

# Adtemp™ 412 Digital Fever Thermometer

Instructions  
for Use

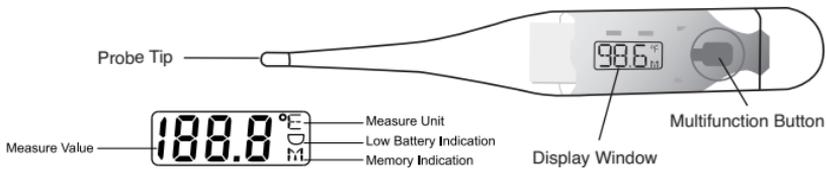


Thank you for choosing an ADC® Adtemp™ digital stick thermometer. Your new thermometer is designed to provide accurate measurements. Adtemp thermometers meet or exceed all relevant international performance standards.

## Device Description and Intended Use

This device is intended to measure human body temperature in children and adults. It has a compact size and digital display and can be used in a professional or household environment.

## Parts and Assembly



## Symbol Definitions

The following symbols are associated with your thermometer.

Symbol	Definition
	Important warning/caution
	Not made with natural rubber latex
	Phthalate free
	Operating instructions
	Manufacturer's information
	Authorized European representative's information

Symbol	Definition
	Meets essential requirements of European Medical Device Directive 93/42/EEC
	Lot number
	Multifunction button
	Auto detection error
	Memory indication
	Low battery indication

## General Warnings

**A warning statement in this manual identifies a condition or practice which, if not corrected or discontinued immediately, could lead to patient injury, illness, or death.**

**WARNING:** This instrument is designed for oral, rectal, or axillary use only.

**WARNING:** High prolonged fever requires medical attention, especially for young children. Please contact your physician.

**WARNING:** Keep out of reach of unsupervised children. Components may be harmful if swallowed.

**WARNING:** Stop using the thermometer if it operates erratically or if the display malfunctions.

**WARNING:** Oral temperature readings are often 1.0°F. to 2.0°F lower than actual body temperatures; rectal measurements are generally 1.0°F. to 2.0°F higher.

**WARNING:** Avoid taking temperature for 30 minutes after physical exercise, bathing, dining, or drinking hot or cold beverages.

**WARNING:** Allow the thermometer to warm naturally to room temperature before using. Performance may be affected if operated or stored outside stated temperature and humidity ranges or if the patient's temperature is below the ambient (room) temperature.

**WARNING:** After using, clean the thermometer and place it into the case. Clean the unit by wiping it with a dry cloth and disinfect the probe with isopropyl (rubbing) alcohol. See cleaning instructions for additional details.

**CAUTION:** Keep thermometer away from direct sunlight, extreme temperatures, or dust.

**CAUTION:** Do not boil, bite, bend, drop, or disassemble the thermometer.

**CAUTION:** Do not open the unit.

**CAUTION:** Do not use this device close to strong electromagnetic fields, such as mobile telephones.

**CAUTION:** Do not autoclave. Please note the cleaning procedures described in this manual.

**CAUTION:** Dispose of batteries in accordance with locally applicable regulations, not with domestic waste.

**CAUTION:** IP22: Protected against solid foreign objects of 12.5mm diameter and greater. Protected against vertically falling water drops when the device is tilted up to 15°.

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## How to Use

1. Disinfect the probe with isopropyl (rubbing) alcohol before using.
2. Press and release the multifunction button. The display will read  confirming the unit is functioning properly. The last measured temperature will be displayed for approximately 2 seconds. Next the thermometer will read L°F (or L°C).
3. We recommend using probe covers with all digital stick thermometers. If using, place cover over tip of unit.

4. Place the probe in the appropriate position for your measurement site (see **Ensuring Accurate Temperature Measurement** below).
5. The °F or °C symbol will flash when the unit is ready to measure temperature. Please note that the “” indicates a low battery. Do not expect an accurate temperature reading if this low battery indicator is present. An “ERR” message in the window indicates your unit is not functioning properly.
6. Depending on the measurement site, the unit will complete measurement in 60 (oral), 40 (rectal), or approximately 90 (axillary) seconds. When the F° or C° symbol stops flashing and the display reads a consistent temperature, the peak temperature has been reached.
7. Read and record the temperature and time for reference. The reading will automatically be stored in the memory.
8. The unit will automatically turn off in about 8 minutes. To prolong battery life, press the multifunction button to turn off the device manually.

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## Switching Temperature Modes

From the OFF position, the Celsius or Fahrenheit mode can be switched by pressing and holding the multifunction button for at least 5 seconds. After 3 seconds in one scale the °F or °C will flash, indicating ready to measure.

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## Ensuring Accurate Temperature Measurement

We recommend using probe covers with all digital stick thermometers (Figure 1).



Figure 1

**Oral Use:** Place the probe well under the patient's tongue (Figure 2).

Keep mouth closed while thermometer is reading.

Instruct children not to bite down on the probe. The peak temperature should be reached in approximately 60 seconds, and will make a continuous beeping sound. Opening the mouth or improper placement of the probe tip could result in a longer time for a reading.

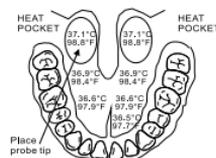


Figure 2

**Rectal Use:** Lubricate the probe cover with a water-soluble jelly for easier insertion; do not use petroleum jelly, as it may cause an inaccurate reading. Gently insert the tip of the probe no more than 1/2 inch into the rectum. The peak temperature should be reached in approximately 40 seconds, and will make a continuous beeping sound.

**STOP** if you meet any resistance. The sensing unit is on the very tip of the probe and there is no need to insert the probe deep into the rectum. Dispose of the used probe cover and wash the thermometer as recommended.

**Axillary Use:** Wipe armpit with a dry towel. Place the probe in the patient's armpit (Figure 3) and keep the patient's arm pressed firmly against the body. In order to achieve a better axillary reading, a minimum measuring time of 90 seconds or longer is recommended, depending on placement of the probe and closure of the arm against the body.

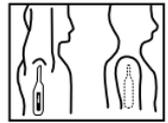


Figure 3

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### Cleaning and Disinfecting

- ⚠ **Do not use corrosive detergent to clean the unit.**
- ⚠ **Clean and disinfect the thermometer before and after each use.**

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### Cleaning Process

1. Wipe probe with a cloth dipped in a disinfectant solution such as 70% isopropyl (rubbing) alcohol or soap and water.
2. Rinse off disinfectant residue.

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### Care and Storage

- Do NOT drop or crush; this device is not shock proof.
- Do NOT dismantle or modify device.
- Do NOT store the device in an extreme environment with direct sunlight or high tempera-

## Specifications

<b>Size</b>	5"L x 3/4"W x 3/8"H (12.7 cm L x 1.9 cm W x .95 cm H)
<b>Weight</b>	0.49 oz (14 grams)
<b>Display:</b>	LCD, Liquid Crystal Display
<b>Battery:</b>	1.55V (LR41)
<b>Battery Life:</b>	Estimated 4,500 uses
<b>Measurement Time:</b>	Oral 60 Seconds / Rectal 40 Seconds / Axillary 90 Seconds
<b>Measurement Range:</b>	90.0°F to 109.9°F (32.0°C to 43.9°C)
<b>Accuracy:</b>	$\pm 0.2^{\circ}\text{F} / 0.1^{\circ}\text{C}$ between 96.0°F to 107.0°F (34.0°C to 42.0°C) at a room temperature of 64.4°F to 82.4°F (18°C to 28°C) $\pm 0.4^{\circ}\text{F} / 0.2^{\circ}\text{C}$ between 90.0°F to 96.0°F (32.0°C to 34°C) and 107.0°F to 109.9°F (42.0°C to 43.9°C)
<b>Measurement Mode:</b>	Real measurement with peak-hold method
<b>Auto Turn Off:</b>	In approximately 8 $\pm$ 1 minutes
<b>Memory Feature:</b>	Last reading
<b>Operating Environment:</b>	50 °F to 104 °F (10°C to 40°C) humidity: 15 % to 95 % (noncondensing)
<b>Storage Environment Temp:</b>	-13 °F to 131 °F (-25°C to 55°C) humidity: 15 % to 95 % (noncondensing)
<b>Standard:</b>	Complies with EN 12470-3, ASTM E 1112-00, IEC 60601-1-2, IEC 60601-1-11 Electromagnetic compatibility: device fulfills the stipulations of standard IEC 60601-1-2

***The manufacturer recommends a calibration check every 2 years.***

### LIMITED WARRANTY

ADC warrants its products against defects in materials and workmanship under normal household use and service as follows:

1. Warranty service extends to the original retail purchaser only and commences with the date of delivery.
2. Your Adtemp Digital Stick Thermometer is warranted for two years from date of purchase.

**What Is Covered:** Replacement of parts, and labor.

**What Is Not Covered:** Transportation charges to ADC. Damages caused by abuse, misuse, accident, or negligence. Incidental, special, or consequential damages. Some states do not allow the exclusion or limitation of incidental, special, or consequential damages, so this limitation may not apply to you.

**To Obtain Warranty Service:** Send item(s) postage paid to ADC, Attn: Repair Dept., 55 Commerce Dr., Hauppauge, NY 11788. Please include your name and address, phone no., proof of purchase, and a brief note explaining the problem.

**Implied Warranty:** Any implied warranty shall be limited in duration to the terms of this warranty and in no case beyond the original selling price (except where prohibited by law). This warranty gives you specific legal rights and you may have other rights which vary from state to state.

**For Australian Consumers:** Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonable foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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Batteries and electronic devices must be disposed of in accordance with the locally applicable regulations, not with domestic waste.

Refer to user manual before use

CE  
0044

Type BF applied part

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