

## Upgrading the firmware version of Trimble GPS board

This document describes steps on how to upgrade the firmware version of your GPS board. This document applies to GPS enabled Receivers shipped between September 2008 and March 2010 only, which have a new GPS mini board. [Figure 1 below]. The latest firmware version is v 1.18.

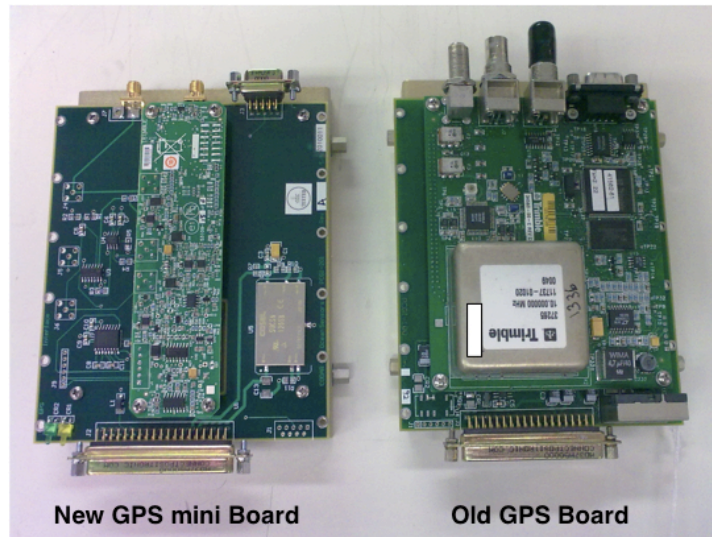
If your Receiver was shipped after March 2010, then your GPS board already has the latest firmware. You can still check your GPS firmware version as described in the document downloaded in step 4.

The new firmware upgrade is to fix the issue of random satellite tracking outage observed on new GPS boards. The issue doesn't appear with older GPS boards. If your issue persists even after firmware upgrade, then it might be related to other GPS hardware related issues. You may need to contact Codar support at [support@codar.com](mailto:support@codar.com).

**Do not attempt to upgrade the firmware on GPS boards for any older Receivers as described above.**

Follow these steps for firmware upgrade. If you have any doubts, contact Codar support at [support@codar.com](mailto:support@codar.com).

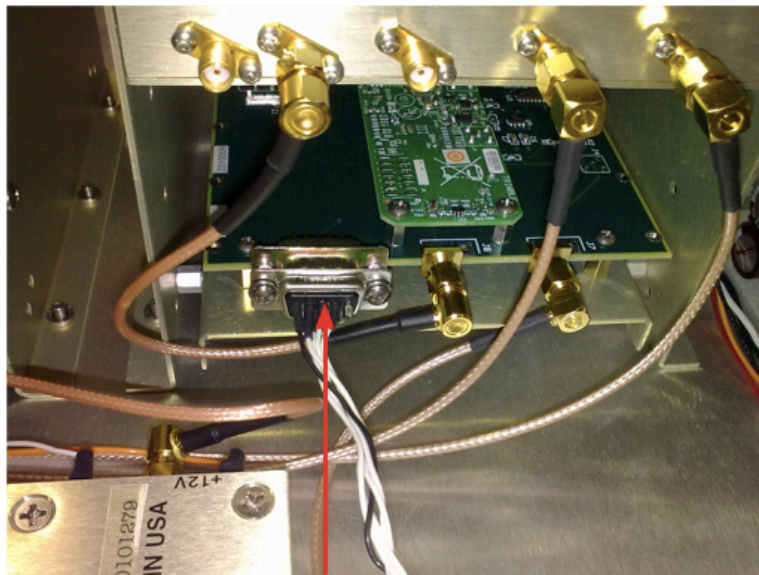
- 1) Identify your GPS board. Your receiver should have new GPS mini boards for this firmware upgrade. Refer to Figure 2 below for the view from the back of the receiver.



**Figure 1**

If your Receiver has the new GPS mini board, proceed to the next step.

- 2) You will need a PC with Windows Operating System and a serial port or usb port.
- 3) If your PC does not have a serial port, you will need a High-Speed USB To Serial Adapter like the one from the below link:  
<http://www.tripplite.com/en/products/model.cfm?txtSeriesID=518&txtModelID=3914>
- 4) Next, download the firmware update procedure document from the below link:  
<http://www.trimble.com/timing/mini-t.aspx?dtID=support>
- 5) Download the firmware from the same link as above. Click on the Mini T v1.18 Application to download the latest firmware.
- 6) Next, download the TrimbleStudio software application from the same link as above. Download the .exe file.
- 7) After downloading all the above required applications, connect the PC to the serial port of the GPS module in the Receiver. [Figure 2]



Disconnect the Receiver serial cable and connect another serial cable to the computer or the keyspan adapter

**Figure 2: View from the back of the Receiver.**

(Transmitter connection, receiver usb port connection to the computer and any other cable connections not required. Only the serial connection between the GPS module and the computer required.)

If you use a Keyspan adapter, then connect the serial cable from the GPS module to the keyspan adapter serial port and connect the usb port of the keyspan adapter to the usb port of your computer.

8) Once, the above connection is complete, follow the instructions in the firmware update procedure document that you downloaded in step 4 above.

9) If you have any doubt, contact [support@codar.com](mailto:support@codar.com).