DigiTerra EXPLORER Version 6

Professional

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Plug & Survey

DigiTerra
Térinformatikai megoldások

Initial Steps

To use DigiTerra Explorer Version 6 software

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Plug & Survey – Insert your card and start surveying

Table of contents:

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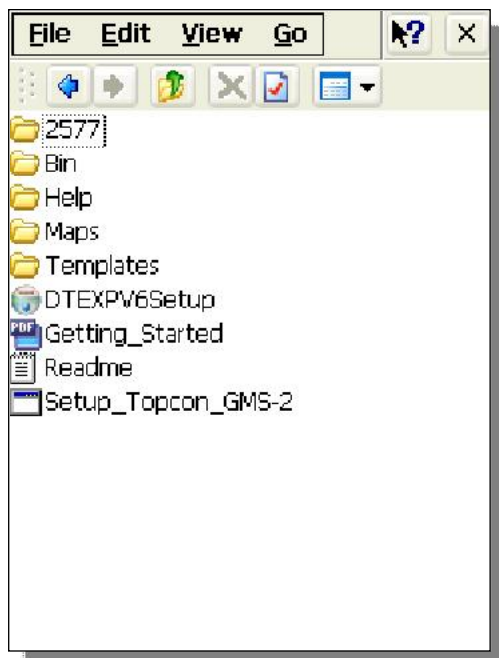
What does the box contain?

Your DigiTerra Explorer Version 6 box contains a pre-installed SD card and a printed version of this Getting Started Manual that includes the initial steps of putting the software in operation. That is all you will need to run your software initially.

What does the SD card include?

The SD card includes your DigiTerra Explorer Version 6 software that requires neither installation nor registration through the Internet before use. You can start mapping right away.

Contents of the SD card:

- A DigiTerra Explorer Version 6 mobile geographical information and field data collection software
  'Bin'
- An autorun utility program to start DigiTerra Explorer Version 6 automatically as soon as your SD card is inserted into your mobile device
  '2577'
- Sample data and digital background maps applicable to learn to use the program and the teaching material in Users' Manual
  'Maps'
- A digital Users'Guide *(in Hungarian, English)* to help first program running
  '**Getting_Started.pdf**'
- A DigiTerra Explorer Version 6 desktop version for installation on desktop PCs
  'DTEXPV6Setup.exe'

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How to start the program initially?

Putting DigiTerra Explorer Version 6 into operation is remarkably simple. By inserting the SD card into your mobile device for the first time its Autorun utility program will start running automatically* and will do all the necessary settings to start the program. This has to be performed only once with any mobile device you want to run the program on. The program then will start running automatically and exit automatically on such devices once you insert or remove your SD card.

Some mobile devices will not start running the DigiTerra Explorer Version 6 program automatically. Should that happen to your device, please follow the instructions in the chapter titled 'How to start the program manually?'.

Setting languages

- Just tap on the required language that appears on the 'Select Language' option when running the software for the first time and press 'OK' at the bottom of the panel*

Please note that setting the language of your DigiTerra Explorer Version 6 software is required only if it is not 'Hungarian' that has been selected in the 'Regional settings' menu of your operation system.
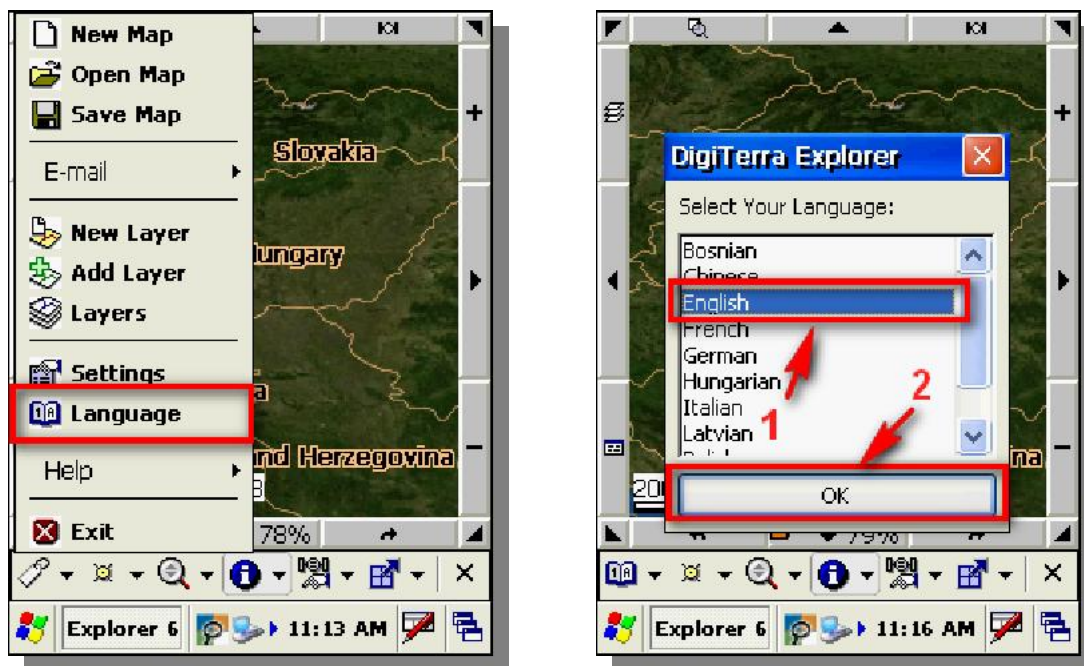
**Setting of languages later on**

- Open up the first pop-up menu of DigiTerra Explorer Version 6 on the left by selecting the small triangle that is pointing upwards in the bottom left corner.
- Tap on 'Dictionary', select the language you need, then press 'OK'

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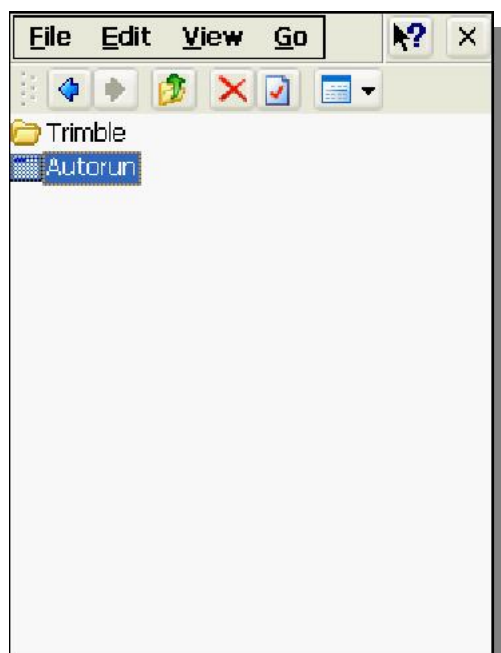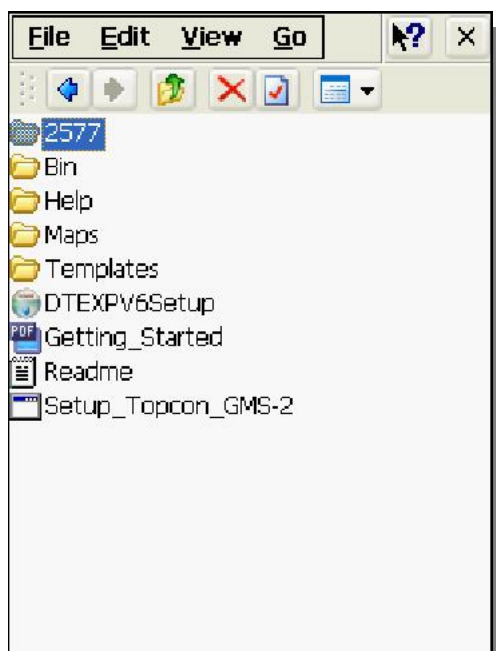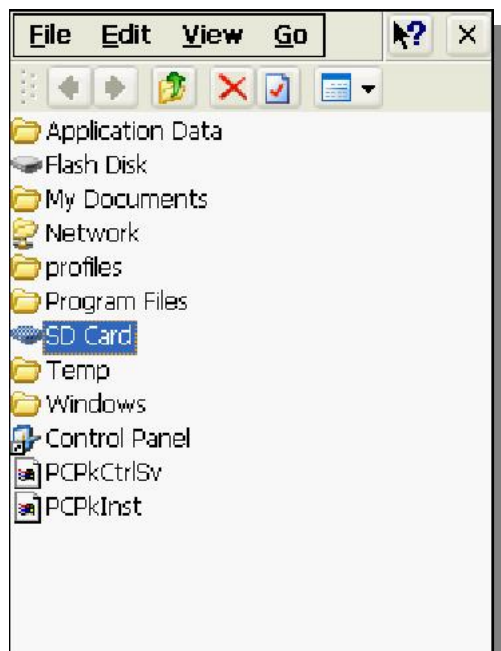## How to start the program manually?

Should your mobile device be unable to run automatically, the Autorun utility program is easy to start manually.*

- The operating system may (depending on the type of PC) disable the function of running the program automatically.
- If your DigiTerra Explorer version 6 software does not start automatically by inserting your SD, the operating system must be re-started by pressing ″Reset″(or reset by the manufacturers recommended solution). Then insert your SD card again.
- If you have managed to start the program by using its autorun function disregard the following steps.

To start your Autorun utility program manually you are to take the following steps:
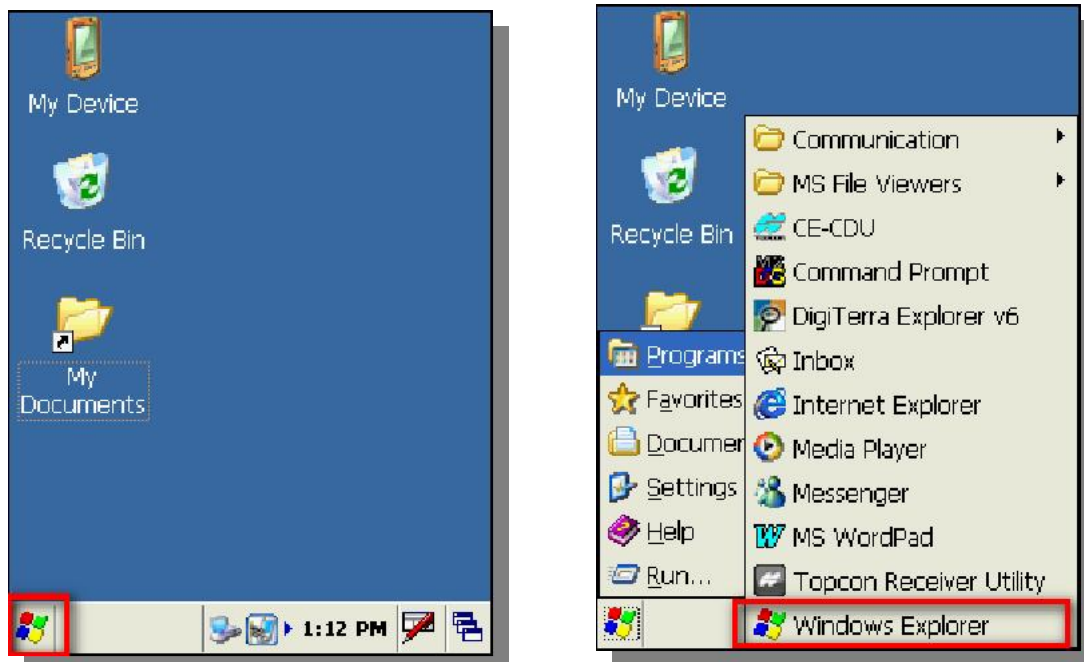
- Tap on the Windows® flag in the top right corner of the screen to open Start Menu.
- Open the 'Programs' window.
- Start the 'Windows Explorer' application.
- Open the SD Card directory (file label varies from device to device, the most common are: 'Storage Card', 'SD Card', 'My Flash Disk' etc.)
- Open the '2577' directory within the 'SD Card' directory.
- Run program 'Autorun'.

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File	Edit	View	Go

Application Data
Flash Disk
My Documents
Network
profiles
Program Files
SD Card
Temp
Windows
Control Panel
PCPkCtrlSv
PCPkInst

File	Edit	View	Go

2577
Bin
Help
Maps
Templates
DTEXPV6Setup
Getting_Started
Readme
Setup_Topcon_GMS-2

File	Edit	View	Go

Trimble
Autorun

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How to start the program from shortcut?

After starting the program successfully either automatically or manually, its Autorun utility program will create the shortcut icons for your DigiTerra Explorer Version 6 software. After this setup starting your program is done by selecting the DigiTerra Explorer Version 6 program, provided the SD Card is in the mobile device.

- Tap on the Windows® flag in the top right corner of your PDA screen to open Start Menu.
- Open the 'Programs' window.
- Tap on the shortcut of DigiTerra Explorer v6 application* with your stylus.
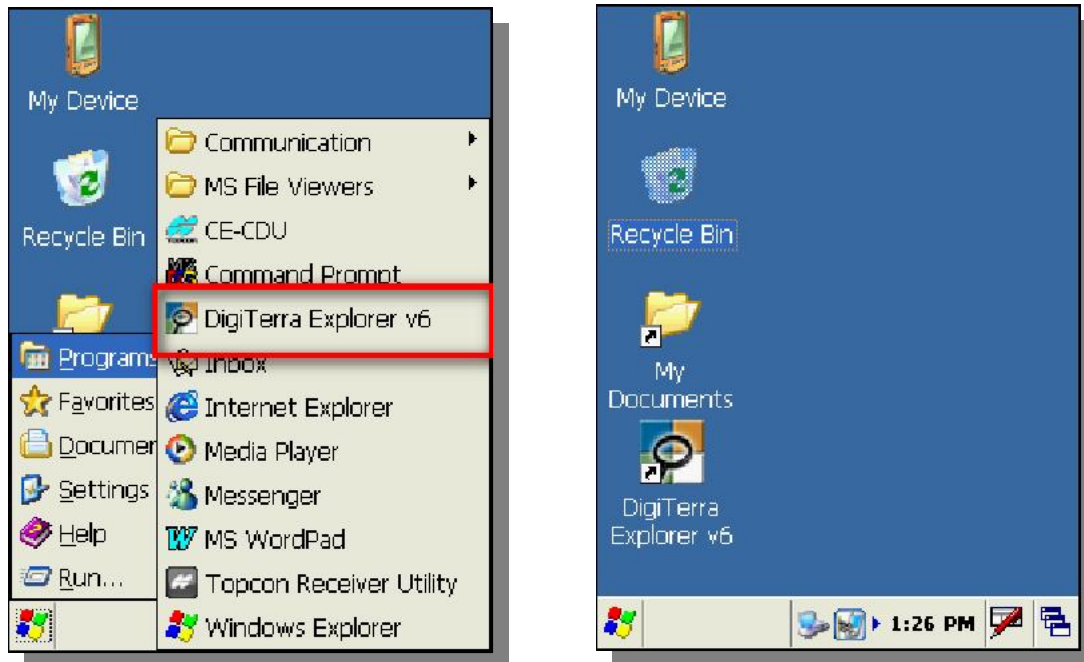
The shortcut icon of DigiTerra Explorer Version 6 application will usually be found amongst the most recently used programs in the centre of Start Menu.
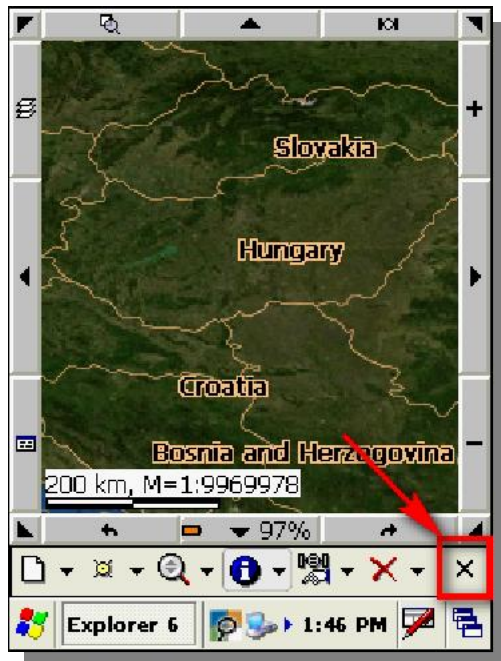
After installation the shortcut icon of the program is found in the Desktop window or by following the route: Start Menu > Programs > DigiTerra Explorer v6.

How to exit the program?

- Open up the first pop-up menu of DigiTerra Explorer Version 6 on the left by selecting the small triangle that is pointing upwards in the bottom left corner.
- Then tap on 'Exit' and press 'Yes' on the panel that appears.
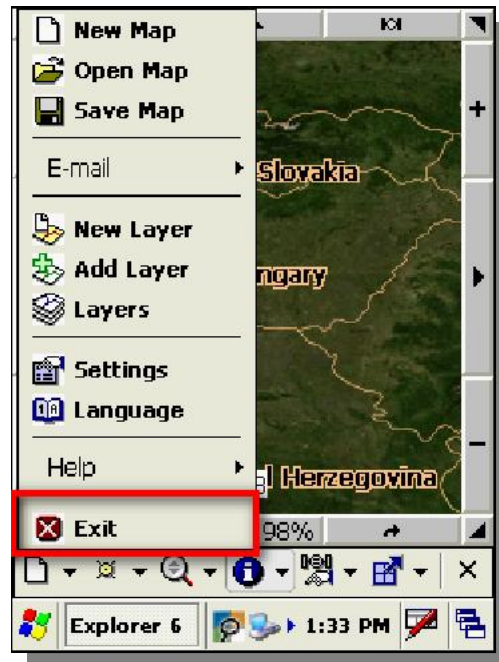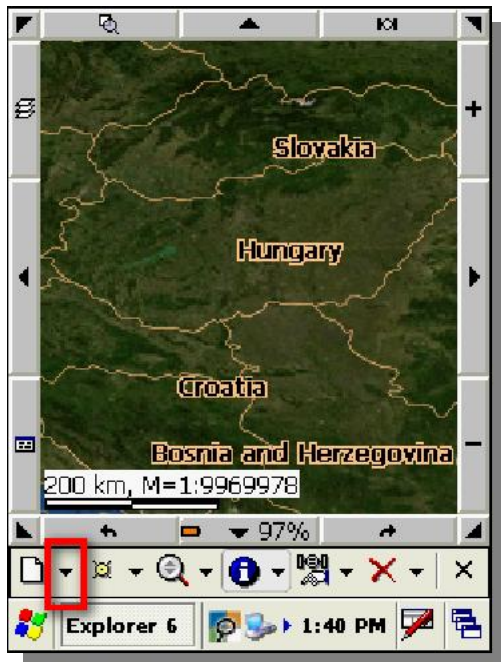
Please note: By tapping on 'X' in the bottom right corner of the screen when the program is running, the working window will close. In the Windows CE operation system, the window of the program can be opened again by tapping on the icon on the Desktop.

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How to set GPS connection?

To connect your GPS receiver and DigiTerra Explorer Version 6. This procedure is performed on any mobile device where DigiTerra Explorer Version 6 is installed. This is a one off procedure as after the initial setup the GPS, settings are saved.

Your DigiTerra Explorer Version 6 software will make it possible for you to connect to NMEA compatible GPS receivers. Almost all receivers that are available on the market (receivers with built in mobile devices, receivers that can be inserted into CF and SD card sockets or Bluetooth receivers) can meet these requirements.
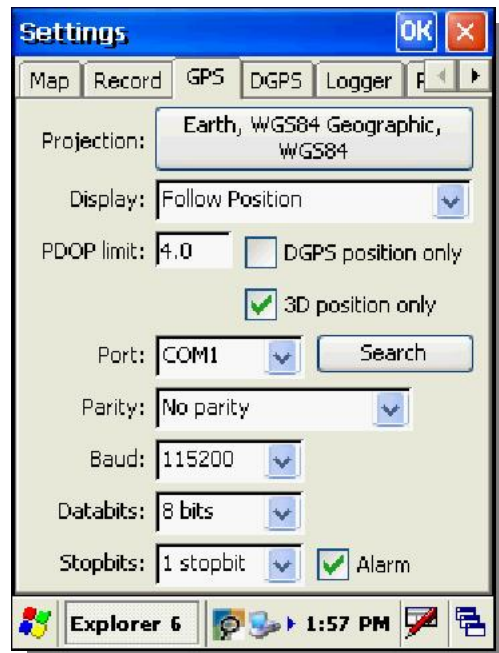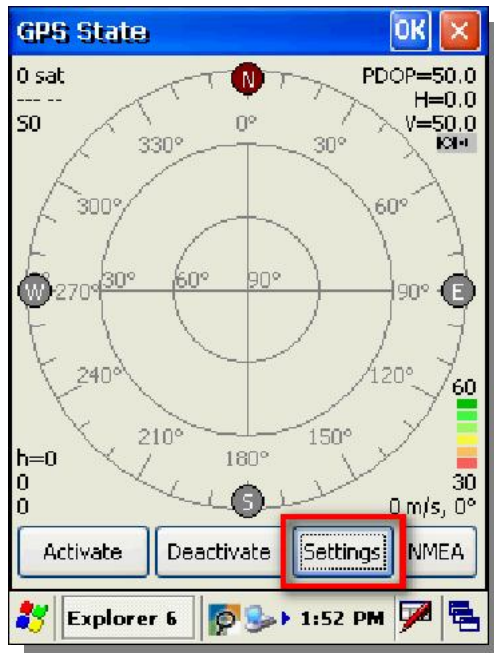
Please note: If you want to use an external GPS receiver connected by Bluetooth, you must first pair your device using the Bluetooth Manager, then connect and match your device with the Bluetooth Manager program.

Automatic GPS recognition

- Open up the second pop-up menu on the right side by tapping on the small triangle that is pointing upwards.
- Tap on 'GPS state' in the menu.
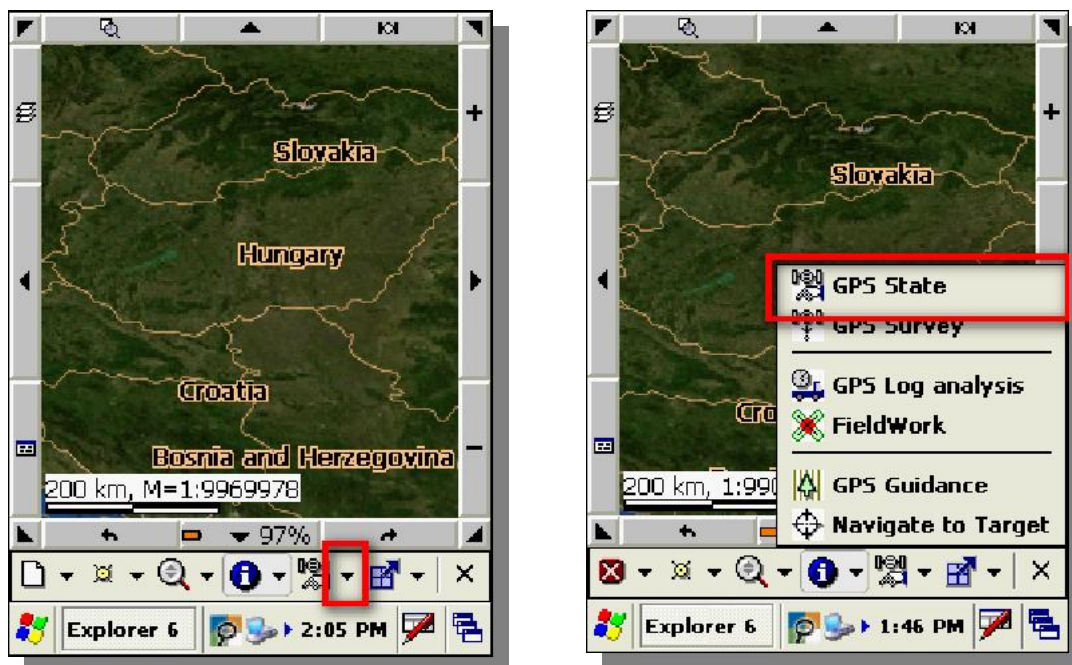
- Tap on the 'Settings' button in the bottom left corner of the window that pops up on 'GPS State'.
- Press 'Search' in the 'GPS Settings' window to set communication port and data transfer rate automatically.

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- To start searching press 'Yes' button.
- Port and data transfer rate have been set properly if a window with the message 'Attention! GPS Port has been found' pops up.
- To approve settings press the button 'OK' in the top right corner.
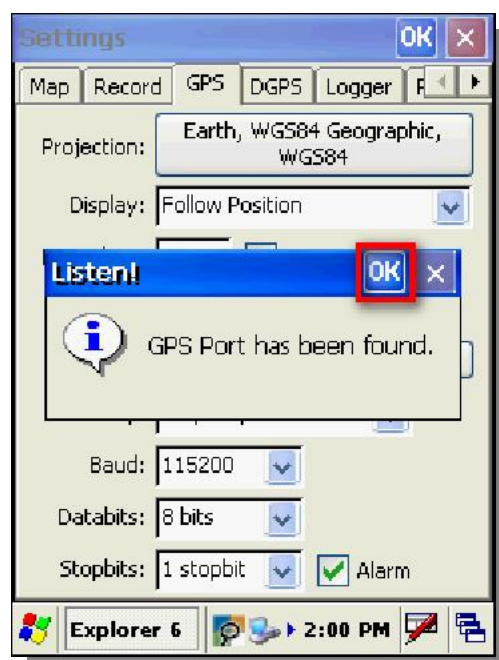
- To save settings press 'OK' in the top right corner of the 'GPS settings' window*.

* *Please note: When switching from one window to another in the Windows Mobile operation system, The 'OK' button is not always visible because its window is not active. To activate the window again simply tap on the window at the top of its frame. The 'OK' button will show up again as a result.*

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Proper connection is, indicated by *a small icon of a satellite that is sending out signals on its right* in the top right corner of the 'GPS State' window and, also, by the constantly changing 'NMEA' data string that come from the GPS receiver. These information is made visible by a window that appears when you select the 'NMEA' button. This window is closed by selecting the 'NMEA' button again.
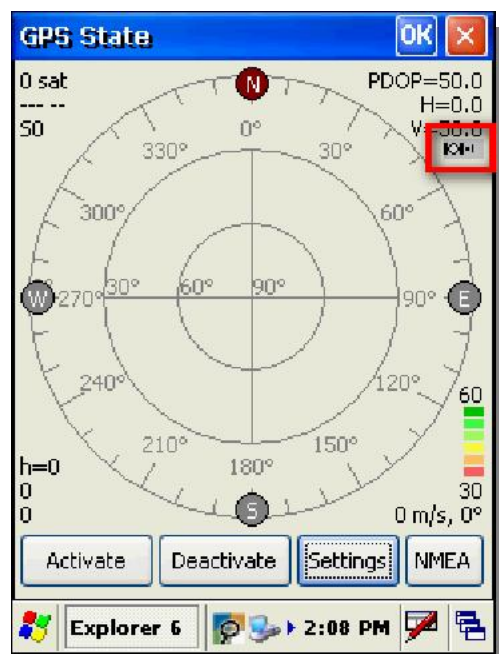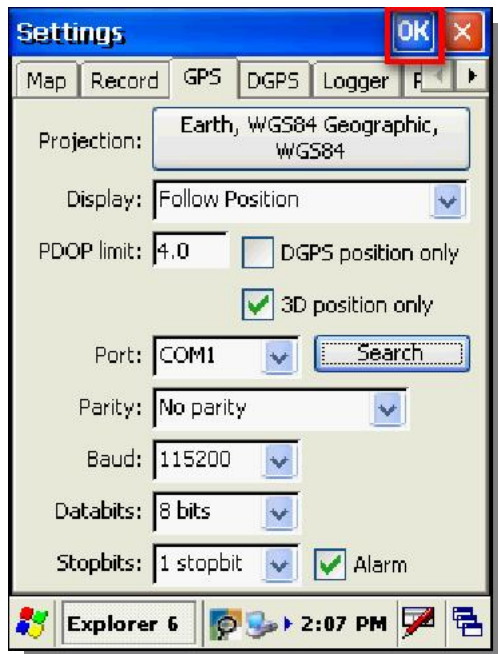
- To close 'GPS State' window press 'OK' in the top right corner.

Once the GPS connection has been established the software will receive NMEA data from the GPS receiver. Then, having established a constant link with a minimum of 3 satellites, it defines a fixed position on the WGS-84 ellipsoid surface (i.e. the ideal surface of the Earth). Initialising the device may take 2-3 seconds or up to 5 minutes depending on the length of time that has passed since the last use of your GPS receiver and also on the geographical distance from the position of its last use. Regular use, however, results in a shorter initialisation time.
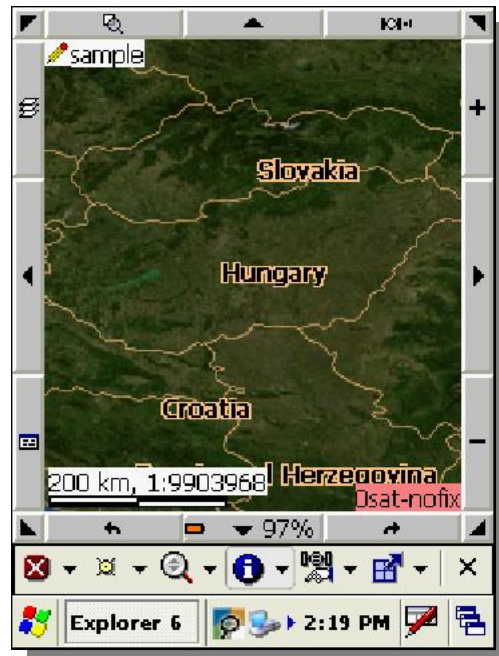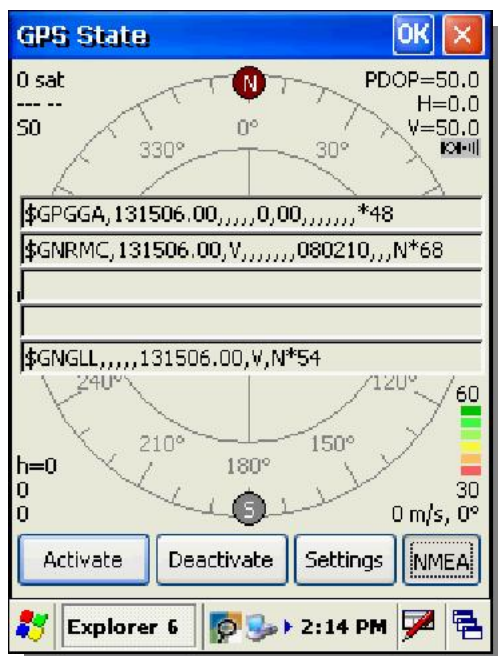
The background data indicating the quality of your GPS position in the bottom right corner of the map window will remain red until the accuracy of your GPS position reaches the required level. Before this happens, processing of data is not possible. The GPS position is ready for location if the above background turns green or, after receiving a DGPS correction, blue.*
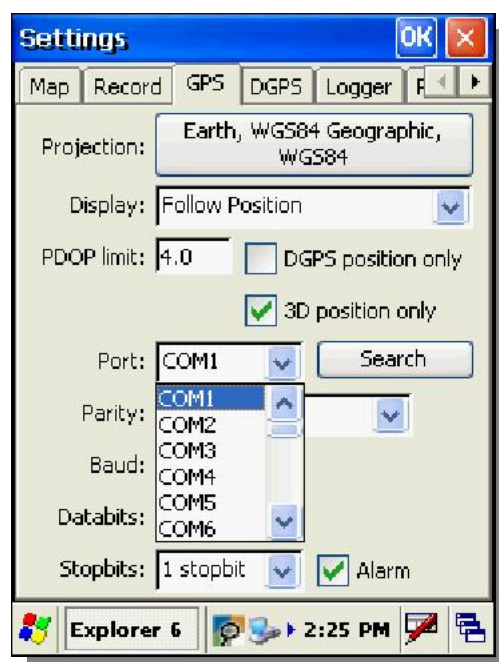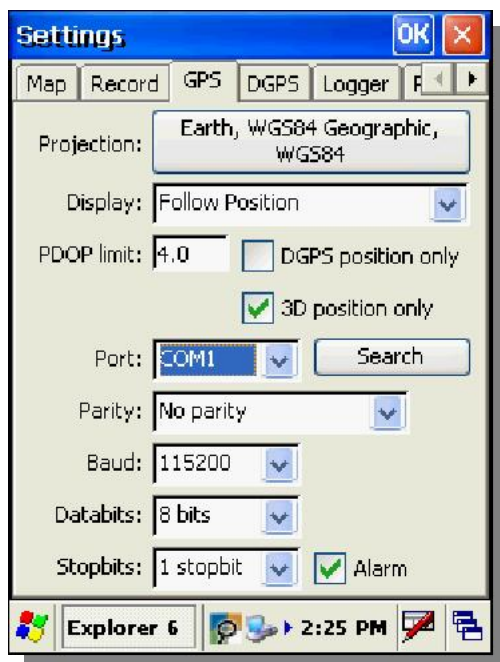
For more information on 'GPS Settings' please see the Users' Manual of DigiTerra Explorer Version 6 software.

How to set GPS connection manually?

To Set the GPS connection manually if the communication ports (COM1,2...) and Baud rates are known.*

Please note that the number of communication ports and data transfer rate values depend on the technical features of your GPS receiver. Accurate values are usually provided in the technical description of your GPS receiver or may be obtained from the manufacturer.
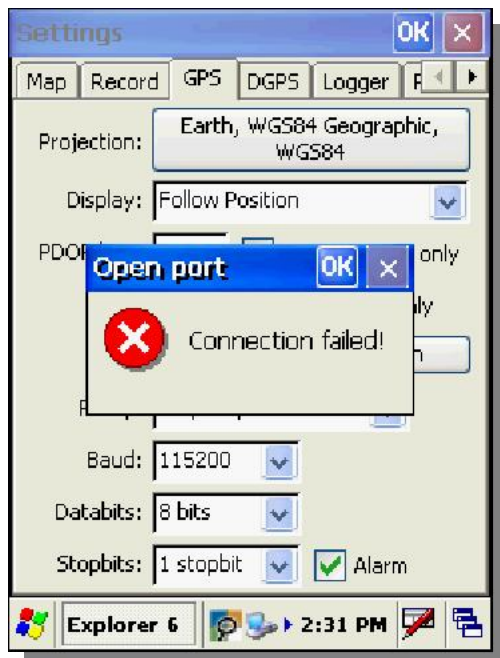
- Open the 'GPS Settings' window as described under the topic 'Automatic GPS recognition'.
- Tap on the drop-down list next to the 'Port' and select the communication port that matches your GPS receiver. If the correct port is selected no error message will appear.

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- Tap on the drop-down list next to 'Baud' as described in setting port above and select the data transfer rate of your GPS receiver. If the data transfer rate is correctly selected no error message will appear.
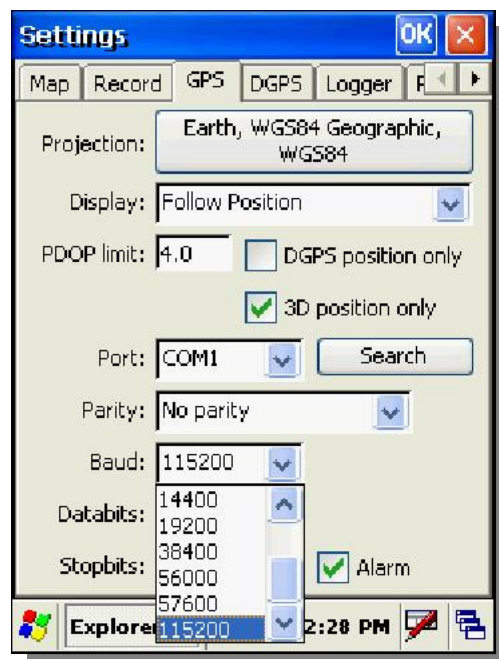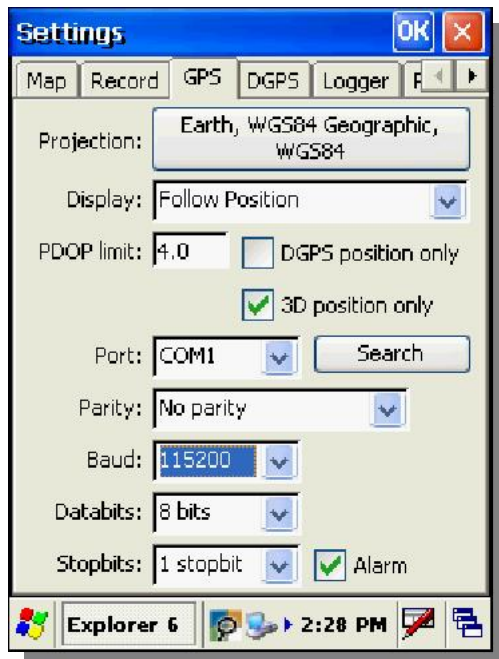
- The improper setting of 'Port' or data transfer speed rate will lead to an error message that reads 'Opening Port: Connection failed!' If you see this notice consult your GPS manual for the correct information.

Once a the GPS connection has been established take the steps as described under the topic 'Automatic GPS recognition' to close 'GPS Settings' window and to check the quality of the connection.

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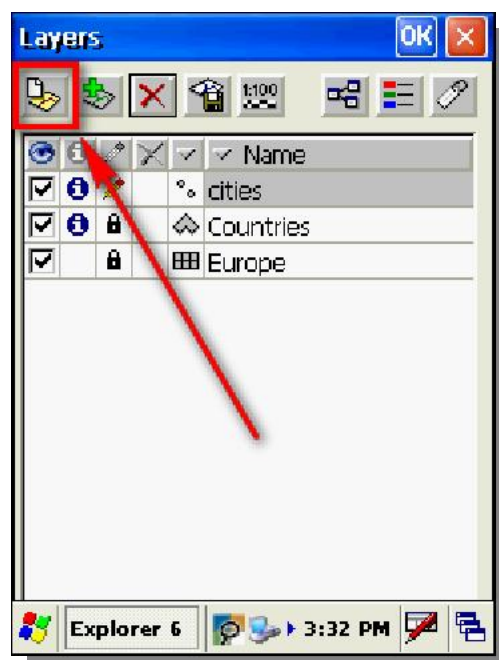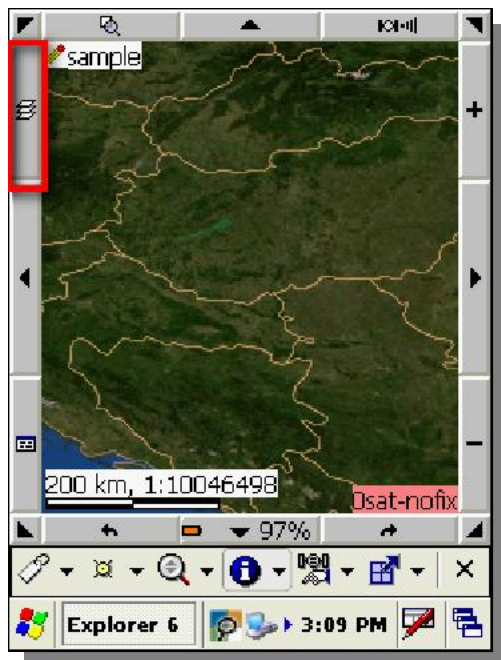
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Preparation for Mapping and Surveying

Having initialised your GPS receiver you are required either to select an already existing DigiTerra map layer (containing geometric entities) or to create a new (blank) DigiTerra map layer where you can record your GPS position in either points, lines or polygons. *
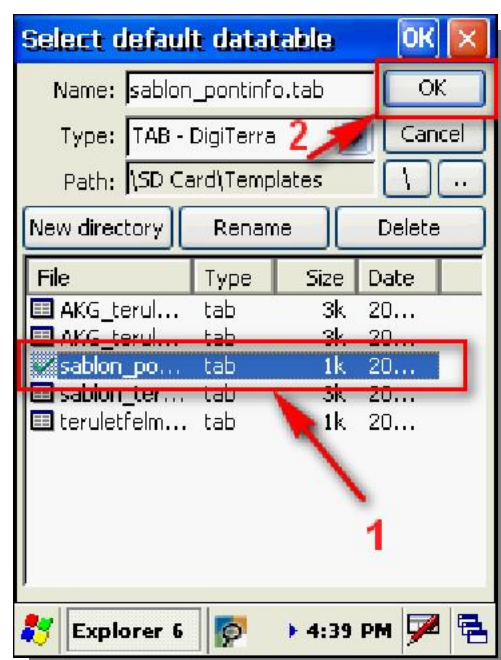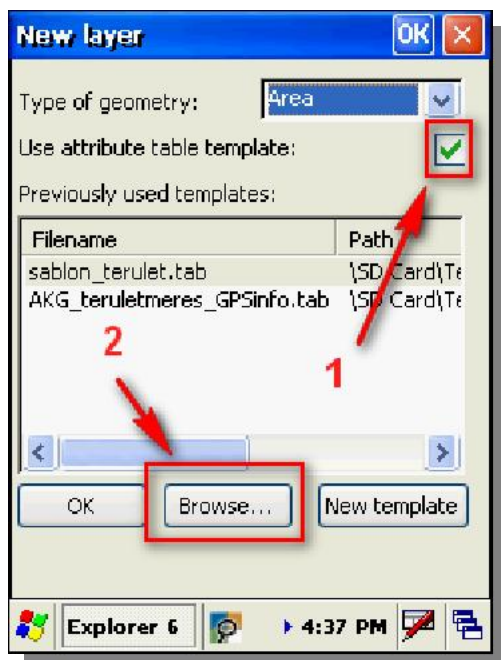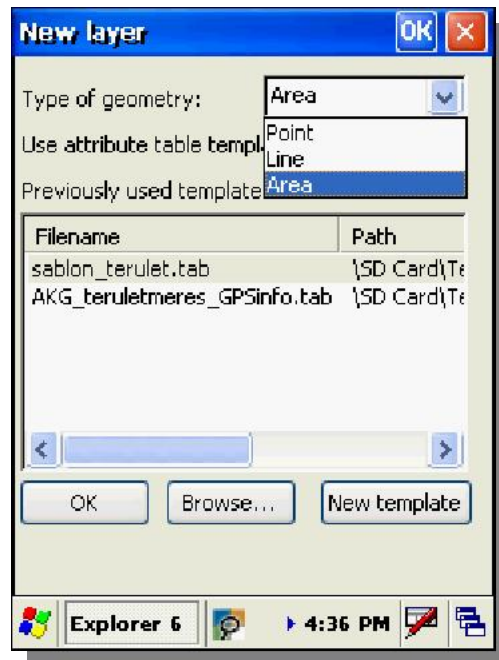
When you have set your software and GPS connection properly, you are ready to record your data and position.

Steps of preparation for mapping and surveying

- Start DigiTerra Explorer Version 6. Tap on the 'Layers' button on the top left-hand side frame to open 'Layers' window.
- Tap on 'Create Layer' button in the top left-hand side corner of the window to create a new (blank) layer where you can record your GPS position in either points, lines or polygons.
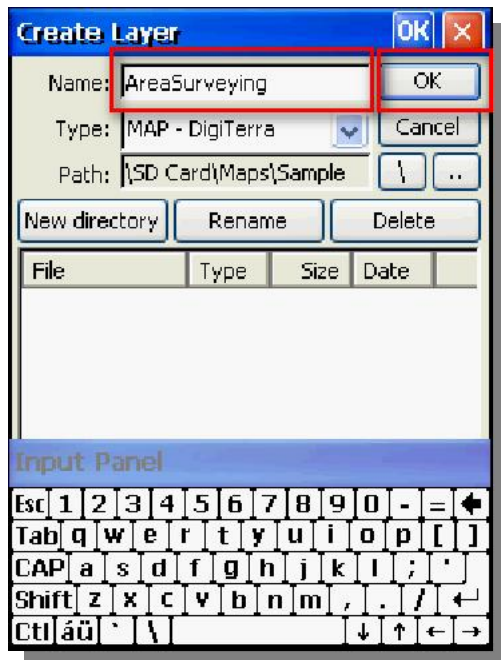
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- Tap on the 'Name' text box within 'Create Layer' window and enter the name of the map layer (eg. 'AreaSurveying') you want to create. Press 'OK'.
- Define the type of the geometry (Point, Line or Area - depending on the mode of the survey)
- There is a possibility to add an existing datatable template to the geometry. First check the box next to 'Use attribute table template' then with the 'Browse... ' button you can select a template.
- Press 'OK' in 'Layers' window.

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- Tap on the 'GPS Surveying Panel' button in the top right-hand side corner of the map window. The program then links up with the GPS receiver and starts reading position data. As soon as Initialisation (as described in topic 'Automatic GPS recognition') takes place the program is ready for locating (measuring) positions.*
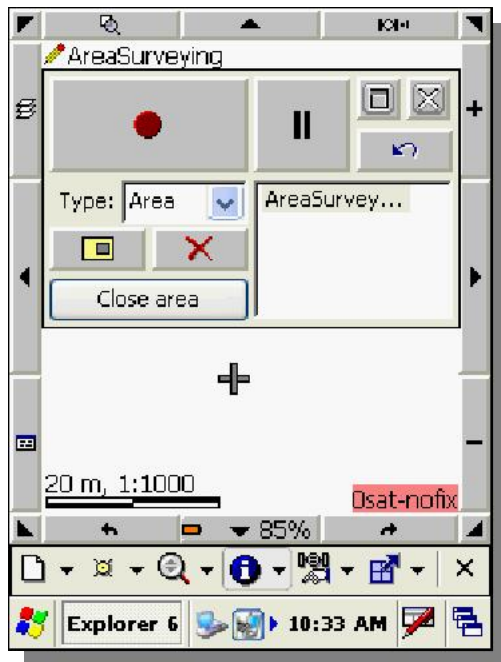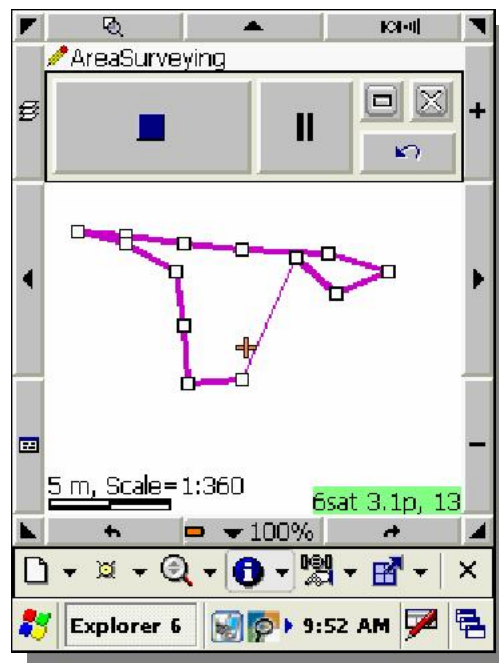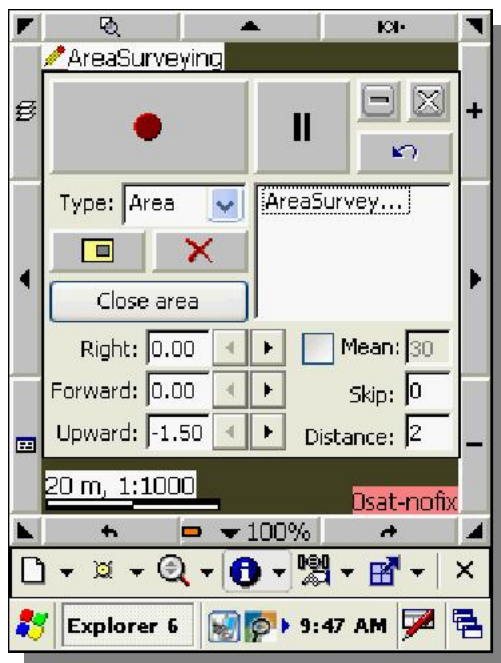

- *Please note that point, line and polygon objects are to be created in separate layers. (Example. if you are collecting data in a polygon layer points or lines cannot be recorded.)*

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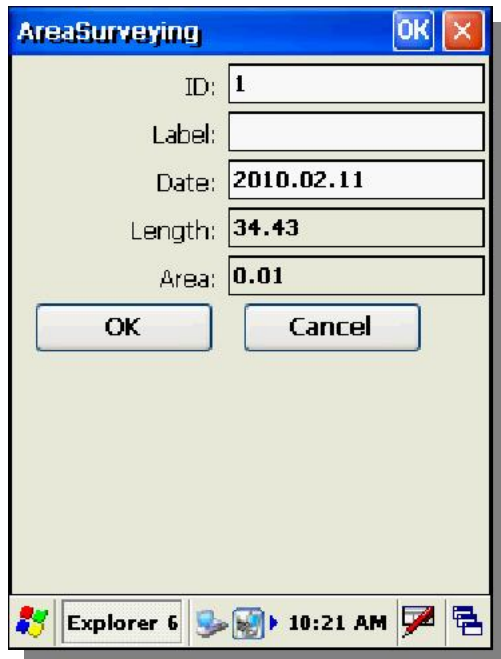
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Simple measuring (continuous measuring of an area)

Perform the tasks as described under the topic 'Preparation for mapping and surveying'. Wait until your GPS receiver initialises, and the GPS position is considered good for locating a position (if the background colour of the quality of GPS position is green). It may also turn blue after DGPS correction.

- With blank map layers (layers with no measurements or objects) select 'Polygon' on the 'GPS Surveying Panel.*
- Before you start collecting the boundary of a field or area in DigiTerra stand at a point on the boundary of the field or area
- Press the (Record) button (the red dot) to start recording and walk around the area. (*The red dot will change to a blue square walk around the field or area*)

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- When you get back to your starting point press the (Stop button which is the Blue Square) this will stop the surveying of the area and close the polygon.
- The program then displays a form that is attached to the area which has been surveyed. Fill in the necessary data records and close the window by pressing 'OK' in the top right-hand side corner.

If you continue to record area information in the area layer you will not need to select 'Type' as it will automatically select Area.

Please note that the program will automatically save the measured geometrical entities together with their descriptive attributes by default. You do not need to save the data of your measurements.

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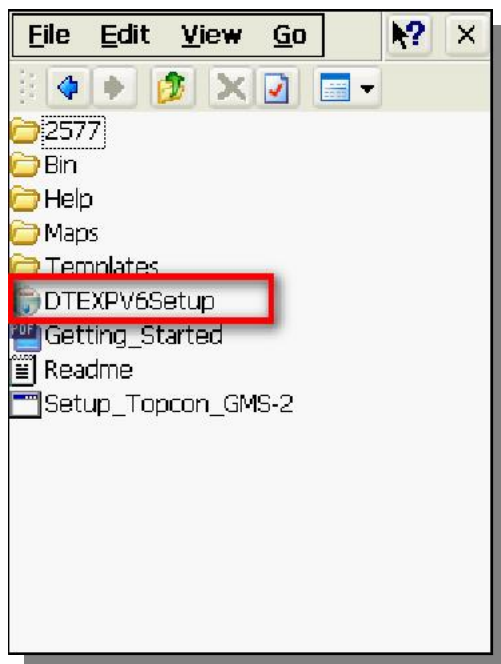## *Installation and putting the program into operation on desktop PCs*

The installer called **"DTEXPV6Setup.exe"** for the desktop version of DigiTerra Explorer Version 6 can be found in the root library of the SD card.*

- After inserting your DigiTerra Explorer Version 6 SD card into your mobile device, connect it to your desktop PC (with USB-cable for example).
- Copy **"DTEXPV6Setup.exe"** installer to your desktop PC by using Microsoft ActiveSync - or in case of Windows Vista operation system Windows Mobile Device Center – software. If your desktop PC is equipped with an SD card reader, feel free to use it.
- Run the installer on your desktop PC and follow the instructions.

* The latest desktop version of DigiTerra Explorer Version 6 you can always find on the website www.digiterra.hu, it is recommended to download and use this!

Desktop version of DigiTerra Explorer Version 6 can be installed on unlimited number of desktop PC's. However, full functionality of the software is available only if a mobile device – containing DigiTerra Explorer SD card – **is connected**** .

** Provided that Microsoft ActiveSync - or in case of Windows Vista operation system Windows Mobile Device Center - connection works properly. In case you have difficulties with setting up connection between your mobile device and desktop PC, please contact your system administrator!

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Important facts

You will find detailed information as to how to use the software in the Users' Manual on the SD Card and (is in various languages) on www.digiterra.hu website (User_Manual_.pdf). To read the Users' Manual you will need Adobe Acrobat Reader that you can download from http://www.adobe.com/products/acrobat/readstep2.html.

DigiTerra Kft. as the producer of DigiTerra Explorer Version 6 software guarantees to replace SD Cards within the period of one year from the date of purchase. Neither the producer nor the distributors of the software will take responsibility of whatsoever for damage caused by improper use. Nor does it lie in our power to replace SD Cards with the software in the event of their being lost or stolen.

For further information please turn to the distributors of DigiTerra Explorer Version 6. or contact us at www.digiterra.hu website.

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