



# **User Manual**



Legal information United Navigation GmbH Marco-Polo-Str.1 73760 Ostfildern

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### **1** Safety instructions and maintenance

### 1.1 Safety instructions

The device may only be stored at temperatures of from -20°C - 70°C and be operated at temperatures of from -10°C – 60°C.

Keep your device away from extreme temperatures. The device should only be operated and stored in an atmospheric humidity of from 0% to 90%.

Do not expose your device to sudden great fluctuations in temperature. This could result in condensation collecting in the device, which could damage it. If any condensation forms, wait until the device has completely dried out.

The device is waterproof in accordance with the IPX4 standard. This means that the device is protected against splash water.

Please note: In order to ensure that the device is protected against the ingress of water, make sure that the rubber cover for the USB port on the bottom of the device is completely closed.

You must not place, store or leave your product in or next to heat sources, at places which have high temperatures or a high level of solar radiation, in a microwave oven or pressurised container, and you must also not expose it to any temperatures of over 60°C (140°F). Use only Falk original accessories or Falk-approved adapters. The use of other components may result in malfunctions and/or serious damage.

### Caution:

- This navigation device for outdoor use is merely an orientation and navigation aid which cannot be a substitute for making a sensible assessment of the situation you are in. Please in any event note the particular characteristics of the terrain and the routes you are using. Do not follow any routes or suggested routes which would entail a dangerous or illegal form of riding or would place you in a dangerous situation.
- The road traffic regulations must be complied with at all times, for example when cycling, and have priority over the routes of the navigation device.
- Never operate the navigation device while riding and do not allow yourself to be distracted by the device while riding.
- Please note that United Navigation GmbH does not accept any liability for any damage caused by the device/bracket becoming detached from the bicycle.
- The map data which is used may include inaccurate or incomplete data. You should therefore check the calculated route to see if it makes sense and choose your own alternative route if necessary.
- The navigation device is **NOT** suitable for use as a vehicle navigation system!

### 1.2 Disposal



DISPOSAL OF USED ELECTRICAL AND ELECTRONIC DEVICES (TO BE APPLIED IN THE COUNTRIES OF THE EUROPEAN UNION AND OTHER EUROPEAN COUNTRIES WITH A SEPARATE COLLECTION SYSTEM FOR THESE DEVICES)

The symbol on the product or its packaging indicates that this product cannot be treated as normal household waste, but must instead be handed in at a collection point for recycling electrical and electronic devices. Your contribution to correctly disposing of this product helps to protect the environment and the health of your fellow human beings. The environment and health are endangered by incorrect disposal. Material recycling helps to reduce the consumption of raw materials. You can obtain further information about recycling this product from your local authority, the municipal waste disposal companies or the shop in which you purchased the product.



– WEEE Reg. No. DE 19715620

#### Aircraft and hospitals

The use of electronic devices is prohibited in most aircraft, in many hospitals and at lots of other places. The device must not be used in such environments. Always switch your device off wherever appropriate requests are made for you to do so.

### **CE certificates and RoHs**

This device complies with the Directives of R&TTE 1999/5/EC and the Directive 2002/95/EC OF THE EUROPEAN PARLIAMENT AND COUNCIL dated 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (ROHS). The link to the certificates can be called up here: http://www.falk-outdoor.com/de/service/zertifikate.html.



## 2 Introduction

This manual describes the functions of the Falk PANTERA products. Functions which do not apply to versions of products because they are not included in the standard scope of supply for the product are marked "**optional**".

The chapters are based around the menu structure of the application. This means you quickly know where you need to look to find an explanation of a particular function. The **Glossary** explains important terminology to you.

The **Tips and tricks** help you to do what you want and quickly get to grips with your device. If you have any problems using the device or something seems not to be working, the **Troubleshooting** section may be able to help. If this still does not provide you with a solution, please contact our **Service & support** team.

The following elements are used in this manual to make it easier to understand:

Note: Information worth knowing Tip: Practical application aids Caution: Warning notice to prevent any undesired effects

Important terms are marked in **bold** in the text. All illustrations similar to actual product.



### 3 Device description

### 3.1 Device



**Power Button:** Switches the device on. When you press the power button during use, you have the following options:

Switch off: Switches the device off completely.

Stand-by: Switches to stand-by mode.

Screen off: The screen is switched off, ongoing navigations or track recordings remain active. This is done to save power.

Keylock on/off: Activates or deactivates the keylock. The keylock prevents unwanted entries being made via the screen. To deactivate the keylock, press the power button again and then "Keylock".

X takes you back to the application.

**Note:** If the device stops responding and can no longer be operated, press the power button for approx. 3 seconds. The device will then restart.

**Start/Stop Button:** Starts or pauses the recording of a training session or a timed route (see Chap. 8.1). If you press it long while recording, the recording will end.

**Touch Screen:** Displays the map and the menu. To make entries or select functions, use your finger to tap on the appropriate point on the screen.



**USB Connector:** Connector for charging up the battery via the adapter or for connecting the device to a PC via the USB cable.

The connector is located beneath a rubberised cover. Pull this up to connect a cable. **Note:** The rubberised cover also provides protection against the ingress of water. Make sure that it is always completely closed when using the device.

### 3.2 Bracket



To attach the bracket to the bicycle, you must plug the cable ties which are also supplied in the manner shown in the drawing through the slots in the bracket which are provided for this purpose and then pull them tight around the handlebar or stem. Please first attach the bracket to the bicycle before you fix the device on it. The cable ties can also be opened again if you pull the small nipple on the fastener upwards.







To secure the device on the bracket, insert it into the bracket with the bicycle bracket base and lock it securely in place by turning it to the right. Check before each ride whether the device is firmly secured.



### 3.3 Sensors

Your Falk PANTERA is designed for ANT+<sup>™</sup> fitness sensors to be coupled on. The optional combined speed and cadence sensor wirelessly transmits the current speed and the cadence to the device. The optional heart rate sensor in a chest strap wirelessly transmits the current heart rate to the device.



This product is ANT+™ certified. Visit www.thisisant.com/directory for a list of compatible products and apps.

### 3.4 Speed/cadence sensor (optional)

To attach the combined cadence and speed sensor, you must secure it to the frame of your bicycle with the cable ties as shown. Make sure that you secure the sensors pointing downwards and with the correct side facing the wheel as shown in the drawing.





### 3.5 Magnets

You must secure the magnet for the speed sensor (S sensor) to a spoke. Assemble it as shown here and screw it tight onto a spoke so that it runs past the sensor when the wheel rotates.



Make sure that the speed sensor (S sensor) and the magnet are no more than 5 mm apart. Move the sensor on the frame so that the gap is no more than 5 mm.

Please be aware that the S sensor may only be fitted to the frame facing downwards in order to avoid any damage to the spokes.



You must secure the magnet for the cadence sensor (C sensor) to the pedal crank using the cable tie so that it runs past the sensor when you move the pedal crank arm.





Make sure that the cadence sensor (C sensor) and the magnet are no more than 5 mm apart.

Move the sensor on the frame so that the gap is no more than 5 mm.



Once you have attached the sensors and magnets, the bicycle should look like this:



The sensors are attached to the frame pointing downwards. The magnet for the speed sensor is attached to a spoke so that it runs past the S sensor with a gap of no more than 5 mm when the wheel rotates.

The magnet for the cadence sensor is attached to the pedal crank so that it runs past the C sensor with a gap of no more than 5 mm when the crank is pedalled.

You can find out how to couple the sensors to the device in Chapter 3.3.



### 3.6 Heart rate sensor (optional)

The heart rate sensor is worn on a chest strap against the body and transmits the current pulse to the device wirelessly.



Attach the sensor to the chest strap using the press studs.



To use the chest strap, you should moisten the sensor contact area on the back of the chest strap slightly and then adjust the strap so that it fits you comfortably. The strap should rest on your body below the chest area.



You can find out how to couple the heart rate sensor to the device in Chapter 3.6.



## 4 Main Screens

### 4.1 Navigation view



**Distance to destination:** shows how far away your destination still is. You can choose what information you want to be displayed here. In the same way, you can edit the "Current speed" box.

Profile: shows which profile you are currently using.

**Active sensors**: The symbols tell you which sensors are currently coupled up. The symbols are white when an active connection exists and grey when no connection currently exist.

- 🖤 Heart rate sensor
- Speed sensor
- I Cadence sensor

**Recording**: When recording of a training session or timed route is taking place, a corresponding symbol is displayed.

- recording of a training session taking place
- recording of a timed route taking place

**Tip**: If no connection exists with the heart rate sensor, moisten the sensor contact area on the back of the chest strap again.

If there is no connection with the combined sensor, check the gap between the sensors and magnets.



Map: Shows the map extract with your current position. However, you can also move the

map with your finger. Tap on the Zoom-Button \* to move the map or to zoom in and out. Using the arrow button , which then appears at the bottom, you can return the map back to your current position.

### Next Manoeuvre:

In the manoeuvre box you are shown, via an arrow, the next turn-off direction, other roads which lead off and the distance to your next manoeuvre. If you are on a roundabout, the other roads which lead off are also shown in addition to your turn-off arrow.

Relevant crossroads and junctions located before you get to your next turn-off point are also shown. If there are several crossroads leading off prior to your next manoeuvre, numbers at the side indicate how many crossroads you still need to pass.

### Distance to next manoeuvre:

Shows you how far the next manoeuvre is away.

### Next-but-one manoeuvre:

If you need to perform several manoeuvres in quick succession, the next-but-one manoeuvre is shown in the form of a directional arrow at the right of the Manoeuvre box. This means you can always see where you are heading in good time.

Main Menu The main menu button takes you to the menu guidance screen.

Current Position: Your current position is marked by a red arrow on the map.

**Zoom Button:** Tap on the zoom button  $\stackrel{\circ}{\checkmark}$  and then on the plus or minus symbol to adjust the scale of the map. If you tap on  $\stackrel{\circ}{\checkmark}$ , you can see your route from the bird view.

GPS Signal: Indicates the status of the GPS reception.

GPS signal is not sufficiently strong to allow positioning. Signals are being received from fewer than 3 satellites.

GPS signal is sufficiently strong to allow positioning. Signals are being received from 3 satellites.

A high-quality GPS signal is being received that allows your elevation to be determined. Signals are being received from at least 4 satellites.

**Compass:** Indicates the current compass direction. If the compass arrow is shown in red, the compass needs to be recalibrated.

You can calibrate the compass on the settings menu under "Settings > System / General > Calibrate compass".

Battery: The battery symbol shows you the status of the battery.

- Battery has at least 70% of capacity remaining
- Battery has between 15 and 70% of capacity remaining
- Battery has less than 15% of capacity remaining
- Device connected to power source



### Click on map

If you tap on the Zoom Button and then on a point on the map, the point is marked with a pin and the address or position is displayed. If you then tap on "Actions", you can for example navigate to the marked point or save the point as a waypoint.

### **Clickable POIs**

With just one click on a POI icon on the map, you can easily display all the information you need to know about the POIs which are shown, remember the position, start a radius search or select the POI for route calculation.

Select a POI icon on the map about which you would like to know more information.

If you tap on the name of the POI, you will be shown the detailed view for this POI.

An **Actions** button appears below the name.

Tap on this. The actions mentioned above are now available to you.

Tap on **Close** in the info box or on the red arrow at the bottom edge of the screen to switch back to the map view.





### 4.2 Trip computer

To the right of the map view is the trip computer which shows you lots of measured values. It has a second page which you can call up by swiping up or down on the screen. You can configure the values in the trip computer yourself by tapping on a field and then choosing from the list which value should be displayed in this field.

**Tip:** You get the average values, such as average speed, by recording a training unit.



### 4.3 Manoeuvre view

To the left of the map view is the manoeuvre screen with the altitude profile. It displays the next manoeuvre to you in the middle. As on the map, here too there are configurable displays of route information or training figures at the top edge of the screen.

If on the manoeuvre screen you swipe further to the left, you return to the trip computer (and vice versa).

Via the houston you can view the altitude profile in detail.





### 5 Main menu

The main menu gives you access to the different functions on your device which are explained one after the other in the following chapters. To switch from the map view to the main menu, tap on **1**. To then return to the map view, tap on **4**.

# 6 Destination entry



On the destination entry screen, you have the option of entering any destination you want in order to be navigated to it. Various possibilities for doing this are available to you and they are explained one after the other below.

6.1 Address



Here you can navigate to a destination by entering an address. You can enter a full address with the street and street number.

**Note:** With the basemap it is not always possible to enter a street number.

To enter an address, carry out the following steps:

First tap in the main menu on "Destination entry" and then on "Address".

You can now enter the city name first or enter a postcode by tapping on **and**.

**Note:** With the basemap it is not possible to enter a postcode.

Tap on rotation to enter the street and street number. You can also tap on the city name or street name in the text box to confirm the entry.

**Note:** If you do not wish to further restrict your search by selecting a street and / or street number and simply want to navigate to the centre of the destination city, simply tap on

after selecting the city with  $\rightarrow$ . If you just want to navigate to a street without a street number, tap after

entering the street on

The solution allows you to view the destination on the map in advance.

If you tap on the country flag in the upper section of the screen, you can select the destination country (if you have also installed other country maps).

To enter umlauts or special characters, press on the corresponding basic letter for a long time.

Once you have entered a letter, all of the letters which are no longer possible will be blanked out.

If you tap on **OO**, a list containing all possible city names for your entry will be displayed.









6.3

The Home function takes you back home without any bother at any time.

When you first start the device, you will be asked to enter your home address.

After you have entered your address once, it is saved and you can navigate there at any time by tapping on "Home" once. The route from your current position to your home is calculated immediately.

You can change the saved address in the settings menu at any time.



Your Falk PANTERA contains countless points of interest such as restaurants, viewing points, natural monuments, places to stay, places to visit and lots more. If you select "Points of interest" on the destination entry screen, a list containing all categories appears. You can select individual categories by tapping on them or select all categories at once by tapping on "All" (top right).

Tap on *m* (or on **o** if you want to search for a name of a category).

Next you must specify a search centre for your search. The POIs will then be displayed sorted according to their distance from this point.

The search centre can be a waypoint, your current location, the current destination, along the route, a city, an address, a position on the map or coordinates.

The results are then displayed in a list.

You then have the following options:

**Sort** – here you can sort the POIs according to various criteria

– displays the selected POI on the map

✓ – starts the route calculation to the selected POI
 Double click – opens the detailed view for a POI

•• – allows you to search for a POI by entering text

- shows you special Premium POIs around the search centre. If these exist, they always appear at the beginning of the list.





### 6.3.1 Detailed view of a POI

In the detailed view you will find all of the available information about a POI.

At the top you can switch between the Info, Map, Picture (optional) and Options screens by tapping on the tabs. Info shows you the address, the distance and a descriptive text.

"Map"shows you the POI on the map view.

Via "**Picture**" you can view a picture of the selected POI if one exists.



In the Options you also have the following possibilities:

Places of int Info	terest Map	میں میں Picture	01:02 AM Opt.	<b>Search for POI around POI</b> - Searches for another POI around the current one (if for example you would like to find a restaurant near to the hostel where you are staying).
Search fo POI	or POI	around	>	<b>Enter rating</b> - Possibility of rating the POI. The rating is then displayed at the top in the detailed view.
Enter rating >				<b>Save POI as waypoint</b> - Adds the POI to your own waypoints.
				You can use the two arrows at the bottom to scroll to the next or previous POI from the list.
				$\checkmark$ starts the route calculation to this POI.
+	<	>	$\checkmark$	switches back to the list of POIs.

### 6.4 **Previous destinations**

This function allows you to select the previous destinations that you entered very easily. The previous forty destinations are automatically saved.





Here you can mark a point on the map in order to navigate there. You can also move the map here using your finger. If a point which is located in a city or on a street is marked, the address for this point is displayed. Otherwise the geocoordinates are displayed.

**Tip**: Zoom out via the "minus" button so that you can move the map to the correct point more quickly.





A waypoint is a position or address which has been saved. You can create waypoints yourself (see Chap. 13.2.2) so that you can then navigate to the point again at a later date.

Here you can now select a destination from the waypoints which are located on your device. These may be waypoints you have created yourself or imported waypoints.

To do this, a search centre must first be stipulated.

The waypoints are then displayed sorted according to their distance from this point.

The search centre can be your current location, the current destination, along the route, a city, an address, a position on the map or coordinates.

As an alternative to a search centre, you can also tap on "Display all waypoints"; all waypoints will then be displayed sorted in alphabetical order.



The results are then displayed in a list.

You now have the following options:

**Sort** - the waypoints can be sorted in alphabetical order or by distance.

I - displays the currently selected waypoint on the map

- starts the route calculation to the selected waypoint

Double click - opens the detailed view for a waypoint

The further functions in relation to waypoints are explained in Chapter 13.2.





You can also enter your destination via coordinates.

This function is particularly helpful for reaching a precise location in open terrain where it is not possible to specify an address.

You can also use the entry of the coordinates for geocaching.

**Note**: The entry format is important here as there are different formats for coordinates.

The preset format is based on the pattern of degrees/decimal minutes (dd°mm.mmmm<sup>^</sup>). To set a different format, tap on "Format" on the right. A list containing possible formats will then be displayed. You can change the format again at any time in the settings (see Chap. 10.4.7).

With the degrees/decimal format, the degree of latitude is entered first.

To do this, tap on the right on "N" for "north" (north means north of the equator). Now enter the coordinates.

If you tap on *m*, you can enter the degree of longitude. To do this, tap on "E" for "east" (east means east of the prime meridian).



If you click on **(b)**, the coordinates of the current position are entered.

**Note**: As Central Europe is situated north of the equator and east of the zero meridian, you will always use the north/east combination when entering coordinates in this format.

If after entering the degree of longitude you tap on *m*, it is (if possible) specified which address is located close to the coordinates.

Tap on  $\blacksquare$  to display the point on the map or on  $\checkmark$  to start routing to this location.



6.8 Arrange menu ~ V

Here you can change the order of the functions as you wish within the destination entry screen.

Select a function and move it to the place you want with the aid of the rectangular arrows. Do not worry - no function will be lost. And even if the functions become mixed up, you can

tap on  $\mathfrak{D}$  to restore them to the preset order.



### 6.9 Calculated route

Once you have entered a destination, the route options are then enquired about. If a route has then been calculated, you have the option of calling up different information about the route or calculating alternative routes.

- calculates two alternative routes (see 3.13.1).

- displays the altitude profile for the calculated route. If you have already calculated alternative routes, here you can view and compare the altitude profiles for all routes (see 3.13.1).

• here you can set the route options again if necessary.

(i) - displays the route information with a description for the route in a list. In the route description, each road that the route runs along is shown in the form of a list. At the end of each line, the distance travelled along this road is specified.



You can mark a line and click on at the bottom to view this section on the map.

Note: The route description is only available in navigation, not in bearing mode (linear line).

You can start routing via V

**Note:** The alternatives are also calculated by taking account of the route options entered previously.

Alternative routes and altitude profiles If after calculating a route you have calculated alternative routes, they are shown in different colours on the map.

You can then select an alternative via the boxes at the bottom which are also marked in the relevant colour.

You can then view the different information for the selected alternative.





You can compare the altitude profiles for all alternatives if you tap on  ${}^{{\color{black} \black}}$  .



The altitude profiles are marked in the same colour as the route in each case.

The route is plotted on the x axis in km (or in miles). On the y axis the geographical altitude is plotted in m (or in feet). The scale can be altered using the plus and minus buttons.

You can switch between the altitude profiles using the arrows at the bottom.

**Tip:** Zoom in closer to identify more details in the altitude profile. If you tap twice on a point on the graph, this point is zoomed in on.

When you click on a point on the graph, it is marked and the distance from the starting point is displayed. By clicking on one of the info boxes, different values which are to be displayed there can be selected.





# 7 Training history

In the Training history you find your recorded training units.

You can record the route that you are riding or walking along. This recording will help you to be able to retrace the route you have ridden or walked precisely at a later date. After it has been recorded, the route can be displayed on the map under training history and the altitude profile can be viewed. Further information such as the starting and end position, distance and the height gain or loss can then likewise be displayed.

To start a recording, press the "Start/Stop" button on the outside of the device. You can then select whether you want to record a training session or a timed route (see Chap. 8). Tap on the training session "Record" button. A message confirms the start of recording.

**Note**: It is recommended that you calibrate the barometer manually before you start the recording (see Chap. 10.4.6).

The recording can be interrupted at any time if, for example, you take a break. To do this, tap on the "Start/Stop" button again and then on the Pause button.

To continue, tap on the "Start/Stop" button and then again on the Pause button. To end the recording, tap on the "Start/Stop" button for a long time or first on the "Start/Stop" button and then on the Stop button.

You will then be asked to specify the name for the track. In the line for the name, initially the date and the time of the recording are displayed. The track can be saved under this designation. Or you can delete the name line with and enter your own name for the track. You can also cancel the recording if you tap on **1**.

**Note:** It is advisable to enter a recognisable name for tracks so that you can find them more easily at a later date if several tracks are saved on the device.

### 7.1 Detailed view of a training unit

Training unit Info	دی هی 01:05 AM Map Alt.profile	To select an existing training unit, tap in the list on the unit you want and then on $\checkmark$ .
طة Sonnta	agsrunde	Info - displays all the information about the training unit. The
Date: Wheel type: Distance: Duration: Calories:	5/12/2013 9:47:12 PM Mountain bike 1.5 km 0:02:57 h 21 kcal	<ul> <li>displayed information also depend on whether sensors were connected.</li> <li>Map - displays the track on the map. You can zoom in and out and move the map. If you click on "Position", you can show or hide your current position on the map.</li> <li>Altitude profile - displays the altitude profile for the unit.</li> </ul>
Speed:	31.1 km/h	<ul> <li>starts the track navigation.</li> <li>If you want to edit the training unit further, tap on (see Chap. 4.2).</li> </ul>



### 7.2 Edit training unit

To edit a training unit, tap in the detailed view (see Chap. 7.2) on  $\checkmark$ .

The following options are available to you:



### 7.3 Start training unit

When you start a track, you have the possibility of deciding whether you want to start the track directly or would like to convert the track into a route in order to obtain turn-off instructions.

### 7.3.1 Convert track to route

The Convert track to route function calculates a route which is as similar as possible to the original training unit.

In addition, in contrast to standard track navigation, you then get instructions via beeps which guide you with turn-off instructions. In addition, you are shown the arrival time and the real distance.

**Note**: If road segments do not exist in the map material or sections of road are avoided by the route options which are set, the alternative route will make an appropriate detour.

The calculated alternative route is compared with the original track so that you have the option to decide for yourself which version of the route you would like to use.



### 7.3.2 Start track directly

"Start track directly" starts the training unit without any changes. You are given directional instructions on the map view, but no beeps relating to turns or distances. Select "Start track

directly" and tap on V

You can now decide whether, taking account of your current position, you would like to be guided to the starting point of the track or to the nearest point on the track.



### 7.3.3 Set track start point

Track start point 10 1:06 AM You will now be guided from your current position to the track. Please choose one of the following options:	If you have selected <b>Convert route to track</b> , initially the route is calculated and displayed on the map. By clicking on "Route" or "Track" you can switch back and forth between the track and the route on the map view. The chequered flag shows the end point of the track.
<ul> <li>To the starting point of the track</li> <li>Direct route to the track</li> </ul>	To start routing using the alternative route, select "Route" and tap on $\checkmark$ . To retain the original track and start the track guidance without any turn-off instructions, select "Track" and tap on $\checkmark$ .
× ⑦ ✓	You can now decide whether, taking account of your current position, you would like to be guided to the starting point of the track or to the nearest point on the track (see picture on the right).





This function allows you to race in competition mode against yourself or a virtual opponent. Over a specific route (which you can either record yourself or import), you then compete against the time which your "opponent" needed to complete this segment. During the time trial, a view appears which shows you exactly where you currently are compared to your fictitious opponent and shows you on a graph how far ahead or behind you are (see Chap. 8.4). To start a time trial, you must first select on which route you want to compete against your "opponent". You have the following possibilities for doing this:

### 8.1 Against my timed route

8

Here you can select a timed route which you have recorded yourself. You then compete against your own previous performance.

With a timed route you record a specific section of a route, e.g. an incline. When you compete against such a timed route, you can monitor the success of your training particularly well.

The training unit is used to record the entire route, from the start to the finish.



Select a timed route from the list and tap on  $\checkmark$  to start.

Double-clicking on a list entry opens the detailed view for the timed route in which you can see all the information you need, view the route on the map and view the altitude profile.

To record a timed route yourself, tap on the "Start/Stop" button on the outside of the device and then under "Timed route" on the Record button **2**. If during the recording you press again on the "Start/Stop" button, you can end the recording. When the recording is ended, you can enter a name for the timed route.

**Tip**: Give your timed routes descriptive names which will help you to find them faster at a later date (e.g. "Forest route up to mountain").

### 8.2 Against my training session

As an alternative to a timed route, you can also compete against one of your recorded training sessions.

Select a training session from the list and tap on  $\checkmark$  to start.



Double-clicking on a list entry opens the detailed view for the training session.

To record a training session yourself, tap on the "Start/Stop" button on the outside of the device and then under "Training session" on the Record button . If during the recording you press again on the "Start/Stop" button, you can pause or end the recording. When the recording is ended, you can enter a name for the training session .

You can also find all training sessions under Training history (see Chap. 7).

### 8.3 Against transferred route

Here you can compete against a route which you have transferred to your device. To do this, the route must contain data on the times which have been recorded.

Select a route from the list and tap on  $\checkmark$  to start.

Double-clicking on a list entry opens the detailed view for the route.

The way you can transfer routes to your device is explained to you in Chapter 14 on the Falk Navi-Manager.

### 8.4 Starting a time trial

Once you have selected a segment, the time trial can begin! First of all you can select whether the chosen segment should be converted into a route or be started directly. If it is converted into a route, you receive turnoff instructions.

You are then initially guided to the starting point. A message warns you 200 m before the start of the time trial. At the starting point, another message is issued to indicate the start.

On the time trial view, you can track exactly where you are currently placed compared to your fictitious component. The altitude profile shows the course of the route with the inclines. The red arrow shows your current position; your "opponent" is indicated by a white arrow.

Your deficit or lead is also displayed as a distance and time figure. If you are ahead, the values have a green background, and they have a red background if you are behind.

At the end of the time trial, the time you have achieved is displayed and also whether you have beaten your opponent's time.

Your recorded times are saved. If you compete several times against a specific timed segment, all of your times are recorded and displayed in the detailed view for the



particular time trial. If you have beaten your opponent's time, your new best time is adopted.





Tours are routes which contain several destinations one after the other. You can compile your own tours on the device. You can use all sorts of destinations to do this.

### 9.1 Create new tour

Tour manager

9

Tap in the main menu on **Tour manager**. Via "**Plan tour**" you can compile a tour for yourself.

The preset starting point is your current location. To change this, simply click on the "Start" button. You then have several options for entering a starting point (e.g. address, previous destinations etc.)

You can then also enter the destination point in the same way.

When you tap on  $\checkmark$ , the route is calculated and displayed on the map.

In addition to the functions for the calculated route from the normal destination entry, you can also simulate the calculated route here (not where there are several stations).

The route is run through virtually here. You will see on the map how the route proceeds and

when and how turns are made. To do this, tap after calculation on  $\mathfrak{O}$ .

For routes with several stations, you can add destinations to the tour by tapping on the "Add further destinations" button and then "+ Add station".

All kinds of destinations can be used as stations. The different kinds of destinations are entered in the same way as with normal destination entry.

Once you have entered all destinations, tap on  $\checkmark$ . You will then be asked to save the route under a name which you are free to choose. When you confirm the name, the tour is

created. You can start the routing by tapping on  $\checkmark$  again. You can choose whether the route calculation should start from your current position or the first station.

### 9.2 Plan circuit (optional)

Tap in the tour planner on **"Plan circuit".** Here you can start a circuit from a stipulated starting address. Here too, the

preset starting point is your current location. Via  $\checkmark$  you can enter another starting point.

After the starting point has been entered, you can either specify the distance you want or the length of time around the circuit. The Falk Navigator then calculates a circuit which reflects the route options that have been set and takes you back to your starting point.



Plan tour dis @201:07 AM Starting address → Start Montluelweg 10 D 73760 Ostfildern/ Ruit Destination address



Add further destinations





### 9.3 Select saved tour

If you have already created tours, you can call up a tour via Select saved tour.

First select whether the tours should be displayed sorted around your current location or an address. Or you can simply have all tours displayed. They are then listed in alphabetical order.

Select the tour you want from the list and tap on  $\checkmark$ . The detailed view of the tour is then displayed.



Via 🖉 you can change the settings for the tour.

If you tap on  $\checkmark$ , you start the routing. You can select whether the route calculation should start from your current position or the first station.



### 9.3.1 Detailed view of a tour

You will find all of the information you need about a tour in the detailed view.

First select a tour and tap on  $\checkmark$ 





# 10 Settings

The settings for your device are divided up into four categories.

The navigation settings relate to the routing, the map settings comprise all functions of the map, the profile / sensor settings relate to the set-up and all settings of the profiles and sensors, and the system / general settings relate to the device or the application as a whole.



**10.1 Navigation settings** 

Here you can make various settings relating to the routing. To do this, click in the menu on **Settings > Navigation Settings**.

The following options can be changed:

### 10.1.1 Route options



The route options allow you to define your own individual route ("My route"). The route options include two settings: the route optimisation and the type of routes. These settings are run through as standard after each route calculation.

With the route optimisation, you have various options for adapting the route:

I the route preferably runs over flat sections.

Mountainous

Flat

- the route preferably runs over hilly sections.

Short / neutral inclines.

(bearing navigation).



- plots a straight line from your current location to the destination

calculates the shortest route to the destination, regardless of

**Note:** The selected route optimisation also has an impact on the length of the route. For example, if you choose "flat", sections of the route with an incline that is too steep will be avoided, which can result in a longer route.

With the types of routes, you have the following options:

Cycle paths	- uses or avoids cycle paths (only in bicycle mode)
Hiking trails 🌾	<ul> <li>uses or avoids hiking trails (hiking trails can be preferred in pedestrian mode)</li> </ul>
Steep gradient	<ul> <li>– uses or avoids gradients of over 8% (only in bicycle mode)</li> </ul>
Road traffic	<ul> <li>uses or avoids roads (only in bicycle mode)</li> </ul>
Turns 🌾 – allo	ws or reduces turnoffs on the calculated route





Ferries V- uses or avoids routes involving ferry connections

Tunnels - uses or avoids routing through tunnels

**Fixed rope routes** *Solution - uses or avoids going along via ferrata (only in pedestrian mode)* 

To avoid one of the options, tap on the corresponding symbol. Symbols with a red "X" mean that the corresponding type of route will be avoided.

**Note:** "Avoid" does not mean that these types of routes are completely ruled out. It is always possible that avoided types of routes will also be used in individual cases.



10.1.2 Speed profile

This function allows you to set your average speed. The set profile helps to calculate the arrival time and total travel time more exactly.

You can set this setting separately for pedestrian and bicycle mode. You can choose between different speed settings in each case. Set your desired profile using the

plus/minus buttons and confirm it with

The set speed profile has an impact on the route.

Set speed profile 🛛 🖧 🔞 01:08 AM

Average speed for



# 10.1.3 Ask about route options

If this function is activated, the route options are asked about before each route calculation. This function is activated as standard. If you do not frequently change the route options, disable this function.



### 10.2 Presentation of the map

Here you can make various settings which affect the map view. To do this, click in the menu on **Settings > Presentation of the map**.

The following options can be changed:

### **10.2.1 Map perspective**



With the map perspective you can switch between the two-dimensional and threedimensional representation of the map. The respective setting is indicated by the symbol and the text 2D or 3D.

### 10.2.2 Raster maps (optional)

With the raster maps you can view landscapes and cities from a bird's-eye perspective via topographic maps. The raster map thus makes it easy for you to get your bearings. **Requirement:** You have activated the 2D map view and installed raster maps.

### 10.2.3 In direction of movement

The map can be orientated either in the direction of movement or always to the north. **Note:** If you select "In direction of movement", the positional arrow always points upwards. This setting facilitates orientation. If you select "Map orientated north", the positional arrow is located in the middle of the map and rotates according to the direction of movement.

### 10.2.4 Position on street



Here you can stipulate whether your current position should be mapped onto the route network.

**Note**: For geocaching and for navigation on open terrain, it is essential that you switch off this function.

### 10.2.5 City names on basic map

If you do not have maps for a continent or country, this function still allows you to display the city names on the basic map to allow better orientation.

If you then subsequently go on to purchase more maps, you can deactivate the labelling on the basic map here.

### 10.2.6 Auto zoom 🌮 /



When auto zoom is activated, the scale of the map is adjusted on the basis of your speed (at high speed the map zooms out). If you switch off the auto zoom, you can set the scale of the map on the map view screen yourself. This is then retained.

#### 10.2.7 Points of interest on map



Here you can choose which points of interest should be displayed with small symbols on the map. To do this, select the categories you want. All points of interest in the chosen categories will then be displayed on the map.






# 10.2.8 Track recording 🥓 / 🧩

For the recording of a training unit, you can set here whether the route covered should be shown on the map view.

**Note:** This setting only relates to the map view during recording. With a saved track, the route covered can always be displayed on the map at a later date.

#### 10.2.9 Set map colours



Here you can select from various map colours which colour appeals to you more. Using the arrows at the bottom, you can switch back and forth between the different colour options available.

Select your colour options and confirm your selection with  $\checkmark$ .







## 10.3 Profiles / Sensors

Here you will find all settings which relate to the user and the bicycle profiles, as well as the settings relating to the fitness sensors.



You can set your user profile here. The values of the user profile are required among other things to allow your calorie consumption to be calculated.

You can make the following settings here which you select by tapping on the respective line:

Gender – select Male or Female

Year of birth – enter your year of birth here

**Height** – enter your height in cm here

Weight – enter your current weight here

Confirm your entries in each case by tapping  $\checkmark$  .

#### 10.3.2 Change bike profile

Here you can change the bike profile. You can choose from four profiles which you can configure yourself (see Chap. 10.3.3).

Select the profile you want (bike 1-3 and walker profile) and confirm by tapping  $\checkmark$ .

Ealt user profile	
Gender	Male >
Year of birth	1980 >
Height	180 cm >
Weight	80 kg >
◆	0
Select profile	പ്പന്തിവ1 ന8 AM
	6-9 6 0 1.00 AM
Rennrad	Mountainbike
Rennrad	Mountainbike Wanderprofil



Rennrad	<b>ຢ</b> ັ້ນ 🗊 01:08 AM	
Bike type	Road bike >	
Weight incl. equipment	9 kg ゝ	
Wheel size	2120 mm >	
Map priority	Premium	
+	?	

Here you can edit the bike profile which is currently chosen, as well as view all of the statistics for this profile.

To do this, first select the bike profile that you would like to edit (see Chap. 10.3.2).

You have the following options for editing the current profile: **Bike type** – select the bike type for this profile here. The route calculation and the maps used are adapted for you on the basis of this specification.

**Weight incl. equipment** – here you should specify the total weight of the bike and your equipment in kg.

**Wheel size** – here you should specify the wheel size of your bike that you are using for this profile.

The following list gives you an overview of the customary type designations for the tyres and the associated wheel size in mm.



The type designation can generally be read off the tyre.

47-305	16x1.75x2	1272
47-406	20x1.75x2	1590
37-540	24x1 3/8A	1946
47-507	24x1.75x2	1907
23-571	26x1	1973
40-559	26x1.5	2026
44-559	26x1.6	2051
47-559	26x1.75x2	2070
50-559	26x1.9	2089
54-559	26x2.00	2114
57-559	26x2 125	2133
37-590	26x1 3/8	2105
37-584	26x1 3/8x11/2	2086
20-571	26x3/4	1954
32-630	27x1 1/4	2199
28-630	27x1 1/4	2174
40-622	28x1.5	2224
47-622	28x1.75	2268
40-635	28x1 1/2	2265
37-622	28x1 3/8x1 5/8	2205
18-622	700x1 BC	2102
20-622	700x200	2114
23-622	700x23C	2133
25-622	700x25C	2146
28-622	700x2BC	2149
32-622	700x32C	2174
37-622	700x35C	2205
40-622	700x4DC	2224

**Map priority** – here you can stipulate which map type is preferred for this profile. You will find detailed information about the map priority in the following chapter (10.3.4).

Name – here you can change the name for the profile.

**Full statistics** – here you will find the overall distance covered and the total ascent which have already been accomplished with this profile. You can also correct these details by

tapping on 🖉.

#### 10.3.4 Map priority

Only one country map at a time can ever be used for a country. If you have installed several country maps for a country on your device (e.g. Basic Map Plus Germany and Premium Outdoor Partial Map Germany), you can set the priority of the map to be used. This will then be used both for the map display and in the address entry. To do this, proceed as follows: Tap in the country selection list on the map which is currently inactive (grey background) for a country.

The prompt for the map priority then appears. You then have the following options:



- **Premium Outdoor Map:** Stipulates that (if present) the Premium Outdoor Map will always be used (recommended setting if you are travelling in an area for which you have a Premium Outdoor Map [e.g. southern Germany if you have the Trans-Alpine Premium Outdoor Map]).

- **Premium Road Map:** Stipulates that the Premium Road Map will be preferred. This setting is recommended if you are travelling for example with a road bike and want to use paved roads that are also available for car traffic.

- Prefer Basic Map Plus (OSM) before Premium Partial Map (e.g. southern Germany): Stipulates that preference will be given to the Basic Maps even if a Premium Outdoor Map is available for part of the country.

This setting is recommended if you have installed the Trans-Alpine Premium Outdoor Map and want to calculate a route which is no longer fully within the area covered by the partial map (e.g. southern Germany). In this case, the Basic Map Plus (OSM) will be used for the corresponding country, if available.

**Example:** You are planning a tour involving several stops from Frankfurt to Florence. You have installed the Trans-Alpine Premium Outdoor Map and the Basic Maps Plus (OSM) for Germany, Austria and Italy. With the setting described above, you can now follow a route from Frankfurt on the Basic Map Plus Germany as far as the Austrian border. As the Trans-Alpine Premium Outdoor Map also covers the whole of Austria, you will be routed all the way through Austria on this map. In Italy, you will then be routed on the Basic Map Plus Italy as the destination (Florence) is no longer covered by the Trans-Alpine Premium Outdoor Map.

- Basic map Plus (OSM): Stipulates that the Basic Map will always be used even if a Premium Outdoor Map is available for this country or part of this country.

Weitere Informationen zu den verschiedenen Kartentypen findest du im Glossar.



#### 10.3.5 Fitness sensors

Your Falk PANTERA is designed for coupling several ANT+<sup>™</sup> fitness sensors. You can couple a heart rate sensor, a speed sensor and a cadence sensor to the device which will provide you with up-to-date and accurate figures at all times while you are on the move.

How you attach the sensors is explained to you in the device description right at the start of the manual.

When you first call up the **Fitness sensors** function, you are guided through the process of coupling up the individual sensors. Follow the instructions provided on the device. If the coupling has already been carried out, here you can view a list of the sensors and their respective status.



#### Heart rate monitor

Once you have coupled up a heart rate sensor, here you see the ID of the sensor as well as the status. You can use the **Search for sensor** button here to search again for a sensor. **Tip**: If it is not possible to establish a connection to the heart rate sensor, moisten the sensor contact area on the back of the chest strap again.

#### Speed sensor

Once you have coupled up a speed sensor, here you see the ID of the sensor as well as the status. You can use the **Search for sensor** button here to search again for a sensor.

#### Cadence sensor

Once you have coupled up a cadence sensor, here you see the ID of the sensor as well as the status. You can use the **Search for sensor** button here to search again for a sensor. **Tip:** If it is not possible to establish a connection to the combined sensor, check the gap between the sensors and magnets.

You can display the measured values of the sensors at any time (e.g. in the info fields of the map view).





Here you can make various settings which affect the device. To do this, click on the menu on **Settings > System / General**.

The following options can be changed:





The battery option allows you to check the remaining capacity of the batteries. When connected to a power source, "Charging" is displayed here.



#### 10.4.2 GPS Info

GPS Info indicates the GPS reception signal strength at the current location. Adequate GPS reception is essential for any navigation.

An info page with information about the existing GPS connection and your current position as

well as the altitude and speed is displayed. The settings menu.

The colouring provides you with information about the GPS status at a quick glance: **Red**: GPS signal is not sufficiently strong to allow positioning. Signals are being received from fewer than 3 satellites.

**Yellow**: GPS signal is sufficiently strong to allow positioning, but not sufficiently strong to allow the current elevation to be determined. Signals are being received from 3 satellites. **Green**: A high-quality GPS signal is being received that allows your elevation to be determined. Signals are being received from at least 4 satellites.



#### 10.4.3 Brightness

Here you can set the brightness of the screen.

The brightness settings have a great influence on the power consumption of your navigation device. To save power in battery mode, turn down the brightness level.

In addition, you can select whether the screen should automatically be dimmed when the battery is weak in order to save power.

Confirm your setting by tapping on  $\checkmark$ .



#### 10.4.4 Beeps

The beeping noise output warns you with a beep when you are approaching a turn-off or when you deviate from the calculated route.

#### 10.4.5 Calibrate compass

To guarantee precise orientation of the compass, you should recalibrate the compass at regular intervals. To do this, tap on "Calibrate compass" and follow the instructions on the device.

**Note**: You should only ever calibrate the compass outdoors. Make sure when calibrating it that no metallic objects are located in the vicinity of the device and that no magnetic or electro-magnetic sources of disturbance (e.g. high-voltage power lines, antennae) are present.



#### 10.4.6 Calibrate barometer

To optimise the accuracy of the height measurement, you should calibrate the barometer at regular intervals.

You can calibrate the barometer in three ways:

**Automatic** - the barometer is then calibrated completely automatically. (However, to obtain more accurate results it is recommended that you calibrate it manually.)

**Manual by specifying height** - if you know the height of your current position, enter this and place the device down to rest on a flat surface for a short time.

**To standard atmospheric pressure** - then the standard atmospheric pressure at sea level is used to determine the height.

**Note**: The barometer should be calibrated after each change of battery. In changeable weather and where there are large differences in height, it is recommended that you calibrate the barometer several times a day.



#### 10.4.7 Set position format

Position format	AM 01:09 👧 🗗

dd.ddddo reference system WGS84

dd°mm.mmm' reference system WGS84

dd<sup>o</sup>mm'ss.ss" reference system WGS84





This setting is then used in the entire system. **Note:** UTM and Gauß-Krüger are formats from printed maps. You can read the coordinates off such maps and enter them in the device.

#### 10.4.8 Screen auto-off

You can use this function to set whether and after what period of time the screen automatically switches off. You can choose between 15 seconds, 30 seconds and 1 minute. In addition, you can select whether the keylock should also be activated at the same time so that no accidental entries are made.

**Note:** While your screen is switched off, existing navigation operations or track recordings continue to run. If you press the hardware key (when the keylock is active) or click on the screen, the screen is activated again. Beeps continue to be output. This function helps you to extend the life of the battery.





The Set home option allows you to change your home address which you entered when you first started the device.

#### Tap on Set home.

10.4.9 Set home

You can enter your home address via the on-screen keypad.

Confirm your entry with ¥

The display automatically switches back to the settings menu.

The address which is entered can be overwritten at any time by entering a new address.

#### 10.4.10 Default settings



If you tap on **Default settings**, you can reset the **settings** of the Falk Navigator to the factory settings; the navigation device is automatically restarted when you do this. You then have the option via the start wizard of making new settings.





Time

The **Time** option allows you to set the time zone and the time format.

**Note**: The current date and the current time are received with the GPS signal and are thus always set to the nearest second.

To set the time zone in which you are situated, tap on the left or right arrow in the top section of the screen.

An automatic switchover between winter and summer time is preset. If you would prefer to set the summer time manually, select On. If Off is activated, winter time is displayed.

Confirm the settings with or exit the display without

saving the settings via the 👗 button.



Tap on **Language** to select the language in which you want to be guided through the menus in the Falk Navigator. The language is always specified in the respective national language.

Confirm your selection with V

#### 10.4.13



If the screen no longer reacts to being tapped on without any errors, it needs to be recalibrated. To do so, you need a stylus (optional) or another blunt object. To avoid damaging the display, never tap it with any pointed object.

Choose the Screen option and start calibration by confirming the following display screen

with  $\checkmark$ . If you do not want to carry out the calibration, exit the display by tapping on  $\checkmark$ . Tap and hold the stylus for a short while on the cross. Repeat the process for each position at which the cross is located.

The calibration process is complete as soon as there is no longer any cross displayed. Tap on the screen again to return to the menu.





## 10.4.14 Info about

You can use the **Info about** option to display system information, in particular about the version of the **navigation software** used, about the **map material** and **map data** used. The

button gives you an overview of the software functions available to you for a limited period of time.

To exit the display, tap on

Tap on the **C** button to display information about copyrights for the software used. Here you will also find country-specific copyright notices.



**10.4.15** Arrange menu **\* \*** Here you can change the order of the functions within the settings menu as you wish. Select a function and move it to the position you want with the aid of the rectangular arrows.

Do not worry - no function will be lost. And even if the functions become mixed up, you can

tap on *b* to restore them to the preset order.



## 11 Active route

If you have calculated a route and are in navigation mode, you have the following options under **Active route**:

- Calculate alternatives calculates two alternative routes
- Enter stop-off point here you can enter a stop-off point which is then navigated to before the destination which has already been entered.
- **Next destination** if you have entered a stop-off point or are on a tour, you can navigate to the next destination here.
- Current tour profile if you are travelling along a tour, you can view the entire tour profile here.



## **12 Transferred tracks**

Under "Transferred tracks" you will find all tracks that you have transferred to your device. Here you can also delete imported tracks from your device again.

You can search for the name of a track by tapping on

When you select a track and tap on  $\checkmark$ , you are shown the detailed view for the track.

Tapping on  $\checkmark$  again starts the routing.

When you start a saved track, you have the possibility of deciding whether you want to start the track directly or want to convert it into a route in order to receive turn-off instructions in the form of a beep. In addition, you can select whether you want to travel to the starting point of the track or to the point on the track nearest to your current position.

To edit a transferred track, tap in the detailed view on  $\checkmark$ .

The following possibilities are available to you:







Here you find further functions, which will be explained to you in the following chapters.



## 13.1 Remember position

To remember a position so that you can find your way back there at a later date, use the "Remember position" function. This saves the current position as a waypoint. You then have the option of specifying a name for the location.

The date and the time is first displayed as the name as standard.

You can change the name by pressing the back button for a long time and entering another name.

#### You save the position with V

If you want to save a point which is not your current location, you can do this via the waypoint manager.

## 13.2 Waypoint manager

Here it is possible to select, create and delete waypoints.



## 13.2.1 Choose waypoint <sup>^</sup> If you want to navigate to a waypoint, tap on "Choose

**waypoint**". Then specify the search centre you want. The waypoints will then be displayed, sorted by their distance from this centre.

Alternatively, you can tap on "**Show all waypoints**". All waypoints will then be displayed sorted in alphabetical order.

Once you have selected a waypoint from the list, you can

display the waypoint on the map by clicking on

navigate there directly by clicking on  $\checkmark$  or call up the detailed view with a double-click.

The detailed view offers similar possibilities to the detailed view for a point of interest.



You have various possible options for creating a waypoint.

#### You can:

Use your current position, enter an address, select a position on the map, use one of your previous destinations, enter coordinates or select a point of interest.

Entry then takes place in the same way as when entering a destination (see Chap. 6.6).



13.2.2 Create waypoint



Once the destination has been defined, you are asked to enter a name for the new waypoint. In the row for the name, initially the address or the geocoordinates of the waypoint are automatically displayed. However, it is advisable to assign an appropriate name to each waypoint, particularly if several waypoints have already been created.

You can change the name by pressing the back button for a long time and entering another name.

Confirm the name with  $\checkmark$  and the waypoint is then saved.

#### 13.2.3 Delete created waypoints



To delete a waypoint that you have created yourself, tap on "Delete created waypoints".

One or several waypoints can then be marked from the complete list and deleted by clicking on

**Note**: Imported waypoints can be deleted by deleting the corresponding GPX file in the GPX manager (see Chap. 13.3).

#### 13.3 GPX manager

The GPX manager contains all of the GPX files that are located on your device. These can be either tracks that you have recorded yourself or imported GPX files. Here you can also delete imported GPX files from the device.

Note: The imported files may contain tracks, tours and waypoints.

They are also displayed in each case in the track manager and waypoint manager. **Caution:** When you delete a GPX file, all of the elements contained (tracks, tours and/or waypoints) are deleted.

**Tip:** If you want to delete a GPX file, but would like to keep a waypoint from it, simply save the waypoint under a different name before you delete the GPX file.



Help takes you to the online help containing brief operating instructions for your navigation

system. On each screen on which you see the 🕐 symbol, you can tap on it and you will be guided directly to the chapter in the Help section which deals with the corresponding topic. This allows you to find an explanation about the respective function quickly in lots of different contexts.

In addition, in the Help section you can select "Demonstrate functions" to get a demonstration of certain functions.



## 14 Falk Navi-Manager

In this chapter you are given a brief introduction to the Falk Navi-Manager. The following explanations relate to version 2.8 of the Navi-Manager. If you are now using a newer version, you will find information about this in the program help section. You can access help via the ? in the menu bar of the Navi-Manager program interface. There you will also find detailed information about the functions which are outlined below, as well as about other functions.

With the Falk Navi-Manager you are able to transfer country maps, speakers, POIs and GPX files to your device or from the device to your PC.

In addition, you can transfer individually compiled content from the Falk Online Community to the device via the Navi-Manager.

As the memory capacity on your navigation device is limited, the Falk Navi-Manager also offers you the possibility of managing your data by for example only saving the data which is currently required on your navigation device and downloading other data onto a memory card or your PC.

The Falk Navi-Manager provides you with the following further functions: Import of GPX files Setting up, activating and changing the theft protection POI import from, for example, Google Earth Installation of software updates Installation of the maps Creation of a device back-up (optional)

#### 14.1 Introduction to the Falk Navi-Manager

You must first install the Falk Navi-Manager on your PC. To do this, you must first download the program from the internet.

You will find the Navi-Manager on www.falk-navigation.de under "Service > Navi-Manager". After download is complete, double-click on the file "setup.exe" and then follow the instructions given by the installation wizard.

Now connect your navigation device to your PC via the USB cable.

To start the Falk Navi-Manager, click on the Windows Start menu: Start/Programs/Falk/Navi-Manager or if necessary on the Navi-Manager icon which was placed on your desktop when installation took place. The Falk Navi-Manager then opens up.

## 14.2 Import of GPX files

GPX is the most common file format for saving tracks, geocaches and waypoints. There are numerous portals and providers on the internet that offer tracks to download. If they are in GPX format, they can easily be transferred to your device and utilised. To transfer GPX files from a portal to your device, you must first save them on your PC.

Then choose "GPX Manager" at the top in the Falk Navi-Manager.

The GPX manager shows all GPX files on the PC or on the device in a list.





You then have the following possible options:

🌆 Falk Navi-Man

**Back up to PC** – The selected GPX file from one of the two windows can be saved to a freely selectable directory on the PC.

Delete - Deletes the selected GPX file from the device.

**Import** – Imports a GPX file from a PC to your device. To be able to manage the GPX files, the files to be imported must first be imported to the Navi-Manager.

**Update** – Updates the content of the windows if, for example, you have imported a GPX file again.

You can display your waypoints, tracks and geocaches on the map.

Altitude and speed profiles and the time required for the tracks can be called up.

#### Transfer and save GPX files to the PC

To save imported GPX files and GPX files you have created yourself to the computer, proceed as follows:

1. Select the file you want and use the "Save" button.

**2.** Once you have acknowledged the notice about the intended storage location with "OK", two entries will appear in your list. There is an entry for the GPX file on your navigation device and an entry for the GPX file on your computer.

**3.** To find the file you want again on your PC, mark the file and, by clicking the right mouse button, call up the menu item "Show folder". The folder in which the GPX file has been saved is automatically opened.



#### Import GPX files from your PC to the navigation device

To import downloaded GPX files to your navigation device, please perform the following steps:

**1.** Select the button "Import".

2. Search for the file you want on your PC, select it and use the button "Open".

**3.** The file has now been imported to the GPX manager and can now be saved on the navigation device.

**4.** Mark the file you want and choose "Copy PC > Flash" in the bar on the right. The GPX file is now saved on your navigation device and can be used.

#### Delete GPX files from the navigation device

To delete recorded or imported GPX files from your navigation device, please perform the following steps:

**1.** Select the file you want and use the "Delete from Flash" button in the function bar on the right.

2. Confirm the notice with "Yes" to remove the file.

#### **Edit GPX files**

To edit the name or the description of tracks or waypoints, proceed as follows:

- 1. Select the element you want and use the button "Edit".
- **2.** A window will open up in which you can change the name and description as you wish.

#### GPX files on the map view

In the GPX manager, you can display waypoints, tracks and geocaches that you have created yourself. The map can be moved using the arrows and the hand icon. The zoom level of the map can be changed with "+" and "-". Viewing options such as satellite and map are located at the top right-hand edge of the map view screen.

In the bottom section of the GPX manager, you can display the altitude and speed profiles, length, time and description of tracks and waypoints. If no information exists in relation to this, the detailed view remains empty at this point.

If no actually required time exists, the anticipated required time is calculated based on the average speeds for cyclists and pedestrians which exist in the navigation device.



#### 14.3 Transfer of content

All of the available data is summarised in various categories. In the top section of the screen interface, the categories Country maps, POIs, My favourite lists, Speakers, Software and Raster maps (optional) are presented in the form of tabs.

When you click on the tab you have selected, all of the data in this category is presented in list form in the overview.

Thanks to row headings and corresponding icons, you can tell from the overview where the individual data for the various categories is saved. The data may be stored

in the internal memory of the navigation device,

on the SD card,

📥 on the PC,

🕗 on CD/DVD or

Son an internet server.

Important: An active internet connection must exist to enable downloading from the internet.

Copying or deleting:

The selected data is copied from the PC to the SD card.

The selected data is copied from the PC to the internal memory of your device.

The selected data is deleted from the internal memory.

The selected data is deleted from the SD card.

The selected data is deleted from your PC.

Please note that the memory capacity of the internal memory is limited. The capacity utilisation of the internal memory is displayed on the bar at the bottom of the screen.

#### 14.4 Compiling your own tour on the PC

The Falk Navi-Manager offers the possibility, via the online route planner from Falk, of planning your journeys from the comfort of your own PC. You have the option of transferring the tours planned in this way to the device and navigating with them there.

Vital prerequisities for using this function are an active internet connection and connection of the navigation device by USB cable to the PC.

Initially proceed in the manner described in the introduction.

In the opened Falk Navi-Manager, you will find the **Service** item in the menu bar. Select the subitem **Falk Route Planner** 

You will get directly to the webpages of Falk. There you have the option to plan a route with the route planner. First enter your starting address followed by your destination and then click on Plan route.

In the top menu bar of the Navi-Manager, the **Transfer tour** button is activated after the route has been calculated. Select this to transfer the tour to your device. An input box will appear into which you can enter a name for your tour. This name will then be used as the tour name on the navigation device.

You can find the tours transferred to the navigation device in the main menu under the menu item **Tour planner**.

Select the tour by tapping on it and then choose  $\checkmark$ . You can now travel along the tour that has been compiled.

Note: The routes which are planned here only travel along the road network.



#### 14.5 Software

Under the Software tab you are shown software updates which are compatible with your device. In addition, you are shown additional products that allow you to expand your device to include particular functions. If you click on "**Buy**", you are automatically directed to the Falk Online Shop where you can get further information about the additional products and buy them.

#### 14.6 Training Manager

To open the Training Manager, use the following buttons or menu options:

- 1. Training Manager"" button
- 2. Training Manager"" menu option

The Training Manager has the following functions available:

- **Training Units** The training units recorded with your device are being displayed.
- **Training Statistics** The training units recorded with your device are currently being statistically analyzed.
- Compare Training Units Tracks
  Aufgezeichnete Trainingseinheiten und auf Ihr Gerät übertragene Strecken können verglichen werden.
- Save Training Units In order to analyze them, you first have to save your recorded training units and your transferred tracks on your computer.
- **Transferred Tracks** The tracks transferred to your device are being displayed.

#### 14.6.1 Training Unit

Used to display all the details concerning the training units recorded with your Falk Outdoor navigation device.

#### Selecting a training unit

In order to select a training unit that is being recorded, follow the steps below:

- 1. Select the file you want from the list of training units being displayed.
- 2. If the list of training units is too long, you can filter it by moving your mouse over a column label of your choice and then selecting a value that should be used for filtering.
- 3. After this, the list will only show training units that match the filter value (i.e., these will be the only training units available for selection).
- 4. To confirm your selection, simply click on the "Show details" button.

#### Training unit view



#### Detailed information:

The left side will show all available details concerning the training unit that is being recorded and that you selected. If no values are shown, this unit has not been recorded. This may occur with transferred tracks, for example.

Map view:

- 1. The map view has the following features available:
- 2. View of the training unit being recorded in the form of a line on the map view.
- 3. You can move the map with the arrows or with the hand icon.
- 4. You can change the level of zoom with "+" and "-".
- 5. View options, such as "Satellite" and "Street map," are found on the upper right edge of the map view.
- 6. When you click on a waypoint, a layer with details concerning the waypoint will be displayed.

Profile display:

The following profiles are available on the lower pane in the Details view:

- 1. Speed profile
- 2. Elevation profile
- 3. Heart rate profile
- 4. Cadence profile

#### 14.6.2 Training Statistics

Your device carries out statistical analyses of the training units being recorded. This will provide you, for example, with an overview of the number of training units, total distance, duration, calories consumed, and the number of climbs and descents during a specific period of time.

Total statistics:

- **Total kilometers:** In contrast to your actual training statistics, your total statistics not only total the values of the training units being recorded. Instead, they show the grand total of kilometers you've ridden.Values that you enter manually into the device will also be added to this total.
- Elevation gain: In contrast to your training unit statistics, your total statistics not only total the values of the training units being recorded. Instead, they show the grand elevation gain total. Values that you enter manually into the device will also be added to this total.

Training statistics:

Your "training statistics" will only include the training units that have been recorded with your device. You can use the filters to filter these training units by bicycle profile or by year. If you do this, the statistics will only take into account the training units that meet the filter conditions.

You can use the "Week," "Month," and "Year" buttons to select the period for which you want a report. Training units that have been recorded with your device will be statistically



analyzed. This way, you can get, for example, an overview of the number of training units, total distance, duration, calories consumed, and the number of climbs and descents during a specific period of time.

#### 14.6.3 Save Training Units

In order to be able to analyze your recorded training units and transferred tracks, you will have to save them once on your computer. Whenever new training units that have not yet been saved on your computer are detected on your device, a prompt will immediately appear asking you to save your data.

If you interrupt the saving operation, you will be asked to save the newly found training units and tracks the next time you start the Training Manager.

#### 14.6.4 Transferred Tracks

This function can be used to analyze tracks that have been transferred to your device using the GPX Manager. The actual values shown will depend on the data in the transferred tracks.

Selecting a transferred track

In order to select a transferred track follow the steps below:

- 1. Select the file you want from the list of transferred tracks being displayed.
- 2. If the list of transferred tracks is too long, you can filter it by moving your mouse over a column label of your choice and then selecting a value that should be used for filtering.
- 3. After this, the list will only show tracks that match the filter value (i.e., these will be the only training units available for selection).
- 4. To confirm your selection, simply click on the "Show details" button.

#### Training unit view

Detailed data:

The left side will show all available details concerning the tracks you transferred. If no values are shown, no values are available in the data.

Map view:

- 1. The map view has the following features available:
- 2. View of the training unit being recorded in the form of a line on the map view.
- 3. You can move the map with the arrows or with the hand icon.
- 4. You can change the level of zoom with "+" and "-".
- 5. View options, such as "Satellite" and "Street map," are found on the upper right edge of the map view.
- 6. When you click on a waypoint, a layer with details concerning the waypoint will be displayed.



#### 14.7 Import of POIs

On Falk.de, Google Earth and lots of other websites a large number of points of interest (POIs) are available for you to download. If these POIs exist in a **KML or KMZ format**, you can transfer them to your navigation device via the **KML import plugin** of the Navi-Manager. Visit the corresponding website from which you want to download the KML files, e.g. <u>www.falk.de</u>.

#### KML files from falk.de

On <u>www.falk.de</u>. you enter on the entry menu (top left) an address within whose surroundings you would like to search for POIs. On the right next to this entry area, you can select a theme for the search, e.g. restaurant, cinema etc.

To complete your entries, you confirm them with the button "**display**". Below the entry area you will see a dropdown list of POIs. In addition, you will see a map display with the POIs marked on it.

To select the POI which you want to transfer to your navigation device, click directly on the map on the corresponding POI or select is by clicking on it from the dropdown list. After a POI has been selected, an info window for the POI appears.

Now select the **Tool** button. A list will open up. Now select **Save** and **For my Falk Navi**. The POI is saved as a KML file on your PC.

#### KMZ/KML files from Google Earth

You will also find lots of interesting POIs on Google Earth. The following section describes how you can incorporate several POIs as a new POI category.

**Note**: Falk has no influence over functions of Google Earth which are described in the instructions. There may therefore be changes to the sequence which is described. Start the program Google Earth.

Enter a city and a subject theme in the search box at the top left (e.g. "Stuttgart" and ",,Museums").

Selection of the POIs which are to be adopted:

You can adopt blocks of POIs by using the umbrella term (e.g. "Museums (1 - 10)") by clicking on the right mouse button and then selecting the menu item "Save under "My Places"".

You can adopt individual POIs by clicking on the right mouse button and then selecting the menu item "Save under "My Places"".

The selected POIs are displayed under "My Places".

Further POIs, including those from other cities, can now also be added to "My Places" in the manner described above.

Click on the "My Places" item with the right mouse button and select the menu item "Save As". The file can now be saved on the PC as a KMZ file.



#### KML/KMZ import in the Falk Navi-Manager

The following text describes how KML and KMZ files can be imported to the sat nav via the Falk Navi-Manager. Start the Navi-Manager. On the Navi-Manager screen interface in the menu bar under "**Plugins**", call up the menu item "**KML Import Plugin**".

Here you will then see the window for the import wizard. You can acknowledge this with the **Next** button. With the aid of the "**Select**" button, you can select the KML or KMZ

Select a KML file			
Select a KML file which you would like to convert to	the Falk POI forma	ıt.	
C:\Users\Kosmo\Downloads\KML_Samples.kml	_	Select	
The selected file contains 4 POIs:			
Simple placemark			
Floating placemark			
Extruded placemark			
Roll over this icon			
,			
Cancel	/ Back	Next	Complete
<u>L</u> ancel	V Dack	ILIEM /	Famblets

file on your PC which you would like to transfer to your navigation device. Once you have selected a file, a list of the POIs in it appears beneath it. Press the **Next** button.

In the next window, you must assign an individual category name for your POI category. You also have the option here of providing more details about the particular POI category. Once you have provided the POI category with a name and the information you want, confirm your entries again with the **Next** button.

In the next step, you have the option of selecting an **icon** to be displayed on the map with the respective POIs. A small

Falk KML Import Manager step 3/6
Category name and description
Define a name for the new category.
You have the option of entering a descriptive text. This text will be displayed in the Falk Navi-Manager in the 'Description' column.
Category name:
My Camping
Description:
This is my favourite list of camping grounds around Stuttgart.
Cancel < Back Next > Complete

selection of icons are suggested for you.

However, you can also select your own **icon** (if one exists) from your PC. This icon should have a **resolution of 72 dpi** and the image size **16x16 pixels**.

Finally, confirm your entry again with the "**Next**" button. If you do not specify your own icon, the default icon shown will be used for displaying the POI on the map.

The final window once again summarises the information for the POI category which is to be imported. When you press the **Complete** button, you start the conversion process (the KML file is converted into the Falk format).

**Note**: The conversion may take a little time.

The converted POI category appears automatically after a few seconds under the "**My favourites**" tab. The POI category is now located on the PC. To transfer the POI category to the navigation device, you must click on the right-hand side of the window on the button Copy **PC > Flash** or Copy **PC > SD** card.

Following successful transfer, your own POI category is available on the navigation device for further use, e.g. for radius searches or navigation operations.



**Note**: The POIs which are imported via the KML import plugin cannot be rated on the navigation device.

## 14.8 Falk Online Community "123POI.com"

In addition to the preinstalled points of interest, you can create your own points of interest in the Falk Community and then transfer them to your device.

There you have the possibility of adding a descriptive text and also pictures to your POIs. You can comment on POIs from other users with your own experiences or simply rate them using up to 5 stars.

The Falk Community can of course also be used to expand your own content because you can download countless POIs with pictures, ratings and comments from other users to your device.

To be able to use these functionalities via the Navi-Manager, you first require free access with a user name and password. If you already have log-in data from the websites "falk.de" or "123POI.com", you can use this. If not, register at "123POI.com" using the "Register now for free!" button.

#### 14.8.1 Use "Favourite lists" from the Community

When you click on the "My favourites" tab in the main window of the Navi-Manager, an overview list of your available "own" POI collections is displayed.

These may be POI collections which were generated with the KML import plugin. On the other hand, here you are also shown your own "Favourite lists" which exist at "123POI.com" (to create a new favourite list at "123POI.com", click there in the menu on "My favourite lists" and then on the "Create" tab). The favourite lists from the community are only displayed if you are currently registered with the community via the Navi-Manager. Your "own" POI collections mentioned above from a KML import or from "123POI.com" can be transferred to the sat nav in the usual way. Content which is located in the online community is presented with a globe symbol.

#### 14.8.2 Upload new and amended ratings

On the sat nav, in the detailed view for a point of interest (POI), you can submit a rating of from 1 to 5 stars. This means, for example, that you can rate a restaurant you have visited. You can upload these ratings in the Falk Online Community, where they are combined to produce an overall rating. To do this, you must click in the menu under "Edit" on "Transfer new and amended ratings to the Falk Community".

If the automatic update function is set appropriately, uploading of the new and amended ratings will be performed automatically each time that you start the Navi-Manager.



## 15 Tips and tricks

Here you will find a number of tips and tricks that will help you to handle the device.

This means you can find what you are looking for even faster.

Back to map – Wherever you are on the menu, you can easily switch back to the map view

at any time. To do this, press down on X or 숙 .

**Help** – On any screen on which you see the O symbol, you can tap on it and you will be guided directly to the Help chapter which relates to the corresponding theme. This ensures that you can find an explanation of the particular function in many different contexts.

**Scrolling and browsing** – In list views, you can move the continuous text up and down directly with your finger. In menus with several pages, you can scroll to the next page by swiping your finger sideways.

**Route options** – With the route option "Easy" the route may be longer as gradients of over 4% are avoided. The avoidance of certain types of routes (tunnels, hiking trails etc.) also has an influence on the route which is calculated. After the route has been calculated, you can

change the route options again if you tap on for this allows you to compare what difference these settings make.

**Map zooming** – Zooming in and out of the map helps in many situations. If you want to move the map a large amount, first zoom out. You can then move the map over greater distances more quickly. Zoom in on the map (e.g. in the view of the calculated route) to identify more details.

**Save power** – You can save power and thus increase the operating life if you switch the device to stand-by mode when you are not actually using it. In addition, you can set the brightness of the screen to a relatively low level to save power.



## 16 Troubleshooting

Problem	Possible cause	Solution
Navigation device does not start up	Battery capacity too low	Connect the device to a suitable power source or replace the batteries. If the device is not being used for a prolonged period, please switch it off entirely. Press the power button and tap on "Switch off".
No GPS reception / GPS reception is interrupted	GPS reception may be interfered with in forests, when you are surrounded by tall buildings, where there is heavy cloud cover etc.	Reposition the navigation device if necessary. At least 4 satellites are required for navigation. This information can be retrieved on the device under "Settings > "System / General" > "GPS Info".
Device no longer responds to entries	Occasionally, overloading may result in the device no longer responding	Carry out a hard reset by holding down the power button for around 3 seconds. The device then switches off entirely.
Compass does not align	The compass should be regularly calibrated	Recalibrate the compass
itself correctly	There are sources of interference in the immediate vicinity	Make sure that there are no sources of interference such as magnets or high-voltage power lines close by.
Barometer values are not correct	The barometer should be regularly calibrated	When there are breaks in the weather or you experience great gains or losses of altitude, you should calibrate the barometer several times a day.
The destination you are searching for cannot be entered	The corresponding country map may not be available	Please check whether the corresponding detailed map is included with the product or is already preinstalled. Please use the Navi-Manager for any possible installation that may be required.
The track includes jumps in altitude	The barometer was not calibrated prior to the start of the track recording.	It is recommended that you calibrate the barometer manually, by entering an altitude, in particular before recording a track.



## 17 Technical data

Soroon	Display	7.1 cm diagonal (3"), transflective
Screen	Resolution	240 × 320 pixels
Dimensions		ca. 6,2 x 10,8 x 1,7 cm
Internal memory	Flash memory	8 GB
Internal memory	RAM memory	128 MB
GPS	Chip	SiRF Star IV
Sensors		Barometer, compass
Input / output	Input	Screen interface, on-screen keypad
	USB	USB 2.0 (Micro USB)
Battery		Integrated 1840 mAh LI-Ion battery,
Dattery		rechargeable
	Waterproof rating	IPX 4
Environmental conditions	Operating temperature	-10~+60°C
	Storage	-20~+70°C
	Atmospheric humidity	0~90% atmospheric humidity



## **18 Change of battery**

#### Sensors

To change the battery of the sensors, you must untwist the battery cover on the back to the left. You can do this, for example, using a coin which you place into the slot on the cover. Insert the battery (note the correct polarity) and close the sensor by twisting the cover to the right to shut it.



To replace the battery of the device in the event of a defect, you must pull out the four rubber nipples (1) on the back of the device. Then undo the screws (2) with a suitable precision screwdriver. Then carefully open the housing cover (3) and carefully remove the battery (4). Detach the connector of the battery from the device.



## **19 Service & support**

To provide optimum support to customers, Falk has set up a service centre which handles all warranty claims and repairs.

If you have any questions about the guarantee and warranty, please feel free to contact the technical hotline:

#### +49 1805 - 003233

(€0.14 / min. from a German landline, mobile phone prices may vary, max.  $\in 0.42$  / min.)

In the event of a technical defect within the guarantee period, you can also register the device for a free repair on the following website:

#### http://www.falk-outdoor.com/en/service-en/guarantee-processing.html

#### Scope and duration of the warranty

United Navigation GmbH guarantees, for a period of 24 months (battery: 6 months) from the purchase date, that at the point in time of the transfer of risk the product is free of any material defects and defects of title in accordance with Sections 434, 435 of the German Civil Code. If a product which is supplied has evident material or manufacturing defects, which also include damage caused during transportation, the defect must be complained about immediately.

In other respects, the statutory regulations pursuant to Sections 434 ff., 475 para. 1 of the German Civil Code apply.

Proof of purchase is required to make a claim under the guarantee.

The gurantee does not cover defects which have been caused by improper maintenance, unauthorised attempts to open, repair and/or modify the product or its parts, inappropriate installation, use of software added by the customer, viruses, causes outside of the scope of the intended uses which are envisaged, accidents, fire, lightning, power cuts and/or natural disasters as well as similar causes. This guarantee shall further lapse in the event of any attempted or completed alteration or repair to the product by unauthorised people, removal or alteration of the device's serial number.



## 20 Glossary

**Barometer**: A barometer is a measuring device used to measure atmospheric pressure. The barometer is used to calculate the current height and is shown on the trip computer.

**Menu button**: The menu button is the lower button on the left-hand side of the device. When you press the menu button, you can control the volume and brightness levels. However, you can also select another function which is to be controlled using the menu button.

Button: Buttons which are shown on the screen. These many be menu items or command buttons ( Ket.). Buttons can be operated by tapping on them.

**GPS**: The Global Positioning System is a satellite-based system for global positioning. Your location can be pinpointed using the conventional GPS satellite system to within 20 metres at any time – provided that a GPS signal is being received.

**GPX file**: The most common file format for saving tracks or waypoints is the GPX format. The files are saved in the GPX manager. However, the tracks or waypoints they contain are also displayed in the track manager or waypoint manager.

Note: To delete imported waypoints, the corresponding GPX file must be deleted.

**Compass**: A compass is a measuring instrument for determining the cardinal direction. The compass icon on the navigation view screen shows you the north bearing. If you display the compass in a large-scale view via the rapid access menu, the entire map is orientated in the direction you are looking.

**Favourite lists**: A compilation of several points of interest is a favourite list. You can create your own points of interest via the Falk Online Community. You can then also compile the points of interest to create favourite lists or use favourite lists and points of interest from other users.

**Circuit**: In the case of a circuit, the starting point and end point are identical. Either a route length or your preferred travel time can be entered. An appropriate route is calculated automatically from these details.

**Point of interest**: A point of interest (POI) is an address or position of special interest such as restaurants, interesting sights, museums and many more besides.

The points of interest on your device are divided up into various categories to make it easier to search for specific destinations. Additional points of interest can be transferred to the device via the Falk Online Community (see Chap. 14.8.1).

Coordinates: Positions can be determined precisely with the aid of coordinates. This makes sense particularly on open terrain away from roads. Coordinates are normally specified with degrees of latitude and longitude.

**Tour**: Tours are the linking together of waypoints, favourite locations or other destinations in a defined sequence. However, the route between the individual waypoints is not precisely defined, as as the case with tracks.

**Track**: A track is a route which is precisely defined (with the aid of coordinates placed close to one another which are connected to form a line). This can be displayed on the map so that you can travel along it. Tracks can also be recorded with the device. In track navigation, no turn-offs are displayed or spoken announcements issued.



**Trip computer:** The trip computer is the ingenious information and statistics hub in your Falk PANTERA. Data relating to the current route but also barometer figures (atmospheric pressure, altitude) as well as astronomical figures (sunrise and sunset, lunar phase) can be called up.

**Waypoint**: A waypoint is a geoposition saved as a pair of coordinates (geographical latitude and longitude) in open terrain. A waypoint can be any point in the countryside, e.g. a branch on a path, a hut, or any desired POI (picturesque point in the countryside, viewing point or interesting sight). Each waypoint can be selected as a destination.

#### **Basic Map Plus**

The Basic Map Plus is an OpenCycleMap/OpenStreetMap prepared specifically for the products of Falk Outdoor.

It is a simplified outdoor map but still fully routable. The map shows a more or less comprehensive network of routes and in some places also cycle paths and footpaths (depending on the data provided by OpenCycleMap/OpenStreetMap).

In contrast to the Premium Outdoor Map, this map is not quality-tested but rather is based on the information provided by a free community on the internet. For this reason, there is no road classification and there may be limitations in the quality of routes. The coverage of the network of routes is less than that of a quality-tested Falk Premium Outdoor Map. The map shows a simpler representation of the surface area and contains fewer points of interest. However, the familiar design of the Falk Premium Outdoor Map has been kept in order to make it simple to embrace the world of outdoor navigation of Falk Outdoor.

Basic Maps Plus are offered for a large number of European countries. Others will follow and can be downloaded and transferred to the device via the Falk Navi-Manager. It is also possible to navigate by moving from a Premium Outdoor Map to a Basic Map Plus.

#### Premium Outdoor Map (optional)

The quality-tested Falk Premium Outdoor Maps offer a maximum level of information for outdoor use. The maps are developed in collaboration with outdoor specialists (e.g. KOMPASS cycling and hiking maps) and offer comprehensively standard/uniform coverage. In addition to the road network for a country, these maps contain a huge range of cycle paths, footpaths, hiking trails and forest trails. In some cases, this outdoor route network, which is fully integrated into the map, is just as extensive as the road network for the country in question.

All maps undergo extensive quality testing before they are used on the navigation devices. Outdoor maps from Falk therefore know (almost) all routes to the destination - on foot or by bike. They are also fully routable. Starting from your chosen location, a suitable route to your destination is therefore automatically determined which is then output with the aid of acoustic and visual commands.

The presentation of the map remains sharp and clear on every zoom level.



## 21 Licence terms and conditions

## Licence terms and conditions for the Falk Navigator and Navi-Manager

§ 1

Object of the contract

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- c) in other cases only when a substantial contractual obligation is breached and when there is a delay, specifically for reimbursement of the typical and predictable loss.
- 2. Statutory liability in the event of culpable loss of life, physical injury or damage to health and in accordance with the German Product Liability Act shall remain unaffected.
- 3. The Licensor shall be at liberty to claim contributory negligence.
- 4. If any data is lost, the Licensor shall only be liable for losses which would have occurred even if the Licensee had backed up its data properly.

#### § 6

Term of the contract

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- 3. If permission to use the software is withdrawn, the Licensee must destroy the original data carriers and any copies which exist and delete any data and software which is stored completely and irreversibly. It must provide the Licensor with a written assurance that the items have been completely destroyed and deleted.

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§ 8

#### Final provisions

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