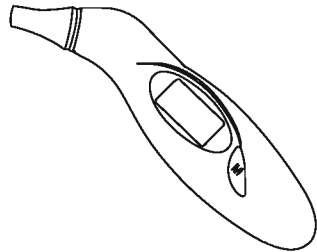


# Infrared Ear - Forehead Thermometer

**norditalia**  
elettromedicali



## INSTRUCTION MANUAL

Model TI-150

CE 0051

Distributed by:  
Norditalia Elettromedicali S.r.l.  
via Colli Storici n°215  
25010 S. Martino della Battaglia (BS) - ITALY  
Web: [www.norditalia.biz](http://www.norditalia.biz) - Mail: [nordita@tin.it](mailto:nordita@tin.it)

## Contents

Precaution .....	1
Parts Identification .....	2
Information You Should Know Before Operating the IR Ear Thermometer.....	3
Preparation for Use .....	4
How to Operate the Thermometer .....	5
Memory Mode .....	7
Cleaning and Care.....	8
Error Message.....	9
Specifications .....	10

### ⚠ Precautions

1. Please consult your physician to verify your body temperature.
2. **DO NOT** scrape or scratch the lens as it will hamper the effectiveness of the device.
3. The device is intended for consumer-use only.

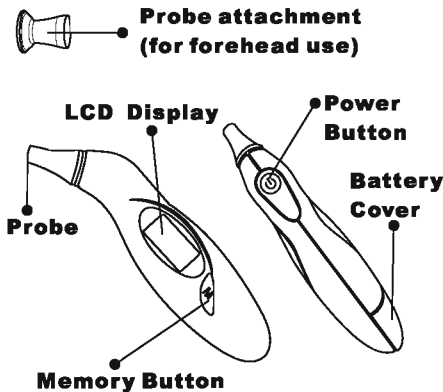
### ⚠ Warning:

When replacing batteries use the same type of batteries included in the product package. To avoid incompatibility, do not mix old and new batteries together or mix alkaline, carbon, zinc, rechargeable, nickel-cadmium or different types of batteries together. Dispose of used batteries properly following local recommended procedure.

**POWER SOURCE**  
one battery  
CR2032(3.0V)

1

## Parts Identification



### Why IR ear thermometer?

The tympanic membrane (eardrum), and the hypothalamus, the part of the brain which controls body temperature, share a common blood supply, so tympanic readings rise and fall rapidly with core temperature (deep-body temperature). This makes the ear temperatures one of the best indicators of internal body (core) temperature.

### What are normal temperature values?

Human body temperature varies from person to person. One person's body temperatures are different from time to time. Therefore, it is very important to know your normal body temperature range. Because of this, we recommend that you measure yourself when healthy to establish reference temperatures which will make you feel more confident of the measured temperature when ill.

2

## Information You Should Know Before Operating the IR Ear Thermometer

### How to use the IR ear thermometer correctly?

1. It is useful to try this thermometer on yourself first to become familiar with its operations.
2. Please do not take the temperature immediately after waking up. Sleeping on the ear may cause the temperature to be higher than normal.
3. It is common for the readings to be slightly different between the right and the left ear. Therefore, we suggest using the same ear to obtain temperature.

4. **To make the ear canal straight for measurement:**  
For Children under 12 months:  
Make the ear canal straight by pulling the ear back.



- For Children over 12 months and Adults:  
Make the ear canal straight by pulling the ear back and up.



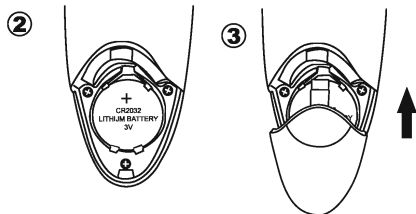
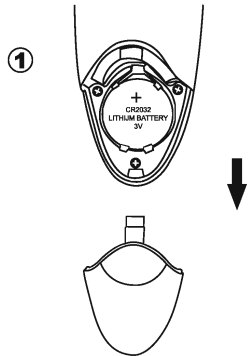
5. This IR ear thermometer automatically converts measured ear temperature reading to oral temperature.

3

## Preparation for Use

### Installing/Replacing the Battery

1. Pull the battery cover off in the direction shown.
2. Install one new "CR2032" battery into the battery compartment matching correct polarities.
3. Replace and fasten the battery cover securely.



4

## How to Operate the Thermometer

1. Press and release the On/Off button to **turn on** the unit. (Figure1) **The display will show the last memory.** A beep is heard. After about 2 seconds, the display shows that the unit is ready for measurement. (Figure2)
2. Place the probe into the ear canal then press and release the On/Off button to start measurement. (You will hear a beep.)
3. While it is measuring, the display will show as (Figure3).
4. A "beep-beep" sound is heard when the measurement is completed. (Figure1)

### Forehead mode

5. Press MEM key for 2 seconds, it will switch from "Ear" mode to "Forehead" mode. You need to apply the probe attachment. (Figure4)
6. Place the probe attachment on the probe of the thermometer then place it on the middle of the forehead. Ensure proper contact between forehead and probe.
7. Press the On/Off button to start measurement with moving the probe across the left or right side of the forehead to the temporal artery for at least three seconds (Figure5), during the measurement the display shows as (Figure 6) then release the On/Off button.
8. You will hear a "beep-beep" sound with the measuring value showed as (Figure7)

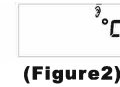
5

## How to Operate the Thermometer

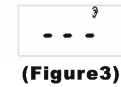
9. **Turn off** the unit :It will auto power off in 1 minute.



(Figure1)



(Figure2)



(Figure3)



(Figure4)



(Figure5)



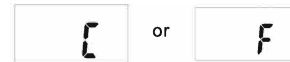
(Figure6)



(Figure7)

### For Centigrade and Fahrenheit Switchable Models:

The Centigrade or Fahrenheit mode can be switched when the unit is ready for a measurement. First, pressing the MEM button then immediately press the On/Off button. The display will show "F" or "C". Then it will back to Memory mode display (also see memory mode).



### Operational Hints:

1. Between each measurement, please allow a **5-second** interval in order to obtain the most accurate result.
2. Ensure that the probe lens is clean before each measurement. Dirty probe lens may cause inaccurate measurement.

6

## How to Operate the Thermometer

3. Because the thermometer is a very sensitive device, it must be at room temperature approx. 16~40°C (60.8~104°F) for at least 30 minutes before using to avoid any incorrect measurements.

**Warning :** Performance of the device may be degraded if the device is operated or stored outside the stated temperature and humidity range or if the patient's temperature is below ambient (room) temperature.




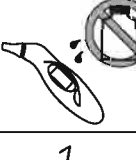
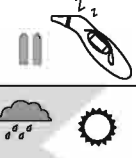

### Memory Mode

#### Recalling Memory:

1. Turn on the power first.
2. Press MEM button.
3. For models with 10 memories Press the MEM button repeatedly will take you to each recorded temperature in the memory. you may toggle the button to see the recorded temperatures.
4. You can start a new measurement by press On/Off button again or it will power off automatically in 1 minute.






7

## Cleaning and Care

	Please do not drop the unit. It is not shock-proof. Warning: following mechanical shock, the unit should not be used.
	Please do not modify or disassemble the unit.
	Please use a cotton swab with alcohol to gently clean the surface of the lens. Before next measurement, wait at least 40 minutes for the unit to dry.
	Please avoid thinner and benzene or other harsh cleaners.
	Please remove the batteries if the unit will not be used for a long time.
	Please keep the unit in a suitable place avoiding high temperature, direct sunlight, high moisture, and dust. The unit is not water proof.


8


## Error Message

Message	Correction
	The temperature measured was higher than the specified measuring range. <b>Please measure again.</b>
	The temperature measured was lower than the specified measuring range. <b>Please measure again.</b>
	The ambient (room) temperature was outside the operating range. <b>Keep it at room temperature approx. 16°C~40°C (60.8°F~104°F) for 30 minutes before using.</b>
	Failed self-diagnostic test. <b>Reinstall batteries and try again.</b>
 No display	<b>Replace one "CR2032" battery.</b>

9

## Specifications

<b>Power Source</b>	one "CR2032" (3.0Vx1) battery
<b>Measuring Range</b>	32.2°C~43.3°C(90°F~109.9°F)
<b>Resolution</b>	±0.1°C(°F)
<b>Accuracy</b>	0.2°C(0.4°F) for blackbody temperature range 35.5-42.0°C (95.9-107.6°F) ; Other ranges ±2%
<b>Memory</b>	10 sets
<b>Low Battery</b>	Replace the batteries if the low battery indicator appears.
<b>Auto Shut Off</b>	Auto shut off after one minute of non-use
<b>Battery Life</b>	Approximately 1000 measurements.
<b>Operating Environment</b>	10.0~40.0°C ,(50~104°F) < 95% RH
<b>Storage Environment</b>	-20.0~50.0°C(-4~122°F) ,< 95% RH
<b>Dimensions</b>	114x38x30mm
<b>Weight</b>	Approximately 64g (including batteries)
<b>Guarantee of Quality</b>	Certification ISO 13485 Conformity EN 12470-5 & ASTM 1965-98
<b>Product Classification</b>	Type BF  equipment

 Disposal of this product and used batteries should be carried out in accordance with the national regulations for the disposal of electronic products.

### WARRANTY : ONE YEAR

Two years only for EU countries.  
The warranty starts from the purchase's date.

ed. 03/2008

10