



Engineering Update

Aquarius 01-02

Aquarius²22

Sagitta 01-02

3011

March 2007

Application firmware (PC Board)

UCIMV20063

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2. INTRODUCTION

MAGELLAN makes every effort to satisfy its clients by regularly releasing enhanced versions of its products. The object of this document is to provide all the instructions required for updating any equipment already in use in the field so that users can benefit from the new enhancements.

3. EQUIPMENT CONCERNED

Product line : Marine
Product : Aquarius01/02 - Aquarius²22 - Sagitta01/02 -3011
Sub-part : PC Board.
Firmware :
Software :
Hardware :

4. VERSION INDEX

UCIMV20063

5. ENHANCEMENTS

V20063 corrects minor anomalies reported from V20053 and implements suggestions from customers.

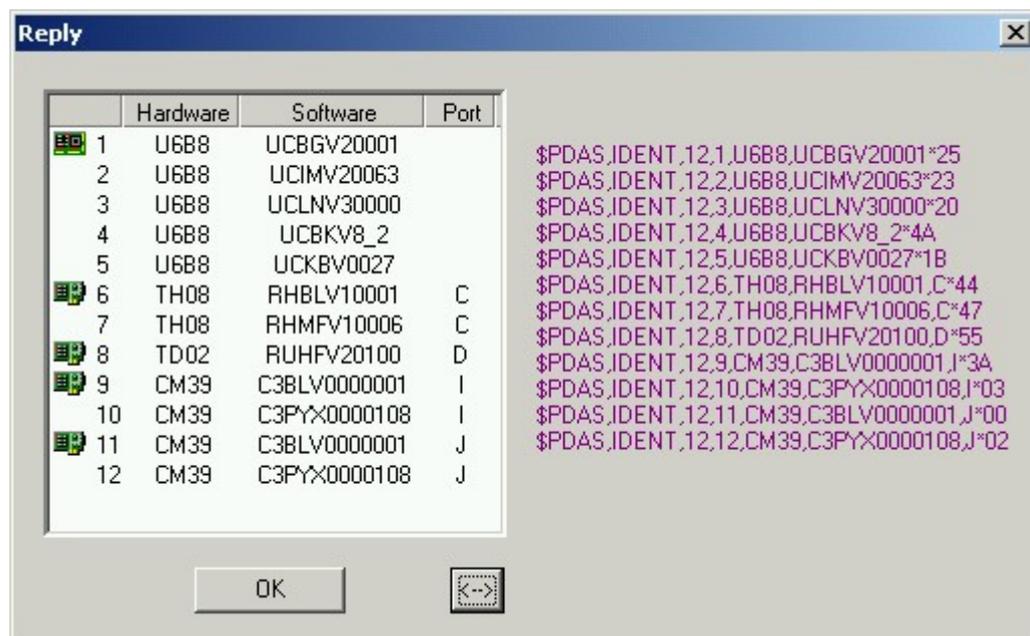
- **Anomalies corrected**
 - **Input of antenna phase center data** is simplified
 - **Satellite status for secondary antenna** is displayed again
 - **SBAS satellite related data** is available as output again
 - **\$ALARM** message works as in 5000-series units
 - **RSIM messages** (#1, #3, #20, #21) are corrected
 - **RTCM 16** long messages do not generate anomalies anymore
 - **Speed and heading information in KART** mode are now displayed
 - **Waypoint height** is properly stored and used when modifying waypoint information
- **New implementation**
 - **GGAB** message : Backup position data is now available as output. Only the accurate position is available. Variable format data are to be used
 - **DGPS station** : Number of stored DGPS station has been increased from 20 to 45
 - **Waypoint operation**: if height is equal to 0, waypoint direction / distance is now in 2D
 - **X84b, Y84b, Z84b** “Backup” solution data is available as output
 - **\$GPGGA (displayed as GG84)** is a GGA message available as output in WGS84 whatever the current geodesy system selected by the user. GGA message stays as is; i.e. it is displayed and output in the coordinate system selected by the user

6. KNOWN ANOMALY

- **No anomaly is known today**

7. COMPATIBILITY

There is no hardware or software incompatibility of any sort with the other parts of the equipment. But to get complete benefit of all improvements, it is advisable to check you receiver hardware/software versions. After completing the update, the different versions in the equipment should be as follows:



NOTE :

Only **CONFIGPACK** version V3.52 can be used to modify the internal configuration.

Former **Configpack** and **Confpac** used for 5000 and 600 series cannot be used. In particular, functions introduced in V20053 would not be properly configured.

8. EQUIPMENT REQUIRED

- A PC computer using WINDOWS XP, or 2000
- A PC to receiver serial line cable (Part No.: 101243...) and RS422/232 converter (Part No.:75675..).

9. STEP-BY-STEP PROCEDURE

Software and Firmware are available on ftp site. **Address** <ftp://ftp.magellangps.com/>

Using **Softload.exe** software

9.1 Installing **SOFTLOAD V2.0** software

Run **Install-SoftLoad-V2.0.exe** and follow instructions.

9.2 UNZIP **UCIMV20063.zip** file.

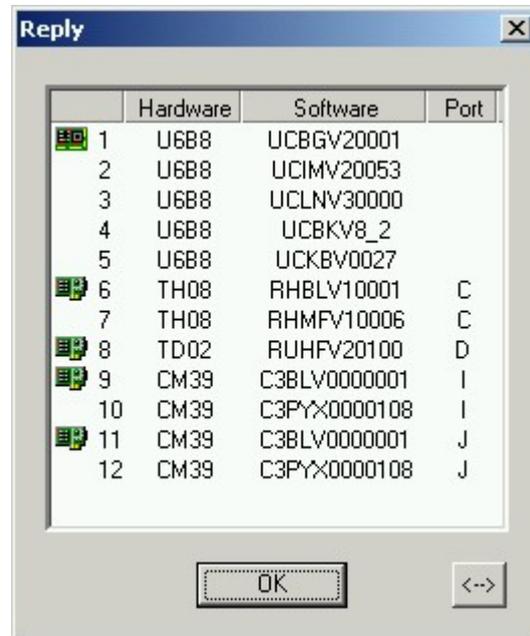
- 3 Unzipped files are:

File Name	Date (dd/mm/yy)	Size (bytes)
Thales.def		
UCIMV20063.sfl	26/03/07	1 Ko
UCIMV20063	26/03/07	4 231 Ko

9.3- Firmware loading

- **Before loading new firmware, save the configuration file you currently use with CONFIGPACK software.**
- Copy **Thales.def** file to the “**products**” directory of **Softload**.
- Copy **UCIMV20063** (no extension) and **UCIMV20063.sfl** files to the “**Release/Marine Survey**” directory of **Softload**.
- Verify / change parameter in **softload.ini** file
- Open the **softload.ini** file located in Windows directory for Windows95/98/XP or in WinNT for Windows NT/2000
- Modify the line Reserved 3=7 to Reserved 3=15 in [Miscellaneous] block and save the file
- Connect port **A** (RS422) of the receiver to RS232 port of your PC with cable (Part N°.: 101243...) and adaptation cable (Part N°:.....75675..).
- Switch on the receiver
- Run the **SOFTLOAD** Software from the task bar (Start/Programs/ Thales Navigation /SoftLoad)
- On the **File** menu, select **Open**, choose the **UCIMV20063.sfl** file then click **Open**

- Check data communication between the receiver and the PC by clicking the **?** button on the toolbar. If communication is established, a window will open listing the different versions currently installed in the unit. In that case, close this window. If instead of the window, you get an error message, check the connections (data and power cables) and communication parameters. Unless these parameters have intentionally been changed earlier, they usually are the following: 9600 Baud, 8 data bits, 2 stop bits and “no parity”



- To start re-loading, click the red arrow on the toolbar. Note that the time of re-loading is about 10 minutes

NOTICE: At the end of transfer SOFTLOAD software checks to see if the firmware has been correctly loaded then displays the new firmware status

EXIT SoftLoad after loading

RESCUE mode:

If during firmware loading either the receiver or PC supply shuts down it is not any more possible to establish dialogue.

The “**Rescue**” mode, selectable in device menu of **Softload** (selection in Option menu), is used to restore dialogue with the receiver.

Firmware re-loading then becomes possible.

This “Rescue” mode is only available on A port

IMPORTANT WARNING:

- Before using receiver you **MUST** do as follows
- Open WinCOMM software or any terminal software.
- Send “ **\$PDAS,CONFIG,DEL** ” command.
- Acknowledgement is return by the receiver.

- Make a ON / OFF of the receiver.
- Send “ **\$PDAS,CONFIG,RESET** ” command.
- Wait while receiver resets its configuration and reboots. This process can take some minutes.

10. ATTACHED ITEMS

Items	Version / name	Date (dd/mm/yy)	Size (bytes)
Logiciel SOFTLOAD	Install-SoftLoad-V2.0.exe	07/04/02	2 658 714
Compressed file UCIMV20063.zip	UCIMV20063	26/03/07	1 489 Ko