Cycling App Professional User Manual

A Comprehensive Guide

Robert Hofer (RH-SPORTS)

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1. User documentation

Welcome to the **Cycling App Professional** user documentation

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2.1 Cycling App Professional

The **Cycling App Professional**, running on several Connect IQ™-compatible Garmin devices, supports you in strengthen your heart muscle by tracking the most important parameters like distance, speed, pace and time with high sensitivity GPS. Additionally ANT+™ compatible sensors for heart rate and foot pod are supported. Especially the internal or ANT+™ heart rate sensor can be used to obtain important heart rate-related info like current, minimum and maximum heart rate, current heart rate zone, current percentage of the maximum heart rate and much more. It is designed as a watch app (and not a data field) for following reasons:

- Simple to install and use
- Arbitrary feature enhancement possible
- Circumvent that some watches (e.g. vivoactive™) can only display two Connect IQ™ data fields

Link to **Cycling App Professional** on Garmin App Store

This website provides further information regarding requirements, installation, getting started, supported data fields and features as well as frequently asked questions.

2.2 Disclaimer

2.2.1 Software disclaimer

Our offered applications, widgets and data fields (further on simply called software), which can be downloaded from the Garmin App Store, are provided ‘as is’ without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of fitness for a purpose, or the warranty of non-infringement. Without limiting the foregoing, Robert Hofer (RH-SPORTS) makes no warranty that:

- the software will meet your requirements.
- the software will be uninterrupted, timely, secure or error-free.
- the results that may be obtained from the use of the software will be effective, accurate or reliable.
- the quality of the software will meet your expectations.

Software and documentation on our web site:

- could include technical or other mistakes, inaccuracies or errors.
- may be out of date where we make no commitment to update the it right away.
- we assume no responsibility for errors or omissions in the software or documentation available from our web sites.
- Robert Hofer (RH-SPORTS) has the right to change the software or documentation anytime.

In no event shall we be liable to you or any third parties for any special, punitive, incidental, indirect or consequential damages of any kind, or any damages whatsoever, including, without limitation, those resulting from loss of use, data or profits, whether or not we have been advised of the possibility of such damages, and on any theory of liability, arising out of or in connection with the use of this software.

The use of the software downloaded is done at your own discretion and risk and with agreement that you will be solely responsible for any damage to your computer system, watch of navigation device or loss of data that results from such activities. No advice or information, whether oral or written, obtained by you from us by mail or from our web sites shall create any warranty for the software.

2.2.2 User data protection according to DSGVO

RH-SPORTS clearly wants to state that we do not collect or save user information of any kind. If you are using our applications or data fields and save the recorded session afterwards then the data will be fully processed by Garmin Ltd. or its subsidiaries. This might include that the recorded data is sent to servers hosted or paid for by Garmin. Please read the user data protection rules from Garmin for further details.

Following applications offer map support:

- Cycling App Professional
- Hiking App Professional
- MTB App Professional
- SkiTour App Professional

These applications do not directly track personal information but makes use of a 3rd party API provided by dynamicWatch which does store personal information on every data request. You can read the detailed privacy policy of dynamicWatch here.

2.2.3 Activity tracking and fitness metric accuracy

Our applications and data fields use the Garmin API´s to retrieve most of the information and cannot be more precise than the data delivered from there. Garmin states following about activity tracking and accuracy:

- "Garmin devices are intended to be tools to provide you with information to encourage an active and healthy lifestyle. Garmin wearables rely on sensors that track your movement and other metrics. The data and information provided by these devices is intended to be a close estimation of your activity and metrics tracked, but may not be precisely accurate. Garmin wearables are not medical devices, and the data provided by them is not intended to be utilized for medical purposes and is not intended to diagnose, treat, cure, or prevent any disease. Garmin recommends you consult your doctor before engaging in any exercise routine."

2.2.4 Accuracy of wrist-based heart rate (Elevate)

Our applications and data fields use the Garmin API´s to retrieve heart rate related data cannot be more precise than the data delivered from there. Regarding wrist-based accuracy, Garmin states following:

- "The optical wrist heart rate (HR) monitor for Garmin wearables is a valuable tool that can provide an accurate estimation of the user's heart rate at any given point in time. The optical HR monitor is designed to attempt to monitor a user's heart rate 24 hours a day, 7 days a week. The frequency at which heart rate is measured varies, and may depend on the level of activity of the user. When you start an activity with your Garmin optical HR device, the optical HR monitor measures more frequently. The intent is to provide the user with a more frequent and accurate heart rate reading during a given activity."
- "While our wrist HR monitor technology is state of the art, there are inherent limitations with the technology that may cause some of the heart rate readings to be inaccurate under certain circumstances. These circumstances include the user's physical characteristics, the fit of the device and the type and intensity of the activity as outlined above. The HR monitor data is not intended to be used for medical purposes, nor is it intended to diagnose, treat, cure or prevent any disease or condition."
- "Wrist heart rate accuracy during swimming is very limited. Garmin does not recommend using wrist heart rate during swimming activities and on some products, wrist heart rate monitoring is disabled while swimming. Garmin recommends using HRM-Swim™ or HRM-Tri™ heart rate monitors with compatible devices to track heart rate while swimming."

2.2.5 White background on AMOLED displays

For devices with AMOLED display (e.g. Venu™ based devices) we strongly recommend to always select the black background to avoid damages due to burn-in effects and to save battery life time!

> **Note:**
> We take over NO responsibility in case of damages due to burn-in effects.

2.3 Requirements

Supported Garmin devices

The **Cycling App Professional** runs on following Garmin devices:

- Approach® S50, S60 and S62
- Approach® S70 42mm
- Captain Marvel
- D2™ Air, D2™ Air X10
- D2™ Bravo
- D2™ Bravo Titanium
- D2™ Charlie
- D2™ Delta, D2™ Delta PX, D2™ Delta S
- D2™ Mach 1
- Darth Vader™
- Descent™ G2
- Descent™ MK1, Descent™ MK2, Descent™ MK2s
- Descent™ Mk3 51mm
- Enduro™ and Enduro™ 3
- Epix™ 2, Epix™ Pro (Gen 2) 42mm and 47mm
- Fēnix® 3, Fēnix® 3 HR, Fēnix® Chronos
- Fēnix® 5, Fēnix® 5S, Fēnix® 5X
- Fēnix® 5 Plus, Fēnix® 5S Plus, Fēnix® 5X Plus
- Fēnix® 6/6 Pro
- Fēnix® 6s/6s Pro
- Fēnix® 6x Pro/6x Sapphire/6x Pro Solar/tactix® Delta Sapphire
- Fenix® 7, Fenix® 7s and Fenix® 7x
- Fenix® 7 Pro, Fenix® 7s Pro and Fenix® 7x Pro
- Fēnix® 7 Pro (no Wi-Fi) and Fēnix® 7x Pro (no Wi-Fi)
- Fenix® 8 43mm, 47mm, 51mm and Fenix® 8 Solar 47mm, 51mm
- Fenix® E
- First Avenger
- ForeAthlete® 230J, 235J, 630J, 735XTJ and 920XTJ
- Forerunner® 55, 165, 165 Music, 230, 235, 245, 245 Music, 255, 255 Music, 255s, 255s Music, 265 and 265s
- Forerunner® 630, 645, 645 Music, 735XT, 935, 945, 945 LTE, 955 / Solar and 965
- MARQ™ Adventurer, Athlete, Aviator, Captain, Commander, Driver, Expedition and Golfer
- MARQ® (Gen 2) Athlete / Adventurer / Captain / Golfer / Aviator
- Rey™
- Venu™ and Venu™ Mercedes-Benz® Collection
- Venu™ SQ and Venu™ SQ Music
- Venu™ SQ 2 and Venu™ SQ 2 Music
- Venu™ 2, Venu™ 2 Plus, Venu™ 2s
- Venu® 3 and Venu® 3s
- Vivoactive™
- Vivoactive™ HR
- Vivoactive® 3, Vivoactive® 3 Music, Vivoactive® 3 Music LTE, Vivoactive® 3 Mercedes-Benz® Collection
- Vivoactive® 4s/4
- Vivoactive® 5 and 6

Garmin device Firmware requirements

Please install the latest firmware on your Garmin device. Here the information about the minimum required Connect IQ™ version depending on your device type:

- V1.3.0
    - ForeAthlete® 230J, 235J, 630J and 920XTJ
    - Forerunner® 230, 235, 630 and 920XT
- V1.4.0
    - Vivoactive™
- V1.4.1
    - D2™ Bravo and D2™ Bravo Titanium
    - Fēnix® 3 and Fēnix® 3 HR
- V2.4.1
    - Approach® S60
    - ForeAthlete® 735J
    - Forerunner® 735XT
    - Vivoactive® HR
- V3.0.0
    - Approach® S62
    - D2® Charlie
    - D2® Delta, D2® Delta PX, D2® Delta S
    - Descent™ MK1
    - Vivoactive® 3 Mercedes-Benz® Collection
- V3.1.0
    - Descent™ MK2
    - Fēnix® Chronos
    - Fēnix® 5, Fēnix® 5S, Fēnix® 5X and Fēnix® 5 Quatix
    - Fēnix® 5 Quatix
    - Fēnix® 5 Plus, Fēnix® 5S Plus, Fēnix® 5X Plus
    - Forerunner® 935
    - Forerunner® 645 and 645 Music
    - Vivoactive® 3

- V3.2.0
    - Captain Marvel
    - Darth Vader™
    - D2™ Air
    - Descent™ MK2s
    - Enduro™
    - Fēnix® 6/6 Pro
    - Fēnix® 6s/6s Pro
    - Fēnix® 6x Pro/6x Sapphire/6x Pro Solar/tactix® Delta Sapphire
    - First Avenger
    - Forerunner® 55, 245, 245 Music, 745 and 945
    - MARQ™ Adventurer, Athlete, Aviator, Captain, Commander, Driver, Expedition and Golfer
    - Rey™
    - Venu™ SQ and Venu™ SQ Music
    - Venu™ and Venu™ Mercedes-Benz® Collection
    - Vivoactive® 3 Music, Vivoactive® 3 Music LTE
    - Vivoactive® 4s/4
- V3.3.0
    - Forerunner® 945 LTE
- V4.0.0
    - D2™ Air X10
    - D2™ Mach 1
    - Venu™ 2, Venu™ 2 Plus, Venu™ 2s
- V4.1.0
    - Fenix® 7, Fenix® 7s and Fenix® 7x
    - Forerunner® 255, 255 Music, 255s and 255s Music
    - Forerunner® 955 and Solar
    - Venu™ SQ 2 and Venu™ SQ 2 Music
- V4.2.0
    - Approach® S70 42mm and 47mm
    - Descent™ Mk3 51mm
    - Epix™ 2
    - Epix™ Pro (Gen 2) 42mm, 47mm and 51mm
    - Fenix® 7 Pro, Fenix® 7s Pro and Fenix® 7x Pro
    - Fēnix® 7 Pro (no Wi-Fi) and Fēnix® 7x Pro (no Wi-Fi)
    - Forerunner® 165 and 165m
    - Forerunner® 265 and 265s
    - Forerunner® 965
    - Venu® 3 and Venu® 3s
    - Vivoactive® 5

- V5.0.0
    - Approach® S50
    - Descent™ G2
    - Enduro™ 3
    - Fenix® 8 43mm
    - Fenix® 8 47mm and 51mm
    - Fenix® 8 Solar 47mm
    - Fenix® 8 Solar 51mm
    - Fenix® E
    - Vivoactive® 6

> **Note:**
> Please also take a look to the Garmin feature set description for your device.

Garmin software requirements

- Please install the latest Garmin Connect App if you use the mobile phone for installation and configuration.
- Please install the latest Garmin Express Version if you use the PC/MAC for installation and configuration.

2.3.1 Sensor requirements

- Please enable GPS for speed, distance, location and altitude information.
- Please enable ANT+ sensors for heart rate, foot pod, cadence, speed and power information.

2.4 Getting started

This section describes everything you need to know to get **Cycling App Professional** up and running on your Garmin device.

Topics:

2.4.1 Install application

Please install the **Cycling App Professional** application by downloading it from the Garmin App Store via the Garmin Express Software on PC/MAC or via the Garmin ConnectIQ mobile app on your mobile phone.

Link to **Cycling App Professional** on Garmin App Store

Here a YouTube video describing the installation process in more detail:

Click here to watch the video

2.4.2 Change the user settings

The **Cycling App Professional** in the PREMIUM version offers a huge amount of configuration options which can be changed on your PC/MAC your or on your mobile phone:

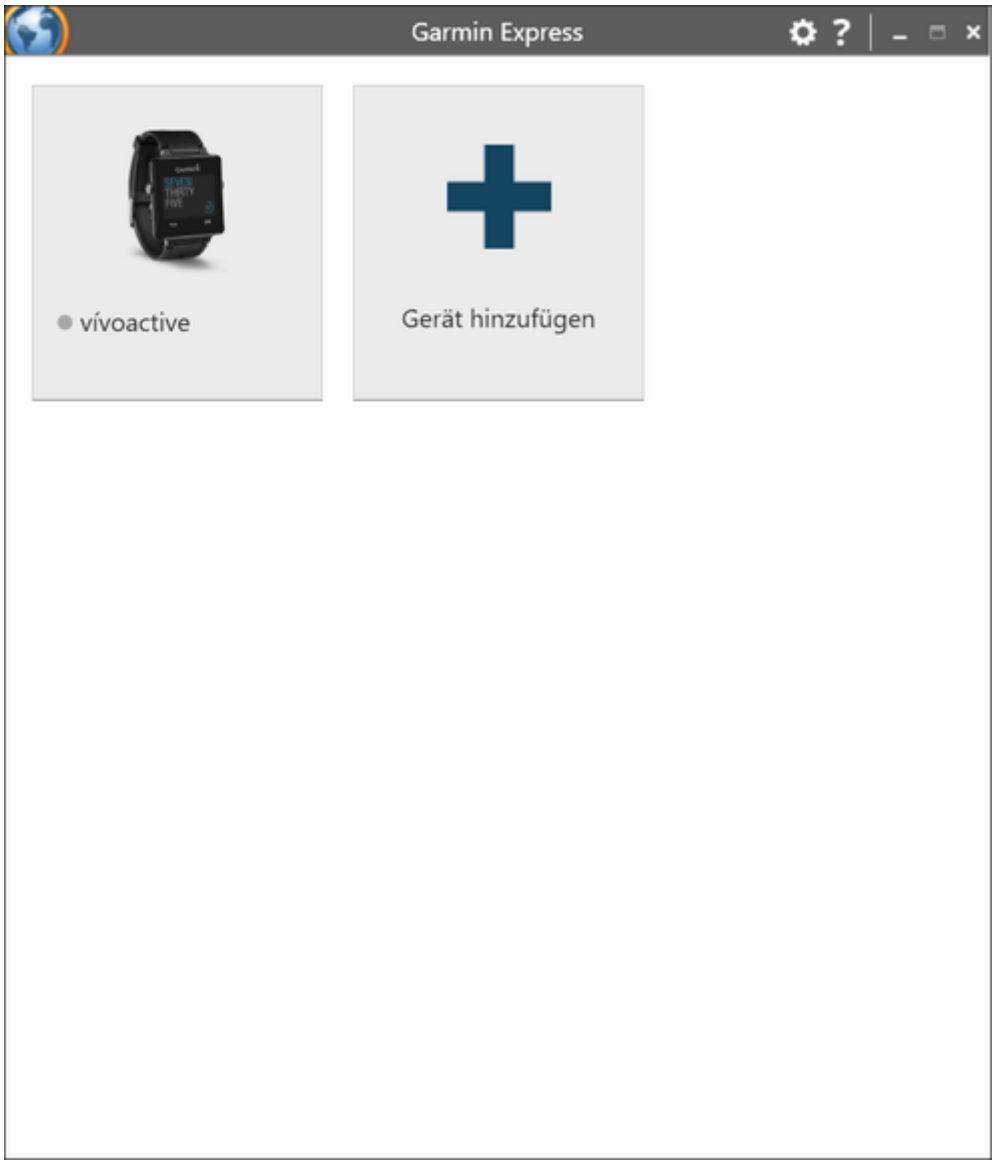
- Change User Settings on PC/MAC
- Change User Settings on Mobile Phone

Change user settings on PC or MAC

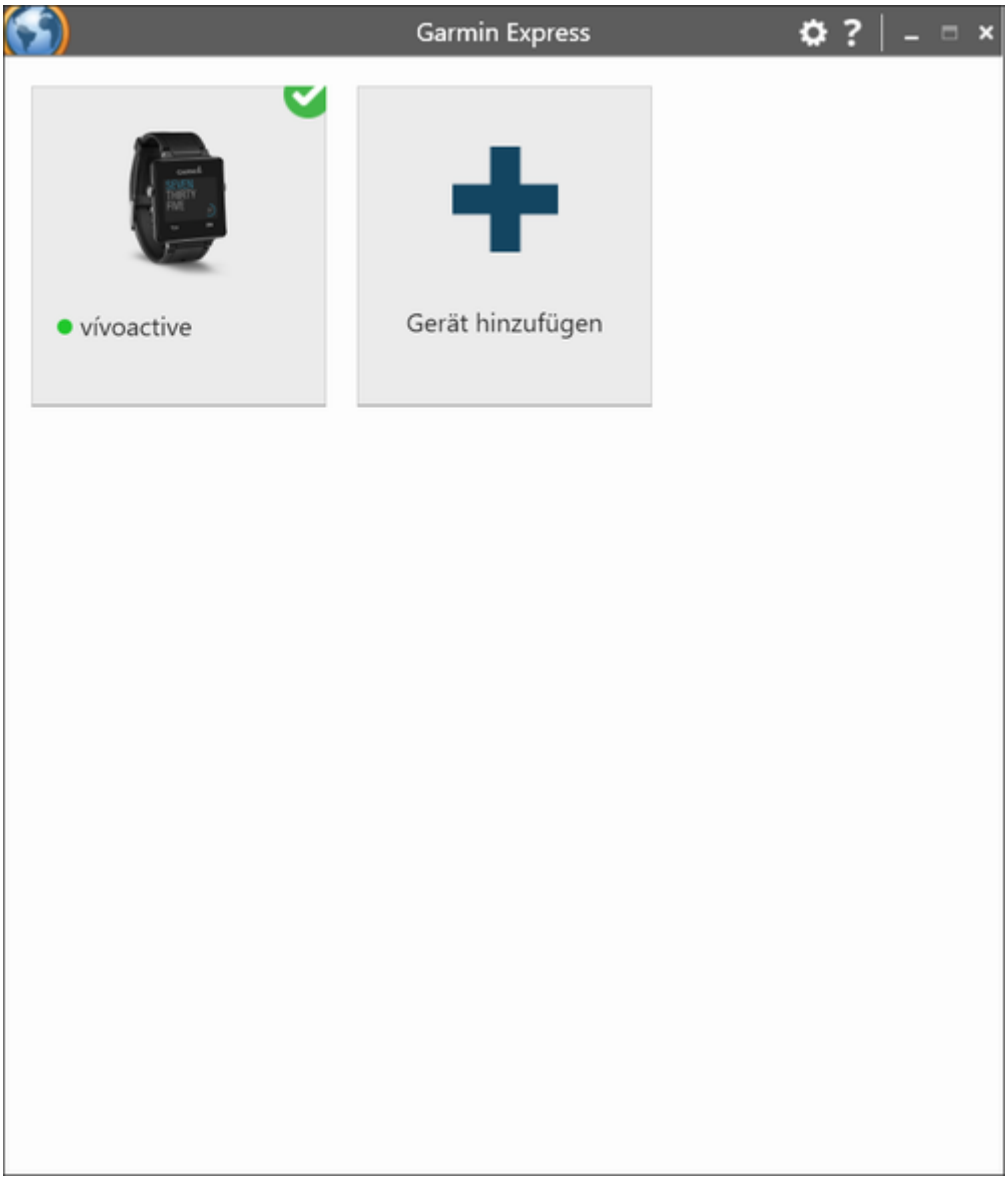
All configurations can be changed on your PC or MAC by using the Garmin Express Software. Before changing configurations, please make sure that you have installed the latest software version. The software can be downloaded from the official Garmin web site.

Step 1: Start Garmin Express Software Look for the symbol as shown below and double-click it to start the Garmin Express software.

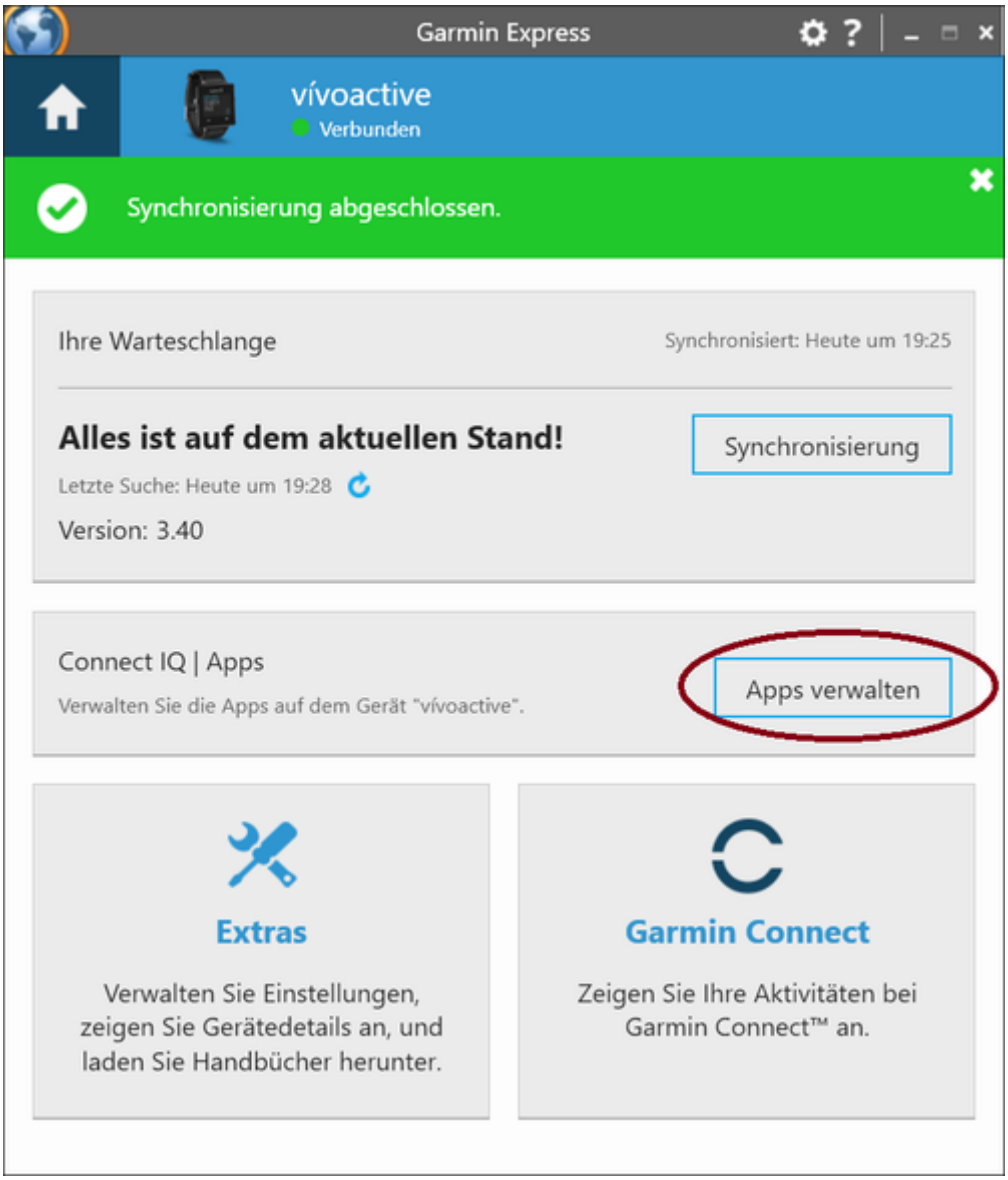
After that you should be able to see your Garmin device as shown in the picture below. If not, please add your device first. For details refer to the documentation provided by Garmin.



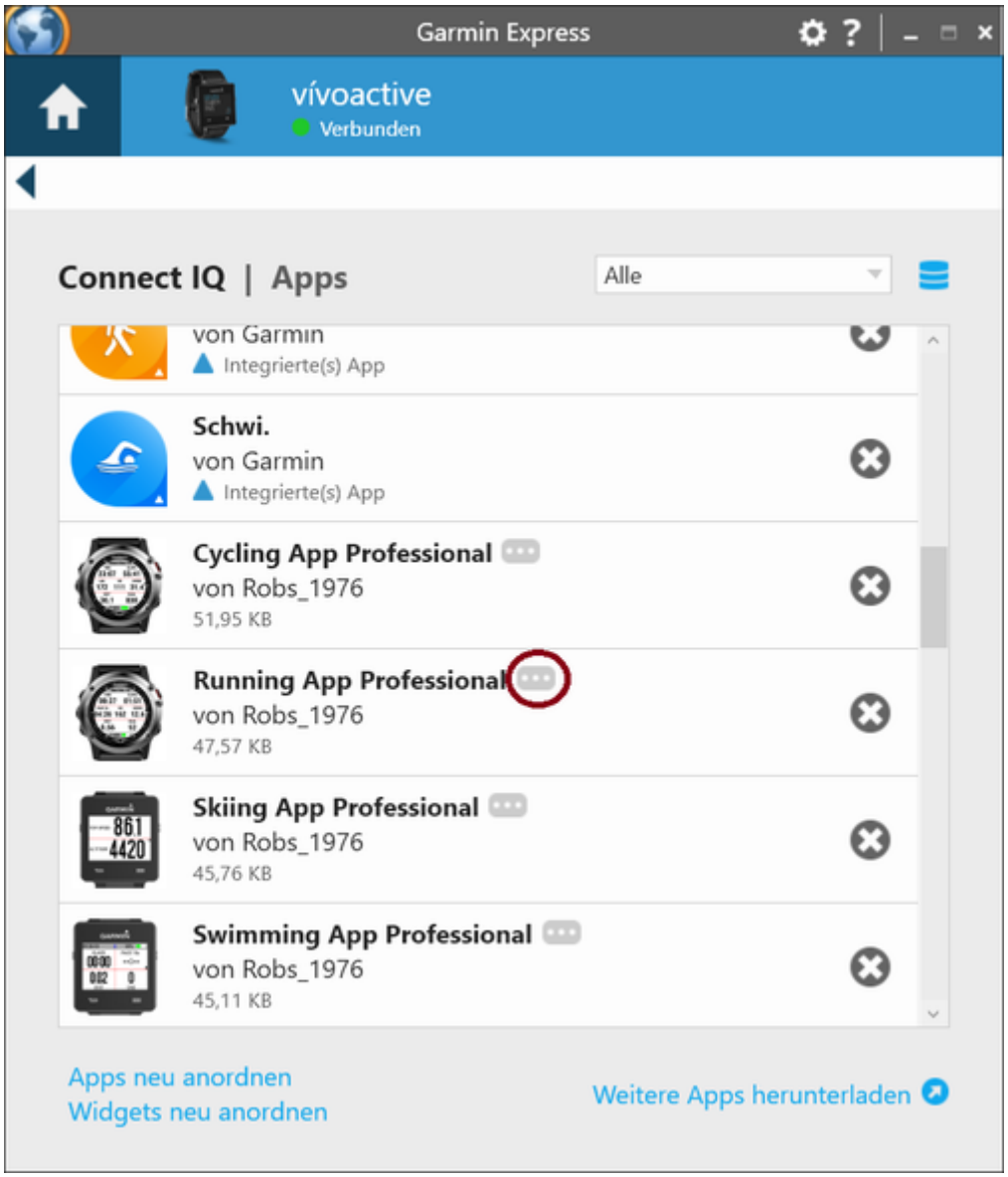
Step 2: Establish Connection between PC/MAC and the Garmin Device Connect your device via USB to your PC/MAC. Your device should be automatically detected and the Garmin Express software starts a synchronization process. When everything is ok, it is signalized via green lights as shown in the figure below. In case problems occur, please refer to the documentation provided by Garmin.

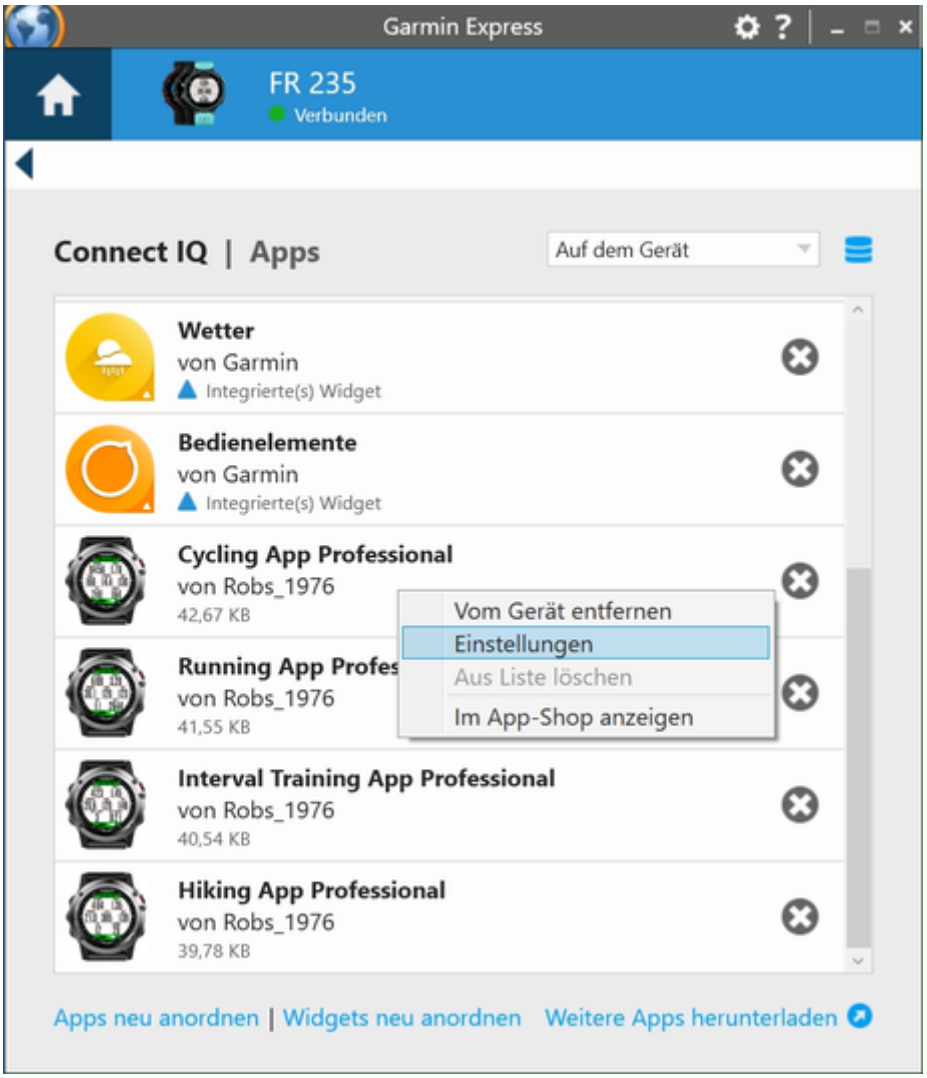


Step 3: Select Device Please click on the icon which shows your device. Following picture should appear:



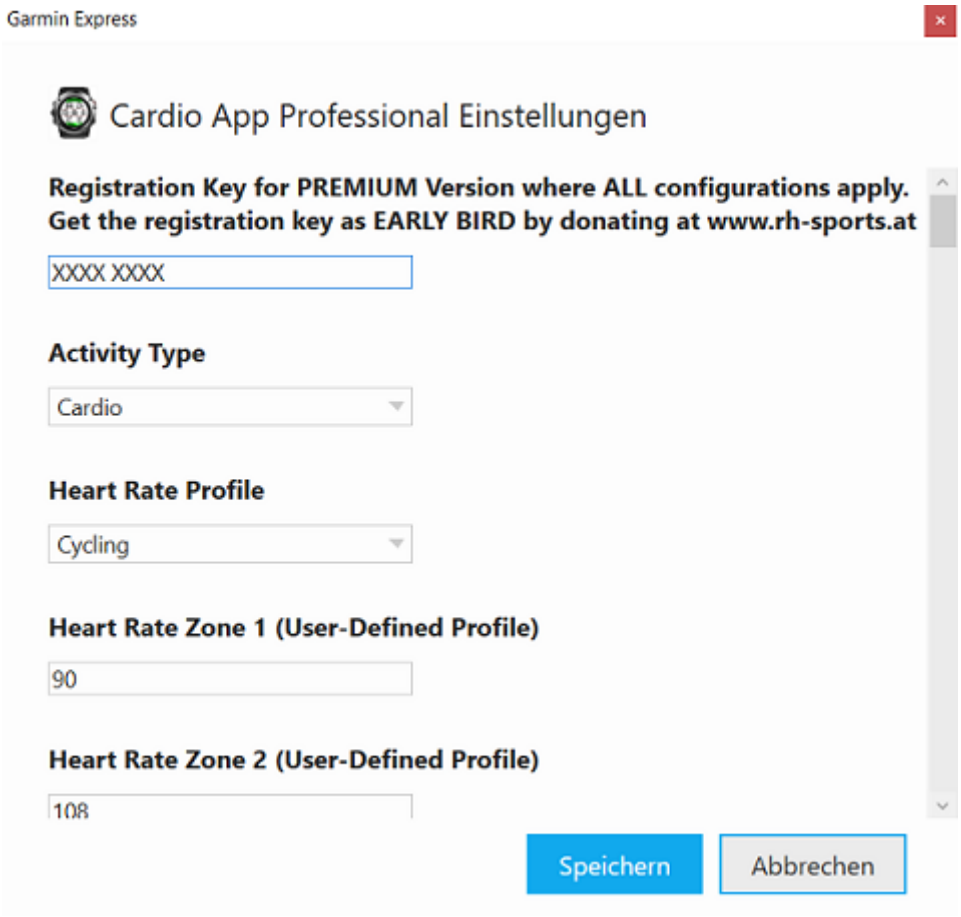
Step 4: Find our Apps Please click the marked button in the picture above. A list of all installed applications on your device should appear. Please scroll up/down until you find the application you would like to configure as shown in the figure below:



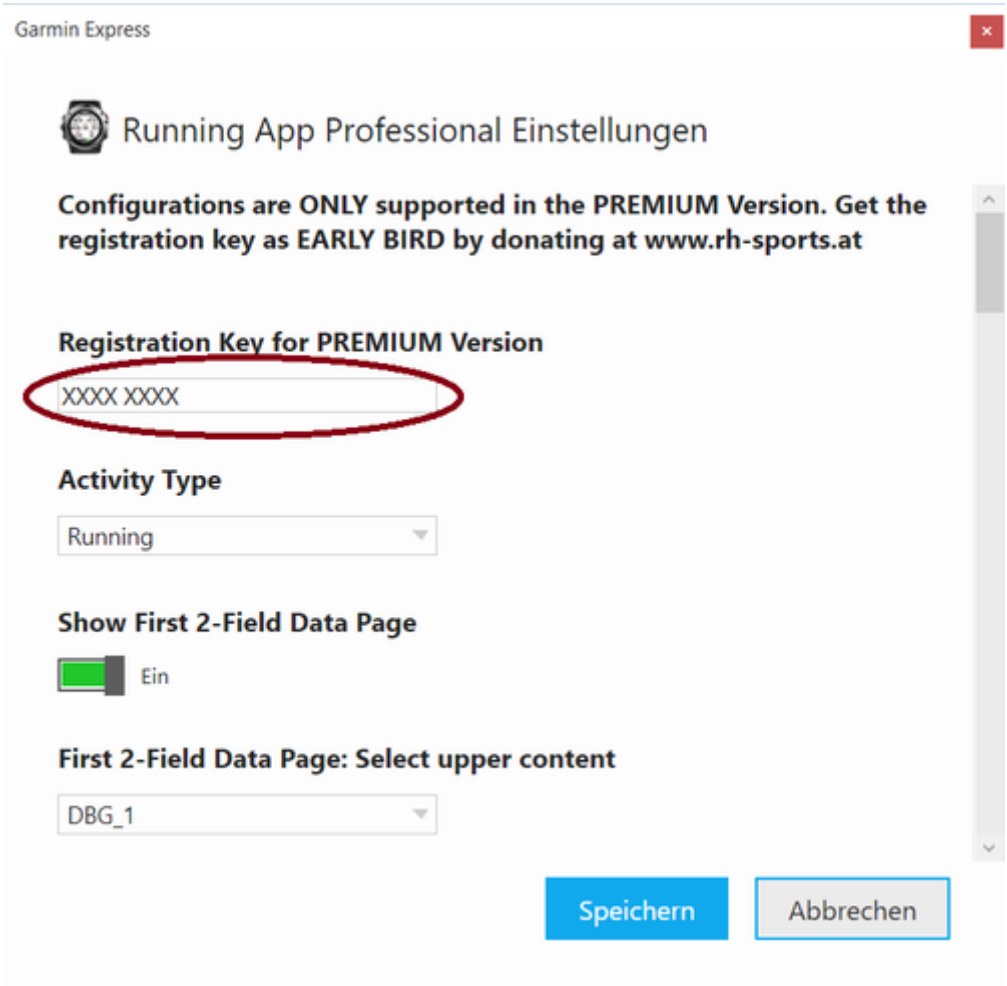


Step 5: Select App for Configuration Please select the application you would like to configure by clicking with the left mouse button to the three dots as marked in the left picture above to the app of your choice as shown in the right picture above. A context menu will be shown where you have to select "Settings"

Following screen should appear:



Step 6: Change Configuration Please note that configuration changes ONLY apply on your Garmin device if you have entered the proper PREMIUM key in the field marked in the picture below. The key consists of two times four characters separated by a space in between. If the proper key is entered, please make the configurations according to your needs and press the "Save" button at the end. The Garmin Express Software will update the configurations on your device. In case of errors, please refer to the documentation provided by Garmin.



Step 7: Disconnect Device After the configuration changes were saved, disconnect your device from the PC/MAC.

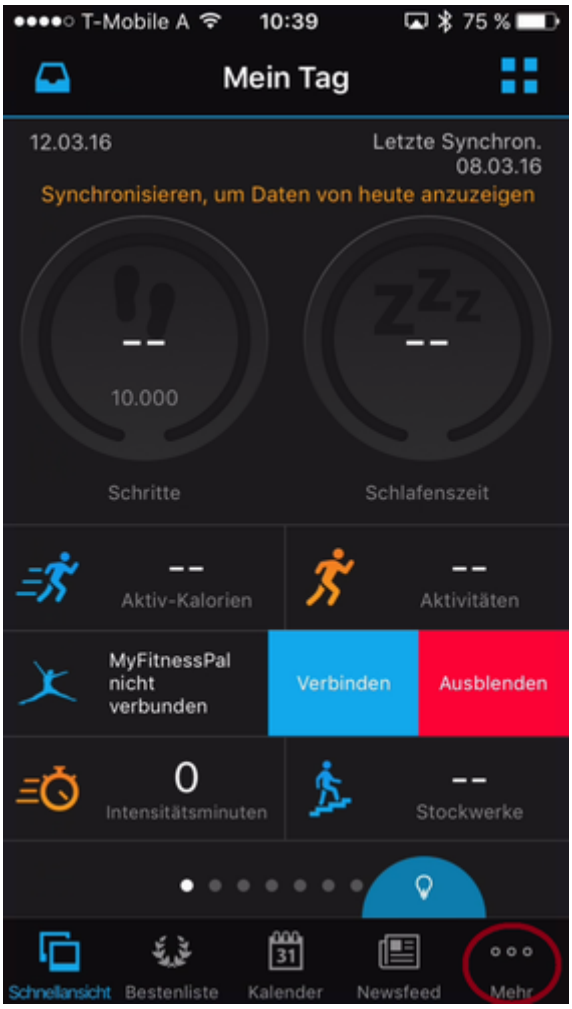
Step 8: Start Application on Device Please start your application on your Garmin device. If you have the PREMIUM Version (key was correct), then your configuration changes should have been applied. If not, please refer to our Frequently Asked Questions.

Change user settings on mobile phone

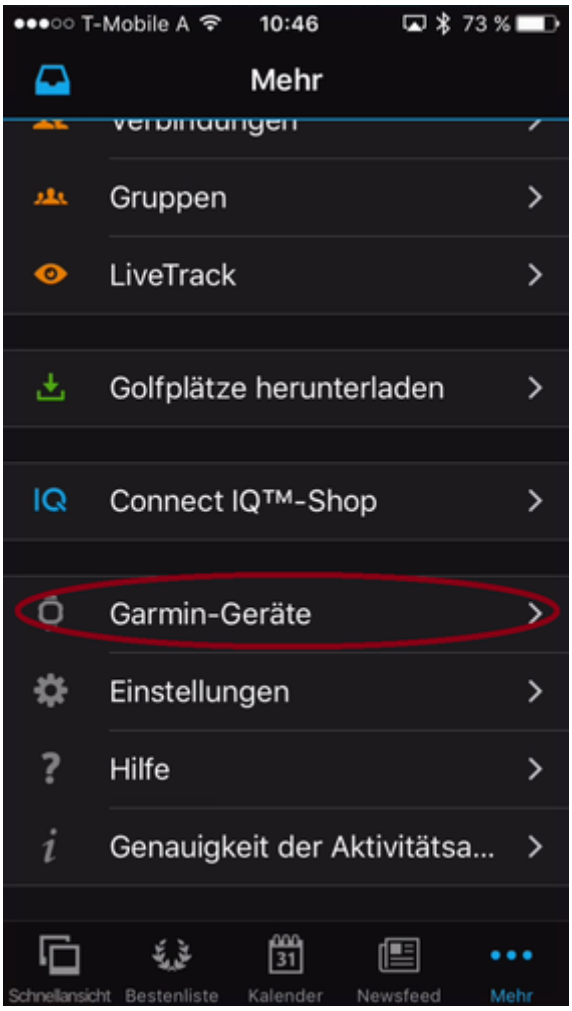
All configurations can be changed on your mobile phone by using the Garmin Connect(TM) Mobile app which is available for Android-, iOS- and Windows-compatible devices. Before changing configurations, please make sure that you have installed the latest app version. The app can be downloaded from the appropriate App Store (e.g. Google Play, Apple Store, etc.)

Step 1: Start Garmin Connect Mobile App Look on your mobile phone for the app with the symbol shown on the left side and click it to start the Garmin Connect™ Mobile app.

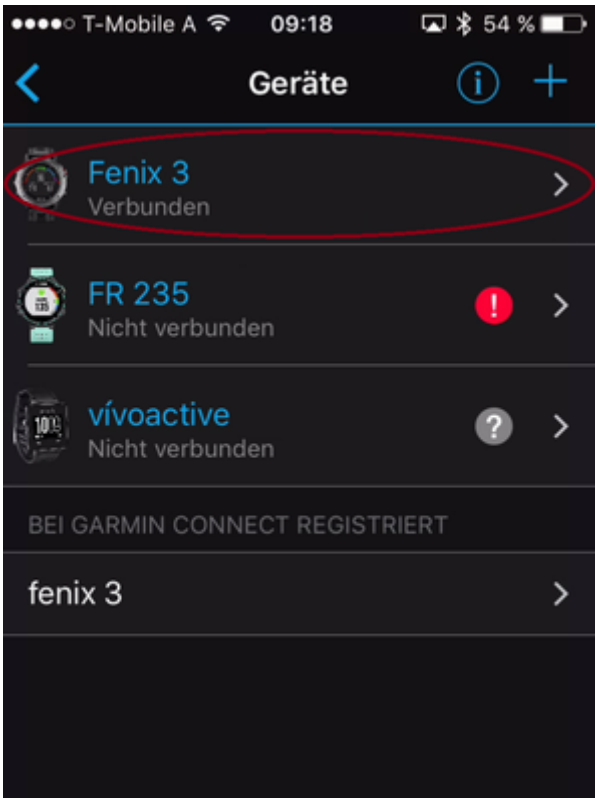
A similar window as shown below should appear.



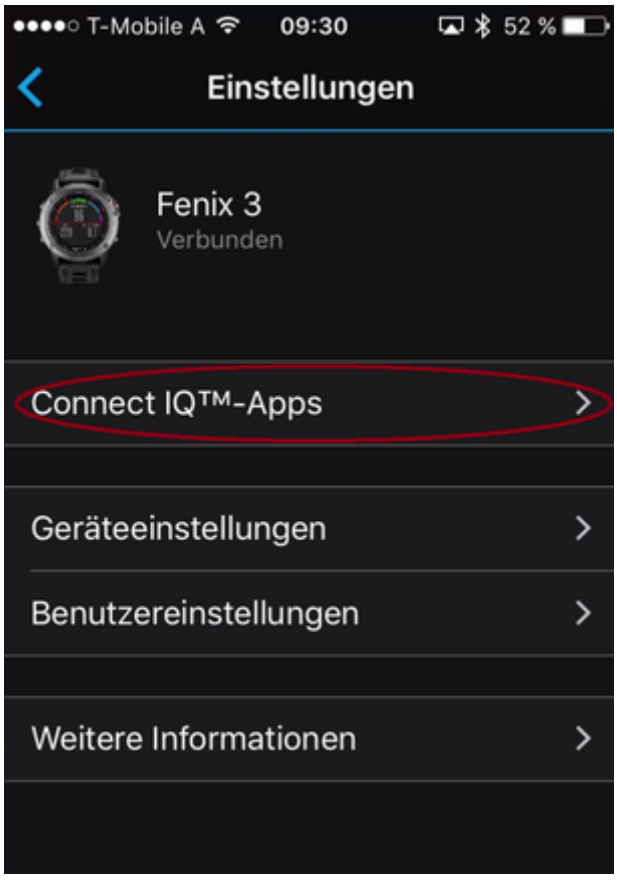
Step 2: Look for Garmin Devices List After pressing the button with the dots on the lower right side (as marked above) a new windows appears. Please scroll down until you find the entry "Garmin Devices".

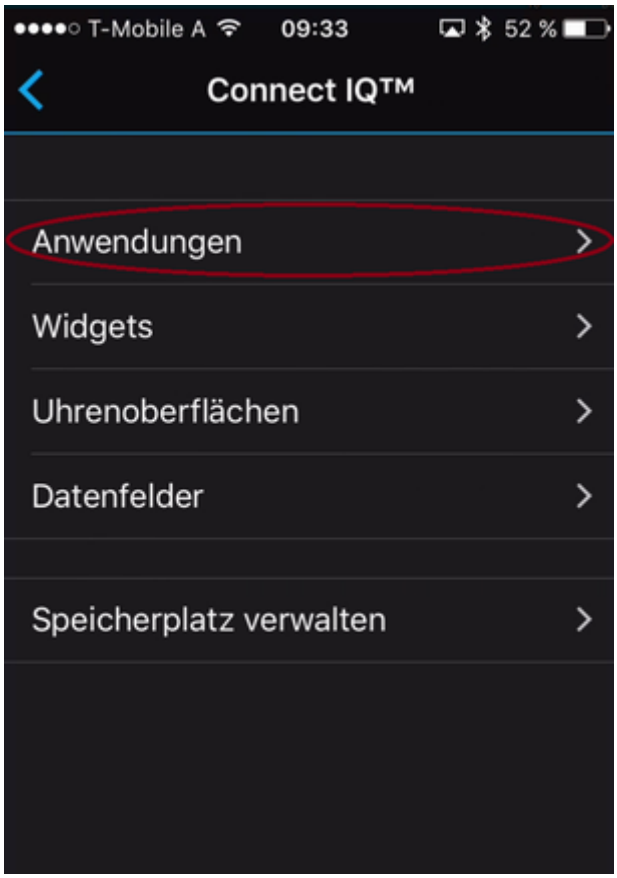


Step 3: Select your Garmin Devices After pressing the button marked above, a window with all your registered Garmin devices appears (see picture below). If you cannot find your device, please add it before by clicking on the upper right "+" sign. For further details, please refer to the documentation offered by Garmin. Then select one of your connected device.

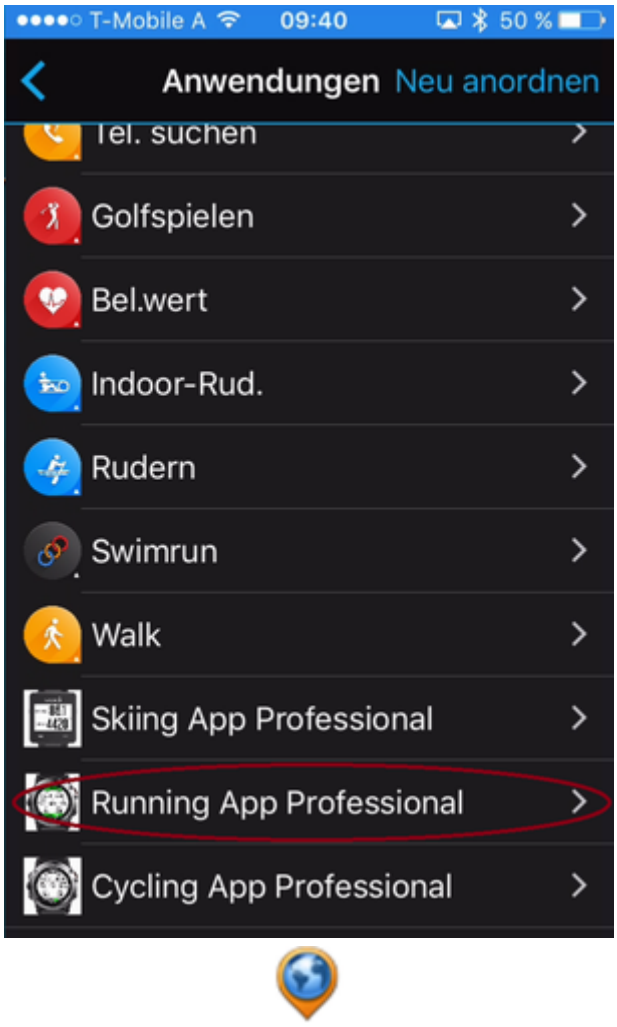


Step 4: Select Activities and Apps Please click the marked button in the picture below following by clicking to applications.

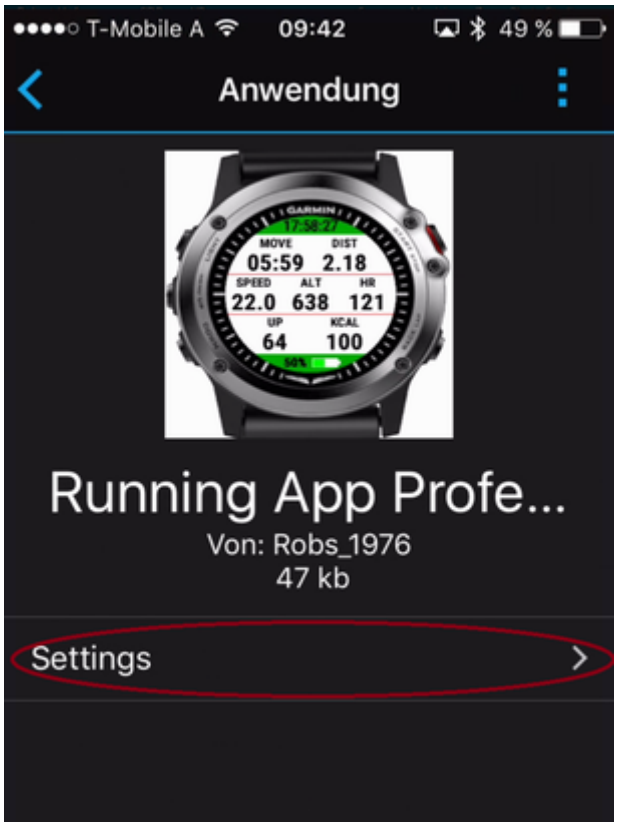




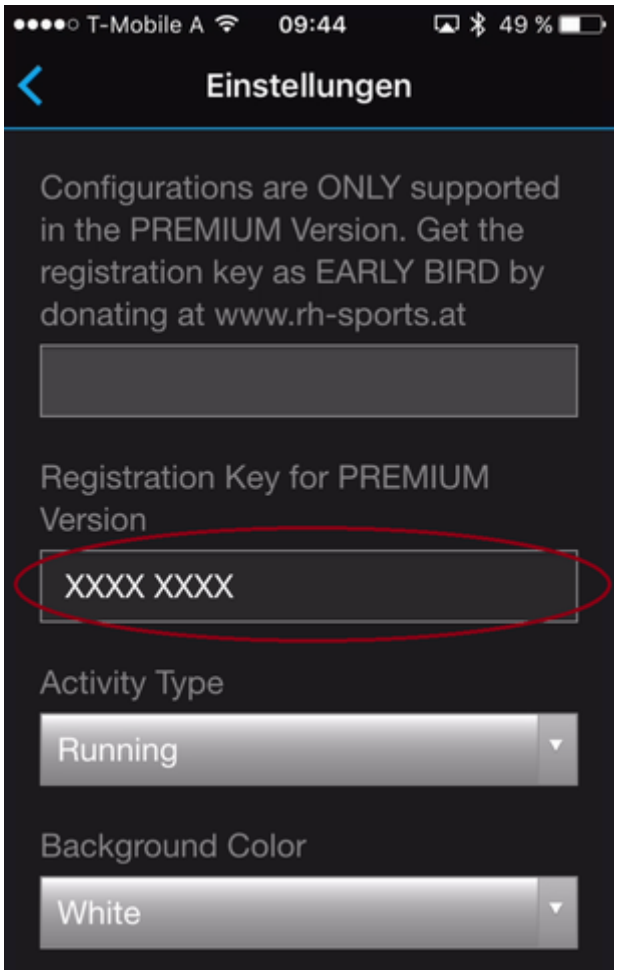
Step 5: Select an Application for Configuration A list of all applications appear. Please scroll up/down until you find the application you would like to configure as shown in the figure below:



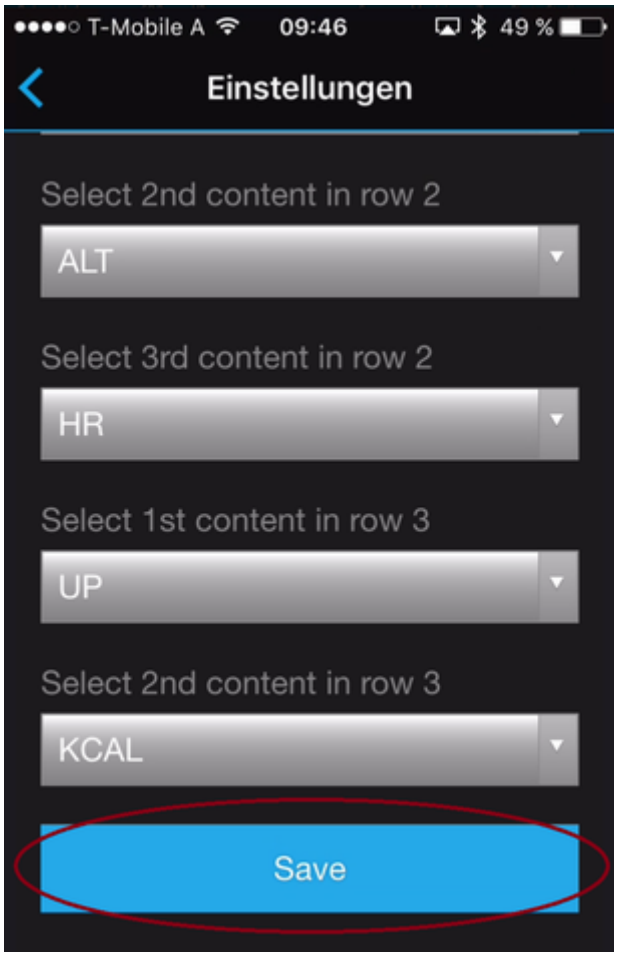
Step 6: Select Settings Please click on Settings as marked below.



Step 7: Change Configuration Please note that configuration changes ONLY apply on your device if you have entered the proper PREMIUM key in the field marked in the picture below. The key consists of two times four characters separated by a space in between. If the proper key is entered, please make the configurations according to your needs.



Step 8: Save Configurations Finally scroll down and press the "Save" button. The Garmin Mobile App will update your configurations on your device. In case of communication errors, please refer to the documentation provided by Garmin.



Step 9: Start Application on Device Please start your application on your device. If you have the PREMIUM Version (key was correct), then your configuration changes should have been applied. If not, please refer to our *Frequently Asked Questions*.

2.4.3 Start application

This section describes how to start Cycling App Professional on your Garmin device.

Find application on Garmin device

After installation the downloaded **Cycling App Professional** application can be found on the Garmin Watch by pressing the “Start" Button. Search for following icon and select it to start the application:

Application start

The application start process runs through following phases:

Phase 1:
In this phase the About screen with version information is shown for ~2 seconds (FREE version) respectively ~1 second (PREMIUM version). This phase cannot be aborted. On a D2™ Bravo is looks like that:

Phase 2:
In this phase information about your registration status is shown for ~6 seconds (FREE version). In the PREMIUM Version this screen is omitted for faster startup. This phase cannot be aborted. On a D2™ Bravo is looks like that:

Phase 3:
In this phase the sensor polling screen is shown as long as no proper GPS signal has been found or the timeout is reached. If a proper GPS signal is already available, then the screen is only visible for a short moment (~1 second). If not, then this screen is shown for at most ~35 seconds. During this phase the "BACK" button can be used to abort the polling sequence. On a D2™ Bravo is looks like that:

> **Note:**
> Please make sure that your GPS or ANT+ sensors are configured and enabled on your device. Otherwise certain data fields do not show useful/ proper information.

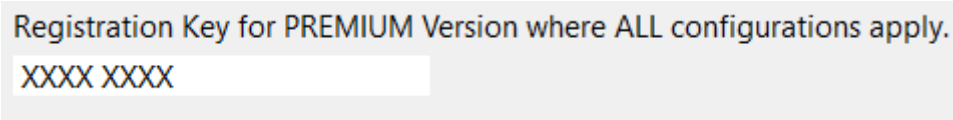
Phase 4:
The application startup process is finished and the application can be used. On a D2™ Bravo it looks like that:

2.4.4 Change user settings

Most configuration changes only APPLY in the **PREMIUM Version** after storing the settings. Please donate first to get the registration key.

Registration key for PREMIUM version

After successful donation you receive a mail with the PREMIUM activation key(s). Please copy the registration key exactly in the given format (XXXX XXXX) into this text field. The registration key evaluation is case sensitive and no spaces are allowed at the beginning or end. One space is mandatory after the fourth character.



Here some important registration hints:

Hint 1: Please copy the registration key with 9 characters length exactly in the given format (XXXX XXXX) into this text field. The registration key is a hexadecimal number (numbers from 0 to 9 and big letters from A to F) and the evaluation is case sensitive. No spaces are allowed at the beginning or end. One space is mandatory after the fourth character.

Hint 2: Users reported that on some devices (e.g. Android-based mobile phones) more than one space is added when copying the key to the app settings field. Please make sure that there is exactly one space after the fourth character.

Hint 3: Please synchronize the settings with your watch afterwards. If you use Garmin Express software on PC or MAC, please disable the bluetooth connection between your mobile phone and watch during configuration as otherwise the settings might be overwritten again.

Hint 4: Sometimes it is necessary to reboot the watch once (for whatever reason).

Hint 5: Please use the right key for the selected application or data field.

Hint 6: Please make sure that there are no floating point values in the app settings anymore (except for Swimming App where they are allowed).

Activity type

This option allows you to select among different activity types. Depending on your selection the session data will be catagorized. Please note that this configuration has to be done before manually starting a session the first time.

Following options are available:

- Cardio (supports ANT+ heart rate and foot pod sensors)
- Cycling (supports ANT+ heart rate, cadence and speed sensors)
- Running (supports ANT+ heart rate and foot pod sensors)
- Swimming (supports ANT+ heart rate)

> **Note:**
> This configuration feature is only available in the PREMIUM Version!!!
>
> **Note:**
> The generic activity type is used for swimming to allow access to heart rate which Garmin blocked for several devices for swimming activity type.

Satellite configuration

This option allows you to select the satellite configuration. Following options are available on devices with CIQ 3.2 and higher:

- GPS legacy setting
- GPS only
- GPS + BEIDOU
- GPS + GALILEO
- GPS + GLONASS
- GPS + GLONASS + GALILEO + BEIDOU
- Multi-GNSS
- AutoGNSS (SatIQ)
- GPS off

> **Note:**
> Not all applications are offering all mentioned configuration options listed above.
>
> **Note:**
> If a certain configuration is not supported by GARMIN on your device then a less accurate setting will be selected automatically.

The sensor page shows you the information of the satellite configuration which is currently used. For further details about the satellite quality, please refer to here.
Please be aware that disabling satellites (GPS off) may have following impacts:

- Satellite-dependent data fields will not show proper information anymore.
- Tracking of your location will be disabled.

> **Note:**
> On devices with CIQ 3.1 and lower always GPS (legacy setting) is used as Garmin does not allow to control this here. Rumors say that the latest configuration in your Garmin native app is used which means that you could also have e.g. GPS + GLONASS.

Heart rate profile

This option allows you to select a heart rate profile independent from the selected activity type. A complete user-defined profile is supported as well. Please note that this configuration has to be done before manually starting a session the first time.

Following options are available:

- User-defined profile (all zones have to be configured by the user manually below)
- Cycling heart rate profile (as defined in Garmin Connect)
- Running heart rate profile (as defined in Garmin Connect)
- Swimming heart rate profile (as defined in Garmin Connect)

If the user-defined profile is selected, following configuration fields have to be filled as well:

> **Note:**
> This configuration feature is only available in the PREMIUM version!!!

Background color

This option allows you to select the background and text color.

Following options are available on devices with CIQ 1:

- White .. white background and black text color
- Black .. black background and white text color

Please refer to following picture for better illustration:

On devices with CIQ2 and higher, following extended options are available:

- White background with black text color and grey header/footer
- Black background with white text and grey header/footer
- White background with black text and inverted colors in header/footer
- Black background with white text and inverted colors in header/footer

Please refer to following picture for better illustration:

> **Note:**
> By default the option with "Black background with white header/footer" is used for best readability on all devices!
>
> **Note:**
> Devices with AMOLED display (e.g. Venu™ based devices) only support black background to avoid burn-in damages and to save battery life time!

Auto scroll time

This option allows you to enable and configure the auto scroll feature (automatically cycles through data pages during workout) by entering the auto scroll time. This is the time in seconds when the application automatically scrolls to the next page.

> **Note:**
> A value of 0 (default) or 1 deactivates this feature!
>
> **Note:**
> This configuration feature is available in the FREE version as well.

Auto start/stop (= Auto Pause) feature

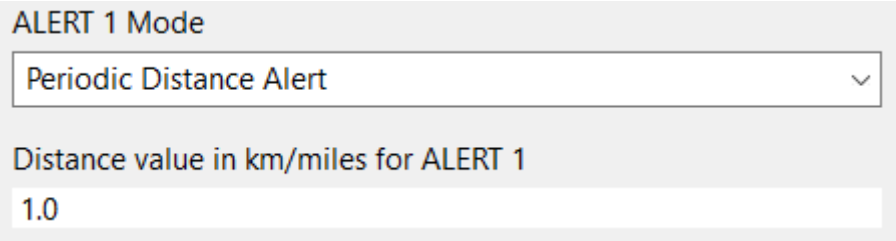
This option allows you to configure the limit in km/h or mi/h (depending on your watch unit settings for distance) when the application switches to the auto-stop mode or leaves this mode again. A value of 0 disables the auto start/stop feature completely.

> **Note:**
> Please note that no activity recording takes place while the Auto-Stop mode is active. This might cause problems especially when doing indoor training sessions!
>
> **Note:**
> This configuration feature is available in the FREE version as well.

ALERT features

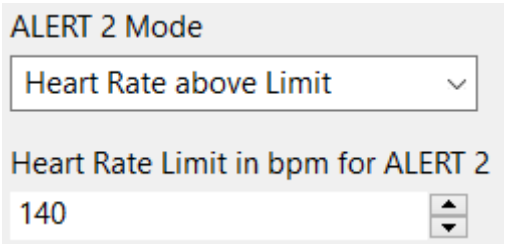
The **ALERT1 mode** configuration option allows you to select the mode for the ALERT1 feature. Please note that this configuration has to be done before manually starting a session the first time. Following options are available:

- Feature disabled (no user-defined ALERT support)
- Single distance alert (an ALERT is shown once when the user-defined distance is reached)
- Periodic distance alert (an ALERT is shown every time when the user-defined distance elapsed)



The **ALERT2 mode** configuration option allows you to select the mode for the ALERT2 feature. Please note that this configuration has to be done before manually starting a session the first time. Following options are available:

- Feature Disabled (no user-defined ALERT support)
- Heart Rate above limit where an ALERT is shown when the user-defined heart rate (in beats per minute) is exceeded.



For further details about the ALERT features, please click here.

> **Note:**
> This configuration feature is only available in the PREMIUM version!!!

Data field coloring

This option allows you to enable the data field coloring feature. For further details, please click here.

> **Note:**
> This configuration feature is only available in the PREMIUM version!!!

Use ANT+ foot pod sensor

This option allows you to use an ANT+ foot pod sensor for more precise information (e.g. for cadence)

> **Note:**
> This configuration feature is only available in the PREMIUM version!!!

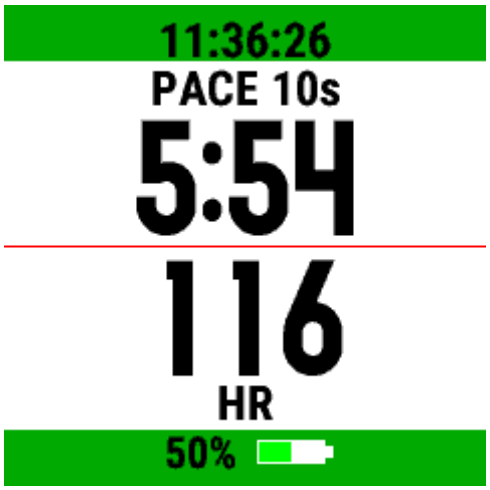
Show/hide data pages

This option allows you to select whether data pages shall be visible or not to have a better overview about your really needed information.

> **Note:**
> In the FREE version the generic page with advertisement cannot be disabled!!!

2-field data pages

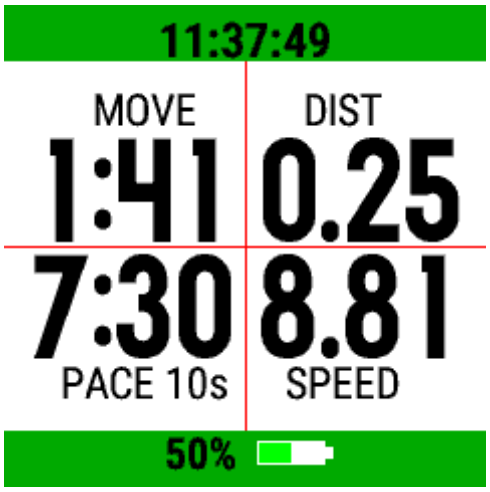
This option allows you to freely select the content of all 2-field data pages out of a huge list of all available data fields (even during the ongoing training session). This enables you to adjust all fields completely according to your personal preferences.
For an overview of available data fields, please click here!



> **Note:**
> This configuration feature is only available in the PREMIUM version!!!

4-field data pages

This option allows you to freely select the content of all 4-field data pages out of a huge list of all available data fields (even during the ongoing training session). This enables you to adjust all fields completely according to your personal preferences.
For an overview of available data fields, please click here!

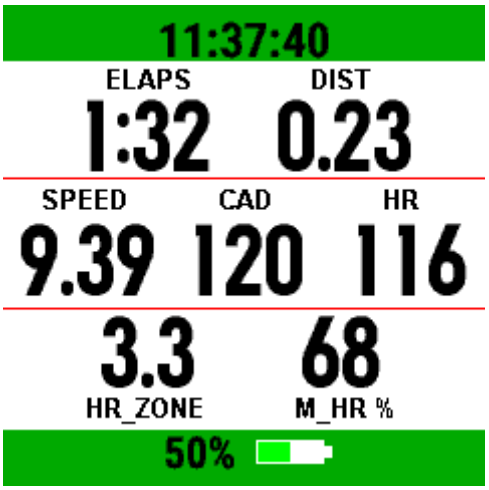


> **Note:**
> This configuration feature is only available in the PREMIUM version!!!

7-field data pages

This option allows you to freely select the content of the 7-field data page out of a huge list of all available data fields (even during the ongoing training session). This enables you to adjust all fields completely according to your personal preferences.

For an overview of available data fields, please click here!



> **Note:**
> This configuration feature is only available in the PREMIUM version!!!

2.5 Data fields

This section gives you an overview about all data fields of the **Cycling App Professional** application.

2.5.1 Data field table

Below the table with all available data fields:

> **Note:**
> Please note that some of them require the **PREMIUM Version** to be active so that they are visible!

Data field header	Data field description
ALT	Current altitude in meters or feet depending on your watch unit settings for distance. Please click here and find further information in note 1.
A CAD	Average cadence information of the whole session.
A HR	Average heart rate information in bpm for the whole session.
A PACE	Average pace information of the whole session for 1 km/mi depending on your watch unit settings for distance.
A SPEED	Average speed information of the whole session in km/h or mi/h based on your watch unit settings for distance.
CAD	Current cadence information.
DIST	Distance information in km or mi based on your watch unit settings for distance.
DOWN	Negative altitude difference in meters or feet for the whole session depending on your watch unit settings for distance. Please click here and find further information in note 1.
ELAPS	Elapsed total session time (including IDLE time) in the format hh:mm, h:mm:ss or mm:ss.
GRADE %	Grade in percent. This information is derived from the distance and altitude information and averaged over the last 10 seconds. Please click here and find further information in note 2.
HR	Current heart rate information in bpm.
HR ZONE	Current heart rate zone in the range of 0.0 to 6.0 with following meaning: * 0.0 ... current heart rate below Zone 1 (minimum heart rate) * 1.0 - 1.9 ... current heart rate in Zone 1 * 2.0 - 2.9 ... current heart rate in Zone 2 * 3.0 - 3.9 ... current heart rate in Zone 3 * 4.0 - 4.9 ... current heart rate in Zone 4 * 5.0 - 5.9 ... current heart rate in Zone 5 * 6.0 ... current heart rate above Zone 5 (maximum heart rate). The value is derived from your heart rate user settings. Please click here and find further information in note 3.
IDLE	Idle session time where speed was below the following user-defined limit (default is 0.5 km/h or mi/h).
KCAL	Kilo-calories consumption for the whole session.
MOVE	Moving session time (without IDLE time) in the format hh:mm, h:mm:ss or mm:ss.
M CAD	Maximum cadence information of the whole session.
M HR	Maximum heart rate information in bpm for the whole session.
M HR %	Current heart rate in percentage of maximum heart taken from the user settings depending on the application you are using. Please refer to HR ZONE for further details. Please click here and find further information in note 3.
M PACE	Maximum pace information of the whole session for 1 km/mi depending on your watch unit settings for distance.
M SPEED	Maximum speed information of the whole session in km/h or mi/h based on your watch unit settings for distance.
PACE 10s	Current pace of the last 10 seconds (contineously calculated) for 1 km/mi depending on your watch unit settings for distance.
SPEED	Current speed information in km/h or mi/h based on your watch unit settings for distance.
STEPS	Number of steps achieved in the current training session.
TEMP	Current temperature in celsius or fahrenheit depending on your watch unit settings for temperature. Please click here and find further information in note 4.
TIME	Current time in 12/24h format based on your watch system settings.
UP	

	Positive altitude difference in meters or feet for the whole session depending on your watch unit settings for distance. Please click here and find further information in note 1.

2.5.2 Notes

Note 1
This information is only precise enough on watches with barometric altimeter as altitude information cannot be derived precisely from GPS. For further details, please click here.

Note 2
Information is only precise if you have an ANT+ speed sensor and a barometric altimeter on your watch. Especially if relative altitude information is derived from GPS, then it will not be very precise due to the physical limitations of GPS as described here. For further details, please click here.

Note 3
The EPIX watch does not support the Garmin SDK >= 1.2.6. Thus it is not possible for an app to access the heart rate profiles. Therefore the heart rate zones are derived from the maximum heart rate configured by the user.

Note 4
Temperature sensor support in Garmin apps is only possible if a ANT+ TEMPE sensor is available.

2.6 Features

This section describes the most important features of the **Cycling App Professional** in more detail. Here a short summary:

- Session features
- Alert features
- Data field coloring
- Key lock feature
- Graphical heart rate gauge
- Graphical heart rate chart
- Graphical heart rate zone distribution
- Workout summary

2.6.1 Session features

This section describes the workout session features which are very similar among all of our Garmin Connect IQ™ applications. The current workout session status is indicated by a specific sign. Following table provides an overview about all possible states of a workout session.

Session status	Visualization	Description
NOT STARTED	Blinking red border	Workout session (recording) was not started so far. This is the state after starting the app. Press the "START" button to start workout.
RUNNING	Constant grey header/footer	Workout session (recording) is running. This is the case after you manually pressed the "START" button. If the auto-stop feature is enabled, the speed must be above the specified limit, otherwise the app automatically enters AUTO-STOP mode.
AUTO-STOP	Blinking yellow pause sign	Workout session is in auto-stop mode which means that the speed is below the user-defined auto start/stop limit. Please be aware that no session recording takes place in this state.
PAUSED	Blinking red stop sign	Workout session (recording) was manually paused in the menu by selection of "Pause Session". It can be resumed at any point in time by entering the menu again and selecting "Resume Session". Please be aware that no session recording takes place in this state.

Start a workout session (NOT STARTED)

After starting the app the workout session status is "NOT STARTED" as the session has to be manually started by the user. This can be done by pressing the "START" button. This state is visualized by showing a blinking red boarder every two seconds as illustrates in following picture:

Workout session running (RUNNING)

After pressing the "START" button the first time after app start, the session status changes from "NOT STARTED" to "RUNNING". This is illustrated by a constant grey header/footer as shown in the following picture:

Auto-stop mode (AUTO-STOP)

Whenever the speed goes below the user-specific limit the app automatically enters the "AUTO-STOP" mode. When the speed goes above this limit, the app enters "RUNNING" mode again. This state is visualized by showing a blinking yellow boarder with a pause sign in the middle every two seconds as shown in following picture:

Manually paused session (PAUSED)

The user can manually pause the workout session at any time if the session status is in "RUNNING" or "AUTO-STOP" mode. This can be done by pressing the "START" button. A menu is shown where the user can select among following choices by either pressing the touch screen or by up/down or left/right buttons:

User selection	Description
Resume	Start or resume workout session
Pause	Pause workout session. This allows the user to navigate through the data pages. The workout session can be resumed again at any time by pressing "START" button and select "Resume".
Save and Exit	Save workout data and close the application. After synchronization with your watch or via Garmin Express Software the workout data will be uploaded to the Garmin cloud and will be visible via Garmin Connect.
Discard and Exit	Discard session data and close the application. Please note that all the collected workout data is lost!

A stopped session is indicated by a blinking red boarder and pause sign in the middle of the screen as shown in following figure:

2.6.2 ALERT features

Already the FREE Version of **Cycling App Professional** provides you basic ALERT features, e.g. to indicate the start and stop of the session recording.

Following figure illustrates how it looks on a Forerunner® 235:

In the PREMIUM version of the **Cycling App Professional** following additional ALERT features are provided:

- Distance alert
- Heart rate alert

Distance alert feature

In order to use this feature, please configure the proper "ALERT1 mode" and "ALERT2 mode" according to following tables:

ALERT1 mode	Description
Disabled	Feature is disabled.
Single distance alert	In this mode a distance ALERT is shown once when the user-defined distance (in km or miles) is reached.
Periodic distance alert	In this mode a distance ALERT is shown every time when the user-defined distance (in km or miles) elapsed.

Following figure illustrates how it looks on a Forerunner® 235:

Heart rate alert feature

ALERT2 mode	Description
Disabled	ALERT2 feature is disabled.
Heart rate above limit	In this mode a heart rate ALERT is shown when the user-defined limit (in beats per minute) is exceeded. If such an alert is shown then you have ~30 seconds time for reduce the heart rate below the limit, else a new alert is shown again.

Following figure illustrates how it looks on a Forerunner® 235:

2.6.3 Data field coloring

Data field coloring is currently only supported for the heart rate related data fields and has to be enabled via the user settings.

Following table describes the color coding:

HR zone	Color	Percentage of maximum heart rate
Zone 0	BLACK	M HR % < 50
Zone 1	GREY	50 <= M HR % < 59
Zone 2	BLUE	60 <= M HR % < 69
Zone 3	GREEN	70 <= M HR % < 79
Zone 4	ORANGE	80 <= M HR % < 89
Zone 5	RED	90 <= M HR % < 99
Zone 6	DARK RED	M HR % >= 100

Following figure illustrates how it looks on a Forerunner® 235:

2.6.4 Key lock feature

When the session is started, the key lock feature can be activated by following sequence:

- Press "START" button.
- Move down until "Lock Keys" appears in the menu via "UP" and "DOWN" buttons.
- Select "Lock Keys" by pressing "START" button.

When the key lock feature is active, only the "START" button will be handled anymore, all other buttons and inputs are ignored.

To disable the key lock feature, please perform following steps:

- Press "START" button.
- Move down until "Unlock Keys" appears in the menu via "UP" and "DOWN" buttons.
- Select "Unlock Keys" by pressing "START" button.

2.6.5 Heart rate gauge

This view shows a gauge about the current heart rate information as shown in the picture below:

2.6.6 Heart rate chart

This view shows a heart rate chart of the last x seconds where the time (x-axis) is adapted automatically. The chart is colored according to the heart rate settings. Following picture gives an impression of the way this information is presented:

2.6.7 Heart rate zone distribution

This view shows a heart rate zone distribution of the current training session as shown in the picture below:

2.6.8 Workout summary

After saving the workout session a workout summary is shown with following information:

- Duration in the format m:ss, mm:ss, h:mm:ss or hh:mm:ss.
- Distance in km or mi.
- Average speed in km/h or mi/h.
- Average pace in min/km or min/mi.
- Average heart rate in bpm.
- Elevation gain in feet or meter (except for swimming activity type).
- Elevation loss in feet or meter (except for swimming activity type).
- Calories consumption in kcal.

2.7 Sensors

This section gives an overview about the supported GPS and ANT+ sensors in the **Cycling App Professional**.

Satellite quality

The number of green bars indicates the satellite signal quality.

Following table describes the meaning in more detail:

Number of green bars	Meaning
0	No satellites available
1	Satellite quality is based on the last known fix
2	Satellite quality is poor (Only a 2-D fix is available, likely due to a limited number of tracked satellites)
3	Satellite quality is usable (A 3-D fix is available, with marginal HDOP (horizontal dilution of precision))
4	Satellite quality is good (A 3-D fix is available, with good-to-excellent HDOP)

2.7.1 ANT+ sensors

The **Cycling App Professional** supports following ANT+ sensors:

- ANT+ speed sensor
- ANT+ cadence sensor
- ANT+ heart rate sensor
- ANT+ foot pod sensor

> **Note:**
> Please pair the ANT+ sensor(s) before starting the application in your watch settings!
>
> **Note:**
> If an ANT+ power sensor is available and connected to the Garmin device then the power sensor data is tracked as well. Even though no data fields are available for power data, the tracked data is later visible on Garmin Connect when you save and exit the session.
>
> **Note:**
> Some sensors support ANT+ and BLE. Please make sure you paired the sensors for ANT+!

2.8 Frequently asked questions

2.8.1 What to do if the app or data field does not work?

We do our best to test the applications and data fields as good as possible. As we do not have all physical available Garmin devices and all ANT+ sensors with all combinations of Garmin firmware versions, we have to do most of the tests on the simulator provided by Garmin. If you detect problems with our application or data field on your Garmin device, please provide us detailed feedback via the official bug report form in order we are able to understand and reproduce your problem. This gives us a fair chance to provide a fix as soon as possible.

Please press here to get the bug report dialog

THANK YOU VERY MUCH for YOUR SUPPORT!!!!

2.8.2 Why is an update of the firmware required?

Some users reported that an update of the firmware is requested even though the latest firmware is already installed. In such a case, please try out following options:

- Update your Garmin Express or Garmin Mobile software (if you don´t have the latest versions installed).
- Reboot your device once.

2.8.3 What is the purpose of the FREE version?

The **FREE Version** is fully functional and offers you a basic feature set which allows you to test the application or data field intensively without any risk on your Garmin device.

> **Note:**
> In our standalone applications some more advanced features (e.g. alerts) cannot be activated in the FREE verison and a periodic **FREE Version** notification is shown.
>
> **Note:**
> In our data fields all features are available even in the FREE verison but still a periodic **FREE Version** notification is shown.

If you like our application or data field we would be very happy if you donate to upgrade to the **PREMIUM Version**.

2.8.4 How to upgrade to the PREMIUM version?

If you like our application or data field and would you like to benefit of following further advantages:

- support our further development or
- unlock all (more advanced) features or
- get ride of the periodic **FREE Version** notification

we would be very happy if you donate to upgrade to the **PREMIUM Version**.

> **Note:**
> The PREMIUM version is a **lifetime license** which is valid for ALL future updates and can be used on as many devices you personally own, even at the same time!

Here two links for further details how to donate for the **PREMIUM Version**:

- RH-SPORTS website
- Online shop with additional payment options like:
  - stripe credit card
  - PayPal (including credit card, debit card and bank transfer)
  - Payment in advance (useful for countries where stripe or PayPal do not work)

2.8.5 I did not received the unlock keys for the PREMIUM Version after donation?

After successful donation you immediately will get a mail to the mail address used in PAYPAL. It contains the unlock keys and the activation information for the selected **PREMIUM version(s)**. The information is provided as attached PDF. If this is not the case, please do following:

- Check whether you used the right mail address. It is the one you are using in PAYPAL.
- Check whether the mail went to your JUNK or SPAM folder.
- Write a mail to rh-sports@gmx.at to request the keys.

2.8.6 What to do if after entering the key, still the FREE version is active?

You can detect whether the **FREE version** is still active or not in following way:

- In standalone applications (e.g. Running App Professional) the **FREE version** is active, if you see a "Please donate as EARLY BIRD" message upon application start.
- In data fields (e.g. RunningDF4 1), which have to be integrated into one of the Garmin native apps, the **FREE version** is active if you get a "FREE Version" notification upon session start and regularily after some minutes.

Some users reported that the **FREE version** is still active after entering the registration key and after synchronization. In all known cases, the wrong key has been entered. Please make sure that you enter the proper key and following the instructions below:

Here some important registration hints:

Hint 1: Please copy the registration key with 9 characters length exactly in the given format (XXXX XXXX) into this text field. The registration key is a hexadecimal number (numbers from 0 to 9 and big letters from A to F) and the evaluation is case sensitive. No spaces are allowed at the beginning or end. One space is mandatory after the fourth character.

Hint 2: Users reported that on some devices (e.g. Android-based mobile phones) more than one space is added when copying the key to the app settings field. Please make sure that there is exactly one space after the fourth character.

Hint 3: Please synchronize the settings with your watch afterwards. If you use Garmin Express software on PC or MAC, please disable the bluetooth connection between your mobile phone and watch during configuration as otherwise the settings might be overwritten again.

Hint 4: Sometimes it is necessary to reboot the watch once (for whatever reason).

Hint 5: Please use the right key for the selected application or data field.

Hint 6: Please make sure that there are no floating point values in the app settings anymore (except for Swimming App where they are allowed).

2.8.7 What to do if GPS is not found upon start?

Sometimes it happens that GPS is not found during app startup and the app polls infinitely for a proper GPS signal. According to customer feedback this happens when the Garmin (sensor) firmware was updated. This is out of our control. Following workaround seems to do the trick:

- Once start a Garmin native app like running, cycling, etc.
- Wait until GPS is found.
- Stop the Garmin native app and start one of our apps.
- GPS should be found soon.

> **Note:**
> Indoor it is sometimes very difficult for a device to find a proper GPS signal. So please make sure you do it outdoor.

2.8.8 How to enable GPS, GLONASS or GALILEO?

On Garmin devices with CIQ below 3.3.6, Garmin does not allow Connect IQ applications to controll which satellites are used. Following steps seem to help here as workaround:

- Once start a Garmin native app like running, cycling, etc.
- Select the required positioning sources in the settings of the native app.
- Stop the Garmin native app and start one of our apps.
- According to our information the selected sources of the native app are then used for our apps as well.

2.8.9 What to do in case of a app or data field crash upon start?

If you see following icon on your Garmin device upon application start or when you add a data field into a Garmin native app:

please completely uninstall and reinstall the application or data field. The setting file changed and the automated Garmin install is not replacing the setting file.

2.8.10 What to do if settings cannot be changed?

Setting changes always work in the Garmin eco-system and a valid connection to Garmin serves are necessary. Sometimes these servers are down and settings cannot be changed.

> **Note:**
> Unfortunately this is out of our control and we have to wait until Garmin fixed that problem.

In case the settings are corrupted, then following seqeunce may help:

- Delete app
- Synchronize
- Once reboot your device (e.g. watch)
- Install the app again
- Change settings

2.8.11 User settings lost after update?

Unfortunately Garmin may reset the user settings when updating the Garmin firmware version of the application or data field. This leads to the problem that all configurations are lost and the **FREE Version** is active again. I´m testing some work-arounds but so far I was not successful. As soon as I have updates, I will publish them here.

2.8.12 Activity not visible on Garmin Connect?

There could be several reasons why an activity is not visible on Garmin Connect:

- Activity recording was never started.
- Activity recording was not saved upon leaving the Garmin native app.
- No synchronization between device and Garmin Connect happened.
- Especially in indoor sessions it can happen that the device stays in Auto-Stop Mode. Please deactivate this feature in the user settings.
- Especially in indoor sessions no movements might be detected by the device. Thus distance stays 0. In such a case no activity results are stored on Garmin Connect.

2.8.13 Activity tracking and fitness metric accuracy

The app uses the Garmin API´s to retrieve most of the information and cannot be more precise than the data delivered from there. Garmin states following about activity tracking and accuracy:

- "Garmin devices are intended to be tools to provide you with information to encourage an active and healthy lifestyle. Garmin wearables rely on sensors that track your movement and other metrics. The data and information provided by these devices is intended to be a close estimation of your activity and metrics tracked, but may not be precisely accurate. Garmin wearables are not medical devices, and the data provided by them is not intended to be utilized for medical purposes and is not intended to diagnose, treat, cure, or prevent any disease. Garmin recommends you consult your doctor before engaging in any exercise routine."

2.8.14 Accuracy of wrist-based heart rate (Elevate)

The app uses the Garmin API to retrieve heart rate related data cannot be more precise than the data delivered from there. Regarding wrist-based accuracy, Garmin states following:

- "The optical wrist heart rate (HR) monitor for Garmin wearables is a valuable tool that can provide an accurate estimation of the user's heart rate at any given point in time. The optical HR monitor is designed to attempt to monitor a user's heart rate 24 hours a day, 7 days a week. The frequency at which heart rate is measured varies, and may depend on the level of activity of the user. When you start an activity with your Garmin optical HR device, the optical HR monitor measures more frequently. The intent is to provide the user with a more frequent and accurate heart rate reading during a given activity."
- "While our wrist HR monitor technology is state of the art, there are inherent limitations with the technology that may cause some of the heart rate readings to be inaccurate under certain circumstances. These circumstances include the user's physical characteristics, the fit of the device and the type and intensity of the activity as outlined above. The HR monitor data is not intended to be used for medical purposes, nor is it intended to diagnose, treat, cure or prevent any disease or condition."
- "Wrist heart rate accuracy during swimming is very limited. Garmin does not recommend using wrist heart rate during swimming activities and on some products, wrist heart rate monitoring is disabled while swimming. Garmin recommends using HRM-Swim™ or HRM-Tri™ heart rate monitors with compatible devices to track heart rate while swimming."

2.8.15 Is there a way to enable/disable GLONASS?

The GPS/GLONASS setting is based on what was last used in the Garmin native apps (like cycling, running). Garmin does not allow Connect-IQ apps or data fields to change this setting.

2.8.16 Why is info derived from altitude (e.g, UP, DOWN, PWR, GRADE in %) not accurate?

People with Garmin devices (e.g. watches) are frequently concerned about the accuracy (or lack of it) of the altitude data (or from altitude derive data) if the info is derived from GPS and not from a barometric altimeter. Many suspect their equipment or the app may even be defective or buggy

when they see the altitude data. Unfortunately this is NORMAL as GPS is not accurate enough regarding altitude information. Following Garmin devices have no barometric altimeter and are thus affected (list might not be complete):

- ForeAthlete® 230J, ForeAthlete® 235J, ForeAthlete® 630J.
- Forerunner® 735XTJ, ForeAthlete® 920XTJ, Forerunner® 230, Forerunner® 235, Forerunner® 630, Forerunner® 735XT.
- Vivoactive™ series.
- Others: Please take a look to the Garmin feature set description for your device.

With the integrated GPS receivers, the horizontal error is specified to be within about +/- 15 meters (50 feet) 95% of the time. Most users find this is a conservative specification and that their modern GPS receivers routinely perform better than this worst case specification. But users should expect that SOMETIMES they may see the error approach the specification limits. AND 5% of the time, the error may be "any value" from zero to whatever. Note: Unless you have a CLEAR AND UNOBSTRUCTED view of the sky you can count on your error excursions to be much greater than the above numbers. Your GPS depends on this clear and unobstructed view or it cannot make accurate range measurements to the satellites. Generally, altitude error is specified to be 1.5 times horizontal error specification. This means that the user of standard consumer GPS receivers should consider +/-23meters (75ft) with a DOP of 1 for 95% confidence. Altitude error is always considerably worse than the horizontal (position error). Much of this is a matter of geometry. If we (simplistically) consider just four satellites, the "optimum" configuration for best overall accuracy is having the four SVs at 40 to 55 degrees above the horizon and one (for instance) in each general direction N, E, W, and S.

> **Note:**
> You will get a very BAD DOP if the SVs are at the exact same elevation. Luckily, this is a rare occurrence. The similar "best" arrangement for vertical position is with one SV overhead and the others at the horizon and 120 degrees in azimuth apart. Obviously, this arrangement is very poor from a signal standpoint. As a result, of this geometry the calculated solution for altitude is not as accurate as it is for horizontal position. Almost any calibrated altimeter will be more stable at reading altitude than a GPS. GPS altitude measures the user´s distance from the center of the SVs orbits. These measurements are referenced to geodetic altitude or ellipsoidal altitude in some GPS equipment. Garmin and most equipment manufacturers utilize a mathematical model in the GPS software which roughly approximates the geodetic model of the earth and reference altitude to this model. As with any model, there will be errors as the earth is not a simple mathematical shape to represent. What this means is that if you are walking on the seashore, and see your altitude as -15 meters, you should not be concerned. First, the geodetic model of the earth can have much more than this amount of error at any specific point and Second, you have the GPS error itself to add in. As a result of this combined error, I am not surprised to be at the seashore and see -40 meter errors in some spots.

Following data fields are affected if you have no watch with barometric altimeter:

- UP
- DOWN
- GRADE in %
- PWR, A PWR, M PWR (if not derived from a compatible ANT+ power sensor)
- VSPD xs, A VSPD, M VSPD

2.9 Backlog

This section shows the backlog with potential features planned for upcoming releases:

- Add training effect data field and summary
- Improve heart rate graph for all devices (same as for Hiking App)
- Cadence coloring
- Allow user to directly configure certain options on watch
- Power data fields
- Add heart rate alarm features
- Add "walking" as an option in the activity list. Without walking then the calorie offset is not computed correctly for steps.

> **Note:**
> Please note that there is no guarantee if and when the feature will be implemented!

2.10 Version history

The following table lists the version history of the latest released **Cycling App Professional** versions:

Version	Date	Change description
3.6.5	25.06.2025	Several GUI improvements Support for Vivoactive® 6 added
3.6.0	15.04.2025	Several GUI improvements Support for Approach® S50 added Support for Descent™ G2 added
3.5.1	23.12.2024	Several GUI improvements
3.5.0	01.11.2024	Support for Fenix® 8 43mm added Support for Fenix® 8 47 / 51mm added Support for Fenix® 8 Solar 47mm added Support for Fenix® 8 Solar 51mm added Support for Fenix® E added Support for Enduro™ 3 added
3.4.1	04.10.2024	Hotfix for app setting problems
3.4.0	04.05.2024	Hotfix for app setting problems on newer devices Hotfix for language problems Build with latest SDK 7.1.1
3.3.5	06.04.2024	Support for Forerunner® 165 and 165 Music added
3.3.2	01.02.2024	Additional satellite configurations added
3.3.1	23.01.2024	Support for Descent™ Mk3 43mm added Build with SDK 6.4.1
3.3.0	07.12.2023	Support for Venu® 3 added Support for Descent™ Mk3 51mm added Support for Fēnix® 7 Pro (no Wi-Fi) added Support for Fēnix® 7x Pro (no Wi-Fi) added
3.2.5	22.11.2023	Support for Venu® 3s added Support for Vivoactive® 5 added
3.2.0	27.10.2023	Support for Approach® S70 47mm added Support for Epix™ Pro (Gen 2) 51mm added GUI improvements
3.1.5	05.10.2023	Support for Forerunner® 265 and 265s Support for Forerunner® 965 GUI improvements
3.1.0	03.08.2023	Change background color to "Black with white header/footer" for better visibility on some devices Background color can be configured in the FREE version as well Hotfix to support other satellite configurations than legacy GPS where a device supports it Support for Approach® S70 42mm added Support for Epix™ Pro (Gen 2) 42mm and 47mm added Support for MARQ® (Gen 2) Athlete / Adventurer / Captain / Golfer / Aviator added
3.0.1	13.07.2023	Support for Fenix® 7 Pro, Fenix® 7s Pro and Fenix® 7x Pro added
3.0.0	09.03.2023	Workaround implemented for FR645 and FR645m to avoid app crashes upon start due to font problems GPS polling improvements for some older CIQ1 devices
2.9.5	22.10.2022	Support for Venu™ SQ 2 and Venu™ SQ 2 Music added GPS acquisition improvements upon startup GUI improvements

2.9.1	28.08.2022	Hotfix to avoid app crashes on Venu SQ Several GUI and stability improvements
2.9.0	14.07.2022	Support for Forerunner® 255, 255 Music, 255s and 255s Music added Support for Forerunner® 955 / Solar added GUI improvements
2.8.5	26.05.2022	Add calories information in workout summary Avoid disabling of GPS on session pause Support for D2™ Mach 1 added Several GUI and stability improvements
2.8.0	12.03.2022	Allow user of devices with CIQ2 or higher to select more background and header color schemes Add notification when GPS was found first time after app start Allow skipping of GPS polling upon startup via start button Improvements in GPS acquisition to avoid 0 distance and speed Poll for GPS after resuming session (if GPS required) Save last shown page and restore it at next startup Support for D2™ Air X10 added Several GUI improvements
2.7.0	29.01.2022	Support for Epix™ 2 added Support for Fenix® 7, Fenix® 7s and Fenix® 7x added
2.6.9	17.01.2022	Support for Venu™ 2 Plus added

3. Deutsch

3.1 Deutsche Dokumentation

Diese Seite beinhaltet die deutschen Dokumente für alle Garmin Connect-IQ-kompatiblen Applikationen und Datenfelder von RH-SPORTS.

Aktuell ist nur eine Liste aller Datenfelder in deutscher Beschreibung verfügbar.

> **Note:**
> Die Dokumentation in deutscher Sprache ist in Arbeit und kommt in den nächsten Monaten sukzessive für alle verfügbaren Applikationen.

3.1.1 Datenfelder

Folgende Tabelle beschreibt alle Datenfelder unserer Garmin Connect-IQ kompatiblen Apps (mit Ausnahme der Skiing App). Bitte berücksichten Sie folgende zwei Punkte:

- Einige Datenfelder sind nur in der **PREMIUM Version** verfügbar.
- Nicht jedes Datenfeld ist in jeder angebotenen Applikation oder Datenfeld verfügbar.

Datenfeld	Beschreibung
AHEAD	Aktuelle Zeit die Sie vor (bei positivem Wert) oder hinter (bei negativem Wert) dem konfiguriertem Rennziel liegen. Die Angabe ist im Format hh:mm, h:mm:ss, mm:ss oder m:ss.
ALT	Aktuelle Höhe in Meter oder Fuß, abhängig von den Einstellungen auf der Uhr für Höhe.
A CAD	Durchschnittliche Trittfrequenz in Umdrehungen pro Minute, gemittelt über die gesamte Trainingseinheit. Anmerkung: In der Cycling App Professional werden nur jene Zeiten berücksichtig, wo auch wirklich getreten wird. In Garmin Connect ist allerdings der Wert gespeichert, der auch die Zeiten ohne Treten beinhaltet.
A HR	Durchschnittliche Herzfrequenz in Schläge pro Minute gemittelt über die gesamte Trainingseinheit.
A PACE	Durchschnittliche Pace der aktuellen Trainingseinheit für einen Kilometer oder eine Meile, abhängig von den Einstellungen auf der Uhr für Pace/Geschwindigkeit.
A PWR	Durchschnittliche Power in der aktuellen Trainingseinheit in Watt. Bitte berücksichtigen Sie auch Anmerkung 4
A SPEED	Durchschnittliche Geschwindigkeit der aktuellen Trainingseinheit in Kilometer/Stunde oder Meilen/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
A VSPD	Durchschnittliche vertikale Geschwindigkeit in der aktuellen Trainingseinheit in Meter/Stunde oder Fuß/Stunde, abhängig von den Einstellungen auf der Uhr. Bitte berücksichtigen Sie auch Anmerkung 1
CAD	Aktuelle Trittfrequenz in Umdrehungen pro Minute.
CL DIST	Distanz der aktuellen Runde in Kilometer oder Meilen, abhängig von den Einstellungen auf der Uhr für Distanz.
CL PACE	PACE der aktuellen Runde für einen Kilometer oder eine Meile, abhängig von den Einstellungen auf der Uhr für Distanz.
CL SPEED	Durchschnittsgeschwindigkeit der aktuellen Runde in Kilometer/Stunde oder Meilen/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
CL TIME	Aktuelle Rundenzeit im Format hh:mm, h:mm:ss, mm:ss oder m:ss.
CR AHR	Durchschnittliche Herzfrequenz während der aktuellen Abfahrt in Schläge pro Minute.
CR DOWN	Aktuelle negative Höhenmeter während der aktuellen Abfahrt in Meter oder Fuß, abhängig on den Einstellungen auf der Uhr für Höhe.
CR DIST	Zurückgelegte Strecke der aktuellen Abfahrt in Kilometer oder Meilen, abhängig on den Einstellungen auf der Uhr für Distanz.
CR MHR	Maximale Herzfrequenz während der aktuellen Abfahrt in Schläge pro Minute.
CR MSPD	Maximale Geschwindigkeit der aktuellen Abfahrt in Kilometer/Stunde or Meilen/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
DBG1	Debug Datenfeld das aktuell den minimalen freien Speicher anzeigt.
DIST	Aktuell zurückgelegte Strecke in Kilometer oder Meilen, abhängig von den Einstellungen auf der Uhr für Distanz.
DIST REM	Noch zu laufende Strecke in Kilometer oder Meilen, abhängig von den Einstellungen auf der Uhr für Distanz.
DOWN	Absteigende Höhenmeter in der aktuellen Trainingseinheit in Meter oder Fuß, abhängig von den Einstellungen auf der Uhr für Höhe. Bitte berücksichtigen Sie auch Anmerkung 1
ELAPS	Vergangene Zeit in der aktuellen Trainingseinheit (inkl. Standzeiten bei eingeschaltenem Auto Start/Stop Feature) im Format hh:mm, h:mm:ss, mm:ss oder m:ss.
ETA	Geschätze Ankunftszeit auf Basis Ihrer Konfigurationen im Format hh:mm, h:mm:ss, mm:ss oder m:ss.
GRADE %	Aktuelle Steigung in Prozent. Diese Information wird abgleitet von der zurückgelegten Strecke und Höhe gemittelt über die letzten 10 Sekunden. Bitte berücksichtigen Sie auch Anmerkung 2

HR	Aktuelle Herzfrequenz in Schläge pro Minute.
HR GOAL	Herzfrequenzziel in Schläge pro Minute.
HR ZONE	Aktuelle Herzfrequenzzone im Bereich 0.0 bis 6.0 mit folgender Bedeutung: * 0.0 ... aktuelle Herzfrequenz unterhalb der Zone 1 (= Minimale Herzfrequenz) * 1.0 - 1.9 ... aktuelle Herzfrequenz in Zone 1 * 2.0 - 2.9 ... aktuelle Herzfrequenz in Zone 2 * 3.0 - 3.9 ... aktuelle Herzfrequenz in Zone 3 * 4.0 - 4.9 ... aktuelle Herzfrequenz in Zone 4 * 5.0 - 5.9 ... aktuelle Herzfrequenz in Zone 5 * 6.0 ... aktuelle Herzfrequenz oberhalb der Zone 5 (= Maximale Herzfrequenz). Dieser Wert wird von den Herzfrequenzzoneneinstellungen des Users abgeleitet. Auf der Epix hat man darauf über die Garmin API keinen Zugriff. Deswegen werden die Zonen dort von der maximalen Herzfrequenz abgeleitet.
IDLE	Standzeit in der aktuellen Trainingseinheit wo die Geschwindigkeit unterhalb dem eingestellten Limit für den Auto Start/ Stop Modus liegt.
INT LEFT	Anzahl der offenen Intervalle.
INT NEXT	Ausständige Distanz oder Zeit bis das nächste Intervall startet.
KCAL	Aktuell verbrauchte Kilo-Kalorien in der aktuellen Trainingseinheit.
KCAL_DAY	Kilo-calories consumption of today.
LAP	Aktuelle Rundenzahl.
LL DIST	Distanz der letzten Runde in Kilometer oder Meilen, abhängig von den Einstellungen auf der Uhr für Distanz.
LL PACE	PACE der letzten Runde für einen Kilometer oder eine Meile, abhängig von den Einstellungen auf der Uhr für Distanz.
LL SPEED	Durchschnittsgeschwindigkeit der letzten Runde in Kilometer/Stunde oder Meilen/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
LL TIME	Letzte Rundenzeit im Format hh:mm, h:mm:ss, mm:ss oder m:ss.
MOVE	Zeit in Bewegung (ELAPS - IDLE) in der aktuellen Trainingseinheit im Format hh:mm, h:mm:ss, mm:ss oder m:ss.
M CAD	Maximale Trittfrequenz in Umdrehungen pro Minute in der aktuellen Trainingseinheit.
M HR	Maximale Herzfrequenz in der aktuellen Trainingseinheit in Schläge pro Minute.
M HR %	Aktuelle Herzfrequenz in Prozent der maximalen Herzfrequenz, die von den User-Settings ausgelesen wird.
M PACE	Maximale PACE in der aktuellen Trainingseinheit für einen Kilometer oder eine Meile, abhängig von den Einstellungen auf der Uhr für Distanz.
M PWR	Maximale Power in der aktuellen Trainingseinheit in Watt. Bitte berücksichtigen Sie auch Anmerkung 4
M SPEED	Maximale Geschwindigkeit in der aktuellen Trainingseinheit in Kilometer/Stunde oder Meilen/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
M VSPD	Maximale vertikale Geschwindigkeit in der aktuellen Trainingseinheit in Meter/Stunde oder Fuß/Stunde, abhängig von den Einstellungen auf der Uhr. Bitte berücksichtigen Sie auch Anmerkung 1
PACE	Aktuelle PACE gemittelt über die letzten x Sekunden für einen Kilometer oder eine Meile, abhängig von den Einstellungen auf der Uhr für Distanz.
PACE xs	Aktuelle PACE gemittelt über die letzten x Sekunden für einen Kilometer oder eine Meile, abhängig von den Einstellungen auf der Uhr für Distanz.
PACE REQ	Benötigte PACE um das konfigurierte Rennziel zu erreichen.
PHASE	Aktuelle Phase, entweder Run (=Abfahrt) oder Up (Liftfahrt).

PRESSURE	Barometrischer Druck in Pascal.
PWR	Aktuelle Leistung in Watt. Bitte berücksichtigen Sie auch Anmerkung 4
PWR xs	Leistung in Watt gemittelt über die letzten x Sekunden. Bitte berücksichtigen Sie auch Anmerkung 4
RUNS	Gesamtanzahl der bereits getätigten Abfahrten.
R AHR	Durchschnittliche Herzfrequenz in Schläge pro Minute gemittelt über alle Runs (=Abfahrten).
R ASPD	Durchschnittlich Geschwindigkeit aller Abfahrten in Kilometer/Stunde oder Meilen/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
R AVSPD	Durchschnittlich vertikale Geschwindigkeit aller Abfahrten in Meter/Stunde oder Fuß/Stunde, abhängig von den Einstellungen auf der Uhr. Bitte berücksichtigen Sie auch Bitte berücksichtigen Sie auch Anmerkung 1
R DIST	Aktuell zurückgelegte Abfahrtsstrecke in Kilometer oder Meilen, abhängig von den Einstellungen auf der Uhr für Distanz.
R TIME	Vergangene Zeit aller Abfahrten im Format hh:mm, h:mm:ss, mm:ss oder m:ss.
R MHR	Maximale Herzfrequenz aus allen Abfahrten in Schläge pro Minute.
R MSPD	Maximale Geschwindigkeit aller Abfahrten in Kilometer/Stunde oder Meilen/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
R MVSPD	Maximale vertikale Geschwindigkeit aller Abfahrten in Meter/Stunde oder Fuß/Stunde, abhängig von den Einstellungen auf der Uhr für Distanz.
SPEED	Aktuelle Geschwindigkeit in Kilometer/Stunde or Meilen/Stunde, abhängig von den Einstellungen auf der Uhr.
STEPS	Anzahl der zurückgelegten Schritte in der aktuellen Trainingseinheit.
STEPS T	Anzahl der zurückgelegten Schritte am heutigen Tag.
STEP G	Schrittziel für den heutigen Tag.
STEP G%	Aktueller Prozentsatz für die Zielereichung der Schritte für den heutigen Tag.
TEMP	Aktuelle Temperatur in Celsius oder Fahrenheit, abhängig von den Einstellungen auf der Uhr für Temperatur. Bitte berücksichtigen Sie auch Bitte berücksichtigen Sie auch Anmerkung 3
TIME	Aktuelle Tageszeit 12- oder 24-Stundenformat, abhängig von den Einstellungen auf der Uhr.
UP	Aufsteigende Höhenmeter in der aktuellen Trainingseinheit in Meter oder Fuß, abhängig von den Einstellungen auf der Uhr für Höhe. Bitte berücksichtigen Sie auch Bitte berücksichtigen Sie auch Anmerkung 1
VSPD xs	Aktuelle vertikale Geschwindigkeit in der aktuellen Trainingseinheit in Meter/Stunde oder Fuß/Stunde gemittelt über die letzten x Sekunden, abhängig von den Einstellungen auf der Uhr. Bitte berücksichtigen Sie auch Anmerkung 2

3.1.2 Anmerkungen

Anmerkung 1

Diese Information ist nur dann genau genug wenn die Uhr über einen barometrischen Höhenmesser verfügt. Eine Ableitung der Höheninformation über GPS ist zwar möglich aber ungenau.

Anmerkung 2

Diese Information ist nur dann genau genug wenn Sie über einen ANT+ Geschwindigkeitssensor und eine Uhr mit barometrischem Höhenmesser verfügen. Speziell die Höheninformation ist aufgrund physikalischer Grundsätze sehr ungenau, wenn sie von GPS abgeleitet wird und für Differenzmessungen verwendet wird.

Anmerkung 3

Eine Temperatur-Messung in Garmin Apps funktioniert nur dann wenn Sie über einen ANT+ TEMPE Sensor verfügen.

Anmerkung 4

Diese Information ist nur dann genau genug wenn Sie über einen ANT+ Power Sensor verfügen. Alternative ist auch eine Schätzung der Leistung implementiert, die aber für brauchbare Genauigkeit einen barometrischem Höhenmesser benötigt.