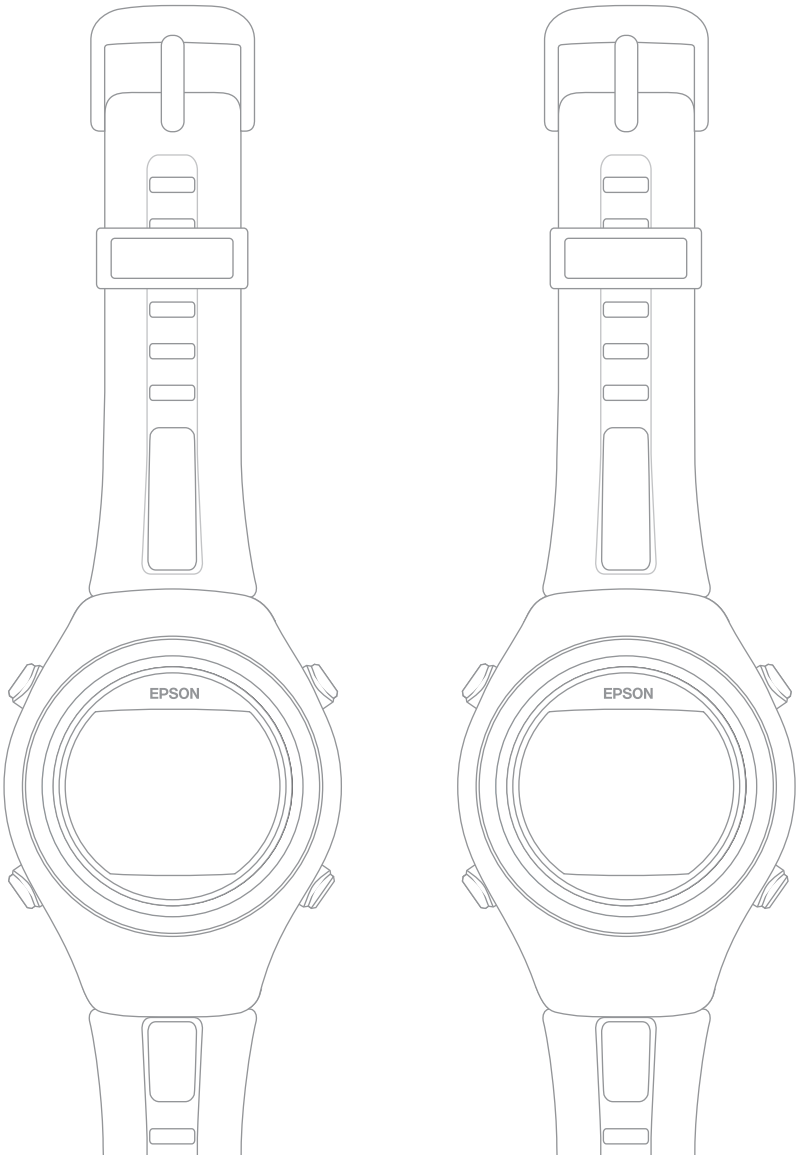
EPSON

GPS Sports Monitor

RUNSENSE

SF-710 | SF-510 | SF-310

User Manual



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.

The illustrations and screens shown in the Quick Start Guide/User Manual are for the SF-710.

This device can measure running distance, pace, elapsed time, altitude, 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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- ❏ 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.

Features

Chronograph 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.

☞ "Measuring Time, Distance, and Speed (Chronograph Function)" on page 38

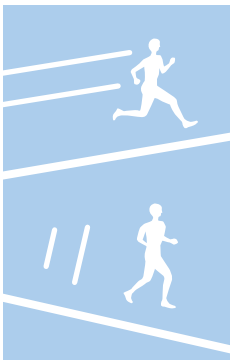
Split Time: Elapsed time from the start

Lap time: Time taken for each lap

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

☞ "Checking Measurement Data" on page 63

Interval function



Allows you to perform interval training.

Interval training:

Training method in which you repeat sets of light and hard exercise to increase your athletic ability. An exercise menu is created using combinations of hard (sprint) and light (recovery) exercise. An alarm sounds when it is time to change between sprinting and recovering.

☞ "Setting a Time and Distance for Hard and Light Workouts (Interval Function)" on page 43

Goal function (timed race)

Allows you to set a time as your goal and measure the time remaining until that goal is reached.

You can exercise while checking the elapsed time. You can also calculate the estimated distance you will cover during that time.

☞ "Measure until the Time or Distance Set in Advance Is Reached (Goal Function)" on page 50

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

☞ "Checking Measurement Data" on page 63

Goal function (distance race)

Allows you to set a distance as your goal and measure the distance taken until that goal is reached.

You can exercise while checking the distance. You can also calculate the estimated total time to complete the set distance.

☞ "Measure until the Time or Distance Set in Advance Is Reached (Goal Function)" on page 50

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

☞ "Checking Measurement Data" on page 63

Measure settings

Allows you to change the measurement settings.

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

  ☞ "Recording Laps Automatically (AT Lap Function)" on page 54

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

  ☞ "Automatically Start/Stop Measuring (AT Pause Function)" on page 56

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

  ☞ "Setting a Pace and Measuring (Target Pace Function)" on page 57

- ❏ Set a waypoint to display the direction and distance to the waypoint, and the difference in elevation (Waypoint function) (SF-710 only)

  ☞ "Setting and Measuring Waypoints (Waypoint Function)" on page 59

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

  ☞ "Measuring Heart Rate" on page 72

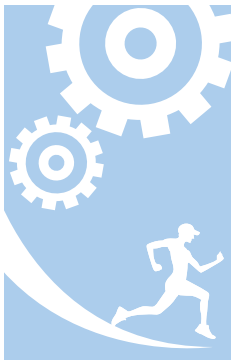
- ❏ You can change the items and layout of the measurement screen display (Screen settings function)

  ☞ "Screen" on page 115

- ❏ Tap to display a set function (Tap function)

  ☞ "Tap" on page 20

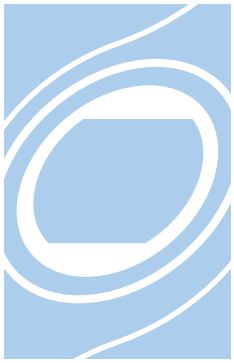
Settings



Allows you to change the settings for the device.

- ❏ Communicates with external devices (Communication function)
  ☞ "Comm. Settings" on page 112
- ❏ Inverts the screen's display (Invert function)
  ☞ "Sys. Settings" on page 113
- ❏ Adjusts the screen's contrast (Adjust contrast function)
  ☞ "Sys. Settings" on page 113
- ❏ Turns on the light automatically when the screen changes (Auto Light function)
  ☞ "Sys. Settings" on page 113
- ❏ Sets an alarm (Alarm function)
  ☞ "Sys. Settings" on page 113
- ❏ Turns off operation tones (Operation Tones function)
  ☞ "Sys. Settings" on page 113
- ❏ Resets configuration information in the device's memory (Initialise function)
  ☞ "Sys. Settings" on page 113

Other features



- ❏ You can measure pitch and stride using the built-in stride sensor (SF-710/SF-510 only).
  ☞ "Educating Your Stride Sensor" on page 33
- ❏ You can skip GPS positioning if it is taking too long.
  ☞ "Skipping GPS positioning" on page 30
- ❏ You can take measurements without performing GPS positioning.
  ☞ "Indoor mode (SF-710/SF-510 only)" on page 31
- ❏ You can monitor, analyse, compare and share your recorded data using the dedicated Web application "RUNSENSE View".
  ☞ "Data Management Using the Web Application (RUNSENSE View)" on page 77

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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	
	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

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.

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.

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.
☞ “Contacting us About this Product” on page 139

⚠ 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 use the device if you have a surgically implanted medical device such as a cardiac pacemaker.
	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.

Preparing and Basic Operations

You need to make the following preparations before use.

☞ **“Checking the Items Provided” on page 13**
☞ **“Basic Operations” on page 14**
☞ **“Charging” on page 22**
☞ **“Initial Settings” on page 26**

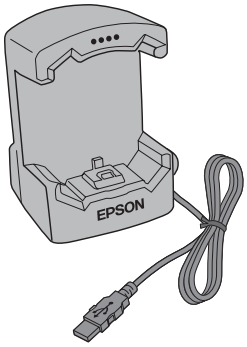
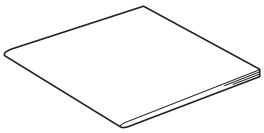
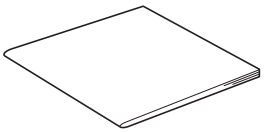
Once preparations are complete, check the method and important points when performing GPS satellite positioning.

☞ **“Specifying a GPS (GPS Positioning)” on page 29**
☞ **“Educating Your Stride Sensor” on page 33**
☞ **“Measurable Items” on page 34**

Checking the Items Provided

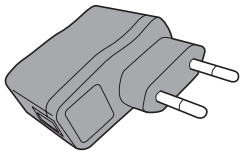
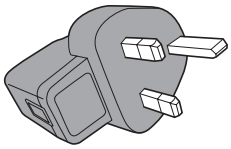
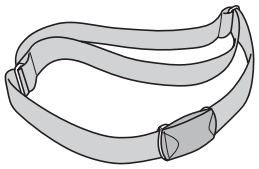
Make sure you check that all of the following items have been supplied with this product. If there is anything missing, contact your local reseller.

Main unit (One of the models that you purchased.)		
SF-710	SF-510	SF-310
		

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

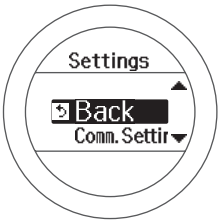
This device is comprised of a Time screen, Measurement screen, Settings screen (**Settings** menu and **Measure set.** menu), and Recall screen, and you can perform operations with the following buttons.

Operation buttons

: Short press

: Long press (two seconds or more)

Settings menu



"Setting screen (**Settings** menu/**Measure set.** menu)" on page 18

B / A

Time screen

"Time screen" on page 16

C / A/C

Measurement screen

"Measurement screen" on page 17

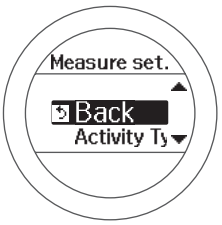
A / D

Recall screen

"Recall screen" on page 19

A / B

Measure set. menu



"Setting screen (**Settings** menu/**Measure set.** menu)" on page 18

See the following pages for information on making settings for each screen.

"Making Settings" on page 105

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 113*

- ❏ *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	-
	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.
	Long press (two seconds or more)	Displays the **Settings** menu. ☞ "Setting screen (**Settings** menu/**Measure set.** menu)" on page 18
C	Short press	Performs GPS positioning, and displays the measurement screen. ☞ "Measurement screen" on page 17
	Long press (two seconds or more)	Changes to indoor mode (GPS off) (SF-710/SF-510 only). ☞ "Indoor mode (SF-710/SF-510 only)" on page 31
D	Short press	Displays a record of the measurement history (recall screen). ☞ "Recall screen" on page 19
	Long press (two seconds or more)	Performs Bluetooth® communication. Use this when uploading measurement data.

Measurement screen

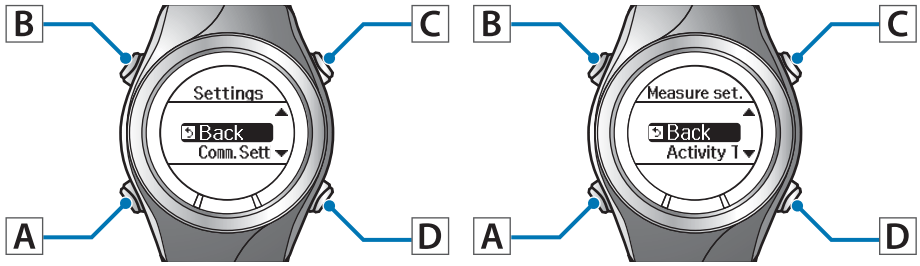
Operation buttons

Button Operation		Explanation
A	Short press	You can display up to four 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.
	Long press (two seconds or more)	Displays the **Measure set.** menu. Not available while measuring.
C	Short press	Starts, stops, or resumes measuring.
	Long press (two seconds or more)	Displays the time screen. Displays the time screen if you use reset* while measuring is stopped. Not available while measuring.
D	Short press	Records laps while measuring.
	Long press (two seconds or more)	Resets* while measuring is stopped. Not available while measuring.

* When you reset the display, it returns to the status before measuring started allowing you to start the next measurement. Data that has been measured up to that point is stored in the device's memory.

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.

Recall screen

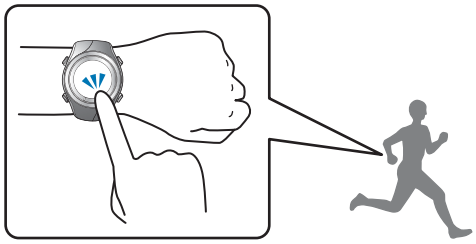
Operation buttons

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.

Tap

You can perform one of the following operations by tapping the screen once while measuring.

Tapping is only supported by SF-710/SF-510.



Function	Explanation
Lap	Records the lap. The same operation as pressing **D** while measuring.
Light	Turns on the light. The light turns on for approximately 10 seconds. The same operation as pressing **B**.
Screen Chg.	Changes between the four measurement screens. The same operation as pressing **A**.
OFF (default)	Turns off tap operations.

Note:

- ❏ *When you want to change functions operated by tapping, set **Tap** from the **Measure set.** menu.*

  ☞ *"Measure set." on page 106*

- ❏ *The operation may not be recognised if you tap the screen rapidly in succession. Leave a gap of approximately one second between taps.*
- ❏ *When bike mode is selected, the tap function may operate automatically depending on the condition of the road surface. If this occurs, we recommend to change the setting to **OFF**.*

Alarm (tones/vibration)

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.

Also, vibration is only supported by the SF-710.

Mode	Measurement Settings	Timing
Chronograph Interval Goal	AT Lap ❏ From device ☞ "Recording Laps Automatically (AT Lap Function)" on page 54 ❏ From PC application (Run Connect)* ☞ "Setting the AT Lap Function (SF-710 only)" on page 94	When lap is paused
	AT Pause ☞ "Automatically Start/Stop Measuring (AT Pause Function)" on page 56	❏ When measuring is stopped ❏ When measuring restarts
	Target Pace ❏ From device ☞ "Setting a Pace and Measuring (Target Pace Function)" on page 57 ❏ From PC application (Run Connect)* ☞ "Setting the Target Pace Function (SF-710 only)" on page 96	❏ When you are off the target pace ❏ When you have set multiple target paces and the target pace changes*
	Waypoint* ❏ From device ☞ "Setting and Measuring Waypoints (Waypoint Function)" on page 59 ❏ From PC application (Run Connect)* ☞ "Setting the Waypoint Function (SF-710 only)" on page 99	When you have reached to the set point
	HR ☞ "Measuring Heart Rate" on page 72	When you are off the HR Zone
Interval	❏ From device ☞ "Setting a Time and Distance for Hard and Light Workouts (Interval Function)" on page 43 ❏ From PC application (Run Connect)* ☞ "Setting the Interval Function (SF-710 only)" on page 102	❏ When changing between sprint/recovery ❏ When the number of sets is complete
Goal	☞ "Measure until the Time or Distance Set in Advance Is Reached (Goal Function)" on page 50	❏ When 50/90% of the set time/distance is reached ❏ When the set time/distance is complete

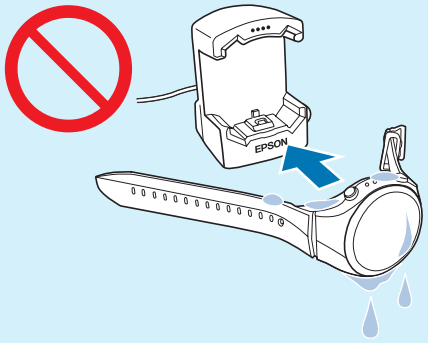
* Only for the SF-710.

Charging

Before use

Important:

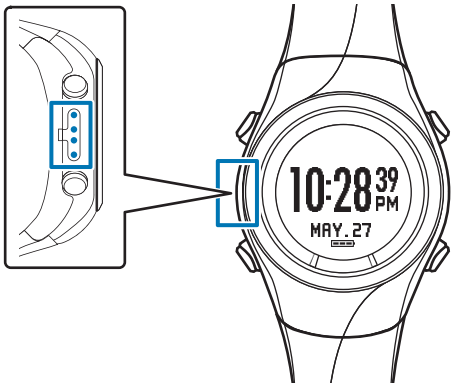
❏ *Do not place the device in the cradle if it is wet from water or sweat.*
Otherwise the contact points on the cradle and the device could corrode, malfunction, or cause a communication failure.



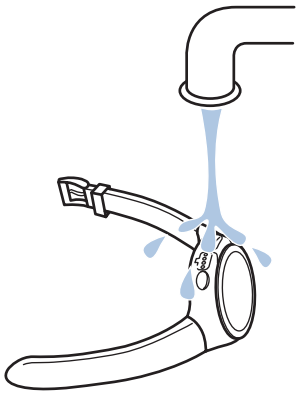
❏ *Do not perform button operations when it is wet; otherwise, a malfunction could occur.*

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.

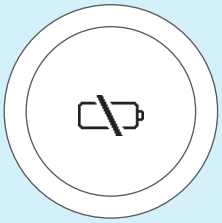


See the following for more details about daily maintenance.
“Looking after your device” on page 130

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.*

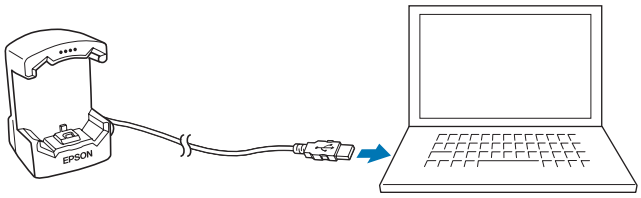


1 Connect the cradle using one of the following methods.

■ **Using a computer**

Connect the cradle's USB plug to the computer's USB port.

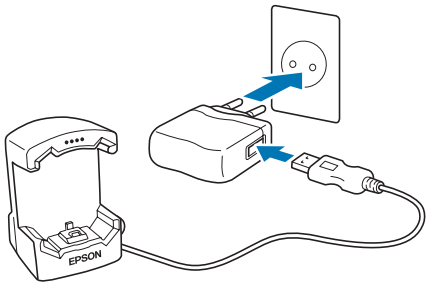
This is not guaranteed to work with all computers. Do not use a USB hub. Instead, connect the cradle directly to the computer.



■ **Using the AC adapter**

Connect the cradle's USB plug to the AC adapter's USB port.

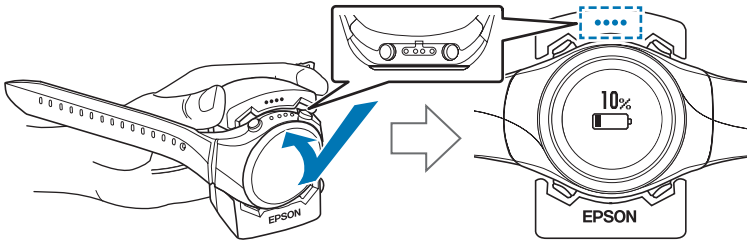
We recommend using the optional AC adapter (Model No.: SFAC02 Europe excluding UK / SFAC03 UK). If you do not use a supported AC adapter, you may not be able to charge or it may not operate correctly.



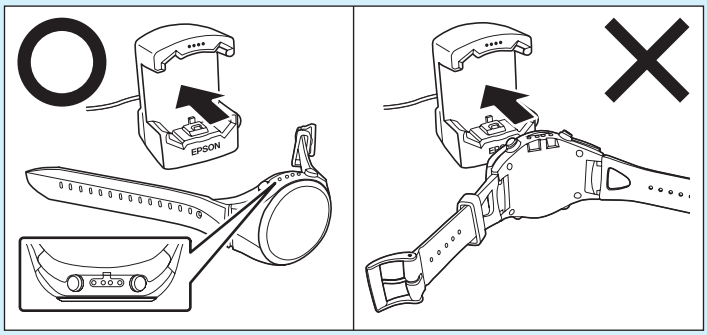
2 Place the device into the cradle.

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.

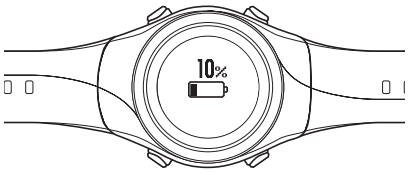


Important:
Make sure the device is placed in the correct direction; otherwise, the device or the cradle could be damaged.



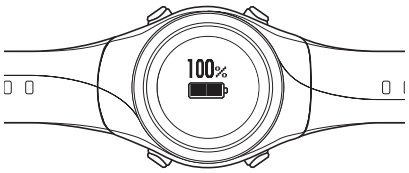
When the device is placed in the correct direction, the alarm sounds, the following screen is displayed, and charging starts.

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.

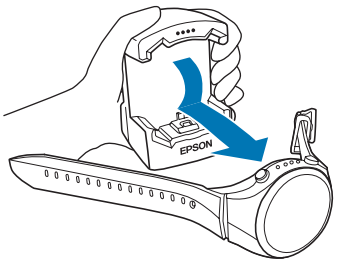
When the following charging icon is displayed, charging is complete.



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

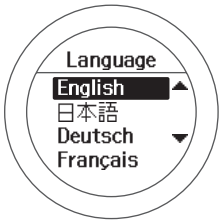
After charging the device for the first time and removing it from the cradle, follow the on-screen instructions to Initialise the settings.

> ***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

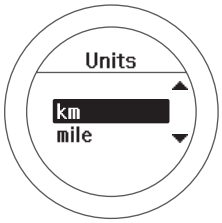
1 Set the language.

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



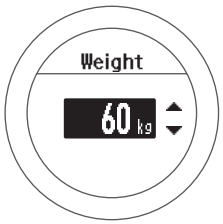
2 Set the **Units**.

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



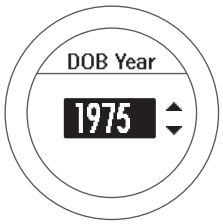
3 Set your **Height** and **Weight**.

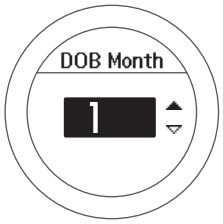
Use **C**/**D** to select, and then press **A**.

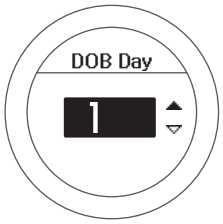


4 Set your **DOB**.

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

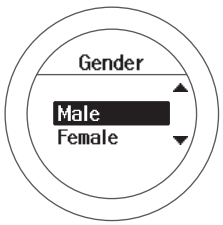






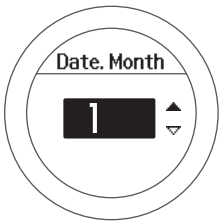
5 Set your **Gender**.

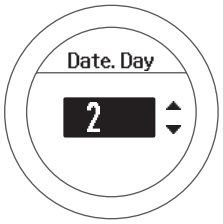
Use **C**/**D** to select, and then press **A**.



6 Set today's date.

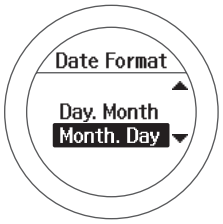
Use **C**/**D** to select, and then press **A**.





7 Set the **Date Format**.

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

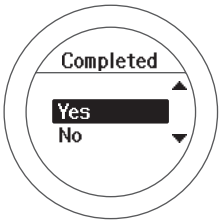


8 Go to a location outside with no obstructions overhead.

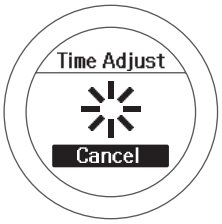
> ***Important:***
> *Take the following steps to receive a signal from the GPS and synchronise time automatically. Since the signal from the GPS cannot be received indoors, go outside to a location without any obstructions overhead.*

9 Complete the settings.

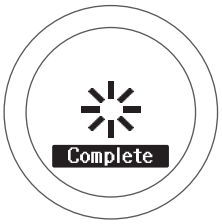
Use **C**/**D** to select **Yes**, and then press **A**.



A signal is received from the GPS and time is automatically synchronised.



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



The time screen is displayed.

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 Adjust** from **Sys. Settings**.*

"Sys. Settings" on page 113

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 Chronograph 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.*

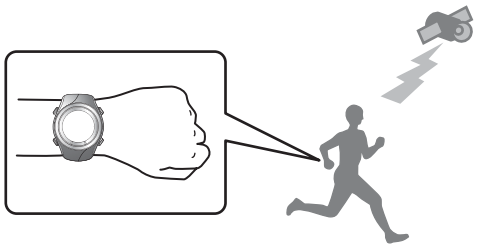
Note:
Even if the battery runs out, measurement data is stored in the main memory.

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

When you change to the measurement screen, the 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.*

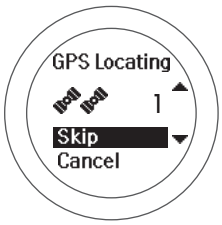
Operation buttons

1 Go to a location outside with no obstructions overhead.

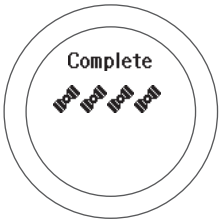
2 Perform GPS positioning.

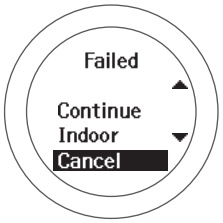
Press **C**.

GPS positioning starts.



When GPS positioning is complete, the positioning complete screen flashes, and then the measurement screen is displayed.

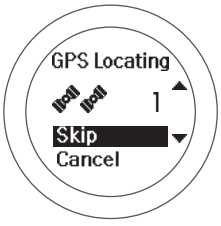


> ***Note:***
> *It usually takes less than two minutes to complete GPS positioning.*
>
> *If it takes more than two minutes and **Failed** is displayed, we recommend selecting **Cancel**, moving to a different location, and trying again.*
>
> 
>

When the measurement screen is displayed, you can start measuring.
"Measure" on page 37

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. For SF-710 and SF-510, distance and pace data can still be measured. The device will use the stride sensor until a GPS connection is made.
☞ "Measurable Items" on page 34

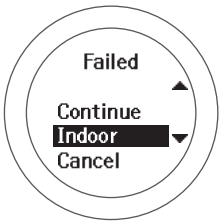
Indoor mode (SF-710/SF-510 only)

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.
☞ "Measurable Items" on page 34

Use either of the following methods to enter indoor mode.

- ❏ Hold down **C** on the time 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.

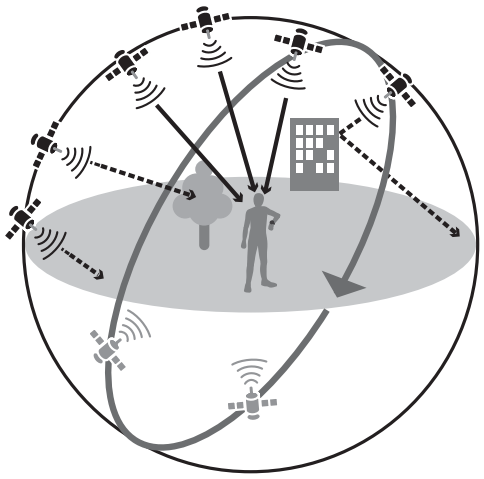
❏ When you use the device for the first time after purchase

❏ 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 pitch and stride even when GPS signal is lost such as in a tunnel, and so on (SF-710/SF-510 only).

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.

Measure

Measure using the chronograph function.

☞ "Measuring Time, Distance, and Speed (Chronograph Function)" on page 38

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****.*

☞ *"Measure set." on page 106*

❏ *The device's stride sensor is used for running and walking.*

❏ *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 by each measurement function for chronograph, interval, and goal change according to the settings for the GPS signal (GPS on/off) and the heart rate monitor.

When GPS is off for indoor mode (SF-710/SF510 only), the route is not recorded.

◯ : Measuring possible

- : Cannot measure

* : Cannot measure during indoor mode ☞ "Indoor mode (SF-710/SF-510 only)" on page 31

		SF-710	SF-510	SF-310
Measurement item (display name)	Distance (Dist.)	◯	◯	◯
	Lap Distance (LapDist.)	◯	◯	◯
	Pace (Pace)	◯	◯	◯
	Average Pace (Av.Pace)	◯	◯	◯
	Lap Pace (LapSpd)	◯	◯	◯
	Speed (Speed)	◯	◯	◯
	Average Speed (Av.Spd)	◯	◯	◯
	Lap Speed (LapSpeed)	◯	◯	◯
	Split Time (Split)	◯	◯	◯
	Lap Time (Lap)	◯	◯	◯
	Time (Time)	◯	◯	◯
	Calories Burnt (Calories)	◯	◯	◯
	Altitude (Alt.)*	◯	◯	◯
	Guide Time (Guide)	◯	◯	◯
	Guide Distance (GuideDist.)	◯	◯	◯

		SF-710	SF-510	SF-310
Measurement items (display name)	Stride (Stride)	○	○	-
	Average Stride (Av.Stride)	○	○	-
	Lap Stride (LapStride)	○	○	-
	Pitch (Pitch)	○	○	-
	Average Pitch (Av.Pitch)	○	○	-
	Lap Pitch (LapPitch)	○	○	-
	HR (HR)	See the following table for items that can be measured by the heart rate monitor settings		
	Average HR (Av.HR)			
	Maximum HR (Max.HR)			
	Lap HR (LapHR)			
	Steps (Steps)	○	○	-
	Lap Steps (LapStp)	○	○	-
	HR Zone Time (SpentHR)	See the following table for items that can be measured by the heart rate monitor settings		
	Time to HR Zone (TimeHR)			
	Total Ascent (Tot.Asc.)*	○	-	-
	Total Descent (Tot.Des.)*	○	-	-
	Grade (Grade)*	○	-	-
	Latitude/Longitude (LAT/LONG)*	○	○	-
	Estimated Time (Est.)	○	○	○
	Estimated Distance (Est.Dist.)	○	○	○

See the following table for items that can be measured by the heart rate monitor settings

		SF-710		SF-510		SF-310	
Heart rate monitor status		On	Off	On	Off	On	Off
Measurement items (display name)	HR (HR)	○	-	○	-	○	-
	Lap HR (LapHR)	○	-	○	-	○	-
	Average HR (Av.HR)	○	-	○	-	○	-
	Maximum HR (Max.HR)	○	-	○	-	-	-
	HR Zone Time (Spent.HR)	○	-	○	-	-	-
	Time to HR Zone (Time.HR)	○	-	○	-	-	-

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

Measure

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

Also, training is supported for a variety of functions, such as the interval function.

☞ **“Measuring Time, Distance, and Speed (Chronograph Function)” on page 38**

☞ **“Setting a Time and Distance for Hard and Light Workouts (Interval Function)” on page 43**

☞ **“Measure until the Time or Distance Set in Advance Is Reached (Goal Function)” on page 50**

☞ **“Recording Laps Automatically (AT Lap Function)” on page 54**

☞ **“Automatically Start/Stop Measuring (AT Pause Function)” on page 56**

☞ **“Setting a Pace and Measuring (Target Pace Function)” on page 57**

☞ **“Setting and Measuring Waypoints (Waypoint Function)” on page 59**

Measuring Time, Distance, and Speed (Chronograph Function)

What is the chronograph function?

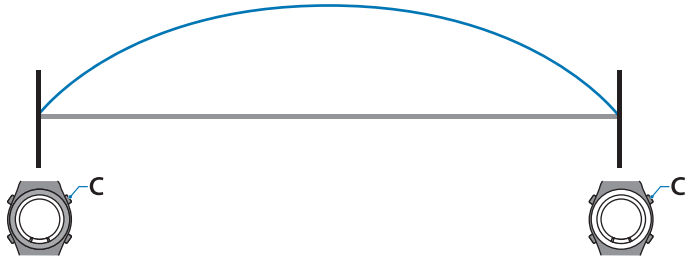
This function allows you to measure split times and lap times simultaneously. Also, since this device is equipped with a GPS function, you can automatically measure distance, speed, and route using the positional information and time from the GPS signal.

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, Walk, or Bike) before you start measuring.*
>
> ☞ *"Measure set." on page 106*

Split Time

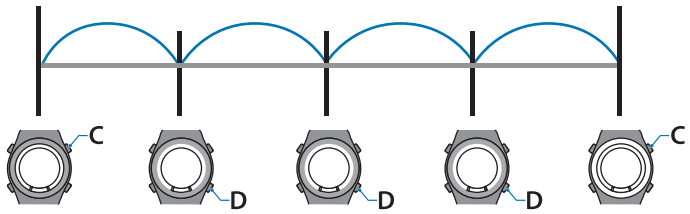
Measures the elapsed time from the start.



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 time or distance set in advance has been reached.

☞ "Recording Laps Automatically (AT Lap Function)" on page 54

Measuring

Operation buttons

1 Display the measurement screen.

Press **C** on the time screen.

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

“Specifying a GPS (GPS Positioning)” on page 29

2 Start measuring.

Press **C**.

3 Record the lap.

Press **D** while measuring.

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

“Lap Hold Screen” on page 42

* The screen display differs depending on the settings.

“Screen pattern table” on page 116

4 Stop measuring.

Press **C** while measuring.

Press **C** to resume measuring.

5 Reset the measurement results.

Hold down **D** while measuring is stopped.

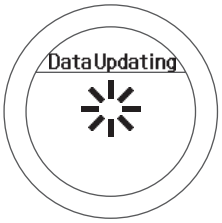
When you reset the display, it returns to the status before measuring started allowing you to start the next measurement.

Data measured up to that point is stored in the device's memory, and you can check it by pressing **D** on the time screen.

“Checking Measurement Data” on page 63

Note:
To stop measuring and return to the time screen

- ❏ *After resetting the measurement results in step 5, hold down **A**.*
- ❏ *While the screen in step 4 is displayed while measurement is stopped, hold down **C**. The measurement results are reset and the time screen is displayed.*



- ❏ *If no operations are made for 60 minutes on a screen other than the measuring screen, the time screen is displayed.*

Screen display

Measurement screen

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

Note:
You can change the screen pattern and the measurement items displayed for each screen.

☞ *"Screen" on page 115*

Screen		Screen Pattern (Default)	Measurement Item (Default)
Screen1		3 Lines	Distance (Dist.) Split Time (Split) Average Pace (Av.Pace)
Screen2		2 Lines	Lap Pace (LapPace) Lap Distance (LapDist.)
Screen3		3 Lines	Distance (Dist.) Lap Time (Lap) Lap Distance (LapDist.)
Screen4		2 Lines	Altitude (Alt.) Time (Time)

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 115*

Screen		Screen Pattern (Default)	Measurement Item (Default)
Display Lap Screen		2 Lines	Lap Distance (LapDist.) Lap Time (Lap)

Setting a Time and Distance for Hard and Light Workouts (Interval Function)

What is the interval function?

This function allows you to perform sets of hard (sprint) and light (recovery) exercise.

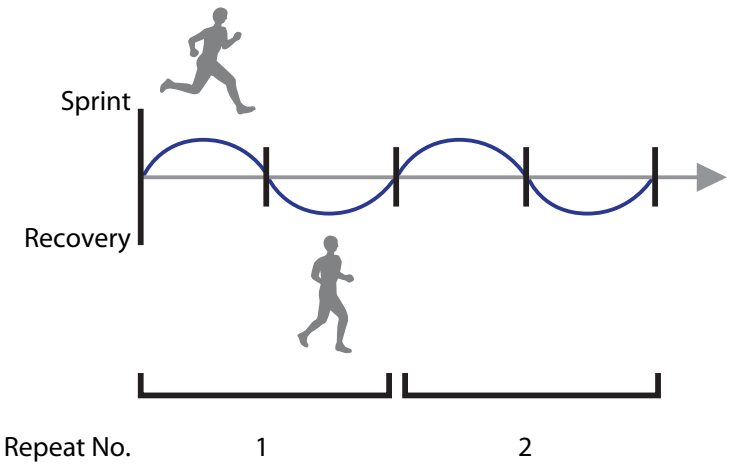
You can set the time and distance, and create an exercise menu.

An alarm notifies you to change between sprint and recovery times.

Sprint: Hard exercise

Recovery: Light exercise

Repeat No.: Number of times to repeat one set of sprinting and recovering



Setting interval conditions and measuring

Note:
By using the PC application (Run Connect), you can setup interval conditions from your computer.

When setting up from your computer, you can also customise your sprint and recovery intervals (SF-710 only).

☞ *"Setting the Interval Function (SF-710 only)" on page 102*

Operation buttons

Setting interval conditions

1 Display the measurement screen.

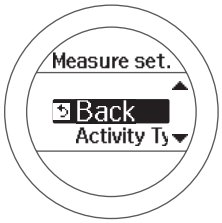
Press **C** on the time screen.

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

☞ "Specifying a GPS (GPS Positioning)" on page 29

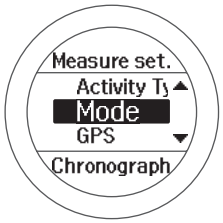
2 Displays the **Measure set.** menu.

Hold down **B** on the measurement screen.



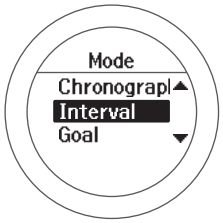
3 Select **Mode**.

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



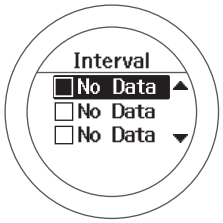
4 Select **Interval**.

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



5 Select an empty setting.

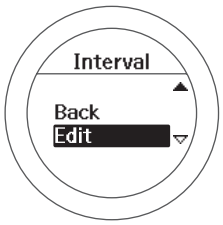
Use **C**/**D** to select, and then press **A**.



When this is already set, select one of **SETTING** 01 to 03. Check the set content, and then press **A**.

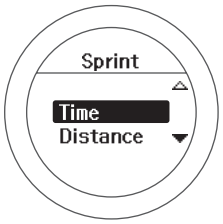
6 Select **Edit**.

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



7 Select whether to set distance or time as the length of the sprint (hard exercise).

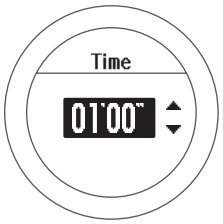
Use **C**/**D** to select, and then press **A**.



8 Set the time or distance.

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

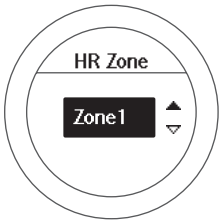
Hold down **C**/**D** to speed through the numbers.



9 Set the heart rate zone you want to maintain while sprinting.

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 112*

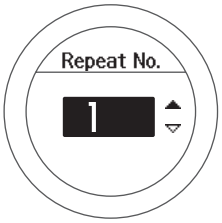
10 Set the recovery (light exercise).

Follow steps 7 to 9.

11 Set the Repeat No. (number of times to repeat one set of sprinting and recovering).

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

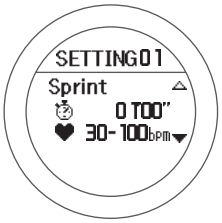
Hold down **C**/**D** to speed through the numbers.



12 Check the set content.

Use **C**/**D** to scroll the screen.

After checking, press **A**.



13 Select **OK**.

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

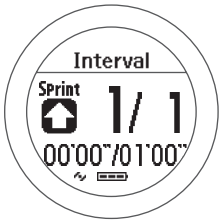
The interval measurement screen is displayed.

Measuring

1 Start measuring.

Press **C**.

Sprint measuring starts.



When the sprint time (or sprint distance) has passed, an alarm sounds and recovery measuring starts automatically.

When the repeat number is set to two or more, the sprint and recovery set is repeated.

> ***Note:***
> - *If you press **D** while measuring, you can change from sprint to recovery, and then back to sprint again.*
> - *To stop while exercising, press **C**. Press **C** to resume measuring.*

2 Finish measuring.

Measuring finishes automatically after repeating the specified sprint and recovery sets.

When you finish, the time, distance, and calories burnt are displayed.

3 Reset the measurement results.

Hold down **D** while measuring is stopped.

When you reset the display, it returns to the status before measuring started allowing you to start the next measurement.

Data measured up to that point is stored in the device's memory, and you can check it by pressing **D** on the time screen.

☞ "Checking Measurement Data" on page 63

> ***Note:***
> *To stop measuring and return to the time screen*
> - *After resetting the measurement results in step 3, hold down **A**.*
> - *While the screen in step 2 is displayed while measurement is stopped, hold down **C**. The measurement results are reset and the time screen is displayed.*
> - *If no operations are made for 60 minutes on a screen other than the measuring screen, the time screen is displayed.*

Loading interval conditions that have already been set

Operation buttons

Loading interval conditions

1 Display the measurement screen.

Press **C** on the time screen.

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

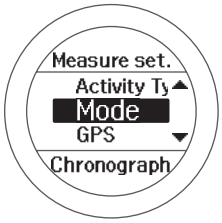
☞ "Specifying a GPS (GPS Positioning)" on page 29

2 Displays the **Measure set.** menu.

Hold down **B** on the measurement screen.

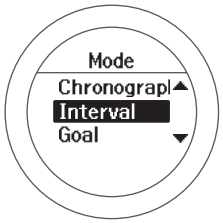
3 Select **Mode**.

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



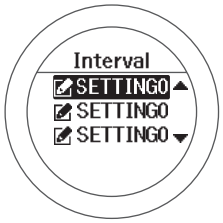
4 Select **Interval**.

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



5 Select one of **SETTING** 01 to 03.

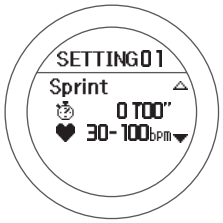
Use **C**/**D** to select the registered setting, and then press **A**.



6 Check the set content.

Use **C**/**D** to scroll the screen.

Press **A**.



7 Select **OK**.

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

The interval measurement screen is displayed.

Measuring

See the following page for information on measuring.

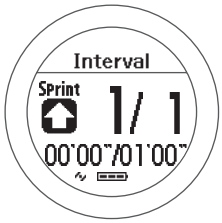
☞ "Measuring" on page 46

Screen display

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

Note:
You can change the screen pattern and the measurement items displayed for screens one to four.

☞ *"Screen" on page 115*

Screen		Screen Pattern (Default)	Measurement Item (Default)
Fixed interval screen		Interval	Time or distance for Sprint/ Recovery
Screen1		3 Lines	Distance (Dist.) Split Time (Split) Average Pace (Av.Pace)
Screen2		2 Lines	Lap Pace (LapPace) Lap Distance (LapDist.)
Screen3		3 Lines	Distance (Dist.) Lap Time (Lap) Lap Distance (LapDist.)
Screen4		2 Lines	Altitude (Alt.) Time (Time)

Measure until the Time or Distance Set in Advance Is Reached (Goal Function)

What is the goal function?

This function allows you to measure until the time or distance set in advance is reached.

Time race

Allows you to set a time as your goal and measure the time to go until that goal is reached. You can exercise while checking the elapsed time. You can also calculate the estimated distance you will cover during that time.

Distance race

Allows you to set a distance as your goal and measure the distance to go until that goal is reached. You can exercise while checking the distance. You can also calculate the estimated total time to complete the set distance.

Note:
By default, ***Estimated Distance*** *and* ***Estimated Time*** *are not displayed. Change the screen settings to display.*

☞ *"Screen" on page 115*

Measuring by setting the time or distance

Operation buttons

Set the time or distance.

1 Display the measurement screen.

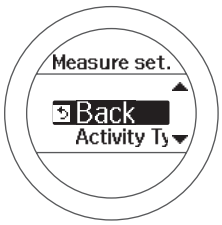
Press **C** on the time screen.

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

☞ "Specifying a GPS (GPS Positioning)" on page 29

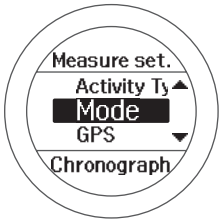
2 Displays the **Measure set.** menu.

Hold down **B** on the measurement screen.



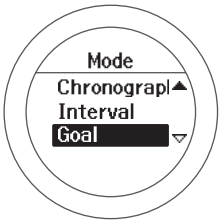
3 Select **Mode**.

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



4 Select **Goal**.

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



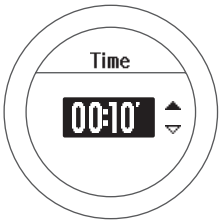
5 Select whether to set time or distance.

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

6 Set the time or distance.

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

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



7 Select **OK**.

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

The goal measurement screen is displayed.

Measuring

1 Start measuring.

Press **C**.

2 When the set time or distance is reached, the "Finish" screen is displayed.

The time, distance, and calories burnt are displayed.

> ***Note:***
> *An alarm notifies you when you reach 50% and 90% of the set time or distance.*

3 Stop measuring.

Press **C** while measuring.

4 Reset the measurement results.

Hold down **D** while measuring is stopped.

When you reset the display, it returns to the status before measuring started allowing you to start the next measurement.

Data measured up to that point is stored in the device's memory, and you can check it by pressing **D** on the time screen.

☞ "Checking Measurement Data" on page 63

> ***Note:***
> *To stop measuring and return to the time screen*
>
> - ❏ *After resetting the measurement results in step 4, hold down **A**.*
> - ❏ *While the screen in step 3 is displayed while measurement is stopped, hold down **C**. The measurement results are reset and the time screen is displayed.*
> - ❏ *If no operations are made for 60 minutes on a screen other than the measuring screen, the time screen is displayed.*

Screen display

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

Note:
You can change the screen pattern and the measurement items displayed for screens one to four.

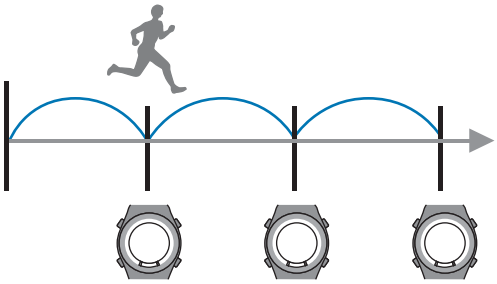
☞ *"Screen" on page 115*

Screen		Screen Pattern (Default)	Measurement Item (Default)
Fixed goal screen		Goal	Time or distance for Goal
Screen1		3 Lines	Distance (Dist.) Split Time (Split) Average Pace (Av.Pace)
Screen2		2 Lines	Lap Pace (LapPace) Lap Distance (LapDist.)
Screen3		3 Lines	Distance (Dist.) Lap Time (Lap) Lap Distance (LapDist.)
Screen4		2 Lines	Altitude (Alt.) Time (Time)

Recording Laps Automatically (AT Lap Function)

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

Set the lap time or distance. You can set five times or distances. However, only one setting can be used while measuring.



Note:
By using the PC application (Run Connect), you can setup AT Lap from your computer.

When setting up from your computer, you can set your own time or distance to divide laps (SF-710 only).

"Setting the AT Lap Function (SF-710 only)" on page 94

Operation buttons

1 Display the measurement screen.

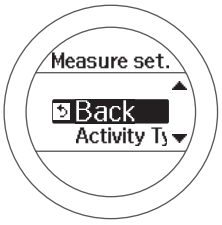
Press **C** on the time screen.

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

"Specifying a GPS (GPS Positioning)" on page 29

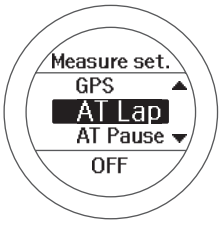
2 Displays the **Measure set.** menu.

Hold down **B** on the measurement screen.



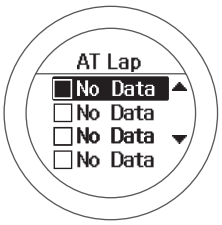
3 Select **AT Lap**.

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



4 Select an empty setting.

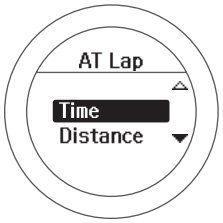
Use **C**/**D** to select, and then press **A**.



When this is already set, select one of **SETTING** 01 to 05.

5 Select whether to set distance or time as the length of the lap.

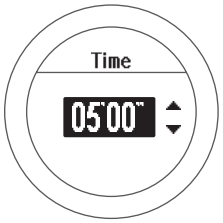
Use **C**/**D** to select, and then press **A**.



6 Set the time or distance.

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

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



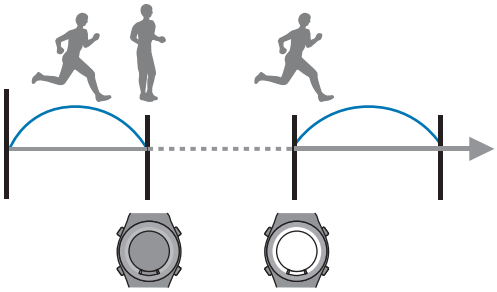
7 Complete the settings.

Hold down **A**.

The measurement screen is displayed.

Automatically Start/Stop Measuring (AT Pause Function)

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



Operation buttons

1 Display the measurement screen.

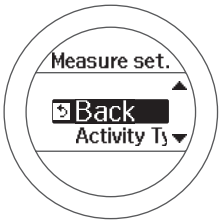
Press **C** on the time screen.

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

☞ "Specifying a GPS (GPS Positioning)" on page 29

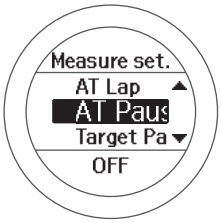
2 Displays the **Measure set.** menu.

Hold down **B** on the measurement screen.



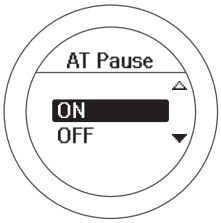
3 Select **AT Pause**.

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



4 Select **ON**.

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



5 Complete the settings.

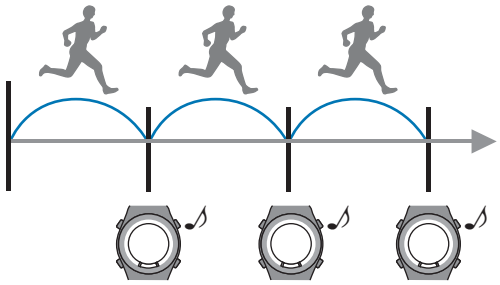
Hold down **A**.

The measurement screen is displayed.

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.



Note:
By using the PC application (Run Connect), you can setup the Target Pace from your computer.

When setting up from your computer, you can customise your target pace (SF-710 only).

☞ *"Setting the Target Pace Function (SF-710 only)" on page 96*

Operation buttons

1 Display the measurement screen.

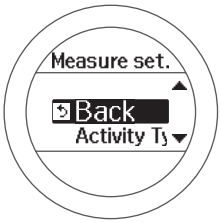
Press **C** on the time screen.

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

☞ "Specifying a GPS (GPS Positioning)" on page 29

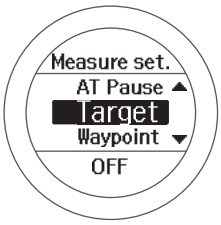
2 Displays the **Measure set.** menu.

Hold down **B** on the measurement screen.



3 Select **Target Pace**.

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



4 Select an empty setting.

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

When this is already set, select one of **SETTING** 01 to 03.

5 Set the target time for one kilometre/mile.

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

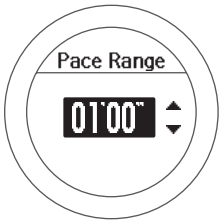
Hold down **C/D** to speed through the numbers.

6 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.



7 Complete the settings.

Hold down **A**.

The measurement screen is displayed.

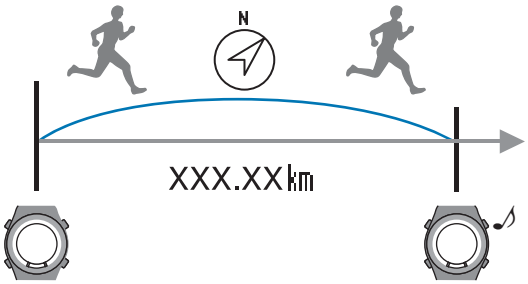
Note:
If you want to turn off the alarm that notifies you when you are falling behind the set pace range, select ***OFF*** *in step 6.****OFF*** *is the bottom line for the* ***Pace Range*** *(under 0'05").*

Setting and Measuring Waypoints (Waypoint Function)

The waypoint function acquires the latitude and longitude for **Current position**, and register to the device as a point.

You can register waypoints to the device by using the buttons while measuring. By specifying the registered point, you can display the directions to the point, the distance in a straight line, and the difference in elevation. As you approach the specified point, an alarm sounds. This is not a navigation function.

The Waypoint function is only available for the SF-710.



Note:
By using the PC application (Run Connect), you can setup Waypoints from your computer.

When setting up from your computer, you can register waypoints on the map.

"Setting the Waypoint Function (SF-710 only)" on page 99

Operation buttons

Registering waypoints

1 Display the measurement screen.

Press **C** on the time screen.

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

"Specifying a GPS (GPS Positioning)" on page 29

2 Start measuring.

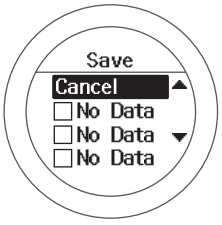
Press **C**.

3 Stop measuring when you reach a point you wish to register as a Waypoint.

Press **C** while measuring.

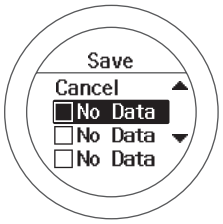
4 To register the Waypoint.

Hold down **A**.



5 Select an empty setting.

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



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

Press **C** to resume measuring.

> ***Note:***
> - ❏ *You can register up to 40 waypoints.*
> - ❏ *You can overwrite by selecting an item that has already been registered.*

Specifying and measuring waypoints

1 Display the measurement screen.

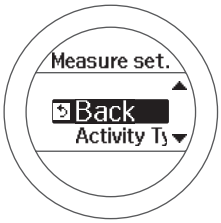
Press **C** on the time screen.

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

☞ "Specifying a GPS (GPS Positioning)" on page 29

2 Display the **Measure set.** menu.

Hold down **B** on the measurement screen.



3 Select **Waypoint**.

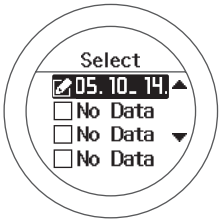
Use **C**/**D** to select, and then press **A**.

4 Select **ON**.

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

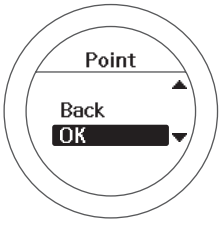
5 Select the registered waypoint.

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



6 Select **OK**.

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



You are returned to the measurement screen.

7 Complete the settings.

Hold down **A**.

The measurement screen is displayed.

8 Start measuring.

Press **C**.

Important:

- *The Waypoint screen is not displayed by default while measuring. To check the information for Waypoint while measuring, change the screen configuration so that the waypoint screen is displayed.*

  "Screen" on page 115

- *See the following pages for information on viewing the Waypoint screen.*

  "Screen pattern table" on page 116

- *If an error condition continues, due to the characteristics of GPS, the waypoint may not be able to display the exact direction. If this occurs, try moving a few tens of metres. Make sure you pay attention to your surroundings if you check the direction while moving.*

9 As you approach the specified point, an alarm sounds.

The alarm sounds in the following conditions. Errors may occur due to the surrounding environment.

Activity Type	Range
Run/Walk	When within a range of 10 m in radius
Bike	When within a range of 100 m in radius

Important:
In environments that do not allow GPS positioning, the alarm does not sound because the Waypoint function is unavailable. Use the Waypoint function in environments that allow GPS positioning.

Checking Measurement Data (Recall Function)

You can check measured data on the recall screen.

☞ "Checking Measurement Data" on page 63

☞ "Measurement data that can be checked in recall" on page 63

☞ "Delete unnecessary measurement data" on page 64

Checking Measurement Data

You can check measured data on the recall screen.

Operation buttons

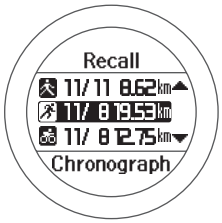
1 Display the recall screen.

Press **D** on the time screen.

2 Select the data you want to check.

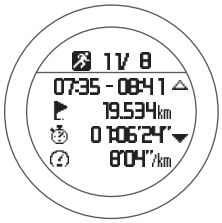
The recall screen displays item icons, the date measured, and the distance.

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



3 Check the measurement data.

Use **C**/**D** to scroll the screen.



4 After checking, display the recall screen.

Press **A**.

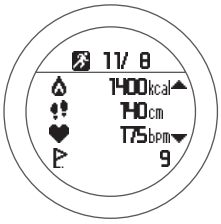
5 Finish checking the history.

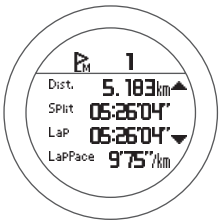
Hold down **A**.

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)
	Walking mode (measuring while walking)
	Bike mode (measuring while riding a bike)

Measurement Item	
-	Date measured

Measurement Item	
-	Start Time/End Time
	Distance
	Split time
	Average pace
	Calories Burnt
	Average Stride
	Average HR
	Lap Steps
	AT Lap
	Manual Lap
	Sprint
	Recovery
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

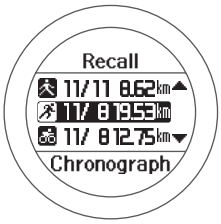
1 Display the recall screen.

Press **D** on the time screen.

2 Select the data you want to delete.

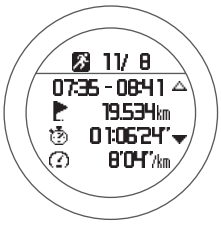
The recall screen displays item icons, the date measured, and the distance.

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



3 Check and delete the measurement data.

Press **A**.

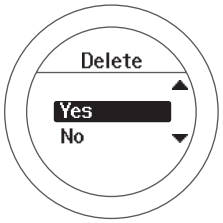


4 Select **Delete**.

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

5 Select **Yes**.

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



6 After deleting, display the recall screen.

> ***Note:***
> *To continue deleting history data, repeat steps 2 to 5.*

7 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.*
>
> *"Sys. Settings" on page 113*

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.

"Sys. Settings" on page 113

Measuring Heart Rate (Heart Rate Monitor)

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

☞ "Preparing to Measure Heart Rate" on page 67

☞ "Measuring Heart Rate" on page 72

☞ "Replacing the Battery for the Heart Rate Monitor" on page 74

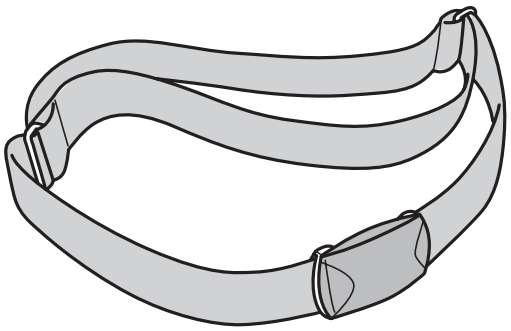
☞ "Disabling the Heart Rate Monitor" on page 76

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.

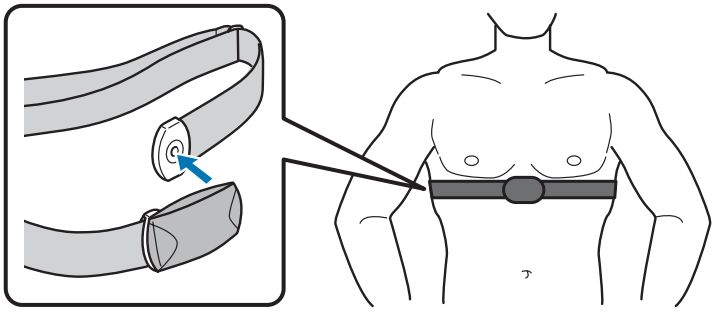
Heart Rate Monitor (Model No.: SFHRM01)

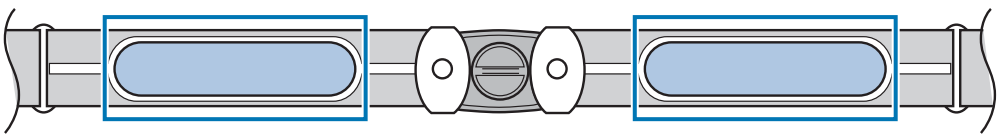


The heart rate monitor communicates with the device using Bluetooth® Smart technology.

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

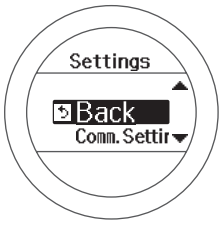
When using the heart rate monitor for the first time, wear the heart rate monitor when you register it to the device.

Operation buttons

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

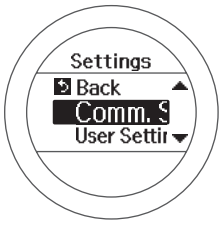
1 Displays the **Settings** menu.

Hold down **B** on the time screen.



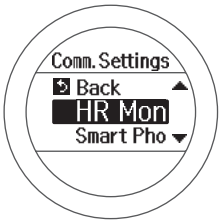
2 Select **Comm. Settings**.

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



3 Select **HR Monitor**.

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



4 Select **Register**.

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

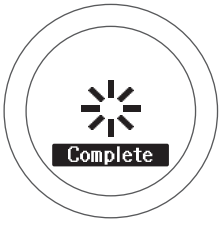
The device starts searching for the heart rate monitor and displays the search results.

5 Select the registered heart rate monitor.

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

6 Complete the communication settings.

Press **A**.

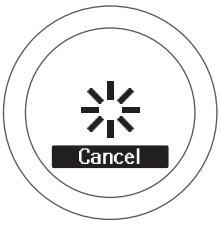


7 Complete the settings.

Hold down **A**.

Displays the time screen.

Note:
If the following screen is displayed and communication cannot be established, reset the heart rate monitor.



☞ *"Replacing the Battery for the Heart Rate Monitor" on page 74*

Enabling the heart rate monitor

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

Operation buttons

1 Display the measurement screen.

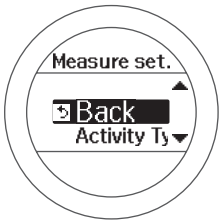
Press **C** on the time screen.

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

"Specifying a GPS (GPS Positioning)" on page 29

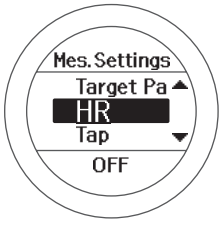
2 Displays the **Measure set.** menu.

Hold down **B** on the measurement screen.



3 Select **HR**.

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



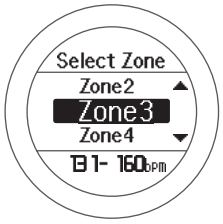
4 Select **ON**.

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

5 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:

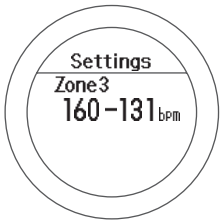
- *You can check or change the value set for the heart rate in each heart rate zone in **User Settings**.*

  "User Settings" on page 112

- *To turn off functions that notify you with an alarm, select **OFF** in **Select Zone**.*

6 Check the set content.

Press **A**.



7 Complete the settings.

Hold down **A**.

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 in the chronograph, interval, and goal functions. See the following pages for information on each function.

☞ "Measuring Time, Distance, and Speed (Chronograph Function)" on page 38

☞ "Setting a Time and Distance for Hard and Light Workouts (Interval Function)" on page 43

☞ "Measure until the Time or Distance Set in Advance Is Reached (Goal Function)" on page 50

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.

Measurement screen: Chronograph

♥ 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.

☞ "Screen" on page 115

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
Average HR	Avg.HR	Av.HR	Average heart rate from the start of measurements
Maximum HR*	Max.HR	Max.HR	Maximum heart rate from the start of measurements
Lap HR	LapHR	LapHR	Average heart rate for each lap

Measuring Heart Rate (Heart Rate Monitor)

Display item	Display name		Explanation
	1 Line	2 Lines/3 Lines	
HR Zone Time*	Spent.HR	Spent.HR	Time within heart rate zone for each lap
Time to HR Zone*	Time.HR	Time.HR	Time until entering heart rate zone for each lap

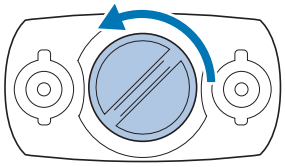
* Only displayed for the SF-710/SF-510.

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).

1 Use something flat, such as a coin, to remove the battery cover.

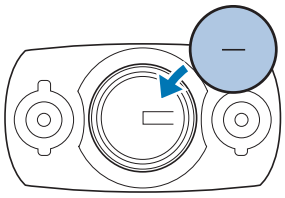


> ***Note:***
> *You can avoid damaging the cover by wrapping the coin in a thin handkerchief and so on.*

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

First, remove the battery.

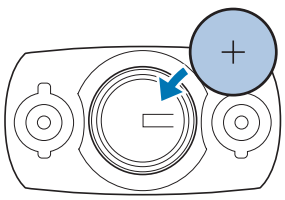
Turn the battery over so that the negative side is facing up and put it back in, and then wait for at least three seconds.



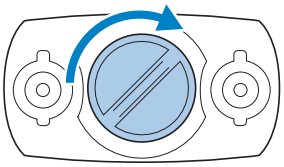
> ***Note:***
> *Resetting the heart rate monitor:*
>
> *Any remaining charge in the HR sensor circuitry is dispersed by removing the battery, reinserting it with the negative side facing up, and waiting for at least three seconds.*
>
> *If the heart rate monitor temporarily freezes, you can reset it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

3 Insert a new battery.

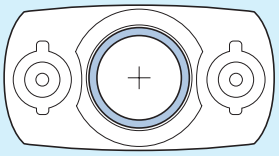
Make sure the + side is facing up.



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 measurement screen.

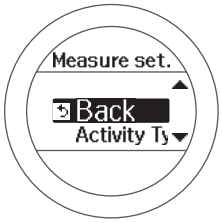
Press **C** on the time screen.

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

“Specifying a GPS (GPS Positioning)” on page 29

2 Display the **Measure set.** menu.

Hold down **B** on the measurement screen.



3 Select **HR**.

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

4 Select **OFF**.

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

5 Complete the settings.

Hold down **A**.

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.*
>
> ☞ *"Creating an Account (When Using for the First Time)" on page 81*
>
> *If you already have an account with RUNSENSE View, you can continue using it with this device.*

☞ **"What is the Web Application (RUNSENSE View)?" on page 78**

☞ **"Installing Run Connect (Uploader Software)" on page 80**

☞ **"Creating an Account (When Using for the First Time)" on page 81**

☞ **"Checking Uploaded Measurement Data" on page 86**

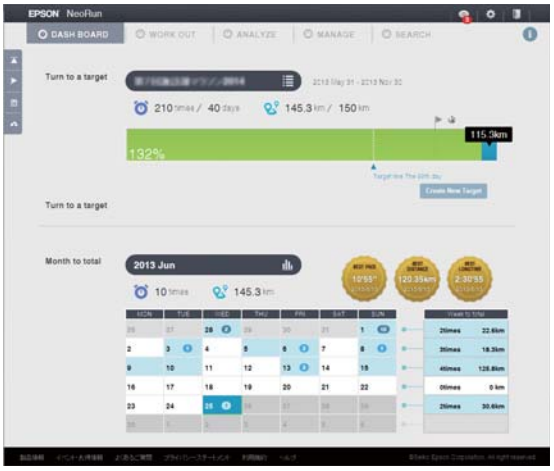
What is the Web Application (RUNSENSE View)?

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.

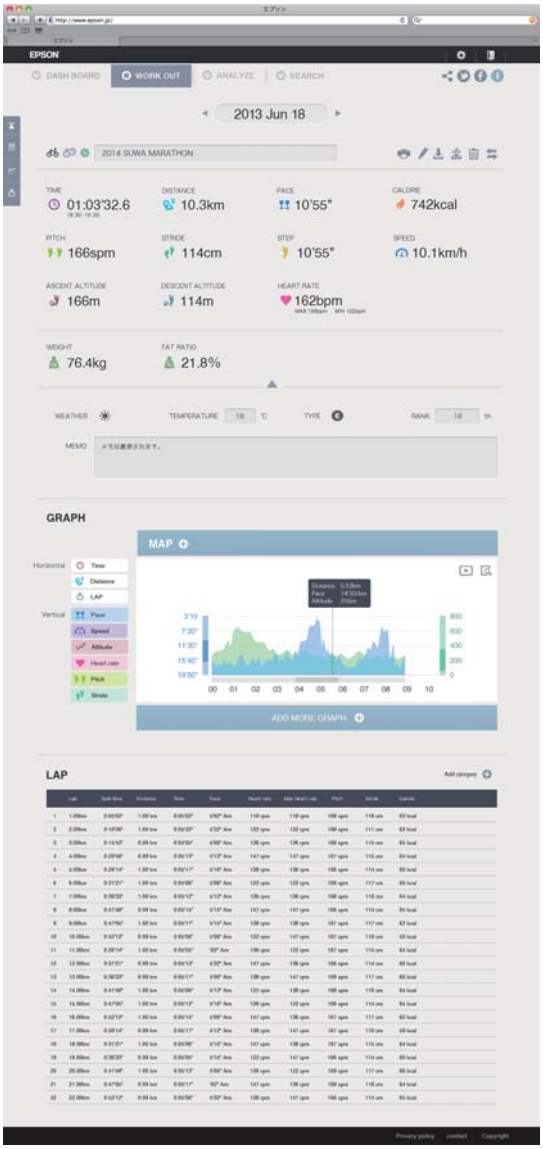
Dashboard



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.

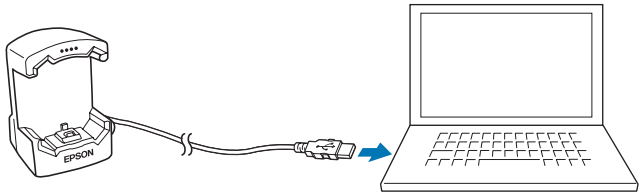
https://go-wellness2.epson.com/portal/

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.

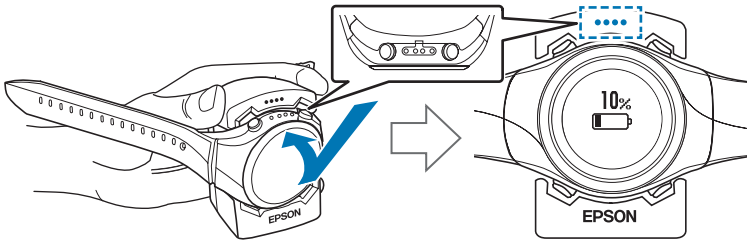
1 Connect the cradle to the computer on which Run Connect is installed with a USB cable.



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.

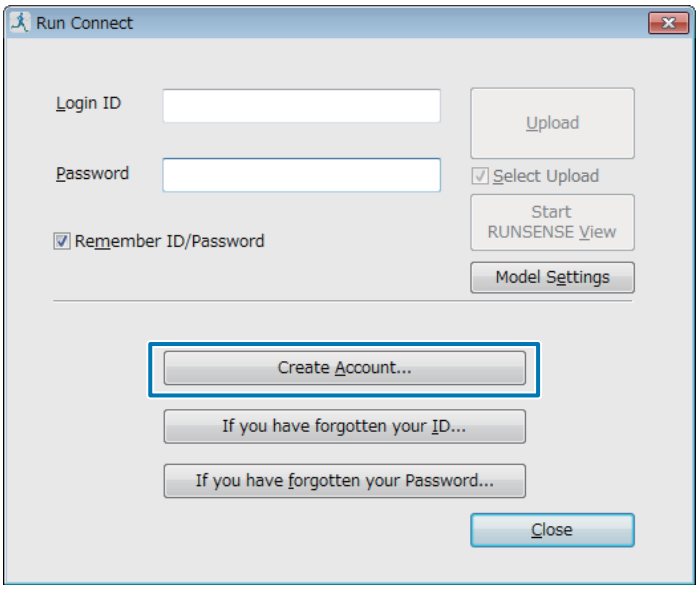


Important:
Make sure the device is placed in the correct direction; otherwise, the device or the cradle could be damaged.

Start Run Connect.

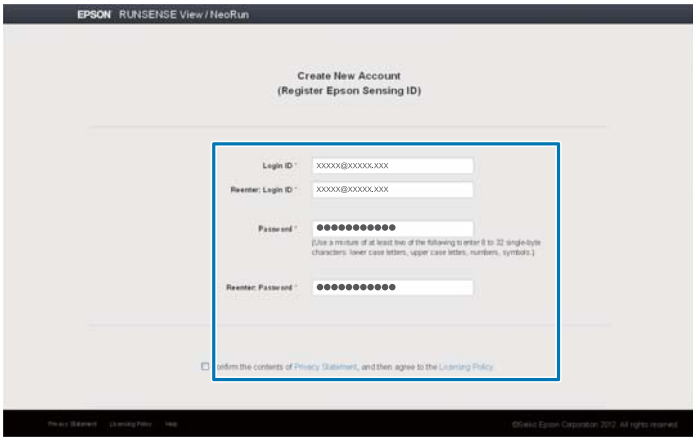
Note:
If Run Connect does not start, disconnect the cable from the cradle, wait a few seconds, and then reconnect. Do not remove the device from the cradle.

3 Click **Create Account**.



4 Create an account.

Enter information for the **Login ID**, **Password**, and **Email Address**, and then click **Create Account**.



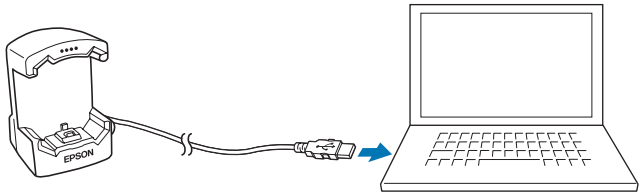
To upload measurement data, go to step 3 in the following section.

“Uploading Measurement Data” on page 83

Uploading Measurement Data

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

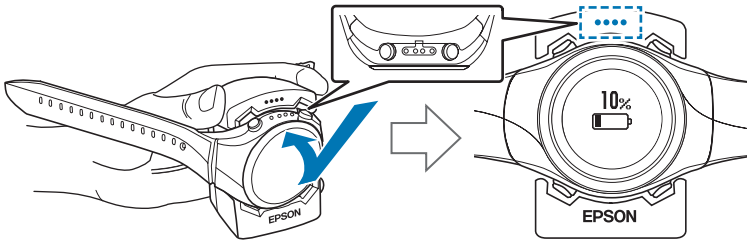
1 Connect the cradle to the computer on which Run Connect is installed with a USB cable.



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.

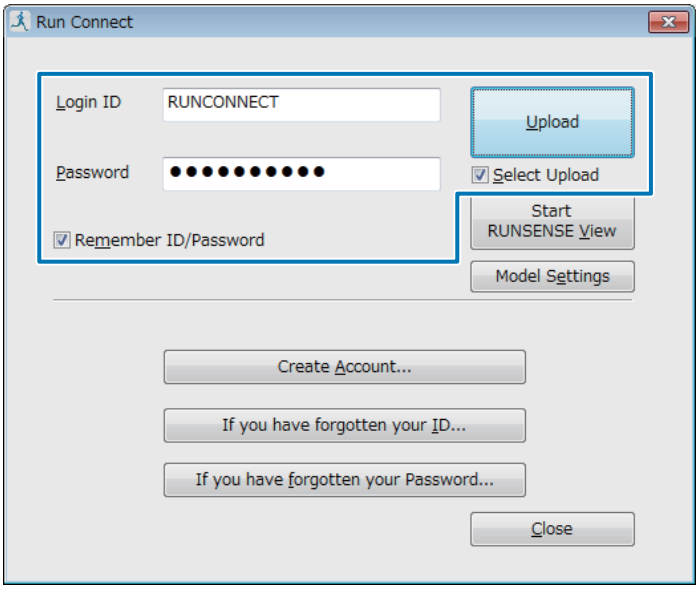
After placing the device into the bottom of the cradle, push carefully on the top of the device until it is fixed in place.



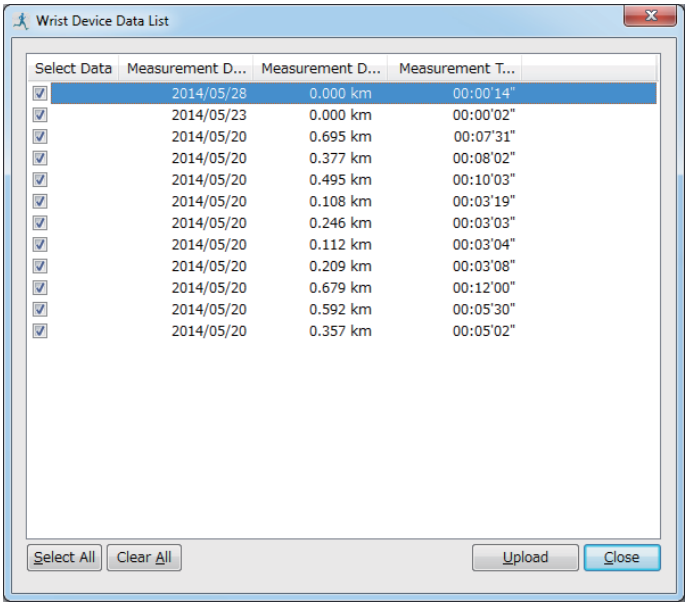
Important:
Make sure the device is placed in the correct direction; otherwise, the device or the cradle could be damaged.

Start Run Connect.

3 Enter your **Login ID** and **Password** on the Run Connect screen, and then click **Upload**.

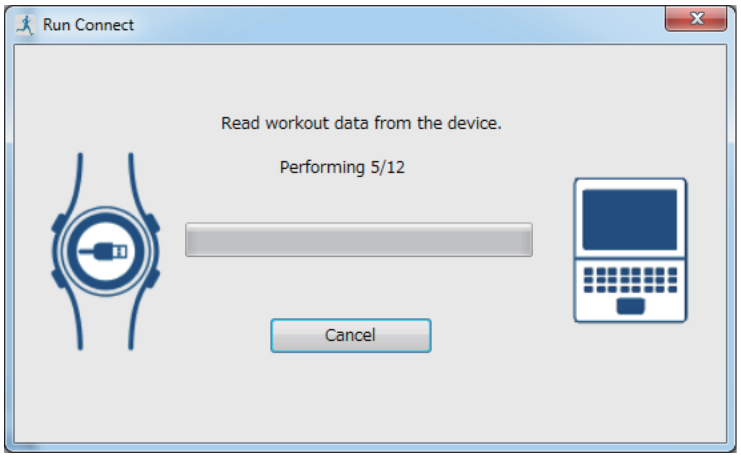


Note:
*If you select **Select Upload** and then click **Upload**, the data list selection screen is displayed, and you can select the data you want to upload.*



Data Management Using the Web Application (RUNSENSE View)

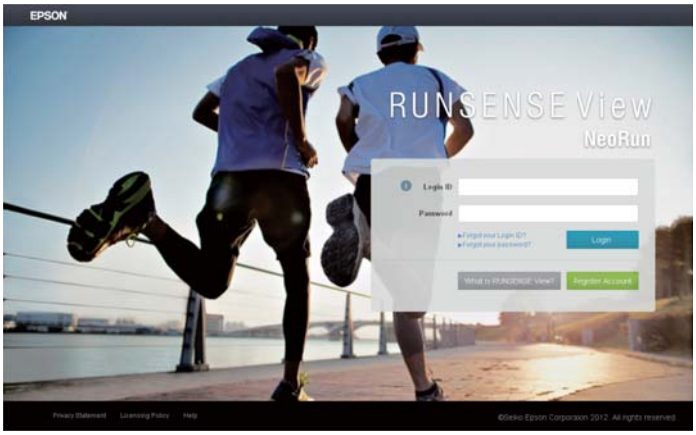
Data is uploaded to the Web application (RUNSENSE View).



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.

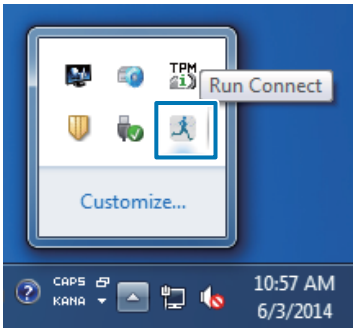


1 Start RUNSENSE View.

Use one of the following methods to start RUNSENSE View.

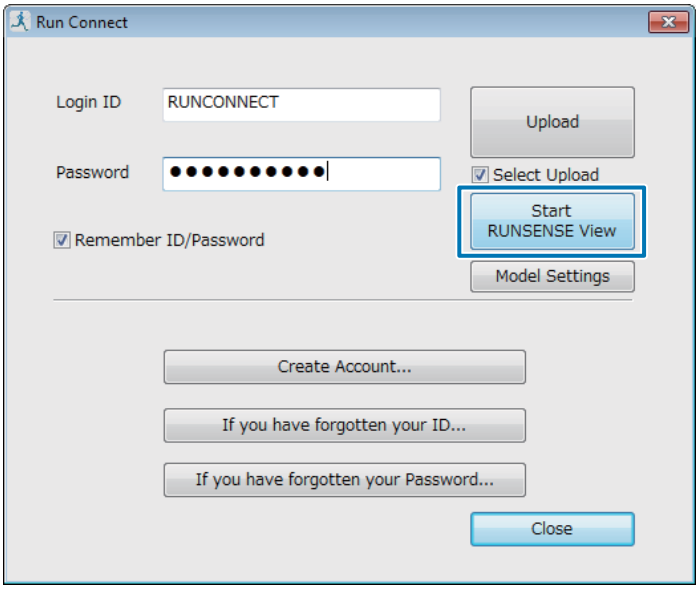
■ **Access the following website.**
https://go-wellness.epson.com/runsense-view/

■ **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**.



■ **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.

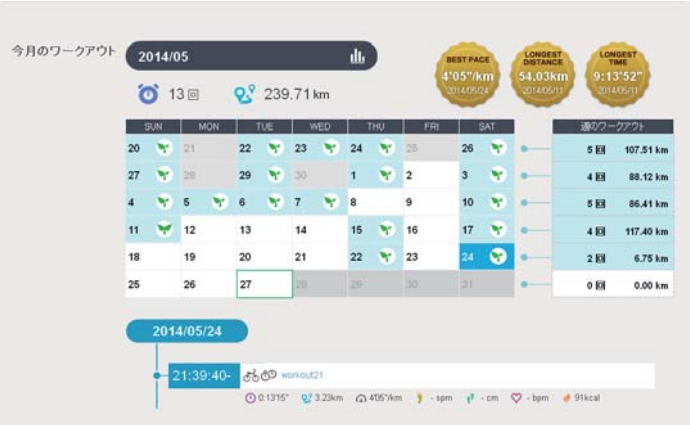
Note:

*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**.

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.

Setting Measurements Using the PC Application (Run Connect) (SF-710 only)

Using the PC application (Run Connect), you can upload measurement data to the Web application (RUNSENSE View), as well as set AT Lap, Target Pace, Waypoint, and Interval.

☞ **"What is the PC Application (Run Connect)" on page 90**

☞ **"Starting Run Connect and Displaying the Settings Screen" on page 92**

☞ **"Setting the AT Lap Function (SF-710 only)" on page 94**

☞ **"Setting the Target Pace Function (SF-710 only)" on page 96**

☞ **"Setting the Waypoint Function (SF-710 only)" on page 99**

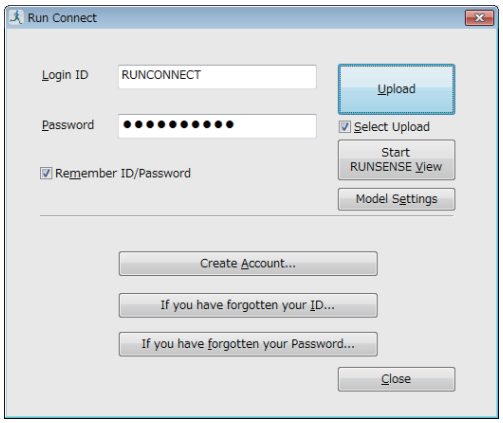
☞ **"Setting the Interval Function (SF-710 only)" on page 102**

What is the PC Application (Run Connect)

Run Connect is an application for computers. You can upload measurement data to the Web application (RUNSENSE View), or set functions such as AT Lap, Target Pace, Waypoint, and Interval for the device from your computer.

> ***Note:***
> *See the following pages for information on how to install Run Connect.*
>
> *"Installing Run Connect (Uploader Software)" on page 80*

Login screen

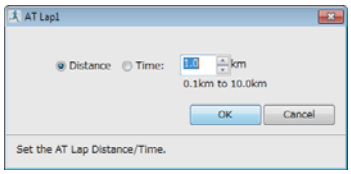


You can setup an account for accessing the Web application (RUNSENSE View), upload measurement data, and start RUNSENSE View.

"Data Management Using the Web Application (RUNSENSE View)" on page 77

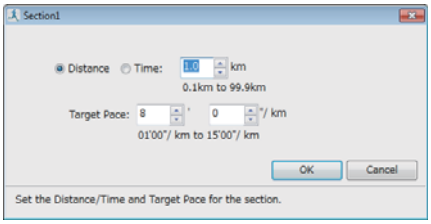
Additionally, in Model Settings, you can set AT Lap, Target Pace, Waypoint (SF-710 only), and Interval from your computer.

Model Settings - AT Lap Settings Screen



When setting the AT Lap function, you can set your own time or distance to divide laps.

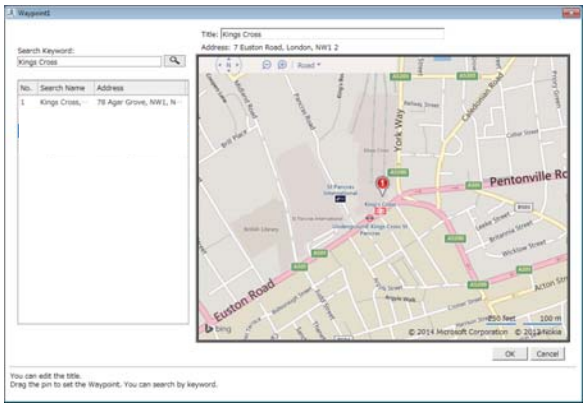
Model Settings - Target Pace Settings Screen



When setting the Target Pace function, you can set your own target pace.

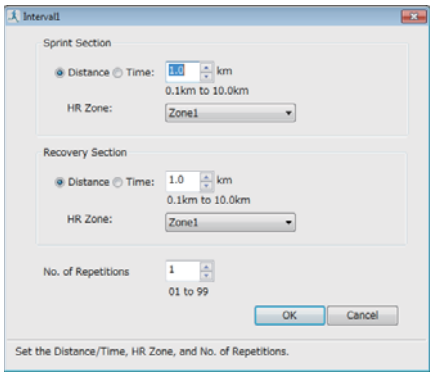
Setting Measurements Using the PC Application (Run Connect) (SF-710 only)

Model Settings - Waypoint Settings Screen



The Waypoint function allows you to register waypoints on a map.

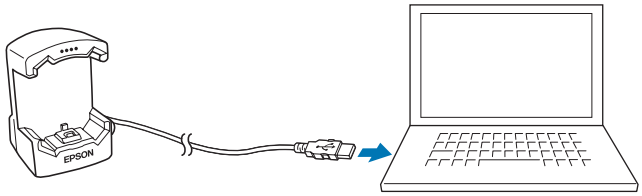
Model Settings - Interval Settings Screen



When making the Interval setting, you can also customise your sprint and recovery intervals.

Starting Run Connect and Displaying the Settings Screen

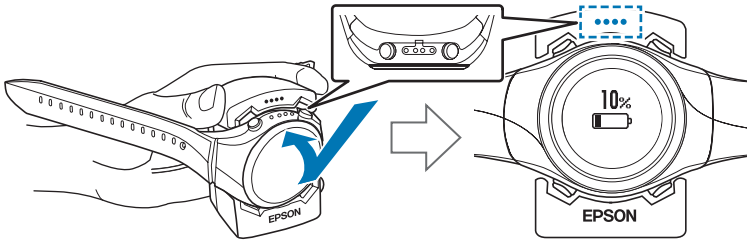
1 Connect the cradle to the computer on which Run Connect is installed with a USB cable.



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.

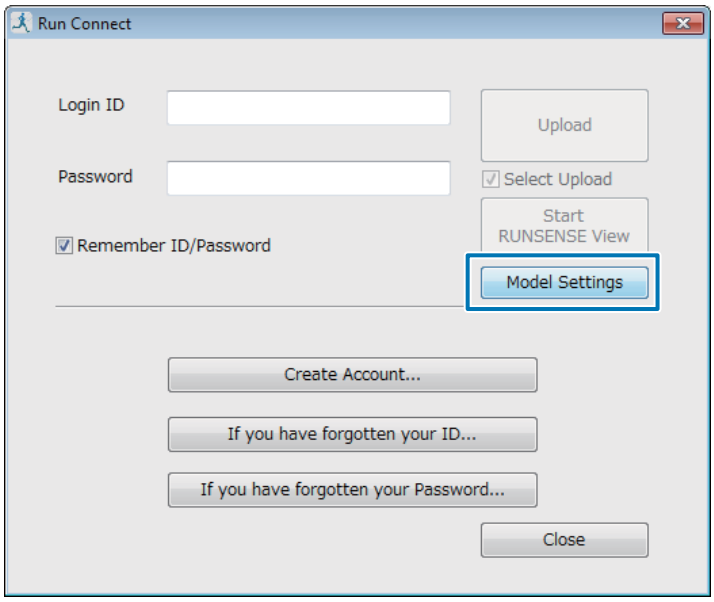
After placing the device into the bottom of the cradle, push carefully on the top of the device until it is fixed in place.



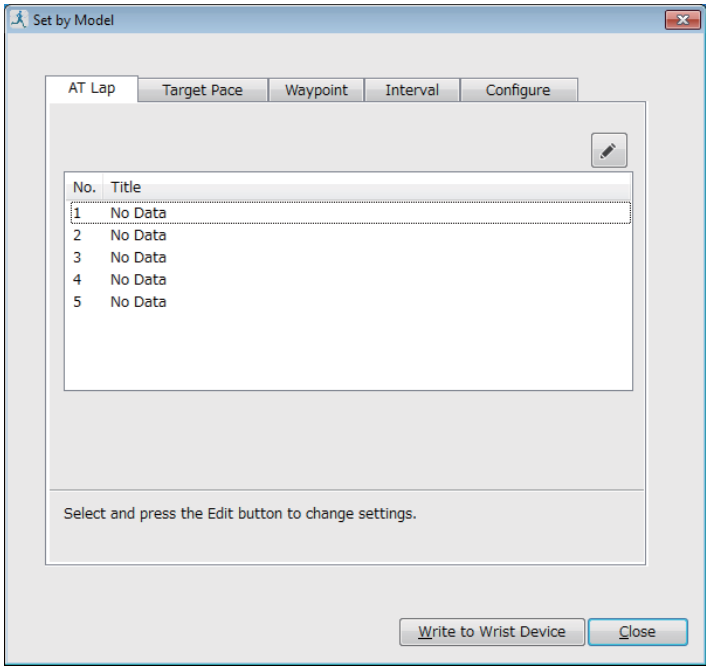
Important:
Make sure the device is placed in the correct direction; otherwise, the device or the cradle could be damaged.

Run Connect starts.

3 Click **Model Settings** on the Run Connect screen. (SF-710 only)



The settings on the device are saved to Run Connect, and the Model Settings screen is displayed.



> ***Note:***
> *Click the **Configure** tab, and then select the unit of distance. However, the units set here are not reflected on the device.*

Setting the AT Lap Function (SF-710 only)

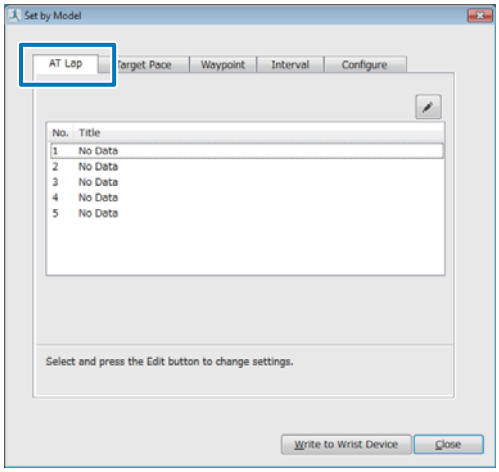
When setting the AT Lap function, you can set your own time or distance to divide laps.

Setting AT lap

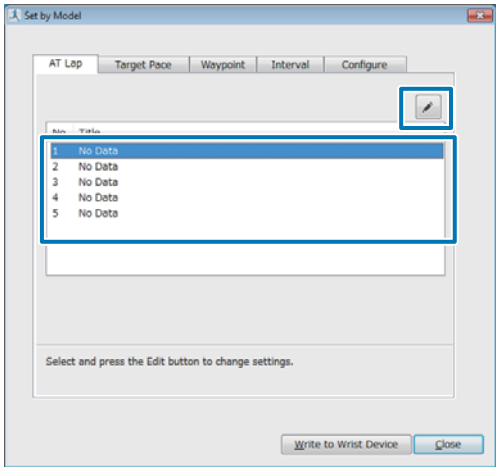
1 Display the Model Settings for Run Connect.

“Starting Run Connect and Displaying the Settings Screen” on page 92

2 Click the **AT Lap** tab.

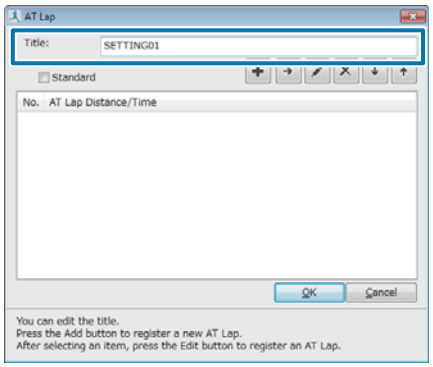


3 When registering new data, select **No Data**, and then click the **Edit** button. When editing registered settings, select the setting you want to edit, and then click the **Edit** button.

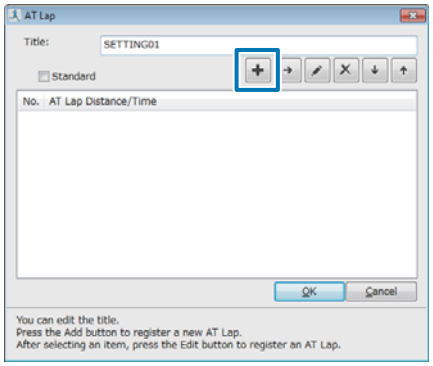


4 Enter or edit the **Title**.

Enter the title using letters, numbers, hyphens, or underscores.



5 Click the **Add** button.

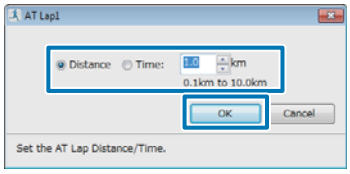


Next, we will explain how to register new data.

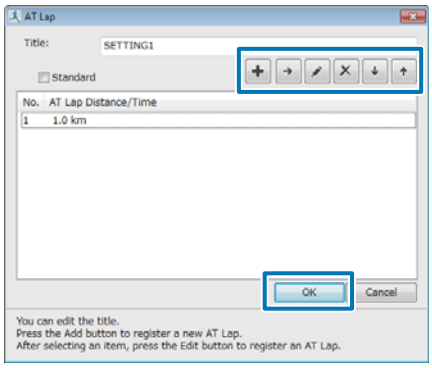
When editing registered settings, select the setting you want to edit, and then click each button.

Button		Explanation
+	Add	Register new settings.
→	Insert	Insert a new setting before the registered settings.
✎	Edit	Edit registered settings.
✕	Delete	Delete registered settings.
↓	Move Down	Move the registered setting down.
↑	Move Up	Move the registered setting up.

6 Set the distance or time to divide the lap, and then click **OK**.

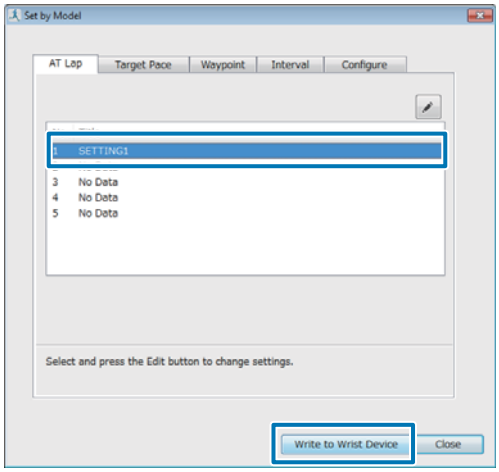


7 When registering multiple entries or editing them, click the button and perform operations.
When you have finished choosing your settings, click **OK**.



> ***Note:***
> *When **Standard** is selected, your setting will be repeated. Deselect **Standard** to customise your settings.*

8 Select the settings you want to write to the device, and then click **Write to Wrist Device**.



9 Click **Yes**.

Settings are written to the device.

10 Click **Close**.

Measuring

See the following pages to select the AT Lap settings, and then measure.

“Recording Laps Automatically (AT Lap Function)” on page 54

“Measuring” on page 39

Setting the Target Pace Function (SF-710 only)

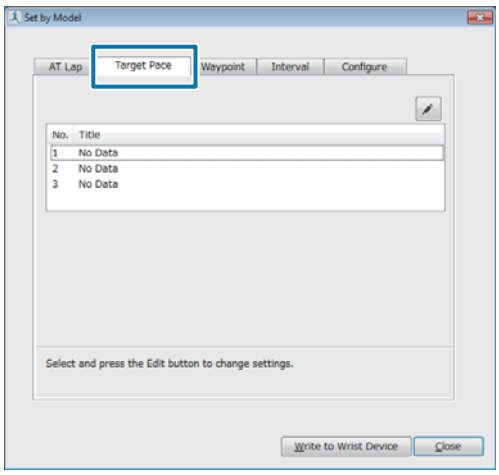
When setting the Target Pace function, you can set your own target pace.

Setting the target pace

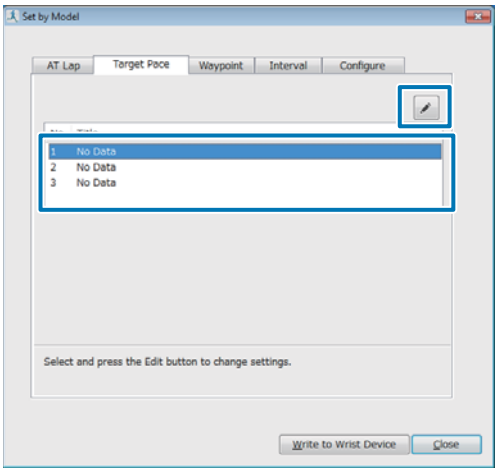
1 Display the Model Settings for Run Connect.

☞ "Starting Run Connect and Displaying the Settings Screen" on page 92

2 Click the **Target Pace** tab.

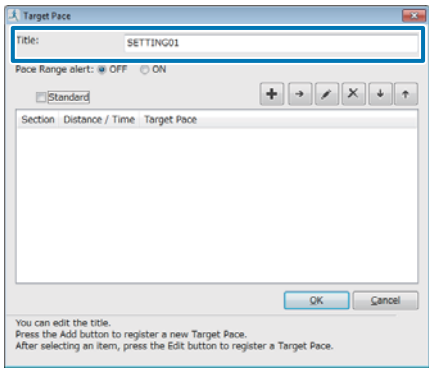


3 When registering new data, select **No Data**, and then click the **Edit** button. When editing registered settings, select the setting you want to edit, and then click the **Edit** button.

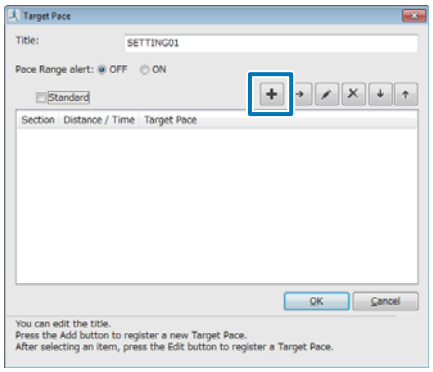


4 Enter or edit the **Title**.

Enter the title using letters, numbers, hyphens, or underscores.



5 Click the **Add** button.

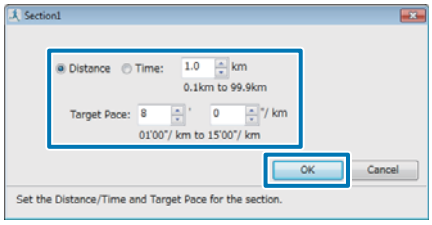


Next, we will explain how to register new data.

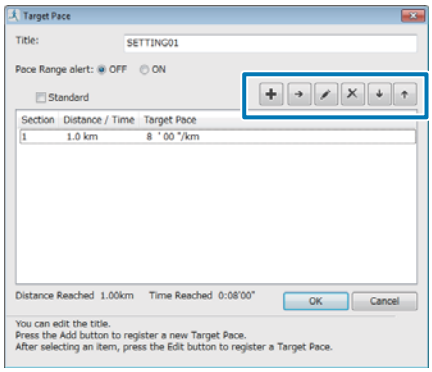
When editing registered settings, select the setting you want to edit, and then click each button.

Button		Explanation
	Add	Register new settings.
	Insert	Insert a new setting before the registered settings.
	Edit	Edit registered settings.
	Delete	Delete registered settings.
	Move Down	Move the registered setting down.
	Move Up	Move the registered setting up.

6 Set the distance or time for the section, set the target pace, and then click **OK**.



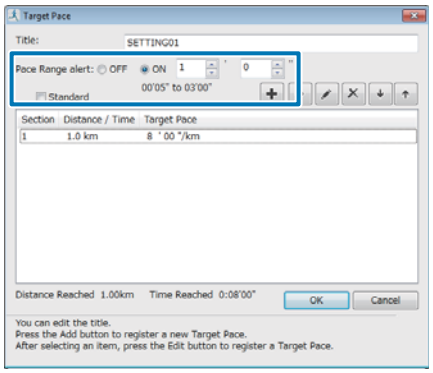
7 When registering multiple entries or editing them, click the button and perform operations.



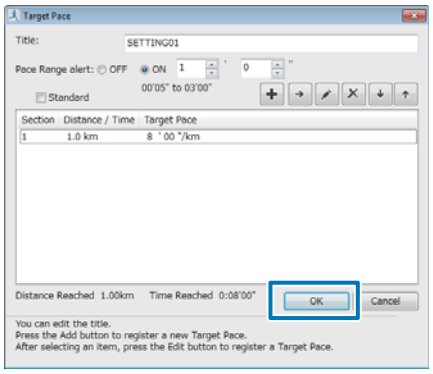
> ***Note:***
> *Since about 1 km is set as the target time when* ***Standard*** *is selected, you cannot register multiple entries.*

8 Set the range for maintaining your **Pace Range**.

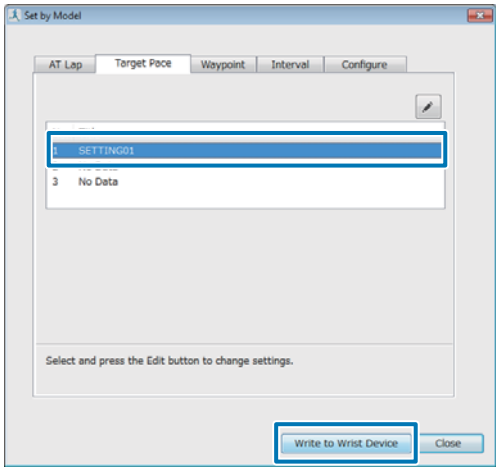
An alarm sounds if you are outside the set pace range.



9 When you have finished making settings, click **OK**.



10 Select the settings you want to write to the device, and then click **Write to Wrist Device**.



11 Click **Yes**.

Settings are written to the device.

12 Click **Close**.

Measuring

See the following pages to select the Target Pace settings, and then measure.

“Setting a Pace and Measuring (Target Pace Function)” on page 57

“Measuring” on page 39

Setting the Waypoint Function (SF-710 only)

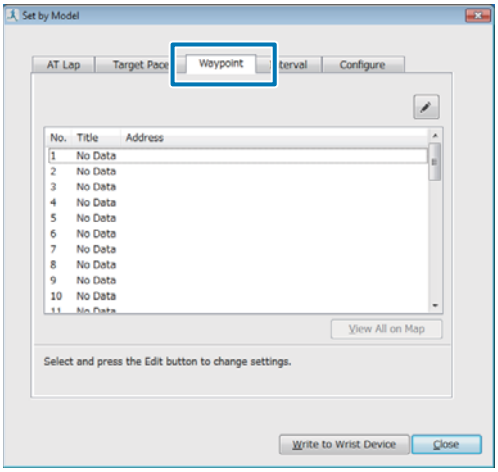
The Waypoint function allows you to register waypoints on a map.

Setting waypoints

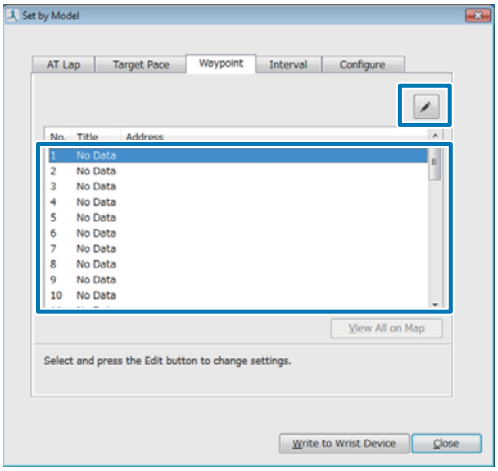
1 Display the Model Settings for Run Connect.

☞ “Starting Run Connect and Displaying the Settings Screen” on page 92

2 Click the **Waypoint** tab.

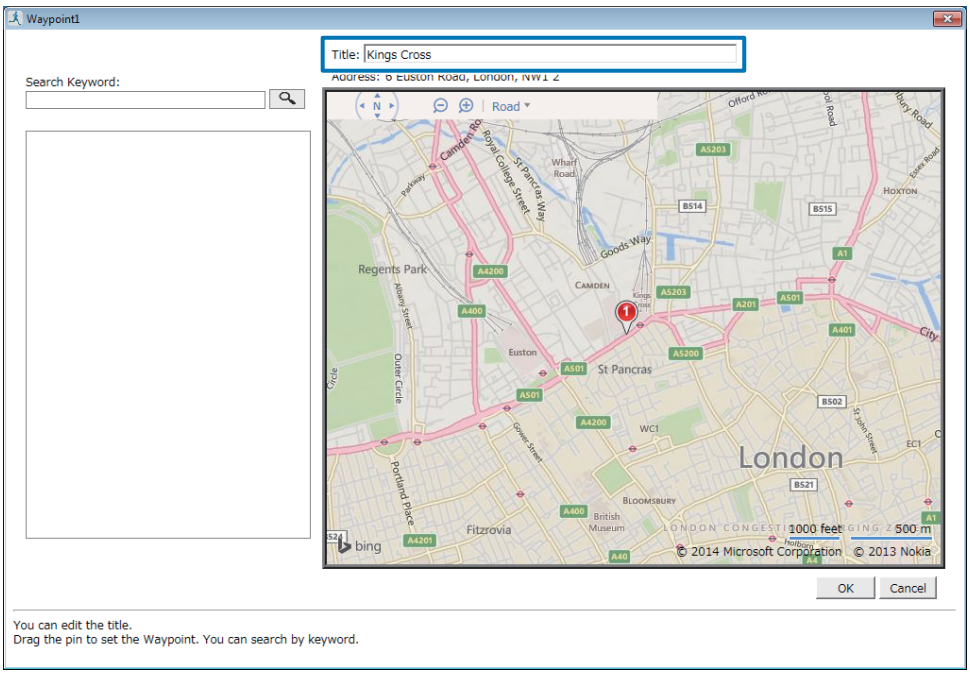


3 When registering new data, select **No Data**, and then click the **Edit** button.
When editing registered settings, select the setting you want to edit, and then click the **Edit** button.



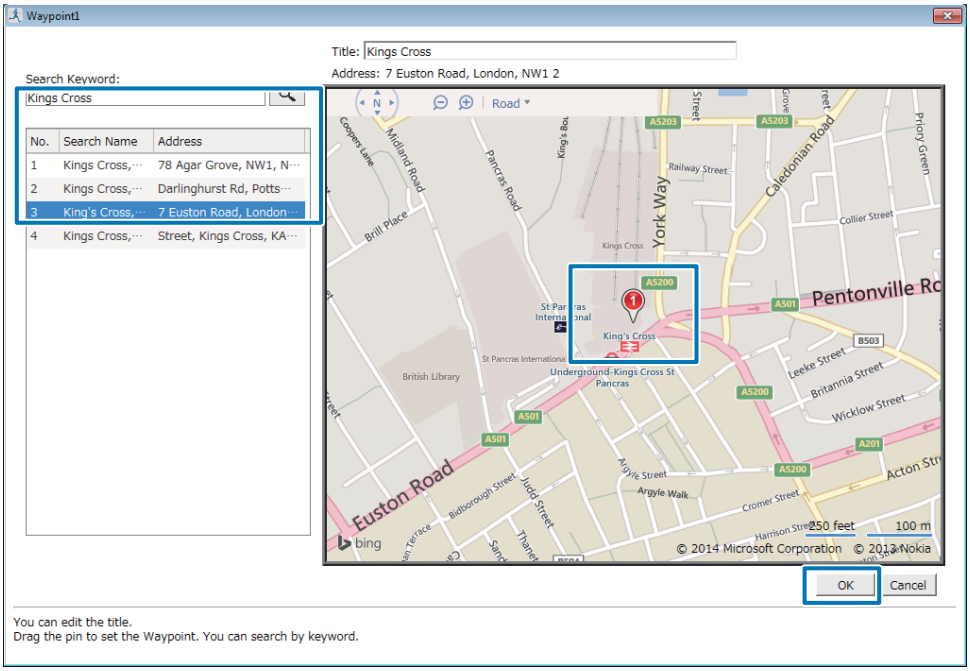
4 Enter or edit the **Title**.

Enter the title using letters, numbers, hyphens, or underscores.

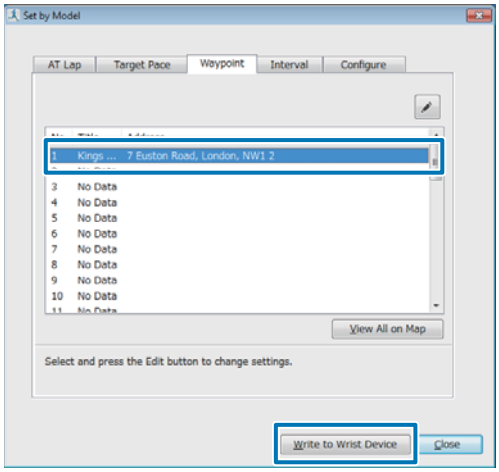


5 Drag a pin on the map to set the waypoint, and then click **OK**.

You can also search by text to set a waypoint.



6 Select the settings you want to write to the device, and then click **Write to Wrist Device**.



> ***Note:***
> *Click **View All on Map** to check all the set waypoints on the map.*

7 Click **Yes**.

Settings (positional information/title) are written to the device.

8 Click **Close**.

Measuring

See the following pages to set a waypoint, and then measure.

☞ "Specifying and measuring waypoints" on page 60

☞ "Measuring" on page 39

Setting the Interval Function (SF-710 only)

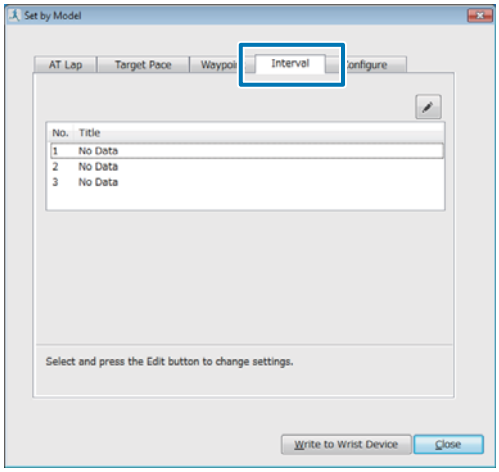
When making the Interval setting, you can also customise your sprint and recovery intervals.

Setting intervals

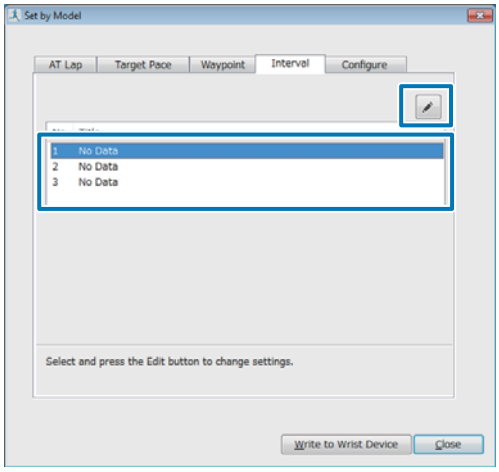
1 Display the Model Settings for Run Connect.

☞ "Starting Run Connect and Displaying the Settings Screen" on page 92

2 Click the **Interval** tab.

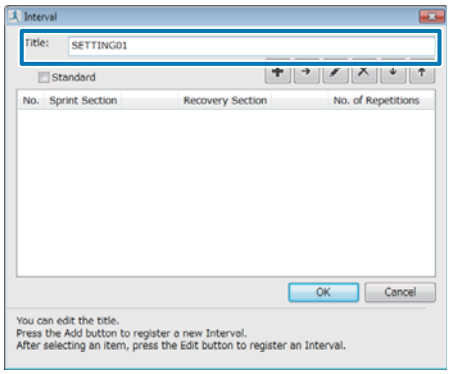


3 When registering new data, select **No Data**, and then click the **Edit** button. When editing registered settings, select the setting you want to edit, and then click the **Edit** button.

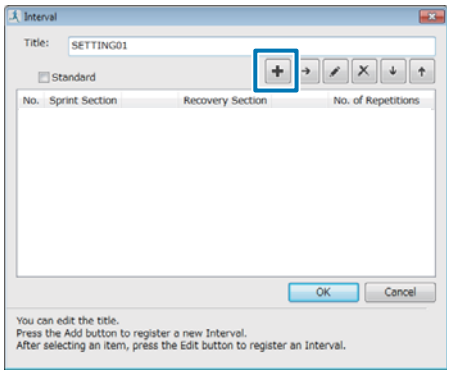


4 Enter or edit the **Title**.

Enter the title using letters, numbers, hyphens, or underscores.



5 Click the **Add** button.

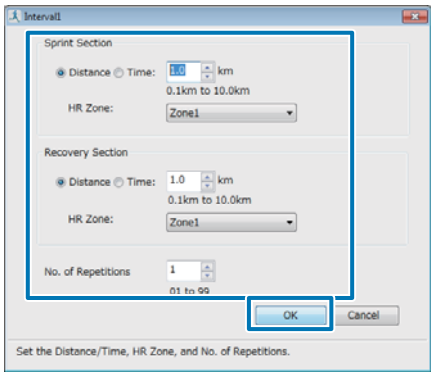


Next, we will explain how to register new data.

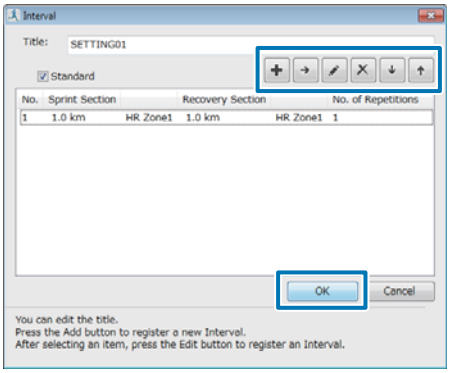
When editing registered settings, select the setting you want to edit, and then click each button.

Button		Explanation
+	Add	Register new settings.
→	Insert	Insert a new setting before the registered settings.
✎	Edit	Edit registered settings.
✕	Delete	Delete registered settings.
↓	Move Down	Move the registered setting down.
↑	Move Up	Move the registered setting up.

6 Set the **Distance**, **Time**, and **HR Zone** for the **Sprint Section** (hard)/ **Recovery Section** (light).
Also, click **No. of Repetitions**, and then click **OK**.

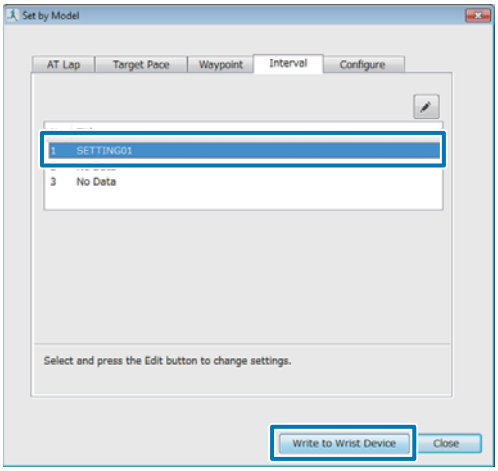


7 When registering multiple entries or editing them, click the button and perform operations.
When you have finished making settings, click **OK**.



> ***Note:***
> *Since settings are repeated in unity when* ***Standard*** *is selected, you cannot register multiple entries.*

8 Select the settings you want to write to the device, and then click **Write to Wrist Device**.



9 Click **Yes**.

Settings are written to the device.

10 Click **Close**.

Measuring

See the following pages to select the Interval settings, and then measure.

“Loading interval conditions that have already been set” on page 47

“Measuring” on page 39

Settings

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

☞ “Making Settings” on page 105
☞ “Measure set.” on page 106
☞ “Settings” on page 111
☞ “Screen” on page 115

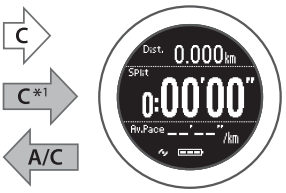
Making Settings

: Short press

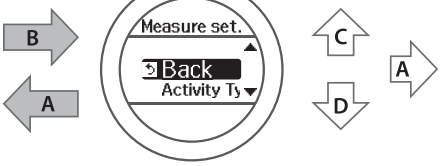
: Long press (two seconds or more)

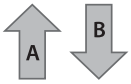
Time screen

Measurement screen



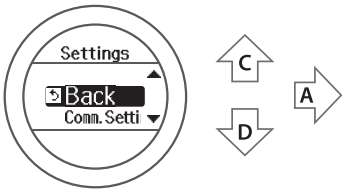
Measure set. screen





*1 : Indoor mode
SF-710/SF-510 only

Settings screen



Measure set. menu

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

*2 : SF-710 only
*3 : Displayed after registering the HR monitor.
*4 : SF-710/SF-510 only

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

Settings menu

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

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

Measure set.

Allows you to change the measurement settings.

Changing the Measure set.

Important:

- ❏ *When performing GPS positioning, make sure the screen is facing up and you are outside with no obstructions overhead.*

  "Specifying a GPS (GPS Positioning)" on page 29

- ❏ *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

1 Display the measurement screen.

Use one of the following methods to display.

- ❏ When performing GPS positioning:

  Press **C** on the time screen.

- ❏ When skipping GPS positioning:

  Press **C** on the time screen, and then select **Skip** on the GPS positioning screen.

  "Skipping GPS positioning" on page 30

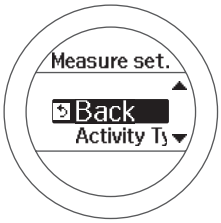
- ❏ When not performing GPS positioning (Indoor mode: SF-710/SF-510 only):

  Hold down **C** on the time screen.

"Indoor mode (SF-710/SF-510 only)" on page 31

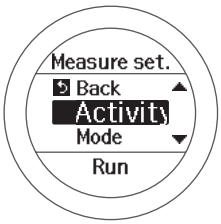
2 Display the **Measure set.** menu.

Hold down **B** on the measurement screen.



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**.

The measurement screen is displayed.

Note:
*On the screen displayed after resetting measurements, if you hold down **A**, the time 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).
	Bike	Set when performing exercises that do not require you to swing your arms, such as riding a bike.
Mode	Chronograph (default)	Set the mode to suit the measurements you want to make. Chronograph mode allows you to measure split times and lap times (section measurement) simultaneously. ☞ "Measuring Time, Distance, and Speed (Chronograph Function)" on page 38 Interval mode allows you to switch the sets of hard (sprint) or light (recovery) exercises, and repeat using the specific distance or time set in advance. ☞ "Setting a Time and Distance for Hard and Light Workouts (Interval Function)" on page 43 Goal mode measures until the time or distance set in advance is reached. ☞ "Measure until the Time or Distance Set in Advance Is Reached (Goal Function)" on page 50
	Interval	
	Goal	
GPS	-	Displays the number of GPS satellites being accessed.
AT Lap	SETTING 01 to 05	When a time or distance set in advance is reached, this function records laps automatically. Set the lap time or distance. You can set five times or distances within the following range. Time: 01'00" to 60'00" (in increments of 1 minute) Distance: 0.1 to 10.0 km (in increments of 0.1 km) ☞ "Recording Laps Automatically (AT Lap Function)" on page 54
	OFF (default)	
AT Pause	ON	This function automatically stops measuring when you stop running, and resumes when you continue running. ☞ "Automatically Start/Stop Measuring (AT Pause Function)" on page 56
	OFF (default)	

Setting items	Value	Explanation
Target Pace	SETTING 01 to 03	Set the target time and pace range for one kilometre/ mile. An alarm sounds if you are outside the set pace range. 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 57
	OFF (default)	
Waypoint*1	ON	By specifying the registered waypoint, you can display the direction to the point, the distance, and the difference in elevation. As you approach the specified point, an alarm sounds. ☞ "Setting and Measuring Waypoints (Waypoint Function)" on page 59
	OFF (default)	
Alarm	Tones (default)	Set the alarm type and time (1 to 10 minutes). You can also set this from **Sys. Settings**.
	Vib. (vibration)*1	
	Tones & Vib. (vibration)*1	
	OFF	
HR*2	ON	You can measure your heart rate by wearing the heart rate monitor (optional). ☞ "Measuring Heart Rate" on page 72
	OFF (default)	
Tap*3 (Only for the measurement screen)	Lap	You can perform one of the operations set here by tapping the screen until the alarm sounds while measuring. When **Bike** is selected as the **Activity Type**, the tap function may operate automatically depending on the condition of the road surface. If this occurs, we recommend to change the setting to **OFF**. ☞ "Tap" on page 20
	Light	
	Screen Chg.	
	OFF (default)	
Screen	Screen1	You can display up to four measurement screens. You can change the screen pattern and the measurement items displayed for each screen. You can also change the **Display Lap Screen**, but this is not displayed for the interval function. ☞ "Screen" on page 115
	Screen2	
	Screen3	
	Screen4	
	Display Lap Screen	

*1 Only displayed for the SF-710.

*2 Displayed after registering the heart rate monitor.

*3 Only displayed for the SF-710/SF-510.

Settings

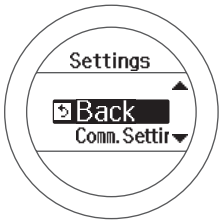
Allows you to change the settings for the device.

Changing the Settings

Operation buttons

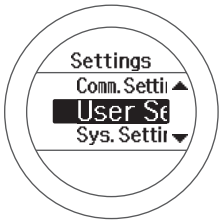
1 Displays the **Settings** menu.

Hold down **B** on the time screen.



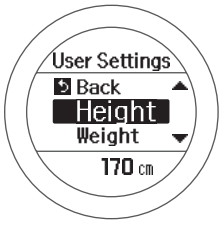
2 Select a setting item.

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. “Registering the heart rate monitor to the device” on page 68
	Register	
Smart Phone	Connect	Register a smartphone to this device. See the "Smartphone User Manual" for more details.
	Forget Device	

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	
HR Zone	Zone1 (30 to 100 bpm)	Set the maximum and minimum heart rate. You can set five zones to suit the exercise intensity.
	Zone2 (101 to 130 bpm)	
	Zone3 (131 to 160 bpm)	
	Zone4 (161 to 190 bpm)	
	Zone5 (191 to 240 bpm)	

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	
Units	km (default)	Set the display units for distance.
	mile	
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. 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.
	Manual	
Date Format	Day. Month	Set the display format for the date.
	Month. Day (default)	
Invert Disp.	ON	Set the display format for the screen. When **ON** is selected, white text is displayed over a black background. When **OFF** is selected, black text is displayed over a white background.
	OFF (default)	

Settings

Setting items	Value	Explanation
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. Entering sleep status reduces the amount of power consumption.
	OFF	
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)	
Alarm	Tones (default)	Set the alarm type and time (1 to 10 minutes). You can also set this from **Measure set.**
	Vib. (vibration)*	
	Tones & Vib. (vibration)*	
	OFF	
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.

* Only displayed for the SF-710.

Screen

You can display up to four 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.

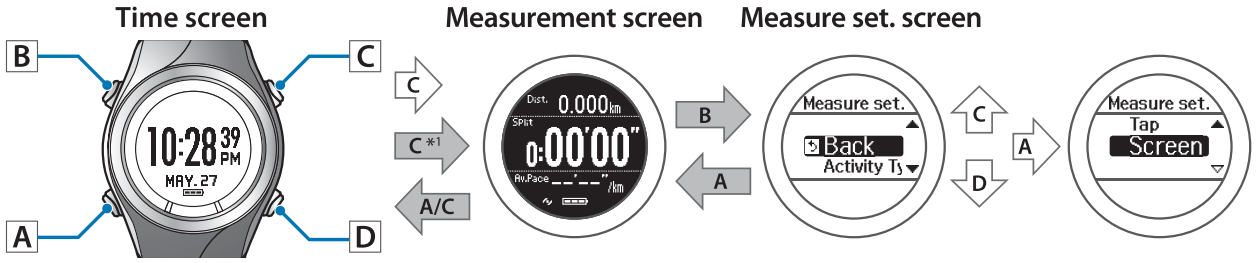
You can also change the display for the lap hold screen.

> ***Note:***
> *See the following pages for the default screen settings.*
>
> *"Screen display" on page 41*

Screen settings

: Short press

: Long press (two seconds or more)



*1 : Indoor mode
SF-710/SF-510 only

Screen menu

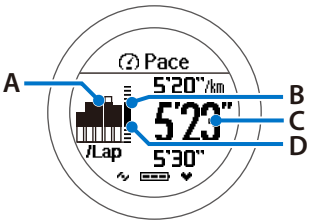
Screen	Scr. Layout	Item
Screen1 Screen2 Screen3 Screen4	1 Line 2 Lines 3 Lines	Distance, Lap Distance, Pace, Average Pace, Lap Pace, Speed, Average Speed, Lap Speed, Split Time, Lap Time, Time, Calories Burnt, Altitude, Guide Time, Guide Distance, Stride*2, Average Stride*2, Lap Stride*2, Pitch*2, Average 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

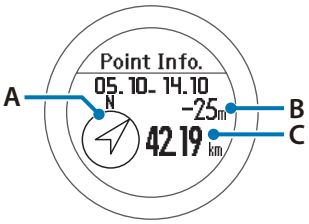
*2 : SF-710/SF-510 only
*3 : SF-710 only

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

Screen pattern table

Measurement screen

Screen Pattern	Screen	Explanation
1 Line		Displays one measurement item on the screen.
2 Lines		Displays two measurement items on the screen by dividing the screen into two sections.
3 Lines		Displays three measurement items on the screen by dividing the screen into three sections. Latitude/Longitude can only be displayed on Line 2.
Pace&Graph		When a pace alarm is set, this shows whether or not you have achieved the pace. When the pace alarm is off, only the current pace is displayed. A: A bar graph displaying the average pace for each lap with the latest at the far right. B: Maximum set pace (Example: 5 mins. 20 secs/km). C: Current pace (Example: 5 mins. 23 sec./km). D: Minimum set pace (Example: 5 mins. 30 secs/km).

Screen Pattern	Screen	Explanation
HR&Graph		When the HR alarm is set, this shows whether or not you are within the limits of the set heart rate zone. When the HR alarm is off, only the current heart rate is displayed. A: A bar graph displaying average heart rate for the intervals you have set (Example: Displays the average heart rate for every 10 seconds with the latest at the far right). B: Maximum set heart rate (Example: 170 bpm). C: Current heart rate (Example: 163 bpm). B: Minimum set heart rate (Example: 155 bpm).
Lap		Displays information on the lap acquired from the lap function.
Waypoint (SF-710 only)		When a Waypoint is set, the directions to the Waypoint, distance in a straight line, and the difference in elevation are displayed. A: Direction B: Difference in elevation C: Distance in a straight line
Target Pace		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		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.

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
Lap Distance	LapDistance	LapDist.	Distance for each lap
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
Speed	Speed	Speed	Current speed
Average Speed	Avg.Speed	Av.Spd	Average speed from the start of measurements
Lap Speed	LapSpeed	LapSpd	Average speed 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
Altitude*1	Altitude	Alt.	Current altitude
Guide Time*2	GuideTime	Guide	Progress time towards target pace (reaching target or falling behind)
Guide Distance*2	GuideDist.	GuideDist.	Progress distance towards target pace (reaching target or falling behind)
Stride*3	Stride	Stride	Current Stride
Average Stride*3	Avg.Stride	Av.Stride	Average stride from the start of measurements
Lap Stride*3	LapStride	LapStride	Average stride for each lap
Pitch*3	Pitch	Pitch	Current Pitch (number of strides in one minute)

Display item	Display name		Explanation
	1 Line	2 Lines/3 Lines	
Average Pitch*3	Avg.Pitch	Av.Pitch	Average pitch from the start of measurements
Lap Pitch*3	LapPitch	LapPitch	Average pitch for each lap
HR	HR	HR	Current heart rate
Average HR	Avg.HR	Av.HR	Average heart rate from the start of measurements
Maximum HR*3	Max.HR	Max.HR	Maximum heart rate from the start of measurements
Lap HR	LapHR	LapHR	Average heart rate for each lap
Steps*3	Steps	Steps	Number of steps from the start of measurements
Lap Steps*3	LapSteps	LapStp	Number of steps for each lap
HR Zone Time*3*4	Spent.HR	Spent.HR	Time within heart rate zone for each lap set by the Interval function
Time to HR Zone*3*4	Time.HR	Time.HR	Time to reach the heart rate zone for each lap set by the Interval function
Total Ascent*1*5	TotalAscent	Tot.Asc.	Total ascent from the start of measurements
Total Descent*1*5	TotalDescent	Tot.Des.	Total descent from the start of measurements
Grade*1*5	Grade	Grade	Current Grade
Latitude/Longitude*3*6	LAT/LONG	LAT/LONG	Current Latitude/Longitude
Estimated Time*7	Est.Time	Est.	Estimated time of arrival at the target distance set in the goal function
Estimated Distance*7	Est.Dist.	Est.Dist.	Estimated distance reached at the target time set in the goal function

*1 **Altitude**, **Total Ascent**, **Total Descent**, and **Grade** are calculated using the GPS signal. These functions may contain larger errors when compared to the accuracy of position and distance depending on the GPS environment.

*2 Set the **Target Pace** in the **Measure set.** menu.
☞ "Setting a Pace and Measuring (Target Pace Function)" on page 57

*3 Only displayed for the SF-710/SF-510.

*4 Make the following settings in the **Measure set.** menu.

Mode: Interval > HR Zone: Zone1 to Zone5

HR > HR Monitor: ON

*5 Only displayed for the SF-710.

*6 When **Line 3** is set on the Screen, **Latitude/Longitude** can only be selected for Line 2.

*7 Use when **Mode** is set to **Goal** from the **Measure set.** menu.

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 Distance	LapDistance	LapDist.	Distance for each lap
Lap Time	LapTime	Lap	Time for each lap
Lap Pace	LapPace	LapPace	Average pace for each lap
Lap HR	LapHR	LapHR	Average heart rate for each lap

Changing the measurement screen

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

"Setting **1 Line/2 Lines/3 Lines**" on page 122

"Setting **Pace&Graph/HR&Graph**" on page 123

"Setting **Lap/Target Pace/OFF**" on page 124

Setting 1 Line/2 Lines/3 Lines

Here we will explain how to display **Calories Burnt** in **Screen4** using **1 Line**.

Operation buttons

1 Display the measurement screen.

Use one of the following methods to display.

- When performing GPS positioning:

  Press **C** on the time screen.

- When skipping GPS positioning:

  Press **C** on the time screen, and then select **Skip** on the GPS positioning screen.

  "Skipping GPS positioning" on page 30

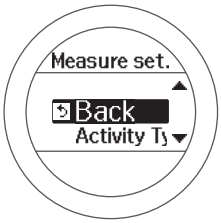
- When not performing GPS positioning (Indoor mode: SF-710/SF-510 only):

  Hold down **C** on the time screen.

  "Indoor mode (SF-710/SF-510 only)" on page 31

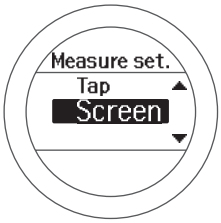
2 Display the **Measure set.** menu.

Hold down **B** on the measurement screen.



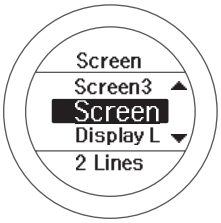
3 Select **Screen**.

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



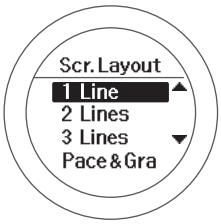
4 Select **Screen4**.

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



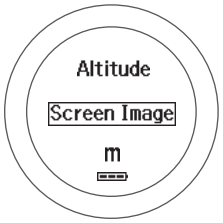
5 Select **1 Line**.

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



Screen Image is displayed. **Altitude** is displayed by default.

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



6 Select **Line 1**.

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

7 Select **Calories Burnt**.

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

Screen Image is displayed.

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

Note:

- ❏ *When you want to set **2 Lines** or **3 Lines**, repeat steps 6 and 7.*
- ❏ *When **3 Lines** is set, **Latitude/Longitude** can only be selected for Line 2.*

8 Complete the settings.

Hold down **A**.

The measurement screen is displayed.

Press **A** on the measurement screen to change the screen, and then check if **Screen4** has been changed.

Note:
*Hold down **A** on the measurement screen to display the time screen.*

Setting Pace&Graph/HR&Graph

Here we will explain how to display **Pace&Graph** in **Screen4**.

Operation buttons

1 Display the measurement screen.

Use one of the following methods to display.

- ❏ When performing GPS positioning:

  Press **C** on the time screen.

- ❏ When skipping GPS positioning:

  Press **C** on the time screen, and then select **Skip** on the GPS positioning screen.

  ☞ "Skipping GPS positioning" on page 30

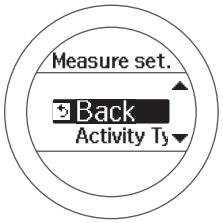
- ❏ When not performing GPS positioning (Indoor mode: SF-710/SF-510 only):

  Hold down **C** on the time screen.

  ☞ "Indoor mode (SF-710/SF-510 only)" on page 31

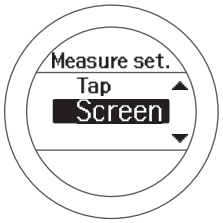
2 Display the **Measure set.** menu.

Hold down **B** on the measurement screen.



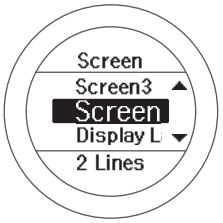
3 Select **Screen**.

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



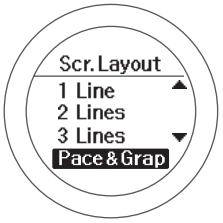
4 Select **Screen4**.

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



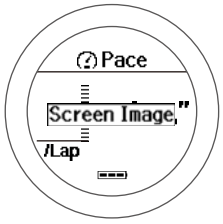
5 Select **Pace&Graph**.

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



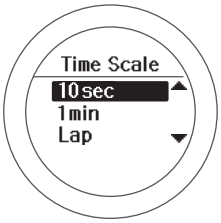
Screen Image is displayed.

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



6 Select the interval at which to display the screen.

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



7 Complete the settings.

Hold down **A**.

The measurement screen is displayed.

Press **A** on the measurement screen to change the screen, and then check if **Screen4** has been changed.

> ***Note:***
> *Hold down **A** on the measurement screen to display the time screen.*

Setting Lap/Target Pace/OFF

Here we will explain how to set **Lap** in **Screen4**.

1 Display the measurement screen.

Use one of the following methods to display.

❏ When performing GPS positioning:

Press **C** on the time screen.

❏ When skipping GPS positioning:

Press **C** on the time screen, and then select **Skip** on the GPS positioning screen.

☞ "Skipping GPS positioning" on page 30

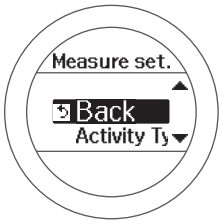
❏ When not performing GPS positioning (Indoor mode: SF-710/SF-510 only):

Hold down **C** on the time screen.

☞ "Indoor mode (SF-710/SF-510 only)" on page 31

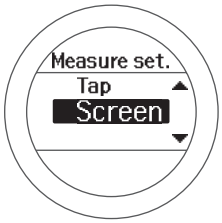
2 Display the **Measure set.** menu.

Hold down **B** on the measurement screen.



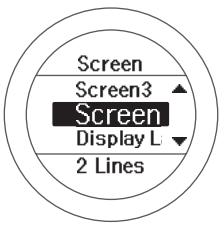
3 Select **Screen**.

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



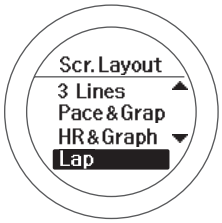
4 Select **Screen4**.

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



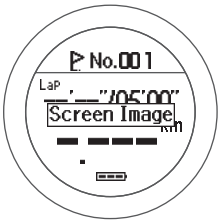
5 Select **Lap**.

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



Screen Image is displayed.

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



6 Complete the settings.

Hold down **A**.

The measurement screen is displayed.

Press **A** on the measurement screen to change the screen, and then check if **Screen4** has been changed.

> ***Note:***
> *Hold down **A** on the measurement screen to display the time screen.*

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

1 Display the measurement screen.

Use one of the following methods to display.

- ❏ When performing GPS positioning:

  Press **C** on the time screen.

- ❏ When skipping GPS positioning:

  Press **C** on the time screen, and then select **Skip** on the GPS positioning screen.

  ☞ "Skipping GPS positioning" on page 30

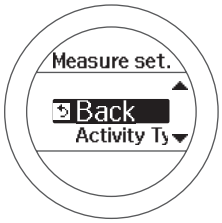
- ❏ When not performing GPS positioning (Indoor mode: SF-710/SF-510 only):

  Hold down **C** on the time screen.

  ☞ "Indoor mode (SF-710/SF-510 only)" on page 31

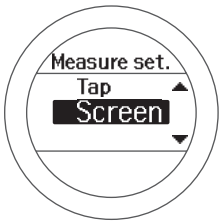
2 Display the **Measure set.** menu.

Hold down **B** on the measurement screen.



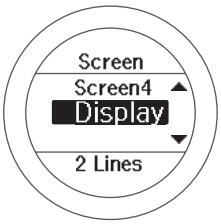
3 Select **Screen**.

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



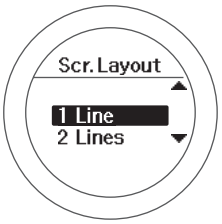
4 Select **Display Lap Screen**.

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



5 Select **1 Line**.

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

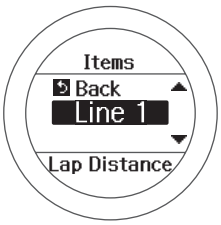


Screen Image is displayed. **Lap Distance** is displayed by default.

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

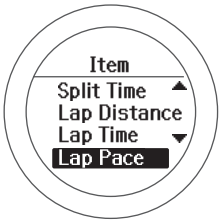
6 Select **Line 1**.

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



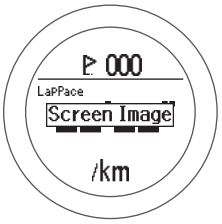
7 Select **Lap Pace**.

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



Screen Image is displayed.

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



> ***Note:***
> *When you have set this to **2 Lines**, repeat steps 6 and 7.*

8 Complete the settings.

Hold down **A**.

The measurement screen is displayed.

> ***Note:***
> *Hold down **A** on the measurement screen to display the time screen.*

Setting examples

Here we will provide two usage examples.

> ***Note:***
> *See the following page for information on making changes.*
>
> *"Changing the measurement screen" on page 122*

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” on page 130**

☞ **“Replacing the Battery on your GPS Sports Monitor” on page 131**

☞ **“Updating the Firmware” on page 132**

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).

“Replacing the Battery for the Heart Rate Monitor” on page 74

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.

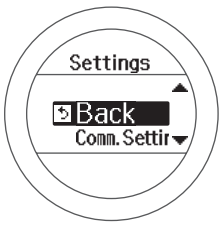
> ***Important:***
> *When updating the firmware, the history may be deleted and settings may be Initialised. For more details on updating, see the following Epson website.*
> *www.epson.eu/runsense*
> *Before updating the firmware, we recommend uploading your measurement data to RUNSENSE View.*
>
> *"Creating an Account (When Using for the First Time)" on page 81*

Checking the firmware version

Operation buttons

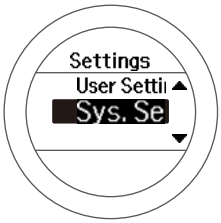
1 Display the Settings menu.

Hold down **B** on the time screen.



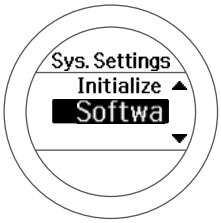
2 Select **Sys. Settings**.

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



3 Select **Software Version**.

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



4 Check the version.

5 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. ☞ "Charging" on page 22
	The device does not react even after performing an operation.	Is the battery running low? Charge the battery. ☞ "About the battery" on page 28 If the device does not operate after charging, try resetting the system. ☞ "Resetting the System" on page 138
	The screen turns off or turns blue during use	Perform a system reset. ☞ "Resetting the System" on page 138
	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. ☞ "Charging" on page 22 Also, if **Auto Sleep** is set to off, the clock does not turn off. ☞ "Sys. Settings" on page 113
	The time is not set correctly.	Set "Time Adjust" from Sys. Settings. ☞ "Sys. Settings" on page 113 If the hour is different, check the time zone and daylight-saving time. ☞ "Sys. Settings" on page 113
	Measurement stops while exercising.	When exercising slowly, such as when walking, we recommend turning off the AT Pause function. ☞ "Automatically Start/Stop Measuring (AT Pause Function)" on page 56

Troubleshooting

Problem		Solution
Chronograph actions	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. ☞ "Looking after your device" on page 130 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˚C.
	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.

Problem		Solution
Heart Rate Monitor	The heart rate monitor is not working correctly.	Check the following items. ❏ Are you wearing the HR belt correctly? ☞ "Wearing the heart rate monitor" on page 67 ❏ Has it been registered to the device? ☞ "Registering the heart rate monitor to the device" on page 68 ❏ Is the heart rate monitor set to **ON**. ☞ "Enabling the heart rate monitor" on page 70 ❏ 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. ☞ "Replacing the Battery for the Heart Rate Monitor" on page 74 ❏ Perform a system reset for the device. ☞ "Resetting the System" on page 138
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. ☞ "Looking after your device" on page 130 Perform a system reset. ☞ "Resetting the System" on page 138
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

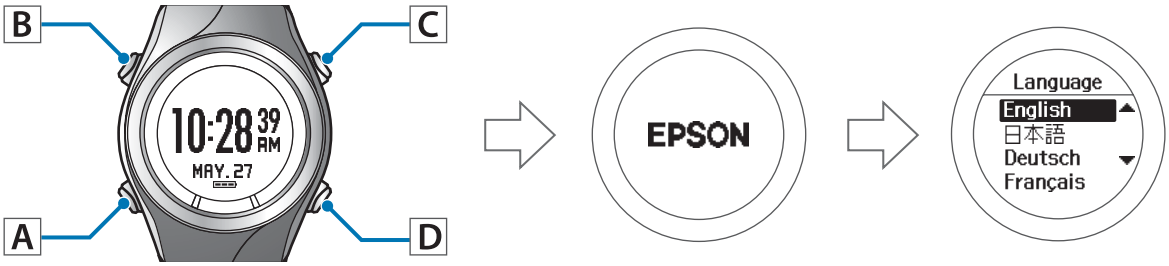
If operations are unstable, try resetting the system.

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.

☞ "Initial Settings" on page 26



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.*

Contacting us About this Product

Go to www.epson.eu/runsense for service contact details.

EPSON EUROPE B.V.

Address: Atlas Arena, Asia Building, Hoogoorddreef 5, 1101 BA Amsterdam Zuidoost, The Netherlands
http://www.epson.com/europe.html

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)
	Bike mode (measuring while riding a bike)
	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
	Average Stride
	Average HR
	AT Lap
	Manual Lap
	Sprint
	Recovery
	Data that can be edited on the device
	Current setting
	Setup from the currently selected external device

Appendix

Icon	Name
	Setup from the external device

Product Specifications

Device specifications

Specifications		SF-710	SF-510	SF-310
Size (thickness)		13.6 mm	11.8 mm	12.8 mm
Weight		59g	49g	50g
Water resistance		5 atm		
Operating time	GPS On	30 hours		
	Time displayed (when Auto Sleep is On)	20 days*1		
Operating temperature		-5 to 50˚C		
Possible memory time (total distance time)		Approx. 70 hours		
Maximum number of laps (one split)		400		
Heart rate measurement (using the heart rate monitor)		○*2	○*2	○*2
Pitch/stride measurement		○	○	-
Indoor mode		○	○	-
Display range	Distance/Lap Distance/Estimated 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		
	Speed/Lap Speed/Average Speed	0.0 to 999.9 km/h/0.0 to 999.9 mi/h		
	Split/Lap time	00'00'' to 99:59'59''		
	Pitch/Lap Pitch/Average Pitch	0 to 255 spm		-
	Stride/Lap Stride/Average Stride	0 to 255 cm/0 to 100 inch		-
	Steps/Lap Steps	0 to 999999		-
	Calories Burnt	0 to 9999 kcal		
	Grade	-99 to 99%	-	-
	Altitude	-500 to 9,999m/-1500 to 914,369.52cm		

Specifications		SF-710	SF-510	SF-310
Display range	Total Ascent	0 to 99999 m/ 0 to 99999 ft	-	-
	Total Descent	0 to 99999 m/ 0 to 99999 ft	-	-
	HR/Lap HR/Average HR/Maximum HR*3	30 to 240 bpm		
	Guide time	0:00'00" to ±9:59'59"		
	Guide Distance	00.00 to ±99.99 km/00.00 to ±99.99 ml		

*1 10 hours/day in sleep mode

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

*3 Maximum HR only available for the SF-710/SF-510.

Cradle specifications

Specifications	SF-710	SF-510	SF-310
Operating temperature range	5 to 35˚C		

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

Glossary

Term	Definition
AT Lap	This automatically records laps when you have run for a fixed amount of time or a fixed distance.
AT Light	This automatically turns on the light during lap measuring, alarm notification, and during the interval function.
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.
Chronograph	This function allows you to measure split times and lap times (section measurement) simultaneously.
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.
Guide distance	This calculates if you are reaching or falling behind the target pace distance.
Guide time	This calculates if you are reaching or falling behind the target pace time.
Heart rate (HR) monitor	The heart rate monitor measures your heart rate while exercising.
HR Zone Time	The time you have remained within the heart rate zone.
Interval	A training mode that allows you to perform sets of hard (sprint) and light (recovery) exercise over a specified time or distance, and repeat the set.
Lap pace	Your pace for the current lap.
Lap Pitch	Your average pitch per lap.
Lap Speed	Your average speed per lap.
Lap Stride	Your average stride per lap.
Lap time	Your time for the lap.
Pace	Your current pace acquired from GPS information.
Pitch	The number of steps taken in one minute while measuring.
Run Connect	Application for computers for use with the Wristable GPS. This uploads measurement data to the Web application (RUNSENSE View), and for the SF-710 you can set AT Lap, Target Pace, Waypoint, and Interval from your computer.

Appendix

Term	Definition
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	The stride calculated from your running data.
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.
Time to HR Zone	The time until you arrive at the heart rate zone.
Total Ascent	The total value of the height ascended from the measurement start point.
Total Descent	The total value of the height descended from the measurement start point.
Water resistant at 5 barometric pressures	The device is water resistant at up to 5 barometric pressures.
Waypoint	The function acquires the latitude and longitude for the current position, and register to the device as a point. By specifying the registered point, you can display the direction and the distance to the point, and the difference in elevation.

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EPSON

GPS Sports Monitor

RUNSENSE

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