

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:

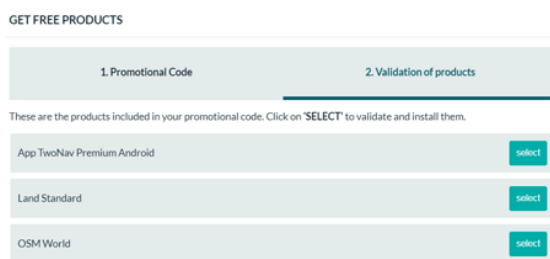
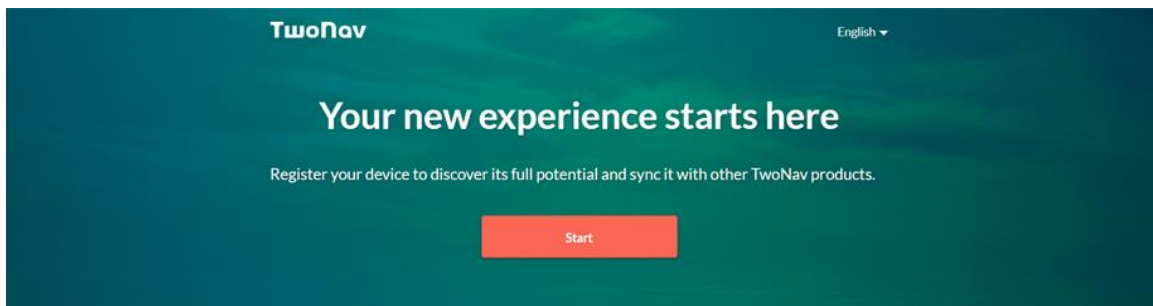
- **Fit TwoNav application correctly:** TwoNav should be fitted in a place where it will not obstruct your visibility. Moreover, it must be secured to ensure it cannot fall off easily and hinder driving. Plan all details regarding your outing before starting the navigation. Any change must be done with 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 REGISTRATION



Your device comes with a range of complementary products and services that will help you get the most from your outdoor activities. Register your GPS device and you'll be able to:

- **Get the products included with the purchase of a TwoNav GPS:** When you purchase a TwoNav GPS, you get some very useful free products, like maps and software licences that complement your user experience.
- **Install maps easily:** Install maps automatically on the device with just a few clicks and without having to manually activate them.
- **Access the GO Cloud:** As a TwoNav user, you have a personal storage area on the GO Cloud to save your tracks. This space is accessible from anywhere in the world.

- **Access the SeeMe™ service:** The SeeMe™ service lets you broadcast your position live during outdoor activities and send emergency alerts. Set up your personal info to start using both functions, or to renew this exclusive service.
- **Access to special offers:** Exclusive deals for users who already own a GPS device.
- **Better service support:** If you have questions or technical problems, registering your GPS device on myTwoNav will give you access to our customer service team.

Activate these products following the steps below:

1. Visit <http://www.TwoNav.com/Start>
2. Select your GPS device model and log in with your TwoNav user account.
3. Enter your device's serial number.
4. Set up the SeeMe™ service by registering your own emergency contacts (during an activity press 'Emergency' button on the GPS and your specified contacts will automatically receive an e-mail and SMS containing your exact location).
5. Next, add several contacts that will be able to follow your activities live. The contacts you add will be able to see where you're going live during your outdoor activities (as soon as you start an activity, if the 'Broadcast' feature is activated, your contacts will receive an e-mail with a link where they can follow your activity in real time).
6. Download and install the latest version of the Land software. Land is software for Windows/Mac that will let you edit tracks, prepare routes, display several maps at once and analyse your itineraries in depth.
7. Finally, visit your myTwoNav customer area where you can install your country's maps on your GPS (your TwoNav GPS comes with maps preinstalled, but you can expand them by installing even more maps for free).

2.2 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....
- **SeeMe™ (GPRS):** Broadcast any outdoor activity live and send emergency alerts if you're in danger.
- **Wi-Fi:** Sync your activities on the GO Cloud.

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.

2.2.1 CONNECTING TO SENSORS



If you have a heart rate monitor, or cadence, speed or power sensors compatible with ANT+™/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. Install the sensors as required and activate them before attempting to connect to them.
2. Go to 'Main menu > Settings > Sensors'.
3. Press 'Add new sensor' and select the type of sensor you want to add.
4. For some sensors you'll have to specify certain technical details. The pairing process between the device and the sensor will then begin.
5. Once detected, the sensor will be saved and connected automatically during an activity.
6. 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.

2.2.2 CONNECTING TO SEEME™

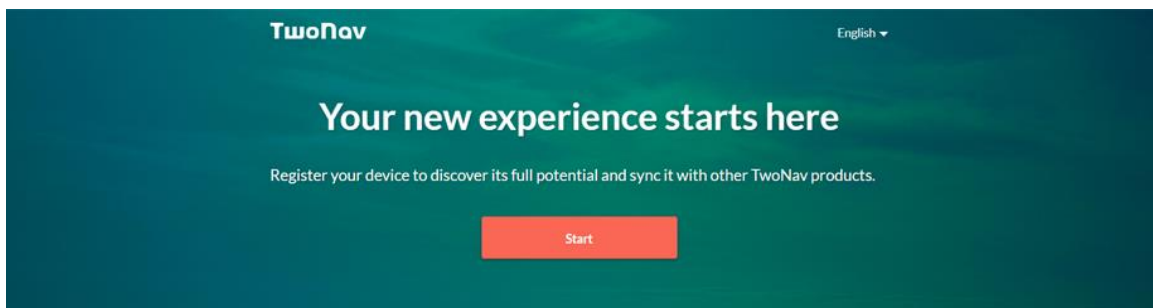


Your device includes a SIM card that will let you take advantage of this service's many features. SeeMe™ is an exclusive service that gives your device connectivity anywhere without the need for a smartphone. Thanks to its autonomous wireless communication

technology (GPRS), it can transfer data from wherever you are. SeeMe™ service offers the following features:

- **Broadcast your position live:** Your broadcast contacts will be able to follow your activities live as they watch your route on a map and monitor parameters like distance, ascent and speed. Go out and explore safe in the knowledge that your loved ones know where you are at all times.
- **Send emergency alerts:** Your emergency contacts will receive an alert (SMS and e-mail) when you press the emergency button on your device. That way they'll know you're in trouble and where you are.

Set up SeeMe™

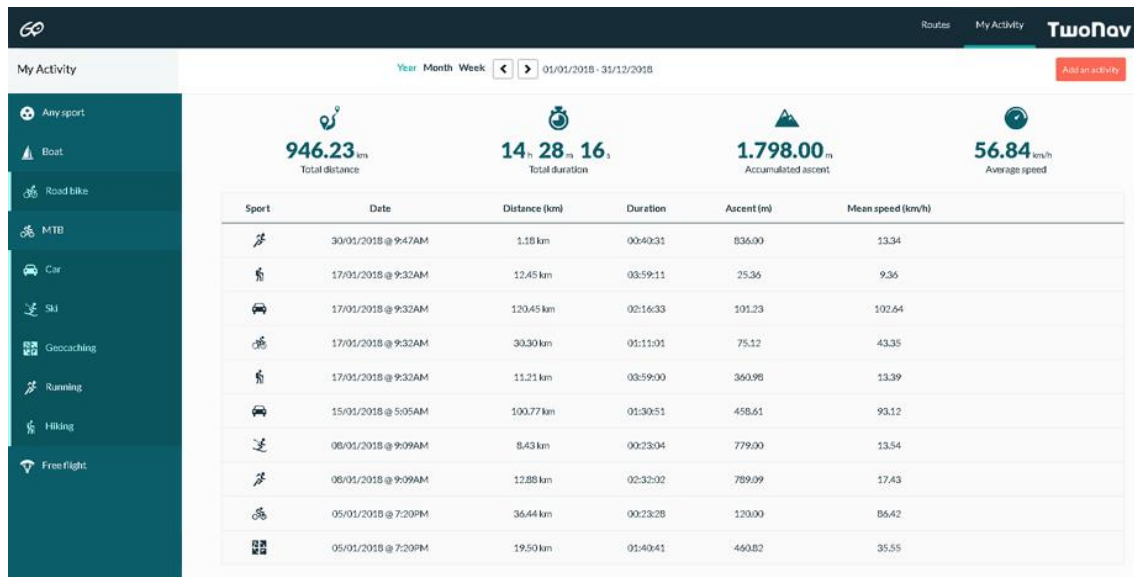


Follow the steps below to activate SeeMe™ service on your device:

1. Access <http://www.TwoNav.com/Start>
2. Select your GPS device model and log in with your user account.
3. Enter your device's serial number.
4. Set up the SeeMe™ service by registering your own emergency contacts (during an activity press 'Emergency' button on the GPS and your specified contacts will automatically receive an e-mail and SMS containing your exact location).
5. Next, add several contacts that will be able to follow your activities live. The contacts you add will be able to see where you're going live during your outdoor activities (as soon as you start an activity, if the 'Broadcast' feature is activated, your contacts will receive an e-mail with a link where they can follow your activity in real time).

IMPORTANT: When you enter a contact, they'll receive a request that they must accept in order to receive SeeMe™ notifications. If they don't accept your contact request, they won't get any messages.

2.2.3 CONNECTING TO GO CLOUD

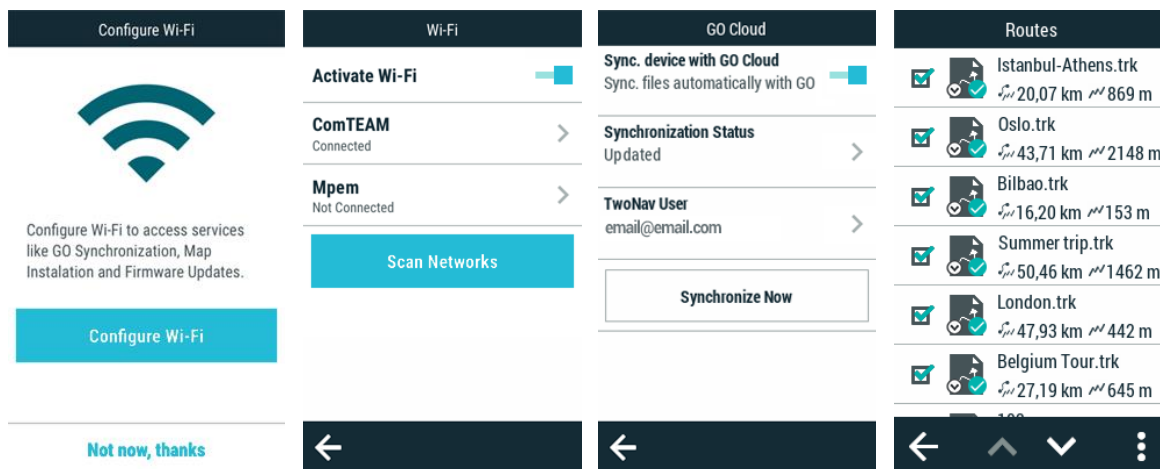


For being a user of one of our GPS, you have the right to have a personal storage area on GO. The GO Cloud is a virtual storage space where you can save your activities and keep them synced in all your devices:

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. Follow the steps below to set up GO and link your device to the GO Cloud:

1. Go to 'Main menu > Settings > Wi-Fi'.
2. Select 'Scan' to see the Wi-Fi networks available.
3. Select the network you want to connect to (and enter the password if necessary).

- Once connected to the Wi-Fi network, log in with your user account from 'Main menu > Settings > My accounts'.

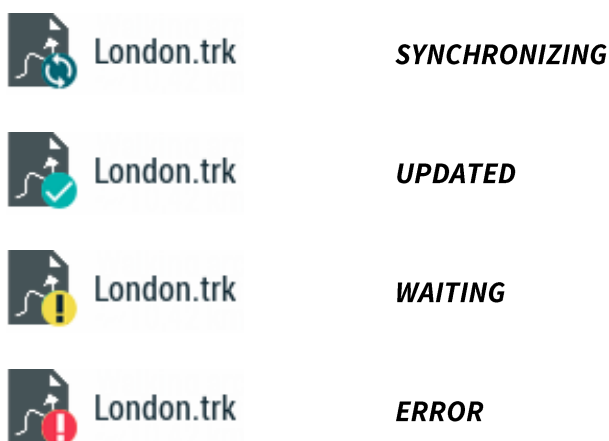


Upload files from GPS to Cloud GO

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

- Press 'Main Menu > Settings > Cloud GO'.
- 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:

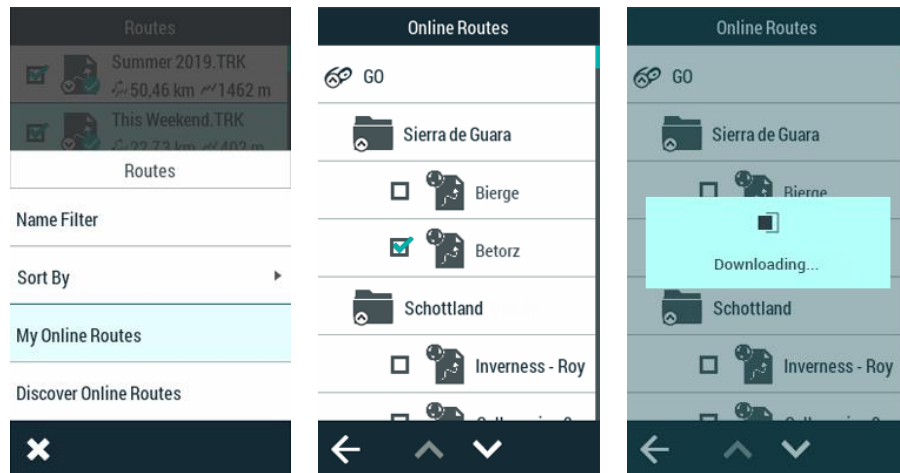


NOTE: Force an instant synchronization by pressing 'Main menu > Settings > Cloud GO > Synchronize now'. After that, your device will automatically synchronize with the GO cloud.

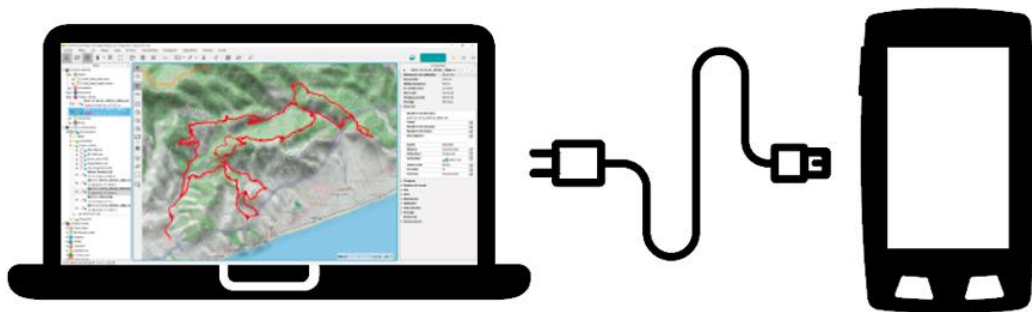
Download files from the Cloud GO to the GPS

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

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



2.2.4 CONNECTING TO A COMPUTER



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

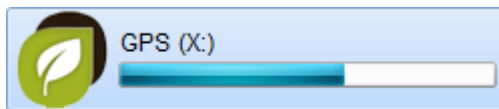
- **Charge the device:** If you don't have chargers, connect your device directly to a computer to charge the battery on the device.
- **Transfer files:** Transfer maps, waypoints, routes and tracks between the device and your computer.
- **Update the AGPS information:** Speed up the GPS initiation process and reduce the time needed to get a GPS fix.

- **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.
- **Update your device to the latest version of the software:** New software releases are periodically published, these updates are free and add new features to your GPS.

Storage units

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

- **GPS disk:** Inner memory of the device.



Storage folders

Maps List	Waypoints	Routes	Routes
<input checked="" type="checkbox"/> Spain Roads <input checked="" type="checkbox"/> Malta Topo <input checked="" type="checkbox"/> Italy Roads <input checked="" type="checkbox"/> Ireland 3D Relief <input checked="" type="checkbox"/> Spain Ortho	<input checked="" type="checkbox"/> Waypoints.wpt Waypoint 1 1543 km Waypoint 2 647 km Waypoint 3 647 km Waypoint 4 223 km	<input checked="" type="checkbox"/> Highest peaks.RTE Waypoint 1 652 km Waypoint 2 652 km Waypoint 3 652 km	<input checked="" type="checkbox"/> Track in Moscow.TRK 9,784 km 779 m Start 185 km 0 km Arrival 185 km 9,784 km
MAPS	WAYPOINTS	ROUTES	ROUTES

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:**
'TwoNavData/Maps'
- **Default folder for your recorded activities:** 'TwoNavData/Data/Tracklog'
- **Default folder for waypoints:**
'TwoNavData/Data'

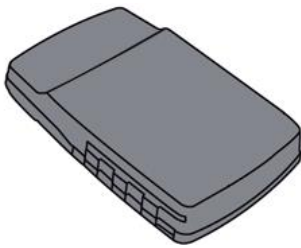
- **Default folder for routes:**
'TwoNavData/Data'



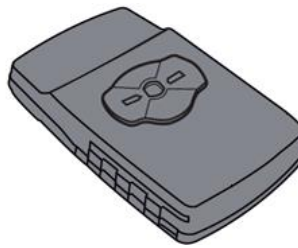
The simplest way to manage files on your device from a computer is by using the Land software (Windows/Mac platforms). You can download and try Land completely free from: <http://www.TwoNav.com>

2.3 MOUNTING

Bicycle mount integrated



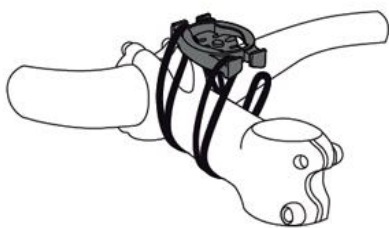
TRAIL



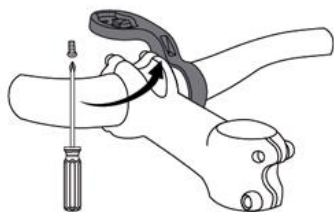
TRAIL BIKE

The rear mount is used to attach the Trail Bike to the bicycle (unlike the Trail Bike, the Trail does not have a rear mount).

TRAIL BIKE ONLY: Stem bike mount



TRAIL BIKE ONLY: Upfront bike mount



Mounting on vehicles



2.4 KEYS



- **'BLOCK'** key:
 - **Press:** Shutdown screen and block buttons
- **'POWER'** key:
 - **Press:** Turn GPS on / Turn GPS off
- **'PAGE'** key:
 - **Short press:** Show next data page
 - **Long press:** Show main menu
- **'BACK'** key:
 - **Short press:** 'Back' in menus / 'Re-center' in map
 - **Long press:** Show map
- **'ZOOM+' / 'ZOOM-'** keys:
 - **Press:** Zoom in / out map



IMPORTANT: Never submerge the device into liquids, not even when all lids are sealed. Do not remove the device from the cradle when device is exposed to liquids, liquids must not get in contact with connectors. While the device is out of the cradle, make sure the rubber is dry and firmly seated into the connectors. Protect your device from extrem weather conditions, your GPS device is certified to work under temperatures between +60°C/-10°C.

NOTE: You can customize button functions in 'Main menu > Settings > System > Keys'.

2.5 RECHARGE

Standard battery life

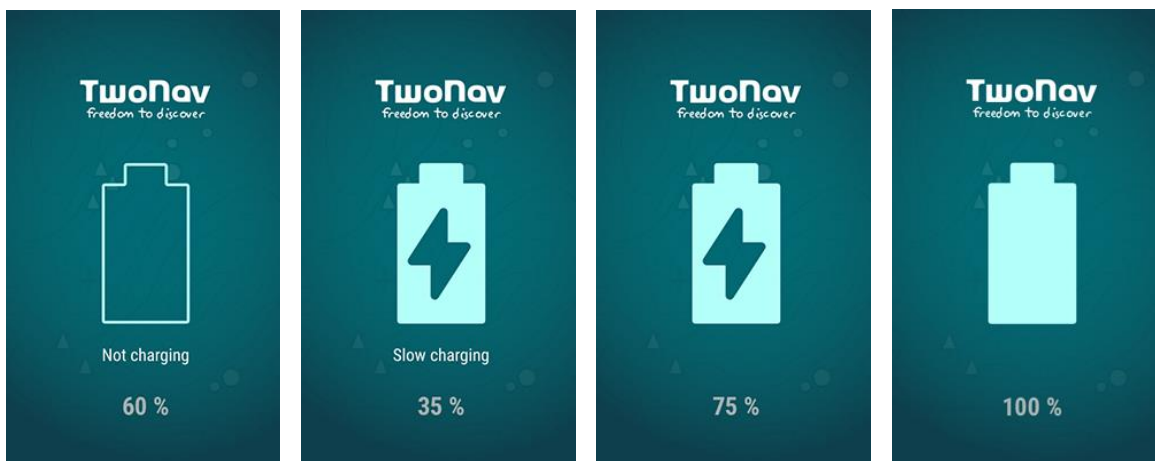
Your GPS device may operate around:

-  **Trail:**
20 consecutive hours with no need of recharging
-  **Trail Bike:**
20 consecutive hours with no need of recharging

Increase battery life

Basic tips to enlarge battery life a little bit longer:

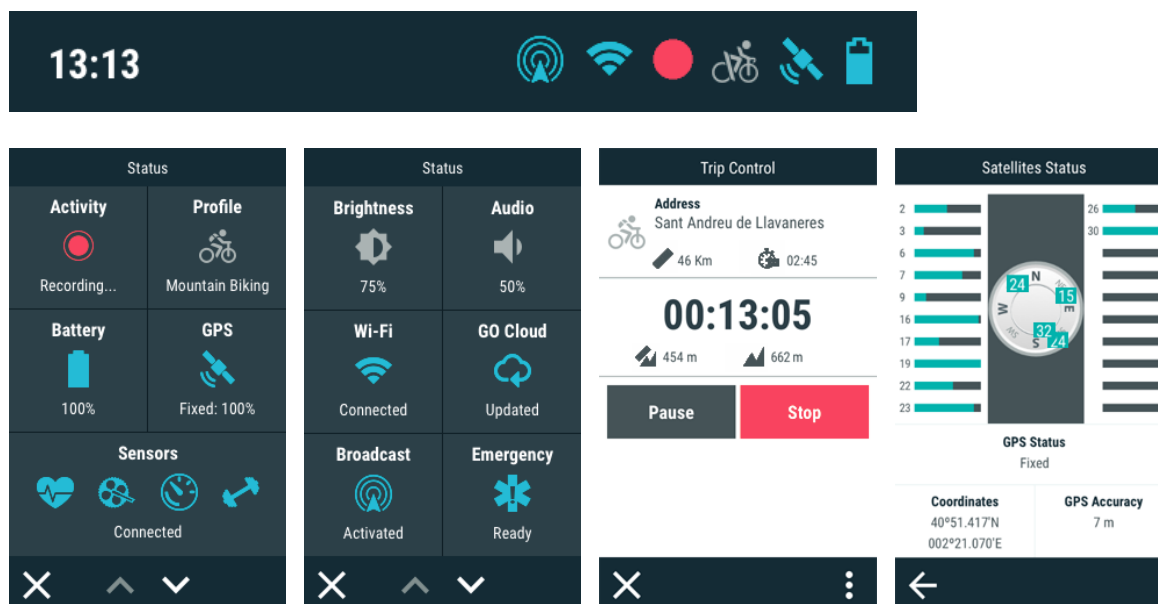
- **Turn the screen off manually when not using the device**
- **Configure automatic shutdown screen function:** 'Main menu > Settings > System > Display and Brightness'
- **Activate the standby mode** ('Block' function): Short press at 'Block' key



Additionally, you can also charge the device by connecting it to a charger with a USB cable. When the device is charging, the screen will automatically turn off to speed up the process. You can turn it on by pressing any button. It will turn off automatically after 15 seconds.

IMPORTANT: To charge the device correctly, we recommend using at least a 2A charger and the original USB cable that is packaged with the device. If you use a less powerful charger, or other cables, the charging may be slower, or the device might even discharge despite being plugged in.

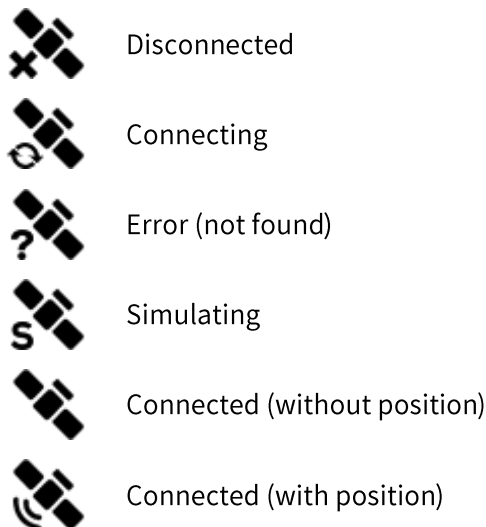
2.6 STATUS



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.
- **Battery:** Check the current battery level of the device.
- **Brightness:** Set the general brightness level for the screen.
- **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:

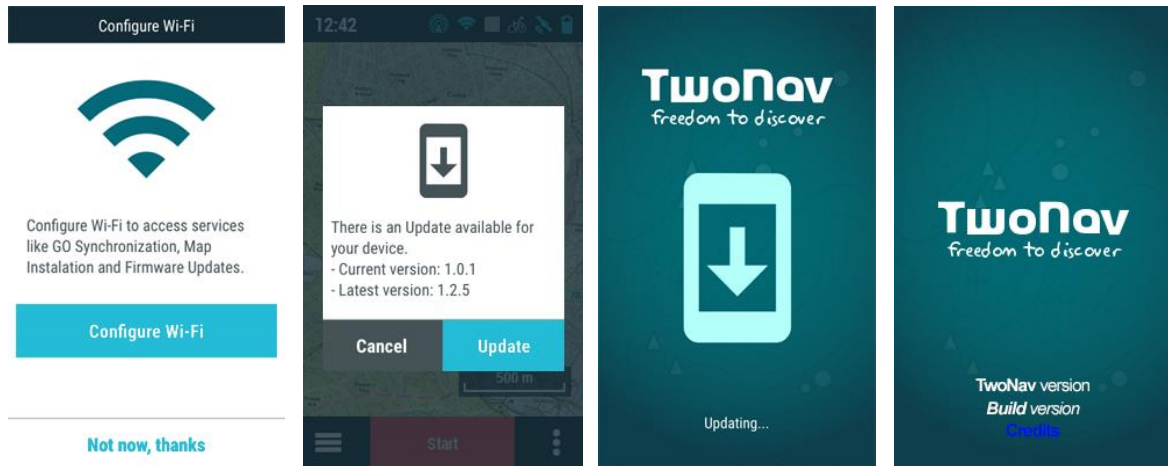


NOTE: *The device will attempt to fix your current position, but if you are somewhere without GPS coverage (for example: inside a building), GPS status will turn into 'Connected (without position)'.*

- **Audio:** Set the general audio and the volume of each audible element individually.
- **Wi-Fi:** Select this option to scan for nearby Wi-Fi networks.
- **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.
- **Broadcast:** Turn this feature on to broadcast your activity live. Your previously specified contacts will be able to see where you're going in real time.

- **Emergency:** Press this button to send an emergency alert if you're in trouble (lost, accident or other emergency). The device will send a rescue message to your contacts with the coordinates of your current position.

2.7 SOFTWARE UPDATE



New software releases are periodically published, these updates are free and add new features to your GPS. Plus, if we've identified any errors or problems with previous versions, the update will fix them. We recommend you to keep your GPS up to date for the best user experience. The updates are downloaded via Wi-Fi. Follow these steps to update your device:

1. Connect to a nearby Wi-Fi network by going into 'Main menu > Settings > Wi-Fi'.
2. Once connected to the internet, the device will check for updates to the software or operating system.



Software update:

Program that runs on top of the operating system and interfaces with the user.



Operating system update:

Underlying software that controls the device's internal operation.

3. If any updates are available, a message will be shown on the screen giving you the option to install them.
4. The installation is automatic.
5. Once complete, you can go back to using the device normally.

2.8 RESET



It is recommended not to force the shutdown of the device unless it is necessary:

- **Force the device to switch off:** Press 'Back' and 'Zoom-.

3 INTERFACE

3.1 MAP PAGE

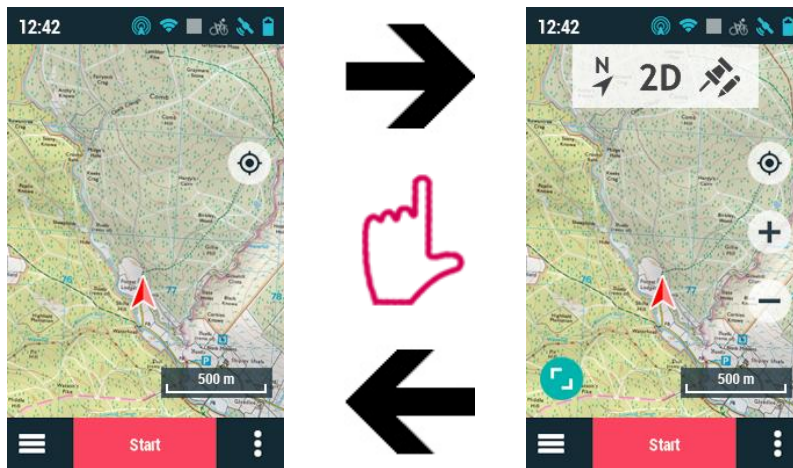
3.1.1 NO NAVIGATION MODE



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.

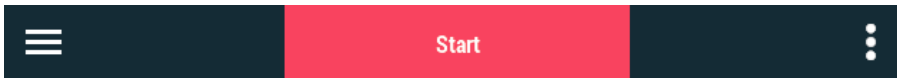
3.1.1.1 STATUS BAR



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+'.



2D FLAT



3D FLAT



3D+ RELIEF

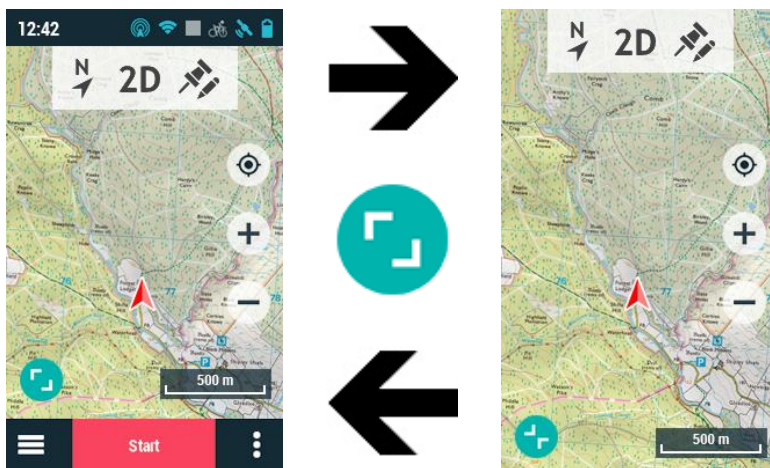


RELIEF MAP

- **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.



Turn RIGHT at the beach, follow the...

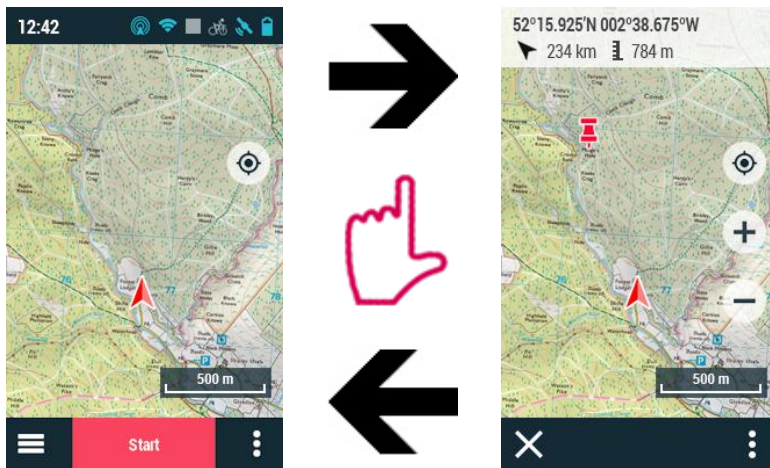
- **Next event:** Information related to the next position (direction and distance). Direction arrow shows direction of the following section of the track. This parameter is the distance to calculate tangent to give direction. Take the direction of this arrow as a reference to keep going your way.



- **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

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.

Data Page (1/3)		Graph Page (2/3)		Compass Page (3/3)		Data Page (1/4)	
Chronometer	Odometer (Km)	Time to Dest.	Ascent to Dest. (m)	Coordinates	Bearing	Chronometer	
01:45:52	2.35	01:15:20	865	52°05.119'N 02°58.836'W	056°	01:20:34	
Ascent (m)	Mean Speed (km/h)	Trip Odometer (mi)		Compass (%)		Activity Odometer	
28.21	9.45					9.21	
Descent (m)	Profile Odometre	Slope	Distance to Dest.			Ascent	
1980	14.52	12.02	8.32			22	
✕ < > ⋮		✕ < > ⋮		✕ < > ⋮		✕ < > ⋮	

**DATA
PAGE**

**GRAPHS
PAGE**

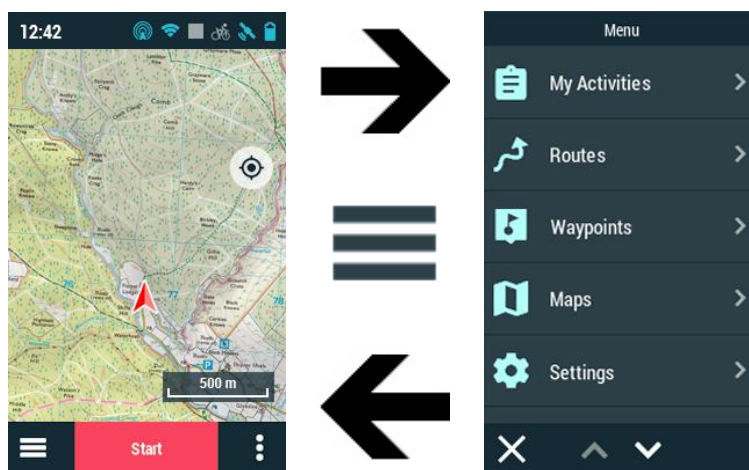
**COMPASS
PAGE**

**DESTINATION
PAGE**

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 sub-menus.

Data lists

Maps List	Waypoints	Routes	Routes
<input checked="" type="checkbox"/> Spain Roads	<input checked="" type="checkbox"/> Waypoints.wpt	<input checked="" type="checkbox"/> Highest peaks.RTE	<input checked="" type="checkbox"/> Track in Moscow.TRK 9,784 km / 779 m
<input checked="" type="checkbox"/> Malta Topo	Waypoint 1 1543 km	Waypoint 1 652 km	Start 185 km / 0 km
<input checked="" type="checkbox"/> Italy Roads	Waypoint 2 647 km	Waypoint 2 652 km	Arrival 185 km / 9,784 km
3D Ireland 3D Relief	Waypoint 3 647 km	Waypoint 3 652 km	
Spain Ortho	Waypoint 4 223 km		

MAPS

WAYPOINTS

ROUTES

ROUTES

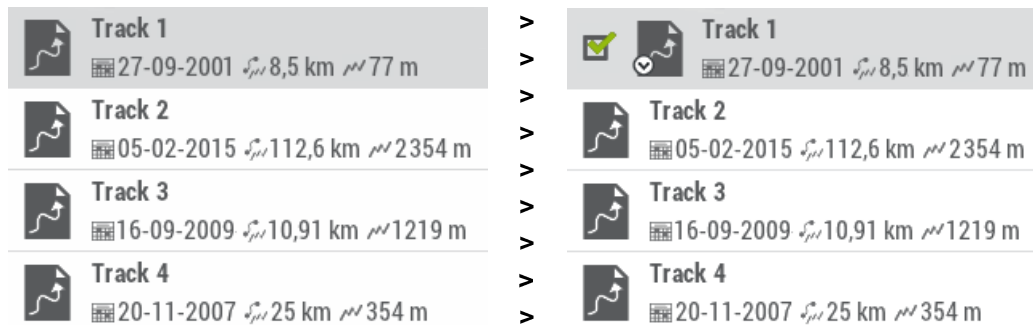
At 'Main menu', you will be able to manage the available files on your device. Files to be taken into consideration on these lists are the files saved at:

- **Default folder for maps:**
'TwoNavData/Maps'
- **Default folder for your recorded activities:** 'TwoNavData/Data/Tracklog'
- **Default folder for waypoints:**
'TwoNavData/Data'
- **Default folder for routes:**
'TwoNavData/Data'

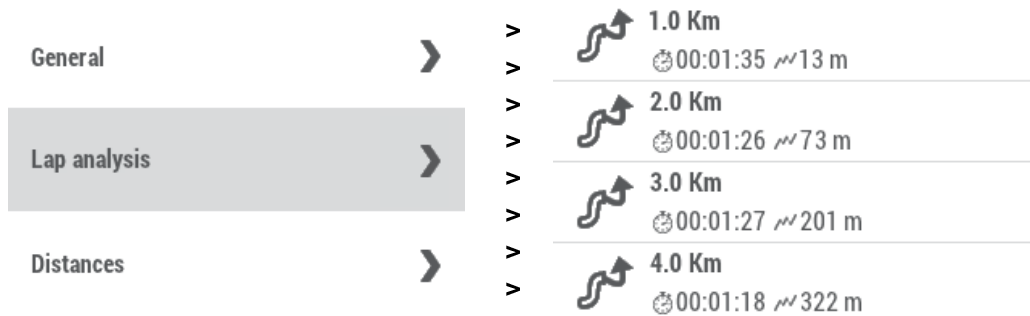
Although the management of elements is centralized at main menu, is also possible to carry out many other actions directly from the map page or using the contextual menu.

Management of elements

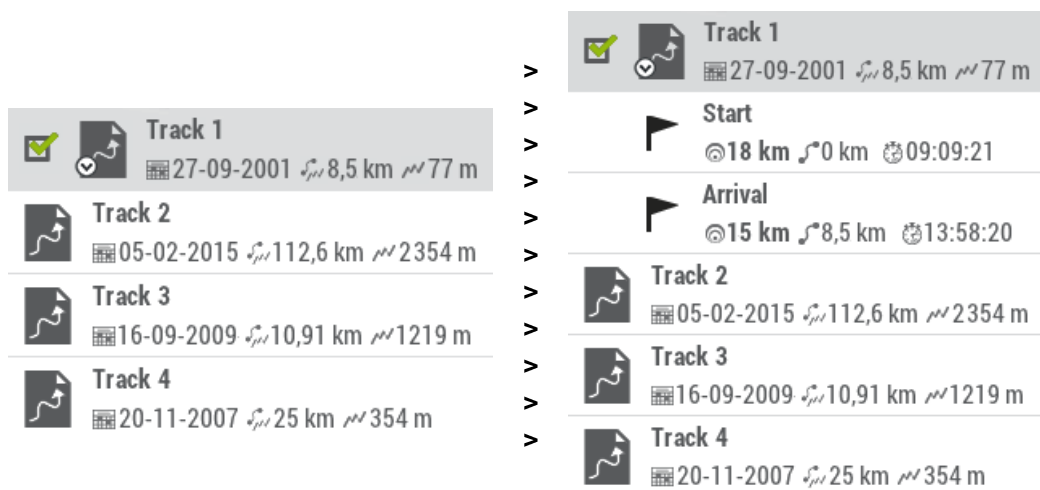
1. **General view:** Opened elements are placed at the top of the list with a ticked square.
2. **Open element:** Press the name of the element.



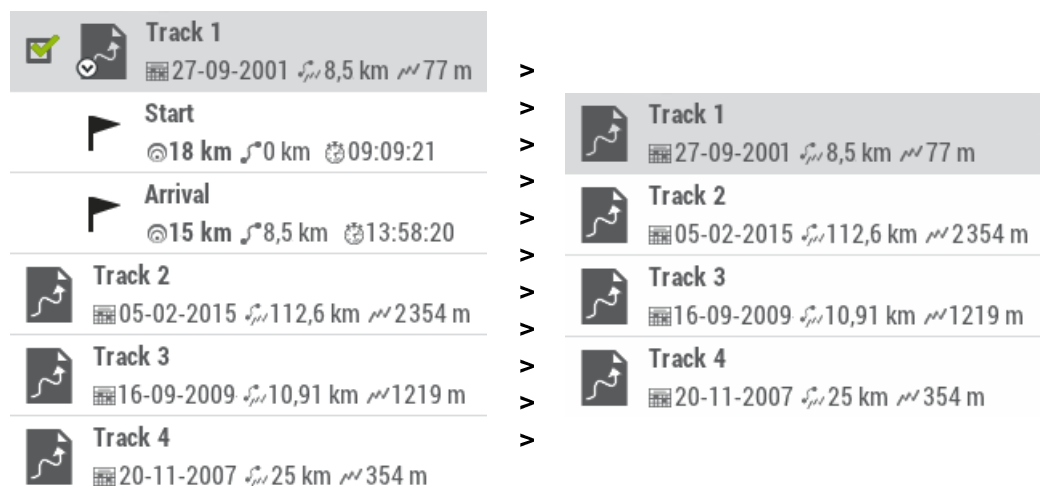
3. **Check the properties:** Press the name of the opened element. At properties window, you can check all the information related to the element and carry out several actions (available information will depend on selected element).



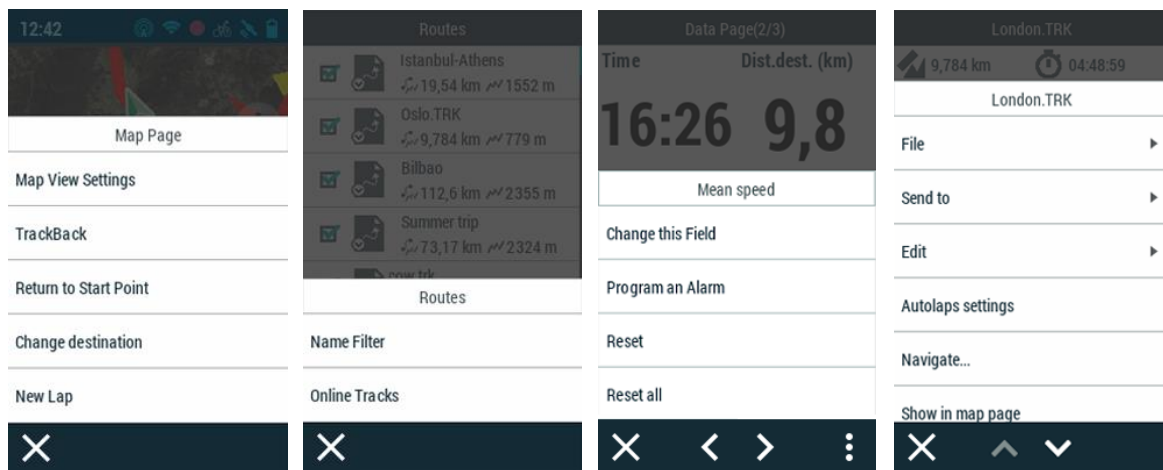
4. **Display subelements:** Some elements might have subelements (for example: waypoints or e-Roadbook points), in order to display them press the icon of the opened element. In order to hide them, press again the icon of the element.



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

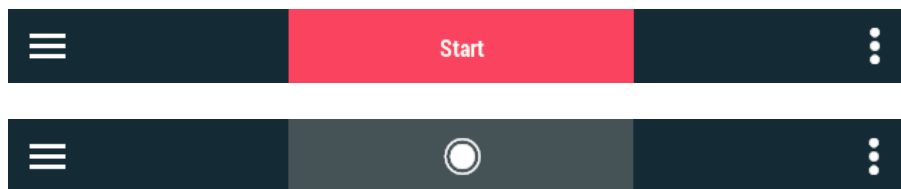


3.4 CONTEXTUAL MENU

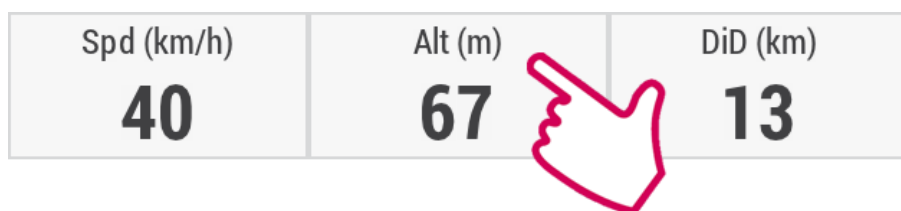


Contextual menus provide additional features that complement your user experience. This software has many features, to keep from showing them all on the screen, which would slow the application down, more specific options are grouped into contextual menus. These options are not initially displayed on 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.



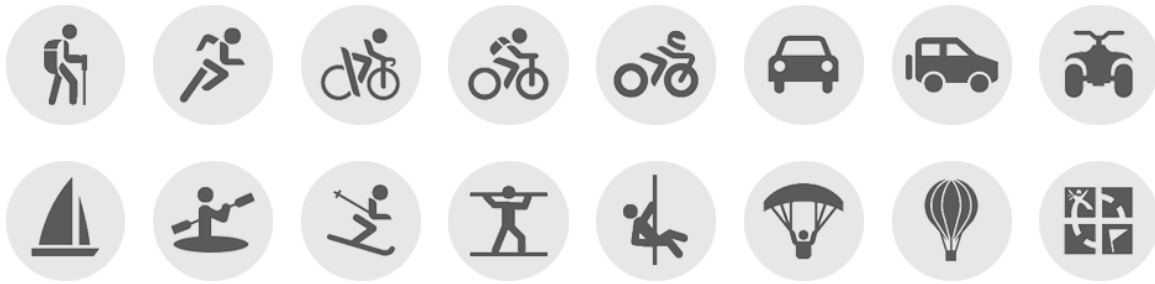
- **Long press:** Long press an item, generally lists of tracks, routes, waypoints, maps or data fields, for approximately 3 seconds



4 OPERATIONS

4.1 ORIENTATION & NAVIGATION

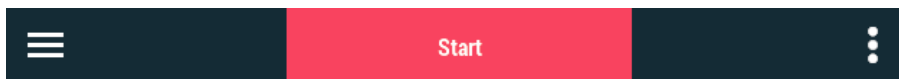
4.1.1 PROFILE



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 special needs, each profile has been developed to have specific settings (restrictions on route calculation, map perspective, 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~~

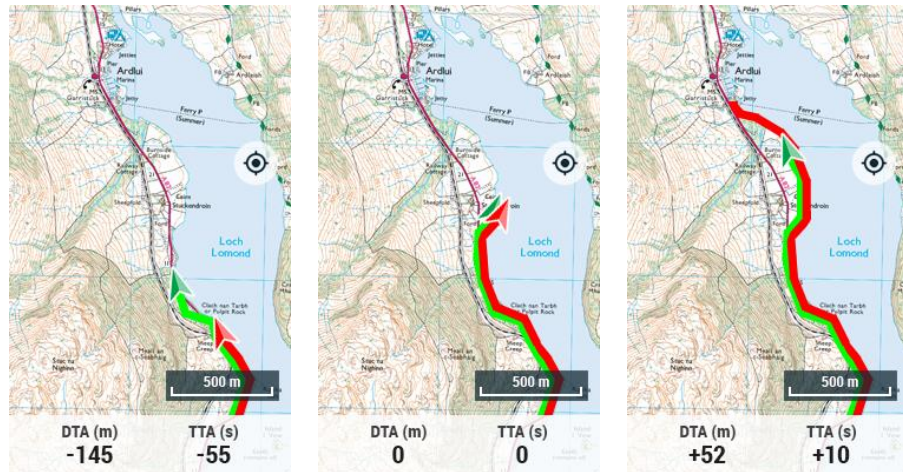
- **Follow a route:** Select a track or route that's been transferred to your device from other sources (recommended by a friend or downloaded from the internet).



- **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.



Health



Services



Tourism



Restaurants



Shops



Transport

- **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 →  **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

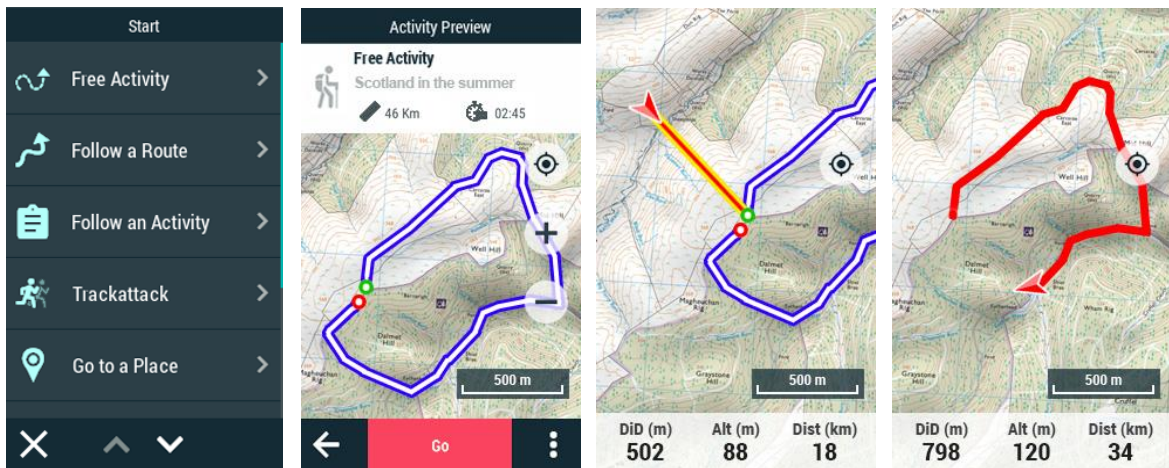
- **Training by time:** Set the duration of your training by time and once your goal has been reached, the device will show a warning message.

1 h 15 m

- **Latest destination:** List of destinations recently selected.

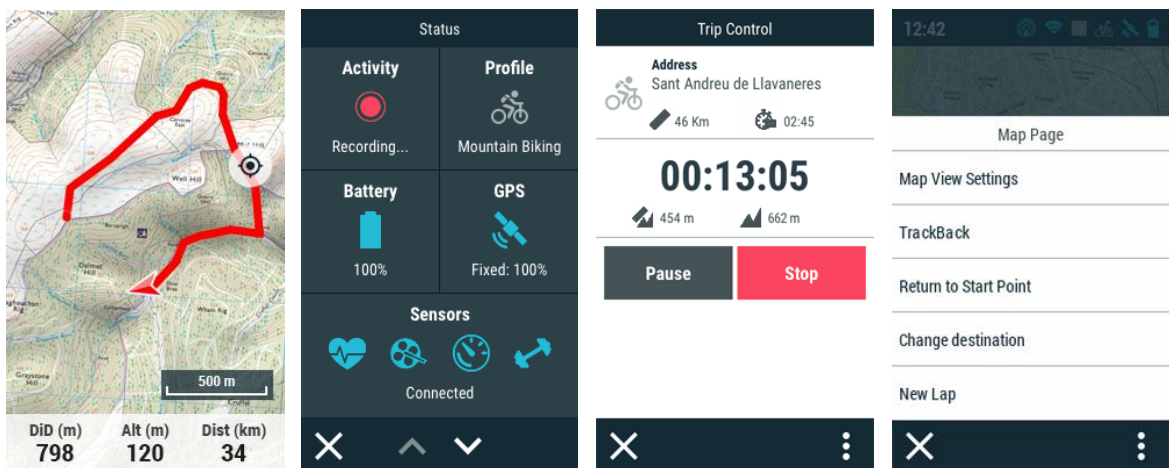


4.1.3 ACTIVITY PREVIEW



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:

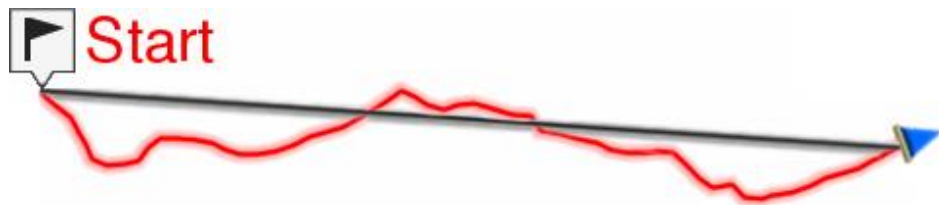
- **Pause:** Press this button to pause your trip at any time (the data fields, the recorded track and other features are synced. When you press the 'Activity control' command, this will pause all commands until the recording is resumed).

- **Stop:** Press this button to finish the current trip and stop the recording. The track of your trip is saved at 'TwoNavData/Data/Tracklog' folder. But you can directly review your recorded tracks from the list of tracks ('Main menu > My activities').

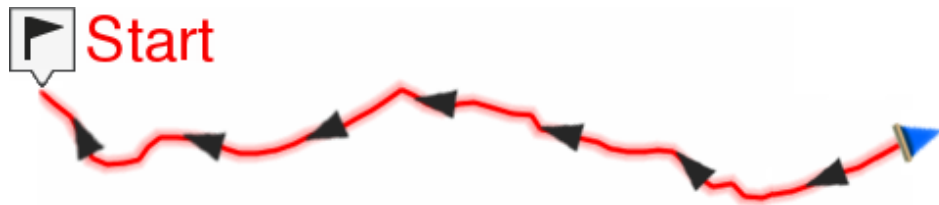
Select another destination

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 inalterd and the device keeps recording it.



4.1.5 ACTIVITY REVIEW

	54,91 km 1277 m 1268 m	04:03:33 14 km/h 886 Kcal	Altitudes 3D track Yes	Distances Projected distance 54,56 km	
	General >	Lap Analysis >	Maximum altitude 210 m	Distance with altitudes 54,91 km	
	Distances >	DiD (m) 812	Alt (m) 345	Dist (km) 69	Linear distance 0,159 km
	Departure altitude 38 m	Arrival altitude 44 m	Height above departure	Area 16,395 km²	

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).

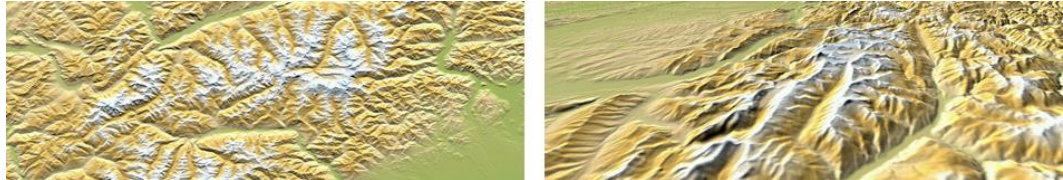


Urban: Maps containing information related to roads and streets (names of the streets, street directions, points of interest...).

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

3D 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' (all maps available at 'TwoNavData/Maps' folder for your present position). Your device can open the following map formats:



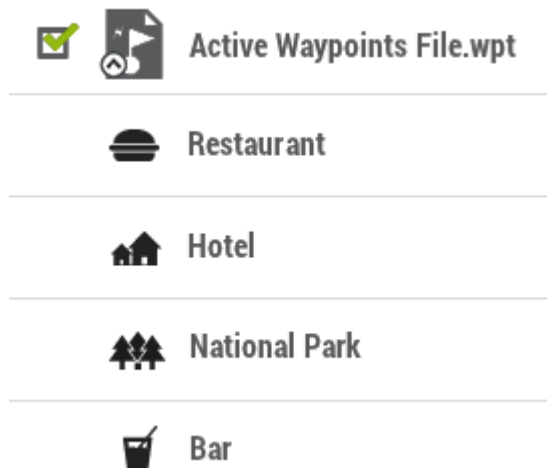
IMPORTANT: Some maps are protected against illegitimate copies. In such situations you must enter a registration code to use the map.

4.3 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' (all waypoints available at 'TwoNavData/Data'). Your device can open the following waypoint formats:

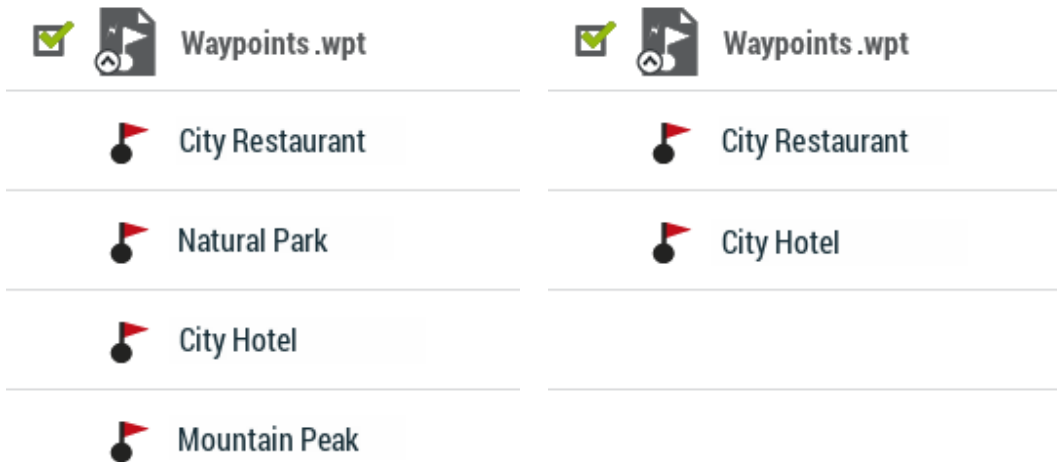


IMPORTANT: More waypoint formats can be easily imported and converted to supported formats using Land software (Windows/Mac), more information at <http://www.TwoNav.com>

4.3.1 OPERATIONS ON WAYPOINTS

Advanced operations that can be performed on waypoints:

- **Name filter:** Filter your waypoints by entering a combination of characters. Only items containing such letter combination will be displayed.



- **Sort by:** Sort your waypoints using a reference. All elements will be rearranged from highest to lowest according to that reference.

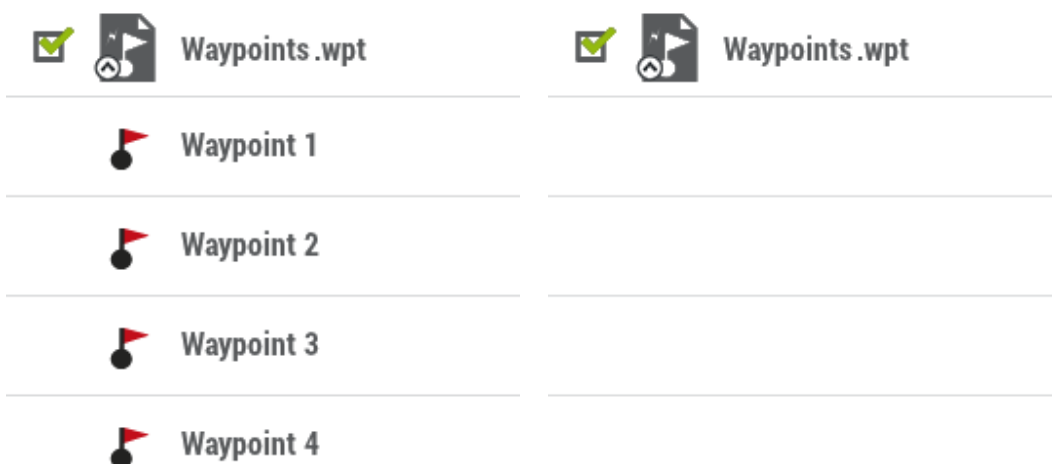
Name
Date

Proximity
Altitude

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



- **Reset:** By pressing 'Reset' at any Active Waypoints File (AWF), you will delete all the waypoints of that specific active file.



4.4 ROUTES



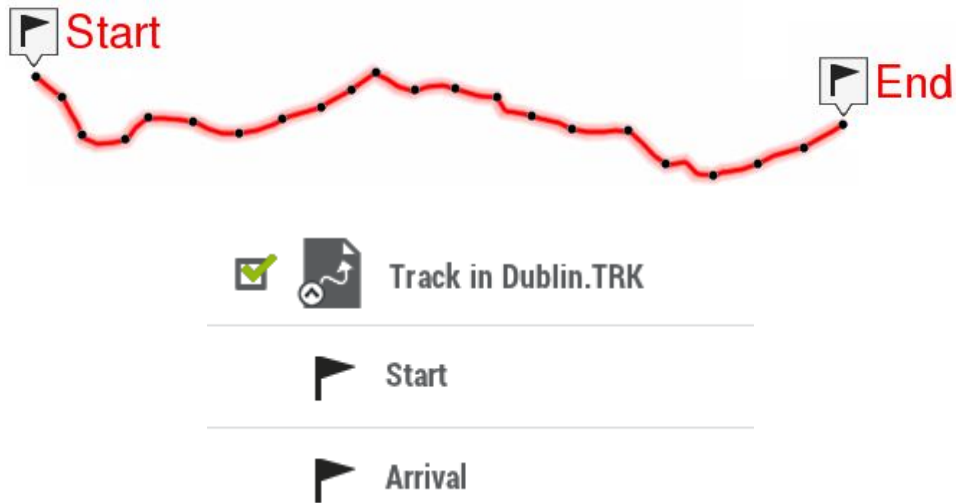
Your device classifies courses into two types, depending on their use:

- **My activities:** Tracks recorded directly with your device. Displayed with an activity 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' (by default the device will record all the activities in the folder 'TwoNavData/Data/Tracklog').
- **Routes:** Tracks that have 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' (routes are stored in the folder 'TwoNavData/Data').

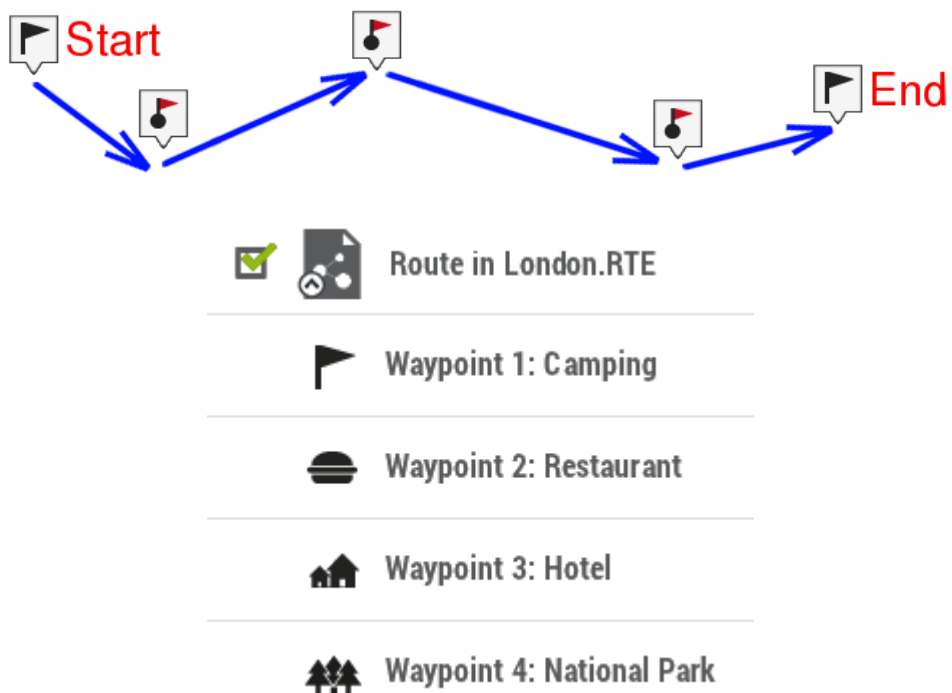
Types of routes

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.



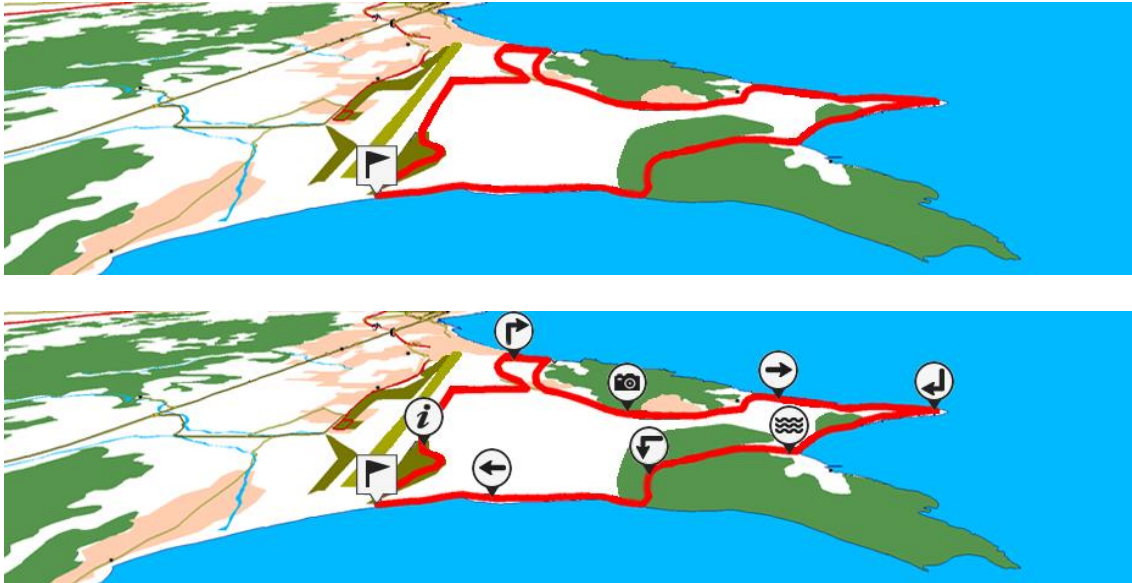
- **Free path routes:** Routes with no defined path based on reaching waypoints no matter which path is followed to reach these points. This type of route is commonly used in activities where it is not possible to reach an objective directly (maritime navigation, aerial activities...). In these activities, 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...

<input checked="" type="checkbox"/> Natural Park of Las Salinas.TRK	<input checked="" type="checkbox"/> Natural Park of Las Salinas.BTRK
Start	Start
Arrival	Turn RIGHT at the beach
	Turn LEFT on a wooden bridge
	Turn RIGHT at the tower
	STRAIGHT on the main track
	Arrival

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...

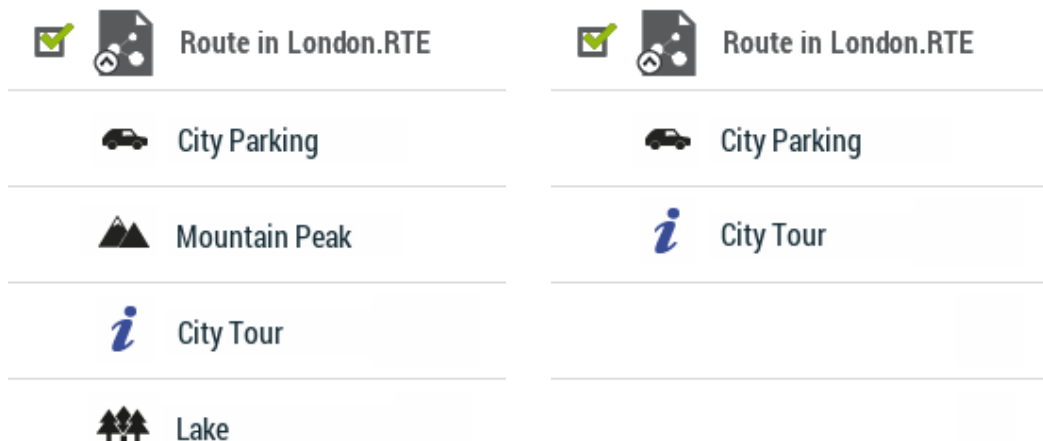


IMPORTANT: More route formats can be easily imported and converted to supported formats using Land software (Windows/Mac), more information at <http://www.TwoNav.com>

4.4.1 OPERATIONS ON ROUTES

Advanced operations that can be performed on routes:

- **Name filter:** Filter your routes by entering a combination of characters. Only items containing such letter combination will be displayed.



- **Sort by:** Sort your routes using a reference. All elements will be rearranged from highest to lowest according to that reference.

Name
Activity
Date
Duration

Distance
Proximity
Ascension
Speed

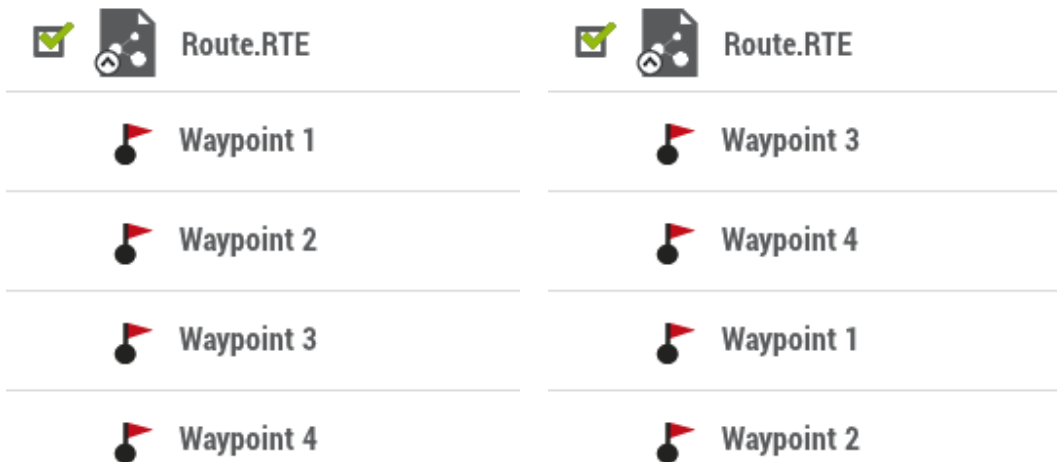
- **My on-line routes:** Access to private servers where you can store or download your own routes (OS Maps, GO cloud, IGN Rando...). Only you can access these accounts as they are linked to your account.



- **Discover on-line routes:** Access to public servers where you can download routes provided by suppliers and specialized websites (FFCT, GPSies, TraceGPS, LaTrace, Utagawa...). Any user can access these servers and download routes.



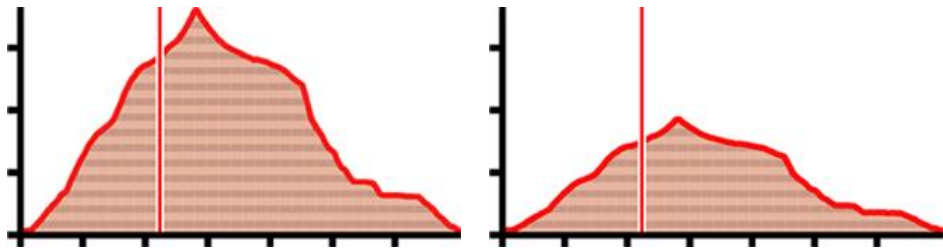
- **Change the order of the waypoints in a route:** In order to change the order of the waypoints of a route, open the contextual menu on the waypoint that you want to move and select 'Move up' or 'Move down'.



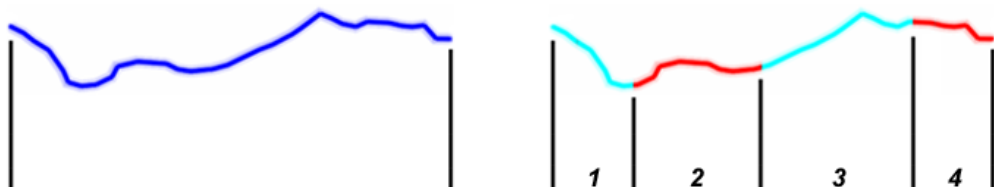
- **Modify for all waypoints in a route:** If any of these properties is modified, it will be applied for all waypoints at the same time.



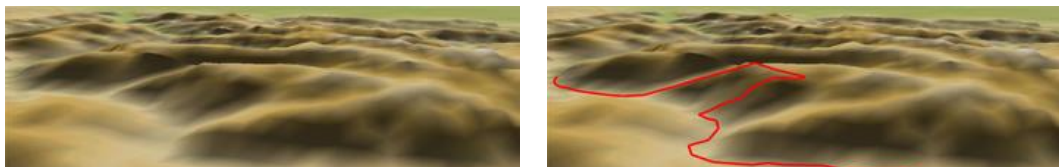
- **Graph representation of routes:** Display a graph representation of your route, just enter the properties of the element and press the button 'Graph representation'. These are the available functions on graphs:



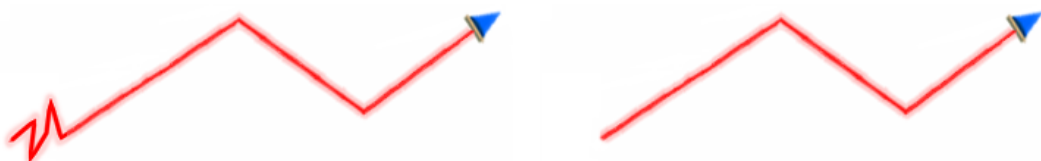
- **Guiding Y axis:** Bar serving as moving axis.
- **Changing data fields on the Y-axis:** Click on the Y-axis to change its default data field and select a new field for this axis (altitude, speed, heart rate, cadence...).
- **Moving graph:** Use 'Zoom' buttons to sections of the graph with more detailed 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.
- **Create separate laps on an existing route:** You may split the route in several laps by opening the contextual menu on the point that divides the two selected laps and select 'Laps > Change lap here'. At this moment, the lap closer to the end of the route will change color to highlight the difference between the two lap.



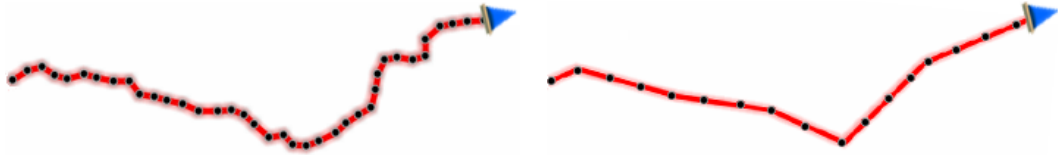
- **Import altitudes:** If you have a 3D relief map loaded (*.CDEM file), your device will assign to each point of the route its altitude considering the information of the loaded relief map.



- **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.



- **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.

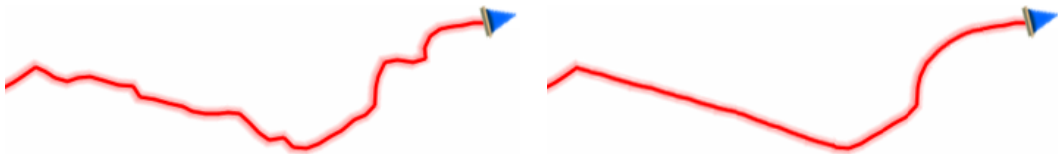


- **Assign time/speed to route points:** Determine a time for departure and a constant speed so that your device will calculate the estimated time of arrival for each point in the route.

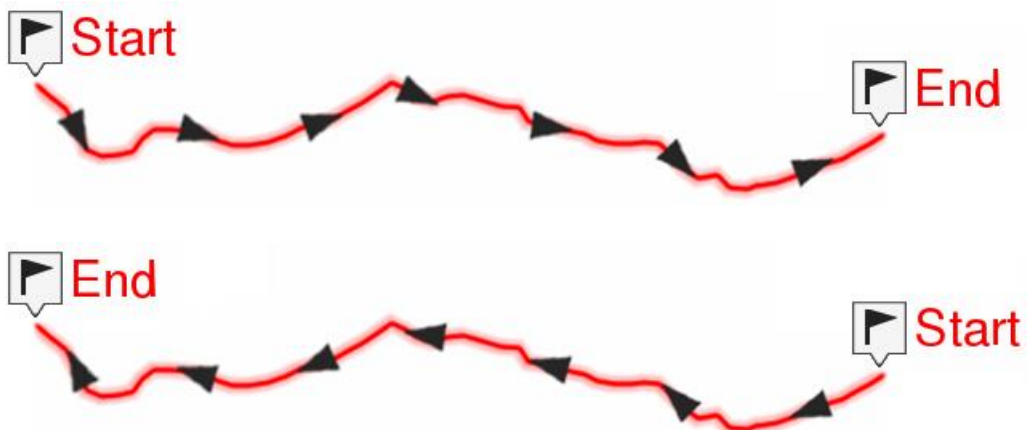
09:30:15

50 mi/h

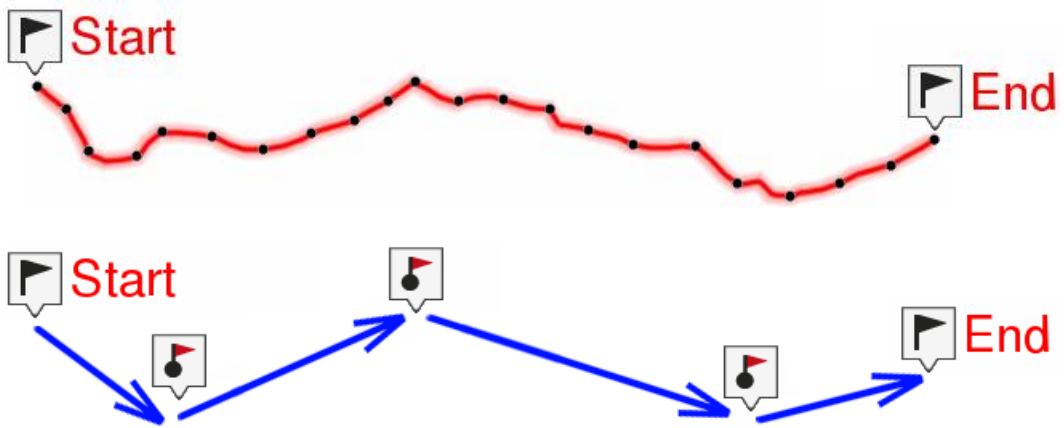
- **Delete aberrant points:** Points deviating excessively from the route will be considered errors, and so deleted.



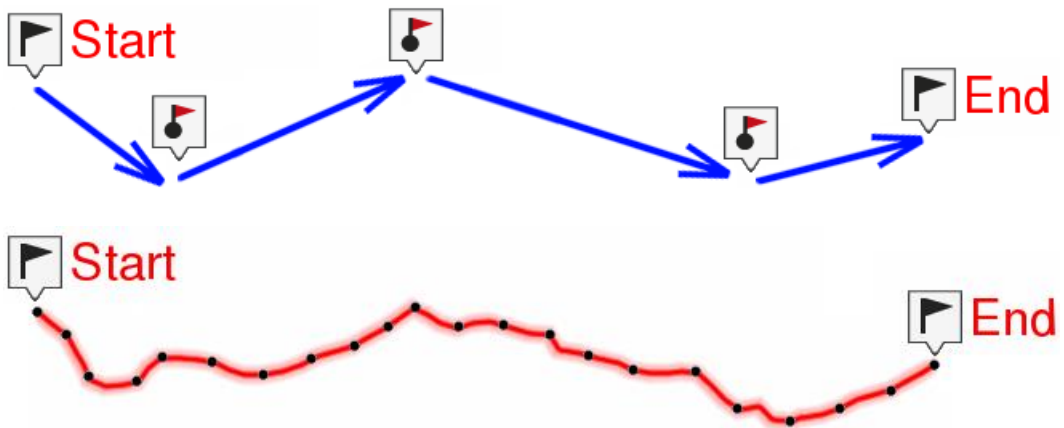
- **Invert route:** In order to display a route in the opposite sense to the default one (the beginning at the end and viceversa), open the contextual menu of the route and select '*Tools > Reverse the route*'.



- **Convert TRK to RTE:** In order to change a TRK into a RTE, open the contextual menu of the route and press '*Tools > Convert TRK to RTE*'.



- **Convert RTE to TRK:** In order to change a RTE into a TRK, open the contextual menu of the route and press 'Tools > Convert RTE to TRK'.



4.5 SEEME™



Your device includes a SIM card that will let you take advantage of this service's many features. SeeMe™ is an exclusive service that gives your GPS device connectivity anywhere without the need for a smartphone. Thanks to its autonomous wireless communication technology (GPRS), it can transfer data from wherever you are. The SeeMe™ service offers the following features:

- **Broadcast your position live:** Your broadcast contacts will be able to follow your activities live as they watch your route on a map and monitor parameters like distance, ascent and speed. Go out and explore safe in the knowledge that your loved ones know where you are at all times.

- **Send emergency alerts:** Your emergency contacts will receive an alert (SMS and e-mail) when you press the emergency button on your device. That way they'll know your location and that you're in trouble.

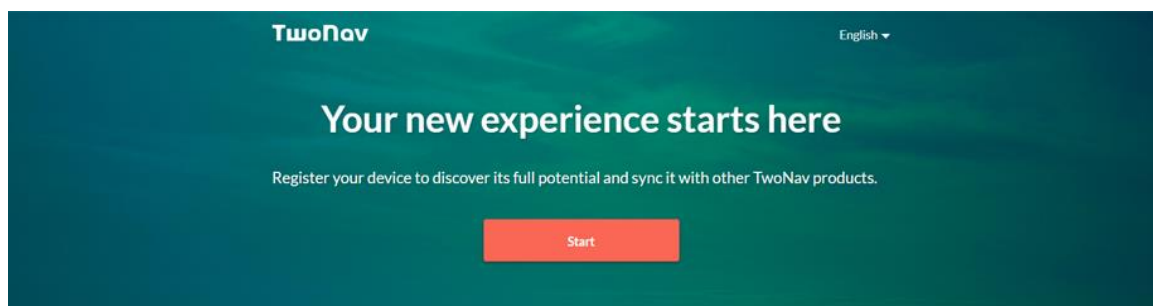
You can stay visible without a mobile phone, without draining your mobile battery and without having to rely on its coverage. This connectivity is provided thanks to the integrated SIM card, which gives the GPS device 2G GSM connectivity. This means the availability of the service will depend on the 2G GSM coverage, which is widespread in Europe and North America, but may not exist in specific countries or areas.

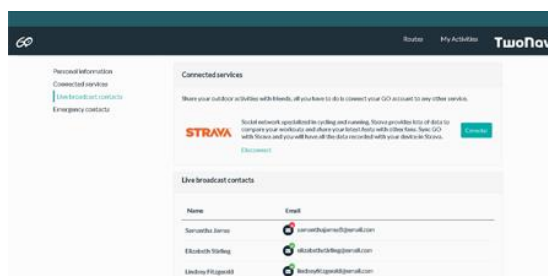
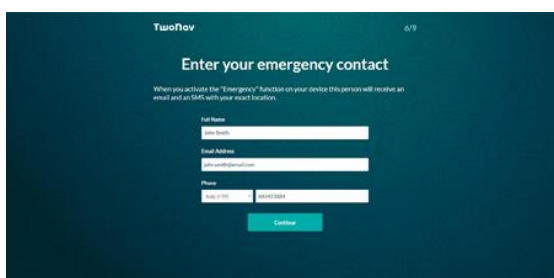
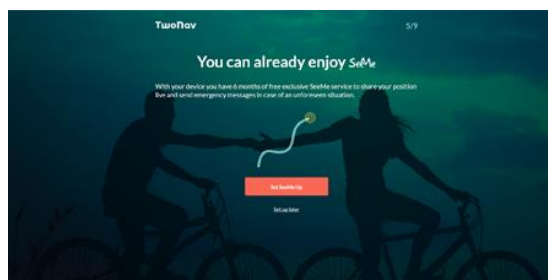
IMPORTANT: SeeMe™ is a renewable subscription service. These features require an active subscription, which you can manage from: <http://SeeMe.TwoNav.com>

Register new contacts

The broadcast and emergency contacts are different:

- **Broadcast contacts:**
 - Maximum number of contacts: 10
 - Information: Contact name and e-mail
 - How it works: When you start an activity, your contacts will receive an e-mail with a link where they can follow your activity live.
- **Emergency contacts:**
 - Maximum number of contacts: 2
 - Information required: Name, e-mail and mobile number of the contacts
 - How it works: When you press the 'Emergency' button, your contacts will receive an SMS and e-mail with your current location.





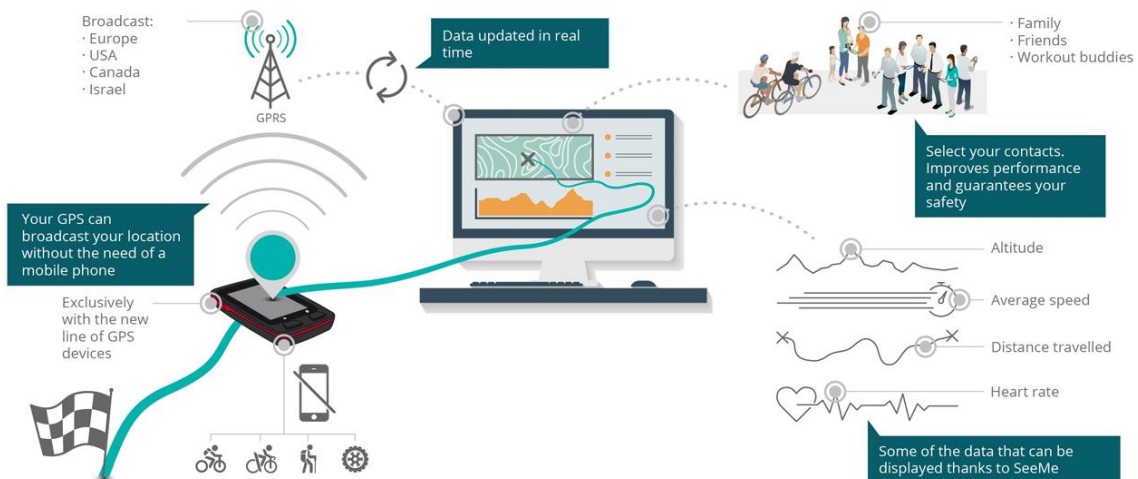
Follow the steps below to activate SeeMe™ service on your device:

1. Access <http://www.TwoNav.com/Start>
2. Select your GPS device model and log in with your TwoNav user account.
3. Enter your device's serial number.
4. Set up the SeeMe™ service by registering your own emergency contacts (during an activity press 'Emergency' button on the GPS and your specified contacts will automatically receive an e-mail and SMS containing your exact location).
5. Next, add several contacts that will be able to follow your activities live. The contacts you add will be able to see where you're going live during your outdoor activities (as soon as you start an activity, if the 'Broadcast' feature is activated, your contacts will receive an e-mail with a link where they can follow your activity in real time).

If you registered your GPS some time ago and forgot to add contacts, you can manage them from your personal space on the GO web portal (<http://Go.TwoNav.com>). Go to 'Main menu > SeeMe™' and add them. And if your contact list is set up, you can edit it and add other contacts from the GO portal whenever you want.

IMPORTANT: When you enter a contact, they'll receive a request that they must accept in order to receive SeeMe™ notifications. If they don't accept your contact request, they won't get any messages.

4.5.1 LIVE BROADCAST



Usefulness of live broadcasts

Discover the multiple advantages of broadcasting your activities with SeeMe™:

- **Broadcast your movements wherever you are**
- **Give your friends and relatives peace of mind on each outing**
- **Remain visible at all times with your position in real time**
- **Let others know the track you're on and where you're headed**
- **Analyse a wealth of data and stats on your last activity (total distance, time, accumulated ascent, cadence, power...).**

How the service works

13:13

Status

Brightness 75%	Audio 50%
Wi-Fi Off	GO Cloud Off
Broadcast Activated	Emergency Off

Start

Free Activity

Remember that you have Broadcast enabled and this will consume more battery.

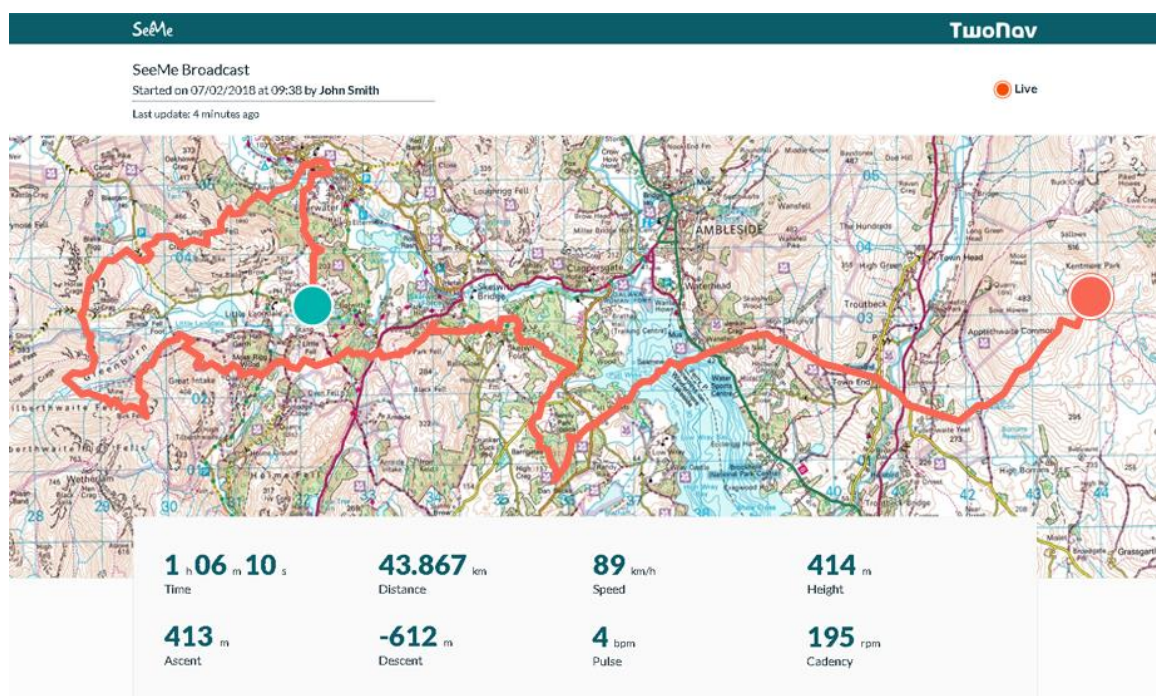
Don't show this message anymore

Cancel Start

DiD (m) 798 Alt (m) 120 Dist (km) 34

Once you're registered your contacts, go out and enjoy your favourite activity. Launch the broadcast by pressing: 'Status bar > Broadcast'. Over the course of your activity, check the status bar to quickly verify that the broadcast is still active (if SeeMe™ is working, the broadcast icon will be on).

Once you start the broadcast, the people on your contact list will automatically receive an e-mail inviting them to follow along (you can invite up to 10 people). This e-mail will give them access to the GO platform, where they can track you live. This link can be shared with other people or on social media, meaning anyone with the link will be able to follow you live. Friends and relatives will be able to see your activity broadcast on a map of the area you're in and analyse a large amount of data on your performance. All this information will be updated in real time as you move.

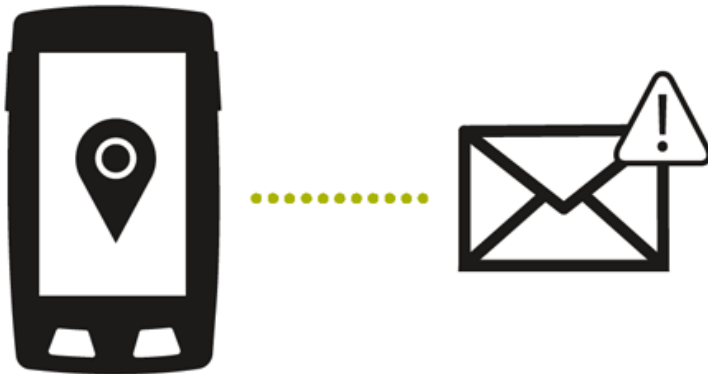


Your device will send positions every so often (5 minutes), with several parameters in each transmission. If you lose the GPRS signal at some point on your route, the data will be stored and broadcast again when the signal is recovered. The broadcast will finish when you end your activity, or automatically if your position doesn't change for one hour.

Depending on your activity, you can use a SeeMe™ broadcast to go a step further. For example, if you usually practice sports with other enthusiasts, use SeeMe™ to meet up at a common gathering point or so your friends will know where they can join you in your activity. And if you like to work out, once you finish training, SeeMe™ will show you your progress along the route to help you improve on your next outing.

IMPORTANT: SeeMe™ is a renewable subscription service. These features require an active subscription that you can manage from <http://SeeMe.TwoNav.com>

4.5.2 EMERGENCY ALERTS



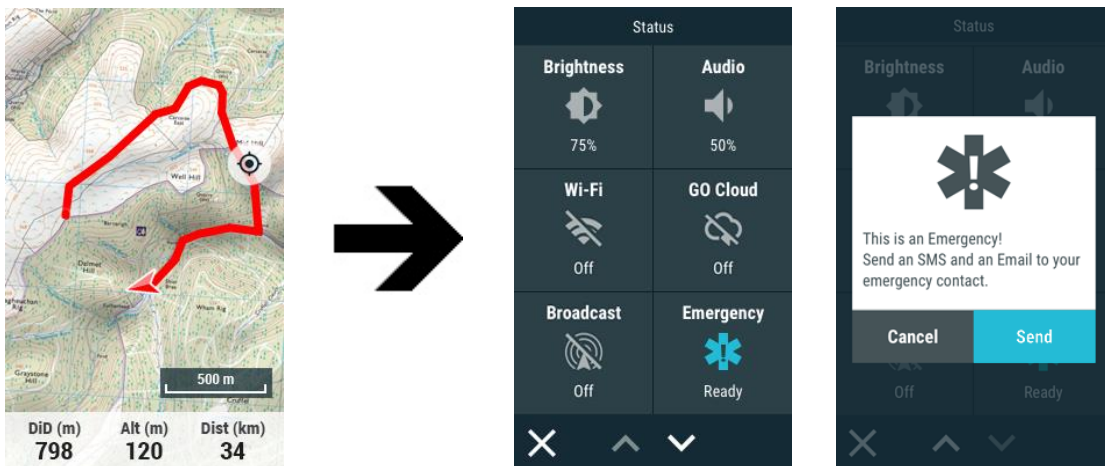
Usefulness of emergency alerts

Stay safe while doing your favourite activity. Thanks to the SeeMe™ emergency alert system, you'll be able to:

- **Reduce the risk of your activities and ensure your safety on any terrain, even if you go off your planned route**
- **Alert your family if you get lost or have a problem**
- **Inform medical services if you witness an accident**

How the service works

Go out, explore and feel free to leave your mobile at home. If you need help or find yourself in a dangerous situation, your device is all you need. The SeeMe™ emergency alert system will let you send an SOS from wherever you are, even if your mobile provider doesn't have coverage in that country. The SIM card included in the device lets you send an emergency alert so that family and friends can locate and help you in any situation.



After starting your activity, if you get lost in an unfamiliar area or have an accident, open the status page and press the 'Emergency' button. After pressing the button, the two people you specified in your contact list will receive an e-mail and SMS to let them know you need help. This message will contain:

- **The exact coordinates that the emergency alert was sent from.**
- **A link showing your location on a map of the area.**

Your contacts can then alert emergency services close to your location or go find you themselves. With SeeMe™ you can concentrate on your activity worry-free.

IMPORTANT: If the GPS coordinates are unavailable at the time you send the alert, you'll be able to send a message with your last known coordinates.

4.6 GO CLOUD



The screenshot shows the 'My Activity' page in the GO Cloud interface. At the top, there are navigation tabs for 'Routes', 'My Activity', and 'TwoNav'. Below the tabs, there are four summary cards: 'Total distance' (946.23 km), 'Total duration' (14h 28m 16s), 'Accumulated ascent' (1.798.00 m), and 'Average speed' (56.84 km/h). Below these cards is a table of activities with columns for Sport, Date, Distance (km), Duration, Ascent (m), and Mean speed (km/h).

Sport	Date	Distance (km)	Duration	Ascent (m)	Mean speed (km/h)
Running	30/01/2018 @ 9:47AM	1.18 km	00:40:31	836.00	13.34
Car	17/01/2018 @ 9:32AM	12.45 km	03:59:11	25.36	9.36
Car	17/01/2018 @ 9:32AM	120.45 km	02:16:33	101.23	102.64
Cycling	17/01/2018 @ 9:32AM	30.30 km	01:11:01	75.12	43.35
Running	17/01/2018 @ 9:32AM	11.21 km	03:59:00	360.98	13.39
Car	15/01/2018 @ 5:05AM	100.77 km	01:30:51	458.61	93.12
Running	08/01/2018 @ 9:09AM	8.43 km	00:23:04	779.00	13.54
Running	08/01/2018 @ 9:09AM	12.88 km	02:32:02	789.09	17.43
Cycling	05/01/2018 @ 7:20PM	36.44 km	00:23:28	120.00	86.42
Cycling	05/01/2018 @ 7:20PM	19.50 km	01:40:41	460.82	35.55

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:

- **TwoNav 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.

4.6.1 SYNCING

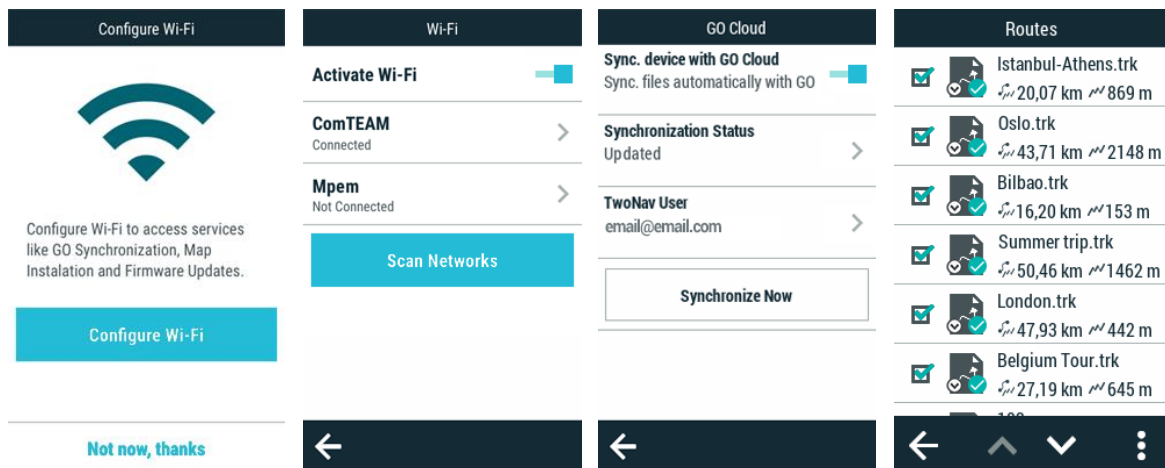
4.6.1.1 SYNCING ON THE GPS



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. Follow these steps to set up Wi-Fi access on your device:

1. Go to *'Main menu > Settings > Wi-Fi'*.

2. Select 'Scan' to see the Wi-Fi networks available.
3. Select the network you want to connect to (and enter the password if necessary).
4. Once connected to the Wi-Fi network, log in with your user account from 'Main menu > Settings > My accounts'.

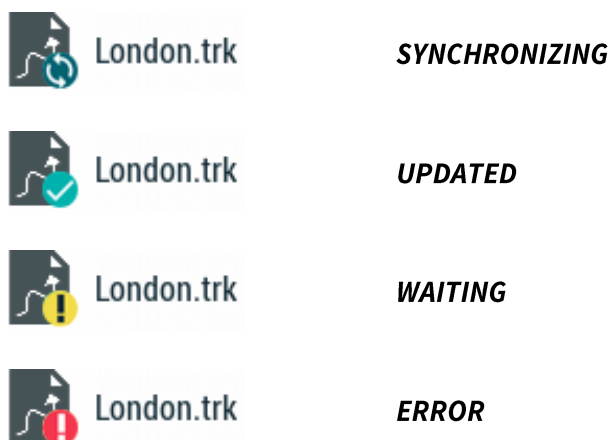


Upload files from GPS to Cloud GO

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:

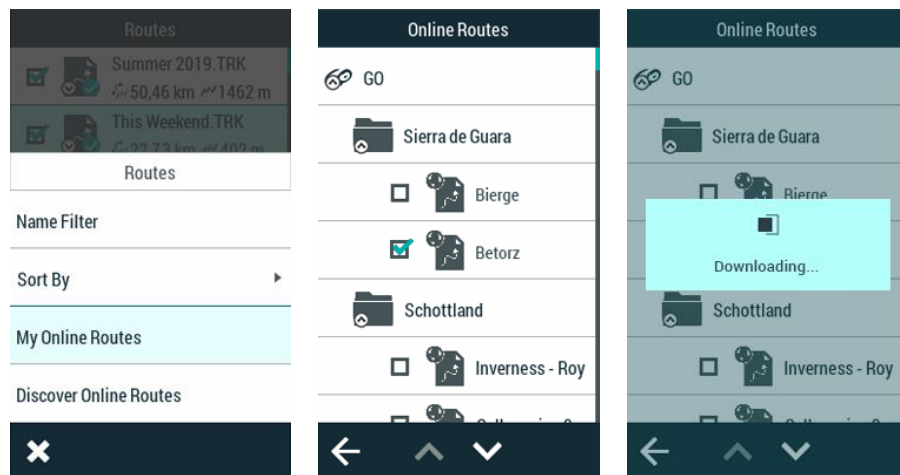


NOTE: Force an instant synchronization by pressing 'Main menu > Settings > Cloud GO > Synchronize now'. After that, your device will automatically synchronize with the GO cloud.

Download files from the Cloud GO to the GPS

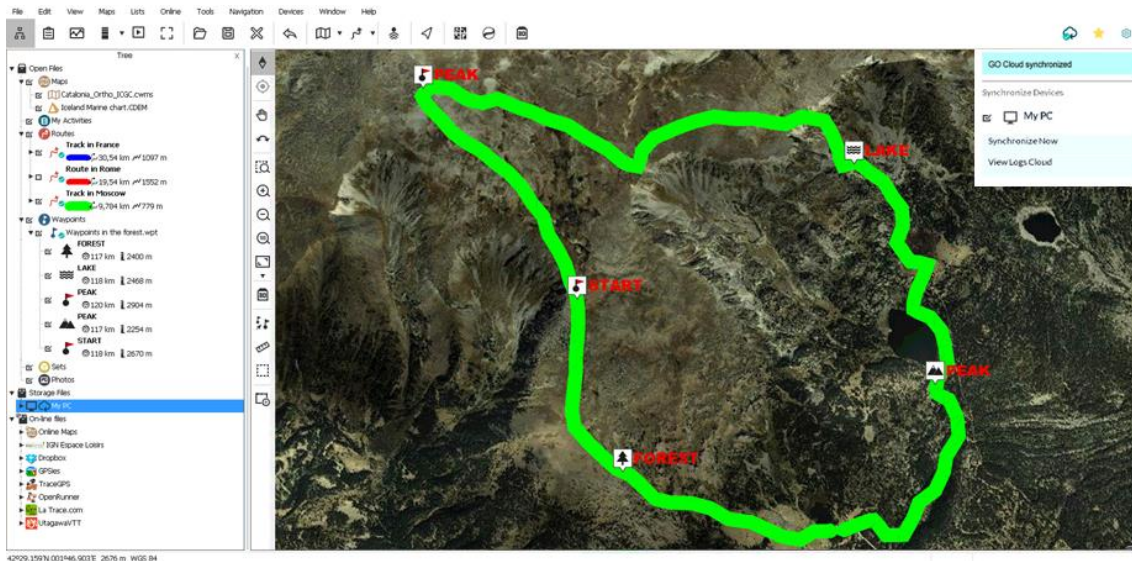
If you want to access your activity record stored at GO and download any of them to the GPS, follow these steps:

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



4.6.1.2 SYNCING IN LAND

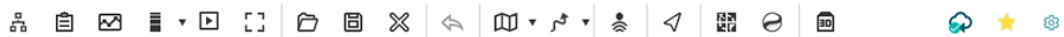




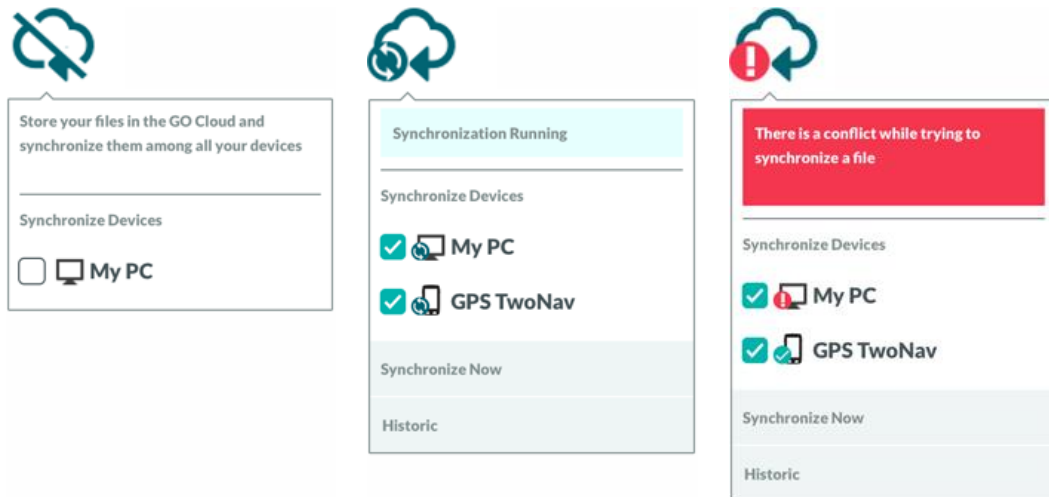
IMPORTANT: Remember that you can download the Land software (Windows/Mac platforms) for free from <http://www.TwoNav.com>

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:

- 
London.trk  441 m  67,13 km **SYNCHRONIZING**
- 
London.trk  441 m  67,13 km **UPDATED**
- 
London.trk  441 m  67,13 km **WAITING**
- 
London.trk  441 m  67,13 km **ERROR**

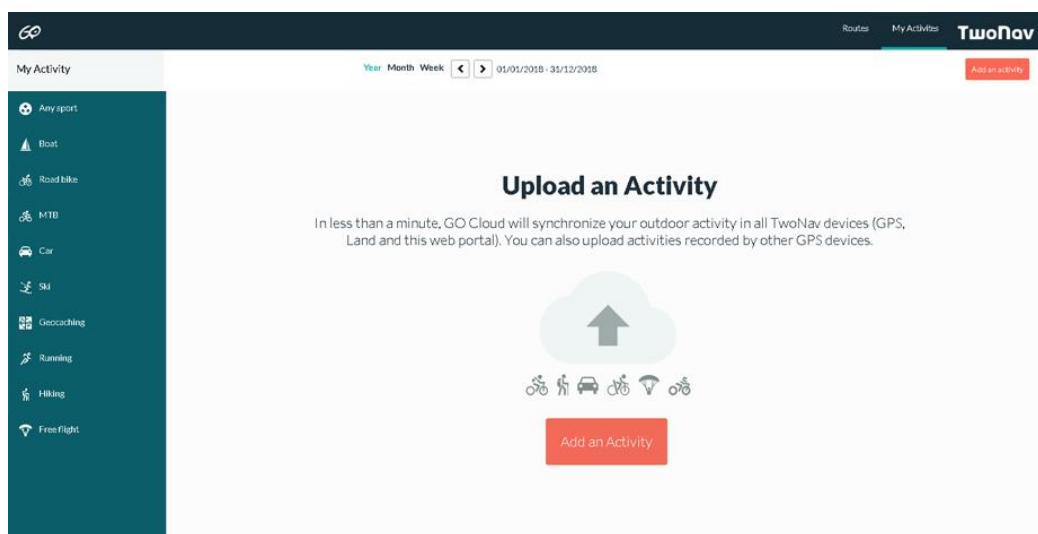
NOTE: You can force instant syncing if desired by going to 'Buttons bar > GO cloud > Synchronize Now'. Your device will then be automatically synced with the GO cloud.

4.6.1.3 SYNCING ON THE WEB

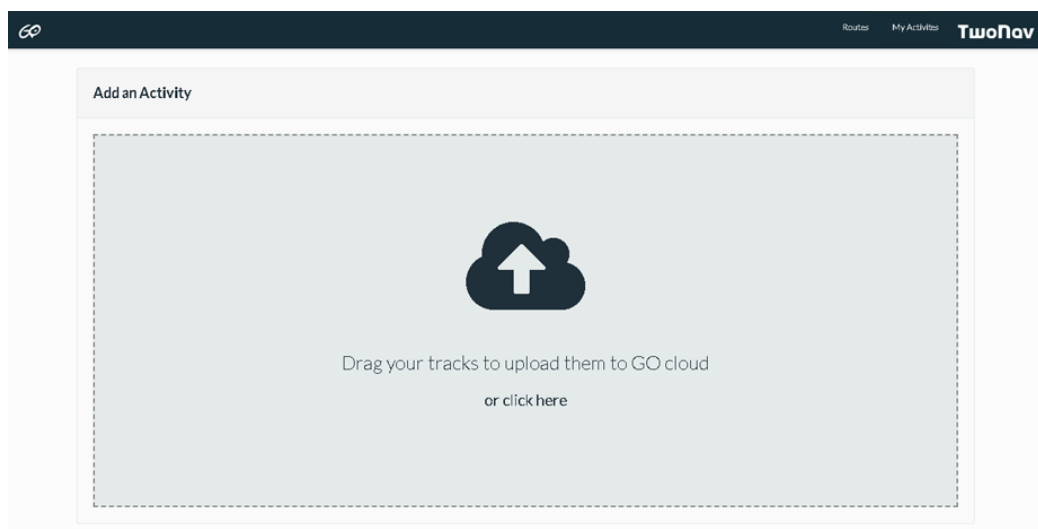


Although one of the above methods is recommended for syncing your files, you can also upload routes manually to the GO Cloud, that is, one by one. It's slower and more involved, but it can be useful if you're having connection problems. Follow these steps to upload your activities manually to the GO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

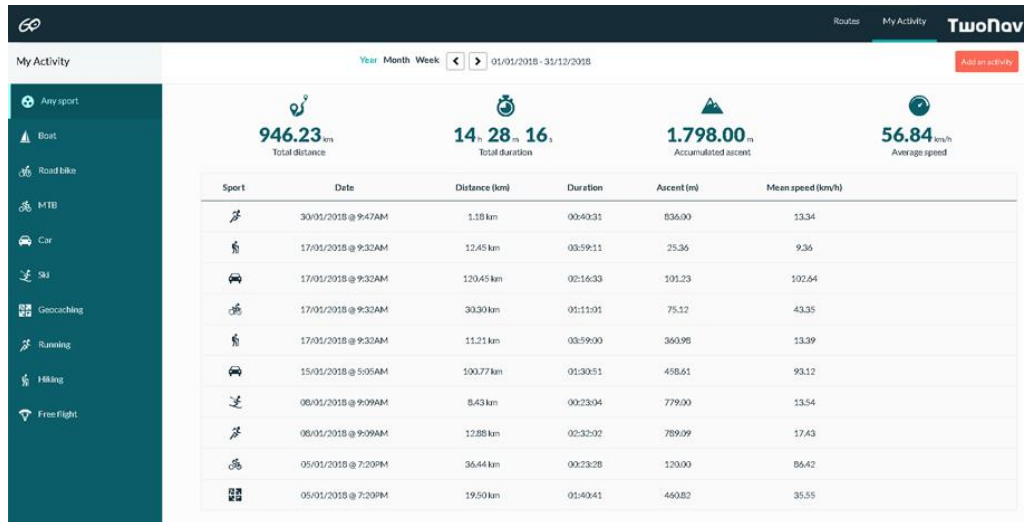


4. Then press 'Add an activity' or 'Add a route' and browse to the file in your computer that you want to upload to the GO Cloud.

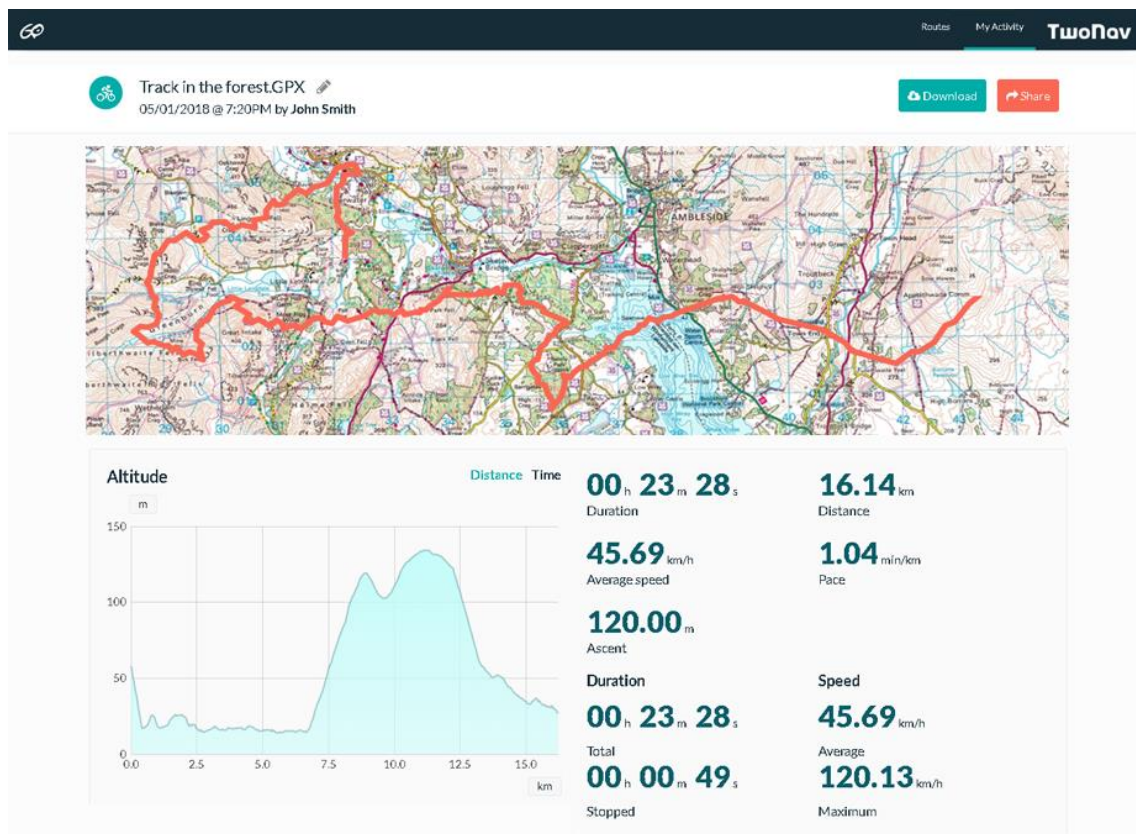


5. From then on, your new activities will be automatically uploaded to the GO Cloud and synced automatically on your other devices.

- 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.



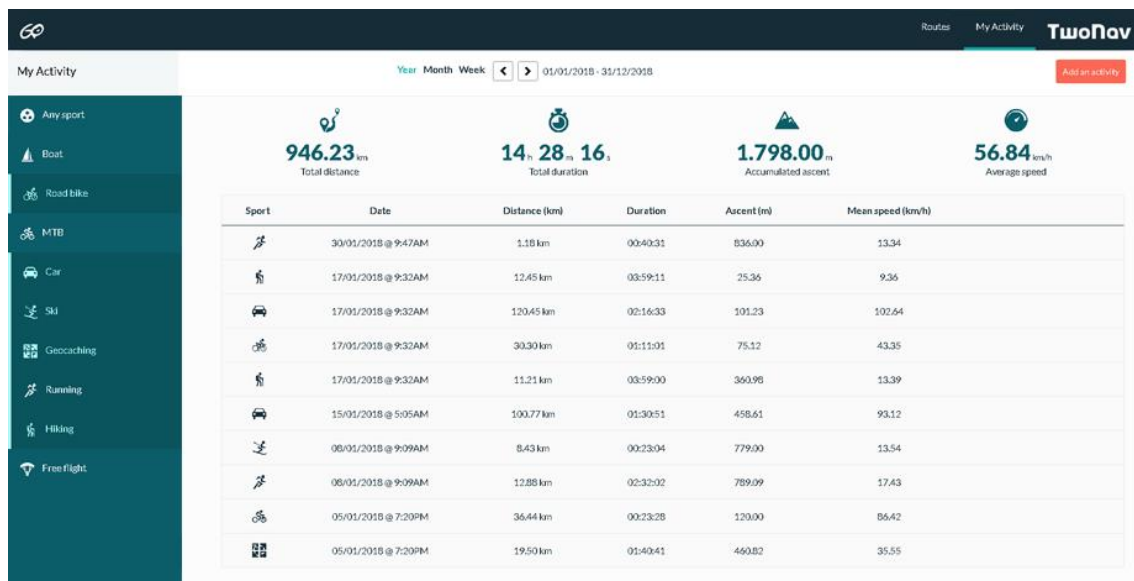
4.6.2 DATA ANALYSIS



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)



Sharing your activities on Strava™

From the <http://Go.TwoNav.com> portal you can also link your account to Strava™. That way all your new activities will be uploaded to the largest online community for cyclists, runners and athletes. Follow these steps to link your activities between GO and Strava™:

1. Sync your device with the GO Cloud (see previous sections).
2. Link your GO and Strava accounts from 'Settings > Connected services > Strava'.

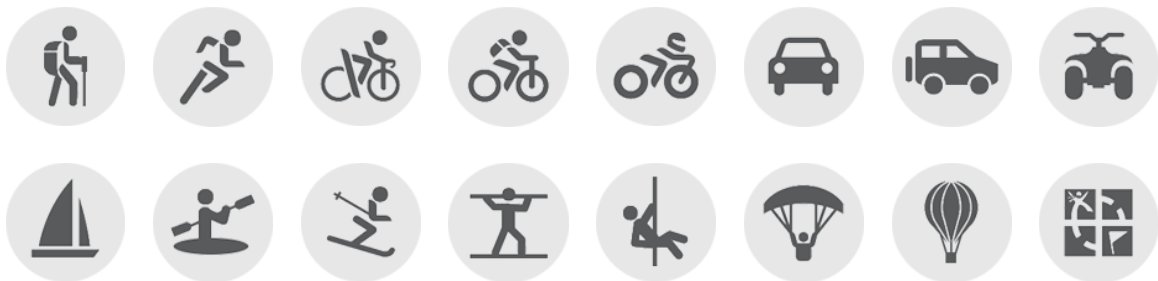
Connect with **STRAVA**

3. As soon as the accounts are linked, any new activities will be automatically uploaded to Strava™ as soon as they are synced with the GO Cloud.

5 SETTINGS

5.1 ACTIVITY PROFILES

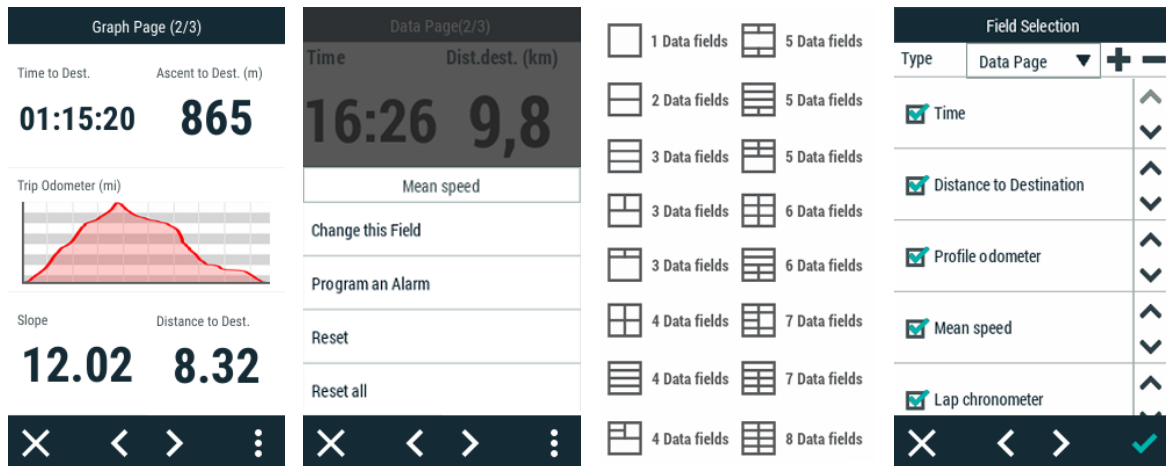
5.1.1 PROFILE



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 its calculations will be adapted to the selected profile. Due the fact that each activity has its own special needs, each profile has been developed to have specific settings (restrictions on route calculation, map perspective, 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



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

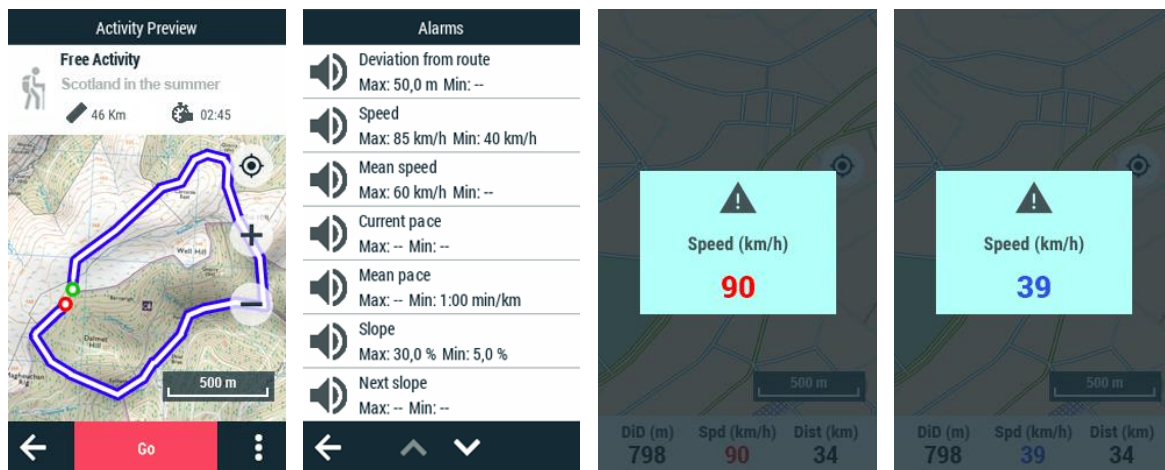
If the arrangement of default data pages does not suit your needs, you can create your own pages by following these steps:

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



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.

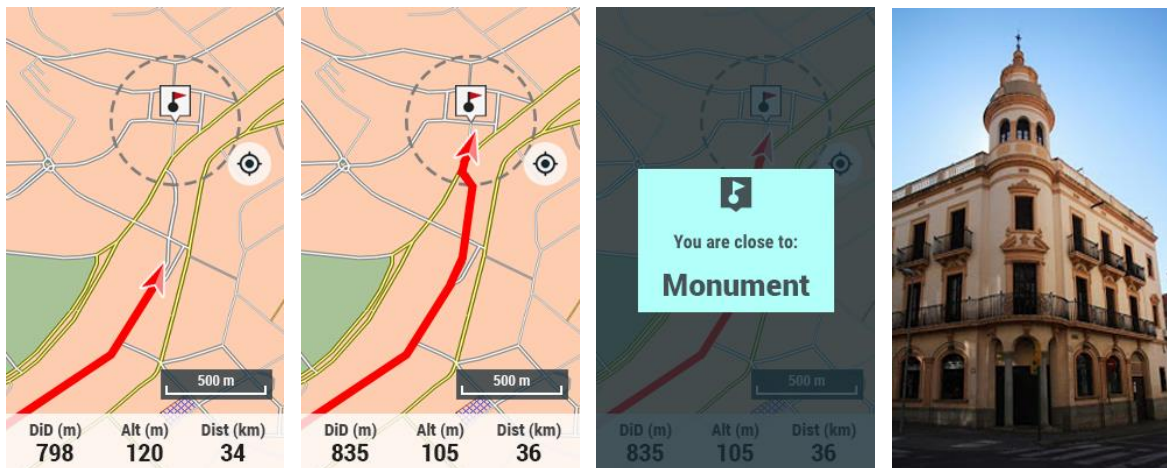
- **Red alarm:** If the maximum value is exceeded.
- **Blue alarm:** If the minimum value is not reached.

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,...).
- **Repeat alarm:** Specify the alarm repeat interval.

5.1.3.2 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

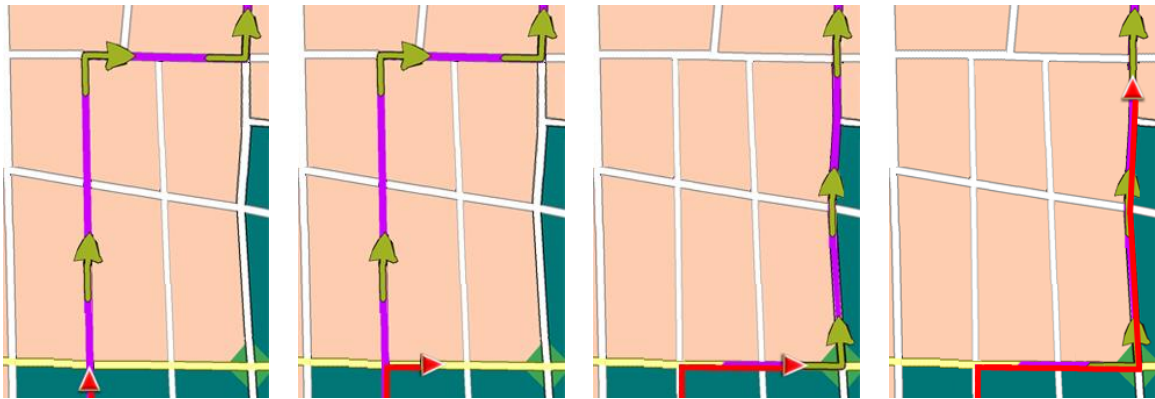


AUTOROUTE CALCULATION



NO AUTOROUTE CALCULATION

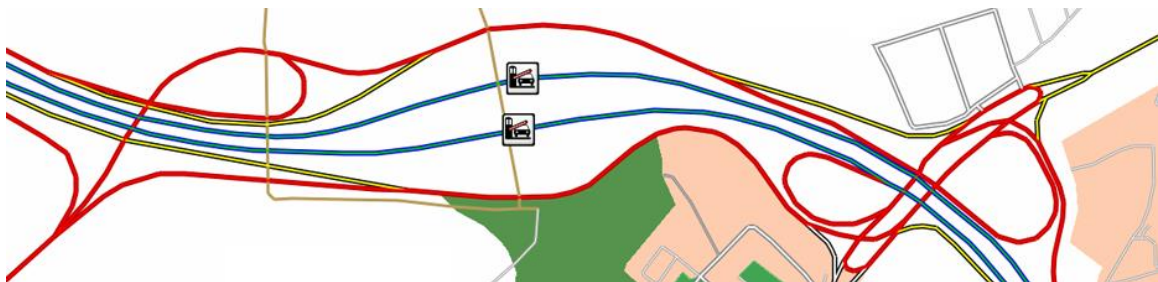
The device can be set up to calculate a route from your current position to a chosen destination. Specify your goal, the device will automatically calculate the best route based on your preferences and on the information in the map that is currently loaded. The GPS automatically calculates the route 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 manually 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



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.
- **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.

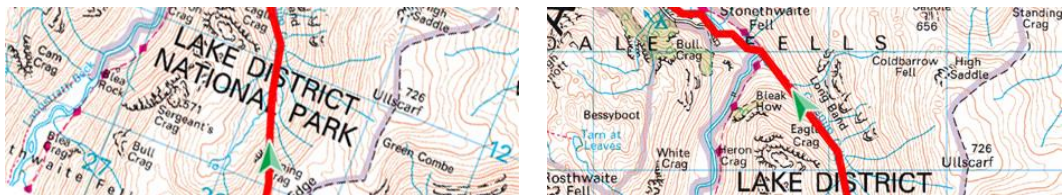
NOTE: You can also start a brand new lap at any moment pressing 'Change lap' at the tool bar.

5.1.6 MAP VIEW

5.1.6.1 MAP ORIENTATION

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



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



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



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

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

- **Draw relief:** Draw relief on the maps.

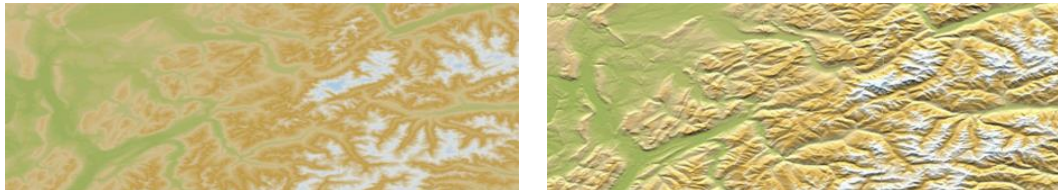
- **2D shaded relief:** 2D maps can display relief shadows.



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



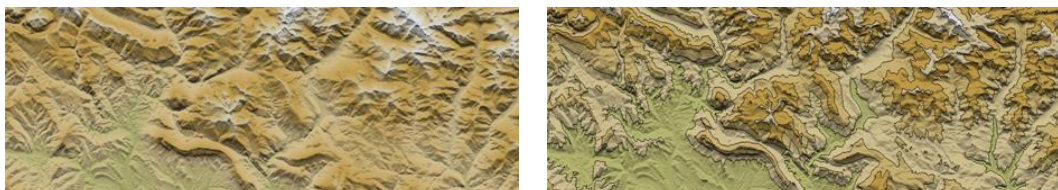
- **Draw relief with shadow:** This visual option makes the relief drawing more attractive.



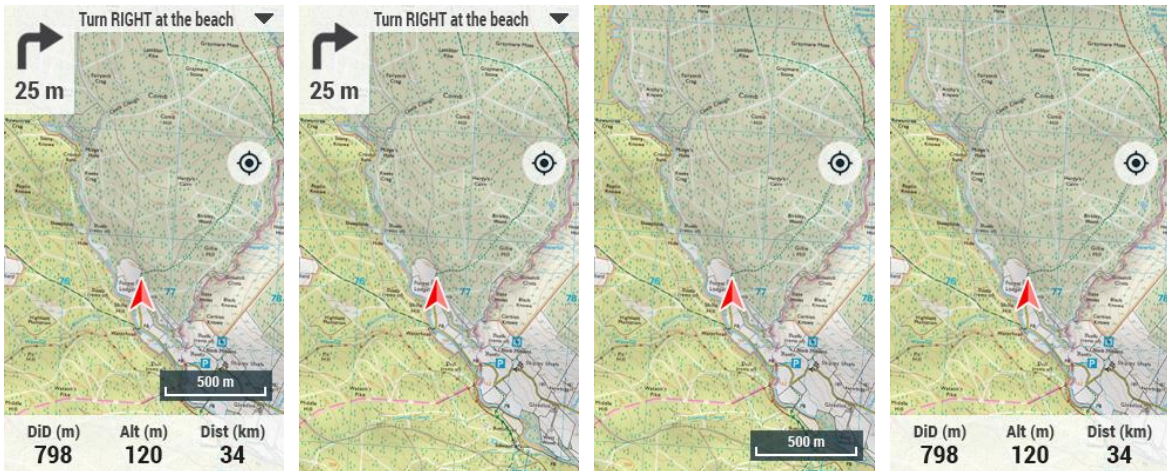
- **Flat color steps:** Instead of using a fading color, just one plain color for each height interval will be used.



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



5.1.6.6 INFORMATION PANELS



Show/Hide the functions accessible from the map page:

- **Info current:**



Turn RIGHT at the beach, follow the...

- **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



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 3D MODE



2D FLAT



3D FLAT



3D+ RELIEF



RELIEF MAP

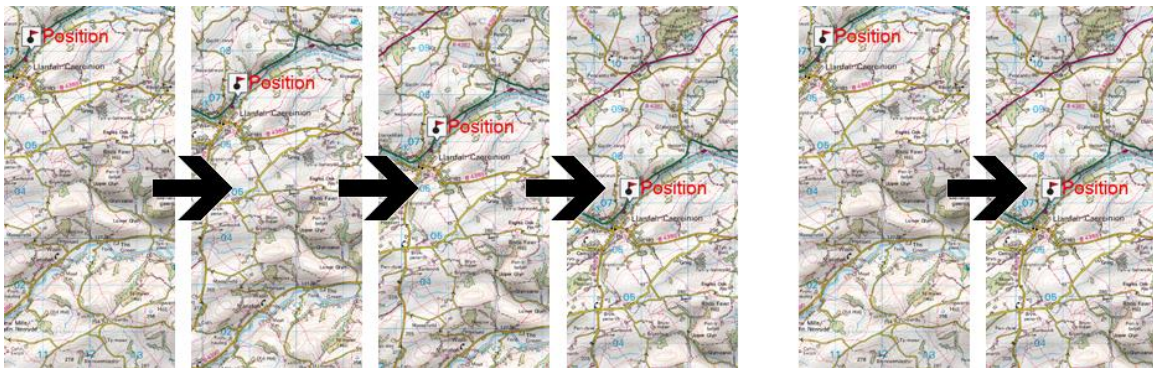
The device offers several visualizing modes so you have the most adequate perspective in each moment.

- **'2D flat' mode:** Zenith plan.
- **'3D flat' mode:** Tridimensional flat image with a perspective.
- **'3D+ relief' mode:** Orography of the terrain in real 3D (vectorial maps will not be displayed in 3D+). This mode can only be displayed if you load:
 - 3D relief map (*.CDEM)
 - Raster map (normally *.RMAP or *.RTMAP)

IMPORTANT: Press '2D > 3D > 3D+' button at the tool bar to switch between viewing modes.

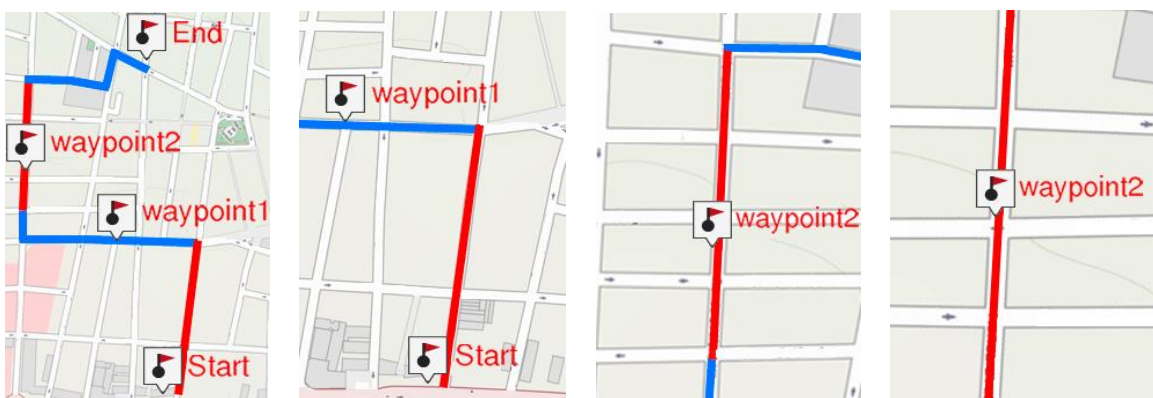
- **'3D' mode:** Choose the sequence for '2D > 3D > 3D+' button:
 - **'2D flat > 3D flat':** 2 positions '2D > 3D'
 - **'2D flat > 3D flat > 3D+ relief':** 3 positions '2D > 3D > 3D+'
 - **'2D flat > 3D+ relief':** 2 positions '2D > 3D+' (your device will try to show 3D+. If not possible, 3D flat will be shown)

5.1.6.9 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.

5.1.6.10 AUTOZOOM



DESTINATION

NEXT

ALL LAP

AUTOMATIC

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.

5.1.6.11 POINTER ICON



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

5.1.6.12 POINTER SIZE

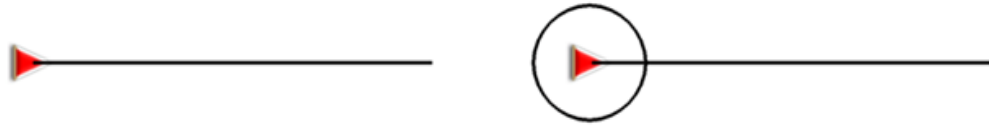


Set the size for the icon used to show your position in the map window. TwoNav offers several sizes for the position pointer.

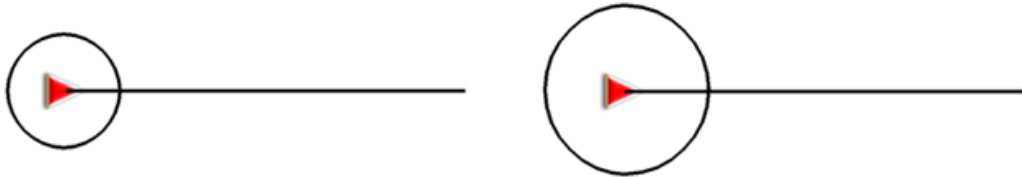
5.1.6.13 EXTRA POINTER ELEMENTS

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

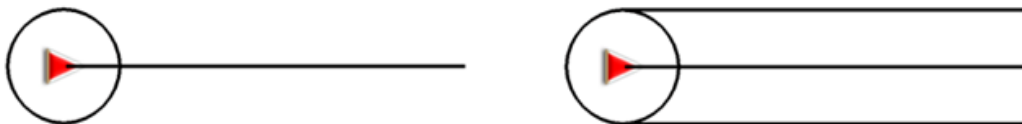
- **Fixed ring and parallels:** A circumference encircling your position will be drawn.



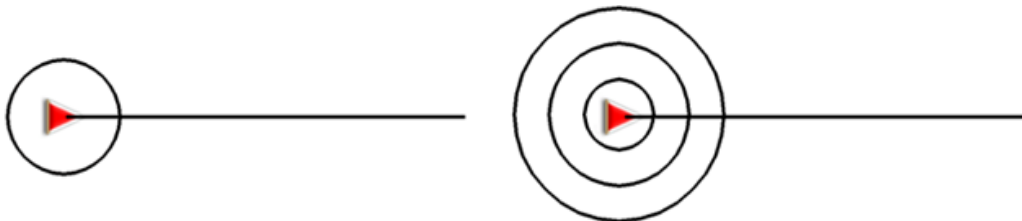
- **Fixed ring radius:** It determines the size of the circumference surrounding your position.



- **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.

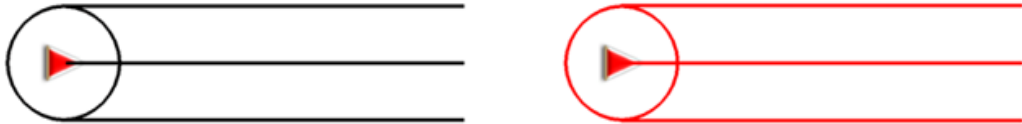


- **View turning radius:** When turning, the radius corresponding to the circumference described will be displayed.
- **View direction line:** Set the length of the prow line that will be displayed on the map.

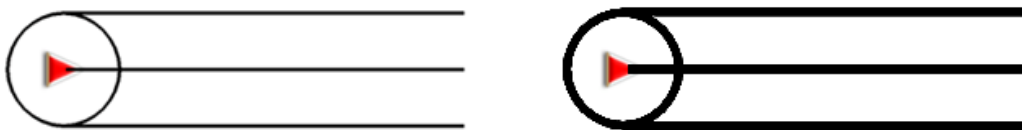


- **Disabled:** No prow line will be displayed.
- **Pixels:** Set the length of the prow line in pixels.
- **Real distance:** Prow line will be displayed on the map at real scale.

- **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 prowl 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

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

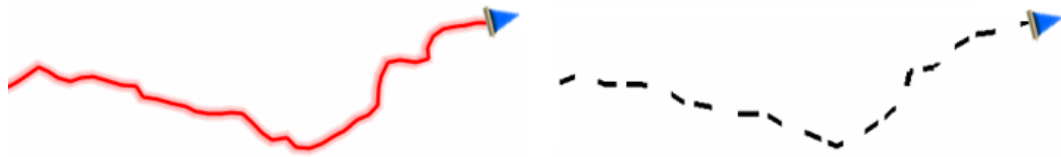
- **Recording interval:**



- **By time:** Set the time to create every new track point.
- **By distance:** Set the distance to create every new track point.
- **Automatic:** Track points will be automatically recorded when changing course and depending on the speed.
- **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.

<u>Minimum accumulated altitude:</u> 5 m	<u>Current altitude:</u> 4.7 m	→	<u>Increase considered:</u> 0 m
	<u>Current altitude:</u> 5.2 m	→	<u>Increase considered:</u> 5.2 m

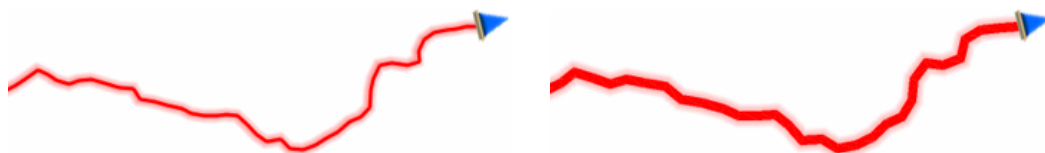
- **Minimum moving speed:** Set the minimum speed value to consider movement. Speeds under this value will not be considered movement. This value is set by you.

<u>Minimum moving speed:</u> 0.8 mi/h	<u>Current speed:</u> 0.5 mi/h	→	<u>Increase considered:</u> 0 mi/h
	<u>Current speed:</u> 1.4 mi/h	→	<u>Increase considered:</u> 1.4 mi/h

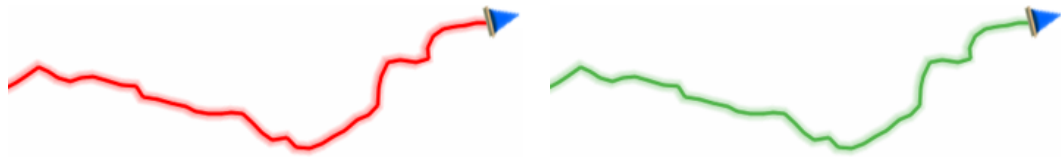
5.1.8 TRACK VIEW

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.



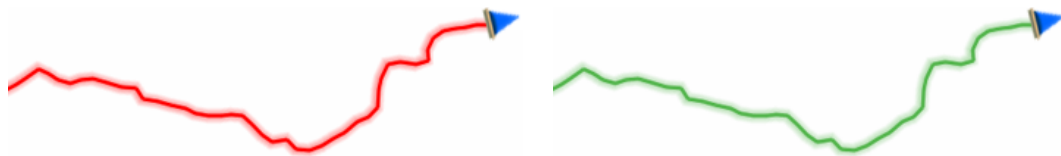
- **Track variable color:** Track can be represented using variable colors representing all along the itinerary the variability of a specific track data field (altitude, speed, slope, time, heart rate frequency...). Degradation colors are related to different levels of the same field.



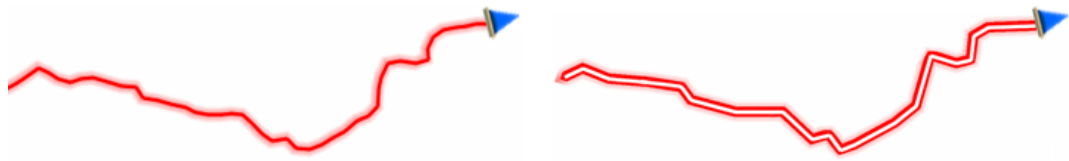
5.1.8.1 NAVIGATED TRACK VIEW

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

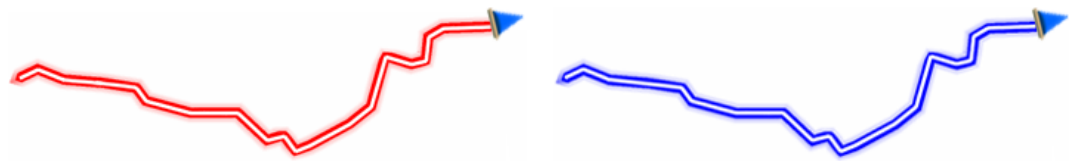
- **Highlight navigated track:** When navigating a track (active track) you might see it highlighted from the rest of the tracks.
- **Navigated track color:** The active track can have a different color line from the rest of the tracks.



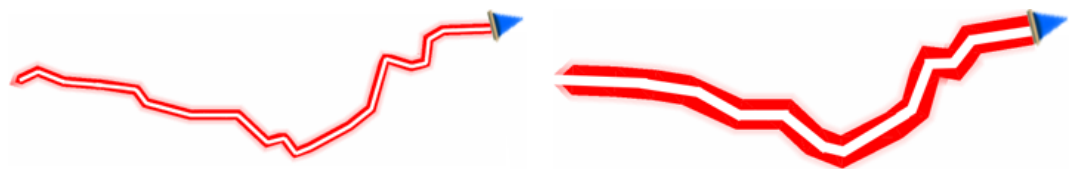
- **Add double line:** The active track can have a specific double line to easily highlighted from the rest of the tracks.



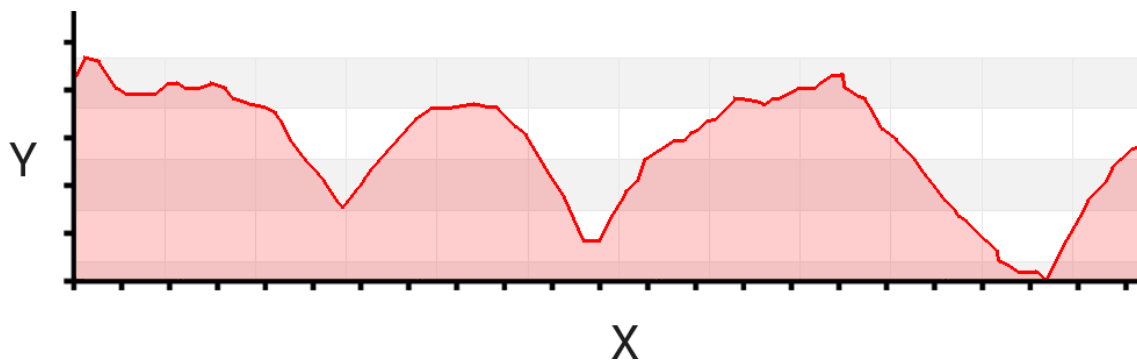
- **Double line color:** Color of the double line of the active track.



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



5.1.9 GRAPH VIEW



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 DEVICE INFORMATION

5.2.1.1 DEVICE ID

X-XXXXX-XXXXXX-XXXXX*XX

Get to know the registration status of the device. This identifier is essential to activate the default software of your device as well as any map (exclusive identifier for your device).

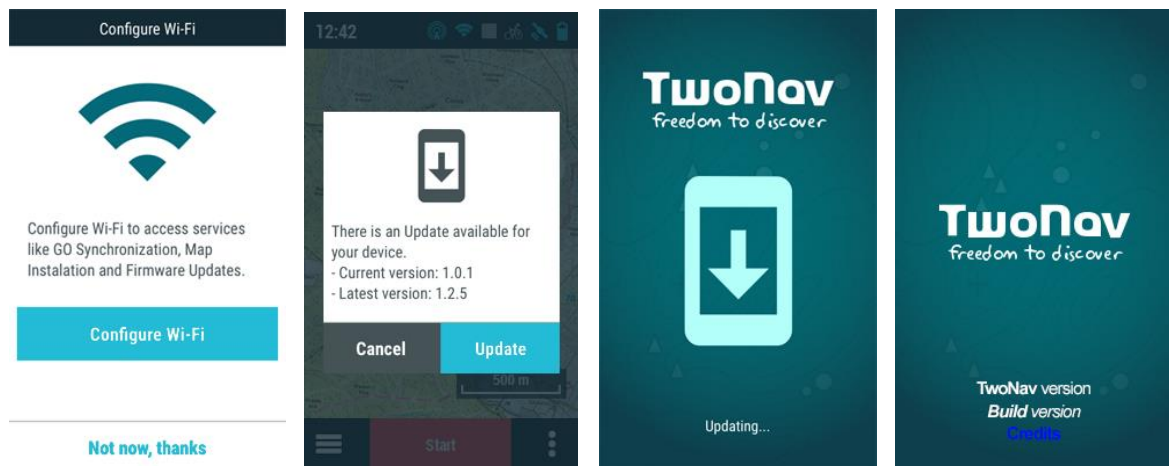
5.2.1.2 ABOUT



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.

5.2.1.3 SOFTWARE UPDATE



New software releases are periodically published, these updates are free and add new features to your GPS. Plus, if we've identified any errors or problems with previous versions, the update will fix them. We recommend you to keep your GPS up to date for the best user experience. The updates are downloaded via Wi-Fi. Follow these steps to update your device:

1. Set up access to a nearby Wi-Fi network by going into 'Main menu > Settings > Wi-Fi'.
2. Once connected to the internet, the device will check for updates to the software or operating system.



Software update:

Program that runs on top of the operating system and interfaces with the user.



Operating system update:

Underlying software that controls the device's internal operation.

3. If any updates are available, a message will be shown on the screen giving you the option to install them.
4. The installation is automatic.
5. Once complete, you can go back to using the device normally.



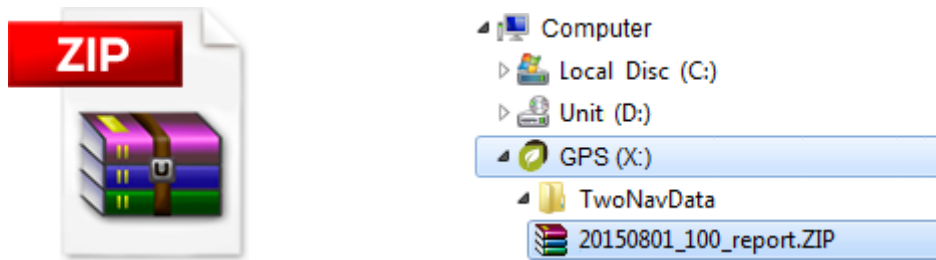
IMPORTANT: Remember that you can also update the software on your TwoNav GPS easily using the Land software (Windows/Mac platforms). For more information, visit <http://www.TwoNav.com>

5.2.1.4 ASSISTED GPS UPDATE



When 'Assisted GPS update' is pressed, the device will download through a Wi-Fi network the current location of satellites. This fact will speed up the GPS initiation process by reducing the time needed to search for satellites and fix GPS position.

5.2.1.5 STATUS REPORT



When 'Status report' is pressed, a *.ZIP file containing technical information of the current status of the application is created at 'TwoNavData/Data'. Create a 'Status report' in order to help our technical department to solve any of your problems.

5.2.1.6 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.

5.2.1.7 IP ADDRESS

XXX.XXX.X.XX

















See your device's IP address for later use.

5.2.1.8 MAC ADDRESS

XX:XX:XX:XX:XX:XX

See your device's MAC address. If using a Wi-Fi network with whitelist, you can find your Mac address here.

5.2.2 LANGUAGE

 English	 Español	 Français	 Italiano
 Deutsch	 Português	 Polski	 Català
 Euskara	 Chinese	 Türkçe	 Suomi
 Hebrew	 Galego	 Magyar	 Nederlands

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

5.2.3 AUDIO



Manage the general audio level of the application.

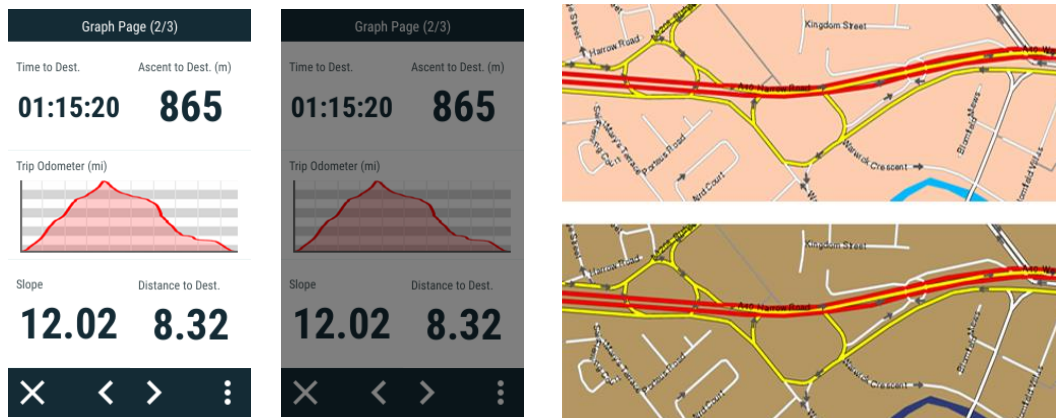
5.2.4 DISPLAY AND BRIGHTNESS

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

- **Brightness:** Set the screen brightness manually. If the percentage of brightness is high, application interface will be more highlighted.



- **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.

5.2.5 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 intermittent, 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.

5.2.6 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

5.2.7 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.ddddddd dd°mm.mmm' dd°mm'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.

5.2.8 CALIBRATION

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, but the electronic compass must be manually calibrated whenever it detects inaccuracies in its operation:

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

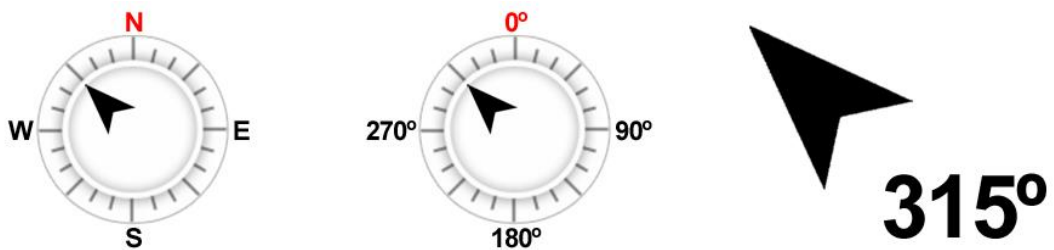


- **GPS:** Altitude data from the GPS will be used.
- **3D relief (altitude map):** Current altitude of the 3D relief map (3D relief map must be loaded).
- **Barometric (manual):** Values from the barometric altimeter will be used.

- **Barometric (autocalibrated by GPS):** Barometric altitude will be used, but the barometer will be automatically calibrated using the altitude data from the GPS by means of an algorithm that optimizes the final result.
- **Barometric (autocalibrated by CDEM):** Barometric altitude will be used, but the barometer will be automatically calibrated using the altitude data of the 3D relief map (3D relief map must be loaded).
- **Calibrate barometric altimeter:** It is very important to calibrate the barometer in order to achieve reliable data, your device provides you several ways to calibrate it:
 - **Enter altitude manually:** If you know the current altitude, enter it.
 - **Take altitude from current GPS:** Takes the current altitude from the GPS by means of an algorithm that optimizes the final result.
 - **Take altitude from current 3D relief:** Takes the current altitude from the 3D relief map (3D relief map must be loaded).

NOTE: *This option might minimize little errors of altitude data from the GPS. It also overcomes limitations of the barometric altimeter regarding atmospheric pressure and temperature, alien to altitude changes.*

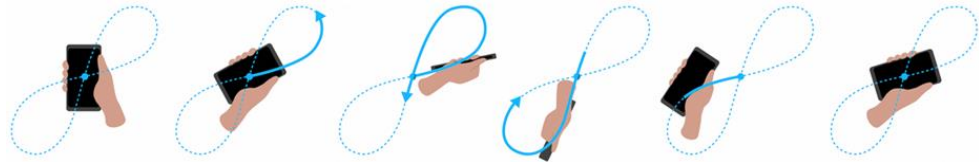
- **Take bearing from:** Your device offers you different ways to determine the bearing you are taking during your navigations:



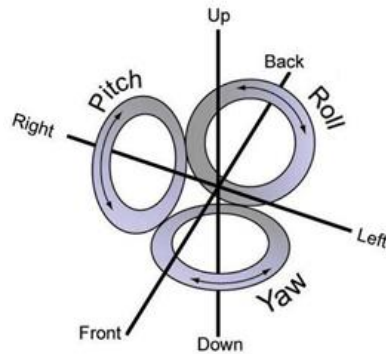
- **GPS:** The latest positions received are used to calculate the bearing of your current movements. As soon as you stop, this reference will not be reliable because there will be no reliable movements to calculate the bearing.
- **Compass:** Data recorded from the compass will be used in order to determine 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).
- **Calibrate compass:** The calibration of the electronic compass is essential in order to display right directions during your navigations. After pressing the button, follow the

steps shown on the screen. Rotate the device for a few seconds to do the calibration. It is important to move the device about all 3 axes of rotation. This effect can be achieved in 2 ways:

- **Figure-8 motion:** Not a flat figure-8. The device must be rotated while moving it to capture readings in all 3 axes.



- **Sequential rotation about the 3 axes:**



X-axis:
Longitudinal (yaw)

Y-axis:
Vertical (roll)

Z-axis:
Transversal (pitch)

IMPORTANT: The electronic compass is an instrument very sensitive to weather conditions and magnetic fields. Calibration must be carried out in the open air and far from sources of alterations of the magnetic fields, such as cars, buildings or electric lines.

- **Touch screen:** If you notice inaccuracies while using the device, you should calibrate the screen, this action prevents little maladjustments. Follow these steps:

<p>Carefully press and briefly hold stylus on the center of the target.</p> <p>Repeat as the target moves around the screen.</p>			<p>New calibration settings have been measured. Tap the screen to register save data.</p> <p>Wait 30 seconds to cancel saved data and keep the current setting.</p>
--	--	--	---

1. Click the centre of the displayed cross.
2. Repeat this action in the moving across.
3. Once the screen is calibrated, a confirmation message will pop up. Press any part of the screen to end the calibration process.

5.2.9 TIMEZONE



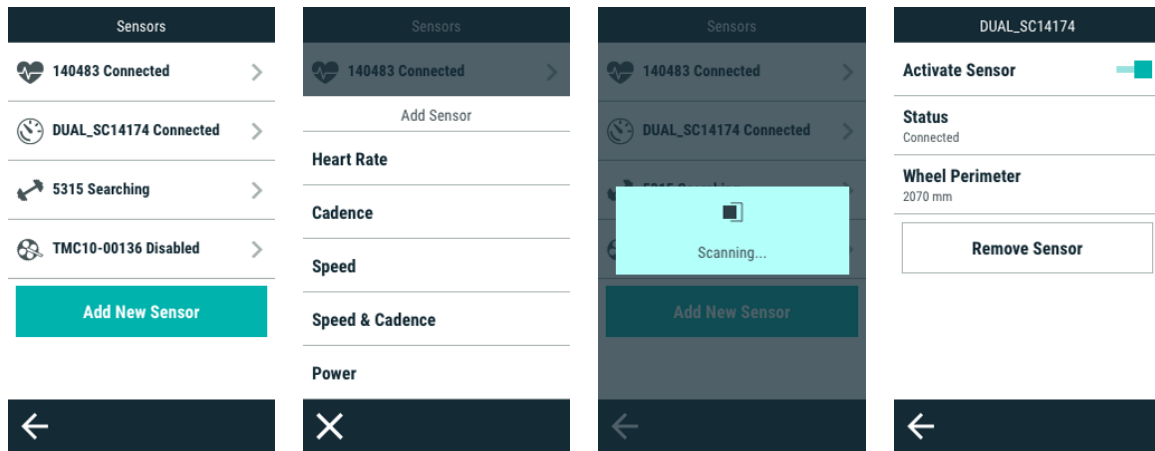
Set the time that will appear by default in the application according to the Universal Time Coordinates (UTC). You may also set the summer time automatically.

5.2.10 KEYS



Each device button has a double command: short press and long press. Both of them can be personalized for different usages.

5.3 SENSORS



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

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



4. For some sensors you'll have to specify certain technical details. The pairing process between the device and the sensor will then begin.
5. Once detected, the sensor will be saved and connected automatically during an activity.
6. 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 WI-FI



Follow these steps to connect the device to a Wi-Fi network:

1. Go to 'Main menu > Settings > Wi-Fi'.
2. Select 'Scan' to see the Wi-Fi networks available.
3. Select the network you want to connect to (and enter the password if necessary).

IMPORTANT: By default, every time you start an activity, TwoNav will turn off Wi-Fi to save the battery and turn it on again automatically at the completion of the activity. To keep Wi-Fi on during the route, open the contextual menu and select 'Battery save mode'.

5.5 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:

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

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.

5.6 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.

5.7 MY ACCOUNTS



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

- **TwoNav user**

- **IGN Rando:** Institut national de l'information géographique et forestière
- **Others**

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 beginning 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 receives 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 beginning of the current lap section up to the current position.
- **Lap descent:** Total amount descended from the beginning 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 beginning of itinerary up to the current position.
- **Trip descent:** Total amount descended from the beginning 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 beginning 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 beginning of the current lap section up to the current position.
- **Lap pace:** Average of all pace values from the beginning 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 beginning 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 beginning 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 ('2D > 3D > 3D+').
- **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 (⏸):** 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 (⏪):** 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.
