iHealth ThermoPro

Smart Non-Contact Infrared Thermometer

Model: NT13B

INSTRUCTION MANUAL

Please read this instruction manual carefully
before using your forehead thermometer

Contents

Introduction

Utilizing infrared technology, this thermometer takes temperatures in seconds by measuring heat generated by the surface skin of the forehead or other objects. This product conforms to the provisions of the EC directive MDD (93/42/EEC). Its advantages include:

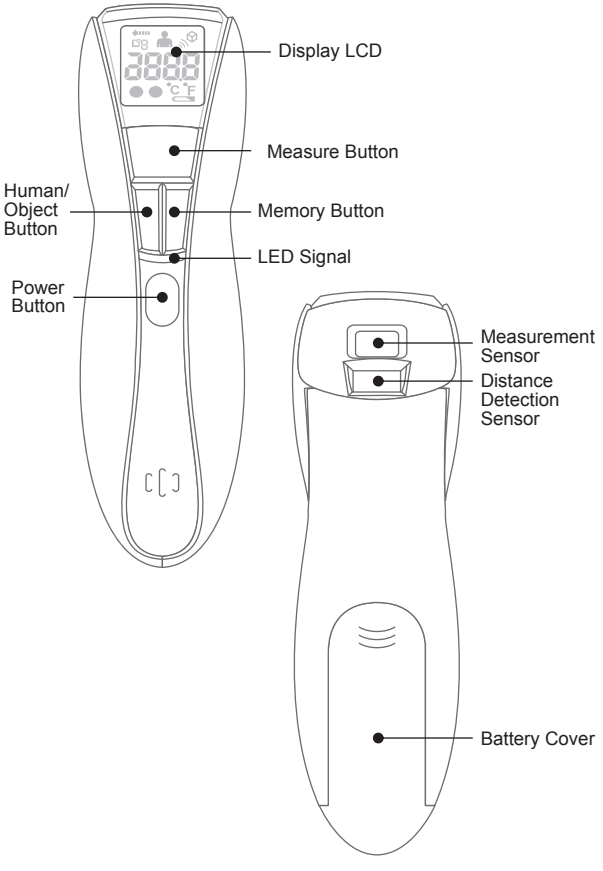
1. 2 in 1 thermometer
   Human Body/Object
2. Fever Indication (Human Body Mode only)
3. ℃ / ℉ Switch-able Function
4. 10-memory Recall
5. One-second Reading
6. Power Saving-Auto Power Off
   Auto power-off after 60 second idling to ensure battery life.
7. Warning indication
   "low battery" symbol, and "Lo"/ "Hi" symbol indicating out of measuring range.
8. Large LCD Display
9. Large Button Design
10. Economic design and convenience
    This is a "Non-contact" medical thermometer that enables temperature readings, designed for sanitary conditions, cleanliness, and convenience. Simply move the thermometer close to the subject's forehead or object at the distance indicated by the device.
11. Accurate and Reliable
12. User Friendly
    Due to our unique design of the measuring software, users don't need to have special skill to operate this device.
13. Instant Measurement
    By using our unique technology, users can get their precise body temperature instantly and accurate.

Important Information Before Use

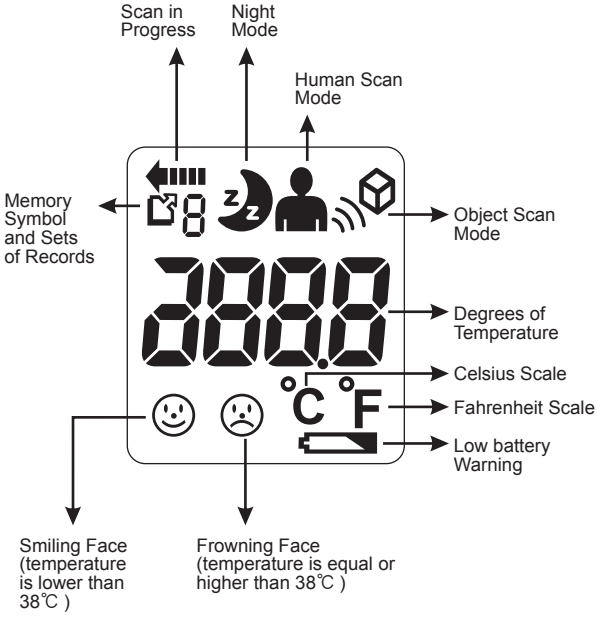
When using this product, please be sure to follow all the notes listed below. Any action against these notices may cause injury or affect the accuracy.

1. Do not disassemble, repair, or remodel the thermometer.
2. Be sure to clean the thermometer lens each time after usage.
3. Avoid direct finger contact with the lens.
4. No modification of this equipment is allowed.
5. It is recommended that user may take 3 temperatures. If they are different, use the highest reading.
6. Do not expose the thermometer to extreme temperature, very high humidity, or direct sunlight.
7. Avoid extreme shock or dropping the device.
8. Before the measurement, patients and thermometer should stay in steady state room condition for at least 30 minutes.
9. Avoid measuring temperature in 30 minutes after exercise, bathing, or returning from outdoor.
10. To protect the environment, dispose of empty batteries at appropriate collection sites according to national or local regulations.
11. Please use the thermometer solely for its intended purpose.
12. There are no absolute body temperature standards. Keep reliable records of your personal temperature to serve as a reference for judging a fever.
13. Under any circumstances, the temperature taking result is ONLY for reference. Before taking any medical action, please consult your physician.

Product Identification



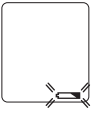
Description of LCD Display



Battery Installation

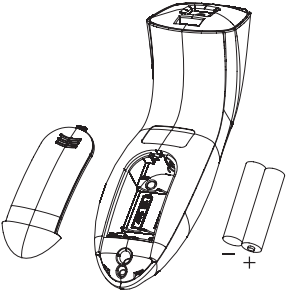
Low battery warning:

When the battery power becomes low, the low battery symbol "▭" will appear on the display. The thermometer can still be used during this time, but the batteries should be replaced as soon as possible. If the batteries run out completely, "Lo" will be displayed along with the low battery symbol. In this case, the batteries will need to be replaced before using the thermometer again.



Replacing the Battery:

1. Gently slide the battery cover back.
2. Carefully remove the old batteries and properly discard.
3. Insert new batteries (Two 1.5V alkaline AAA Size) according to the proper polarity.
4. Slide the battery cover back on.

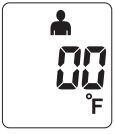


NOTE: Battery-operated

1. Please properly dispose of the batteries away from small children and heat.
2. For long durations of non-operation, please remove all batteries from the device.
3. Dispose of used batteries in accordance with the applicable legal regulations. Never dispose of batteries in the normal household waste.

Switching Between Fahrenheit or Celsius

Your thermometer can display results in either degrees Celsius (℃ or degrees Fahrenheit (℉). To switch between Celsius and Fahrenheit, while the unit is on, press and hold both the Human/Object Button and the Memory Button simultaneously. This will change the mode to either ℃ or ℉ . Once the thermometer beeps, at which time the mode has been changed and you may release the button.



Switching between 4 Kinds of Scan Mode

1. Under power on status, you can press the Human/Object Button to switch different measuring modes. There are 4 kinds of mode which including Human, Object, Human/ Night, and Object/Night Mode (in order).
2. The beep sounds will be off (mute) when your choice in Human/Night Mode, and Object/Night Mode, and the Moon symbol will appear on the LCD in both Night Modes.

Human Mode

Object Mode

Human Mode & Night Mode

Object Mode & Night Mode

NOTE:

Each press will come with a beep sound to ensure the setting is activated (except in both Night Modes).

Tips for Measuring Human Temperature

Bear in mind that the thermometer needs to have been in the room in which the measurement is taken for at least 30 minutes before use.

NOTE:

- Attempting to take temperature readings from sites on the body other than the forehead may produce inaccurate results.
- The patient should remain still while the reading is being taken.
- Readings taken while asleep should not be compared directly to readings taken while awake, as body temperature while asleep is typically lower.
- Do not take body temperature readings within 30 minutes of being outdoors, exercising or bathing.

Measuring Human Temperature

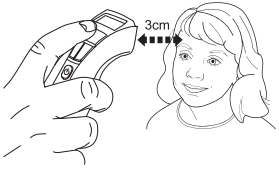
Taking a Measurement

1. Press the Power Button to power on the thermometer. The unit will run a self-test and the LCD will briefly display all of its symbols during this time. When the device is ready, '00' will appear on the screen, and the thermometer is ready to take a measurement.
2. Select the desired mode by pressing and releasing the Human/Object Button.

Note:

- When taking a patient's temperature, ensure that the thermometer is in Human mode; the Human symbol "" will appear on the display.
- If the patient's skin is covered with hair, sweat, or dirt, clean the area and wait 10 minutes before taking a measurement.
- Ensure that the thermometer is held firmly during measurement and that the patient does not move until the measurement is complete. Movement can impact the measurement.

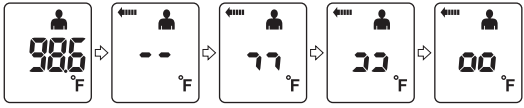
3. Position the thermometer under 3cm (around 1 inches) from the center of the patient's forehead with the sensor aimed between the eyebrows.



4. Press and release the Measure Button.
5. Slowly move the device toward or farther from the forehead until you have reached the correct distance. If the distance is beyond the correct distance, the dash-icon on the display

Measuring Human Temperature

flashes with beep sound in this sequence until the correct distance is achieved.



Note:

When the user presses the Measure Button, this workflow begins and they have 20 seconds to capture the temperature. After 20 seconds, the display turns to stand-by mode.

6. As you hear a short beep means this temperature reading has been completed and accompany with a back-light.

7. If the temperature measurement is below 38℃ , a “Smiling Face” will appear next to the reading. If the reading is 38℃ or above, a “Frowning Face” will be displayed and the LED light up to alert.

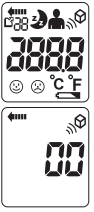
8. After about 60 seconds after use, the thermometer will automatically beep and shut off.

Fever Alarm:

Only in Human Mode and Human/Night Mode

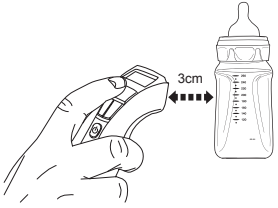
Measuring Object/Liquid Temperature

1. Press the “Power Button” to turn the thermometer on. All symbols on the display will momentarily appear.



2. Ensure that the thermometer is in Object Mode; the Object symbol “” will be on the display. To alternate between modes, press and release the Human/Object Mode Button until you see the desired measurement symbol on the display.

3. Position the thermometer under 3cm (around 1 inches) from the object.



4. Release the “Measure Button” and the temperature reading will be displayed.

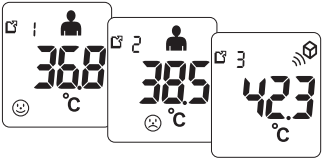
5. After about 60 seconds after use, the thermometer will automatically beep and shut off.

Memory Function

Memory Recall:

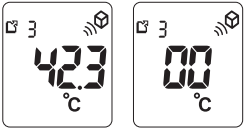
You can recall up to 10 measurements currently stored in memory to share with your physician or trained healthcare professional.

1. When the device is on, press once briefly on the "MEM button", then pass it again to show the last measurement accompanied by " " symbol.
2. The " " symbol or " " symbol will appear with each measurement stored in memory to indicate whether a person or object temperature was taken.
3. Each press of the same button recalls a previous measurement.



Memory Deletion:

1. Under power on status, keep pressing the "Memory button" for more than 3 seconds to delete all the readings. The LCD shows "00" with one beep sound to indicate that all memories are cleared.
2. Remove batteries, memory will be cleared.



Note:

All the readings will be cleared no matter record in Human mode or Object mode.

Clinical accuracy validation method

NT13B is an adjusted mode clinical thermometer. The validated information for clinical accuracy is.

Group A1: Δcb=-0.01℃ , L_A=0.18, σr=±0.08℃
Group A2: Δcb= 0.06℃ , L_A=0.22, σr=±0.08℃
Group B : Δcb=-0.01℃ , L_A=0.20, σr=±0.07℃
Group C : Δcb=-0.01℃ , L_A=0.18, σr=±0.07℃

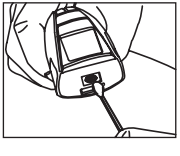
These groups are referring to: Group A1 (0 up to 3 months); Group A2 (3 months up to one year); Group B (older than one and younger than five years); Group C (older than five years).

cb: CLINICAL BIAS
L_A: LIMITS OF AGREEMENT
σr: CLINICAL REPEATABILITY

Cleaning and Disinfecting

For home use device disinfection, 70-75% alcohol (available in the pharmacy) can be used.

- Measurement Sensor
  Clean the measurement sensor with an alcohol swab before and after each measurement.
- Thermometer:
  Use a soft, dry cloth to clean thermometer body. Never use abrasive cleaning agents, thinners or benzene for cleaning. Do not scratch the surface of the probe lens or the display. Do not expose the thermometer to extreme temperatures, humidity, direct sunlight, or shock.



Applied Standards

This product conforms to the provisions of the EC directive MDD (93/42/EEC). The following standards apply to design and/or manufacture of the products:

- **ISO 80601-2-56**

  Medical electrical equipment -- Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement

- **IEC/EN 60601-1**

  Medical electrical equipment- Part 1: General requirement for safety

- **IEC/EN 60601-1-2**

  Medical electrical equipment- Part 2: Collateral standard: Electromagnetic compatibility - Requirements and tests

Error Codes

When a malfunction or incorrect temperature measurement occurs, an error message will appear as described below.

LCD Display	Cause	Solution
	The temperature measured is higher than 1. Human thermometer mode: 43℃ (109.4 ℉) 2. Object temperature mode: 100℃ (212.0 ℉)	Operate the thermometer only between the specified temperature ranges. If necessary, clean the sensor tip. In the event of a repeated error message, contact your retailer or Customer Services.
	The temperature measured is lower than 1. Human thermometer mode: 34℃ (93.2 ℉) 2. Object temperature mode: 0℃ (32 ℉)	
	The operating temperature is not in the range 15℃ ~35℃ (59 ℉ ~95 ℉)	Operate the thermometer only between the specified temperature ranges.

Operating the Bluetooth function

What You Need

NT13B Bluetooth IR Forehead Thermometer.
An Android device with Android version 4.3 or above and hardware support for Bluetooth 4.0.
An iOS device with iOS version 5 or above and hardware support for Bluetooth 4.0. All devices Apple released since the iPhone 4S (including the 4S) do, the older ones don't.

Note:

Please refer to the instruction manual of your smart phone for how to activate the Bluetooth function.

Set Up Process

1. Download an App which supports Bluetooth 4.0 from the iTunes App Store or Google Play.
2. Enable Bluetooth on your mobile device.
3. Open the App and activate the measure function.
4. Turn on the NT13B.
5. The App should automatically detect your NT13B. Tap the NT13B that is showed in the device list.
6. Your NT13B is now successfully connected to your mobile device. Every temperature reading will be transferred to your mobile device automatically.

Package contents

- 1x iHealth ThermoPro Thermometer
- 1x User manual
- 2x AAA batteries

Technical specifications

- Measuring range :
  Human Body: 34℃ ~43℃ (93.2 ℉ ~109.4 ℉)
  Object: 0℃ ~100℃ (32.0 ℉ ~212.0 ℉)
- Measuring Accuracy:
  Human Body:
  ±0.2℃ (±0.4 ℉): from 34 to 43 ℃ (93.2 to 109.4 ℉)
  Object: < 40℃ ± 2℃ ; >= 40℃ ± 5%
- Laboratory Accuracy:
  ±0.2℃ (±0.4 ℉): from 34 to 43℃ (93.2 to 109.4 ℉)
- Display resolution : 0.1℃
- Measuring site: Forehead
- Operating environment :
  15℃ ~35℃ (59 ℉ ~ 95 ℉)
  with relative humidity up to 95% (non-condensing)
  Atmospheric pressure: 700~1060 hPa
- Storage/ Transportation environment :
  -25 to 55 ℃ (-13 to 131 ℉)
  with relative humidity up to 95% (non-condensing)
  Atmospheric pressure: 700~1060 hPa
- Power supply : 2 x 1.5V AAA size alkaline batteries
- Weight : approx. 120g (with batteries)
- Dimensions :
  approx. 141mm×42mm×55.5mm (W×D×H)
- Operation Distance : 3 cm
- Bluetooth specifications:
  Frequency: 2402~2480MHz
  Output power range: <=4dBm

Calibration

The thermometer is initially calibrated at the time of manufacture. If this thermometer is used according to the instructions for use, periodic readjustment is not required. If any time you question the accuracy of measurement, please contact distributor or manufacturer.

Warranty information

iHealthLabs Europe ("iHealth") warrants the iHealth ThermoPro electronic thermometer (the "Product"), and only the Product, against defects in materials and workmanship under normal use for a period of two years from the date of purchase by the original purchaser ("Warranty Period"). Under this Limited Warranty, if a defect arises and a valid claim is received by iHealth within the Warranty Period regarding the Product, at its option and to the extent permitted by law, iHealth will either (1) repair the Product using new or refurbished replacement parts or (2) exchange the Product with a new or refurbished Product. In the event of a defect, to the extent permitted by law, these are the sole and exclusive remedies.

This warranty does not apply: (a) to consumable parts, such as the battery that diminishes over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents; (c) to damage caused by accident, abuse, misuse, contact with liquid; (d) to damage caused by operating the iHealth product outside the user manual, the technical specifications or other iHealth product published guidelines; (e) to damage caused by service performed by anyone who is not a representative of iHealth or one of its representatives.

To contact the technical support: support@ihealthlabs.eu

Electromagnetic Compatibility Tables

The thermometer NT13B is intended for use in the electromagnetic environment specified below. The customer or the user of NT13B must make sure that it is used in such an environment.

Guidance and manufacturer's declaration - Electromagnetic emissions

Phenomenon	Professional healthcare facility environment a)	HOME HEALTHCARE ENVIRONMENT a)
Conducted and radiated RF EMISSIONS	a)	CISPR 11 Group 1 Class B
Harmonic distortion	Not applicable	
Voltage fluctuations and flickering	Not applicable	

a) The equipment is suitable for use in Home Health Environments and Professional Health Care Environments limited to patient rooms and respiratory treatment facilities in hospital or clinics. The more restrictive acceptance limits of Group 1 Class B (CISPR 11) have been considered and applied. The equipment is suitable for use in the mentioned environments when directly connected to the Public Mains Network.
b) The test is not applicable in this environment unless the ME EQUIPMENT and ME SYSTEM used will be connected to the PUBLIC MAINS NETWORK and the power input is otherwise within the scope of the Basic EMC standard.

Guidance and manufacturer's declaration - Electromagnetic immunity - Enclosure port

Phenomenon	Basic EMC standard or test method	Immunity test levels	
		Professional healthcare facility environment	HOME HEALTHCARE ENVIRONMENT
ELECTROSTATIC DISCHARGE	IEC 61000-4-2	± 8kV contact ± 2 kV, ±4kV ±, ±8 kV, ±15 kV air	
Radiated RF EM fields	IEC 61000-4-3	a)	10 V/m b) 80MHz - 2.7 GHz 80% AM at 1kHz
Proximity fields from RF wireless communications equipment	IEC 61000-4-3	COMPLIANT NOTE: Further information about distances to be maintained between portable and mobile RF communications equipment (transmitters) and the NT16 can be requested from using the contact information provided in this manual. However, it is advisable to keep the electromechanical aerosol equipment at an adequate distance of, at least, 0.5 m from mobile phones or other RF communications transmitters to minimise possible interference.	
RATED power frequency magnetic fields.	IEC 61000-4-8	30 A/m c) 50 Hz or 60 Hz	

a) The equipment is suitable for use in Home Health Environments and Professional Health Care Environments limited to patient rooms and respiratory treatment facilities in hospital or clinics. The more restrictive IMMUNITY acceptance limits have been considered and applied.
b) Before modulation is applied.
c) This test level assumes a minimum distance of at least 15 cm between the ME EQUIPMENT or ME SYSTEM and sources of power frequency magnetic fields.

Explanation of Symbols

CE 0598	The CE marking with the Registration Number of the Notified Body. This denotes the compliance of European Medical Device Directive 93/42/EEC
	Consult the instruction for use
	Disposal information: Should you wish to dispose of the article, do so in accordance with current regulations. Details are available from your local authority
	Type of protection of applied part against electric shock, body floating
IP22	This product meets the basic safety and essential performance requirements indicated in the IP22 conditioning test (protection against solid foreign objects of 12.5mm Ø and greater and against vertically falling water drops when enclosure tiled up to 15°)
	Temperature limits
EC REP	European Authorized Representative
	Manufacturer's name and address
SN	SN YYMWWWXXXXX SN: Product Serial Number YY: year, M: month, WWW: working sheet, XXXXX: serial no.
	The empty, completely flat batteries must be disposed of through specially designated collection boxes, recycling points or electronics retailers. You are legally required to dispose of the batteries.
RoHS	This product fulfilling the requirements of the RoHS Directive 2011/65/EU.
REACH	This product fulfilling the requirements of the REACH Directive EC 1907/2006 and its amendments, do not contain Substances of Very High Concern in concentration above the limit of 0.1 %. No substance(s) is/are present in the parts of the product above the concentration of 0.1 % weight by weight.

EC REP MDSS GmbH
Schiffgraben 41
30175 Hannover Germany

Manufacturer:
AViTA (WUJIANG) CO., LTD
No. 858, Jiao Tong Road,
Wujiang Economic Development Zone,
Jiangsu Province, P.R.C
Made in P.R.C

Distributor: iHealthLabs Europe
36 rue de Ponthieu, 75008 Paris, France
www.ihealthlabs.eu

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