Zeno Connect Software Integration Guide

This document explains how the GG04 plus/FLX100 plus can be fully utilised from a 3rd party application on iOS, Android or Windows. The integration differs depending on the operating system used and is covered in individual chapters.

1. iOS

To utilise the position coming from the GG04 plus/FLX100 plus on iOS you must:

- Connect to the GG04 plus/FLX100 plus via the iOS Bluetooth settings.
- Request the Core Location iOS feature and allow your app to access it in the Location Services settings.

As soon as those two requirements are met the position from the GG04 plus/FLX100 plus will be utilised within your app.

Please refer to the official iOS documentation for further details on the Core Location feature.

To configure the GG04 plus/FLX100 plus to enable high accuracy positions via PPP or RTK and/or to define the NMEA message output, Zeno Connect on iOS is necessary which is available to download from the iOS App Store.

Please refer to the Zeno Connect documentation to learn more about the Zeno Connect settings. All official Leica Zeno documentation can be found on myWorld.

To receive NMEA messages within your app and access GNSS metadata a few preparation steps are necessary:

Your app must be whitelisted by the Zeno Support team. Please write an email to zeno.support@leica-geosystems.com with the following information about your iOS app:

- Name of app as it will appear in App Store
- App version
- Bundle Identifier
- A short description of the iOS app including a functional overview and key features.

Please specify the protocol names that match the target device within your app. Please read the following <u>documentation</u> to find out how the integration can be achieved.

Zeno Support will provide the name of the GG04 plus/FLX100 plus protocol ID (PPID) when the whitelisting has been completed.

When you submit your new app or modifying an existing app using iTunes Connect you must enter the PPID in your app metadata Review Notes field. Please refrain from uploading your app to the App Store until you receive feedback from Zeno Support that your app was successfully whitelisted.

Once your app is uploaded, please follow the below steps to receive GNSS Metadata via NMEA messages:



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- Connect via iOS Bluetooth settings to the GG04 plus/FLX100 plus.
- Start Zeno Connect and configure the GG04 plus/FLX100 plus with the desired NMEA output settings.
- Start your app and connect to the external accessory protocol to read out selected NMEA messages.

2. Android

To utilise the position coming from the GG04 plus/FLX100 plus from any location aware app on your Android mobile device please follow the below steps:

- Download and start Zeno Connect from the Google Play store free of charge.
- Enable Mock Location for Zeno Connect and restart the mobile device.
- Start the GPS of the mobile device.
- Connect to the GG04 plus/FLX100 plus via the Zeno Connect settings.
- <u>Request the Location</u> from the Android Location Service.

More details can be found in the GG04 plus/FLX100 plus user manuals.

To receive NMEA messages for GNSS metadata:

- Define the required NMEA settings in Zeno Connect.
- Open a SPP Bluetooth port in your app to read out the NMEA messages.

For integration guidelines on how to connect to a SPP Bluetooth port within your app, please follow the <u>example</u> shown in the chapter "Connect Bluetooth Devices".

3. Windows

To utilise the position coming from the GG04 plus/FLX100 plus please connect to the antenna from the Zeno Connect settings page.

NMEA messages can be set as desired from the same settings menu. To receive the NMEA messages in your app, connect to the virtual COM port COM66 which is generated as part of the Zeno Connect install.

Please read the following <u>documentation</u> to see how the COM port integration can be achieved.

If you require the integration of the Zeno Connect functionality in your own software, a Windows Zeno Connect SDK is available. For more information, please contact zeno.support@leica-geosystems.com

