Configuration And Using Correction Services

Trimble RTX Correction Services

Receiver Setup - Using GFX-750 and Precision IQ

1. Open the Precision-IQ app
2. From the Home screen, tap the GNSS card
3. Tap the Edit button
4. On the Corrections tab, tap Correction Source
5. Select a Trimble RTX correction service (along with delivery method)
   ○ CenterPoint RTX Satellite (Fast Convergence)
   ○ CenterPoint RTX Satellite (Standard Convergence)
   ○ CenterPoint RTX Modem (Standard Convergence)
   ○ or RangePoint RTX
6. Tap the Setup Tab
7. Turn Fast Restart on or off (Not available for CenterPoint RTX Fast)
8. Tap Convergence Threshold to edit (Not available for CenterPoint RTX Fast)
9. Set the Convergence Threshold
10. Tap Frequency to select the Trimble RTX satellite beam frequency

- Central North America (1557.8150) (Baud Rate 2400)
11. Select a predefined frequency and baud rate, allow the software to automatically determine based on your current location, or set a custom frequency and baud rate.
12. If Custom is selected, tap the second Frequency to set a frequency, and tap Baud Rate to select a baud rate.

There is no need to actively save the configuration. Tap the Android back icon (triangle on bottom of the screen) to return to the GNSS screen. Review GNSS Settings Summary on this screen.
Verifying Correct Setup

There are a number of ways to verify the configuration and view the status of Correction Services within PIQ.

1. Home screen
2. GNSS screen
3. Any screen
4. Diagnostics screen

1. Home Screen

From the Home screen, the GNSS card will display the Correction Service being used, along with a coloured icon quickly indicating the status of the correction. If the icon is green, then the correction is being used and has converged, yellow indicates that the correction has been configured but is not being used yet or has not converged, and gray indicates that the correction source has not been configured.
2. GNSS screen
The GNSS screen can be navigated to by selecting the GNSS card on the Home screen. The configuration summary is shown on the GNSS Settings Summary card, and a minimal amount of current status information is shown on the GNSS card.
3. Any screen
There is a GNSS/satellite icon on the top left corner of every screen within PIQ. Tap the GNSS icon to see a minimal amount of current status information.
4. Diagnostics screen
The Diagnostics screen will show detailed diagnostics information for Correction Services, as well as general GNSS. To navigate to the Diagnostics screen, tap the Diagnostics icon from any screen.
Under GNSS Receiver, tap Performance
1. From the Overview tab, the following can be viewed or set:
   a. View Configuration: Correction Type, Correction Source, Frequency, Position Quality, and Convergence Threshold
   b. Set Configuration: Frequency, and Position Quality
   c. View Status: Number of Satellites used, Correction Status, Correction Age, HDOP, Max Correction Age, Estimated Horizontal Error, and RTX SAT SNR
2. From the Skyplot tab, the following can be viewed
   a. The individual satellites being tracked and used, along with their relative position in the sky
3. From the Tracking Table tab, the following can be viewed
   a. Detailed satellite relative position, and SNR information for all 3 frequencies, for all satellites being tracked and used
   b. Note that the symbols for satellite IDs are as follows:
      i. Circle is GPS
      ii. Triangle is GLONASS
      iii. Pentagon is Galileo
      iv. Hexagon is BeiDou