

New Balance N2^{hrm}
Heart Rate Monitor

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INTRODUCTION

Thank you for selecting the New Balance Sport Monitor. The N2^{hrm} is a very useful sports & fitness product that can help you achieve and maintain your optimum exercise zone by monitoring your heart rate while exercising. The N2 bundles a heart rate transmitter and receiver watch complete with real-time clock, stopwatch, and backlight functions.

KNOW YOUR DATA

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

- Maximum heart rate (MHR) training zone
- Upper heart rate limit
- Lower heart rate limit

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

$$220 - \text{age} = \text{MHR}$$

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 % of the zone you choose becomes your lower heart rate limit and the higher % becomes the upper heart rate limit.

English

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:

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

- His Upper Heart Rate Limit $[220 - 40(\text{age})] \times 78\%$
- His Lower Heart Rate Limit $[220 - 40(\text{age})] \times 65\%$

TRAINING ZONES

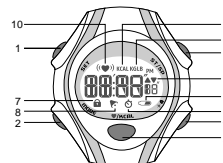
Always warm up before exercise and select the training zone that best suits your physique. Exercise regularly, 20 to 30 minutes per session, three to four times a week for a healthier cardiovascular system. There are three training zones:

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.

WARNING 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 your maximum heart rate, upper and lower limits, exercise frequency and duration appropriate for your age, condition and specific goals.

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RECEIVER / WRIST WATCH CONTROL BUTTONS



1. **SET** button: Changes values in Settings mode; turns the alarm ON /OFF in Alarm mode; resets the stopwatch.
2. **MODE** button: Changes operating modes or press and hold to enter Settings mode.
3. **START / STOP** button: Starts or stops the stopwatch.
4. **Light / Lock** button: Turn on backlight; lock / unlock keypad
5. **Heart / KCAL** button: Displays your heart rate or press and hold to activate the high / low heart rate alert.
6. **Kg / Lb**: Weight units in Kilograms or in pounds
7. **Lock** : Indicates keypad is locked
8. **Alarm** : Indicates alarm is ON
9. **KCAL** calorie icon
10. **Heart rate icon** ((♥)) heart rate icon, flashes to indicate successful connection with the chest belt.
11. **▲ / ▼** Upper / Lower heart rate limits achieved
12. **Battery** low battery icon
13. **Stopwatch** icon

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 help establish 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.

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THE RECEIVER

The receiver comes in the format of a wristwatch.

**EFFECTIVE RANGE**

The transmitter and receiver will start transmitting and receiving signals after the batteries are in place. When the battery is full, both units can be worn or mounted up to 76 cm (30 inches) apart.

If signals 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 N2 is water-resistant up to 50 meters (164 feet).

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

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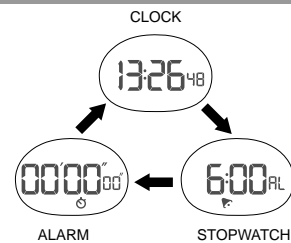
OPERATION**THE BACKLIGHT**

Press to turn backlight ON for 5 seconds.

ACTIVATING KEYPAD LOCK

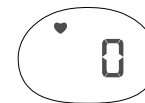
To toggle keypad lock ON / OFF:

Press and hold for 2 seconds. indicates keypad is locked.

OPERATING MODES

Press **MODE** to switch between:

- Clock mode
- Alarm mode
- Stopwatch mode

HR / KCAL MODE**HEART RATE MEASUREMENT**

Press / **KCAL** to enter HR Measurement mode. Press **MODE** to return to previous mode.

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

HEART RATE LIMITS

The heart rate limits help you determine if you are exercising within your training zone.

- If you go above your limits will flash
- If you go below your limits will flash

To set the heart rate limits:

1. Press / **KCAL** to navigate to HR measurement mode.
2. Press and hold **MODE** until appears.
3. Press **SET** to choose the lower limit, then press **MODE** to confirm.
4. Press **SET** to choose the upper limit , then press **MODE** to confirm.

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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 a beeping sound when the limits are exceeded.

To activate the heart rate limits alarm:

1. Press / **KCAL** to Navigate to HR measurement Mode.
2. Press and hold / **KCAL**.

ICON	HIGH / LOW ALARM
	On
No Icon	Off

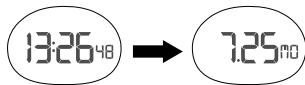
TIME AND DATE

To set the time and date:

1. Press **MODE** to navigate to Clock mode.
2. Press and hold **MODE** to enter settings.
3. Press **SET** to scroll through the setting options. The setting sequence is as follows: 12 / 24-hour time; hour; minute; day-month / month-day; month; day; day of the week.
4. Press **MODE** to confirm.

TIP Press and hold **SET** to rapidly scroll through value settings.

To display the date:



Press **SET** in Clock mode.

NOTE If no key is pressed for ten seconds, the display will return to Clock mode.

To set the alarm:

- Press **MODE** to navigate to Alarm mode.



- Press and hold **MODE** to enter settings.
- Press **SET** to scroll through the setting options. The setting sequence is as follows: hour; minute.
- Press **MODE** to confirm.

To activate or deactivate the alarm:

- Press **MODE** to navigate to Alarm mode.
- Press **SET** to turn the alarm on or off. A will indicate that the alarm has been activated.

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

STOPWATCH

To use the stopwatch:

- Press **MODE** to Navigate to Stopwatch mode.



- Press **ST/SP** to start the stopwatch.
- Press **ST/SP** to stop the stopwatch.
- Press and hold **SET** to reset.

NOTE Unless you stop the stopwatch, will blink in all modes to remind you that the stopwatch is still timing.

USER DATA

To access the full benefits of this product, set up your user data before you exercise. This will automatically enable the watch to calculate the level of calories burned when exercising. This information helps you track your progress over time.

To set user data:

- Press / **KCAL** to navigate to **HR** measurement mode.
- Press and hold to **MODE** to enter **USER DATA** mode.
- Press **MODE** to scroll through the setting options. The setting sequence is as follows: set Lower limit; set Upper limit; set Age; set Weight unit; set Weight.
- Press **SET** to increase values.
- Press **MODE** to confirm.

NOTE You must enter your user data to enable the calorie count function.

To view the amount of calories burnt:

- Press / **KCAL** to navigate to HR mode.
- Press / **KCAL** to view calories burnt.

NOTE The calorie display will only appear for approximately 3 seconds.

BATTERY

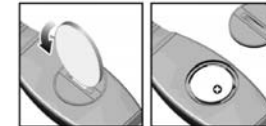
The N2 uses a CR2032 lithium battery for the transmitter and a CR2032 for the receiver. Both are included with the unit. When the receiver battery is running low, the low battery indicator will light up on the watch display.

If the heart rate readings become erratic or stop, your transmitter battery may need replacing.

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To change the battery:

- Open the transmitter battery lid with a coin by turning it counterclockwise.
- Insert a new CR2032, 3V lithium battery.
- Replace the battery compartment door.



NOTE Take care not to touch the two contacts otherwise the battery can discharge. If you are unsure about the procedure consult your dealer.

ENERGY SAVING FEATURE

If the watch receives no transmitter signal after 5 minutes, the N2 will switch back to the previous display mode.

SPECIFICATIONS

Real time clock	12/24 hour with hour / minute / second
Stopwatch	00:00:00 to 29:59:59 (hrs: min: sec)
Heart rate	30 - 240 bpm
Upper limit	80 - 240 bpm
Lower limit	30 - 220 bpm
Calorie range	0 - 9999 kcal

Power	Watch 1 x CR2032 3V battery Chest belt 1 x CR2032 3V battery
Operating temp	-10°C to +50°C (14°F to 122°F)
Storage temp	-20°C to +60°C (-4°F to 140°F)
Water resistant	Up to 50 meters (164 feet) without pressing keys

PRECAUTIONS

To ensure you use your product correctly and safely, read these warnings and the entire user manual before using the product:

- Use a soft, slightly moistened cloth. Do not use abrasive or corrosive cleaning agents, as these may cause damage. Use luke warm 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 bend or stretch the transmitter part of the chest belt.
- Do not subject the product to excessive force, shock, dust, temperature changes, or humidity. Never expose the product to direct sunlight for extended periods. Such treatment may result in malfunction.
- Do not tamper with the internal components. Doing so will terminate the product warranty and may cause damage. The main unit contains no user-serviceable parts.
- Do not scratch hard objects against the LCD display as this may cause damage.
- Take precautions when handling all battery types.
- Remove the batteries whenever you are planning to store the product for a long period of time.

- When replacing batteries, use new batteries as specified in this user manual.
- The product is a precision instrument. Never attempt to take this device apart. Contact the retailer or our customer service department if the product requires servicing.
- Do not touch the exposed electronic circuitry, as there is a danger of electric shock.
- Do not use the chest belt in aircrafts or hospitals. The use of radio frequency products can cause malfunctions in the control devices of other equipment.
- Check all major functions if the device has not been used for a long time. Maintain regular internal testing and cleaning of your device. Have your watch serviced by an approved service center annually.
- When disposing of this product, do so in accordance with your local waste disposal regulations.
- 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.

NOTE The technical specifications for this product and the contents of the user manual are subject to change without notice.

EU-DECLARATION OF CONFORMITY

The N2 heart rate monitor is in compliance with EMC directive 89 / 336 / CE. A copy of the signed and dated Declaration of Conformity is available on request.

