



X90-OPUS: GNSS Board Reset

Date: 24 November 2014

If an X90-OPUS fails to track satellites it may be possible to 'reset' the Trimble GNSS board. (Alternatively it could be a hardware issue.)

These instructions describe how to reset the board and check for lost activation keys.

--

1. Download HCLoader from the web:

<http://x90gps.com/out/hcloader/index.html>

Download the Trimble Reset utility:

http://x90gps.com/out/TReset/ConfigurationToolbox_v6_9_0_5.zip

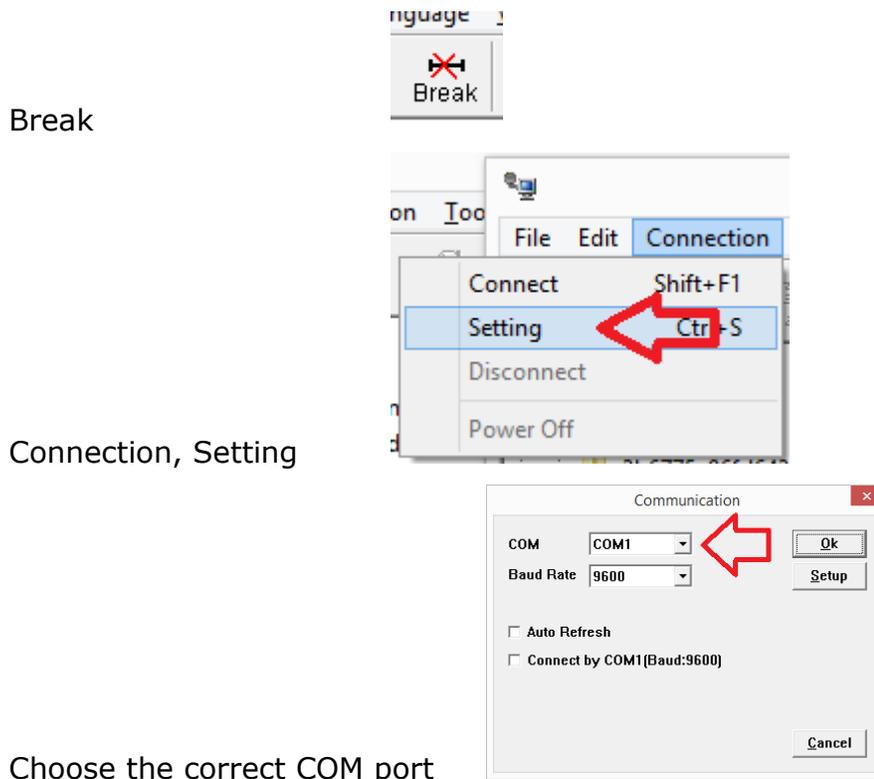
Extract it from the ZIP file and install it on your computer.

2. Connect the GPS head to a serial port on your computer. Insert a fully charged battery in the GPS, turn on the GPS and wait 30 seconds for it to fully boot. Start HCLoader.

Note: If you start the HCLoader.exe program and you see Mandarin Chinese characters, you can switch to English by clicking on the menu option 'L' and then 'E'. Exit program and restart.

HCLoader will attempt to communicate with the GPS on COM 1.

If the GPS is connected on a COM Port other than COM1, click on



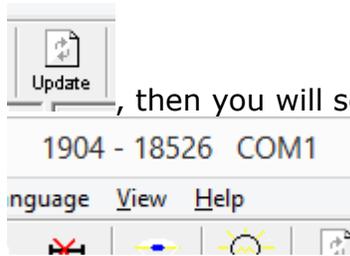
Break

Connection, Setting

Choose the correct COM port

Click on OK, HCLoader will automatically attempt to connect to the head.

3. Click on Update:

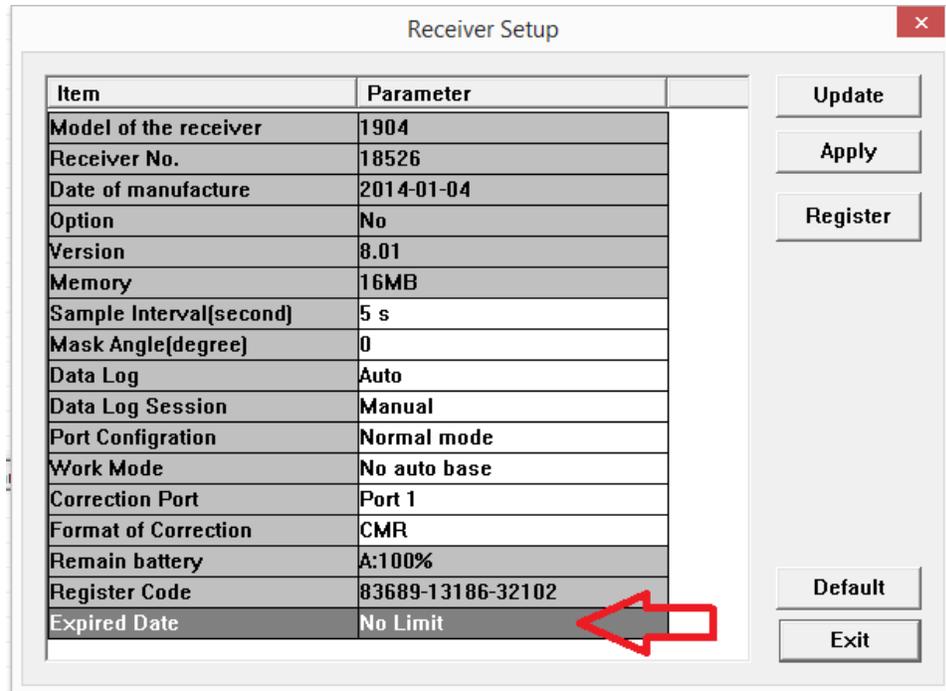


the top of HCLoader:

4. Click on Setup:



The 'Receiver Setup' will be shown:

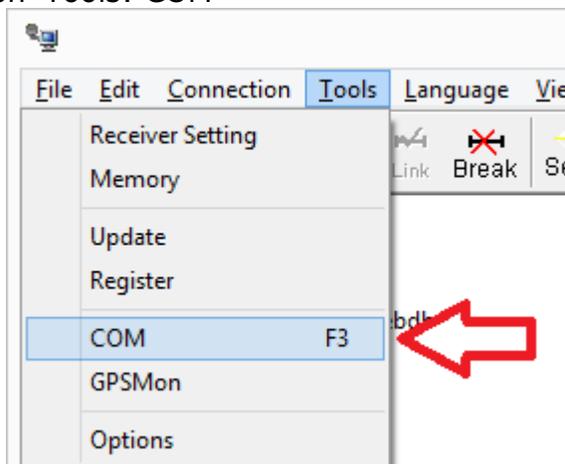


3

Verify that the 'Expired Date' is set to 'No Limit' If there is another date listed, the receiver has lost its registration code. Contact iGage or the CHC factory with the 'Receiver No.' (18526 for the receiver shown above) You will be supplied with a new registration code which you can enter using the 'Register' button.

Click on 'Exit' to return to the main HCLoader menu.

4. Click on 'Tools: COM'

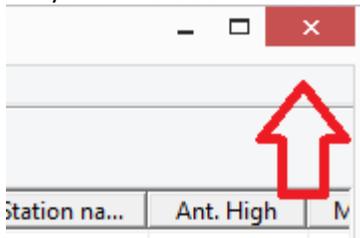


5. Type the command "ST,B1", then click Send:



4

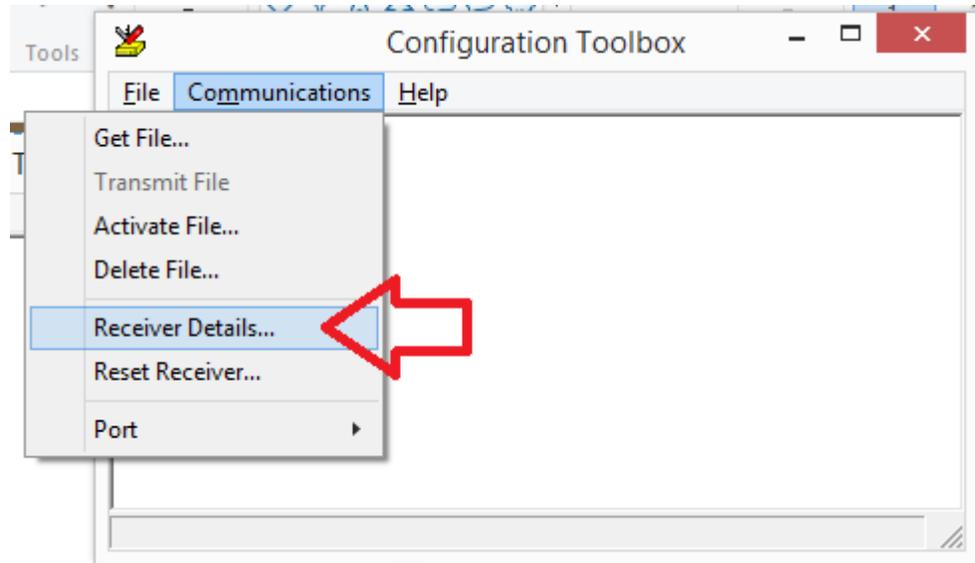
6. Click on 'Exit', then close HCLoader by clicking the X in upper-right corner:



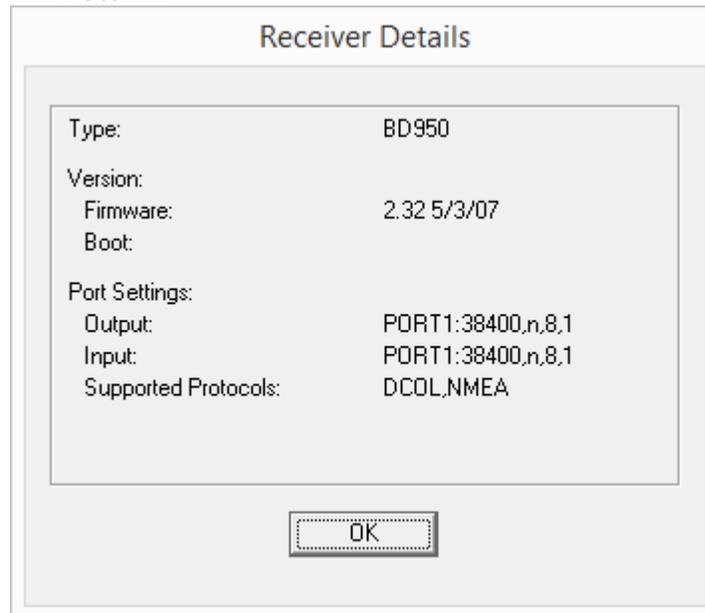
7. Start the Trimble Configuration Toolbox from your desktop:



8. Click on 'Communications: Receiver Details...' to verify that you are connected to the GNSS board:

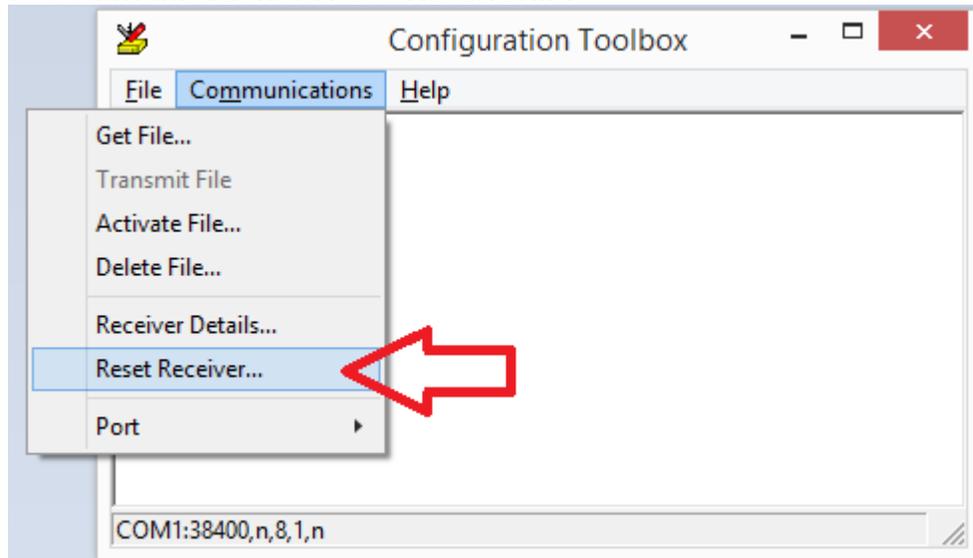


The Toolbox will return:



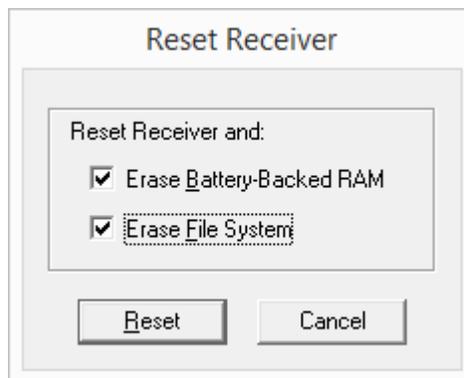
verifying that you are connected to the internal GNSS board.

9. Click on 'Communications: Reset Receiver...':

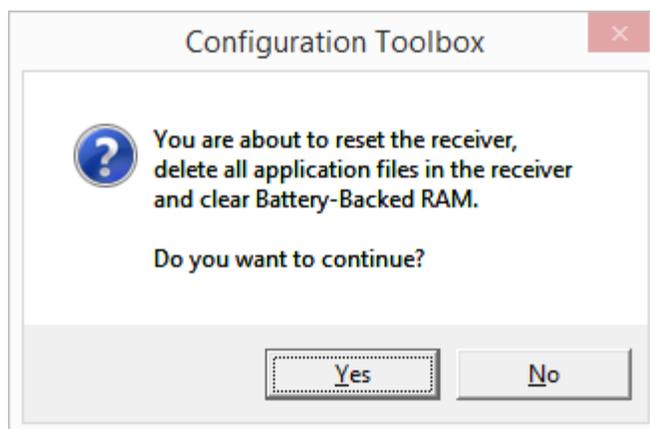


6

Check both option boxes:



Click the 'Reset' button, then



Verify the reset by clicking 'Yes'.

After a few seconds you will see:



Click OK.

Wait 30 seconds, then turn the receiver off.

Take the receiver outside, turn it on, then allow it to acquire a new ephemeris. It may take 10 minutes for it to begin tracking satellites again.

If this does not fix the receiver, contact iGage. The most likely next step is to send the receiver in for service.