# **REIZEN**<sup>™</sup> TALKING DIGITAL THERMOMETER

Model # BT-A31

# **INSTRUCTIONS**

## Intended Use

Digital Thermometer, Model # BT-A31 is intended for monitoring human body temperature by physician or consumers in hospital or home.

#### Operation

- 1. When the thermometer is ready to measure the temperature,
- you will hear audio announcement "Please measure"
- 2. When the measurement is complete,
- you will hear the audio announcement for the measured result.
- 3. Press blue audio button again, the latest temperature reading will be announced & displayed on the LCD screen.

# What is a "Normal" temperature?

Although the generally accepted "normal" temperature reading is 37.0 °C /98.6 °F, temperature readings can vary from 36.1 °C/97.0 °F to 37.2 °C /99.0 °F and still may be considered "normal". Variations in temperature can be attributed to activities such as exercise, smoking, eating and drinking. Your temperature is lower in the morning than in the afternoon. Other variations may be due to the location of the temperature reading. While the oral temperature follows the guidelines previously described, a rectal temperature is generally 0.5 °C /1.0 °F higher. Conversely, an axillary (under the arm) temperature will be 0.5 °C /1.0 °F lower.

# How to switch audio option to mute condition?

During POWER OFF mode, press POWER button for about 5 seconds until you see 'ON' or 'OFF' to display on the screen. Then you can remove your finger from the button and quickly click on the "POWER" button again to switch. (Reminder: This may take you 4 ~ 5 seconds to see 'ON' or 'OFF' icon to display on the screen for you to switch.

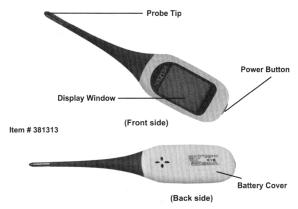
# How to switch voice processor announcement between English and Spanish Feature?

During POWER OFF mode, press POWER button for about 10 seconds until you see 01 displayed on LCD, then release the POWER button. Continually press POWER button to allow to switch the voice announcement between English and Spanish. 01 means English. 02 means Spanish

# How to switch Celsius and Fahrenheit degrees on display screen? During POWER OFF mode, press POWER button for about 15 seconds until "C" or "F" symbol blinks on I.O. display then release POWER button Continually press POWER button

During POWER OFF mode, press POWER button for about 15 seconds until "C" or "F" symbolinks on LCD display, then release POWER button. Continually press POWER button to allow you to prompt to switch display to either Fahrenheit or Celsius.

# Features of your digital thermometer



# How to take your temperature

- 1. Press "POWER" button to activate. The unit would beep and ( 1888).

  (or 1888) for around 2 seconds.
- 37.0 C (or 98.6 F) will display after the latest measured temperature is displayed with an "M" icon at the bottom of right corner.
- 4. When Lo and flashing "C ("F) displays, the thermometer is ready for measurement but if the room temperature is higher than 32.0"C (89.6"F), the room temperature would be displayed instead of Lo.
- Beep sound alerts when measurement is complete.
- Press "POWER" button to turn off the thermometer.(The thermometer will automatically power off in ten minutes if the thermometer is not in use.)

# Taking an Oral temperature

Place the probe tip under the tongue and keep it near to the heat pocket as close as possible.

Approximate measuring time: 8 seconds.
Suggestion: Close your mouth for at least 2 minutes before taking temperature.

#### Taking a Rectal temperature

Apply a water soluble lubricant to the probe cover.

Gently insert the probe (MAXIMUM 1/2") into the rectum.

Approximate time for measurement: 10-30 seconds.

Note: Rectal temperatures are generally 0.5 C /1.0 F higher than oral readings

## Replacing the battery

The battery in your digital thermometer needs to be replaced when you see the icon "\(\times\)" appear at the bottom of right corner.

\*Replace the batteries with 2 CR2025.

## To replace the battery

- Remove the battery cover from the back of the thermometer.
- Remove the plastic security chip from battery compartment.
- 3. Use a non-metal pointed tool to remove the battery.
- Place battery cover back after the 2 new CR2025 (2\*3V) batteries have been replaced.





Battery cover

Battery compartment for 2 batteries

## Note: Please properly discard the batteries. KEEP away from small children and heat.

#### Specifications

Measurement range	32.0°C (89.6°F)~ 42.9°C (109.2°F)	
Low temperature display	Temperature<32.0°C (89.6°F): display: Lo°C (Lo°F)	
High temperature display	Temperature>42.9°C (109.2°F): display: Hi °C (Hi °F)	
Display resolution	0.1°C (0.1°F)	
Accuracy	35.0°C(95.0°F)~39.0°C(102.2°F) ±0.1°C(0.2°F) other range: ±0.2°C(0.3°F)	
Fever beep Sound (>37.8°C (100.0°F))	"Tin-Don" then show your measured value	
Normal beep sound 〔≤37.8°C (100.0°F)〕	"Tin-Don" then show your measured value	
Auto power off	8 minutes ± 2 minutes	
Battery	CR2025	
Life of battery	Approximately 2 years	
Operating condition	Temperature: 10°C ~40°C (50.0°F to 104.0°F) Humidity: 30%~85%RH	
Storage condition	Temperature: -10°C ~60°C (14.0°F to 140.0°F) Humidity: 25%~90%RH	
Weight	0.99 ounces (28 grams)	

# Cleaning instructions

Each time, before or after using the thermometer, please clean it with a soft cloth that has Isopropyl rubbing alcohol diluted with water or wash it with cold soap and water. The thermometer can not be submersed into water or alcohol. Do not soak or sterilize by boiling, gas or steam autoclaves method.

Solution	Dilution with water	Method
Ethanol	70-80%	Wipe the probe with the soaked cloth.
Isopropyl Alcohol	70-90%	As above.
Glutaraldehyed	0.5-2%	Soak the probe in solution for 30 sec.

# Precautions:

- The thermometer should only be used under the supervision of an adult. Please keep away from children.
- Do not walk, run or talk while taking temperature.
- Do not keep the thermometer directly exposed in sunshine or any environment with dust, humidity or extreme temperature.
- Dropping or subjecting your thermometer with strong shocks should be avoided.
   Do not attempt to disassemble the thermometer, except for replacing the battery

Guidance and manufacturer's declaration – electromagnetic emission . The digital thermometer is intended for use in the electromagnetic environment specified below. The customer of the user of the digital thermometer should assure that it is used in such an environment.

		20.00.000000000000000000000000000000000
Emission test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The digital thermometer uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emission CISPR 11	Class B	The digital thermometer is suitable for use in all establishments, including domestic establishments and those directly connected to public low-voltage power supply networks that supplies buildings used for domestic purposes.

Guidance and manufacturer's declaration – electromagnetic immunity
The digital thermometer is intended for use in the electromagnetic environment specified below.
The customer or the user of digital thermometer should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Power frequency (50Hz/60Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Guidance and manufacturer's declaration – electromagnetic immunity

The digital thermometer is intended for use in the electromagnetic environment specified below.

The customer of the user of the thermometer should execute the lectromagnetic environment specified below.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
	120 0000 1 0001 0001	Sompliance level	Portable and mobile RF communications equipment should be used no closer to any part of the digital thermometer, including cables, than the recommender separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance
Conducted RF	3 Vrms		$d = 1,2\sqrt{P}$
IEC 61000-4-6	150 kHz to 80 MHz	Not Applicant	$d = 1.2\sqrt{P}$ 80 MHz to 800 MHz
			$d = 2,3\sqrt{P}$ 800 MHz to 2,5 GHz
			Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	Field strengths from fixed RF transmitters as determined by an electromagnetic site survey.  A. Should be less than the compliance level in each frequency range.  B. Interference may occur in the vicinity of equipment marked with the following symbol: ((••))

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

- A Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the digital thermometer is used exceeds the applicable RF compliance level above, the digital thermometer should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the digital thermometer.
- Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the digital thermometer .

Digital thermometer is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the digital thermometer can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the digital thermometer as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output	Separation distance according to frequency of transmitter(m)		
power of transmitter(W)	150 KHz to 80 MHz $d = 1,2\sqrt{P}$	80 MHz to 800 MHz $d = 1.2\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
11	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Explanation of Symbols:

€ 0598 Symbol for 'CE"

LOT Symbol for batch code

Symbol for manufacturer

Symbol for "electrical and electronic equipment"

Symbol for "TYPE BF APPLIED PART"

Symbol for "Follow operating instructions"

IP22 Symbol for "the IP classification"

Distributed By Fudakang Industrial LLC. Princeton Junction, NJ08550

Customer Care By: Maxi Aids Inc. Toll Free:(800) 522-6294

#### LIMITED WARRANTY

REIZEN guarantees that its Digital Thermometer will be free from manufacturing defects under normal use for 1 Year.

This warranty covers only normal use, and does not apply to use in any clinical or commercial applications. This warranty does not cover batteries or other power sources that may be provided with or used with the Digital Thermometer. This warranty is voided if the Digital Thermometer product is misused or abused in any manner.

If the Digital Thermometer fails to operate during the time the original purchaser owns it. Please call Maxi Aids Inc. customer care team at our Toll Free number: 800.522.6694 for further assistance. Repair or replacement of the defective unit, at the warrantor's option, is the sole remedy under this warranty.

ANY IMPLIED WARRANTIES WHICH THE PURCHASER MAY HAVE ARE LIMITED IN DURATION TO THE TIME THAT THE ORIGINAL CONSUMER PURCHASER OWNS THE PRODUCT. Some states do not allow limitations or how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty constitutes the warrantor's only responsibility and obligation to repair and/or replace materials or components, or refund the purchase price. The warrantor will not be responsible for any indirect, incidental, special, consequential, or punitive damages or other loss, including, but not limited to, damage to or loss of other property or equipment and personal injuries, whether to purchaser or others. The warrantor shall in no event be liable to the purchaser for any amount in excess of the cost of repair and/or replacement of the unit, or the purchase price of the unit. Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation or exclusion may not anoly to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.