

BASIC HEART RATE MONITOR

MODEL NO.: HR102

USER'S MANUAL

SECTION 1

INTRODUCTION

Congratulations on your purchasing the HR102 Basic Heart Rate Monitor.

The HR102 is a very useful healthcare product to help you achieve and maintain your optimum exercise zone by monitoring your heart rate in working out.

The HR102 comes with a heart rate transmitter and a receiver watch complete with the functions of a real-time clock, stopwatch and back light.

KNOW YOUR DATA

It is important you know your maximum heart rate (MHR), training zone, upper heart rate limit and lower heart rate limit before you begin. They help you achieve the maximum health benefits out of your workout.

MHR is expressed in beats per minute. You can get your MHR from a MHR test. Or you can estimate it using the following formulae:

Men 220 - age = MHR

Women 230 - age = MHR

There are several training zones that bear specific results in your fitness program. The most popular zones range between 50% to 80% of your maximum great rate. This is where you achieve cardiovascular benefits, burn fat, and become fitter. When programming your watch, the lowest % of the zone you choose becomes your lower heart rate limit and the highest % becomes the upper heart rate limit.

50%	Moderate Activity
60%	Weight Management
70%	Aerobic Zone
80%	Anaerobic Threshold Zone
90%	Red Line Zone (maximum capacity)
100%	

The upper and lower heart rate limits are calculated by multiplying your MHR by the percentages of the selected training zone.

For example:

For a 40-year-old man to train for health maintenance,

His Upper Heart Rate Limit $(220 - 40) \times 70\% = 126$
(beats per minute)

His Lower Heart Rate Limit $(220 - 40) \times 60\% = 108$
(beats per minute)

For a 30-year-old woman to train for aerobic exercise,

Her Upper Heart Rate Limit $(230 - 30) \times 80\% = 160$
(beats per minute)

Her Lower Heart Rate Limit $(230 - 30) \times 70\% = 140$
(beats per minute)

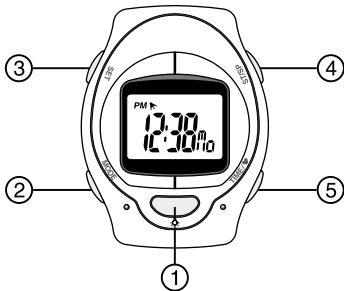
TRAINING TIPS

- Start slowly. Select the training zone most suitable for your physique.
- Exercise regularly. 20 to 30 minutes each and three to four times a week for a healthier cardiovascular system.
- Gradually steps up your training zone as you become fitter.
- The health maintenance zone has the lowest training intensity. It is good for beginners and those who want to strengthen their cardiovascular systems.

- The aerobic exercise zone increases strength and endurance. It works within the body's oxygen intake capability, burns more calories and can last longer.
- The anaerobic exercise zone generates speed and power. It works at or above the body's oxygen intake capability, builds more muscle and cannot be maintained for a long time.

WARNING: Determining your individual training zone is a critical step in the process towards efficient and safe training. Please consult your doctor or health professional to help you determine your maximum heart rate, upper and lower limits, exercise frequency and duration appropriate for your age, condition and specific goals.

RECEIVER CONTROL BUTTONS



1. LIGHT BUTTON

Turns on the EL back light for five seconds

2. MODE BUTTON

Changes the operating mode or holds to enter the setting mode

3. SET BUTTON

Changes a value in the setting mode or turns on or off the alarm clock in alarm clock mode, reset stop watch

4. ST/SP BUTTON

Starts or stops the stopwatch

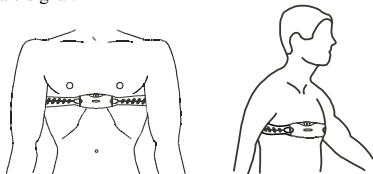
5. TIME / ♥ BUTTON

Displays the heart rate or holds to activate the heart rate alert

THE TRANSMITTER

The transmitter is used to count your heartbeat and transmit the data to the receiver. To put it on,

1. Wet the conductive pads on the underside of the transmitter with water or a conductive gel to ensure a solid contact.
2. Strap the transmitter across the chest. Adjust the strap until the transmitter sits snugly below the pectoral muscles for an accurate heart rate signal.

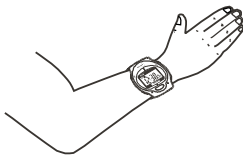


HINTS:

- The position of the transmitter affects its performance. Move the transmitter along the strap for the best transmission. Avoid areas with dense chest hair.
- In dry, cold climates, it takes the transmitter a while to function steadily. This is normal as the conductive pads need a film of sweat to improve contact with the skin.

THE RECEIVER

The receiver comes in the format of a wrist watch. You can wear it on your wrist or strap it to your bike or exercise machine. You can also obtain a mounting bracket from your authorized dealer.



EFFECTIVE RANGE

The transmitter and receiver will start transmitting and receiving signals once batteries are in place. Both units should be worn or mounted within an effective distance of 50 centimeters (20 inches). If the signals have become unsteady,

- Shorten the distance between the transmitter and receiver.
- Re-adjust the position of the transmitter.
- Check the batteries. Replace them when necessary.

USE IN THE WATER

The HR102 is water-resistant up to 30 meter.

Note: Set the unit before exposing it to excessive water. Activating the keys while in the water or during heavy rainstorms may cause water to enter the unit.

SECTION 2 OPERATION

THE BACK LIGHT

Press LIGHT to turn on the back light for five seconds.

OPERATING MODES

There are four operating modes, **see FIG. A**

NOTE : When no signals are received or the measurement is out of range for five minutes, the receiver will disable the function and return to the previous operating mode automatically.

HOW TO SET HEART RATE LIMITS

The heart rate limits help you determine if you are exercising within your training zone. Whenever you go above or below your limits, an indicator will flash to attract your attention. To set the heart rate limits, **see FIG. B**

NOTE: The upper limit must exceed the lower limit. The transmitter will adjust the ranges automatically according to the data entered.

You can also activate the heart rate limit alert function, so the transmitter will emit beeping sound when the limits are exceeded. [**see FIG. C**]

REAL TIME CLOCK

To set the clock, **see FIG. D**

NOTE: The date format for 12-hour display is MONTH-DAY while that for 24-hour display is DAY-MONTH.

To display the date, see **FIG. E**

To set the alarm, see **FIG. F**

NOTE : When the alarm clock is activated, it will go off at the set time every day. Press any button to stop the alarm for the day. The alarm clock is still active and will set off again the following day.

STOP WATCH

To use the stop watch, see **FIG. G**

SECTION 3 ADDITIONAL INFORMATION

BATTERY INFORMATION

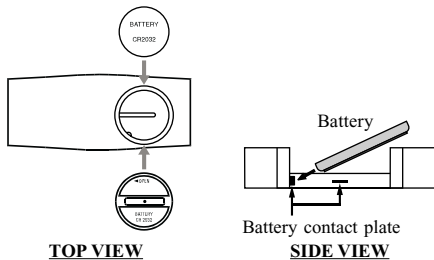
The HR102 uses a CR2032 lithium battery for the transmitter and a CR2032 for the receiver. Both are included with the unit.

When the battery of the receiver is running low, the low-battery indicator will light up.

If the heart rate readings become erratic or stop, your transmitter battery may need replacing. You can do this by yourself very easily without any special tools.

To change the battery,

1. Remove the battery compartment door.
2. Replace the old battery with a new one.



3. Replace the battery compartment door.
4. Open the transmitter battery lid with a coin by turning counterclockwise.
5. Insert one CR2032, 3V lithium battery with writing facing you.
Note: Take care not to touch the two contacts, otherwise the battery can discharge.
6. Replace lid.

If you are unsure about the procedure consult your dealer.

ENERGY SAVE FEATURE

If no transmitter signal is received by the watch after 15 minutes, the HR102 will switch back to previous display mode.

PRECAUTIONS

- Read the user's manual thoroughly.
- Do not subject the unit to excessive force, shock, dust and temperature.
- Do not tamper with the unit's internal components.

- Do not mix fresh and old batteries, or batteries of different specifications.

SPECIFICATIONS

Function

Real time clock	: 12/24 hour with hour / minute / second
Stopwater	: 00:00:00 to 29:59:59 (hrs : min : sec)
Heart rate measurement	: 30 - 240 bpm
Upper limit	: 80 - 240 bpm
Lowr limit	: 30 - 220 bpm
Weight	: Watch - approx. 40 g (included battery) Chestbelt - approx. 68 g (included battery)
Power	: Watch - 1 ps CR 2032 3V battery Chestbelt - 1pc CR 2032 3V battery
Operating temperature	: -10°C to +50°C (14°F to 122°F)
Storage temperature	: -20°C to +60°C (-4°F to 140°F)
Water resistance	: not actuating keys to 30 meters

MAINTENANCE


1. Do not clean the unit with abrasive or corrosive materials. Abrasive cleaning agents may scratch the plastic parts and corrode the electronic circuit.
2. Do not subject the unit to excessive: force, shock, dust, temperture, or humidity. Such treatment may result in malfunction, a shorter electronic life span, damaged batteries, or distorted parts.
3. Do not tamper with the unit's internal components. Doing so will terminate the unit's warranty and may cause damage. The unit contains no user-serviceable parts.

Read this instruction manual thoroughly before operating the unit.


CAUTION

- The content of this manual is subject to change without further notice.
- Due to printing limitation, the displays shown in this manual may differ from the actual display.
- The contents of this manual may not be reproduced without the permission of the manufacturer.


GB

LEGENDE : *ITALIC* - PRESS
ITALIC - PRESS AND HOLD
 - FAST INCREMENT

F

LEGENDE : *ITALIQUE* - APPUYEZ
ITALIQUE - APPUYEZ, PUIS GARDEZ ENFONCEE
 - DEFILEMENT RAPIDE


D

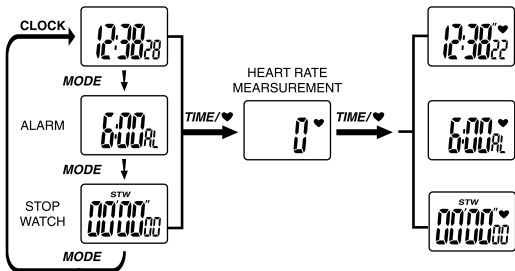
LEGENDE : *KURSIV* - DRÜCKEN
KURSIV - GEDRÜCKT HALTEN
 - SCHNELLVORLAUF

I

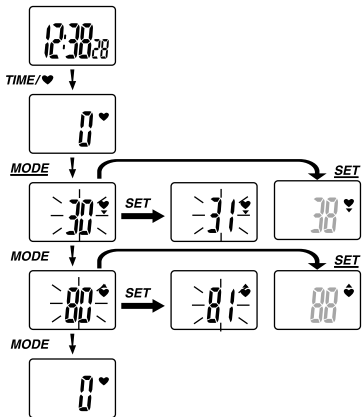
LEGENDA : *CORSIVO* - PREMERE
CORSIVO SOTTOLINEATO - TENERE PREMUTO
 - INCREMENTO RAPIDO

ES

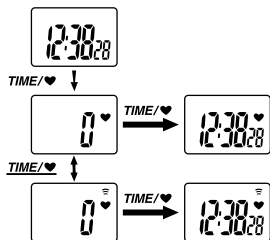
CLAVE : *CURSIVAS* - PRESIONE
CURSIVAS - MANTENGA PRESIONADO
 - INCREMENTO RÁPIDO



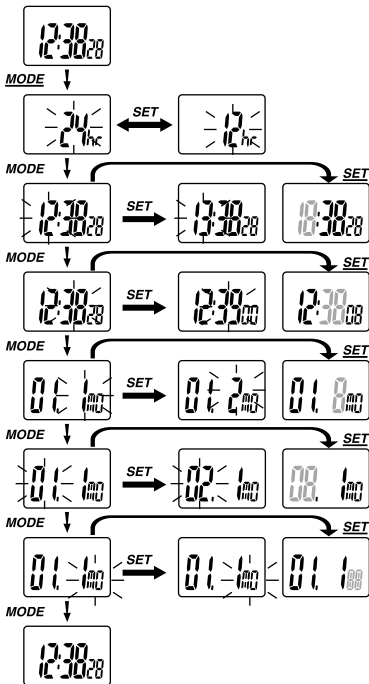
[FIG. A]



[FIG. B]



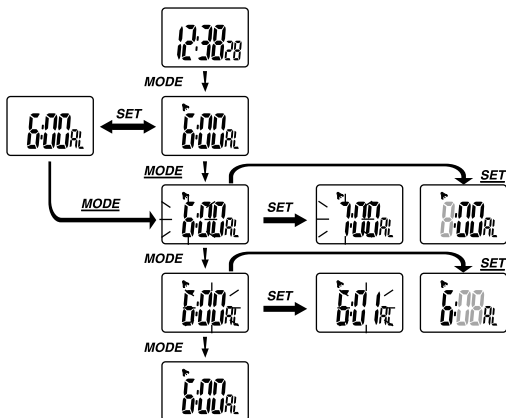
[FIG. C]



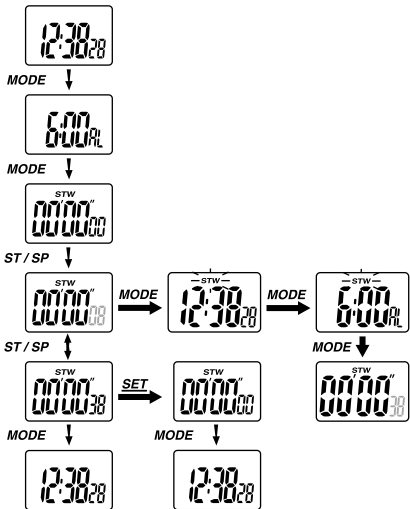
[FIG. D]



[FIG. E]



[FIG. F]



[FIG. G]