RELEASE NOTES

Trimble® Precision GNSS OEM Receivers, 4.85

This document contains late-breaking product information, updates, and troubleshooting tips not covered in the Trimble® OEM GNSS receivers' documentation.

- Introduction
- Upgrade Procedure
- New Features and Changes
- Legal Notices

Introduction

These Release Notes describe improvements made since version 4.81 to the following Trimble GNSS OEM receivers:

- BD910
- BD920
- BD920-W3G
- BD930
- BD960
- BD970
- BD982
- BX960
- BX982

With this release, all the above receivers can use version 4.85 firmware. To use firmware version 4.85, you must have a valid firmware warranty. You can check the Firmware Warranty Date using the web interface. Make sure the date shown is 2 April 2013 or later. Alternatively, obtain the warranty date from the WinFlash software. Select *Verify receiver options* and ensure the *Firmware Option* is 2 April 2013 or later. For further support information, go to www.trimble.com/OEM_ReceiverHelp/V4.85/en/default.html.

Upgrade Procedure

There are two ways to load the new firmware:

- Use the WinFlash utility (BD9xx WinFlash v234_v485.zip) downloaded from the Trimble website.
- Use the web interface of the receiver to load the firmware image file downloaded from the Trimble website.

New Features and Changes

The following improvements have been made to the OEM GNSS receivers:

General

- Minor translation updates.
- Updated OmniSTAR™ libraries.
- NTP and Proxy DNS servers are disabled by default (to help avoid DoS attacks).
- Updated antenna models.

Tracking

- Improvements to GLONASS acquisition on the vector antenna of the BD982.
- Now GLONASS L2-P tracking is available only when GLONASS L2-C/A(M) tracking is also enabled.

Positioning

- The BD982 receiver now supports L1-Only RTK operation on the internal vector between the position and vector antennas.
- Resolved an issue that could cause third-party virtual reference stations to reject GLONASS observables due to unexpected timing biases.

Data formats

- Resolved an issue where sCMRx corrections that included BeiDou failed to work with older rovers (with v4.44 or older firmware).
- RTCMv3 1033 messages now output the proper IGS name for the receiver type.
- The NMEA BPQ message shows RTK fixed as "4".
- The NMEA ZDA message uses null when data is unreliable.

Web interface

- Resolved an issue where using an "&" (ampersand) in PPP init-string caused the PPP page to appear blank and the "&" was not properly structured in the AT command.

Documentation updates

The following updates have been made to the online help (www.trimble.com/OEM_ReceiverHelp/V4.85/en/default.html).

• Added the BD930 product guide.

• Noted that all receivers were designed to work with Zephyr 2 antennas, which have a gain of 50dB. Higher gain antennas have not been tested.

• Updated the BD920-W3G integration guidelines.

• Updated and corrected maximum baud rates for all boards.

• The BX982 does not have Event input support. This is now corrected in the manual.

• Updated BD970 and BD982 power consumption with current firmware and tracking all constellations.

• Added an introduction page to the section "Configuring the Receiver", which cites other sections that should be referenced.

• Added text about the default login on the page "Configuring Ethernet settings", in the PPP setup.

• Added text for the 55h subtype 7 regarding how to apply the increment scalar.

• Corrected the lost carrot on the 55h subtype 7 increment scalar.

• Added the 64h (APP file) record 53h: Multiplexed port control record.

• Added the 64h (APP file) record 4Eh: Vector antenna record.

• Added the 64h (APP file) record 1Ah: GNSS heading attitude record.

• Further detailed the NMEA GSV message and the prefixes that are output for various constellations.

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Release Notice

This is the April 2014 release (Revision A) of the *Release Notes*. It applies to version 4.85 of the OEM GNSS receivers software.