



*Now, what's tomorrow's challenge?*

APN-018 Rev 1

February 3, 2000

## **What New In SoftSurv 1.51?**

### Overview

SoftSurv is a Windows-based suite of programs that support all aspects of GPS surveying. It includes a full-featured GPS post-processing software package, the flexibility to display and plot data in a variety of ways, and the ability to export data in formats that are compatible with most industry-standard mapping and GIS packages. SoftSurv is easy to learn and use, while still providing a wide range of features and flexibility.

### What's New in the Software?

#### **Planner**

- features a 3D model of the globe which you can rotate, with “zoom in” and “zoom out” capabilities

#### **Processor**

- processes data logged by the DL-Series GPS receiver (often referred to as the DL)
- displays properties of data files before they are imported
- imports and processes raw Trimble and RINEX data files
- auto-detects kinematic ‘rover’ files
- optional update of site positions computed from double difference phase solutions
- organizes project files using a default directory structure
- contains new information in Baseline Summary and Process Summary
- displays additional color codes on plan view
- baselines may be fixed as references to initialize differential processing
- supports semi-kinematic processing, with 2-10 minute occupations of known baselines used to fix integers
- displays a history list of recently opened files
- uses previously-occupied baselines/sites during kinematic runs to re-initialize as necessary

#### **Project Manager**

- compresses and archives Processor projects to save disk space
- retrieves archived projects

#### **Utilities**

- displays several new dialogs that allow support for the DL receiver
- splits or joins observation data files

### Also...

#### **New CD and Hardware Key**

SoftSurv includes a new CD as part of the installation process and a new hardware key for transferring SoftSurv licences to and from the key to a PC or for upgrading your current software package.

You will have received a CD which contains the SoftSurv program modules for the PC and data collection software for the DAP, Husky and HP200 data loggers. Also on the CD are an overview of what is new in the latest version of SoftSurv software (MS Word document), contact information for NovAtel (MS Word document) and the SoftSurv User Manual (PDF document). Adobe Acrobat Reader is required to read the

manual. If you do not have the Acrobat Reader, it can be downloaded from Adobe's web site at: [www.adobe.com](http://www.adobe.com). Also included with the CD is a security key unless you have the Basic package where a key is not needed. If applicable, the key is to be inserted into the parallel (printer) port of the PC for transferring licences or to upgrade your SoftSurv software.

NovAtel provides one security key with a minimum of three licences that can be transferred back and forward from the key to a PC. You can purchase additional licences up to a maximum of 10 per key. To transfer a licence between your key and a PC, open the self-administering dialog in *PROCESSOR*, for details see the *SoftSurv User Manual, Processor: Licence Options*. Your security key does not need to stay plugged into your PC once a licence has been transferred from it.

You can distribute licences yourself, however, to obtain an upgrade from one SoftSurv package to another, you must contact NovAtel Customer Service. You must also contact NovAtel Customer Service to obtain a temporary demonstration SoftSurv package, see the *SoftSurv Manual, Software Installation*.

The SoftSurv packages available are:

**Basic:** DATA COLLECTOR  
 UTILITIES  
 PLANNER  
 GRAPHICS  
 PROJECT MANAGER  
 RASTER & VECTOR TRANSLATORS  
 BASIC PROCESSOR (code positioning on L1 only)  
 CATALOG\*

**GIS:** Basic + CATALOG

**L1:** GIS + L1 PROCESSOR (L1 code and carrier)

**L2:** GIS + L2 PROCESSOR (L1 & L2 code and carrier)

\* CATALOG is installed with the Basic package however it will not work unless you have a security key with the GIS option.

The package you have specifies what method of processing may be used when computing differential baseline and trajectory solutions. The processing solution types are shown in the table following:

Solution Type	Characteristics	Hardware Key		
		Basic	L1	L2
Automatic	Uses the best method based on the data available (in the L1-only version of SoftSurv: L1; fixed in the L1/L2 version of SoftSurv: L3 or L5 fixed)		✓	✓
Raw Pseudoranges	Uses code measurements only; this is the fastest algorithm	✓	✓	✓
L1 fixed	Uses L1 carrier phase measurements (fixed ambiguities); recommended for use with baselines <20 km		✓	✓
L1 float	Uses L1 carrier phase measurements (floating ambiguities)		✓	✓
L2 fixed	Uses L2 carrier phase measurements (fixed ambiguities). <i>This can only be performed by the L1/L2 version of SoftSurv, if the L2 carrier phase is available.</i>			✓
L3 fixed iono-free	Ionospheric-free solution uses L1 & L2 carrier phase measurements (fixed ambiguities); recommended for use with baselines >30 km; extra noise is unavoidable. <i>This can only be performed by the L1/L2 version of SoftSurv, if the L2 carrier phase is available.</i>			✓
L3 float iono-free	Ionospheric-free solution uses L1 & L2 carrier phase measurements (floating ambiguities); recommended for use with baselines >50 km; extra noise is unavoidable. <i>This can only be performed by the L1/L2 version of SoftSurv, if the L2 carrier phase is available.</i>			✓
L4 fixed widelane	Uses the L1-L2 widelane{ XE "widelane" } carrier phase combination (fixed ambiguities). <i>This can only be performed by the L1/L2 version of SoftSurv, if the L2 carrier phase is available.</i>			✓
L5 fixed narrowlane	Uses the L1+L2 narrowlane carrier phase combination (fixed ambiguities); recommended for use with baselines <20 km. <i>This can only be performed by the L1/L2 version of SoftSurv, if the L2 carrier phase is available.</i>			✓

For more information please contact Customer Service toll free at 1-800-NOVATEL (Canada & U.S.) or at 403-295-4500.