

# BeFitter Apps Manual

## Key features

The apps BF Outdoor, BF Hiker, BF Cycle, BF XC Ski and BF Runner have 13 pages. You can toggle through these pages with the *previous page* and *next page* function. See the chapter *User Interface* how this is implemented for your watch.

You have 6 data pages, each one is configurable to have a layout for 2, 3, 4 or 7 data fields. Then you have graphical data pages for the expected elevation profile, the measured speed, elevation and heart rate. There is also a compass page, a map page with the track data and page with navigation hints.

In the configuration of the app (see chapter *Configuration*) you can select which of these data pages should be shown, the layout of the data pages and which measure value should be shown in which data field on these data pages.





The apps are localized to the following languages

- English
- German
- Italian
- French
- Russian
- Czech

If the watch is set to another language, English is taken as the default language.

## Additional features

### **Automatic / manual lap mode**

In the configuration you can select the behavior how to add lap information to the activity. In automatic lap mode a lap is added every Kilometer or Mile (according the system settings). To add a lap in manual lap mode you must press a key or use a touch gesture, see chapter *User Interface*.

You can configure that you get a notification dialog with a vibration after each lap showing the lap number and the time needed for the last lap.

## GPS Quality

The quality of the GPS signal is shown in the status bar with one of the following indicators.

### Good GPS signal



The location was calculated with a good GPS fix. A 3-D GPS fix is available, with good-to-excellent HDOP (horizontal dilution of precision).

### Usable GPS signal



The location was calculated with a usable GPS fix. A 3-D GPS fix is available, with marginal HDOP (horizontal dilution of precision).

### Poor GPS signal



The location was calculated with a poor GPS fix. Only a 2-D GPS fix is available, likely due to a limited number of tracked satellites.

### NO GPS signal



GPS is not available. You may have to wait a little bit longer or at your position there are not enough satellites visible. Find a better position. If no GPS signal is available, all values based on the position are invalid (e.g. velocity, distance).

## Available data fields

The following data fields are available:

**Clock** According system settings with 12 or 24 hours

- **HH:MM** The current time without seconds
- **HH:MM:SS** The current time with seconds

**Time** According system settings with 12 or 24 hours

- **Total time** The total time since start of the activity
- **Time in move** The total time where you are in move (the speed was more than 1 km/h)
- **Idle time** The total time not in move (the speed was less than 1 km/h)

**Distance** According system settings in kilometers or miles

- **Elapsed distance** The elapsed distance since start of the activity based on the found GPS positions
- **Distance to destination** The expected distance to the destination if a route is found at the current location

**Speed** According system settings in kilometers per hour or miles per hour. The speed is measured every second from the GPS position.

- **Current speed** Current speed
- **Maximum speed** Maximum speed
- **Average speed** Average speed based on the time in move
- **Current pace** The time for one kilometer or one mile
- **Average pace** The average time for one kilometer or one mile based on the time in move
- **Lap time** The time needed for the last lap

**Elevation** According system settings in meters or feet

- **Current elevation** Current elevation
- **Maximum elevation** Maximum elevation during the activity
- **Minimum elevation** Minimum elevation during the activity
- **Elevation (Navigation)** Current elevation from navigation data
- **Ascent** Total ascent during the activity since start
- **Remaining ascent** The remaining expected ascent from now to destination
- **Descent** Total descent during activity since start
- **Remaining descent** The remaining expected descent from now to destination
- **Grade (Incline) measured** Current grade in percent (measured) (not available on Forerunner 735xt and Venu SQ)

- **Grade (Incline) navigation** Current grade in percent from navigation data
- **Elevation per hour** Elevation in m or ft per hour

**Arrival time** Expected remaining time and time of arrival if the sport is hiking (only available in BF Outdoor Map). These times are based on the calculation of the hiking time used in the Swiss Alps (<https://www.wandern.ch/de/signalisation/signalisation/wanderzeit>)

- **Estimated remaining time** Estimated remaining time to the hiking destination
- **Estimated time of arrival** Estimated time of arrival at the hiking destination

**Cadence** The cadence from external cadence sensor (only available in BF Outdoor Map and BF Cycle Map)

- **Current cadence** Current cadence
- **Maximum cadence** The maximum cadence during the activity
- **Average cadence** The average cadence during the activity

**Heart rate** From the internal optical heart rate sensor or external heart rate chest strap

- **Current heart rate** Current heart rate
- **Maximum heart rate** The maximum heart rate during the activity
- **Minimum heart rate** The minimum heart rate during the activity
- **Average heart rate** The average heart rate during the activity

**Temperature** According system settings in °C or °F

- **Internal temperature** From the internal temperature sensor (not very precise)
- **External temperature** From the external Tempe sensor (if available)

**Sun** According system settings with 12 or 24 hours

- **Sunrise** Time of the sunrise at the current location in HH:MM
- **Sunset** Time of the sunset at the current location in HH:MM

**Barometric pressure** According system settings in hPa or in inHg

- **Ambient pressure** Barometric pressure at current location (temperature compensated) (not available on Forerunner 735xt and Venu SQ)
- **Pressure at sea level** Normalized barometric pressure at sea level (not available on Forerunner 735xt and Venu SQ)

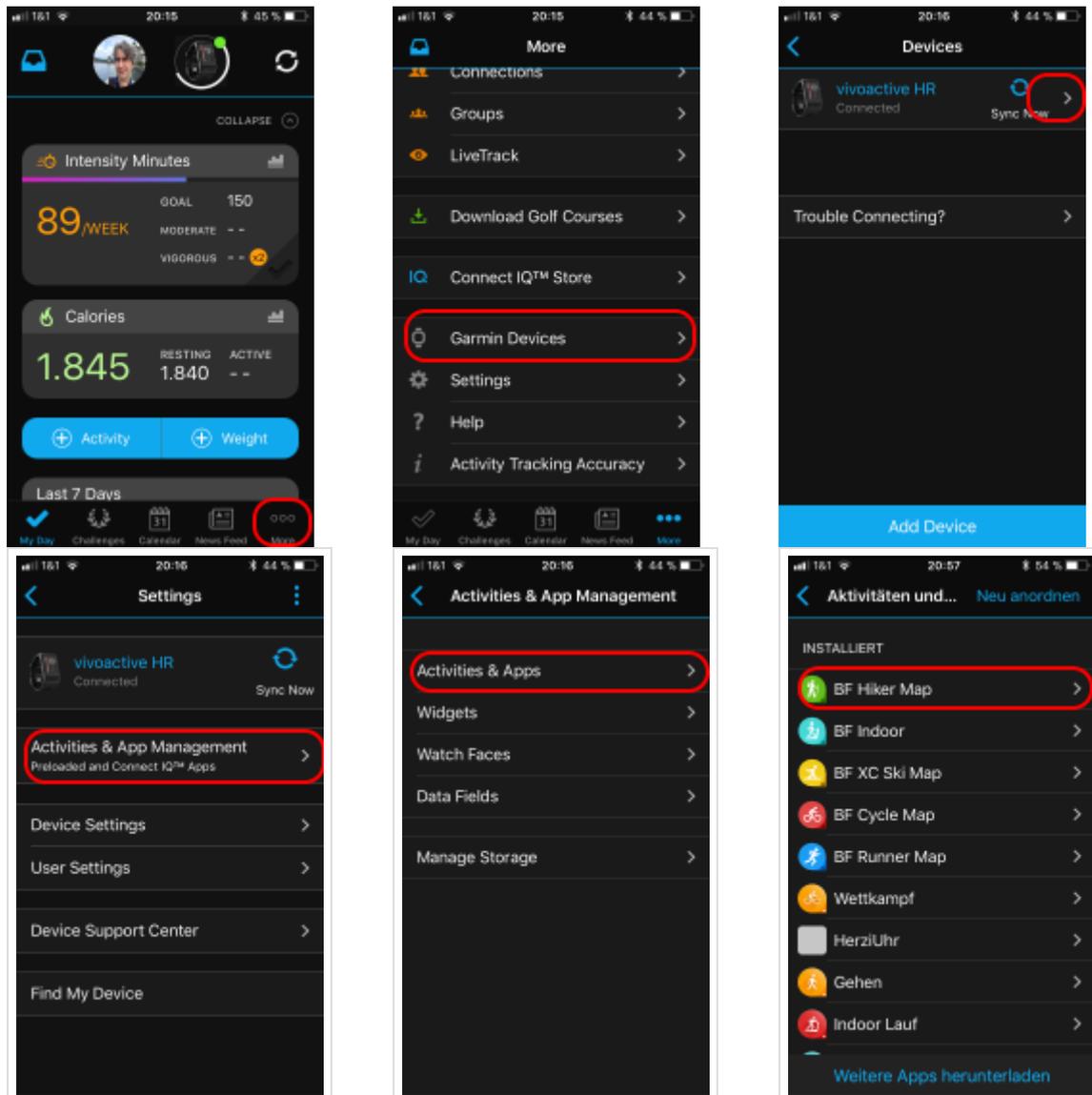
**Miscellaneous**

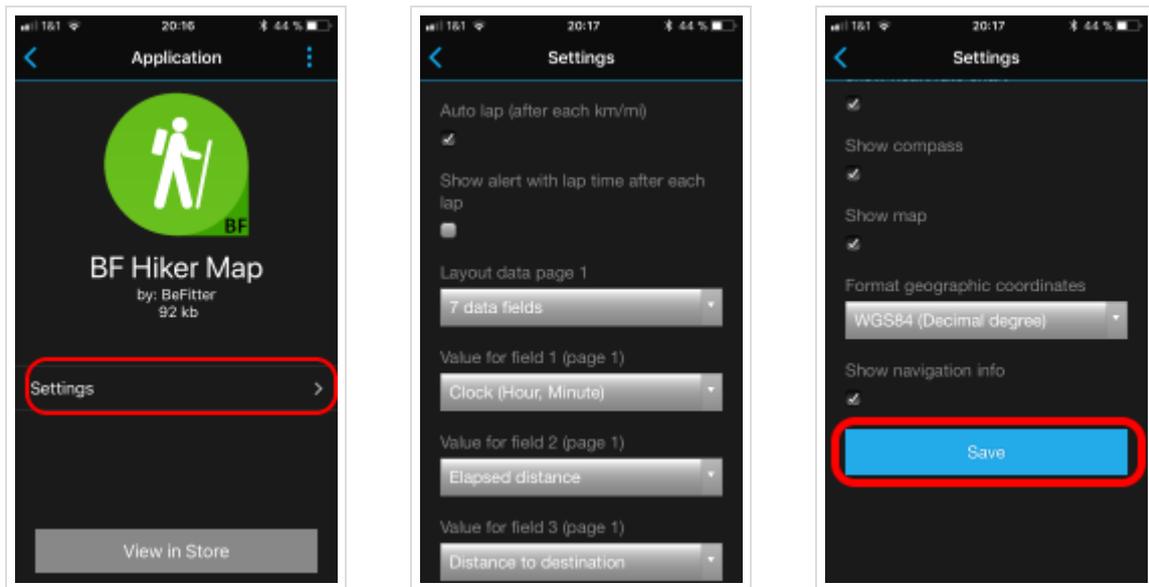
- **Steps** Total number of steps during the activity
- **Energy consumption** Your energy consumption during the activity

Fields based on the current GPS position are not available in BF Indoor.

## Settings with Garmin Connect Mobile

Configuration with Garmin Connect Mobile on a smartphone (Android or iOS). See the following series of images how to get the configuration of an installed app. During the configuration your watch should be connected to your phone.

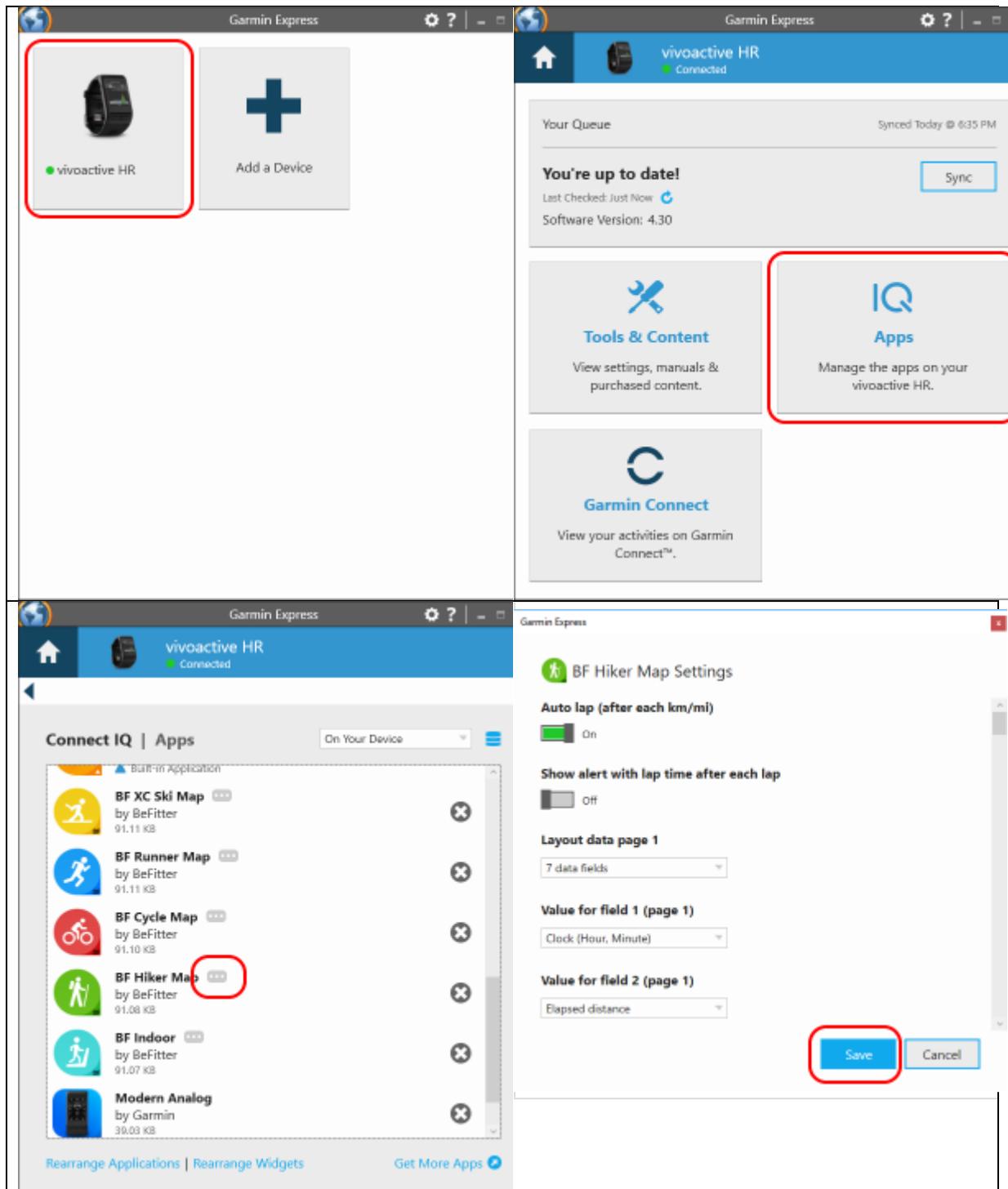




Don't forget to save your changes by pressing the *Save* button in the last screen.

## Settings with Garmin Express

Configuration with Garmin Express on a PC. See the following series of images how to get the configuration of an installed app. During the configuration your watch should be connected to your PC.



Don't forget to save your changes by pressing the *Save* button in the last screen.

## User interface Garmin fenix / Forerunner



### Standard pages

Action	Function
key up (short press)	show previous page
key up (long press)	show menu where you can select stop activity, pause
key down	show next page
key start/stop	if activity not started: start activity, if activity started in auto lap mode: pause/restart, if activity started in manual lap mode: add lap
key back	stop activity (save/discard)

### Navigation page

Action	Function
key up (short press)	show previous page
key up (long press)	show menu where you can select stop activity, pause
key down	show next page
key start/stop	download track data
key back	stop activity (save/discard)

### Map page

Action	Function
key up (short press)	show previous page
key up (long press)	show menu where you can select stop activity, pause

<b>Action</b>	<b>Function</b>
<b>key down</b>	show next page
<b>key start/stop</b>	<b>Zoom</b>
<b>key back</b>	stop activity (save/discard)

## User interface Garmin vivoactive HR



### Standard pages

Action	Function
swipe left	show previous page
swipe right	show next page
left key (short press)	stop activity (save/discard track data)
left key (long press)	show menu where you can select stop activity, pause
right key	if activity not started: start activity, if activity started: pause/restart activity
touch	in manual lap mode: add lap

### Navigation page

Action	Function
swipe left	show previous page
swipe right	show next page
left key (short press)	stop activity (save/discard track data)
left key (long press)	show menu where you can select stop activity, pause
right key	<b>download track data</b>
touch	in manual lap mode: add lap

### Map page

Action	Function
swipe left	show previous page
swipe right	show next page
left key (short press)	stop activity (save/discard track data)
left key (long press)	show menu where you can select stop activity, pause
right key	if activity not started: start activity, if activity started: pause/restart activity
touch	<b>Zoom</b>

## User interface Garmin vivoactive 3



### Standard pages

Action	Function
swipe up	show next page
swipe down	show previous page
touch	in manual lap mode: add lap
right key	if activity not started: start activity, if activity started: show menu where you can select stop activity, pause

### Navigation page

Action	Function
swipe up	show next page
swipe down	show previous page
touch	in manual lap mode: add lap
right key	<b>download track data</b>

### Map page

Action	Function
swipe up	show next page
swipe down	show previous page
touch	<b>zoom</b>
right key	if activity not started: start activity, if activity started: show menu where you can select stop activity, pause

## User interface Garmin vivoactive 4/4s, Venu, Venu SQ Music, Venu 2/2s/2+ (BF Outdoor Map)



Action	Function
swipe down	show previous page
swipe up	show next page
lower key (short press)	If activity not started: exit app, if activity started: add manual lap
lower key (long press)	See note
upper key (short press)	All pages except navigation page: if activity not started: start activity, if activity started: show menu to save or discard activity, start or stop a pause  On navigation page: download track data
upper key (long press)	Show system menu (e.g. show music player)
Touch	No action. On map page: zoom

**Note:** In some rare cases, the Venu 2/2s will not recognize a short press of the upper button. If this affects you, please use a long press on the lower button instead, this has the same function.

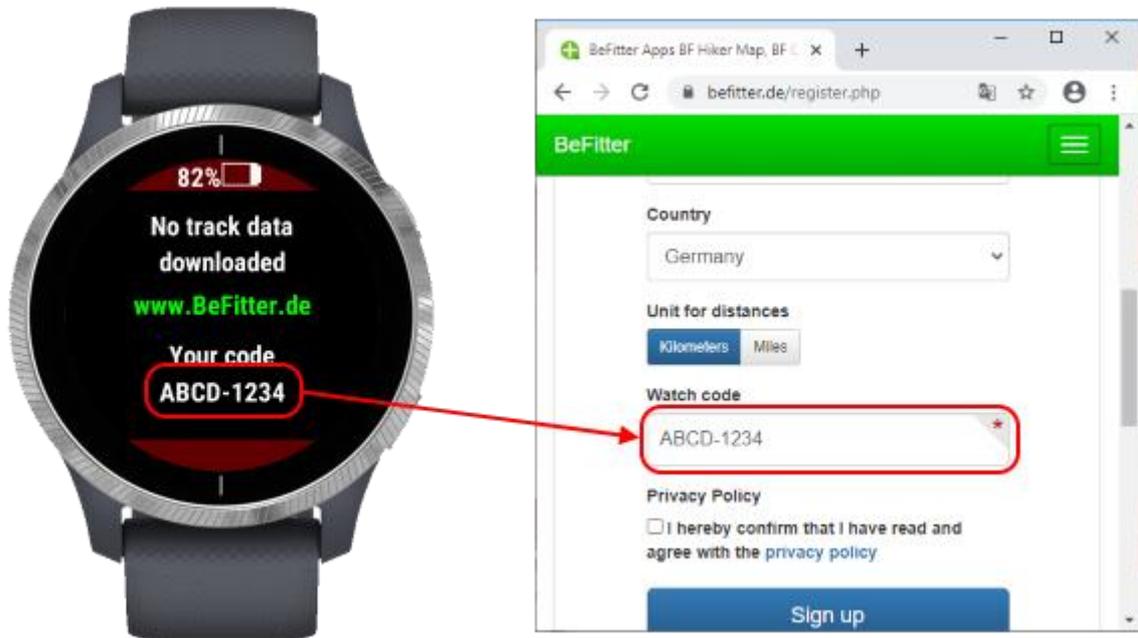
### Shortcuts:

Start the activity: double click on the top button. Starts with the last selected sport.

Ending the activity: double click on top button. Terminates activity and saves the data.

## Create an account

Open the Sign-Up page and fill in the form



The required watch code can be found on the navigation page of your app.

After sending this form you will get a registration email with a confirmation link. Please click on this link to confirm your email address and to finish the registration.

The service on this webpage is free of charge for any private user interested in sporting activities. If we detect extraordinary usage (e.g. spam, commercial usage) of this webpage from a user we may exclude him.

## Manage tracks

You can create new tracks on the website either by uploading a GPX file or with the planning tool on the website.

### Upload GPX file

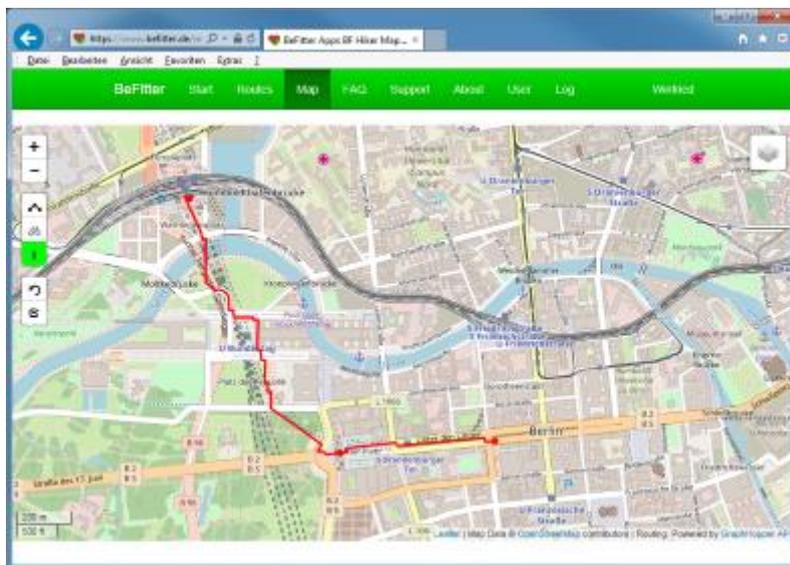
You can upload an existing GPX file to the website. Typically, such a file contains the GPS coordinates from a track that was recorded during a hiking or cycling tour. This is a good possibility to follow the same track. You can also create or manage your GPS tracks on another website, export them on the website and import it here. At the moment there is no direct import from another website (e.g. Strava) realized.

But there are some limitations you should consider

- The GPS coordinates are not exact and sometimes a little bit noisy. Therefore, it is sometimes difficult to decide whether you are not on the route or the original GPS coordinates are faulty.
- The elevation information is optionally in GPX files and sometimes not included. In these cases, you have no elevation information during your tour.
- There are no navigations hints at relevant intersections.

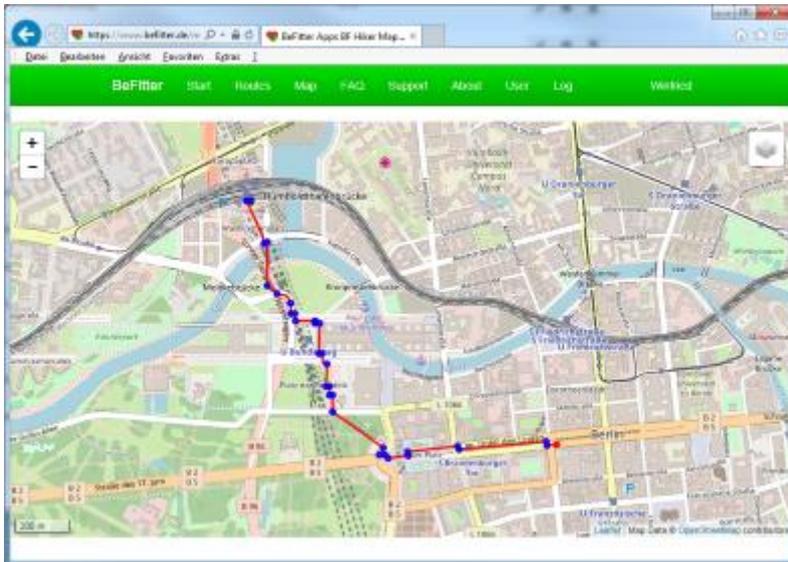
### Planning tool

You can use the planning tool in the user area of the website to create a track.

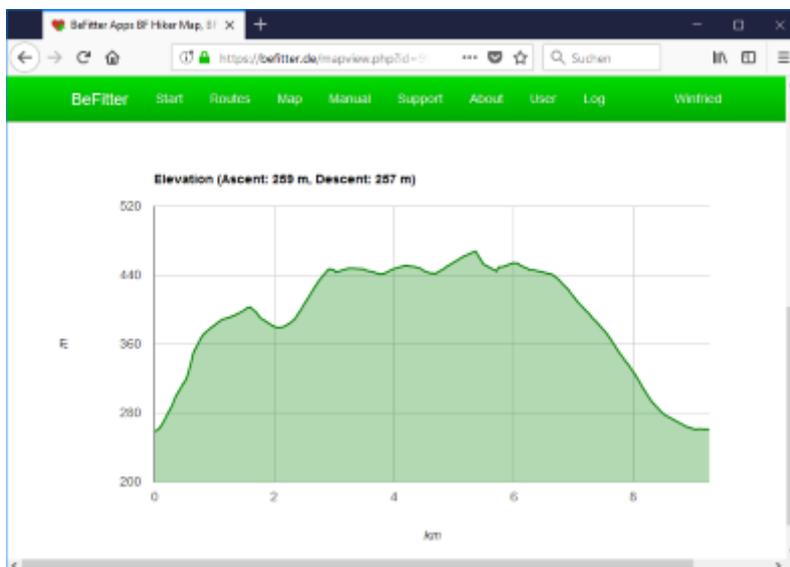


Tracks created with the planning tool have always correct GPS coordinates and elevation information. Navigations hints for the relevant intersections are created automatically.

In the view mode you see blue points. These are the critical intersections where you may get navigation hints on your watch. The hints are shown 50 m before the intersection, in BF Cycle Map 100 m before the intersection.

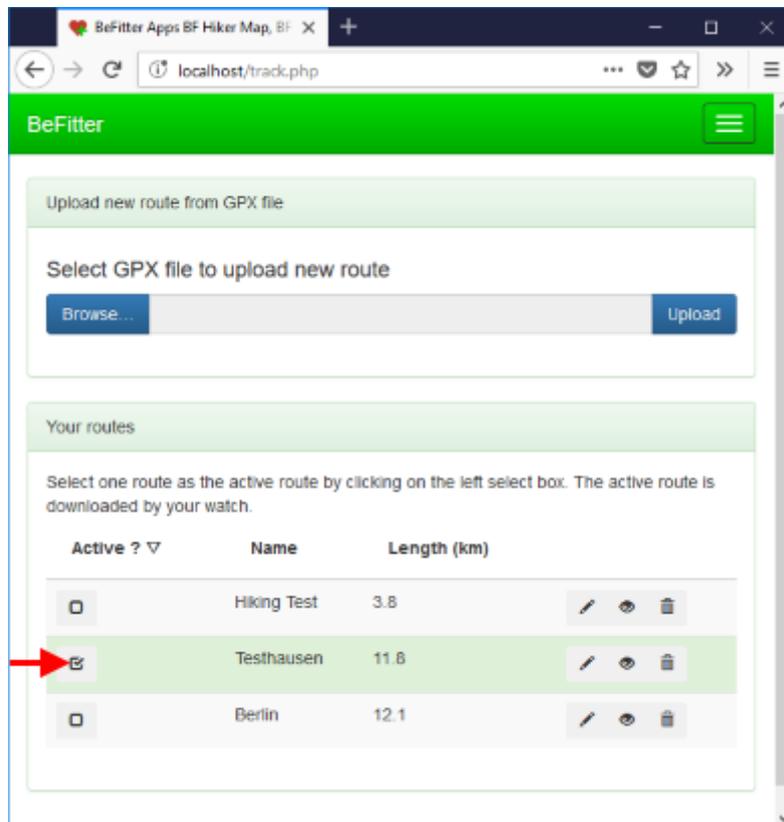


Below the map you find a chart showing the elevation of the planned tour.



## Download track to watch

One of your routes should be marked as the active route.



To start the download process of the active route, press the download key in the navigation page of the app (see chapter User interface). During the download process the watch needs a connection to the internet. This is realized with a Bluetooth connection between the watch and your phone and a GSM or Wi-Fi connection from your watch to the internet. On the smartphone this is handled by the Garmin Connect Mobile app. Therefore, the Garmin app must be running on the smartphone.

A connection from the watch to the internet via PC / Garmin Express is not possible.

Download error messages on the watch

Message	Description
<b>No track found</b>	You have no track which is marked as your active route.
<b>No BLE</b>	No Bluetooth connection between watch and smartphone. May be the Garmin Connect Mobile App is not started on the smartphone
<b>No GSM/Wi-Fi</b>	No GSM or Wi-Fi connection from the smartphone to the internet. You are not connected to a GSM or Wi-Fi network.
<b>Timeout</b>	The GSM or Wi-Fi connection from the smartphone to the internet is very bad. Try another location with a better connection.

You can download a new route even if an activity is running. This can be used for example if you decide during the activity to change the route. In this case you can plan the new route on the smartphone and download it to the watch. You can use this approach also for a pedestrian navigation in a city.

If you don't start at the start point of the downloaded route, use an abbreviation or return to the start point the logic can detect this situation but this needs some seconds because the navigation information is not completely updated every second.

## Navigation page

In the following you see some examples of the navigation page and how to interpret them.

Remark: All distances are shown in meters or yards according to the system settings of your watch.



If you have no route downloaded or the downloaded track is far from your current location you see the above image. A watch code is shown which can be used as a unique identifier for your watch during the sign-up process on this website.

To start downloading a route from the website press on the indicated button, see also chapter *Download track to watch*.



You are on the planned route. In 132 meters there is a crossing where you have to turn right.



You are on the planned route. In 42 meters there is a crossing where you have to turn right and immediately after that turn that is another turn where you have to turn left.



The black line is your planned track, your position is shown as the small orange circle with the blue arrow. In the above example you are 45 meters right to the planned route, you are may be on the wrong way.

The small blue arrow shows a little bit to the right. This means that if you go straight on your distance to the correct route will further increase.

If you see an image like the above example you should look for the correct route. Maybe you have to return to a previous crossing.

## Crossroads Maps

This function is only available in the BF Outdoor Map app, which supports the Garmin Venu (round display), Venu SQ Music and vivoactive 4 / 4s watches. It is available to all users of this app without restriction and free of charge.

Crossroads maps are small maps at the crucial junctions at which your planned route has a turn. These illustrate all roads and paths at the crossroads, so not only the correct, planned route but also show the other roads and paths which are not on the route. In many cases, this leads to a better overview and a better assessment of which is the correct continuation of the route.

The crossroads maps are generated when the route is created and loaded onto the watch together with the route data. The maps are available offline during the tour. In particular, this means that no internet connection or a connection to a smartphone is necessary during the activity. All data can be loaded onto the watch at home in advance of the activity.

### Examples



Simple navigation: it is only indicated that the right path will soon branch off to the left.



The same situation with a crossroads map: It can be seen that two paths branch off to the left in quick succession. The right way is the first way.



Easy navigation: only a single arrow is shown



With the crossroads map it quickly becomes clear that three roads forks with almost the same direction at this crossroads. The correct route is on the left of the three options.

## Legend

The focus of the display is always the decisive intersection point at which the path branches off or takes a course that is not always obvious (for example another path branches off in almost the same direction).

The map is always scaled so that a circle is displayed around the center of the crossroads with a radius of 30 meters. Even with a square display (Venu SQ Music), the crossroads map is always circular.

The map is aligned in such a way that your own movement always goes from bottom to top and the correct continuation of the route points upwards.

The correct path is marked in light blue and has an arrow at the end. The streets and paths that are not on the correct route are colored in the usual colors:

- Motorways, expressways, main roads: reddish and yellowish

- Normal streets: light gray
- Footpaths: green
- Bicycle lanes: blue
- Rails: dark gray
- Rivers: bluish

The current position and direction of movement on the map is indicated by a red arrow on the map. Behind it you can see your own route on the map in red.

A small red triangle at the edge of the display always points north.

The map is displayed 50 meters before the crossroads (100 meters for the bicycle sport) and 30 meters after the crossroads, unless the next junction is to take place immediately afterwards. In this case, the next crossroads is displayed immediately after passing the crossroads.

### **Special features for roundabouts**

- Roundabouts are always displayed so that the center of the roundabout is the center of the map shown.
- For larger roundabouts, the scale is enlarged so that the complete roundabout (entrance, roundabout and exit) is displayed in full.
- When driving through the roundabout, the map is not rotated and realigned. The orientation is always according to the entrance

### **Items shown**

The following elements from OpenStreetMap are displayed on the crossroads maps

- Roads (motorways, expressways, country roads, urban roads, residential streets)
- Paths, Footpaths
- Bicycle lanes
- Stairs
- Rivers
- Rails

The following items are not displayed

- Planned roads
- Squares, pedestrian zones
- Buildings
- Additional features of the road (e.g. whether it leads over a bridge or through a tunnel)
- Traffic restrictions, e.g. whether it's a one-way street.
- Lakes, seas
- POI (Lookouts, monuments, fountains, traffic lights,...)

Please note that maps can contain errors. The map may not be up to date or the current situation is different due to construction work. It may also be that paths or streets are displayed that you are not allowed to use because they lead over private property or are only allowed to be used for certain purposes or with certain vehicles.

### **Creation of crossroads maps**

The creation of crossroads maps is only possible if the route is created using the planning tool on the website. The crossroads maps can also be generated here when calculating the route. This is done directly via the OpenStreetMap server. Depending on the load on the server, this can be faster or slower. You will be notified of the progress of the generation, do not abort the process, otherwise the previously created route will be lost.

### **Remarks**

Since every intersection is structured differently, it cannot be guaranteed that an optimal display will take place in all cases. If you discover problematic crossroads, the author is happy to receive feedback by email to [info@befitter.de](mailto:info@befitter.de) so that the functionality can be improved in the future.

The functionality is available free of charge to all users of the BF Outdoor Map app. A restriction may be necessary depending on the use of this feature and the load on the server. The number of routes with crossroads maps per user may be restricted in the future or deleted after a certain period of non-use in order to enable this feature for other users.

Please do not create too many routes with crossroads maps unnecessarily and delete them again when you no longer need this route.



## FAQ

Garmin allows the installation of apps only on the newest firmware of the watch. If you get a message that your firmware is not up-to-date and that you cannot therefore install an app you must update your firmware first. Typically, the new firmware is downloaded at the same time to your watch, but the watch itself installs the new firmware only after disconnecting from PC / smartphone. This means that you must disconnect the watch and wait for the update. After that you can reconnect the watch to the PC / smartphone. Now you should be able to download and install new apps.