

Spatial FOG Trimble BD930 Firmware Update

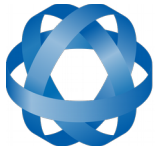
This document outlines the steps involved in upgrading the firmware of the Trimble BD930 GNSS receiver that is inside the Spatial FOG. Please contact our Application Support Engineers if you have any questions about this procedure before you start: support@advancednavigation.com.

Requirements

- Spatial FOG
- Spatial FOG breakout cable
- RS422-to-USB adaptor cable
- RS232-to-USB adaptor cable
- PC with Java JRE v8 installed

Procedure

1. Download the latest version Spatial FOG Manager from our website:
<https://www.advancednavigation.com/product/spatial-fog#software>
2. Download the special Spatial FOG GNSS Update firmware from here:
https://hq.advancednavigation.com.au/filesshare/spatial_fog_gnss_firmware_update.anfw
3. Download and unzip the latest standard Spatial FOG firmware from our website:
<https://www.advancednavigation.com/product/spatial-fog>
4. Download the latest Trimble BD930 firmware from here:
https://hq.advancednavigation.com.au/filesshare/BD930_V537.timf
5. Download the Trimble Utility.
<http://hq.advancednavigation.com.au/filesshare/TrimbleUtility.jar>
6. Attach the RS422-to-USB adaptor cable to the Primary port of the breakout cable and to a USB port on your PC. Connect to the Spatial FOG with Spatial FOG Manager using the correct COM port and baud rate.
7. In Spatial FOG Manager, go to the View menu and choose GNSS Receiver Information to view the current Trimble BD930 firmware version. If the version is already at v5.37 you can stop here.
8. In Spatial FOG Manager, go to the Tools menu and choose Firmware Update and update the Spatial FOG with the special Spatial FOG GNSS Update firmware from Step #2.



9. Once the firmware update has completed, disconnect and then close Spatial FOG Manager. Unplug the RS422-to-USB adaptor cable from the PC.
10. Attach the RS**232**-to-USB adaptor cable to the GNSS RS232 connector of the Spatial FOG breakout cable and to a USB port on your PC.
11. Connect with the Trimble utility and ensure that the serial number appears in the top left of the window indicating a successful connection.
12. Click browse in the bottom right of the Trimble Utility and select the Trimble firmware file .timg from step #4.
13. **Once the update starts do not stop it!** Click update. The process will take around 40 minutes.
14. After the upgrade is completed, close the Trimble Utility and disconnect the RS232-to-USB adaptor cable. Reconnect the RS422-to-USB adaptor cable to the Primary port of the breakout cable and to a USB port on your PC.
15. Restart Spatial FOG Manager and connect to the Spatial FOG. Using the Firmware Update function in Spatial FOG Manager, load the latest Spatial FOG firmware previously downloaded at Step #3.
16. Please power cycle the Spatial FOG. You are now finished the upgrade procedure. To confirm success, in Spatial FOG Manager, go to the View menu and choose GNSS Receiver Information to check the firmware version.