microlife®

Microlife AG
Espenstrasse 139
9443 Widnau / Switzerland
www.microlife.com

CE 0044

IB NC150 BT EN-PL 2518

NC150 BT

Non Contact Thermometer

EN → 1
PL → 7

Bluetooth® SMART

Connected Health+ microlife

Download on the App Store

GET IT ON Google Play

Microlife NC150 BT

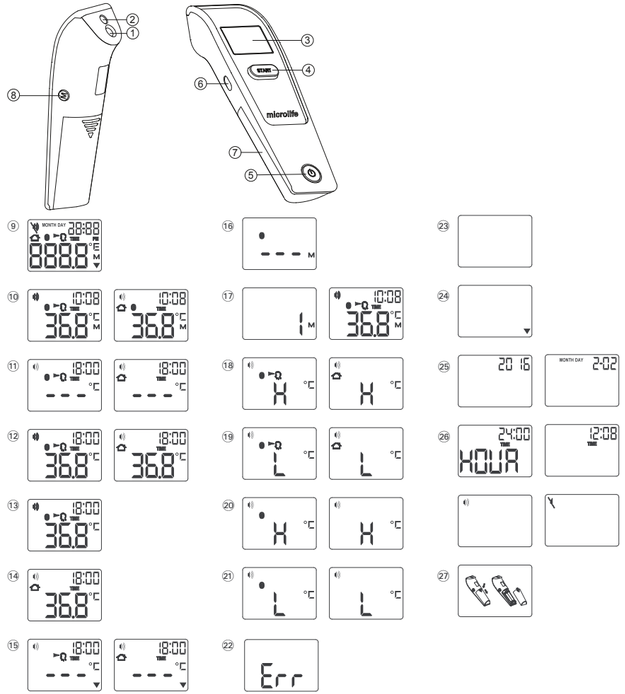
1

2a

2b

3

4



Microlife Non Contact Thermometer NC150 BT

EN

1. Measuring sensor
2. Tracking light
3. Display
4. START button
5. ON/OFF button
6. Mode switch
7. Battery compartment cover
8. M-button (memory)
9. All segments displayed
10. Memory
11. Ready for measuring
12. Measurement complete
13. Body mode
14. Object mode
15. Low battery indicator
16. Recall mode
17. Recall the last 30 readings
18. Measured temperature too high
19. Measured temperature too low
20. Ambient temperature too high
21. Ambient temperature too low
22. Error function display
23. Blank display
24. Flat battery
25. Date/Time
26. Beeper function setting
27. Replacing the battery

Read the instructions carefully before using this device.

Type BF applied part

Keep dry

This Microlife thermometer is a high quality product incorporating the latest technology and tested in accordance with international standards. With its unique technology, this device can provide a stable, heat-interference-free reading with each measurement. The device performs a self-test every time it is switched on to always guarantee the specified accuracy of any measurement. This Microlife thermometer is intended for the periodic measurement and monitoring of human body temperature.
This thermometer has been clinically tested and proven to be safe and accurate when used in accordance to the operating instruction manual.
Please read through these instructions carefully in order for you to understand all functions and safety information.

Table of Contents

1. **The Advantages of this Thermometer**
   - Measures in a matter of seconds
   - Multiple uses (wide range of measurement)
   - Accurate and reliable
   - Gentle and easy to use
   - Multiple readings recall
   - Safe and hygienic
   - Fever alarm
   - Bluetooth® Function
2. **Important Safety Instructions**
3. **How this Thermometer measures Temperature**
4. **Control Displays and Symbols**
5. **Setting Date, Time and Beeper Functions**
6. **Directions for Use**
7. **Changing between Celsius and Fahrenheit**
8. **How to recall 30 readings in Memory Mode**
9. **Bluetooth ® Function**
   - Downloading the «Microlife Connected Health +» App
   - How the Bluetooth® Function Works
   - Bluetooth® Icon Indicator
   - App Tutorial
10. **Error Messages**
11. **Cleaning and Disinfecting**

Guarantee Card

NC150 BT

Name of Purchaser
Imie i nazwisko
nabywcy _____

Serial Number
Numer seryjny _____

Date of Purchase
Data zakupu _____

Specialist Dealer
Przedstawiciel _____

microlife®

12. Battery Replacement
13. Guarantee
14. Technical Specifications
15. www.microlife.com
Guarantee Card (see Back Cover)

1. The Advantages of this Thermometer

Measures in a matter of seconds
The innovative infrared technology allows the measurement without even touching the object. This guarantees safe and sanitary measurements within seconds.

Multiple uses (wide range of measurement)
This thermometer offers a wide range of measurement from 0 . 1 - 99.9 °C , meaning the unit can be used to measure body temperature or it also has a feature allowing it to be used to measure surface temperature of the following examples:
- Milk surface temperature in a baby's bottle
- Surface temperature of a baby's bath
- Ambient temperature

Accurate and reliable
The unique probe assembly construction incorporates an advanced infrared sensor, ensuring that each measurement is accurate and reliable.

Gentle and easy to use
- The ergonomic design enables simple and easy use of the thermometer.
- This thermometer can even be used on a sleeping child without causing any interruption.
- This thermometer is quick, therefore child-friendly.

Multiple readings recall
Users will be able to recall the last 30 readings with a record of both time and date when entering the recall mode, enabling efficient tracking of temperature variations.

Safe and hygienic
- No direct skin contact.
- No risk of broken glass or mercury ingestion.
- Completely safe for use on children.

Fever alarm
10 short beeps and a red LCD backlight alert the patient that he/she may have a temperature equal to or higher than 37.2 °C.

Bluetooth® Function
This device connects to the «Microlife Connected Health+» App by using Bluetooth® 4.0 and enables easy monitoring of temperature.

2. Important Safety Instructions

- Follow instructions for use. This document provides important product operation and safety information regarding this device. Please read this document thoroughly before using the device and keep for future reference.
- This device may only be used for the purposes described in these instructions. The manufacturer cannot be held liable for damage caused by incorrect application.
- **Never immerse this device in water or other liquids. For cleaning please follow the instructions in the «Cleaning and Disinfecting» section.**
- Do not use this device if you think it is damaged or notice anything unusual.
- Never open this device.
- A basic physiological effect called vasoconstriction can occur in the early stages of fever, resulting in a cool skin effect. The recorded temperature using this thermometer can, therefore, be unusually low.
- If the measurement result is not consistent with the patient's finding or unusually low, repeat the measurement every 15 minutes or double check the result by another core body temperature measurement.
- This device comprises sensitive components and must be treated with caution. Observe the storage and operating conditions described in the «Technical Specifications» section.
- Ensure that children do not use this device unsupervised; some parts are small enough to be swallowed.
- Do not use this device close to strong electromagnetic fields such as mobile telephones or radio installations. Keep a minimum distance of 3.3 m from such devices when using this device.
- Protect it from:
  - extreme temperatures
  - impact and dropping
  - contamination and dust
  - direct sunlight
  - heat and cold
- If the device is not going to be used for a prolonged period the batteries should be removed.

WARNING: The measurement results given by this device is not a diagnosis. It is not replacing the need for the consultation of a physician, especially if not matching the patient's symptoms. Do not rely on the measurement result only, always consider other potentially occurring symptoms and the patient's feedback. Calling a doctor or an ambulance is advised if needed.

3. How this Thermometer measures Temperature

This thermometer measures infrared energy radiated from the forehead as well as objects. This energy is collected through the lens and converted to a temperature value.

4. Control Displays and Symbols

- **All segments displayed** (9)**:** Press the ON/OFF button (5) to turn on the unit; all segments will be shown for 1 second.
- **Ready for measuring** (11)**:** When the unit is ready for measuring, the «**°C**» icon will keep flashing while the mode icon (body or object) will be displayed.
- **Measurement complete** (12)**:** The reading will be shown on the display (3) with the «**°C**» icon and the mode icon steady. The unit is ready for the next measurement as soon as the «**°C**» icon is flashing again.
- **Low battery indicator** (15)**:** When the unit is turned on, the «▼» icon will keep flashing to remind the user to replace the batteries.

5. Setting Date, Time and Beeper Functions

Setting the date and time

1. After the new batteries are fitted, the year number flashes in the display (25). You can set the year by pressing the START button (4) To confirm and then set the month, press the M-button (8).
2. Press the START button (4) to set the month. Press the M-button (8) to confirm and then set the day.
3. Follow the previously mentioned instructions to set the day, 12 or 24 hour mode, hours and minutes.
4. Once you have set the minutes and pressed the M-button (8), the date and time are set and the time is displayed.

☞ If no button is pressed for 20 seconds, the device automatically switches to ready for measuring (11).

☞ **Cancel time setup:** Press the ON/OFF button (5) during time setup. The LCD will show Date/Time icons with «--:--». After that press the ON/OFF button (5) to start the measurement. If no further action is taken within 20 seconds, the device will automatically turn off.

☞ **Change current date and time:** Press and hold the M-button (8) for approx. 3 seconds until the year number starts to flash (25). Now you can enter the new values as described above.

Setting the beeper

1. When the device is switched off, press and hold the ON/OFF button (5) for 5 seconds to set the beeper (26).
2. Press the ON/OFF button (5) again to either turn the beeper on or off. The beeper is activated when the beeper icon (26) is not crossed-out.

☞ If no button is pressed for 5 seconds, the device automatically switches to ready for measuring (11).

6. Changing between Body and Object Mode

For changing from body to object mode, slide the mode switch (6) at the side of the thermometer downwards. For switching back to body mode, slide the switch up again.

7. Directions for Use

Measuring in body mode

1. Press the ON/OFF button (5). The display (3) is activated to show all segments for 1 second.
2. When the «**°C**» icon is flashing, a beep sound is heard and the thermometer is ready for measuring (11).
3. **Aim the thermometer at the center of the forehead with a distance of no more than 5 cm.** Please remove any hair, sweat or dirt from the forehead before measuring to improve the accuracy of the readings.
4. **Press the START button (4) and ensure that the activated blue tracking light is aimed at the center of the forehead.** After 1 second a long beep will verify the completion of measurement.
5. Read the recorded temperature from the LCD display.

Measuring in object mode

1. Follow steps 1-2 above, then aim the thermometer at the center of the object you want to measure with a distance of no more than 5 cm. Press the START button (4). After 1 second a long beep will verify the completion of measurement.
2. Read the recorded temperature from the LCD display.

☞ **NOTE:**

- **Patients and thermometer should stay in similar room condition for at least 30 minutes.**
- Don't take a measurement while or immediately after nursing a baby.
- Don't use the thermometer in high humidity environments.
- Patients should not drink, eat or exercise before/while taking the measurement.
- Don't move the measurement device from the measuring area before hearing the termination beep.
- 10 short beeps and a red LCD backlight alert the patient that he/she may have a temperature equal to or higher than 37.2 ° C.
- Always take the temperature in the same location, since temperature readings may vary according to locations.
- Doctors recommend rectal measurement for newborn infants within the first 6 months, as all other measuring methods might lead to ambiguous results. If using a non contact thermometer on those infants, we always recommend verifying the readings with a rectal measurement.
- In the following situations it is recommended that three temper-atures are taken with the highest one taken as the reading:
  1. Children under three years of age with a compromised immune system and for whom the presence or absence of fever is critical.
  2. When the user is learning how to use the thermometer for the first time until he/she has familiarized himself/herself with the device and obtains consistent readings.
  3. If the measurement is surprisingly low.
- **Readings from different measuring sites should not be compared as the normal body temperature varies by measuring site and time of day**, being highest in the evening and lowest about one hour before waking up.
  Normal body temperature ranges:
  - Axillar: 34.7 - 37.3 °C
  - Oral: 35.5 - 37.5 °C
  - Rectal: 36.6 - 38.0 °C
  - Microlife NC 150 BT: 35.4 - 37.4 °C

8. How to recall 30 readings in Memory Mode

This thermometer can recall the last 30 readings with a record of both time and date.

- **Recall mode** ⑯ Press the M-button ⑧ to enter recall mode when the power is off. The memory icon «**M**» will flash.
- **Reading 1 - the last reading** ⑰**:** Press and release the M-button ⑧ to recall the last reading. Number «1» and a flashing «**M**» are displayed.
- **Reading 30 - readings in succession:** Press and release the M-button ⑧ consecutively to recall the last 30 readings in succession.

Pressing and releasing the M-button ⑧ after the last 30 readings have been recalled will resume the above sequence from reading 1.

9. Bluetooth® Function

This device can be used in conjunction with a smartphone running the «Microlife Connected Health+» App. The measurement results will be automatically transferred via Bluetooth®.

Downloading the «Microlife Connected Health+» App

Download «Microlife Connected Health+» App for free from Google Play™ (Android) or App Store (iOS) and install it on your smartphone.

How the Bluetooth® Function Works

The Bluetooth® function on your device will automatically turn on and will be ready to connect with the «Microlife Connected Health+» App after the device is switched on. Your device will automatically upload the data once it is connected to the smartphone.

Bluetooth® Icon Indicator

The Bluetooth® icon indicator on your device, located in the middle left portion of the display, is designed to provide information about the connection between your device and smartphone.

☞ **NOTE:**

- The Bluetooth® function is enabled: The Bluetooth® icon indicator ⑪ appears steady on the display.
- The Bluetooth® icon indicator ⑪ flashes, when connecting with a device or uploading data to the device.

- The Bluetooth® function is automatically switched off during measurement; after measurement the device will switch it on and upload the data to the «Microlife Connected Health+» App.

App Tutorial
To access the tutorial, select «Tutorial» in the menu of the «Microlife Connected Health+» App (located in the upper left corner on the screen).

10. Error Messages

- **Measured temperature too high** ⑱**:** Displays «**H**» when measured temperature is higher than 43 °C in body mode or 99.9 °C in object mode.
- **Measured temperature too low** ⑲**:** Displays «**L**» when measured temperature is lower than 34.0 °C in body mode or 0.1°Cin object mode.
- **Ambient temperature too high** ⑳**:** Displays «**H**» and ⌓ when ambient temperature is higher than 40.0 °C
  Ambient temperature too low ㉑**:** Displays «**L**» and ⌓ when ambient temperature is lower than 15.0 °C in body mode or lower than 5.0 °C in object mode.
- **Error function display** ㉒**:** The system has a malfunction.
- **Blank display** ㉓**:** Check if the batteries have been inserted correctly. Also check polarity (<+> and <->) of the batteries.
- **Flat battery indicator** ㉔**:** If only «▼» icon is shown on the display, the batteries should be replaced immediately.

11. Cleaning and Disinfecting

Use an alcohol swab or cotton tissue moistened with alcohol (70% Isopropyl) to clean the thermometer casing and the measuring sensor. Ensure that no liquid enters the interior of the device. Never use abrasive cleaning agents, thinners or benzene for cleaning and never immerse the device in water or other cleaning liquids. Take care not to scratch the surface of the sensor lens and the display.

12. Battery Replacement

This device is supplied with 2 new, long-life 1.5V, size AAA batteries. Batteries need replacing when this icon «▼» ㉔ is the only symbol shown on the display.
Remove the battery cover ㉗ by sliding it in the direction shown. Replace the batteries – ensure correct polarity as shown by the symbols in the compartment.

Batteries and electronic devices must be disposed of in accordance with the locally applicable regulations, not with domestic waste.

13. Guarantee

This device is covered by a **2 year guarantee** from the date of purchase. The guarantee is valid only on presentation of the guarantee card completed by the dealer (see back) confirming date of purchase or the receipt.

- The guarantee covers the device. Batteries and packaging are not included.
- Opening or altering the device invalidates the guarantee.
- The guarantee does not cover damage caused by improper handling, discharged batteries, accidents or non-compliance with the operating instructions.

Please contact Microlife-service.

14. Technical Specifications

Type:	Non Contact Thermometer NC150 BT
Measurement range:	Body mode: 34.0 - 43.0 °C Object mode: 0.1 - 99.9 °C
Resolution:	0.1 °C
Measurement accuracy (Laboratory):	Body mode: ±0.2 °C, 35.0~42.0 °C ±0.3 °C, 34.0~ 34.9 °C and 42.1~ 43.0 °C Object mode: ±1.0 °C, 0.1~ 99.9 °C
Display:	**L**iquid **C**rystal **D**isplay, 4 digits plus special icons
Acoustic:	The unit is turned ON and ready for the measurement: 1 short beep. Complete the measurement: 1 long beep (1 sec.) if the reading is less than 37.2 °C , 10 short «beep» sounds, if the reading is equal to or greater than 37.2 °C . System error or malfunction: 3 short «bi» sounds.
Memory:	30 readings recall in the memory mode with a record of both time and date.

Backlight:	The display light will be GREEN for 1seconds, when the unit is turned ON. The display light will be GREEN for 5 seconds, when a measurement is completed with a reading less than 37.2 °C . The display light will be RED for 5 seconds, when a measurement is completed with a reading equal to or higher than 37.2 °C
Operating conditions:	Body mode: 15 - 40.0 °C Object mode: 5 - 40.0 °C 30 - 75 % relative maximum humidity
Storage conditions:	--20-+60 ℃ ±2 ℃ 91 - 95 % relative maximum humidity
Automatic Switch-off:	Approx. 1 minute after last measurement has been taken.
Communication:	Bluetooth® Low Energy 4.0 (Bluetooth® Smart)
Compatibility:	iOS: iOS 9.0 or newer Android: Android 4.4 or newer
Battery:	2 x 1.5 V alkaline batteries; size AAA
Battery lifetime:	approx. 1500 measurements (using new batteries)
Dimensions:	141.1 x 43.3 x 36.9 mm
Weight:	90 g (with batteries), 67 g (w/o batteries)
IP Class:	IP21
Reference to standards:	ASTM E1965; IEC 60601-1; IEC 60601-1-2 (EMC); IEC 60601-1-11
Expected service life:	5 years or 12000 measurements

This device complies with the requirements of the Medical Device Directive 93/42/EEC.
Technical alterations reserved.
According to the Medical Product User Act a biennial technical inspection is recommended for professional users. Please observe the applicable disposal regulations.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Microlife Corp. is under license. Other trademarks and trade names are those of their respective owners.

15. www.microlife.com

Detailed user information about our thermometers and blood pressure monitors as well as services can be found at www.microlife.com.