

# RELEASE NOTES

15 APRIL 2015

## TRIMBLE SURVEY GNSS FIRMWARE

### Trimble Survey GNSS Firmware Version 5.01 (April 2015)

#### Requirements

This firmware version includes improvements to the Survey Receiver firmware.

**NOTE:** For best results, users should upgrade to Trimble Access 2014.20 or later when using Receiver Firmware version 5.01.

#### Supported GNSS Receivers

The following table identifies the Survey GNSS receivers supported by this revision.

Integrated	
Receiver	Support
Trimble R10/R10 LT	●
Trimble R8 Model 4	●
Trimble R8 Model 3	●
Trimble R8 Model 2	-
Trimble R8 Model 1	-
Trimble R6 Model 4	●
Trimble R6 Model 3	●
Trimble R6 Model 2	-
Trimble R6 Model 1	-
Trimble R4 Model 3	●
Trimble R4 Model 2	●
Trimble R4 Model 1	-
Trimble 5800 Model 1	-

Modular	
Receiver	Support
Trimble NetR9 Geospatial	●
Trimble R7 Model 2	●
Trimble R7 Model 1	-
Trimble R5	●
Trimble 5700 Model 2	-
Trimble 5700 Model 1	-

Handheld	
Receiver	Support
Trimble Geo7X	-
Trimble GeoXR	-
Trimble R3	-

This document is for informational purposes only and is not a legally binding agreement or offer. Trimble makes no warranties and assumes no obligations or liabilities hereunder.

Geospatial Division, 10368 Westmoor Drive, Westminster, CO 80021, USA

© 2015, Trimble Navigation Limited. All rights reserved. Trimble and the Globe & Triangle logo are trademarks of Trimble Navigation Limited registered in the United States and in other countries. All other trademarks are the property of their respective owners.



<http://surveypartners.trimble.com>

## Firmware Warranty Dates

To upgrade your receiver's firmware, the 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".

Example: You purchase a Trimble R10 receiver on 1 June 2013 with the standard one year firmware support warranty. Your warranty end date will be June 2014. Since the end date is beyond May 2014, you can upgrade your receiver to v5.00.

Version	Release Date	Warranty Date
5.01	April 2015	May 2014
5.00	March 2015	May 2014
4.93	November 2014	May 2014
4.91	Sept 2014	May 2014
4.90	June 2014	May 2014
4.84	December 2013	April 2013
4.81	July 2013	April 2013
4.80	April 2013	April 2013
4.71	February 2013	March 2013*
4.70	January 2013	March 2013*
4.64	February 2013	March 2013
4.63	October 2012	August 2012
4.61	March 2012	March 2012
4.44	December 2011	April 2011
4.43	August 2011	April 2011
4.19	November 2010	Sept 2009
4.12	December 2009	Sept 2009
4.11	September 2009	Sept 2009
4.01	April 2009	March 2009
*Trimble R10 Warranty Date = August 2012		

## Change to the WINFLASH software *Device type* listing since version 5.00 firmware

In the *Device type* listing (on the opening dialog) of the latest Winflash release, the device listing for the Survey receivers has changed. The device type listing previous to this release listed all the receiver models. To simplify this, the Geospatial receivers are now listed as:

- Trimble Survey Modular Receivers\*
- Trimble Survey Integrated Receivers\*

The *Trimble Survey Modular Receivers* selection includes the following receiver types:

- Trimble NetR9 Geospatial\*\*
- Trimble R7
- Trimble R7 Model 2 (R7 GNSS)
- Trimble R5

The *Trimble Survey Integrated Receivers* selection includes the following receiver types:

- Trimble R10
- Trimble R10 LT
- Trimble R8
- Trimble R8 Model 2 (R8 GNSS)
- Trimble R8 Model 3
- Trimble R8 Model 4
- Trimble R6
- Trimble R6 Model 2
- Trimble R6 Model 3
- Trimble R6 Model 4
- Trimble R4
- Trimble R4 Model 2
- Trimble R4 Model 3

\*The **Trimble 5800 and Trimble 5700/5700II** receivers will remain in their individual device listings, if your existing version of Winflash on your PC includes them. The receiver models are considered legacy and are no longer included with current firmware releases.

\*\*The **Trimble NetR9 Geospatial** receiver was moved from the *Trimble NetRx receiver* device listing now resides in the *Trimble Survey Modular Receiver* device listing

## Version 5.01 Release Notes

The release notes describe the added features and improvements made to Trimble Survey GNSS receiver firmware.

Issue	Type	R10 <sup>6</sup>	NetR9	R8 <sup>1</sup>	R7 <sup>2</sup>	Geo7	R6 <sup>3</sup>	R5	R4 <sup>4</sup>
<p>✓ RTX version 5.0</p> <p>RTX v5.0 now includes regional ionosphere modeling to improve RTX PPP performance in select regions around the world. The improvements include faster convergences times and more robust positioning and error estimates.</p>	Update	•	•						
<p>✓ Automatic collection of diagnostic data.</p> <p>During RTK survey operations, the Trimble R10 receiver automatically logs data for diagnostics and analysis. If you experience any issues with your receiver, and troubleshooting is required, you can download the log from the receiver and send it to your support representative for analysis.</p> <p>The receiver can log up to 48 hours of data for analysis. The file is downloadable or is easily deleted using the WebUI.</p> <p>In the WebUI menu item <b>Help &gt; Diagnostic Log</b>, there are two options:</p> <ol style="list-style-type: none"> <li>1. <b>Download</b> Diagnostic Log</li> <li>2. <b>Delete</b> Diagnostic Log Data</li> </ol> <p>The logging collects raw GNSS data and received (RTK) corrections. The data is logging to the receivers protected memory, and any downloading or deleting of the data is only available to the user. The receiver will over-write the diagnostic data every 48 hours.</p>	Feature	•							
<p>✓ The WebUI Receiver Options page now displays GSM/GPRS information.</p> <p>When a GSM/GPRS internal cellular modem is detected in a Trimble R8/R6/R4 or R10, the information is displayed in the Receiver Options page in the same way that all other installed <b>Communication</b> devices are displayed.</p> <p>In the WebUI menu item <b>Receiver Status &gt; Receiver Options</b>, you will find the</p>	Fix	•		•			•		•

Issue	Type	R10 <sup>6</sup>	NetR9	R8 <sup>1</sup>	R7 <sup>2</sup>	Geo7	R6 <sup>3</sup>	R5	R4 <sup>4</sup>
GSM/GPRS Modem listed under <i>Communication</i> .									
<b>Special Note in reference to Leap Second announcement from IERS.</b> Trimble has made every effort to ensure our receivers will work seamlessly through the added leap second on July 1, 2015. Currently, our firmware supports this change and we are testing with simulators to ensure there are no issues. In the event that a fix is needed, we will release a new firmware prior to July 1, 2015.	**								

1 R8 Model 4, R8 Model 3

2 R7 Model 2

3 R6 Model 4, R6 Model 3

4 R4 Model 3, R4 Model 2

6 R10 and R10 LT

**Before** you update the receiver, download and backup any data files that are on the receiver.

## Download information

The latest version of Trimble Survey GNSS Firmware can be downloaded from the Trimble website within the support page of each supported receiver.

1. Go to [www.trimble.com](http://www.trimble.com)
2. Click on the *Support & Training* link in the blue banner at the top of the page.
3. Click on *Support A-Z List* on the drop-down menu.
4. Find your receiver on the list of supported products.

*Hint: Click on the associated first character of your receiver type. All survey receivers fall under "T" for "Trimble XX Receiver".*

5. Click on the link for your receiver type.
6. Click on the *Downloads* link.
7. The latest firmware version should be located at the top of the page.
8. Click on the link to the latest version.
9. Your browser will begin downloading the latest Winflash utility installer that contains your firmware.
10. At this point you can save the Winflash installer to a local folder or click on *Run (Open)* to begin installing the utility.

*Note: You may need to accept some security warnings based on your computer configuration.*

## Installing Winflash utility

At this point you will continue from the last step above or if you have saved the downloaded Winflash utility, you must navigate to the folder that contains the file and click on *WFC-Rx-5x-vxxx.exe*. (*xxx* = latest firmware version)

1. The Winflash installer will start. Click on the *Next* button.
2. Read the License Agreement and click on *Yes* to accept the terms.
3. At this point the Winflash installer will try to detect any previous versions of Winflash on your system
  - a. If the Winflash installer detected a previous version of Winflash on your computer, it will display the current Winflash folder in use. Click on *Next*.
  - b. If the Winflash installer does not detect a previous version of Winflash on your computer, it will ask you to accept the default folder for Winflash. If you do not want to use the default location then:
    - i. Click on the *Browse...* button and navigate to the desired folder location you would like to use.
    - ii. Click *Ok* to accept the new location.
    - iii. Click on *Next* to continue.
    - iv. Select the Program Folder location for the program icon, and then click on *Next*.
4. Winflash installer will now install all required files to run the Winflash utility.
5. The Winflash installer will now ask if you want to register Winflash. You have three options:
  - a. **Register via the Internet (web access required)**
  - b. **Register by Fax or Mail.** Selecting this option will open a document. Complete the document and fax or mail to Trimble.
  - c. **Register Later.**
6. The Winflash installation is now complete.

## Loading new Firmware

Use the Winflash utility to install the latest firmware on your Trimble GNSS receiver.

1. Click on the *Winflash* icon added to the Start menu on your computer.
2. Click on the *Device type* (receiver group) for your receiver type.
3. Click on the *PC serial port* drop down menu to select the serial port your receiver is connected to.
4. Click on the *Next* button.
5. From the *Operations* list box, click on the *Load GPS software* operation.
6. Click on the *Next* button.
7. Click on the *Available Software* for you receiver and the firmware you just downloaded. If you have installed firmware before, the firmware versions are still available in the listing.
8. Click on the *Next* button.
9. The next screen shows the current settings and actions to be taken by the Winflash utility.
10. Click on the *Finish* button.
11. Winflash will now load the latest firmware onto your receiver. This procedure can take several minutes. If the firmware loads correctly, then click on the *Exit* button.



## Loading the USB Driver

This version of Winflash now includes the USB driver necessary to connect the Trimble R10 and Trimble R7/R5 Survey receiver with USB to your computer. Your PC will assign a COM port as your USB connection.

Once you have installed Winflash, the USB Driver installer is found in the *Program Files\Common Files\Trimble\USB Driver<sup>1</sup>* folder. Follow the steps below to install the USB Driver.

1. Using Windows Explorer (or equivalent), navigate to the *Program Files\Common Files\Trimble\USB Driver<sup>1</sup>* folder on your computer.
2. Double click on the *Win7\_USB\_Installer.exe* file in the folder. A *Device Driver Installation Wizard* dialog box will open. **Note:** If you are running Windows 7 64-bit, you will see a second dialog box, which automatically loads the 64-bit USB driver.
3. Click on the *Next* button if the installation wizard to continue.
4. The USB Driver will install and present you will and dialog showing the USB drivers that were installed. Click the *Finish* button.
5. The USB Driver is now installed. **Note:** The Windows 7 64-bit USB driver will complete its installation.
6. Plug the USB cable into the USB port of the R7 or R5, and then plug the other end into your computer. Your computer will find the device and assign a COM Port for the USB connection. A message is displayed in the Taskbar indicating which COM port the USB is assigned to.

<sup>1</sup>For Windows 7 users, the *USB Driver* folder is located in *Program Files (x86)\Common Files\Trimble\USB Driver*