# AgGPS<sup>®</sup> Firmware Release Notes

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# Introduction

These release notes contain information on:

- *AgGPS®* receivers supported by version 1.73 firmware.
- New features in the version 1.73 firmware.
- How to install the 1.73 firmware on an *Ag*GPS receiver



**Warning** – Do not use the *Ag*GPS 70 RDL to upgrade *Ag*GPS receivers to the *Ag*GPS 1.73 firmware. The *Ag*GPS 70 RDL does not support this version of the firmware.

# **Supported Receivers**

The following receivers are supported by the 1.73 firmware:

- AgGPS 106 DGPS receiver
- AgGPS EZ-Guide<sup>®</sup> SL Lightbar Guidance System
- AgGPS 114 DGPS receiver
- AgGPS 122 DGPS receiver

*Note* – *AgGPS 122 receivers with PN 29654-xx cannot be upgraded to version 1.73 firmware.* 

- AgGPS 124 DGPS receiver
- AgGPS 132 DGPS receiver

*Note* – *AgGPS 132 receivers with PN 33302-x0 cannot be upgraded to version 1.73 firmware.* 

# **New Features**

Version 1.73 of the AgGPS receiver firmware provides:

- Improved DGPS performance with EGNOS (European Geostationary Navigation Overlay Service)
- Activated EVEREST<sup>TM</sup> multipath rejection technology, even when the lightbar is not connected
- Improved Code Carrier filter convergence
- Enhanced GPS filtering
- Increased smoothness of guidance indications

### **User interface**

Improvements to the AgGPS user interface enable you to further optimize system performance. You can now select satellites based on HDOP or PDOP.

# **Upgrade Procedure**

This section describes how to install the 1.73 firmware on an AgGPS receiver, and what to do if the installation procedure fails.

To install the firmware on an AgGPS receiver, the basic process is:

- Step 1.Download the installation files from the Trimble website.
- Step 2.Install the FlashLoader100 firmware transfer utility.

Note – You must use version 2.10 of this utility.

- Step 3.Connect the receiver to the office computer.
- Step 4.Use the installation files to upgrade the receiver.

For details, see below.

### Step 1: Downloading the installation file

You need the following files:

- *xx173*.tnr the firmware file (*xx* will vary depending on the type of receiver you have)
- FL100v210.exe the FlashLoader100 firmware update utility
- *AgGPSfmw\_173\_RelNotes\_ENG.pdf the electronic version of these release notes*

If necessary, you can download these files from the Trimble website:

- 1. Go to the Trimble website (www.trimble.com).
- 2. Click **Support**. Click your *Ag*GPS product, then click **Downloads**.
- Click the link v-1.73 AgGPS Receiver Firmware, Release Notes, and FlashLoader100 and download the file to a folder on your computer. Once the compressed file is downloaded, double-click it to access the files to install.

## Step 2: Installing the FlashLoader100 version 2.10 software

The FlashLoader100 software runs on an office computer that has a Microsoft<sup>®</sup> Windows<sup>®</sup> operating system (95, 98, Me, NT, 2000, or XP).

To install the FlashLoader100 software:

- 1. Go to the folder where you extracted the installation files and double-click the file FL100v210.exe. The message This will install FlashLoader100. Do you wish to continue? appears.
- 2. Click **Yes**. The *Welcome* dialog appears.

3. Click **Next**. The following dialog appears:



- 4. Click Next.
- 5. If you are installing the FlashLoader100 software for the first time on the office computer, go to Step 8 on page 7. If FlashLoader100 is already installed on the computer, the following dialog appears:



6. Click **Yes** to remove the previous version of the FlashLoader100 software. The following dialog may appear:

Remove Shared	File?	×				
The system indicates that the following shared file is no longer used by any programs. If any programs are still using this file and it is removed, those programs may not function. Are you sure you want to remove the shared file?						
Leaving this file will not harm your system. If you are not sure what to do, it is suggested that you choose to not remove this shared component.						
File name:	MFC42.DLL					
Located in:	C:\WINNT\System32\					
<u>Y</u> es	Yes To <u>A</u> ll <u>N</u> o No to All					

- 7. Click **No to All**. The *Remove Programs From Your Computer* dialog appears.
- 8. Click **OK**. The following dialog appears:



9. Click Next. The following dialog appears:



10. Select the option *Yes, I want to restart my computer now*, then click **Finish**.

### Step 3: Connecting the receiver to the computer

To connect the receiver to the office computer, use the supplied data/power cable as shown in Figure 1, Figure 2, or Figure 3.













When you connect a data/power cable to an AgGPS receiver, use a cable that has part number 40947, 30945, or 46441.

### Step 4: Upgrading the receiver

Upgrading the firmware on the receiver resets any custom settings to the factory defaults. Before you upgrade, make a note of any GPS settings that you have changed. You can then reconfigure them after the upgrade.



**Warning** – Do not disturb or disconnect the power to the receiver while you are installing the firmware. If power is lost or the computer fails during the installation, you may have to return the receiver to the factory for service.

To upgrade the receiver firmware:

1. From the Windows start menu, select *Programs / FlashLoader100*. The following dialog appears:

😵 FlashLoader100	
Options Debug Help	
Manage configuration of receiver	
Head into inte: C:\PROGRA~1\Trimble\FLASHL~1\currRX.cfg	
C Fjash from file:	_
O Interactive	
Upload firmware to receiver	
Flash file:	
<u>Bead error log from receiver</u>	
Save to file: C:\PROGRA~1\Trimble\FLASHL~1\errorlog.txt	
Proceed Find Device	
Mode Manufacturing / Engineering	

2. Select the *Upload firmware to receiver* check box and click **Proceed**. The following dialog appears:

Select Flash (	ode File		? ×
Look jn: 🔁	Trimble	- 🗢 🔁	<b>* III -</b>
) bt173.tnr cf173.tnr ss173.tnr			
File <u>n</u> ame:	bt173.tnr		<u>O</u> pen
Files of type:	TNR Flash Code File (*.tnr)	T	Cancel
			<u>H</u> elp

3. Select the location of the firmware file and click **Open**. The *FlashLoader100* dialog displays the location and name of the firmware file:

FlashLoader100	- IX
Options Help	
Update receiver with password	
Download configuration of receiver	
C Review ongoreen	
Upload firmware to receiver	
Flash file: C:\Documents and Settings\mhellin\Desktop\Trimble\bt173.tnr	
Save to file: C:\PROGRA~1\Trimble\FLASHL~1\errorlog.txt	
Proceed Find Device	

4. Click **Proceed**. FlashLoader100 should establish communication with the receiver and transfer the new firmware.

A progress bar appears during the upgrade. The upgrade process takes approximately five minutes. When the upgrade is complete, the message Requested operations completed successfully appears.

- 5. Click **OK**.
- 6. Exit FlashLoader100.
- 7. Use the *Ag*Remote software to reconfigure any custom settings.

### Installation problems

If the firmware installation fails:

- Check that you are using version 2.10 of the FlashLoader100 software. If you clicked **No** instead of **Yes** in Step 6 on page 7 of the installation procedure, run the installation procedure again.
- If power was disconnected during the upgrade, contact your local Trimble reseller or e-mail trimble\_support@trimble.com. Your reseller, or a technical support representative, can explain how to send the *Ag*GPS receiver to Trimble for repair.