

Using the GLRM Receiver with GPS Coordinates Locator Map

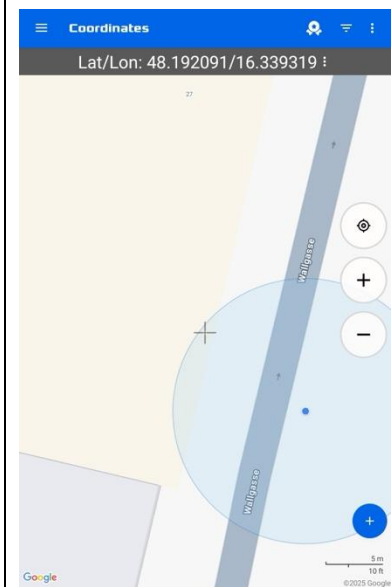


GPS Coordinates Locator Map is a classic GPS mapping app for simple surveying and location determination. It allows you to obtain, identify, and calculate GPS coordinates. The app is ideal for basic field surveying tasks, such as capturing points, lines, or areas using GPS data. This guide explains how to use the GLRM receiver together with the GL Connect app to provide precise positioning data to the app on Android devices. GL Connect acts as a mock location provider, streaming corrected GNSS positions from the GLRM receiver and making them available to other apps. To use it with the GPS Coordinates Locator Map app, you need to configure GL Connect with your NTRIP credentials and set it as the mock location app in the Android system settings

location app in the Android system settings

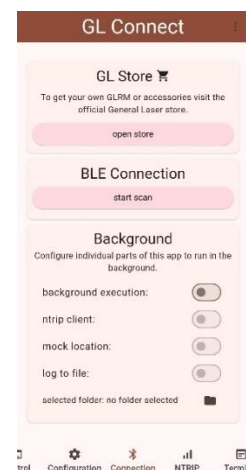
After downloading and launching the GPS Coordinates Locator Map app, the main map view will appear immediately. At the top of the screen, you can see the current positioning information.

The app is now ready to receive location data. However, to use the precise GNSS data from your GLRM receiver, you need to set up GL Connect as a mock location provider, as explained in the following steps.



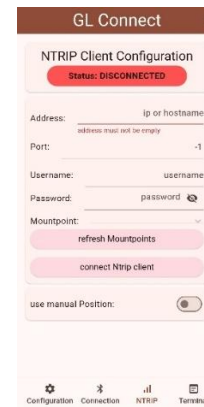
To ensure proper communication between the GLRM GNSS receiver and QField, configure the GL Connect app as follows:

1. Open the GL Connect app.
2. Navigate to the “Connection” tab.
3. Enable the following options:
 - **Background Execution** – Allows the app to run continuously in the background.
 - **NTRIP Client** – Activates real-time correction data streaming via an NTRIP connection. Please note: this option becomes available only after completing the NTRIP configuration in GL Connect.
 - **Mock Location** – Enables the app to provide corrected GNSS coordinates to other applications by overriding the internal GPS location. Please note: this option becomes available only after selecting GL Connect as the mock location app in your Android device’s developer settings.



Adding an NTRIP Profile in GL Connect

From the GL Connect main screen, navigate to the NTRIP section. Enter the required connection details, including the server address, port, username, and password. Then, select the appropriate mount point from the list. Once all fields are completed, initiate the connection by tapping Connect to NTRIP Client.



Enabling Developer Options on Your Android Device

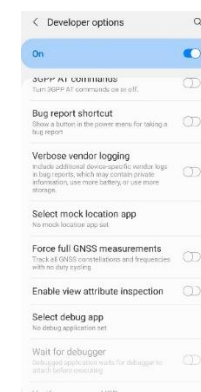
To allow the use of Mock Location with external GNSS receivers, you first need to unlock the Developer Options on your Android device:

1. Open your device's Settings.
2. Scroll down and select About Phone (or About Device, depending on your Android version).
3. Locate the Build Number entry.
4. Tap the Build Number repeatedly (approximately 7 times) until you see a message confirming that Developer Options have been unlocked.
5. Return to the main Settings menu, where you will now find a new section called Developer Options.



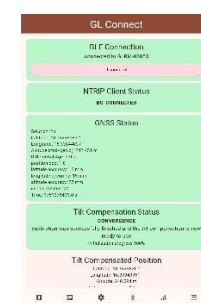
To allow your device to use corrected GNSS data from an external NTRIP client, follow these steps:

1. Navigate to Developer Options (previously unlocked).
2. Tap on Select mock location app.
3. From the list of available apps, select GL Connect.



Once the mock location app is selected and active, all applications on your Android device that use location services will automatically receive the high-accuracy positional data streamed from the GLRM GNSS receiver.

You can now open QField and begin surveying without any additional configuration. The app will use the corrected coordinates provided by the external receiver instead of the internal GPS.



<p>Once GL Connect is set up and selected as the mock location provider, switch back to the app. If configured correctly, the app will now receive positioning data from the GLRM receiver.</p> <p>You should see an improvement in the displayed accuracy in the status bar of the map view. Both vertical and horizontal accuracy will reflect the enhanced precision of the GLRM receiver. This confirms that the app is successfully using the corrected GNSS data stream for georeferenced data collection.</p>	