### TOUCH FREE Infrared Thermometer



NT62B



FN











P 22 ROHS REACH



MDSS GmbH

Schiffgraben 41

30175 Hannover Germany



AViTA Corporation

9F., No. 78, Sec. 1, Kwang Fu Rd., San Chung Dist., New Taipei City 24158, Taiwan, China



China, AViTA(WUJIANG)



Importer



Distributor

## INSTRUCTION MANUAL

Please read this instruction manual carefully before using your forehead thermometer

## Contents

Introduction	1
Important Information before Use	2
Product Identification	4
Description of LCD Display	5
Battery Installation	6
Switching Between Fahrenheit or Celsius	7
Switching between 4 Kinds of Measuring Mode Mode	7
Tips for Measuring Human Temperature	8
Measuring Human Temperature	8
Measuring Object/Liquid Temperature	10
Memory Function	11
Cleaning and Disinfecting	12
Error Codes	12
Troubleshooting	13
Operating the Bluetooth function	15
Technical Specification	16
EMC Tables	17
Explanation of Symbols	19

#### Introduction

#### Intended Use:

Touch Free Infrared Thermometer is intended for home use and the intermittent measurement of human body forehead temperature in people of all ages.

#### Features:

- 1. 2 in 1 thermometer: Human Body/Object
- 2. Fever Indication (Human Body Mode only)
- 3. °C/°F Switch-able Function
- 4. Multi-memory Recall
- 5. One-second Reading
- Power Saving-Auto Power Off Auto power-off after idling to ensure battery life.
- 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.
- Handicapped persons and children need assistance by another person to use the device.

### 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.
- Before the measurement, patients and thermometer should stay in steady state room condition for at least 30 minutes.
- Avoid measuring temperature in 30 minutes after exercise, bathing, or returning from outdoor.
- 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.
- There are no absolute body temperature standards. Keep reliable records of your personal temperature to serve as a reference for judging a fever.
- Under any circumstances, the temperature taking result is ONLY for reference. Before taking any medical action, please consult your physician.
- 14. The thermometer is calibrated at the time of manufacture. If at any time you question the accuracy of temperature measurements, please contact an authorized distributor for sending calibration services, additional cost may apply for return shipping fee.

- CAUTION: Please keep this device away from pets, pests, and children.
- 16. A CAUTION: Please keep away from children and pets, because small parts may be inhaled or swallowed.
- 17. If any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user is established.
- 18. If you would require any assistance during setting up, using or maintaining, please contact the manufacturer.
- Avoid using the device near an operating cell phone or microwave oven.

#### Contraindications:

- 1. Scarred or compromised tissues on measurement site.
- 2. Patient' s skin' s on certain medication of measurement site.

## **Product Identification**



- 1 Measurement Sensor
- 2 Memory & Mode Button
- 3 Battery Cover
- 4 Display LCD
- 5 Top Case
- 6 Measure Button

## **Description of LCD Display**

Measuring sequence in process

Night Mode (Mute Mode)

Human Mode

Object Mode

Degree of measurement

Celsius Scale

۴ Fahrenheit Scale

Low battery indicator

Frowning Face

(temperature is equal or higher than 38°C)

Smiling Face (temperature is lower than 38°C)

Memory Symbol and sets of records

## **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.

# **∴** CAUTION:

- 1. Risk of explosion if battery is replaced by an incorrect type.
- It is recommended not to use rechargeable, unqualified or different spec of batteries as it may damage the device or cause circuit shortcut.

### 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(LR03) Size) according to the proper polarity.
- 4. Slide the battery cover back on.

#### NOTE: Battery-operated

- Please properly dispose of the batteries away from small children and heat.
- It is recommended to remove the batteries if the unit will not be used for an extended period of time.
- 3. Batteries must be disposed of in accordance with local environmental and institutional policies.
- 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 (°C) or degrees Fahrenheit (°F). With combination of Memory and Mode button are able to change the mode to either °C or °F with a beep sound.

## Switching between 4 Kinds of Measuring Mode

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



#### NOTF:

Each press will comes with a beep sound to ensure the setting is activated. (Except 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, "-- "appear on the screen, and the thermometer is ready to take a measurement.
- 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 " (2" 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 inch) from the center of the patient's forehead with the sensor aimed between the eyebrows.
- 4. Press and release the Measure Button.
- Slowly move the device toward or farther from the forehead until you have reached the correct distance. (If below icon appears, move thermometer closer to forehead)



#### Note:

When the user presses the Measure Button, this workflow begins and they require time for device to capture the temperature. After capture the temperature, 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°C, a "Smiling Face" will appear next to the reading. If the reading is 38°C or above, a "Frowning Face" will display 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

- Press the "Measure Button" to turn the thermometer on. All symbols on the display will momentarily appear.
- 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.
- Release the "Measure Button" and the temperature reading will be displayed.
- After use, the thermometer will automatically beep and shut off after idling.

## **Memory Function**

### Memory Recall:

You can recall up to **30 measurements** currently stored in memory to share with your physician or trained healthcare professional.

- When the device is on, press once briefly on the Memory Button, then pass it again to show the last measurement accompanied by "M" symbol.
- 2. The " (2" symbol or " (2" 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:

- Under power on status, you may hold press the "Memory button" to delete all the readings. The LCD shows "--" 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.

## Cleaning and Disinfecting

For home use device disinfection, 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.

### **Error Codes**

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

Display	Cause	Solution
Х,	higher than measurement range. Human mode: 43°C (109.4°F)	Operate the thermometer only between the specified temperature ranges. If necessary, clean the sensor
Lo	lower than measurement range.	tip. In the event of a repeated error message, contact your retailer or Customer Services.
-	The operating temperature is not in the range: 15°C~40°C (59°F~104°F)	Operate the thermometer only between the specified temperature ranges.

Troubleshooting

Iroubleshooting		
Trouble	Probable Case	Recommended Action
Failed to power on.	Batteries are drained.	Replace with a new battery
	Batteries are not correctly aligned with terminals.	Reinsert batteries correctly.
	The thermometer is damaged.	Contact your retailer or Customer Services.
Low battery symbol appears.	Low battery.	Replace with a new battery as soon as practical
	In colder temperature batteries have weaker electrical charges.	Warm up the batteries or use the device in a warmer setting.
The measurement is abnormal or if	Incorrect measure position.	Reposition the probe point center of the forehead.
there is any doubt on the measured result	The measuring distance is too far.	Maintain a distance of 3 cm.
	The measuring is hampered by hair, perspiration, oil, sweat, makeup, etc.	Remove obstructions from forehead.
	The lens of probe is dirty.	Clean the lens according to <i>cleaning</i> and disinfecting.
	You have just come	Stay in steady state

	from extreme	room at least for 30
	temperatures	minutes.
	environment.	
	The thermometer has	Put the thermometer in
	been stored in a cold	steady state room at
	room or exposed to	least for 30 minutes.
	direct sunlight.	
	Measurement was	Switch mode to human
	taken in surface	mode.
	temperature mode.	
Power switches	System design.	Push the power button
off automatically.		again.
	Batteries are drained.	Replace with a new
		battery
	The thermometer is	Contact your retailer or
	damaged.	Customer Services.

## Operating the Bluetooth function

This product is an TOUCH FREE Infrared Thermometer with Bluetooth function. design without entering personal information. If the device has a transmission function, the transmission measurement data is designed to be encrypted and transmitted, and will not be tampered with or retrieve user-related information during the transmission process. The firmware and software of the product have been programmed in the production process, and the programming interface is different from the data transmission interface. When programming to the microcontroller, use an encrypted programmer, so there is no need to worry about the software being tampered with during transmission.

#### Bluetooth function requirement:

- An Android device with Android version 4.3 or above and hardware support for Bluetooth 4.2.
- An iOS device with iOS version 5 or above and hardware support for Bluetooth 4.2

### How to activate the Bluetooth function:

Please refer to the instruction manual of your mobile phone or computer for how to activate the Bluetooth function.

### Set Up Process

- (1) Please determine your mobile phone or computer has BLE4.2.
- (2) Turn on the NT62B device, when the Bluetooth icon shows on the device, it means NT62B device is under broadcast condition.
- (3) Please check the connecting condition from your mobile phone or computer. The device name should be "NT62B".
- (4) Every measure reading will be transfer to your mobile phone or computer automatically.

## **Technical Specification**

· Measuring range:

Human Body: 34°C~43°C (93.2°F~109.4°F) Object: 0°C~100°C (32.0°F~212.0°F)

· Calibration Accuracy:

Human Body:  $\pm 0.2^{\circ}C(\pm 0.4^{\circ}F)$ : from  $34^{\circ}C \sim 43^{\circ}C$  ( $93.2^{\circ}F \sim 109.4^{\circ}F$ ) Object:  $< 40^{\circ}C \pm 2^{\circ}C$ ;  $> = 40^{\circ}C \pm 5\%$ 

• Display resolution: 0.1°C

• Operating environment: 15°C~40°C (59°F ~ 104°F) with relative humidity 15% to 95% (non condensing)

Atmospheric pressure: 700~1060 hPa 700 🚭

• Storage/ Transportation environment : -25 to 55 °C(-13 to 131 °F)

with relative humidity 15% to 95% (non condensing)

• Atmospheric pressure: 700~1060 hPa not seem to seem

- Power supply: 2 x 1.5V AAA size alkaline batteries
- Weight: approx. 120g (with batteries)

Memory: 30 sets

• Dimensions : approx. 157.2mm×37mm×37.5mm (L×W×H)

Operation Distance: 3 cmFrequency: 2402~2480GHz

- Output power range : <=4dBm
- Output power range : <=4dBm

  Battani On anation Times:

Battery Operation Time:
 about 90 minutes (Done

about 90 minutes (Depends on different brand of batteries.)

· Shelf Life: 3 years

- Reference body site: Ear temperature
- · For Customer Service

To obtain further service please contact AViTA Corp. for the address of the repair location. Enclose the Proof of Purchase. Include \$10.00 USD for the return shipping and handling. 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.

## **EMC Tables**

NTC2B is intended	l for use in the	lastromagnotic	anvironment
	NT62B is intended for use in the electromagnetic environment specified below. The customer or the user of NT62B must make sure		
that it is used in su			DZB must make sure
			tromagnetic emissions
Guidance and mai		onal healthcare	
Phenomenor			
Caradonatadanad	CISPR 11	environment a)	ENVIRONMENT a)
Conducted and	0.0		CISPR 11
radiated RF MISSI	Function	Class A (Not BLE	Group 1 Class B (Not BLE Function)
	BLE Func	Class A (With	Group 2 Class B (With BLE Function)
Llamas and a distant			IBLE FUNCTION)
Harmonic distortion	Harmonic distortion Not applicable (Note: Power by Battery or DC Input)		
Voltage flucturation		AC input needs	to be tested
Voltage fluctuation and flickering			or DC Innut)
and lickering		(Note: Power by Battery or DC Input)	
-> The second second	Only the AC input needs to be tested  a) The equipment is suitable for use in Home Health Environments and		
			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.		
EOI IIDMENIT and M	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			
	standard or		HOME HEALTHCARE
	test method		ENVIRONMENT
	test metroa	facility	EIVINGIVIEIVI
		environment	
ELECTROSTATIC	IEC 61000-4-2	± 8kV contact	
DISCHARGE	120 01000 4-2		±, ±8 kV, ±15 kV air
	IEC 61000-4-3		10 V/m b) 80MHz - 2.7
fields	120 01000 4 3		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 NT62B can be requested from supplier using the contact information provided in this manual. However, it is advisable to keep the 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**

<b>C E</b> 2797	The CE marking with the Registration Number of the Notified Body. This denotes the compliance of Regulation (EU) 2017/745
MD	Medical Device
<u>س</u>	Manufacturer
EC REP	Authorized representative in the European Community
سا	Date of manufacture (YYYY-MM-DD or YYYY-MM)
LOT	Batch code (YYMMWWWW)
SN	Serial number (YYMWWWXXXXX)
<del>*</del>	Keep dry
1	Temperature limit

<u></u>	Humidity limitation
( <del>-)</del>	Atmospheric pressure limitation
$\triangle$	Caution
<b>(2)</b>	Consult the instruction for use
X	Disposal information: Should you wish to dispose of the article, do so in accordance with current regulations. Details are available from your local authority. WEEE 2012/19/EU Directives
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.
Ů	Stand-by
*	Device classification type BF

IP 22	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°)	
<b>X</b>	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.	
	Importer	
	Distributor	
#	Model Number	
CN	Country of Manufacturer	
	Unique Device Identifier  Al Data Flement Data Type/Format	
	7.11	Data Type/Format Numeric
UDI	(11) Manufacturing Date	Numeric: YYMMDD
	(10) Lot Number	Alphanumeric
	(21) Serial Number	Alphanumeric
*	Keep away from sunlight	

Electronic IFU available at http://www.avita.com.tw

NT62BP-22476AV 2022-12-22