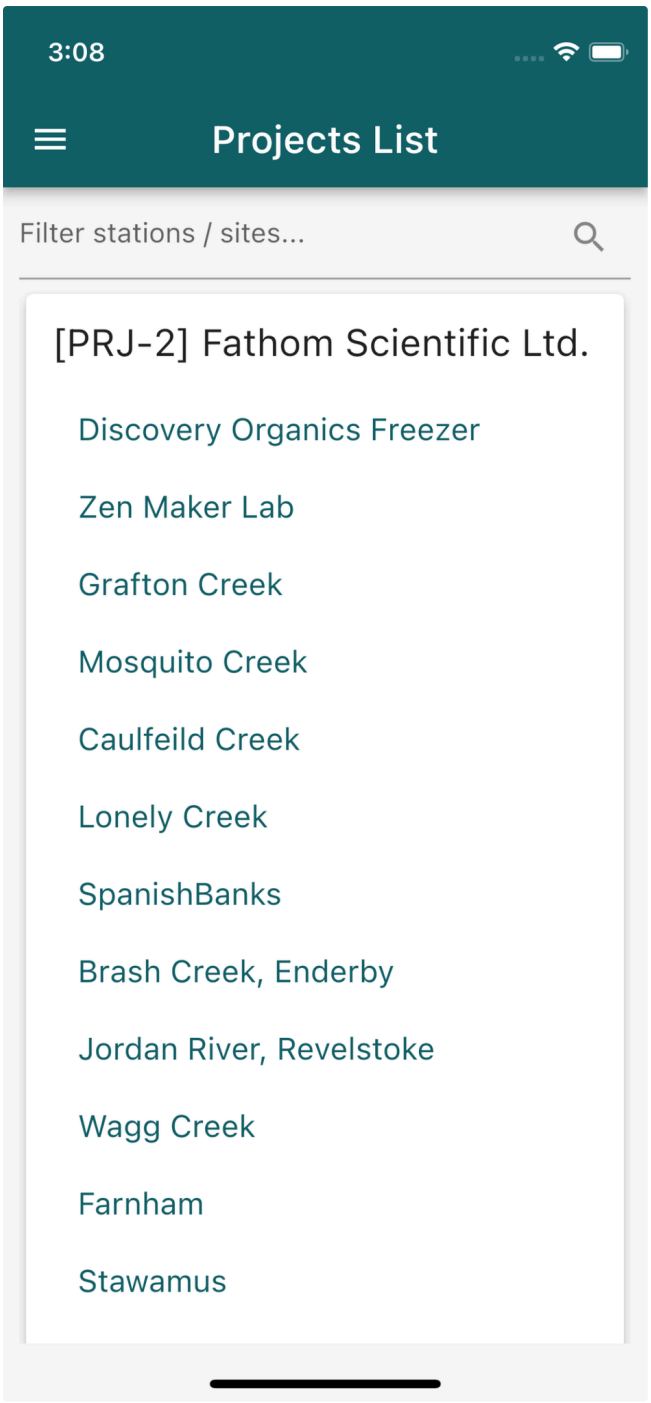


Account user ricky.wang has logged in

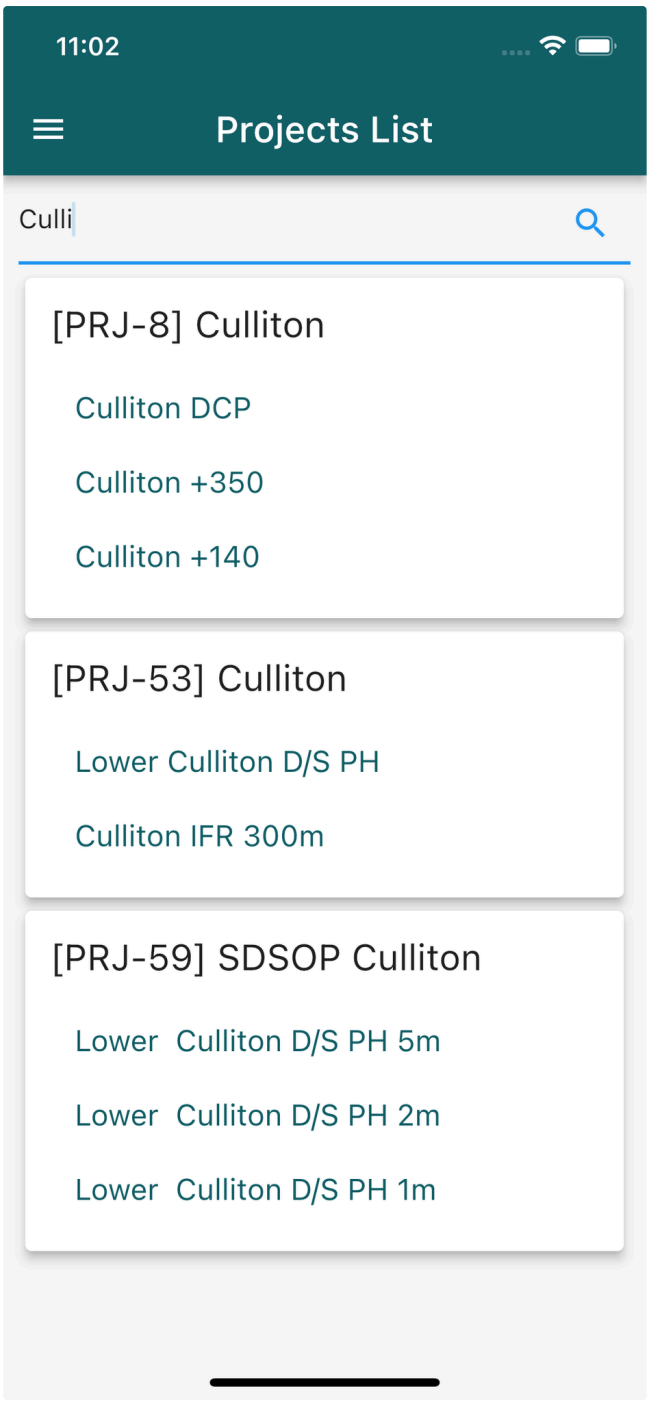
Projects List Page

This page displays all the projects to which the user has access in SP. To quickly search for a station or site, use the filter search box at the top of the page.

Click on a station to access the station detail page.



Scrollable Project List



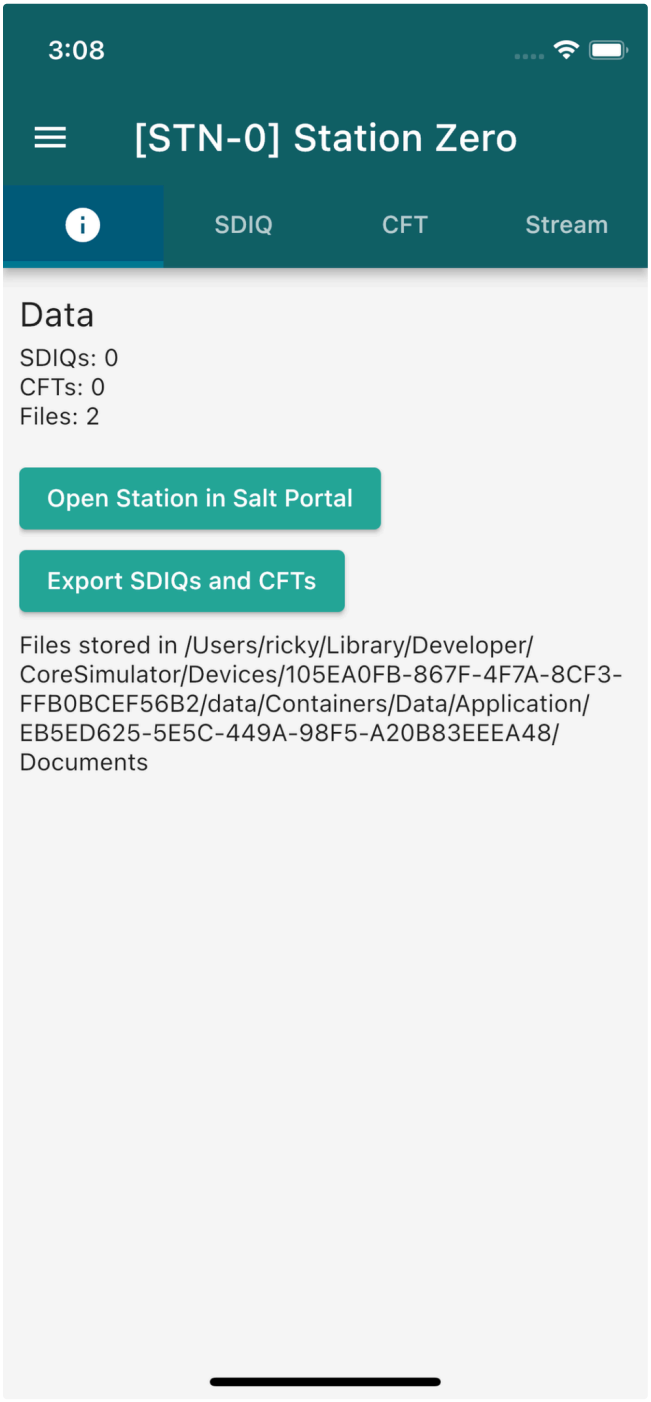
Filtering through many stations

Station Detail Page

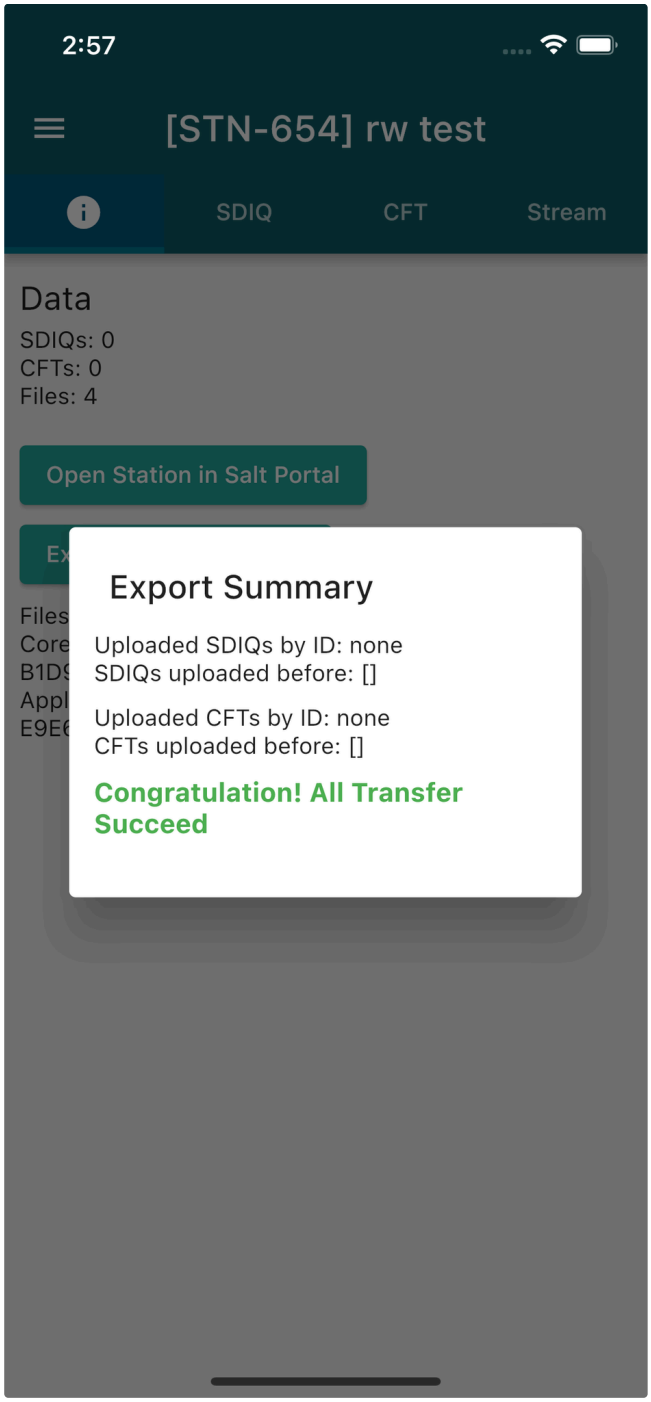
On a respective station's detail page, the user can manage data, export, or initiate the bluetooth streaming process through 4 different tabs: Export tab, SDIQs tab, CFTs tab, and Stream tab.

Export Tab

From this tab, the user can see a summary of the data in this station. Note that the numbers reflect only what is contained in the app, rather than what is on SP. Press the export button to upload all measurements, calibrations, and files to SP; duplicates are detected and rejected.



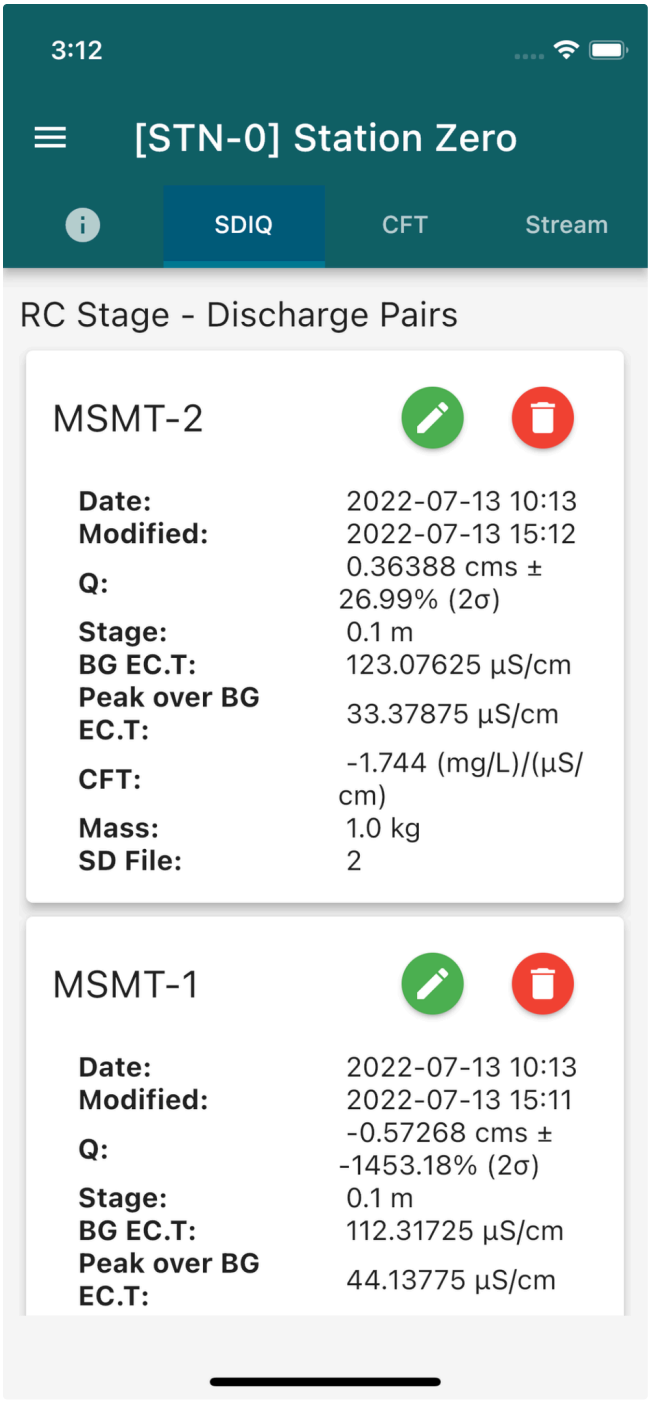
Station Data summary page



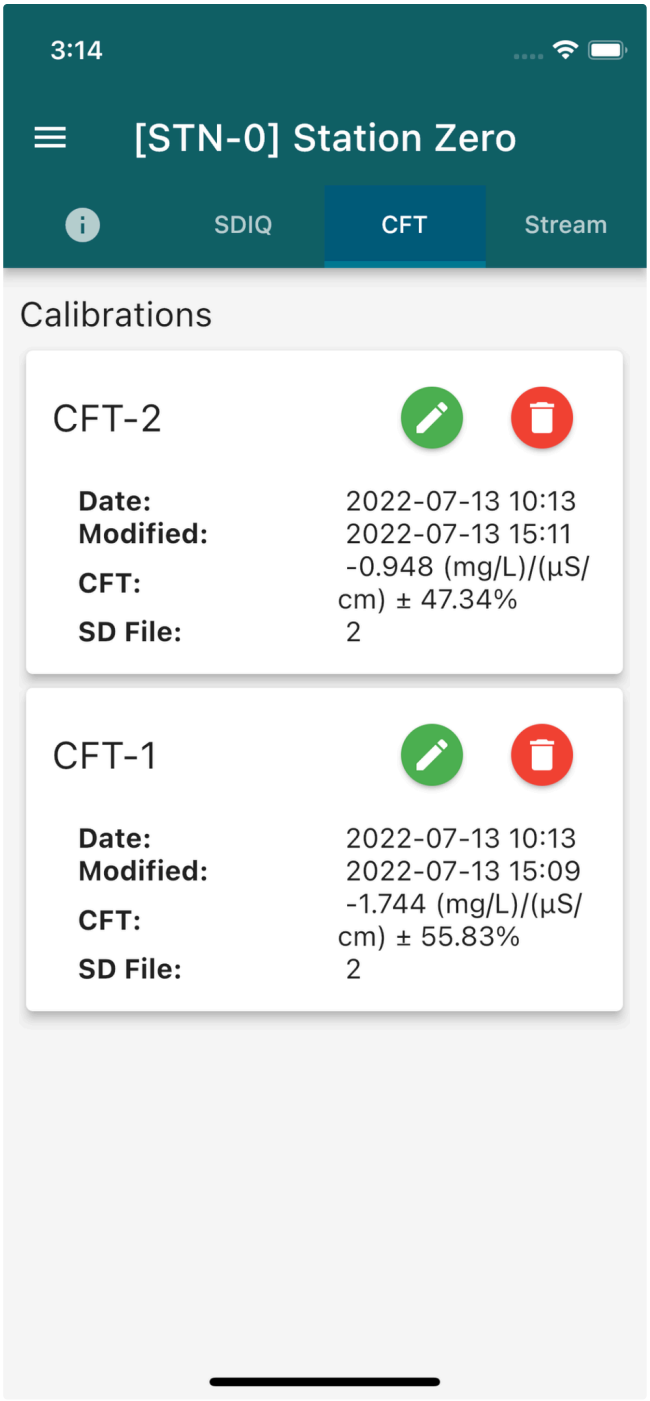
Export summary shows after exporting

SDIQ and CFT Tab

These tabs show past measurements and calibrations. From these tabs, a user can delete or edit the record by opening SD Calc.



Generated SDIQ List



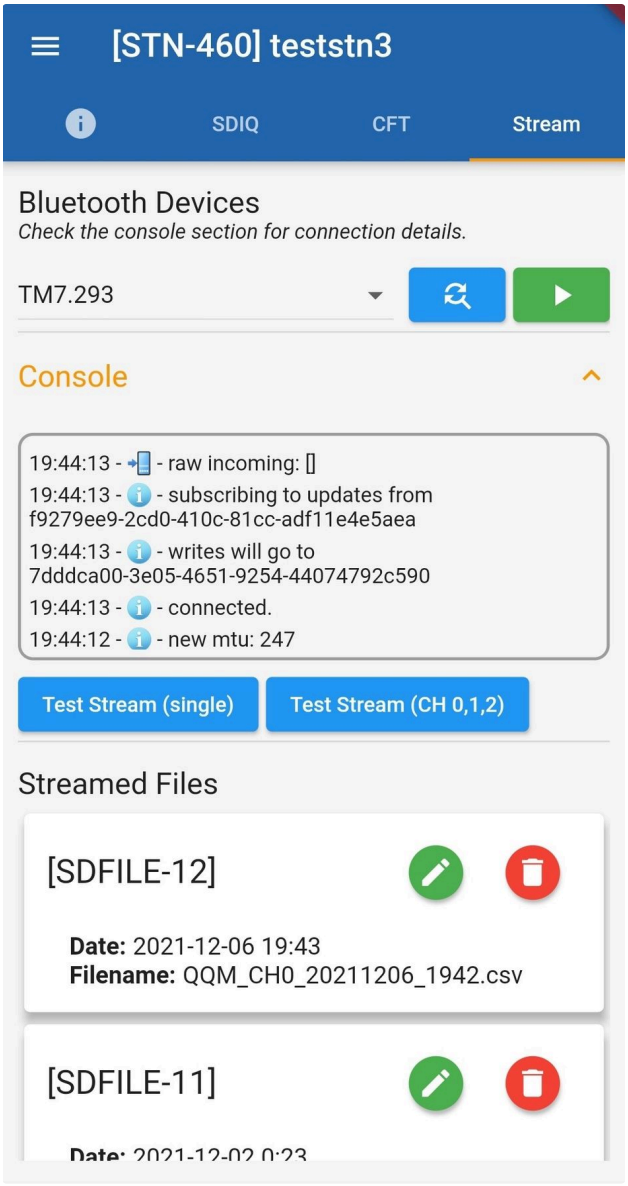
Generated CFT List

Stream Tab

From this tab, the user can see a dropdown list of detected Bluetooth devices. Once a device name is selected, the app will try to connect to that device. If it is a valid QiQuac, there will be a play button. It initiates an authentication process which takes the user to the Salt Dilution Calculator (SD Calc) to receive and process the incoming data.

Every connection or authentication event will be logged in the 'Console' section (initially hidden). Use the information here to diagnose any connection issues. Most of the time, problems are solved by resetting SDIQ mode on the QQ and restarting QQ Mobile.

There is also a section to list the SD Files streamed in the past. From these SD Files, the user can actually create a new SDIQ or CFT.



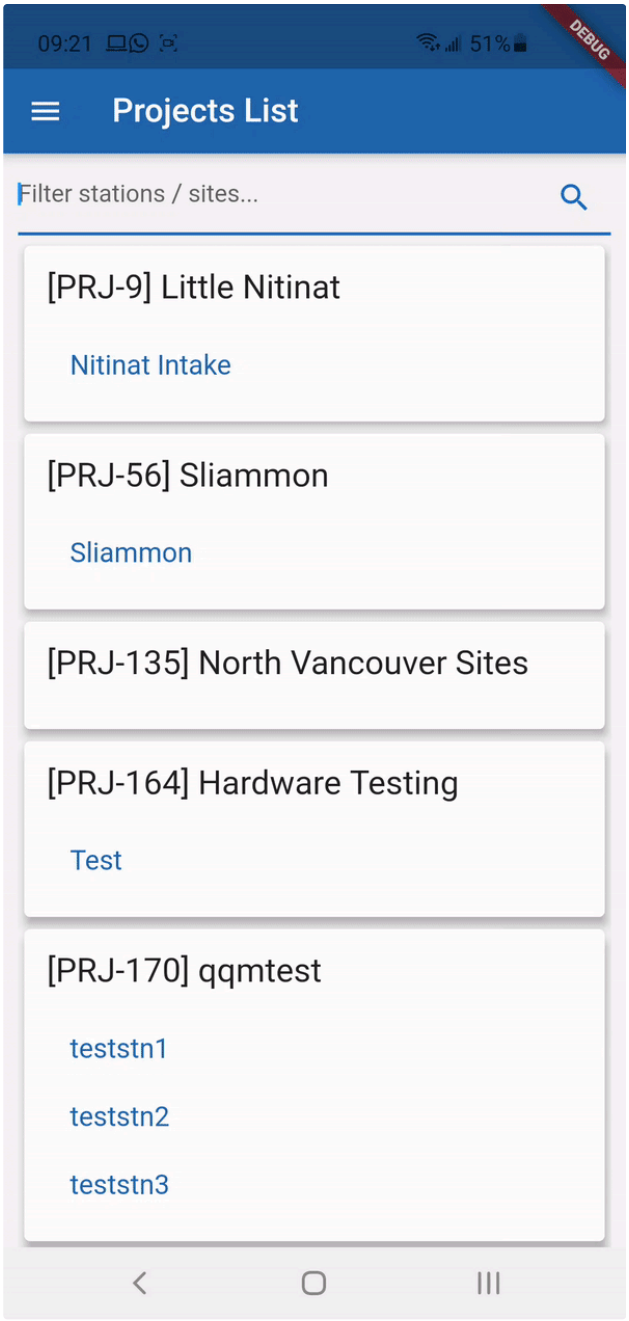
Connect through the

Connecting to QiQuac

In the stream tab, you can connect to a QiQuac device via Bluetooth. Follow the instructions below and see the GIF for a demonstration.

1. Navigate to the desired station and ensure your Bluetooth and location services are on.
2. Go to the stream tab.
   Optional: expand the Console section to see connection details.
3. Tap the scan button to see which devices are in the vicinity.
4. Look through the now-populated drop-down list and select the desired QiQuac. Wait a second as the app establishes a connection.
5. When ready, press the green play button. Wait a few seconds as the app establishes an encrypted connection. The app will automatically navigate to the stream page to view incoming ECT data.

If there is an error, try again from step 3. If the error persists, reset SDIQ mode on the QiQuac, and then back to the app, exit out of the station and try again from step 1.

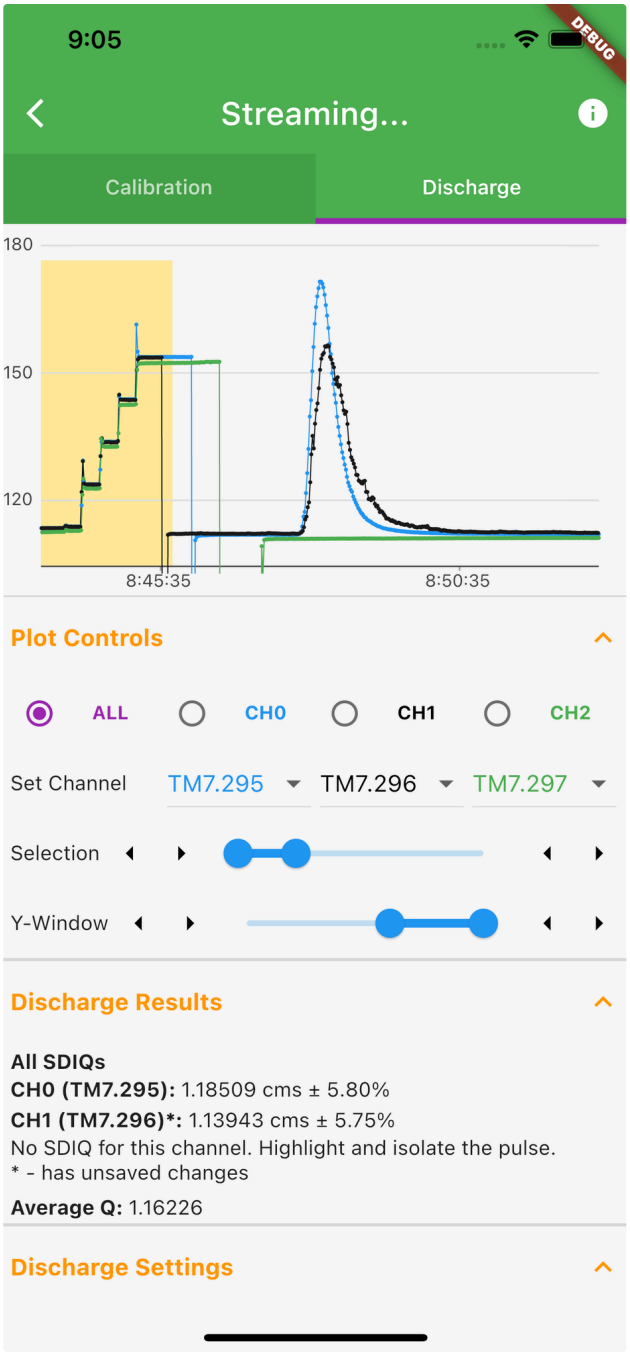


Connecting to QiQuac to view its real-time stream of ECT data

Salt Dilution Calculator

The Salt Dilution Calculator (SD Calc) is a tool used for performing calculations on a set of ECT data plotted against time, either while reading from a QiQuac, or in post-processing. Be sure to save your progress to the database before exiting!

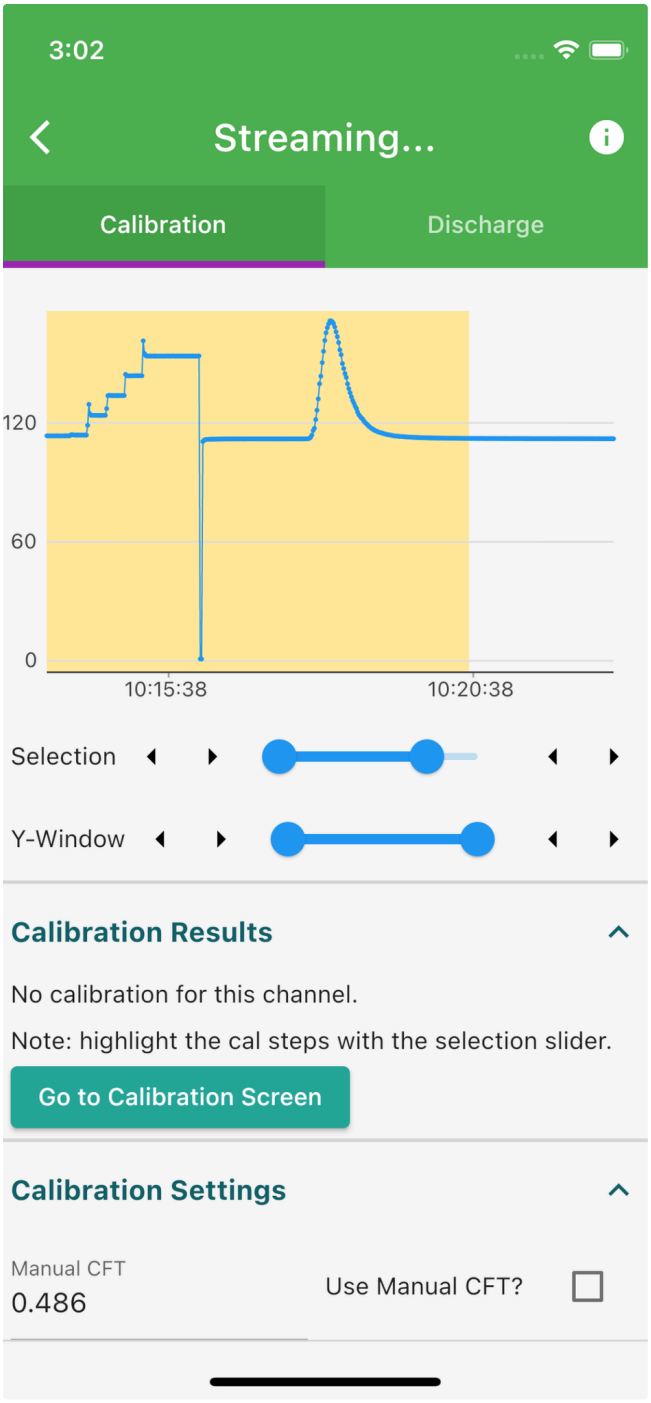
This works very similarly to Salt Portal's SD Calc, but on a lighter UI.

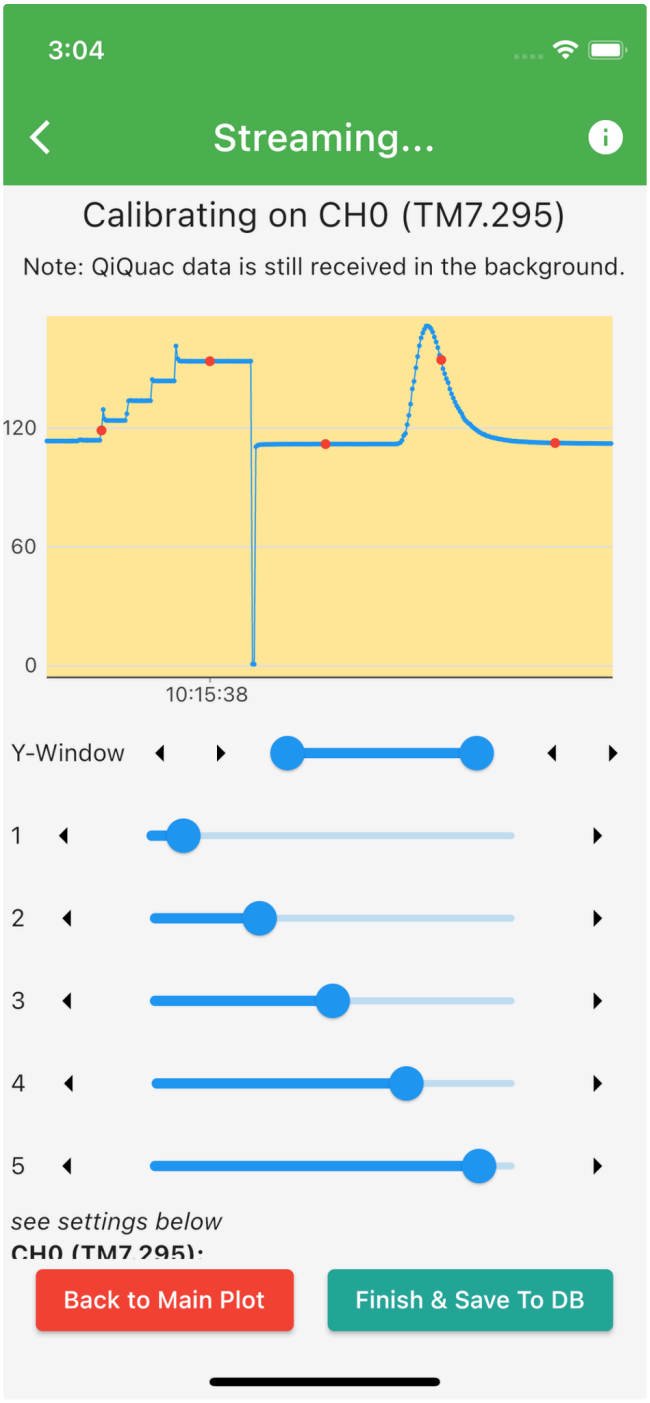


wp labeling and such

Calibration

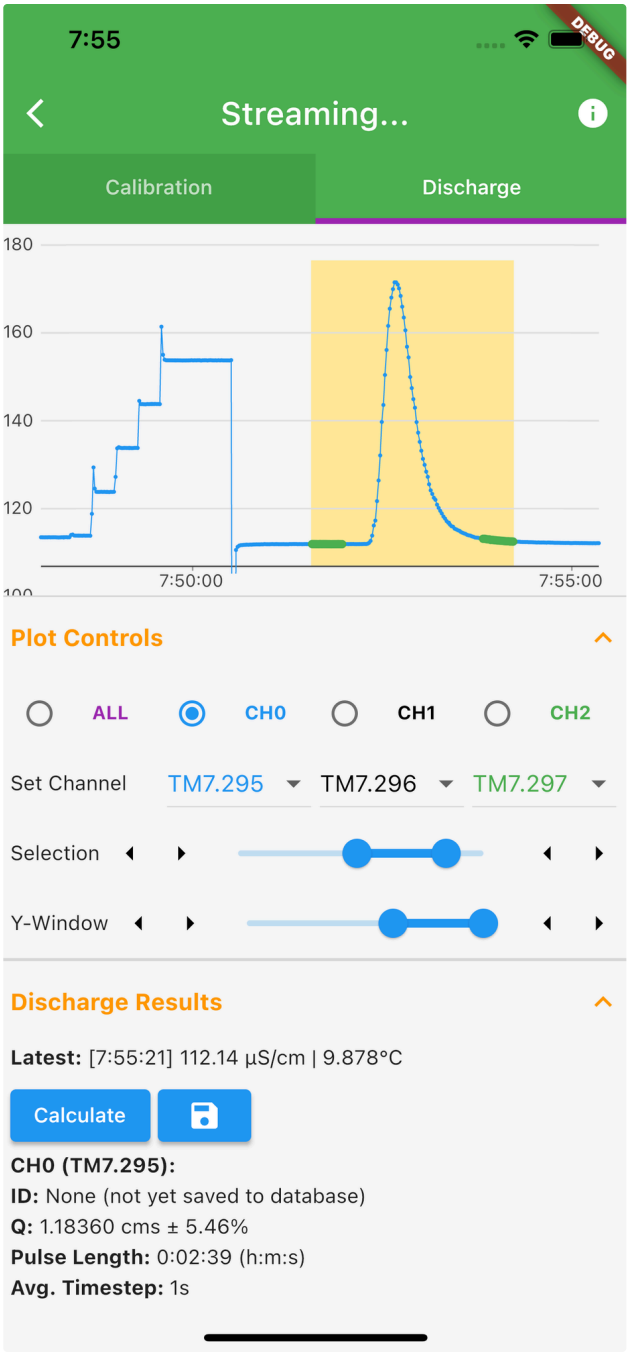
A user can create a calibration by highlighting the calibration steps and selecting the tuning points.





Discharge

A user can measure the discharge by highlighting the salt wave, giving some room for background points.

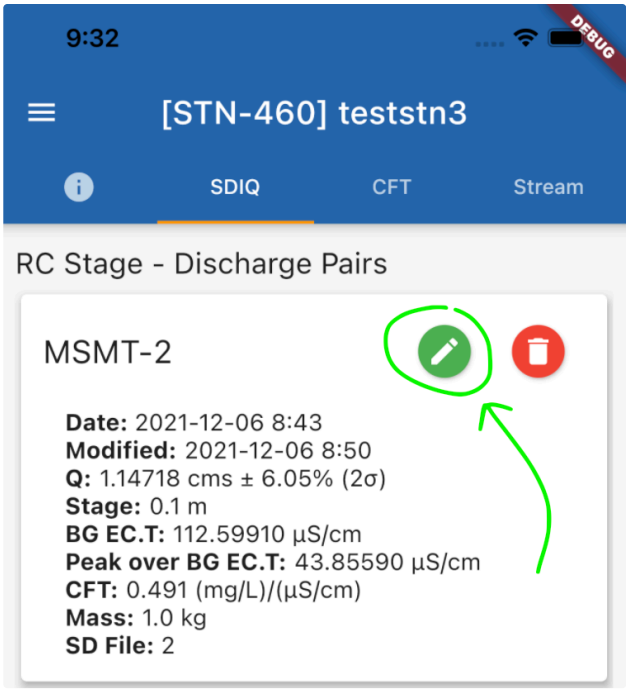


Taking a Live Measurement

Please visit this page to see a walkthrough on taking a live measurement with QQ Mobile.

Editing a Measurement

SDIQs and CFTs can be edited by tapping the edit button on the desired SDIQ or CFT. This loads the targetted item and **opens SD Calc**. Remember to save your changes!



The user can edit this measurement in SD Calc

It is important to note that SDIQ and CFT records are not intrinsically related – this means that when editing an SDIQ measurement, the app will load the measurement into SD Calc, but not the CFT with which it was recorded. While editing the SDIQ, working on the Calibration tab will create a new CFT, not edit the original CFT.

Likewise, editing a CFT will load the CFT data but no SDIQ data, and any work done in the Discharge tab will create a new SDIQ. Editing an SDFile will load just the ECT data, and any work done will create a new SDIQ and/or CFT.

FAQ

<Link to FAQ child page>

Troubleshooting Common Errors

Upon coming across an unrecognized error, please notify us at Fathom Scientific Ltd.