# Trimble GNSS OEM

## RECEIVERS

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

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## Introduction

These Release Notes describe improvements made since version 5.50/6.10.

With this release Trimble is making available two versions of the firmware, 5.53 and 6.13. The 6.13 firmware includes the ProPoint™ RTK/Trimble RTX® engine. Only receivers that have the ProPoint upgrade option installed can load 6.XX firmware. Listed below are the Trimble GNSS OEM receivers that these release notes apply to and the firmware that can be loaded.

| Receiver | Firmware version | |
| --- | --- | --- |
| | 5.53 | 6.13 ProPoint (upgrade required [1]) |
| BD940 | ✔ | ✔ |
| BD940-INS | ✔ | ✔ |
| BX940 | ✔ | ✔ |
| AX940 / AX940i [2] | ✘ | ✔ |
| BD970 | ✔ | ✘ |
| BD982 | ✔ | ✘ |
| BX982 | ✔ | ✘ |
| BD992 | ✔ | ✔ |

Version 5.53 and 6.13

Revision A

December 2021

Trimble.

| | Firmware version | |
|---|---|---|
| Receiver | 5.53 | 6.13 ProPoint (upgrade required [1]) |
| BD992-INS | ✓ | ✓ |
| BX992 | ✓ | ✓ |

[1] Upgrade steps if the receiver does not have the ProPoint option installed: (a) Ensure that firmware version 5.46 or later is loaded in receiver. (b) Install the purchased ProPoint option key password provided by the support team. (c) Install the ProPoint 6.XX firmware.

[2] All AX940 / AX940i receivers use the 6.XX firmware and do not require an upgrade to install 6.13.

To use the new firmware, you must have a valid firmware warranty. You can check the Firmware Warranty Date using the web interface. Make sure the date shown is 1 November 2020 or later. Alternatively, obtain the warranty date from the WinFlash software. Select **Verify receiver options** and ensure the **Firmware Option** is 1 November 2020.

For further support information, go to https://www.trimble.com/support/support_az.aspx#B. Select your BD/BX receiver and click **Support**.

# Upgrade Procedure

There are two ways to load the new firmware:

- Use the WinFlash utility (BD9xx WinFlash V550V610.exe) downloaded from the Trimble website. For help on using WinFlash, go to https://tinyurl.com/66925kjr.

- Use the web interface of the receiver to load the firmware image file downloaded from the Trimble website.

# New Features and Changes Between Versions 5.50 and 5.53

The following improvements have been made to the Trimble GNSS OEM receivers since version 5.50:

- Added a new GSOF message called Lat, Long, MSLHt (message #70), which includes orthometric height.

- Corrected an issue with the NMEA PGN12751 message.

- Added text on the web interface **INS configuration** page to indicate order of rotations.

- Updates for new RTX beam changes.

- Updates for OmniSTAR beam changes.

- Updated the Hungarian coordinate system.

- Improved latency on the ethernet data outputs.

- Improvements to L2C tracking.

- Improvements to B2A tracking.

## Special note on the Trimble RTX server maintenance affecting QZSS users

In June 2021, Trimble deployed a maintenance update to the Trimble RTX servers to reconcile with a change to QZSS tracking in receiver firmware version 5.50/6.10. Consequently, users must upgrade their receiver firmware to version 5.50/6.10 or later to use QZSS with Trimble RTX. Users who do not upgrade their receiver firmware will continue to receive corrections for GPS, GLONASS, Galileo, and BeiDou satellites.

# New Features and Changes for ProPoint Receivers Between Firmware versions 6.10 and 6.13

All features and special notes listed in the section New Features and Changes Between Versions 5.50 and 5.53 on page 2 also apply to version 6.13 of the ProPoint firmware.

- Improvements in 20 Hz Moving Base RTK operation.

- NMEA BPQ is now working correctly with Moving Base sCMRx.

- Corrected position flags in INS mode to report correct RTX service subscription level.

- INS enabled systems now support a new dynamic model called Offroad vehicle (Moving Start) that allows alignment without an initial stationary period.

- Updates to the web interface **Vector status** page.

- Support RTCM MSM for NavIC (IRNSS) L5.

- Improved RTK performance when the L1 signal is jammed.

## Documentation updates

The latest documentation can be found online at https://oemgnss.trimble.com/support/.

## Legal Notices

### Copyright and Trademarks

### Release Notice

This is the December 2021 release (Revision A) of the GNSS OEM Receivers' Release Notes. It applies to version 5.53 and 6.13 of the Trimble GNSS OEM receivers.