## TOUCH FREE Infrared Thermometer

NT61



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 on and setting the thermometer	7
Setting the basic functions	7
Measuring Object and Room Temperature	11
Cleaning and Disinfecting	12
Error Codes	13
Troubleshooting	14
Technical Specification	16
EMC Tables	17
Explanation of Symbols	19

## Introduction

#### Intended use

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

## Type of Use/ Reuse

Multiple patient multiple use

#### Intended User

The Patient is an intended operator.

Patient selection criteria: Handicapped persons and children are the exception of handicapped persons and children need assistance by another person to use the device.

- 1. Setting menu
- 2. Sound
- 3. Non-contact Forehead measurement
- 4. Object Measurement
- 5. Storage: 60 Measurements
- 6. Fever / No-Fever indicator (smiley symbols in LCD)
- Backlight (turns on after each measurement for 5 seconds and in the memory mode)

#### Contraindications:

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

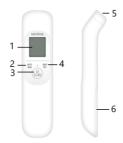
## Important Information before Use

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.
- 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.
- 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.
- 12. 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.

- ACAUTION: Please keep this device away from pets, pests, and children.
- ACAUTION: 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.
- If you would require any assistance during setting up, using or maintaining, please contact the manufacturer.
- 19. Avoid using the device near an operating cell phone or microwave oven

## **Product Identification**



- 1 Display
- 2 MODE/MEM button

MODE sets the measurement mode MEM display stored measurement

- 3 U / SCAN button
  - (1) Switch on the device.

SCAN Starts the temperature measurement.

4 LIGHT/SET button

LIGHT manual switch on/off the illuminated display

SET sets the basic functions

- 5 Measuring sensor
- 6 Battery compartment lid

**Description of LCD Display** 

Description of ECD display		
	Object temperature mode	
	Room temperature mode	
<b>"</b> \(\frac{1}{2}\)	Forehead temperature mode	
叹))	Acoustic signal symbol	
TIME	Time	
MEM	Memory function	
DATE	Date	
188.8	Temperature/memory space number display	
<b>7</b>	Battery status indicator	
<b>:</b>	Measurement ≥ 38.0 °C (≥ 100.4 °F) "fever"	
$\odot$	Measurement < 37.5 °C (< 99.5 °F) "no fever"	
∜	Illuminated display symbol	
°C	Temperature measurement unit Celsius	
°F	Temperature measurement unit Fahrenheit	
88÷88	Year/date/time display	

## **Battery Installation**

## Low battery warning:

If the batteries run out completely, the low battery symbol " " will be displayed. 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:

The device requires two AAA (LR03) batteries.

- Open the battery compartment.
   To do this, push the battery compartment down.
- Take the used batteries out of the battery compartment.
- Insert new batteries.

Make sure that the batteries are inserted the correct way round.

Close the battery compartment.

### 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 on and setting the thermometer

To switch on the thermometer, briefly press the  $\circlearrowleft$  / SCAN button. After a brief self-test and two short beeps the thermometer is ready for forehead measurement. The device always starts up in forehead temperature mode  $\H$ {}

## Setting the basic functions

This menu allows you to set the following functions individually, one after another.



## Temperature measurement unit

Insert the batteries or press and hold the LIGHT/SET button for 3 seconds when the thermometer is switched on. The temperature measurement unit flashes on the display.

You can set the device to display the temperature in degrees Celsius (°C) or degrees Fahr-enheit (°F).

- To display the temperature in Celsius, select °C using the MODE/MEM button and con-firm with the LIGHT/SET button.
- To display the temperature in Fahrenheit, select °F using the MODE/MEM button and confirm with the LIGHT/SET button.

#### Time format

The time format flashes on the display

 Use the MODE/MEM button to set your preferred time format, and confirm with the LIGHT/SET button.

#### Date

The year flashes on the display

- Use the MODE/MEM button to set the year, and confirm with the LIGHT/SET button.
  - The day/month flashes on the display
- Use the MODE/MEM button to set the day and month, and confirm with the LIGHT/SET button

① If the hour format is set as 12 h, the day/month display sequence is reversed. Be sure to set the date and time correctly. Otherwise, you will not be able to save your measured values correctly with a date and time and access them again later.



#### Time

The hour flashes on the display

- Use the MODE/MEM button to set the hour, and confirm with the LIGHT/SET button.
  - The minute flashes on the display
- Use the MODE/MEM button to set the minute, and confirm with the LIGHT/SET button
- (i) In the 12 h format, the time is displayed with AM/PM.



#### Illuminated display

The illuminated display symbol flashes on the display.
You can activate or deactivate the automatic illuminated display (appears following forehead temperature measurement).

- To activate the automatic illuminated display, use the MODE/MEM button to select <sup>OR</sup>, and confirm with the LIGHT/SET button.
- To deactivate the automatic illuminated display, use the MODE/MEM button to select @F F, and confirm with the LIGHT/SET button.

## Acoustic signal

The acoustic signal symbol flashes on the display.

You can activate/deactivate the acoustic signals (device activation, measurement in progress, measurement completion).

- To activate the acoustic signals, use the MODE/MEM button to select  $\ensuremath{\mathfrak{M}}$  , and confirm

with the LIGHT/SET button.

- To deactivate the acoustic signals, use the MODE/MEM button to select #FF, and confirm with the LIGHT/SET button.
- Hold the thermometer 2 to 3 cm in front of the forehead measuring point. Press the (1) / SCAN button.



(i) If the measurement is less than 37.5°C (99.5°F), appears in the display to indicate no fever; this indicates that the body temperature is in the normal range.

The measurement is automatically saved with the date/time and the

"fever" ( classification.

The device is ready to take another measurement when two short beeps sound and the forehead symbol stops flashing.

The device automatically switches off after approx. 60 seconds or you can press the  $\bigcirc$  / SCAN button for 5 seconds to switch it off.

## Displaying stored measurements

The device only stores measurements in forehead temperature mode .

The device automatically stores the values from the last 60 measurements.

When 60 memory spaces are exceeded, the oldest value is deleted.

- The memory can be called up as follows:
- With the thermometer switched on, press and hold the MODE/MEM button for 3 seconds.
  - The most recent measurement is displayed.
- Pressing the MODE/MEM button again will display the measured value.
- In the upper line, the time and date are displayed alternately.

## Measuring Object and Room Temperature

## Object temperature mode



If you want to measure an object temperature with this thermometer, switch to object temperature mode.

- With the thermometer switched on, briefly press the MODE/MEM
- Hold the thermometer 2 to 3 cm from the measuring point. Briefly press the (1) / SCAN button and read the temperature on the display. The device automatically switches off after approx. 60 seconds or you can press the (1) / SCAN button for 5 seconds to switch it off. Measurements taken in object temperature mode are not stored.

## Room temperature mode



If you want to use the thermometer to measure the room temperature you need to switch to room temperature mode.

 With the thermometer switched on, briefly press the MODE/MEM button twice

The device switches to room temperature mode  $\square$  .

• The room temperature is immediately displayed. The device automatically switches off after approx. 60 seconds or you can press the U/SCAN button for 5 seconds to switch it off. Measurements taken in room temperature mode are not stored.

## 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  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

error message will appear as described below.

Error message	Problem	Solution
Er I	Measurement during self-test, device not yet ready for measurement.	Wait until the forehead symbol stops flashing.
Er 3	Room temperature below 10 °C or over 40 °C (<50 °F, >104 °F).	Room temperature must be between 10 °C and 40 °C (<50 °F, >104 °F).
Н	(1) Forehead temperature mode: The temperature recorded is higher than 42.2 °C (108 °F). (2) Object temperature mode: The temperature recorded is higher than 80 °C (176 °F).	Operate the thermometer only between the specified temperature ranges. In the event of a repeated error message, contact your retailer or Customer Services.
Lo	(1) Forehead temperature mode: The temperature recorded is lower than 34 °C (93.2 °F). (2) Object temperature mode: The temperature recorded is lower than -22 °C (-7.6 °F).	Operate the thermometer only between the specified temperature ranges. In the event of a repeated error message, contact your retailer or Customer Services.
C	The batteries are empty.	Replace the batteries.

Troubleshooting

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

Technical Specification	
Model	NT61
Measurement method	Non-contact infrared measurement
	Measuring site: Forehead
	Reference body site: Ear
Basic functions	Forehead temperature measurement
	Object temperature measurement
	Room temperature measurement
Measurement units	Celsius (°C) and Fahrenheit (°F)
Operating conditions	10 °C to 40 °C (50 °F to 104 °F)
	with a relative humidity 15% to 95 %
Storage conditions	-25 °C to 55 °C (-13 °F to 131 °F)
Management	with a relative humidity 15% to 95 %
Measurement distance	2 to 3 cm from the measuring point
Measurement range and accuracy	Forehead temperature measurement
of forehead temperature measurement	34 °C to 43 °C (93.2 °F to 109.4 °F)
measurement	laboratory accuracy 34 °C to 43 °C: ± 0.2 °C
	(93.2 °F to 109.4 °F: ± 0.4 °F)
Clinical repeat precision	Forehead:
Cirrical repeat precision	Children 1 – 5 years ± 0.07 °C (0.13 °F)
	Adults:
	± 0.08 °C (0.14 °F)
Measurement range and accuracy	Object temperature measurement
Object temperature measurement	0 °C to 80 °C (32 °F to 176 °F)
,	Measurement accuracy
	± 4% or ± 2 °C (± 4 °F)
Memory function	Automatically stores the last 60 measurements.
Body temperature measurement	, and the second
Acoustic signal	With device activation, during measurement,
	when measurement is complete (can be set).
Display	LCD display
Energy saving functions	Device automatically switches off after 1 minute.
Dimensions Width x depth x height	approx. 166.9*40.62*33.35mm
Weight	67 g (without batteries)
2 x AAA (LR03) batteries	Batteries last for approx. 2000 measurements
	Activated functions such as acoustic signal or
_	illuminated display also reduce the battery life.
Frequency	2402~2480GHz
Output power range	<=4dBm
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.
	Shelf Life: 3 years
	5.15.1 E.15 . 5 yours

## **EMC Tables**

LIVIC IUDICS			
	ner or the user o		environment specified nake sure that it is used
		eclaration - Ele	ctromagnetic emissions
Phenomenor	Profession	onal healthcare environment a)	HOME HEALTHCARE
Conducted and radiated RF MISSI	Function)	Class A (With	CISPR 11 E Group 1 Class B (Not BLE Function) Group 2 Class B (With BLE Function)
Harmonic distorti	Harmonic distortion Not applicable (Note: Power by Battery or DC Input) Only the AC input needs to be tested		
Voltage fluctuatio and flickering	age fluctuations 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 Professional healthcare facility environment	levels HOME HEALTHCARE ENVIRONMENT
ELECTROSTATIC DISCHARGE	IEC 61000-4-2	± 8kV contac	t ±, ±8 kV, ±15 kV air

fields		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 NT61 can be requested from supplier 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**

<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></u>	Manufacturer
EC REP	Authorized representative in the European Community
<u>~</u>	Date of manufacture (YYMMDD or YYYY-MM)
LOT	Batch code (YYMMWWWW)
SN	Serial number (YYMWWWXXXXX)
<del>*</del>	Keep dry
1	Temperature limit

<u></u>	Humidity limitation
<u></u>	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°)	
	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	
₹cz	Country of Manufacturer	
	Unique Device Identifier	
	Al Data Element Data Type/Format	
LIDI	(01) Device Identifier(GTIN) 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

NT61P-22464AV 2023-05-30