SIGMA GERMANY

EN

GPS TRACK NAVI

ANT+

POWER COMPATIBLE

SPEED DIGITAL WIRELESS

CAD DIGITAL WIRELESS

HRM DIGITAL WIRELESS

DATA LOG

IAC+ ALTI BAROMETRIC

TRAINING DATA ANALYSIS

PC MAC READY

ROX 10.0 GPS

BIKE COMPUTER

Contents

1 Functions and packaging contents

1.1 Foreword

Thank you for choosing a SIGMA SPORT bike computer. Your new ROX 10.0 GPS will be a loyal companion for your bike trips for years to come. To familiarize yourself with and learn how to use the many functions of your new bike computer, please read these operating instructions carefully.

SIGMA SPORT wishes you hours of fun and enjoyment with your ROX 10.0 GPS.

The ROX 10.0 GPS is a GPS bike computer that provides you with a broad range of information both during and after your trips:

- Speed, time, distance, power and position, altitude, incline, heart rate, intensity zones, and much more.
- Transmission of all information to the PC so that you can simply and graphically view your tour data.
- Planning tracks with DATA CENTER 3.1.

1.2 Packaging contents

<table>
<tr><td>ROX 10.0 GPS Black or white bike computer
  </td><td>CR2450 twist-lock bracket
  </td></tr>
<tr><td>USB charger (5V, 1A)
  </td><td>USB type A to micro-B cable
  </td></tr>
<tr><td>Attachment materials</td><td>ROX 10.0 GPS quick start guide</td></tr>
<tr><td colspan="2">DATA CENTER 3.1 on CD (including operating instructions)</td></tr>
</table>

1.2.1 Optional accessories

ANT+ speed transmitter* 	ANT+ cadence transmitter* 
ANT+ heart rate transmitter* 	COMFORTEX+ textile belt* 
Attachment materials*	

* In complete ROX 10.0 GPS with transmitters package only

1.3 ROX 10.0 GPS functions

The ROX 10.0 GPS is a versatile bike computer. Thanks to its five navigation functions, nine bicycle, nine heart rate, eight performance, and five altitude measuring functions, as well as several other functions, the ROX 10.0 GPS is the perfect companion for any ambitious athlete. To measure the cadence, power, and heart rate, you need the appropriate accessories (depending on the set).

All current values – current speed, current altitude, current heart rate, current cadence, and current incline – can be simply and permanently read from the large display.

The ROX 10.0 GPS has classic bike computer features such as three bikes that can be switched between, a configurable automatic start/stop function, and three different altitude calibration options.

1.3.1 ANT+ speed transmitter (optional accessory)

Use the ANT+ speed transmitter to precisely determine your speed and trip distance whatever the GPS signal quality. An ANT+ speed transmitter can also be used to automatically detect different bikes.

1.3.2 ANT+ heart rate transmitter (optional accessory)

Use the ANT+ heart rate transmitter to precisely tailor your training to different heart rate zones.

1.3.3 ANT+ cadence transmitter (optional accessory)

The ANT+ cadence transmitter enables you to see your cadence at all times. The cadence transmitter is also required to calculate your power using the power formula.

1.3.4 GPS sensor

The integrated GPS sensor determines your current speed and distance ridden. When the ROX 10.0 GPS is switched on, it automatically searches for GPS satellites. When indoors, you may not be able to receive GPS satellite signals, or those received may be weak. In such cases, move outdoors to obtain optimum satellite reception or use the optionally available ANT+ speed transmitter.

1.3.5 Favorites

By individually programming the available 'Favorites A and B', you can reduce the amount of 'clicking' during your trip.

In the favorites, store the trip functions that are of importance to you and which you want to see during your trip. You can store up to 28 settings per favorite.

Distracting searches for information can therefore be avoided. Using your personally compiled functions enables you to fully concentrate on your ride.

1.3.6 PC interface

The ROX 10.0 GPS can be connected to a PC. The micro USB cable supplied can be used to charge the ROX 10.0 GPS and transfer data between your PC and the ROX 10.0 GPS.

You can also configure the settings for the ROX 10.0 GPS on the PC and then transmit them to the bike computer. This enables you to quickly and easily configure your ROX 10.0 GPS without having to navigate through all the menu levels. Before starting, install the Data Center software from the CD supplied. Keep an eye out for regular updates online.

2 Attaching the ROX 10.0 GPS and initial use

2.1 Attaching the bracket

- Attachment to the handlebars or stem.
- Remove the yellow foil.
- The bracket can be attached using either cable ties (permanent attachment) or the O-rings.

Detailed attachment information can be found in the quick start guide provided.

2.2 Before initial use

Note

Fully charge the ROX 10.0 GPS:
Charge the device using the micro USB cable and the USB port on your PC. Alternatively, use the USB charger supplied. The process takes approximately three hours.

To charge the device, plug the USB cable into the micro USB port on the back of the ROX 10.0 GPS and the USB port on your PC or the USB charger. Only charge the battery at an ambient temperature of 0 to 40°C. Never charge the ROX 10.0 GPS if the crossed-out battery icon is shown on the display. Let the device cool down first!

2.3 Initial use

1. Press and hold the ENTER button for five seconds.
2. Press ENTER to change the language.
3. Now press the ▲- and +▼ buttons to select your desired language then press ENTER.
4. Configure the remaining settings using the same principle.

2.4 Pairing the sensors with the ROX 10.0 GPS

To use the sensors, these must be paired with the ROX 10.0 GPS.

Information on how to pair the sensors can be founding under 'ANT+ pairing' in section "10.3 Bike 1–3 & totals".

2.5 Synchronizing the sensors

To synchronize the sensors, the ROX 10.0 GPS must be switched on and in training mode.

Once synchronization is complete, the respective values appear on the ROX 10.0 GPS's top display segment in 'Bikecomputer' view mode.

Note:

The ROX 10.0 GPS has been designed for use with up to three bikes. You have already used the pairing menu to assign the sensors to a specific bike (bike 1, 2, or 3). You must manually select the bike that you are riding (default: bike 1).

This can be done as follows:

- Open the short menu (simultaneously press the two top buttons – BACK and ENTER)
- Press ▲ - or + ▼ to go to 'Bike selection'
- Press ENTER
- Press ▲ - or + ▼ to select the relevant bike
- Press ENTER to confirm
- Press BACK to exit the short menu

IMPORTANT:

The ROX 10.0 GPS only displays values for paired sensors for which you have chosen a bike.

2.5.1 Synchronizing the speed

There are two options for synchronizing the speed:

- Start cycling – the receiver usually synchronizes with the sensor after five wheel rotations.
- Turn the pedals until the current speed appears on the display.

2.5.2 Synchronizing the cadence

There are two options for synchronizing the cadence:

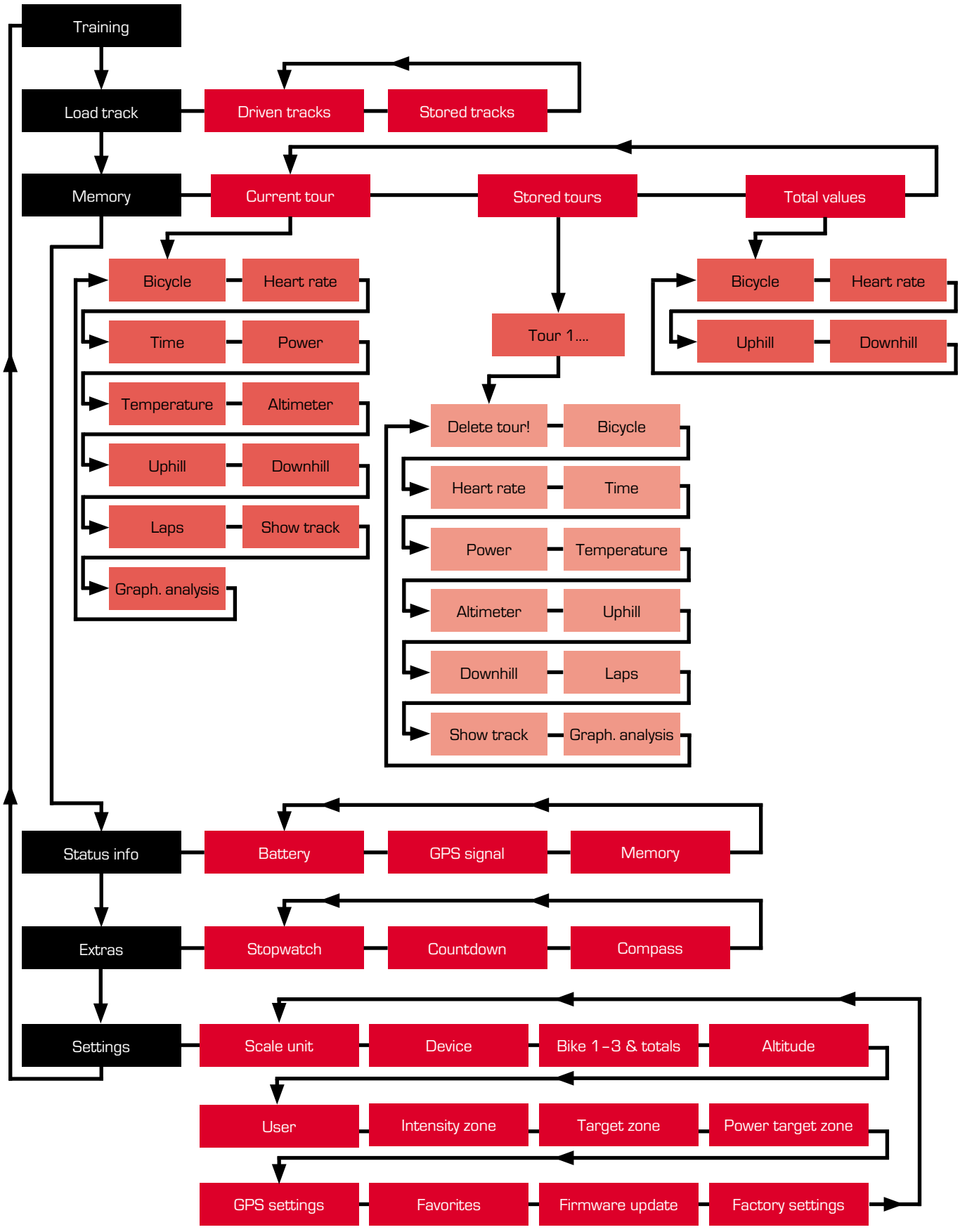
- Start cycling – the receiver usually synchronizes with the transmitter after five pedal rotations.
- Turn the pedals until the current cadence appears on the display.

2.5.3 Synchronizing the chest belt

Put on the chest belt and moisten the sensor areas. Move into the vicinity of the ROX 10.0 GPS or get onto your bike. The ROX 10.0 GPS usually synchronizes with the chest belt in less than 10 seconds.

The current heart rate then appears on the display.

3 Menu tree


Training
Load track
Driven tracks
Stored tracks
Memory
Current tour
Stored tours
Total values
Bicycle
Heart rate
Time
Power
Temperature
Altimeter
Uphill
Downhill
Laps
Show track
Graph. analysis
Tour 1....
Delete tour!
Bicycle
Heart rate
Time
Power
Temperature
Altimeter
Uphill
Downhill
Laps
Show track
Graph. analysis
Bicycle
Heart rate
Uphill
Downhill
Status info
Battery
GPS signal
Memory
Extras
Stopwatch
Countdown
Compass
Settings
Scale unit
Device
Bike 1–3 & totals
Altitude
User
Intensity zone
Target zone
Power target zone
GPS settings
Favorites
Firmware update
Factory settings

4 Operating concept

4.1 ROX 10.0 GPS navigation principle

The ROX 10.0 GPS has up to seven menu levels. When navigating through the ROX 10.0 GPS menus and submenus, you should always use the tree diagram in section "3 Menu tree" as a guide.

A continually visible navigation level makes ROX 10.0 GPS menu navigation far easier for the user. The possible functions of the BACK and ENTER buttons are displayed in this level to:

- Go to the next level down (ENTER/SELECT/EDIT)
- Go back to the next level up (BACK)
- Go to the next editable position (NEXT)
- Activate or deactivate a function (ON/OFF)
- Scroll forward or backward within the menu levels (and)
- Confirm/save a setting (SAVE).

4.2 Button functions

Shortcut
Only in training mode

Simultaneously press the BACK and ENTER buttons to open the short menu.

Back/Stop button

Press this button to exit the submenus or stop a running data log.

Pressing and holding the button in training mode zeros all data and stores the current trip.

Enter button

Press this button to access the submenus or switch the top display.

Press and hold the button to switch the ROX 10.0 GPS on and off.

Start/Lap button

Press this button to start a data log. During a data log you can also press this button to start a new lap.

Mode button

Press this button to switch between the 'Bikecomputer', 'Track View' and 'Altitude View' modes in the training menu.

Minus button

Scroll backward in a menu level ...

... or lower/change the value displayed ...

... or zoom out in Track/Altitude View.

Backlight on/off

Simultaneously press the START and MODE buttons.

Plus button

Scroll forward in a menu level ...

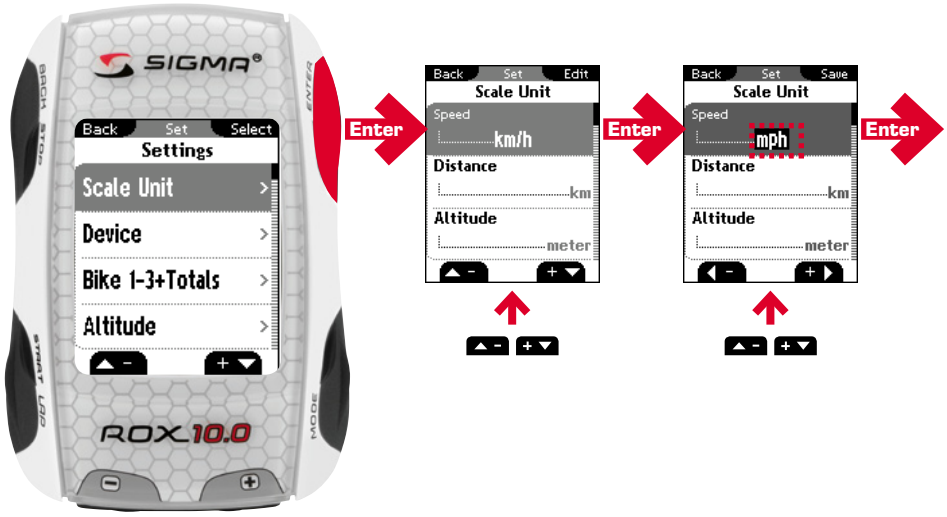
... or increase/change the value displayed ...

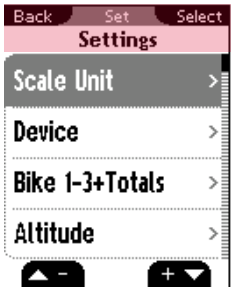
... or zoom in in Track/Altitude View

4.3 Operating concept for the remaining menu

The settings are always made using the same principle:

Press the − and + buttons to select the desired menu and open this by pressing ENTER. Navigate to the respective unit and press ENTER to edit it. The value to be edited has a black background and can be modified by pressing the − and + buttons. Save your changes by pressing ENTER.

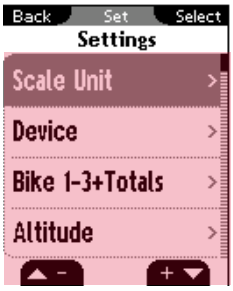




4.3.1 Top display segment

The top line of the upper display segment displays different information depending on which menu you are in. The possible functions of the BACK and ENTER buttons are displayed.

The second line of the top display segment always shows which menu/submenu you are currently in.



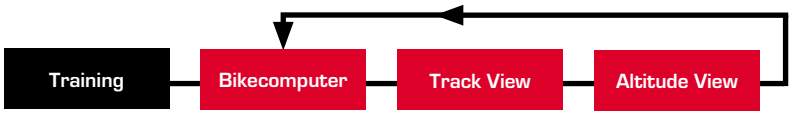
4.3.2 Bottom display segment

The submenus and programmable values are displayed in the bottom display segment.

Press the − and + buttons to select the desired menu/submenu and open this by pressing ENTER.

4.4 Training menu operating concept & display structure

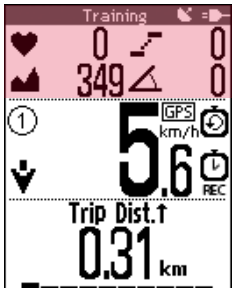
The ROX 10.0 GPS's training menu is divided into three view modes:



While training, you can track your current training parameters using the three modes 'Bikecomputer', 'Track View' and 'Altitude View'. Press the MODE button to switch between the different modes. Here, you will find all the preset values and the values specified in the favorites.

4.4.1 'Bikecomputer' view mode

The 'Bikecomputer' view mode is divided into three display segments.



4.4.1.1 Top display segment

The first line displays the following values:

 Battery status indicator or

 Battery charging

 GPS signal available

Beneath these, four current values are displayed:

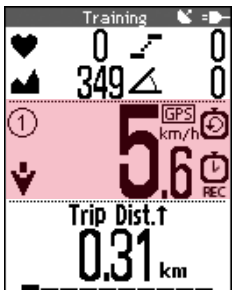
 Current heart rate (only if you are wearing the chest belt)

 Current cadence (only if the cadence transmitter has been attached)

 Current altitude (permanent)

 Current incline (permanent)

Press the ENTER button to zoom in so that only one of the four functions is displayed.



4.4.1.2 Middle display segment

This displays your current speed plus other icons:

Bike I/bike II/bike III icon

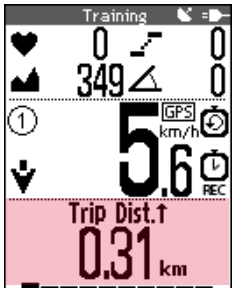
Speed comparison on the basis of the average speed

GPS — Indicates that the speed signals are coming from the GPS signal

km/h — Preset unit (km/h or mph)

REC — Exercise time active

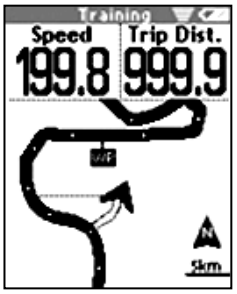
Training countdown active (see section "10.2 Device")



4.4.1.3 Bottom display segment

This segment displays up to 10 individually programmable values (see section "10.10 Favorites").

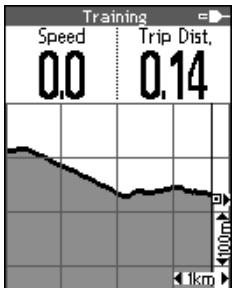
Press the ▲- and +▼ buttons to display the individual values.



4.4.2 'Track View' mode

In 'Track View' mode, up to six individually programmable values (see section '10.10 Favorites') are displayed in the upper display segment. Press the ENTER button to navigate through the values.

Your route is graphically displayed in the bottom segment. Press the ▲- and +▼ buttons to zoom the display.



4.4.3 'Altitude View' mode

In 'Altitude View' mode, up to six individually programmable values (see section '10.10 Favorites') are displayed in the upper display segment. Press the ENTER button to navigate through the values.

Your altitude profile is graphically displayed in the bottom segment. Press the ▲- and +▼ buttons to zoom the display.

5 Training with the ROX 10.0 GPS

5.1 Favorites A + B

The functions/values that are most important to you can be stored under favorites A and B. This enables you to quickly and easily access the functions you want (speed, altitude, heart rate, cadence, incline, and the favorite functions) while cycling. Up to 28 functions can be stored in each of the favorites.

The two favorites A and B are preset with certain functions but cannot be changed during a training session (see section "10.10 Favorites"). Ten functions per favorite can be specified for the 'Bikecomputer' view mode, and six for each of the 'Track View', 'Altitude View' and 'Lap Message' view modes.

Favorites A and B are switched between using the short menu.

Preset functions for favorite A in 'Bikecomputer' view mode:

1. Trip distance
2. Exercise time
3. Average speed
4. Max. speed
5. Max. incline uphill
6. Trip distance uphill
7. Altitude ascent
8. Altitude profile
9. Temperature
10. Time

Preset functions for favorite B in 'Bikecomputer' view mode:

1. Trip distance
2. Exercise time
3. Lap time
4. Average speed
5. Power
6. Average heart rate
7. Intensity zone
8. Altitude ascent
9. Temperature
10. Time

Preset functions for favorite A in 'Track View' mode:

1. Current speed
2. Trip distance
3. Time of arrival
4. Distance to destination
5. GPS accuracy
6. Driving direction

Preset functions for favorite B in 'Track View' mode:

1. Current speed
2. Trip distance
3. Current heart rate
4. Current power
5. GPS accuracy
6. Driving direction

Preset functions for favorite A in 'Altitude View' mode:

1. Current speed
2. Trip distance
3. Incline
4. Current altitude
5. Altitude ascent
6. Trip distance uphill

Preset functions for favorite B in 'Altitude View' mode:

1. Current speed
2. Trip distance
3. Incline
4. Current rise rate
5. Altitude ascent
6. Max. altitude

Preset functions for favorite A in 'Lap Message':

1. Lap time
2. Lap number
3. Avg. HR per lap
4. Empty
5. Lap distance
6. Avg. lap speed

Preset functions for favorite B in 'Lap Message':

1. Avg. HR per lap
2. Avg. Power per lap
3. Lap time
4. Empty
5. Lap distance
6. Avg. lap speed

5.2 Calibrating the altitude IAC+

The ROX 10.0 GPS's altitude measurement is determined on the basis of the barometric air pressure. Any change to the weather means a change to the air pressure, which can lead to a change to your current altitude. To offset these changes in air pressure, you must enter a reference altitude into the ROX 10.0 GPS (process known as calibration).

The ROX 10.0 GPS offers three types of calibration (only one has to be used):

1. Home altitude 1–3

   The home altitude is the altitude of your start location. You can set three different home altitudes.

2. Current altitude

   The current altitude is the altitude at your current location. The current altitude is used if you are out on your bike and altitude information is provided.

3. Air pressure at sea level

   If you are at an unknown altitude, you can enter the 'air pressure reduced to sea level' to calculate the current altitude. The air pressure reduced to sea level can be found online (e.g. www.meteo24.de), in the daily newspaper, or at airports.

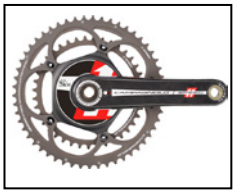
Altitude points list

To prevent weather-induced changes of altitude, the device stores 'altitude measurement points'. Every time the user calibrates the barometric altitude, the ROX 10.0 GPS stores the location. Whenever the user returns to this location (within a 30 m radius), the altitude is automatically calibrated.

The altitude measurement points from the IAC+ altitude calibration are stored in the altitude points list (see "10.4 Altitude"). You can also delete individual altitude measurement points from this list.

CAUTION:

The air pressure at your weather station is the air pressure at the measurement site and not the air pressure reduced to sea level! An opening below the button on the ROX 10.0 GPS is used to measure the air pressure. This opening must not be covered. Do not insert sharp objects into the measurement hole!



5.3 Power calculation or measurement

Note

The ROX 10.0 GPS can calculate (!) the power on the basis of several parameters or use the power values sent via an ANT+ compatible power meter. Please choose between power meter and formula under Settings/Device/ Power Meter or Formula.

5.3.1 Power calculation

The power is calculated (!) on the basis of the speed, cadence, incline, bike weight, bike type, rider position, body weight, shoulder width and body height. The wind speed is not considered.

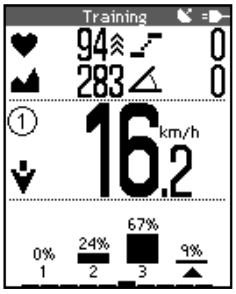
The power can only be calculated in conjunction with the cadence.

The power values displayed are approximations and are calculated presuming an average wind speed and average road conditions.

5.3.2 Power measurement

The ROX 10.0 GPS is furthermore fully compatible with ANT + compatible power meters (e.g. SRM power meter – www.srm.de). These power meters measure the power using forces e.g. on the pedals and are therefore independent of external influences.

For a full list of compatible devices, visit www.thisisant.com/directory



5.4 Intensity zones

The arrow below the bar chart indicates which intensity zone you are currently training in. Furthermore, an intensity distribution is also calculated and displayed even during your training session.

Athletes can set their intensity zones themselves (see section "10.6 Heart rate intensity zones"). In the default setting, the intensity zones are based on common German definitions of the training zones:

- Intensity zone 1 = 60–70% HRmax (e.g. BE1)
- Intensity zone 2 = 70–80% HRmax (e.g. BE1/2)
- Intensity zone 3 = 80–90% HRmax (e.g. BE2 or development zone)
- Intensity zone 4 = 90–100% HRmax (e.g. CE or peak zone)

5.5 Training

5.5.1 Using the short menu to select training settings

You can use the short menu to select the following basic settings for your training:

- Altitude
- Favorites A or B
- Load track
- Track settings (reverse track (on/off), same track back (on/off), and track direction (driving direction/north)
- Target zone alarm
- Auto pause (on/off)
- Altitude (home altitude 1–3, sea level calib., manual calib.)

  Information about altitude settings can be found in section "5.2 Calibrating the altitude IAC+".
- Bike selection
- Calibrate compass

To access the short menu, simultaneously press the BACK and ENTER buttons in training mode.

Press the ▲− and +▼ buttons to select the desired functions and open or confirm these by pressing ENTER.

Functional description of track settings:

1. Reverse track (on/off)

   Use this function to reverse the direction of a tour that you have stored. If, for example, you have downloaded a tour to your ROX 10.0 GPS from the Internet and have switched the start and finish locations, you can directly reverse the tour on the ROX 10.0 GPS. If you do not do this, your device will indicate that you are riding in the wrong direction.

Note

'Reverse track' must be activated before a track is loaded to reverse the track!

2. Same track back (on/off)

   Use this function to return along the same track that you have just ridden.

3. Track direction (driving direction/north)

   Use this function to define the type of direction indication. Driving direction means that the route is always in front of you. North means that the track is always pointing north and the arrow rotates on the display in accordance with your ride direction. This means that if you are cycling south, the arrow on the display will point down.

5.5.2 Starting logs

To start logs for your training session, press the START button. A brief confirmation message 'Exercise time started' is displayed and the 'stopwatch active' icon appears in the 'Bikecomputer' view mode.

5.5.3 Stopping/ending logs

To end logs for your training session, press the STOP button. A brief confirmation message 'Exercise time stopped' is displayed and the 'exercise time active' icon disappears from the 'Bikecomputer' view mode.

You can continue the log at any time by pressing the START button.

5.5.4 Storing a log

To zero all values and store the log, press and hold the STOP button for five seconds.

The tour evaluation data can be found under the menu item 'Memory/Stored Tours'.

5.5.5 Auto pause

The auto pause function can be activated and deactivated in the short menu.

Auto pause function activated:

You can start training as soon as you have pressed Start. The ROX 10.0 GPS waits until it can record a speed of more than 2.2 km/h before starting to record the training session. From then on, the activated auto pause function ensures that the exercise time pauses for speeds of less than 2.2 km/h ('Auto Pause' appears on the display) and restarts at speeds of over 2.2 km/h (auto start).

Note:

If you have stopped the device manually, it will no longer automatically restart; you must also manually restart it.

Auto pause function deactivated:

The exercise time starts as soon as you have pressed START and stops when you press STOP. This enables you to record your heart rate even when resting, for example.

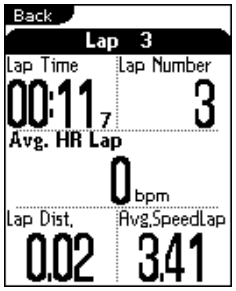
Note:

The exercise time is linked to the logging. If the exercise time is stopped, no data is recorded for further analysis. If the auto pause function is activated, the exercise time is identical to the trip time. If the auto pause function is deactivated, the trip time and the exercise time differ.

5.5.6 Displaying training parameters

During the training session your current training parameters can be displayed using the three modes 'Bikecomputer', 'Track View' and 'Altitude View' and the preset values or values defined in the favorites.

All training parameters for the current tour are stored under the menu item 'Memory/Current Tour' and can be used to evaluate the training session after the tour.



5.5.7 Lap Message view

You can use the lap function to start a new lap (or interval) after covering a certain distance or at a certain position. This enables you to compare your performance on different sections with similar distances.

A training log must be started for the lap function.

Press the LAP button to end the current lap and automatically start a new one. The 'Lap Message' view appears for eight seconds, displaying all the key values for the last lap. The display then jumps back to the previous view mode.

The preset functions can be changed (see "10.10 Favorites").

Note

The analysis data for the individual laps can be found under the menu path 'Memory/Current Tour or Stored Tours (section "7.3.9 Tour data – laps").

5.6 Training functions

5.6.1 Zoom function in Track View and Altitude View

Press the ▲- and +▼ buttons to select the optimum zoom setting.

5.6.2 Same track back function

With the 'same track back' function, the ROX 10.0 GPS safely returns you to your start location.

5.6.3 Track found message

The 'track found message' appears if you ride along a previously loaded track.

5.6.4 Off-track alarm

The 'off-track alarm' helps you stay on route and is triggered if you leave it.

5.6.5 Wrong direction message

The ROX 10.0 GPS detects if you are riding in the wrong direction and indicates this.

If a tour has been incorrectly stored (start and end points mixed up), you can use the 'Reverse track' function (see section "5.5.1 Using the short menu to select training settings") to directly reverse the tour on the ROX 10.0 GPS.

Note

'Reverse track' must be activated before a track is loaded to reverse the track!

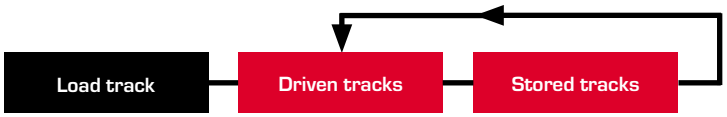
5.6.6 Waypoint alarm

The waypoint alarm reminds users that they have reached an interesting waypoint that was marked in advance.

5.7 Analysis

The analyses for the current tour, stored tours, and total values can be found under the menu item 'Memory'.

6 Load track



This function enables you to select, start, display, and delete driven or stored tracks.

Note

Information on the memory capacity of the tracks and points can be found in section "6.1.1 Track data memory".

6.1 Memory capacity for track data

The memory for the training sessions can store up to 100 training files. The maximum storage period also depends on the log interval selected.

The log times in hours per log interval can be seen in the table:

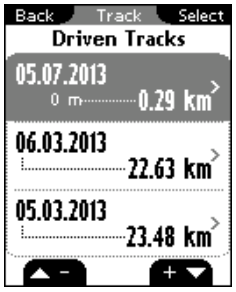
Log interval	Log time in hours
1 sec	8:12:00
2 sec	16:25:00
5 sec	41:04:00
10 sec	82:08:00
20 sec	164:16:00
30 sec	246:24:00

The log interval can be set at the menu path 'Settings/Device' (see section "10.2 Device").

6.1.1 Track data memory

The track memory can store up to 50 tracks with a total of up to approx. 42,000 track points.

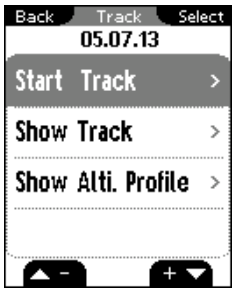
A maximum of 384 waypoints can be stored. You can also mark special points of interest (POI) located near the route as waypoints.



6.2 Driven tracks

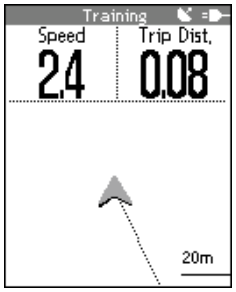
This area displays all the tracks you have already cycled.

Information on how to delete driven tracks can be found in section "7.2 Stored tours".



After selecting a track by pressing the ENTER button, you have three options:

- Start track
- Show track
- Show altitude profile

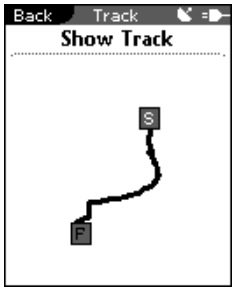


6.2.1 Start track

Select 'Start track' to cycle the selected track.

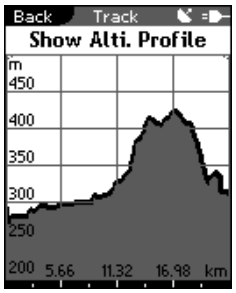
Once you have selected 'Start track' by pressing the ▲- and +▼ buttons and confirmed your selection by pressing ENTER, the track starts. The display automatically switches to the training menu in 'Track View' mode. Follow the route shown on the display.

Press the ▲- and +▼ buttons to zoom in and out.



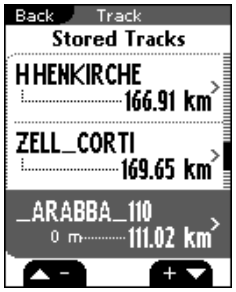
6.2.2 Show track

Select 'Show track' to display the route for the selected tour. Press the ▲- and +▼ buttons to zoom in and out.



6.2.3 Show altitude profile

Use 'Show altitude profile' to view a graphical representation of the route's altitude profile.



6.3 Stored tracks

Note

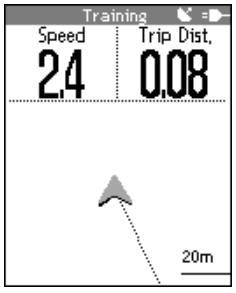
Information on the memory capacity for tracks and waypoints can be found in section "6.1.1 Track data memory".

Here, you can find your tracks that you have transferred to the ROX 10.0 GPS with the help of SIGMA Data Center.

Data Center enables you to download, modify, and store tracks from other users or plan your own tracks on an interactive map. These tracks can then be loaded onto the ROX 10.0 GPS. Further information about Data Center can be found in the Data Center instructions.

After selecting a track by pressing the ENTER button, you have four options:

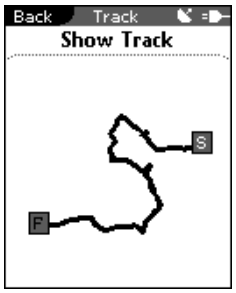
- Start track
- Show track
- Show altitude profile
- Show details



6.3.1 Start track

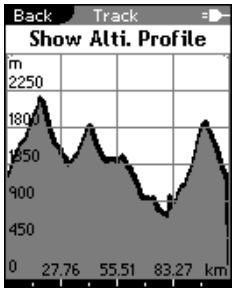
Select 'Start track' to cycle the selected track.

Once you have selected 'Start track' by pressing the and buttons and confirmed your selection by pressing ENTER, the track starts. The display automatically switches to the training menu in 'Track View' mode. Follow the route shown on the display.



6.3.2 Show track

Select 'Show track' to display the route for the selected tour.



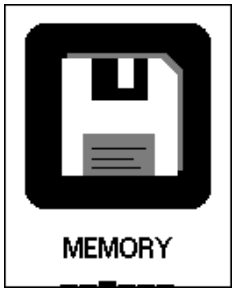
6.3.3 Show altitude profile

Use 'Show altitude profile' to view a graphical representation of the trip's altitude profile.

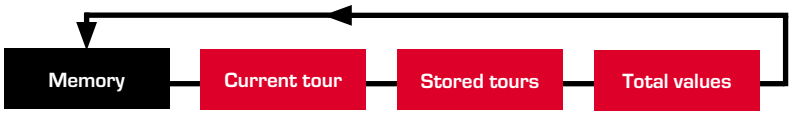
6.3.4 Show details

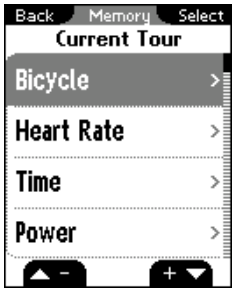
Use this area to find the following detailed data for the selected tour:

- Trip distance
- Altitude ascent ↑



7 Memory





7.1 Current tour

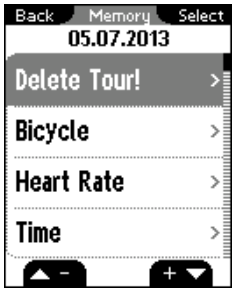
This area provides all values for your current tour. These are divided into 11 sub-items (see section "7.3 Stored data").

7.2 Stored tours

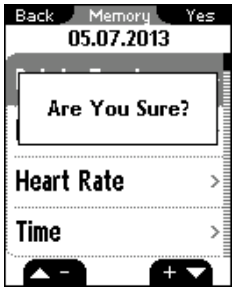
This area provides an overview of your stored tours.

Use the ▲- and +▼ buttons to select the tour for which you want to view the data then press ENTER.

All the values for the selected tour are displayed. These are divided into 11 sub-items (see section "7.3 Stored data"). You will also find the menu item 'Delete tour!'.



You can also delete individual tours. Press the ▲- and +▼ buttons to select 'Delete tour!' then press ENTER.



The question 'Are you sure?' appears. Press the ENTER button again to delete the tour.

7.3 Stored data

All trip data is individually stored per trip.

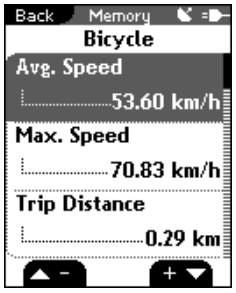
The data is divided into the following 11 areas:

1. Bicycle
2. Heart rate
3. Time
4. Power
5. Temperature
6. Altimeter
7. Uphill
8. Downhill
9. Laps
10. Show track
11. Graph. analysis

Note:

The values (heart rate, power, work, cadence) can only be determined when using the ANT+ heart rate transmitter or ANT+ cadence transmitter.

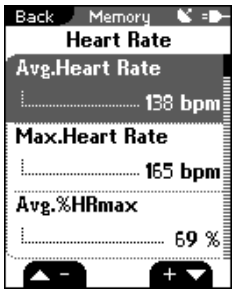
For a full list of compatible devices, visit www.thisisant.com/directory



7.3.1 Tour data – bicycle

This area displays the following bike values:

- Average speed
- Max. speed
- Trip distance
- Average expansion
- Average cadence
- Max. cadence

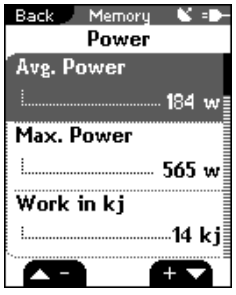


7.3.2 Tour data – heart rate

- Average heart rate
- Max. heart rate
- Average % of the max. heart rate
- Calories
- Time in target zone
- Time at intensity 1
- Time at intensity 2
- Time at intensity 3
- Time at intensity 4

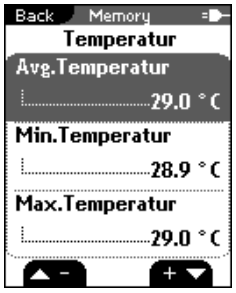
7.3.3 Tour data – time

- Start date
- Start time
- Exercise time
- Trip time



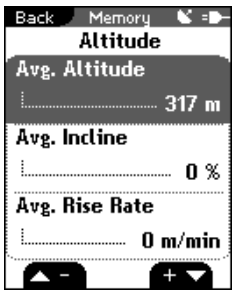
7.3.4 Tour data – power

- Average power
- Max. power
- Work (kj)
- Average power in W/kg
- Time in target zone



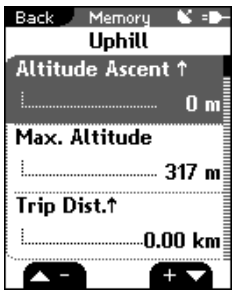
7.3.5 Tour data – temperature

- Average temperature
- Min. temperature
- Max. temperature



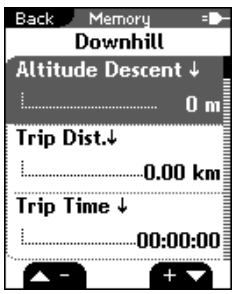
7.3.6 Tour data – altimeter

- Average altitude
- Average incline
- Average rise rate



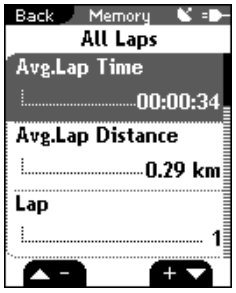
7.3.7 Tour data – uphill

- Altitude ascent ↑
- Max. altitude
- Trip distance ↑
- Trip time ↑
- Average speed ↑
- Average rise rate ↑
- Max. rise rate ↑
- Average incline ↑
- Max. incline ↑
- Average expansion ↑



7.3.8 Tour data – downhill

- Altitude descent ↓
- Trip distance ↓
- Trip time ↓
- Average speed ↓
- Average rise rate ↓
- Max. rise rate ↓
- Average incline ↓
- Max. incline ↓
- Average expansion ↓

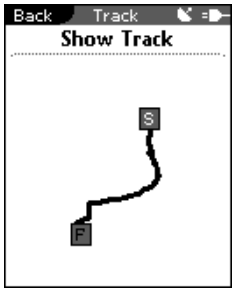


7.3.9 Tour data – laps

- Average lap time
- Average lap distance
- Lap
- Lap 01, 02 ..... (average speed, distance)

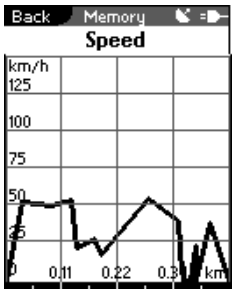
The individual values for each lap can be found in the respective submenus:

1. Lap time
2. Time since start
3. Lap distance
4. Distance since start
5. Avg. lap speed
6. max. lap speed
7. Avg. heart rate per lap
8. Max. heart rate per lap
9. Calories per lap
10. Avg. lap cadence
11. Max. lap cadence
12. Avg. lap power
13. Max. lap power
14. Avg. lap altitude
15. Max. lap altitude
16. Lap altitude ↑
17. Lap altitude ↓
18. Avg. incline ↑
19. Avg. incline ↓



7.3.10 Tour data – show track

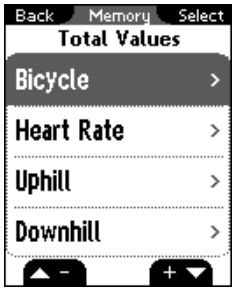
This area shows your tour graphically.



7.3.11 Tour data – graph. analysis

This area displays a graphical analysis of the following values:

- Speed
- Heart rate
- Cadence
- Power
- Altitude



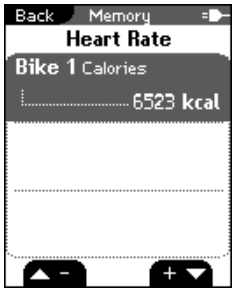
7.4 Total values

All total values for the three bikes are divided into the following sub-areas:

1. Bicycle
2. Heart rate
3. Uphill
4. Downhill

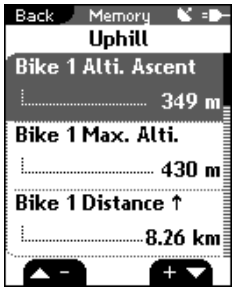
7.4.1 Total values – bicycle

This area displays the total values for the distance and trip time for each bike.



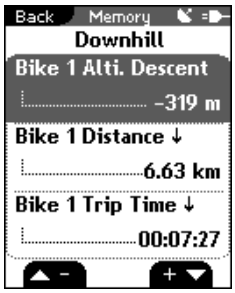
7.4.2 Total values – heart rate

This area displays the total calories for each bike.



7.4.3 Total values – uphill

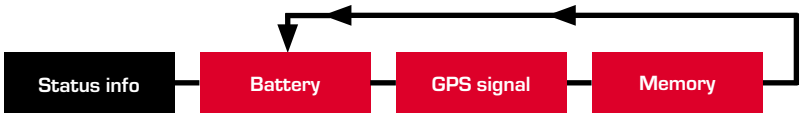
This area displays the total values for the altitude ascent, max. altitude, distance ↑ and trip time ↑ for each bike.

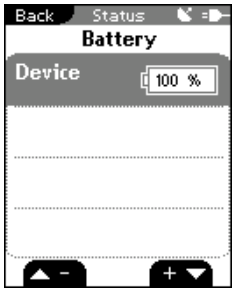


7.4.4 Total values – downhill

This area displays the total values for the altitude descent, distance ↓ and trip time ↓ for each bike.

8 Status info



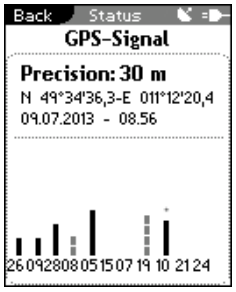


8.1 Battery

- ROX 10.0 GPS receiver

  The ROX 10.0 GPS comes with a rechargeable battery. This can be charged using a micro USB cable and the USB port on your PC or the USB charger supplied.

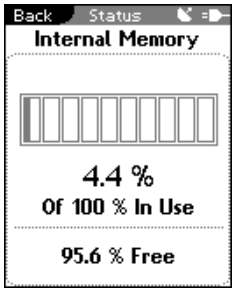
  The charge status is always shown at the top right of the display. If the device is switched off, the charge status will appear in the center of the display while the device is charging.



8.2 GPS signal

This area provides all the information about the GPS signal:

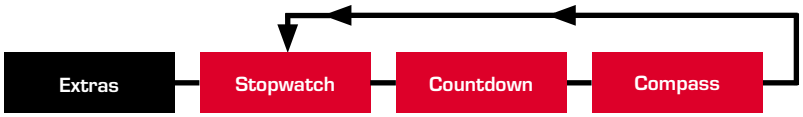
- Accuracy in meters
- Position
- Date and time
- Satellites and signal strength



8.3 Memory

This view shows how much internal memory is used and free.

9 Extras



Note

In addition to the normal training functions, your ROX 10.0 GPS has further functions that you can use when not training.

9.1 Stopwatch

Use the stopwatch to record times during sports events.

Start the stopwatch by pressing the START button. The stopwatch runs independently of all other functions in the training menu.

Press the START button again (after starting the stopwatch) to also time laps. Press the STOP button to stop the stopwatch and ENTER to reset it to zero.

Press the ▲- and +▼ buttons to scroll through the list of laps.

9.2 Countdown

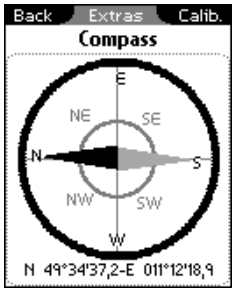
Use the countdown function to make sure you do not miss important events.

Press the ENTER button to pre-program the countdown. Press the ▲- and +▼ buttons as well as the ENTER button to set the time.

After setting the time, start the countdown by pressing the START button. Press the ENTER button to pause the countdown and STOP to end the countdown.

Note

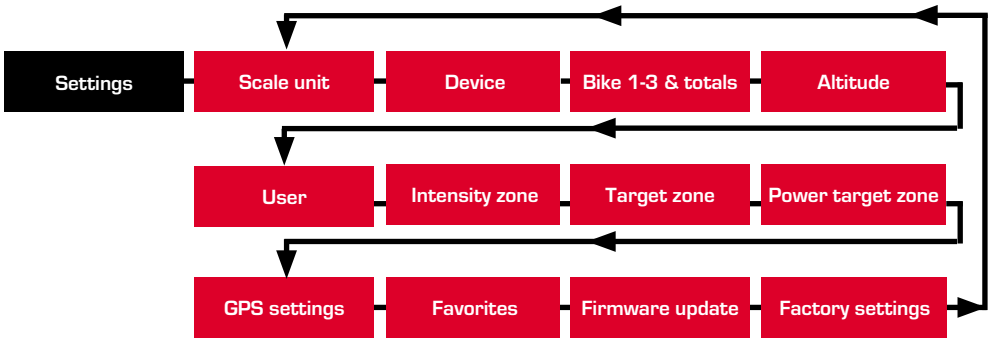
Please note that the countdown in the 'Extras' menu is independent of the countdown in the 'Training' menu.



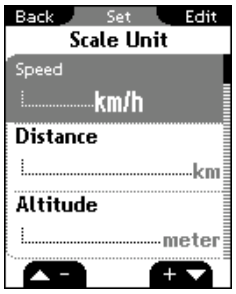
9.3 Compass

The compass indicates your direction so that you can navigate while offroad.

10 Settings



All functions can either be directly set on the ROX 10.0 GPS or set on the PC and then transferred to the ROX 10.0 GPS.



10.1 Scale unit

You can define the following units for the ROX 10.0 GPS:

- Speed (km/h, mph)
- Distance (km, miles)
- Altitude (meter, feet)
- Temperature (°C, °F)
- Weight (kg, lb)
- Date (DD.MM.YYYY, MM/DD/YYYY)
- Clock (24h, 12h)

10.2 Device

- Language
  Press the ▲- and +▼ buttons followed by ENTER to select the language for the ROX 10.0 GPS.
- Log interval

  Press the ▲- and +▼ buttons followed by ENTER to select the log interval (1 sec, 2 sec, 5 sec, 10 sec, 20 sec, 30 sec) for the ROX 10.0 GPS.

  For information about how the log interval affects the memory capacity, see section "6.1.1 Track data memory".
- Time zone

  Press the ▲- and +▼ buttons followed by ENTER to select the time zone (Berlin + 01:00, London + 00:00 etc.).
- Summer time (on/off)

– Countdown (on/off)

  Press the ▲- and +▼ buttons followed by ENTER to specify the time for a countdown to help you complete your training. The countdown starts running as soon as your training session starts.

– My name

– Auto pause (on/off)

– Target zone alarm (on/off)

– Button tone (on/off)

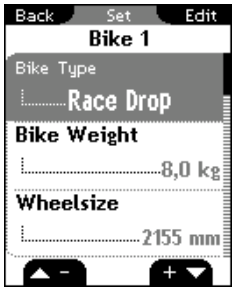
– System tone (on/off)

– Contrast

  Press the ▲- and +▼ buttons followed by ENTER to set the contrast (1–4) on the ROX 10.0 GPS.

– Backlight time

  Press the ▲- and +▼ buttons followed by ENTER to set the backlight time (permanent, 5 min on, 2 min on, 30 sec on) for the ROX 10.0 GPS.



10.3 Bike 1–3 & totals

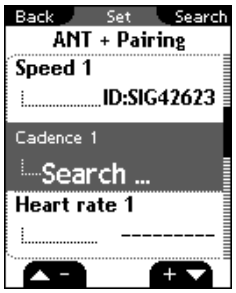
Use this area to set the following data for up to three bikes:

– Bike type (race drop, race hoods, mountain bike)

– Bike weight (1.0–50.0 kg)

– Wheel size (500–3999 mm)

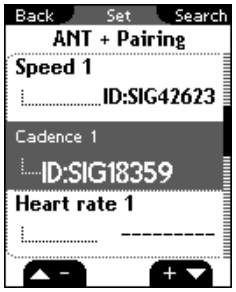
10.3.1 Pairing with the ROX 10.0 GPS



ANT+ pairing (speed, cadence, heart rate, power)

The transmitter to be paired must be activated (by means of the magnet with ANT+ speed and ANT+ cadence transmitters or by putting on the chest belt with the heart rate transmitter).

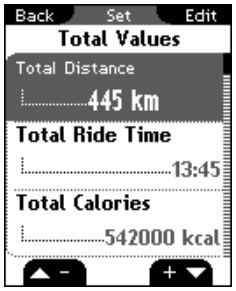
Press the ▲- and +▼ buttons to select the appropriate sensor for pairing and start the pairing process by pressing the ENTER button.



'Search' appears briefly followed by the transmitter's ID. The pairing process is now complete and the sensor can be used for training.

Note

Maintain a gap of one to two meters between the sensor and the ROX 10.0 GPS. Also ensure that there are no other ANT+ sensors within a 20-meter radius. This setting assigns the sensors to a specific bike (bike 1, 2, or 3). When training, you must manually select the bike that you are riding in training mode. For further information, see section '2.5. Synchronizing the sensors' (default: bike 1).



– Total values (total distance, total ride time, total calories, total altitude ascent, total maximum altitude, total distance up, total time up, total altitude descent, total distance down, total time down)

You can use this area to enter existing values (e.g. transferred from your old device). New values are then added to these.

10.3.2 Pairing power meters

Press the ▲- and +▼ buttons to select 'Set powerm.' then press ENTER.

Press ENTER again to trigger the pairing process with the power meter.

Activate your power meter as described by the manufacturer (usually by turning the pedals or the wheel).

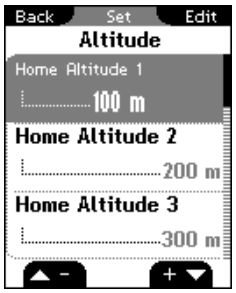
Once the pairing process has successfully completed, you can switch the automatic process for determining the zero point on and off and/or manually calibrate the zero point. Please note that this is not necessary for all power meters. For further information, please read the operating instructions for your power meter.

Note

The zero point is the value that the power meter sends to the ROX 10.0 GPS if it is not recording any forces. It is important to set the zero point before setting off or the automatic zero point will be activated. This value is used to calculate all power data.

IMPORTANT:

To use the power meter's values, switch to 'power meter' under 'Settings –> Device –> Power m./Formula'.



10.4 Altitude

The home altitude is the altitude of your usual start location (usually your home). You can find this information on road or country maps. It is only set once on the ROX 10.0 GPS. You can set three different home altitudes on the ROX 10.0 GPS.

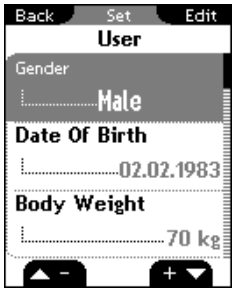
- Home altitude 1
- Home altitude 2
- Home altitude 3
- Altitude points list

  The altitude measurement points from the IAC+ altitude calibration (see section "5.2 Calibrating the altitude IAC+") are stored in this list.

  You can delete individual altitude measurement points in this area.

Note

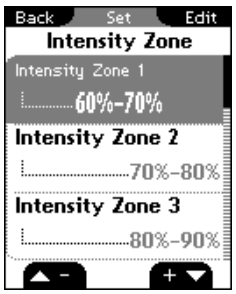
A maximum of 20 altitude measurement points are stored.



10.5 User

Use this area to set the following user data:

- Gender (male, female)
- Date of birth (DD.MM.YYYY)
- Body weight (20–200 kg)
- Body height (100–250 cm)
- Shoulder width (40–80 cm)
- Max. HR (100–240 bpm)



10.6 Heart rate intensity zones

The ROX 10.0 GPS has four intensity zones, which make it easier to control your training. The values are automatically calculated on the basis of your maximum heart rate. You can manually modify the % values for the individual intensity zones.

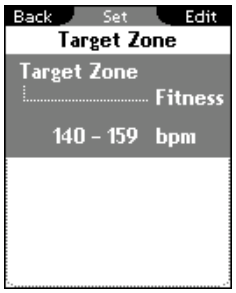
The four pre-calculated zones are:

- Intensity zone 1 (60–70%)
- Intensity zone 2 (70–80%)

- Intensity zone 3 (80–90%)
- Intensity zone 4 (90–100%)

Note

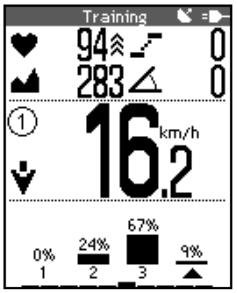
In training mode you can view the intensity zone function with a frequency distribution for your current training session.



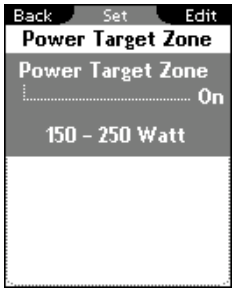
10.7 Heart rate target zone

The ROX 10.0 GPS has three target zones. The target zones 'Fitness' and 'Fatburning' are automatically calculated on the basis of your maximum heart rate. You can independently determine the heart rate value for the target zone 'Individual'. The target zone function can also be deactivated.

- Fitness
- Fatburning
- Individual
- Off



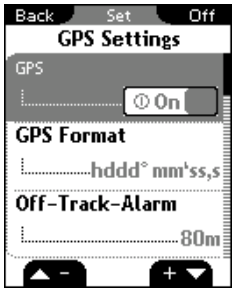
If the target zone is activated, a zone indicator arrow next to the heart rate and a beep sound indicate if you have breached the upper or lower limits of the target zone in training mode.



10.8 Power target zone

Use this area to set the values for the power target zone function or to deactivate the function. The following values can be set:

- On or off
- Lower limit and upper limit



10.9 GPS settings

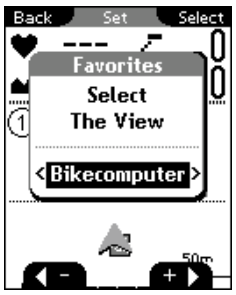
- GPS (on/off)
- GPS coordinate format (hddd°mm'ss,s or hddd°mm,mmm)
- Off-track-alarm (40 m, 80 m, 150 m, off)

  This alarm informs you that you have left the route. You can set the distance (40 m, 80 m, 150 m, off) at which the alarm should be triggered or deactivate it.

– Waypoint alarm (waypoints are special points of interest (POI) near the route that you have marked).

  This alarm indicates the distance of a waypoint. You can set the distance (40 m, 80 m, 150 m, off) at which the alarm should be triggered or deactivate it.

– Auto-zoom track (on/off)



10.10 Favorites

Favorites A and B can be filled with functions for the view modes (Bikecomputer, Track View, Altitude View, Lap Message). You can choose these yourself.

To set you favorites:

1. Start by pressing the ▲- and +▼ buttons to choose whether to specify the functions for favorites A or B then press ENTER.

2. Press the ▲- and +▼ buttons to select the view mode (Bikecomputer, Track View, Altitude View, or Lap Message) then press ENTER.

3. In the 'Bikecomputer' view mode, you can define up to 10 values and their display positions. Press the ▲- and +▼ buttons to choose the position (1–10) in which the value should be displayed then confirm your selection by pressing ENTER.

Note

Six functions (1A–3B) can be selected in the 'Track View', 'Altitude View' and 'Lap Message' view modes.

4. Press ▲- and +▼ to select the function area in the overview then press ENTER.

5. You are now shown the relevant functions. Press the ▲- and +▼ buttons to select the desired functions then press ENTER.

6. Your selection is confirmed and a tick appears.

7. You now automatically move to step 3. Select the next position and repeat steps 4 to 6.

8. Press the BACK button to select the view mode again (step 2) and determine the positions and functions for this.

The list below contains all the selectable functions that can be added to your favorites:

Bikecomputer	
Bicycle	
Current speed	Avg. speed
Max. speed	Trip distance
Expansion	Avg. expansion
Current cadence	Avg. cadence
Max. cadence	
Heart rate	
Current heart rate	Avg. heart rate
Max. heart rate	% of the max. heart rate
Avg. % HR max	Calories
Target zone	Intensity zone
Heart rate graph	
Time	
Exercise time	Trip time
Time	Date
Countdown	
Power	
Current power	3s avg. power
30s avg. power	Avg. power
Max. power	Work in kJ
Current power in W/kg	Power target zone
Temperature	
Current temperature	Minimum temperature
Maximum temperature	
Altitude	
Current altitude	Incline (in %)
Rise rate	Altitude profile
Uphill	
Altitude ascent ↑	Max. altitude
Trip distance ↑	Trip time ↑
Avg. speed ↑	Max. rise rate ↑
Avg. incline	Max. incline
Avg. expansion	
Downhill	
Altitude descent ↓	Trip distance ↓
Trip time ↓	Avg. speed ↓
Max. rise rate ↓	Avg. expansion
Status	
Battery status	GPS accuracy
GPS signal	

Navigation	
Time to destination	Time of arrival
Distance to destination	Direction
Mini track	
Lap	
Lap number	Lap time
Lap distance	Avg. speed per lap
Max. speed per lap	Avg. heart rate per lap
Max. heart rate per lap	Calories per lap
Avg. cadence per lap	Max. cadence per lap
Avg. power per lap	Max. power per lap
Altitude ascent per lap ↑	Altitude descent per lap ↓
Avg. incline per lap ↑	Avg. incline per lap ↓

Track View, Altitude View	
Bicycle	
Current speed	Avg. speed
Max. speed	Trip distance
Expansion	Avg. expansion
Current cadence	Avg. cadence
Max. cadence	
Heart rate	
Current heart rate	Avg. heart rate
Max. heart rate	% of the max. heart rate
Avg. % of the max. heart rate	Calories
Time	
Exercise time	Trip time
Time	Date
Countdown	
Power	
Current power	3s avg. power
30s avg. power	Avg. power
Max. power	Work in kJ
Current power in W/kg	
Temperature	
Current temperature	Minimum temperature
Maximum temperature	
Altitude	
Current altitude	Incline (in %)
Rise rate	

Uphill	
Altitude ascent ↑	Max. altitude
Trip distance ↑	Trip time ↑
Avg. speed ↑	Max. rise rate ↑
Avg. incline ↑	Max. incline ↑
Avg. expansion ↑	
Downhill	
Altitude descent ↓	Trip distance ↓
Trip time ↓	Avg. speed ↓
Max. rise rate ↓	Avg. incline ↓
Max. incline ↓	Avg. expansion ↓
Status	
Battery status	GPS accuracy
Navigation	
Time to destination	Time of arrival
Distance to destination	Direction
Lap	
Lap number	Lap time
Lap distance	Avg. speed per lap
Max. speed per lap	Avg. heart rate per lap
Max. heart rate per lap	Calories per lap
Avg. cadence per lap	Max. cadence per lap
Avg. power per lap	Max. power per lap
Avg. altitude per lap	Max. altitude
Altitude ascent per lap ↑	Altitude descent per lap ↓
Avg. incline per lap ↑	Avg. incline per lap ↓

Lap Message	
Lap	
Lap number	Lap time
Time since start	Lap distance
Distance since start	Avg. speed per lap
Max. speed per lap	Avg. heart rate per lap
Max. heart rate per lap	Calories per lap
Avg. cadence per lap	Max. cadence per lap
Avg. power per lap	Max. power per lap
Avg. altitude per lap	Max. altitude
Altitude ascent per lap ↑	Altitude descent per lap ↓
Avg. incline per lap ↑	Avg. incline per lap ↓

10.11 Firmware update

Caution

Firmware updates reset all values to zero and all settings to factory status. Before starting the firmware update, store your tours and relevant data on your PC.

To conduct a firmware update:

1. Use the micro USB cable to connect your ROX 10.0 GPS to your PC then press ENTER on the ROX 10.0 GPS.
2. Start the program 'Data Center' on your PC.
3. In Data Center, select the Firmware Update option and follow the on-screen instructions. Further information can be found in the Data Center instruction manual.

After the update, the ROX 10.0 GPS switches off.

10.12 Factory settings

Caution

Resetting the ROX 10.0 GPS to factory settings resets all values to zero and all settings to factory status. Before restoring the factory settings, store your tours and relevant data on your PC.

To restore the factory settings:

1. Press the ▲- and +▼ buttons to select 'Yes' then press ENTER.
2. The question 'Are you sure?' appears. Confirm that you are sure by pressing ENTER.
3. The device is now reset to factory settings.

After the ROX 10.0 GPS has reset to factory settings, it switches off.

11 Important information, troubleshooting, and FAQ

11.1 Important information

11.1.1 ROX 10.0 GPS water resistance

The ROX 10.0 GPS is watertight in accordance with Standard IPX7. It can be used in the rain without any risk of damage. The buttons can be pressed.

11.1.2 Water resistance of the transmitters (optional accessory)

ANT+ speed transmitter and ANT+ cadence transmitter

Watertight in accordance with IPX7:
It can be used in the rain without any risk of damage.

ANT+ heart rate transmitter

Watertight up to 3 ATM and therefore suitable for many sporting activities.

General

ANT+ wireless transmission does not work under water!

11.1.3 Chest belt care (optional accessory)

The COMFORTEX+ textile chest belt is machine washable on a +40°C/104°F hand wash cycle. Conventional detergent may be used. Please do not use any bleaching agents or detergents containing bleaching agents. Do not use soap or fabric softener.

Never have your COMFORTEX+ chemically cleaned. Neither the belt nor the transmitter are suitable for dryers. Lay your belt on a flat surface to dry. Do not wring it out, stretch it while wet, or hang it up. The COMFORTEX+ must not be ironed.

11.1.4 Training advice

Consult your physician before starting training to avoid health risks. This particularly applies if you suffer from any underlying cardiovascular diseases.

If you wear a pacemaker, always check with your physician that this is compatible with our systems before using them!

11.2 Troubleshooting

No speed displayed via the ANT+ speed transmitter

- Have you checked the distance between the magnet and the ANT+ speed transmitter (max. 12 mm)? If the selected distance is not correct, the transmitter flashes the first 10 times on magnet contact.
- Do you have both the ANT+ speed transmitter and the magnet?
- Have you checked whether the magnet is magnetized?
- Has the ANT+ speed transmitter been paired with the ROX 10.0 GPS? (See section "10.3 Bike 1–3 & totals")
- Have you checked the ANT+ speed transmitter's battery status? To do so, press the button on the transmitter and check if the LED illuminates.

No speed displayed via the GPS signal

- You can switch off the GPS function under the menu path 'Settings/GPS Settings'. Is it switched on?
- Are you outdoors?
- Does your ROX 10.0 GPS have satellite connection? (See section "8.2 GPS signal"). Please note that it can initially take a short while (approx. one minute) for a valid GPS signal to be received.

No cadence displayed

- Have you checked the distance between the magnet and the ANT+ cadence transmitter (max. 12 mm)? If the selected distance is not correct, the transmitter flashes the first 10 times on magnet contact.
- Do you have both the ANT+ cadence transmitter and the magnet?
- Have you checked whether the magnet is magnetized?
- Has the ANT+ cadence transmitter been paired with the ROX 10.0 GPS? (See section "10.3 Bike 1–3 & totals")
- Have you checked the ANT+ cadence transmitter's battery status?

No heart rate displayed

- Are the electrodes damp enough?
- Is the ANT+ heart rate transmitter correctly positioned against your body?
- Has the ANT+ heart rate transmitter been paired with the ROX 10.0 GPS?
- Have you checked the ANT+ heart rate transmitter's battery status?

Display blank

- Have you checked the ROX 10.0 GPS's charge status?
- Is the battery charged?
- Is the ROX 10.0 GPS switched on?

Display weak/slow

– Is the temperature too high (> 60°C) or too low (< 0°C)?

Incorrect speed displayed

– Have two magnets been attached?

– Is the magnet correctly positioned (parallel and centrally to the ANT+ speed transmitter)?

– Is the wheel size correctly set?

11.3 Frequently asked questions

Can I change the batteries myself?

The ROX 10.0 GPS uses an integrated lithium ion rechargeable battery that you cannot change yourself.

Lithium-ion batteries are known for losing some of their capacity over time and/or after a high number of charge cycles. Despite this, even after several years and many charge cycles, their capacity remains at approximately 75%.

If your battery is faulty, please contact the SIGMA SPORT service team who can replace it for you.

If you store the ROX 10.0 GPS for a long time (more than three months) without use, ensure that you do so at a temperature of between 0 and 20°C and a low humidity level. The pre-storage charge status should be approximately 60%.

The battery will not fully charge

Please disconnect the micro USB cable from the ROX 10.0 GPS and reconnect it after 20 seconds.

Can I charge the ROX 10.0 GPS while cycling?

Yes, the ROX 10.0 GPS can also be charged while cycling by using an external power source (e.g. SIGMA IION or SIGMA IICON rechargeable battery). This vastly extends its operating time. Please note, however, that the protective cover is open when charging the device so the ROX 10.0 GPS is no longer watertight!

A crossed-out battery icon has appeared on the display. What should I do?

The ROX 10.0 GPS is too warm. Never charge the ROX 10.0 GPS if the crossed-out battery icon is shown on the display. Let the device cool down first!

Only charge the battery at an ambient temperature of 0 to 40°C.

Can another person with a different bike computer/heart rate monitor cause interference?

The ANT+ sensor unit works on a high digital frequency and is therefore extremely resistant to electromagnetic interferences. The pairing process assigns the sensors to specific bikes. All other ANT+ sensors that are not paired are ignored in training mode. This almost entirely prevents any interference between two different devices.

How long will the battery in the transmitter last?

In general, all three transmitters are designed so that the battery lasts at least a year (based on one hour of usage each day). The heart rate transmitter's battery lasts for three years.

Is the ANT+ transmission system compatible with other transmission systems (e.g. Bluetooth, STS, DTS etc.)?

No, the various transmission systems are not intercompatible.

Why has the altitude changed even though I have not moved?

The ROX 10.0 GPS's altitude measurement is based on a barometric altitude measurement. As the barometric air pressure constantly changes, the current altitude can change even though you are not moving.

Why do I always have to calibrate the current altitude?

As we use the barometric air pressure to determine the current altitude, the constant changes to the current air pressure lead to changes to the current altitude. To offset these and achieve an accuracy of one meter in the current altitude information, a reference altitude should be specified for the ROX 10.0 GPS before each trip. Entering this reference altitude is known as calibration.

Data transfer between the ROX 10.0 GPS and the Data Center software does not work or is faulty or slow:

Please ensure that the ROX 10.0 GPS is installed in the device manager as a COM port.

Avoid connecting the device via a USB hub.

Preferably use USB 1.1 or 2.0 connections.

If you still have data transfer problems, please contact our service team.

12 Technical data

12.1 Max, min, and default values

	Unit	Min.	Max.
Bicycle			
Current speed	kmh/mph	2.2	199.8
Avg. speed	kmh/mph	0.00	199.80
Max. speed	kmh/mph	0.00	199.80
Trip distance	km/mi	0.00	9999.99
Expansion	m/r	0.0	10.0
Avg. expansion	m/r	0.0	10.0
Current cadence	rpm	20	180
Avg. cadence	rpm	20	180
Max. cadence	rpm	20	180
Heart rate			
Current heart rate	bpm	30	240
Avg. heart rate	bpm	30	240
Max. heart rate	bpm	30	240
% of the max. heart rate	%	12	240
Avg. % of the max. heart rate	%	12	240
Calories	kcal	0	99999
Time			
Exercise time	mm:ss.x/hhh:mm:ss	00:00.0	999:59:59
Trip time	mm:ss.x/hhh:mm:ss	00:00.0	999:59:59
Time	hh:mm:ss (24 h)	00:00:00	23:59:59
Date	DD.MM.YYYY	01.01.2011	31.12.2099
Countdown	hh:mm:ss	00:00:00	09:59:59
Power			
Current power	Watt	0	2000
3s avg. power	Watt	0	2000
30s avg. power	Watt	0	2000
Avg. power	Watt	0	2000
Max. power	Watt	0	2000
Work in kJ	kj	0	99999
Current power in W/kg	Watt/kg	0	40
Power target zone	Watt	0	2000
Temperature			
Current temperature	°C	-10.0	+70.0
Minimum temperature	°C	-10.0	+70.0
Maximum temperature	°C	-10.0	+70.0
Altitude			

	Unit	Min.	Max.
Current altitude	m	-999	4999
Incline (%)	%	-99	99
Current rise rate	m/min	-499	499
Uphill			
Rise rate	m	0	99999
Max. altitude	m	-999	4999
Trip distance uphill	km	0	9999.99
Trip time uphill	mm:ss.x/hhh:mm:ss	00:00.0	999:59:59
Avg. speed uphill	km/h	0.00	199.80
Max. positive uphill speed	m/min	0	499
Avg. incline uphill	%	0	99.5
Max. incline uphill	%	0	99
Avg. expansion uphill	m/r	0.0	10.0
Downhill			
Incline	m	0	-99999
Trip distance downhill	km	0	9999.99
Trip time downhill	mm:ss.x/hhh:mm:ss	00:00.0	999:59:59
Avg. speed downhill	km/h	0.00	199.80
Max. negative rise rate	m/min	-499	0
Avg. incline downhill	%	-99.5	0
Max. incline downhill	%	-99	0
Avg. expansion downhill	m/r	0.0	10.0
Status			
Battery status	%	0	100
GPS accuracy	m	0	-
GPS signal strength	-	-	-
Navigation			
Time to destination (estimated)	hh:mm:ss	00:00:00	99:59:59
Estimated time of arrival	hh:mm:ss	00:00:00	23:59:59
Distance to destination	km	0	9999.99
Direction	NO UNIT	N	NW
Laps			
Lap number	NO UNIT	0	999
Lap time	mm:ss.x/hhh:mm:ss	00:00.0	999:59:59
Time since start	mm:ss.x/hhh:mm:ss	00:00.0	999:59:59
Lap distance	km	0	9999.99
Distance since start	km	0	9999.99
Avg. max. speed per lap	km/h	0.00	199.80
Max. speed per lap	km/h	0.00	199.80
Avg. HR per lap	bpm	40	240
Max. HR per lap	bpm	40	240

	Unit	Min.	Max.
Calories per lap	kcal	0	99999
Avg. cadence per lap	rpm	20	180
Max. cadence per lap	rpm	20	180
Avg. power per lap	Watt	0	2000
Max. power per lap	Watt	0	2000
Avg. altitude per lap	m	-999	4999
Max. altitude per lap	m	-999	4999
Altitude ascent per lap	m	0	99999
Altitude descent per lap	m	0	-99999
Avg. incline per lap ↑	%	0	99.5
Average incline per lap ↓	%	-99	0

12.2 Temperature, batteries

Bike computer

Ambient temperature +60°C/-10°C

ANT+ speed transmitter

Ambient temperature +60°C/-10°C

Battery type CR 2032 (ref. no. 00396)

ANT+ cadence transmitter

Ambient temperature +60°C/-10°C

Battery type CR 2032 (ref. no. 00396)

ANT+ heart rate transmitter

Ambient temperature +60°C/-10°C

Battery type CR 2032 (ref. no. 00396)

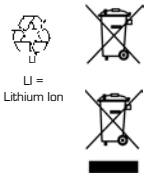
13 Warranty and guarantee

We are liable to our contracting partners for defects in line with legal provisions. The warranty does not extend to batteries. In the event of a warranty claim, please contact the retailer from whom you purchased your bike computer. You can also send your bike computer, together with your receipt and all accessories, to the address below. Please ensure you pay sufficient postage.

SIGMA-ELEKTRO GmbH
Dr.-Julius-Leber-Straße 15
D-67433 Neustadt/Weinstraße

Service tel. +49-(0)6321-9120-140
E-mail: sigmarox@sigmasport.com

In the event of justified warranty claims, you will receive a replacement device. You will only be entitled to the model available at the time of replacement. The manufacturer retains the right to make technical modifications.



Batteries must not be disposed of in household waste (Battery Law - BattG)! Please take the batteries to an official collection point for disposal.

Electronic devices must not be disposed of in household waste. Please take the device to an official waste collection point.

CE

The CE declaration can be found at: www.sigmasport.com

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

1 This device may not cause harmful interference

2 This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this equipment not expressly approved by SIGMA may void the FCC authorization to operate this equipment.

This Class B digital apparatus complies with Canadian ICES-003.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this

equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

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SIGMA-ELEKTRO GmbH
Dr.-Julius-Leber-Straße 15
D-67433 Neustadt/Weinstraße

SIGMA SPORT USA
3487 Swenson Ave.
St. Charles, IL 60174, U.S.A.

SIGMA SPORT ASIA
4F, No.192, Zhonggong 2nd Rd.,
Xitun Dist., Taichung City 407, Taiwan