Release Notes

TRIMBLE GEOSPATIAL

12 July 2023

TRIMBLE SURVEY GNSS FIRMWARE

Trimble Survey GNSS Firmware version 5.61/6.21 (July 2023)

This firmware version includes fixes and enhancements to the Survey Receiver Firmware.

Note: *For best results, users should upgrade to Trimble Access 2023.01 (2017.24 for legacy controllers) or later when using Survey GNSS Receiver Firmware version 5.61/6.21.*

Supported GNSS receivers

The following table identifies the Survey GNSS receivers supported by this revision. To upgrade your receiver's firmware, a current and valid receiver warranty is required. Your warranty must cover the time period beyond the first day of the month of the "Warranty Date."

Receiver Model	Firmware Version	Warranty Date
Trimble R780 Trimble R750 / R750MON Trimble R12i Trimble R12 Trimble R10 Model 2	6.21	December 2022
Trimble R10 / R10 LT Trimble R9s Trimble NetR9 Geospatial Trimble R8s / R8s LT Trimble R8 Model 4, 3 Trimble R6 Model 4, 3 Trimble R4 Model 3, 2 Trimble R2	5.61	December 2022

New Features and Changes

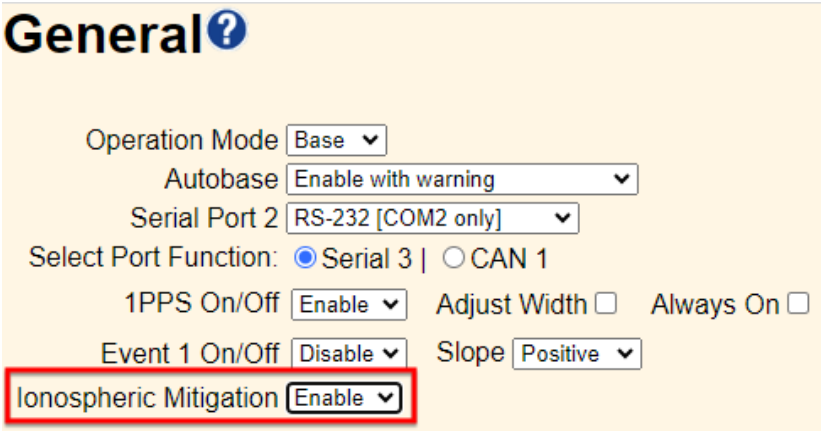
Description	Type	Supported Receiver Models
SFTP (Secure File Transfer Protocol) support	Enhancement	Trimble R750 Trimble R9S
Improved Trimble RTX functionality and stability	Bug Fix	Trimble R12i Trimble R12 Trimble R780 Trimble R750 Trimble R10-2
Added support for the Tallysman VC 6150 and TWIVC6050 antennas	Enhancement	All Receivers
HTTPS enabled by default	Enhancement	All Receivers
Czech language support added to Web UI	Enhancement	All Receivers
Improved LTE connection to the modem	Enhancement	Trimble R750 / R750MON
Omnistar L-Band beam updates	Enhancement	All Receivers
Keypad improvements	Bug Fix	Trimble R750 / R750MON
Korean SBAS services (PRN#134) will be supported if MSAS, and KASS are both available in the service area; KASS will have priority.	Enhancement	Trimble R12i Trimble R12 Trimble R780 Trimble R750 / R750MON
xFill improvements when switching from base mode and rover mode	Bug Fix	Trimble R12i Trimble R12 Trimble R780 Trimble R750 / R750MON
Addressed issues with receivers rebooting when performing RTK and logging base survey	Bug Fix	Trimble R12i Trimble R12
Corrected issues with base antenna type not being recognized when switching between base stations	Bug Fix	Trimble R12i Trimble R12
Fixed issues with load times when installing firmware via the WebUI	Enhancement	All receivers
Radio firmware version added to T0x files	Enhancement	All receivers

Note: *Before updating, download and backup any data files that are on the receiver.*

Ionospheric Mitigation

With the recent rise of solar flares with the solar cycle 25, users may encounter ionospheric disturbances with GNSS receivers. Ionospheric disturbances can result in scintillation events, decreasing GNSS performance.

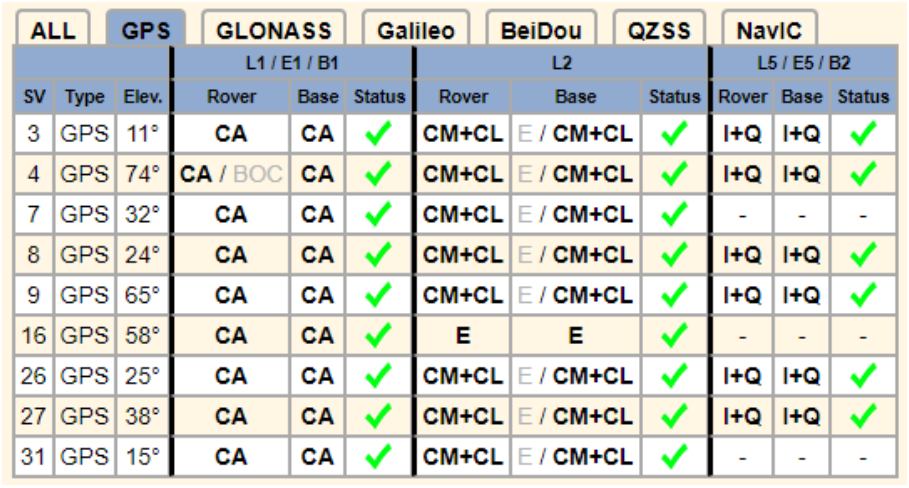
Additional RTK improvements for ionospheric interference and ionospheric high gradients have been added to firmware v6.21. *Ionospheric Mitigation* should be enabled via the WebUI to help mitigate ionospheric interference when encountering high ionospheric activity. This option applies to the R12i, R12, R780, and R750.



Note: *The impact of the solar flares/ionospheric interference depends on your device and geographic location.*

Base and rover signal interoperability check

A rover/base signal tracking matrix has been added to the WebUI under *Receiver Status / Vector*. The matrix allows the user to see the current tracking status of both the rover and base in addition to which signals are being used in the rover position solution. The base information comes from the CMRx, CMR, or RTCM MSM stream. This feature should also work for a Trimble rover receiving RTCM corrections from a third party base.



Note: *Trimble does not support or guarantee signal tracking on third party devices.*

Trimble Installation Manager

Trimble Installation Manager is a free download and can be found here: install.trimble.com

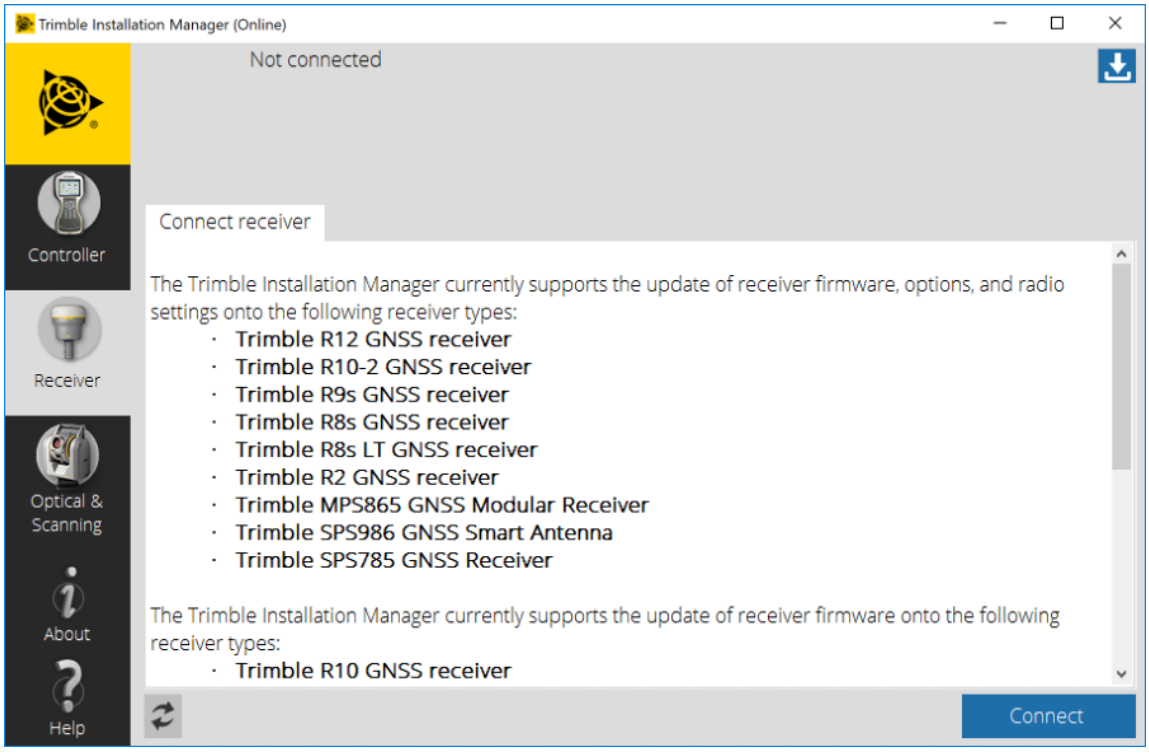
The primary Trimble Installation Manager functions for GNSS receivers are:

- Warranty Activation
- Option Loading
- Radio Configuration
- Firmware Installation

The following GNSS receivers are currently supported:

Receiver Model	Supported Functions
Trimble R2 Trimble R8s Trimble R9s Trimble R750 / R750MON Trimble R10-2 Trimble R12 Trimble R12i Trimble R780	Warranty Activation Option Loading Radio Configuration Firmware Installation
Trimble R10	Firmware Installation

After installing, launch Trimble Installation Manager, connect the receiver with the appropriate data cable to your computer and click on **Connect**.



Trimble Installation Manager will display receiver-specific information. Select the firmware version you would like to install from the selection menu in the top right corner. Click on **Install** to start the installation process.

For legacy Trimble Survey GNSS receivers not supported by Trimble Installation Manager, the latest version of firmware can be downloaded (Winflash installer or *.timg file) from the Support & Downloads for Discontinued Products page on the Trimble Geospatial website.

For more information

For more information, contact your local Trimble Distribution Partner.