

# Trimble® NetRS

## Release Notes

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Version 1.02  
Revision A  
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#### **Notices**

Class B Statement – Notice to Users. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.

#### **Regulations and Safety**

STATEMENT ACCORDING FCC PART 15.19 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

STATEMENT ACCORDING FCC PART 15.21 Modifications not expressly approved by Trimble could void the user's authority to operate the equipment.

#### **CE Declaration of Conformity**

This product conforms to the following standards, and therefore complies with the requirements of the R&TTE Directive 1999/5/EC, which specifies compliance with the essential requirements of EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC:

EMC Emissions: BSEN 55022:1998 (W/A1:00) Class B  
EMC Immunity: EN 55024:1998 Safety: EN 60950:2000  
Mark First Applied: 03 The technical file is maintained at:  
Trimble Navigation Limited, 645 North Mary Avenue, Post Office Box 3642, Sunnyvale, CA 94088-3642, USA

## Product Information

These release notes describe features of the Trimble® NetRS GPS receiver that are not included in the *NetRS GPS Receiver User Guide*.

If your NetRS GPS receiver is supplied with other Trimble firmware or software, you must run the installation or upgrade program on the CD for *each* product or upgrade that you have purchased. The CD also contains data format conversion programs.

For more information about the CD distributed with this product, refer to the *NetRS GPS Receiver User Guide* included on the CD. For information about the CD distributed with another Trimble product, refer to the release notes for that product.

## Installing the Firmware

The latest release of the Trimble NetRS GPS receiver uses version 1.02 firmware. Review the firmware version on the main menu of the Receiver Status page. If your receiver version is 1.02 you do not need to install the firmware. However, if you do have an earlier version of firmware you will need to upgrade the firmware to version 1.02. Please refer to the firmware installation notes in the *NetRS GPS Receiver User Guide*.

Trimble recommends that you check the Trimble website periodically for information and updates about Trimble NetRS firmware. Firmware updates are made available on the Web for all customers on support. Support information is located at <http://www.trimble.com/support.html>

## Registering the Receiver

Trimble recommends that you register your Trimble NetRS GPS receiver to protect your investment and to ensure that the system is always up to date. When you register the receiver, you will be notified by e-mail when there are updates to the receiver firmware, or when new functionality becomes available.

To register the receiver:

1. Run the NetRS GPS Receiver CD.
2. From the main menu, select *Register your receiver*.
3. Do one of the following:
  - To register online, select Register using the Internet. The online registration form opens in your default web browser. Fill in the required fields, and then click Submit to submit the completed form.
  - To register by facsimile or mail, select Register using fax or mail. The registration form opens in the Microsoft® WordPad editor. Fill in the required fields, print the form and then fax or mail it to the address shown at the bottom of the form.

## Software and Utilities on the CD

For information on the data format conversion utilities on the CD, refer to the *NetRS GPS Receiver User Guide*.

## Trimble NetRS 1.02 Base Features

GPS Engine

- L1, L2, WAAS/EGNOS tracking and L2C
- 1PPS output
- 10 MHz external frequency input
- User selectable clock steering
- User selectable Everest multipath mitigation
- User selectable smoothing of carrier phase and code phase measurements

### Data Logging

- Internal 160 MB compact flash memory
- T00 compressed data logging format
- MET/Tilt data from external sensor logged to data file
- Configurable manual, once only and continuous logging sessions
- User selectable Auto delete mode
- Configurable Power saving and Power Fail Safe modes

### Streaming Output

- Configurable RT17 with MET/Tilt data from external sensor
- RTCM 2.x
- CMR/CMR+
- Configurable streaming outputs using TCP or UDP protocols over serial and Ethernet links.

### Query Output

- Ephemeris, almanac and SV data information available over Ethernet link using TCP protocol

### Configuration

- Dynamic network configuration using DHCP protocol
- PPP protocol supported on serial ports
- HTTP interface for configuration through a web browser
- File transfer through HTTP and FTP
- Configurable support for increasing levels of security for HTTP and FTP access
- Receiver configuration cloning
- NTP time service protocol
- Remote firmware upload and installation

## **Trimble NetRS 1.02 New Features**

Trimble NetRS 1.02 includes support for L2C signals. L2C tracking is controllable using the Web-based configuration pages and the programmatic interface. When tracked, L2C measurements are included in both GPS logging and GPS RT17 streaming sessions, and are identified by unique settings in the data produced by these sessions.

Version 1.02 also provides support for a programmatic interface. Information about this programmatic interface is available as a main menu selection on the Trimble NetRS Web-based interface. Extensive Help, including an overview, format of commands, and using the interface in Curl and Perl are provided. Refer to the Web pages for a detailed description of this new capability.