EPSON

GPS Sports Monitor

R U N S E N S E

SF-110

## User Manual

10:28
5/27 AM

Introduction

Thank you very much for purchasing this GPS Sports Monitor "RUNSENSE".

To use the device correctly, make sure you read the User Manual along with the supplied Quick Start Guide.

Keep the supplied Quick Start Guide handy to help you resolve any problems.

This device can measure three measure GPS functions of running distance, pace, and altitude, as well as elapsed time, and calories burnt. You can also upload recorded data to a dedicated website allowing you to look back over previous workouts.

Descriptions in the User Manual

❗ *Important:*	Indicates things you must or must not do. Ignoring these instructions or mishandling this device could cause malfunction or operational problems to the device.
Note:	Indicates additional explanations and related information.
Menu Name	Indicates menu items displayed on the screen of the device.
A/B/C/D	Indicates the device buttons.
☞	Indicates related pages. Click the link in blue text to display the related page.

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Caution:

❏ Unapproved copying of part or all of this guide is strictly forbidden.

❏ The content of this guide is subject to change without prior notice.

❏ Although every effort has been made to ensure the accuracy of this guide, contact us if you have any questions or notice any errors in descriptions in the content of this guide.

❏ Despite the preceding clause, we cannot accept any responsibility for mishandling due to errors in this guide.

❏ We cannot accept any responsibility for malfunctions and so on that occur due to ignoring the content of this guide, the device being handled inappropriately, repairs or modifications performed by a third party that is not our company or appointed by our company.

Introduction

Features

Measurement function

Allows you to measure running data such as distance and time.

You can measure split and lap times, as well as using the GPS signal to measure distance and pace.
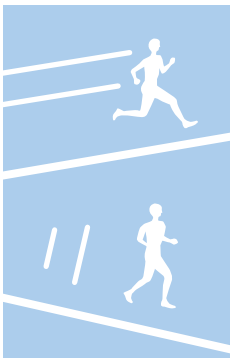
U "Measuring Time, Distance, and Speed " on page 34

Split Time: Elapsed time from the start

Lap time: Time taken for each lap

You can use the recall screen to check recorded measurement data.

U "Checking Measurement Data" on page 44

Exercise measurement function

Allows you to measure the burnt calories of all daily activities. Besides exercise, you can measure all burnt calories such as desk work, housework, sleeping, and so on.

U "Checking Measurement Data" on page 44

Measure settings

Allows you to change the measurement settings.

❏ Automatically records laps when a distance set in advance has been reached (AT Lap function)

U "Recording Laps Automatically (AT Lap Function)" on page 38

❏ Automatically stops measuring when you stop running, and resumes when you continue running (AT Pause function)

U "Automatically Start/Stop Measuring (AT Pause Function)" on page 40

❏ Sets and measures the target time for one kilometre/mile (Target Pace function)

U "Setting a Pace and Measuring (Target Pace Function)" on page 41

❏ Monitors heart rate with the heart rate monitor (Heart rate function)

U "Measuring Heart Rate" on page 51

❏ You can change the items and layout of the measurement screen display (Screen settings function)

U "Screen" on page 77

Introduction

Settings

Allows you to change the settings for the device.

❏ Communicates with external devices (Communication function)

U "Comm. Settings" on page 74

❏ Adjusts the screen's contrast (Adjust contrast function)

U "Sys. Settings" on page 75

❏ Turns on the light automatically when the screen changes (Auto Light function)

U "Sys. Settings" on page 75

❏ Resets configuration information in the device's memory (Initialise function)

U "Sys. Settings" on page 75

Other features
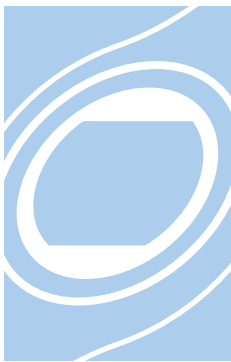
❏ You can measure stride using the built-in stride sensor.

U "Educating Your Stride Sensor" on page 31

❏ You can skip GPS positioning if it is taking too long.

U "Skipping GPS positioning" on page 28

❏ You can take measurements without performing GPS positioning.

U "Indoor mode" on page 29

❏ You can monitor, analyse, compare and share your recorded data using the dedicated Web application "RUNSENSE View".

U "Data Management Using the Web Application (RUNSENSE View)" on page 55

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Using this Device Safely

Make sure you read the manuals (Quick Start Guide and User Manual) first to use this product safely.

The product may malfunction, or an accident may occur if it is handled incorrectly.

❏ Keep the manuals handy to help you resolve any problems.

❏ When taking this product out of the country of purchase, check the laws and regulations in the destination country before you travel.

❏ This product is not a medical device. Use this product as an indicator during physical exercise.

Symbols in this Manual

The following symbols are used in this guide to indicate possible dangerous operations or handling. Make sure you understand these warnings before using the product.

> ⚠️ *Warning:*
> *This symbol indicates information that, if ignored, could possibly result in serious personal injury.*

> ⚠️ *Caution:*
> *Ignoring these instructions and mishandling this device could cause injury or damage to property.*

🛈	This symbol indicates an action that should be done.
🚫	This symbol indicates an action that must not be done.

Notes on Usage

Notes on using the product and components

	Warning
!	Exercise according to your physical capabilities. Stop exercising and consult your doctor if you feel unwell during exercise.
🚫	Do not use or store this product in the following environments. It may cause an electric shock or fire, or the product may malfunction or be damaged. ❏ Locations with very high or low temperatures or humidity ❏ Near volatile substances ❏ Dusty places ❏ Near a strong magnetic field (for example, near a loudspeaker)
	Do not disassemble this product, and do not attempt to repair this product by yourself. It may cause an electric shock or accident.
	Do not leave this product within reach of young children.

	Caution
!	Stop using the device immediately and consult your doctor if you have an allergic reaction or a rash during use.
🚫	The device is water resistant at 5 bar (5 ATM). Although you can use the device for swimming and so on, do not perform button operations under water.
	Do not pour water directly from the tap onto this product. The power of the tap water stream may be strong enough to compromise the product's waterproof feature.
	Do not wear this product in a bath or sauna. The steam and soap may compromise the waterproof feature or cause corrosion.

Notes on using the cradle

	Warning
🚫	Do not use the cradle or AC adapter if they are in any way damaged, faulty or contaminated by foreign material such as dust, water or dirt. Do not use any adapter other than the specified adapter for charging.

Optional heart rate monitor

⚠ Warning	
⚠ (blue)	If the heart rate monitor battery is accidentally swallowed, contact your doctor immediately.
	When disposing of the heart rate monitor battery, follow your local laws and regulations.
🚫	When replacing the heart rate monitor battery, only use the type of battery specified. Also, make sure the direction of the positive and negative terminals is correct.
	Do not place the battery or the heart rate monitor with a battery installed into a fire.

Notes on Electromagnetic Waves

This device is equipped with Bluetooth® Smart technology. When operating supported heart rate monitors or smartphones, this function wirelessly sends and receives heart rate measurement data to the device.

This device has been classified as a low electronic data communication system based on Radio Law. Therefore, this device does not require a radio station licence. The following acts may be punishable by law.

❏ Disassembling or remodeling the device

❏ Removing the verification or certification number for the device

VCCI Class B Information Technology Device

This device is a class B information technology device. This device is designed for home use, but interference could occur when using in close proximity to radios or television aerials.

Certification information

CE

Frequency

This device uses the frequency bands 2.402 to 2.480 GHz. Other wireless devices may use the same frequency. Note the following points to avoid wireless interference with other wireless devices.

2.4 XX 1
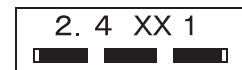
Precautions when performing wireless communication

This device operates on the 2.4 GHz band.

This device operates in the same frequency bandwidth as industrial, scientific, and medical devices such as microwave ovens and mobile object identification (RF-ID) systems (licensed premises radio stations, amateur, and unlicensed specified low-power radio stations (hereafter "other radio stations")) used in factory production lines.

1. Before using this device, make sure there are no "other radio stations" being used in the vicinity.

Using this Device Safely

2. If this device causes RF interference between the device and "other radio stations", promptly move to a different location, stop using the device, and contact your local reseller to ask for advice on preventing interference (for example setting up partitions).

3. In addition, when harmful radio wave interference occurs between the device and "other radio stations", and refer to "Contacting us about this product" to contact our service centre.

⚠ **Warning**	
🛈	If you notice any abnormalities on your skin and so on, stop using the device immediately and contact a specialist.
	In areas in which usage is restricted, such as on airplanes and in hospitals, follow the rules and regulations provided (such as in-flight announcements).
🚫	Do not bring the device into an operating room, intensive care unit, and so on, and do not use the device near medical equipment. Radio waves from the device may interfere with electronic medical equipment causing the equipment to malfunction and cause an accident.

⚠ **Caution**	
🛈	Radio waves from the device may affect implantable medical devices such as a cardiac pacemaker.Follow the instructions and precautions of such implantable medical devices before use.

Preparing and Basic Operations

You need to make the following preparations before use.

Once preparations are complete, check the method and important points when performing GPS satellite positioning.
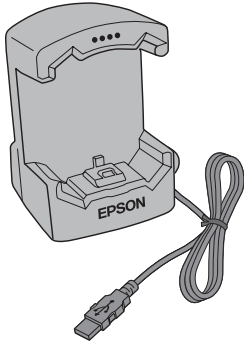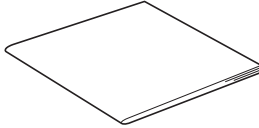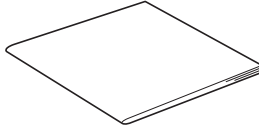
Checking the Items Provided
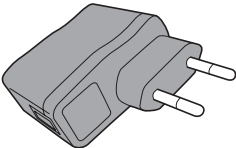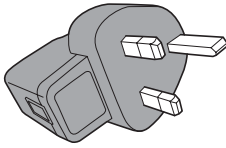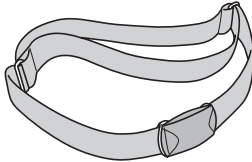
Make sure you check that all of the following items have been supplied with this product. If there is anything missing, contact your local reseller.

Main unit
SF-110

Cradle	Quick Start Guide	Warranty

Options

You can purchase the following optional extras. Contact your local reseller for more information.

AC Adapter for Europe excluding UK (Model No.: SFAC02)	AC Adapter for UK (Model No.: SFAC03)	Heart Rate Monitor (Model No.: SFHRM01)

Basic Operations

Changing screens

This device is comprised of a Time screen, Measurement screen, Settings screen (**Settings** menu and **Measure set.** menu), and Recall screen, and you can perform operations with the following buttons.

Operation buttons
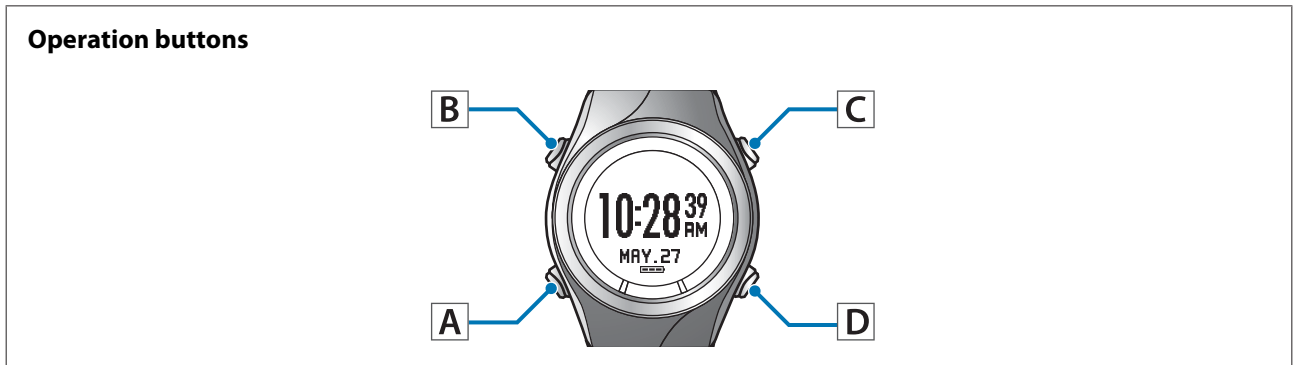
▷ : Short press

▶ : Long press (two seconds or more)

Settings menu
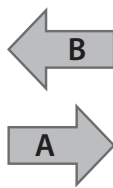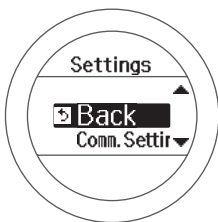
U "Setting screen (**Settings** menu/**Measure set.** menu)" on page 17

Time screen

U "Time screen" on page 15

Measurement screen

U "Measurement screen" on page 16
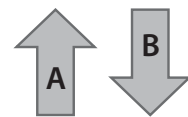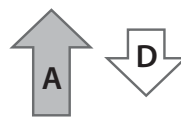
See the following pages for information on making settings for each screen.

U "Making Settings" on page 68

Recall screen

U "Recall screen" on page 18

Measure set. menu
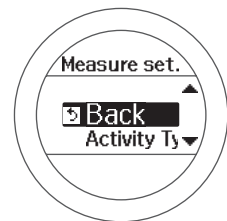
U "Setting screen (**Settings** menu/**Measure set.** menu)" on page 17

Preparing and Basic Operations

> *Note:*
> ❏ *When you leave the device for a while, it enters sleep status and the time display turns off. This is not a malfunction as the display is restored the next time a button is pressed or you move the device. You can also turn off the sleep function.*
>
>   ☞ *"Sys. Settings" on page 75*
>
> ❏ *The time screen is displayed if no operations are made for a specified length of time. The time varies depending on the screen displayed.*
>
>   *Sys. Settings/User Settings/Recall screen: 3 mins.*
>
>   *Measurement Screen (while not measuring): 60 mins.*
>
> ❏ *When three minutes have passed without any operations being performed on the Measure set. menu screen, the measurement screen is displayed.*

Function of each button

The function for each button changes depending on which screen is displayed.

Time screen

Operation buttons

Button Operation		Explanation
A	Short press	Displays the exercise measurement screen.
	Long press (two seconds or more)	Turns the power on or off.
B	Short press	Turns the light on or off. The light turns on for approximately 10 seconds.
C	Short press	Displays the Menu. U "Setting screen (**Settings** menu/**Measure set.** menu)" on page 17
D	Short press	-

Measurement screen

Operation buttons

Button Operation		Explanation
A	Short press	You can display up to three measurement screens and switch the screens using this button.
	Long press (two seconds or more)	Displays the time screen. Not available while measuring.
B	Short press	Turns the light on or off. The light turns on for approximately 10 seconds.
C	Short press	Starts, stops, or resumes measuring.
D	Short press	Displays the Measurement menu while measurement is being paused. Records laps while measuring.

Setting screen (Settings menu/Measure set. menu)
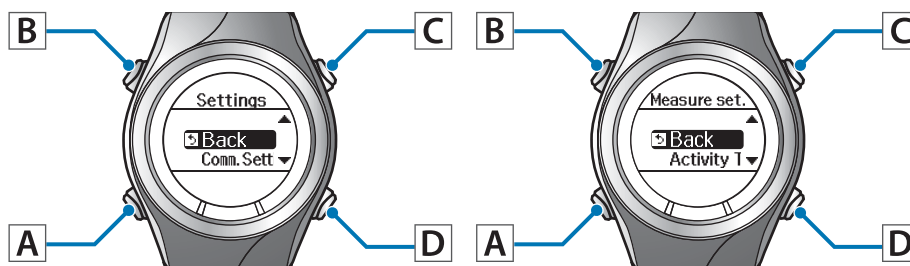
Operation buttons

Button Operation		Explanation
A	Short press	Confirm a selection.
	Long press (two seconds or more)	From the **Settings** menu, the time screen is displayed. From the **Measure set.** menu, the measurement screen is displayed.
B	Short press	Turns the light on or off. The light turns on for approximately 10 seconds.
	Long press (two seconds or more)	-
C	Short press	Selects the upper item. Increases the value.
	Long press (two seconds or more)	Selects the upper item. Speeds through the values.
D	Short press	Selects the lower item. Decreases the value.
	Long press (two seconds or more)	Selects the lower item. Speeds through the values.

Preparing and Basic Operations

Recall screen

Operation buttons

Button Operation		Explanation
A	Short press	Confirm a selection.
	Long press (two seconds or more)	Displays the time screen.
B	Short press	Turns the light on or off. The light turns on for approximately 10 seconds.
	Long press (two seconds or more)	-
C	Short press	Selects the upper item.
	Long press (two seconds or more)	Selects the upper item.
D	Short press	Selects the lower item.
	Long press (two seconds or more)	Selects the lower item.

Preparing and Basic Operations

Alarm

This function allows you to sound an alarm when pausing a lap, setting the target pace, and so on.

The following shows the alarm timing. A long alarm sounds when the lap is paused, and a short alarm sounds at other times.

Measurement Settings	Explanation
AT Lap ☞ "Recording Laps Automatically (AT Lap Function)" on page 38	When lap is paused.
AT Pause ☞ "Automatically Start/Stop Measuring (AT Pause Function)" on page 40	❏ When measuring is stopped ❏ When measuring restarts
Target Pace ☞ "Setting a Pace and Measuring (Target Pace Function)" on page 41	When you are off the target pace.

Charging

Before use

> ⚠ *Important:*
> ❑ *Do not place the device in the cradle if it is wet from water or sweat.*
>   *Otherwise the contact points on the cradle and the device could corrode, malfunction, or cause a communication failure.*
>
>
>
> ❑ *Do not perform button operations when it is wet; otherwise, a malfunction could occur.*
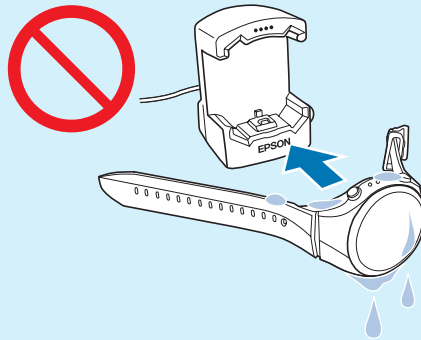
If the device is wet from water or sweat, use a little running water to wash the contact points, wipe away most of the water with a towel and so on, and then let it dry naturally before placing it in the cradle.
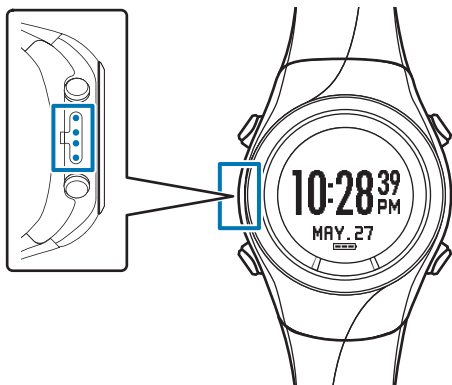
Contact points   Use low pressure water to wash the device.

See the following for more details about daily maintenance.
☞ "Looking after your device" on page 86

Charging

> ⚠ *Important:*
> ❑ *Charge this device when using it for the first time.*
>
> ❑ *Charge in an environment where the surrounding temperature is 5 to 35°C. In any other environment the following charge error screen is displayed, and charging stops. When it returns to a suitable temperature, charging resumes.*
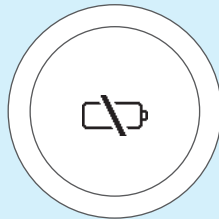
1 Connect the cradle using one of the following methods.

■ **Using a computer**
Connect the cradle's USB plug to the computer's USB port.
This is not guaranteed to work with all computers. Do not use a USB hub. Instead, connect the cradle directly to the computer.
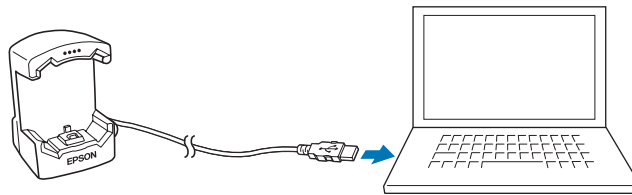
■ **Using the AC adapter**
Connect the cradle's USB plug to the AC adapter's USB port.
We recommend using the optional AC adapter (Model No.: SFAC02 Europe excluding UK / SFAC03 UK). If you do not use a supported AC adapter, you may not be able to charge or it may not operate correctly.
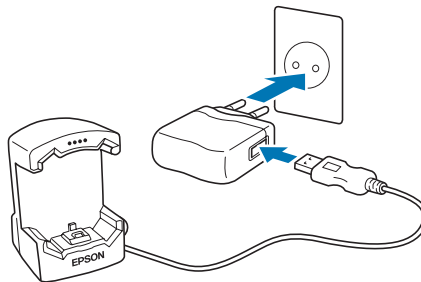
2 Place the device into the cradle.

Check that the contact points on the device are pointing up and match the contact marks on the cradle.

After placing the device into the bottom of the cradle, push carefully on the top of the device until it is fixed in place.
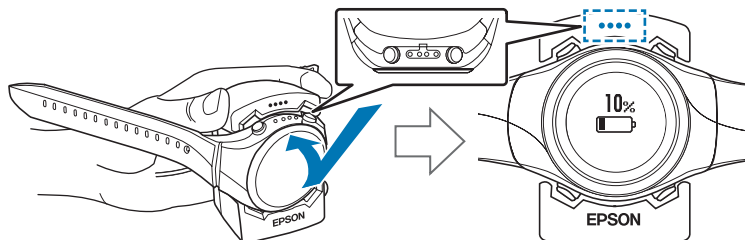
> **⚠ Important:**
> *Make sure the device is placed in the correct direction; otherwise, the device or the cradle could be damaged.*
>
>
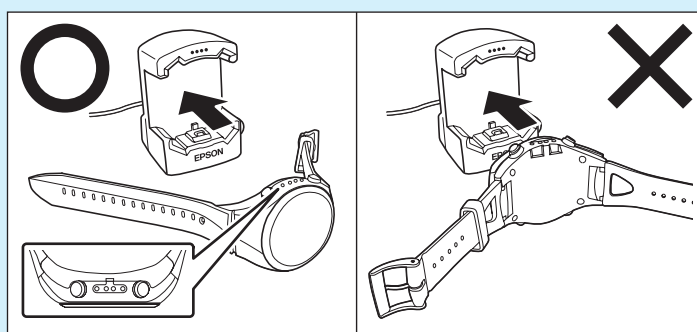
When the device is placed in the correct direction, the alarm sounds, the following screen is displayed, and charging starts.

Although the average time necessary for a full charge is **2.5 to 3.5 hours**, this varies depending on the situation.
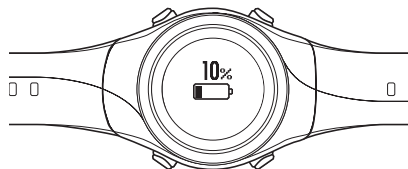
3 Check that charging is complete.

When the following charging icon is displayed, charging is complete.
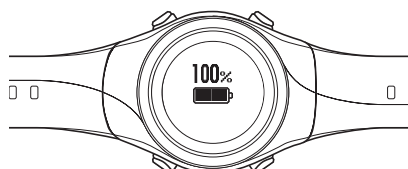
> *Note:*
> *When the battery icon displays 100%, an over-charge prevention function is activated. The device will not be damaged even if you continue to charge the battery.*

4 When charging is complete, remove the device from the cradle.

Hold the cradle and press the device down into the lower part of the cradle to release it.
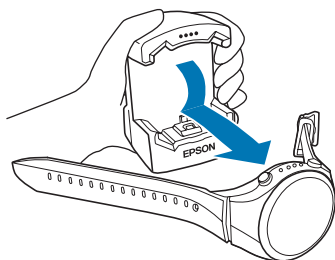
Initial Settings

After charging the device for the first time and removing it from the cradle, follow the on-screen instructions to Initialise the settings.

> ⚠ *Important:*
> *Set the time by receiving a GPS signal. Signals from the GPS cannot be received while indoors. Make sure this is performed outside.*

Operation buttons

1 Set the language.

Use **C/D** to select, and then press **A**.

2 Set the **Units**.

Use **C/D** to select, and then press **A**.
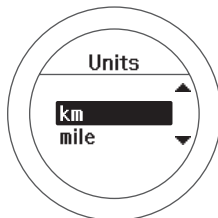
3 Set your **Height** and **Weight**.

Use **C/D** to select, and then press **A**.

4 Set your **DOB**.

Use **C/D** to select, and then press **A**.
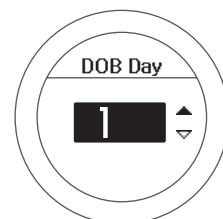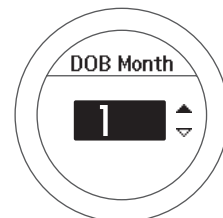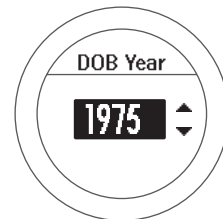
5 Set your **Gender**.

Use **C/D** to select, and then press **A**.
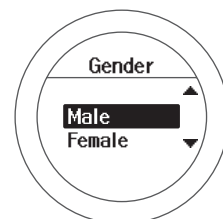
6 Set today's date.

Use **C/D** to select, and then press **A**.

Date. Year

2014

Date. Month

1

Date. Day

2
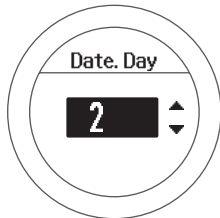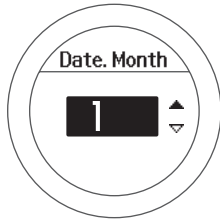
7 Set the **Date Format**.

Use **C/D** to select, and then press **A**.

Date Format

Day. Month
Month. Day
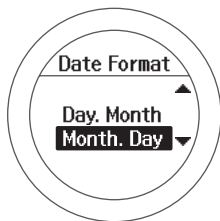
8 Go to a location outside with no obstructions overhead.

> ⊘ *Important:*
> *Take the following steps to receive a signal from the GPS and synchronise time automatically. Since the signal from the GPS cannot be received indoors, go outside to a location without any obstructions overhead.*

9 Complete the settings.

Use **C/D** to select **Yes**, and then press **A**.

Completed

Yes
No
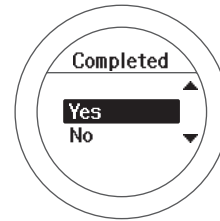
A signal is received from the GPS and time is automatically synchronised.

Time Adjust

Cancel
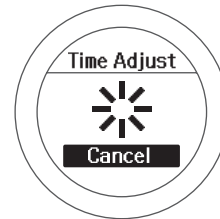
When **Complete** is displayed, press **A**.
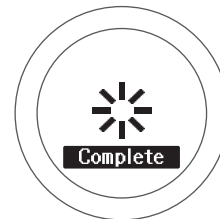
Complete

The time screen is displayed.

10:28³⁹ AM

MAY.27

> *Note:*
> ❑ *When you leave the device for a while, it enters sleep status and the time display turns off. This is not a malfunction as the display is restored the next time you move the device.*
>
> ❑ *If time synchronisation fails, the signal from the GPS may not be being received properly. Perform* **Time Settings** *from* **Sys. Settings**.
>
> ☞ *"Sys. Settings" on page 75*

About the battery

You can check how much charge remains from the battery icon below the time display.

Battery icon		▭▬▬▬▭	▭▬▬▭	▭▬▭	▭ ▭
Hours remaining*	GPS On Heart Rate Monitor Off	30 to 21 hours	21 to 12 hours	12 to 3 hours	3 to 0 hours
	GPS On Heart Rate Monitor On	26 to 18 hours	18 to 10 hours	10 to 2 hours	2 to 0 hours

* Standard hours during which you can use the Measurement function while receiving a GPS signal. Usage hours vary depending on the conditions (Heart Rate Monitor On, frequency the light turns on, and so on).

> ❗ *Important:*
> *Nothing is displayed when the battery is running out. If the device is left for a long time with a low battery, the performance of the rechargeable battery will deteriorate. Make sure you charge the device **at least once every six months** even when it is not being used.*

> *Note:*
> *Even if the battery runs out, measurement data is stored in the main memory.*

Specifying a GPS (GPS Positioning)

Measuring function for the device

This device receives a signal from the GPS, and measures distance and pace. To make sure measurements are performed accurately, try to use the device under the following conditions which allow for easy reception of GPS signals.

❏ Outside with no obstructions overhead

❏ Wear the device with the screen facing up
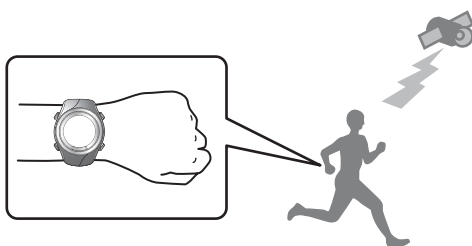
Locations where you cannot receive signals

Inside rooms or buildings, or underground	In tunnels	Under water

Locations that are difficult to receive signals

Locations with electronic interference, such as constructions sites and heavy traffic	Near high-voltage wires or television towers, overhead electric wires for trains, and roads with skyscrapers	On water

GPS positioning

This device receives a signal from various satellites, and identifies your position to use for measurement.

> **Important:**
> *While identifying a GPS, make sure you are outside with no obstructions overhead, and try to keep the device as still as possible.*

Operation buttons

1 Go to a location outside with no obstructions overhead.

2 Display the **Menu**.

Press **D** on the time screen.

3 Select **Measurement**.

Press **C** or **D** to select, and then press **A** to set.

GPS positioning starts.
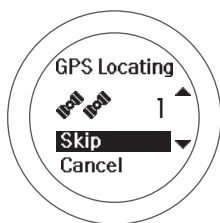
When GPS positioning is complete, the positioning complete screen flashes, and then the measurement screen is displayed.
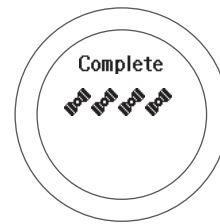
> **Note:**
> *It usually takes less than two minutes to complete GPS positioning.*
>
> *If it takes more than two minutes and **Failed** is displayed, we recommend selecting **Cancel**, moving to a different location, and trying again.*
>
>

When the measurement screen is displayed, you can start measuring.

Skipping GPS positioning

If you want to start measuring immediately, or if GPS positioning is taking too long, select **Skip** during GPS positioning and start measuring.
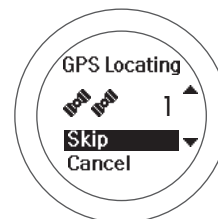
GPS positioning continues while measuring, and when positioning is complete the device starts recording positional information. The routes before GPS positioning is complete and while using indoor mode are not recorded.

Indoor mode

This function allows you to measure without performing GPS positioning. Use this when GPS positioning cannot be performed because you are indoors and so on.

The route and so on is not recorded in indoor mode. Also, measurement items are limited in indoor mode.

Use either of the following methods to enter indoor mode.

❏ Select **Indoor** on the Menu screen
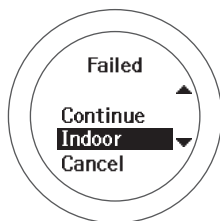
❏ If GPS positioning fails, select **Indoor** on the screen displayed
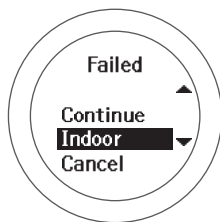
Making precise measurements

In the following situations, complete GPS positioning, display the measurement screen, and then wait outside for at least 15 minutes with no obstructions overhead. This allows you to make precise measurements.

❏ When you use the device for the first time after purchase

❏ When the device has not been used for several months

You need not make these preparations from the second time.

Note:
The basic configuration of the GPS system is 24 satellites orbiting the Earth at an altitude of 20,000 km, with at least four satellites travelling in six different orbits. The GPS receiver acquires data from four satellites and calculates the latitude, longitude, altitude, and time. Measuring can start once positioning has been performed and this information has been received. Since you can receive more detailed GPS navigation data (satellite orbital information) after 15 minutes from this point, you can make more precise measurements.

However, errors may occur in distance measurements, even after waiting 15 minutes or more, due to atmospheric conditions and the usage environment.
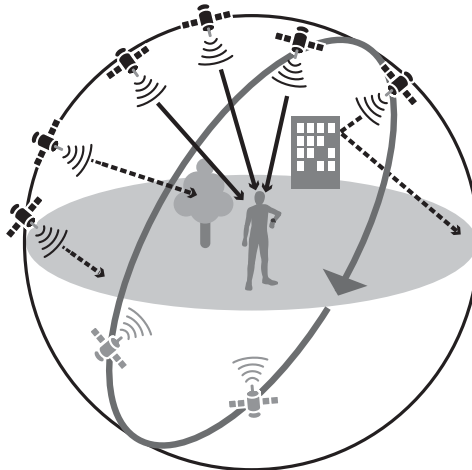
Educating Your Stride Sensor

About the stride sensor

This device contains a stride sensor that uses a stride algorithm to learn your pace from your actual speed and your body's vibration frequency. This allows the device to calculate distance and laps with high precision, as well as measure your stride even when GPS signal is lost such as in a tunnel, and so on.
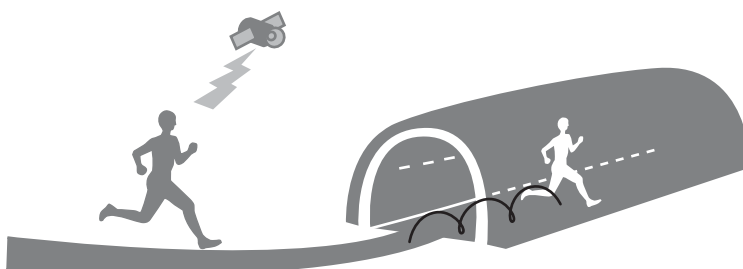
Educating the stride sensor

When using the device for the first time, run under the following conditions so that the stride sensor can learn your stride.

Location/Time

Run or walk in the following locations that allow GPS positioning.

❏ When outside with no obstructions overhead: Approximately 10 mins.

❏ When surrounded by tall buildings: approximately 30 mins.

> *Note:*
> ❏ *You need not make these preparations from the second time. However, note if the device is reset so you have to go through the device set up again you will need to repeat this process.*
>
> ❏ *When you mainly use the device for walking, from the **Measure set.** menu, set **Activity Type** to **Walk**.*
>
>   U *"Measure set." on page 69*
>
> ❏ *Usage, for example educates the stride sensor according to your primary usage for example if you plan to use the device to measure running, run at your usual pace to educate the sensor. Errors may occur if your stride pattern is significantly different to the learning session.*

Measurable Items

Items that can be measured change according to the settings for the GPS signal (GPS on/off) and the heart rate monitor.

When GPS is off for indoor mode, the route is not recorded.

Measurement item (display name)
Distance (Dist.)
Pace (Pace)
Average Pace (Av.Pace)
Lap Pace (LapSpd)
Split Time (Split)
Lap Time (Lap)
Time (Time)
Calories Burnt (Calories)
HR (HR)[1]
Steps (Steps)
Altitude[2][3]

[1] : Can be measured when HR monitor is on (You can purchase the optional HR monitor.)

[2] : Cannot measure during indoor mode ☞ "Indoor mode" on page 29

[3] : Only displayed in the Web application (NeoRun) ☞ "Data Management Using the Web Application (RUNSENSE View)" on page 55

Measure

Using the positional information and time for the GPS signal, the time, distance, and speed are measured automatically.

Measuring Time, Distance, and Speed

What is the measurement function?

This function allows you to measure split times and lap times simultaneously. Also, since this device is equipped with a GPS function, you can automatically measure distance, speed, and route using the positional information and time from the GPS signal.

This is useful for a variety of activities such as running or walking, and can be used for competition or standard exercise.

> **Note:**
> *Set the Activity Type (Run or Walk) before you start measuring.*
>
> U *"Measure set." on page 69*

Split Time

Measures the elapsed time from the start.
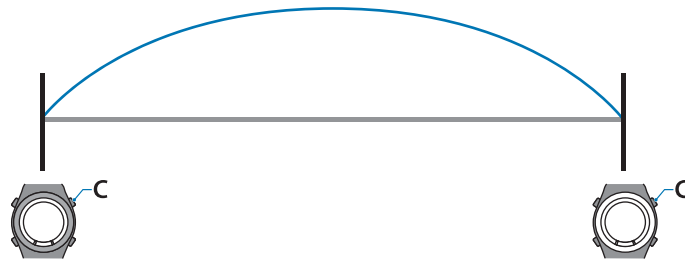
Press **C** to start measuring, and press **C** again to stop measuring.

Lap Time

Records the elapsed time for each lap.
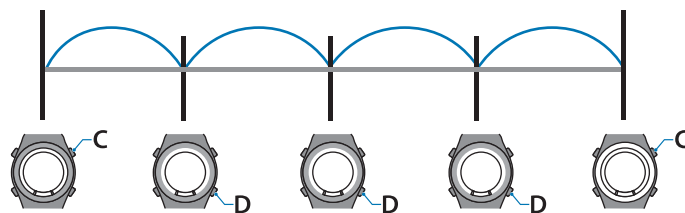
To record a lap, press **D** while measuring.

Also, when using the AT Lap function, laps are recorded automatically when a distance set in advance has been reached.

U "Recording Laps Automatically (AT Lap Function)" on page 38

Measuring

Operation buttons

A **Display the Menu.**

Press **D** on the time screen.

B **Select Measurement.**

Use **C**/**D** to select, and then press **A**.

GPS positioning starts, and the measurement screen is displayed once positioning is complete.

C **Start measuring.**

Press **C**.

D **Record the lap.**

Press **D** while measuring.

The Lap Hold Screen* is displayed for 5 seconds, and then the measurement screen is displayed.

* The screen display differs depending on the settings.

E **Stop measuring.**

Press **C** while measuring.

Press **C** to resume measuring.

F **Save the measurement result.**

Press **D** while measurement is being paused to display the **Measurement menu**, and then select **Complete measurement.**

The data that has been measured is stored in the main memory and can be checked in the History screen.

Screen display

Measurement screen

There are three measurement screens available. Press **A** to change the screen.

> *Note:*
> *You can change the screen pattern and the measurement items displayed for each screen.*
>
> U *"Screen" on page 77*

Screen	Screen Pattern (Default)	Measurement Item (Default)
Screen1	3 Lines	Distance (Dist.) Lap Pace (LapPace) Lap Time (Lap)
Screen2	3 Lines	Steps (Steps) Average Pace (Av.Pace) Calories (Calories)
Screen3	3 Lines	Time (Time) Split Time (Split) Pace (Pace)

User Manual

Measure

Target Pace Screen

The Target Pace Screen is displayed when it is set to ON.

☞ "Setting a Pace and Measuring (Target Pace Function)" on page 41

Screen		Screen Pattern (Default)	Measurement Item (Default)
Target Pace		2 Lines	Average Pace (Av.Pace) Set target pace

Lap Hold Screen

The Lap Hold Screen is displayed for 5 seconds when a lap is recorded.

> *Note:*
> *You can change the screen pattern and the measurement items displayed.*
>
> ☞ *"Screen" on page 77*

Screen		Screen Pattern (Default)	Measurement Item (Default)
Display Lap Screen		2 Lines	Lap Time (Lap) Lap Pace (LapPace)

Recording Laps Automatically (AT Lap Function)

When a distance set in advance is reached, laps are recorded automatically.

Set the lap distance.

Operation buttons

A Display the **Menu**.

Press **D** on the time screen.

B Select **Settings**.

Use **C/D** to select, and then press **A**.

C Select the **Measure set.** menu.

Use **C/D** to select, and then press **A**.
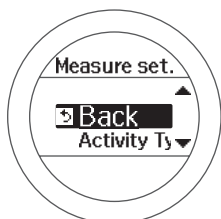
Note:
*You can also select the **Measure set.** menu from the measurement screen.*

U *"Changing the Measure set." on page 69*

D Select **AT Lap**.

Use **C/D** to select, and then press **A**.
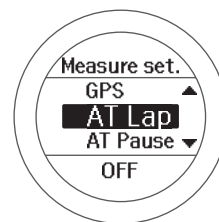
E Select **ON**.

Use **C/D** to select, and then press **A**.

F Set the distance.

Use **C/D** to set, and then press **A**.
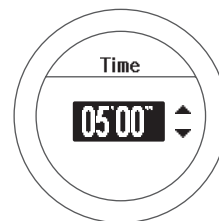
Hold down **C/D** to speed through the numbers.

G Complete the settings.

Hold down **A**.

The time screen is displayed.

When you have made the settings from the measurement screen, the measurement screen is displayed.

H Start measuring.

For details on how to measure, see the following page.

Measure

Automatically Start/Stop Measuring (AT Pause Function)

Measuring stops automatically when you stop running, and resumes when you continue running.

Operation buttons

A Display the Menu.

Press **D** on the time screen.

B Select Settings.

Use **C/D** to select, and then press **A**.

C Select the **Measure set.** menu.

Use **C/D** to select, and then press **A**.
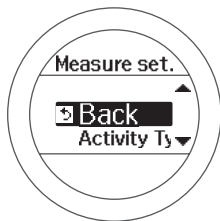
Note:
*You can also select the **Measure set.** menu from the measurement screen.*

U *"Changing the Measure set." on page 69*

D Select **AT Pause**.

Use **C/D** to select, and then press **A**.

E Select **ON**.

Use **C/D** to select, and then press **A**.

F Complete the settings.

Hold down **A**.

The time screen is displayed.

When you have made the settings from the measurement screen, the measurement screen is displayed.

G Start measuring.

For details on how to measure, see the following page.

U *"Measuring" on page 35*

Setting a Pace and Measuring (Target Pace Function)

You can use this function to sound an alarm if you fall behind the pace set as the target pace during measuring.

Set your target time for one kilometre/mile (target pace) and the range at which the alarm sounds when you fall behind that target pace.
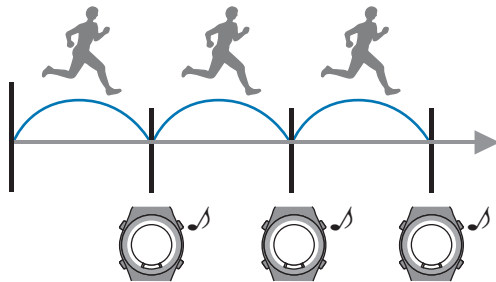
Operation buttons

A Display the Menu.

Press **D** on the time screen.

B Select Settings.

Use **C/D** to select, and then press **A**.
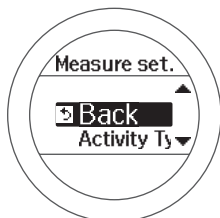
C Select the **Measure set.** menu.
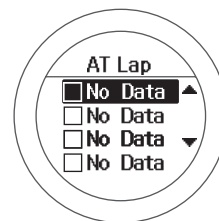
Use **C/D** to select, and then press **A**.
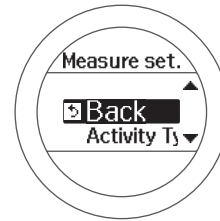
> *Note:*
> *You can also select the **Measure set.** menu from the measurement screen.*
>
> U *"Changing the Measure set." on page 69*

D Select **Target Pace**.

Use **C/D** to select, and then press **A**.
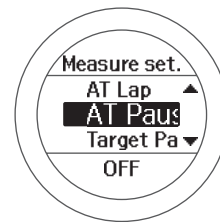
E Select **ON**.

Use **C/D** to select, and then press **A**.
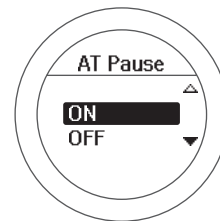
F Set the target time for one kilometre/ mile.

Use **C/D** to set, and then press **A**.

Hold down **C/D** to speed through the numbers..
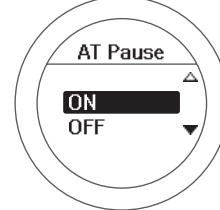
7 Set the range for maintaining your target pace.

Use **C/D** to set, and then press **A**.

Hold down **C/D** to speed through the numbers..

An alarm sounds if you are outside the set pace range.

8 Complete the settings.

Hold down **A**.

The time screen is displayed.

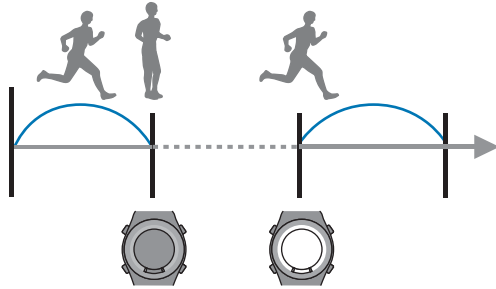When you have made the settings from the measurement screen, the measurement screen is displayed.

9 Start measuring.

For details on how to measure, see the following page.

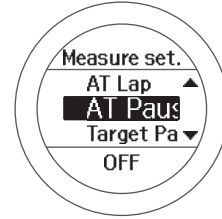U "Measuring" on page 35

Note:
If you want to turn off the alarm that notifies you when you are falling behind the set pace range, select **OFF** *in step 6.* **OFF** *is the bottom line for the* **Pace Range** *(under 0'05").*

Checking Measurement Data (Recall Function)

You can check measured data on the recall screen.

Checking Measurement Data

You can check measured data on the recall screen.

Operation buttons

A **Display the Menu.**

Press **D** on the time screen.

B **Select the Recall screen.**

Use **C/D** to select, and then press **A**.

C **Select the data you want to check.**

The recall screen displays item icons, the date measured, and the distance.

Use **C/D** to select, and then press **A**.

D **Check the measurement data.**

Use **C/D** to scroll the screen.
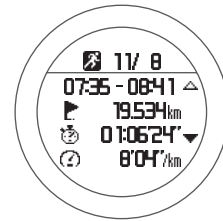
E **After checking, display the recall screen.**

Press **A**.

F **Finish checking the history.**

Hold down **A**.

Displays the time screen.

Measurement data that can be checked in recall

The following measurement data can be checked.

Icon	
🏃	Run mode (measuring while running)

Icon	
🏃	Walking mode (measuring while walking)

Measurement Item	
-	Date measured
-	Start Time/End Time
🚩	Distance
⏱	Split time
⦶	Average pace
◊	Calories Burnt
🚩	Lap Steps
🚩A	AT Lap
🚩M	Manual Lap
Dist.	Total distance from the start of measurements
Split	Split Time
Lap	Lap time
LapPace	Lap pace

Delete unnecessary measurement data

You can delete unnecessary measurement data from the history logs.

Operation buttons

A Display the **Menu**.

Press **D** on the time screen.

B Select **Recall**

Use **C/D** to select, and then press **A**.

C Select the data you want to delete.

The recall screen displays item icons, the date measured, and the distance.

Use **C/D** to select, and then press **A**.
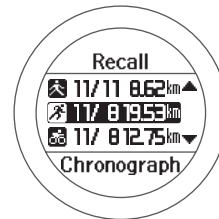
D Check and delete the measurement data.

Press **A**.

5 Select **Delete**.

Use **C/D** to select, and then press **A**.
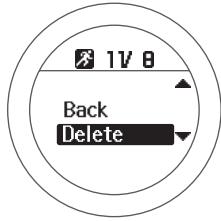
6 Select **Yes**.

Use **C/D** to select, and then press **A**.
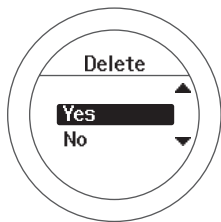
7 After deleting, display the recall screen.

> *Note:*
> *To continue deleting history data, repeat steps 3 to 6.*

8 Finish deleting history data.

Hold down **A**.

The time screen is displayed.

> **!** *Important:*
> *Even if you delete unnecessary measurement data, the memory on the device is not cleared. If the free space on the device is full, saved data is removed in order starting with the oldest data. Be aware that data will be deleted when the memory is full. Initialise the device to clear the memory.*
>

To clear all of the history, you need to Initialise the device. When initialising, all setting information for **User Settings**, **Sys. Settings**, and **Measure set.** is also Initialised along with the history information.

Measuring Heart Rate (Heart Rate Monitor)

You can measure your heart rate by using the optional heart rate monitor.

Preparing to Measure Heart Rate

Preparing the heart rate monitor

The heart rate monitor can be purchased as an optional item. Contact your local reseller to purchase a heart rate monitor.

Heart Rate Monitor (Model No.: SFHRM01)
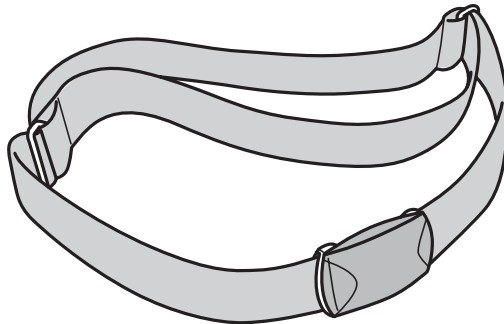
The heart rate monitor communicates with the device using Bluetooth® Smart technology.

Wearing the heart rate monitor

Wear the HR belt so that the electrode section of the HR belt is pressed against your chest. Make sure it is attached correctly to avoid missing out on any data. For best results moisten the electrodes shown below in blue.

Registering the heart rate monitor to the device

When using the heart rate monitor for the first time, wear the heart rate monitor when you register it to the device.

Operation buttons

> ⚠ *Important:*
> *Check that there are no other heart rate monitors in the surrounding area before registering.*

1 Display the **Menu**.

Press **D** on the time screen.

2 Select **HR Monitor**.

Use **C/D** to select, and then press **A**.

3 Select **Register**.

Use **C/D** to select, and then press **A**.

The device starts searching for the heart rate monitor and displays the search results.

4 Select the registered heart rate monitor.

Use **C/D** to select, and then press **A**.

5 Complete the communication settings.

Press **A**.
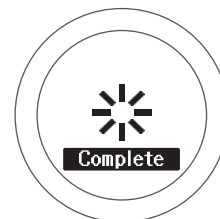
6 Complete the settings.

Hold down **A**.

Displays the time screen.

> *Note:*
> *If the following screen is displayed and communication cannot be established, reset the heart rate monitor.*
>
>
>
> U *"Replacing the Battery for the Heart Rate Monitor" on page 52*

Enabling the heart rate monitor

When using the heart rate monitor, set **HR** to **ON** from the **Measure set.** menu.

Operation buttons

A Display the **Menu**.

Press **D** on the time screen.

B Select **Settings**.

Use **C/D** to select, and then press **A**.

C Select the **Measure set.** menu.

Use **C/D** to select, and then press **A**.
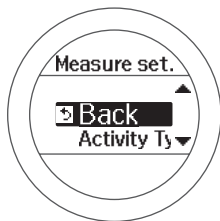
D Select **HR**.

Use **C/D** to select, and then press **A**.

E Select **ON**.

Use **C/D** to select, and then press **A**.

F Set the heart rate zone you want to maintain while exercising.

Use **C/D** to select, and then press **A**.

An alarm sounds if you are outside the set heart rate zone.
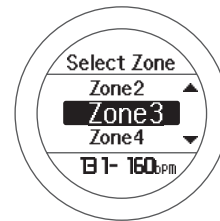
> *Note:*
> ❏ *You can check or change the value set for the heart rate in each heart rate zone in **User Settings**.*
>
> ✆ *"User Settings" on page 74*
>
> ❏ *To turn off functions that notify you with an alarm, select **OFF** in **Select Zone**.*

G Complete the settings.

Hold down **A**.

The time screen is displayed.

When you have made the settings from the measurement screen, the measurement screen is displayed.

> *Note:*
> *When **HR** is set to **ON**, the battery life for the device is reduced. When you are not using the heart rate monitor, set **HR** to **OFF**.*

Measuring Heart Rate

When **HR** is set to **ON** from the **Measure set.** menu, you can use the heart rate monitor to measure heart rate. See the following pages for information on each function.

U "Measuring Time, Distance, and Speed " on page 34

Checking the communication status with the heart rate monitor

You can check the communication status of the heart rate monitor from the icon on the measurement screen.

If ♥ is flashing, check that you are wearing the heart rate monitor correctly.

♥ On: Communicating with the heart rate monitor.

♥ Flashing: Cannot communicate with the heart rate monitor.

Displaying the measured heart rate screen

The heart rate measurement item is not displayed by default. Change the screen settings to display the heart rate item.

U "Screen" on page 77

List of measurement items displayed (items related to heart rate)

Display item	Display name		Explanation
	1 Line	2 Lines/3 Lines	
HR	HR	HR	Current heart rate

Replacing the Battery for the Heart Rate Monitor

If you cannot measure your heart rate, the heart rate monitor battery may have run out. Replace the battery.

The heart rate monitor uses a lithium battery (CR2032).

A Use something flat, such as a coin, to remove the battery cover.
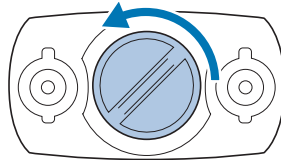
> *Note:*
> *You can avoid damaging the cover by wrapping the coin in a thin handkerchief and so on.*

B Remove the battery, and reset the heart rate monitor.

First, remove the battery.

Turn the battery over so that the negative side is facing up and put it back in, and then wait for at least three seconds.
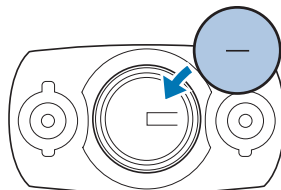
> *Note:*
> *Resetting the heart rate monitor:*
>
> *Any remaining charge in the HR sensor circuitry is dispersed by removing the battery, reinserting it with the negative side facing up, and waiting for at least three seconds.*
>
> *If the heart rate monitor temporarily freezes, you can reset it by using this method.*

C Insert a new battery.

Make sure the + side is facing up.
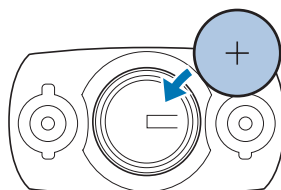
4 | Replace the battery cover.
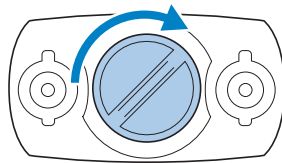
> **! Important:**
> *If the internal seal (the blue part in the following diagram) has come out, put it back in its original position, and then close the cover. If the seal gets caught or broken when closing the cover, sweat or water could enter into the device causing a malfunction.*
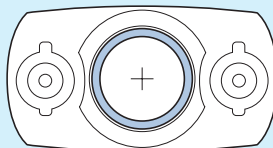
Disabling the Heart Rate Monitor

When disabling an heart rate monitor that has been registered, set **HR** to **OFF** from the **Measure set.** menu.

Operation buttons

1 Display the **Menu**.

Press **D** on the time screen.

2 Select **Settings**.

Use **C/D** to select, and then press **A**.

3 Select the **Measure set.** menu.
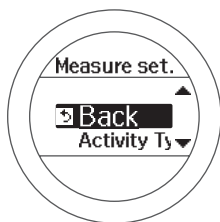
Use **C/D** to select, and then press **A**.

> **Note:**
> You can also select the **Measure set.** menu from the measurement screen.
>
> U *"Changing the Measure set." on page 69*

4 Select **HR**.

Use **C/D** to select, and then press **A**.
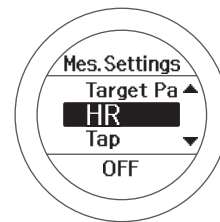
5 Select **OFF**.

Use **C/D** to select, and then press **A**.

6 Complete the settings.

Hold down **A**.

The time screen is displayed.

When you have made the settings from the measurement screen, the measurement screen is displayed.

Data Management Using the Web Application (RUNSENSE View)

This device allows you to manage measured data using a dedicated Web application (RUNSENSE View).

The Web application (RUNSENSE View) allows you to manage, review, and use your running route, distance, speed, heart rate, calories burnt, and so on.

> *Note:*
> *You need to make an account the first time you use RUNSENSE View.*
>
> U *"Creating an Account (When Using for the First Time)" on page 59*
>
> *If you already have an account with RUNSENSE View, you can continue using it with this device.*

U **"What is the Web Application (RUNSENSE View)?" on page 56**

U **"Installing Run Connect (Uploader Software)" on page 58**

U **"Creating an Account (When Using for the First Time)" on page 59**

U **"Checking Uploaded Measurement Data" on page 64**

What is the Web Application (RUNSENSE View)?

The web application (RUNSENSE View) sends measurement data through your computer allowing you to monitor, analyse, compare and share your running route, distance, speed, heart rate, calories burnt, and so on.

You can also use this for data analysis as the sent data can be displayed in various formats, such as a map display for the route, a graph showing speed/distance, and a total display (for months/entire periods).

By exporting in GPX format, you can also use the measurement data on other applications.

Dashboard
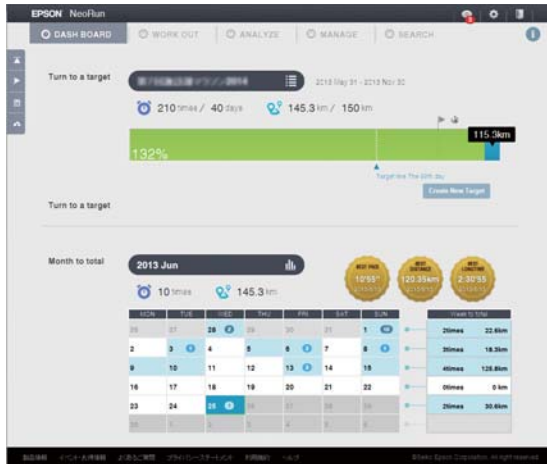
Manage records in calendar format. This allows you to easily review past runs.

Data Management Using the Web Application (RUNSENSE View)

Workout
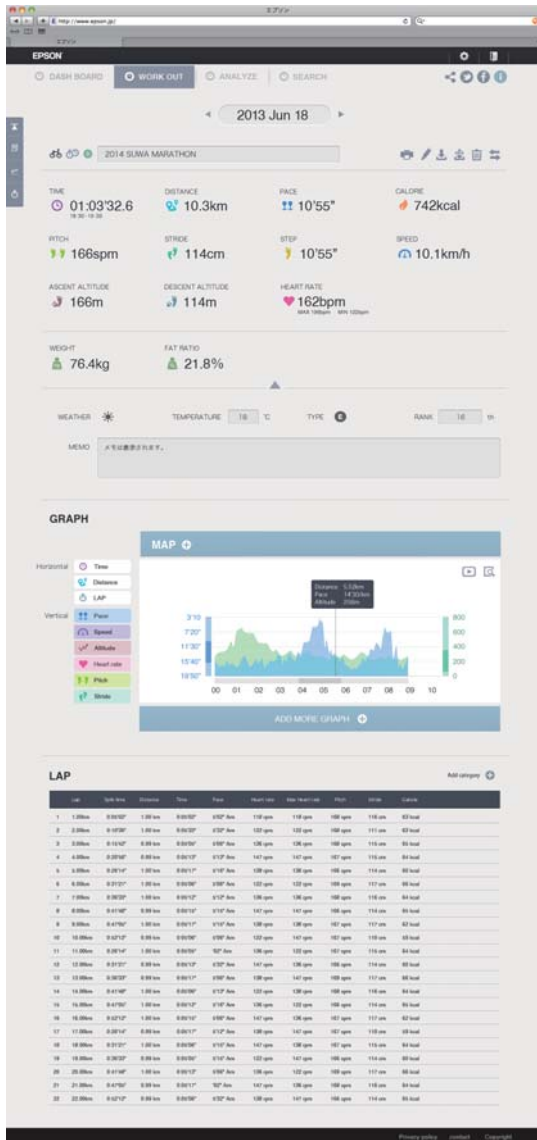
Displays your data as a graph. This allows you to analyse training from different angles.

Installing Run Connect (Uploader Software)

You need Run Connect to upload measurement data to the Web application (RUNSENSE View).

Follow the steps below to install Run Connect.

1 Access the following website and download Run Connect.

https://go-wellness2.epson.com/portal/

2 Run the downloaded file and follow the on-screen instructions.

Creating an Account (When Using for the First Time)

You need to create an account with the Web application (RUNSENSE View) when using it for the first time.

A | Connect the cradle to the computer on which Run Connect is installed with a USB cable.

B | Place the device into the cradle.

Check that the contact points on the device are pointing up and match the contact marks on the cradle.

After placing the device into the bottom of the cradle, push carefully on the top of the device until it is fixed in place.
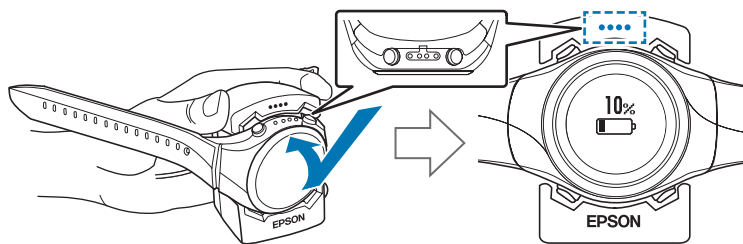
> **❗Important:**
> *Make sure the device is placed in the correct direction; otherwise, the device or the cradle could be damaged.*

Start Run Connect.

> **Note:**
> *If Run Connect does not start, disconnect the cable from the cradle, wait a few seconds, and then reconnect. Do not remove the device from the cradle.*

3 Click **Create Account**.
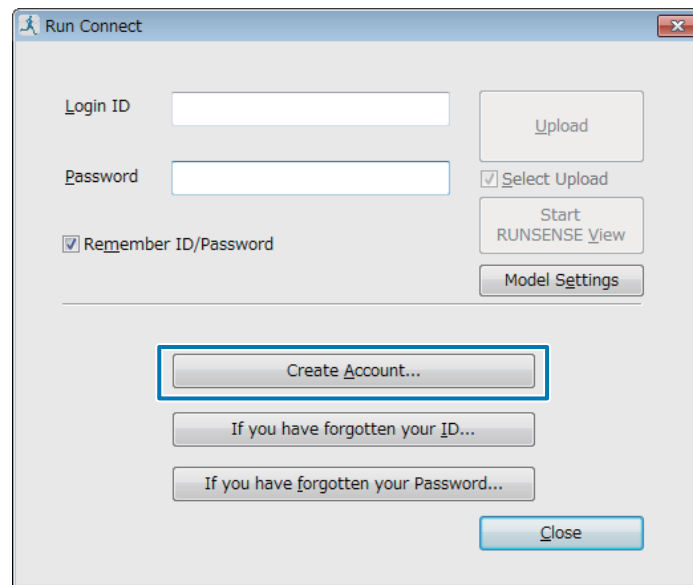
4 Create an account.

Enter information for the **Login ID**, **Password**, and **Email Address**, and then click **Create Account**.
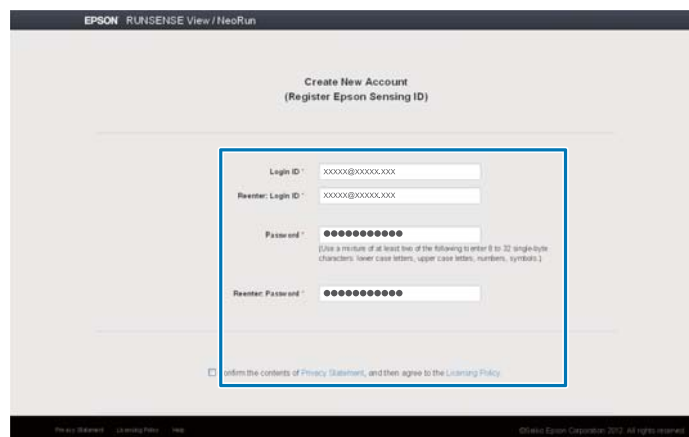
To upload measurement data, go to step 3 in the following section.

U "Uploading Measurement Data" on page 61

Uploading Measurement Data

You can upload measurement data to the Web application (RUNSENSE View).

A Connect the cradle to the computer on which Run Connect is installed with a USB cable.

B Place the device into the cradle.

Check that the contact points on the device are pointing up and match the contact marks on the cradle.

After placing the device into the bottom of the cradle, push carefully on the top of the device until it is fixed in place.

> ❗ *Important:*
> *Make sure the device is placed in the correct direction; otherwise, the device or the cradle could be damaged.*

Start Run Connect.

Data Management Using the Web Application (RUNSENSE View)

3 Enter your **Login ID** and **Password** on the Run Connect screen, and then click **Upload**.
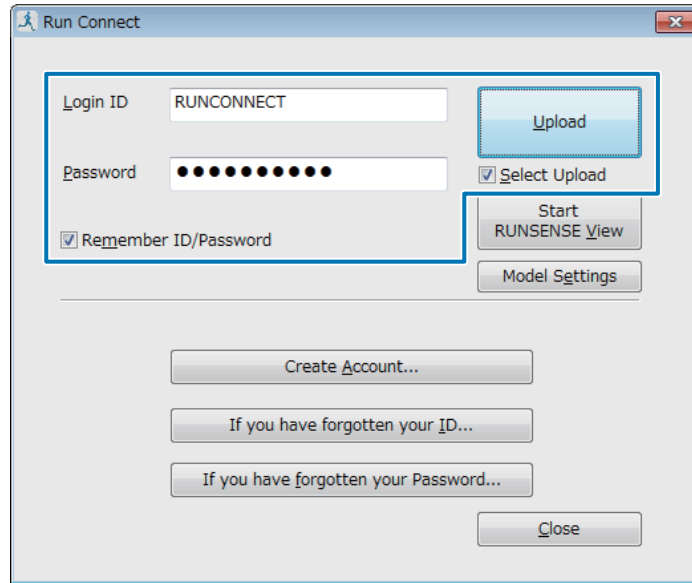
Note:
*If you select **Select Upload** and then click **Upload**, the data list selection screen is displayed, and you can select the data you want to upload.*
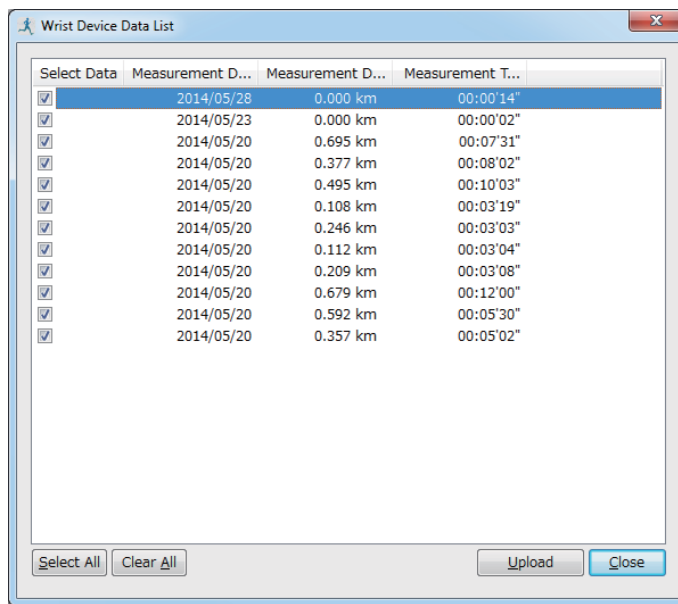
Data Management Using the Web Application (RUNSENSE View)

Data is uploaded to the Web application (RUNSENSE View).
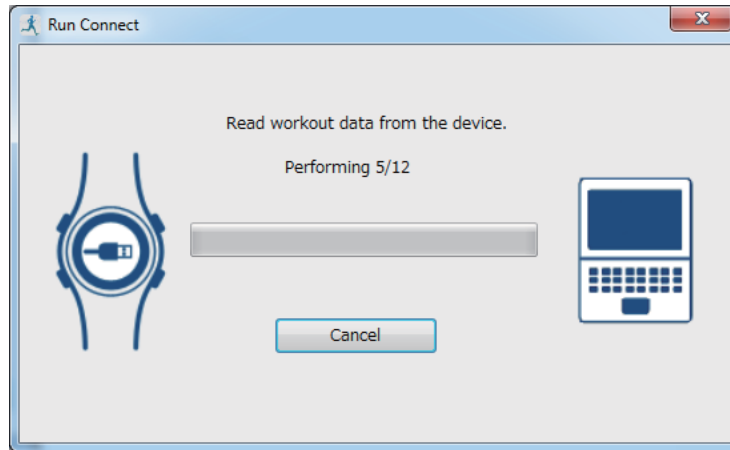
When the upload is complete, the Web application (RUNSENSE View) starts and the Home screen is displayed.

Checking Uploaded Measurement Data

Access the Web application (RUNSENSE View) to check uploaded measurement data.
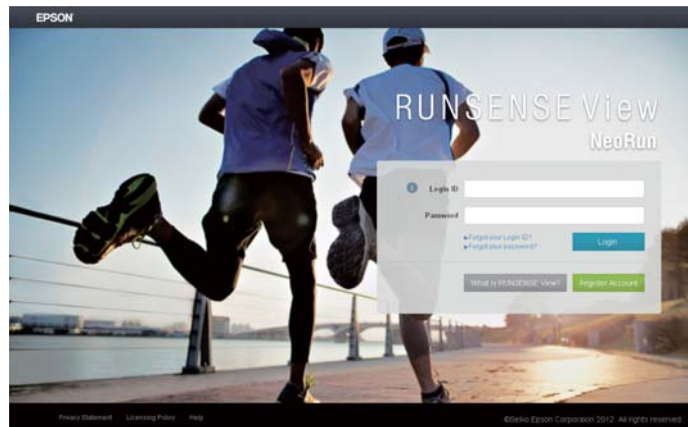
1 Start RUNSENSE View.

Use one of the following methods to start RUNSENSE View.

■ **Access the following website.**
https://go-wellness.epson.com/runsense-view/

■ **Start from the Run Connect icon on your computer.**
Right-click the Run Connect icon from the Windows desktop taskbar, and then select **Start RUNSENSE View**.
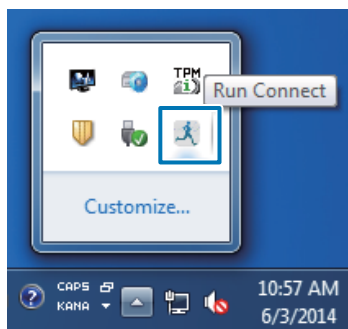
Data Management Using the Web Application (RUNSENSE View)

■ **Click Start RUNSENSE View on the Run Connect screen.**

The Run Connect screen is displayed when you place the device in the cradle connected to the computer.

The Web application (RUNSENSE View) starts and the Home screen is displayed. Go to step 3.

Note:
The **Start RUNSENSE View** *button is not available in the following circumstances.*

❏ *When the login ID and password have not been saved or entered.*

❏ *When the device has been removed from the cradle.*

2 Enter the **Login ID** and **Password**, and then click **Login**.

65
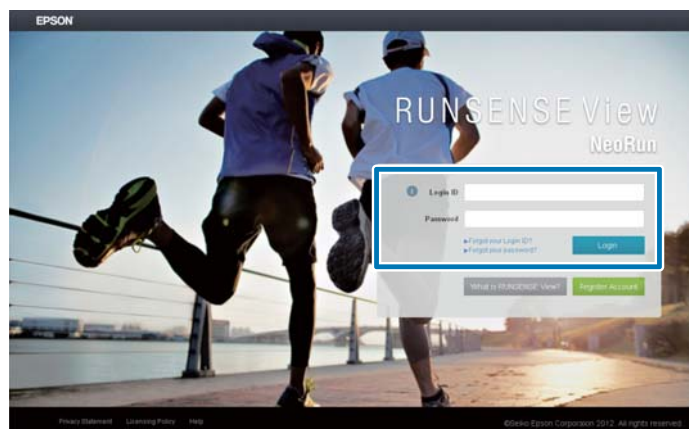
Data Management Using the Web Application (RUNSENSE View)

3   Click the data you want to check from the uploaded data.
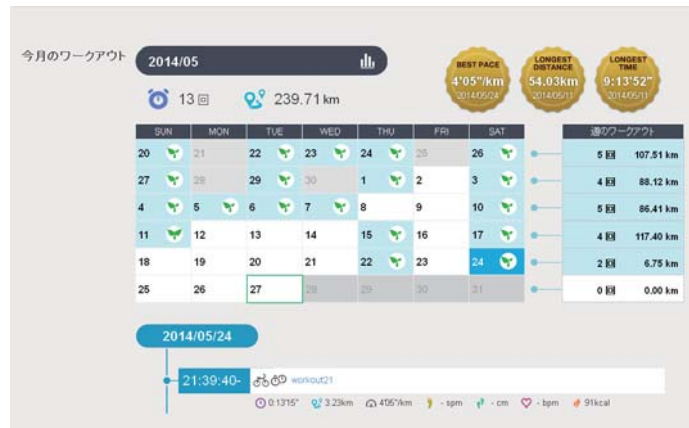
> *Note:*
> *For information on using the Web application (RUNSENSE View), see the RUNSENSE View Help.*

Settings

You can change a variety of settings for measurement or device. Choose settings to suit your purpose.

Making Settings

⇨	:	Short press
⇨	:	Long press (two seconds or more)

Time screen   **Measurement screen**   **Measure set. screen**

B   C
A   D

C
C*1
B
A
A/C

Dist. 0.000 km
Split
0:00'00"
Av.Pace __'__"/km

Measure set.
↰Back
Activity Ty

C
D
A

B
A

Settings screen

Settings
↰Back
Comm. Setti

C
D
A

Measure set. menu	
Activity Type	Settings
Mode	
GPS	
AT Lap	
AT Pause	
Target Pace	
Waypoint*2	
HR*3	
Tap*4	
Screen	

Hold down **A** to display the measurement screen.

Settings menu		
Comm. Settings	HR Monitor	Settings
	Smart Phone	
User Settings	Height	Settings
	Weight	
	DOB	
	Gender	
	HR Zone	
Sys. Settings	Language	Settings
	Units	
	Clock	
	DST	
	Time Adjust	
	Time Zone	
	Date Format	
	Invert Disp.	
	Contrast	
	Auto Sleep	
	AT Light	
	Alarm	
	Operation Tones	
	Initialize	
	Software Version	

Hold down **A** to display the time screen.

Measure set.

Allows you to change the measurement settings.

Changing the Measure set.

There are two ways that allow you to change the measurement settings.

Making the measurement settings from the time screen

Operation buttons

A Display the **Menu**.

Press **D** on the time screen.

B Select **Settings**.

Use **C/D** to select, and then press **A**.

C Select the **Measure set.** menu.

Use **C/D** to select, and then press **A**.

D Select a setting item.

Use **C/D** to select, and then press **A**.

E Select a setting value.

Use **C/D** to select, and then press **A**.

Depending on the selections, you may need to choose further settings. Follow the on-screen instructions.

> *Note:*
> *When setting a number, hold down C/D to speed through the numbers.*

F Complete the settings.

Hold down **A**.

The time screen is displayed.

Making the measurement settings from the measurement screen.

If you want to start measuring immediately after making the measurement settings, we recommend taking the following steps.

> **! Important:**
> ❑ While identifying a GPS, make sure you are outside with no obstructions overhead, and try to keep the device as still as possible.
>
> ❑ It usually takes less than two minutes to complete GPS positioning. If it takes more than two minutes and Failed is displayed, we recommend selecting **Cancel**, moving to a different location, and trying again.

Operation buttons

A Display the **Menu**.

Press **D** on the time screen.

B Select **Measurement** .

Use **C/D** to select, and then press **A**.
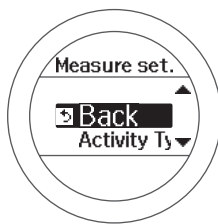
> **Note:**
> If you want to start measuring immediately, or if GPS positioning takes too long, you can skip the GPS positioning step.
>

C Display the Measurement menu.

Press **D** on the measurement screen.

D Select **Measurement set.**.

Use **C/D** to select, and then press **A**.

E Select the setting items.

Use **C/D** to select, and then press **A**.
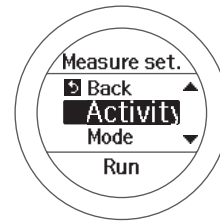
F Select the setting value.

Use **C/D** to select, and then press **A**.
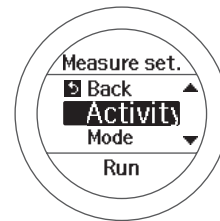
Depending on the item, you might have to make further settings. Follow the on-screen instructions.

> **Note:**
> When setting a number, hold down **C/D** to speed through the numbers.

G Complete the settings.

Hold down **A**.

The measurement screen is displayed.

Measure set. table

Setting items	Value	Explanation
Activity Type	Run (default)	Set when running or jogging.
	Walk	Set when walking (exercising at a slow pace).
AT Lap	ON	When a distance set in advance is reached, this function records laps automatically.
	OFF (default)	Set the lap distance.
		Distance: 0.1 to 10.0 km (in increments of 0.1 km)
		☞ "Recording Laps Automatically (AT Lap Function)" on page 38
AT Pause	ON	This function automatically stops measuring when you stop running, and resumes when you continue running.
	OFF (default)	☞ "Automatically Start/Stop Measuring (AT Pause Function)" on page 40
Target Pace	ON	Set the target time and pace range for one kilometre/ mile. An alarm sounds if you are outside the set pace range.
	OFF (default)	You can set three target paces within the following range.
		Target Pace: 1'00" to 15'00"/km or miles (in increments of 1 second)
		Pace Range: 00'05" to 03'00"/km or miles (in increments of 1 second)
		☞ "Setting a Pace and Measuring (Target Pace Function)" on page 41
Alarm	Tones (default)	Set the alarm type and time (1 to 10 minutes).
	OFF	You can also set this from **Sys. Settings**.
HR[*1]	ON	You can measure your heart rate by wearing the heart rate monitor (optional).
	OFF (default)	☞ "Measuring Heart Rate" on page 51
GPS[*2]	-	Displays the number of GPS satellites being accessed.
Screen	Screen1	You can display up to three measurement screens. You can change the screen pattern and the measurement items displayed for each screen.
	Screen2	
	Screen3	You can also change the **Display Lap Screen**.
	Display Lap Screen	☞ "Screen" on page 77

*1   Displayed after registering the heart rate monitor.

Settings

*2   Displayed when measurement settings have been made from the measurement screen.

Settings

Allows you to change the settings for the device.
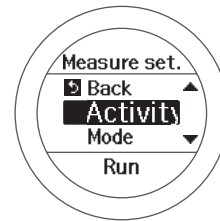
Changing the Settings

Operation buttons

1 Display the **Menu**.

Press **D** on the time screen.

2 Select the **Settings** menu.

Use **C/D** to select, and then press **A**.
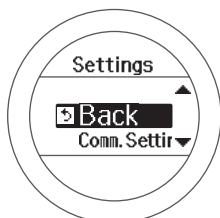
3 Select a setting item.

Use **C/D** to select, and then press **A**.
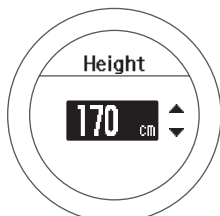
4 Select a setting value.
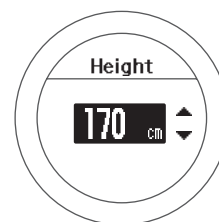
Use **C/D** to select, and then press **A**.

Depending on the selections, you may need to choose further settings. Follow the on-screen instructions.

> *Note:*
> *When setting a number, hold down C/D to speed through the numbers.*

5 Complete the settings.

Hold down **A**.

Displays the time screen.

Settings table

Comm. Settings

Set to connect the heart rate monitor or smartphone to this device and communicate.

| Setting items	Value	Explanation
HR Monitor	Status	Register the heart rate monitor to this device.
	Register	☞ "Registering the heart rate monitor to the device" on page 49
Smart Phone	Connect	Register a smartphone to this device.
	Forget Device	See the "Smartphone User Manual" for more details.

User Settings

Set the user information.

The Height, Weight, DOB, and Gender information is used to calculate the calories burnt.

The value in brackets () is the default setting.

Setting items	Value	Explanation
Height	(170 cm)	Set the height.
Weight	(60 kg)	Set the weight.
DOB	(01.01.1975)	Set your date of birth.
Gender	Male (default)	Set your gender.
	Female	

Sys. Settings

Make settings for the device's system.

The value in brackets () is the default setting.

Setting items	Value		Explanation
Language	English (default)		Set the display language.
	日本語		
	Deutsch		
	Français		
	繁體中文		
Time	Clock	12 Hour (default)	Set the format for the display time.
		24 Hour	
	DST	ON	Set Daylight Saving Time.
		OFF (default)	
	Time Adjust		The device receives a signal from the GPS and automatically sets the time.
			Signals from the GPS cannot be received while indoors. Make sure the screen is facing up and you are outside with no obstructions overhead.
			If GPS positioning has not completed after two minutes, we recommend selecting **Cancel**, moving to a different location, and trying again.
	Time Zone	Auto (default)	Sets the time zone for your location.
		Manual	When **Auto** is selected, perform **Time Adjust** to set the time zone automatically.
			When **Manual** is selected, you can set the time zone within a range of -12:00 to +14:00.

Settings

Setting items	Value			Explanation
Display	Units		km (default)	Set the display units for distance.
			mile	
	Date Format		Day. Month	Set the display format for the date.
			Month. Day (default)	
	Contrast		(4)	Set the contrast for the screen.
	Auto Sleep		ON (default)	When you leave the device for a while, this function automatically puts the device into sleep status.
			OFF	Entering sleep status reduces the amount of power consumption.
	AT Light		ON	When the screen changes, this function automatically turns on the light. When a specified time has passed, the light automatically turns off.
			OFF (default)	
Key Tones	ON (default)			Turn on or off the operation tones.
	OFF			
Initialise	-			Initialises all setting information (**Comm. Settings**, **User Settings**, **Sys. Settings** and **Measure set.**) and stride sensor information in the device's memory. Measurement history data is also deleted.
Software Version	-			Displays the firmware version information.

Screen

You can display up to three measurement screens. You can change the screen pattern (by displaying one line to three lines of data) and the measurement items displayed for each screen.

You can also change the display for the lap hold screen.

> *Note:*
> *See the following pages for the default screen settings.*
>
> ∪ *"Screen display" on page 36*

Screen settings

⇨	:	Short press
⇒	:	Long press (two seconds or more)

Time screen **Measurement screen** **Measure set. screen**

Screen menu

Screen	Scr. Layout	Item		
Screen1 Screen2 Screen3 Screen4	1 Line 2 Lines 3 Lines	Distance Lap Distance Pace Average Pace Lap Pace Speed Average Speed Lap Speed Split Time Lap Time Time Calories Burnt	Altitude Guide Time Guide Distance Stride*2 Average Stride*2 Lap Stride*2 Pitch*2 Average Pitch*2 Lap Pitch*2 HR Average HR Maximum HR*2 Lap HR	Steps*2 Lap Steps*2 HR Zone Time*2 Time to HR Zone*2 Total Ascent*3 Total Descent*3 Grade Latitude/Longitude*2 Estimated Time Estimated Distance
	Pace&Graph HR&Graph Lap Target Pace Waypoint*3 OFF			
Lap Hold Screen	1 Line 2 Lines	Split Time Lap Distance Lap Time Lap Pace Lap HR		

Hold down **A** to display the measurement screen.

Screen pattern table

Measurement screen

Screen Pattern	Screen	Explanation
1 Line	Distance 0.000 km	Displays one measurement item on the screen.
2 Lines	LaPPace 00'00" /km LaPDist. 0.000 km	Displays two measurement items on the screen by dividing the screen into two sections.
3 Lines	Dist. 0.000 km LaP 0:00'00" LaPDist. 0.000 km	Displays three measurement items on the screen by dividing the screen into three sections.
Target Pace	Target Pace 5'24" /km 5'24" /km	Displays the current pace at the top and the Target Pace at the bottom.
OFF	-	The measurement screen is not displayed.

Display Lap Screen

Screen Pattern	Screen	Explanation
1 Line	▷ 001 LaPDist. 3.285 km	Displays one measurement item on the screen.

Settings

Screen Pattern	Screen	Explanation
2 Lines		Displays two measurement items on the screen by dividing the screen into two sections.

Settings

Measurement display abbreviations

Measurement screen

Display item	Display name		Explanation
	1 Line	2 Lines/3 Lines	
Distance	Distance	Dist.	Total distance from the start of measurements
Pace	Pace	Pace	Current pace (time taken for one kilometre/mile)
Average Pace	Avg.Pace	Av.Pace	Average pace from the start of measurements
Lap Pace	LapPace	LapPace	Average pace for each lap
Split Time	SplitTime	Split	Total time from the start of measurements
Lap Time	LapTime	Lap	Time for each lap
Time	Time	Time	Current time
Calories Burnt	Calories	Calories	Current calories burnt through exercise
HR	HR	HR	Current heart rate
Steps	Steps	Steps	Number of steps from the start of measurements

Display Lap Screen

Display item	Display name		Explanation
	1 Line	2 Lines/3 Lines	
Split Time	SplitTime	Split	Total time from the start of measurements
Lap Time	LapTime	Lap	Time for each lap
Lap Pace	LapPace	LapPace	Average pace for each lap

Changing the measurement screen

The setting method varies depending on the screen pattern. See the explanations for each screen pattern.

U "Setting **1 Line/2 Lines/3 Lines**" on page 81

Setting 1 Line/2 Lines/3 Lines

Here we will explain how to display **Calories Burnt** in **Screen3** using **1 Line**.

Operation buttons

A Display the **Menu**.

Press **D** on the time screen.

B Select Settings.

Use **C/D** to select, and then press **A**.

C Select the **Measure set.** .

Use **C/D** to select, and then press **A**.
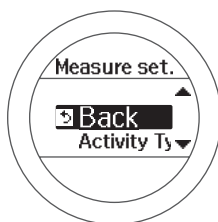
D Select **Screen**.

Use **C/D** to select, and then press **A**.
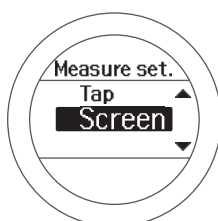
E Select **Screen3**.

Use **C/D** to select, and then press **A**.
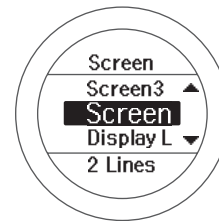
F Select **1 Line**.

Use **C/D** to select, and then press **A**.
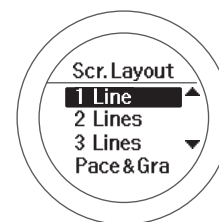
Screen Image is displayed. **Split Time** is displayed by default.

After checking, press **A** and go to the following step.
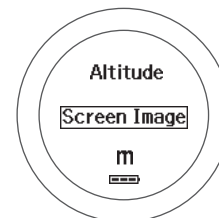
G Select **Line 1**.

Use **C/D** to select, and then press **A**.

H Select **Calories Burnt**.

Use **C/D** to select, and then press **A**.

```
        Item
     Split Time    ▲
     Lap Time
     Time
     Calories Bu    ▼
```

Screen Image is displayed.

After checking, press **A** and go to the following step.

```
      Calories
     Screen Image
        kcal
         ▭
```
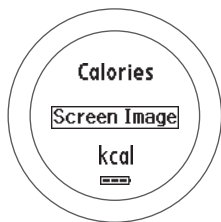
> *Note:*
> *When you want to set **2 Lines** or **3 Lines**, repeat steps 7 and 8.*

9 Complete the settings.

Hold down **A**.

The time screen is displayed.

Press **A** on the measurement screen to change the screen, and then check if **Screen** has been changed.

10 Start measuring.

For details on how to measure, see the following page.

Changing the Lap screen

The Lap screen is displayed when recording laps. Here we will explain how to display **Lap Pace** in **1 Line** for demonstration purposes.

**Operation buttons**

A Display the **Menu**.

Press **D** on the time screen.

B Select **Settings** .

Use **C/D** to select, and then press **A**.

```
     Measure set.
          ▲
     ⟲Back
     Activity Ty  ▼
```

C Select **Measurement set.**.

Use **C/D** to select, and then press **A**.

```
     Measure set.
        Tap      ▲
     Screen
              ▼
```

D Select **Screen**.

Use **C/D** to select, and then press **A**.

```
     Measure set.
        Tap      ▲
     Screen
              ▼
```
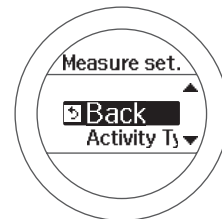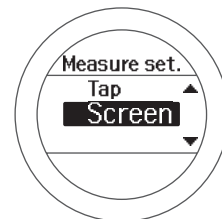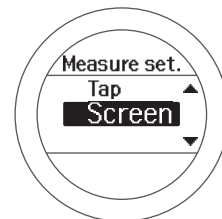
Settings

5 Select **Display Lap Screen**.

Use **C/D** to select, and then press **A**.

```
Screen
Screen4  ▲
■Display
    ▼
2 Lines
```
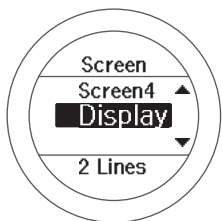
6 Select **1 Line**.

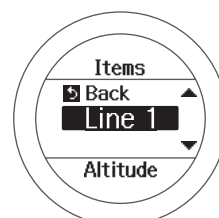Use **C/D** to select, and then press **A**.

```
Scr.Layout
        ▲
1 Line
2 Lines  ▼
```
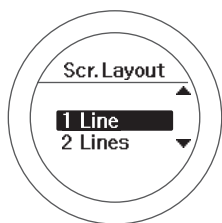
Screen Image is displayed. **Lap Time** is displayed by default.
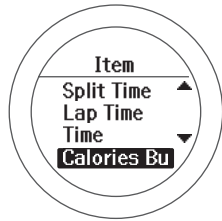
After checking, press **A** and go to the following step.

```
▷ 000
LaPDist.
Screen Image
0.000
km
```

7 Select **Line 1**.

Use **C/D** to select, and then press **A**.

```
Items
🔲 Back  ▲
Line 1
    ▼
Lap Distance
```
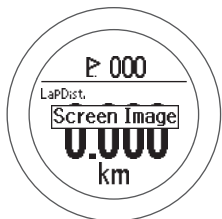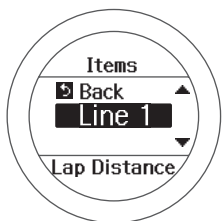
8 Select **Lap Pace**.

Use **C/D** to select, and then press **A**.
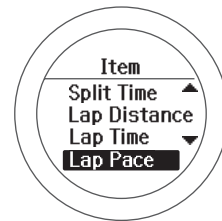
```
Item
Split Time   ▲
Lap Distance
Lap Time    ▼
Lap Pace
```

Screen Image is displayed.

After checking, press **A** and go to the following step.

```
▷ 000
LaPPace
Screen Image
/km
```

> *Note:*
> *When you have set this to **2 Lines**, repeat steps 7 and 8.*

9 Complete the settings.

Hold down **A**.

The time screen is displayed.

10 Start measuring.

For details on how to measure, see the following page.

Setting examples

Here we will provide two usage examples.

> *Note:*
> *See the following page for information on making changes.*
>
> U *"Changing the measurement screen" on page 81*

Default settings

Screen		Screen Pattern	Measurement item
Screen1		3 Lines	Distance (Dist.) Split Time (Split) Average Pace (Av.Pace)

Recommended settings for a marathon

Display **Distance** and **Split Time** enlarged on one screen.

Screen		Screen Pattern	Measurement item
Screen1		2 Lines	Distance (Dist.) Split Time (Split)

Recommended settings for walking

Display **Calories Burnt**, **Distance**, and **Time** on one screen.

Screen		Screen Pattern	Measurement item
Screen1		3 Lines	Calories Burnt (Calories) Distance (Dist.) Time (Time)

Maintenance

This section explains how to maintain this device, replace the battery, and update the firmware.

Looking after your device

> ⚠️ *Important:*
> ❏ *If the device is placed in the cradle when it is covered in water, sweat, or dirt, the contact points could corrode, malfunction, or cause a communication failure.*
>
> ❏ *Do not perform button operations when it is wet; otherwise, a malfunction could occur.*

After using the device, wash the contact points lightly with tap water, wipe away most of the water with a towel and so on, and then let it dry naturally. Water, sweat, or dirt could cause the device to malfunction.

If charging or communicating becomes unstable, clean the contact points on the device and the cradle with a damp cotton bud.

Do not clean using organic solvents such as benzine, thinner, alcohol, or detergent. This could cause the product to degrade.

About the strap

If the strap gets soiled, wash it with water and wipe thoroughly with a dry cloth. This strap is made from polyurethane and after years of use the colour may fade or it may lose its elasticity.

Heart rate monitor maintenance

❏ After exercising, take off the heart rate monitor and heart rate belt, dip them in water and wash.

❏ Also make sure that you wash the button sections and wipe off all moisture.

❏ Although you can wash the HR belt in a washing machine, make sure you place the belt in a net, and do not use a dryer.

❏ Do not iron, dry clean, or use a chlorine-based detergent on the HR belt.

❏ Wash the heart rate monitor carefully with water. Do not use a washing machine or a dryer.

❏ Dry the heart rate monitor and heart rate belt completely and store them separately.

Replacing the Battery on your GPS Sports Monitor

About the device's built-in rechargeable battery

You cannot replace the built-in rechargeable battery yourself.

If the battery does not retain its charge for as long as it used to due to prolonged use, it may have reached the end of battery life. In this situation, contact our service centre.

The average service life for the battery is five years, although this may change depending on the operating conditions.

About the heart rate monitor battery

Be careful not to injure yourself when replacing the heart rate monitor battery (CR2032).

The average service life for the battery when using the heart rate monitor for one hour every day is one and a half years.

Updating the Firmware

You may be able to resolve problems that occur by updating the firmware.

We recommend downloading and using the latest version.

> **!** *Important:*
> *When updating the firmware, the history may be deleted and settings may be Initialised. For more details on updating, see the following Epson website.*
> *www.epson.eu/runsense*
> *Before updating the firmware, we recommend uploading your measurement data to RUNSENSE View.*
>
> *□ "Creating an Account (When Using for the First Time)" on page 59*

Checking the firmware version

Operation buttons

A Display the **Menu**.

Press **D** on the time screen.

B Select **Settings**.

Use **C/D** to select, and then press **A**.

C Select **Sys. Settings**.

Use **C/D** to select, and then press **A**.
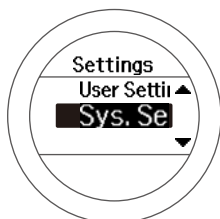
D Select **Software Version**.

Use **C/D** to select, and then press **A**.
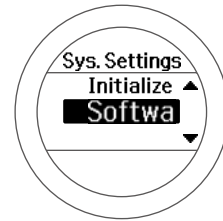
E Check the version.

F Complete the settings.

Hold down **A**.

The time screen is displayed.

Updating the firmware

Download the firmware for "RUNSENSE View" from the following Epson website and update the firmware.

www.epson.eu/runsense

> *Note:*
> *See the download page on the Epson website for details on how to update the firmware.*

Troubleshooting

This section explains how to solve problems that occur during use.

Caution

❏ If charging or data transfer becomes unstable, clean the contact points on the device and the cradle with a damp cotton bud.

❏ If device operations become unstable or if functions do not operate correctly, perform a system reset (hold down all four buttons at the same time).

❏ If the heart rate monitor operations become unstable or if it does not function correctly, remove the heart rate monitor battery, place it in the battery compartment so that the negative side is facing up. Wait for three seconds (reset), and then put it back in the correct direction.

Problem Solving

Check each item.

Problem		Solution
Basic actions	The screen is not displayed.	You cannot start using the device immediately after purchase until the device is charged. Charge the device first. Also, nothing is displayed if the battery runs out. Make sure you charge the battery before use. U "Charging" on page 20
	The device does not react even after performing an operation.	Is the battery running low? Charge the battery. U "About the battery" on page 26 If the device does not operate after charging, try resetting the system. U "Resetting the System" on page 94
	The screen turns off or turns blue during use	Perform a system reset. U "Resetting the System" on page 94
	The clock turns off.	When you leave the device for a while, it enters sleep status and the time display turns off. This is not a malfunction as the display is restored the next time a button is pressed or you move the device. If the display is not restored, the battery is running low. Charge the device. U "Charging" on page 20 Also, if **Auto Sleep** is set to off, the clock does not turn off. U "Sys. Settings" on page 75
	The time is not set correctly.	Set "Time Adjust" from Sys. Settings. U "Sys. Settings" on page 75 If the hour is different, check the time zone and daylight-saving time. U "Sys. Settings" on page 75
	Measurement stops while exercising.	When exercising slowly, such as when walking, we recommend turning off the AT Pause function. U "Automatically Start/Stop Measuring (AT Pause Function)" on page 40

Troubleshooting

Problem		Solution
GPS	The device cannot receive a GPS signal.	Go to a location outside with no obstructions overhead. Signals from the GPS cannot be received while indoors. Also, if there are any obstacles partially blocking the sky, such as tall buildings and mountain sides, reception may be interrupted causing a lack of precision in distance measurements.
	Signals from the GPS are hard to receive or are interrupted.	Even when a signal is being received, it may be interrupted depending on the running environment. Wear the device on the outside of your arm.
Charging	The device does not charge even when it is placed in the cradle. Charging stops frequently.	Check the connection for the cradle. Clean the contact points on the device and the cradle. U "Looking after your device" on page 86 A malfunction may have occurred if you cannot charge the device even after checking the points above. Stop charging the device immediately, and contact our service centre.
	The charge error screen is displayed.	Charge in an environment where the surrounding temperature is 5 to 35℃.
	The device and the cradle become hot while charging.	There may be a malfunction. Stop using the device immediately, and contact our service centre.
Waterproofing performance	Can I use the device when swimming?	This device is water resistant at 5 barometric pressures and can be used when swimming. Do not perform button operations in the water. GPS signals cannot be received when in water. Also, do not swim while wearing the optional heart rate monitor as it is not waterproof.
	The inside of the glass becomes cloudy.	Condensation may occur in the device due to differences in temperature between the device and the open air. Temporary condensation does not have any effect on the device. You can continue to use the device in this condition. If the condensation remains for a long time, water may have entered the device. Contact our service centre.
Accessories	Acquiring optional products.	The AC adapter and heart rate monitor are available as optional extras. Contact your local reseller for more information. Also, if you need an extra cradle, contact your local reseller or our information center.

Troubleshooting

Problem		Solution
Heart Rate Monitor	The heart rate monitor is not working correctly.	Check the following items. ❏ Are you wearing the HR belt correctly? U "Wearing the heart rate monitor" on page 48 ❏ Has it been registered to the device? U "Registering the heart rate monitor to the device" on page 49 ❏ Is the heart rate monitor set to **ON**. U "Enabling the heart rate monitor" on page 50 ❏ If you cannot register to the device, replace the battery after resetting the heart rate monitor. To reset the heart rate monitor, place the battery in the battery compartment so that the negative side is facing up, and leave it for three seconds. ❏ Is the battery running out? Replace the battery if it is running out. U "Replacing the Battery for the Heart Rate Monitor" on page 52 ❏ Perform a system reset for the device. U "Resetting the System" on page 94
Communication	The device is not recognised correctly when it is connected to a computer.	Check the connection for the computer and the cradle. Clean the contact points on the device and the cradle. U "Looking after your device" on page 86 Perform a system reset. U "Resetting the System" on page 94
Web application	When communicating with a computer, an error screen is displayed and communication stops.	Do not move the device and the cradle during communication. Avoid communicating data under environments where static electricity can be easily generated. If the same error occurs, reconnect the cradle to start the communication again.

If you cannot solve the problem even after trying the points above, contact our service centre.
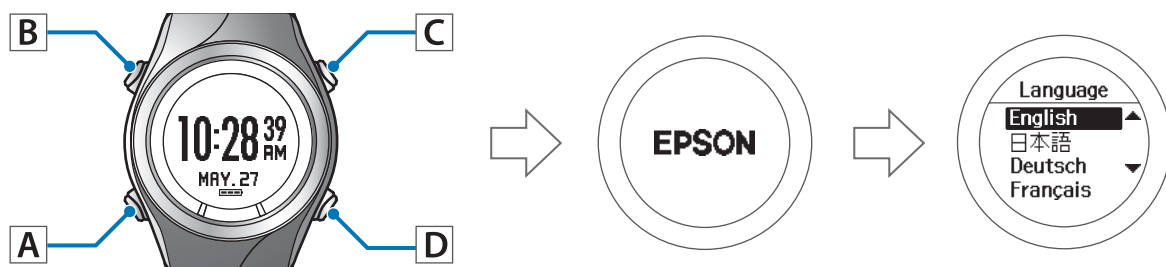
Resetting the System

If operations are unstable, try resetting the system.

Hold down all of the buttons (A/B/C/D) at the same time.

The screen is reset and the device restarts.

Initialise the device after restarting.

> ![!] *Important:*
> *Measurement data is not recorded if a system reset is performed while measuring.*

Note:
❏ *Setting data and measurement data remain as they were before the reset was performed.*

❏ *The following shows the differences between a system reset and initialisation. The time needs to be set again for both operations.*

*System reset: The **User Settings**, **Sys. Settings**, **Measure set.**, history, stride, heart rate monitor, and smartphone registration information all remain as they were before the reset was performed.*

*Initialise: The **User Settings**, **Sys. Settings**, **Measure set.**, history, stride, heart rate monitor, and smartphone registration information are all Initialised.*

After-sales Service

❏ For repair and maintenance of this product, contact your local reseller or our repair center.

❏ If the battery does not retain its charge for as long as it used to due to prolonged use, it may have reached the end of battery life. In this situation, contact your local reseller or our repair center to replace the battery for a fee.

❏ The strap for the device, the battery for the heart rate monitor, and the heart rate belt are not covered by the guarantee. If you need to purchase any of these items, contact your local reseller or our information center.

❏ Spare parts for repairing this product will be available for six years after the device has stopped being manufactured.

❏ In the event of product failure, we do not guarantee that data recorded on the device can be recovered.

❏ A sticker displaying the serial number for this product is attached to the guarantee. If there is no sticker, the guarantee is void.

Appendix

Understanding the Icons

Icon	Name
	Run mode (measuring while running)
	Walking mode (measuring while walking)
	The signal is being received from the GPS (GPS On)
	GPS positioning
	Communicating with the heart rate monitor
	Average pace
	Lap
	Distance
	Calories Burnt
	Split Time
	AT Lap
	Manual Lap
	Setup from the currently selected external device
	Setup from the external device

Appendix

Product Specifications

Device specifications

Specifications		SF-110
Size (thickness)		13.5 mm
Weight		43 g
Water resistance		5 atm
Operating time	GPS On	10 hours
	Time displayed (when Auto Sleep is On)	10 days*1
Operating temperature		-5 to 50℃
Possible memory time (total distance time)		Approx. 13 hours
Maximum number of laps (one split)		200
Heart rate measurement (using the heart rate monitor)		◯*2
Indoor mode		◯
Display range	Distance	0.000 to 999.99 km/0.000 to 999.99 mi
	Pace/Lap pace/Average pace	0'00" to 30'00"/km/0'00" to 45'00"/mi
	Split/Lap time	00'00" to 99:59'59"
	Steps	0 to 999999
	Calories Burnt	0 to 9999 kcal
	Altitude*3	-500 to 9,999m/-1500 to 914,369.52cm
	HR	30 to 240 bpm

*1   10 hours/day in sleep mode

*2   The heart rate monitor can be purchased as an optional item.

*3   Only displayed on the Web application (NeoRun).

Appendix

Cradle specifications

Specifications	SF-110
Operating temperature range	5 to 35℃

Option specifications

You can purchase the following optional extras. Contact your local reseller for more information.

AC adapter specifications

Specifications	Model No.: SFAC02 Europe excluding UK / SFAC03 UK
Input	AC 100V-240V 50/60 Hz
Output	DC 5V/1.0A

Heart rate monitor specifications

Specifications	Model No.: SFHRM01
Water resistance	Water resistant for daily use

Appendix

Glossary

Term	Definition
AT Lap	This automatically records laps when you have run for a fixed distance.
AT Light	This automatically turns on the light during lap measuring or alarm notification.
AT Pause	Automatically stops measuring when you stop exercising, and resumes when you continue.
Calculating calories burnt	Total calories burnt from the start of the exercise.
Distance	Distance from the measurement start point to the current time.
GPS function	A system that receives signals in a GPS receiver from satellites orbiting the earth and calculates your current position. This function allows you to accurately understand positional and time information.
Heart rate (HR) monitor	The heart rate monitor measures your heart rate while exercising.
Lap pace	Your pace for the current lap.
Lap time	Your time for the lap.
Pace	Your current pace acquired from GPS information.
Run Connect	Application for computers for use with the Wristable GPS. This uploads measurement data to the Web application (RUNSENSE View).
RUNSENSE View	RUNSENSE dedicated Web application. This allows you to manage your course, analyse your pace, check calories burnt, and check your condition.
Split time	The total time from starting to stopping the measurements.
Stride sensor	This uses the GPS function to accumulate data on your stride and acceleration allowing the device to estimate the distance travelled even when you enter locations that cannot receive GPS signals, such as in a tunnel.
Water resistant at 5 barometric pressures	The device is water resistant at up to 5 barometric pressures.

Index

EPSON

GPS Sports Monitor

RUNSENSE

SF-110

www.epson.eu/runsense

EPSON
EXCEED YOUR VISION

Certification information

FC

GPS Sports Monitor
Model : SF-110

FCC ID : BKMAP007

CAN ICES-3（B）/NMB-3（B）
IC ：1052F-AP007

FCC /IC Notices
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This device complies with Part 15 of FCC Rules and 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 acceptany interference, including interference that may cause undesired operation of this device.

Le présent appareil est conforme aux la partie 15 des règles de la FCC et CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit　pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Explanation that an SAR examination is unnecessary with Portable equipment

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR).

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles les radioélectriques (RF) de la FCC lignes directrices d'exposition et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement émet une énergie RF très faible qui est considérée conforme sans évaluation du débit d'absorption spécifique (DAS).

**Explanation of the EMC demand part of the United States. **
Note: 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 radio/TV technician for help.

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