NESTLE
MIT DEN BESTEN MESSEN

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User Manual

NESTLE
Satellite Positioning System

GNPS-64



Art.-Nr. 26068001

In order to use the System well, please read this instruction manual carefully and keep it cautiously for consulting in the future.

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1 Introduction

1.1 About the document

This document describes the preselected functions of the NESTLE on4go software app.
Nestle on4go_V1.0.20260902.apk was used to create this document.

1.2 Legend

[abc] App Button (normal)
(abc) App Button (popup round)
[] abc App Button (icon)
T abc Screen Title / Subtitle
≡ abc Screen Content Item (modifiable)
abcd Screen Content Item (non-modifiable)
► Shortcut to another Chapter

1.3 Note on the Relevance of Illustrations

Screenshots and illustrations are for illustrative purposes only. Actual user interface design and features may vary slightly due to software updates. Core functionality remains unchanged.

1.4 General Notes

Please avoid umlauts (ä, ö, ü, ß) and special characters (e.g., /, , , !, ?, *). Use ae, oe, ue, ss and standard characters instead.

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2 Warning and safety instructions

The operator must ensure that all users understand and follow these instructions.

Intended use

- Calculation with software.
- Record the measurements.
- Execution of measuring tasks with different GNSS measuring techniques.
- Record GNSS and point related data.

Improper use

- Using the product without instructions.
- Use outside its intended purpose and operating limits.
- Disabling safety devices.
- Removing any warning or notification labels.
- Opening the product with tools, e.g., screwdrivers, unless expressly permitted for specific cases.
- Making modifications or alterations to the product.
- Using the product with visible defects or damage.
- Using accessories from other manufacturers that are not expressly approved by Gottlieb Nestle GmbH.
- Inadequate safety measures at the place of use.
- Controlling machines, moving objects, etc., in monitoring applications or similar without additional monitoring and safety devices.
- The product must not be disposed of with household waste. Dispose of the product properly. Follow national and country-specific disposal regulations.
- Protect the product from unauthorized access at all times.

Limits of use

- See chapter "Technical data".
- The product is suitable for use in a permanently habitable atmosphere.
- The product must not be used in potentially explosive or aggressive environments.
- The local safety authority and those responsible for safety must be contacted by the operator before working in a hazardous environment, near electrical systems or similar situations.

Before every start-up

- Check the product for possible damage before commissioning.
- Never use the product if it has obvious defects.

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Disposal WEEE-Regulation

Electrical tools, accessories and packaging should be sorted and submitted to an environmentally-sound recycling facility.



Do not dispose of waste batteries, waste electrical and electronic equipment as unsorted municipal waste. Waste batteries and waste electrical and electronic equipment must be collected separately. Waste batteries, waste accumulators and light sources have to be removed from equipment. Check with your local authority or retailer for recycling advice and collection point. According to local regulations retailers may have an obligation to take back waste batteries and Waste electrical and electronic equipment free of charge. Your contribution to re-use and recycling of waste batteries and waste electrical and electronic equipment helps to reduce the demand of raw materials. Waste batteries, in particular containing lithium and waste Electrical and electronic equipment contain valuable, recyclable materials, which can adversely impact the environment and the human health, if not disposed of in an environmentally compatible manner. Delete personal data from waste equipment, if any.

EU countries only:
Dispose of battery packs and batteries in an environmentally friendly manner in accordance with the EU directive on batteries and battery
packs.

Laser Classification

The Laser module built into the product produces a visible laser beam which emerges from the Laser exit window opposite the on/off switch, at a right angle to the antenna base.
The laser product is classified as laser class 3R in accordance with:
• IEC 60825-1 (2014-05): "Safety of laser products"

Direct intrabeam viewing may be hazardous (low eye hazard level), in particular for deliberate ocular exposure. The beam may cause dazzle, flash-blindness and after-images, particularly under low ambient light conditions. The risk of injury for laser class 3R products is limited because of:
a) unintentional exposure would rarely reflect worst case conditions of (e.g.) beam alignment with the pupil, worst case accommodation,
b) inherent safety margin in the maximum permissible exposure to laser radiation (MPE)
c) natural aversion behaviour for exposure to bright light for the case of visible radiation.

Description	Value
Wavelength	[TBD]
Maximum average radiant power	[TBD]
Pulse duration	[TBD]
Pulse repetition frequency (PRF)	[TBD]
Beam divergence	[TBD]

From a safety perspective, class 3R laser products should be treated as potentially hazardous.
Precautions:

- Prevent direct eye exposure to the beam.
- Do not direct the beam at other people.
- Potential hazards are not only related to direct beams but also to reflected beams aimed at reflecting surfaces such as prisms, windows, mirrors, metallic surfaces, etc.

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3 Check the settings and results

As is **standard practice with surveying**, we recommend verifying the settings and position data in the field. Therefore, we advise **checking the position data for all GNSS measurements against known, coordinated points on site**.

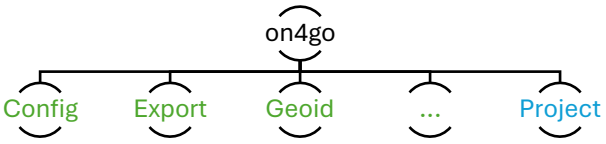
If coordinates for the points marked on-site are not available, the settings and position data can alternatively be verified approximately by comparing them with coordinates from a web-based provider. This gives you a simple way to verify your data, at least regarding the coordinate system, zone, etc. The comparison provides an approximation within the range of a few decimeters.

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4 App and Project File Structure

Understanding the core concepts of the app and project file structure makes navigating the application's files and folders much easier. Therefore, it streamlines your workflows and effectively prevents data loss.

Nestle on4go automatically creates the default folder "/Internal Storage/on4go/" to save both "app data" and "project data".



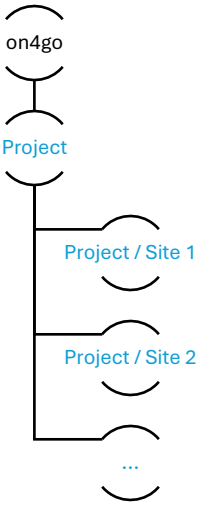
The Nestle on4go "app data" folder structure (information only)

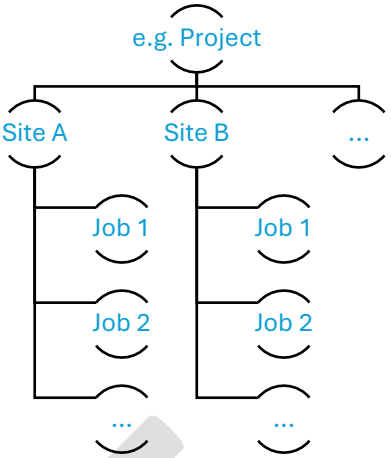
Folder	Content
+--.Cache	Hidden folder for temporary cached app files.
+--Config	General *.ini/cfg/dat files defining *AntennaParam, ConfigCodeLibrary, CorsParam, CustomFunction, ConfigEllipsoidItem, ConfigSystem, CordinateSystemList, MountPointList, projectInfo (list of existing projects), etc.*
+--Data	Other data directory; currently used mainly in the digital dictionary / custom function module.
+--Debug	Debug / exception logs, generated when the app encounters an error or crash.
+--Electric	Default import/export directory for power-line related data.
+--Export	Staging directory for exported files.
+--Geoid	Geoid / undulation model files used for vertical datum conversion. Certain geoid model files are pre-stored in the app.
+--Import	General *.tnb files defining imported TriangleNet data.
+--Installation	Download directory for app installation packages.
+--Map	Default import/export directory for map data (offline basemaps, tiles).
+--Road	Default import/export directory for road / alignment related data.
+--Project	Central repository for user projects

The Nestle on4go "project data" folder structure

By default, Nestle on4go saves surveying "project data" in the "Project" folder, located within the "on4go" root directory.	Optionally, the "project data" folder can be set to a different path. This allows for example to organize survey projects by sites and jobs (advanced users only).

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Folder / File	Content
+--Project	
| | config.job	Project index / listing file used by the app to populate the Project List.
| |	
| +--Project_01	Folder name of customer project 1
| | | config.job	Project specific app config settings containing *Version, Operator, CreateDateTime, DefaultPointName, LengthScaleFactor, Units, UseCoordSystemType, etc.* Note: See opening an existing project ▶.
| | | coordparam.sys	Project specific coordinate system settings
| | | surveydata.db	Surveying database of the project containing *CoordinateBackupTable, AntennaInfoTable, GnssRefStationTable, CadEntityTable, CadLayerTable, PointLayerTable, FileInfoTable, AppVersionTable, CoordinatePointTable, etc.*
| | | surveydata.db-journal	Auto-generated SQLite transaction log; users should not edit, back up, or delete it manually.
| | | dxf-export.dxf | | | areacalc.jpg | | | volumecalc.jpg | | | volumereport.pdf | | | Pt23.html	File exports, screenshots of area/volume calculation, volume reports, measurement reports, etc.
| | +--Config	Project specific *.ini/cfg files such as *ConfigBaseCorrect, ConfigCad, ConfigCodeLibrary, ConfigMapConvert, ConfigPointSurvey, ControlPointList, etc.*
| | +--Data	Autom. generated raw log and backup files of the project such as *Project_01.raw, Project_01.rw5, backup.bak, etc.*
| | +--Files	Project-level attachments folder.
| | \--Images	Field photos and screenshots attached to this project.
| +--Project_02	Folder name of customer project 2
| | | config.job	
| | | etc.	

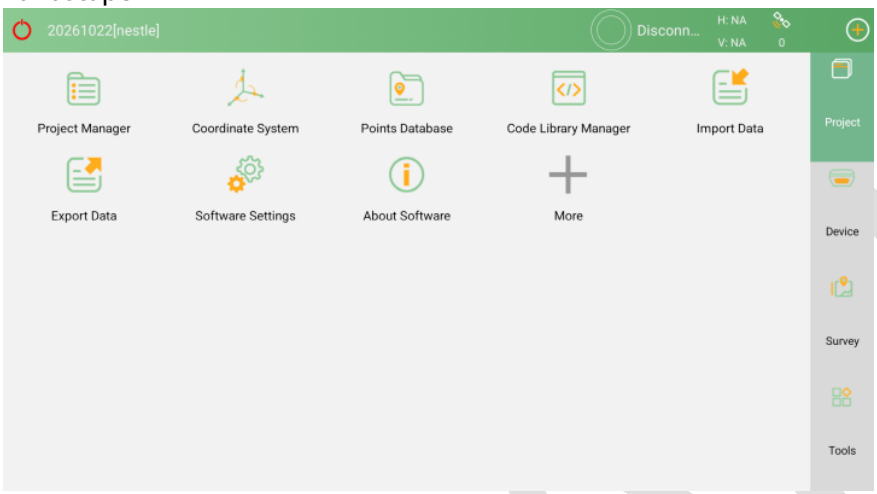
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5 on4go User Interface

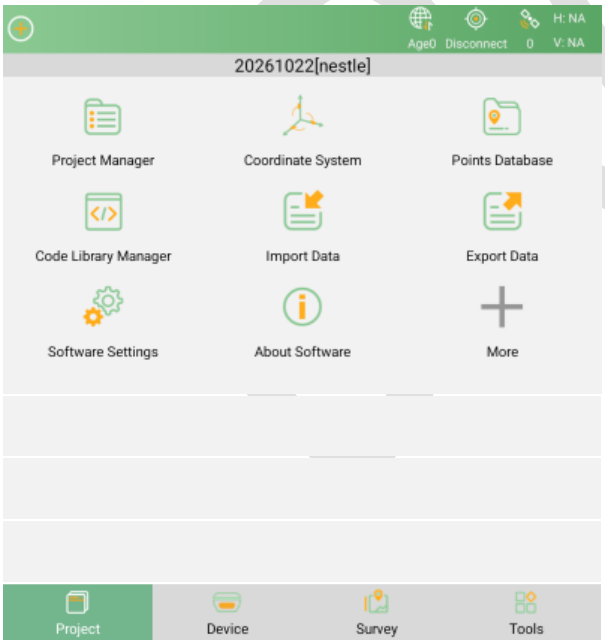
Nestle on4go has user-friendly interfaces, which provide you a convenient and effective surveying experience.

- The "Project" screen is active by default when the application starts.
- The "Status Bar" is always located on top.
- The main screen function buttons are located within the content pane.
- Depending on the screen orientation, the main screen buttons are located at the bottom or on the right.

Landscape



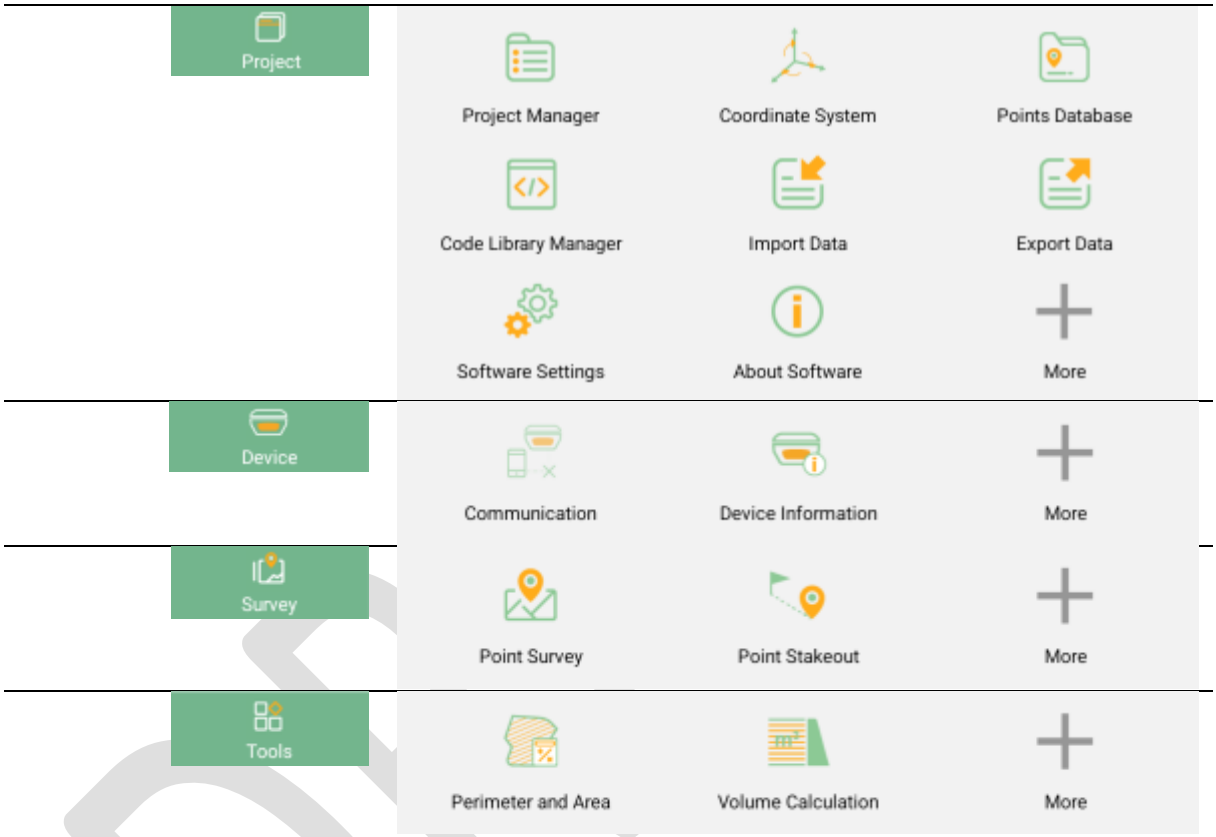
Portrait



There are four main screens:



A new installed Nestle on4go comes with a preconfigured default user interface that includes the most important standard functions.

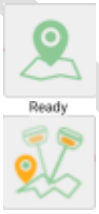


But users can customize the information display content and measurement function menu according to their own usage scenarios, so that the software can better meet the needs of their own applications.

Each main screen includes various functions as well as a "More" section.
This section features advanced tools such as additional import formats, calculation utilities, stakeout accuracy analysis, auto-sketching by codes, CAD layer editing, etc.

Note, that the functions under "More" are not part of the preconfigured default user interface and therefore not covered in this manual.

How to customize the user interface?

Adding a function		**Tap** [+ More] to see available functions.
		**Tap** the (+) on the top right of the icon to move the function to the main interface.
		If you **tap** on the icon itself, the function will be called.
Hiding a function		**Long-press** any function of the main interface, until the (-) appears at the top right of the icons. Now the edit mode is active.
		**Tap** the (-) of an icon to move it from the main interface to the [+ More] screen.
		**Tap** the [back arrow] to exit the icon edit mode.
Change order of icons		**Long-press** any function of the main interface, until the (-) appears at the top right of the icons. Now the edit mode is active.
		**Long-press** the icon to move, until it turns red.
		Then **drag & drop** it to its new position.
		**Tap** the [back arrow] to exit the icon edit mode.
Reposition the measure button		During survey or stakeout, you can use **drag & drop** to reposition the [measure] button.

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6 on4go Project Screen

This screen contains the functions related to your projects.
The default interface includes …

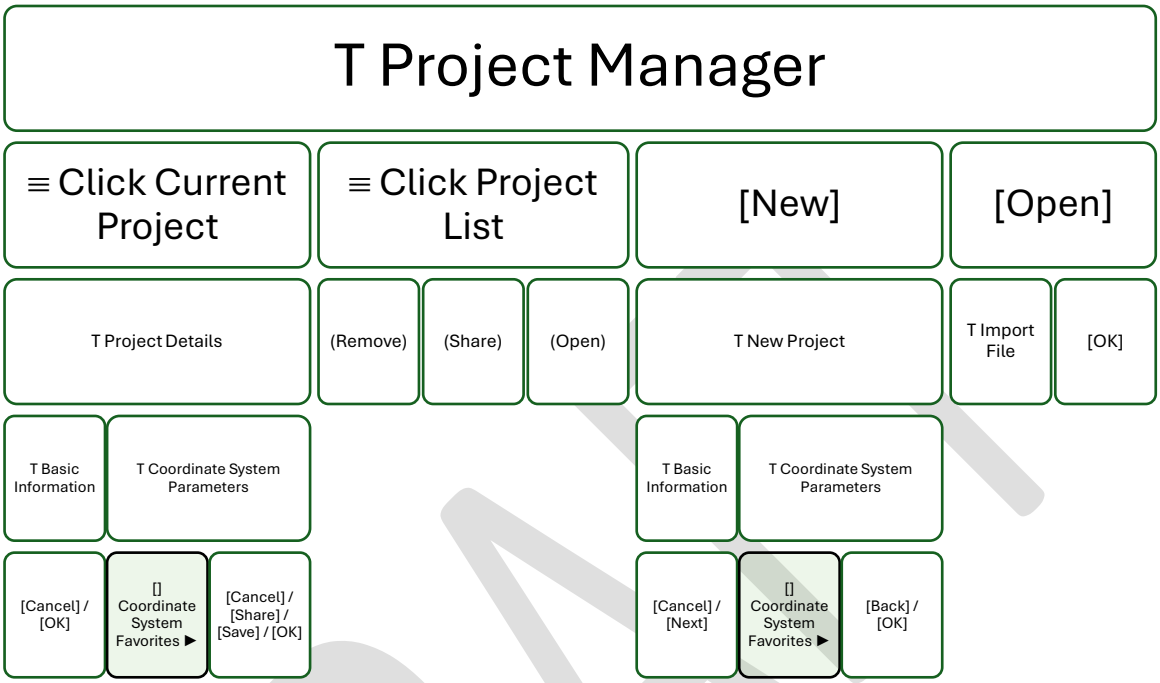
 Project Manager	Create a new project or Open/Share/Remove an existing project.
 Coordinate System	Manage users favorite coordinate systems (add/share/delete or load a template).
 Points Database	Manage all points, which are surveyed, staked, added, imported or entered.
 Code Library Manager	Manage survey code lists.
 Import Data	Import data from various file formats.
 Export Data	Export data to various file formats. Also to export measurement report and stake point report.
 Software Settings	Manage app settings such as System (Language, Units, Precision, Screen Orientation, etc.), Cloud Share Server, Voice and Shortcuts
 About Software	Informs about software ID, version and license state. Also allows to activate the license, check for latest version and send feedback.
 More	Additional non-default functions.

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6.1 Project Manager

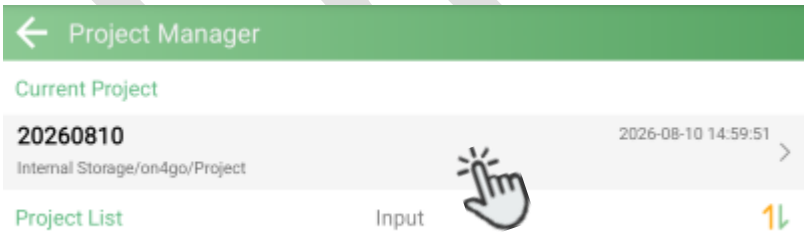
This screen allows to manage your surveying projects.

Menu Structure:



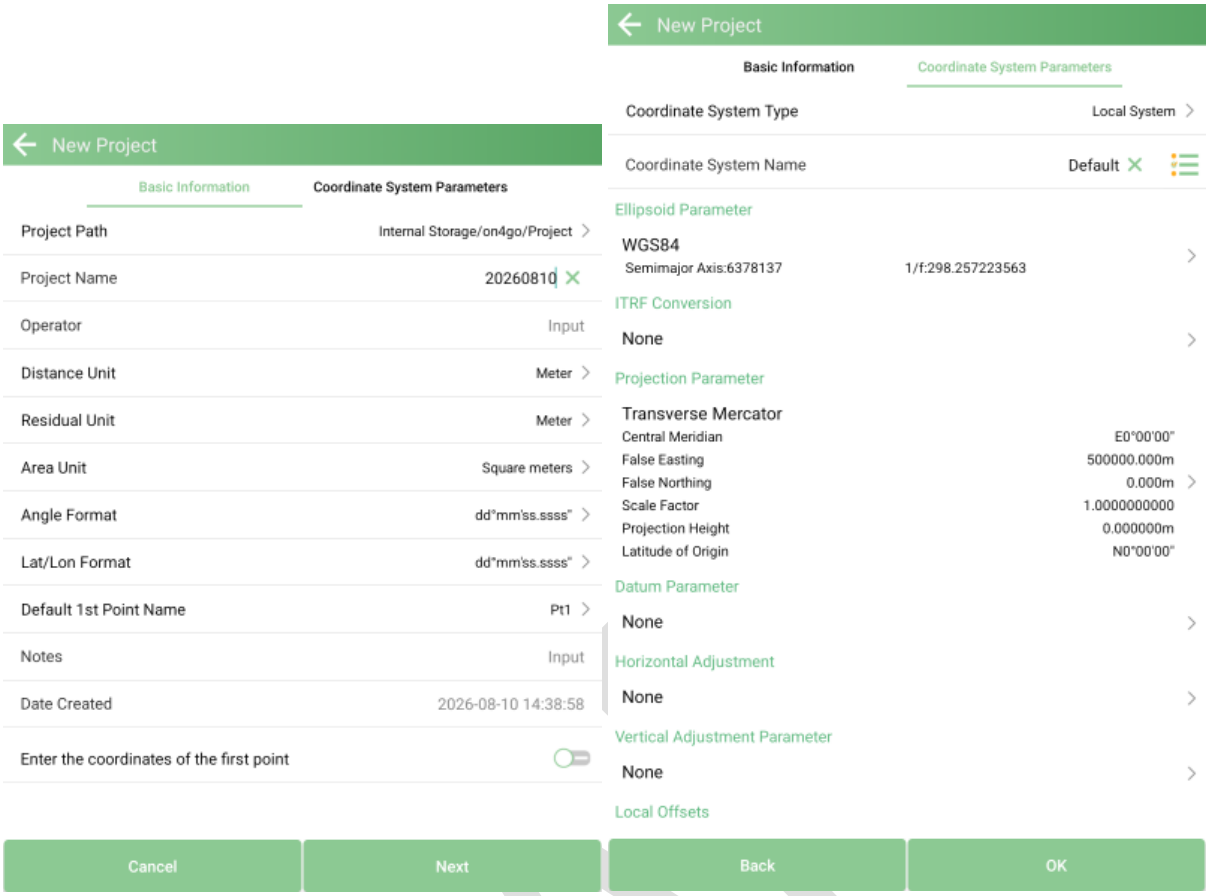
6.1.1 Current Project

At first time using the “Project Manager”, “Current Project” field and “Project List” were empty. If the last opened project will be shown as “Current Project”, the job is already loaded, you can directly continue with survey or other functions.



Tap the current project to view the “Project Details” of the current project.

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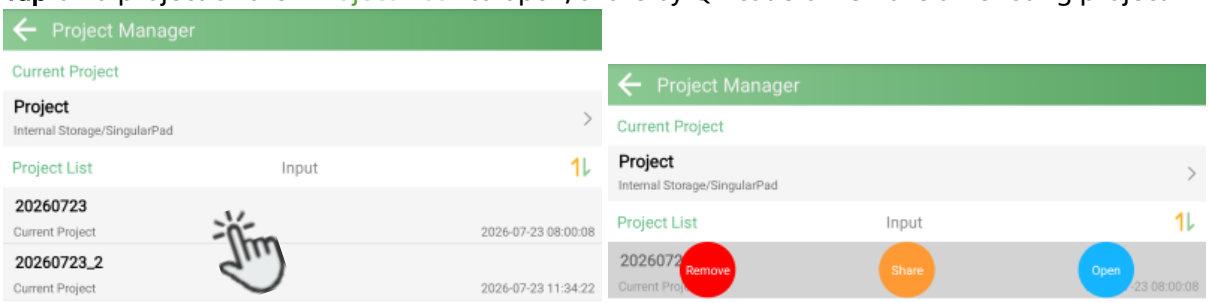


Note
Even though some values can be modified, never change the coordinate system of an existing project. Otherwise you risk to get wrong coordinates.

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6.1.2 Open, Share or Remove from the Project List

Tap on a project of the "Project List" to open, share by QR code or remove an existing project.



Note, that "Remove" only unlinks the project from the "Project List"; it does not delete the project files from the "Project" directory.

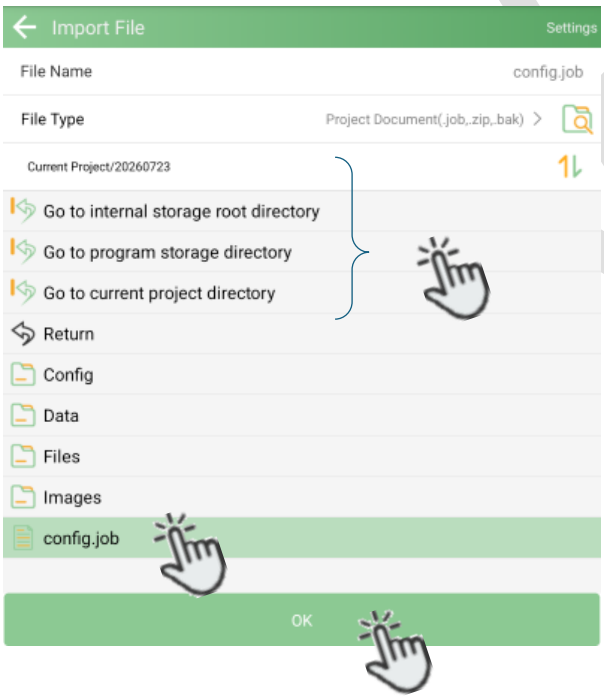
To delete a project from the tablet, manually remove the folder via an Android file manager. Once Nestle on4go is restarted, the project will automatically disappear from the "Project List".

6.1.3 Open an existing Project

Tap [Open …] button to search, select and open an existing project on the device.



The "Import File" screen opens.



Navigate to an existing project by using the (Goto shortcuts), Return (Jump up 1 level) and clicking on folder names.

Then **select** the related "config.job" file (or a zip-compressed archive containing the project folder)

and **tap** [OK] to open it.

6.1.4 Create a new Project

Tap [New] to create a new project.



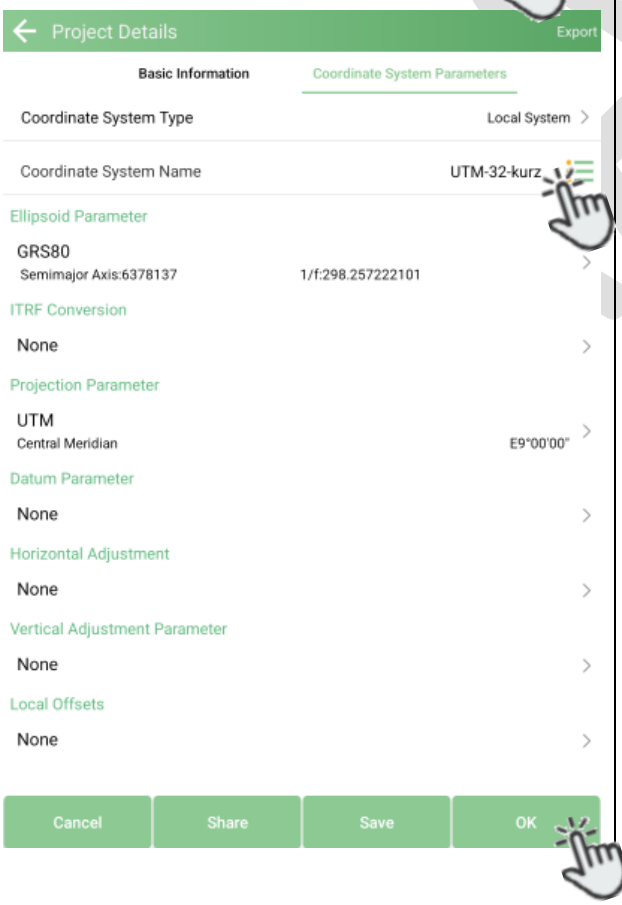
The "New Project" screen opens.



Enter all fields.

Project Path
the path of the project folder
Project Name
the name of the surveying project
Operator
the name or abbreviation of the user
Notes
job-related notes
Date Created
date/time when the job was created (is autom. filled in)

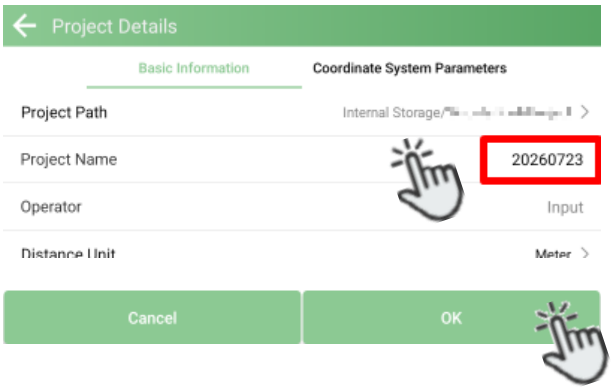
Use Last Project Coordinate System
Option, default = enabled
Enter the coordinates of the first point
Option, default = disabled



(see chapter "Coordinate System" ▶)

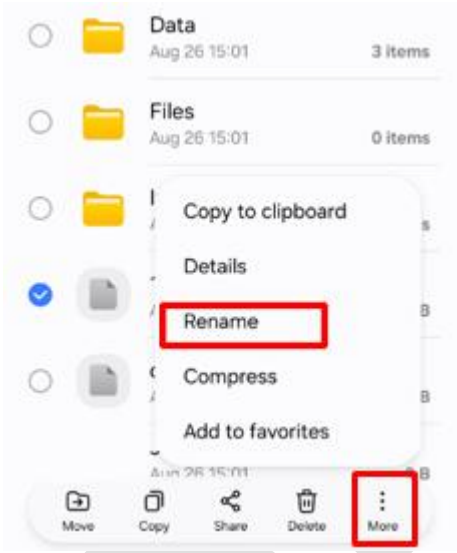
Tap [OK] to save the new project

6.1.5 Rename an existing Project



To rename a project folder, simply **open** the file in the app and **modify** the name.

Then **tap** [OK] to confirm.



Alternatively, you can manually rename the project using an Android file manager.

Note: Because this change is made within Android, Nestle on4go will lose the link to the folder. If this happens, just **open** the project via the "Project Manager". The project will automatically be re-added to the "Project List".

6.1.6 Move an existing Project

To change a project location, you need to manually move it within the system memory of the controller.

Note
Moving the "config.job" file itself in isolation serves no purpose. It is merely a configuration file and does not contain the actual project data. It functions as an index and cannot be opened independently of the project folder to access that data.

6.1.7 Backup & Restore Projects

General note
As long as you do not delete the on4go folder on the data collector, your data remains intact even after updating or reinstalling the app.

Case	How to Backup?	How to Restore?

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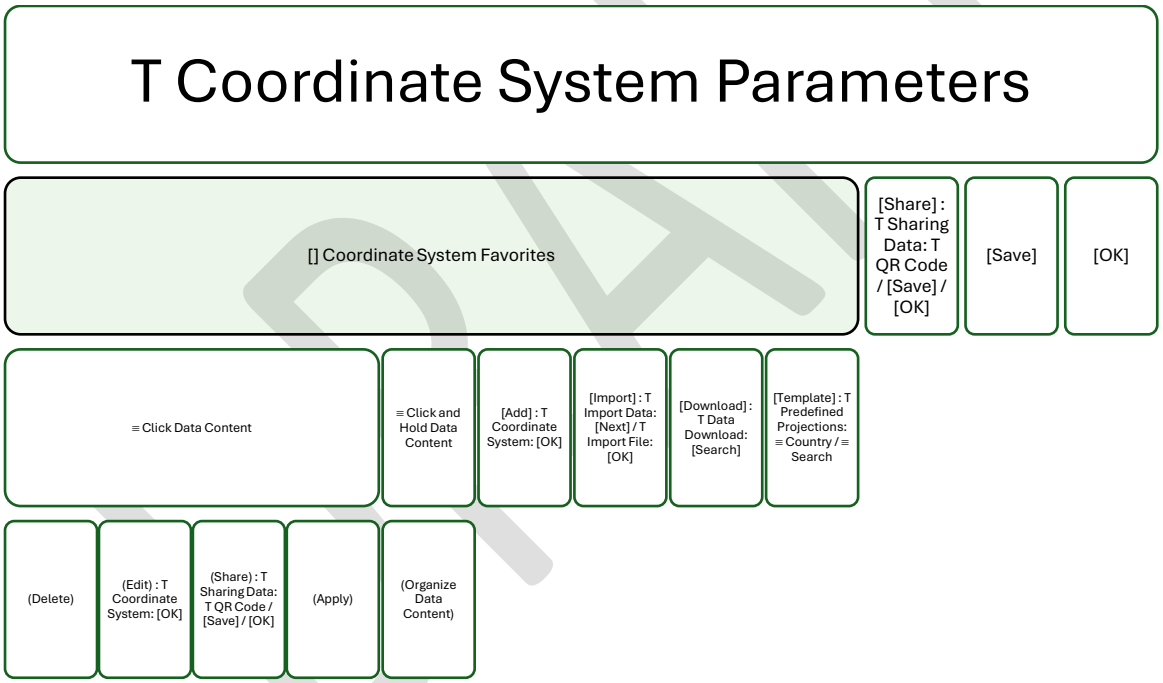
a) Ongoing Survey	The system automatically creates a backup file named “backup.bak” within your project folder.	You can import the corresponding file format in “Project Manager”.
b) Complete Project	Use Android file manager to create a zip-compressed archive containing the project folder.	You can import the corresponding file format in “Project Manager”.
c) All Projects	Use Android file manager to backup by copy the root project folder “Project”.	You can import the corresponding file format in “Project Manager”.

6.2 Coordinate System

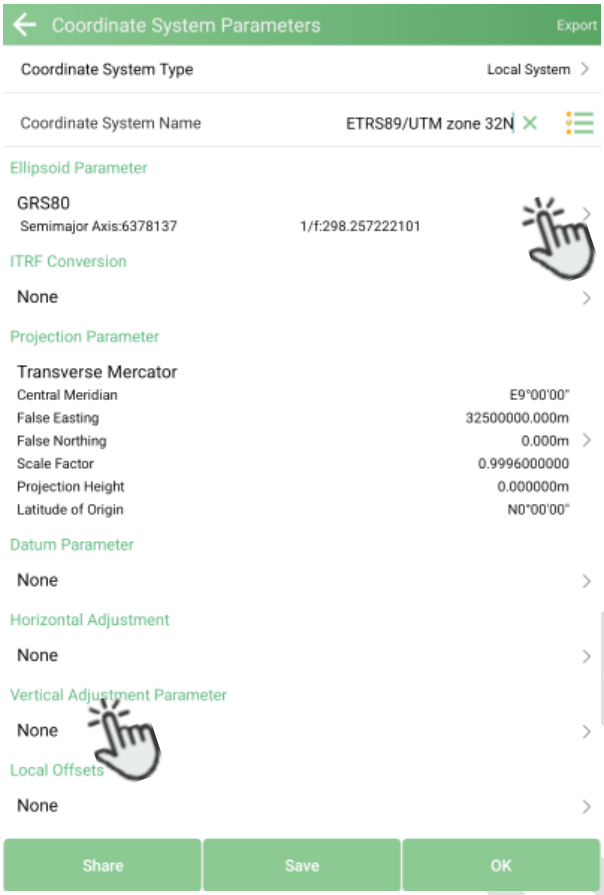


This screen allows to manage coordinate systems.

Menu Structure:



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Enter all fields
(if not yet done with "New Project").

Coordinate System Type
default = Local System

Coordinate System Name
the name of the current coordinate system

Ellipsoid Parameter
default = GRS1980 or GRS80

Projection Parameter
the name and values of the current projection

Vertical Adjustment Parameter
the current assigned "**Geoid File**" for correct height calculation (important!)

Tap on any screen section to directly edit the settings.

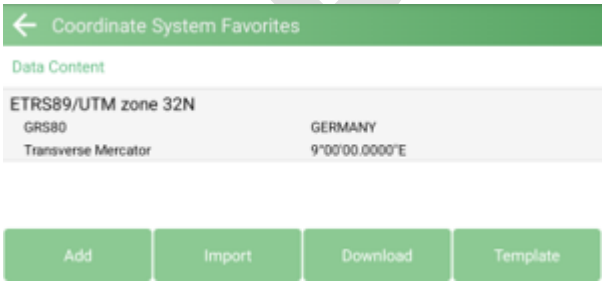
Tap to open the "Coordinate System Favorites" screen ▶.

When finished with settings:

Tap [Export] to save settings as *.sys coordinate system parameter file for later import or just backup.
Tap [Share] to transfer the settings to another Nestle on4go device by QR code.
Tap [Save] to enter a name and save settings in the "Coordinate System Favorites" list.
Tap [OK] to apply settings for current project.

6.2.1 Coordinate System Templates

This screen allows to load a predefined projection from Nestle on4go templates.



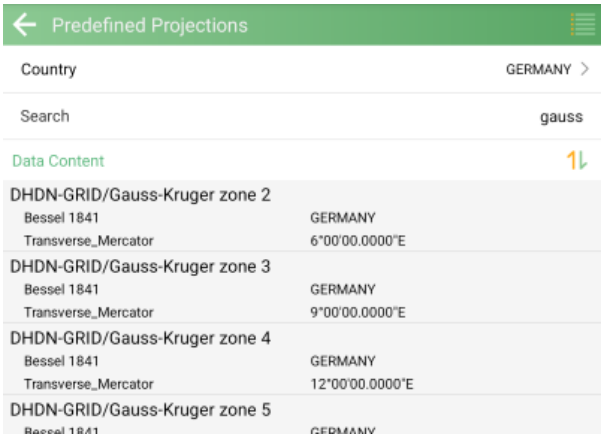
Tap [Add] to edit manually a new coordinate system

Tap [Import] to read from a *.sys coordinate system parameter file

Do not use [Download] button.

Tap [Template] to load a predefined projection template

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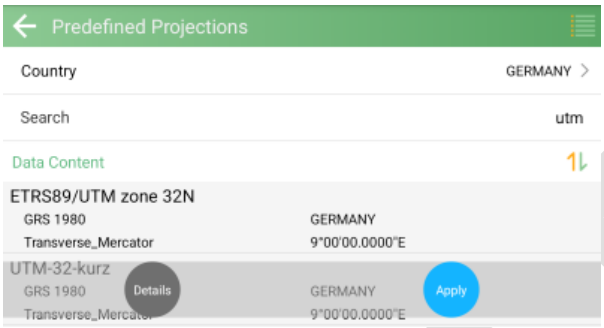
Country

Tap to open the dropdown list. **Select** your country.

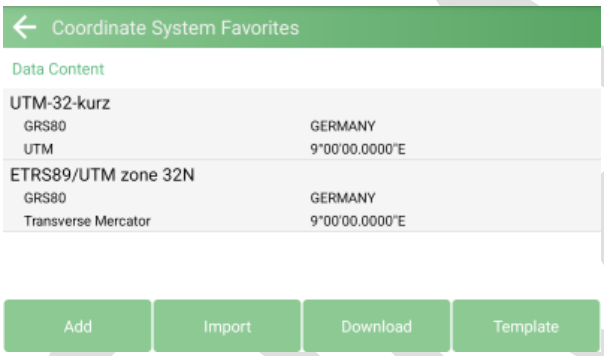
Search

Then **enter** a search term (e.g. utm, gauss, etc.) to narrow down the selection of templates.

The "Data Content" shows the search results.



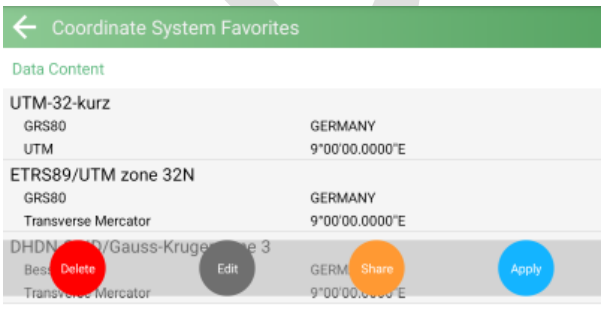
Tap on a "Data Content" item to see more [Details] or [Apply] its coordinate settings.



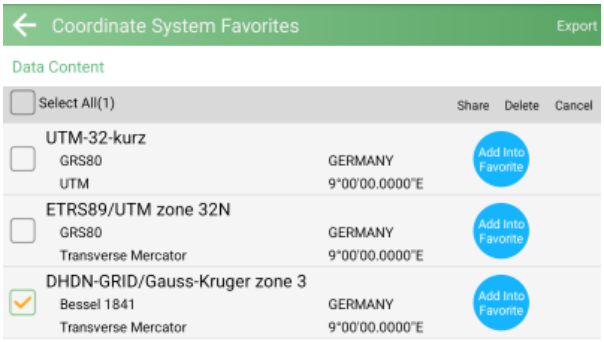
The coordinate system is automatically added to the favorite list.

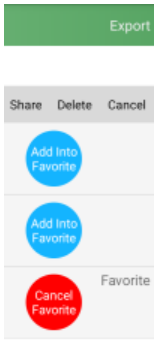
6.2.2 Coordinate System Favorites screen

This screen allows to open saved coordinate systems and manage your favorites.



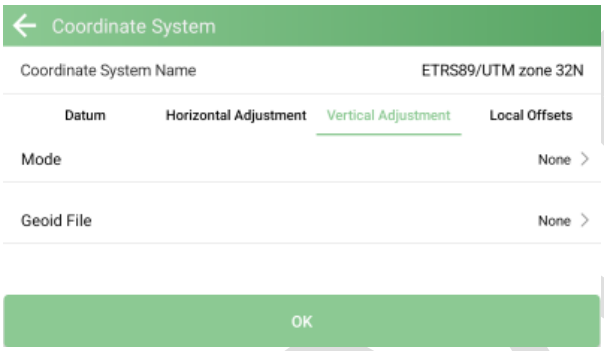
Tap on a "Data Content" item to [Delete], [Edit], [Share] or [Apply] its coordinate settings.



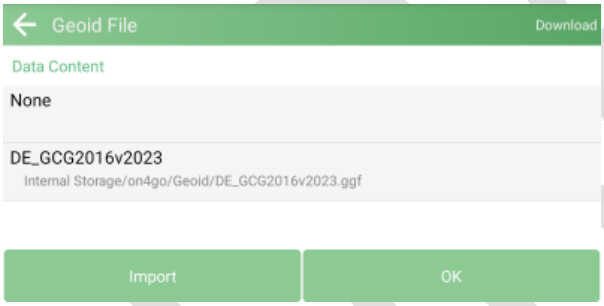


Tap and Hold a "Data Content" item to [Set] or [Remove] it as favorite.

6.2.3 Add a Geoid File to Coordinate System Favorite

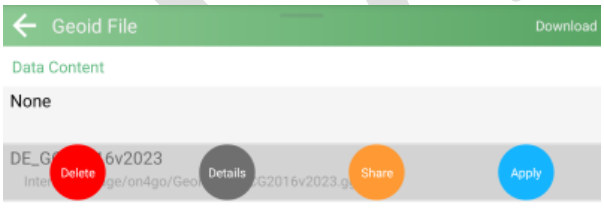


[Edit] tab "Vertical Adjustment" allows to pre-assign a geoid file from "/Internal Storage/on4go/Geoid" folder to the selected coordinate system favorite.

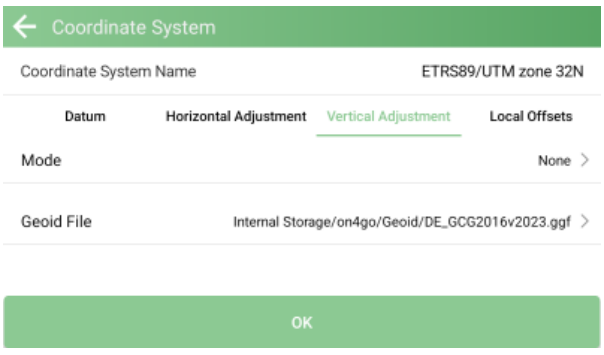


Do not use [Download] button.

Tap [Import] to add a geoid file instead.



When the geoid file is added to the "Data Content" list, **select** it and **tap** (Apply).



Tap [OK] to apply.

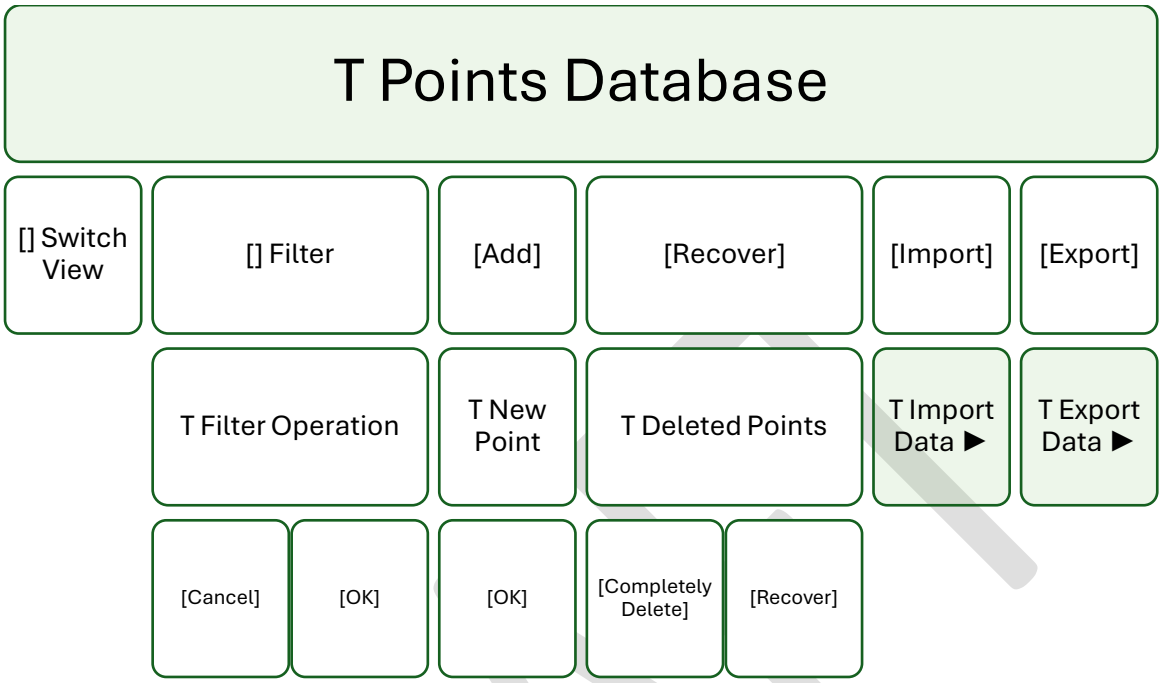


Now the geoid file is added to the coordinate system favorite.

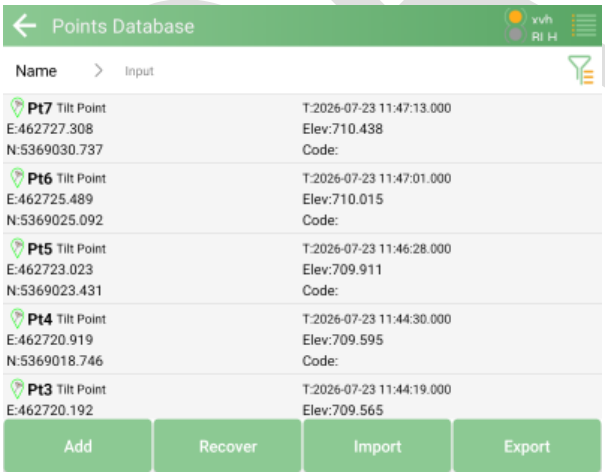
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6.3 Points Database

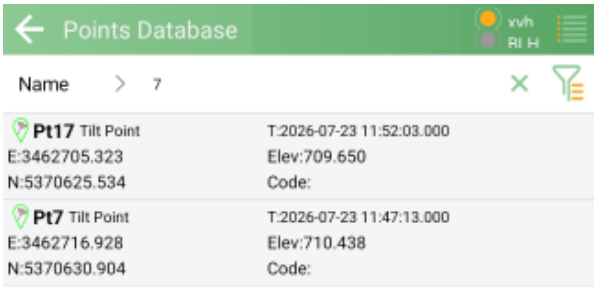
Menu Structure:



The points, which are surveyed, staked, added, imported or entered from display map, will be stored in point database. The surveyed points will be shown under one base while surveying. Also, no matter where you need to select a point, all the points of the database are available.

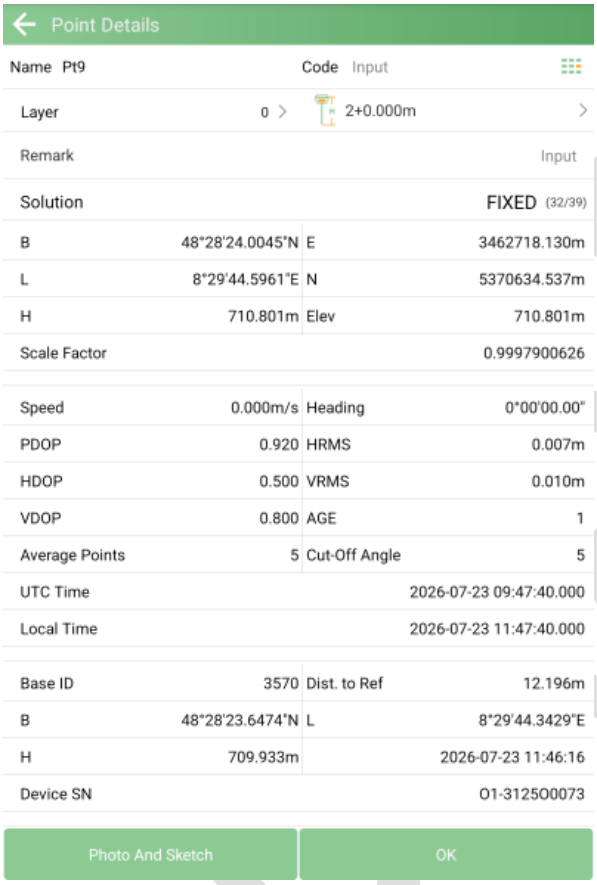


6.3.1 Search for Points



Tap [Name] input box to enter the name of the point you want search for.

6.3.2 Detailed point information



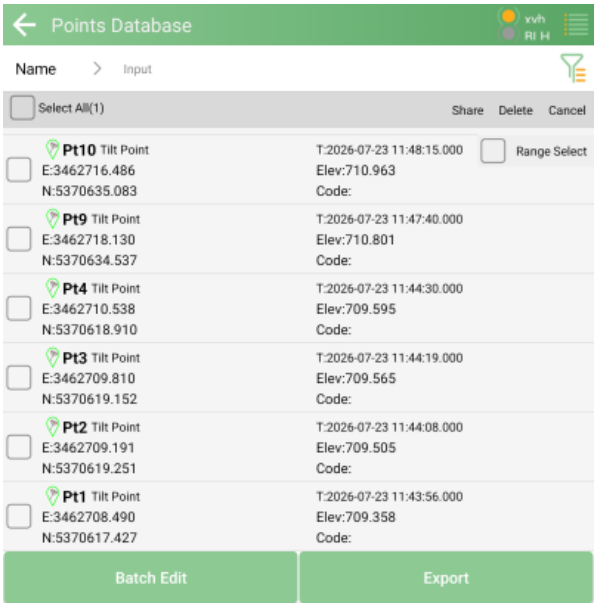
Tap any point of the points list to view the detailed information.

The information includes antenna height, solution status, WGS84 Coordinate, local grid coordinate, base id and measure time. If the point has been calibrated, the offset parameters will be displayed.

Note: “Name”, “Code”, “Layer”, “Antenna Height” and “Remark” can be modified. All other values can not be changed.

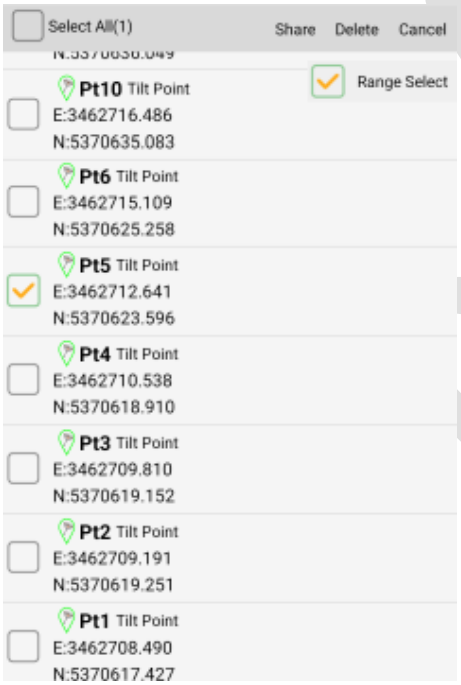
Tap [Photo And Sketch] to add notes by note, arrow, drawing and photo.

6.3.3 Multiselect Mode

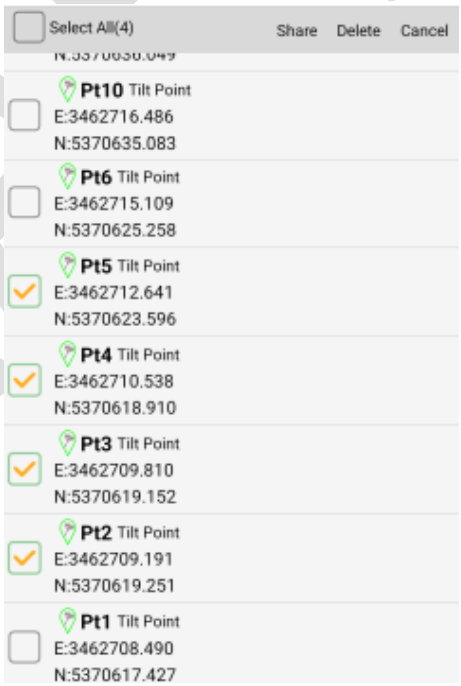


Tap and Hold any point to switch into multiselect mode.

Select point item by point item or use the "Range Select" option (selects autom. the range of points between currently selected and the next point item you tap on.



Example
"Pt2" was clicked, after "Range Select" option was enabled.



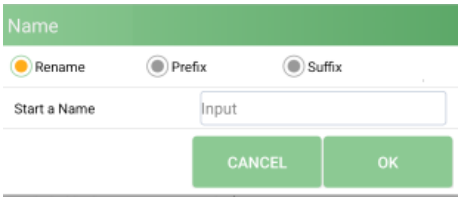
6.3.4 Batch Edit Point Properties

Tap [Batch Edit] to modify "Name", "Code", Layer" and/or "Antenna Height" in one step.

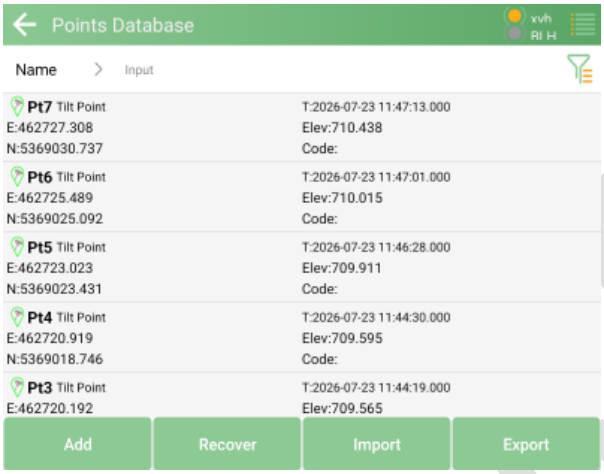
Depending on the selection, a different popup appears.

Example
"Name" was selected.

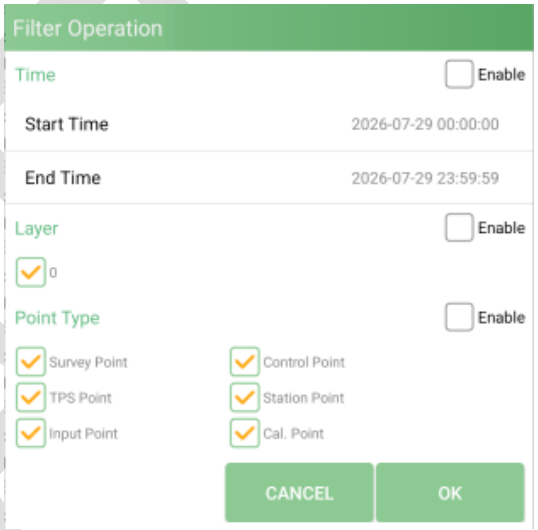




6.3.5 Filter Operation



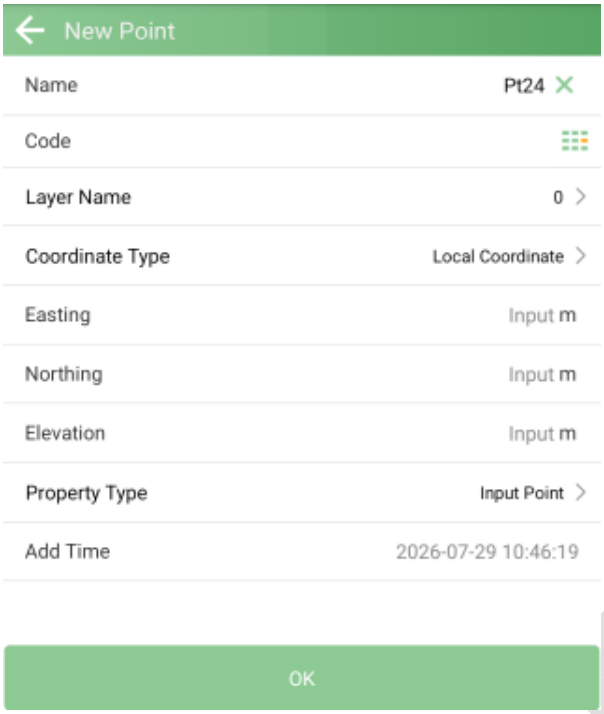
Tap : to open “Filter Operation”.



The criteria “Time”, “Layer” and “Point Type” can be separately enabled.

6.3.6 Add New Point

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Tap [Add] to open "New Point" screen.

Enter all fields.

Tap to select code from "Code Library Manager".

Tap [Layer Name] to select layer from "Layer List".

Coordinate Type
default = Local Coordinate

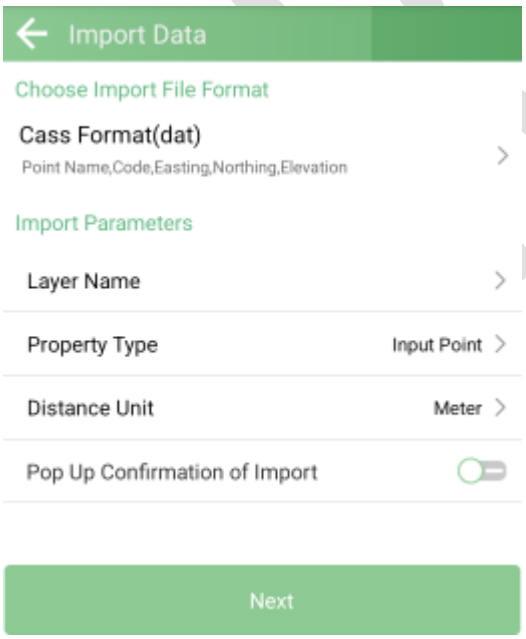
Enter geodetic coordinate (E,N,H).

Tap [Property Type] and select "Input Point" or "Control Point".

Tap [OK] to apply.

6.3.7 Miscellaneous

Tap [Recover] to recover deleted points from deleted points screen.
Tap [Import] to import points by different formats of files.
Tap [Export] to export points by different formats of files.

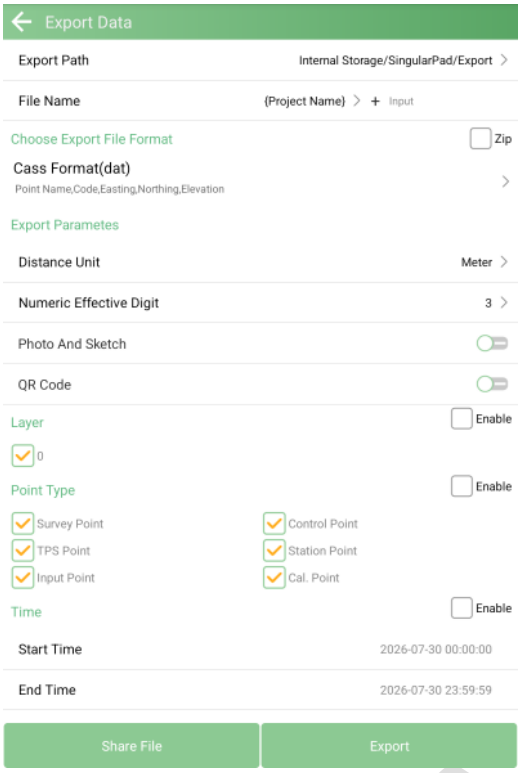


The "Import Data" screen opened from "Points Database" screen is almost similar to the screen opened from "Import Data" screen ▶.

Data Type
not selectable here

Pop Up Confirmation of Import
Option, default = disabled

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The “Export Data” screen opened from “Points Database” screen is similar to the screen opened from “Export Data” screen ▶.

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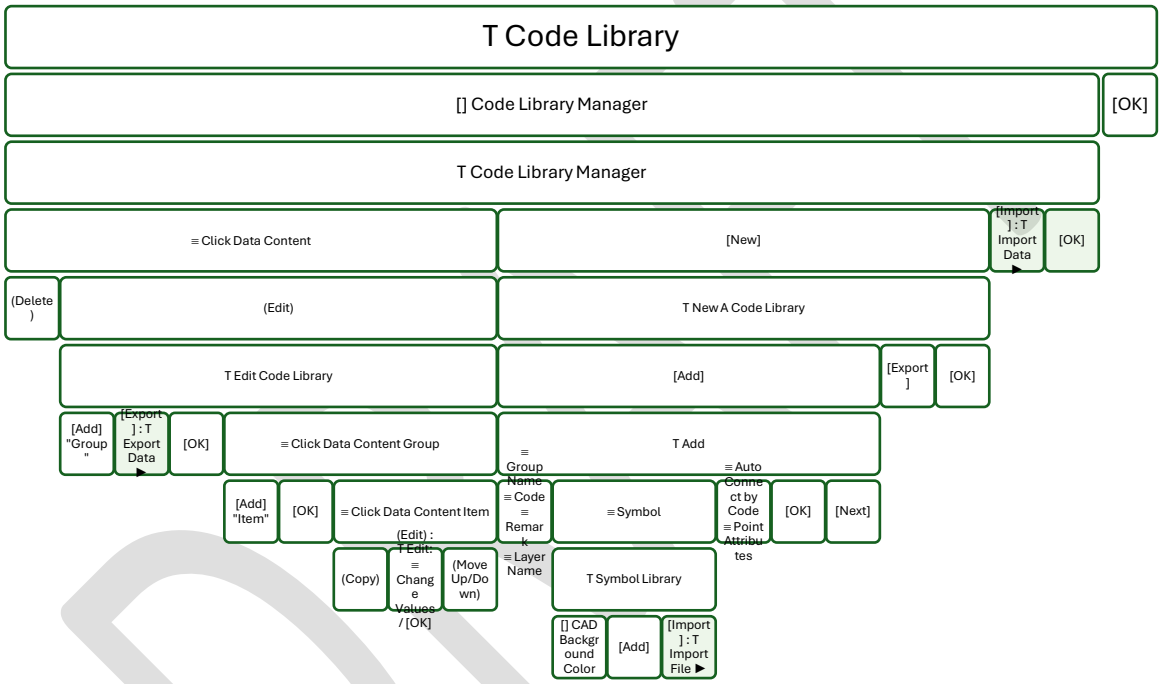
6.4 Code Library Manager

For advanced users only

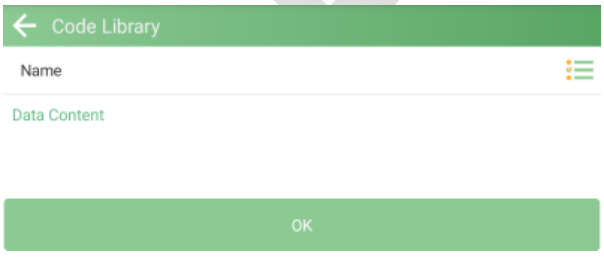
You can add the code for point, line and polygon by grouping. After add a code list what you need, it will be convenient to use point survey and stakeout. In addition, the description of code is good for you to survey features. In some situation, code will be easy, so you can select the description to know what you are surveying.

If you don't have a code list, you can modify current code list and add the code.
If you added a code list before, you can choose this code list when you create a new project.

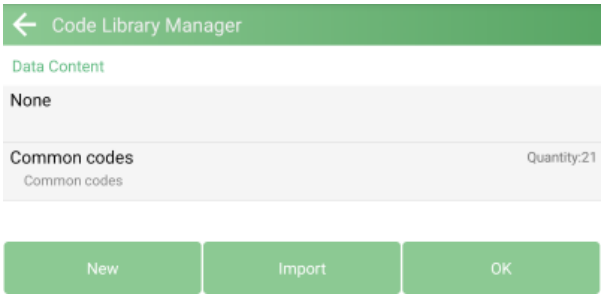
Menu Structure:



6.4.1 Create new code library



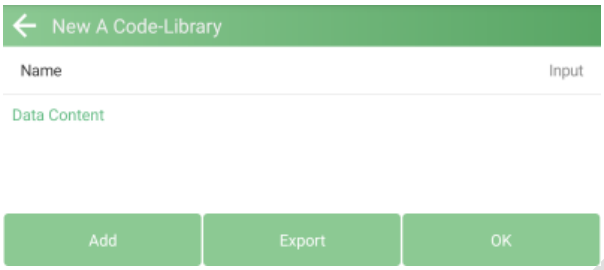
Tap to create or import a new code library. The "Code Library Manager" will open.



Tap [New] to create a new code library.

Tap [Import] to load a saved code list (supports *.cbd, *.csv, *.dat, *.txt, *.xls/xlsx formats).

Tap [OK] to apply.



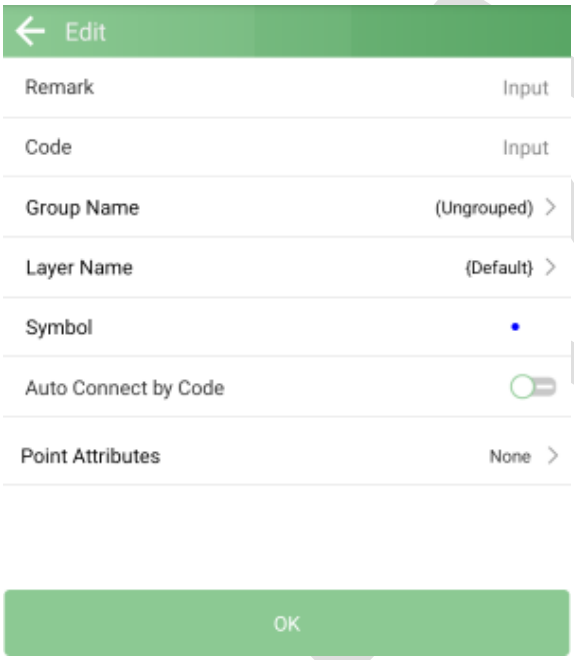
In the "New Code Library" screen you can …

Tap [Add] to create a new code item. The "Edit" screen opens.

Tap [Export] to save the code list.

Tap [OK] to apply.

6.4.2 Add new code item

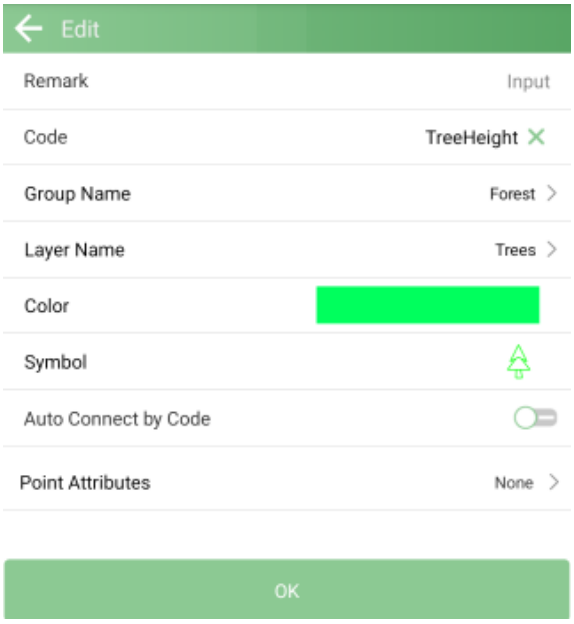


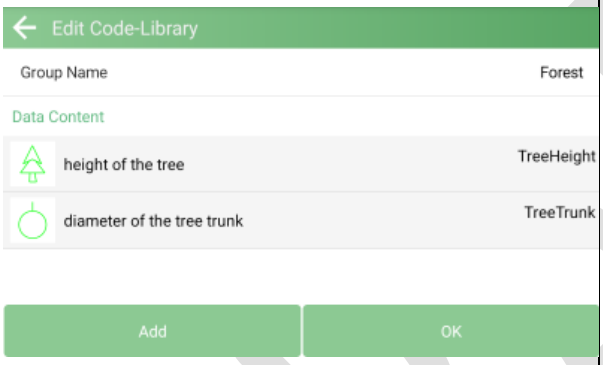
The "Edit" screen.

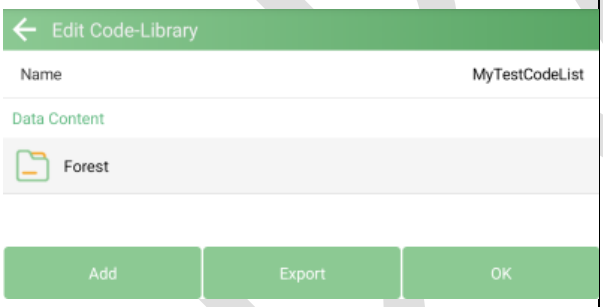
Enter all fields.

- Group Name
- Code
- Remark
- Layer Name
- select a Symbol
- Option Auto Connect by Code
- Point Attributes

Tap [OK] to save.

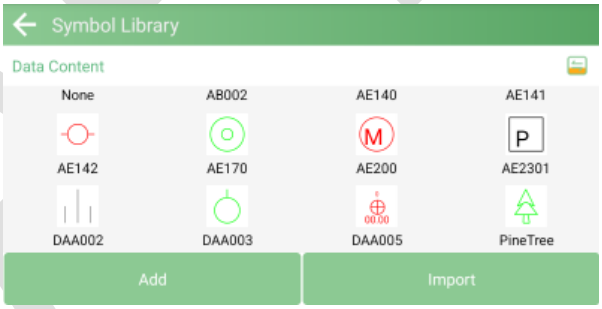




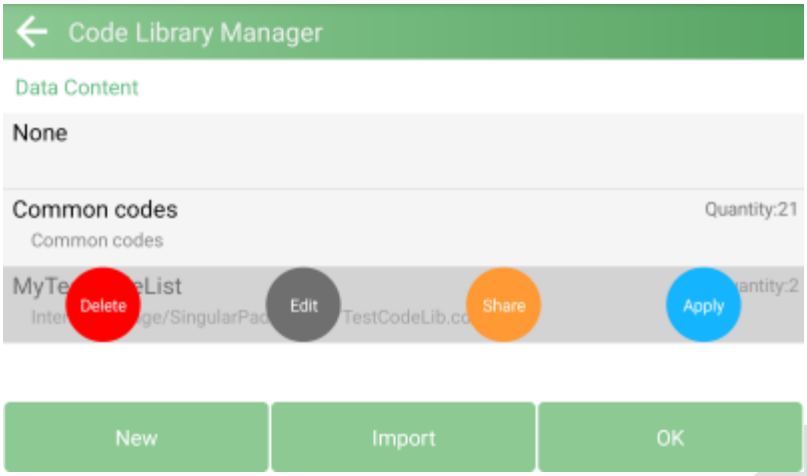


Example





Tap to change “CAD Background Color” (supports “White”, “Gray”, “Black”).

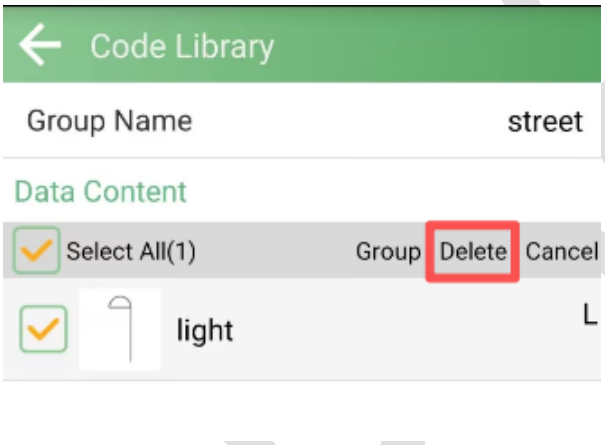


Do not forget to [Apply] the code list to the current project.

Note

a) When you add a code library in the point interface, it will not apply in line or polygon interface.
b) You can enter a new code in the Survey and Stake surface. When you survey the point, the code will be stored in the current code list.

6.4.3 Delete a code item



Long press a code to select and delete.

6.4.4 Delete a code library

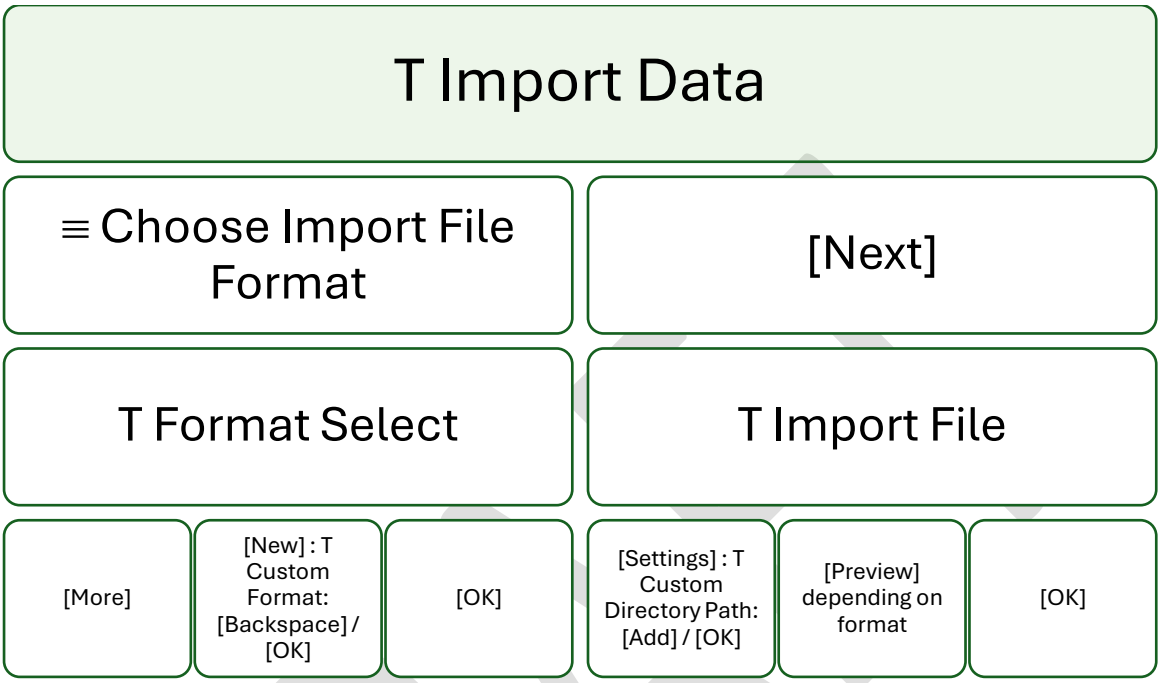
The software doesn't support it.

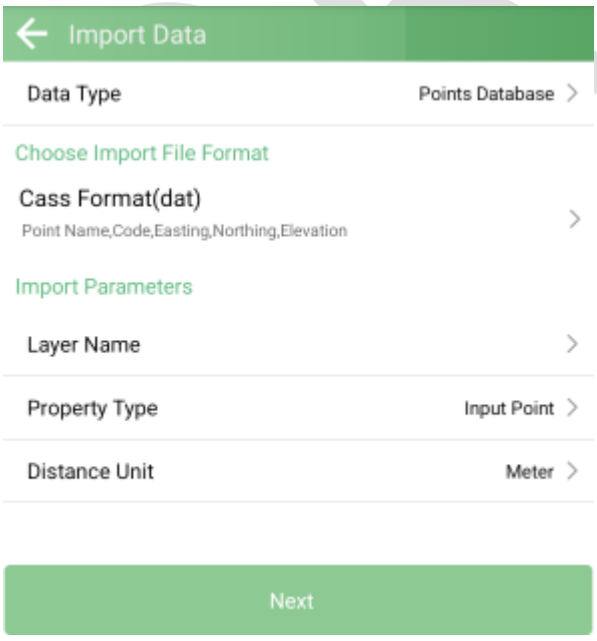
6.4.5 Backup & Restore a code library

The software doesn't support it.

6.5 Import Data

Menu Structure:





Data Type
Tap to select from data type list (supports "Points Database", "Stake Points", "Lines Database (Lines File)", "Lines Database (Coordinates File)", "Transformation Parameters File", "Code Library", "Road Data").

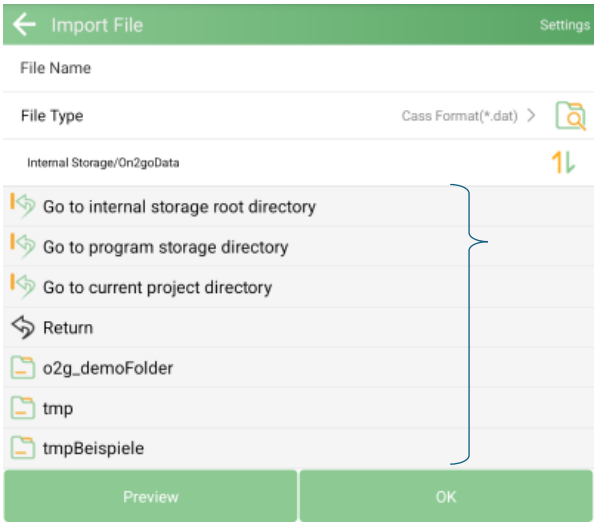
Import File Format
Tap to select the file format. ▶

Layer Name
Tap to select layer name from layer list.

Property Type
Tap to set "Input Point" or "Control Point".

Distance Unit
default = Meter

Tap [Next] to open the "Import File" screen.



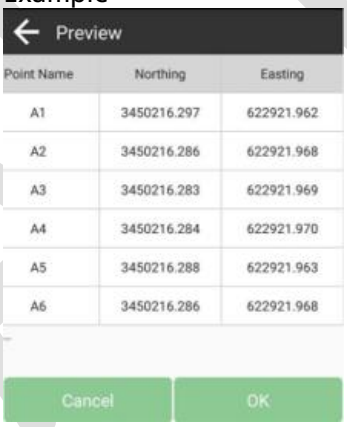
Import Path
default = Internal Storage/on4go/Import

Navigate to the file to be imported and **select** it.

Tap [OK] to open the file.

Depending on the selected file format, a [Preview] button may occur. This allows to inspect if the format is correct.

Example



6.5.1 Supported Import File Formats

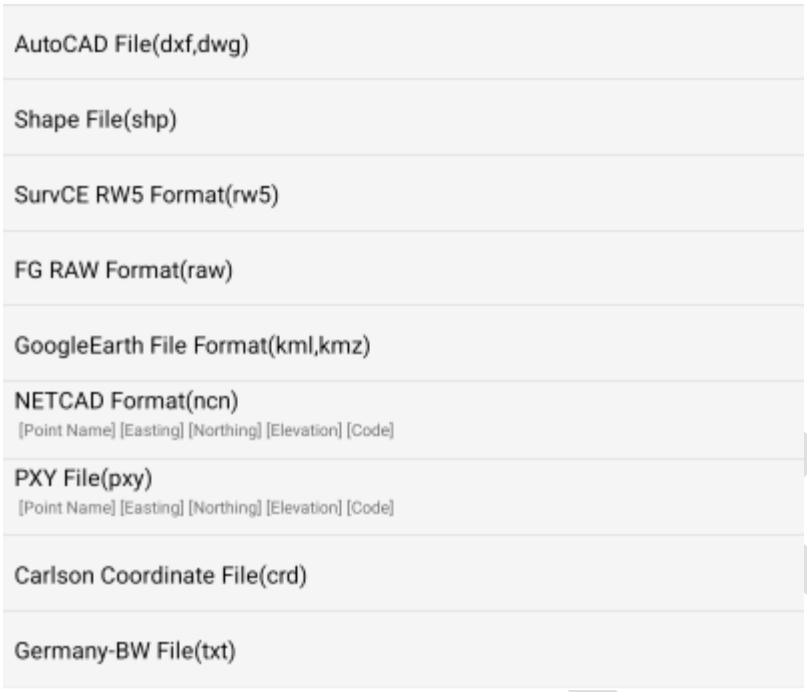
Nestle on4go supports to import point data of the following formats:



The predefined file formats.

Note
Choosing the right format depends on the content of the given file.

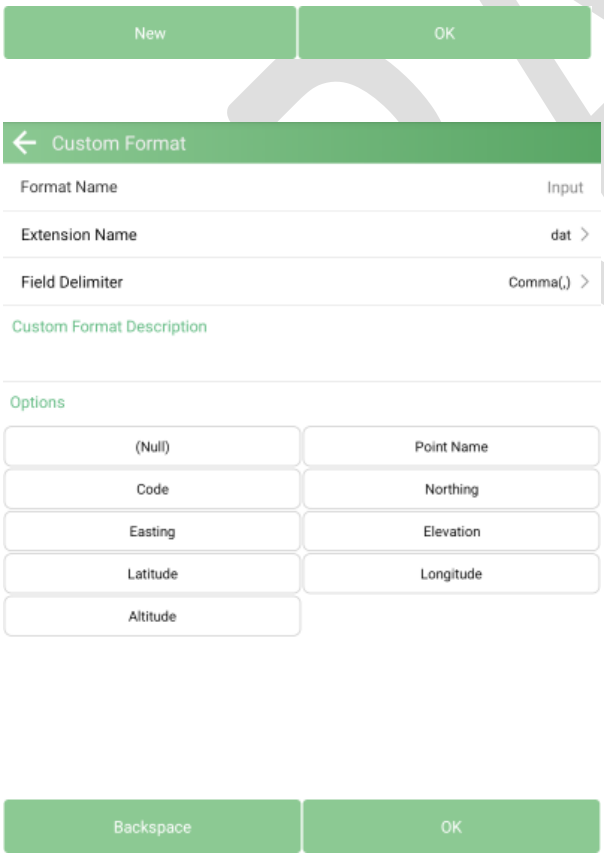
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Tap [More] to get more predefined formats.

6.5.2 Custom File Formats

Nestle on4go also allows to define a user-defined import type.



Tap [New] to create a new custom file format.

Format Name
Enter the name for the custom format.

Extension Name
Tap to select from *.dat, *.txt, *.csv, *.xls,*.xlsx

Field Delimiter
Tap to select from Comma (,), Semicolon (;), Space ( ), Tab (tab), Multi-Space ( )

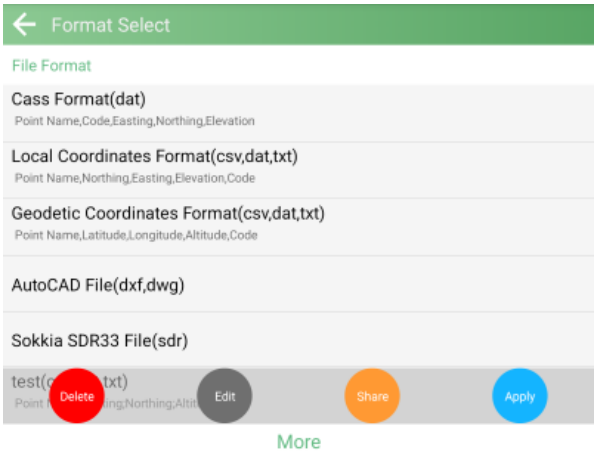
Options
Tap the value fields to compose the custom format.

Example



Tap [Backspace] to remove the previously added field.

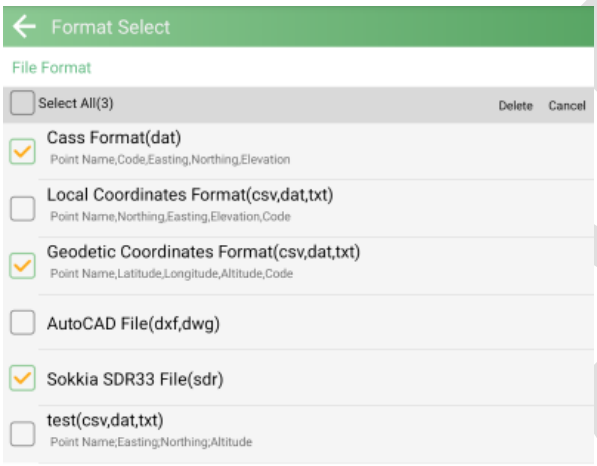
Tap [OK] to apply the custom format.



The new custom format will be added to the predefined file formats.

Tap on a "Custom Format" item to [Delete], [Edit], [Share] or [Apply] its settings.

6.5.3 Organize File Formats



Tap and Hold any "File Format" item to organize the predefined file formats.

Example
3 formats were selected.

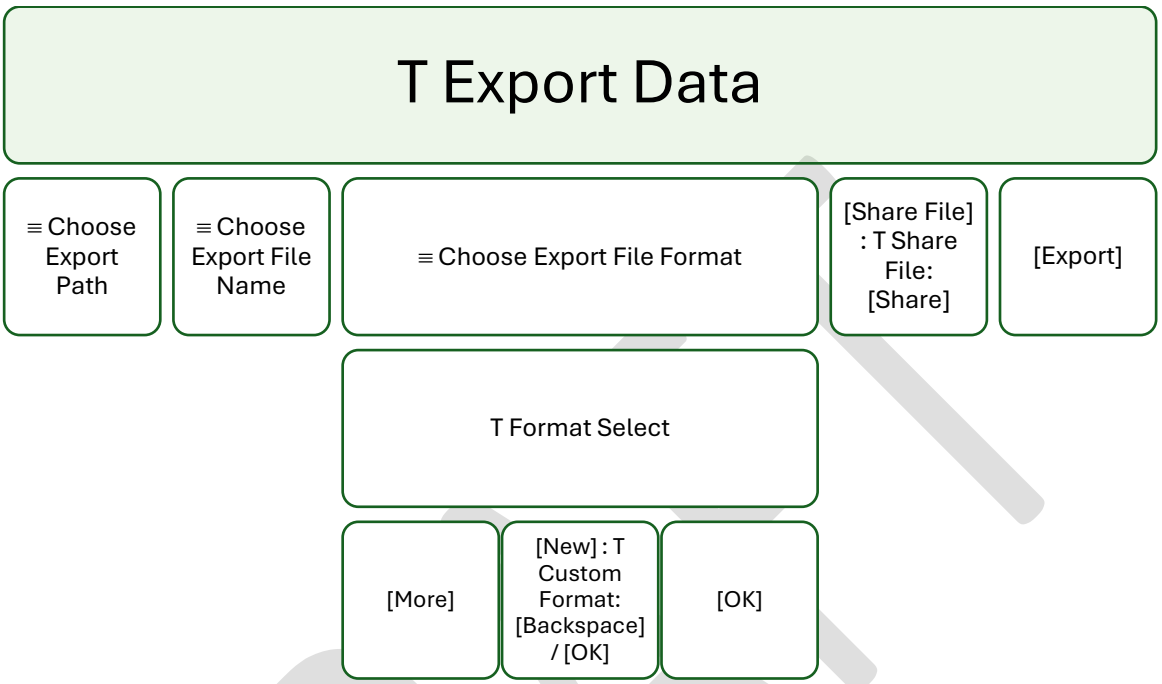


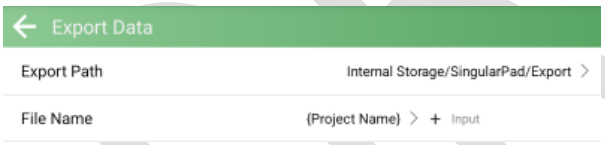
After **tap** on [Delete], the selected formats were removed from the predefined file formats.

Note, that they were NOT deleted, just moved into the [More] section.

6.6 Export Data

Menu Structure:





Important Note: When changing default export path, please be aware that this setting will persist across future projects!

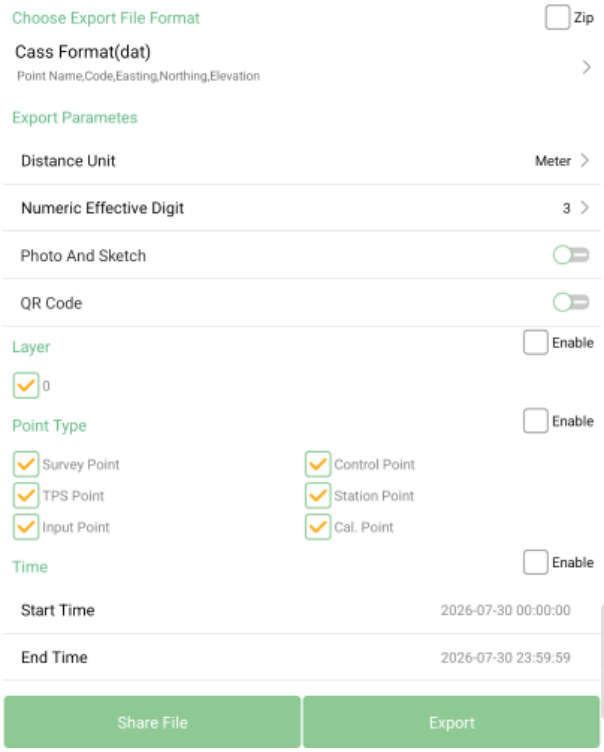
Note: Relative paths (e.g., "Current Path") will be converted into absolute paths (e.g. "/on4go/Project/20261022").

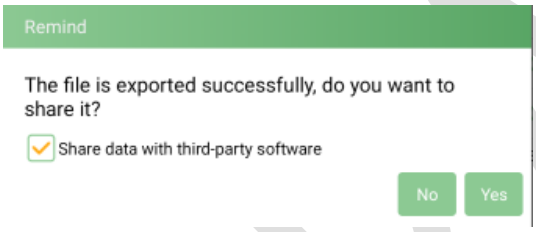
Tip: All files from all projects will be saved to this same default folder. To keep your files organized, we highly recommend prefixing the file name with your project name (e.g., ProjectName_FileName).

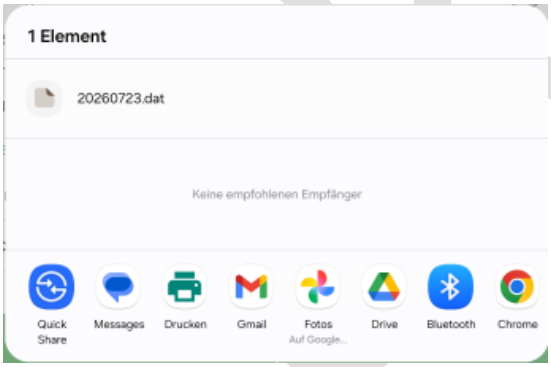
Export Path
default = Internal Storage/on4go/Export
Tap to change to another path.

File Name
Composed by an app variable and a user input field.
Tap the variable and select from variable list (supports {Null}, {Project Name}, {Land Surveyor}, {Date}, [DatenTime}) and

enter the name in the input field.







Export File Format
Tap to select the file format. ▶

Export File Format Option
Tap [Zip] option to export as zip-file.
Default = disabled

Export Parameters
& Layer
& Point Type
Depending on the selected file format, different parameters appear.
Option Distance Unit, default = Meter
Option Numeric Effective Digit, default = 3

Tap on the required options.

Time
default = disabled

Do not use **Tap** [Share File].

Tap [Export] to start the file export.

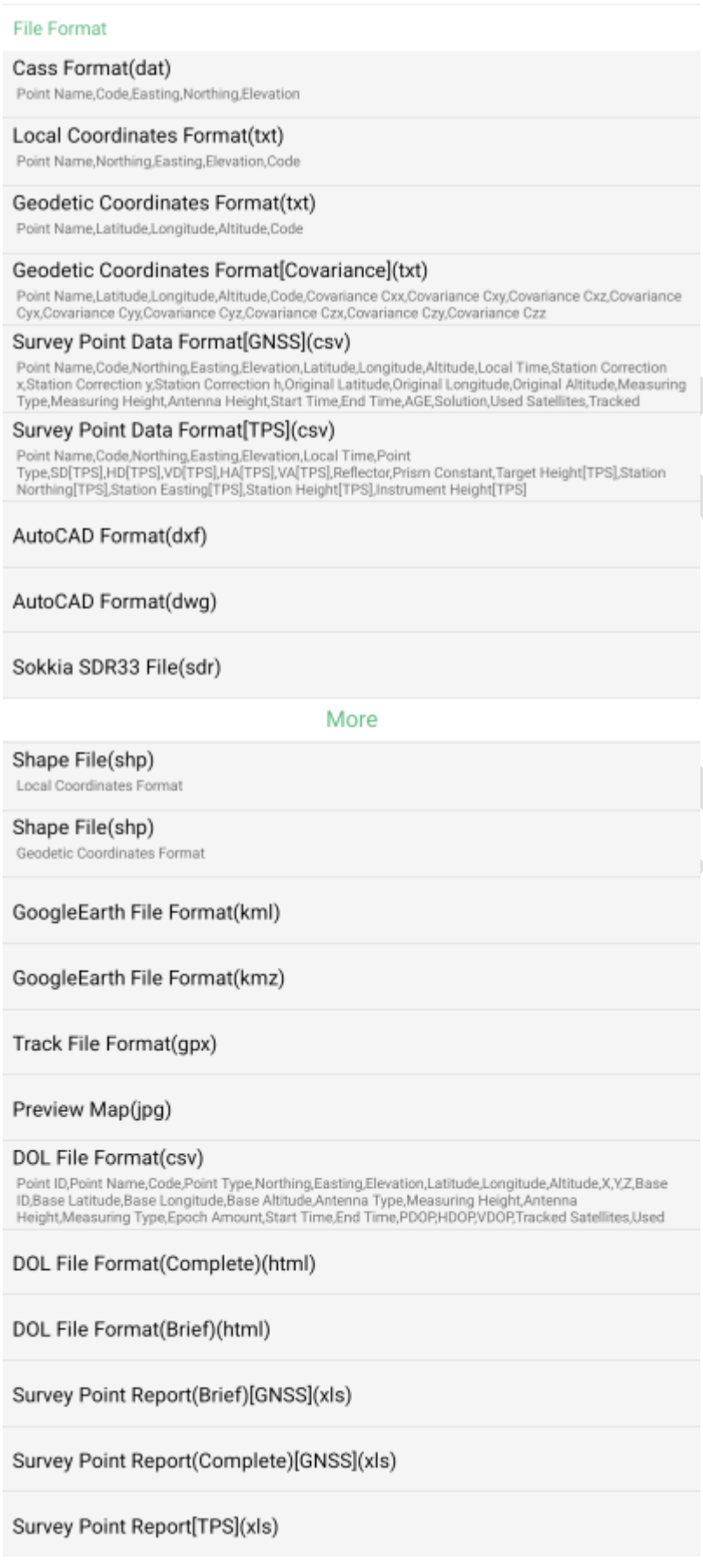
After the export, a popup message informs you about the export status.

Tap [No] to leave the export process.

Tap [Yes] to share the export file with other applications on the device.

6.6.1 Supported Export File Formats

Nestle on4go supports to export point data of the following formats:



The predefined file formats.

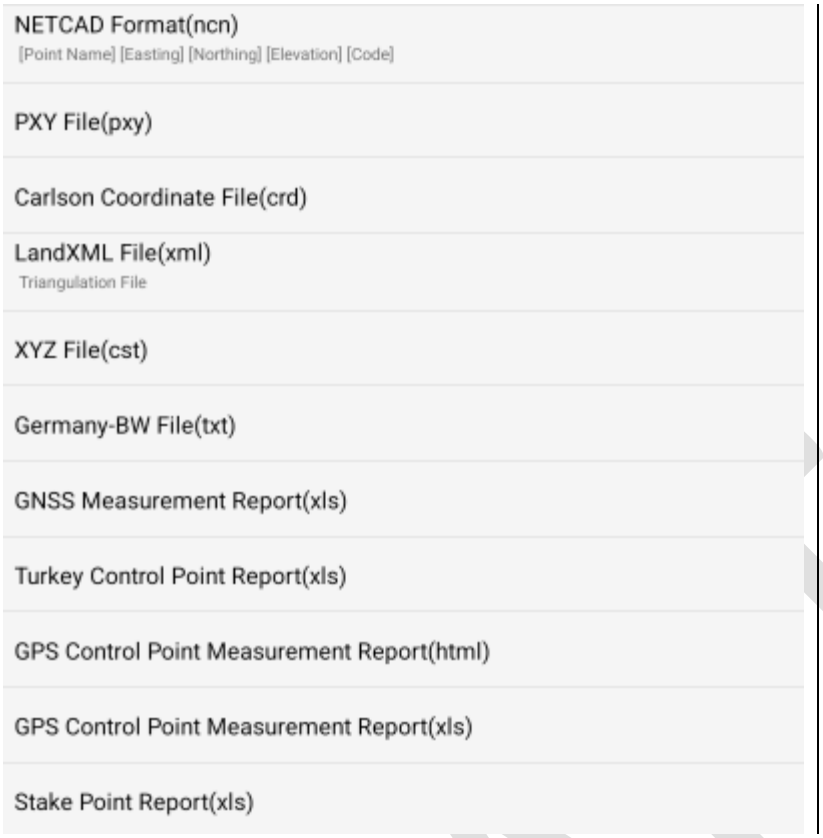
Note
Choosing the right format depends on several factors:

- Export only point coordinates or also geometries?
- Are there client specifications?
- Can the recipient process the format?

For the points, lines and polygons you surveyed in point survey, export to DXF file. Then it can be edited in 3rd party CAD or other software.

For pure point data, other formats such as CSV or TXT are also sufficient.

Tap [More] to get more predefined formats.

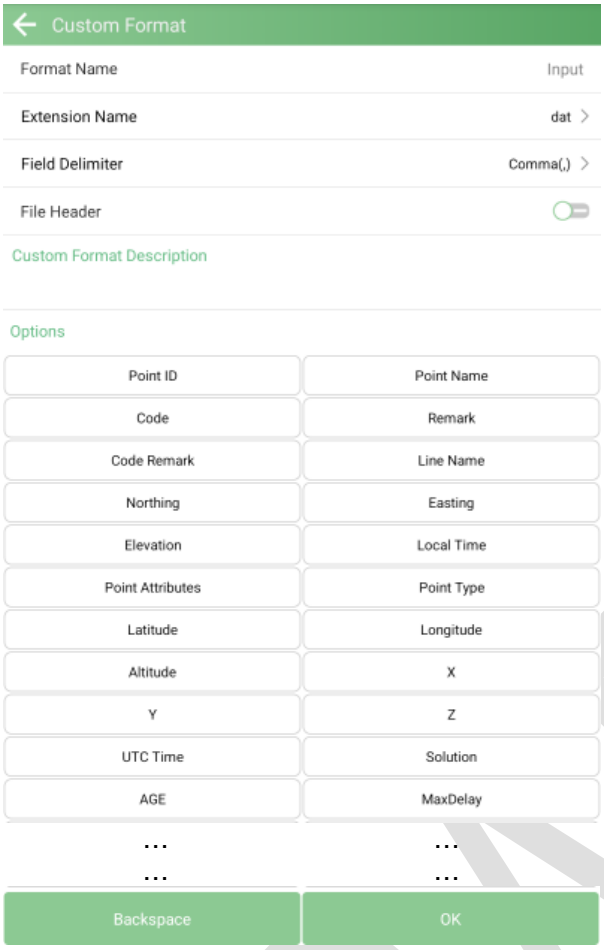


6.6.2 Custom File Formats

Nestle on4go also allows to define a user-defined export type.



Tap [New] to create a new custom file format.



Format Name

Enter the name for the custom format.

Extension Name

Tap to select from *.dat, *.txt, *.csv, *.xls,*.xlsx

Field Delimiter

Tap to select from Comma (,), Semicolon (;), Space ( ), Tab (tab), Multi-Space ( )

File Header

Option, default = disabled

Options

Tap the value fields to compose the custom format. Screenshot shows just an extract.

Example



Tap [Backspace] to remove the previously added field.

Tap [OK] to apply the custom format.

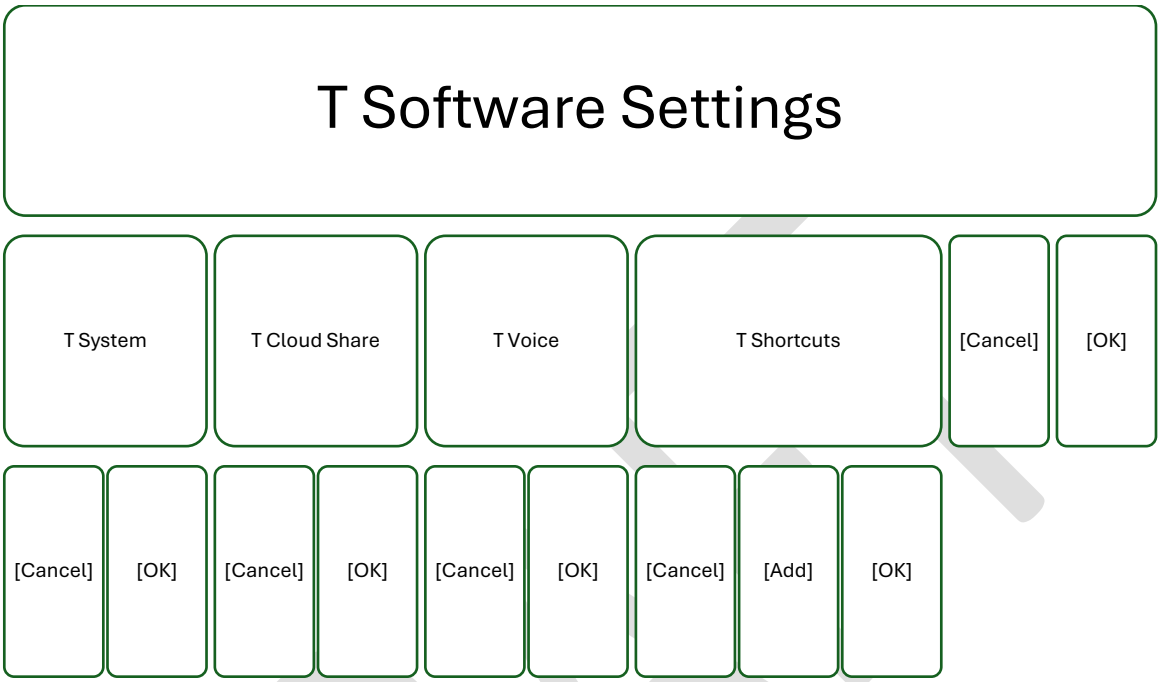
6.6.3 Organize File Formats

See chapter “Import Data” ►.

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6.7 Software Settings

Menu Structure:

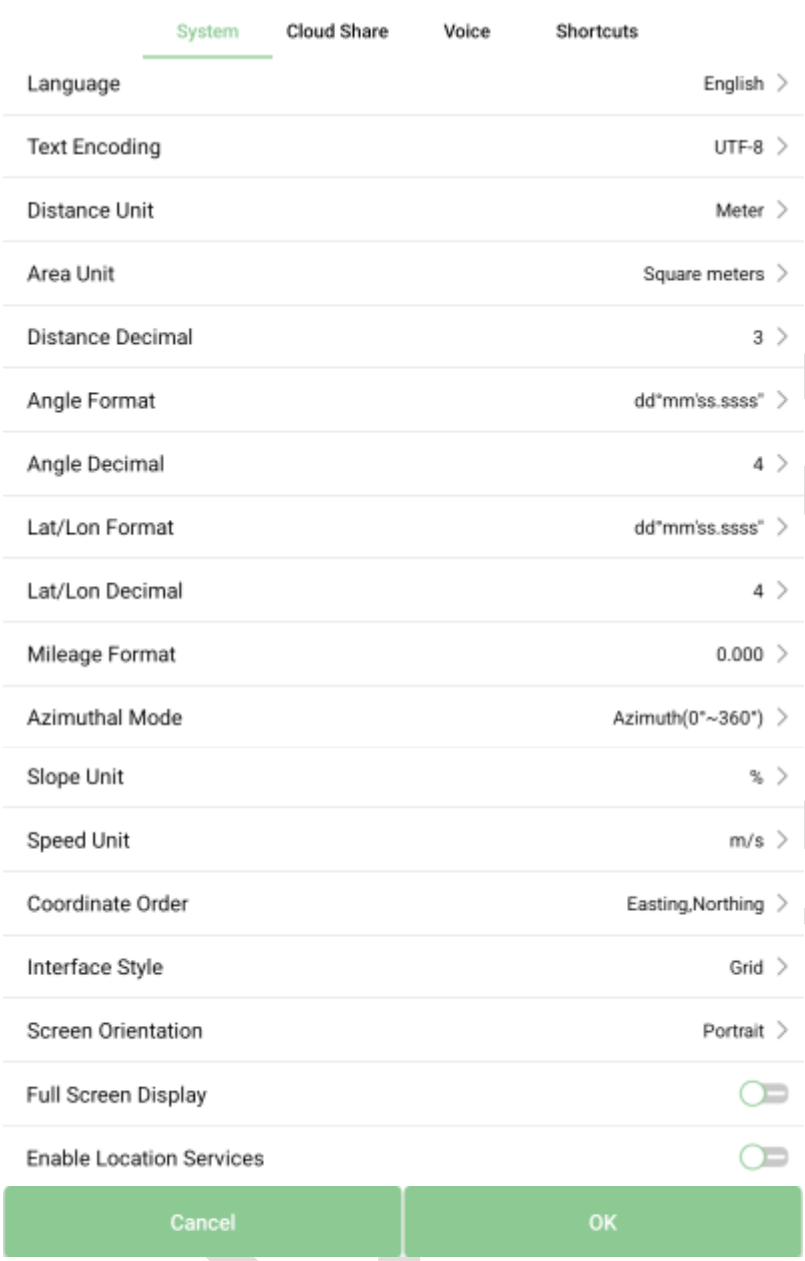




The “Software Settings” screen consists out of the taps “Settings”, “Cloud Share”, “Voice” and “Shortcuts”. Most of these settings were for advanced users, only.
In case you accidently changed any settings, check the screenshots, which indicate the default settings.

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6.7.1 System Settings



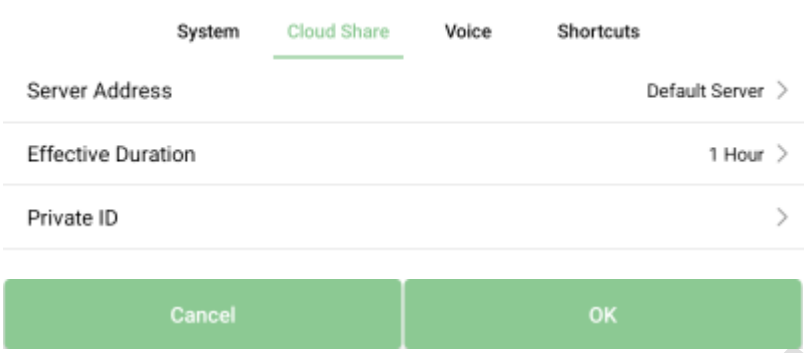
Except
- "Language"
- "Interface Style"
- "Screen Orientation"

we recommend to keep the the default settings.

Tap [Cancel] to ignore your changes.

Tap [OK] to apply your changes.

6.7.2 Cloud Share Settings

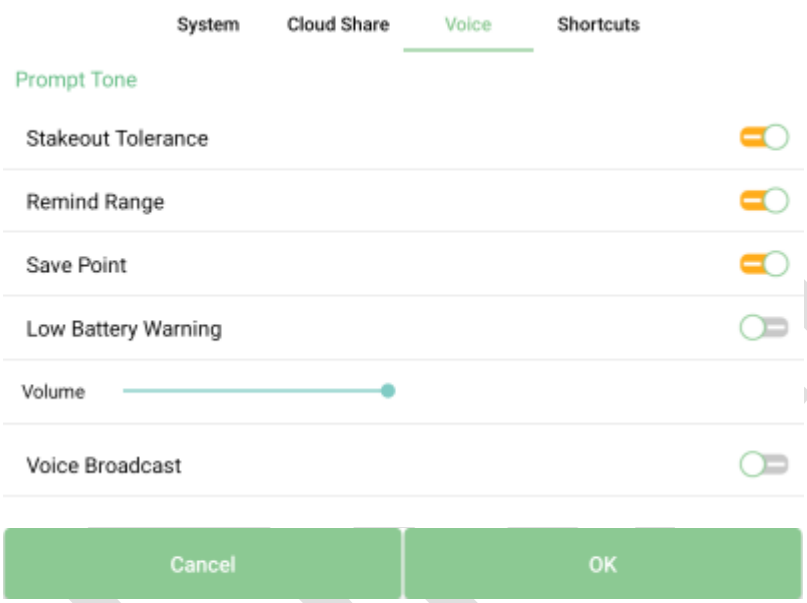


Cloud Share settings were for advanced users only.

Tap [Cancel] to ignore your changes.

Tap [OK] to apply your changes.

6.7.3 Voice Settings



The voice settings control the output of sounds and speech.

Stakeout Tolerance
Option, default = enabled

Remind Range
Option, default = enabled

Save Point
Option, default = enabled

Low Battery Warning
Option, default = disabled

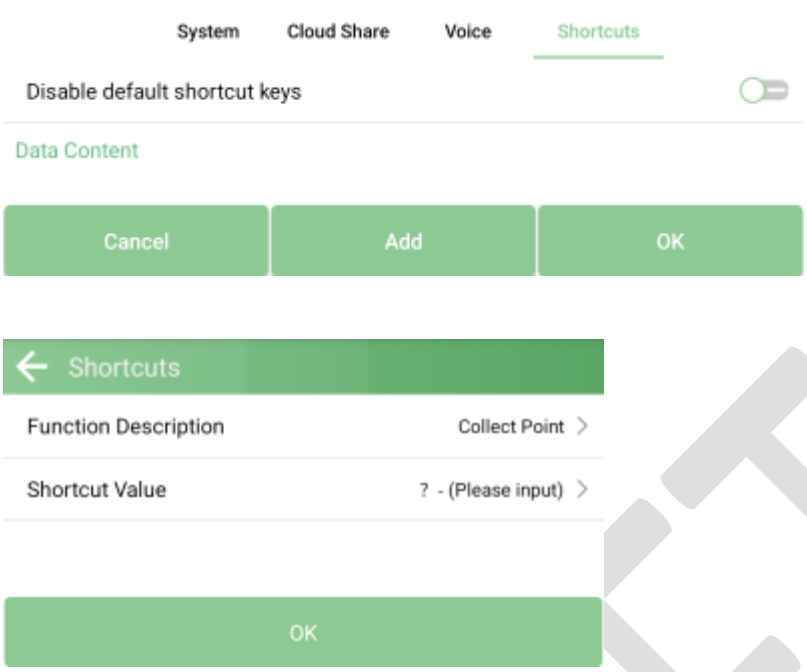
Volume
Default = max.

Voice Broadcast
Option, default = disabled

Tap [Cancel] to ignore your changes.

Tap [OK] to apply your changes.

6.7.4 Shortcuts Settings



Shortcuts settings were for advanced users only.

Tap [Cancel] to ignore your changes.

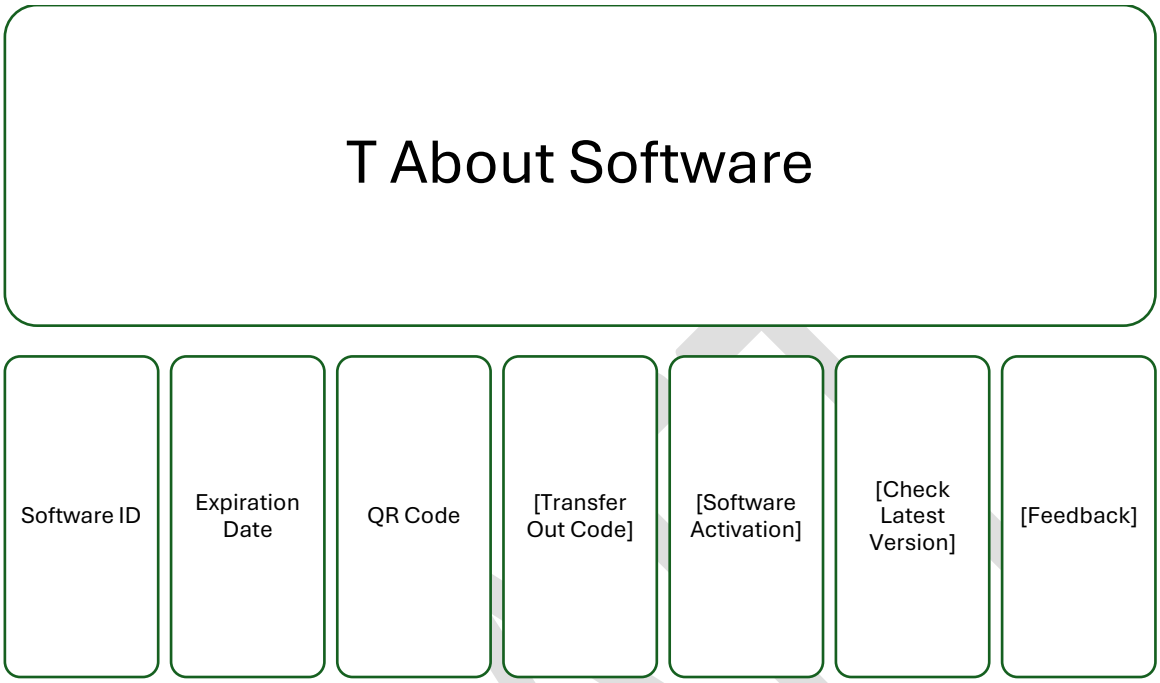
Tap [Add] to open the "Shortcuts" screen.

Tap [OK] to apply your changes.

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6.8 About Software

Menu Structure:





Software ID
the unique ID of the current app
Tap to copy the ID to clipboard.

Expiration Date
the date, when the software will expire

QR Code
leads to further Information

Software Version
the version of the current app

[Download Quick Start] View “Quick Start Guide”.

[Download Manual] View “Manual”.

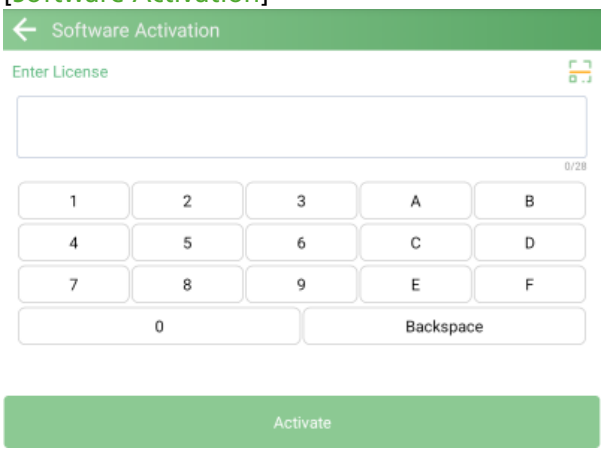
[Download Release Note] View “Release Notes”.

[Check Latest Version] **Tap** [Check Latest Version] to check if there is an app update available.



If yes, download the latest version for installation.

[Software Activation]

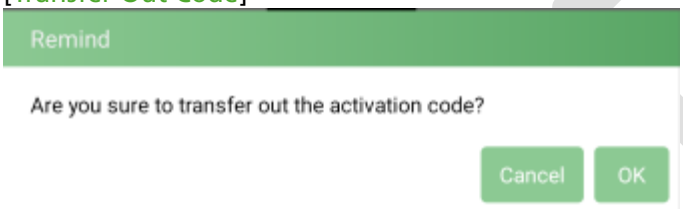


Tap [Software Activation] to open the activation screen.

Enter the license code and …

Tap [Activate].

[Transfer Out Code]



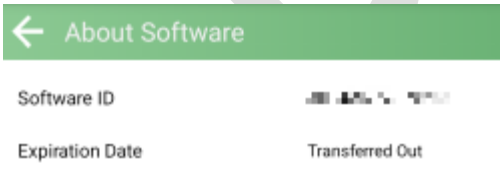
Tap [Transfer Out Code] to remove the license from the app/device, so it can be reactivated on another one.

Tap [OK] to confirm.

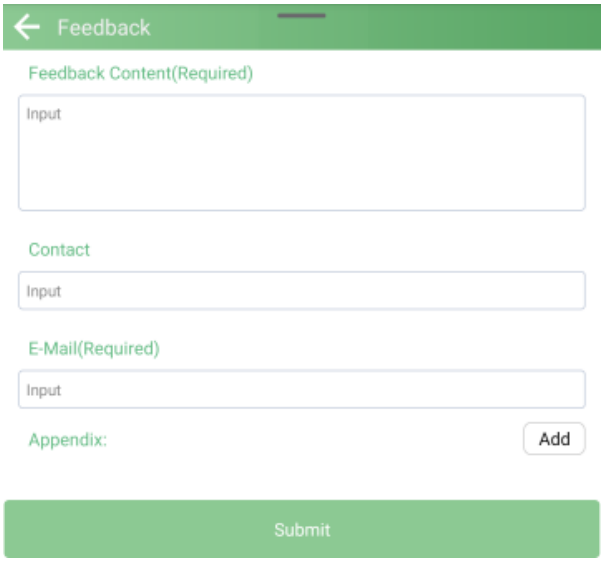


A reactivation license will appear on the screen.

Important
Please keep the new activation code carefully, it can be used in a new device!



The Expiration Date changes its status to “Transferred Out”



Tap [Feedback] to send your suggestions or advice to Gottlieb Nestle GmbH.

6.9 More

This section contains the additional non-default functions (for advanced users only):

- Localization
- Calibrate Point
- Track Manage
- Survey Area Settings
- Grid to Ground
- Layers Setting

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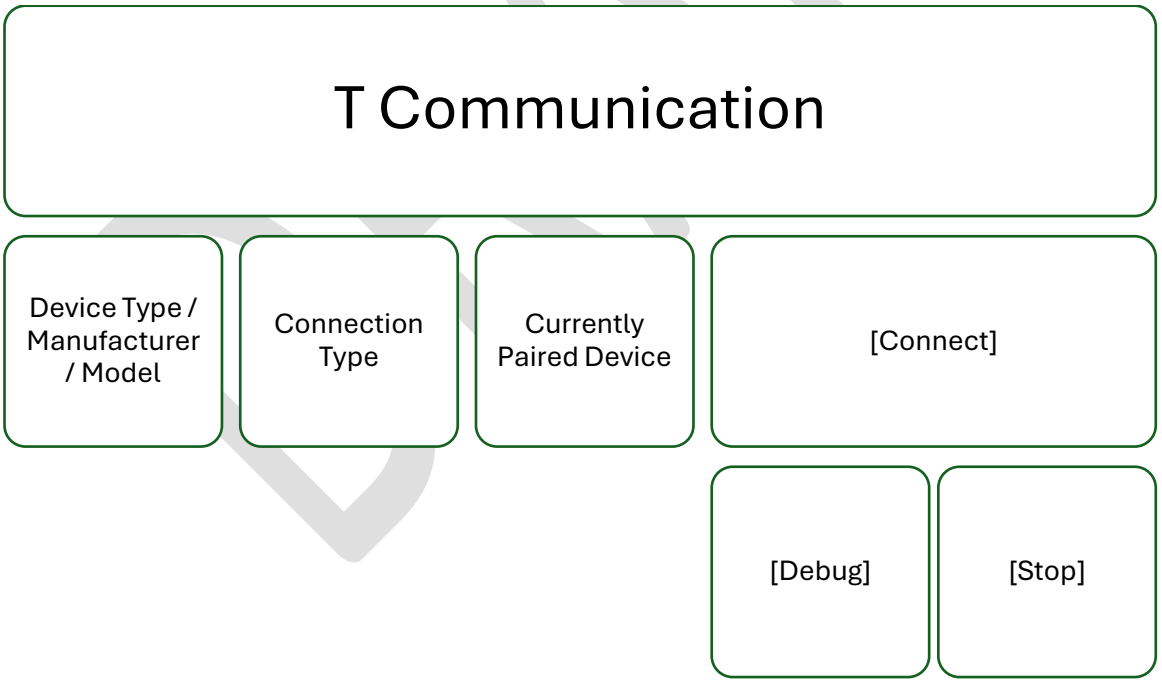
7 on4go Device Screen

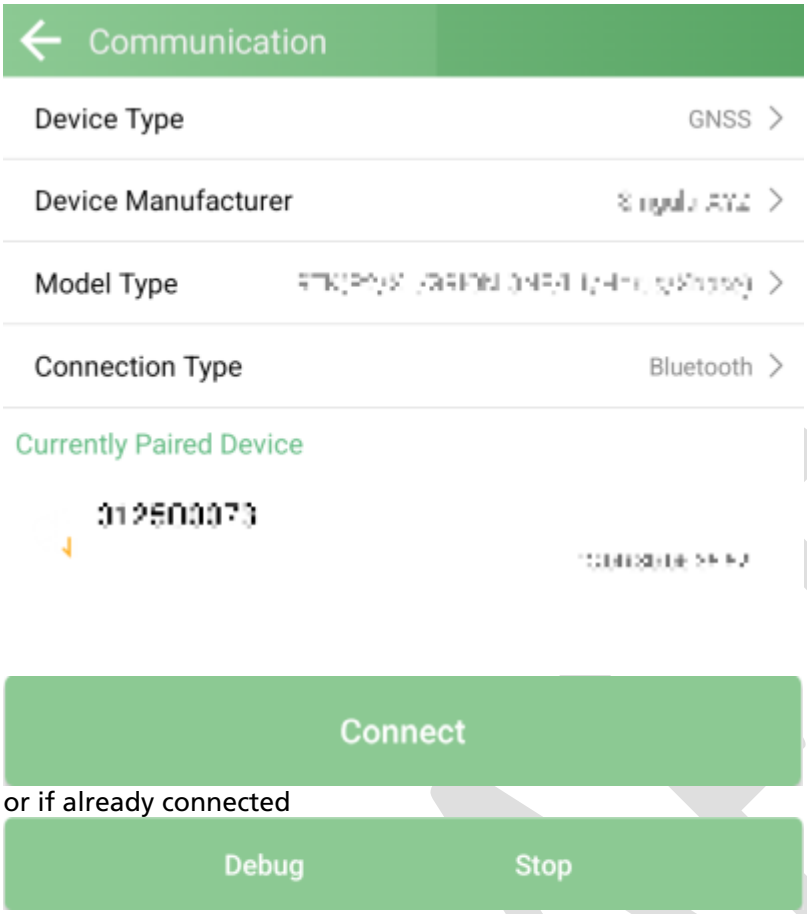
This screen contains the functions related to setup the GNSS receiver in RTK mode and to check the receiver information. The default interface includes …

	Communication	Connect the receiver.
	Rover	Setup the receiver to work as rover.
	Device Information	Show firmware, hardware, status, etc.
	More	Additional non-default functions.

7.1 Communication

Menu Structure:





Once a new project is created, **navigate** to [Device] > [Communication].

Tap [Connect} to connect the Nestle on4go app with the GNSS receiver.

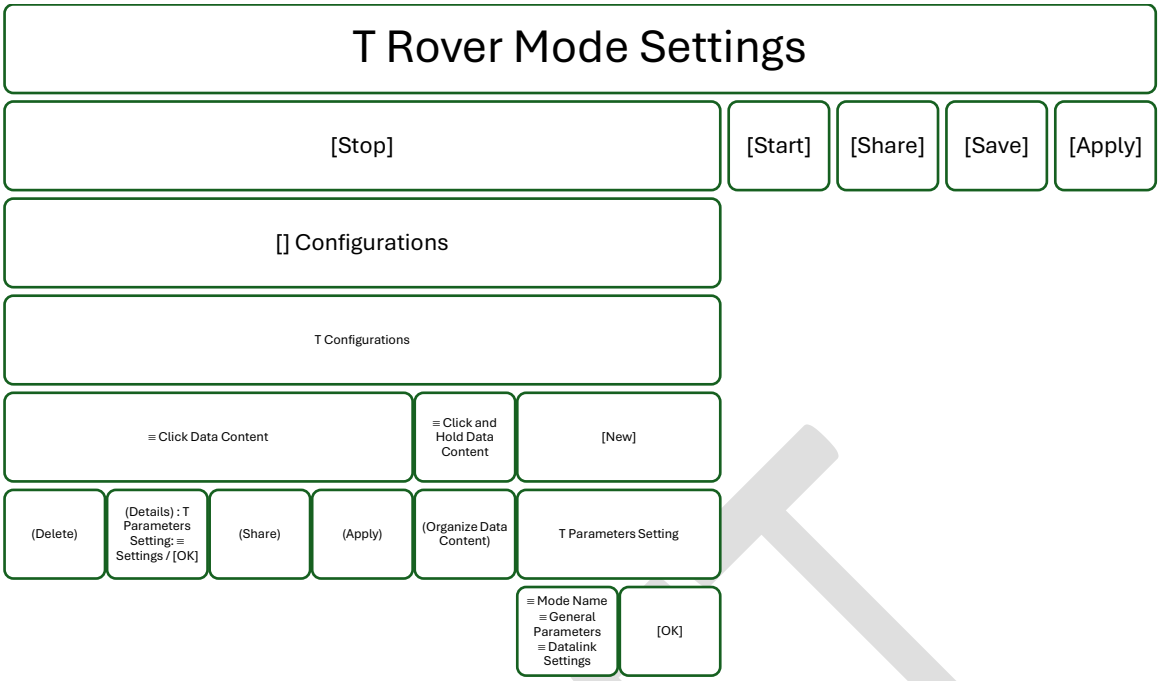
Tap [Debug] to see the data send by the receiver to your controller.

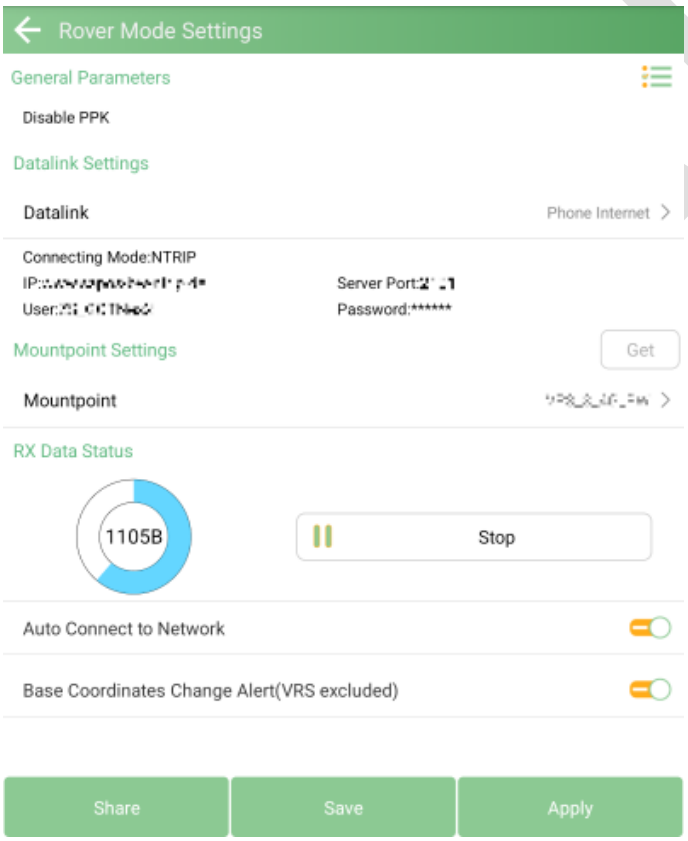
Tap [Stop] to interrupt the connection.

7.2 Rover

Menu Structure (antenna connection required):

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The “Rover Mode Settings” allow to setup your correction data service provider.

Note
In case Nestle on4go is already receiving data, the screen is in view mode.
Tap [Stop] to switch into edit mode.
Tap [Start] to launch the data reception.

Tap ≡ to open the “Configurations” screen.

Tap any “Data Content” item to “Delete”, view “Details”, “Share” or “Apply”

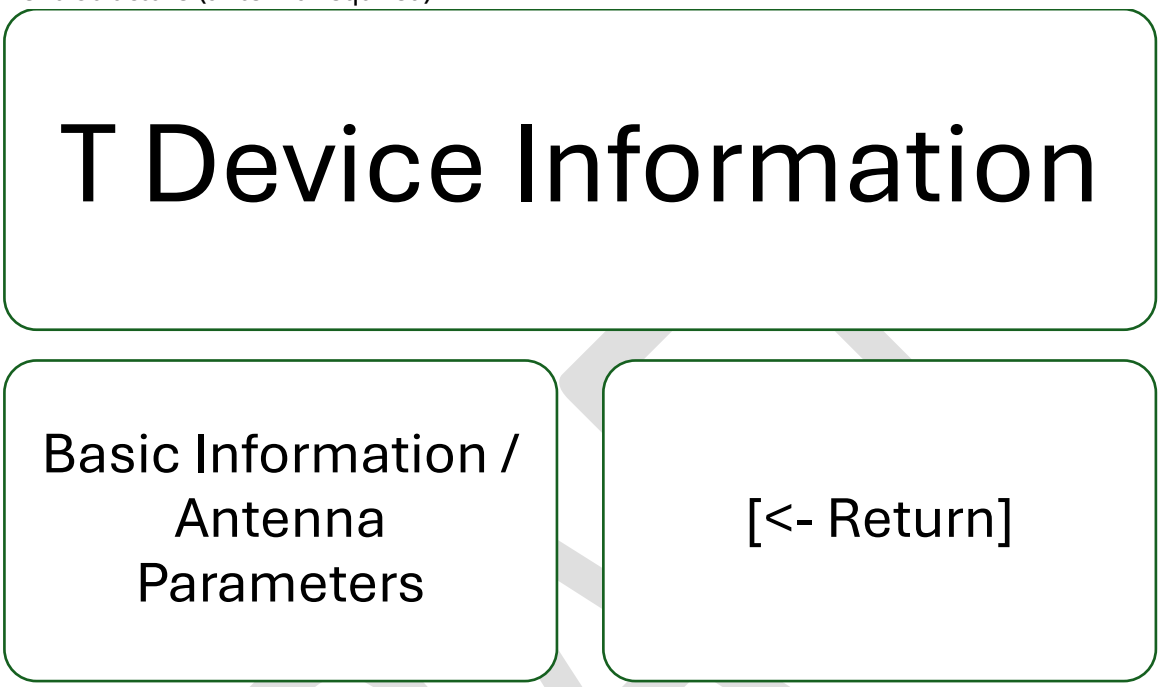
Tap [New] to open “Parameters Setting” screen and create a new configuration.

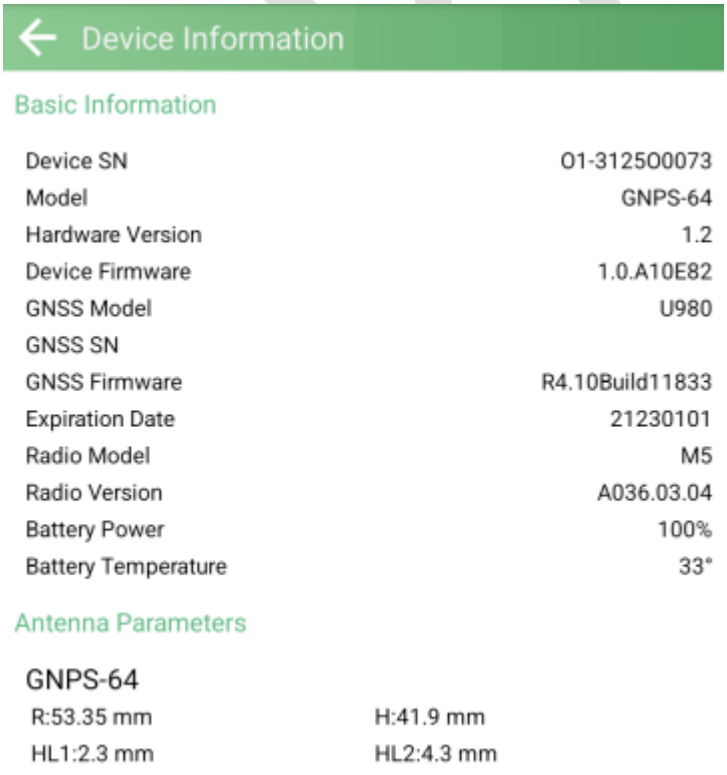
Tap [Share] to share the settings by QR code.
Tap [Save] to store the settings as file.
Tap [Apply] to save the settings and launch the data reception.

Tip
If the NTRIP connection data are greyed out and locked for editing, switch to edit mode by stopping the receipt of correction data.

7.3 Device Information

Menu Structure (antenna required):





"Device Information" can be opened, if the antenna is connected by Bluetooth.

Here you can check current "Basic Information" and "Antenna Parameters".

7.4 More



This section contains the additional non-default functions (for advanced users only):

- Base
- Static Record
- Inspection Accuracy
- COM Settings
- Device Settings
- Device Activation

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8 on4go Survey Screen

This screen contains the functions related to your surveying tasks. Such as the most used functions “Point Survey” and “Point Stakeout”. The default interface includes …

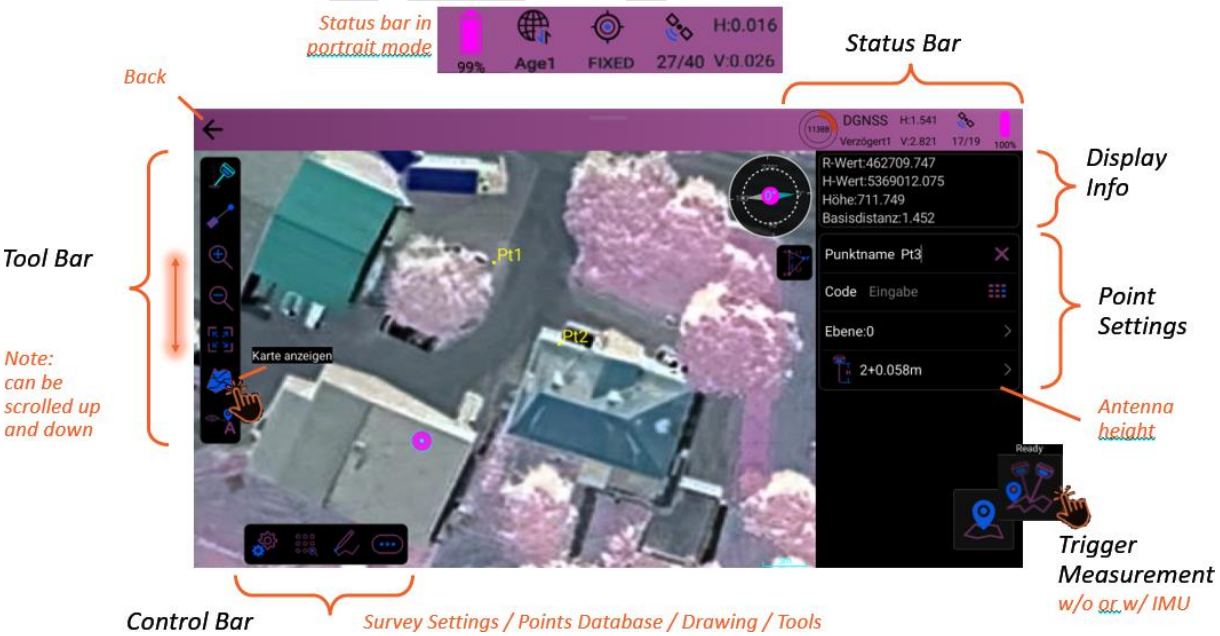
	Point Survey	Measure points.
	Point Stakeout	Stake out points.
	More	Additional non-default functions.

8.1 Layout of Function Bars

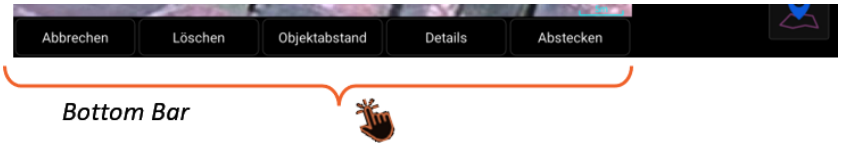
First, here is some common information about the screen layout of the Nestle on4go survey functions.

8.1.1 Functional Bars

- The “Status Bar” is located at the top of the screen. Here you can find the current RTK solution status (see next section for details ►).
- The customizable “Tool Bar” is located on the left.
- The “Control Bar” and “Bottom Bar” are located on the bottom.
- “Display Info”, “Point Settings” and the movable “Measurement Trigger” are located on the right.



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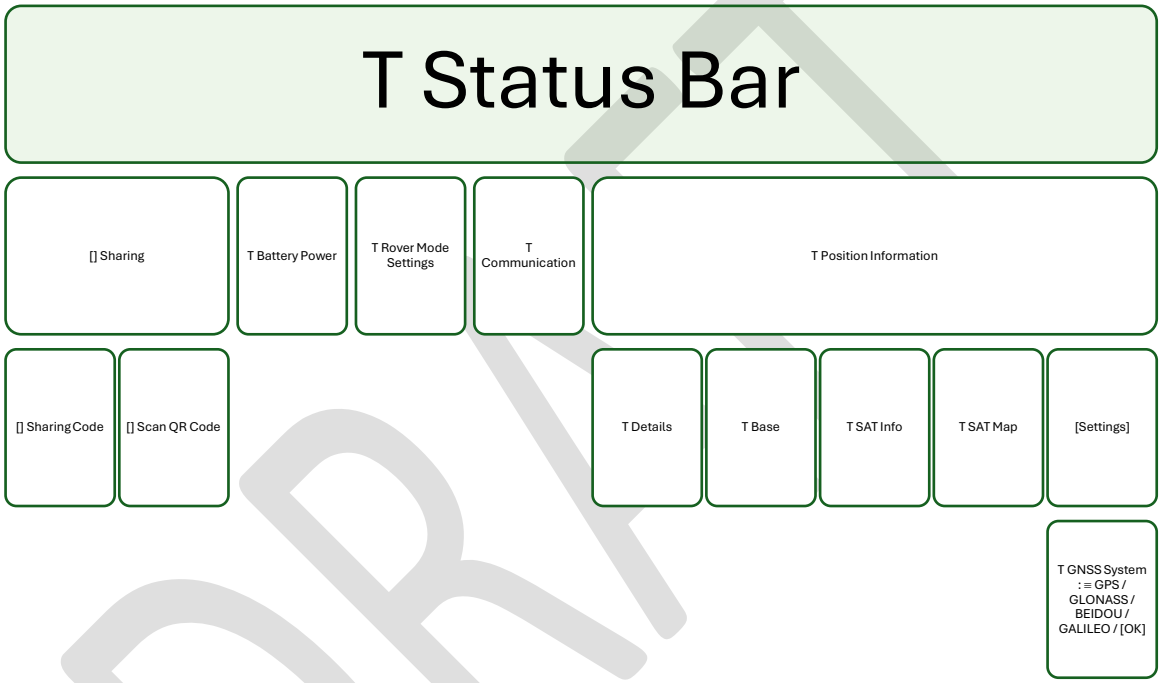


8.1.2 Status Bar



The **tap** on the symbols opens the according detail screens.

Bar Structure:





Sharing Codes
Download files with “Sharing Code” or “Scan QR Code”.



Receiver Battery Capacity
Tap opens “Battery Power” popup.

FIXED



Receiver Status
Tap opens Communication Screen.

Receiver gets RTK corrections stably and has a RTKfix solution. Accuracy is ***centimeter-level***.

DGNSS

Receiver gets RTK corrections from the base/CORS, but it needs more time to calculate due to environmental interference or correction data quality. Accuracy is ***decimeter-level***.

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FLOAT	Receiver gets RTK corrections from the base/CORS, but due to obstructions or magnetic field interference the signal reception is not very stable. Accuracy is ***sub-meter level***.
AUTONONOUS	Single-point satellite positioning without receiving RTK correction data. Accuracy is ***meter-level***.
	Age of CORS **Tap** opens Rover Setup. ***Age*** means the time since the last differential data was received. • When connecting to a CORS account for measurement work, please ensure the ***Age*** is within the range of 1-2. • When using the radio mode for measurement work, please ensure the ***Age*** is within the range of 2-5. A high ***Age*** will result in poor measurement point accuracy.
	Used / tracked satellites **Tap** opens Position Information Screen. The satellite icon shows calculated satellites number/tracked satellites number. You can tap it to check satellite map and more information.
	H-RMS / V-RMS **Tap** opens Position Information Screen. H-RMS (Horizontal Root Mean Square) Attribute: Horizontal positioning accuracy (2D plane). Value: Represents the radius of an error circle. If your H-RMS is 0.02 m, there is roughly a 65–68% probability that the true horizontal position is within 2 centimeters of the measured point. V-RMS (Vertical Root Mean Square) Attribute: Vertical positioning accuracy (altitude/elevation). Value: Represents the 1D error range along the vertical axis. Due to satellite geometry (all satellites are above the receiver, none below), the V-RMS value is typically 1.5 to 2 times higher (worse) than the H-RMS value.

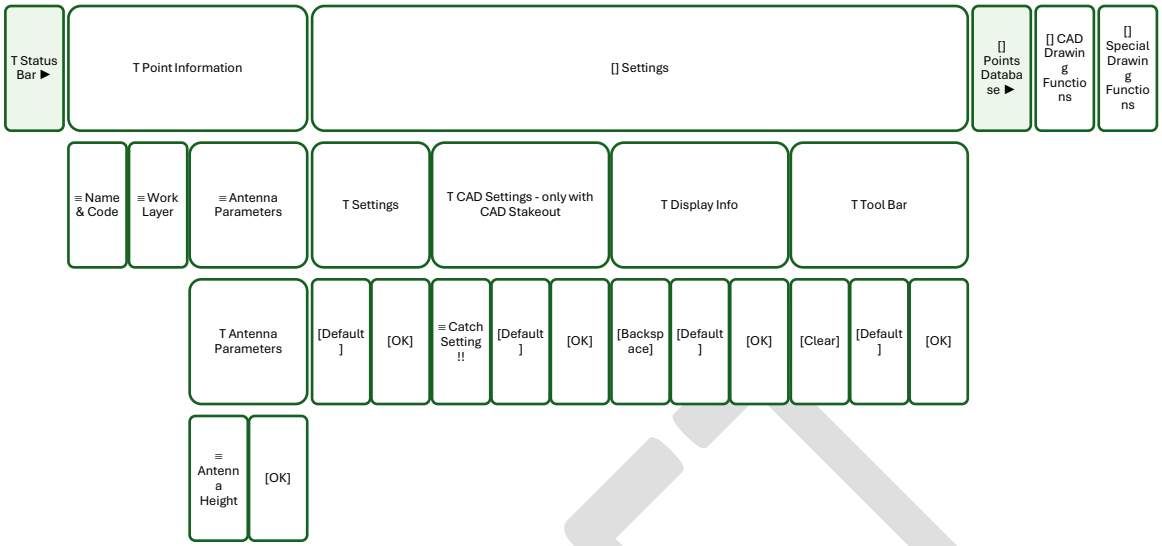
8.2 Point Survey

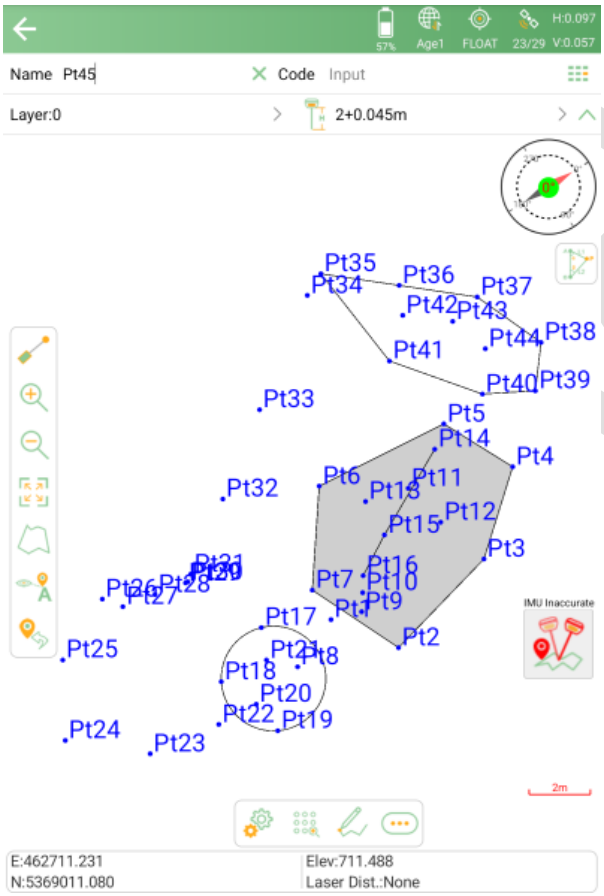


Menu Structure:

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T Point Survey



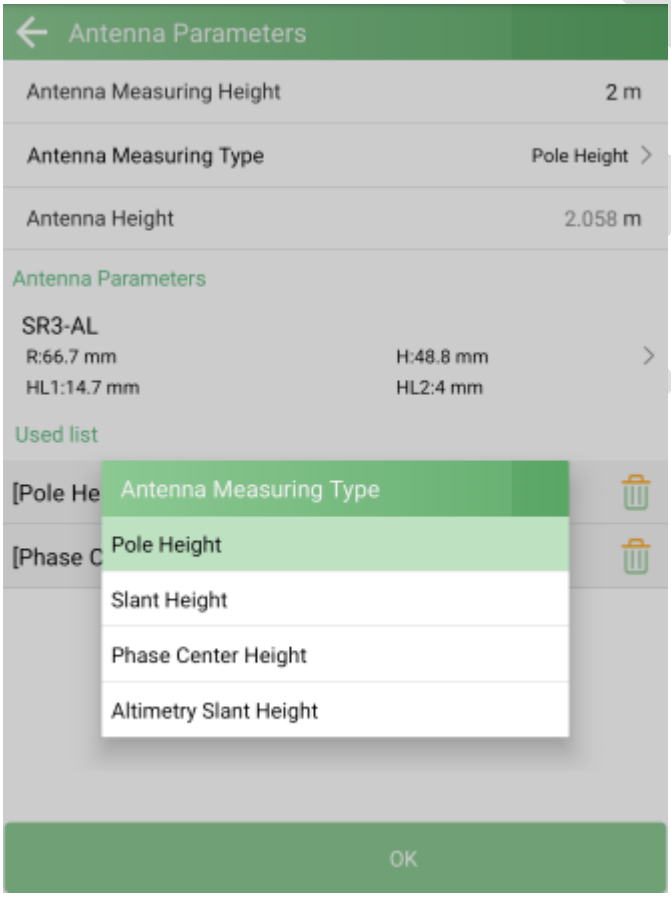


The current project after surveying some objects.



Enter "Point Name", "Code" and optional "Antenna Parameters (Height)".

Then **tap**  to measure a point.



Only **tap** , if you need to change the current "Antenna Parameters".

Once set, usually you do NOT have to change these settings.

Antenna Measuring Type
Nestle on4go supports 4 antenna measuring types.
default = Pole Height

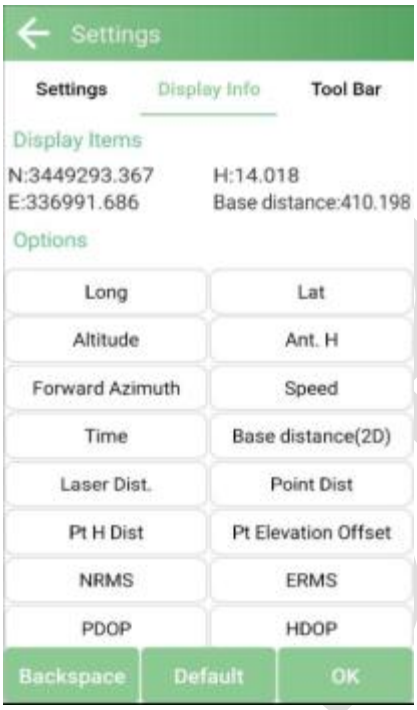
Antenna Measuring Height
Enter the height of your centering pole.

default = 2 m
(for Nestle GNPS-64)





Tap  to open the "Settings > Settings" screen to modify Tolerance Setting such as solution limit, HRMS limit, VRMS limit, etc., Average parameters and More Settings options.

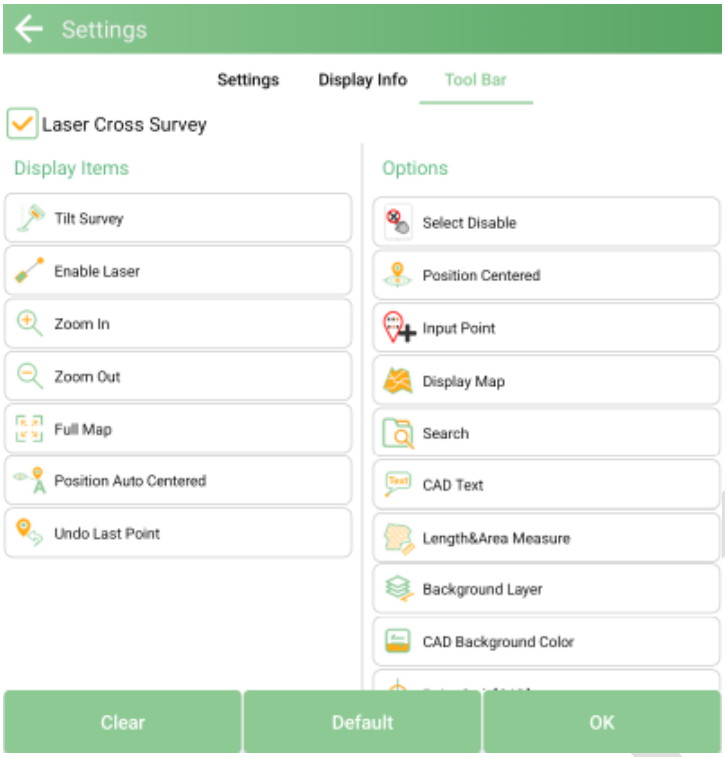


The "Settings > Display Info" screen allows to customize the displayed variables according to your needs.

The default information is NEH and Laser distance.

In addition to default information, Nestle on4go supports many other variables.

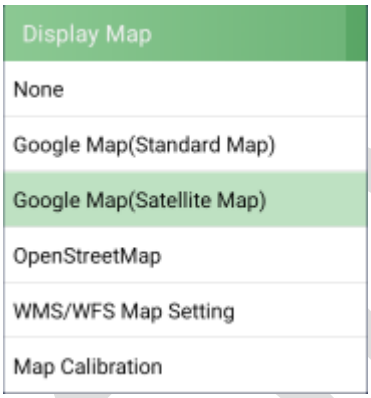
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The “Settings > Tool Bar“ screen allows to customize the displayed functions according to your needs.

default = Tilt Survey, Zoom In/Out, Full Map, Position Auto Centered, Undo Last Point

Tip
We recommend activating the "Display Map" function to fast switch the displayed map type.



Tap to select different map types or do a “Map Calibration”.

Nestle on4go supports Google Map (Standard / Satellite), OpenStreetMap and WMS/WFS Map.



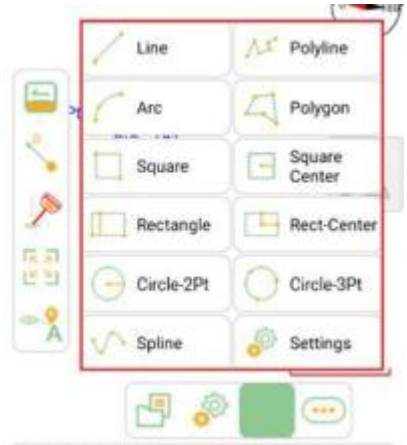
Tap to open the “Point Database” screen and view the coordinates of the already measured points.

You can add, recover, import and export data.

After selecting a point, you can view the details and take notes or take photos.

►

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Tap  to draw features, there are 12 types and methods you can choose, follow the prompts and draw.





Tap  to see available tools which can help to work smoothly. For example, to find the intersection points of neighboring circles.



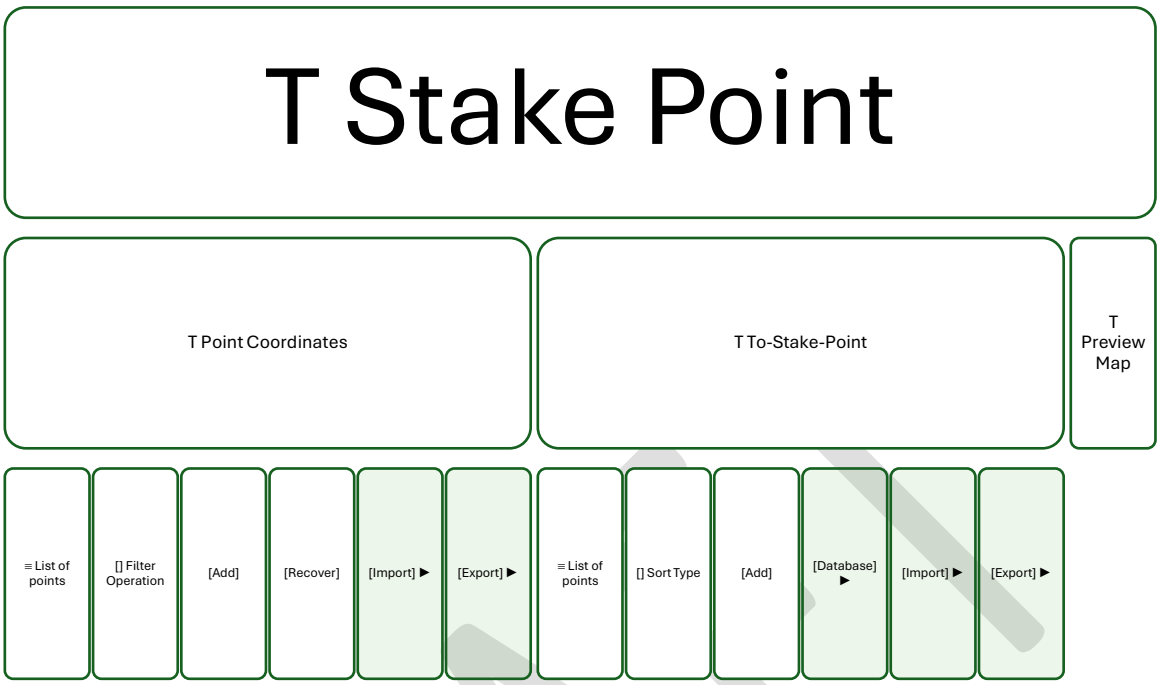
Tap  to zoom in / out.

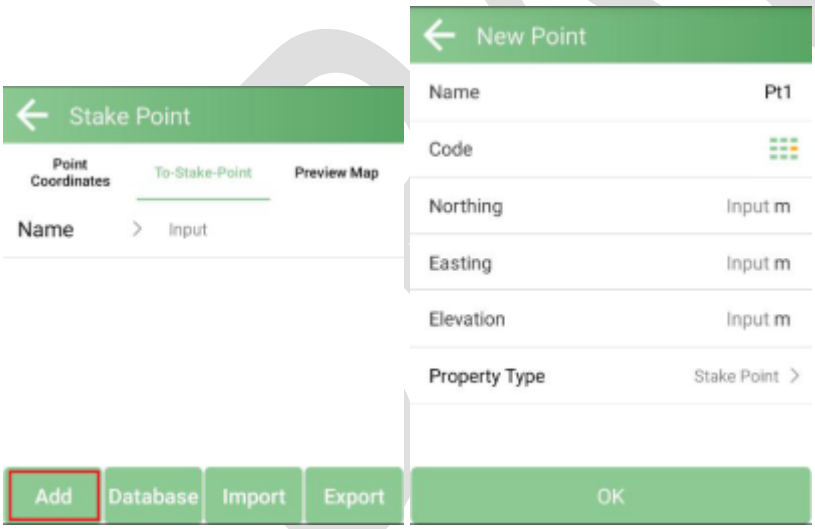
Tap  to show the all points on the screen.

Tap  to jump to map center.

8.3 Point Stakeout

Menu Structure:





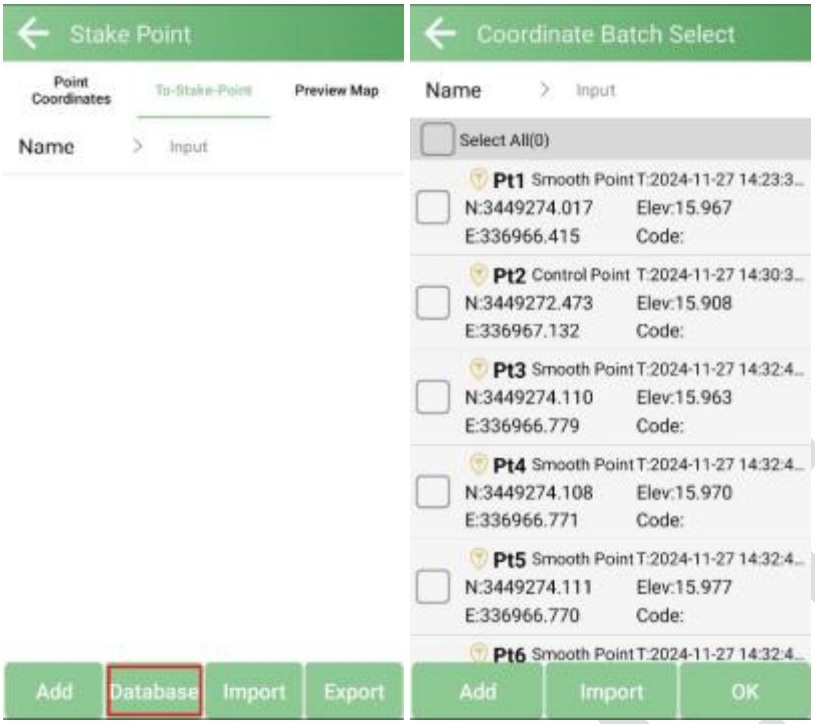
The "Stake Point" function is divided into three tabs.

- Point Coordinates
- To-Stake-Point
- Preview Map

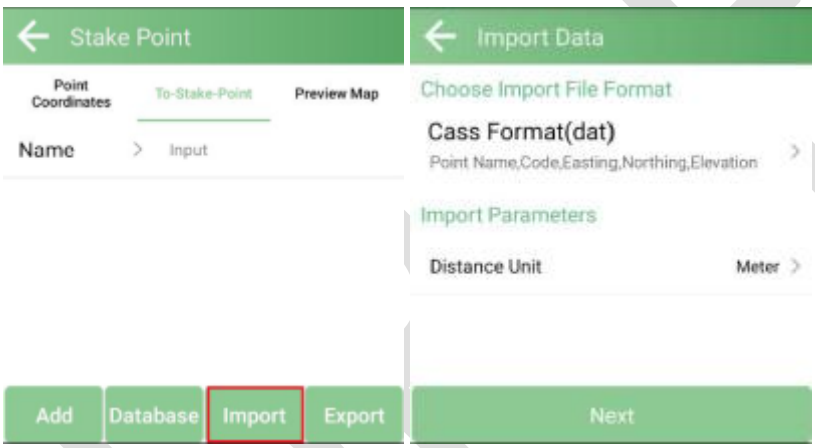
By default, "To-Stake-Point" screen is displayed upon opening.

Add or import the point coordinates you need to stake out.

Tap [Add] to enter a new coordinate



Tap [Database] to select items from the point database. ▶



Tap [Import] to import points from a file. ▶







Select a point to stake out.

Nestle on4go provides a navigation map while staking out points/lines. The software alerts you, when you approach the target point to the set range value.

For GNPS-64 receivers, you can use the IMU stakeout feature. In IMU stakeout, you can turn on the IMU feature without keeping the receiver perpendicular to the ground. The maximum tilt angle is 60°.

During stakeout, the target direction is indicated on the map by an arrow.

Tap  to start or  to stop stake points.

Tap  to open or close IMU.

Tap  to scale automatically to full map.

Tap  to jump to current point.

Tap  to jump to next point.

Tap  to jump to previous point.

Tap  to set stake out settings (incl. tolerances), display info or add/hide the displayed tool bar items.

Tap  to open compass.

8.4 More



This section contains the additional non-default functions (for advanced users only):

- Detail Survey
- Control Point Survey
- Photographic Survey
- Images Database
- CAD Stakeout (Import dxf or dwg file; edit layers and choose points/lines to stake out)
- Line Stakeout
- DSM Stakeout
- Stake Road
- Electric Lines Survey
- Function Customization
- Spiral Stakeout
- Polyline Survey
- Polygon Survey
- Electric Towers Stakeout

8.4.1 CAD Stakeout



Menu Structure:
See “Point Survey” ►

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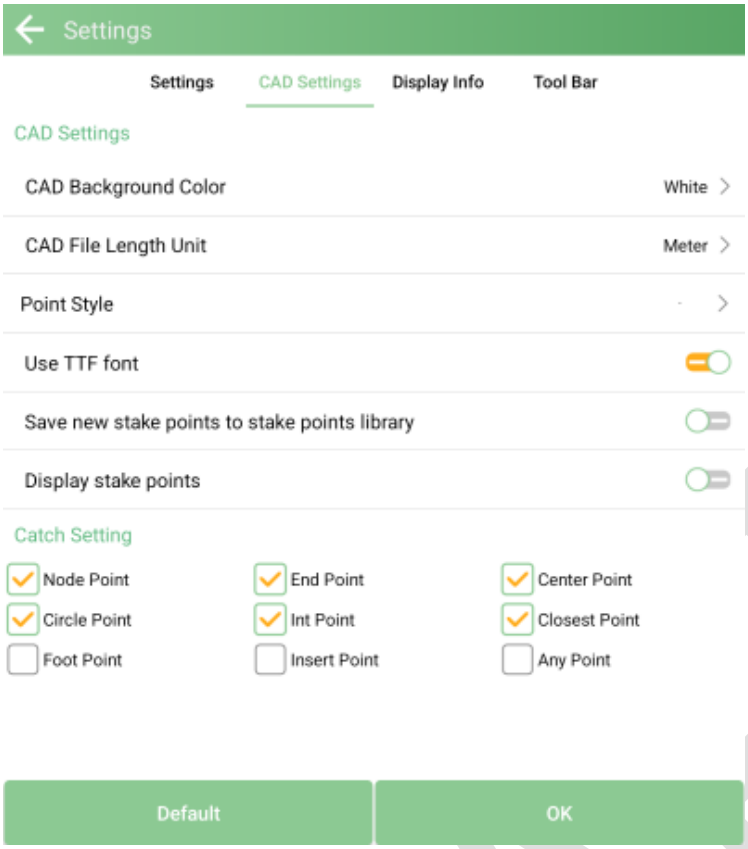
When using this function for the first time, the CAD interface has no layers and floating window to display the features you need to stake.

Therefore, unlike with "Point Survey," a file must first be loaded upon initial launch.



Tap to create or import a CAD file, supporting *.dxf, *.dwg format.

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Tap  to open the "Settings" screen.

Unlike to "Points Survey > Settings", an additional "CAD Settings" tab appears, which allows to set CAD and Object Snap settings.

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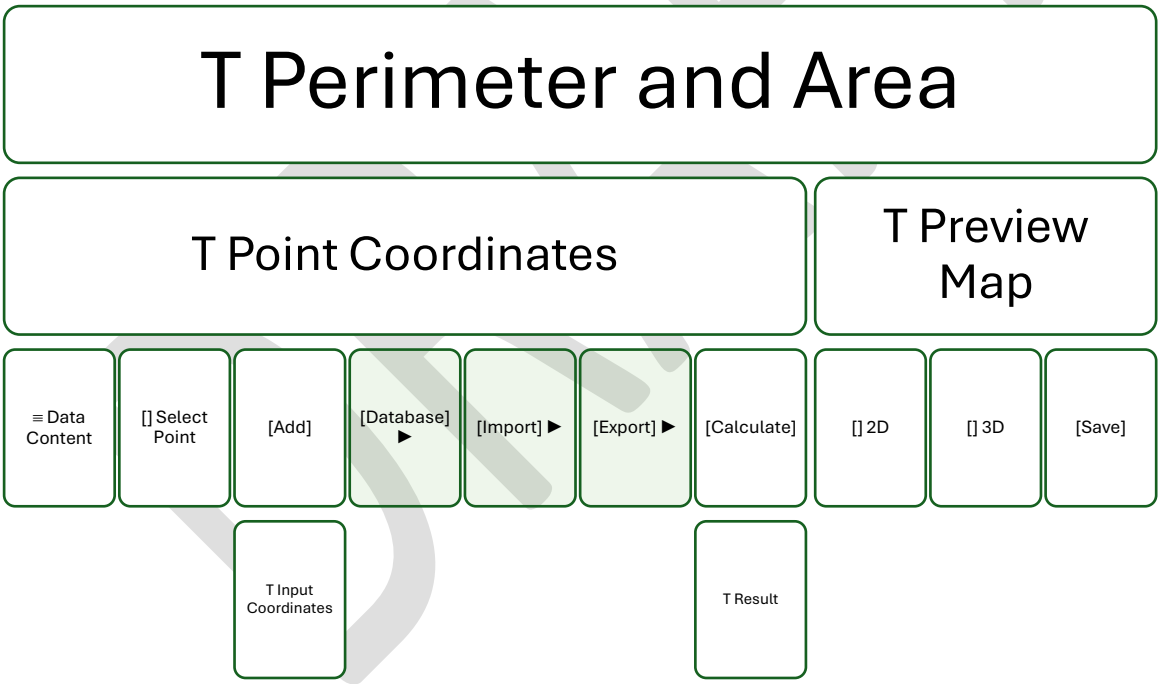
9 on4go Tools Screen

This screen contains the functions related to calculations and other useful tools. The default screen includes …

Perimeter and Area	Calculate the perimeter and its area from selected point coordinates.
Volume Calculation	Calculate the volume of a selected polygon.
More	Additional non-default functions, (mainly includes coordinates converter, file sharing, calculator and COGO functions)

9.1 Perimeter and Area

Menu Structure:





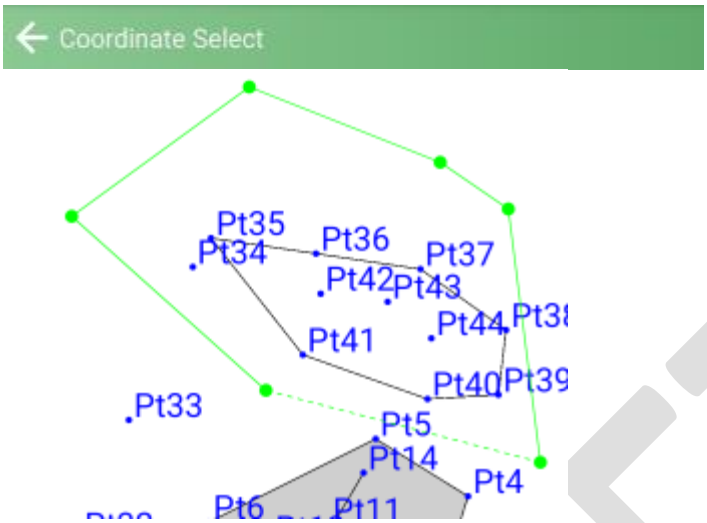
When opening this function, the list of point coordinates is empty.

Method 1

Tap to choose points from the "Coordinate Select" screen.

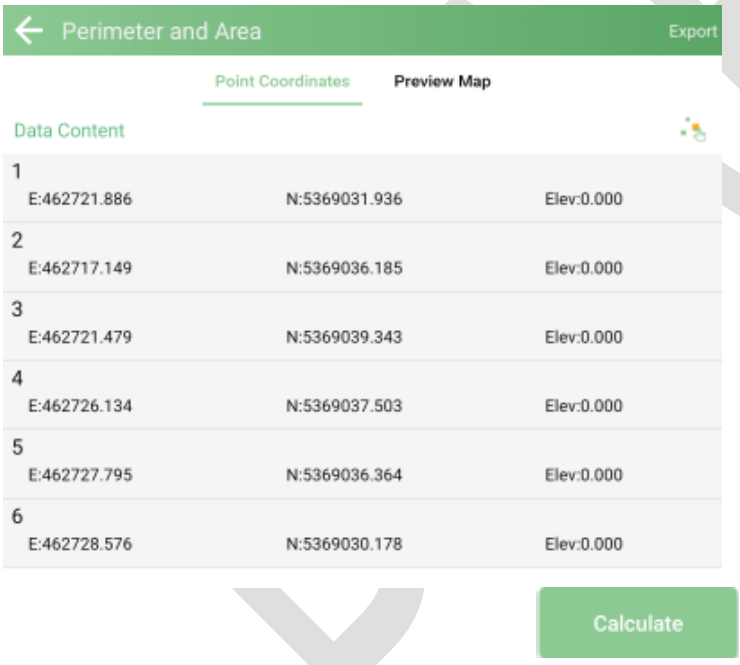


Then choose, if you want to select points from the "Display Map" or the "CAD" view.

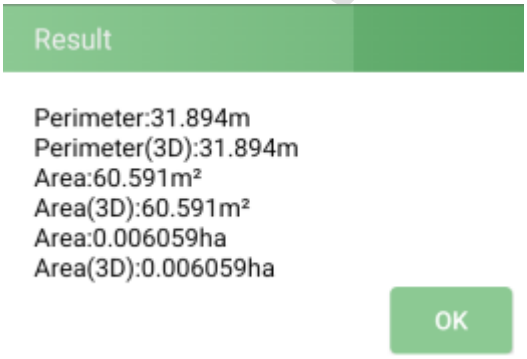


Tap on the screen to draw a box around the points you want to select.
Comparable to making a selection with a mouse on a PC.

Tap [OK] to apply.



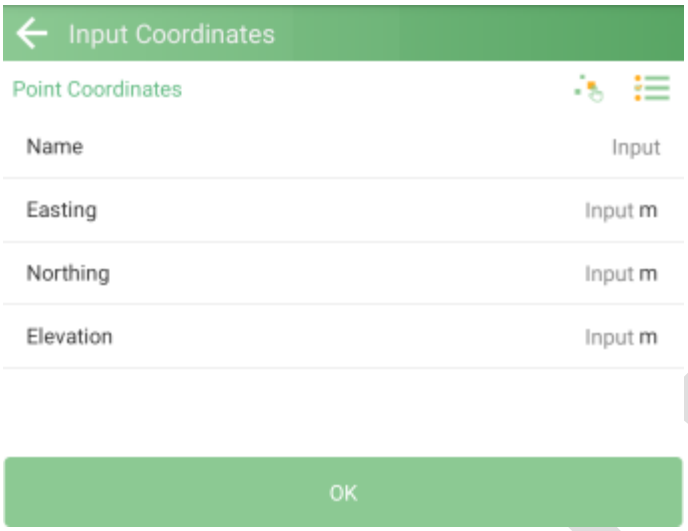
The coordinates will be added to the "Point Coordinates" list.



Tap [Calculate] to get the results.



Method 2
Alternatively you can select point coordinates by “Add”, “Database” or “Import” function.



Selecting one point.

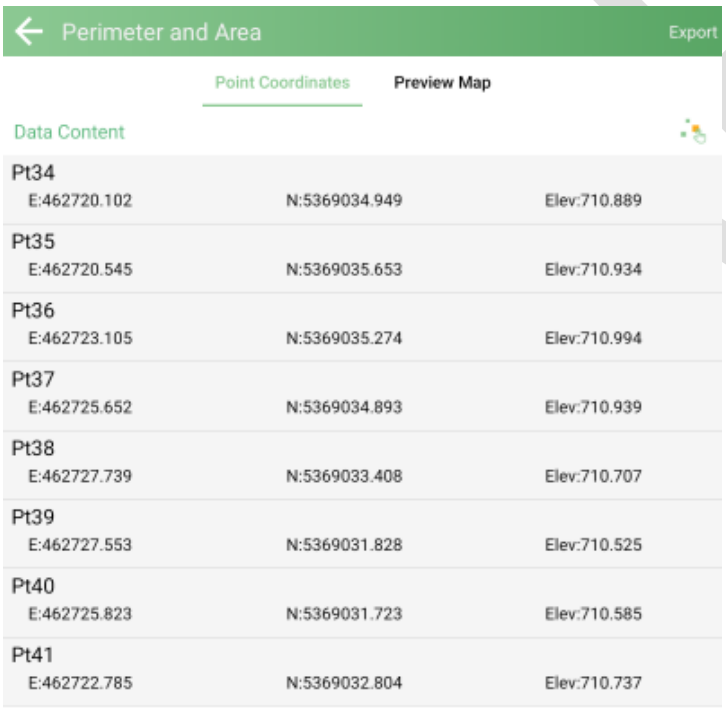
Tap [Add] to open “Input Coordinates” screen.

Her you can enter point coordinates manually or

Tap to select from “Coordinate Select CAD” or

Tap to select from “Coordinate Select List”.

Tap [OK] to apply.



Selecting multiple points.

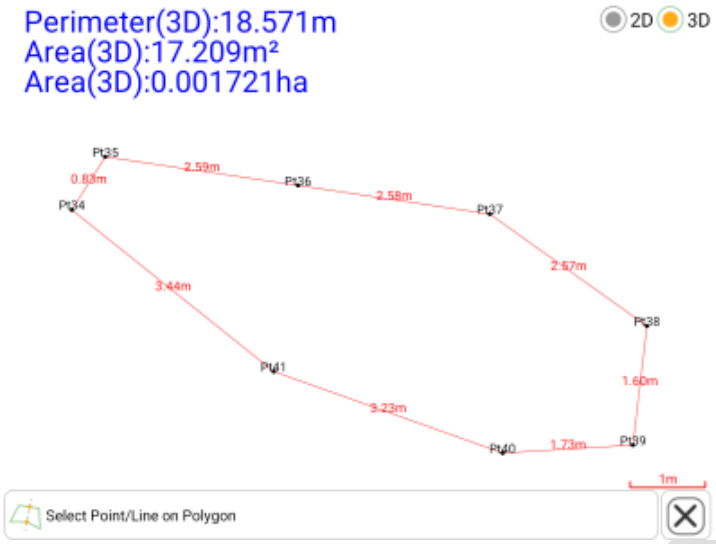
Tap [Database] to open “Coordinate Batch Select“ screen allowing to select existing database points ▶.

Tap [Import] to open “Import Data“ screen allowing to import data from an existing file ▶.

Tap [Export] to save the selected points as a file ▶.



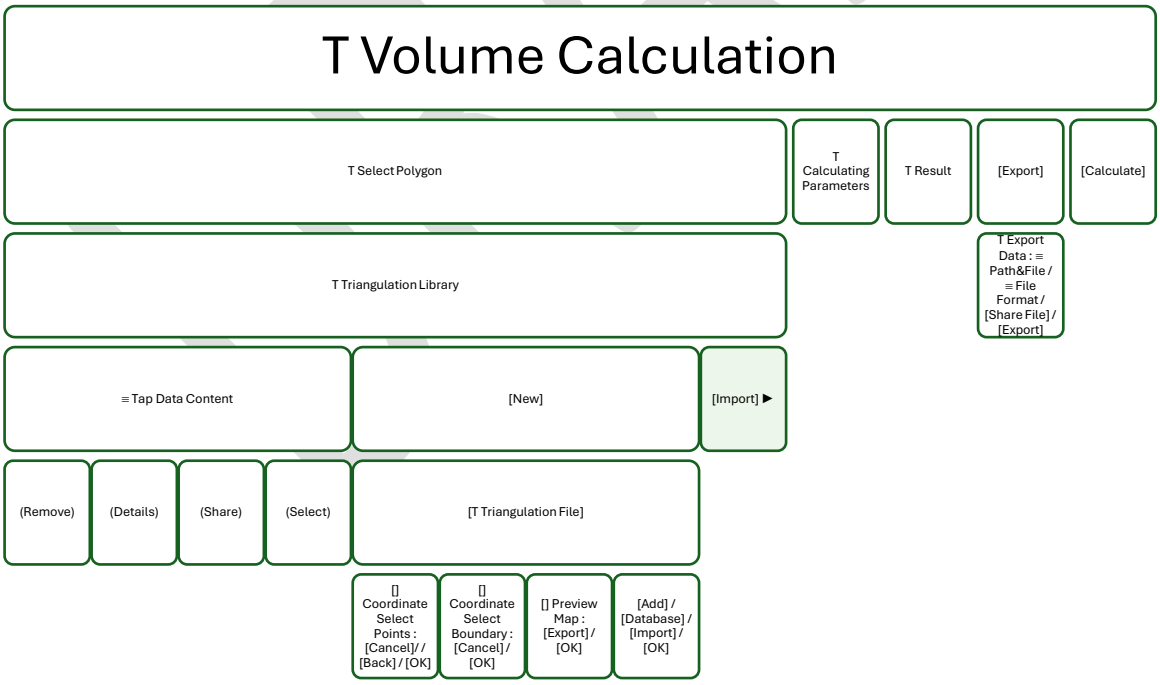
The "Preview Map" tab allows for a quick preview of the selected points, the perimeter length, and its area in [2D] or [3D].



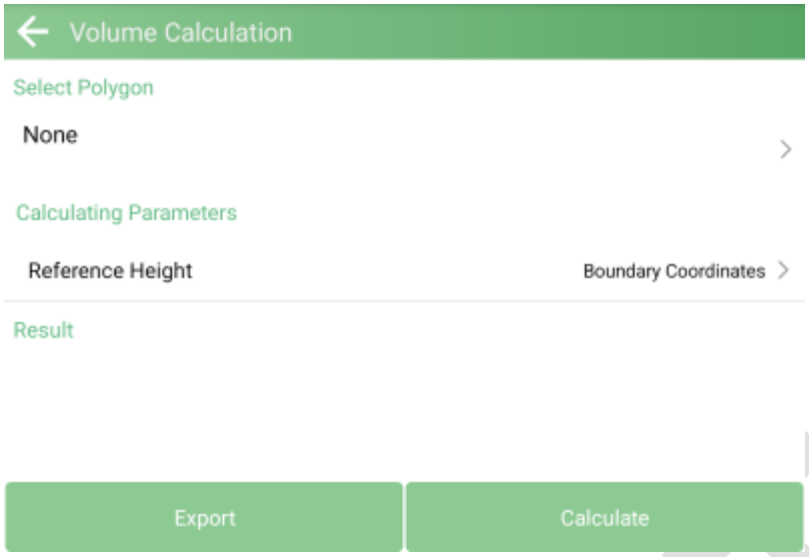
Tap [Save] to save the "Preview Map" as *.jpg file.

9.2 Volume Calculation

Menu Structure:



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When opening this function, the lists were empty.

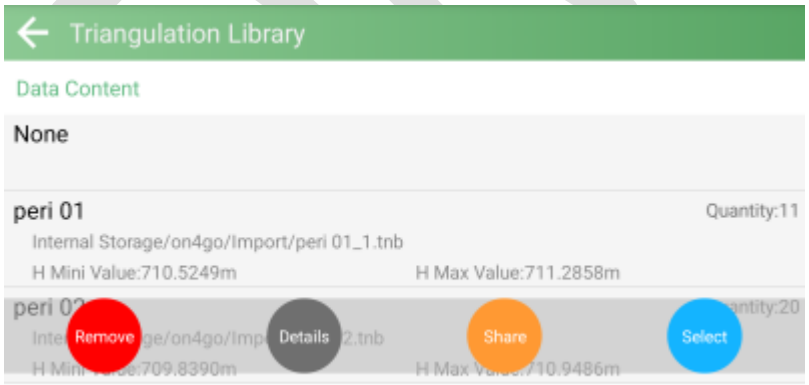
Tap the current "Select Polygon" item to open the "Triangulation Library" screen.

Tap "Calculating Parameter > Reference Height" to select reference height type.



Nestle on4go supports the following reference heights:

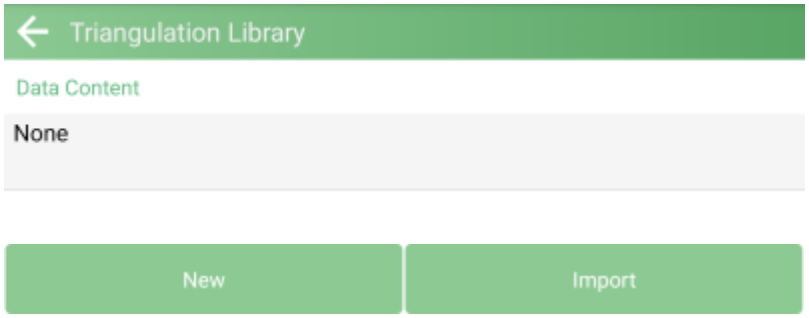
- "Boundary Coordinates"
  = to autom. use the boundary point heights of the current polygon
- "Enter Height"
  = to manually enter an elevation
- "Reference Point"
  = to select height from a point coordinate
- "Reference Polygon"
  = to select a polygon



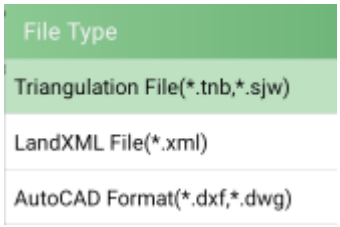
Case A
You already calculated a triangulation the existing triangulations were shown in the "Data Content" list.

Tap on a "Data Content" item to [Remove], edit [Details], [Share] or [Select] its triangulation coordinates.

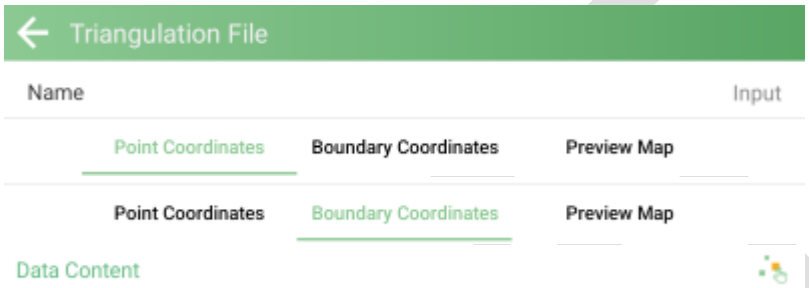
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Case B
The list is empty.



Tap [Import] to load saved triangulations files (supports *.tnb, *.sjw, *.xml, *.dxf/dwg formats).



Tap [New] to create a new triangulation file.

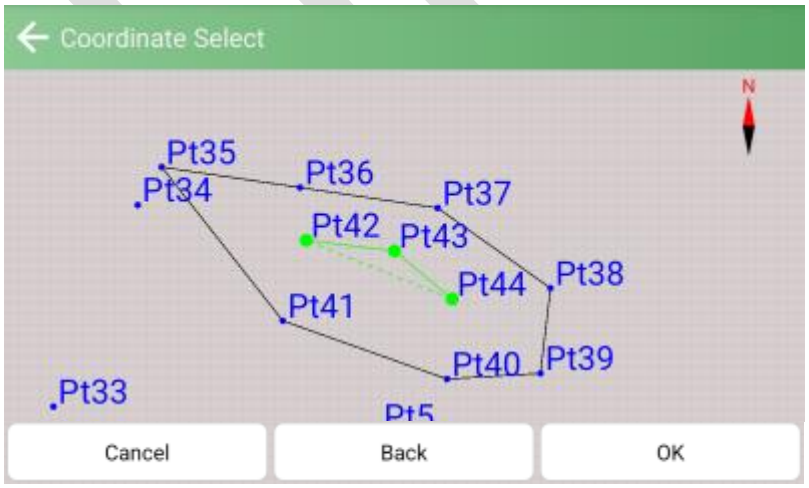
Enter the name for the triangulation in the name input field.

METHOD 1

Tap to choose objects from the "Coordinate Select" screen.



You can choose to select points from the "Display Map" or the "CAD" view



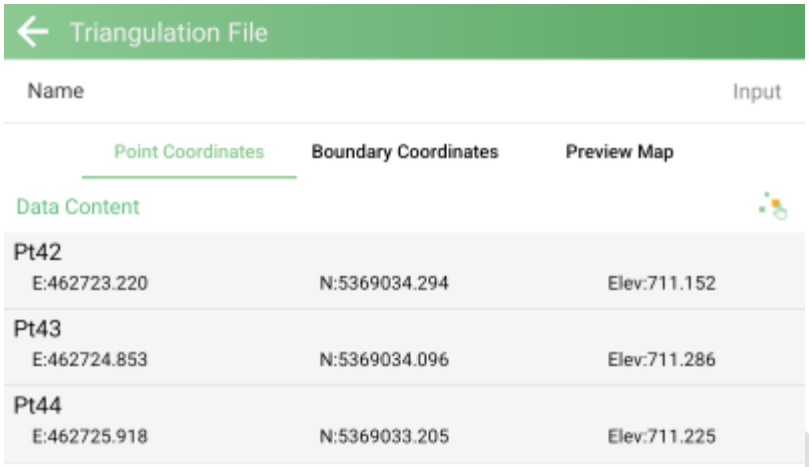
For "Point Coordinates" tab you **select** point objects.

Tap [Cancel] to unselect the current selection.

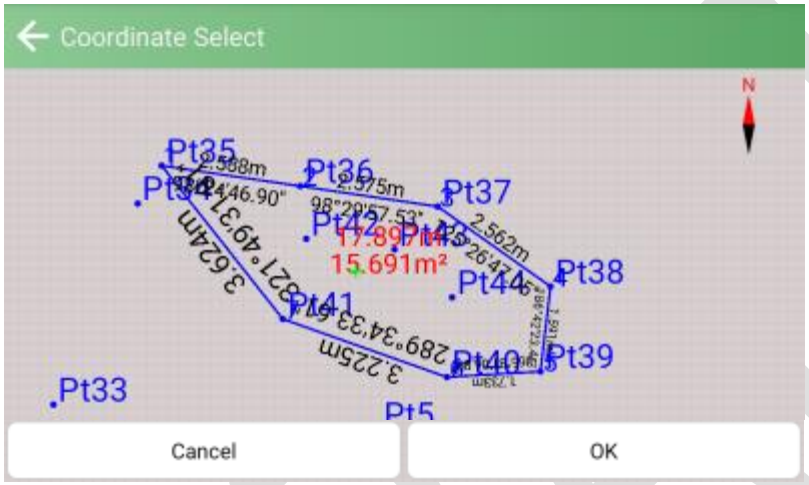
Tap [Back] to undo the latest selection.

Tap [OK] to apply.

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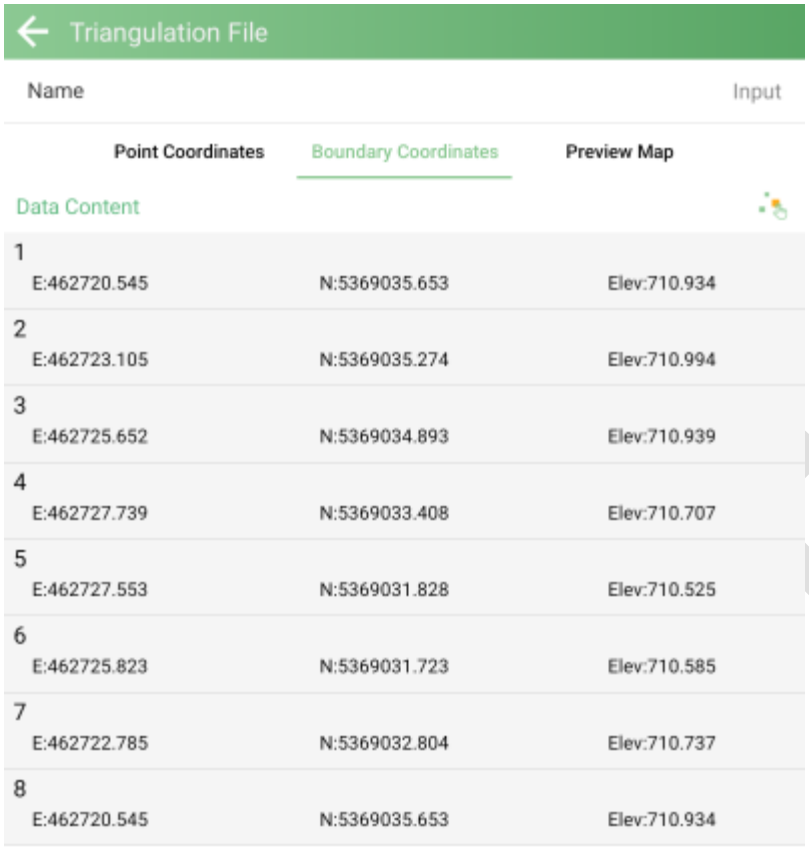
When applied, the selected points were added as "Point Coordinates".



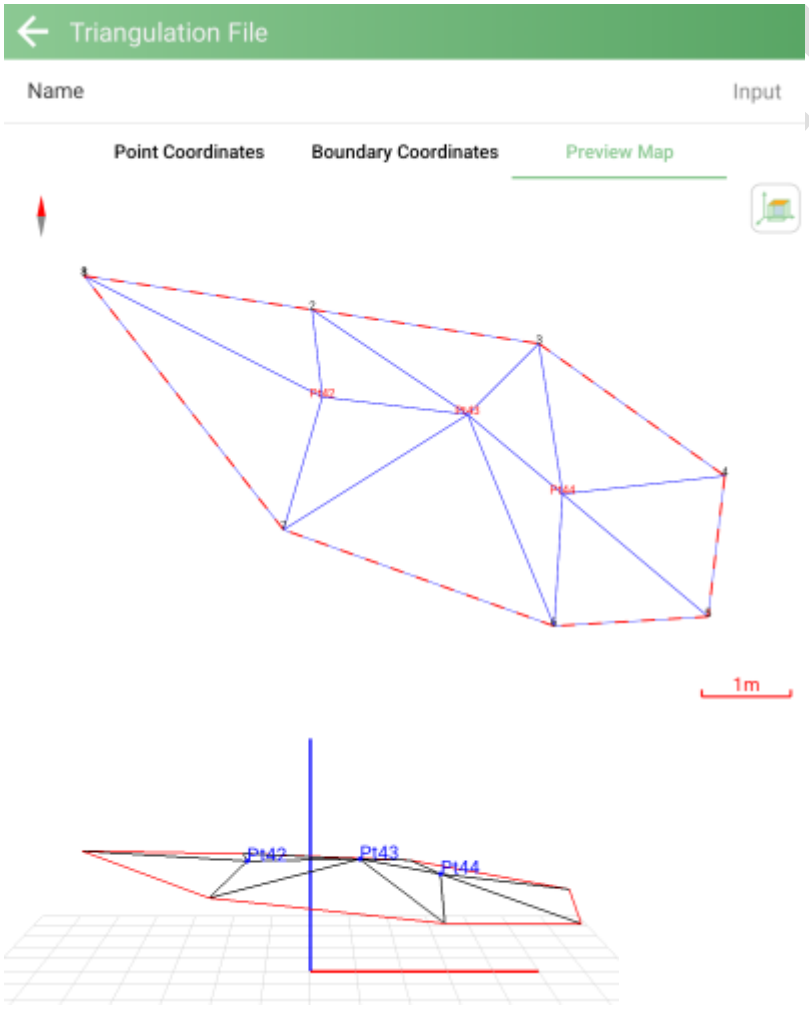
For "Boundary Coordinates" you **select** a boundary object.

Tap [Cancel] to unselect the current selection.

Tap [OK] to apply.



When applied, the selected points were added as "Boundary Coordinates".



Select "Preview Map" to see the triangulation of the current point and/or boundary coordinates.

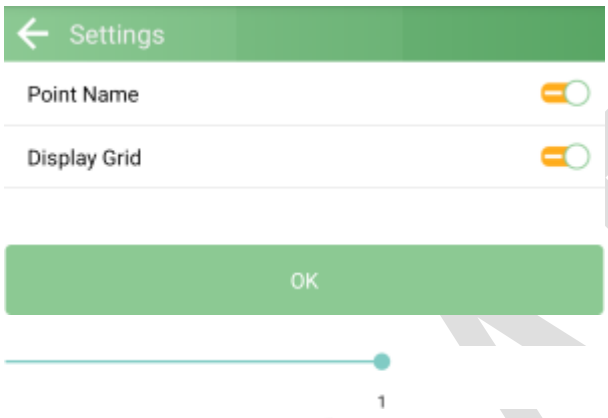
Tap to enable the 3D view mode. Here you can select preset isometric views or rotate the view manually.

Tap to return to normal preview mode.

Tap to open the preset dropdown and select an isometric view.



Tap  to close the preset dropdown.

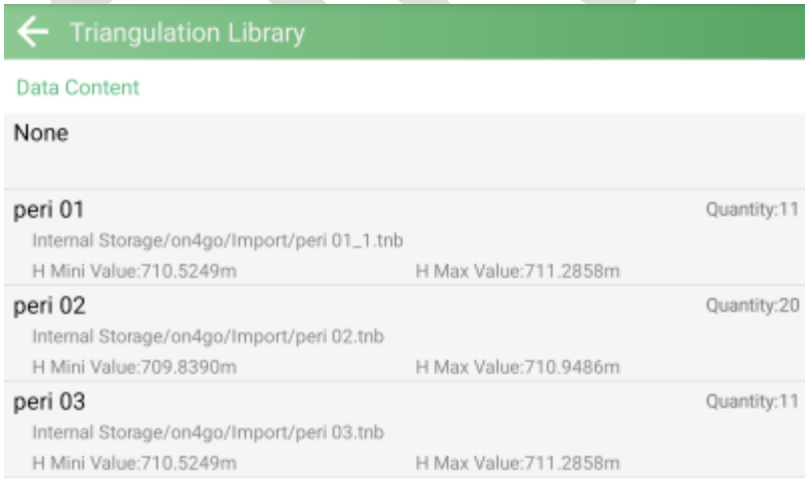


Tap  to open the "Preview Map Settings".

Tap  to change the viewpoint height factor.
Min = 0,01
Default = 1
Max = 100

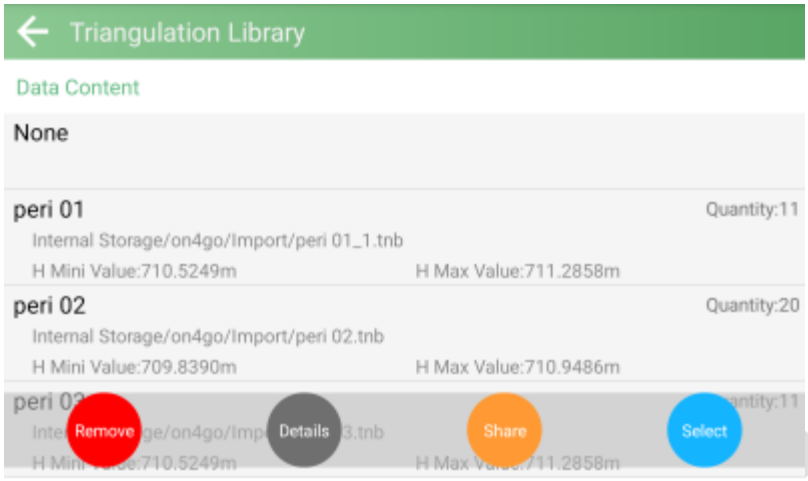


Tap [Export] to save the preview in LandXML (*.xml) format.



Tap [OK] to save the coordinates to the "Triangulation Library".

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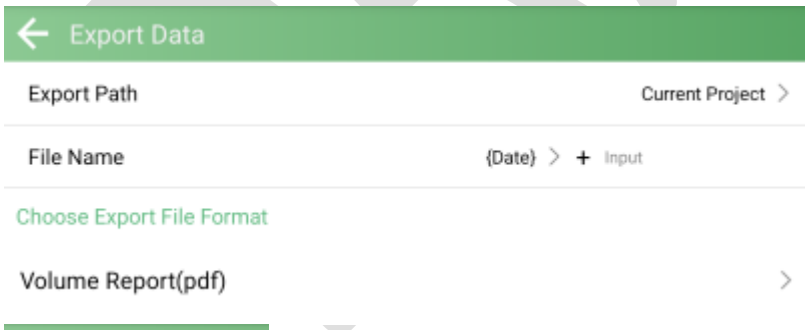


Tap on a "Data Content" item to [Select] its triangulation coordinates for volume calculation.



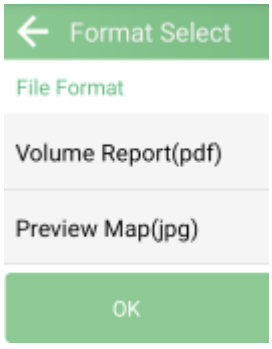
Tap [Calculate] to get the area and the volume of the current triangulation.

Tap [Export] to open the "Export Data" screen.



Verify the current default "Export Path" and **select** a new one if necessary.

Enter a "File Name".



Select the "Export File Format".
Supported formats:

- "Volume Report (pdf)"
- "Preview Map (jpg)"



Finally **tap** [Export] to save the file.



METHOD 2

You can select points and boudaries by [Add], [Database] or [Import] function.

Tap [OK] to save the coordinates to the "Triangulation Library".

9.3 More

This section contains the additional non-default functions (for advanced users only):

- Coordinate Converter
- Angle Converter
- Share File
- Calculator
- AB Line
- Coordinate Positive Calculation
- Circle Center Calculation
- Average Calculation
- Post-Measure Correction
- Coordinate Inverse Calculation
- Point Line Calculation
- Vector
- Angle Calculation
- Intersection Calculation
- Resection
- Forward Intersection
- Offset Point Calculation
- Extend Point Calculation
- Equal Point Calculation

Note
Some functions are described within the app itself after being accessed.

10 Workflows

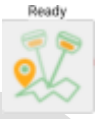
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Workflows define the individual steps required to carry out tasks and procedures. They contribute to an efficient and quality-assured way of working. The following sections describe selected key processes and their implementation. They also incorporate experience and proven practices from day-to-day operations to present the processes in a practical and comprehensible manner.

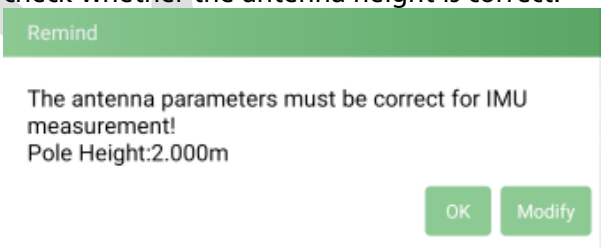
10.1 WF IMU Initialization for using tilt function

The Nestle GNPS-64 GNSS receiver has a built-in IMU module that supports tilt surveying up to 60°. The system precisely calculates the actual offset based on the tilt angle, thereby reducing the effort required for the user to align the measuring rod exactly for each measurement.

IMU module can be turned on and off:

Tap  to turn tilt option on / off.	The IMU module tilt option will appear in each survey/stakeout function interface.
 = Tilt is off	 Survey holding the pole vertical (without IMU module) is active.
 = Tilt is on	 Survey using IMU module is active.
	 Before using the IMU module, tilt initialization is required. Note: The IMU module requires tilt initialization before its first use, whenever the receiver is powered off or reset, or if the calibration has expired.

Tilt initialization process:

1	**Goto** [Survey] > [Point Survey]	Nestle on4go will prompt you to check the antenna information. Please check whether the antenna height is correct. 
2a	**Tap**  to start	If receiver **has not** a FIXED solution yet, Nestle on4go will inform about and wait for it.

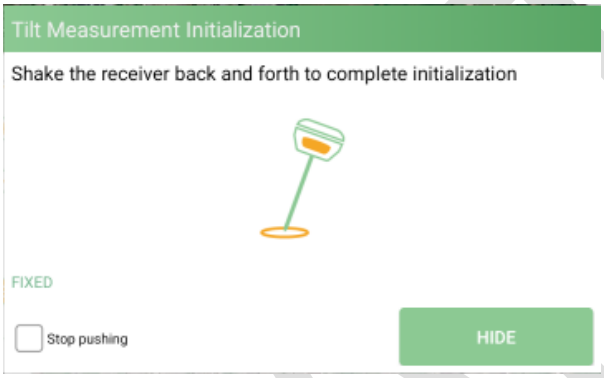
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Ensure, that the receiver can search for satellites and has a FIXED solution.

2b 

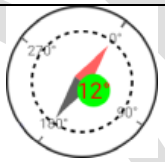
If receiver **has** a FIXED solution, follow the on-screen instructions to initialize the IMU.



Note: Do not shake or rotate the receiver violently, otherwise you need to re-initialize.

3 

When the IMU button shows "Ready", the IMU was successfully initialized. Verify the displayed antenna information.



In survey interface, you can find the bubble and angle value showing how you tilt the pole in real time.

Note: For optimum accuracy, a tilt angle below 30° is recommended.

10.2 WF Surveying

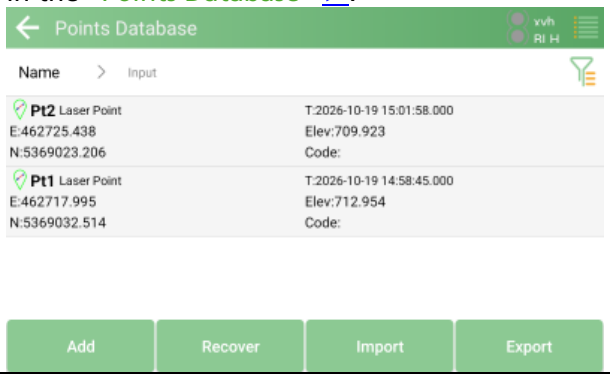
See also chapters point survey ▶ / tilt initialization ▶

10.2.1 Survey Objects

1		Goto "Survey Screen" and start "Point Survey" function.
2		Confirm or modify the antenna parameters.
3		Enter point name, code and antenna height.
4		Select a map type.
5		Center the map or use the zoom controls to view existing objects.

6		Select the required object type (line, circle, or arc) and follow the on-screen instructions.
7	IMU off  IMU on 	Start or stop collecting data. If tilt initialization is required, follow the tilt initialization process. *Note: The Nestle GNPS-64 receiver supports tilt compensation up to 60°. For optimum accuracy, a tilt angle below 30° is recommended.*

10.2.2 Using Laser Survey

1		Goto "Survey Screen" and start "Point Survey" function.
2	 FIXED	Ensure, that the receiver has a RTKfix solution.
3		Enable tilt compensation and, if required, initialize it until the IMU status is "Ready".
4		Turn on the laser surveying function in the "Point Survey" interface. Then the GNPS-64 laser can be clearly seen.  *Tip: It is recommended to use a bipod for laser survey to reduce the shaking caused by human factors and lead to inaccurate precision.* *Tip: The laser of Nestle GNPS-64 can reach a distance of about hundreds of meters, but it does not mean that it can measure so far. Generally speaking, 3-5 meters is the best accuracy.*
5		**Tap** the measure button and you can perform laser survey normally. The points measured using the laser can be viewed in the "Points Database" ▶. 

6		Turn off the laser surveying.

10.2.3 Edit Objects

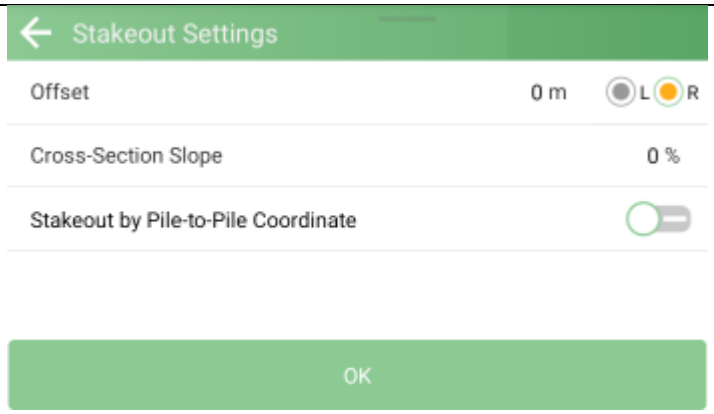
1		Select a CAD object. The selection will be indicated in blue. *Note: The button bar changes depending on the selected CAD object.*
2	Cancel	Unselect the object and abort the process.
3	Delete	Remove the object.
4	Object Dist.	Measure and show the distance to other CAD objects.
5	Details	Open "Object Info" screen showing detailed information about the selected object. *Note: The displayed tabs and variables (e.g. length, start point, end point and center point, radius, area, etc.) were depending on the selected CAD object.*
6	Stakeout	Navigate to the selected object.

10.2.4 Line Stakeout

The workflow is comparable to point stakeout. ►

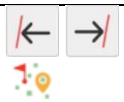
1		Goto "Survey Screen" > "More" and start "Line Stakeout" function. The "Lines Database" screen will open.
2	„Lines Database"	Add or import lines you need to stake out. • **Tap** [Add] to input line parameters • **Tap** [Import] to import point data in different file types. You can also define a new format according to your needs.  **Select** a line to stakeout.
3		**Tap** (Stakeout) or [Stakeout] button.
		Check and, if necessary, adjust the stakeout settings ("Offset", "Cross-Section Slope" and "Stakeout by Pile-to-Pile Coordinate"),

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Tap [OK] to confirm.





Tap to jump to previous, next or current line.

10.2.5 Using Visual AR Stakeout

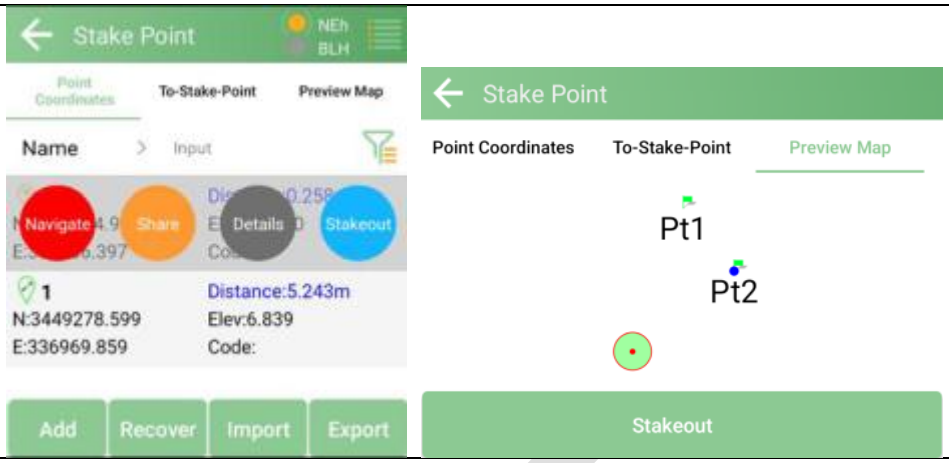
To use the visual AR camera function you have to consider the following points:

- RTKfix GNSS solution must be established
- IMU tilt compensation must be enabled
- Visual data is transmitted via Wi-Fi
- Operating Wi-Fi may reduces battery runtime

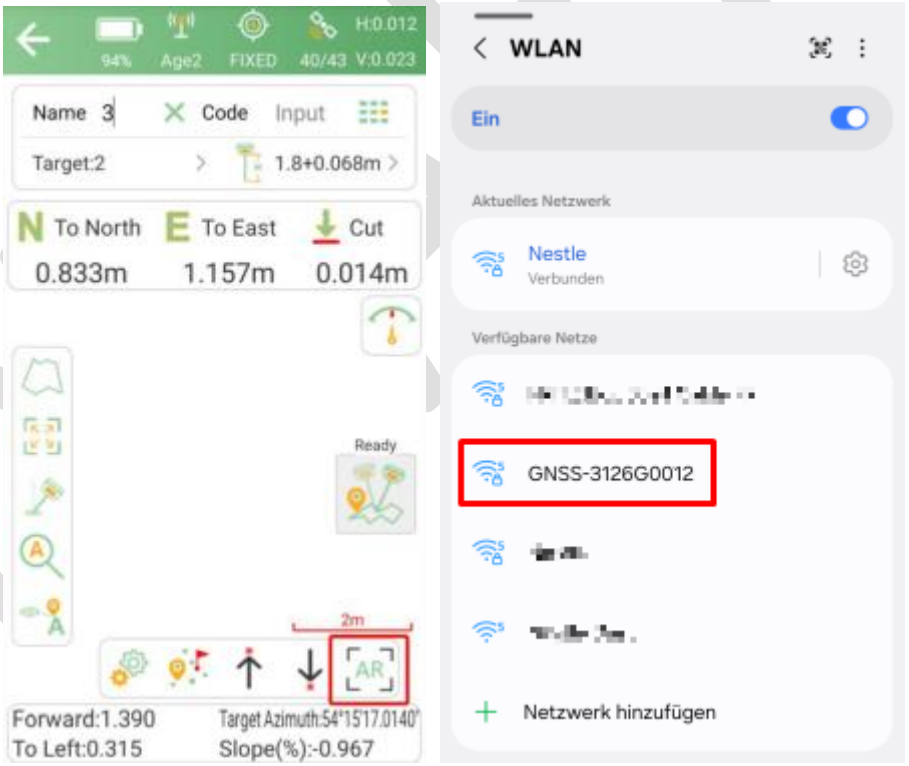
Note (not valid for radio communication)
Since the Wi-Fi connection is reserved for AR data transmission, **do not use Wi-Fi or a mobile hotspot** for RTK correction data. Instead, **use a SIM card in the field controller**.

1		Goto “Survey Screen“ and start “Point Stakeout“ function. The “Stake Point“ screen will open.
2	„Stake Point“	Select a point from the “Point Coordinates“ or “To-Stake-Point“ list, or choose from the “Preview Map“.

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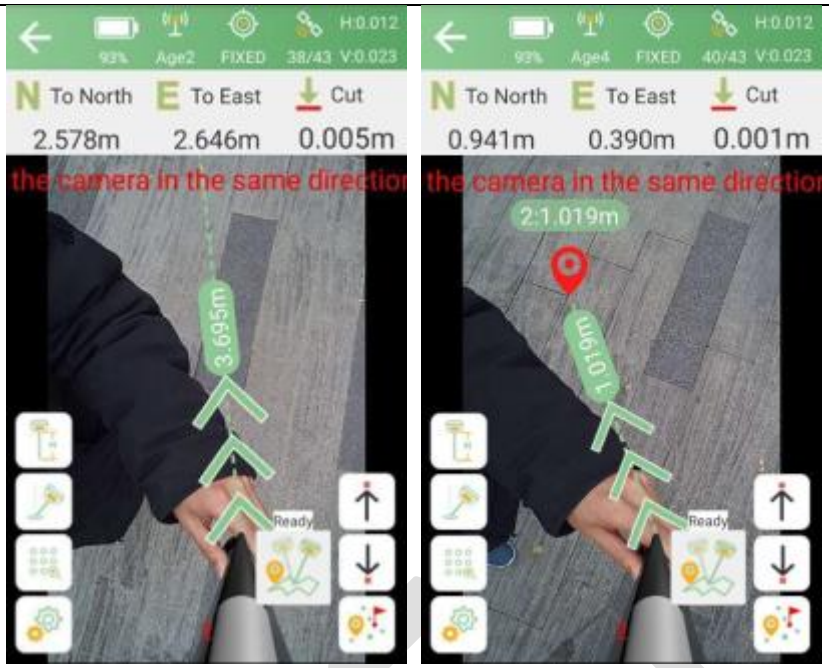
3		**Tap** (Stakeout) or [Stakeout] button.
4	FIXED	Ensure, that the receiver has a RTKfix solution.
5		Enable tilt compensation and, if required, initialize it until the IMU status is "Ready".
6	AR	**Tap** the [AR] staking icon to connect to the AR camera.



*Note: At first connection, the Nestle on4go will automatically open the Wi-Fi connection interface. Select the S/N of your GNPS-64 from the Wi-Fi list and enter the **password 12345678** to connect.*

After connecting, return to the stakeout interface to see the image from the GNPS-64 camera.

7		Ensure that the front of the receiver is facing toward the rear. The software uses the camera image to indicate the direction of the stakeout point.



When you approach the point to be staked, the software will mark the location on the screen.

8		Align the tip of the rod with the position of the stakeout point. Then **tap** the [Survey] button to stake out.
		**Tap** to jump to previous, next or current point.

10.3 WF Adding Maps with Georeferenced Parcels and Boundary Points (WMS/WFS)

WMS and WFS are standardized OGC geoservices for retrieving geodata via the Internet. OGC stands for "Open Geospatial Consortium".

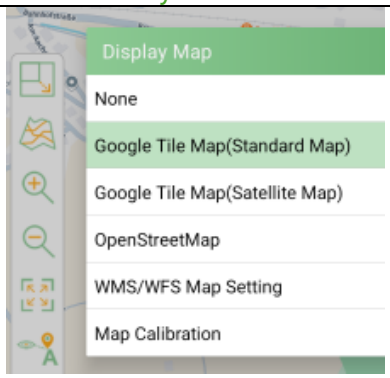
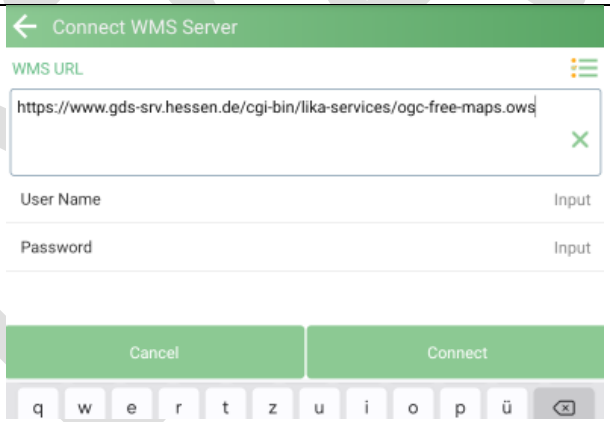
WMS = Web Map Service
A WMS essentially provides a georeferenced image as a background map.
For example, you display ALKIS parcel boundaries. You see the boundary, but the line itself is not a CAD/vector object that you can directly select and process.

WFS = Web Feature Service
A WFS provides the real vector data, e.g. points, lines/polylines, polygons, coordinates, associated attributes. For example, you can actually select a boundary point as an object. The data is often transmitted as GML (Geography Markup Language).

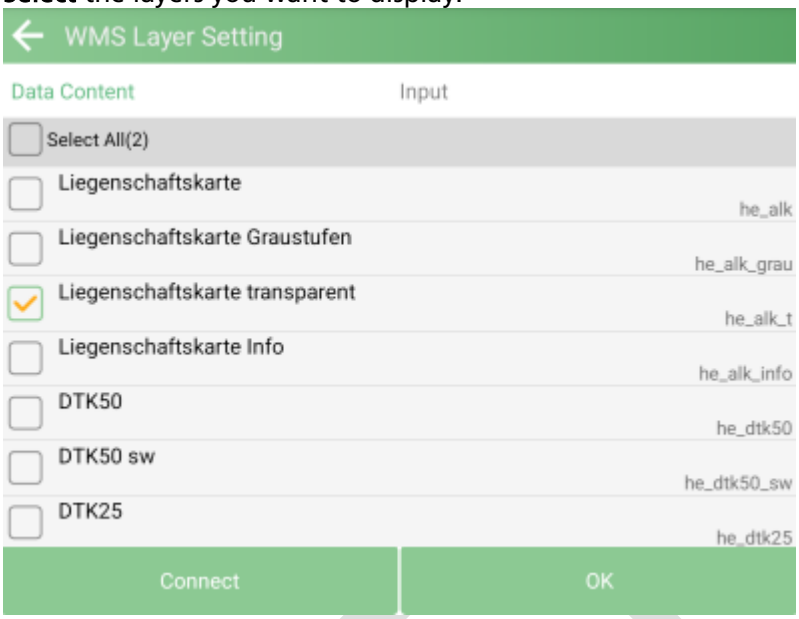
	WMS	WFS
See parcel boundary	✅	✅
Background Map	✅	
Boundary point as a real object	❌	✅
Coordinates of the object	not directly	✅
Attributes to the object	restricted	✅
Further processing	rather no	✅

Remember:
WMS = watching -> shows you the field map

WFS = work with the objects -> gives you the field map as usable geometry

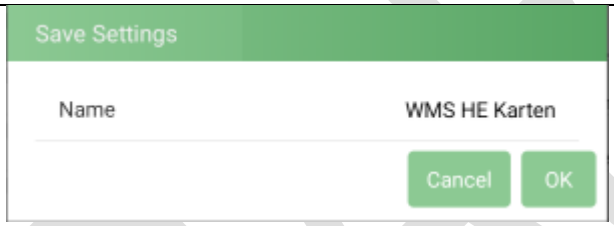
1	Goto "Survey Screen" and start "Point Survey"or "Point Stakeout" function.
2	  **Tap** the "Display Map" icon and select WMS/WFS Map Setting.
3	 **Set** the map type "WMS" or "WFS" **Tap** "Add".
4	 **Enter** the URL, and if required, the user name and password. shows some examples. Then **tap** "Connect". *Note "URL": Use the address of the actual WMS/WFS service (not the geoportal web address), or its GetCapabilities URL if applicable.* *Note "Coordinate system": The service and the project must use an appropriate coordinate system. If no data is displayed, check the EPSG code or projection.*
5	A list of all provided layers appears.

Select the layers you want to display.



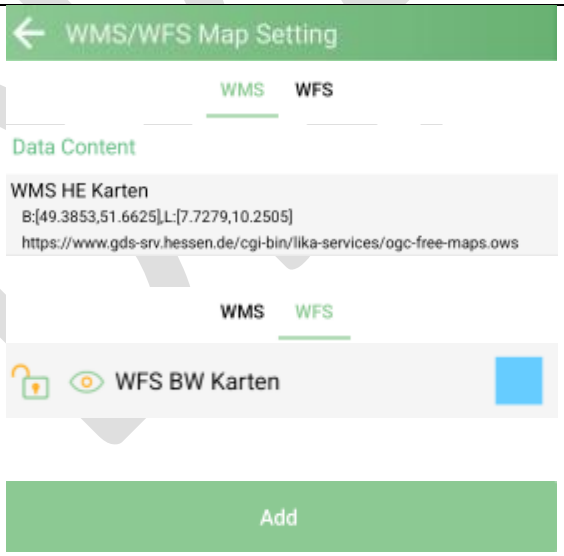
Tap "Connect" to return to the previous screen.
Tap "OK" to continue.

6



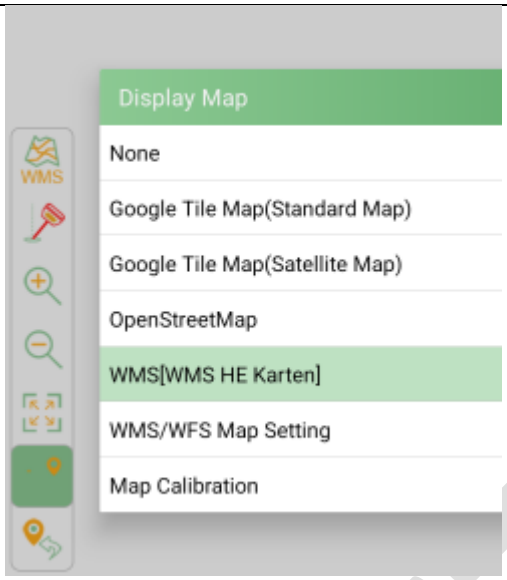
Enter a save name and **tap** "OK".

7



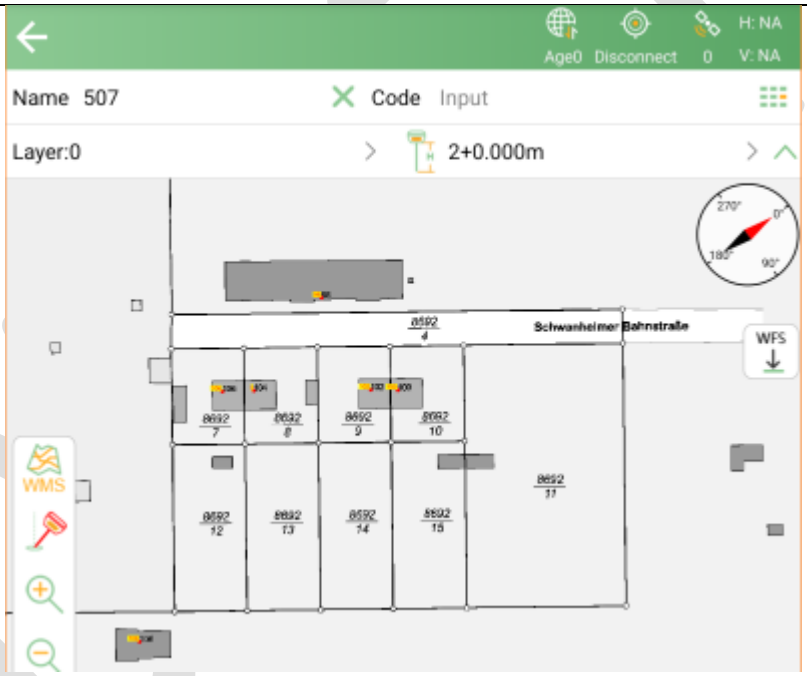
Tap „←" to return to the surveying screen.

8



Tap the "Display Map" icon and select the WMS/WFS map to be displayed.

9 Result



Note – "Zoom level and loading time": Before loading the WFS data, zoom in as close as possible to the workspace you need, selecting only the section you need. The larger the area you choose and the more objects you contain, the longer it may take to load. Wait for the included objects to be fully discovered and displayed before continuing.

10.4 WF DXF/DWG Drawing Preparation using 3rd party CAD

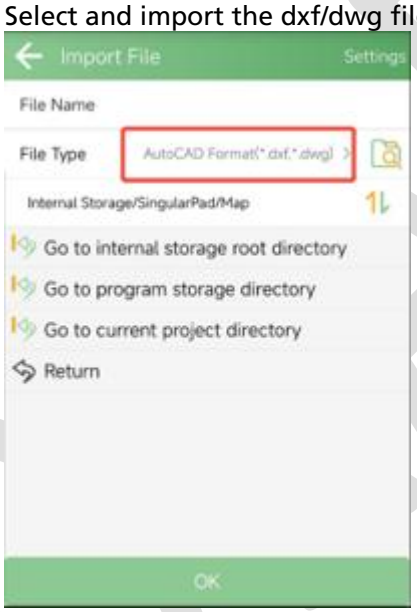
TBD

10.5 WF How to load/open/import DXF/DWG files?

For importing a CAD file in Nestle on4go for stakeout, there are two ways:

a) Goto [Project] > [Layers Settings] and tap [Import] to import the dxf/dwg file.
b) Goto [Survey] > [CAD Stakeout] and tap the file icon and then import the dxf/dwg file.

We recommend to use method b):

1		Goto "Survey Screen" and start "CAD Stakeout" function.
2		**Tap** the file icon. 
3		Select and import the dxf/dwg file. 

Note
If you often use stakeout from a CAD file, add [CAD Stakeout] button to [Survey] screen for more easier access.

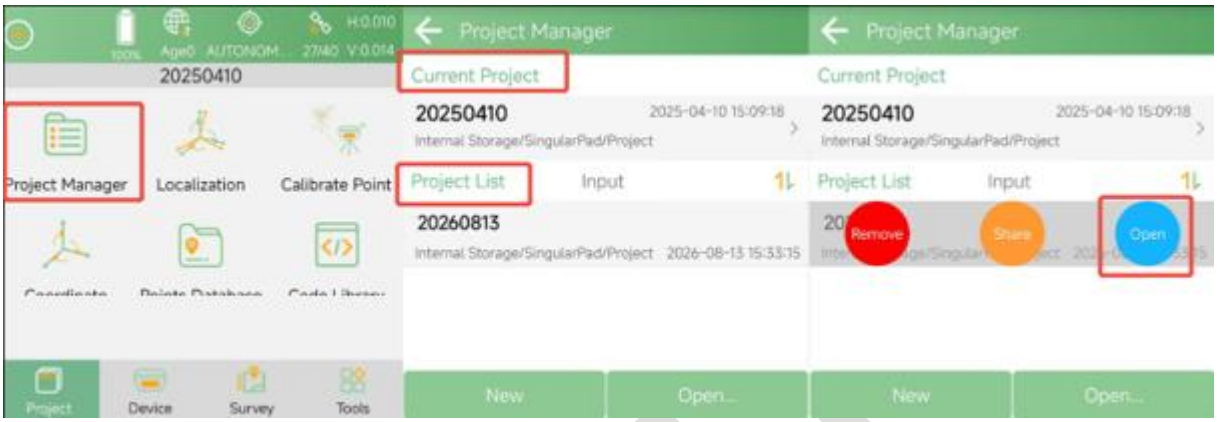
Rule
Imports are always added to the active project.

The following workflows were derived from this rule.

- To import a dxf/dwg file into a **new** Nestle on4go project:
  First, create a new project in Nestle on4go. Then import the dxf/dwg file into the current project.

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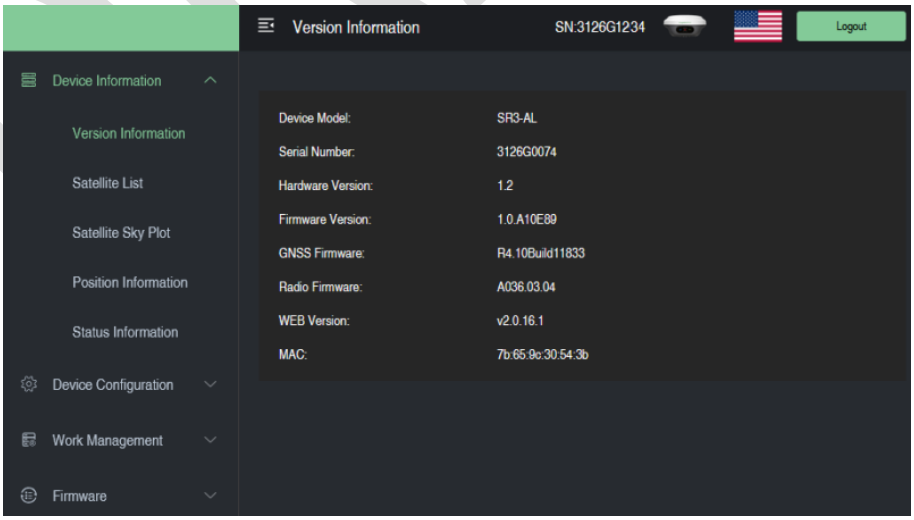
- To import a dxf/dwg file into an **existing** Nestle on4go project:
  Open the [Project Manager] to view the current project and the list of existing projects. Select the project you want to use and open it. Then, import the dxf/dwg file into the selected project.



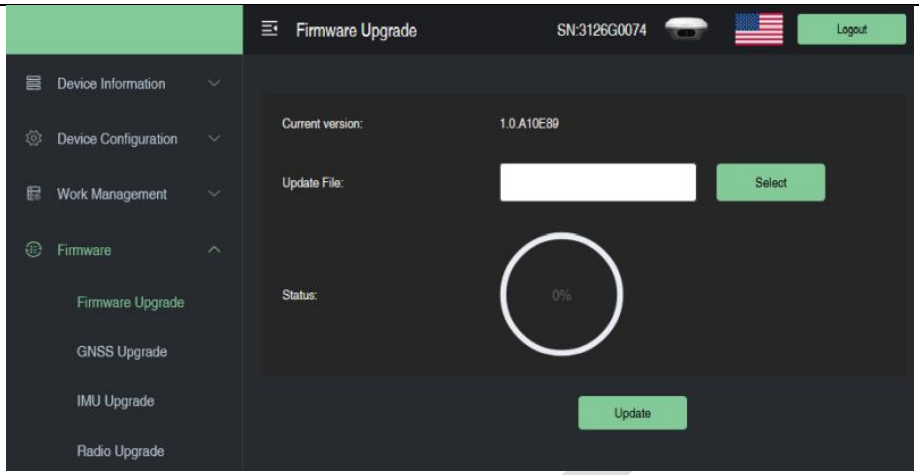
10.6 WF Device Firmware Updates

This chapter describes the firmware upgrade procedure for the NESTLE GNPS-64 receiver (for trained users only).

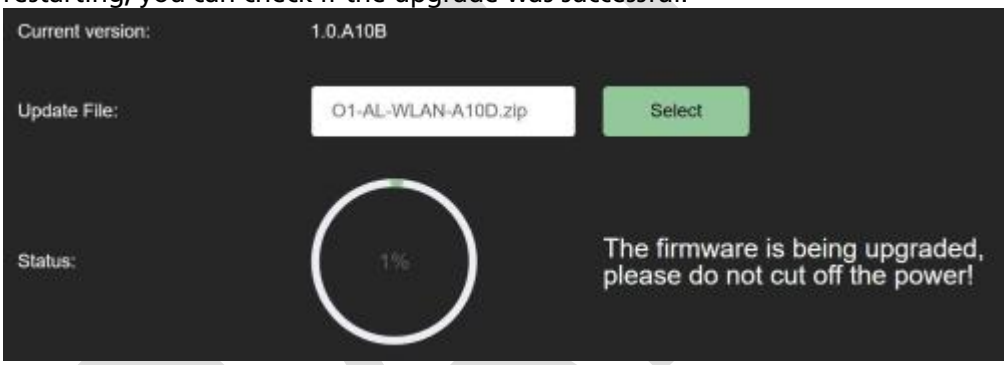
10.6.1 Update Antenna

1	Power on the receiver and connect the computer to the receiver's WiFi. Wifi Password: 12345678
2	Open the browser and enter 192.168.10.12 to access the device's web interface. Username: admin / Password: admin 
3	**Tap** [Firmware] to enter the [Firmware Upgrade] interface, where you can check the current firmware version of the device, select the corresponding version file, and perform the upgrade

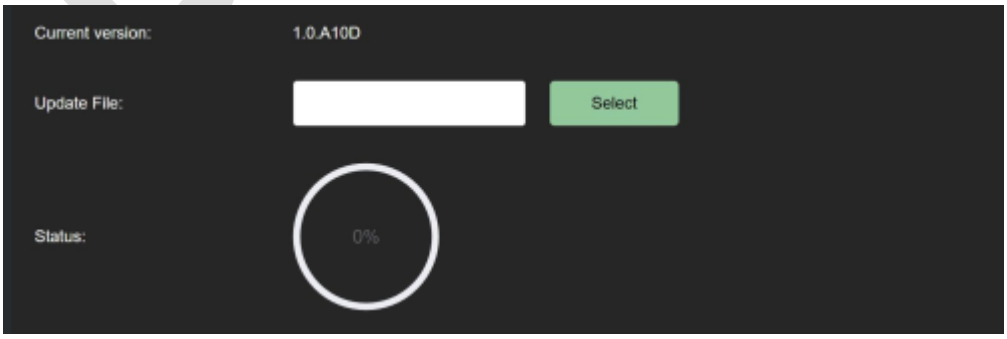
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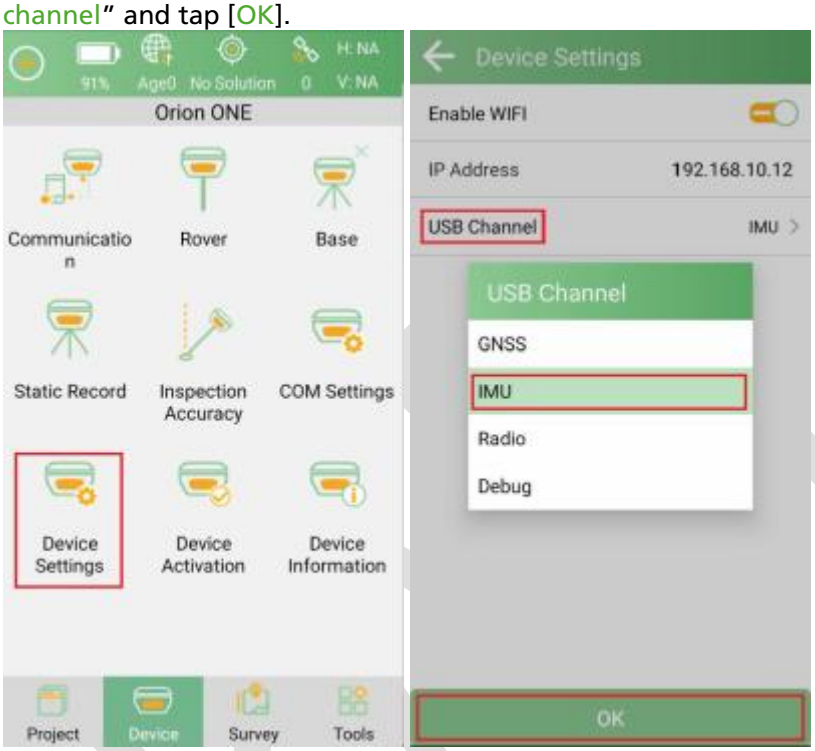
4 After selecting the upgrade file, tap [Update] to start the upgrade process. Once the upgrade is complete, the device will automatically restart. After restarting, you can check if the upgrade was successful.







10.6.2 Update IMU

1	Install the setup IMU software on a Windows® (desktop/laptop) computer. e.g. “Setup_Forsense_IMU_V1.0.6.exe”
2	Ensure that the Nestle on4go software is updated to the latest version. e.g. “on4go_V1.0.20261105.apk”
3	Power on the Nestle GNPS-64 receiver, and connect it to the Nestle on4go app via Bluetooth. Enter the device settings interface, select "IMU" as “USB channel” and tap [OK]. 
4	Use a type-C USB cable to connect the Nestle GNPS-64 receiver to the computer, and open the “Forsense_IMU” software. 
5	In the software, select the corresponding COM port for the receiver, set the baud rate to 921600, and tap [Connect].



6 In the upgrade operation prompt, tap [Open File] and select the IMU upgrade firmware “IMU-230227.firmware”.



7 **Tap** [Upgrade] button to start upgrade.



8 When the progress bar is complete, it indicates that the upgrade is done.



9	Restart the Nestle GNPS-64 receiver to complete the upgrade.

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11 Compliance with national regulations

Gottlieb Nestle GmbH hereby declares that the product complies with the applicable European directives and therefore bears a CE marking.

12 Electromagnetic compatibility (EMC)

Electromagnetic compatibility is the ability of the products to function properly in an environment with electromagnetic radiation and electrostatic discharge without causing electromagnetic interference in other devices.
Therefore, please note:

- Electromagnetic radiation can cause interference in other devices.
- Although the products meet the strict requirements of the relevant guidelines and standards, the manufacturer cannot completely rule out the possibility of interference with other devices.
- Using the product with accessories from other manufacturers, such as Field computers or other electronic devices as well as non-standard cables or external batteries can cause interference in other devices.

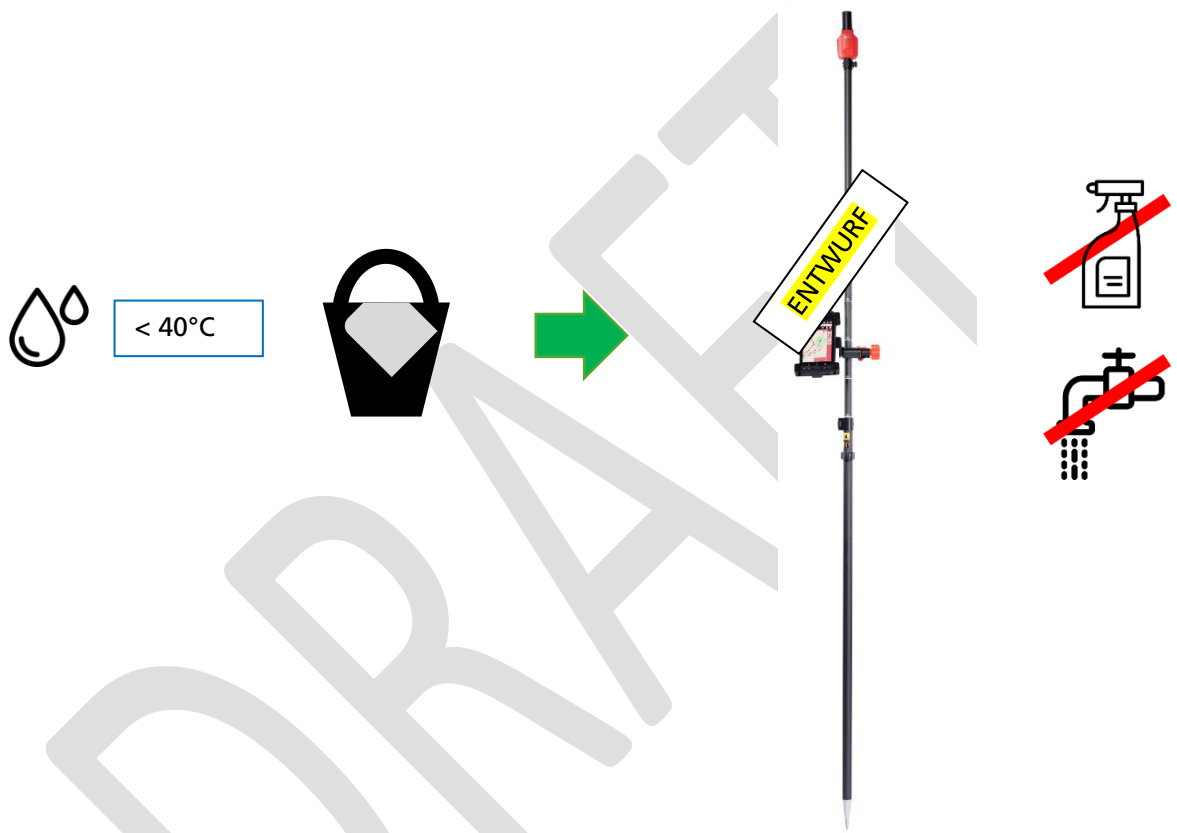
13 Dangerous goods regulation

This product is powered by lithium batteries.
Lithium batteries can be dangerous under certain conditions and pose a safety risk. Under certain conditions, lithium batteries can overheat and ignite.
When transporting or shipping this product, the requirements of the relevant transport guidelines must be observed. In particular, the transport or shipping on board commercial aircraft must be carried out in accordance with the Dangerous Goods Regulations (DGR) (IATA dangerous goods regulations).
Damaged or defective batteries must not be transported on board an aircraft. Therefore, make sure that your batteries can be transported safely.

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14 Storage and cleaning

- Keep plugs clean and protected from moisture.
- Blow out any dirty charging cable plugs.
- The product may be damaged by strong shocks or drops.
- Transport and store the system in a dry place.
- Do not leave the system in vehicles.
- Avoid strong vibrations and impacts during transport.
- Do not expose the device to extreme temperature fluctuations.
- Observe the storage temperature according to the technical specifications.



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15 Technical Data

Item	GNPS-64
Application	RTK real-time positioning for recording and staking out points and geometric shapes
GNSS-Tracking	GPS, Glonass, Beidou, Galileo, QZSS, SBAS
Accuracy[1] (RTK Fixed)	horizontal 8 mm +1ppm, vertical 15 mm + 1ppm
Accuracy Tilt compensation	< ± 2.5 cm, up to 60° tilt
Accuracy Laser distance measurement	< 5.5 cm, at 5m <60° tilt
Weight (Complete system ready to work)	2.250 g
Working temperature	-30°C to +60°C
Storage temperature	-55°C to +85°C
IP-Protection class	Antenna IP67, Field computer IP68
Field computer	8“Tablet, Android 16, WLAN, Bluetooth, LTE Battery: Li-ION 3,8 V, 5050 mAh, interchangeable Carge current:5V DC / 2A via USB-C Port Battery run time[2]: 6 h Battery run time[2] AR-Modus: 4 h Charging time[2]: 5 hours Weight: 520 g
GNPS-64 Antenna	Channels 1408 Bluetooth, WIFI, NFC Battery: Li-ION 4200 mAh, firmly installed Charge current: 5V-15V DC via USB-C Port Battery run time[2]: ≥ 10 hours Charging time[2]: 3 hours fast charge Built in visible green Laser rangefinder (Class 3R) Built in Camera 2 MegaPixel Weight: 547 g
Pole	Working height 2 m, 20‘ vial, Quick-out
Field software permanent license	NESTLE on4go

1) Accuracy depends on atmospheric conditions, signal multipath effects, satellite geometry and available corrections as well as their quality. Positional accuracy applies to positional accuracy. The height deviation is normally less than twice the position error. The performance data apply to at least five satellites and use according to the manual. In areas with high signal multipath effects, high satellite geometries (PDOP values) and at times of difficult atmospheric conditions, performance can deteriorate.

2) Actual operating time and charging time depend on temperature and running software.

16 Disclaimer

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17 Contact

Gottlieb NESTLE GmbH
Freudenstädter Straße 37-43
72280 Dornstetten - Germany
info@g-nestle.de

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