



# EAR & FOREHEAD Thermometer



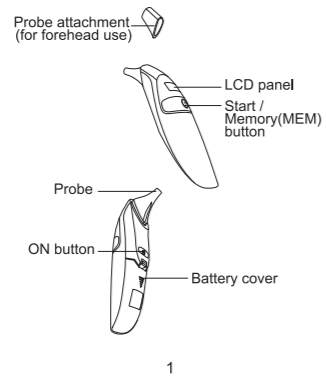
MODEL: EF-401B

## INSTRUCTION FOR USE

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### THE PARTS OF THE UNIT



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### SPECIFICATIONS

Model	EF-401B
Point of measurement	Infrared measurement at the eardrum or forehead
Measuring range	Ear mode: 35.0 °C to 42.9 °C (95 to 109.3 °F); Forehead mode: 32.0 °C to 42.9 °C (89.6-109.3 °F)
Operating conditions	10 °C to 40 °C (50 °F to 104 °F), humidity: 15 to 95 % R.H.
Storage conditions	-25 °C to 55 °C (-13 °F to 131 °F), humidity: 15 to 95 % R.H.
Resolution	0.1 °C or 0.1 °F
Accuracy (laboratory)	36.0 °C to 39 °C(96.8 °F to 102.2 °F): +/- 0.2 °C; other ranges +/- 0.3 °C
Clinically repeatability	max. +/- 0.3 °C
Memory	stores up to 16 measurements
IP Classification	IP20 (protected against foreign bodies < 12.5 mm)
Automatic switch-off	after 20 seconds of no use
Reaction time	1 second
Battery	DC 3.0V, 2pcs Alkline Battery AAA
Battery life	approx. 1000 measurements
Dimensions	160mm X 43mm X 35mm
Weight	85 g (including battery)

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### PRECAUTIONS

- This thermometer may only be used for the purposes described in this booklet.
- It is intended only for the ear and forehead measurements and not for rectal, oral or axillary body temperature measurement.
- Use of this instrument is not intended as a substitute for consultation with your physician.
- A dirty sensor lens or a dirty/ curved auditory canal may affect the measurements.
- The unit is not waterproof. Never immerse this instrument in any liquids.
- For cleaning and disinfection, please follow the instructions in the section entitled "Cleaning and Disinfection".
- Ensure that children do not use the instrument unsupervised.
- Do not use the instrument if you think it is damaged or if you notice anything unusual.
- Without the manufacturer's consent, no changes may be made on this unit (e.g. opening of the unit other than changing the batteries).
- Observe the storage and operating conditions described in the «Specifications» section.
- Protect it from:
  - extreme temperatures
  - impact and dropping
  - contamination and dust
  - direct sunlight
- If the instrument is not going to be used for a prolonged period, the batteries should be removed.
- Do not apply a protective cap.
- The unit has an off-set function to compensate for the influence of the ambient temperature.
- When it is switched on, the unit conducts an automatic self-testing procedure. Any faults are shown on the display.

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### INTENDED USE

This thermometer is intended for the periodic measurement and monitoring of human body temperature

### WHAT IS BODY TEMPERATURE?

Body temperature refers to the internal temperature of the body (core temperature). 'Normal' body temperature fluctuates over the course of 24 hours. It tends to be lowest in the early morning and highest in the late afternoon. Body temperature also varies depending on the part of the body where the temperature is

Normal temperature ranges - by point of measurement		
Axillary	34.7 - 37.3 °C	0 - 2 years: 36.4 - 38.0 °C
Oral	35.5 - 37.5 °C	3 - 10 years: 36.1 - 37.8 °C
Ear	35.8 - 38.0 °C	11 - 65 years: 35.9 - 37.6 °C
Rectal	36.6 - 38.0 °C	> 65 years: 36.8 - 37.5 °C

### OPERATION OF THE THERMOMETER

- Unpack
- Remove protective foil from the display

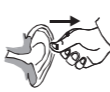
### TEMPERATURE MEASUREMENT -EAR

In order to ensure accurate measurement, the patient should first rest for 30 minutes in the same room as the thermometer. Immediately after exercise or a bath, the temperature may be raised.

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Press the ON button to turn on the unit and a beep is heard, remove the probe cover of thermometer. It will switch from forehead mode to ear mode. The display shown in figure



Insert the probe into the auditory canal. Straighten the the by pulling the ear upwards and backwards so that the middle ear is clearly visible.



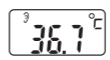
Children under 1 year: Make the ear canal straight by gently pulling the ear backward. Children from 1 year and adults: Make the ear canal straight by gently pulling the ear backward and upward.



For the temperature to be measured accurately in the ear canal, the tip of the probe must be directed towards the eardrum.



Press the Start button and wait until you hear a beep. If no beep is heard, press and release the Start button again.



As soon as you hear the beep, remove the probe from the auditory canal. Read the temperature displayed on the LCD panel.

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### NOTE:

- If the measured temperature is high than 37.8 °C, The Machine have sound alarm function, it will give off 6 times beep. The backlight of LCD will change from green to red.
- It is advisable to take the temperature in the same ear, since the values measured in the left and right ear may be different.
- In the case of patients whose auditory canal is curved, the temperature values measured may deviate owing to anatomical influences.
- The ear should not be obstructed, for example by excessive amounts of ear wax.

### TEMPERATURE MEASUREMENT - FOREHEAD

In order to ensure accurate measurement, the patient should first rest for 30 minutes in the same room as the thermometer. Immediately after exercise or a bath, the temperature may be raised.



Always check that the probe cover is fixed onto the thermometer. Prior to measurement, the forehead should be free of perspiration, make-up, etc.



Press the ON button [ON].



It will automatically switch to Forehead Mode.

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Place the probe tip on the patient's forehead. The recommen ded area is on the middle side above the left eye-brow and the right eyebrow). Press the Start button (you will hear a beep).Then remove the thermometer from the point of measurement. It will automatically measure the temperature. The measurement begin with beep and end with beep. .



Read the temperature value displayed on the LCD panel.

Temperatures measured on the forehead mode are displayed as comparable rectal temperatures.

### NOTE:

- The precise sensing system records the heat emitted naturally through the skin. If the thermometer is not moved over the temple, the temperature recorded may be lower.
- It is advisable to take the temperature 2-3 times and record the highest value.
- In some patients the forehead temperature may differ as a result of environmental factors
- The measurement of forehead temperature is an excellent point of reference for recognising raised body temperature.
- If you are in any doubt about the temperature measured, please measure it again in the ear and, for the sake of accuracy, record the highest value.

### MEMORY



Press the MEM button.

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	The signal "MEM" will be shown on the LED.
	Press the MEM button again. The previous reading will be shown.
	The other values stored in the memory can be viewed by pressing the MEM button again.
	Press the MEM button again. Now the reading before last will be shown. Then press the on/off button until the signal-- appear in LCD and release the button, All records are deleted.

### CHANGING THE TEMPERATURE SCALE

In order to switch over to Fahrenheit (°F), press the Start button for 8 seconds while the signal --- °C is displayed on the LCD panel as figure shown . Press the start button to change Celsius °C to Fahrenheit(°F) .

### MEASURING WATER AND ROOM TEMPERATURE

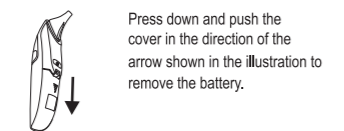
Press the Start button for 12 seconds until the symbol as figure is displayed on the LCD panel. It can be used to measure the temperature from 0 °C to 100°C (32 to 212 °F) .

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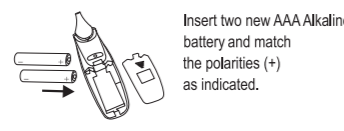
- Measurement should be conducted in ear mode only.
- To measure water temperature, keep the probe at least 1cm (± 0.5 cm) above the surface of the water. The greater the distance from the surface of the water, the less accurate the measured values will be.

### BATTERY REPLACEMENT AND INSERTION

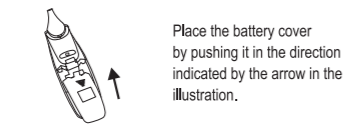
When the symbol appears on the LCD panel, The battery needs to be replaced.



Press down and push the cover in the direction of the arrow shown in the illustration to remove the battery.



Insert two new AAA Alkaline battery and match the polarities (+) as indicated.



Place the battery cover by pushing it in the direction indicated by the arrow in the illustration.

If no signal is received after changing the battery, insert the new battery again and press the ON button.

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### FAULT INDICATION

FAULT OR FAULT SYMBOL	FAULT DESCRIPTION	CORRECTIVE MEASURE
	No display On the LCD panel	The battery has run out.Incorrect battery polarity.
	Measurement not possible (or an abnormal value is displayed)	The thermometer is not ready.
	An abnormal temperature value is displayed.	The probe tip is dirty or damaged. Did you hear the beep after pressing the ON button?
	LO or HI symbol is displayed	The temperature measured is outside the measuring Range . LO: temperature too low HI: temperature too high

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	The battery has run out.	Replace the battery.
	The thermometer is not yet ready for measuring.	Wait until the symbol is displayed on the panel.
	The ON button was not pressed at the right time.	Then press the ON button as soon as you begin measuring.
	The ambient temperature is outside the operating temperature range or is changing too fast.	To ensure accurate measurement, let the thermometer rest at operating temperature for 30 minutes prior to use.

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### CLEANING AND DISINFECTION TURE

- The probe tip should be cleaned before each use.
- It can be cleaned by wiping it with a cloth or cotton-wool ball soaked in rubbing alcohol.
- Do not reuse the thermometer until it is completely dry.
- If the lens is dirty, false reading may occur. Make sure that the display is free of contaminants, and if required, clean as described above.

### DISPOSAL

Observe the applicable regulations when disposing the thermometer and batteries. This thermometer must not be disposed of together with domestic waste.

All users are obliged to hand in all electrical or electronic devices, regardless of whether or not they contain toxic substances, at a municipal or commercial collection point so that they can be disposed of in an environmentally acceptable manner. Please remove the batteries before disposing of the thermometer. Do not dispose old batteries with your household waste, instead at a battery collection station at a recycling site or in a shop.

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### SYMBOL INDEX

	For use Follow instructions		Type BF applied part
	Keep dry		Batch code (mm/yyyy; month/ year)
	Store between 15% and 95% RH.		Serial number
	Store between -25 °C and +55 °C		Manufacturer
	The device must not be disposed with household waste.		Caution! Read the instruction manual.

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## Product Warranty Card

NAME:	DATE OF PURCHASE:
ADDRESS:	PURCHASE FROM:
ITEM PURCHASED: <b>TMS EAR &amp; FOREHEAD THERMOMETER (EF-401B)</b>	REGISTRATION DATE:

Inmed Corporation warrants this product to be free from defects in material or workmanship within 1 years from date of purchase under normal use. If fault is found, please return the equipment, freight prepaid, in its original packaging along with the purchase receipt to the address below. Inmed Corporation will repair or replace any defective parts free of charge subject to the terms and conditions stated herein.

*For service, the unit is to be returned freight prepaid to:*

**Inmed Corporation**  
5 Calle Industria, Bagumbayan, Quezon City 1110, Philippines  
Tel: 02.571.1888 | Fax: 02.571.9912

**Please register your unit online at [www.inmed.com.ph](http://www.inmed.com.ph)**

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