

## 1. About this release



**LEICA Geo Office Tools** (LGO Tools) is the office software, which supports the basic tools for the BUILDER, TPS 300, TPS 400, TPS 700, TPS 800, TPS 1100 and the System 1200 instruments, the TPS 1000 series, and the DNA or SPRINTER levels. It is based upon the Leica Geo Office main program, but simplified in functionality and with additional tools for the above mentioned instruments embedded in the main frame.

For advanced use please install the full version of Leica Geo Office, which is available on a separate CD. The full version additionally supports the GPS System 300 and 500 instruments and includes the complete functionality for the System 1200 GPS and TPS instruments.

## 2. Included Components

Leica Geo Office Tools includes the following software components. For details please always refer to the corresponding Online Help System.

### 2.1 Management components



The Management list bar includes the shortcut to the Project Management, to the Codelist Management as well as to the Satellite Availability component:

The **Project Management** allows you to manage your point related data in projects. Projects can be created, deleted and the project properties can be modified.

The **Codelist Management** component allows you to manage global codelist definitions for the various instrument types. Codelists can be created, and you can create codes and attributes for your instrument. Codelists from installations of LEICA Survey Office can be registered.

The **Satellite Availability** tool allows you to calculate the availability of GPS and GLONASS satellites and helps to plan your survey providing numerical and graphical information about the constellation of GPS and GLONASS satellites.

## 2.2 Projects

All point related information including coordinates (Easting, Northing, Height) and thematical information (codes and attributes) is stored within projects. When you open a project you can choose between two tabbed views: Points and Codelist.

The **Points** tabbed view displays all the point information in one view. The view can be configured to only show the relevant items. You can sort the columns and you can directly export to ASCII using the SaveAs command from the context menu (right mouse-click). You can enter new points, modify point properties or delete points by using the context-menu functionality. You can import GSI or ASCII files into your project and you can export information to ASCII (GSI or other formats). See section 2.3 for an overview.

In the **Codelist** tabbed view you can manage all coding information relevant for the points contained in the project. Note, that you can copy and paste codes from the global Codelist Management to the Codelist tabbed view of your project and vice versa.

Point Id	Easting	Northing	Code	Attributes
TPS Point: 079	548974.4630	5247560.6274		
TPS Point: 080	549006.9821	5247567.4202		
TPS Point: 081	548981.9201	5247542.9875		
TPS Point: 084	548980.4335	5247548.0846		
TPS Point: 085	548980.5692	5247549.3773		
TPS Point: 086	548979.9696	5247543.4602		
TPS Point: 002	549029.0623	5247571.1369	BMESC	
Point: L35	549055.8745	5247562.7860	PSM	
TPS Point: 003	549037.2735	5247607.1530	SM	
TPS Point: 005	548999.3236	5247550.0742	SM	
TPS Point: 028	548989.7638	5247636.0364	STN	
TPS Point: 062	548968.3613	5247465.8824	STN	
Point: 037	549109.5767	5247518.4597	TPEG	
TPS Point: 001	548973.8910	5247527.4089	TPEG	
TPS Point: 004	549006.9004	5247636.2538	TPEG	
TPS Point: 015	548974.5301	5247563.7013	TPEG	
TPS Point: 016	548992.8187	5247576.3309	TPEG	
TPS Point: 032	548936.4514	5247662.5119	TREL	Height=4.0/Spread=2.0/Width=0.25
TPS Point: 052	548939.2468	5247577.2062	TREE	Height=6.0/Spread=3.0/Width=0.25
TPS Point: 053	548988.2746	5247679.7993	TREE	Height=5.0/Spread=2.0/Width=0.25
TPS Point: 054	548915.8114	5247668.2374	TREE	Height=5.0/Spread=2.0/Width=0.25

## 2.3 Tools

The Tools list bar contains the shortcuts to the following Tools:



**Import raw data** enables you to import point coordinates from GSI data into your project. Code information stored as Word Index WI 71 will be interpreted as a thematical code.



**Import ASCII data** enables you to import point coordinates and thematical data contained in ASCII files into your project. During the import procedure the ASCII Import Wizard helps you to define the format of your ASCII file.



**Export ASCII data** enables you to export information from your project to an ASCII file using a format mask created with the Format Manager program. Click the Settings button to select the format file and other settings. For exporting data in the GSI format different GSI format files are available on the LGO Tools CD

(for GSI-8 and GSI-16, with and without codes). You can also define your own export masks using the Format Manager.



The **Data Exchange Manager** (DXM) enables you to upload or download data to or from your instrument. In the DXM right-click on the background and select Settings to configure the communication settings of your instrument and the COM port of your PC. Then you can transfer files to and from your instrument by using the Windows “drag & drop” method.



The **Software Upload** component enables you to upload new firmware to your instrument. Simply click on the tool and follow the instructions in the Software Upload Wizard.



The **Format Manager** enables you to create formats for data download from the instrument or for the export of data from an LGO project using the ASCII Export tool. Format files can be created for the various supported instruments and can be saved to a \*.FRT file.



The **Export from job** utility enables you to export a System 1200 job to an ASCII file using a format mask (System 1200 Field template) created with the Format Manager program.

## 2.4 Additional Tools



The Additional Tools list bar includes a series of additional tools as separate applications for the various instrument types. The following tools are included:

The **Configuration Manager** enables you to configure your instrument settings. This is needed for TPS 300, 400, 700, 800, BUILDER and DNA instruments.

The **DNA GSI Converter** can be used for the DNA03 and DNA10 instrument to convert GSI files.

The **Code Developer** is used for the TPS 1000 series instruments.

The **Code Converter** is used for the TPS 1000 series instruments and for the TPS 1100.

The **TPS Configuration** tool enables you to configure your TPS1000 series or TPS 1100 instrument.

The **Coordinate Editor** enables you to create lists of coordinates for uploading to the instrument. This can be used as an alternative to the LGO projects.

The **Road Line Editor** is a simple tool for the creation and editing of road alignment files in GSI format, which can be used in Road application on various TPS and GPS instruments.

For details on any of the additional tools please refer to the Online Help of the corresponding component.

### 3. Changes to version 5.0

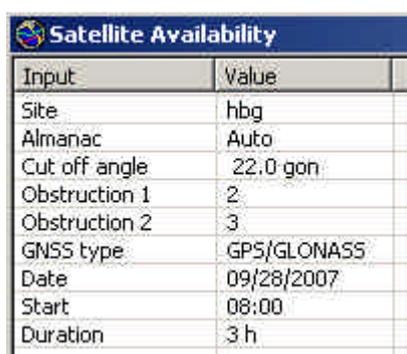
- **Creating a job for selected points**

LGO Tools version 6.0 adds functionality to create a job, that can be used onboard a System 1200 or System 500 instrument, for a selected series of points. Previously it was only possible to create jobs for all points of a project.

Highlight the points in the Points view of your project and select **Send To** from the context menu.

- **Satellite Availability**

The Satellite Availability component of LGO Tools version 6.0 offers new functionality to simultaneously use two obstructions when predicting the satellite availability. This allows taking reference and rover obstructions into account. Define the obstructions as usual in the **Management** tabbed view, and optionally select two obstructions in the **Availability** tabbed view. The two obstructions will be added and only satellites will be predicted, which are visible simultaneously under both obstructions.



Input	Value
Site	hbg
Almanac	Auto
Cut off angle	22.0 gon
Obstruction 1	2
Obstruction 2	3
GNSS type	GPS/GLONASS
Date	09/28/2007
Start	08:00
Duration	3 h

In the Satellite Availability component it is now also possible to predict positions of GPS and GLONASS satellites for dates differing 30 days from the validity of the almanac. Previously the almanac date had to match the selected date by 7 days.

- **Format Manager**

The new version of the Format Manager included in LGO Tools version 6.0 supports new variables and one new export block in the **System 1200 Office template**, which can be used with the Custom Ascii Export of the full Leica Geo Office installation. These new variables are not applicable for projects created with the LGO Tools installation.

## 4. Comments on the Installation

### Before you install...

Note that LGO Tools version 6.0 is running under Windows 2000, Windows XP or Windows Vista operating systems. The Coordinate Editor can only be used under Windows 2000 or Windows XP. If you wish to manually enter coordinates and transfer to a GSI file, it is recommended to use the Points tab view of an LGO Tools project.

Note that LGO Tools can only be installed successfully if the user is logged in as Administrator.

#### Note on Windows 64-bit operating systems:

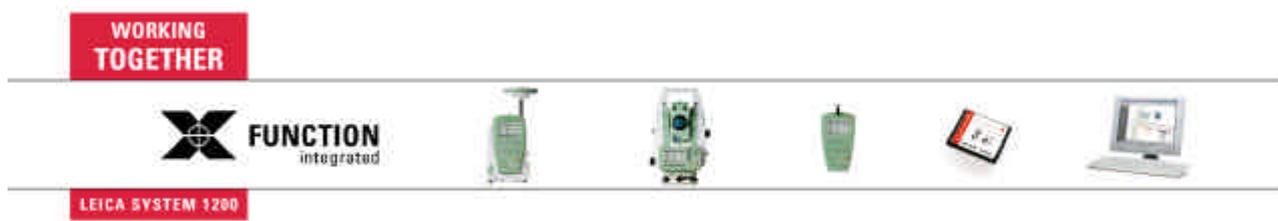
LGO Tools version 6.0 is prepared for Windows 64-bit operating systems. Note, that separate USB drivers for the RX1250 terminal are included on the LGO CD.

### How to Install!



It is recommended to uninstall any version of Leica Survey Office **before** you install LGO Tools version 6.0.

To install LGO Tools please run LAUNCH.EXE from the CD and follow the instructions on the screen.



### Leica Geosystems AG

Leica Geosystems AG, Heerbrugg, Switzerland, has been certified as being equipped with a quality system, which meets the International Standards of Quality Management and Quality Systems (ISO standard 9001), and Environmental Management Systems (ISO standard 14001).



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Our commitment to total customer satisfaction.

Ask your local Leica agent for more information about our TQM program