AH01: WJ30/WJ31

ASICS
HRM WATCH
&
CHEST STRAP

INSTRUCTION MANUAL

World-Wide Limited Warranty

- Warranty term: Two years from the date of purchase
- Your watch will be repaired or replaced (with the same or similar model) free of charge at our option during the warranty term (see above) if it should malfunction during normal use as described in the Instruction Manual.
- This warranty covers the watch itself (movement and case). Other parts than the above are not covered by the warranty.
- To have repairs and adjustments covered under this warranty performed, bring the watch, the warranty, and the original receipt identifying the ASICS watch purchased and the date of purchase to an ASICS watch retailer or a nearby authorized ASICS service facility.
- Note that repairs will be charged in the following cases, even during the warranty term:
  a. Failure or damage caused by improper use or carelessness;
  b. Failure or damage caused by unjustifiable repair or modification;
  c. Failure or damage caused by fire or water, or a natural disaster such as an earthquake;
  d. Esthetic changes that occur during use (minor scratches, etc. on the case and glass);
  e. In case the retail store and the purchase date are not indicated on the warranty, or if this information has been rewritten; and
  f. If the warranty is not submitted along with the watch.
- Battery replacement will be charged even during the warranty term.
- Since the battery in your watch is a monitor battery inserted at the factory to check the functions and performance of the watch, it may run down in less than the specified period after the date of purchase.
- The case, glass, watchband or other parts of the watch may be replaced with substitutes if the originals are not available.
- All postage, insurance and shipping costs incurred in presenting or sending the watch to the service facility are your responsibility.
- Some countries, states and regions do not allow the exclusion or limitation of consequential damages or limitations on how long an implied warranty lasts so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country, state to state, and region to region.
- This warranty warrants that you can receive free repair in accordance with the terms set forth herein and within the specified term, and shall not restrict any lawful right of the Customer.

For the locations of the authorized ASICS service facilities, please visit our website at http://www.asics-watch.com.

Manufacturer: Seiko Instruments Inc.
8, Nakase 1-chome,Mihama-ku, Chiba-shi, Chiba-ken, Japan

CE

EU contact information:
Please visit the Website below, and contact a nearby distributor.
http://asics-watch.com/eg/shoplist.html

For the US Consumers:
Additional Notation to Obtain Warranty Service

Warranty Disclaimers

We make no express warranties other than as expressly set forth in this warranty.

WE HEREBY DISCLAIM ANY AND ALL LIABILITY FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Warranty Limitations

All implied warranties, including, without limitation, implied warranties of merchantability and fitness for a particular purpose, which may exist, are limited to the duration of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

We make no warranties except as expressly set forth in this warranty.

TO PRESERVE THE QUALITY OF YOUR WATCH

⚠ DANGER	This symbol indicates any condition or practice which will imminently result in serious personal injury or death if the instruction with this symbol is not strictly observed.
⚠ WARNING	This symbol indicates any condition or practice which could result in serious personal injury or possible death if the instruction with this symbol is not strictly observed.
⚠ CAUTION	This symbol indicates any condition or practice which could result in minor personal injury or property loss if the instruction with this symbol is not strictly observed.

● PRECAUTIONS ON WEARING YOUR WATCH

⚠ DANGER

- If you are wearing any medical device such as a pace maker, never use this product.
- Do not use this product near a person using any medical device such as a pace maker, or do not bring it close to such person.
- If you feel sick while taking exercise using this product, stop using it immediately, and consult a doctor.
- Do not use this product inside an airplane.

⚠ WARNING

- When you are wearing the watch, take care not to tumble, fall or bump into others. This may injure yourself and others.
- Take care not to hold a young child in your arms with the watch worn on your wrist. This may injure the child or cause him/her to develop a rash or allergy.
- When you are wearing the watch, do not swing your arms forcefully to bump the watch against hard objects. This may cause property loss, or a malfunction of the watch.
- Never attempt to operate any of the buttons in water. Water may get inside the watch to cause damage to it.
- Those who have not taken physical exercise for a long time and those who are ill should consult a doctor before starting running with the watch. If you feel sick while running, stop running immediately.
- Do not place the chest strap within the reach of children.
- Do not use this product near a microwave oven, a television set or a mobile phone, or inside an automobile or a train. If it is used near a transmitting station, accurate measurement may not be obtained due to interference.

● DAILY CARE

⚠ CAUTION

- The case and band contact directly with the skin like an underwear. If they are left soiled, the rust that forms on them may stain the edge of the sleeve, or cause a rash or allergy on your wrist. Keep the case and bracelet clean to avoid this.
- After the watch is removed from your wrist, wipe off perspiration or moisture from the watch using a soft dry cloth. Doing this will serve to prolong the service life the case, band, gasket and other parts.
- Do not use chemicals such as benzine, thinner, alcohol and a solution of neutral detergent to clean the watch. This may cause a chemical change to deteriorate the watch.
- If the chest strap becomes soiled, wipe it with a dry soft cloth or a cloth soaked in a diluted solution of neutral detergent and squeezed tightly.

    <Soft plastic band>
    If the watch is left under fluorescent light or direct sunlight for a long time, or the band is left soiled until the soil adheres to it, the band may be discolored, hardened or broken. If your watch has a semitransparent urethane band, which is easily discolored, special care should be taken to keep it clean. It may be discolored in several months depending on the conditions of use. Also, do not keep the watch in a place where it is exposed to high humidity, or do not leave the band wet with perspiration or water. Otherwise, the band may be discolored in a very short time. When the band is soiled, rinse it in soapy water. Do no use solvents for cleaning as some solvents may deteriorate the band.

● RASH AND ALLERGY

⚠ CAUTION

- Adjust the watchband so that there will be a little clearance between the band and your wrist to avoid accumulation of perspiration.
- If you are susceptible to rash, the band may cause a rash or itching on your skin depending on your physical condition.
- If wearing the chest strap causes a rash or other problems on your skin, stop using it immediately.
- The possible causes of the rash are as follows:
    1. Allergy to metals; or
    2. Rust, soil or perspiration on the watch or band.
- If any abnormal condition occurs on your skin, remove the watch from your wrist immediately, and consult a doctor.

TO PRESERVE THE QUALITY OF YOUR WATCH

● REMARKS ON THE BATTERY

☐ MONITOR BATTERY

The battery in your watch may run down in less than the specified period after the date of purchase, as it is a monitor battery inserted at the factory to check the functions and performance of the watch.

We cannot guarantee that the stored data will remain intact after the battery is replaced with a new one, or the watch is repaired at the service facility. To prevent the data from being lost, it is recommended that the important measurement and setting data be noted down on paper beforehand.

☐ BATTERY REPLACEMENT

● When the battery expires, be sure to replace it with a new one as soon as possible to prevent any malfunction. For battery replacement, contact the retailer from whom you watch was purchased.

● If the exhausted battery is left in the watch for a long time, a malfunction may result due to battery leakage, etc. Have it replaced with a new one as soon as possible.

● Battery replacement is charged even if it runs down within the warranty period.

⚠ WARNING

● The battery is not rechargeable. Never attempt to recharge it, as this may cause the battery to explode, leak fluid or be damaged.

● Do not open the case back of the watch forcibly to remove the battery.

● If it is necessary to take out the battery from the watch, keep it out of the reach of children.

● If the battery for the sensor unit of the chest strap is taken out from it, keep the battery out of the reach of children.

● If a child swallows it, consult a doctor immediately as it will adversely affect the health of the child.

⚠ CAUTION

● Do not expose the watch to temperatures outside the normal temperature range (5°C ~ 35°C) for a long time. This may shorten the battery life, or cause a malfunction due to battery leakage.

● WATER RESISTANCE

Check the dial or case back of your watch for the water resistance indication, and use it properly according to the instructions in the table below:

Indication on the case back	Condition of use / Degree of water resistance		Accidental contact with water such as rain and splashes	Swimming, kitchen work and other water-related activities	Skin diving without breathing apparatus	Scuba diving using breathing apparatus and saturation diving using helium gas
WATER RESIST	Water resistance for daily life use		○	✕	✕	✕
WATER RESIST 5 BAR or 10BAR	Enhanced water resistance	5 bar	○	○	✕	✕
		10 bar	○	○	○	✕

⚠ WARNING

● NEVER WEAR 10-bar water-resistant watch during saturation diving and air diving.

● NEVER WEAR 5-bar water-resistant watch during any type of diving including skin diving.

⚠ CAUTION

● NEVER PUT 3-bar water-resistant watch into water.

● After the 5-bar or 10-bar water-resistant watch is used in the seawater, rinse the watch to remove salt as soon as possible. Otherwise, the watch may become rusty. To do so, do not rinse the watch under running water. Excessive water pressure may be applied to the watch, deteriorating its water resistant quality. Be sure to rinse the watch in a pot or bowl filled with water.

TO PRESERVE THE QUALITY OF YOUR WATCH

● PLACES TO KEEP YOUR WATCH

When not in use, the watch may be damaged, deteriorated or broken in the following cases:

- If the watch is exposed to temperatures outside the range between -5°C and +50°C, its performance may be deteriorated or it may stop operating.
- If the watch is left under direct sunlight or extremely high or low temperatures for a long time, this may cause it to gain or lose time.
- If the watch is left at a place where it is exposed to magnetic leakage from a TV set, speaker, mobile phone, magnetic necklace, etc., it may gain or lose time.
- If the watch is left at a place where it is exposed to strong vibration, it may be damaged or gain or lose time.
- If the watch is left at a place where it is exposed to chemical steam or chemicals, it may be deteriorated or damaged.

  Examples of such chemicals: Benzine, thinner, manicure, cosmetic sprays, cleaners, toilet detergents, adhesives, mercury, iodized disinfectants, insecticides, etc.
- If the watch is left near a hot spring or kept together with insecticides, it may be deteriorated.
- If you decide not to use the watch for a long time, it is recommended that the watch be stored in a box and placed at a well-ventilated place.

● PERIODIC CHECK

- To enjoy longer use of the watch, it is recommended that you have it overhauled and undergo thorough checking every 2 or 3 years. Depending on the conditions of use, the gasket and other parts may be deteriorated to affect the water resistant quality of the watch due to perspiration or water that may get inside it. For overhaul and checking, contact the retailer from whom the watch was purchased.
- When replacing the parts such as battery, please specify "GENUINE PARTS".
- When the periodic check is performed, it is recommended that the gasket and the push-pin be also replaced with new ones.

TABLE OF CONTENTS

FEATURES - 1

ASICS HRM (Heart Rate Monitor) Watch measures heart rate, and calculates "AT-Heart Rate" and "AT-Pace" from running data using the proprietary algorithm developed by ASICS, providing runners with useful information to perform their training efficiently and effectively.

■ AT (Anaerobic Threshold) refers to the point at which your body transitions from aerobic to anaerobic exercise as the exercise intensity increases.

When the exercise intensity (running pace) exceeds the AT, the exercise gradually becomes anaerobic, making it difficult to continue running for long.

The AT has a strong relation with marathon pace. It not only provides a measure to control the intensity of training efficiently, but also serves as a guideline for your race pace.

■ ASICS HRM Watch automatically calculates AT-Heart Rate and AT-Pace using the algorithm developed by ASICS Institute of Sports Science based on its accumulated database.

By setting the target heart rate zone around AT-Heart Rate, and performing various types of training programs day by day utilizing the target zone, higher effect can be expected from less amount of training.

AT-Heart Rate (AT-HR) Calculation Function (P. 20)

For the runners seeking to complete a marathon, or those aiming to improve their performance, planning training programs based on the AT-Heart Rate will enhance the efficiency of training and, achieve their purposes more effectively.

For the runners worrying about their running pace, the AT-Pace will serve as a guideline for their race pace.

The watch calculates your AT-Heart Rate and AT-Pace by inputting your gender, personal best time for 5 or 10 km (preferably, the time measured within last 2 years), and running data obtained by running a usual distance at a usual pace.

For the details of the method of training based on the heart rate zones, please refer to the "Training Book."

Target Zone Function (PP.15 & 17)

The watch indicates, while you are running, whether your heart rate is above, below or within the target zone around your AT-Heart Rate. This function helps you perform training based on heart rate zones in a well-balanced manner.

It is possible to customize this function by finely adjusting the target heart rate ("TARGET") and the zone width above/below it ("ZONE").

For the details of the method of training based on the heart rate zones, please refer to the "Training Book."

Estimate of Marathon Finish Time (P. 22)
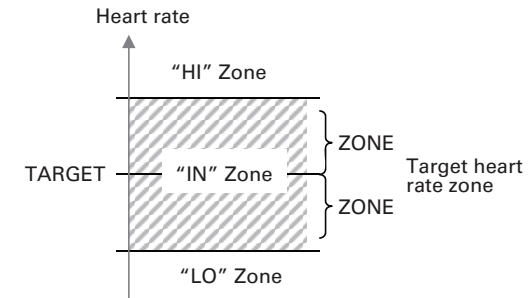
Using the algorithm developed by ASICS, the watch estimates your finish times for a full marathon and a half marathon by inputting your gender and running time for 5 or 10 km.

FEATURES - 2

Interval Timer Function (PP. 16 & 17)

It starts counting down the set time simultaneously with the start of the chronograph, and is reset and restarted repeatedly each time a lap time is measured.

This timer is suitable for such training programs as interval training and build-up training.

Auto-HRM Function (PP. 14 & 17)

By wearing the chest strap, the heart rate data it measures is transmitted to the watch, and displayed automatically. The watch can be used alone without wearing the chest strap as a sports watch.

Measurement Condition Checking Function (P. 14)

When the heart rate is not measured properly, the color and shape of the heart shape change to indicate the poor measurement condition.

Graphic Display of Heart Rate (P. 18)

The transition of heart rate during the latest run is displayed graphically. As detailed data, heart rate at each time point of the graph can be checked numerically.

Double Repeat Timer (P. 23)

Two timers repeat counting down the respective set times alternately as many times as necessary. They can be set to count down from 10 seconds up to 99 hours 59 minutes and 59 seconds, and the countdown can be repeated up to 99 times.

300 Lap Memory (P. 10)

Up to 300 measurement data can be stored in memory.

Dual Time Display (P. 8)

The time of two different time zones can be set and displayed as necessary.

3-Channel Daily Alarm (P. 24)

The alarm can be set to ring at three different times of a day. It can be engaged or disengaged channel by channel, and the time zone of the designated alarm time can be selected.

Use Your HRM Watch in the Manner Best Suited to Your Needs.

● The watch can be set to display, during measurement, the measured data in different ways according to your needs.

To know your heart rate while running besides running data:

Skip AT-Heart Rate setting procedure to disable calculation based on ASICS's algorithm.
(See p. 20.)

→

Auto-HRM function works as soon as the watch receives heart rate signal, and heart rate is displayed automatically.

→
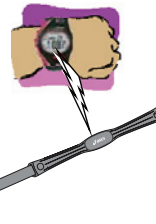
Heart rate is displayed together with running data including lap time and split time.

To use AT-Heart Rate as a guideline of intensity of training and race pace:

Set your AT-Heart Rate on the watch. (See p. 20.)

HR-LOG Mode

Press for more than 1 second

→

Input "usual pace" running data and "best time."
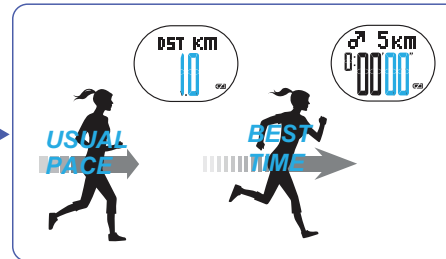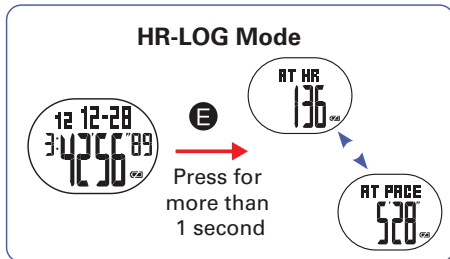
USUAL PACE

BEST TIME

→

The watch indicates, in real time, whether your heart rate is above, below or within the target zone which includes AT-Heart Rate at its center.

To customize Target Zone function to utilize it for various training programs:

Customize Target Zone function. (See pp. 15 and 17.)

Function setting display of HR-CHR Mode

Press for more than 2 seconds

→

Input target heart rate (TARGET) and width above/below target (ZONE).

Heart rate

"HI" Zone

TARGET — "IN" Zone

ZONE

ZONE

Target heart rate zone

"LO" Zone

→
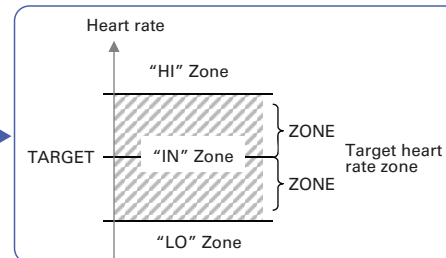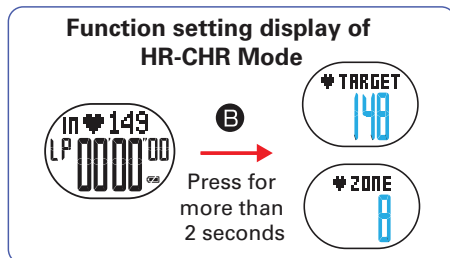
By customizing target heart rate zone finely according to the purpose of training program, Target Zone function provides a measure to control exercise intensity of training, enhancing its quality and efficiency.

3

PARTS OF YOUR HRM WATCH AND CHEST STRAP

WATCH

CHEST STRAP

Rubber strap

Sensor unit (outer surface side)
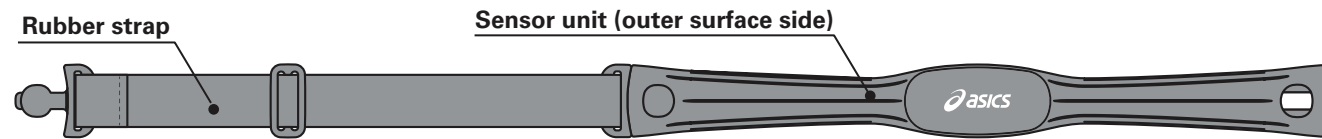
How to Connect the Sensor Unit with the Rubber Strap

Outer surface side of sensor unit

Joint

Rubber strap

1.

2.

3.
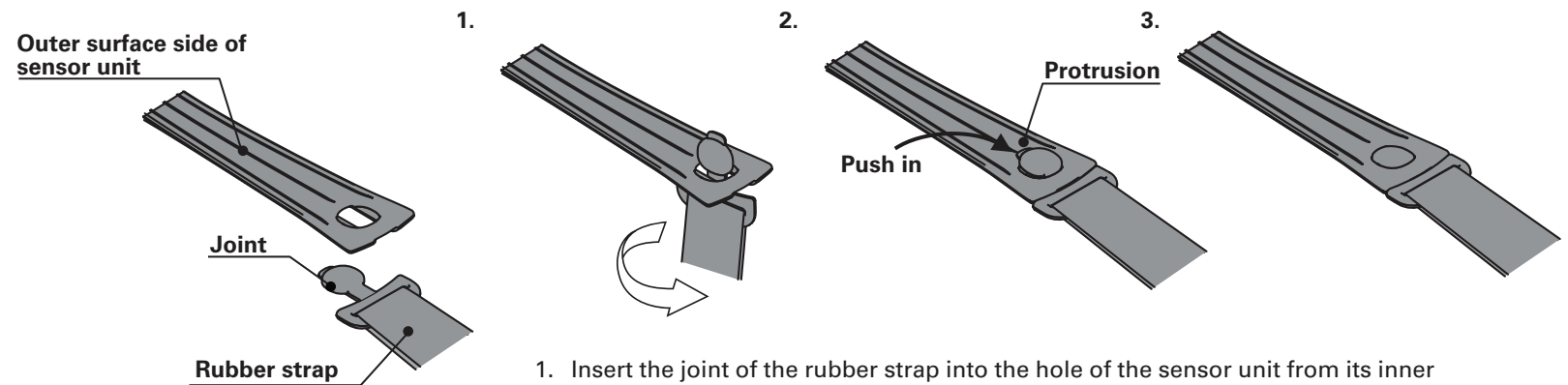
Protrusion

Push in

1. Insert the joint of the rubber strap into the hole of the sensor unit from its inner surface side.

2. Turn the joint, and push in the protrusion at its tip until it clicks in position.

3. Check that the protrusion of the joint is invisible from the outer surface side of the sensor unit.

* *When wearing the chest strap around your chest, follow the same procedure to connect the sensor unit and the rubber strap.*

MODE CHANGE AND FUNCTIONS AVAILABLE IN EACH MODE

Button "B":
[With each press]
Mode change

Button "B":
[Press for more
than 2 seconds in
HR-CHR Mode]
Activation of Function
Setting Display

Button "A"

[TIME Mode]

Button "C"

Button "D"

Button "E":
[Press for more
than 1 second in
HR-LOG Mode]
Display and setting of AT-HR

> Keeping Button "C" pressed for more than 2 seconds in any mode returns the display to TIME Mode.

● With each press of Button "B", the mode changes in the following order:

| In any mode | **C** Press for more than 2 seconds. | → | **TIME Mode** |

B Press for more than 2 seconds.

HR-CHR Mode ← **B**

• Setting Auto-HRM function
• Setting Target Zone function
• Setting Interval Timer function

HR-GRAPH Mode

E Press for more than 1 second.

HR-LOG Mode ← **E**

• Displaying AT-HR
• Setting AT-HR calculation function

ALARM Mode

TIMER Mode

GOAL TIME Mode

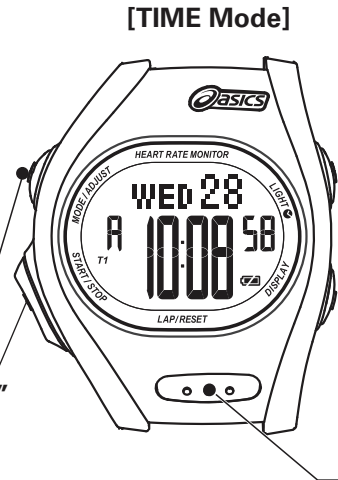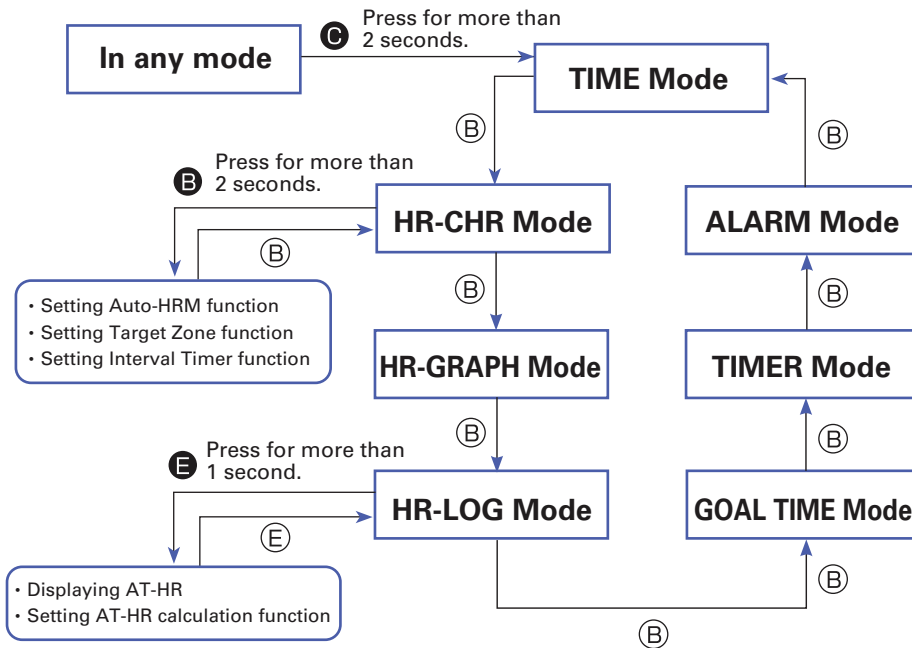| Mode name	Functions available in each mode	Refer to
TIME	Time and calendar are displayed. Setting of time, calendar and other functions can be made.	PP. 6 ~ 8
HR-CHR	Heart rate and chronograph measurement can be made. Setting of the following functions can be made: ● Auto-HRM function When the watch receives the heart rate data from the chest strap, it is displayed automatically. ● Target Zone function The watch indicates, in real time, whether your heart rate is above, below or within the target zone. ● Interval Timer function It is a timer function suitable for "interval" and other types of training.	PP. 9 ~ 17 / P. 14 / P. 15 / P. 16
HR-GRAPH	Transition of heart rate in the latest run is displayed in graphical form.	P. 18
HR-LOG	Log data measured in HR-CHR Mode can be displayed. ● AT-Heart Rate (HR) is displayed. ● Setting for AT-HR calculation can be made.	PP. 19 ~ 21 / P. 20
GOAL TIME	Finish time of a full/half marathon is estimated.	P. 22
TIMER	Two timers repeat counting down the respective set times alternately for the set number of times.	P. 23
ALARM	Alarm can be set to ring at three different times of a day.	P. 24

SETTING OF TIME/CALENDAR AND OTHER FUNCTIONS

● Set the current time/calendar, and the auto-backlight, contrast and "ECO" functions in the Time Setting Display.

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* When the TIME Mode appears, "TIME" is shown in the upper row of the display for 1 second , and then, "day of the week and date" or "month and date" appear instead.

Button "B":
[Press for more than 2 seconds]
Activation of Time Setting Display

Button "B":
Returning to TIME Mode

Button "A":
Increasing digits to be adjusted
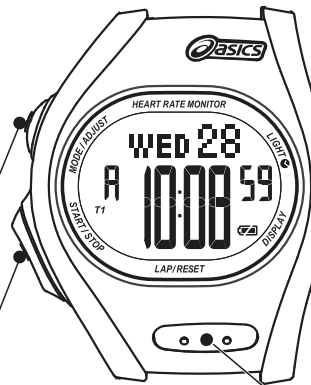
Button "C":
Turning on backlight

Button "D":
Decreasing digits to be adjusted

Button "E":
Selection of digits to be adjusted

■ How to Set Time/Calendar and Other Functions

[1] Keep Button "B" pressed for more than 2 seconds in the TIME Mode. The Time Setting Display appears, and the Seconds digits start flashing.

[2] Press Button "A" or "D" to set the flashing digits.

[3] Press Button "E" to select the digits to be adjusted.

[4] Repeat Steps **[2]** and **[3]** to set the digits in the order shown in the illustration below.
* If Button "A" or "D" is kept pressed for more than 2 seconds, the digits attached with "A/D" in the illustration below move quickly.

[5] After all the adjustments are completed, press button "B" to return to the TIME Mode. All the settings are registered in memory.
* If the watch is left untouched in the Time Setting Display with the digits flashing, the display will automatically return to the TIME Mode in 2 to 3 minutes.
* If Button "A" or "D" is pressed while the Second digits are flashing, they are reset to "00". When the Seconds read any number from "30" to "59" and either of the buttons is pressed, one minute is added.
* Once the Year, Month and Date are set, the Day of the week is set automatically.

TIME Mode

Press for more than 2 seconds.

Time Setting Display

Second — Minute — Hour — Date — Month — Year

12/24-hour time system — Day of the week-date/month-date format — "ECO" function (See p. 7.) — Contrast (See p. 7.) — Auto-backlight (See p. 7.)

6
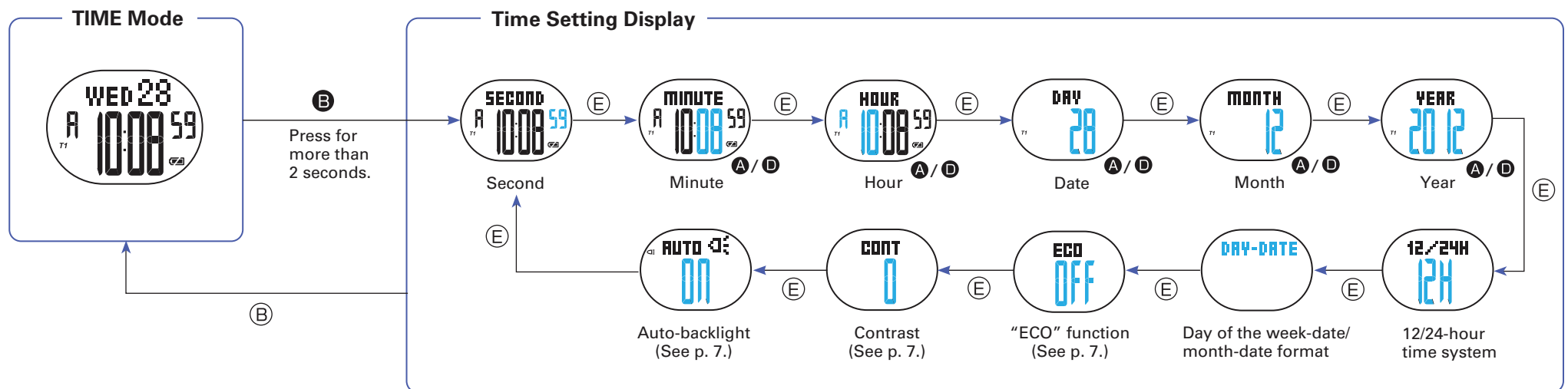
DETAILS OF FUNCTIONS SET IN TIME SETTING DISPLAY

■ Changeover of display format

The display format of the upper row of the display can be changed over between "Day of the week-Date" and "Month-Date".

[Day of the week - Date]   **[Month - Date]**

DAY-DATE   Ⓐ or Ⓓ   MTH-DATE

Day of the week ———— WED 28 ———— Date   Month ———— DEC 28 ———— Date
A 10:08 58   A 10:08 58
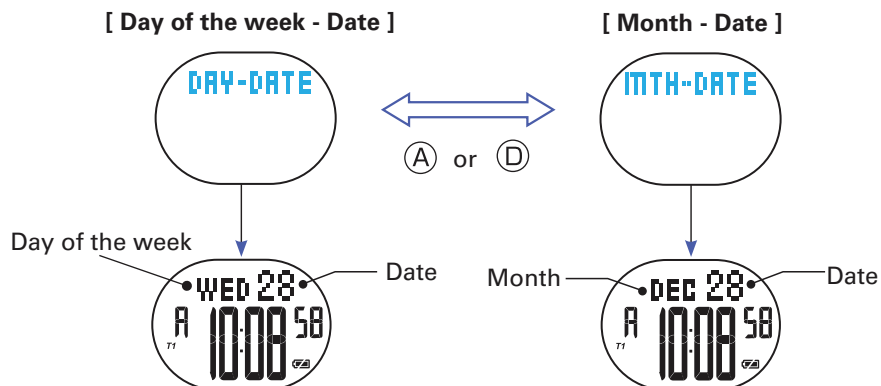
■ Setting of "ECO" Function

If the watch is left untouched without any button operation for a certain period of time (1, 3, 6 or 12 hours), the display goes blank automatically to save the battery energy.

ECO
OFF

Select the time period before "ECO" function starts working in the following order:

→ OFF ↔ 1H ↔ 3H ↔ 6H ↔ 12H ←
          Ⓐ   Ⓓ
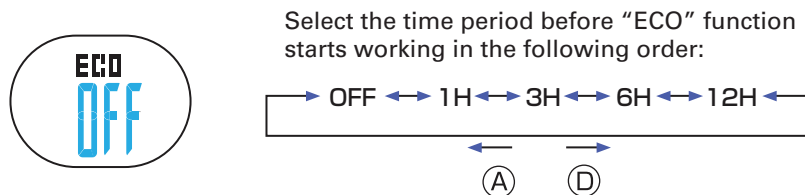
* When the time period before "ECO" function works is selected, "ECO" is shown in the lower right corner of the display.

* When the display is blank, having been turned off by the "ECO" function, pressing any button will turn on the display again.

* The "ECO" function is activated only when both the chronograph and the timer are stopped and reset.

WED 28
A 10:08 58
ECO

ECO

■ Contrast Adjustment

The contrast of the display can be adjusted in 7 levels for easy viewing.

CONT
0

3	2	1	0	−1	−2	−3

Higher ←   → **Lower**
          Ⓐ   Ⓓ
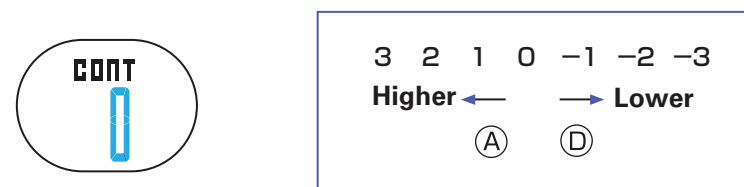
■ Turning ON/OFF of Auto-Backlight

When the Auto-Backlight function is turned on, the backlight automatically turns on approximately for 2 seconds with each press of any of the buttons.
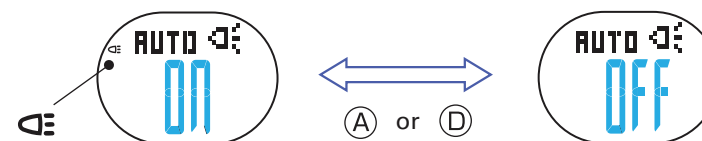
AUTO
ON   Ⓐ or Ⓓ   AUTO
OFF

* When the Auto-Backlight function is turned on, the Auto-Backlight mark " " is displayed on the upper left corner of the display.

* Even if the function is turned on, the button operations for data input such as those for alarm and timer setting will not light up the backlight.

OTHER FUNCTIONS THAT CAN BE SET IN TIME MODE

Button "B":
[Press for more than 2 seconds] Activation of Time Setting Display

Button "B":
Mode change

Button "A":
Turning ON/OFF of Button Operation Confirmation Sound
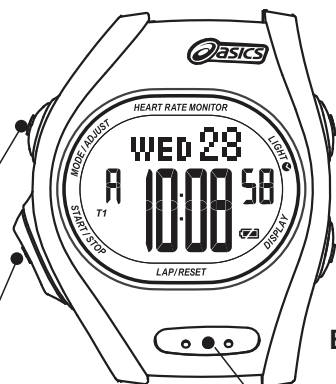
Button "C":
Turning on backlight

Button "D"

Button "E":
[Press for more than 2 seconds] Selection of Time Zone (T1/T2)

■ Selection of Time Zone

With each continuous press of Button "E" for more than 2 seconds, the time zone changes over between T1 and T2. The dual time function is convenient during trip abroad. The Time Zone mark (T1 or T2) indicates the time zone selected.

Time Zone mark

■ Turning ON/OFF of Button Operation Confirmation Sound
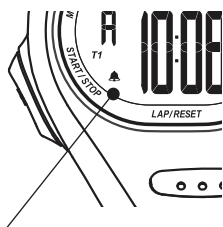
With each press of Button "A", the Button Operation Confirmation Sound turns ON and OFF alternately. When it is turned ON, the Button Operation Confirmation Sound mark "🔔" is shown.

Button Operation Confirmation Sound mark

When the display is returned to the TIME Mode, and when the data of the latest run is displayed, and the total time display is shown in the HR-LOG Mode, by pressing a button, the Button Operation Confirmation Sound rings differently from usual.

Battery Life Indicator Function

· This function enables you to know when the battery needs to be replaced.
· The remaining life of the battery is shown graphically in three levels.

Battery mark

The battery mark "🔋" indicates that the battery is nearing its end. When it is shown, replace the battery with a new one immediately.

CHRONOGRAPH MEASUREMENT PROCEDURE

● During running, the watch indicates heart rate automatically besides measuring lap and split times with button operation.

* When the HR-CHR Mode appears, "HR-CHR" is shown in the upper row of the display for 1 second, and then, the Chronograph Display appears.

Button "B":
Mode change

Button "A":
Start/Stop

Button "C":
[Press for more than 2 seconds]
Returning display to TIME Mode

Button "C":
Turning on backlight

Button "D":
Selection of measurement display

Button "E":
Lap/Reset

■ Selection of Measurement Display

● Measurement when chest strap is worn:

Display can be changed during measurement

Heart rate — Lap time
Heart rate — Split time
Heart rate — Current time*

* Split time is shown for 6 seconds when the chronograph is started, stopped and reset.

● Measurement with watch alone:

Current time — Lap time
Split time — Lap time
Lap time — Split time
Current time — Split time

Display can be changed during measurement

■ Chronograph Measurement

Run
Running interrupted

Start — Lap — Stop — Restart — Lap — Lap — Stop — Reset

A → E → A → A → E → E → A → E

LAP 1 | LAP 2 | LAP 2 | LAP 3 ~ LAP 9 | LAP 10
SPLIT 1
SPLIT 2 | SPLIT 2
1*
SPLIT 3 ~ SPLIT 8
SPLIT 9
SPLIT 10 = Total time

1*: Measurement is halted.

Start
Finish

* During measurement, stop and restart can be repeated as many times as necessary by pressing Button "A".
* When the chronograph is reset by pressing Button "E", the measured data is stored in memory as log data.

Lap time: Time required to run any given section of the entire distance.
(Ex.: Time required to run a circuit in a track race)
Split time: Time required to run from the start to any given point of the entire distance.
(Ex.: Time required to reach 10 or 20 km point of a marathon)
Total time: Entire time to run from start to finish (excluding the time while the measurement is halted).
Run: A running attempt measured by the chronograph from when it is started until it is finally stopped and reset.

■ Display Immediately After Lap Time Measurement

· Each time Button "E" is pressed to measure a lap time, the lap time measured remains displayed for 6 seconds.

Lap No.
Lap time
Chronograph mark

* While the lap time remains displayed, the lap No. and the heart rate are shown alternately.
* Once "FULL" is displayed, no more lap data is stored in memory (see p. 10).
* When the lap time in progress exceeds 1 hour, the lap time indication "LP" disappears.

9
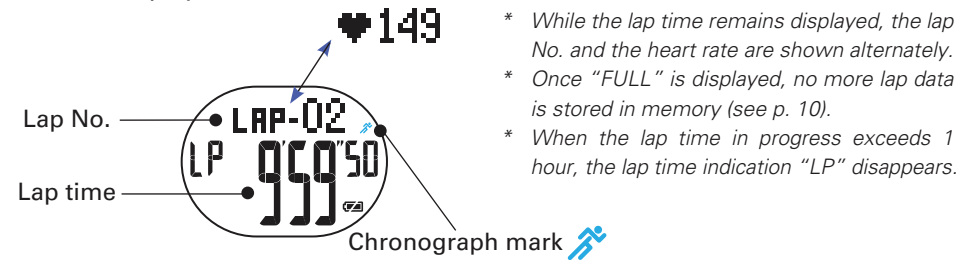
STORAGE OF DATA AFTER MEASUREMENT

● After measurement, the measured data is stored in memory as log data.

■ Storage of Measured Data

- ・ By pressing Button "E" to reset the chronograph after measurement, the measured data is stored in memory as log data.
- ・ The measured data is stored in memory on a run-by-run basis. "Run" refers to a running attempt measured by the chronograph from when it is started until it is stopped and reset.

■ Checking of Log Data (See p.19.)

- ・ To check the log data stored in memory, use the HR-LOG Mode. The log data is displayed in order of measurement or reverse order of measurement on a run-by-run basis.

■ "LAP m." (LAP Memory: Number of measurement data in memory)

- ・ While the chronograph has been reset, pressing Button "E" in the HR-CHR Mode will show the "LAP m." (the number of measurement data stored in memory) while the button is kept pressed.

While the button is kept pressed

The number of measurement data stored in memory is "18".
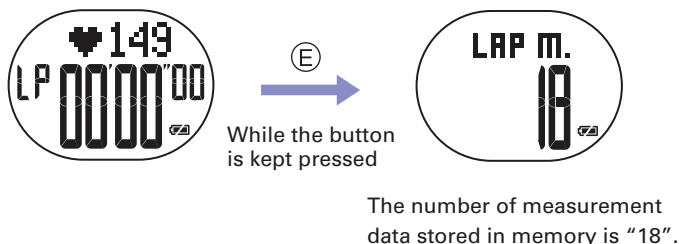
- ・ The "LAP Memory" number accumulates each time the measurement of a run is made.
- ・ Up to 300 measurement data can be stored in memory. When the number of data in memory reaches 300, the data measured thereafter cannot be stored in memory. The table below shows the number of data stored in memory after the measurement of one run for your reference.

Example of chronograph measurement	Number of lap times measured	Number of data stored
Start → Stop → Reset	Nil	3
Start → LAP-1 → Stop → Reset	1	4
Start → LAP-1 …… → LAP-n → Stop→ Reset	n	3 + n

■ When "LAP Memory" Number has reached "300" (For deletion of data, see p. 21.)

- ・ If Button "E" is pressed to measure a lap time after the number of data in memory has reached "300", "FULL" is shown instead of the lap No.
- ・ Even when "FULL" is displayed, lap and split times can be measured, but will not be stored in memory.
- ・ To store new data in memory, delete unnecessary data in the HR-LOG Mode after resetting the chronograph.

The number of data stored in memory has reached "300".

TO MEASURE HEART RATE - 1 : HEALTH CHECK BEFORE RUNNING

● If you do not usually play sports or have a rather sedentary lifestyle, the types of exercise and running recommended to be performed with the Heart Rate Monitor Watch may be hazardous to your health.

THIS PRODUCT IS NOT A MEDICAL DEVICE

● This product is designed to monitor the heart rate during running for the purpose of enhancing training effect, and is not intended for use in treatment of any disease.

● It should be noted that the heart rate values indicated by the watch serve as a general guideline only, as they vary widely from person to person depending on personal physical constitution, and even in one person depending on the day-to-day physical condition.

● Never use the chest strap in water, such as in a pool.

■ To Take Exercise Safely

To minimize the risk of exercise-related disease, check your health condition before starting exercise.

Even if you have not noticed any sign of disease in your daily life, make sure that you have no health problem.

If you answer yes to any one of the following questions of the checklist, it is recommended that you should consult a doctor before starting doing exercise on a regular basis.

Checklist:

① Do you currently have a symptom of a disease, or are you undergoing treatment of a disease?

② Do you have a medical history of a respiratory or circulatory disease, and are you concerned about your health?

③ Do you sometimes feel pain or discomfort in your chest during daily activities?

④ Do you sometimes feel palpitation, breathlessness, dizziness or extreme fatigue during daily activities?

⑤ Did you recently experience a sudden weight change (either gain or loss) in a short period of time?

⑥ Are you using a pacemaker or any other implantable electronic medical device?

⑦ Are you pregnant?

■ Safety Precautions

⚠ CAUTION

● The heart rate measured during exercise is affected not only by the intensity of the exercise but also by the extent of strain felt by the exerciser, temperature, medicine taken before exercise (hypotensive, antasthmatic, psychotropic, or other drugs), or intake of alcohol, nicotine, or some types of energy drinks.

● The AT-Heart Rate calculated by this product and the heart rate zone indications given by the Target Zone function serve as a measure of intensity of training and a guideline for race pace. However, the exercise intensity and the running pace provided by this product are for guideline purposes only, and should not be followed indiscriminately by the user. If the intensity of the exercise or running is felt hard, it is recommended that it should be stopped, or the intensity or the pace should be reduced.

● If you feel unexpected chest pain or breathlessness during exercise, stop it immediately. If the symptom persists after a short rest, it is recommended that you should consult your doctor.

● If you have not exercised regularly for more than 5 years, you are recommended to start exercise with walking (especially if you are over 40 years of age). When you have become able to walk for more than 30 minutes on end, increase the time and distance of running gradually, for example, by walking for 5 minutes and running for 5 minutes at first, and walking for 5 minutes and running for 10 minutes next time.

● Before starting exercise, perform sufficient warm-up and stretching exercises. If you have a rather sedentary lifestyle, they should be performed particularly painstakingly.

● Never use this product if you are using a pacemaker or any other implantable electronic medical device.

● If you are allergic to something that comes into contact with your skin, or if you have experienced an allergic reaction when using a similar type of product, you are recommended to refer to P. 25 of this manual to check the materials used for this product, and consult your doctor for advice.

● If the chest strap rubs strongly against moist clothing, it may stain the clothing due to color transfer. Special care should be taken when wearing light-colored clothing.

TO MEASURE HEART RATE - 2 : WARM-UP BEFORE RUNNING

●To prevent injuries and make your training more effective, perform sufficient warm-up and stretch exercises before starting running. They are particularly important for those who have sedentary lifestyle, and should be performed painstakingly.

■ Before Starting Exercise

Stretching is one of the most important warm-up exercises. It can alleviate the strain of muscles, and increase the range of motion of joints.

The following are the stretching exercises typically performed before starting running or walking.

1. **Stretch whole body.**

   Stand with the feet shoulder-width apart, and put the hands on the back of the head with the fingers interlocked. Then, slowly stretch straight upwards.

2. **Stretch the waist.**

   Stand with the feet shoulder-width apart, and put the hands on the back of the head with the fingers interlocked. Then, lean the upper body slowly sideways.

3. **Rotate the shoulders (to a larger extent).**

   Make circles with the arms by moving them from the back of the body to the front, and then, in the opposite direction, so that you feel the shoulder blades move to a large extent.

4. **Rotate the shoulders (to a smaller extent).**

   Place the hands on the shoulders. Make circles with the elbows by moving them from the back of the body to the front, and then, in the opposite direction, so that you feel the shoulder blades move.

5. **Stretch the groin.**

   Place one foot in front of you away from the other. While keeping the back leg straight, slowly lower the hips so that you feel a stretch in the groin of the back leg, taking care lest the knee of the front leg should go beyond the toes.

6. **Stretch the back of the thigh.**

   Place one foot in front of you away from the other. While keeping the front leg straight, slowly bend the upper body by thrusting out the hips, so that you feel a stretch in the back of the thigh and calf of the front leg.

7. **Stretch the Achilles tendon.**

   Place one foot in front of you away from the other. While keeping the back leg straight, slowly move the hips forward until you feel a stretch in the calf and the Achilles tendon of the back leg. Keep the heel of the back foot flat on the ground.

8. **Stretch the front of the thigh.**

   Standing straight on one leg, hold the top of the other foot with the hand of the same side. Slowly pull the heel toward the buttock.
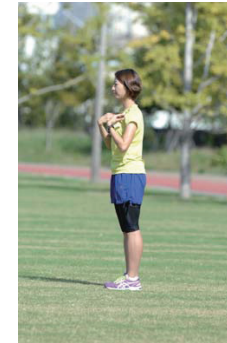
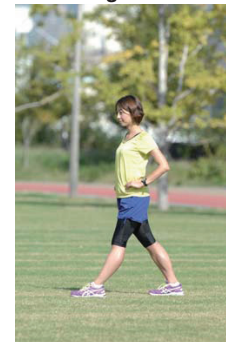1. Stretch whole body.   2. Stretch the waist.   3.Rotate the shoulders (to a larger extent).   4.Rotate the shoulders (to a smaller extent).

5. Stretch the groin.   6. Stretch the back of the thigh.   7. Stretch the Achilles tendon.   8. Stretch the front of the thigh.

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TO MEASURE HEART RATE - 3 : WEARING CHEST STRAP

● To measure your heart rate, it is necessary to wear the chest strap. Wear it securely before starting running.

■ Procedure of Wearing Chest Strap

1. Moisten the electrode portions on both sides of the inner surface of the sensor unit sufficiently with water.
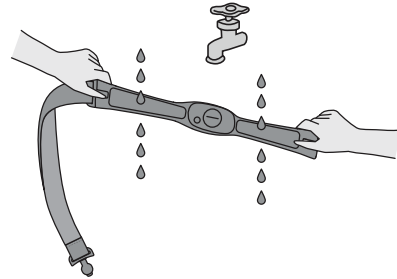
2. Adjust the length of the rubber strap.
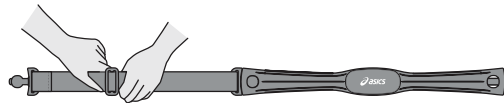
3. Wear the chest strap just below the breast, and adjust the length lest it is fastened too tightly around your chest. Also, check that the electrode portions are kept in secure contact with your skin.
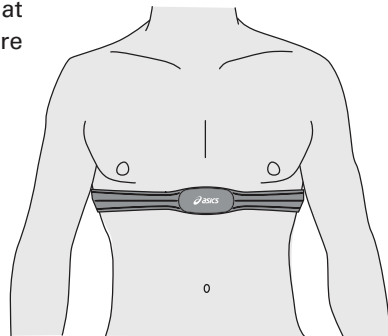
■ Adjustment of Rubber Strap Length

Adjust the length of the rubber strap so that it fits comfortably and securely around your chest.

Length of rubber strap
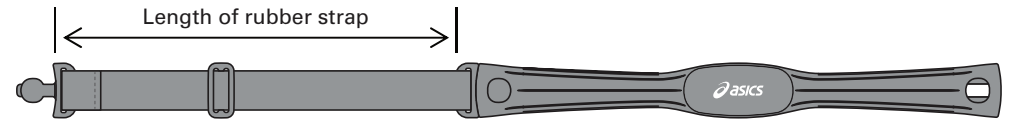
M size strap (with black stitching)	
Chest circumference below breast	Rubber strap length
～75 cm／～29 inches	40 cm／16 inches
75～80 cm／29～31 inches	44 cm／17 inches
80～85 cm／31～33 inches	48 cm／19 inches
85～90 cm／33～35 inches	52 cm／21 inches
90～95 cm／35～37 inches	56 cm／22 inches
95～100 cm／37～39 inches	60 cm／24 inches
100～105 cm／39～41 inches	64 cm／25 inches
105～110 cm／41～43 inches	68 cm／27 inches
110～115 cm／43～45 inches	72 cm／28 inches
115～120 cm／45～47 inches	76 cm／30 inches

* Separately-sold S size rubber strap is also available (product No.: CQAZ0102). It fits a chest circumference of 63 ~ 95 cm / 25 ~ 37 inches.

⚠ WARNING ● Take care not to shorten the rubber strap too much to wear the chest strap too tightly around your chest, as this may cause you to feel sick, putting pressure on your heart. If you find the chest strap too tight, loosen the rubber strap immediately.

⚠ CAUTION ● The rubber strap is consumable. Its elasticity reduces with use, and the chest strap will not fit well around your chest even if its length remains the same. If you find the chest strap loose around your chest, shorten the rubber strap length for secure fit.

● If you feel the chest strap still loose around your chest after shortening the rubber strap length, the rubber strap has reached the end of its serviceable life. It is recommended that a new rubber strap be purchased at the retailer from whom your HRM Watch was purchased.

TO MEASURE HEART RATE - 4 : HEART RATE INDICATION AND MEASUREMENT CONDITION CHECKING FUNCTION

● When the chest strap measures heart rate while the watch is in the HR-CHR Mode, the heart rate data is transmitted to the watch and displayed automatically. The measurement condition of the heart rate is indicated by a "heart shape."

■ Auto-HRM (Heart Rate Monitor) Function

By wearing the chest strap while the watch is in the HR-CHR Mode, the heart rate data is measured and transmitted to the watch, and displayed automatically.

Heart rate data

Measurement with watch alone

Wearing chest strap
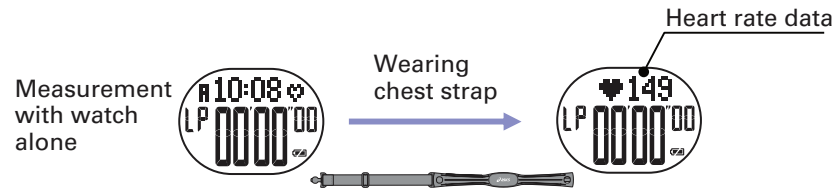
*   *For the method of disabling the Auto-HRM function to use the watch alone at all times, see p. 17.*

■ HR-CHR Mode Displays When Watch is Used Alone and with Chest Strap

● **When the watch is used alone:**

Open heart shape

Heart rate is not displayed. An open heart shape is shown in the upper right corner of the display.
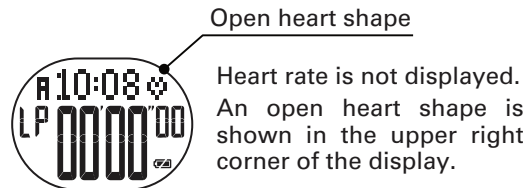
● **When the watch is used with the chest strap:**

Communication mark   Heart rate
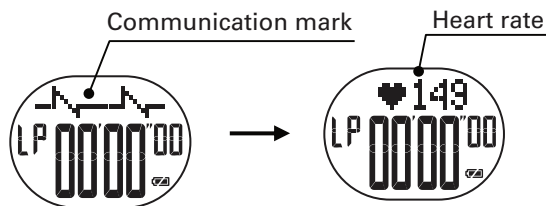
*   *When the chest strap is worn on your chest, the "communication mark" appears, and the heart rate is shown in 2 seconds.*
*   *When the chest strap is removed from your chest, the watch will automatically show the display for single use in approximately 2 minutes.*
*   *Even while the chest strap is worn on your chest, the watch will automatically show the display for single use if it is left untouched for more than 12 hours without pressing any button.*

■ Heart Rate Indication and "Heart Shape"

Heart shape   Heart rate

The heart shape indicates the measurement condition of the heart rate as follows:

♥   A solid heart shape is shown when the heart rate is measured properly.

♡   An open heart shape is shown when the heart rate is not measured properly (when the chest strap is not worn appropriately, for example).

■ Measurement Condition Checking Function

When any noise is detected, or when the heart rate is not measured properly, the heart shape indicates the measurement condition as follows:

● **When any noise is detected:**

♥149   [Heart rate is measured properly]

Noise is detected

>♡200
≫♡200
≫♡200

These indications are shown in order repeatedly until the noise disappears.

*   *Possible cause of the noise:*
    *   *Another heart rate monitor product is used within 1 m radius around you.*
    *   *An electronic device emitting radio wave is placed near you.*
*   *When a noise is detected, accurate measurement of heart rate may not be made constantly.*

● **When heart rate is not measured properly:**

♥149   [Good measurement condition]

♡ 99   [Poor measurement condition]

♡---   [Heart rate in abnormal range is detected]

*   *The open heart shape indicates that the heart rate shown on the display is not accurate.*
*   *The heart rate within the range between 30 and 220 bpm is considered normal. If any heart rate outside this range is measured, "- - -" is displayed.*

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TO MEASURE HEART RATE - 5 : TARGET ZONE FUNCTION

● The watch indicates whether your heart rate is above, within or below the target heart rate zone during measurement.

■ Target Zone Function

The watch indicates, in real time, whether your heart rate while running is above, within or below the target heart rate zone which includes the AT-Heart Rate at its center.

For the details of the training method based on the target heart rate zone, please refer to the "Training Book."

Target heart rate ("TARGET") : The center value of the target heart rate zone
(Initial setting: AT-Heart Rate)

Zone width ("ZONE") : The width above or below the target heart rate within the target heart rate zone
(Initial setting: "7")

■ Customization of Target Zone Function

Once the data input is performed to calculate your AT-Heart Rate in the HR-LOG Mode (see p. 20), the target heart rate ("TARGET") and the zone width ("ZONE") of the Target Zone function is automatically set to your AT-Heart Rate and "7", respectively.

To customize the Target Zone function to meet your needs, input desired the target heart rate ("TARGET") and the zone width ("ZONE") in the Function Setting Display of the HR-CHR Mode (see p. 17).

■ Indication of Current Heart Rate Level

● **The level of your heart rate is indicated by the heart shape and alphabets.**

Ex.): When the target heart rate ("TARGET") and the width above or below the target heart rate ("ZONE") are set to "149" and "7", respectively:

Heart Rate Zone	Level of Current Heart Rate	Zone Indication
"HI" Zone	Heart rate is above the target zone.	HI ▼180
"IN" Zone	Heart rate is within the target zone.	in ♥149
"LO" Zone	Heart rate is below the target zone.	LO ▬120

* The upper and lower limits of the "IN" Zone is "156" and "142", respectively. When the current heart rate measures "180", it is above the upper limit of the "IN" Zone, and "HI" is displayed, whereas "LO" is displayed when your heart rate is "120" as it is below the lower limit of the "IN" Zone.

* When neither the AT-Heart Rate nor the target heart rate ("TARGET") has been set, the Target Zone function will not work, and the zone indication will not be displayed.

ANOTHER FUNCTION OF HR-CHR MODE : INTERVAL TIMER FUNCTION

● It is a timer function suitable for interval, build-up and other types of training.

■ Interval Timer Function

The Interval Timer starts counting down the set time simultaneously with the start of the chronograph, and is reset and restarted repeatedly each time a lap time is measured. The time-up beep can serve as the guideline of the target lap time, and this timer is suitable for use during various training programs including interval training and build-up training.

For the details of the training method based on the target heart rate zone, please refer to the "Training Book."

● Turning ON/OFF of Interval Timer, and Setting of Countdown time

The Interval Timer can be turned ON and OFF in the Function Setting Display of the HR-CHR Mode (see p. 17).

If you intend not to use the Interval Timer, turn it OFF.

* *The countdown time set for the Interval Timer and those set for the timers in the TIMER Mode are independent of each other.*

● Operation Procedure

[1] Press Button "A" to start the chronograph. The Interval Timer starts counting down the set time simultaneously.

[2] When the Interval Timer has finished counting down the set time, the time-up beep sounds as the Interval Timer is stopped and reset.

[3] While the chronograph is measuring, the Interval Timer is reset and restarted simultaneously each time Button "E" is pressed to measure a lap time.

* *If Button "E" is pressed to measure a lap time before the Interval Timer finishes counting down the set time, the Interval Timer is restarted without giving out the time-up beep.*

[4] If Button "A" is pressed to stop the chronograph to interrupt measurement, the countdown of the Interval Timer is also interrupted, and is restarted simultaneously as the chronograph is restarted by pressing Button "A" again. The time-up beep rings when the Interval Timer finishes counting down the remaining portion of the set time.

[5] If Button "A" is pressed to stop the chronograph measurement, and then, Button "E" is pressed to reset the chronograph, the Interval Timer is also stopped and reset.
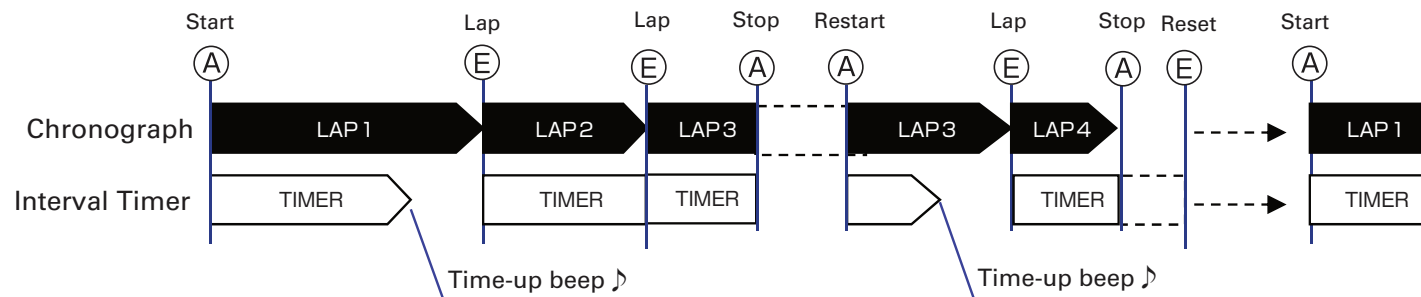
SETTING OF FUNCTIONS USED IN HR-CHR MODE

● Perform the setting for Auto-HRM, Target Zone and Interval Timer functions.

Button "B":
[Press for more than 2 seconds]
Activation of Function Setting Display

Button "B":
Returning to HR-CHR Mode

Button "A":
Increasing digits to be adjusted

Target heart rate

Button "C":
[Press for more than 2 seconds]
Returning display to TIME Mode

Button "C":
Turning on backlight

Button "D":
Decreasing digits to be adjusted

Button "E":
Selection of digits to be adjusted

*   The Function Setting Display will not be activated unless the Chronograph is reset.

■ Function Setting Procedure

[1] Keep Button "B" pressed for more than 2 seconds to activate the Function Setting Display. The target heart rate digits start flashing.

[2] Press Button "A" or "D" to set the flashing digits or turn ON or OFF the respective function.

*   If Button "A" or "D" is kept pressed for more than 2 seconds, the digits move quickly.

[3] Press Button "E" to select the digits or item to be adjusted (flashing).

[4] Repeat Steps **[2]** and **[3]** to perform the setting procedure in the order shown in the illustration below.

[5] After all the adjustment is completed, press Button "B" to return to the HR-CHR mode.

*   If the watch is left untouched in the Function Setting Display with the digits flashing, the display will automatically return to the HR-CHR mode in 2 to 3 minutes.

■ Auto-HRM Function Setting

When the Auto-HRM function is turned ON, by wearing the chest strap while the watch is in the HR-CHR Mode, the heart rate data is measured and transmitted to the watch, and displayed automatically. Do not turn OFF this function unless you decide to use the watch alone at all times.

■ Target Zone Function Setting

Set the target heart rate ("TARGET") and the zone width ("ZONE") above/below it. If you wish to use your AT-Heart Rate as the target heart rate, perform the setting procedure for calculation of AT-Heart Rate in the HR-LOG Mode (see p. 20). Then, "TARGET" is automatically set to your AT-Heart Rate. In that case, set the zone width alone here.

*   Target heart rate ("TARGET")
    Setting range: 100 ~ 220
    Initial setting: AT-Heart Rate if it has been set in HR-LOG Mode, and otherwise "- - - -"

*   Zone width ("ZONE")
    Setting range: 1 ~ 30
    Initial setting: "7"

■ Interval Timer Function Setting

Turn ON/OFF the Interval Timer, and set the Seconds, Minute and Hour of the countdown time.
Setting range: From 10 seconds up to 99 hours 59 minutes and 59 seconds
Initial setting: "ON", and "3'00" (3 minutes)

Function Setting Display

HR-CHR Mode

Interval Timer Function Setting

Press for more than 2 seconds

Target heart rate — Zone width — Turning ON/OFF of Auto-HRM function — Turning ON/OFF — Seconds — Minute — Hour
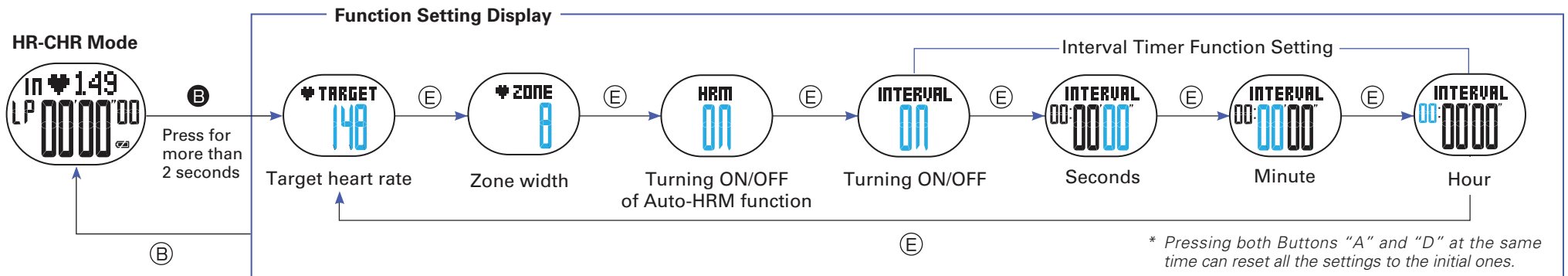
*   Pressing both Buttons "A" and "D" at the same time can reset all the settings to the initial ones.

GRAPHIC DISPLAY OF HEART RATE DATA

● Transition of heart rate during the latest run is displayed graphically from start to finish.

* When the HR-GRAPH Mode appears, "HR-GRAPH" is shown in the upper row of the display for 1 second, and then, the heart rate graph appears.

Button "C":
[Press for more than 2 seconds]
Returning display to TIME Mode

Button "C":
Turning on backlight

Button "B":
Mode change

Button "A":
[Press for more than 2 seconds]
Moving back detailed graph quickly

Button "A":
Moving back detailed graph

Button "D":
[Press for more than 2 seconds]
Advancing detailed graph quickly

Button "D":
Advancing detailed graph

Button "E":
Returning to graph display

Total time

HR-GRAPH

* When no heart rate data is stored in memory, "- - - -" is displayed.

CHR in USE

* When the Chronograph is in use, "CHR in USE" is displayed.

* The data for the heart rate graph is updated each time a new chronograph measurement is made. Even when the measurement is made with the watch alone without wearing the chest strap, the data for the graph is updated, and "- - - -" is displayed.

■ Structure of Heart Rate Graph (Ex.: Interval Training)

Heart rate

Time

Start

Finish

Fast | Slow | Fast | Slow | Fast | Slow
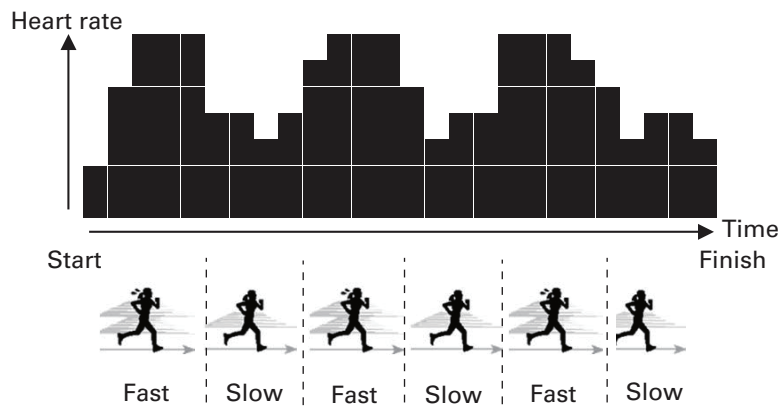
■ Detailed Data Display

The heart rate at each time point along the horizontal axis of the heart rate graph is displayed numerically together with the time elapsed to that point.

[1] Press Button "D". The leftmost bar of the heart rate graph starts flashing, and the corresponding heart rate is shown numerically to the right of the graph. The time elapsed to that time point is displayed in the lower row.

[2] With each press of Button "D", the flashing portion advances to the right, and the heart rate and the elapsed time at each time point are displayed. To move back the flashing portion, press Button "A."

* If Button "A" or "D" is kept pressed for more than 2 seconds, the flashing portion moves quickly.

[3] Press Button "E" to return to the heart rate graph display with total time.

Advancing flashing portion

Heart rate

Total time

Moving back flashing portion

Elapsed time

Detailed Data Display
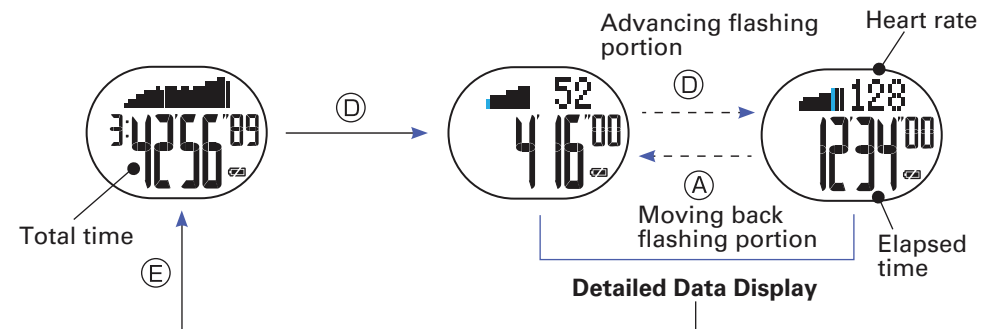
● Sampling Interval of Detailed Data

The interval of sampling the detailed data is adjusted automatically according to the total time measured in the run as follows:

Total time measured	Sampling interval
15 minutes or so	16 seconds
30 minutes or so	32 seconds
1 hour or so	64 seconds
2 hours or so	128 seconds
4 hours or so	256 seconds
9 hours or so	512 seconds

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TO CHECK LOG DATA

● The data measured and stored in the HR-CHR Mode can be checked in the HR-LOG Mode. The log data is displayed on a run-by-run basis.

* When the HR-LOG Mode appears, "HR-LOG" is shown in the upper row of the display for 1 second, and then, the latest log data is displayed.

Year, month and date of measurement

Button "B":
Mode change

Button "A":
Selection of run
(from new to old data)

Total time

* *When no log data is stored in memory, "- - - -" is displayed.*

Button "C":
[Press for more than 2 seconds]
Returning display to TIME Mode

Button "C":
Turning on backlight

Button "D":
Selection of run
(from old to new data)

Button "E":
Displaying each log data
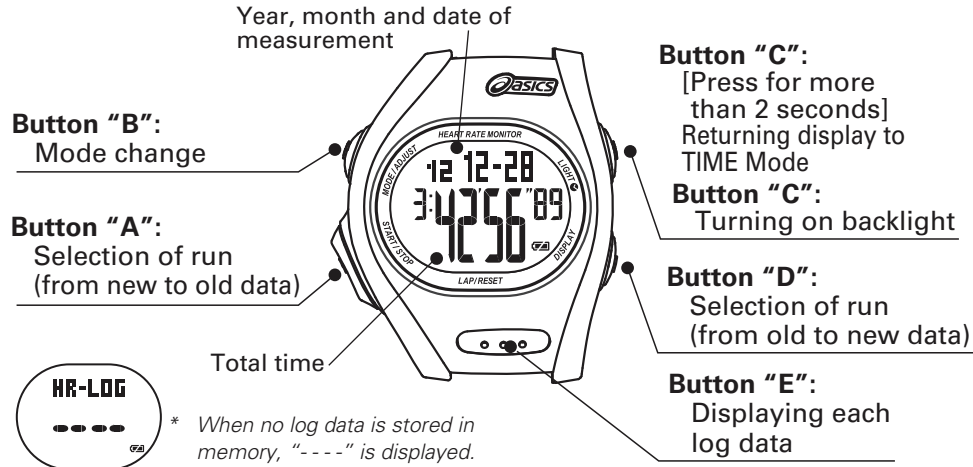
■ Selection of Run

The log data is stored run by run.
While checking "Year, month and date of measurement" shown in the upper row of the display, press Button "A" or "D" to select the run whose log data you wish to check.

Year, month and date of measurement

The newest run data   Previous run data   The oldest run data
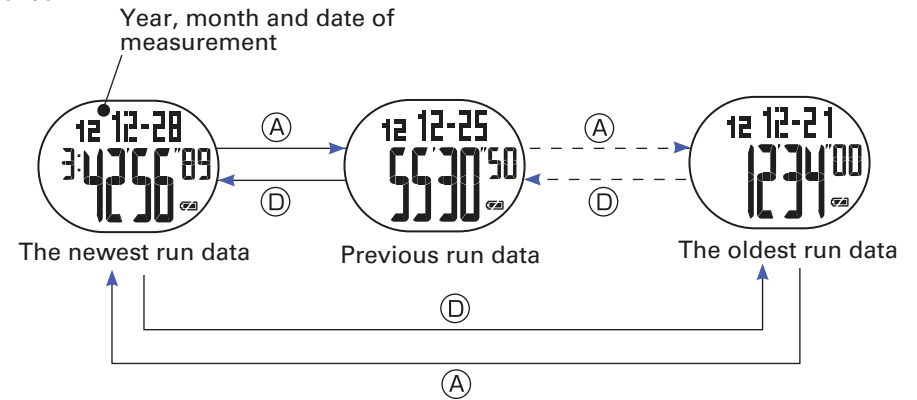
■ Log Data Display

[1] Press Button "A" or "D" to select the run whose log data you wish to check.

[2] With each press of Button "E", the log data is displayed in the following order:

● **Measurement with Watch & Chest Strap**

Upper : Year, month and date of measurement
Lower : Total time

Upper : Lap No.⇔ Average/maximum heart rate of the lap
Lower : Lap time

Upper : Final lap No.⇔ Average/maximum heart rate of the lap
Lower : Lap time

Upper : "BEST"⇔ Lap No.
Lower : Best lap time

Upper : "AVERAGE"
Lower : Average lap time

Upper : "AVERAGE"
Lower : Average heart rate

Upper : "MAX"
Lower : Maximum heart rate

● **Measurement with Watch Alone**

Upper : Year, month and date of measurement
Lower : Total time

Upper : Lap No.⇔Split time
Lower : Lap time

Upper : Final lap No.⇔ Total time
Lower : Lap time

Upper : "BEST"⇔ Lap No.
Lower : Best lap time

Upper : "AVERAGE"
Lower : Average lap time

Upper : "AVERAGE"
Lower : "- - - -"

Upper : "MAX"
Lower : "- - - -"

19

SETTING FOR AT-HEART RATE (AT-HR)CALCULATION / AT-HR DISPLAY

● Input data for AT-HR calculation using the algorithm developed by ASICS.   By updating the data, your latest AT-HR can be used for your training.

Button "B":
[Press for more than 2 seconds] Displaying average heart rate

Button "B":
Mode change

Button "A":
· Selection of run (from new to old data)
· Increasing digits to be adjusted

Year, month and date of measurement

Total time

Button "C":
[Press for more than 2 seconds] Returning display to TIME Mode

Button "C":
Turning on backlight

Button "D":
· Selection of run (from old to new data)
· Decreasing digits to be adjusted

Button "E":
[Press for more than 1 second] Displaying AT-HR and AT-Pace

Button "E":
Selection of setting item

■ AT-HR Setting Procedure

From the log data, select run data obtained by running a usual distance at a usual pace. Then, activate the setting display for AT-HR calculation, and input the distance of that run, your gender, and your best time for 5 or 10 km run.

[1]   Press Button "A" or "D" to select the run data you wish to use for AT-HR setting.

[2]   Keep Button "E" pressed for more than 1 second to show the current AT-HR and AT-Pace.

[3]   Keep Button "B" pressed for more than 2 seconds to activate the setting display for AT-HR calculation. The average heart rate of the selected run is shown.

[4]   Press Button "E" to show each setting item, and press Button "A" or "D" to input the required data.

 * If Button "A" or "D" is kept pressed for more than 2 seconds, the digits move quickly.
 * "UNIT" and "DISTANCE" refer to the distance of the run selected from the log data and the unit thereof. Refer to the map or other sources, and input as accurate a distance as possible.
 * Setting range of running distance : 1.0 ~ 20.0 km (mile) (initial setting: 1.0 km [mile])
 * Setting range of best time : 0 ~ 2 hours 59 minutes and 59 seconds

[5]   After the input of the best time is completed, press Button "E".

[6]   If the input is made properly, new AT-HR and AT-Pace calculated based on the input data are displayed with a success beep.

 * If any inappropriate data is input, "INVALID" is displayed with error beep. Press Button "E" to return to the display of the selected run.

[7]   By pressing Button "E", "UPDATE?" appears, and then, the display to confirm whether or not to update the AT data is shown in 1 second. Press Button "A" or "D" to select "YES" or "no".

[8]   Press Button "E" to complete the AT-HR setting procedure, and the display returns to the TIME Mode.

Press Button "A" or "D" to select desired run data.

Press for more than 1 second.

Ⓔ

Ⓔ

INVALID

Error beep ♪

AT-HR / AT-Pace

AT HR **136** ⟷ AT PACE **528**   Displayed alternately

* Initial display
AT HR **----** ⟷ AT PACE **----**

Ⓑ Press for more than 2 seconds.

AT-HR Setting Procedure

♥AVERAGE **148** → UNIT **KM** → DST KM **1.0**
Average heart rate   Distance unit (km or mile)   Distance run

DISTANCE

5km **25'30"** ← 5km **05'30"** ← 5km **00'00"** ← 5km **00'00"**
Hour   Minute   Seconds   Gender/Distance (Select from below)

BEST TIME

Best time setting

♂ 5km   ♀ 10km
♂ 10km   ♀ 5km

Success beep ♪

New AT-HR/AT-Pace

AT HR **133** ⟷ AT PACE **534**   Displayed alternately

Ⓔ UPDATE? ····▷ In 1 second YES Ⓔ WED 28 A **10:08** 58
Confirmation of whether or not to update   TIME Mode
* Select "YES" or "no".

* When the AT-HR is updated, the target heart rate ("TARGET") set in the HR-CHR Mode is changed to the new AT-HR, and the zone width ("ZONE") returns to the initial setting "7". Also, the running data for 5/10 km input in the GOAL TIME Mode is changed to the "BEST TIME" input in the AT-HR setting procedure above, and accordingly, the estimated marathon finish time is renewed.

TO DELETE LOG DATA

● By deleting the unnecessary log data stored in memory, the number of storable data can be increased.

■ Log Data Deletion Procedure

The log data can be deleted either run by run or entirely.

● To delete log data of a selected run:

[1]   Checking the "Year, month and date of measurement" shown in the upper row of the display, press Button "A" or "D" to select the run you wish to delete.
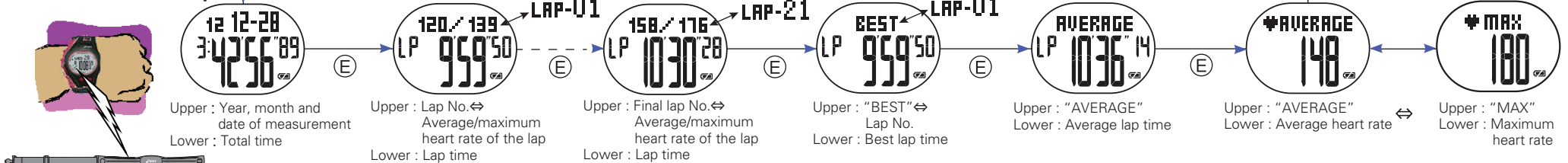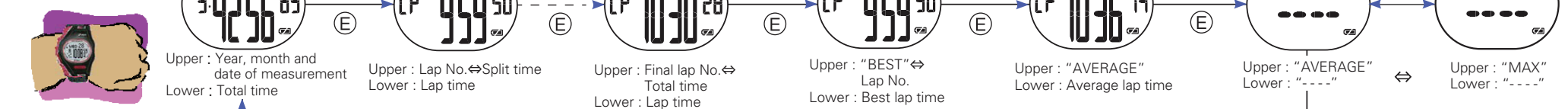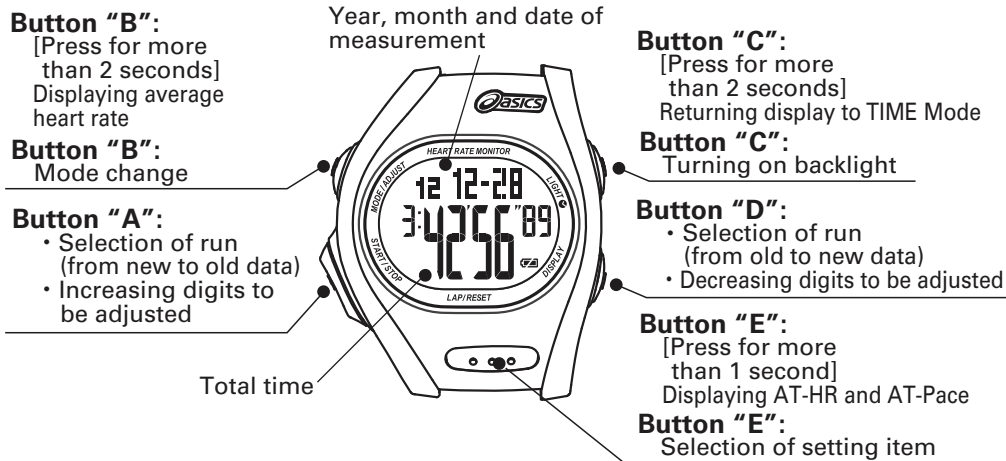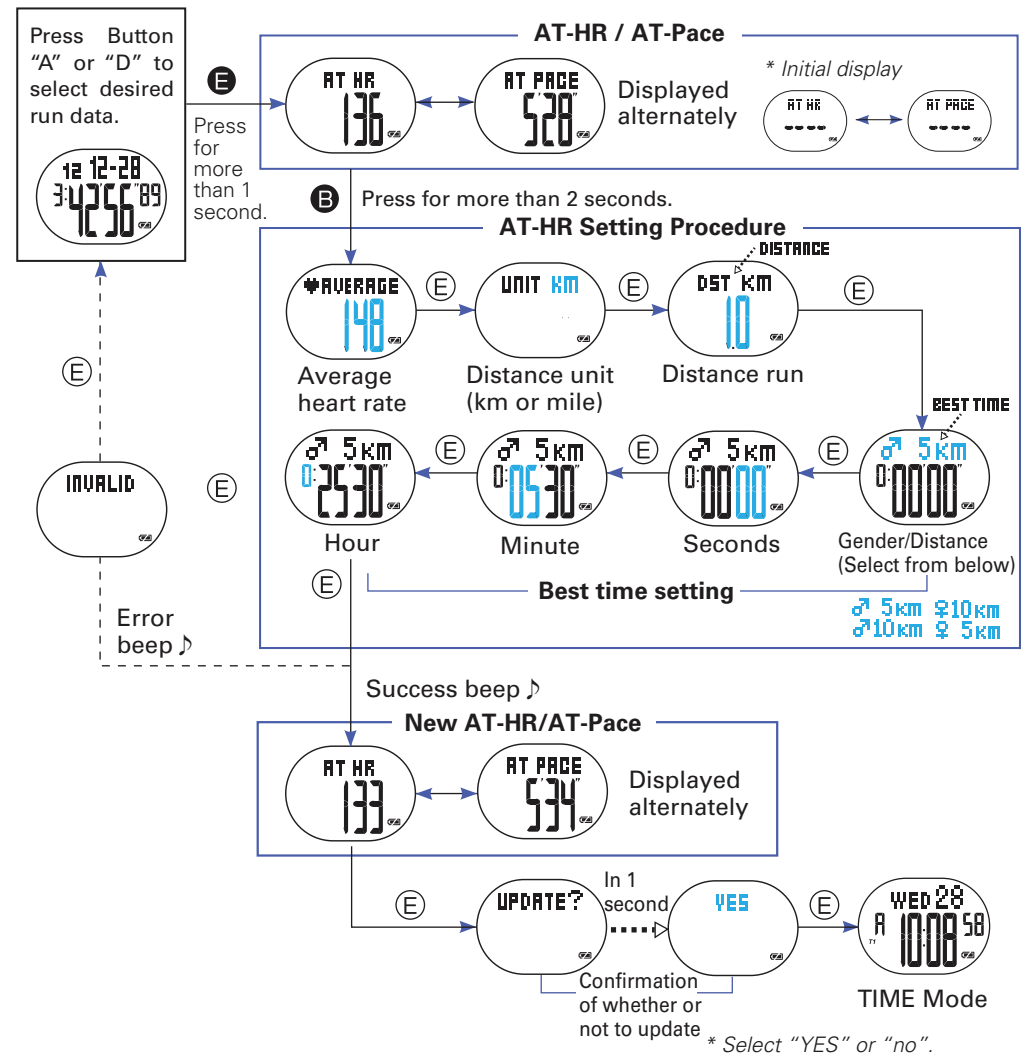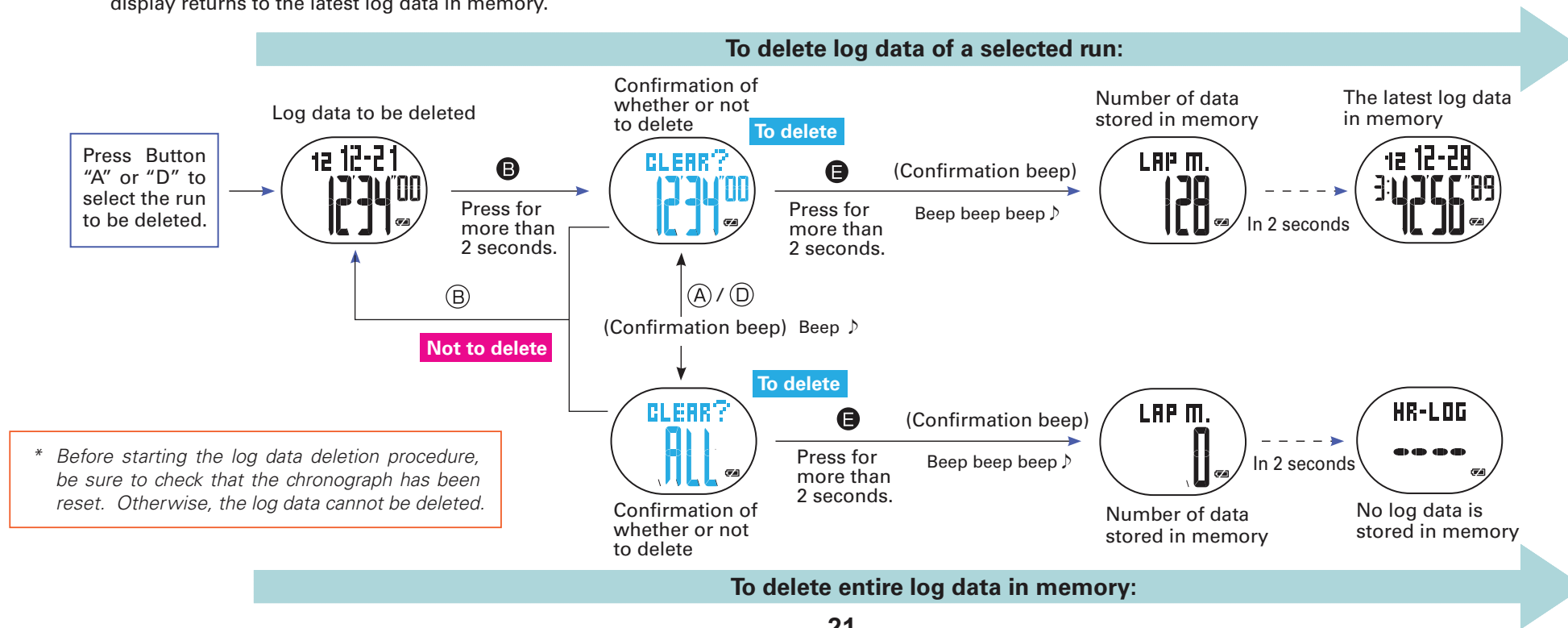
[2]   Keep Button "B" pressed for more than 2 seconds. Flashing "CLEAR?" appears to confirm whether or not to delete the data.

[3]   To cancel the deletion procedure, press button "B". The data remains undeleted, and the display returns to the selected run data.

[4]   To delete the log data of the selected run, keep button "E" pressed for more than 2 seconds.

[5]   The confirmation beep sounds as the data of the selected run is deleted. Then, the current number of data stored in memory is shown, and in 2 seconds, the display returns to the latest log data in memory.

● To delete entire log data in memory:

[1]   Keep Button "B" pressed for more than 2 seconds in the HR-LOG Mode. Flashing "CLEAR?" appears.

[2]   Press Button "A" or "D" to show the display to delete the entire log data. Flashing "CLEAR? ALL" is displayed.

[3]   To cancel the deletion procedure, press button "B". The data remains undeleted, and the display returns to the run data initially displayed.

[4]   To delete the entire log data, keep button "E" pressed for more than 2 seconds.

[5]   The confirmation beep sounds as the entire log data is deleted. Then, "0" is shown as the current number of data in memory, and in 2 seconds, the display indicating that no log data is stored in memory appears.

To delete log data of a selected run:

Log data to be deleted

Confirmation of whether or not to delete

To delete

Number of data stored in memory

The latest log data in memory

Press Button "A" or "D" to select the run to be deleted.

B
Press for more than 2 seconds.

CLEAR?
1234"00

E   (Confirmation beep)
Press for more than 2 seconds.

Beep beep beep ♪

LAP m.
128

In 2 seconds

12 12-28
3:4256"89

Ⓑ

Ⓐ / Ⓓ
(Confirmation beep) Beep ♪

Not to delete

To delete

CLEAR?
ALL

E   (Confirmation beep)
Press for more than 2 seconds.

Beep beep beep ♪

LAP m.
0

In 2 seconds

HR-LOG
■■■■

Confirmation of whether or not to delete

Number of data stored in memory

No log data is stored in memory

*   Before starting the log data deletion procedure, be sure to check that the chronograph has been reset. Otherwise, the log data cannot be deleted.
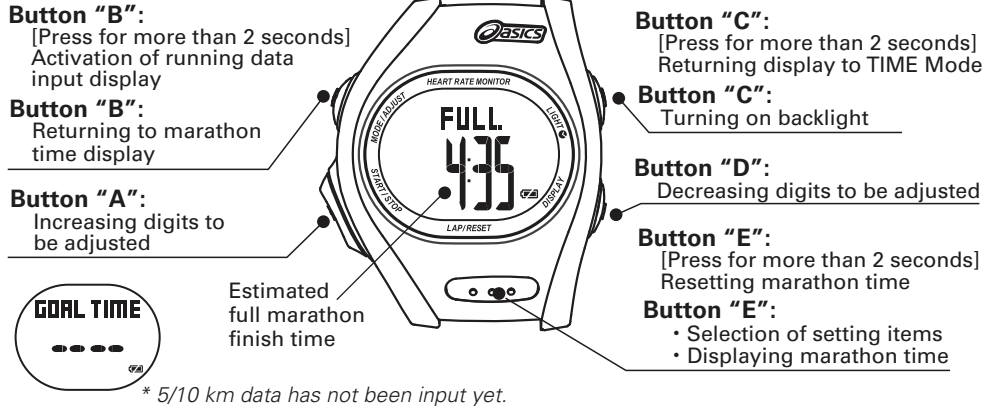
To delete entire log data in memory:

TO ESTIMATE YOUR MARATHON FINISH TIME

● By inputting the running time for 5 or 10 km, the watch estimates your finish times for a half and full marathon using the algorithm developed by ASICS.

* When the GOAL TIME Mode appears, "GOAL TIME" is shown in the upper row of the display for 1 second, and then, the marathon finish time is displayed.

Button "B":
[Press for more than 2 seconds] Activation of running data input display

Button "B":
Returning to marathon time display

Button "A":
Increasing digits to be adjusted

Estimated full marathon finish time

* 5/10 km data has not been input yet.

Button "C":
[Press for more than 2 seconds] Returning display to TIME Mode

Button "C":
Turning on backlight

Button "D":
Decreasing digits to be adjusted

Button "E":
[Press for more than 2 seconds] Resetting marathon time

Button "E":
· Selection of setting items
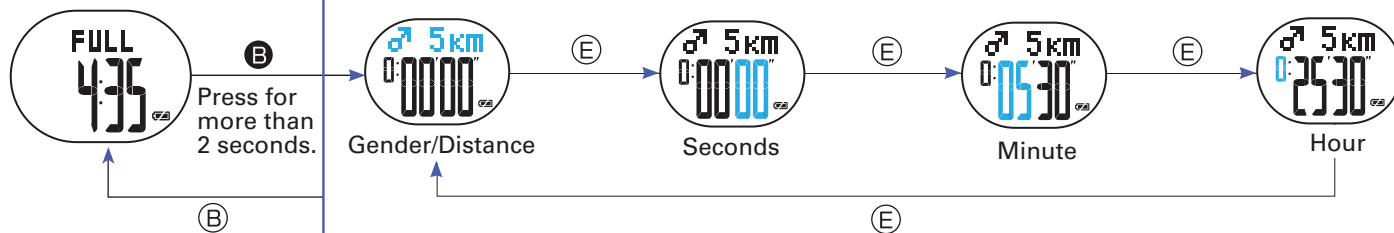· Displaying marathon time

■ Input of Running Data for 5/10 km

Input your running time for 5 or 10 km to estimate your marathon time.

[1] Keep Button "B" pressed for more than 2 seconds to show the display to input running data for 5/10 km. The gender and distance start flashing.

[2] Press Button "A" or "D" to set the flashing digits.

* If Button "A" or "D" is kept pressed for more than 2 seconds, the digits move quickly.

[3] Press Button "E" to show the next digits to be adjusted (flashing).

[4] Repeat Steps [2] and [3] to input the data in the order shown in the illustration below.

[5] After input of all the items are completed, press Button "B" to return to the marathon time display.

* If the watch is left untouched in the display to input data with the digits flashing, the display will automatically return to the marathon time display in 2 to 3 minutes.

■ Marathon Time Display

By inputting the running time for 5 or 10 km, the estimated finish times for a half and full marathon are displayed.

* If the AT-HR data is input in the HR-LOG Mode, the marathon time is estimated based on the "BEST TIME" data even if the running time for 5/10 km is not set (see P. 20).

● With each press of Button "E", the estimated finish times and the input data are displayed in the following order:

Estimated finish time for a full marathon — Estimated finish time for a half marathon — Running data input
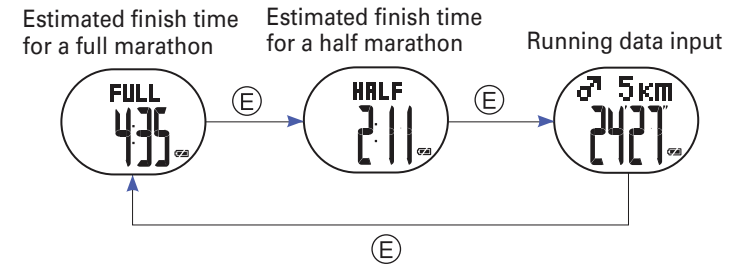
■ To Reset Marathon Time

● By keeping Button "E" for more than 2 seconds in any of the marathon time displays, "RESET" is displayed, and the estimated times and the input data will be reset with confirmation beep.

Confirmation beep

Press for more than 2 seconds.

Beep ♪

Marathon Time Display — **Display to input running data for 5/10 km**

Press for more than 2 seconds.

Gender/Distance — Seconds — Minute — Hour

* Select gender/distance from the pairs below.

♂ 5km ♀10km
♂10km ♀ 5km

* Setting range of running time: 0 ~ 1 hour, 59 minutes and 59 seconds
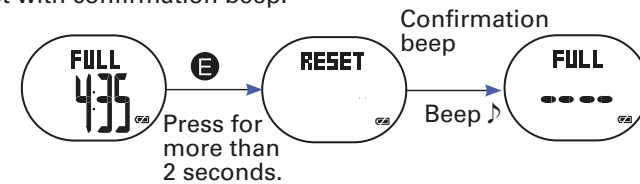
TO SET AND USE "DOUBLE REPEAT TIMER"

● Two timers repeat counting down the respective set times alternately as many times as necessary.

* When the TIMER Mode appears, "TIMER" is shown in the upper row of the display for 1 second, and then, the Timer Display appears.

[TIMER-2]

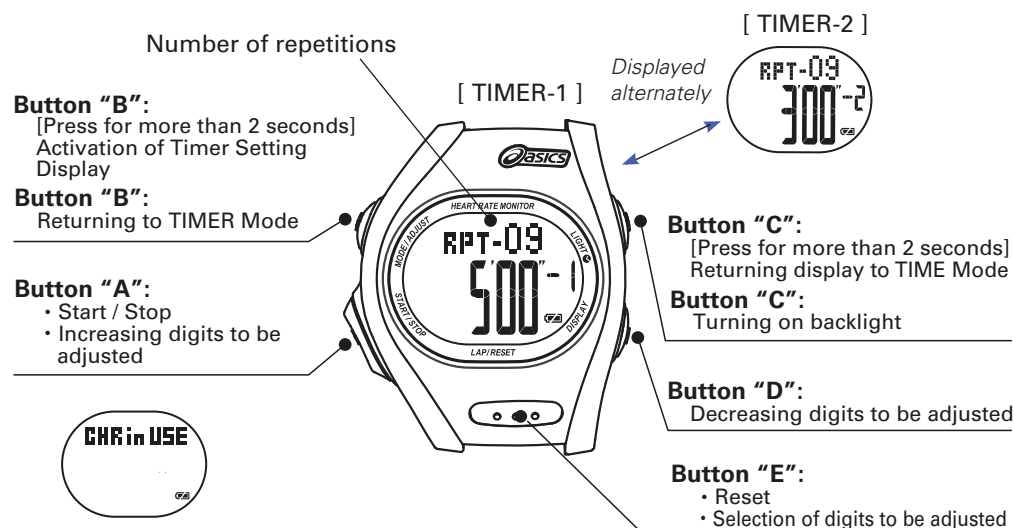Number of repetitions

Displayed alternately

[TIMER-1]

Button "B":
[Press for more than 2 seconds]
Activation of Timer Setting
Display

Button "B":
Returning to TIMER Mode

Button "A":
· Start / Stop
· Increasing digits to be adjusted

Button "C":
[Press for more than 2 seconds]
Returning display to TIME Mode

Button "C":
Turning on backlight

Button "D":
Decreasing digits to be adjusted

Button "E":
· Reset
· Selection of digits to be adjusted

CHR in USE

* While the Interval Timer function is in use, "CHR in USE" is displayed, and the TIMER function cannot be used.

■ Timer Setting Procedure

[1] Keep Button "B" pressed for more than 2 seconds in the TIMER Mode. The Timer Setting Display appears, and the digits of the number of repetitions start flashing.

* Unless the timer has been reset, the Timer Setting Display will not appear. For the method of resetting the timer, see "To Start, Stop and Reset Timer" below.

[2] Press Button "A" or "D" to set the flashing digits.
* If Button "A" or "D" is kept pressed for more than 2 seconds, the digits move quickly.
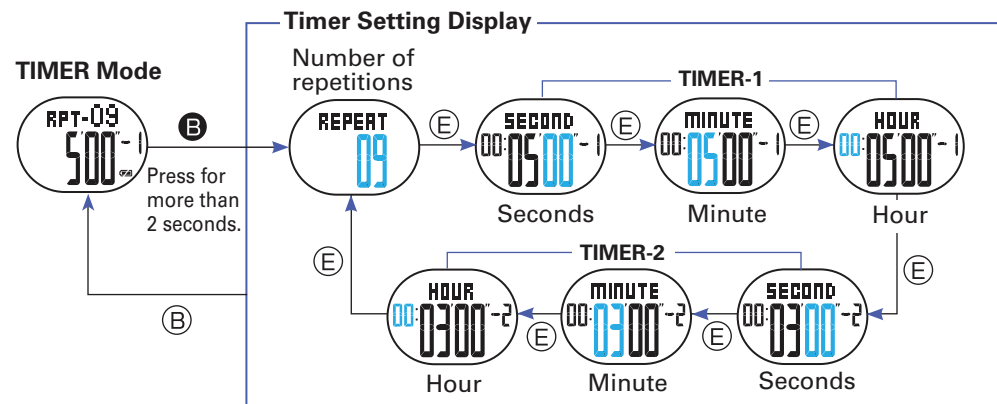
[3] Press Button "E" to show the next digits to be adjusted (flashing).

[4] Repeat Steps **[2]** and **[3]** to set the digits in the order shown in the illustration at right.

[5] After all the adjustments are completed, press Button "B" to return to the TIMER Mode. All the settings are registered in memory.

* If the watch is left untouched in the Timer Setting Display with the digits flashing, the display will automatically return to the TIMER Mode in 2 to 3 minutes.
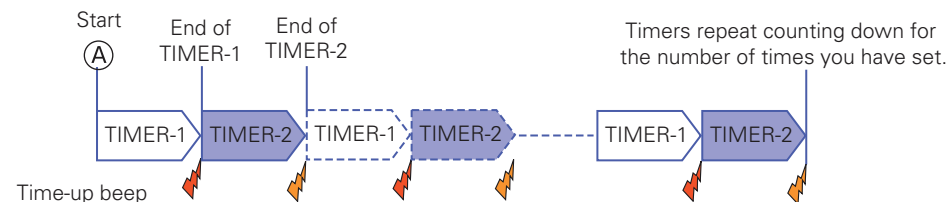
· From 10 seconds up to 99 hours 59 minutes and 59 seconds can be set for each timer.

· By setting "00:00'00''" for TIMER-2, TIMER-1 can be used alone as an independent timer.

TIMER Mode

Press for more than 2 seconds.

Timer Setting Display

Number of repetitions

REPEAT

TIMER-1

Seconds   Minute   Hour

TIMER-2

Hour   Minute   Seconds

■ To Start, Stop and Reset Timer

1. Timer operation

· Press Button "A" to start TIMER-1. The flashing Timer mark " ⬮ " is shown while the timer is counting down.

· When TIMER-1 has finished counting down the set time, TIMER-2 starts countdown. If "2" or more is set for the number of repetitions, both timers repeat counting down the respective set times alternately for the number of times you have set.

· The time-up warning beep starts beeping 3 seconds before each timer finishes counting down, and the time-up beep sounds for 3 seconds when the respective set times are up.

· The time-up beeps for TIMER-1 and TIMER-2 sound differently from each other.

· To stop the time-up beep, press any of the buttons.

· When both timers have finished counting down the respective set times for the set number of times, they are automatically reset.

Start   End of TIMER-1   End of TIMER-2   Timers repeat counting down for the number of times you have set.

Ⓐ

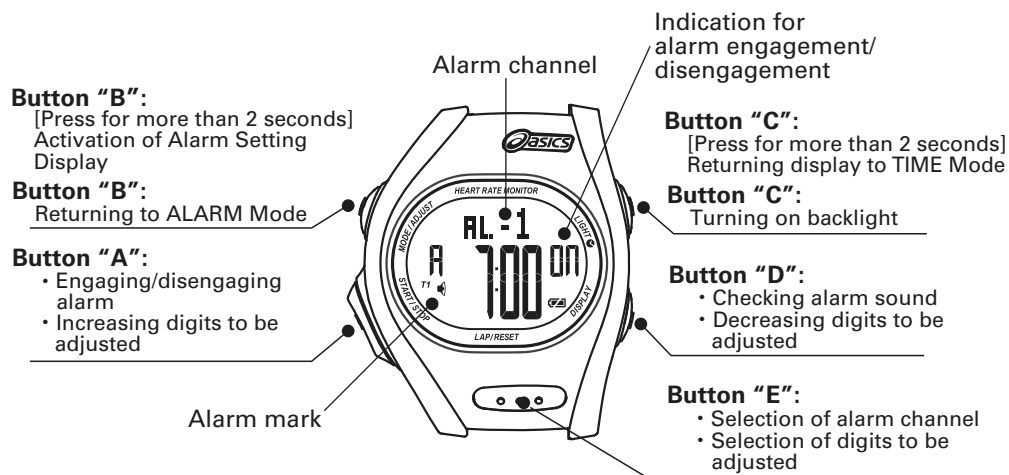TIMER-1   TIMER-2   TIMER-1   TIMER-2   TIMER-1   TIMER-2

Time-up beep

2. To stop timer during countdown

· Press Button "A" to stop the timer. The Timer mark stops flashing.
* When the time-up beep is sounding, press any of the buttons to stop it, and then, press Button "A" to stop the timer.

· To restart the countdown, press Button "A".

· By pressing Button "A" while the timer is stopped, it will be reset.

23

TO SET AND USE "3-CHANNEL ALARM"

● The alarm can be set to ring at three different times of a day. The time zone can also be selected from those set in the TIME Mode.
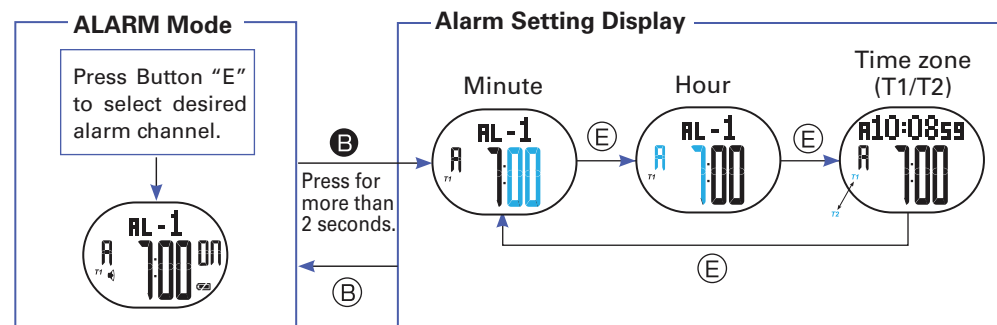
* When the ALARM Mode appears, "ALARM" is shown in the upper row of the display for 1 second, and then, the Alarm Display appears.

Alarm channel

Indication for alarm engagement/ disengagement

Button "B":
[Press for more than 2 seconds]
Activation of Alarm Setting Display

Button "B":
Returning to ALARM Mode

Button "A":
・Engaging/disengaging alarm
・Increasing digits to be adjusted

Alarm mark

Button "C":
[Press for more than 2 seconds]
Returning display to TIME Mode

Button "C":
Turning on backlight

Button "D":
・Checking alarm sound
・Decreasing digits to be adjusted

Button "E":
・Selection of alarm channel
・Selection of digits to be adjusted

■ Alarm Time Setting

[1] Press Button "E" in the ALARM Mode to select the desired alarm channel.

[2] Keep Button "B" pressed for more than 2 seconds to activate the Alarm Setting Display. The minute digits of the alarm time start flashing.

[3] Press Button "A" or "D" to set the flashing digits.
   * If Button "A" or "D" is kept pressed for more than 2 seconds, the digits move quickly.

[4] Press Button "E" to show the next digits to be adjusted (flashing).

[5] Repeat Steps [3] and [4] to set the digits in the order shown in the illustration at right.

[6] After all the adjustments are completed, press Button "B" to return to the ALARM Mode. The alarm is automatically engaged, and the Alarm mark " 🔊 " is shown.
   * If the watch is left untouched in the Alarm Setting Display with the digits flashing, the display will automatically return to the ALARM Mode in 2 to 3 minutes.

* Please note that the alarm rings according to the current time of the time zone you have selected (T1 or T2).

ALARM Mode

Press Button "E" to select desired alarm channel.

Ⓑ Press for more than 2 seconds.

Ⓑ

Alarm Setting Display

Minute   Hour   Time zone (T1/T2)

Ⓔ   Ⓔ

Ⓔ

■ Selection of Alarm Channel

・With each press of Button "E", the alarm channel changes over in the following order.
・The alarm sounds differently from channel to channel.
・The alarm sound can be checked by pressing Button "D".

AL-1 Ⓔ→ AL-2 Ⓔ→ AL-3

Ⓔ
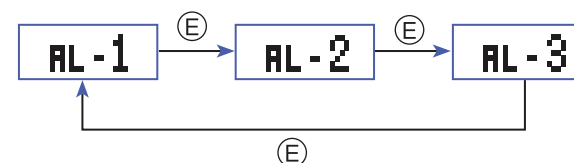
■ Engagement/Disengagement of Alarm

・With each press of Button "A", the alarm is engaged and disengaged alternately. The Alarm mark " 🔊 " is shown when the alarm is engaged.
・The alarm can be engaged or disengaged channel by channel.
・The Alarm mark is shown if alarm is engaged in any one of the alarm channels.

Ⓐ

Alarm mark   [Alarm engaged]   [Alarm disengaged]
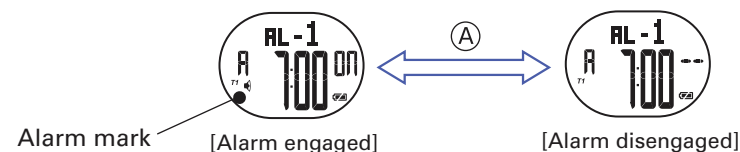
■ To Stop Alarm

・The alarm rings for 20 seconds at the designated time.
・To stop the alarm, press any of the buttons.

SPECIFICATIONS

● Product Specifications

	Watch	Chest Strap
Frequency of crystal oscillator	32,768 Hz	Not applicable
Accuracy	Monthly rate: ±30 seconds (At temperature range between 5 °C and 35 °C; when worn on the wrist)	Measurement accuracy of heart rate: ±1% or ±1 bpm, whichever is greater (during rest)
Operational temperature range	-5 °C ~ +50 °C 0 °C ~ +50 °C for display function	-5 °C ~ +50 °C
Battery	Lithium battery (CR2025)	Lithium battery (CR2032)
Battery life	Approximately 2 years (The above battery life varies depending on the use frequency of each function.)	Approx. 900 hours
Water resistance	5-bar water resistant	3-bar water resistant
Materials	Case: Plastic Case back: Stainless Band: Polyurethane	Sensor unit: Polyurethane Sensor electrode: Silicone rubber with carbon piece Rubber strap: Elastic cloth

Measurement range	[CHRONOGRAPH function]
	  Measurement unit:
	    1/100 seconds
	  Maximum measurable time:
	    99 hours, 59 minutes and 59 seconds 99
	  Maximum storable number of data:
	    300
		[Heart rate measurement range]
		  30 ～ 220 bpm

● Function Specifications

TIME Mode	Dual time: Selection of time zone from T1 and T2 Time/calendar setting: Time/calendar setting, 0-resetting of seconds, changeover between 12- and 24-hour systems, changeover of display format between "day of the week - date" and "month - date", and setting of unit, gender, and "ECO", contrast adjustment and auto-backlight functions
HR-CHR Mode	TARGET: 100 ~ 220 bpm ZONE: 1 ~ 30 Auto-HRM function: ON/OFF setting Interval Timer function: ON/OFF setting, and timer setting (10 seconds ~ 99 hours, 59 minutes and 59 seconds)

HR-LOG Mode	[Log Data Display]
	① Year, month and date of measurement, and total measurement time
	② Lap No., lap time, average heart rate of a lap, and maximum heart rate of a lap
	   When the watch is used alone:
	   Lap No., lap time, and split time
	③ Best lap time, and lap No.
	④ Average lap time
	⑤ Average heart rate, and maximum heart rate
	[AT-Heart Rate setting]
	 ・Unit setting: "km" or "mi."(mile)
	 ・Distance setting: 1.0 ~ 20.0 km (to the first decimal place)
	 ・Best time setting: Gender (male or female) and distance (5 or 10 km)
	   Maximum settable time: 2 hours 59 minutes and 59 seconds

HR-GRAPH Mode	Up to 64 data can be displayed. Sampling interval of detailed data is automatically adjusted according to the total measurement time.
GOAL TIME Mode	Estimated finish time: Full and half marathon Input of running time: Gender (male or female) and distance (5 or 10 km) Maximum settable time: 1 hour 59 minutes and 59 seconds
TIMER function	TIMER-1: 10 seconds ~ 99 hours, 59 minutes and 59 seconds TIMER-2: 10 seconds ~ 99 hours, 59 minutes and 59 seconds Number of repetitions: 1 ~ 99 Warning beep: sounds for 3 seconds Time-up beep: sounds for 3 seconds Time-up beeps for TIMER-1 and TIMER-2 sound differently from each other.
ALARM function	Daily alarm; can be set for either of the two time zones (T1 and T2) 3-channel alarm (can be engaged/disengaged independently of one another) Alarm sounds at the designated time for 20 seconds. Alarm sounds differently from channel to channel.

TROUBLESHOOTING GUIDE

■ For Watch Functions in General

Problem	Possible Cause	Remedy	Refer to
The display has become blank.	The battery has run down.	Request the retailer from whom the watch was purchased to replace the battery with a new one immediately.	— —
The watch gains or loses time temporarily.	The watch was left in a cold or hot place.	The accuracy will be recovered when the watch returns to the normal temperature. Set the correct time before use.	P. 6
The blur on the glass persists.	Water got inside the watch due to deterioration of the gasket or other reasons.	Consult the retailer from whom the watch was purchased.	— —
The timer does not repeat countdown.	The number of repetitions is set to "1" in the Timer Setting Display.	Set the number of repetitions as desired in the Timer Setting Display.	P. 23
The alarm will not ring at the designated time.	A wrong time zone was selected in the Alarm Setting Display.	Activate the Alarm Setting Display to check if the time zone is set correctly.	P. 24
	The alarm is not engaged for the alarm channel for which the alarm time is set.	Select the alarm channel for which you set the alarm in the ALARM Mode, and engage the alarm.	P. 24
	The battery may near its end.	Check the battery life indicator. If it indicates that the battery nears its end, request the retailer from whom the watch was purchased to replace the battery with a new one immediately.	P. 8
The warning and time-up beeps will not sound.	The battery may near its end.	Check the battery life indicator. If it indicates that the battery nears its end, request the retailer from whom the watch was purchased to replace the battery with a new one immediately.	P. 8
The backlight will not light up.			
The LCD display has become dim and difficult to read.	The brightness of the LCD display may decrease after 7 years of use.	The parts replacement is made at cost. If you wish to have an old part replaced with a new one, request the retailer from whom the watch was purchased.	— —
The backlight has become dim.	The brightness of the backlight decreases gradually with use.		

■ For Heart Rate Measurement

Problem	Possible Cause	Remedy	Refer to
The heart rate data is not displayed though you are wearing the chest strap.	The battery for the sensor unit of the chest strap has run down.	Request the retailer from whom the watch was purchased to replace the battery with a new one immediately.	— —
	The Auto-HRM function is turned OFF.	Turn ON the Auto-HRM function in the Function Setting Display of the HR-CHR Mode.	P. 17
The heart rate data is displayed, but the solid heart shape does not appear.	Noise emitted from an adjacent device is interfering with the measurement.	Check that there is no electronic device that emits radio wave near you, such as television and mobile phone.	P. 14
	The chest strap is not attached to your chest securely.	Adjust the length of the chest strap, and wear it properly as instructed in this manual.	P. 13
	An irregular heartbeat was detected.	Consult a doctor.	— —
Abnormal heart rate is displayed.	When strong radio waves are detected, abnormal heart rate may be displayed. Such strong radio waves are emitted from high-voltage cable, signal, engines of train, bus and automobile, cycle computer, motor-driven exercise machine, mobile phone, and so on.	Move away from the possible source of radio wave emission.	P. 14
	The electrode portions of the chest strap are cold and dry. You have not warmed yourself up sufficiently.	Warm yourself up until you feel warm. If the weather is dry, moisten the electrode portions of the chest strap.	P. 13
	You may have an irregular heartbeat.	Check your pulse rate. As a precaution, undergo a diagnosis by a doctor.	— —
The graph previously shown in the HR-GRAPH Mode was deleted.	You made a new chronograph measurement, and new log data was stored in memory.	HR-GRAPH displays only the latest log data graphically. Each time a new measurement is made to store new data, the graph is updated automatically.	— —

DEFINITION OF TERMS/INDICATION OF MARKS

■ Definition of Terms

AT
Anaerobic Threshold: It refers to the point at which your body transitions from aerobic to anaerobic exercise. It not only serves as a guideline for a marathon pace, but also provides a measure to control exercise intensity during training, thus enhancing its efficiency.

Heart rate
The number of times the heart beats per minute.

AT-Heart Rate (HR)
Heart rate obtained during exercise having intensity around the AT.

AT-Pace
Running speed when you run with an intensity around the AT. The watch expresses AT-Pace as the time required to run 1 km.

Target Zone Function
A function that indicates, in real time, whether your heart rate is above, within or below the target zone.

CHR (Chronograph)
Synonym for stopwatch function. The watch can measure in 1/100 second increments.

Lap time
Time required to run any given section of the entire distance (such as the Time required to run a circuit in a track race).

Split time
Time required to run from the start to any given point of the entire distance.

Total time
Entire time to run from start to finish.

Run
A running attempt measured by the chronograph from when it is started until it is finally stopped and reset.

Log data
Running data measured and stored in memory in HR-CHR Mode.

LAP memory (L/m：)
The number of measurement data accumulated in memory.

Chest strap
Worn on your chest below the breast, it measures the cardiac potential, and transmits the heart rate data to the watch. It consists of a sensor unit and a rubber strap that makes it possible to wear it securely on your chest.

Auto-HRM function
A function to automatically display the heart rate data transmitted by the chest strap as soon as the watch receives it.

Measurement condition checking function
It graphically indicates the measurement condition of the heart rate and the existence of noise during measurement.

Interval Timer function
A timer function that is started, stopped and reset in sync with the button operation made in the HR-CHR Mode.

HR-GRAPH Mode
The heart rate data measured in the latest run is displayed graphically over time. The heart rate graph is updated each time a new chronograph measurement is made.

Heart shape
It indicates the measurement condition of the heart rate data. A solid heart is shown when the heart rate is measured properly, and an open heart is shown when it is not.

Timer function
A function to give beeping sound when the set time is counted down.

Alarm function
A function to ring alarm at the designated time.

Auto-Backlight function
A function to turn on the backlight each time a button is pressed.

Contrast adjustment function
A function to adjust the brightness of the LCD display.

ECO function
A function to turn off the display if no button operation is made for a certain period of time, to save the battery energy.
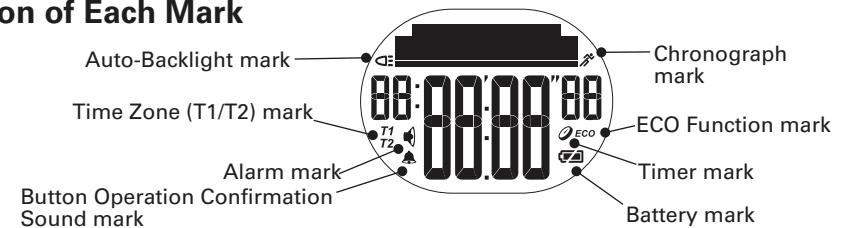
T1 and T2
They indicate the respective time zones set in the TIME Mode.

Button operation confirmation sound
A beep sounds each time a button is pressed to confirm that the button operation was made securely.

■ Indication of Each Mark

Mark		Indication
📏	Chronograph	It flashes when chronograph is measuring, and remains lighted when it is stopped.
🕐	Timer	It flashes when timer is measuring, and remains lighted when it is stopped.
⊂Ξ	Auto-Backlight	When it is shown, backlight turns on automatically with each press of any button.
T1 T2	Time Zone (T1/T2)	Mark of selected time zone (T1 or T2) is shown.
🔔	Button Operation Confirmation Sound	When it is shown, beep sounds with each press of any button.
🔊	Alarm	It is displayed when alarm is engaged.
ECO	ECO Function	When it is shown, display turns off automatically if no button operation is made for a certain period of time.
🔋	Battery	It shows remaining life of battery.