

Software Release Notice

Survey/Mapping

Date: April 15, 2004

Product: Ashtech Solutions version 2.7

Previous Version: Ashtech Solutions version 2.6

Number: Solutions 2004 01

Introduction:

All new orders including Ashtech Solutions will be shipped with version 2.7. Ashtech Solutions software version 2.7 upgrade is available on CD free of charge for all registered purchasers of Ashtech Solutions version 2.0 and higher as of 10/7/02. When the CD is shipped, a handling charge of \$25.00 US / £25.00, plus pre-paid shipping charges will be the responsibility of the customer. Where applicable, customs charges are also the responsibility of the customer. For ordering and upgrade information, please contact Thales Navigation Sales by phone at the following locations or visit us on the web at www.thalesnavigation.com .

Corporate Headquarters, Santa Clara CA USA

1 800 922 2401 or 1 408 615 3970

European Headquarters, Carquefou, France

+33 2 28 09 38 00

New Features vs. Ashtech Solutions 2.60:

- 1. New Download module that supports Z-Max receiver.
- 2. Updated coordinate system database included.
- 3. Possibility of editing the parameters for all predefined datum or map grid.
- 4. Capability of exporting/importing stop-and-go data in the RINEX format.
- 5. Capability of uploading control point information to the ProMark2 receiver.
- 6. Capability of using GEOID03 model for the orthometric height computation.

Fixes vs. Ashtech Solutions 2.60

- 1. RINEX data converter has been fixed to address a problem with some raw data files coming from Leica receivers.
- 2. The number of decimal places for angular parameters in the coordinate system definition windows has been increased.
- 3. Blue Book data export has been fixed to allow exporting processed vector data regardless performing the network adjustment.



Known Problems:

- 1. When an invalid precise orbit file name or path is specified, the software will default to broadcast orbit data.
- 2. If this version is installed over a previous one, an old 'LHS.DB' file which was possibly included with the previous installation will need to be manually removed before starting the program for the first time. This will avoid any malfunctions concerning the user-defined height system.
- 3. The user-defined height system can be used only after a horizontal grid system is defined and selected for a project.
- 4. The installation of Ashtech Solutions v2.70 over earlier versions of Ashtech Solutions will completely overwrite the coordinate system files. Preserve your coordinate system definitions by copying these files prior to installing Ashtech Solutions v2.70. See installation notes in this document for instructions on how to manage coordinate system files through the new installation.
- 5. On some Win32 platforms [Windows ME], Install Shield will begin to load, then disappear without continuing the installation. This occurs if the user does not have write permissions on the local drive[s].

Workaround: Once permissions have been properly set, the software will install normally.

6. When loading Z-Series or Locus raw data files without D-files into Solutions 2.70, the software will automatically interpret segments of the data as either kinematic or static. The segments will be displayed in the Time View Window for that data file.

Workaround: Use a D-file created by Locus handheld or Survey Control II software. You can also edit the data manually by using the following procedure. Toggle the data in the segment to the desired type (kinematic or static) and rename the segment with the same Site ID as the segment immediately before it. Repeat this process for any other unintended segments that occur for that particular data file. Make sure each segment has the same Site ID and antenna height. Then, process the data as you normally would.

- 7. The ProMark2 receiver firmware version cannot be displayed in the RECEIVER functions in Download. The ProMark2 firmware version can be viewed in the opening screen of the ProMark2's on-board software.
- 8. Ashtech Solutions download cannot set the recording interval on ProMark2. Use the on-board software of the ProMark2 to set the recording interval of the receiver for data collection.



- 9. In the Windows ME operating system, the "create new folder" function crashes the program in some cases. In the Windows 98SE operating system, the "add files to new folder" function causes the program to hang up. To avoid the problem in both cases, add the new folder using Windows Explorer and not Ashtech Solutions.
- 10. When including or excluding vectors using the map view window, the adjustment is not automatically performed. Select "adjust all" from the main menu to adjust the updated set of vectors.

Known Incompatibilities:

- 1. Solutions 2.x includes some of the same utility programs that are also a part of Ashtech RCS software. When using both packages, use the utilities in Solutions when available. Choose to exclude the RINEX converter and the receiver download modules when installing the RCS program.
- 2. The project file format was changed in version 2.60. There is complete backward compatibility between version 2.7 and 2.6. Versions older than 2.60 cannot open projects created with version 2.60 or later, but version 2.60 or later can open any project.

General

- 1. When working with very large datasets on systems using Windows 95/98, display problems may occur in Map View and Time View. The operating system has a problem in some cases, but the project data is not corrupted. To remedy the problem, save the project, exit Ashtech Solutions, and start again with the saved project.
- 2. In single-frequency kinematic data-collection mode, it is very important to retain continuous lock to at least 5 satellites throughout the survey. In cases of loss of lock due to obstructions, it is possible that the accuracy of processed results will be degraded if re-initialization is not performed in the field. Therefore, re-initialization in the field after a loss of lock is critical to maintaining survey accuracy.
- 3. Blunders in the naming of sites or in antenna heights can cause processing problems, which have effects throughout a project.
- 4. Ashtech Solutions requires carrier phase data in order to provide a post-processed solution. It will not process data containing only code-phase measurements.
- 5. A problem has been encountered on some computers when using the Ashtech Solutions hardware sentinel key in conjunction with other keys. Keys connected after



the Ashtech Solutions key will sometimes not be detected. Download new and updated Sentinel Pro Plus drivers if you encounter problems accessing the hardware sentinel. The sentinel drivers are available from Rainbow Technologies' download site at: http://www.rainbow.com/support/Drivers.asp

- 6. Pre-defined Datum transformation values and Grid Zone definitions are based on a variety of sources including government agencies such as NIMA, NGS, and the UK Ordnance Survey. Users of these systems should verify that the values are consistent with their local sources, and if not, consider defining a new system using the User-defined Datum, User-defined Ellipsoid, and User-defined Grid System options that are available from the Coordinate System settings tab.
- 7. When adjusting projects with a large number of vectors, there may be an extended period between selection of 'Adjustment' and the appearance of the 'Performing Adjustment...' dialog box. Be patient. The adjustment will execute.

Installation Procedure:

- 1. Install Ashtech Solutions version 2.7 by placing the CD in the CD ROM drive. The installation program should auto run and appear on your screen.
- 2. Select language desired and follow all on-screen instructions.
- 3. When prompted to overwrite the current version of Solutions, say no. If upgrading from a previous version, review the Installation Notes for Upgrading to v2.7.
- 4. Use the product ID number enclosed with the CD.

Installation Notes for Upgrading to v2.7:

Ashtech Solutions v2.7 requires a new product ID if your present Ashtech Solutions version is less than 2.0. The product ID from Solutions versions prior to v2.0 will not work. The Product ID from LOCUS Processor will not work. The new product ID can be found on the label enclosed with the CD. This is the eight-digit number before the hyphen.

Upgrading from a previous version can be accomplished several ways: install the new version in a different folder; overwrite the current version with the new version (not recommended); and uninstall the current version then install the new version.

If upgrading from a previous version, it is recommended to uninstall Ashtech Solutions before installing a new version. Backup coordinate system files and any updates or



changes made to the coordinate system; uninstall the previous version; and install the new version. Backup your coordinate system updates by copying these files prior to installing Ashtech Solutions v2.7. Please follow this procedure.

- 1. Open the Ashtech Solutions\Bin folder, select all *.DB files, and copy them to another folder outside the Ashtech Solutions folder.
- 2. Uninstall Ashtech Solutions.
- 3. Install Ashtech Solutions v2.7.
- 4. Replace the *.DB files installed with version 2.7 with the files that you just saved.

Note that the updates to the pre-defined coordinates systems included with Ashtech Solutions v2.7 will not be available in your coordinate system files based on a previous version.

It is not recommended to perform this procedure when updating from Ashtech Solutions v1.0 to Ashtech Solutions v2.7 as the coordinate system file formats are different.