



Firmware Release Notes

Survey

Date: September 3rd, 2012
Product: ProMark 800
Subject: ProMark 800 V1.2 Firmware Release

Introduction:

This document is the firmware release note of the ProMark 800 V1.2.
This version is minor update and does not require a new registration code.

Upgrade procedure

The procedure to upgrade the receiver is the following:

- 1- Copy the file [p_800_upgrade_V1.1.S759124.tar.bz2](#) to an USB memory key.
- 2- Make sure that there are at least 10Mb of free memory after having copied these files
- 3- Switch off the ProMark 800
- 4- Plug the ProMark 800 into an external power and make sure that there is also an internal battery
- 5- Connect the USB memory key to the ProMark 800
- 6- Turn on the ProMark 800 while keeping pressed the button 'Scroll' (during about 5 seconds)
- 7- Wait for the complete upgrade, which should take about 30 minutes.

Firmware list and versions

General version number: [V1.2 - S759K124](#)

SYS: [S125c](#)

GNSS: [K124](#)

RFS: [759](#)

BOOT LOADER: [1.1.5.9](#)

KERNEL: [2.6.19](#)

PMU: [2.31](#)

GSM: [R7.46](#)

The radio firmware compatible with the ProMark 800 V1.1 are:

-Internal Pacific Crest ADL RXO: [3.02 \(2280\)](#)

-External Pacific Crest ADL Vantage: [3.02 \(2280\)](#)

- External Pacific Crest ADL Vantage Pro: [3.02 \(2280\)](#)
- External Pacific Crest HPB: [2.58](#) or [2.42](#)
- Internal U-Link: [1.02](#)
- External U-Link: [1.03](#) or [1.04](#) (HW: AE) or [1.09](#) (With Connector)

The software compatible with ProMark 800 V1 are:

- FAST Survey: [3.0.1](#)
- GNSS Solutions: [3.71](#)
- RINEX Converter: [4.1.1](#)
- Conf Radio: [2.3.2](#)
- Spectra Precision Survey Pro: [5.1](#)
- Spectra Precision Survey Office: [2.7](#)

New features (compared to ProMark 800 V1.1)

1. **No new feature.**

Resolved Problems (compared to ProMark 800 V1.0)

1. **RMS:** the RMS reported by the product was too pessimistic. The reported RMS is now more adequate.
2. **Local Coordinate System:** the receiver stopped outputting the position when the receiver was in the mode RTK+Heading and local coordinate system computation (\$PASHS,LCS,ON) was activated. This problem is resolved.
3. **Leap Second:** Fix leap second value in ATM,RNX; ATM,ATR,&UEM; ATM,NAV,&GFT.

Known issues

1. GALILEO raw data cannot be available from ProMark 800 because pseudo-range 1ms ambiguity is not resolved. Galileo Navigation data also cannot be available
2. When you connect the ProMark800 to a PC with the USB Cable and you delete some files of the internal memory with the Windows Explorer of the PC, the list of files returned by the [\\$PASHQ,FIL/FLS](#) commands are not correct anymore (so also files displayed by FAST Survey). It is necessary to perform a power cycle in order to retrieve a correct list of files.
3. When the command [\\$PASHS,RST](#) is issued, the message [GNSS Board not detected](#) may appear sometimes. Then after few seconds, the receiver works properly.
4. When the base is a Trimble receiver or board configured in CMR or CMR+ and the rover is a ProMark 800, the age of corrections is not stable and high. This due to the Trimble GLONASS

messages which are not processed by the ProMark 800. In this case, it is recommended to use RTCM3 format.

Recommendations

1. User working with 3rd party NTRIP networks should be recommended not to connect to VRS mount points, if other mount points such as MAC or FKP are available. This will guarantee a more stable performance.
2. User working with 3rd party bases/networks generating GLONASS reference data is recommended to identify with the network provider the name (brand) of reference receivers. If this brand is known a priori, it can be specified on rover by command \$PASHS,RCP,REF,brand,1 (supported brand=TRIMBLE, NOVATEL, SEPTENTRIO, TOPCON). In this case, GPS+GLONASS rover RTK performance can be much better than in a case, when reference receiver name is not known.
3. The new GSM Modem power consumption is higher in 3G mode than in 2G mode. When 2G is available, it is recommended to set the modem to 2G mode in order to increase the battery life of the receiver.