

1 INTRODUCTION

TwoNav dedicates all its experience and effort to enable you get the best out of your outdoor activities such as hiking, cycling, trail running, geocaching...

TwoNav offers directional assistance, both on-road and off-road activities, this assistance is invaluable in order to increase the safety of your outings. Despite this under certain circumstances you may be distracted by the misuse of the device, and in extreme cases it may become a hazard either for you or the environment. Please, use TwoNav application with responsibility.

TwoNav

Even though TwoNav offers you the possibility to use this application in any type of vehicle it is very important to take into consideration a series of recommendations and regulations to properly use the application:

- **Fit TwoNav application correctly:** TwoNav should be fitted in a place where it will not obstruct your visibility. Moreover, it must be secured to ensure it cannot fall off easily and hinder driving. Plan all details regarding your outing before starting the navigation. Any change must be done with the vehicle stopped in a safe place (not on the road or kerbs).
- **Guided by sound indications:** The TwoNav application will warn you with sound indications of upcoming manoeuvres and when to carry them out. A glance at the visual information displayed by TwoNav may be useful in order to know which path you should take, but you should only resort to this visual information if you can do it safely (vehicle stopped).
- **Front-seat passenger can easily help you:** The driver is always facing the road, so if you have a front-seat passenger, TwoNav strongly recommends this person to be in charge of handling the TwoNav application.
- Maps always contain errors: Remember that it is impossible to have 100% updated information for all your maps. So new streets, changes in street directions or road restrictions may invalidate partially the calculation of your itinerary. It is very important to be aware of these changes and to be prepared for any new situation that may arise.
- Traffic regulations always take preference: You should always fully comply with the traffic regulations of each country.

All new developments are based on suggestions and feedback from users like you. If you would like to share your ideas and proposals with TwoNav, feel free to do so at http://TwoNav.uservoice.com



If you have any questions or problems regarding the use of our products, please contact the on-line technical support department of TwoNav at http://Support.TwoNav.com

2 START UP & MAINTENANCE

2.1 INSTALLATION

In order to make TwoNav more accessible to you, TwoNav has developed two modes for the same application:

- TwoNav Free: Certain usage limitations on functions.
- TwoNav Premium: All functions with no limitations.

If you are using TwoNav in free mode, you have the opportunity to go Premium to fully enjoy TwoNav. All you have to do is buy a full TwoNav license from:



Google Play (Android devices) Search 'TwoNav Premium' product



App Store (iOS devices) Search 'TwoNav Premium' product

IMPORTANT: The acquisition of the application via Google Play/App Store does not allow installation on other platforms with different operating system.

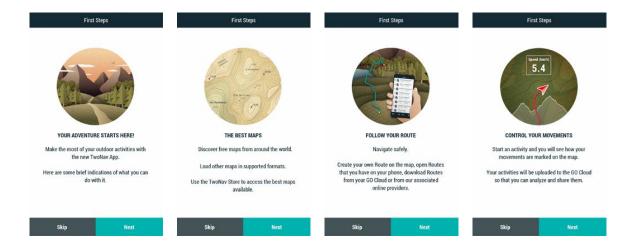
Remember that, once installed, you will only need to activate the software the first time (if you bought the license via Google Play/App Store TwoNav will be automatically activated by default, no activation code will be provided). TwoNav will remain activated the next time you run the software, also after reinstalling or upgrading it on the same device.

Activation can be done connecting the device directly to internet, or via manual process. If you have any questions or problems regarding the registration process, please contact the on-line technical support department of TwoNav at http://Support.TwoNav.com

2.2 GETTING STARTED

When you start TwoNav for the first time, a tutorial with basic information will be shown so that you can get the most out of the application.





2.3 CONNECTIVITY





Your device features several types of wireless connections that will let you multiply the potential of your activities by connecting through any of these technologies:

- **ANT+™ sensors:** Capture data from external sensors like heart rate monitors, cadence sensors, speed sensors, power sensors...
- **BLE sensors (Bluetooth Low Energy):** Capture data from external sensors like heart rate monitors, cadence sensors, speed sensors, power sensors....

You can also connect your device to a computer using a USB cable to charge the device's battery, transfer files, update the software of the device to the latest version...

NOTE: Before going out with the GPS for the first time, it's important to set it up properly. Read the sections below to find out more about your device so you can get the most from it.

2.3.1 CONNECTING TO SENSORS











ANDROID DEVICES ONLY: If you a have heart rate monitor, or cadence, speed or power sensors compatible with ANT+TM/BLE technology, connect them so your device can receive the data. Sensors come in very handy if you want to control your training and make your activities even safer. See your performance in real time by accurately tracking each workout and the data will be displayed on the screen so you can check it on the go. The device will also alert you when you exceed the limits that you specified.

- Heart-rate monitors: Measure your heart beat
- Cadence sensor: Measure your pedalling frequency
- Speed sensor: Measure your speed
- **Power sensor:** Measure your power





Follow these steps to connect your sensors and start receiving information from them:

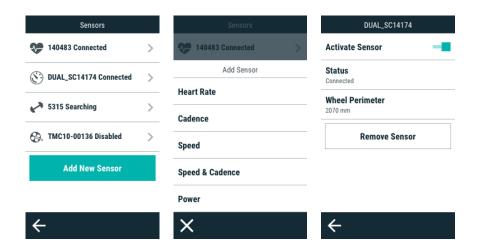
1. In order to activate ANT+™ services on your smartphone, you must first download the following apps from Google Play.





- 2. Install the sensors as required and activate them before attempting to connect to them.
- 3. Go to 'Main menu > Settings > Sensors'.
- 4. Press 'Add new sensor' and select the type of sensor you want to add.





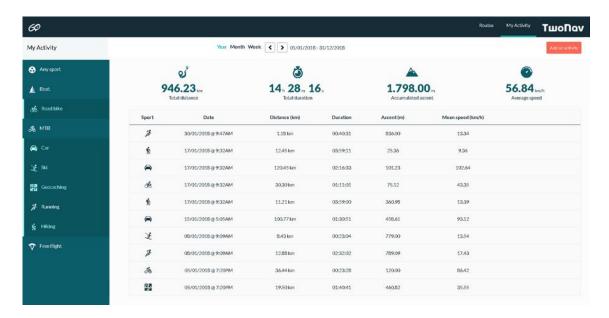
- 5. For some sensors you'll have to specify certain technical details. The pairing process between the device and the sensor will then begin.
- 6. Once detected, the sensor will be saved and connected automatically during an activity.
- 7. The data received from the sensor will be stored with the recorded track and displayed on the data pages.

NOTE: Do not use Vaseline or oils to moisten the conducting band, as they can insulate the transmitter. Do not bend or stretch the heart rate strap. Keep it away from heat and cold. When you finish your activity, clean it and dry it to avoid moisture build-up.

2.3.2 CONNECTING TO GO CLOUD







For being a user of one of our GPS, you have the right to have a personal storage area on GO. The GO Cloud is a virtual storage space where you can save your activities and keep them synced in all your devices:

Your device and the GO Cloud sync via Wi-Fi. When you finish an activity, as soon as the device can log into a Wi-Fi network, your new activity will be uploaded automatically to the GO Cloud without any actions required on your part.

Upload files from the device to Cloud GO

The simplest way to store your activities in the cloud is by activating the automatic synchronization:

- 1. Press 'Main Menu > Settings > Cloud GO'.
- 2. From this moment, every time you finish an activity and TwoNav has detected a Wi-Fi network, your device will automatically upload the latest activity to the GO cloud.

Check the synchronization status for each element on data lists:



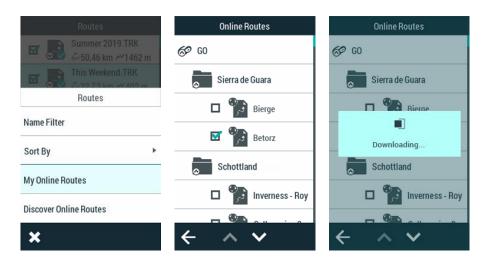


NOTE: Force an instant synchronization by pressing 'Main menu > Settings > Cloud GO > Synchronize now'. After that, your device will automatically synchronize with the GO cloud.

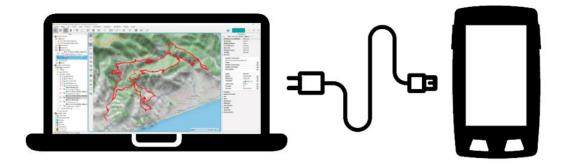
Download files from the Cloud GO to the device

If you want to access your activity record stored at GO and download any of them to the device, follow these steps:

- 1. Press 'Main menu > Routes > More options > My on-line routes'.
- 2. Download routes individually or entire folders.



2.3.3 CONNECTING TO A COMPUTER



Connecting your device to a computer will let you do several things:

• **Charge the device:** If you don't have chargers, connect your device directly to a computer to charge the battery on the device.



- **Transfer files:** Transfer maps, waypoints, routes and tracks between the device and your computer.
- **Sync your activities with the GO Cloud:** If the option to automatically sync your device with the GO Cloud isn't activated, you'll be able to upload your latest activities to the GO Cloud from your computer.

Storage units

When a GPS device is connected to a computer, it becomes a storage unit and will be displayed as follows:

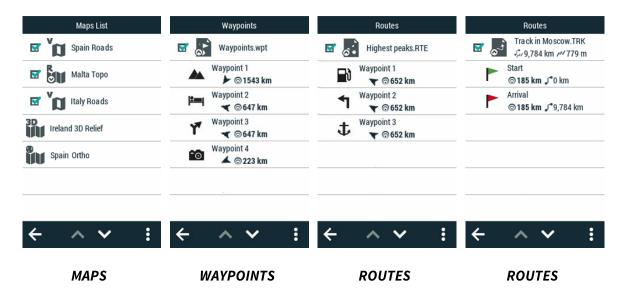
• Smartphone disk: Inner memory of the device.



• **Removable disk:** MicroSD card for extra storage.



Storage folders



Once this is done, you'll be able to manage all the files on the device (as well as files for internal use) from your computer. Remember that you can transfer maps/routes/waypoints to any folder on the device, but only the files stored in the default folders will be shown in these lists. These are the default locations where maps/routes/waypoints are stored:



Default folder for maps:

Android (App TwoNav Free):
 'Android/Data/com.compegps.twonav/files/TwoNavData/Maps'

• Android (App TwoNav Premium):

'Android/Data/com.compegps.twonavfull/files/TwoNavData/Maps'

• iOS (App TwoNav Free): 'TwoNavData/Maps'

• iOS (App TwoNav Premium): 'TwoNavData/Maps'

• Default folder for your recorded activities:

• Android (App TwoNav Free):

'Android/Data/com.compegps.twonav/files/TwoNavData/Data/Tracklog'

Android (App TwoNav Premium):
 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data/Tracklog'

- iOS (App TwoNav Free): 'TwoNavData/Data/Tracklog'
- iOS (App TwoNav Premium): 'TwoNavData/Data/Tracklog'

• Default folder for waypoints:

- Android (App TwoNav Free):
 'Android/Data/com.compegps.twonav/files/TwoNavData/Data'
- Android (App TwoNav Premium):

 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data'
- iOS (App TwoNav Free): 'TwoNavData/Data'
- iOS (App TwoNav Premium): 'TwoNavData/Data'

• Default folder for routes:

• Android (App TwoNav Free):

'Android/Data/com.compegps.twonav/files/TwoNavData/Data'

Android (App TwoNav Premium):
 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data'

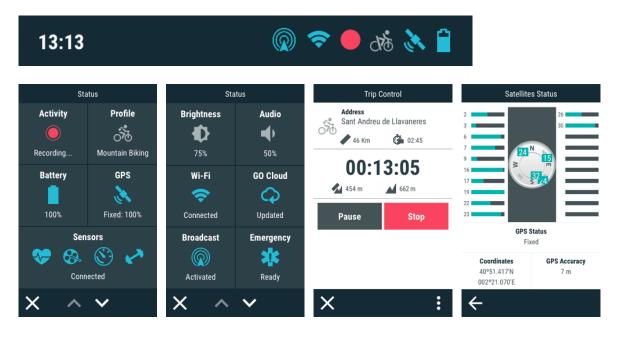
- iOS (App TwoNav Free): 'TwoNavData/Data'
- iOS (App TwoNav Premium): 'TwoNavData/Data'



The simplest way to manage files on your device from a computer is by using the Land software (Windows/Mac platforms). You can download and try Land completely free from: http://www.TwoNav.com

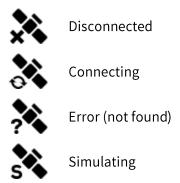


2.4 STATUS



From status bar you can check the status of general functions of the application.

- **Activity:** This is the command allowing you to manage the recording of your itinerary.
- **Profile:** The settings of the device will be automatically configured to fit the activity that you are about to perform.
- **Sensors:** If your device is compatible with ANT+[™] or BLE technology, then you will be able to use sensors such as: Heart rate monitors, cadence sensors, speed sensors...
- **GPS:** See position status and go to GPS settings page (number of satellites available, coverage of each satellite...). By default, when the device is turned on, it will try to connect to available satellites so that you can start working with GPS function. If GPS is disconnected, the device will not receive any position signal and many application functions will stop working. Possible states for GPS function:







Connected (without position)



Connected (with position)

NOTE: The device will attempt to fix your current position, but if you are somewhere without GPS coverage (for example: inside a building), GPS status will turn into 'Connected (without position)'.

- **GO cloud:** Activate automatic syncing between your device and the GO Cloud. If you turn this feature on, all your activities, routes and tracks will be automatically uploaded to the GO Cloud without having to do it manually.
- **Amigos:** Location-aware feature developed by TwoNav allowing you to view the current location of your contacts on the map in real time (and viceversa).

3 INTERFACE

3.1 MAP PAGE

3.1.1 NO NAVIGATION MODE



By default, the map window shows the 'No navigation' mode, which provides an overview of your outing. In it, you can start an activity, see the route on the map, find out the status of the TwoNav application and access the main menu. The 'No navigation' mode contains several areas:

- Status bar
- 'Recenter' button



- Scale
- Navigation bar

Additional functions



Press anywhere on the map to show more features:

- Toolbar
- Full screen
- 'Zoom+' and 'Zoom-' buttons

Press anywhere on the map again to hide these elements.

3.1.1.1 STATUS BAR



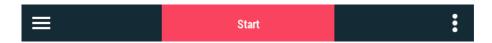
Status bar is placed at the top of the application and it shows the current state of some of the most elementary functions featured in the device:

- Hour: Current time.
- **Sensors:** Sensors connected.
- **Broadcast:** If activated, your activity is being broadcast live to all your contacts.
- **Wi-Fi:** If activated, the device has detected a Wi-Fi network it can connect to.
- **Activity control:** This is the command allowing you to manage the recording of your itinerary. Possible states: recording, paused or stopped.
- **Profile:** Device settings will be automatically configured to fit the activity that you are about to perform.



- **GPS coverage:** Number of satellites available.
- Battery: Current battery level of the device.

3.1.1.2 NAVIGATION BAR



The navigation bar is at the bottom of the application and provides access to:

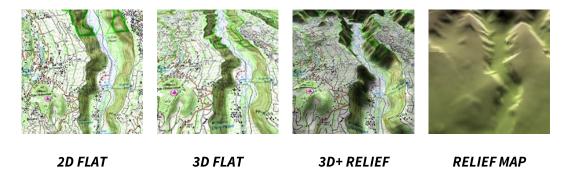
- **Main menu:** From the main menu, you'll be able to manage most system functions, as well as your activities, routes and maps. Press on the menu items to activate them or to access their sub-menus.
- **Start activity:** Press 'Start' to select the type of activity you want to do (navigate a track, follow a route with waypoints, go to a specific location...).
- **Contextual menu:** Contextual menus provide additional features that complement your user experience. These options are not initially displayed on the screen. Instead, you have to open the contextual menu to access them.

3.1.1.3 **TOOL BAR**



The toolbar is located at the top of the application and provides fast access to certain functions:

- **Orient map (north up/track up):** The map may be fixed on the north or rotate according to your movements.
- 2D/3D/3D+: Switch between different map perspectives: '2D > 3D > 3D+'.





• **Mark and edit waypoint:** Create a waypoint at current position and access to its properties to modify them.

IMPORTANT: You can also include and remove the functions of the tool bar according to your needs from 'Main menu > Settings > Activity profiles > Map view > Tool bar'.

3.1.1.4 FULL SCREEN



Press the 'Full screen' button to have more space to view the map. 'Full screen' gives you access to a wider space where you can explore a map and get more details on the terrain, such as finding out what locations are closest to your current position.

Press the 'Full screen' button again to return to the previous mode.

3.1.2 NAVIGATION MODE



Once the destination is selected, navigation will begin and with it, the map window will change to 'Navigation' mode. In addition to seeing the route on the map, this mode lets you



monitor your activity with real-time data, as well as pause, stop or choose another destination at any time. 'Navigation' mode has several areas:

- 'Recenter' button
- Scale
- Navigation bar

Additional functions



Press anywhere on the map to show more features:

- Status bar
- Toolbar
- 'Zoom+' and ' Zoom-' buttons
- Full screen
- Navigation bar

Press anywhere on the map again to hide these elements.

3.1.2.1 DATA BAR

Spd (km/h)	Alt (m)	DiD (km)
40	67	13

Data bar is placed at the bottom of the application, during your trips it shows relevant information of your performance. When navigating a route, it shows a few relevant data fields.



IMPORTANT: Fields contained in the data bar can be selected from 'Main menu > Settings > Activity profiles > Data pages'. You can also change a concrete data field by opening the contextual menu on it.

3.1.2.2 NAVIGATION BAR



Once an activity has started, the navigation bar at the bottom of the application will change its format and give you access to 'Activity control'. In this section, you can review the most basic information of your itinerary in real time, pause or stop your activity as well as choose another destination.

3.1.2.3 ADDITIONAL ELEMENTS

Depending on the activity type, the map window may include the following elements.

• **Info current:** Information related to present position.



• **Next event:** Information related to the next position (direction and distance). Direction arrow shows direction of the following section of the track. This parameter is the distance to calculate tangent to give direction. Take the direction of this arrow as a reference to keep going your way.



• **Info next:** Information related to next events (not shown if no destination is selected).

Turn RIGHT at the beach, follow the sand track that runs parallel to the hotel until the end of the beach.

3.1.3 PIN MODE





Do a long press on any part of the map to access the 'Pin' mode. The selected position will be marked on the map, a window displaying information related to that point will appear at the upper side of the application:

- Name of the location/Coordinates
- Bearing to that point
- Distance to that point
- Altitude of the selected point

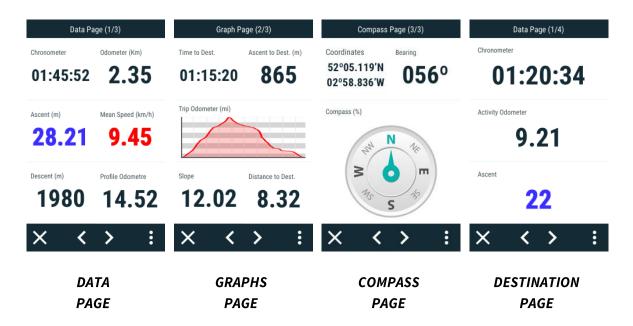
Press elsewhere on the map and the information featured in the upper window will be adapted to the new position. Press 'Close' to close 'Pin' mode.

3.2 DATA PAGES

Spd (km/h)	Alt (m)	DiD (km)
40	67	13

As you travel, the device will record all kinds of information in real time (speed, pace, altitude, distance, gradient....). These values are called data fields and are grouped into data pages. Open the data pages by clicking on the data bar. The pages that are available during your activity will depend on the previously selected activity. These pages offer a space in addition to the data bar that lets you review a greater number of data fields. Data pages usually contain 1/8 fields that are very useful for analysing your performance in real time.

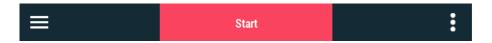




Since the relevant data differ depending on the sport (hiking, running, road bike, mountain bike), the device lets you change the data fields and replace them with others that are better suited to your needs. Customise the device by displaying only the fields that you really need, or create completely new data pages: 'Main menu > Settings > Activity profiles > Data pages'. If you want, you can also change a specific data field by opening its context menu and pressing 'Change this field'.

IMPORTANT: For useful tips on using each data field, see the Appendix.

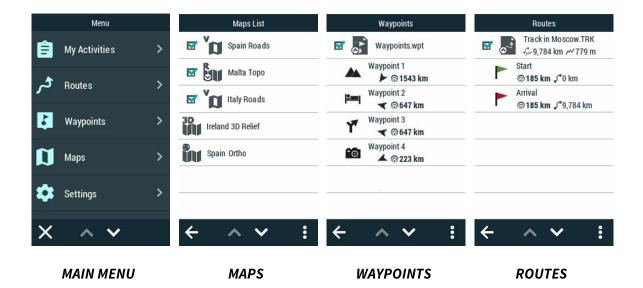
3.3 MAIN MENU



From the main menu, you can manage most of the system's functions by accessing the different sections. Press on menu elements in order to activate them or access their submenus.

Data lists





At 'Main menu', you will be able to manage the available files on your device. Files to be taken into consideration on these lists are the files saved at:

• Default folder for maps:

- Android (App TwoNav Free):
 'Android/Data/com.compegps.twonav/files/TwoNavData/Maps'
- Android (App TwoNav Premium):
 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Maps'
- iOS (App TwoNav Free): 'TwoNavData/Maps'
- iOS (App TwoNav Premium): 'TwoNavData/Maps'

Default folder for your recorded activities:

- Android (App TwoNav Free):
 'Android/Data/com.compegps.twonav/files/TwoNavData/Data/Tracklog'
- Android (App TwoNav Premium):
 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data/Tracklog'
- iOS (App TwoNav Free): 'TwoNavData/Data/Tracklog'
- iOS (App TwoNav Premium): 'TwoNavData/Data/Tracklog'

Default folder for waypoints:

- Android (App TwoNav Free):
 'Android/Data/com.compegps.twonav/files/TwoNavData/Data'
- Android (App TwoNav Premium):

 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data'
- iOS (App TwoNav Free): 'TwoNavData/Data'
- iOS (App TwoNav Premium): 'TwoNavData/Data'



- Default folder for routes:
 - Android (App TwoNav Free):

 'Android/Data/com.compegps.twonav/files/TwoNavData/Data'
 - Android (App TwoNav Premium):

 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data'
 - iOS (App TwoNav Free): 'TwoNavData/Data'
 - iOS (App TwoNav Premium): 'TwoNavData/Data'

Although the management of elements is centralized at main menu, is also possible to carry out many other actions directly from the map page or using the contextual menu.

Management of elements

- 1. **General view:** Opened elements are placed at the top of the list with a ticked square.
- 2. **Open element:** Press the name of the element.

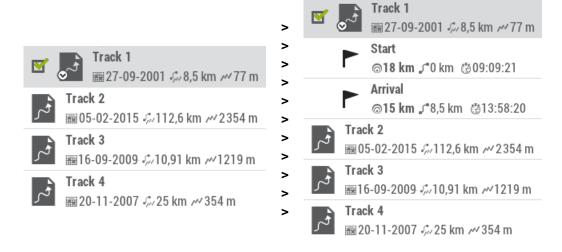


3. **Check the properties:** Press the name of the opened element. At properties window, you can check all the information related to the element and carry out several actions (available information will depend on selected element).

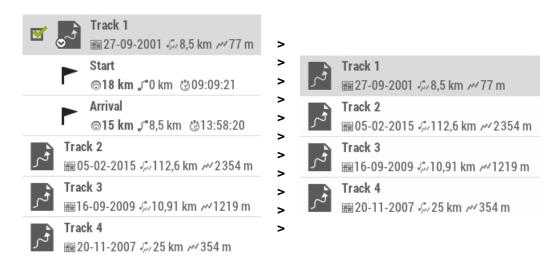


4. **Display subelements:** Some elements might have subelements (for example: waypoints or e-Roadbook points), in order to display them press the icon of the opened element. In order to hide them, press again the icon of the element.

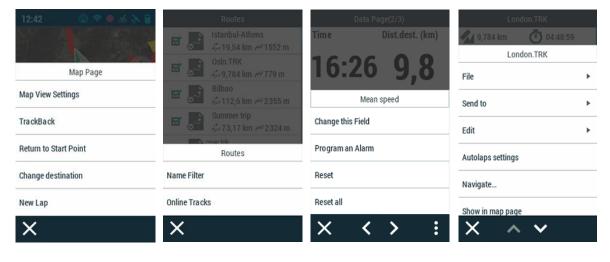




5. **Close element:** Press the ticked square of the element.



3.4 CONTEXTUAL MENU



Contextual menus provide additional features that complement your user experience. This software has many features, to keep from showing them all on the screen, which would slow



the application down, more specific options are grouped into contextual menus. These options are not initially displayed on the screen. Instead, you have to open the contextual menu to access them. Practically every window in the application has contextual menus. The features available will vary depending on the item whose contextual menu is opened. There are two ways to open contextual menus.

• **From the navigation bar:** Press the right side of the navigation bar. This will open the contextual menu, with more features for the page you're on.



• **Long press:** Long press an item, generally lists of tracks, routes, waypoints, maps or data fields, for approximately 3 seconds



4 OPERATIONS

4.1 ORIENTATION & NAVIGATION

4.1.1 PROFILE

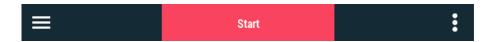


Before you start navigating, select the profile that you are about to use from a list of proposed activities ('Main menu > Settings > Activity profiles > Profile'). The selection of profile is very important because the configuration of the device and calculations will be adapted to the selected profile. Due the fact that each activity has its own specials needs, each profile has been developed to have specific settings (restrictions on route calculation, map prespective, alarm settings, data fields shown in data pages, cruise speed...).



By default, TwoNav offers several preset profiles, though you can also adjust the settings of one of the existing profiles to suit your needs. If none of the existing profiles is suited to your activity, you can create a new one and define all of its settings.

4.1.2 DESTINATION



To start your activity, press 'Start' on the navigation bar and select your destination.

• Free: Set your own movements with no restrictions.

1 h 15 m

30 mi

• **Follow a route:** Select a track or route that's been transferred to your device from other sources (recommended by a friend or downloaded from the internet).







• **Follow an activity:** Select a previous activity that was recorded directly with your device.









• **Trackattack:** Your GPS can use a previous activity as a reference to compare your current performance. Choose an activity and start the navigation. A simulation of that track will be played at its original speed, so you can compete against it ('Virtual Coach'). Trackattack is based on two pointers: your current position and an additional pointer, the 'Virtual Coach'. Try to improve your results by comparing your current and past performances on map or in graphs in real time.





Go to a place:

• **Waypoint:** Select a waypoint among the waypoints loaded or created by you.



• **By map:** Select directly on the map the exact location where you want to navigate to.



• Address (only available when road maps are loaded): Enter any address where you want to navigate to.

10 Downing Street, London, United Kingdom

• **POI** (only available when road maps are loaded): Internet offers you an enormous database of points of interest (gas stations, hospitals, cash dispensers...) that can be downloaded and easily upload to the device. Select the exact POI where you want to navigate to.















• **Coordinates:** Type the exact coordinates for your destination.

LAT: 51° 30' 12" N

LON: 00° 07' 40" W

• **Bearing:** The destination point will be determined by setting the bearing and the distance that you are about to navigate.

30 mi → **1**45°

• **Training by distance:** Set the duration of your training by distance and once your goal has been reached, the device will show a warning message.

30 mi

• **Training by time:** Set the duration of your training by time and once your goal has been reached, the device will show a warning message.

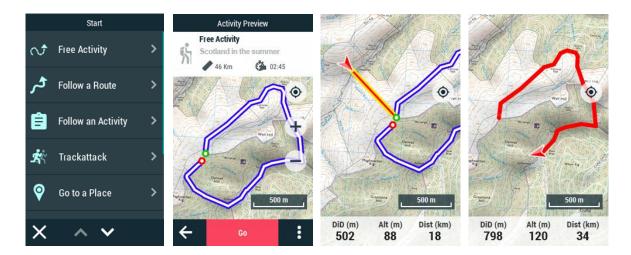
1 h 15 m

• Latest destination: List of destinations recently selected.



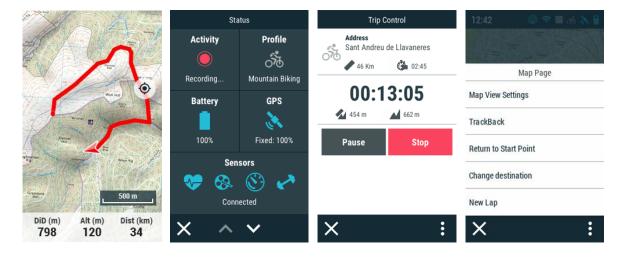
4.1.3 ACTIVITY PREVIEW





Before you start navigating, the device will display 'Activity preview'. This is basically a middle step where you will be able to check basic information of your itinerary (destination, total distance, total time...).

4.1.4 ACTIVITY CONTROL



At this point, you can start the navigation. Once started, you can review 'Activity control' at any moment ('Press on the map > Navigation bar > Activity control'). This page brings you some of the most elementary information of your itinerary (current status of your trip).



Pause or stop the activity

Once started, you can pause it at any time:

• **Pause:** Press this button to pause your trip at any time (the data fields, the recorded track and other features are synced. When you press the 'Activity control' command, this will pause all commands until the recording is resumed).



• **Stop:** Press this button to finish the current trip and stop the recording. But you can directly review your recorded tracks from the list of tracks (*'Main menu > My activities'*).

Select another destination

Over the course of your activity, you can change the destination at any time, or if you want to end the activity, you can easily return to the start point:

- **Change destination:** To stop your current activity, select another destination from those available. The GPS will calculate the route for you to take to the new destination.
- **Start point:** Go to the starting point of the recorded track directly from your present position (straight line to the starting point).



• **Trackback:** The currently recorded track up to this moment is inverted, so you can navigate it in reverse. By pressing '*Trackback*' the recorded track is inaltered and the device keeps recording it.



4.1.5 ACTIVITY REVIEW





This function is basically a summary of your trip. 'Activity review' is very useful to analyse all kind of data recorded during your itinerary. Among several categories of data, this page contains information such as distances, altitudes, elapsed times, speeds, track points, energy data... 'Activity review' also offers you the possibility to compare parts of your trip thanks to graphic representations and lap analysis (sections of the same track divided by time, distance...).

4.2 MAPS



Raster

Maps digitally calibrated based on bitmap images (if map is scaled, there will be loss of clarity, the quality of the map will degrade).









Topographic: Maps containing information related to the relief of the terrain (elevation contour lines, pathways, national parks...).

Orthophoto: Maps containing aerial photographs with information related to all elements included in the landscape (fields, lakes, roads, buildings, national parks...).

Cadastre: Maps containing information related to limits of all terrain parcels (fields, roads, buildings...).

Marine chart: Maps containing nautical information related to the sea (depth data, ports, marine services, tides, currents, marine wrecks...).



Vectorial

Maps digitally calibrated based on vectors (if map is scaled, there will be no loss of clarity, the quality of the map will not degrade).





Urban: Maps containing information related to roads and streets (names of the streets, street directions, points of interest...).

Topographic: Maps containing information related to the relief of the terrain (elevation contour lines, pathways, national parks...).





3D reliefs

Maps digitally calibrated based on elevation reliefs containing information related to the altitude of the ground. With a relief map loaded you may display your maps in 3D+ mode.





By default, the device opens the best map based on your current position automatically. If you prefer to manage your maps manually, disable the 'Auto-open maps' function from 'Main menu > Settings > Activity profiles > Map view > Automaps'.

You can load more than one map at the same time, but if you have two maps for the same area displayed on the interface, one of them can be displayed at the top by superposition, select the map you wish to be placed at the top/bottom.





See your list of available maps from 'Main menu > Maps'. The device will store maps in the default folder:

- Android (App TwoNav Free):

 'Android/Data/com.compegps.twonav/files/TwoNavData/Maps'
- Android (App TwoNav Premium):
 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Maps'
- iOS (App TwoNav Free): 'TwoNavData/Maps'
- iOS (App TwoNav Premium): 'TwoNavData/Maps'

Your device can open the following map formats:















IMPORTANT: Some maps are protected against illegitimate copies. In such situations you must enter a registration code to use the map.



4.2.1 DOWNLOAD FREE MAPS

TwoNav offers you the capacity to download all kinds of free maps located on external Internet servers. This is access to different on-line vendors that will allow you to download maps for whatever area you want. Follow these steps to open and work with on-line maps:

1. In the map window, center the map in the area where you want to get a list of available elements.





2. Click on 'Main menu > Maps > More options > On-line maps' and select any of the suppliers, depending on what you want to download.



- 3. TwoNav will start looking for available maps near that position.
- 4. If an element near your position is found, a list will open with maps available for the selected area.

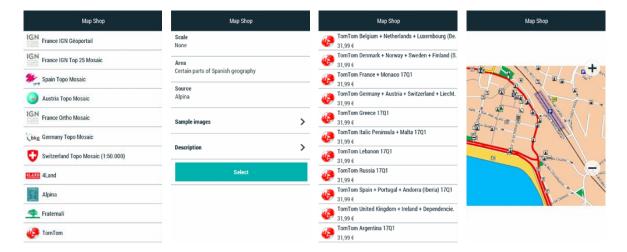




5. Select the map you want, download it by double-clicking on it.

4.2.2 DOWNLOAD PAY MAPS

TwoNav features an on-line shop were you can buy any map from the large portfolio of TwoNav' products ('Main Menu > Map shop'). The on-line shop offers you a wide range of map possibilities in multiple formats: topographic maps of the most prestigious cartographic institutes of the world, navigable road maps from all around the world, to avoid getting lost in any city, satellite images in high resolution...



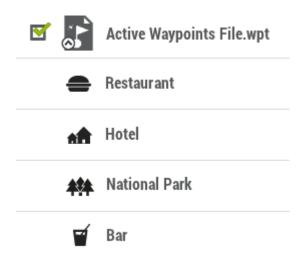
4.3 WAYPOINTS



The waypoint is a point defined by a geographical position, latitude and longitude coordinates and in most cases altitude, used by the GPS navigation tools. Waypoints are represented on screen as points with name or representative icon.



The waypoints are kept inside Waypoints Files (usually in *.WPT format), so a Waypoints File may contain one or more waypoints. You can have several waypoints files opened, but created waypoints will be always saved inside an Active Waypoints File (AWF).



By default, the Active Waypoints File is called 'Waypoints.WPT', but you can set as Active Waypoints File any other file (marked with an asterisk): select 'Set as active waypoint' option. When a new waypoints file is created, it will be automatically set as active.

See your list of available waypoints from 'Main menu > Waypoints'. The device will store waypoint files in the default folder:

- Android (App TwoNav Free):
 'Android/Data/com.compegps.twonav/files/TwoNavData/Data'
- Android (App TwoNav Premium):
 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data'
- iOS (App TwoNav Free): 'TwoNavData/Data'
- iOS (App TwoNav Premium): 'TwoNavData/Data'

Your device can open the following waypoint formats:















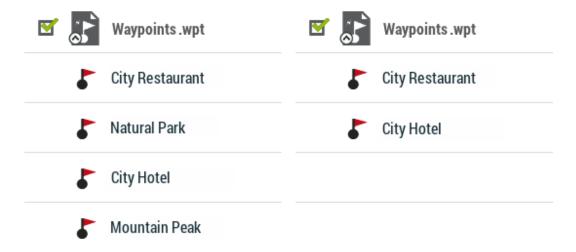
IMPORTANT: More waypoint formats can be easily imported and converted to supported formats using Land software (Windows/Mac), more information at http://www.TwoNav.com



4.3.1 OPERATIONS ON WAYPOINTS

Advanced operations that can be perforned on waypoints:

• Name filter: Filter your waypoints by entering a combination of characters.



- 1. Access 'Main menu > Waypoints > More options > Name filter'.
- 2. Then, enter a combination of characters. Only items containing such letter combination will be displayed.
- **Sort by:** Sort your waypoints using a reference.

Name Date

Proximity Altitude

- 1. Access 'Main menu > Waypoints > More options > Sort by'.
- 2. Then, choose the parameter based on which your waypoints will be sorted. All elements will be rearranged from highest to lowest according to that reference.
- **Modifiy for all waypoints:** If any of these properties is modified, it will be applied for all waypoints at the same time.





- 1. Access 'Main menu > Waypoints > Select a waypoints file > Modify all waypoints'.
- 2. Choose which properties you want to modify. These will apply to all waypoints contained in that waypoints file.
- **Delete the list of waypoints in a waypoints file:** By pressing 'Reset' at any Active Waypoints File (AWF), you will delete all the waypoints of that specific active file.



- 1. Access 'Main menu > Waypoints'.
- 2. Open the contextual menu of the waypoints file and select 'File > Reset'.

4.4 ROUTES



Your device classifies courses into two types, depending on their use:

• **My activities:** Tracks recorded directly with your device. Displayed with an activity is the icon for the sport you had set on the device during the outing (hiking, mountain



bike, road bike, trail running...). Check the list of activities available from 'Main menu > My activities'. The device will record your activities in the default folder:

- Android (App TwoNav Free):

 'Android/Data/com.compegps.twonav/files/TwoNavData/Data/Tracklog'
- Android (App TwoNav Premium): 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data/Tracklog'
- iOS (App TwoNav Free): 'TwoNavData/Data/Tracklog'
- iOS (App TwoNav Premium): 'TwoNavData/Data/Tracklog'
- **Routes:** Tracks that have been been transferred to your device from other sources (recommended by a friend or downloaded from the internet). Check the list of routes available from 'Main menu > Routes'. The device will store routes in the default folder:
 - Android (App TwoNav Free):

 'Android/Data/com.compeqps.twonav/files/TwoNavData/Data'
 - Android (App TwoNav Premium): 'Android/Data/com.compegps.twonavfull/files/TwoNavData/Data'
 - iOS (App TwoNav Free): 'TwoNavData/Data'
 - iOS (App TwoNav Premium): 'TwoNavData/Data'

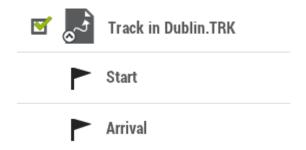
Types of routes

There are different types of routes according to the activity being performed and the path to destination:

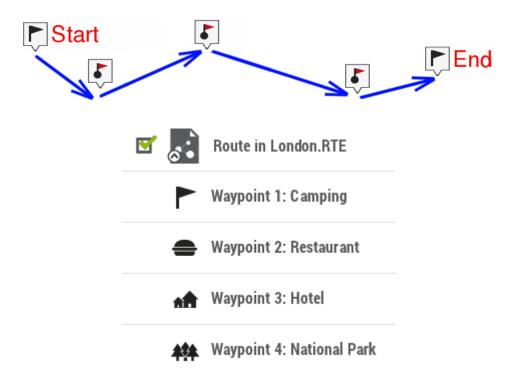
• **Defined path routes:** Routes highly detailed from start to end where the path to follow is drawn step by step. This type of route is commonly used in activities where you must follow an outlined itinerary without deviating (itineraries in the mountain, bicycle routes...). Generally, waypoints in the route are generated by a time interval.







• Free path routes: Routes with no defined path based on reaching waypoints no matter which path is followed to reach these points. This type of route is commonly used in activities where is not possible to reach an objective directly (maritime navigation, aerial activities...). In these activities, the main objective is to reach the next point, being the user who decides what path to follow according to the circumstances, usually the shortest path.

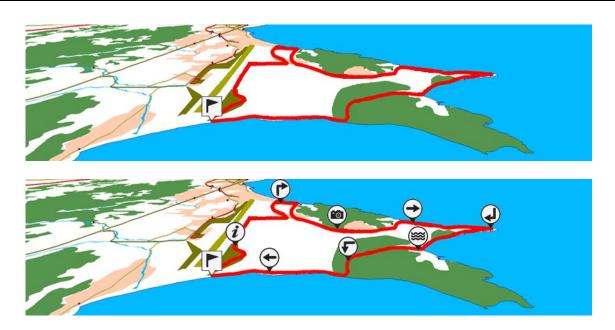


Your device can open the following route formats:

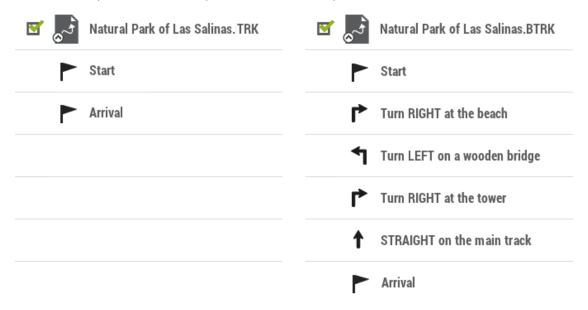


Enriched routes (e-Roadbooks)





A roadbook is a diagram tool commonly used by rally co-drivers and walkers that help them to navigate uncertain terrains. Traditional roadbooks contain several pages of information such as charts, GPS coordinates, written instructions, manoeuvres...



e-Roadbooks, contain all this information in digital format with no need to read indications in a book, your device will display all manoeuvres on the screen. Convert your excursions into a big challenges, or even turn them into a funny game in harmony with nature...



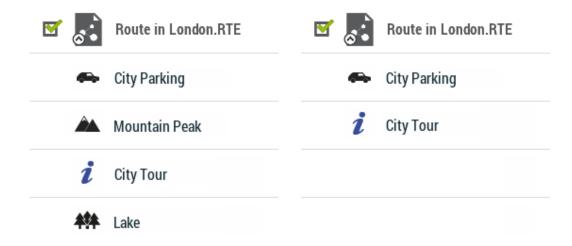
IMPORTANT: More route formats can be easily imported and converted to supported formats using Land software (Windows/Mac), more information at http://www.TwoNav.com



4.4.1 BASIC OPERATIONS ON ROUTES

Basic operations that can be perforned on routes:

Name filter: Filter your routes by entering a combination of characters.



- 1. Access 'Main menu > My Activities or Routes > More options > Name filter'.
- 2. Then, enter a combination of characters. Only items containing such letter combination will be displayed.
- **Sort by:** Sort your routes using a reference.

Name
Activity
Date
Duration

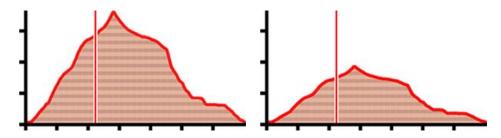
Distance
Proximity
Ascension
Speed

- 1. Access 'Main menu > My Activities or Routes > More options > Sort by'.
- 2. Then, choose the parameter based on which your routes will be sorted. All elements will be rearranged from highest to lowest according to that reference.
- Change the order of the waypoints in a route:





- 1. Access 'Main menu > My Activities or Routes'.
- 2. Open the contextual menu on the waypoint that you want to move and select 'Move up' or 'Move down'
- **Graph representation of routes:** Display a graph representation of your route, just enter the properties of the element and press the button 'Graph representation'. These are the available functions on graphs:



- Guiding Y axis: Bar serving as moving axis.
- Changing data fields on the Y-axis: Click on the Y-axis to change its default data field and select a new field for this axis (altitude, speed, heart rate, cadence...).
- **Moving graph**: Use 'Zoom' buttons to sections of the graph with more detailed precision (graph scrolling can also be applied by dragging the graph up and down as well as laterally).
- **Automatic re-center**: Press 'Re-center' button to automatically re-center the graph.

4.4.2 ADVANCED OPERATIONS ON ROUTES

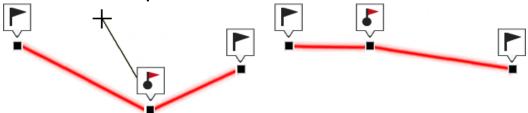
Advanced operations that can be perforned on routes:



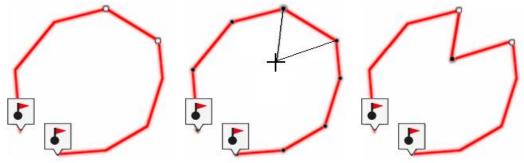
• **Modify for all waypoints in a route:** If any of these properties is modified, it will be applied for all waypoints at the same time.



- 1. Access 'Main menu > My Activities or Routes > Select a route > Modify all waypoints'.
- 2. Choose which properties you want to modify. These will apply to all waypoints contained in that route.
- Move the location of a point on a route:



- 1. In the map window, open the 'Pin' mode by long pressing the track you want to edit.
- 2. Press 'More options > Edit track'.
- 3. Locate the track point you want to move.
- 4. Drag and drop the track point from your current position to the exact point where you want to place it.
- 5. When you have finished the edition, click 'Close edition'.
- Insert intermediate track points to a route:



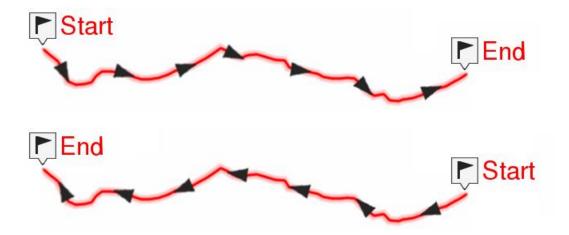
1. In the map window, open the 'Pin' mode by long pressing the track you want to edit.



- 2. Press 'More options > Edit track'.
- 3. Select the track point after which you want to add a brand new point.
- 4. Tap the exact location where you want to create the new track point.
- 5. When you have finished the edition, click 'Close edition'.
- Delete a track point from a route:



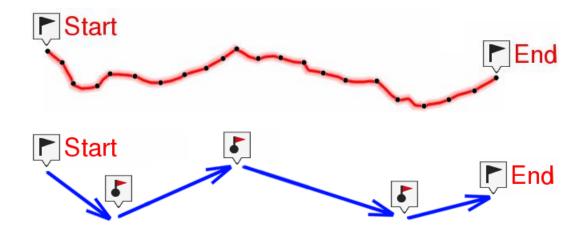
- 1. In the map window, open the 'Pin' mode by long pressing the track you want to edit.
- 2. Press 'More options > Edit track'.
- 3. Select the point you want to delete and press 'More options > Delete point'.
- 4. The two adjacent track points will meet in a straight line (this straight line will not contain any track points).
- 5. When you have finished the edition, click 'Close edition'.
- **Invert route:** Display a route in the opposite sense to the default one (the begining at the end and vicecersa).



- 1. In the map window, open the 'Pin' mode by long pressing the track you want to edit.
- 2. Press 'More options > Ttrack > Tools > Reverse the route'.

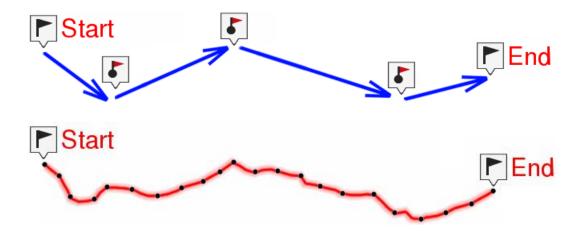


• Convert TRK to RTE:



- 1. In the map window, open the 'Pin' mode by long pressing the track you want to edit.
- 2. Press 'More options > Ttrack > Tools > Convert TRK to RTE'.

• Convert RTE to TRK:



- 1. In the map window, open the 'Pin' mode by long pressing the track you want to edit.
- 2. Press 'More options > Ttrack > Tools > Convert RTE to TRK'.

4.4.3 EXPERT OPERATIONS ON ROUTES

4.4.3.1 DOWNLOAD FREE ROUTES FROM INTERNET











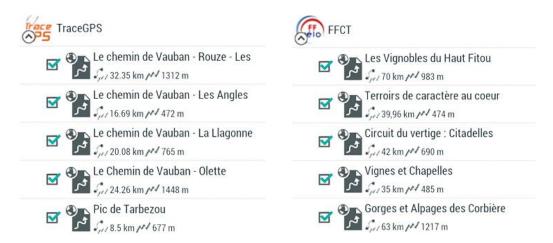
TwoNav offers you the capacity to download all kinds of free routes located on external Internet servers. This is access to different on-line vendors that will allow you to download routes for whatever area you want. Follow these steps to open and work with on-line routes:

1. In the map window, center the map in the area where you want to get a list of available elements.





2. Click on 'Main menu > Routes > More options > Discover on-line routes' and select any of the suppliers, depending on what you want to download.



- 3. TwoNav will start looking for available routes near that position.
- 4. If an element near your position is found, a list will open with routes available for the selected area.
- 5. Select the route you want, download it by double-clicking on it.

4.4.3.2 DOWNLOAD ROUTES FROM PERSONAL STORAGE HOSTINGS









If you have an account to a virtual hosting service where you store activities, you can access it and download any of these routes on your device, and thus, navigate them. Follow these steps to connect with any of these accounts external to TwoNav:



1. Press 'Main menu > Routes > More options > My on-line routes' and select any of the providers depending on what you want to download.



- 2. Identify yourself with your credentials so that TwoNav can access your account on that server.
- 3. A list will appear with the available routes stored in the server.
- 4. Select the route of your choice and download it by double clicking on it.

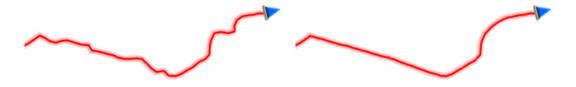
4.4.3.3 CORRECT TRACK POINTS

Expert operations that can be perforned on track points:

• **Delete stopped points start/end:** Route will omit the repetitive points from the beginning and the end where you stopped before and after making the route.

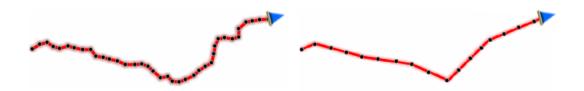


• **Delete aberrant points:** Points deviating excessively from the route will be considered errors, and so deleted.



• **Reduce the number of points:** Route will be drawn by keeping the shape of the original route but according to the number of points that you introduce.





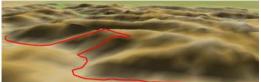
• Assign time/speed to route points: Determine a time for departure and a constant speed so that your device will calculate the estimated time of arrival for each point in the route.

09:30:15

50 mi/h

• **Import altitudes:** If you have a 3D relief map loaded (*.CDEM file), your device will assign to each point of the route its altitude considering the information of the loaded relief map.





4.4.3.4 ANALYSE LAPS

TwoNav allows you to subdivide a track into several portions called 'laps'. By doing this you can work more closely on each stretch, as well as analyse data and statistics with greater precision.



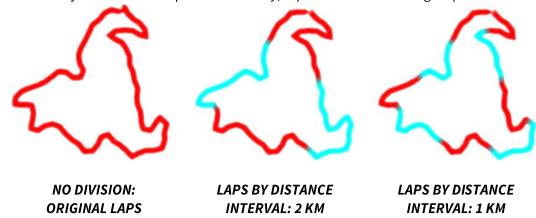
When practising outdoor activities, most of the users record a single track because it is very difficult to generate periodic reports about their performance. TwoNav offers you the possibility to generate these periodic reports once the activity is finished and thus being able to obtain a detailed analysis of the track by virtually dividing it into different laps (portions of the track) either by distance or time.

Laps are equal divisions of the track split based on a default interval set by you (every kilometer, every hour... or according to your needs). The division of the track in equal laps is very useful to analyse all kinds of information and achieve a better performance lap after lap (mainly designed for training purposes).

Define laps automatically



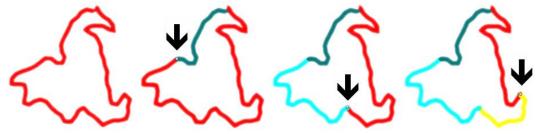
In order to divide your track into laps automatically, reproduce the following steps:



- 1. Access 'Main Menu > Routes > Select your route > More options > Autolaps settings'.
- 2. Select which parameter do you want to use to virtually divide the track into laps:
 - **Original laps:** No division will be shown (track will consist of one single lap).
 - Autolaps by distance: Track will be divided into laps of 1 kilometer (1000 meters).
 - **Autolaps by time:** Track will be divided into laps of 1 hour (3600 seconds).
- 3. If you want to increase the interval used to divide track into laps, change it at 'Main Menu > Routes > Select your route > More options > Autolaps settings'.
- 4. TwoNav will automatically calculate each lap according to your previous settings and laps will be highlighted on the track. Once you have reached the default value, a brand new lap will start lasting the same as the interval value.

Define laps manually

In order to divide your track into laps manually, reproduce the following steps:



1. At map window, open the contextual on the track point where you want to start a new lap and select 'More options > Track > Laps > Change of lap here'.

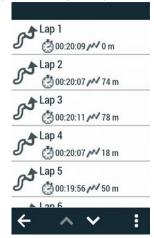


- 2. If you want to keep on dividing the track into more laps, reproduce the previous step once again.
- 3. The newly defined laps will be highlighted on the track.

Lap analysis

Take the chance to analyse in more detail the laps, Land will offer you several statistics and relevant information. Follow these steps to briefly analyse all the laps:







- 1. Access 'Main Menu > Routes > Select your route > Lap analysis'.
- 2. A new window will appear showing the results of the analysis (projected distance, accumulated climb, mean speed, pace, duration, slope...).

Follow these steps to analyse a specific lap in more precision:



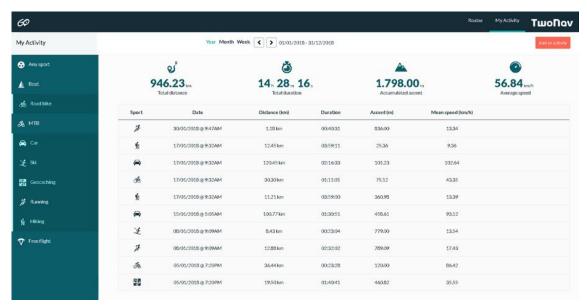
- 1. Access 'Main Menu > Routes > Select your route > Lap analysis > Select a lap'.
- 2. A new window will appear showing the results of the analysis (projected distance, accumulated climb, altitude...).



NOTE: You can store any of the laps that you just defined independently from the rest of the track. At map window, open the contextual on the track lap that you want to save and select 'More options > Track > Laps > Save lap as'.

4.5 GO CLOUD





For being a user of one of our GPS, you have the right to have a personal storage area on GO. The GO Cloud is a virtual storage space where you can save your activities and keep them synced in all your devices:

- GPS
- Smartphone
- Land
- Go.TwoNav.com

Activate auto sync on your device and every time a new route is recorded or created, it will be wirelessly and automatically uploaded to the cloud without having to connect the device to a computer. Use the GO Cloud as a virtual repository in which to store a history of all your files safely and reliably. In addition, you can also access all activities stored at GO cloud from your device and download any of them. Save time and effort by letting GO take care of keeping your devices updated and ready to use.





Plus, thanks to the GO website (http://Go.TwoNav.com), you can use the internet to access, from anywhere in the world, all the activities available in the cloud. Even far from home, you'll be able to check the path of an activity that you want to repeat, or analyse the most significant stats for any of your routes. And if you want, you'll also be able to download them or share them with friends wherever you may be.

4.5.1 SYNCING

4.5.1.1 SYNCING ON THE GPS



Your device and the GO Cloud sync via Wi-Fi. When you finish an activity, as soon as the device can log into a Wi-Fi network, your new activity will be uploaded automatically to the GO Cloud without any actions required on your part.

Upload files from the device to Cloud GO

The simplest way to store your activities in the cloud is by activating the automatic synchronization:

- 1. Press 'Main Menu > Settings > Cloud GO'.
- 2. From this moment, every time you finish an activity and TwoNav has detected a Wi-Fi network, your device will automatically upload the latest activity to the GO cloud.

Check the synchronization status for each element on data lists:



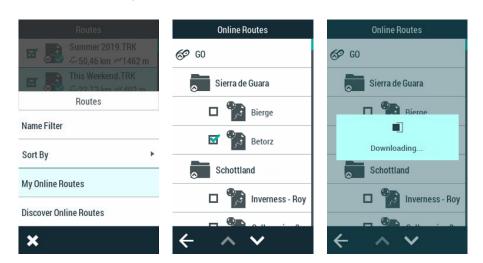


NOTE: Force an instant synchronization by pressing 'Main menu > Settings > Cloud GO > Synchronize now'. After that, your device will automatically synchronize with the GO cloud.

Download files from the Cloud GO to the device

If you want to access your activity record stored at GO and download any of them to the device, follow these steps:

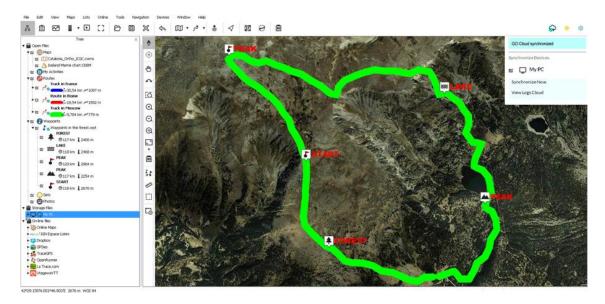
- 1. Press 'Main menu > Routes > More options > My on-line routes'.
- 2. Download routes individually or entire folders.



4.5.1.2 SYNCING IN LAND





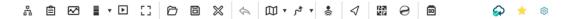




IMPORTANT: Remember that you can download the Land software (Windows/Mac platforms) for free from http://www.TwoNav.com

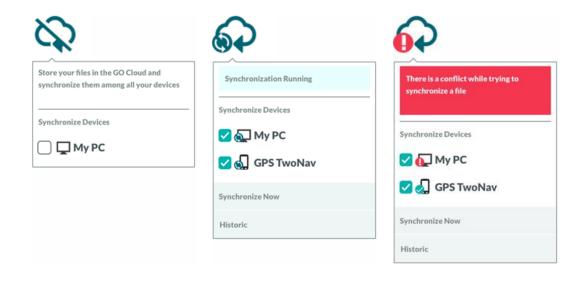
Land is the perfect software for preparing and analysing all your outdoor activities (Windows/Mac). If you've turned on auto sync on your GPS device, when you get home after an activity, Land will automatically download it from the cloud without having to connect the device using cables. You'll be able to start analysing it in less than a minute. And once you finish planning your next outings, Land will upload them automatically to the GO Cloud. Follow these steps to enable syncing between Land and the cloud:

- 1. When you first start Land, log in with your user account.
- 2. Turn on auto sync with the GO Cloud from 'Buttons bar > GO cloud'.



3. From then on, your new activities will be automatically uploaded to the GO Cloud. And if there are more activities on the cloud, they'll be downloaded to your computer.





IMPORTANT: If you delete a file, you can decide whether to delete it only from your computer, or from the GO Cloud and all other devices that are synced with the cloud as well.

You can see the sync status of each file in the list of items:



NOTE: You can force instant syncing if desired by going to 'Buttons bar > GO cloud > Synchronize Now'. Your device will then be automatically synced with the GO cloud.

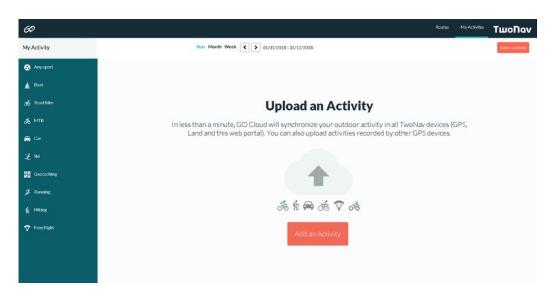
4.5.1.3 SYNCING ON THE WEB



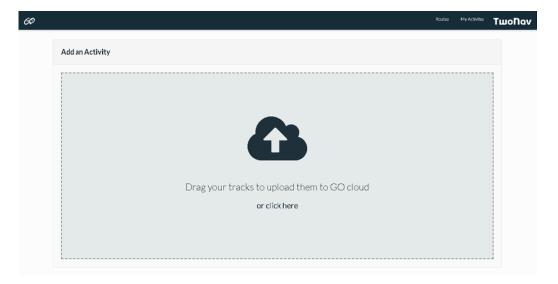


Although one of the above methods is recommended for syncing your files, you can also upload routes manually to the GO Cloud, that is, one by one. It's slower and more involved, but it can be useful if you're having connection problems. Follow these steps to upload your activities manually to the GO Cloud:

- 1. Connect your device to the computer via USB.
- 2. Access http://Go.TwoNav.com and log in using your user account.
- 3. Go to 'My activities' (if you want to upload a track you recorded yourself) or 'Routes' (to upload a route from another source, whether downloaded from the internet or shared by a friend).



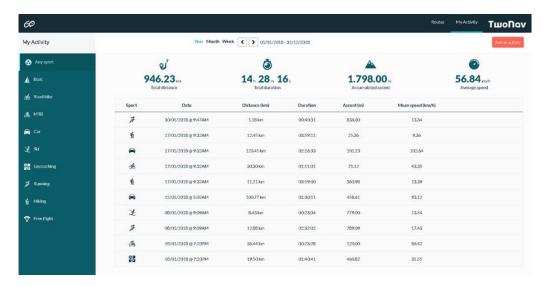
4. Then press 'Add an activity' or 'Add a route' and browse to the file in your computer that you want to upload to the GO Cloud.



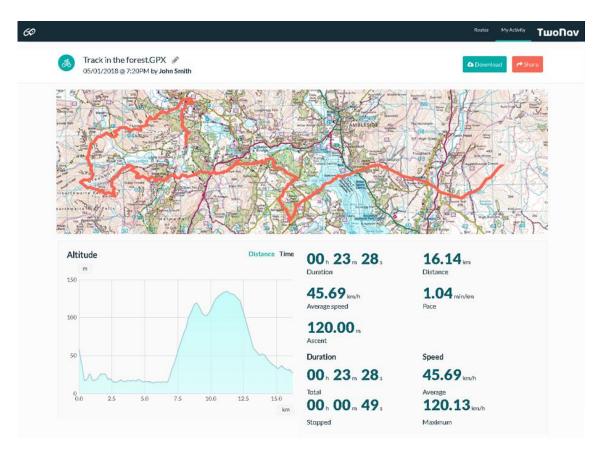
5. From then on, your new activities will be automatically uploaded to the GO Cloud and synced automatically on your other devices.



6. Once uploaded, your new activities will be safely stored on the GO Cloud and you'll be able to see a list of all the other activities you have available on the cloud.



4.5.2 DATA ANALYSIS

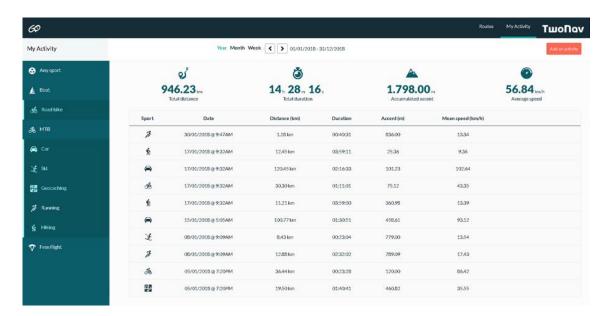


In addition to storing your uploaded activities and syncing them with other devices, with GO you'll be able to check all the activities available on the cloud. Now you won't have to wait



until you get home to analyse your last outing. Access http://Go.TwoNav.com and click on any route to:

- See any itinerary laid out on a map of the area.
- Analyse multiple data fields recorded on the track (time, total distance, average speed, pace, altitude, ascent...)
- Check altitude and speed graphs
- Add a description to each activity
- Sort activities by type of sport
- Use a time filter to manage activities (week, month and year)
- Open tracks directly in Land
- Download a file for the activity (*.TRK or *.GPX format)
- Share the activity by e-mail or on social media (Facebook and Twitter)



4.5.1 CONNECTION WITH THIRD PARTIES

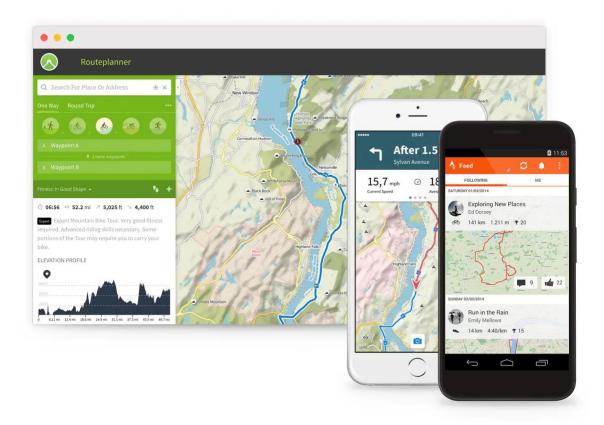


If you have a personal account in one of these services external to TwoNav, you can link them to the GO cloud (http://Go.TwoNav.com), thus, each time an activity is completed, it



will be automatically uploaded to both spaces: to the GO cloud and other services linked to it.

- Storage clouds: Dropbox™, Google Drive™...
- **Sports communities:** Strava[™], Komoot[™], TrainingPeaks[™]...
- **Social networks:** Twitter™...



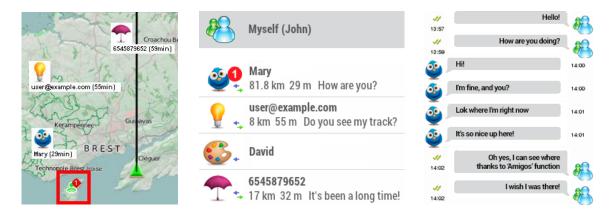
Once both accounts are linked, you don't have to worry, your activities will be available in both environments automatically. Follow these steps to link your activities between the GO cloud and any of these accounts:

- 1. Activate the synchronization between your device and the GO cloud (see previous chapters in this manual).
- 2. Access http://Go.TwoNav.com and press 'Settings > Connected services'.
- 3. Choose which external service you want to link and click 'Connect'.
- 4. You will then be redirected to the website of that service. You will need to identify yourself. Follow the steps indicated in the website (process external to TwoNav).
- 5. From the moment that both accounts are linked, your new activities will be automatically uploaded to both services.



NOTE: You can unlink the synchronization between the GO cloud and any of these services from http://Go.TwoNav.com, you just have to press 'Settings > Connected services > Disconnect'.

4.6 AMIGOS



'Amigos' ('Main Menu > Amigos') is a location-aware feature developed by TwoNav allowing you to view the current location of your contacts on the map in real time (and viceversa). With 'Amigos' you can interact with friends while using TwoNav application:

- Add contacts to your list of friends: Add your friends to your list of contacts using either their e-mail address or mobile phone number.
- Chat with your contacts
- **See your contacts on the map:** See the tracks that your friends are currently navigating. Press the title of the track and you will be able to check out the 'Trip review' of the track right up to this moment.
- **Navigate where your friends are:** Find the friend that you want to reach, open its contextual and press '*Navigate*' button.
- Interval of data refreshing automatically: Movements on map will be more constant as interval refresh is lower.
- **Customize your own profile:** Set your nickname, a short description about yourself, a photo... All this information will be displayed at the list of contacts of users.

In order to disconnect 'Amigos' open the contextual menu on your profile name and press 'Unregister':

- *Unlink this device:* Log out the session on your current device.
- **Delete user account:** Completely eliminate your 'Amigos' account.



5 SETTINGS

5.1 ACTIVITY PROFILES

5.1.1 PROFILE

Functions accessible from: 'Main menu > Settings > Activity profiles > Profile'



Before you start navigating, select the profile that you are about to use from a list of proposed activities ('Main menu > Settings > Activity profiles > Profile'). The selection of profile is very important because the configuration of the device and its calculations will be adapted to the selected profile. Due the fact that each activity has its own specials needs, each profile has been developed to have specific settings (restrictions on route calculation, map prespective, alarm settings, data fields shown in data pages, cruise speed...).

By default, TwoNav offers several preset profiles, though you can also adjust the settings of one of the existing profiles to suit your needs. If none of the existing profiles is suited to your activity, you can create a new one and define all of its settings.

5.1.2 DATA PAGES

Functions accessible from: 'Main menu > Settings > Activity profiles > Data pages'





As you travel, the device will record all kinds of information in real time (speed, pace, altitude, distance, gradient....). These values are called data fields and are grouped into data pages. Since the relevant data differ depending on the sport (hiking, running, road bike, mountain bike). Remember that you can change the data fields and replace them with others that are better suited to your needs. Customise your device by displaying only the fields that you really need, or create completely new data pages.

Changing a specific data field

You can change a specific data field directly from the data page:

- 1. Open the data page containing the field you want to replace.
- 2. Open the context menu for the field you want to change and select 'Change this field'.
- 3. Select the new field to replace it.

Editing an existing data page

To edit any of the data pages follow these steps:

- 1. Go to 'Main menu > Settings > Activity profiles > Data pages'.
- 2. In the 'Type' option, select the data page you wish to modify.
- 3. The fields at the top (squares checked) are the fields that are displayed on the data page. Uncheck the square to hide its associated field.
- 4. At the bottom are the available data fields, sorted by category (distances, altitudes, times, etc.). Look for the field you want to add and check its square to add it to the data page.
- 5. You can also rearrange the order in which the fields are shown on the page by using the arrows on the side.

Creating a new data page

If the arrangement of default data pages does not suit your needs, you can create your own pages by following these steps:

- 1. Go to 'Main menu > Settings > Activity profiles > Data pages'.
- 2. Press '+' to create a new data page (you can also delete any of the current pages by pressing '-').



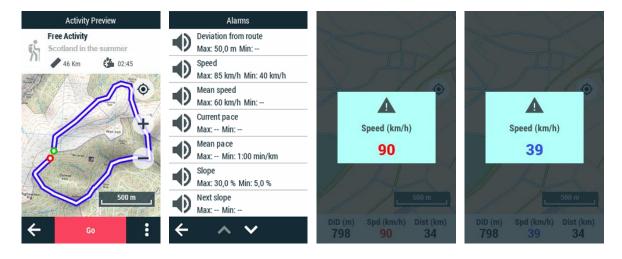
- 3. Give the new page a name and choose a template to define how the data will be arranged.
- 4. Then, simply add the fields that will make up your page.
- 5. The fields at the top (squares checked) are the fields that will be displayed on the data page. Uncheck the square to hide its associated field.
- 6. At the bottom are the available data fields, sorted by category (distances, altitudes, times...). Look for the field you want to add and check its square to add it to the data page.
- 7. You can also rearrange the order in which the fields are shown on the page using the arrows on the side.

IMPORTANT: For useful tips on using each data field, see the Appendix.

5.1.3 ALARMS

5.1.3.1 DATA FIELDS

Functions accessible from: 'Main menu > Settings > Activity profiles > Alarms > Data fields'



When navigating, TwoNav can notify you when you exceed certain limits you yourself specify (deviation from route, speed, slope, ascent, heart rate, cadence, etc.). The alarms will be shown automatically in a pop-up window as you navigate, based on your pre-defined preferences.

- Red alarm: If the maximum value is exceeded.
- Blue alarm: If the minimum value is not reached.



To close the pop-up window, simply press anywhere on the map outside the pop-up window.

Alarms for data fields can be set based on your preferences right before you start the route.

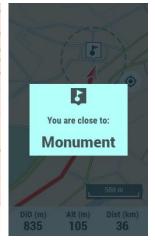
- Maximum/Minimum: Set a maximum and/or minimum value for each field. If no value is specified for certain fields, these alarms will be automatically deactivated when navigating.
- **Audible alarm:** Select the sound that TwoNav will play for each alarm (alert, beep, warning....).
- **Vibration alarm:** Enable/Disable the vibration of the device when the alarm sounds.
- Repeat alarm: Specify the alarm repeat interval.

5.1.3.2 WAYPOINTS PROXIMITY

Functions accessible from: 'Main menu > Settings > Activity profiles > Alarms > Waypoints proximity'









When navigating, TwoNav can let you know when you approach or reach certain points of interest. Set an alarm to have TwoNav notify you when are about to enter that point's radius. The alarms will appear automatically in a pop-up window as you navigate, based on your pre-defined preferences.

- **Default proximity radius:** Set the radius value within which you are considered to be inside the waypoint, and which TwoNav will use to trigger the alarm.
- **Audible alarm:** Select the sound that TwoNav will play when you are within the waypoint's radius (alert, beep, warning...).

To close the pop-up window, simply press anywhere on the map outside the pop-up window.



5.1.4 AUTOROUTE

Functions accessible from: 'Main menu > Settings > Activity profiles > Autoroute'

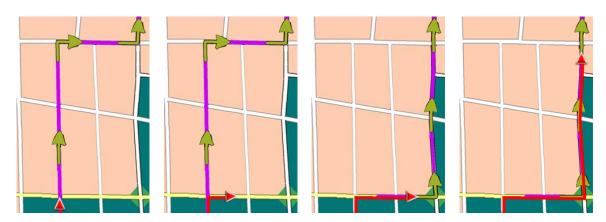




AUTOROUTE CALCULATION

NO AUTOROUTE CALCULATION

The device can be set up to calculate a route from your current position to a chosen destination. Specify your goal, the device will automatically calculate the best route based on your preferences and on the information in the map that is currently loaded. The GPS automatically calculates the route along urban roads and guides you on each manoeuvre using visual and audio cues until you reach your destination.

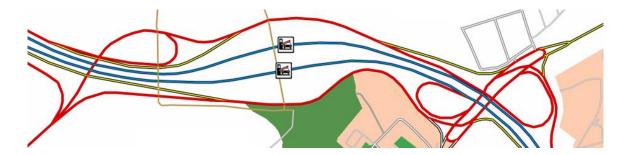


In general, the automatic calculation of these routes is intended more for travelling on roads, but your device also makes this feature available for other activities, such as mountain outings... The automatically calculated routes offer valuable information along the way:

- Distance remaining to the destination
- Manoeuvres to make during the trip (both on the map and on the 'Next event' panel)

IMPORTANT: In order to automatically your route you will need a routable vector map. TomTom and OSM maps have network information that is used to calculate routes automatically.





By default, the 'Autoroute' function is on for the 'Car' and 'Road bike' profiles. If you use any other profile, you will have to turn it on manualy from 'Main menu > Settings > Activity profiles > Autoroute'.

- **Voice:** TwoNav can point the way to your destination with turn-by-turn voice instructions.
- **Voice type:** Specify whether you prefer a man's or woman's voice for the instructions.
- **Preferred route:** Before you start navigating, it is very important to choose if the planned route that you are about to navigate will be automatically calculated by the fastest way or the shortest way.
- **Use roads with toll:** Before you start navigating, it is very important to choose if the planned route that you are about to navigate will be performed only on certain types of roads.
- **Use highways:** Before you start navigating, it is very important to choose if the planned route that you are about to navigate will be performed only on certain types of roads.
- **Use unpaved ways:** Before you start navigating, it is very important to choose if the planned route that you are about to navigate will be performed only on certain types of roads.
- **Use ferries:** Before you start navigating, it is very important to choose if the planned route that you are about to navigate will be performed only on certain types of roads.
- **Distance before recalculation:** The recalculation of route will be applied when the deviation of the planned itinerary is higher than this value.
- **Time before recalculation:** The recalculation of route will be applied when the deviation of the planned itinerary is higher than this value.

5.1.5 AUTOLAPS

Functions accessible from: 'Main menu > Settings > Activity profiles > Autolaps'





Your device can display audio and visual pop up alarms at every lap change (every kilometer, every hour... or according to your needs). Laps are equal divisions of the track split based on a default interval set by you. If you enable the division of tracks by laps ('Main menu > Settings > Activity profiles > Autolaps'), during your itinerary, you will get a periodic report about your performance with relevant information (pace, mean speed, climb, descent...). The division of the track in equal laps is very useful to analyse all kinds of information and achieve a better performance lap after lap (mainly designed for training purposes):

- **Distance/Time autolap:** Set the default value to create the division of the track in laps. Once you have reached the default value, a brand new lap will start lasting the same as the interval value.
- **Alarm on lap change:** The device can display a visual warning (pop up window) each time you complete a lap.
- **Vibration alarm:** Enable/Disable the vibration of the device when the alarm sounds.
- **Information on lap change:** If 'Alarm on lap change' is enabled, define which data field you want to displayed at the pop up window. This value has been recorded during that specific lap.

NOTE: You can also start a brand new lap at any moment pressing 'Change lap' at the tool bar.

5.1.6 MAP VIEW

5.1.6.1 MAP ORIENTATION

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Map orientation'

Choose between two display modes to show the elements loaded on the map page:



• **Track goes up:** Orient map towards your course, map will rotate to be adapted to your present course. Perspective in front of you will be displayed on the screen.





• **North up:** Map is not oriented, your position will be marked with the pointer in the centre of the screen and the pointer will rotate to show your present course. The map will not rotate and the north will always be upwards.

NOTE: You can modify this option from the tool bar.

5.1.6.2 AUTO-OPEN MAPS

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Autoopen maps'













The easiest way to use the most suitable map for each situation is to activate this function.

• **Preferred map type:** Select the map type that will be used for routing as top priority.

NOTE: It is highly recommended to have this option always on, specially on those situations in which you need to make a change in navigation mode.

5.1.6.3 SHOW ZOOM BUTTONS

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Show zoom buttons'







By default, the map window shows the 'Zoom+' and ' Zoom-' buttons. Press on the map to show/hide the buttons. If you want more space to view the map, you can permanently hide the buttons with this option.

IMPORTANT: If you hide the 'Zoom+' and 'Zoom-' buttons, you can only zoom using the physical buttons on the device.

5.1.6.4 STATUS BAR IN ACTIVITY

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Status bar in activity'



By default, when navigation starts, the status bar disappears from the top of the application allowing more space to view the map. You can show the status bar during navigations by enabling this option.

5.1.6.5 3D RELIEF

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > 3D relief'

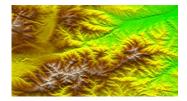
The device may use elevation maps (grids with height information) to assign altitude data on maps/waypoints/routes and then be able to display then dimensionally.

- **Draw relief:** Draw relief on the maps.
- **2D shaded relief:** 2D maps can display relief shadows.





• **Relief colors:** Select between different hypsometric colors to display your maps: high contrast colors, low contrast colors, default palette of colors...









• **Draw relief with shadow:** This visual option makes the relief drawing more attractive.





• **Flat color steps:** Instead of using a fading color, just one plain color for each height interval will be used.







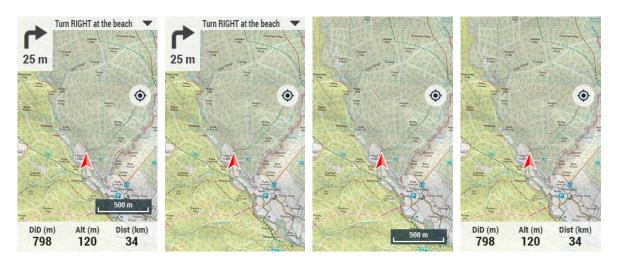
• **Draw level lines:** Altitude lines are drawn.





5.1.6.6 INFORMATION PANELS

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Information panels'



Show/Hide the functions accessible from the map page:



• Info next:

Turn RIGHT at the beach, follow the sand track that runs parallel to the hotel until the end of the beach.

Next event:



• Scale bar:



• Data bar:

Spd (km/h)	Alt (m)	DiD (km)
40	67	13

5.1.6.7 **TOOL BAR**

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Tool bar'



Tool bar can be configured to fit your specific preferences, customize the device according to your needs by displaying the tools that you really need.

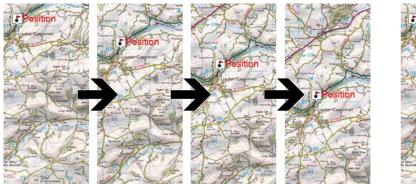
- **Add tools:** By activating the ticked square.
- **Remove tools:** By deactivating the ticked square.
- **Order the tools:** By using 'Up'/'Down' buttons.

IMPORTANT: Get to know more about tool bar functions in Appendix.



5.1.6.8 CENTER AUTOMATICALLY

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Center automatically'

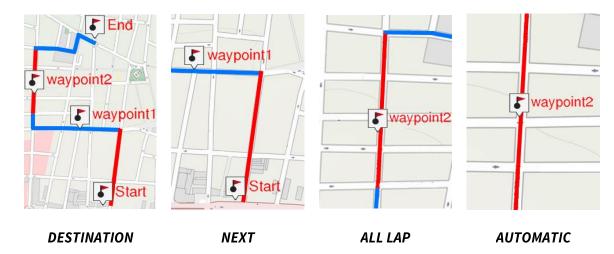




While navigating or editing you may move the map to see other parts of the ground, and so losing your current reference. In these situations press 'Re-center' and the device will move back to your current reference. The device has an automatic re-centring function, so if map is not moved manually, it will be re-centred back to your current position according to the set value.

5.1.6.9 AUTOZOOM

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Autozoom'



If this option is enabled, the device will calculate the most suitable zoom for the present speed (the higher the speed, the further it will go):

- No: Function disabled.
- Automatic: Automatic zoom window.



- **See destination**: Zoom window including the current position and the destination.
- **See next**: Zoom window including the current position and the following route/waypoint/...
- **See all lap**: Zoom window including the current position and the present lap or full track.
- **Fix scale**: Zoom window according to 'Fix scale' value.
- Map scale: Zoom window according to the map scale.

If during the navigation 'Force 2D' is enabled, 2D map view will be automatically displayed even other views are currently in use.

5.1.6.10 POINTER ICON

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Pointer icon'



Select the icon used to show your position in the map window. TwoNav offers several designs for the position pointer.

5.1.6.11 POINTER SIZE

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Pointer size'



Set the size for the icon used to show your position in the map window. TwoNav offers several sizes for the position pointer.

5.1.6.12 EXTRA POINTER ELEMENTS

Functions accessible from: 'Main menu > Settings > Activity profiles > Map view > Extra pointer elements'

Icon displayed at map page can be fully customized according to your needs:

• **Fixed ring and parallels:** A circumference encircling your position will be drawn.

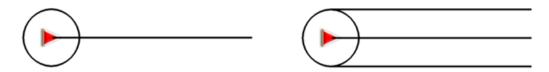




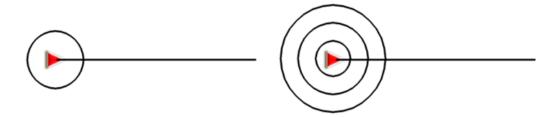
• **Fixed ring radius:** It determines the size of the circumference surrounding your position.



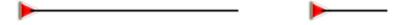
• **Draw prow lines parallels:** Draw parallel lines to the prow line (guideline indicating the direction of your movement).



• **Variable ring:** Add more rings around your position. Define the radius of the inner ring and the number of successive rings which will be equidistant from the first inner ring.



- **View turning radius:** When turning, the radius corresponding to the circumference described will be displayed.
- **View direction line:** Set the length of the prow line that will be displayed on the map.



- **Disabled:** No prow line will be displayed.
- **Pixels:** Set the length of the prow line in pixels.
- **Real distance:** Prow line will be displayed on the map at real scale.

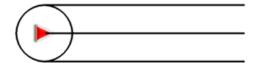


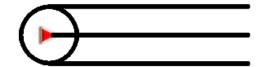
- **Expected distance in time:** The device will calculate the estimated distance to be covered in that time at current speed.
- Infinite: The length of the prow line will be infinite.
- Color extra elements: Default color for extra elements.





• Thickness extra elements: Default thickness for extra elements.





5.1.7 ACTIVITY RECORDING

Functions accessible from: 'Main menu > Settings > Activity profiles > Activity recording'

Set the type of file that will be generated from your navigation:

Recording interval:



- **By time:** Set the time to create every new track point.
- **By distance:** Set the distance to create every new track point.
- **File format:** Set the track format of the resulting file.

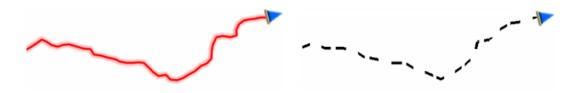






• **Show current track on map:** If enabled, the track that is being recorded will be shown on the map page.





- Estimated times calculation:
 - **Based on track/autoroute:** Calculates the estimated time of arrival taking into consideration the time of the track.
 - **Based on mean speed:** Calculates the estimated time of arrival taking into consideration the speed of the route.
- **Minimum accumulated altitude:** Fixes the minimum altitude to be considered increase of altitude. Altitudes under this value will not be considered increase.

Minimum accumulated altitude:

5 m

Current altitude:

4.7 m

Current altitude:

5.2 m

Increase considered:

0 m

Increase considered:

5.2 m

• **Minimum moving speed:** Set the minimum speed value to consider movement. Speeds under this value will not be considered movement. This value is set by you.

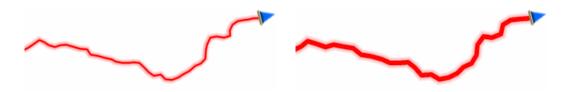
Minimum moving speed:
 0.5 mi/h
 0.8 mi/h
 Current speed:
 1.4 mi/h
 Increase considered:
 Increase considered:
 Increase considered:
 1.4 mi/h

5.1.8 TRACK VIEW

Functions accessible from: 'Main menu > Settings > Activity profiles > Track view'

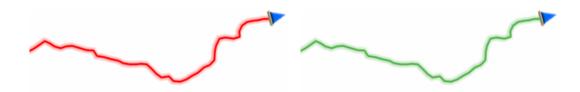
Tracks displayed at map window can be fully customized according to your needs:

• **Default track thickness:** Set the thickness for the generated track.

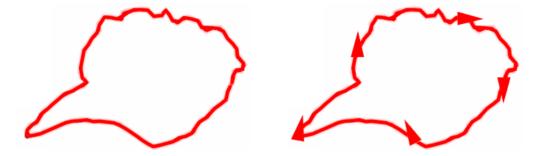


Recorded track color: Set the color for the generated track.





• **Draw arrows over the track:** To easily know its direction.



• **Track variable color:** Track can be represented using variable colors representing all along the itinerary the variability of a specific track data field (altitude, speed, slope, time, heart rate frequency...). Degradation colors are related to different levels of the same field.



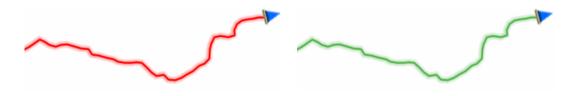
5.1.8.1 NAVIGATED TRACK VIEW

Functions accessible from: 'Main menu > Settings > Activity profiles > Track view > Navigated track view'

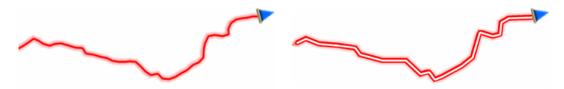
The track that you are currently navigating is displayed at map page and it can be fully customized according to your needs:

- **Highlight navigated track:** When navigating a track (active track) you might see it highlighted from the rest of the tracks.
- **Navigated track color:** The active track can have a different color line from the rest of the tracks.

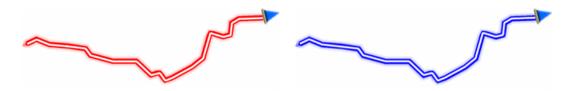




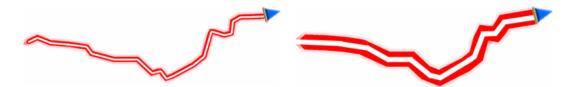
• **Add double line:** The active track can have a specific double line to easily highlighted from the rest of the tracks.



• **Double line color:** Color of the double line of the active track.

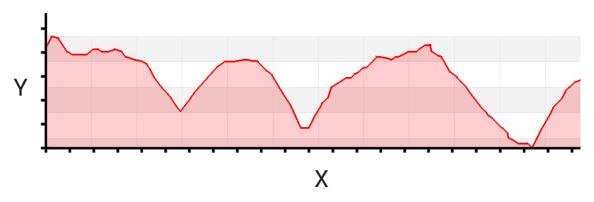


• **Double line thickness:** Line thickness that highlights the active track from the rest of the tracks.



5.1.9 GRAPH VIEW

Functions accessible from: 'Main menu > Settings > Activity profiles > Graph view'



In graph representations of routes it is the user who selects what data he wishes to analyze according to his sports routine. From this option you can determine which data field to display on the Y axis (vertical). You can exchange the value of the vertical axis for another field at any time.



5.2 SYSTEM

5.2.1 ABOUT

5.2.1.1 DEVICE INFORMATION

Functions accessible from: 'Main menu > Settings > System > About > Device information'



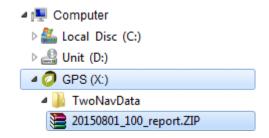
Get to know the software versions running in the device.

NOTE: In order to update the software of your device, as well as solve any kind of problem with our technical team, it is very important to know the exact version that you are using in your device.

5.2.1.2 STATUS REPORT

Functions accessible from: 'Main menu > Settings > System > About > Status report'





When 'Status report' is pressed, a *.ZIP file containing technical information of the current status of the application. Create a 'Status report' in order to help our technical department to solve any of your problems. The file will be saved at:



Android (App TwoNav Free):

'Android/Data/com.compegps.twonav/files/TwoNavData/Data'

Android (App TwoNav Premium):

'Android/Data/com.compeaps.twonavfull/files/TwoNavData/Data'

• iOS (App TwoNav Free): 'TwoNavData/Data'

• iOS (App TwoNav Premium): 'TwoNavData/Data'

5.2.1.3 DEFAULT CONFIGURATION

Functions accessible from: 'Main menu > Settings > System > About > Default configuration'





Re-establish all the settable parameters to their initial status. All the options that have been manipulated will be modified and set as default.

5.2.2 LANGUAGE

Functions accessible from: 'Main menu > Settings > System > Language'



Set the language of the application. Interface texts and indication voices will use the same language.

5.2.3 DISPLAY

Functions accessible from: 'Main menu > Settings > System > Display'

Regulate the amount of light of the screen and adjust it for each situation:

Night view: In low light conditions, the colors and brightness may dazzle. This
function reduces the brightness of the application and displays an interface with
darker tones.





- At night and tunnels: The device will automatically change to night mode at night and inside tunnels.
- At night: Only at night (not for tunnels).
- **Not automatic:** You will be able to set manually when you wish to have the night mode on.
- **Shutdown screen:** Time interval to automatically switch the screen off.

5.2.4 AUDIO

Functions accessible from: 'Main menu > Settings > System > Audio'



Manage the general audio level of the application.

5.2.5 UNITS AND MEASUREMENTS

Functions accessible from: 'Main menu > Settings > System > Units and Measurements'

Set the type of measurement units to use in the device:

• **Distance:** ft, km, m, mi, nm

• Altitude: ft, m

• **Speed:** kt, km/h, min/km, mph

• Short distance: ft, m, mi, nm

Acceleration: g, km/h/s, m/s²



Vertical speed:
ft/min, m/h, m/min, m/s

• Area: hect., km², m²

• Energy: cal, J, Kcal, KJ, MJ, KWh

• **Depth:** fm, ft, m

Pressure: hP, Pa, mbar

5.2.6 COMPASS

Functions accessible from: 'Main menu > Settings > System > Compass'

Before getting out with your GPS it is very important to properly calibrate the device so that it offers accurate data. The default setting usually offers the best results for most users. The electronic compass must be manually calibrated whenever it detects inaccuracies in its operation:

• **Take bearing from:** Your device offers you different ways to determine the bearing you are taking during your navigations:



- **GPS:** The latest positions received are used to calculate the bearing of your current movements. As soon as you stop, this reference will not be reliable because there will be no reliable movements to calculate the bearing.
- **Compass:** Data recorded from the compass will be used in order to determine the orientation of the device.
- **Automatic (recommended)**: Data recorded from the compass will be used (if driving slowly) while GPS position will be used (if driving fast).

5.2.7 ALTIMETER

Functions accessible from: 'Main menu > Settings > System > Altimeter'

Before getting out with your GPS it is very important to properly calibrate the device so that it offers accurate data. The default setting usually offers the best results for most users. The barometric altimeter is self-calibrating:



• **Take altitude from:** Your device offers you different ways to determine the altitude value you are taking during your navigations:



- **GPS:** Altitude data from the GPS will be used.
- 3D relief (altitude map): Current altitude of the 3D relief map (3D relief map must be loaded).

5.2.8 COORDINATES

Functions accessible from: 'Main menu > Settings > System > Coordinates'

These settings will be used when introducing any coordinate into the application as well as creating any element (waypoints/routes):

- **Coordinates type:** UTM, Latitude/Longitude, BGN...
- **Degree format:** Configure the order in which the degrees are displayed.

dd.ddddd ddomm.mmm' ddomm'ss.s

• **Datum:** Used to translate the positions of elements (waypoints/routes) to the exact position on the earth. Datum systems are needed because the earth is an imperfect ellipsoid. Choose the most suitable datum for the map that are working with.

5.2.9 GPS SETTINGS

Functions accessible from: 'Main menu > Settings > System > GPS settings'



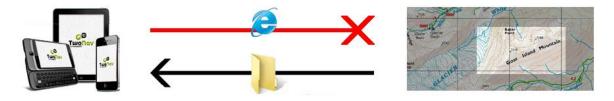


Before using the device to navigate, it is very important to configure the GPS settings to receive data correctly:

- **Activate GPS:** If the function is activated, the device will have a GPS signal to determine its position.
- **GPS connection interval:** Improve the autonomy of the device by setting the connection interval of the GPS. If connection is intermitent, GPS will be disconnected during intervals, track will be recorded but position will not be detected until GPS connection is established again.
- Satellite status: Displays the status, accuracy and signal level of the satellite.
- Connect GPS at start: GPS function will automatically turned on when TwoNav application is started.
- **Disconnect GPS if minimize:** GPS behaviour when TwoNav is disconnected if minimized.

5.2.10 MAPS CACHE

Functions accessible from: 'Main menu > Settings > System > Maps cache'



When an on-line map is opened, downloaded map sections will be kept locally in the device in a temporal folder (cache memory). By doing this you will be able to use that remote map without internet connection. TwoNav application will keep the map area that you have selected in the device memory.



- Cache remote maps: Activate/Deactivate the automatic storage of on-line maps in the device's memory.
- Maps cache folder: Define the folder where the cached map will be stored.
- Maps cache size: Set the maximum capacity of the folder where map areas in cache will be saved.

5.3 SENSORS

Functions accessible from: 'Main menu > Settings > Sensors'









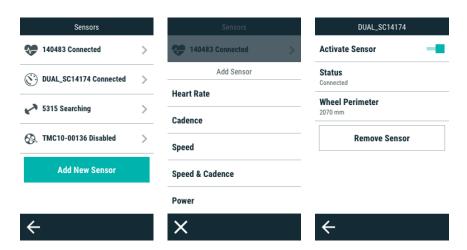
ANDROID DEVICES ONLY: Follow these steps to connect your sensors and start receiving information from them:

1. In order to activate ANT+™ services on your smartphone, you must first download the following apps from Google Play.





- 2. Install the sensors as required and activate them before attempting to connect to them.
- 3. Go to 'Main menu > Settings > Sensores'.
- 4. Press 'Add sensor' and select the type of sensor you want to add.





- 5. For some sensors you'll have to specify certain technical details. The pairing process between the device and the sensor will then begin.
- 6. Once detected, the sensor will be saved and connected automatically during an activity.
- 7. The data received from the sensor will be stored with the recorded track and displayed on the data pages.

NOTE: Do not use Vaseline or oils to moisten the conducting band, as they can insulate the transmitter. Do not bend or stretch the heart rate strap. Keep it away from heat and cold. When you finish your activity, clean it and dry it to avoid moisture build-up.

5.4 GO CLOUD

Functions accessible from: 'Main menu > Settings > GO cloud'



For being a user of one of our GPS, you have the right to have a personal storage area on GO. The GO Cloud is a virtual storage space where you can save your activities and keep them synced in all your devices:

From this menu you can specify how to sync your device and the GO Cloud. If you turn on auto sync, you won't have to worry about uploading your activities manually. Once completed and when a Wi-Fi network is detected, the device will upload them automatically to the GO Cloud.

- **Sync status:** The device shows the status of syncing with the GO Cloud. Check the sync logs if you're having transmission errors.
- **User account:** User account that is being synced (each personal area in the GO Cloud is linked to a user account).
- **Sync now:** If you want, you can force sync by pressing this button. Your device will then be automatically synced with the GO cloud.



5.5 USER DATA

Functions accessible from: 'Main menu > Settings > User data'



Configure the preferences to automatically calculate estimations related to energy and effort:

- **Gender:** Information used to calculate other data.
- Age: Information used to calculate other data.
- Weight: Information used to calculate other data.
- **Energy calculation method:** According to your preferences.
 - Mechanic energy
 - Activity type
 - Activity and slope
- **Resting heart rate:** Information used to calculate other data.
- **Manual maximum heart rate:** Information used to calculate other data. If not enabled, the maximum heart rate is calculated using Tanaka formula.

5.6 MY ACCOUNTS

Functions accessible from: 'Main menu > Settings > My accounts'

This section centralizes all on-line accounts in which you are logged in:

6 APPENDIX: DATA FIELDS

Check full list of data fields and their usage. These fields are displayed in the data pages and the data bar, but you can configure which fields to show according to your needs from 'Main menu > Settings > Activity profiles > Data pages':

Distances

• **Deviation from route:** Distance to active route.



- **Distance to TrackAttack:** Distance between your current position and the position of the '*TrackAttack*'.
- **Distance to next radar:** Distance to next radar point.
- **Distance to destination:** Distance to destination (last waypoint of the route).
- **Distance to next:** Distance to the next waypoint.
- **Lap odometer:** Distance covered from the begining of the current lap section up to the current position. Value reseted every time a new lap section is started.
- **Profile odometer:** Accumulated distance of your current profile (hiking, mountain bike...). Value not automatically reseted every time the device is turned off.
- **Route percentage:** Percentage of the route that has been already done.
- **Total odometer:** Accumulated distance of all your trips. Value not automatically reseted every time the device is turned off. The device can calculate the total distance using different data calculations.
- **Trip odometer:** Distance covered from the beginning of itinerary. Value reseted every time the device is turned off.

Altitudes

- Altitude at next: Predicted altitude to next waypoint if current trajectory is maintained.
- **Altitude:** Altitude from the sea level.
- Altitude difference to destination: Difference between the altitude of destination and current altitude.
- **Altitude difference to next:** Difference between the altitude of the next waypoint and current altitude.
- Altitude ground level: Altitude from the ground level.
- Ascent to next: Ascent to the next waypoint.
- **Ascent to destination:** Ascent till destination is reached.
- **Barometric altitude:** Altitude provided by the barometric altimeter.
- **Current depth:** Current depth value taking as reference the nautical chart.



- Depth at next: Depth value at next waypoint
- **Depth at prow line:** Current depth value at prow line.
- Descent to next: Descent to the next waypoint.
- **Descent to destination:** Descent until the destination.
- **GPS altitude:** Present altitude provided by GPS rerceives via satellites.
- **Graph:** Representation of the track being covered.
- Land altitude: Altitude of the land provided by the 3D relief map (*.CDEM).
- **Lap climb:** Total amount climbed from the begining of the current lap section up to the current position.
- **Lap descent:** Total amount descended from the begining of the current lap section up to the current position.
- **Maximum altitude:** Reached during your itinerary.
- **Slope:** Slope of your current movement.
- **Slope at next:** Slope till the distance set at 'Next slope distance'.
- **Trip ascent:** Total amount climbed from the begining of itinerary up to the current position.
- **Trip descent:** Total amount descended from the begining of itinerary up to the current position.

Times

- Chronometer: Starts counting when started.
- **Estimated hour at destination:** Estimated time of arrival to destination (last waypoint of the route) at present speed.
- **Estimated hour at next:** Estimated time of arrival to the next waypoint (at present speed).
- **Estimated time to destination:** Estimated time to reach destination (last waypoint of the route) at current speed.
- **Estimated time to destination (cruise):** Estimated time to reach destination (last waypoint of the route) at cruise speed.



- Estimated time to next: Estimated time to reach next waypoint at current speed.
- **Estimated time to next (cruise):** Estimated time to reach next waypoint at cruise speed.
- **Lap chronometer:** Time elapsing the current lap section from the begining of the current lap section up to the current position.
- Stopped time: Total amount of time without moving.
- **Sunrise:** Sunrise time.
- Sunset: Sunset time.
- **Time:** Current time according to the selected time zone.
- Time to TrackAttack: Time difference between you and the 'TrackAttack'.
- **Time in movement:** Total amount of time moving.
- **Time without package:** Elapsed time since last time GPS signal was received.

Speeds

- **Current pace:** Speed in minute/kilometer.
- **Lap mean speed:** Average of all speeds values from the begining of the current lap section up to the current position.
- **Lap pace:** Average of all pace values from the begining of the current lap section up to the current position (speed in minute/kilometer).
- **Maximum speed:** Maximum speed in current itinerary.
- Mean moving speed: Average of all speeds values above the minimum speed movement.
- Mean speed: Average of all speeds values.
- Mean moving pace: Average of all pace values above the minimum speed movement.
- Mean pace: Average of all pace values.
- Moving pace: Average of all pace values avoiding stopped points.
- **Next radar speed:** Displays maximum speed allowed by the next radar.



- **Normal acceleration:** Perpendicular to movement in circular movements.
- Partial mean speed: Average of all speeds values from the beginning of itinerary up to this moment.
- **Speed:** Current speed.
- **Speed limit:** Speed limit established for the current road.
- **Tangential acceleration:** Component of linear acceleration tangent to the path.
- **Velocity made good:** Right direction's velocity component to the following waypoint.
- **Vertical speed:** Descending speed (vertical component of speed value).

Bearings

- **Bearing:** Current course.
- **Bearing to next:** Course towards to the next waypoint.
- **Compass:** Compass representation.
- **GOTO arrow:** Arrow that indicates the course towards to the next waypoint.
- Magnetic bearing: Course followed according to the inner device compass.

Effort

- % HRR: Heart Rate Reserve.
- % Maximum heart rate: Maximum heart rate.
- **Accumulated power:** Total amount power from the begining of itinerary up to the current position.
- **Cadence:** Current cadence at this moment (based on pedal stroke frequency).
- **Current power:** Current power at this moment (based on pedal stroke frequency).
- **Heart rate zone (% Max.):** Predefined heart rate intensity zones.
- **Heart rate zone (% Max-Rest):** Predefined heart rate intensity zones (Cardiac frequency in reserve).
- Heart rate: Current heart rate at this moment.



- **Instantaneous cadence:** Current cadence at this moment (based on power meter data).
- Instantaneous power: Current power at this moment (based on power meter data).
- **Left (or combined) pedal smoothness:** How smoothly power is delivered to the left pedal.
- **Left torque effectiveness:** How much of the power delivered to the left pedal is pushing it forward.
- **Maximum power:** Maximum power achieved from the begining of itinerary.
- Mean power: Average of all power values.
- OCA: Optimum chainring angle.
- **Pedal power:** Relative power left-right.
- **Powermeter:** Power of the last pedaling.
- **Right pedal smoothness:** How smoothly power is delivered to the right pedal.
- **Right torque effectiveness:** How much of the power delivered to the right pedal is pushing it forward.
- **Total energy:** Total odometer energy.
- **Trip energy:** Partial odometer energy.

GPS

- **Coordinates:** Coordinates of the current position.
- Differential GPS: GPS gives differential signal (submetric accuracy).
- **HDOP:** Horizontal Dilution Of Precision (estimated current accuracy of the GPS).
- **PDOP:** Position Dilution Of Precision (estimated current position accuracy of the GPS).
- Precision: Error margin of the GPS.
- **Used satellites:** Satellites fixed in current position.
- **VDOP:** Vertical Dilution Of Precision (estimated current vertical accuracy of the GPS).

Flight



- Altitude ground level: Altitude from the ground level.
- **L/D goal:** Minimum glide ratio required to reach your goal (going through all intermediate waypoints).
- **L/D instant glide ratio:** Glide ratio dividing horizontal distance by vertical (descending).
- **L/D required:** Minimum glide ratio required to reach next waypoint (distance to waypoint divided by waypoint's altitude over ground level).
- Land altitude: Altitude of the land provided by the 3D relief map (*.CDEM).
- **Slope to next waypoint:** Slope from your current position to next waypoint.
- **Slope to destination:** Remaining slope till destination is reached.
- **Vertical speed:** Descending speed (vertical component of speed value).

General

- **Air pressure:** Present atmospheric pressure provided by the barometric altimeter.
- **Battery:** Remaining energy in your device.
- City: Current city.
- **Croquis:** Image displaying manoeuvres.
- **Current lap:** Identifies the lap where you are at the present moment.
- **File name:** Name of the current track.
- **Free memory:** Remaining memory in your device.
- **Next waypoint name:** Name of the following waypoint.
- **Next2 waypoint icon:** Icon associated to the waypoint following the next waypoint.
- **Number of points:** Track points saved up to current position.
- Place name: Name of the element of your current position.
- **Radar icon:** Displays an icon when entering the radius of a radar.
- **Radius turn:** Radius of the turn that you are taking at the moment.



- Relative humidity: Current humidity rate.
- **Signpost:** If available, road indications are displayed.
- Virtual free memory: Virtual free memory in your device.

NOTE: Due to platform restrictions, some functions may only be available in certain devices.

7 APPENDIX: TOOL BAR

Check full list of tool bar buttons and their usage. These buttons are displayed in tool bar, but you can configure which buttons to show according to your needs from 'Main menu > Settings > Activity profiles > Map view > Tool bar':

- **3D mode:** Switch between viewing modes ($^{\prime}2D > 3D > 3D + ^{\prime}$).
- Activate GPS: Start/Stop GPS connection.
- **Alternate maps:** The device superimposes maps, so that you can display two or more maps at the same time at map page.
- Close tools: Button to easily close the tool bar mode.
- **Emergency:** A SeeMe emergency message is sent. All your contacts will receive an information message (SMS and email) with your location to let them know you have a problem.
- **FF to next (→):** Jump to next event of the itinerary.
- **FF** (**▶**): Accelerate the itinerary. Press it again to apply normal speed.
- **Full screen:** Most of user interface elements will be hidden to get a wider view of the map.
- Lap: Creates a new lap of the same track starting in the current position.
- **Less detailed map:** The device will try to load a map of lower resolution than the currently loaded.
- **Man over board:** If some falls into the water, route will be automatically calculated to that point.



- Mark e-Roadbook point: Create new e-Roadbook waypoint in current position with default name and icon.
- Mark waypoint: Create new waypoint in current position with default name and icon.
- Mark and edit waypoint: Create new waypoint in current position and access to its properties, so that you can customize them.
- **More detailed map:** The device will try to load a map of higher resolution than the currently loaded.
- Mute: Sound level is totally reduced.
- Navigate: Choose the destination that you are about to navigate.
- **New waypoint:** Choose where to create new waypoint and access to its properties, so that you can customize them.
- **Next waypoint:** When navigating, switch to the next waypoint (only visible when navigating a route which contains waypoints).
- **Open:** Open any file.
- **Orient map:** Track up/North up.
- Page: Access to data pages.
- Panning/Rotate: Map movement mode.
- Pause (II): Pause the itinerary. Press it again to resume the simulation.
- **Previous waypoint:** When navigating, switch to the previous waypoint (only visible when navigating a route which contains waypoints).
- **RW to previous (M):** Jump to previous event of the itinerary.
- **RW (↔):** Accelerate the itinerary in reverse. Press it again to apply normal speed.
- **Screenshot:** A screen picture is automatically taken.
- Shutdown screen: When pressed, screen is directly turned off.
- **Start/Stop:** Pause or stop your current navigation.
- Stop (■): Stop the itinerary.



- **Synchronize TrackAttack:** Automatically places the *'Virtual coach'* at your current position.
- Take photo: A photo picture is automatically taken using the camera of the device.
- Window zoom: Draw an area on the map to zoom to it.
- **Zoom 100%:** Zoom will be automatically set displaying map at its maximum resolution.

NOTE: Due to platform restrictions, some functions may only be available in certain devices.

8 APPENDIX: KEYS

Review the list of functions you can assign the device's keys. You can configure the function of each key according to your own needs from 'Main Menu > Settings > System > Keys':

- **Alternate maps:** The device superimposes maps, so that you can display two or more maps at the same time at map page.
- **Emergency:** A SeeMe emergency message is sent. All your contacts will receive an information message (SMS and email) with your location to let them know you have a problem.
- Lap: Creates a new lap of the same track starting in the current position.
- Lock (Screen On): Lock the device buttons.
- **Lock:** Lock the device buttons and turn off the screen.
- Main menu: Access the main menu of the device.
- Map page: Access the map page where you can see your position in real time.
- **Mark and edit waypoint:** Create new waypoint in current position and access to its properties, so that you can customize them.
- Mark waypoint: Create new waypoint in current position with default name and icon.
- Mute: Sound level is totally reduced.



- **Next page:** Access the following data page.
- **Previous page:** Access the previous data page.
- **Screenshot:** A screen picture is automatically taken.
- **Shutdown:** Turn off the device.
- **Start/Stop:** Pause or stop your current navigation.
- **Zoom in:** Zoom in on the map page for a better detail.
- **Zoom out:** Reduce the zoom level on the map page for a more general view.

NOTE: Due to platform restrictions, some functions may only be available in certain devices.