

Firmware Release Notes

Survey/GIS

Date: July 10th, 2008

Product: PM3

Subject: PM3 Release V2.2

Number: PM32008

Introduction:

The PM3 Release 2.2 is a no-cost firmware update for the PM3 receiver. It includes new versions of:

- Surveying v2.14, whose major enhancement is NMEA output;
- Fast Survey 2.1.3, which contains bug fixing.

The rest of the PM3 package is unchanged, these versions software should be used with operating system version **2.16** and GPS firmware version **P010** and eboot **1.40**.

All programs are available for free download from ftp.magellangps.com in the following folders:

- Operating system version 2.16 :/Land Survey/PM3/Firmware/Operating System

- GPS firmware version P010 :/Land Survey/PM3/Firmware/GPS firmware

- Software version 2.14 :/Land Survey/PM3/Software/ Surveying&Mobilemapping

- Fast survey 2.1.3

There are two versions one for Central and South America the other for the rest of the world. The only difference between the two versions is the background map.

Upgrade procedure

Warning: If you already are a user of the RTK option, you will need to re-enter the activation code this option <u>after upgrading the firmware</u>. So if you have lost this code, please do the following <u>before upgrading</u>: run the "unlock RTK option" utility so you can view and write down this code.

1-Updating the Surveying & Mapping Software Applications

The upgrade procedure is as follows:

- 1. Go to the ftp.magellangps.com FTP site and download the PM3 V2.2 firmware from the /Land Survey/PM3/Software/ Surveying&Mobilemapping folder to your office computer. Choose the firmware version that is suitable for your location.
- 2. Extract the files from the Zip file, making sure your preserve the folder structure while doing this (see below).

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3. Insert a SD card into the card reader of your office computer. Using Windows Explorer on your PC, navigate to the drive used by the card reader, right-click on it and select the Format option. Select FAT32 as the file system for cards 64 MB or larger. Formatting the card will delete all its data.

Copy the unzipped files and folders to the SD Card.

- 4. Remove the SD card from the card reader and insert it into the PM3
- 5. On the PM3, double tap Utilities and then AutoLoader.
- 6. Select the PM3NAV214.txt, and then tap OK. Let the unit complete the installation.
- 7. At the end of the installation, restore the factory settings by pressing simultaneously the following keys LOG+IN+MENU.

2 -Activating the RTK software

- 1. To unlock the RTK option for the Surveying and Mobile Mapping application, go in the "Utility" directory and run the "Unlock RTK option" utility.
- 2. Enter the RTK code and then tap OK. An acknowledgement message should appear.

Compatibility

This release of PM3 is compliant with the following versions of:

GNSS Solutions	Release >2.50.06
Mobile Mapper Office	Release >3.4

New features

Possibility to output NMEA (0183) messages both from Surveying and Mobile Mapping To activate this function :

- launch Surveying (or Mobile Mapping)
- press "Menu"
- choose "Setup"
- choose "NMEA"

The NMEA messages are then delivered on port COM1 (serial port). The port COM1 can be configured through a dedicated display (baud rate, parity...)

Be aware:

- the list of messages is fixed and cannot be changed.
- the output rate is fixed at 1s and cannot be changed.

The following messages are delivered: \$GPGLL, \$GPGGA, \$GPGSA, \$GPGSV, \$GPRMC.

Resolved Problems/Improvements

Surveying application firmware:

Bugs fixed:

Incorrect date

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Fast Survey:

Bugs fixed:

- Points missing in auto by interval.Not possible to make trajectory by distance in Us Feets.
- Wrong elevation of the reference station.
- Difficulty to recover a fix after having lost it on PM3 with Fast Survey