

# **GPS Watch with Heart Rate Measurement**



**Operating instructions** 

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# 1 Application range

The GPS-watch RUNGPS1 is equipped with a navigation system. The User's location can be determined by using the satellite network that surrounds the earth. This is possible at any moment and everywhere in the world.

- The GPS-watch is destined for the use as a global system for determining the location.
- Made for measuring the distance, speed, height and navigation by using the American satellite network, being fit especially for sports types like jogging, cycling, camping, sailing, skiing etc.
- The GPS-watch is not fit for an exigent use as sky diving, gliding.
- The RUNGPS1 is designed for private purposes and it is not made for commercial use.

The GPS-watch can also be used as an auxiliary training gadget for measuring and displaying cardiac frequency, not as a medical device.

Any other use than the ones described in the operating instructions is not allowed, and it may lead to deterioration, and also injuries. No responsibility is taken for the damages which result from the improper use. Further instructions and clarifications can be found in the operating instructions.

All the indicated data are only nominal data. The right to technical modifications is preserved.

# 2 Safety and maintenance

# 2.1 Safety instructions

Please read this chapter carefully and follow all the specified indications. This way you ensure the adequate functioning and a long period of operation for your GPS-watch.

Keep the wrapping and operating instructions well, so that, in case of alienation, you can hand them on to the new owner.

- For safety reasons, do not operate the GPS-watch while driving a car.
   Stop or let a co-passenger carry on the settings. It is dangerous not to watch the street and it may lead to an accident, in which you or someone else could get hurt.
- Do not open the case of the GPS-watch or the chest strap, it does not include parts that must be maintained (excepting the opening of the strap part with the battery, for replacing the battery, see point 9.2 "Replacement of the battery of chest strap").
- Do not place any object on the GPS-watch and do not put any pressure on the display or the display may break.
- Do not touch the screen with sharp objects, in order to avoid damaging.
- The use of this product depends on satellites, as many of the GPS products, satellites that are operated by the American government. If modifications at the level of the satellite network take place, this may influence the execution and accuracy of this GPS-watch.

# Risks for children and individuals requiring assistance

This device is not intended for use by children aged eight (8) upwards and individuals with limited physical, sensorial or emotional capacities or limited experience and / or knowledge unless they are supervised by an individual responsible for their safety or receive instructions from the latter as to how

the device should be used and have understood the dangers arising from it. Children should be supervised in order to ensure that they do not play with the device. Cleaning and user maintenance may not be performed by children without supervision.

**Important**: Always consult your doctor, before starting a regular training program. The RUNGPS1 watch is not a medical device; it is a helping training gadget for the measurement and display of your cardiac frequency.

Wearers of cardiac pacemakers may use devices for cardiac frequency measurement only after consulting with their doctor.

**Indication**: The chest strap may contain latex elements. Allergic reactions under the form of some skin irritations and redness – in relatively powerful conditions – may rarely appear to this material. Even if only slight redness appears, stop using the chest strap. In this case, we recommend you to contact a skin specialist (dermatologist).

# 2.2 Repairing

In case of a necessary reparation or when a technical problem occurs, resort exclusively to our service center. You can find its address on the warranty card.

# 2.3 Water impermeability

The <u>RUNGPS1</u> watch is waterproof up to 3 bar, the chest strap is water resistant. In the table below you will see which activities and conditions the GPS-watch is adequate. Data are based on a verification of aquatic impermeability according to DIN 8310.

	Rain, Spray	Washing hands	Shower	Bathing, Swimming	Water sport
				<b>*</b>	
Watch	Yes	Yes, do not submerge watch in water	No	No	No
Chest strap	Yes	No	No	No	No

Be careful not to touch the buttons, when the watch is still moist. The water only can enter in the case through these buttons and this can affect the watch. Please note that salty and thermal water can lead to the corrosion of the metallic elements.

Note that, in case of <u>extreme</u> temperature differences (e.g. from sauna to the swimming-pool, from the beach to cold sea) water resistance can not be guaranteed. Because of temperature differences condensation water can be formed and thus the mechanism of the watch can be influenced.

# 2.4 Percussion and vibrations

The GPS-watch is protected against the bumps that may appear during its normal wrist wearing.

# 2.5 Electromagnetic compatibility

Very powerful magnetic fields (e.g. transformers) must absolutely be avoided, or differences in measuring time and determining location may

occur. The inobservance of these indications may lead to deteriorations or the mismatch of your GPS-watch.

# 2.6 Environmental temperature

The GPS-watch can be operated durably at an environmental temperature from 0 °C up to 50 °C, and stored at an environmental temperature of -10 °C up to 60 °C. Avoid high temperatures (e.g. in stopped vehicles or under direct sun influence) and permanent environmental humidity.

#### Indication:

Display problems at temperatures of -10° C up to 0° C will not be attributed to the GPS-watch, but on the impairment of accumulators due to coldness.

The electro-chemical processes of the batteries and accumulators are strongly influenced by the environmental temperature. The lower the temperature, the more powerfully the processes are influenced during discharge. That is why you should note that at temperatures below freezing point, the battery, respectively the accumulators may "freeze", a fact that will lead to the damage of the economic life of the battery, respectively of the accumulators.

# 2.7 Functioning of the battery

Your GPS-watch operates on the basis of a lithium-polymer accumulator, which can not be changed. The chest strap operates with a lithium battery 3V CR2032.

Further you will find some indications regarding the manipulation of accumulators:

 The accumulator of the GPS watch can not be changed and must not be taken out.

- Keep the GPS watch far from heat sources of high temperature environments, e.g. direct exposure to sunlight in a vehicle.
- Do not perforate or burn the GPS-watch.
- Charge the accumulator of the GPS watch only with a USB cable delivered together with it. If the accumulator is charged otherwise, this can lead to overheating, explosion or fire.
- Do not charge the accumulator of the GPS watch near heat sources or in a car, under the powerful action of sunbeams. Powerful temperature leads to the destruction of the accumulator and may lead to overheating, explosion or fire.

The inobservance of these indications may lead to the shortage of the service life of the inserted accumulator or to the damaging of the GPS watch.

Further you will find some indications regarding the manipulation of **batteries**:

- Replace a battery only with the similar type of battery.
- Batteries must not be charged or re-activated by other means; they will not be disassembled, thrown in fire or short-circuited.
- Keep batteries out of reach of children. In case of swallowing, batteries
  can jeopardize life. Consequently, keep the batteries and chest strap
  out of reach of small children. If a battery is swallowed, medical help
  must be required immediately.
- Never expose batteries to high heat such as direct sun action, fire or other similar source. There is a leakage danger. The inobservance of these indications may lead to the deterioration and, under certain circumstances, to the explosion of the battery.
- Immediately take out a used battery from the chest strap, otherwise it can leak. In this case, avoid contact with skin, eyes and mucosa. Wash immediately the parts affected by the acid of the battery with a lot of water and require immediately medical help. If need be, clean the

contacts of the battery and the contacts from the device. Keep operating instructions for consulting the information on batteries.

The inobservance of these indications may lead to the deterioration and, under certain circumstances, to the explosion of the battery.

Information regarding the replacement of the battery of chest strap can also be found at point 9.2 "Replacement of the battery of chest strap ".

# 2.8 Disposal

<u>Batteries</u> are special waste. For the adequate disposal of the batteries, there are special containers in the shops where batteries are commercialized, as well as in the communal collection places. If you want to throw the <u>GPS watch</u> and its accessories away, eliminate them in conformity with current dispositions. Information will be received in communal places.





KRIPPL-WATCHES
Warenhandels GmbH
Maria-Theresia-Straße 41
4600 Wels, Austria

Eliminate the wrapping of the GPS watch in conformity with current dispositions. Information will be received in communal places.



# 2.9 Maintenance

**Caution!** In the case of the GPS watch and chest strap there are no parts that require maintenance. Still, we recommend you to clean the sensor surfaces of the chest strap before or after each use.

# 2.10 Cleaning and keeping

- If problems occur when charging the GPS watch, check the contact pins
  on the back of the watch. If these were soiled with sweat deposits and
  skin scales, clean them with a sharp metallic object (e.g. tweezers).
- Clean the GPS watch and chest strap only with a soft, moist towel without naps.
- Do not use diluent, corrosive cleaning agent or under the form of gas.
- Be careful not to leave water drops on the display of the GPS watch.
   Water may cause permanent stains.
- Do not expose the display to sunlight, or to direct action of ultraviolet beams.

# 2.11 Indications regarding application instructions

We structured the application instructions for the GPS watch so that you can choose from the contents the necessary information depending on the theme. For further questions you can resort to <a href="mailto:service@runtastic.com">service@runtastic.com</a>.

# 3 Outlet volume and functional press keys

# 3.1 Outlet volume

<u>1 GPS watch</u> (Art. No.: RUNGPS1-S, RUNGPS1-B,

RUNGPS1-P, Model: D02I280) including integrated

lithium-polymer accumulator

# 1 chest strap

(formed by sensors and elastic strap )

(Art. No.: RUNGPS1, Model: TD0037) incl. lithium battery (3 V, CR2032)

**C**€ 1313



Sensor:





# 1 USB cable



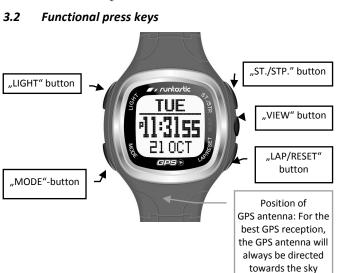
# 1 bike support

incl. 2 cable clamps and 1 installing plate



# 1 cleaning brush







# 4 Start-up

We recommend you to read the operating instructions carefully before starting-up the GPS watch.

On the screen of the GPS watch there is a protection film. Eliminate it before the first use

**Caution!** This protection film for the screen must be kept out of reach of babies and young children! It presents asphyxiation danger!

The watch will be delivered in off-line mode. Press and keep the "LAP/RESET"-button pressed for approx. <u>5 seconds</u>, in order to start the GPS watch. Time mode will be displayed as the first mode:



The GPS watch can be worn as a watch or can be fixed on the slide bar of your bike by means of the delivered support.

## Fixation by bike support.

- Put the bike support on the slide bar of your bike.
- Use the delivered installing plates, if the support is too weak.
   Additionally, you can fix the support with a cable binder.
- Fix the watch on the bike support.

# 4.1 Keypad Lock

By pressing the "Light" and "View" buttons at the same time, you can activate or disable the keypad lock. When the keypad lock is activated before your training, you can avoid accidentally pressing keys during your workout. When the keypad lock is on you can change, with the "View" button in workout mode, between three display options.



Keypad lock activated



Keypad lock disabled

# 4.2 Charging the accumulator of the GPS watch

The GPS watch has a lithium-polymer accumulator. Charge it for minimum 3 hours before the first use of the GPS watch.

To avoid corrosion, we recommend you to dry the contact points of the GPS watch well before starting a charging process.

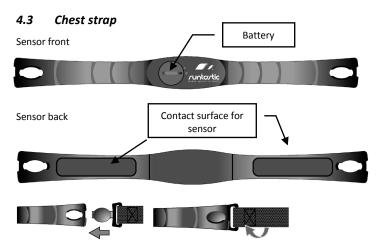
Fix the clip of the USB cable on the GPS watch according to the following image and put the USB cable to a USB port of your computer coupled to the power. The installation of a driver for charging the accumulator is not necessary.



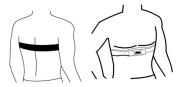
During the charging process, the following symbol appears on the screen:



if the accumulator is fully charged, the display "battery full" appears.



Join the elastic strap with the sensor. Put the elastic strap so that the sensor stays on the chest, under the pectoral muscles.



In order to make an optimum transfer of the cardiac frequency possible, wear the belt with the battery compartment on the <u>right</u> side (from the wearer's point of view).

To ensure a good contact with the skin, you must moist the contacts of the sensor or use an ECG gel (available in medical shops).

The battery is already inserted in the chest strap, this is ready for use upon delivery.

# 5 General information regarding the GPS reception

In order to be able to use the function of your GPS optimally, the below mentioned instructions must certainly be followed.

The GPS watch is a global positioning system (=GPS), which serves especially for measuring the distance, speed, height and navigation by means of USA satellite network. The USA operates this satellite system and also responds for their exactness and maintenance.

The reception of the signal, without problems, from a satellite can only be guaranteed **under calm weather conditions** (clear sky) and an adequate reception area – **open area with clear view to the sky**.

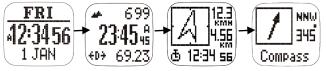
Because satellite signals react very sensitively to external influences, bad weather (e.g. heavy snowfalls), as well as a perturbed reception area (the GPS watch is covered by clothes or other objects, high buildings or narrow valleys and defiles impede the reception) can affect significantly the efficiency and exactness of the GPS watch.

Inside the buildings, GPS reception is strongly restricted or impossible. Near the windows, and also in spaces with large windows and clear view to the sky a determination of the location can be possible, under certain circumstances, depending on the momentary position of the satellites. In interior spaces and in basements the GPS reception is practically impossible.

# 6 Modes of the GPS watch

The GPS watch has the following main functioning modes, which can be changed simply by pressing the "MODE"-button, being described more exactly in the following chapters.

- Time-mode
- GPS-Workout-mode
- GPS-Navigations-mode
  - Compass-mode



Additionally, there is an adjustment mode, for which the following apply:

Call of adjustment mode: Press the "MODE"-button and hold down

# Settings of adjustment mode:

- Press the "ST./STP."-or the "LAP/RESET"
  - selection of the desired environmental point, modification of a setting/value respectively
- Press the "VIEW"-button
  - Confirmation of environmental point, confirmation of a setting/value respectively

Exit from new adjustment mode: Press the "MODE"-button and hold down

The individual modes are described at points 6.1 to 6.5.

# 6.1 Adjustment mode

Press and hold down the "MODE"-button in order to get to the adjustment mode. The following pages offer an image about the structure of the menu from the adjustment mode:

#### Menu structure

Workout (Point 6.3)

Profiles

Select Selection of training profile

Customize Selection of training data for the display

1-3 of each training profile

Reset Setting of training data basis

History
 Call of training history

Smart Lap

By Dist Automatic taking-up of lap times

"Lap-By-Distance"

■ Lap → WP Automatic generation of reference points

From laps "Lap-To-Waypoint"

Alert Alarm activation for "Lap-By-Distance"

View Scan
 Automatic switching among the 3

displays

Track Log
 Setting of the interval for measurements

o Delete

Del Last Deletion of data from last training

Del All Deletion of data from all trainings so far

• Navigation (Point 6.4)

Sel PathDel PathPath deletion

Nav Mode Selection of navigation typeWP Radius Adjustment of path-beam point

GPS (Points 6.3 and 6.4)

On/Off Activation/deactivation of GPS reception

Timeout Setting of GPS Timeout

A-GPS Expiry (Maturity date)

• HRM (Point 6.3)

On/Off Activation of cardiac frequency

measurement

o Zone HR

Select Selection of training area

Customize Modification of upper and lower limits
 Alert Alarm activation for training area

Reset Reset of upper and lower limits to

basic settings

o Max.HR Setting of maximum cardiac frequency

o Pairing Junction of the chest belt with the GPS

watch

Settings

o Timer (Point 6.2) Timer adjustment

o Alarm (Point 6.2) Alarm adjustment

Time Date (Point 6.2)

Home Time

GPS Upd Setting of GPS updating time

■ Time Zone Time zone adjustment

Manual Manual adjustment of time

Dual Time Dual time adjustment

Format Adjustment of 12/24 hour format

User (Point 6.1.1)

Gender Selection of gender

Birth Date
 Date of birth setting

Weight Weight setting

System (Point 6.1.2 – excepting Compass point 6.5)

Sound

Key Tones Activation/deactivation of key tone

Chimes Activation/deactivation of fixed time alarm

Contrast
 LCD contrast adjustment

Units

Dst/Spd Adjustment speed and distance unit of

measure

Position Adjustment of unit of measure for latitude

and longitude degree

Weight Adjustment of weight unit of body

weight

Compass (Point 6.5)

Declinate
 Calibrate
 Language
 Sys Reset
 Entry of declinations
 Compass calibration
 Language adjustment
 Operation of system reset

• Memory (Point 6.1.3) Call of memory status

Some general settings (user's settings, system setting operation and call of memory status), which are not presented directly in the chapters Time mode, GPS-Workout-mode, GPS-Navigations-mode and Compass-mode, are described here:

# 6.1.1 User's settings

These data are necessary for calculating the calorie consumption, the maximum cardiac frequency respectively.

# Selection of gender

- In the setting mode select the "Settings" point from the menu → "User" → "Gender".
- Then select "Male" for masculine or "Female" for feminine.

## Date of birth adjustment

- In the setting mode select "Settings" point from the menu → "User" → "Birth date".
- Then set the year of birth, month and day.

# Weight setting

- In the setting mode select "Settings" point from the menu → "User" → select "Weight".
- Then adjust weight

# 6.1.2 System settings

# Activation/deactivation of key tones

- In the setting mode select "Settings" point from the menu → "System"
   → "Sound" → "Key Tones".
- Then select "On" in order to activate key tones or "Off" to deactivate them.

# Activation/deactivation of fixed time alarm

- In the setting mode select "Settings" point from the menu → "System"
  → "Sound" → "Chime".
- Then select "On" in order to activate fixed time alarm or "Off" to deactivate it.

## LCD contrast adjustment

- In the setting mode select "Settings" point from the menu → "User" → "Contrast".
- Then set the desired LCD contrast from 3 (light) up to 16 (dark).

# Adjustment of the unit of measure for speed and distance

- In the setting mode select "Settings" point from the menu → "System" → "Units" → "Dst/Spd".
- Then select "Metric" for Kilometer/km/h, "Statute" for miles/mph or "Nautical" for miles/ knots.

# Adjustment of the unit of measure for longitude and latitude degree

- In the setting mode select "Settings" point from the menu → "System"
   → "Units" → "Position".
- Then select "00000000 N" for the indication in Degrees-Minutes-Seconds or "0.000000 N" for the indication in decimal degrees

# Adjustment of the unit of measure for body weight

- In the setting mode select "Settings" point from the menu → "System" → "Units" → "Weight".
- Then select "kg" for the indication in kg or "lb" for the indication in Pfund

## Language adjustment

- In the setting mode select "Settings" point from the menu → "System" → "Language".
- Then select the desired language (English, French, Spanish, German, and Italian).

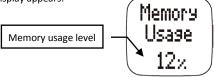
#### System reset operation

- In the setting mode select "Settings" point from the menu → "System" → "Sys Reset".
- Then select "On" to perform a system reset. By this, all the values, all the basic settings will be reset and <u>all</u> the data (paths, reference points, training histories, etc.) deleted.

Select "Off" in order not to reset the system.

# 6.1.3 Memory status programming

In the adjustment mode select the menu point "Memory" until the following display appears:



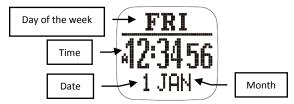
The memory use level of the GPS watch will be indicated in %. 1% of the memory corresponds to approximately 480 in memorized reference points for the GPS watch.

#### CAUTION:

Keep in mind that the watch does not delete automatically the memory with your data. To this effect, when transferring the data from the watch in your computer, you must activate automatic memory deletion at a data transfer from *Runtastic Connect*, in settings/options. If the memory of the watch is full, no timing will be performed, a training timing in workout mode can not be started any more. This means that the ST./STP. cannot be pushed anymore. Still, before the memory is full, the notification "Memory full!" appears on the display of the GPS watch

# 6.2 Time-mode

Press the "MODE"-button until you reach time mode. This appears by the following screen display:

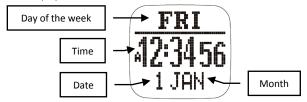


In time mode there are the following sub-functions, with the "VIEW"-button you can choose among them:

- Time and date
- Display of accumulator level
- Timer
- Alarm
- Dual Time

# 6.2.1 Time and date

In <u>Time-mode</u> press the "VIEW" button until the following display appears on the display:



#### Update GPS for time:

- In the setting mode select "Settings" point from the menu → "Time Date" → "Home Time" → "GPS-Upd".
- Then select "ON" or "OFF". "ON" is pre-set, this means that when the satellite signal is received, time and date will be automatically set.

Indication: Keep in mind that the GPS signal transmits Greenwich Mean Time (GMT), therefore, it may be necessary to set a different time zone
In winter, for Austria and Switzerland GMT + 1:00 is applied.
In summer, for Austria and Switzerland GMT + 02:00 is applied.

# Time zone adjustment

- In the setting mode select "Settings" point from the menu → "Time Date" → "Home Time" → select "Time Zone".
- Then you will be able to set a time zone of -12:00 up to +12:00 or "By Longitude". When selecting "By longitude", the GPS watch will try to calculate the time zone based on the established longitudinal degree. If this does not work properly, set the time one in hours (e.g.: + 1:00).

# Adjustment of 12/24 hour format

- In the setting mode select "Settings" point from the menu → "Time Date" → select "Format".
- Then select between the format of 12 or 24 hours.

## Manual time adjustment

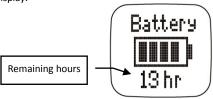
If no GPS reception is possible, time format can also be manually adjusted:

• In the setting mode select "Settings" point from the menu → "Time Date" → "Home Time" → "Manual".

Then adjust the seconds, minutes, hours, year, month and day.

# 6.2.2 Accumulator level display

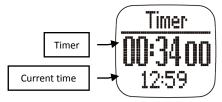
In <u>Time-mode</u> press the "VIEW"-button until the following display appears on the display:



The estimation for the remaining hours for the use of GPS function will be displayed. When the accumulator is almost empty, the symbol will appear, and the GPS functioning and cardiac frequency measurement will be deactivated. To charge the accumulator, see point 9.1 "Charging the accumulator of the GPS watch"

#### 6.2.3 Timer

In <u>Time-mode</u> press the "VIEW" button until the following display appears on the display:



## Timer adjustment

- In the setting mode select "Settings" point from the menu → select "Timer".
- Then adjust the hours, minutes and seconds for the timer.

#### Timer use:

- In the display mode Timer press the "ST./STP" button to start or stop the timer.
- If the timer is stopped, press the "LAP/RESET" button, to reset the timer at the time set previously.
- When timing is finished, during the last 10 seconds a Beep will be given for each second. When it reaches to 0, a longer Beep will be heard.
   Press any key to stop this Beep tone.

#### 6.2.4 Alarm

In <u>Time-mode</u> press the "VIEW" button until the following display appears on the display:



- Press the "ST./STP." button, to select the alarm 1-5.
- Press the "LAP/RESET" button to set the alarm "ON" (enabled) or "OFF" (disabled).

## Setting of alarm time and alarm format:

- In the setting mode select "Settings" point from the menu → select "Alarms".
- Then select from alarms 1-5 and adjust alarm hours and minutes, "ON/OFF" will blink.
- Then adjust the alarm "ON" (activated) or "OFF" (deactivated), the alarm format will blink:

Daily	Daily
Sun	Sunday
Mon	Monday
Tue	Tuesday
Wed	Wednesday
Thu	Thursday
Fri	Friday
Sat	Saturday
Mon-Fri	Monday-Friday

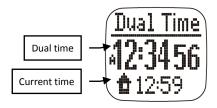
Then select the desired alarm format.

# Alarm stop:

When the alarm rings, you can stop it by pressing any key.

# 6.2.5 Dual Time

By this function you can choose a dual time. In <u>Time-mode</u> press the "VIEW"-button until the following display appears on the display:

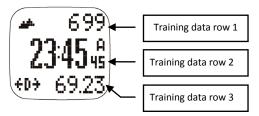


## Dual time adjustment:

- In the setting mode select "Settings" point from the menu → "Time Date" → "Dual Time".
- Then adjust the desired difference (from the current time to dual time) in 30-minute steps.

## 6.3 GPS-Workout mode

Press the "MODE"-button until you get to GPS-Workout-mode. This will be seen by the following display on the screen (example of a display):



Within the GPS-Workout-mode the speed, distance, training time, cardiac frequency and other interesting data are indicated; these can be subsequently seen on the computer by *Runtastic Connect*.

GPS-Workout-mode works in tight connection with GPS-Navigation-mode. The functions start and stop training and lap time taking can be achieved in both modes.

# 6.3.1 Cardiac frequency measurement

## Activation of cardiac frequency measurement

Wear the strap according to the description from point 4.2 "Chest strap."

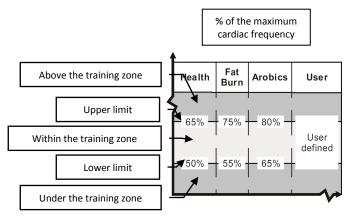
In the setting mode select "HRM" point from the menu → "On/Off", set "On!"

Thus, cardiac frequency measurement is activated.

# **Training zone**

There are three indicated training zones (Health, Fat Burn, Aerobics) and also one defined by the user (User). Based on your age, the GPS watch calculates <u>automatically</u> your maximum cardiac frequency, as well as your upper and

lower limits to the 3 indicated training zones. Select the training zone depending on the purpose you follow by your training.



#### Selection of training zone

- In the setting mode select "HRM" point from the menu → "HR Zone"
  → "Select".
- Then select one of the three preset training zones of the training zone defined by the user (User).

# Modification of upper and lower limits

- In the setting mode select "HRM" point from the menu → "HR Zone"
   → "Customize".
- Then select one of the three preset training zones of the training zone defined by the user (User) for which you want to modify the upper or lower limits.
- Then indicate the desired upper and lower limits for cardiac frequency.

# Reset of upper and lower limits to basic setting

In the setting mode select "HRM" point from the menu → "HR Zone" → "Reset".

# Setting of maximum cardiac frequency

■ In the setting mode select "HRM" point from the menu
→ "Max.HR" and adjust the specific maximum frequency.

## Alarm activation for training zone

• In the setting mode select "HRM" point from the menu → "HR Zone" → "Alert" → "On".

When the cardiac frequency from the training is outside the maximum and minimum limits set, a signal tone will be heard. The alarm for the training zone only works in training mode.

#### Joint of chest strap with the GPS watch

Each chest strap has its own ID and it was paired from the factory with the GPS watch, in order to avoid faults. If you replace the GPS watch or the belt, these must be paired again.

In the setting mode select "HRM" point from the menu  $\rightarrow$  "On/Off". Switch to "Off".

- In the setting mode select "HRM" point from the menu → select "Pairing".
- Then touch, for a few seconds, the contact surfaces of the sensors.
- If pairing was successfully performed, the notification "DONE!" appears.
- If the notification "FAIL" appears, then the pairing did not work. Try again, according to the description above.
- After pairing switch "HRM" back to "On".

# 6.3.2 Profiles and training data

The GPS watch has 5 different training profiles:

Running, Cycling, Hiking, Sailing and "User"

The parameters of the respective profile (3 values per workout) may be set both via Runtastic Connect and directly on the GPS watch. The profile, however, can only be changed on your watch.

## Selection of training profile

- In the setting mode select "Workout" point from the menu → "Profiles" → "Select".
- Then select one of the five training profiles.

For each training profile there are three displays, each display being formed by 3 digits for training data.

These training data can be freely chosen from a list. Thus, each user can select those training data that are especially interesting to him. The selection of training data can be made by the adjustment mode of the GPS watch, and also via *Runtastic Connect*. The selection by *Runtastic Connect* is faster and easier.

# Selection of training data

- In the setting mode select "Workout" point from the menu → "Profiles" → "Customize".
- Then select one of the 5 profiles, for which you wish to adjust the training data.
- Then select for the displays 1-3 (View 1-3) the training data for each 3 rows.

# Possible training data rows 1 and 3

Altitude	Altitude	<b>→</b> 999
Calories	Calories	Cal 999
Distance	Distance	+0> 99.99
Heading	Heading (degree indication)	⊙ 359°
HR-Avg	Average cardiac frequency	AVØ 124552
HR-Max	Maximum cardiac frequency	<b>↑</b> ♥ 124552
HR-Min	Minimum cardiac frequency	<b>4</b> ♥ 124552
HR	Current cardiac frequency	♥ 12455%
HRZ-Abv	Time above training area	2 9:99ss
HRZ-Blw	Time below training area	3 9:99ss
HRZ-In	Time in training area	z 9:9955
LapDist	Lap distance	<u> P</u> 99.99
LapNo	Number of laps	Lap 23
LapTime	Time of laps	© 23"45"ss
Pace Avg	Medium Pace (time/km)	AV 大 9:59
Pace Max	Maximum Pace (the fastest time/km)	↑★ 9:59
Pace	Current Pace (time/km)	火 9:59
Speed Avg	Average speed	AV. 29.9
Speed Max	Maximum speed	↑© 9,9
Speed	Current speed	9,9 ھ
TimeOfDay	Time	AM 12:594s
Wkout Time	Training time	Ф 55°55°ss

## Possible training data row 2

Distance	Distance	<u>™</u> 999.9
HR	Current cardiac frequency	<b>₹ 145</b> 752
LapDist	Lap distance	*1 999.9
LatLong	Longitudinal and latitude degree	23 45'67.89 N 123'45'67.89 W
PaceAvg	Average pace (time/ km)	™ఉ34:55
SpeedAvg	Average speed	ັສ 34.5
Speed	Current speed	™ △ 34.5
TimeOfDay	Time	* 3:45₄å
Wkout Time	Training time	₹59′59 <sub>55</sub>

#### **Training data Basic data setting**

• In the setting mode select "Workout" point from the menu → "Profiles" → "Reset".

The basic setting for training data is:

- Display 1: Distance, medium pace (time per km), training time
- Display 2: Number of laps, current cardiac frequency, lap time
- Display 3: Height, time, calories

# Manual switch among the 3 displays

In GPS-Workout-mode press the "VIEW" key, in order to manually switch among the 3 displays.

#### Automatic switch among the 3 displays

When "Scanning" function is activated, the GPS watch automatically switches among the 3 displays.

• In the setting mode select "Workout" point from the menu → "Viewscan" → "On".

## 6.3.3 Training

#### A-GPS

The watch has a function called "A-GPS" (Assisted global Positioning System). A-GPS is a method, which fastens the search for a good GPS-reception under bad weather conditions. The A-GPS data will be saved on a server and transferred to the watch via the *Runtastic Connect*. The validity period of this data is 7 days.

In order to use this function you require internet access.

#### Download the A-GPS data

Connect the watch with the USB cable and then plug in the cable to your computer. As soon as the watch is linked to the computer, the A-GPS data will be transferred to the watch.



## **GPS** starting

Here, follow especially the indications from point 5 "General information regarding GPS reception".

In optimal conditions, in cold start, the search of the satellites takes approx. 1 minute, and in warm start, approximately 10 seconds.

We talk about <u>cold start</u> when the GPS watch is used for the first time, it has not been used for a long time, or it has been moved for a quite long distance from the last determination of the position (e.g. 300 km).

Then the GPS watch does not know what satellite constellation it should wait and has to gather the data again.

Then there is <u>warm start</u>, in the best case it takes approximately 10 seconds. A warm start can function only when the GPS watch did not go a long distance away from the last determination of the position and there was not too much time since then. The more satellites changed their position since the last determination of the position, from the GPS watch point of view, the longer the search for satellites will be.

For the fast GPS reception it is important for the watch to be at rest and not to be on the move.

**Advice:** Before starting running, before starting the path respectively, start your GPS watch, in open space, with clear view to the sky (e.g. to window ledge or on the bonnet of the car) and start searching for the satellites.

In order to search for the satellites, there are the following options:

- In the setting mode select "GPS" point from the menu > "On/Off", set "GPS On!"
- 2) Press and hold down the "VIEW"-button from GPS-Workout-mode. As soon as the signal is received, the following symbol will appear:



#### Display of GPS status:

Antenna symbol lights – search for satellites

If "GPS fixed" appears on the screen, this means that the watch has found a 2D position (the altitude is still missing, respectively).

When this symbol appears, enough satellites were found in order for the GPS watch to determine a 3D position (with altitude).

If the satellites are lost and no position is determined, "GPS Lost" appears on the screen, until a button is pressed.

#### **GPS** manual stop

In order to stop the search for satellites, the following options exist:

- In the setting mode select "GPS" point from the menu → "On/Off", set "GPS Off!"
- 2) Press and hold down the "VIEW" from the GPS-Workout-mode.

#### **GPS Timeout setting**

The "GPS Timeout" function defines the duration for the satellite search of the GPS watch, before stopping when being unsuccessful. In the adjustment mode 5 or 30 minutes can be set for GPS Timeout:

- In the adjustment menu choose "GPS" → select "Timeout".
- Then either select "5 mins" or "30 mins".

The basic setting for GPS Timeout is 5 minutes. When the GPS is on and you enter, for example, into a room, the GPS watch does not usually receive the GPS signal. In order to protect the accumulators, the GPS watch stops searching for satellites after 5 minutes and stops the GPS.

#### Start/stop of training

Press the "ST./STP." button in GPS-Workout-mode in order to start or stop the training.

This way, the search for GPS signal and cardiac frequency measurement will be activated automatically (if this has not already been performed manually).

#### Recording of lap times

During the training, press the "LAP/RESET" button to record the time of a lap. For each workout, the maximum number of lap times is 99.

#### Automatic recording of lap times "Lap-By-Distance"

By this function, laps can be automatically generated. Then the "LAP/RESET" button no longer needs to be pressed to record the time of a lap.

- In the setting mode select "Workout" point from the menu → "SmartLap" → "By Dist".
- Set the desired distance, after which a lap will always be marked (e.g. 1 km).
- Then press "On", in order to activate "SmartLap" function.

Still, there is the possibility to record manually the lap times between the laps stopped automatically.

#### Alarm activation for "Lap-By-Distance"

In case of an activated alarm, when the GPS watch generates a new lap by means of "Lap-By-Distance" function, a signaling sound will be heard.

- In the setting mode select "Workout" point from the menu → "SmartLap" → "Alert".
- Then select "On" to activate the alarm for "Lap-By-Distance" function or "Off" to deactivate it.

#### Automatic generation of reference points from laps "Lap-To-Waypoint"

By this function, reference points can be automatically generated. Whenever a new lap time is recorded (regardless if manually or automatically), a waypoint is generated.

■ In the setting mode select "Workout" point from the menu →

"SmartLap" → "Lap → WP".

- Then press "On", to activate "Lap-To-Waypoint" function.
- Then select one of the paths. This path will be erased and replaced with a new reference point

#### Setting of measurement interval

The GPS watch records the path continuously. You can set manually how often the measurements are performed, from 1 second up to 10 minutes. The basic setting is 4 seconds:

- In the setting mode select "Workout" point → "Tracklog".
- Then adjust the interval desired for measurements

#### 6.3.4 After training

#### Setting of training data to zero

If training stops, hold down the "LAP/RESET" button, until "Hold to Save" appears; all training data are set to 0 and you can start with a new training. Still, the data of this training will be kept in the memory of the watch and will be able to be viewed later.

#### **Deletion of training data**

If you wish to delete the data of the last training:

- In the setting mode select "Workout" point → "Delete" → "Del Last".
  If you want to delete the data of all trainings so far:
- In the setting mode select "Workout" point  $\rightarrow$  "Delete"  $\rightarrow$  "Del All".

#### **Training history:**

■ In the setting mode select "Workout" point from the menu → "History" to view a training history.

The history consists of 3 parts, if each part is displayed for each 5 seconds (automatic switch between the parts).

#### (Part 1)

- First row: Number of recording (Training)
   Press the "ST./STP."- or the "LAP/RESET" buttons, to switch between recordings (trainings)
- Second row: Date
- Third row: Time
- Fourth row: Integral number of the laps from this recording

#### (2<sup>nd</sup> Part)

- Training time
- Distance
- Average pace (time per km)

#### (3rd Part)

- Calories
- Average cardiac frequency
- Average speed

Press the "VIEW"-button, to view the <u>History of laps</u>. On the left upper side the number of the recording (training) is shown, on the right upper side the number of laps. Press the "ST. / STP." or the "LAP/RESET" buttons, to switch between the individual laps.

The history of the laps consists of 2 parts, which are always displayed alternatively:

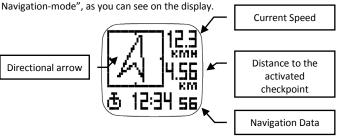
- Part 1.
  - Average lap time, lap distance and Tempo (Pace) of this lap
- 2<sup>nd</sup> Part

Medium, average frequency of this lap and the speed of this lap.

Press the "VIEW"-button, to get again to the Histories of trainings.

### 6.4 GPS-Navigation-mode

Press the "MODE"-button multiple times until you get to the "GPS



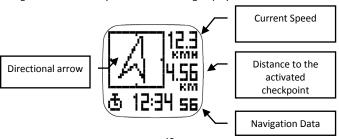
#### Paths and Waypoints

You can save up to 10 routes on this GPS-watch, but you can only work with one path. A path can consist of up to 99 waypoints. Waypoints within a path can be linked with each other and form a path, but they also can be single waypoints. The GPS-Navigation mode has two subfunctions, you can choose between the two of them by tipping the "VIEW"-button.

- Navigation-display
- Go-to-display

#### 6.4.1 Navigation-display

Press the "VIEW"-button multiple times when you are in the "GPS Navigation-mode" until you see the following display:



First choose the path, the navigation-mode and the waypoint-radius, like described as follows:

#### Choose path

- Choose "Settings" → "Navigation" → "SelPath"
- Now you can choose from path 1 to path 10

#### Delete path

- Choose "Settings" → "Navigation" → "DelPath"
- Now you can choose from path 1 to path 10

#### Navigation types

There are three different types of navigation:

- Waypoint-navigation: The activated waypoint is the goal. Choose this
  navigation type, to go to an individual waypoint on the activated path.
   Select the activated waypoint in the "go-to-display".
- Forward-navigation: The last waypoint is the finish. Choose this kind of navigation to run from the first to the last waypoint on the activated path. Activate the nearest waypoint in your area in the "go-to-display" to start with. When you reach the activated waypoint, automatically the next waypoint is displayed until you finish the path.
- Backward-navigation: The first waypoint is the finish. Choose this kind of navigation to run from the last to the first waypoint on the activated path. Activate the nearest waypoint in your area in the "go-to-display" to start with. When you reach the activated waypoint, automatically the previous waypoint is displayed until you rech the first waypoint.

#### **Choose navigation-modes**

- Choose "Settings" → "Navigation" → "NavMode"
- Now choose "waypoint", "forward" or "backward"

#### Waypoint-radius

Here you can adjust when exactly a waypoint is reached. Basic setting is 30 meters (98,43 feet). So when you enter this radius, the waypoint is reached. You can also adjust the radius manually (from 10 to 200 meters/ 32,81 to 656,17 feet).

- To adjust the waypoint-radius manually, hold the "MODE"-button to get to the menu, choose "Navigation" → "WP Radius".
- Now you can adjust the waypoint radius

#### Start GPS

Please carefully read the hints mentionend in chapter 5 "General information regarding the GPS reception".

The search for satellites under best conditions normally lasts app. 1 min. when started cold, about 10 seconds when started warm.

<u>Cold start</u> is the first start ever or the first start after being inactive for a long time. We also talk about a cold start, when the watch was moved more than 300 km (186,41 miles), from the last point of calibration. The GPS-watch does not know the exact constellation of the satellites and has to regain the data.

Once this step is finished, there is only the <u>warm start</u>, which lasts app. 10 seconds. A warm start can only work, if the GPS-watch was not carried over far distances since its last location calibration. The more satellites move since its last location calibration, the longer the search for satellites will last.

For a good GPS-reception it is important to know that the watch should lie even and shall not be moved.

**Indication:** Before you start your workout, lay your GPS-watch in open area with view to the sky (e.g. window board, car roof) and start the search for satellites.

To start the search for satellites, there are following options:

- Hold the "MODE"-button to get to the menu, choose GPS "On/Off", and activate "on".
- 2) Press and hold the "VIEW"-button in the GPS-navigation-mode.
  Once you received the GPS-signal, the display shows a directional arrow, which will show you the way to the next waypoint.



#### **Turn off GPS manually**

To turn off the search for satellites, there are following options:

- Hold the "MODE"-button to get to the menu, choose GPS "On/Off", and activate "off".
- 2) Press and hold the "VIEW"-button in the GPS-navigation-mode.

#### **GPS Timeout setting up**

The "GPS Timeout" defines the time space, how long the watch is looking for a satellite before it takes the defined timeout. You can set 5 or 30 minutes:

- Hold the "MODE"-button to get to the menu, choose GPS → "Timeout"
- Now choose between "5 mins" or "30 mins".

Basic setting for the GPS Timeout is 5 minutes. When the GPS is on and you go to an interior room, the watch probably will not have a GPS-reception.

To save the batteries, the GPS-watch will stop searching after 5 minutes and will turn off the GPS.

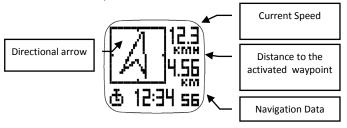
#### Start/Stop Workout

Press the "ST./STP."-button when you are in the GPS-navigation mode to start or to stop the workout. Thus the search for the GPS-reception and the

heart rate measurement are activated automatically (if this has not been done yet manually).

#### **Recording Lap Times**

During the workout press the "LAP/RESET"-button to record a lap time. The maximum number of lap times for each workout is 99.



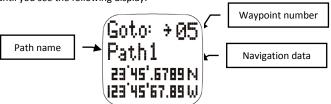
The current speed and the distance to the activated waypoint are displayed. Alternating following navigation data is shown in the bottom of the line:

- Time of day
- Workout time
- Distance to finish
- Estimated time to finish
- Current heart rate (if available)

Once you reach the radius of a waypoint, you can hear 3 short "beep"-sounds, except you deactivated them earlier in the menu (6.1.2 System settings).

#### 6.4.2 Go-to-display

Enter the GPS-Navigation mode and press the "VIEW"-button several times, until you see the following display:



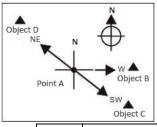
You can choose a waypoint from the previous path by either pressing the "ST./STP." or the "LAP/RESET"-button.

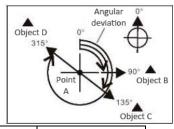
Alternating following navigation data is shown in the bottom of the line:

- Time and date, the time when the waypoint was created and the direction (degree display) to this waypoint (assumption: GPS-reception)
- Longitude and altitude of the waypoint

After activating a waypoint, press the "VIEW"-button to return to the navigation menu.

### 6.5 Compass-mode





ENE	East-North East	57° - 78°
E	East	79° - 101°
ESE	East-South East	102° - 123°
SE	South East	124° - 146°
SSE	South-South East	147° - 168°
S	South	169° - 191°
SSV	South-South West	192° - 213°
SV	South West	214° - 236°
VSV	West-South west	237° - 258°
V	West	259° - 281°
VNV	West-North west	282° - 303°
NV	North west	304° - 326°
NNV	North-North west	327° - 348°

#### 6.5.1 Compass calibration

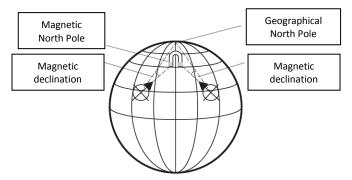
The compass of the GPS watch must be calibrated:

- if the watch is used for the first time.
- if the compass will be used in a place, which is not identical to the place in which the compass was calibrated.
- To calibrate the compass, go in the adjustment mode and select "Settings" → "System" → "Compass" → "Calibrate". Keep the GPS

watch parallel to the floor and rotate clockwise, until "Done" appears on the screen.

#### 6.5.2 Entry of declination

The GPS watch, as most of the magnetic compasses, shows <u>toward the</u> <u>magnetic North Pole</u>. Any departure on a map however refers to the <u>geographical</u> North Pole. An angle arises from here. This is called deviation or declination.



To correct this declination, the deviation degree can be introduced. This deviation degree is indicated on maps as plus Eastern deviation (E), Western deviation minus respectively (V).

#### Example 1:

Western deviation 23° and the compass shows 323°  $\rightarrow$  323° - 23° = 300° Example 2:

Eastern deviation 22° and the compass shows  $278^{\circ} \rightarrow 278^{\circ} + 22^{\circ} = 300^{\circ}$ 

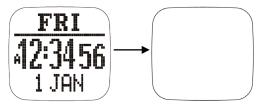
Most of the maps have a small arrow, which indicates where the magnetic North Pole is, how big the deviation is, respectively (it is indicated in degrees). Also, the internet page <a href="https://www.magnetic-declination.com">www.magnetic-declination.com</a> is useful, to find the declination of a place.

- To enter the declination, in the adjustment mode select "Settings" → "System" → "Compass" → "Declinate"
- Then adjust the declination.

# 7 Economic functioning

The GPS watch has an economic functioning mode. Thus, the light turns off, in order to extend the economic life of the accumulators.

To activate the economic functioning, in Time mode press the "LAP/RESET" button for approx. <u>5 seconds</u>. The screen will turn off. The settings from various modes will NOT be lost.



Then, for approx. 5 seconds, press again the "LAP/RESET" button, to exit the economic mode, and the screen will turn on again.

# 8 Display brightness

By pressing the "LIGHT" button, the display will be lit for approximately 5 seconds.

Also, a permanent brightness of the display is possible. To activate the socalled "Night mode", press and hold down the "LIGHT" button for approximately 5 seconds. Press the "LIGHT" button shortly to exit the night mode. Display brightness disappears after approximately 5 seconds.

However, note that more power is consumed for display brightness; therefore the accumulator will be discharged faster.

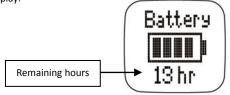
# 9 Charging the accumulator, replacement of batteries respectively

#### 9.1 Charging the accumulator of the GPS watch

The GPS watch has a lithium-polymer accumulator.

#### Display of the level of accumulators

In <u>Time-mode</u> press the "VIEW"-button until the following display appears on the display:



An estimation of the hours left for the use of the GPS function will be displayed. When the accumulator is almost empty, the following symbol will appear , and the GPS functioning and cardiac frequency measurement will be deactivated. The operation duration of the accumulator is of 8 hours when using the GPS, and in time mode of approx. 1 year.

To avoid corrosion, we recommend you to dry well the contact points of the GPS watch, before starting a charging process.

#### To charge the accumulator, proceed as follows:

Fix the clip of USB cable on the GPS watch according to the following image and insert the USB cable in a USB connected to power from your computer. The installation of a driver for charging the accumulator is not necessary.



During the charging process the following symbol appears on the screen:



The charging of an empty accumulator takes approximately 2 hours.

When the accumulator is fully charged, the display "battery full" appears.

#### 9.2 Replacement of the battery of chest strap

Open the cover of the battery compartment with a coin, rotating counterclockwise. Take the old battery and place a new one of 3 V type CR2032. Make sure the plus pole (+) shows upwards. Put back the cover from the battery compartment and close it again, rotating clockwise. Make sure the cover is well closed,



so that moisture does not infiltrate in the chest strap

#### 10 Data download

Runtastic Connect is a software to upload the training data from the watch to your Runtastic profile, where you can then analyse the data..

#### 10.1 Download the installation files

You can download the installation file for the program and the drivers for the USB cable from following homepage: <a href="http://www.runtastic.com/connect">http://www.runtastic.com/connect</a>

#### 10.2 How to install Runtastic Connect

- Do not yet connect the USB cable with your computer.
- 2. Double click on the downloaded file to start the installation process.
- Follow the instructions in the installation program to install the program to your computer.

### 10.3 Installing drivers for the USB cable

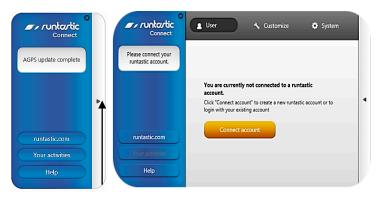
During the installation process of the *Runtastic Connect* progam you will also install the necessary drivers for the USB-port to your computer.

Indication: We are not assuming any liability for damages on your computer.

#### 10.4 Using Runtastic Connect

See below the most important facts how you can use Runtastic Connect:

 Connect the watch with the USB cable and then plug in the cable to your computer. Runtastic Connect will open automatically once linked to the watch with following window:



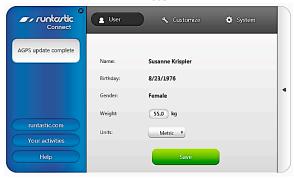
Click to this arrow to open up the window completely:

To sign up with your Runtastic account, click on "Connect account".

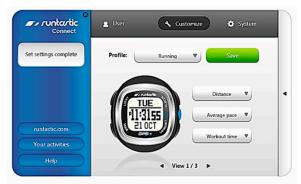
Automatically you will be linked to the homepage of Runtastic were you can log in with your Username. For creating an account please follow the instructions on the site

You can switch between the following windows:

"User"



"Customize"





In each window you can make adjustments in the settings which will be transferred to the watch once you press the "Save" button.

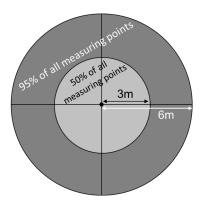
#### 11 Technical data

#### **GPS** watch

Power supply: Lithium-polymer accumulator, 380 mAH, 3,7V GPS accuracy: 3 meters CEP (50%) under clear sky conditions

The indication of the accuracy is based on the so-called CEP 50% (Circular Error Probability). This means that in case of very good GPS reception from the satellites 50% of all measuring points will be located in a circle with the indicated half-line of 3 m. It also means that half of the measuring points are outside this half-line.

Further, however, 95% of all measuring points are in a circle with double halfline. Nearly all points are inside a circle with a half-line of 6 m, in case of good reception of the satellite.



Accuracy of position determination

#### Chest strap

Power supply: 1 Lithium battery (3 V, CR2032)

Transmission frequency from the chest strap to the GPS watch: 2,4 GHz

# 12 Declaration of Conformity

# R&TTE directive 1999/5/EC and EU directive 2011/65/EU (RoHS):

Short text on declaration of conformity: hereby, Krippl watches declares, that the Runtastic GPS watch (Art. No.: RUNGPS1-S, RUNGPS1-B, RUNGPS1-P Model: D02I280) and the chest strap (Art. No.: RUNGPS1, Type: TD0037) is in compliance with the basic requirements, and the remaining relevant conditions of the guidelines 1999/5/EC and 2011/65/EU. You can find the complete text of the declaration of conformity on our homepage: hardware.runtastic.com

# 13 IC Statement (For Canada)

- This equipment is portable device. The output power of this device is less than 20mW. The SAR test is not required.
- This device complies with Industry Canada licence exempt RSS standard(s).
   Operation is subject to the following two conditions:
- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- 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, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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

# 14 FAQ/Correction of errors

Before claiming the GPS watch, verify if the accumulators are charged and charge them if need be. Also, check the batteries from the chest strap and replace them if need be.

#### I'd like to start training, why doesn't the GPS watch show speed?

It is important for GPS fast reception that the watch be at rest and not to be on the move. Before starting running, before starting the path respectively, start your GPS watch, in open space, with clear view to the sky (e.g. at the window ledge or under the bonnet of the car) and start the search for

satellites. Further, comply with point 5 "General information regarding GPS reception" from the operating instructions.

#### What does "GPS lost" display mean?

"GPS lost" display on the screen of the GPS watch means that it does not receive GPS signal or all the signals from the satellites were lost. For this, see point 6.3.3. "Training" of the operating instructions.

#### Why can't I see on the display?

#### Why doesn't the display light work?

Check if the accumulators are charged and charge them if needed. However, if no display appears on the screen, please contact the service.

#### Why is the screen black and why aren't the displays readable?

This is caused by long exposure to sunbeams or too high environmental temperature. Let the GPS-watch cool down, then the display will become readable again.

#### The display on the screen reacts slowly, why?

Is the temperature below 0°C? When the temperature rises again over 0°C, the display will become normal. The saved data will not be lost.

#### How long does the accumulator of the GPS watch last?

The service life of the accumulator is of 14 hours, when using the GPS, and of approx. 1 year in time mode.

#### It doesn't show my current speed, why?

Check if you receive enough GPS signal.

# Why does the GPS watch show a certain speed, if I do not walk/I am not on the move?

This depends on the exactness of position determination, measurement intervals of the GPS respectively. See next paragraph, the exactness of the GPS watch respectively.

#### How exact does the GPS watch show?

The exactness depends on the reception of the satellites. The indication of exactness is based on the so-called CEP 50% (Circular Error Probability). This means that, in case of a very good reception from the satellites 50% of all measurements will be in a circle with the indicated half-line of 3 m. It also means that half of the measurement points are outside this half-line. Further, however, 95% of all the measurement points are in a circle with double half-line. Almost all the points are inside a circle with a half-line of 6 m, in case of a good reception of the satellite.

#### Charge of the accumulator of the GPS watch does not work, why?

Make sure the USB port in which the GPS watch is inserted is power carrier. The installation of a driver for charging the accumulator is not necessary.

If problems appear when charging the GPS watch, check the contact pins on the back of the watch. If these were soiled with sweat deposits and skin scales, clean them with a sharp metallic object (e.g. tweezers).

# Why when riding the bike, a different speed in comparison to the computer without bike cable is shown?

Do not use the computer without bike cable and the GPS watch simultaneously. The signals of the sensor from the bike computer may disturb the GPS watch. Thus, false displays can be shown.

# Can the cell phone and the GPS watch be mounted together on the handle bar of the bike?

It is not recommended because disturbances (radio) may appear.

#### For which types of sports is the GPS watch adequate?

For outdoor sports like jogging, cycling, hikes, sailing, skiing etc.

#### Can I use the GPS watch also for measuring properties, houses etc?

The sports computer of the GPS is used only for free time activities/hobbies. Do not use the GPS watch when measurements demand professional accuracy.

# For climbing, trekking laps, cycling laps etc will I have to use only the GPS watch instead of maps and compass?

The GPS watch was designed to complete other forms of navigation, e.g. maps, compasses. It does not replace them directly. Do not use the GPS watch as a sole navigation support.

### 15 Warranty

We provide a 24 months warranty for this product. The warranty period begins on the date of purchase (till receipt, purchase voucher). During this period you will receive free of charge a new or repaired product. The warranty does not include batteries, improper handling, dropping, shock or the like.

In case of a claim you have the following possibilities:

- a) contact your point of sale or
- b) write us an e-mail: service@runtastic.com

PLEASE NOTE: FOR ORGANIZATIONAL REASONS, WE CANNOT ACCEPT ANY UNANNOUNCED PACKAGES NOT PREPAID.



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