GEDO Track Survey
for Tablet PC

- A measurement system for alignment based survey-

@Trimble Railway GmbH

Version 1.0.2

1 Index of contents

2 Introduction

This manual should guide you thru the first steps with your GEDO software. If you have done this once, it is not necessary to do this again unless you do not change your system configuration.

Every day's standard procedure is described in separate GEDO Track quick guide. For more details and the whole system functionality please consult the GEDO Track manual.

3 Installation and Licensing

3.1   Software Installation

1. Connect your control unit to a desktop PC. Before installing every file has to be copied to any directory on the device, e.g. *WinCE Device\Temp*

2. Install the file ***SNP_COM_SERVER_TSC2_WM5.cab*** resp. ***SNP_COM_SERVER_TSC3_WM6X.cab***

3. Install the file ***NETCFv2.wm.armv4i.cab*** onto the controller

4. Run the file ***GedoTrack_vx.x.x_TSC2.cab*** resp. ***GedoTrack_vx.x.x_TSC3.cab*** on the controller. As soon as you open this file, the software and its components will be installed automatically into the folder *\Program Files\GedoTrack*. Further, a shortcut in the Windows® start menu will be generated.

5. Copy the license file into the created program directory *\Program Files\GedoTrack*

6. If you want to use station setup from Trimble Access in GEDO Track you have to copy the style sheet ***Stationierung.xsl*** or ***Station report.xsl*** into the folder *\Trimble Data\System Files* on your controller.

Then the installation is finished. The program can be started easily by using the Windows® start menu.

All project relevant data will be stored in a separate folder (*\Gedo Data)* in the root directory.

3.2   Licensing

The GEDO Track license file is linked to the serial number of the controller the program is installed on. Licenses cannot be transferred. An installation on a different control unit requires the acquisition of an additional license.

The following steps have to be executed in order to get the license file:

1. Identify the serial number of the TSC2/3. For this purpose choose the menu entry *Settings* from the *Start* menu. Then select tab page *System* and click *About*. The serial number is then shown on tab page *Device ID* as *Device name*.

2. Send the displayed *Device name* to your Trimble GEDO distributor and ask for a license file for program GEDO Track. Please refer to an ongoing order or delivery note.

3. You will then receive a license file *[SerialNumber].lic*. Finally copy this file into the installation directory of GEDO Track.

4. Check the successful software license after re-starting the GEDO Track software in menu ***Configuration – About***. The lower part of the window will show the license expiration, update period and available modules. Please contact your local Trimble GEDO distributor or <u>info@trimble-railway.com</u> if there are still no modules listed after a reset.

4 First standard settings

Standard settings should be defined directly after software installation while default project is activated to use these settings as standard for next projects.
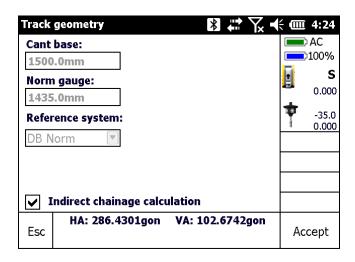
4.1   Language settings

Standard language after software installation is English. German Language package is included in installation file. All other languages need to be added by placing the relevant language file in the directory *GedoTrack\Languages*.

Use *Configuration – Controller – Language* menu to change the selected language.

4.2   Track geometry

The track geometry parameters are not defined for the Default project. These settings cannot be changed later. They are fixed within one project. Last settings will be used as suggestion when creating a new project.

Define the settings for cant base, norm gauge in *Configuration – Track geometry* menu. Further, select a reference system to be used for all calculations.

There are following reference systems available:

- DB Norm:

  Classic and most common definition for alignment data where the center line is defined as half standard gauge from the outer curves rail (inclined/canted) and the height is related to the inner curves rail (lower)

- Singapore Metro:

  Special alignment data with horizontal alignment as center of rotation 1.600m above top of the rails. Gradient is defined in the centre line. Switzerland

- Switzerland:

  Horizontal alignment similar to DB Norm but vertical alignment is running in the center line

- Manual:

  Height and position reference rail can be defined and changed individually between left rail, right rail and DB Norm.

4.3　Instrument communication

Use *Configuration – Port- Instrument* menu is to define the sensor which should be connected to the software.

Select "*TSM Server*" for connecting to a Trimble total station. Further, the radio settings in *Instrument – Radio settings* need to be identical to the values in the instruments second face display. In addition to this, the connection type needs to be selected correctly. Use "*Radio*" to link the total station using the 2,4GHz antenna. Connection via "*USB*" needs to be selected if the control unit (TCU) is directly mounted at the instrument.

"*GNSS*" needs to be selected for handling the coordinates measured by a GNSS antenna. Therefore the measurement with the GNSS rover needs to be started in Trimble Access application GEDO GNSS and streamed via port 2000.

GEDO Track will not connect automatically to the selected instrument. Start the connection manually using menu *Survey – Connect*. This step is also necessary to verify the successful installation.