

English	3 – 52
Dutch	53 – 100
German	101 – 148
French	149 – 196
Spanish	197 – 244
Italian	245 – 292
Japanese	293 – 340

INDEX

Cycle Computer **SC-7900**

English

1. Features of the SC-7900	6
2. Table of Optional Item Combinations	7
• Bracket combinations	7
3. Product Overview	8
• Package contents	8
• Options	9
4. Replacing the Batteries	11
5. Pairing Function	13
6. Installation	14
7. Basic Operation	19
• Power supply (ON)	19
• Sleep mode (power saving function)	19
• Restarting in initialization mode	20
• Restarting from sleep mode	22
• Backlight illumination	22
8. Display Functions	23
• LCD display details	23
• Low battery / low memory indicator	23
• Normal mode details	25
9. Setting Modes	26
• Main menu	27
• SETTING mode	28
Bike settings	28
System settings	30
User settings	32
Setting your heart rate zone	35
Setting the altitude	36
Checking the pairing	37
• FILE VIEW mode	37
Viewing files	37
Deleting files	39

10. Stopwatch Function / Recording Traveling Data	40
11. FLIGHT DECK Manager	43
FLIGHT DECK Manager functions	43
System requirements for using the software	44
Installing FLIGHT DECK Manager	45
Launching for the first time	46
Installing the driver for the USB dongle	47
Connecting to the main unit (PC-LINK)	48
12. Updating the Software	49
13. Troubleshooting	49
14. Main Specifications/Display Ranges	50

Safety precautions

WARNING

- Be careful not to pay excessive attention to the main unit LCD while riding, otherwise you may have an accident.
- Do not use this product if you are using a heart pacemaker.
- This product is not a medical device. Data values should be used as references only.
- Button batteries which have been removed after use should be kept in a safe place out of the reach of children to avoid accidental swallowing.
- If batteries are swallowed by mistake, seek medical advice immediately.
- Do not use any batteries other than those specified. If the batteries explode or leak, fire, personal injury or damage to surrounding objects may occur.
- Used batteries should be disposed of in accordance with local waste regulations.

Note:

- * Equipment such as high-voltage power lines, signal devices, trams, personal computers and LED lights may affect the cycle computer and cause the heart rate to display incorrectly.
- * Handle each unit carefully, and avoid subjecting them to any shocks.
- * Avoid leaving the units exposed to extremely hot weather conditions for long periods.
- * The units are designed to be fully waterproofed to withstand wet weather riding conditions; however, do not deliberately place them into water.
- * Never disassemble any of the SC-7900 components, as they cannot be reassembled.
- * The all clear (AC) switch is used to clear the date and time information.
- * Do not use thinner or other solvents to clean any of the components. Solvents may damage the main unit and sensor surfaces.
- * To clean these parts, wipe them with a cloth soaked in a weak mixture of neutral detergent and water.
- * Natural wear and deterioration which occurs as a result of normal use is not covered by warranty.
- * If the button batteries are used incorrectly, they may leak or explode, so make sure you observe the following points.
 - Use only the specified batteries. Other types of battery cannot be used.
 - Remove the batteries if they are not going to be used for long periods.
 - If the batteries can no longer be used, they should be removed immediately.
 - Do not recharge the batteries.
 - Insert the batteries so that the + and – sides are correctly aligned.
 - Never throw the batteries into fire.
- * None of the parts of the SC-7900 are interchangeable with the previous FLIGHT DECK system, and cannot be used in conjunction with them.
- * All units are connected wirelessly, and therefore there may be a slight amount of time lag before displays appear.

1. Features of the SC-7900

Display can switch to show a variety of traveling data. (Page 25)

Traveling data such as distance, time, heart rate condition, calorie consumption, altitude and slope are displayed in the LCD of the main unit.

Automated stopwatch counter (Page 40)

The stopwatch counter can be started and stopped automatically by detecting the bicycle speed.

Remote operation from ST/SW (Page 25, 42)

Changing the display and recording lap data can be carried out by remote using the dual control lever or the shifting switch.

Units are paired and connected wirelessly (Page 13, 21, 22)

The speed sensor, heart rate sensor and ST wireless units (optional) are connected wirelessly. Up to a maximum of four bicycles can be registered in a single main unit. The main unit can be shared between the registered bicycles, and you can change which registered bicycle you ride.

Managing your heart rate (Page 35, 36)

You can specify the minimum heart rate and maximum heart rate to use as targets for indicating your level of activity. If your heart rate goes outside the set limits, the main unit can notify you by means of a buzzer and the heart rate value flashing on the display.

Checking the display in dark places (Page 22)

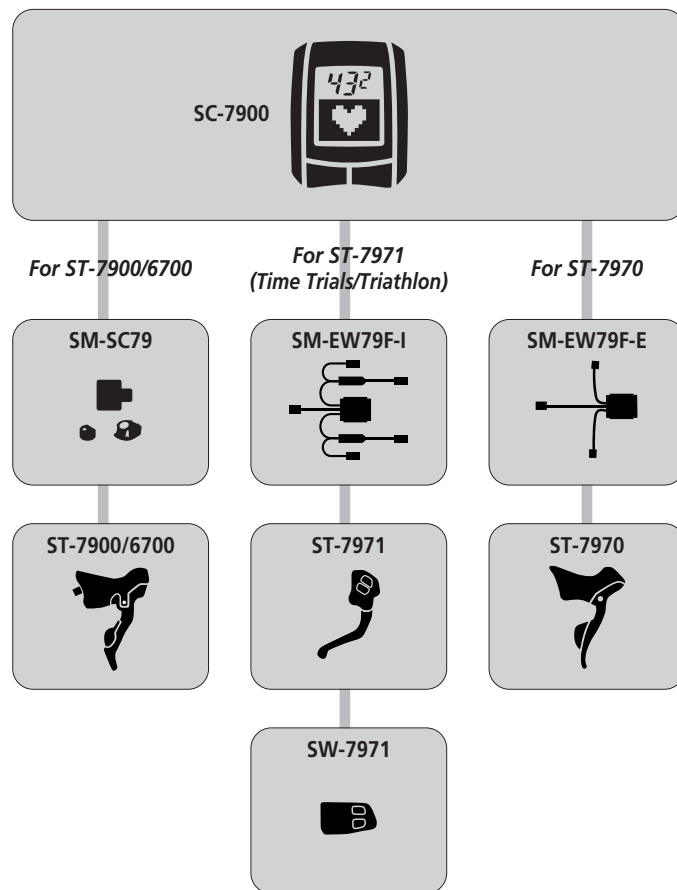
Backlight illumination lets you check the information appearing on the LCD even in dark places.

Managing data using a computer (Page 43)

Communication between a personal computer and the main unit is possible by means of a USB dongle (optional). This can be used to retrieve traveling data from the main unit, display this data in the form of graphs, change main unit settings and update the main unit software.

2. Table of Optional Item Combinations

Bracket combinations

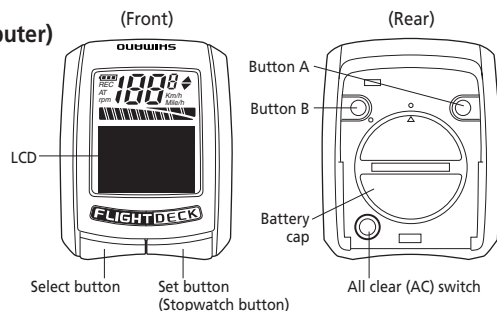


3. Product Overview

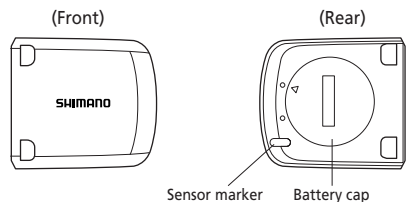
Package contents

Check that all of the following products are present.

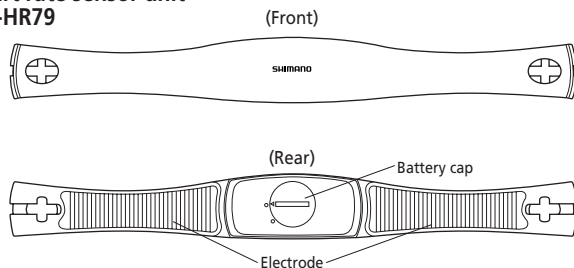
■ Main unit (cycle computer) SC-7900





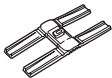


■ Speed sensor



■ Heart rate sensor unit SM-HR79

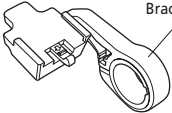







Accessories

- Magnet 
- Cable ties for securing speed sensor (x4) 
- Rubber seat for speed sensor 
- Rubber belt for heart rate sensor unit 
- Battery
CR2450 (x1)
CR2032 (x1)
CR1632 (x1) 
- Service Instructions (This booklet)
- Application CD-ROM

Options

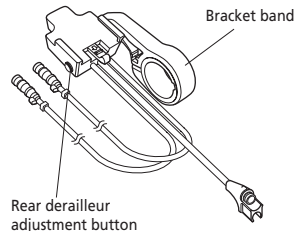
■ Bracket set for FLIGHT DECK SM-SC79 (for ST-7900/6700)

- Bracket  Bracket band
- ST wireless units (1 each for left and right)
Mode button (right)  Lap button (left) 
Battery eject slit
- Battery
CR1632 (x2) 
- Top cover for ST wireless unit

(for ST-7900) (for ST-6700)
- Bracket band adapter For 25.8 mm inner diameter 
- Bracket fixing screws
18mm (x1)
15mm (x1)

■ Bracket set for FLIGHT DECK

SM-EW79F-E (for ST-7970)

• Bracket



• Bracket band adapter For 25.8 mm inner diameter

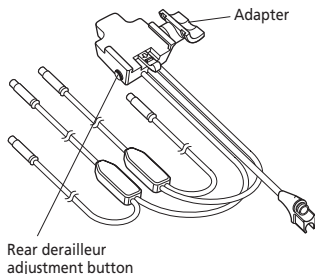


• Bracket fixing screws 18mm (x1) 15mm (x1)

■ Bracket set for FLIGHT DECK

SM-EW79F-I (for ST-7971/SW-7971)

• Bracket



• Bracket band



• Bracket band adapter For 25.8 mm inner diameter



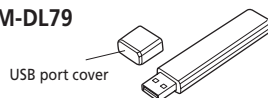
• Aero bar protective sticker



• Bracket fixing screws 18mm (x1) 15mm (x1) 12mm (x1)

• Cable ties for securing adapter (2 types x4)

■ USB dongle SM-DL79



4. Replacing the Batteries

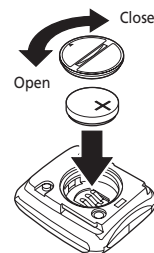
Insert so that the + side is facing upward as shown in the illustration, and then close the battery cap.

■ Main unit

Battery used: CR2450 (x1)

CAUTION:

- Always be sure to operate the buttons to force the main unit into sleep mode before replacing the main unit battery.
- If you replace the battery without setting the main unit to sleep mode first, the main unit will start up in initialization mode.
* For details on initialization mode, refer to page 20.
- When replacing the battery of the main unit, remove the old battery and then wait at least 10 seconds before inserting the new battery.
- If the low battery indicator appears in the main unit display, replace the battery with a new one straight away.
- If carrying out pairing between the main unit and the other units, batteries must be inserted into the other units too.
* Refer to page 13 for details on pairing.



The batteries for units other than the main unit should be inserted when the units are being paired.

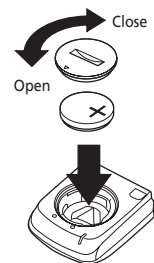
In order to increase the operating life of the battery, it is recommended that you set the main unit to sleep mode after use so that it consumes less power. (For details on sleep mode, refer to page 19.)

■ Speed sensor

Battery used: CR1632 (x1)

CAUTION:

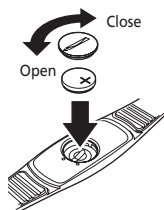
If the speed is not being displayed correctly in the main unit display, repeat the pairing operation. If this still does not solve the problem, replace the speed sensor battery with a new one.



■ Heart rate sensor unit

Battery used: CR2032 (x1)

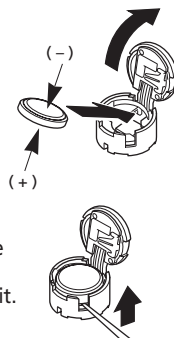
The heart rate sensor unit will operate and battery power will be consumed if the electrodes are touched, even if it is not fitted to your body. In order to avoid battery power being consumed unnecessarily, remove the heart rate sensor unit and set the main unit to sleep mode immediately after use.



■ ST wireless units

Battery used: CR1632 (x1)

- (1) Insert so that the - side is facing upward as shown in the illustration.
- (2) Close the battery cap so that it is back in its original position.



* To remove the battery, insert a thin object into the battery eject slit and push out the battery, while being careful not to damage the battery or the unit.



⚠ WARNING

- Button batteries which have been removed after use should be kept in a safe place out of the reach of children to avoid accidental swallowing.
- If batteries are swallowed by mistake, seek medical advice immediately.
- Do not use any batteries other than those specified. If the batteries explode or leak, fire, personal injury or damage to surrounding objects may occur.
- Used batteries should be disposed of in accordance with local waste regulations.

5. Pairing Function

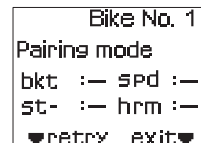
In order for the main unit to display information from each of the sensors, the various units must first be registered with the SC-7900 system. This is called 'pairing'.

■ Pairing setting method

- (1) Press button A and button B on the main unit simultaneously to start up setting mode.

(For details on starting up setting mode, refer to page 26.)

- (2) Select "SETTING" in the main menu. Then select "PAIRING" in the Setting menu so that the pairing confirmation screen is displayed. If pairing has not yet been carried out for a particular unit, "-" will appear beside the name of the unit. If pairing has already been carried out for a unit, "○" will appear.

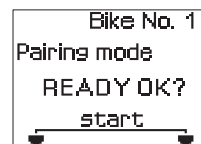


- (3) Press the select button on the main unit to switch to pairing standby mode.

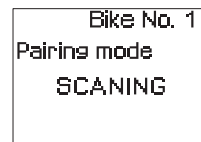
While the main unit is in pairing standby mode, insert the batteries into the units which you would like to carry out pairing for.

* The units will switch to pairing mode for 30 seconds after their batteries are inserted.

* The SM-EW79F-E/I will switch to pairing mode for 30 seconds once the battery for the gear shifting system has been connected.



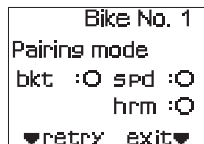
- (4) Press the select button and the set button on the main unit simultaneously within the 30 seconds that the unit to be paired is in pairing mode. "SCANNING" will appear in the data display and pairing will then start.



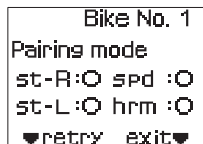
- (5) When pairing is complete, "○" will appear beside the name of the unit which has just been paired. If you press the select button, the main unit will switch to pairing standby mode. You can then continue to carry out pairing operations for any other unit which has not yet been paired.

* Do not press the set button (exit▼) until pairing has been completed for all units.

- (6) Repeat steps (3) and (4) for each unit until all units have been paired.



(SM-EW79F-E/I)



(SM-SC79)

* The st-R and st-L (ST wireless units) are optional.

* The ST wireless units will start operating once both the left and right units have finished being paired. They will not operate only by themselves.

- (7) Once pairing has been completed for all units, press the set button (exit▼) to exit the pairing operation.

* If multiple SC-7900 users carry out pairing simultaneously, the units for other users may become paired with your own system.

In order to make sure that pairing is carried out correctly, do not carry out pairing near any other users who are also carrying out pairing, or near any other devices which may operate wirelessly.

* After pairing has been completed, each user should check to make sure that pairing has been carried out correctly.

6. Installation

CAUTION:

Carry out pairing for a unit before installing the unit.
(For details on pairing, refer to page 13.)

■ Installing the bracket

< SM-SC79, SM-EW79F-E/I >

- (1) Install the bracket band to the middle of the bicycle handlebars. Tighten the band using the fixing bolt.

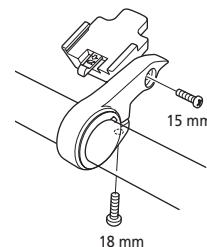
Handlebar installation diameter :

31.8 mm / 25.8 mm (using an adapter)

Tightening torque : 1.5 N·m {13 in.lbs}

- (2) Install the bracket to the band.

Tightening torque = 1.0 N·m {8 in.lbs}



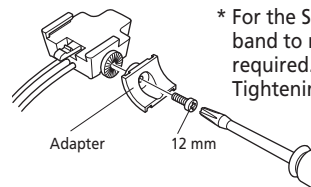
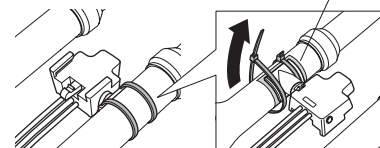
■ Installing the bracket to the aero bar

< SM-EW79F-I >

- (1) Determine the installation position for the bracket, and then attach the aero bar protective sticker.

- (2) Install the bracket to the handlebar as shown in the illustration. Tighten the cable tie along the groove in the adapter. Tighten the cable tie along the groove in the adapter.

Aero bar protective sticker



* For the SM-EW79F-I, replace the adapter and band to match the handlebars being used if required.

Tightening torque = 1.0 N·m {8 in.lbs}

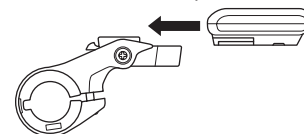
(For details on connecting the cables, refer to page 00.)

■ Installing the main unit

- (1) Before installing the main unit, switch it to setting mode and set the user details and any other necessary settings.

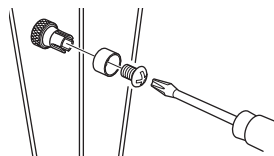
(For details on starting up setting mode and methods of operation, refer to page 26.)

- (2) Slide the main unit into the bracket as shown in the illustration to install it. At this time, insert the main unit securely until it clicks into place.

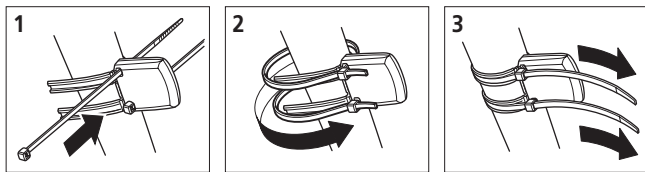
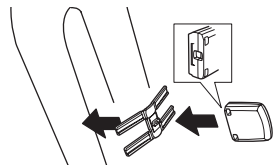


■ Installing the speed sensor

- (1) Use a screwdriver to secure the accessory magnet (x1) to the right side of the front wheel as shown in the illustration.

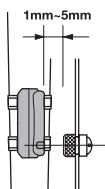


- (2) Use two of the accessory cable ties to provisionally secure the speed sensor to the front fork as shown in the illustration.

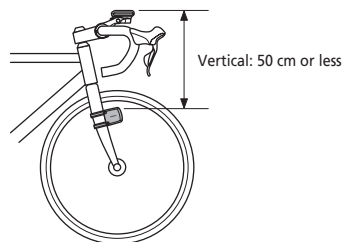


- (3) Adjust the positions of the speed sensor and magnet so that the magnet passes directly over the marker of the speed sensor.

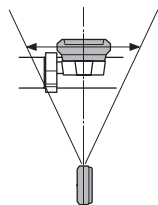
- Distance between speed sensor and magnet: 1 - 5 mm



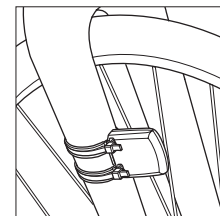
- Distance between main unit and speed sensor



Horizontal: 10 cm or less



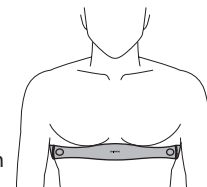
- (4) Once the installation positions have been decided upon, securely tighten the speed sensor and the magnet.



■ Heart rate sensor unit

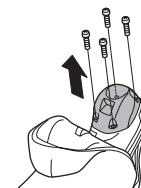
- (1) Attach the hook of the rubber belt onto the plastic part (electrode). Attach the belt directly to your body so that the plastic part is close against your skin.
- (2) The signal will be sent from the casing to the main unit via a transmitter, so attach the belt to the middle of your stomach area as shown in the illustration.

- In order to eliminate measurement errors, it is recommended that you moisten the electrode with water before attaching the belt.
- Dry skin or thick body hair may affect the reliability of measurement.
- If the weather is cold or your skin is dry, measurement errors may still occur even if the sensor is fitted directly against your skin.

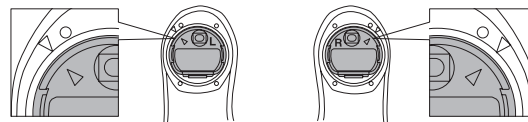


■ Installing the ST wireless units (For the SM-SC79)

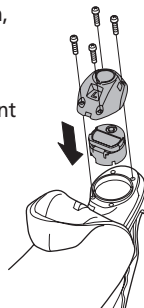
- (1) Open up the bracket cover and remove the top cover of the lever unit.



- (2) Check whether the wireless unit is for the left or right, and then insert it so that the markings are aligned correctly.



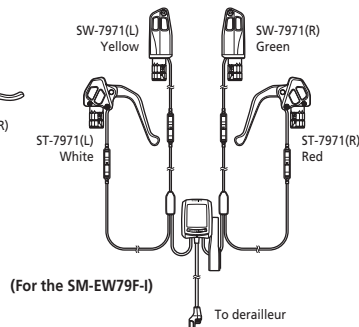
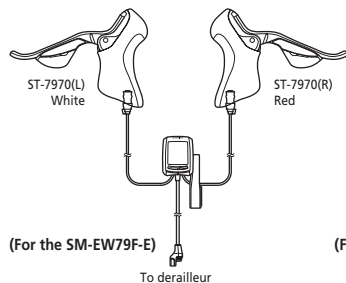
- (3) Install the ST wireless unit as shown in the illustration, and then fit the top cover and secure it by tightening the screw.
Tightening torque = 0.13 - 0.15 N·m {1.1 - 1.3 in.lbs}
* The shape of the top cover to be installed is different for the ST-7900 and the ST-6700.



■ Connection of the electric cables

Cable connection diagram

R: Right L: Left



7. Basic Operation

Power supply (ON)

The power supply for each component is supplied by the following operations and actions.

■ Main unit

The power supply for the main unit turns on when any one of the set button, select button, button A or button B is pressed.

■ Speed sensor

The power supply for the speed sensor turns on when the magnet passes over the speed sensor.

■ Heart rate sensor unit

The power supply for the heart rate sensor unit turns on when the sensor unit detects that the electrode has been placed against your body.

■ ST wireless units

The power supply for the ST wireless units turns on when you press both the mode button and the lap button on the ST wireless units.

* The power does not turn on when a gear shifting operation occurs.

Sleep mode (power saving function)

The power supply for each component switches to sleep mode by the following operations and actions.

■ Main unit

The main unit switches to sleep mode if no buttons on the main unit or on the ST wireless units have been pressed for over 30 minutes, or if there have been no signals detected from the speed sensor or heart rate sensor unit.

If you hold down the set button and the select button simultaneously for 2 seconds or more, it will force the main unit to switch to sleep mode.

(If the stopwatch is currently operating or if the main unit is in setting mode, it will not switch to sleep mode.)

Bye

■ ST wireless units

If there have been no button operations or gear shifting operations for 30 minutes or more, the ST wireless units will switch to sleep mode.

Restarting in initialization mode

If the language or the units have been changed, the main unit will start up in initialization mode.

* The main unit will also start up in initialization mode when the power is turned on for the first time.

■ Restarting in initialization mode

(1) Replace the main unit battery or press the all clear switch to reset the main unit.

(2) Turn on the power supply for the main unit.

However, if the battery is replaced while the main unit has been in sleep mode for less than 30 seconds, the main unit will not start up in initialization mode.



(3) The startup screen for initialization mode will be displayed (for 3 seconds).



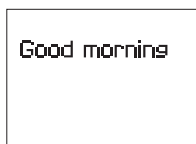
(4) Press the select button, button A and button B to select the display language.

(5) Press the set button to confirm the display language selection.



(6) Press the select button, button A and button B to select the units.

(7) Press the set button to confirm the units selection.



(8) The startup screen will be displayed (for 3 seconds).



(9) The bike No. selection screen will be displayed (for 3 seconds).

(10) If you press the select button while this screen is displayed, the bike number will flash and the bike number can then be changed. If you press the select button once more, the bike number can then be changed.

- Bike No.: 1-4

(11) Press the set button to confirm the bike number selected.



(12) The remaining memory/remaining time display will appear (for 3 seconds).

- User memory: 0% - 100% (no remaining memory when 0%)
- Record time: Length of time that traveling data can be recorded

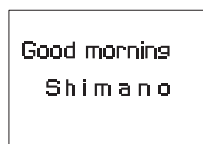
CAUTION:

Check that there is enough memory remaining before riding the bicycle.



(13) The normal mode screen will be displayed.

Restarting from sleep mode



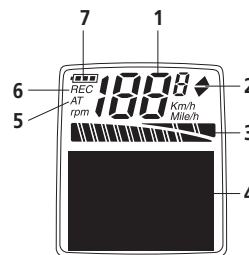
- (1) The startup screen will be displayed (for 3 seconds).
- (2) The bike No. selection screen will be displayed (for 3 seconds).
- (3) If you press the select button while this screen is displayed, the bike number will flash and the bike number can then be changed.
If you press the select button once more, the bike number will increase.
• Bike No.: 1-4
- (4) Press the set button to confirm the bike number selected.
- (5) The remaining memory/remaining time display will appear (for 3 seconds).
• User memory: 0% - 100% (no remaining memory when 0%)
• Record time: Length of time that traveling data can be recorded
- CAUTION:**
Check that there is enough memory remaining before riding the bicycle.
- (6) The normal mode screen will be displayed.

Backlight illumination

- (1) Hold down the select button on the main unit (for 2 seconds or more).
- (2) The backlight of the LCD will illuminate (for 3 seconds).

8. Display Functions

LCD display details



(Display example)



1. Speed (km/h, mph)/ cadence display (rpm)

The cadence is displayed while the speed is appearing in the information display.

2. Pace arrow display

If the current traveling speed is faster than the average speed, an upward-pointing arrow will be displayed, and if it is slower, a downward-pointing arrow will be displayed. (They are only displayed while the stopwatch counter is being displayed too.)

3. Gear indicator

This displays the gear being used as an icon. (The display

example shows the largest chainring and the 6th sprocket.)

4. Information display

For details, refer to page 00.

5. Automatic mode display

Displayed when the stopwatch mode is set to AUTO.

6. Memory operation display

Rec is displayed while traveling data is being recorded.

7. Battery charge display

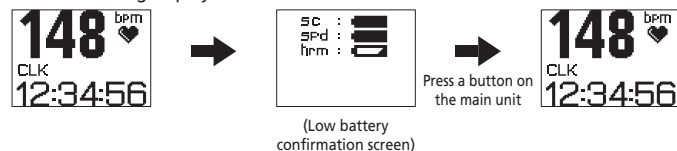
The battery charge for the gear shifting system is displayed when the bracket set (SM-EW79F-E/I) is being used. (It is not displayed when the SM-SC79 is being used.)

Low battery/low memory indicator

<Low battery indicator>

When the battery level for any of the batteries in the units is at a low level, a low battery confirmation screen is display by the main unit as a notification. This display can be cleared by pressing the set button, select button, button A or button B on the main unit.

- When using in combination with the bracket set (SM-EW79F-E/I), the low battery indicator will not be displayed even when the battery level for the gear shifting system is low.
- It is also not displayed during PC-LINK mode or while the pairing confirmation screen is being displayed.



If the low battery indicator is being displayed for a unit, replace the battery for that unit as soon as possible.

Main unit display	Unit
sc	Main unit
spd	Speed sensor
hrm	Heart rate sensor unit
st-R	ST wireless unit /right (optional)
st-L	ST wireless unit /left (optional)

Low battery icon

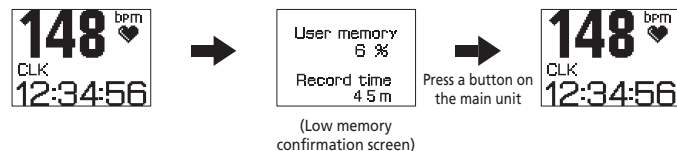


SC : [battery icon]
 SPd : [battery icon]
 hrm : [battery icon]
 st-R : [battery icon]
 st-L : [battery icon]

* The respective units must be paired for this to happen.

<Low memory indicator>

When the amount of spare memory for recording traveling data in the main unit drops to 10% or less, the low memory confirmation screen is display by the main unit as a notification. This display can be cleared by pressing the set button, select button, button A or button B on the main unit.



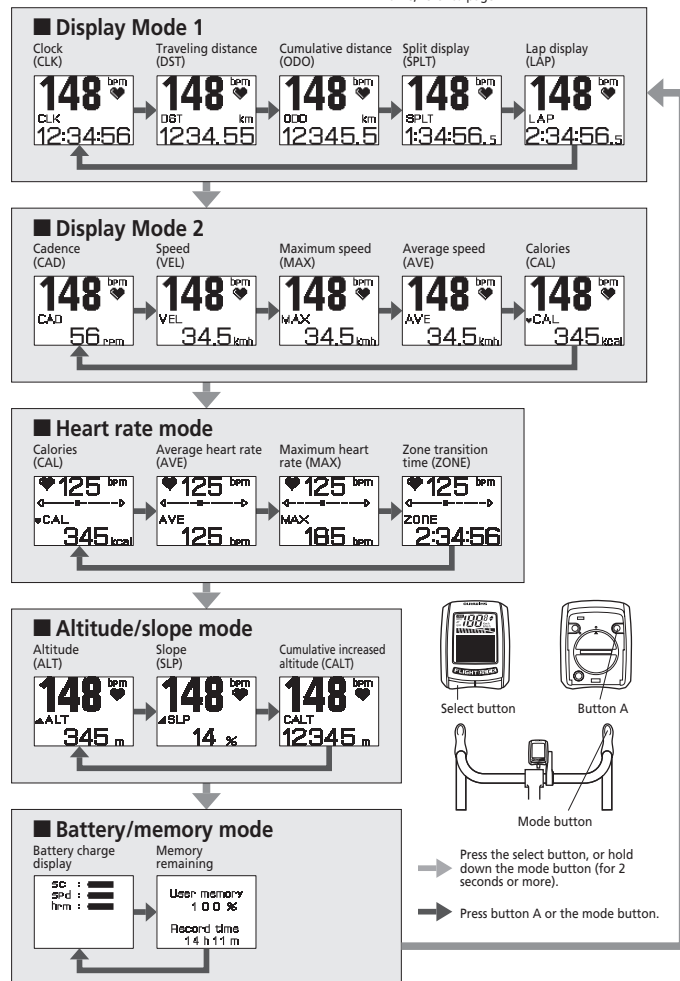
If the low memory indicator appears, delete any unneeded traveling data to make more free memory available.

(For details on how to delete data, refer to page 39.)

- If the low battery indicator and the low memory indicator are generated at the same time, each screen will be displayed alternately for one second.
- If you clear the low battery indicator or low memory indicator while riding the bicycle, the low battery or low memory confirmation screen will be displayed once more when speed signals are no longer being input.

Normal mode details

For details on measurement of the traveling time, refer to page 42.



- Press the select button, or hold down the mode button (for 2 seconds or more).
- Press button A or the mode button.