

Firmware Release Notes

Survey

Date: September 1, 2015

Subject: New ProFlex 800 Firmware Release

Product: ProFlex 800

Version: v2.02

Introduction

This document is the Firmware Release Notes for the ProFlex 800 v2.02.

This version is minor 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_V2.02.S845Kl27.tar.bz2 to a USB memory key
- 2- Make sure that there are at least 10Mb of free memory after having copied these files
- 3- Switch off the ProFlex 800
- 4- Plug the ProFlex 800 into an external power source and make sure that there is also an internal battery
- 5- Connect the USB memory key to the ProFlex 800
- 6- Turn on the ProFlex 800 while keeping the 'Scroll' button pressed (for about 5 seconds)
- 7- Wait for the upgrade to complete, which should take about 30 minutes

Firmware List and Versions

General version number: v2.02 - S845Kl27

SYS: S241 GNSS: Kl27 RFS: 845 BOOT LOADER: 1.1.5.9 KERNEL: 2.6.19 PMU: 2.31 GSM: R7.46 The radio firmware compatible with the ProFlex 800 v2.02 are: -Internal Pacific Crest ADL Foundation: 3.04 (2280, 2288 or 2300)

- -External Pacific Crest ADL Vantage: 3.04 (2280, 2288 or 2300)
- -External Pacific Crest ADL Vantage Pro: 3.04 (2280, 2288 or 2300)
- -External Pacific Crest HPB: 2.58 or 2.42
- -Internal U-Link: 1.02
- -External U-Link: 1.03 (HW: AD), 1.04 (HW: AE) or 1.09 (With Connector)

The software compatible with ProFlex 800 v2.02 are:

- FAST Survey: 3.1.12
- GNSS Solutions: 3.80.8
- RINEX Converter: 4.4.2
- Conf Radio: 2.3.2
- Spectra Precision Survey Pro: 5.3
- Spectra Precision Survey Office: 2.90

New Features (compared to ProFlex 800 v1.9)

- 1. **Receiver name**: the receiver name written in RTCM3 messages and raw data files was ProFlex 800. Modifying the name is now supported.
- 2. **Unsmoothed data**: by default the measurements provided by the receiver are smoothed. Output of unsmoothed measurements is now supported.
- 3. **NTRIP V2 and Central**: the protocol NTRIP V2 is now supported by the ProFlex 800. It allows the receiver to broadcast corrections through Spectra Precision Central (CCC).

Resolved Problems (compared to ProFlex 800 v1.9)

1. **Leap Second**: since July 1st, 2015 the leap second written in the RINEX files generated by the ProFlex 800 was not correct.

Recommendations

- 1. The new GSM Modem power consumption is higher in 3G mode than in 2G mode. When 2G is available, it is recommended to force the modem into 2G mode in order to increase the autonomy of the receiver.
- 2. The Ring File Memory does not work properly with 8 GB internal memory. The receiver may lose measurements in sessions when there are many files in the memory. It is recommended to disable the Ring File Memory feature and to delete manually files and directories when the memory is almost full.