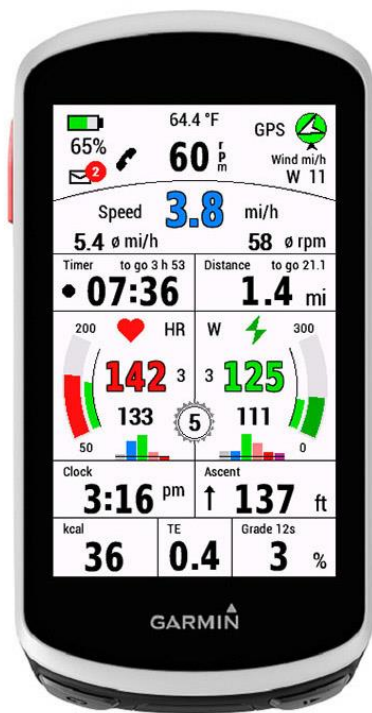


## EDGE All in One I (for Edge 1030 series and Edge 1040 series)



### EDGE All in One I is a single data field.

It displays many values for cycling - around the most important values: speed, cadence, heart rate and power. I have this data field in use for my mountain bike. The data shown on this layout correspond to my own needs.

This datafield is free of charge, but if you like it and use it, it would be nice to be invited to a beer:

<https://paypal.me/AndreasWirth>

I have tested the datafield intensively with my two devices Edge 1030 and 1030 PLUS.

After installing this datafield on your device, various settings can be made. This is best done with Garmin Express or Garmin IQ Mobile. Instructions for this can be found here:

<https://forums.garmin.com/developer/connect-iq/w/wiki/14/changing-connect-iq-app-settings>

### The following settings are supported (please read for new features in Appendix!):

- Optional: colored main data numbers
- Power gauge or Cadence gauge
- Optional: disable the LAP function
- Maximum value on gauge for HR, Power and Cadence selectable
- Power zones
- Optional: display of Power zone 7
- Optional: Grade display with one decimal place
- Period for smoothing the Grade display in seconds (5 - 20 sec)
- Optional: display of a pulsating timer indicator
- Optional: display Index of derailleur or alternative number of teeth
- Optional: I use Varia Radar (shows Varia battery and changes layout)
- Optional: Save Edge battery charge in FIT and display in Garmin Connect
- Optional: Save rear derailleur index in FIT and display in Garmin Connect
- Optional: Definition for 2 additional sport profiles
- Automatic layout adjustment for indoor
- Toggle between kcal and elevation by tapping (primary display in settings)
- Toggle between Average Power and Normalized Power by tapping on it.

Both the **metric** and the **US-American system** of measurement are supported.

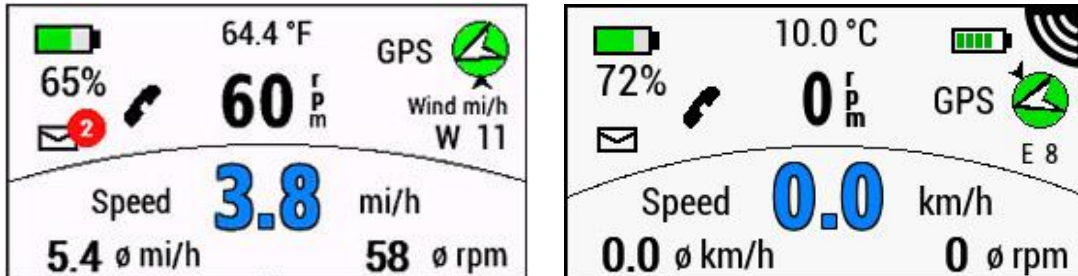
### The following languages are currently supported:

English, German, French, Spanish, Italian, Polish

To use the power section, a power meter must be paired with the device and the values of the individual power zones must be stored in the settings.

For the heartrate graphs the heartrate zones are taken from your profile. It is therefore necessary that the zones are set in your device!

The upper section of the display (without or with Varia Radar):



### Battery status

of device battery on left - and if enabled, Varia battery on the right side.  
Please note that Varia battery can take some time until it shows the status!

### Notifications

For notifications there is a envelope symbol on the display.  
If there are unread notifications, a red filled circle with the number of notifications pops up and blinks.

Note: on iPhone there are all kinds of notifications counted. So, be sure that all messages are deleted from the lock screen!

### Phone connected

is shown by a phone symbol: grey if not connected, black if connected.

### Weather data

For the display of wind bearing and wind force, as well as the outdoor temperature, the data of a nearby weather station must be available via Garmin Connect Mobile. The app must therefore be loaded on the phone (but it can work in the background).

If no data is available - no such data is shown.

### GPS circle

The color of the circle depends on the current GPS signal strength.

- red: no GPS available - the GPS label blinks
- light red: no GPS available but last GPS Position is shown - the GPS label blinks
- light green: poor signal
- green: good signal

### Compass

There is an arrow inside the circle indicating North direction.

If weather data are available, there is another small arrow outside indicating the wind bearing.

### Speed and Cadence

The speed display can optionally be set blue with outline.

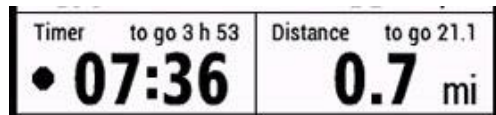
Below average speed and average cadence are shown.

## Timer and Distance

On the left side there is the timer for the activity recording.

The timer shows mm:ss for time below one hour and shows h:mm for time more than one hour.

A black pulsating dot is displayed by default, signaling that the timer is running. During a pause, the dot is red. This indicator can be turned off in settings.

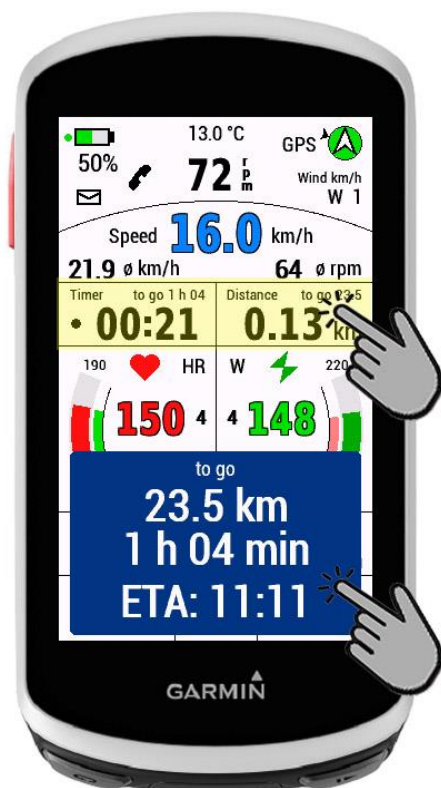


On the right side there is the elapsed distance displayed.

New feature: there is a **Lap function** available - see explanation in the appendix!

When a course is loaded, the data for **Time** and **Distance to Destination** and **ETA** appear at the according fields.

As long as no average speed is available - e.g. after loading the course but before the start - an avg speed of 20 km/h (12.4 mi/h) is used for road and ebike sport, for all other sports 10 km/h (6.2 mi/h). After that the time is calculated continuously over the avg speed.



1

Tap here (yellow area) for popup window

2

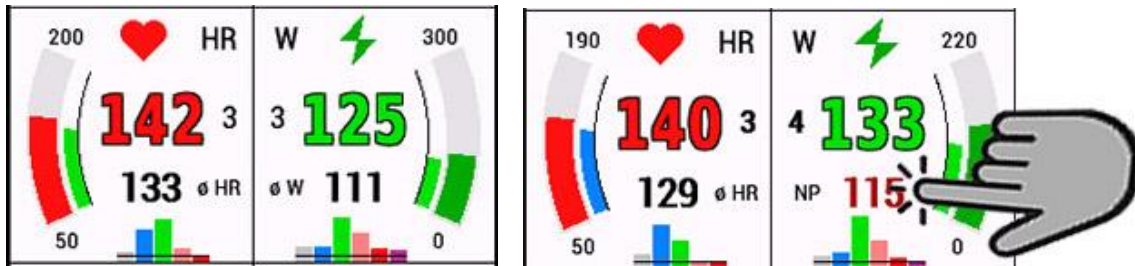
Wait 10 sec or tap here for closing popup window

Since the digits for **Time** and **Distance to Destination** are very small, there is the possibility to read these values comfortably in a pop up window (as from version 1.1.0).

To do this, tap on the yellow marked area of the display.

The pop up window closes itself after 10 seconds - but it can also be closed early by tapping on the window.

## Heartrate field and Power field



To display the heart rate, a HR-belt or similar must be paired.

The heart rate display can optionally be set red with outline. Next to it a small display shows the current HR zone.

The heart rate zones are read from the user profile stored on the device. It is therefore important that all information in the user profile is entered correctly.

The bar graph continuously shows the time in each zone as a percentage.

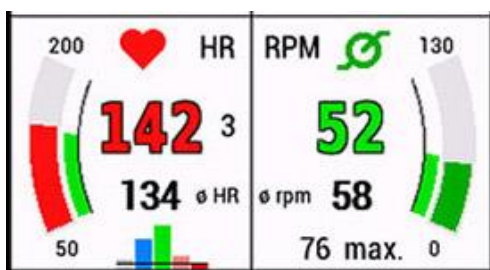
To display the power, a power sensor must be paired.

The power display can optionally be set green with outline. Next to it a small display shows the current power zone. By tapping on avg.power, you can toggle to NP. The setup defines whether zero values are counted (independent of the setting on the Edge device).

The maximum for the power gauge can be set in settings (100 - 500 W).

Since the power zones cannot be read from the user profile, they must be entered in the settings. Enter the values exactly as they are stored on the Edge under power zones. The bar graph continuously shows the time in each zone as a percentage. By default 6 zones are shown because zone 7 is hardly reached by most cyclists. In settings, however, it is also possible to set zone 7 is also shown.

## Cadence field



Instead of power you can chose a cadence field in settings.

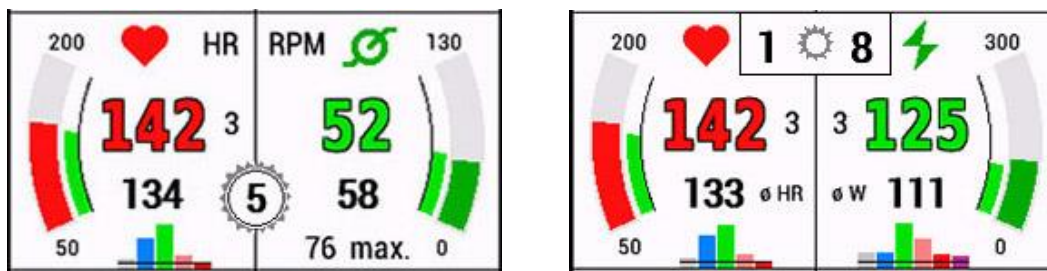
The maximum of rpm on the gauge can be set in settings (110 - 200 rpm).

For all kind of gauges applies:

-the outer arc represents the current value.

-the inner arc represents the average value in color of the zone.

## Derailleur (Gear shifter )



In addition you can set a cogwheel to the display showing the Index of the rear derailleur.

In setup you can chose:

0 ... do not show

1 ... for mechanical shifter, rear only

2 ... for electric derailleurs, rear only

3 ... for electric derailleurs, front and rear (as from version 1.1.0)

For mechanical shifters in setup you have to set:

-rear wheel circumference in cm

-teeth of chainring

-teeth of cogwheels from smallest to biggest

All values are separated by a semicolon.

For my 29" Mountainbike with 30 teeth chainring and SRAM Eagle 12 gears:

220; 30; 10; 12; 14; 16; 18; 21; 24; 28; 32; 36; 42; 50;

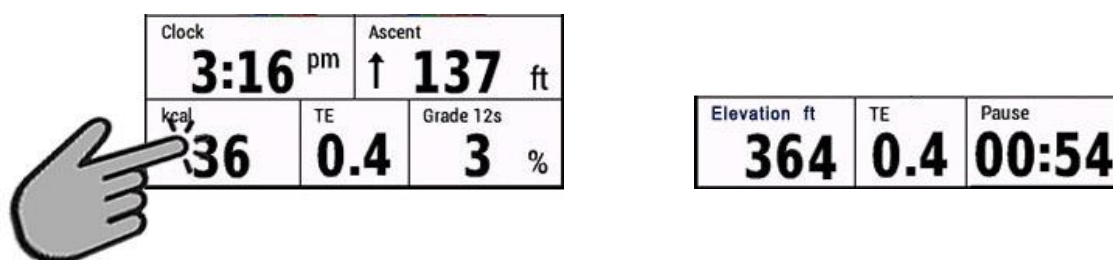
Although the program checks the string for plausibility during the evaluation, it is important to enter this series of numbers correctly and not to forget the separating semicolons ";" !

If an error occurred during evaluation of the string, the index 99 is shown on the display.

For a meaningful display of the shift index for mechanical shifting, a speed sensor must be used!

If the display of the current shift index is not stable, you must vary the rear wheel circumference in the setup in 5 cm steps up or down.

## The bottom section



The bottom section of the display shows clock, Ascent, kcal Consumption, Training Effect and Grade or alternatively the Pause time (if paused).

By tapping on the kcal field, the display can be changed to Elevation.

## Grade

The display is calculated via the distance traveled and the associated change in altitude. This has to be done in small steps in order to display the current situation in the best possible way.

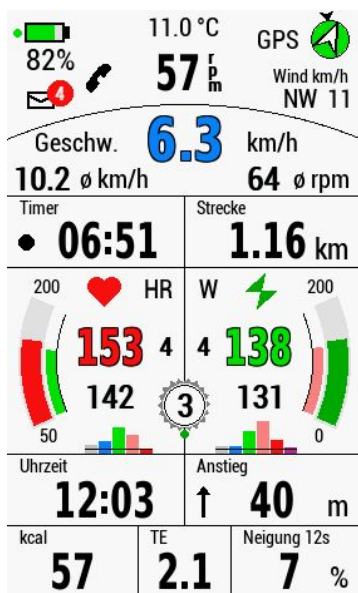
To get a good compromise between display stability and delay, the time over which the values are averaged can be selected in settings (5 - 20 sec).

The faster the average speed is the smaller the value of seconds may be.

For my mountain bike the best compromise is around 12 sec.

It is also possible to set a decimal place for grade in settings. Though I think, this is overkill considering the calculation situation - but each as he likes!

## Log values to the FIT Activity file and show them in Garmin Connect:



Currently, the following values can be logged and displayed in Garmin Connect:

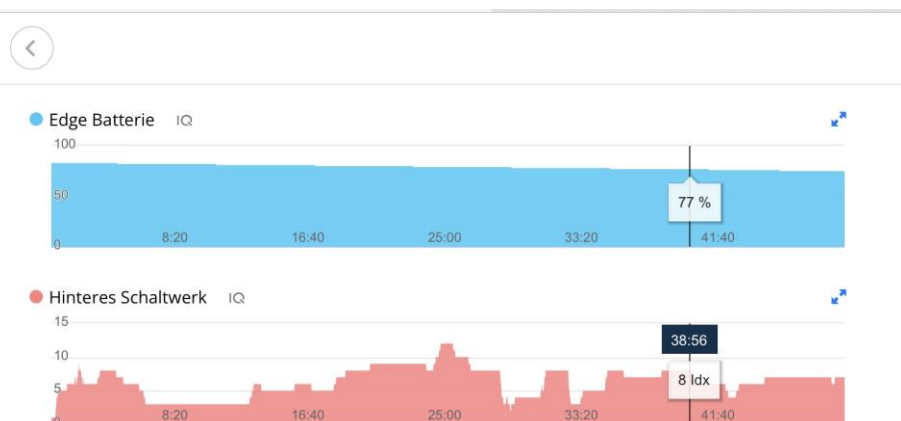
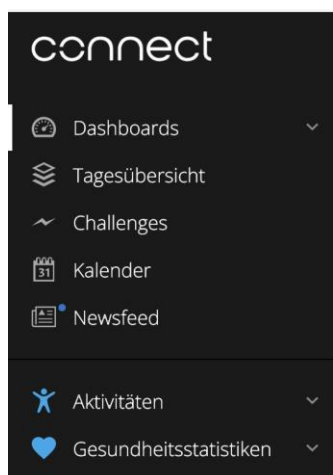
- Battery Status in %
- Shift index for front and rear

These options must be enabled in the setup.

The readiness to log these values is confirmed by a small green dot at battery or derailleur display:

### ATTENTION:

**After activation in the setup, the device must be restarted!**



## Settings for 2 additional activity profiles:

In the setup - in addition to the default layout - 2 additional activity profiles can be defined, for which own values for gear shifting and Varia use can be set.

For automatic assignment, please select the sport that is set on the Edge for the desired profile. e.g. Road, Commuting, Mountain Bike, Indoor etc....

If INDOOR is assigned to the selected activity profile, the layout also changes automatically:



The data of the standard layout that is not relevant for indoor use is hidden and other data is inserted.

Thus, a graph for heart rate and power/cadence over the last 4 minutes is shown in the lower area.

The height of the graphs depends on the settings for the maximum value on the display for HR, power or cadence.

### IMPORTANT:

After settings are done for optional sports in the setup, the device must be restarted!

## Setup:

The setup in Garmin Connect Mobile is shown below. The setup in Garmin Express is practically identical!

As stated at the beginning, you will find an explanation of how the setup is called:

<https://forums.garmin.com/developer/connect-iq/w/wiki/14/changing-connect-iq-app-settings>

### Lower area of the setup:

If optional sports have been defined, the values set there for power or cadence, Varia use and gear shifting are used. However, the respective sport must correspond to the selected activity profile.

Indoor is a special type of sport, because the layout is automatically adjusted.

=====

Optional Activity Sport 1:

no optional

show power gauge? (or  
Cadence)

I use Varia Radar

Derailleur: 0...don't show,  
1...mechanical,  
2...electric, 3...el.  
front+rear

mech. Gear: wheel  
circumferenc cm; teeth of  
chainring; smallest cog;  
next; next; biggest cog;

=====

Optional Activity Sport 2:

no optional

show power gauge? (or  
Cadence)

I use Varia Radar

Derailleur: 0...don't show,  
1...mechanical,  
2...electric, 3...el.  
front+rear

mech. Gear: wheel  
circumferenc cm; teeth of  
chainring; smallest cog;  
next; next; biggest cog;



## APPENDIX:

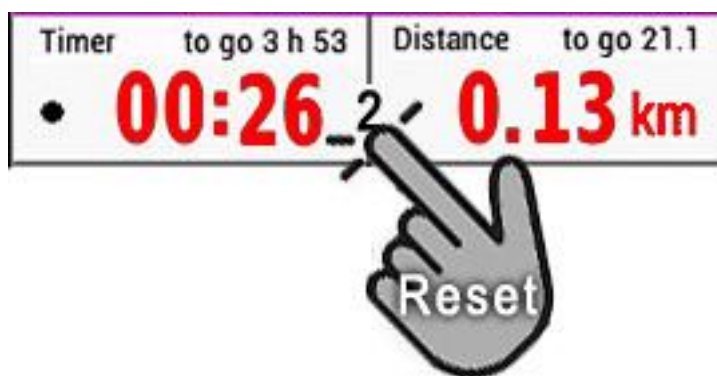
### Newly introduced features:

#### LAP function:

After a lap event the figures for Timer, Distance, avg. Speed and avg. RPM toggle between elapsed and lap data (red) every 10 seconds.

To reset/discard the lap function: tap (exactly) on the lap counter in the middle. (This has no effect on Garmin's lap data recording!)

You can disable this LAP function in the setup



#### VAM30s:

**Velocità ascensionale media**, translated in English means "average ascent speed".

VAM30s shows the calculated ascent per hour of the last 30 seconds. It's displayed as m/h or feet/h, depending on your settings.

My VAM30s does not show VAM for downhill (negative VAM) - simply because VAM is a value for estimating your climb capabilities - and on the other hand it reacts much faster after downhill/uphill changes.

#### Edge internal temperature:

In settings you can choose to display the internal Edge temperature or temperature from weather station. For the internal temperature you can set a temperature correction if you think, your Edge is wrong by some degrees.

##### NOTE:

The Edge temperature can only be updated at an interval of 5 minutes. It is a restriction given by CIQ SDK.

If you turn on your Edge it might be that there is no temperature available yet. You simply have to wait!

## Disable Notification Envelope:

You can completely disable the display of the notification's envelope in the setup. If you enable the envelope in setup, you can switch between full display and reduced display of the envelope by tapping on it.

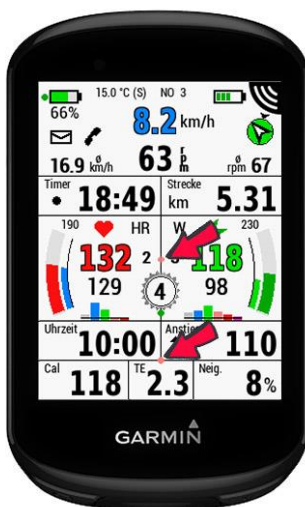
## RADAR Target-vehicle Speed

You can show the target vehicle speed in two ways:

In the setup chose:

- 0 ... don't show at all
- 1 ... show in TE field
- 2 ... show as big overlay

Note: there is a orange dot on screen proving that the datafield will show the speed. Without orange dot - no such speed will be shown.



orange dot if option 2 was chosen

orange dot if option 1 was chosen

(Pictures show Edge 530, but it is the same with Edge 1030 and 1040!)

Show Speed Option 1

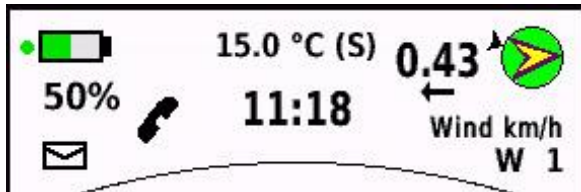
Show Speed Option 2



## Display of distance and direction to the starting point

By tapping on the GPS compass rose, the direction arrow changes from north to the direction to the starting point.

The airline distance to the starting point is also displayed in the set unit of measurement (km or mi).



As an alternative you can tap on the Ascent field to change for direction to the starting point:



## Swap RPM for Clock time

See picture above!

Swap RPM for Clock time in the settings.

## Display Pedal Balance for dual sided power meters

Dual sided power meters are detected automatically.

In the settings you can chose:

0...don't show balance

1...show percent numbers only

2...show percent numbers and a graphical display



The appearance of the power split percentage numbers is different according to the settings of gear shifting! (see pictures above)

A green area can be selected for the graphical display in which the user wants to try to maintain their balance. The range can be selected from left and right 2% to left and right 10%.

The default value is 5% to each side, which results in a green bar width of 10%.

## Summary of TAP functions on your EDGE:

Tap to switch between Edge intern temperature (E) or weather station's temperature (S)

Tap to switch North direction for direction to starting point

Tap to switch between full and reduced display of the envelope

Tap to show a pop up for time and distance to go and ETA

Tap to reset the Lap function

Tap to switch between avg Power and NP

Tap to switch Ascent for direction to starting point

Tap to switch between kcal and elevation

Tap to switch between TE and VAM30s

The diagram shows a Garmin Edge cycling computer screen with the following data fields and tap functions:

- Temperature:** 32.7 °C (E) - Tap to switch between Edge intern temperature (E) or weather station's temperature (S)
- GPS:** GPS icon - Tap to switch North direction for direction to starting point
- Wind:** Wind km/h S - Tap to switch North direction for direction to starting point
- Speed:** Geschw. 16.7 km/h - Tap to switch between full and reduced display of the envelope
- Timer:** noch 2h42 - Tap to show a pop up for time and distance to go and ETA
- Dist.:** noch 50.8 - Tap to show a pop up for time and distance to go and ETA
- Time:** 15:55 - Tap to show a pop up for time and distance to go and ETA
- Distance to go:** 4.98 km - Tap to show a pop up for time and distance to go and ETA
- Power:** 119 - Tap to switch between avg Power and NP
- Ascent:** 32 - Tap to switch Ascent for direction to starting point
- Height:** 200 m - Tap to switch between kcal and elevation
- VAM30s:** 13 - Tap to switch between TE and VAM30s

**How to set the datafield to your screen:**

First you have to download the datafield from the IQ Store to your device using **Garmin Express** or **Garmin Connect IQ Mobile**.

Here is a step by step guidance for EDGE 1040, starting at the Home Screen:

