



3000L DGPS Receiver Software Download Instructions

Revision History

Issue	Date	Description	Issue	Date	Description
Issue 1.0	01/11/1996	First Issue	Issue 2.0	21/04/1998	
Issue 3.0	03-Jul-2000	BDG – removed BBS			

1. Purpose

This procedure describes the instructions for downloading main software revisions to the 3000L products.

2. Scope

This procedure covers the 3000L Product Range only.

3. General

3000L Receivers have different revisions of software as part of the normal feature enhancements of the product throughout the product life. There are also special applications within various industries requiring special software. The software is written on a personal computer development station, in the C and Assembler languages. The software is stored in an EEPROM within the 3000L receiver and is downloadable via the command (and for special purposes the auxiliary) port. Several techniques are available for downloading the main software into the 3000L and these are described below.

4. Procedure

The Main software can be transferred to the 3000L in one of four ways:

- via the new Software Toolkit Version 3 (the easiest and fastest)
- via the Command Port and a Terminal Emulation Program (ie Telix) - not recommended for inexperienced users.

The DSP EEPROM must be reprogrammed

5. Main Software Download Procedures

5.1 Using the new Toolkit Version 3

- Make sure you have an edition of the Toolkit Version 3 available. If you don't download it from the OmniSTAR website (<http://www.omnistar.com.au/>) or the Fugro IP Division public folders on the private Fugro IP network (Fugro companies only).
- Copy the *.H86 file to the same directory as the Toolkit program. For example if Toolkit is stored in the C:\3000 directory and the .H86 file is stored in the C:\DOWNLOAD directory then the command:
`copy c:\download*.H86 C:\3000`
will copy the file to the toolkit directory.
- Connect the 3000L's command port cable to the PC communications port. Do not connect the antennas as this slows the download process down.
- Run the Toolkit Program. After the main screen has been filled in and a receiver has been detected, go to the maintenance menu and select the Software download button. Hit the select button and select the *.H86 file containing the main version of the software.
- For Main software files, check the Auto switch check box. For Data files deselect the check box.



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6. Hit the Start Download Button. The program will do the rest. When the button changes from CANCEL to DONE the upgrade is complete. You may then have to download a data file as well using the same process.

5.2 Using a Communications Program

1. Open up the communications program.
2. Type in the current password for the unit using the PW command (PW=password). This is calculated using the password calculator.
3. Start the download process by sending the software download command to the unit with the area to store the software in (SD=area). The area is a number 1 through 12 and should match the last two digits of the filename being downloaded, the first six specify the version number. Area 1 is the area the bulletin board versions are compiled for.
4. If you are certain you have the settings correct, then press Y and <ENTER> to signal your acceptance of the download. Otherwise press N and <ENTER> and the process will abort.
5. When the Ready response appears, using the Comms program send the software down to the unit AS A TEXT FILE.
6. Wait till the OK response signals the download has completed.
7. Then issue the Software Switch Command (SS=area) using the same area number as for the download. This will make the unit use the software that has just been downloaded.

6. Reprogramming the DSP

The current DSP software is available on the bulletin board (see Appendix A for download details). Once the DSP code is on the machine that the EEPROM burner is attached to, the new code can be burnt into the EEPROM.

The chips used are the XICOR X28C256 EEPROM's or equivalent. The old EEPROM which is in the unit can simply be removed and reused. However care should be taken to ensure the old EEPROM is erased before reburning. Some EEPROM burning software does this automatically.

The EEPROM burner software should be configured as follows:

Device Type : EEPROM

Manufacturer : XICOR

Chip : X28C256

Format : Motorola HEX format