# INSTRUCTION MANUAL

OMRON.

# Heart Rate Monitor Model: HR-100C



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#### INTRODUCTION

Thank you for purchasing the OMRON® HR-100C Heart Rate Monitor

# Fill-in for future reference DATE PURCHASED:

- Staple your purchase receipt here
   Register your product online at www.register-omron.com
- The heart rate monitor can help ensure you receive the maximum benefit from your exercise program. You can increase the effectiveness of your exercise program by monitoring and quantifying your results every step of the way.

Your HR-100C Heart Rate Monitor comes with the following components:

- Heart Rate Monitor Watch
- · Chest Belt
- Chest Belt Strap
- 2 Lithium CR2032 Batteries (1 Monitor Watch, 1 Chest Belt - installed)
- · Storage Case
- Instruction Manual

Please read all the instructions in this booklet before using the unit.

#### **A** WARNING

The signals used by this monitor may interfere with a pacemaker or other implanted devices. Consult the manufacturer of the implant device and your physician before using this monitor.

## **SAVE THESE INSTRUCTIONS**

## **IMPORTANT SAFETY INFORMATION**

To assure the correct use of the product basic safety measures should always be followed including the warnings and cautions listed in this instruction manual.

SAFETY SYMBOLS USED IN THIS INSTRUCTION MANUAL			
<b>MARNING</b>	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.		
<b>⚠CAUTION</b>	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property.		

#### OPERATING THE DEVICE

- ▲ The signals used by this monitor may interfere with a pacemaker or other implanted devices. Consult the manufacturer of the implant device and your physician before using this monitor.
- ▲ Contact your physician or healthcare provider before beginning a weight reduction or exercise program.
- ⚠ Keep the unit out of the reach of young children. The unit contains small pieces that may be swallowed. Immediately contact your physician if any piece is swallowed.
- ▲ If battery fluid gets in your eyes, immediately rinse with plenty of clean water. Contact a physician immediately.
- ▲ Please do not place the chest belt around your neck or the neck of children
- ⚠ Do not bend or stretch the chest belt

## **IMPORTANT SAFETY INFORMATION**

- ♠ Do not scratch hard objects against the LCD display as this may cause damage.
- ⚠ When using this unit near any electronic devices, keep the devices at least 8 inches (20 cm) away from the unit in order to avoid the possibility of display errors occurring.
- ⚠ If battery fluid gets on your skin or clothing, immediately rinse with plenty of clean water.
- ♠ Do not throw the batteries into fire. The batteries may explode.
- ▲ Do not use batteries not specified for this unit. Do not insert batteries with the polarities in the wrong direction.
- ▲ Do not touch the exposed electronic circuitry, as there is a danger of electric shock.
- ⚠ Check all major functions if the device has not been used for a long time. Maintain regular internal testing and cleaning of your device.
- ▲ Dispose of the device, batteries and components according to applicable local regulations. Unlawful disposal may cause environmental pollution.
- ⚠ Due to printing limitations, 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.

## **IMPORTANT SAFETY INFORMATION**

#### CARE AND MAINTENANCE

- △ Use a soft, slightly moistened cloth. Do not use abrasive or corrosive cleaning agents, as these may cause damage. Use lukewarm water and mild soap to clean the watch and chest belt thoroughly after each training session. Never use the products in hot water or store them when wet.
- ♠ Do not disassemble or modify the unit. Changes or modifications not approved by Omron Healthcare will void the user warranty.
- ▲ Do not subject the unit to strong shocks, such as dropping the unit on the floor.
- ♠ Do not submerge the unit or any of the components in water.

#### NOTES:

- This product is not to be used for diagnostic purposes or to prescribe medication.
- The technical specifications for this product and the contents of the user manual are subject to change without notice.
- Features and accessories will not be available in all countries. For more information, please visit our web site at www.omronhealthcare.com.

## **PHYSICAL CONDITION AND WORKOUT**

To help achieve maximum health benefits from your workout program, it is important to know your:

- Maximum heart rate (MHR)
- Upper heart rate limit
- · Lower heart rate limit

MHR is expressed in beats per minute. You can get your MHR from an MHR test, or you can estimate it by using the following formula:

220 - age = MHR

#### **Training zones**

There are several training zones that are relevant to a fitness program. The most popular zone range is from 50% to 80% of your maximum heart rate. This is where you achieve cardiovascular benefits, burn fat, and become fitter. When programming your watch, the lower percentage of the zone you choose becomes your lower heart rate limit and the higher percentage becomes the upper heart rate limit.

50%	Moderate Activity
60%	Weight Management Zone
70%	Aerobic Zone
80% 90%	Anaerobic Threshold Zone
100%	Red Line Zone ( maximum capacity )
100/0	

## PHYSICAL CONDITION AND WORKOUT

There are three training zones, as described below:

TRAINING ZONE	MHR%	DESCRIPTION	
Health Maintenance	65-78%	This is the lowest training intensity level. It is good for beginners and those who want to strengthen their cardiovascular systems.	
Aerobic Exercise	65-85%	Increases strength and endurance. It works within the body's oxygen intake capability, burns more calories and can be maintained for a long period of time.	
Anaerobic Exercise	78-90%	Generates speed and power. It works at or above the body's oxygen intake capability, builds muscle, and cannot be maintained for a long period of time.	

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

#### For example:

A 40-year-old training for basic health maintenance:

- Upper Heart Rate Limit [220 40(age)] × 78% = 140
- Lower Heart Rate Limit  $[220 40(age)] \times 65\% = 117$

#### IMPORTANT:

Always warm up before exercise and select the training zone that best suits your physique. Exercise regularly, 20 to 30 minutes per session, three to four times a week for a healthier cardiovascular system.

#### **A** CAUTION:

Determining your individual training zone is a critical step in the process towards an efficient and safe training program. Please consult your doctor or health professional to help you determine exercise frequency and duration appropriate for your age, condition and specific goals.

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## **KNOW YOUR UNIT**

#### **Main Unit**

The Control Buttons on the monitor watch are used to select and set the operating modes, add your personal data, and use the features of the heart rate monitor.



- 1. A Backlight Button
- 2. MODE Button
- 3. SET Button

- 4. ST/SP Stopwatch Button
- Time/♥ Heart Rate Button

## **KNOW YOUR UNIT**

#### Components



Chest Belt

Counts your heartbeat and sends the data to the monitor watch.



Instruction Manual



Chest Belt Strap

Adjustable strap attaches to the chest belt for a comfortable fit.



Storage Case

Compact case holds all components.

2 Lithium CR2032 Batteries (1 monitor watch, 1 chest belt - installed)

## **SELECTING THE OPERATING MODE**

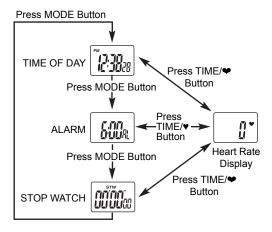
Press the MODE button to toggle between the following operating modes:

Time of Day

Alarm

Stopwatch

Press the TIME/♥ button to toggle between the operating modes and the Heart Rate Display.



## **BASIC SETTING INSTRUCTIONS**

- 1. Press and hold the MODE button to enter the setting mode.
- Press the SET button to adjust the blinking digits.Press and hold the SET button to increase the digits faster.
- Press the MODE button to go to the next setting option or exit the setting mode.

**NOTE:** If no button is pressed the monitor will automatically exit the setting mode after 60 seconds.

## SETTING THE TIME AND DATE

Press the MODE button to select the Time of Day operating mode.



1. Press and hold the MODE button.

12/24 hr blinking



Press the SET button to choose the 12-hour AM/PM or 24-hour universal clock. Press the MODE button.



Hour blinking

3. Press the SET button to adjust the hour. Press the MODE button.



Minutes blinking

4. Press the SET button to adjust the minutes. Press the MODE button.



Month blinking

5. Press the SET button to change the month. Press the MODE button.



Date blinking

#### SETTING THE TIME AND DATE

6. Press the SET button to change the date. Press the MODE button.

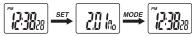
Day blinking

Press the SET button to change the day. Press the MODE button to exit the setting mode. The date and time is set.

NOTE: If the time has been set to the 12-hour AM/PM clock, "AM" is not displayed for times before noon, but "PM" is displayed for times after noon.

#### **DISPLAYING THE DATE**

- Press the MODE button to select the Time of Day operating mode.
- 2. Press the SET button to display the date.
- Press the MODE button to return to the Time of Day.NOTE: If no button is pressed the monitor will return to the Time of Day after 10 seconds. Press any key.



### **SETTING THE ALARM**

Press the MODE button to select the Alarm operating mode.



1. Press and hold the MODE button.

Hour blinking



Press the SET button to adjust the hour. Press the MODE button.



3. Press the SET button to adjust the minutes. Press the MODE button to exit the setting mode. The Alarm time is set.

#### ACTIVATING THE ALARM

1. Press the SET button to turn the alarm on or off.



When the alarm is activated, the alarm will go off at the set time every day. Press any button to stop the alarm signal.

### **SETTING THE HEART RATE LIMITS**

The Heart Rate Limits help you determine if you are exercising within your training zone. When you go above or below your limits, an indicator will flash to warn you.



Press the TIME/ button to select the Heart Rate display.

#### SETTING THE HEART RATE LIMITS

1. Press and hold the MODE button.

Lower Limit blinking



2. Press the SET button to enter your training zone lower limit. Press the MODE button.



Upper Limit blinking

NOTE: The upper limit must be greater than the lower limit. The monitor will automatically adjust the upper limit range based on the data entered.

Press the SET button to enter your training zone upper limit. Press the MODE button to exit the setting mode. The training zone limits are set.

#### SETTING THE HEART RATE ALERT

1. Press and hold the TIME/♥ button to turn the alert indicator on or off







2. Press the TIME/♥ button. The alert indicator is set.

## USING THE BACKLIGHT FEATURE

Press the A Backlight button.

The screen will illuminate for approximately 5 seconds.

## **USING THE STOPWATCH FEATURE**

1. Press the MODE button to select the Stopwatch operating mode.



- 2. Press the ST/SP button to start the stopwatch.
- 3. Press the ST/SP button to stop the stopwatch.
- 4. Press and hold the SET button to reset the stopwatch.

### THE CHEST BELT

The chest belt counts your heartbeat and sends the data to the monitor watch.

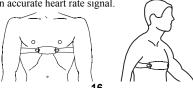
#### ATTACHING THE CHEST BELT

Attach the strap to the chest belt by inserting the strap clip through the backside of the corresponding shaped hole on the chest belt. Gently push down to secure.

 Moisten the conductive pads on the backside of the chest belt with water or a conductive gel to ensure a solid



2. Strap the chest belt across your chest. Adjust the strap until the chest belt sits snugly below your pectoral muscles for an accurate heart rate signal.



### **USE IN THE WATER**

The watch is water-resistant up to 98 feet (30 meters). The chest belt is splash proof, but should not be worn for underwater activities, as the heart rate transmission cannot occur under water. Refer to the table for proper use guidelines.

				Ċ	<b>₽</b>
	RAIN SPLASHES ETC	SHOWERING (WARM/ COOL WATER ONLY)	LIGHT SWIMMING / SHALLOW WATER	DIVING/	SNORKELING / DEEP WATER DIVING
Watch 98Feet (30m)	OK	ОК	OK	NO	NO
Chest Belt	OK	NO	NO	NO	NO

#### IMPORTANT:

- Ensure the buttons and battery compartment are secured and intact before exposing the watch to excessive water.
- Avoid pressing the buttons while in the water or during heavy rainstorms, as this may cause water to enter the watch, leading to malfunction.

### **EFFECTIVE RANGE**

The chest belt and monitor watch should be worn within 20 inches (50 centimeters) from each other.

**NOTE:** If no signal is sent from the chest belt to the monitor watch for 15 minutes the watch will display the previous mode.

### **TROUBLESHOOTING**

If the signals become unsteady re-adjust the position of the chest belt strap and make sure the distance between the chest belt and monitor watch is within the effective range.

Make sure the low battery indicator light is not displayed on the monitor watch.

The chest belt battery may need to be replaced.

## **BATTERY INSTALLATION**

The monitor watch uses a CR2032 3V Lithium battery. When the battery is running low, 
will light up. To assure the water resistance take the monitor to a local iewelry store for battery



replacement. Improper replacement will void the warranty. The chest belt uses a CR2032 3V Lithium battery. If the heart rate signals become unsteady or stop your chest belt battery may need replacing.

To change the chest belt battery:

- Open the chest belt battery lid with a coin by turning counterclockwise
- Remove the old battery.
- 3. Insert the new battery with the positive side facing up. DO NOT touch the contacts.
- 4. Replace the battery lid.

## **CARING FOR YOUR MONITOR**

To keep your heart rate monitor in the best condition and protect the unit from damage follow these directions:

- Clean the monitor watch with a soft, slightly moistened cloth. Do not use any abrasive or volatile cleaners.
- Always thoroughly dry off any moisture on the components before storing.
- Do not subject the monitor watch to extreme hot or cold temperatures, humidity and direct sunlight.
- Do not excessively twist or bend the conductive pads on the chest belt.
- Do not subject the chest belt or watch to strong shocks, such as dropping on the floor.
- Use the unit consistent with the instruction provided in this manual.

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# **SPECIFICATIONS**

Model	HR-100CN (HBE-100-Z)			
Real Time Clock	12/24 hour with hour/minute/second			
Stopwatch	00:00:00 to 29:59:59 (hrs:min:sec)			
Performance Tracking	HR measuring range:	30-240 bpm (beats per minutes)		
	Upper HR settable range:	80-240 bpm (beats per minutes)		
	Lower HR settable range:	30-220 bpm (beats per minutes)		
Chest Size	Approx. 29 inches to 55 inches (74 cm to 140 cm)			
Weight	Monitor watch - approx. 1 3/8 oz (included battery)			
	Chest belt - approx. 1 1/2 oz (included battery)			
Power Source	Monitor watch - 1 pc CR2032 3V battery			
Power Source	Chest belt - 1 pc CR2032 3V battery			
Battery Life	Monitor watch: Approx. 1 year (when used for measuring 30 minutes a day) Chest belt: Approx. 1 year (when used for measuring 30 minutes a day)			
Operating Temperature	14°F to 122°F (-10°C to +50°C)			
Water Resistant	Monitor watch: 98 feet (30 meters) - Do not press keys.			
Contents	Heart Rate Monitor Watch, Chest Belt, Chest Belt Strap, 2 Lithium CR2032 Batteries (1 Monitor Watch, 1 Chest Belt - installed), Storage Case and Instruction Manual			

NOTE: Specifications are subject to change without notice.

### **FCC STATEMENT**

#### NOTE:

POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for U.S.A. only)

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the product does cause harmful interference to radio or television reception, which can be determined by turning the product on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the product and the receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for Canada only)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Canadian Department of Communications.

Cet appareil numérique respecte les limites de bruits radioeléctriques applicables aux appareils numériques de Clase B prescrites dans la norme sur le materiel brouilleur: "Appareils Numériques", ICES-003 édictée par le minister des communications.

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

### LIMITED WARRANTY

Your OMRON® HR-100C Heart Rate Monitor, excluding the batteries, is warranted to be free from defects in materials and workmanship appearing within 1 year from the date of purchase, when used in accordance with the instructions provided with the unit. The above warranties extend only to the original retail purchaser.

We will, at our option, repair or replace without charge any monitor covered by the above warranties. Repair or replacement is our only responsibility and your only remedy under the above warranties.

To obtain warranty service contact Omron Healthcare's Customer Service by calling 1-800-634-4350 for the address of the inspection center location and the return shipping and handling fee. Information for warranty service is available on our website at www omronbealthcare com

Enclose the Proof of Purchase. Include a letter, with your name, address, phone number, and description of the specific problem. Pack the product carefully to prevent damage in transit. Because of possible loss in transit, we recommend insuring the product with return receipt requested. Lost packages are not covered under warranty.

THE FOREGOING IS THE SOLE WARRANTY PROVIDED BY OMRON IN CONNECTION WITH THIS PRODUCT, AND OMRON HEREBY DISCLAIMS ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IMPLIED WARRANTIES AND OTHER TERMS THAT MAY BE IMPOSED BY LAW, IF ANY, ARE LIMITTED IN DURATION TO THE PERIOD OF THE AROYF FYPRESS WARRANTY

OMRON SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT COSTS, EXPENSES OR DAMAGES.

This warranty provides you with specific legal rights, and you may have other rights that vary by jurisdiction. Because of special local requirements, some of the above limitations and exclusions may not apply to you.

#### FOR CUSTOMER SERVICE

Visit our web site at: www.omronhealthcare.com
Call toll free: 1-800-634-4350

# NOTES

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