

# Adtemp™ II 413 Digital Fever Thermometer



USE, CARE &  
MAINTENANCE

**ADC**<sup>®</sup>  
AMERICAN DIAGNOSTIC CORPORATION

## Intended Use:

A digital thermometer is a device used to measure the body temperature of a patient by means of a transducer coupled with an electric signal amplification, conditioning, and display unit.

## Safety Information:

- **WARNING:** High, prolonged fever requires medical attention especially for young children. Please contact your physician.
- **WARNING:** Do not allow children to take their temperatures unattended.
- **WARNING:** Read the enclosed instructions carefully to ensure accurate temperature readings. Temperature readings are affected by many factors including exercise, drinking hot or cold beverages prior to taking a reading as well as technique.
- **WARNING:** Do not allow children to walk or run during temperature taking. The rigid probe could present a hazard. Oral, underarm, and rectal temperatures vary by approximately 1°F (0.5°C).
- **WARNING:** Keep battery out of children's reach. Swallowing battery could be harmful. Battery should not be recharged or placed into extreme heat as it may explode.
- **WARNING:** This product may contain a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.
- **CAUTION:** Do not take an axillary temperature through patient's clothing. Direct probe cover to skin contact is required.
- **CAUTION:** Biting the probe tip while taking a temperature may result in damage to the probe.
- **CAUTION:** Do not autoclave. Please note the cleaning procedures described in this manual.
- **CAUTION:** Do not store the unit under direct sunlight, at a high temperature, or in high humidity or dust. Performance may be degraded.
- **CAUTION:** Do not use this device close to strong electromagnetic fields such as mobile telephones or radio installations. Keep a distance from such devices when using this unit.
- **CAUTION:** IP22: Protected against solid foreign objects of 12.5 mm diameter and greater. Protected against vertically falling water drops when the device is tilted up to 15°.
- **CAUTION:** Do not use the device if you it is damaged or if anything appears unusual.

## How to take temperature:

1. Place a probe cover carefully over the tip (Figure 1). Select oral, underarm or rectal as your measurement site based on the individual requiring a temperature measurement.



Figure 1

2. Push the Multi-Function button located beside the display window. The thermometer will beep and the display will read: "188.8 °  $\frac{F}{M}$ ". This is a function check indicating the unit is working properly. The last measured temperature will be displayed for approximately 2-seconds. Next the thermometer will read ---°F.(or ---°C)

3. The °F or °C symbol will flash when the unit is ready to measure temperature. Please note that the "☹" indicates a low battery. See instructions for replacing battery before measuring temperature. 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.

4. Depending on the measurement site, the unit will complete measurement in approximately 30-40 (oral), 25-35 (rectal), or 90 (axillary) seconds. The display will flash and the unit will beep signaling completion.

5. Read and record the temperature and time for reference. The reading will automatically be stored in the memory.

6. Push the Multi-Function button to turn the unit off. This will prolong the battery life. If you do not turn the unit off, it will shut off automatically in approximately 8'40"±1' minutes.

### Oral use: (for children 4 years and older)

1. Do not drink hot or cold fluids, exercise or perform other activities that will raise or lower temperature readings when compared to your normal, average temperature. The mouth should remain closed up to 5 minutes before attempting a reading.

2. Place the probe tip well under the tongue as indicated (Figure 2).

3. Instruct children not to bite down on the probe.

4. The peak temperature should be reached in as little as 30\* seconds. Opening the mouth or improper placement of the probe tip could result in a longer time for a reading.

(\*30 second response time achieved in water bath test)



Figure 2

## Rectal use:

1. Commonly used for babies, young children or when it is difficult to take an oral or underarm temperature.
2. After placing the probe cover on the thermometer, lubricate with a water-soluble jelly or petroleum jelly.
3. Gently insert the probe tip no more than 1/2 inch or 1.3 cm into the rectum. Do not force the tip into the rectum if resistance is encountered.
4. Dispose of the used probe cover and wash the thermometer as recommended.
5. The peak temperature should be reached in approximately 25-35 seconds.

## Underarm (Axillary) use:

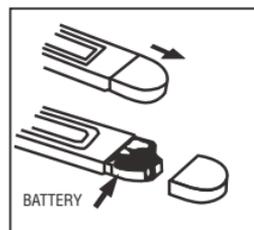
1. Wipe underarm with a dry towel.
2. Place probe tip in armpit and bring arm down against the body.
3. The probe should be pointing upward in the same direction as your body if possible.
4. The time required for an accurate underarm temperature may be 90 seconds or longer depending on placement of the probe and closure of the arm against the body.

## Operation of the °F - °C feature (How to change the measuring scale)

From the "OFF" position, hold down the "MULTI-FUNCTION" button for 5-sec. The thermometer will automatically change from °F - °C or °C - °F. Release the button. You may toggle between °C and °F. After 3-sec. in one scale the °C or °F will flash, indicating ready to measure.

## Changing the battery:

When the "␣" appears in the lower right of the display, the battery is exhausted and needs replacing. Make sure a battery of the same type is on hand and proceed as follows: Remove battery compartment lid. Use a small Phillips screwdriver to remove battery. Insert new equivalent battery type (1.55v, LR41 or SR41). Ensure battery is correctly positioned with the "+" facing up or towards the display of the unit. Carefully replace the battery compartment lid. Properly dispose of the batteries, keeping them from small children and heat.



## Standards:

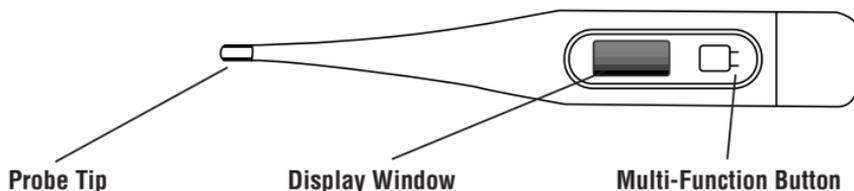
Complies with EN 12470-3, ASTM E 1112-00, IEC 60601-1, IEC 60601-1-2  
Electromagnetic compatibility: device fulfills the stipulations of standard  
IEC 60601-1-2

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

## How to care for this product:

- Use of probe covers is recommended to help avoid spreading germs, and to keep the thermometer clean. The thermometer should be cleaned after use even when probe covers are used.
- Clean the thermometer tip and probe only using isopropyl alcohol or soap and water.
- Store the unit in the protective case while not in use.
- Do not store or keep in direct sunlight, or in high temperatures.
- Keep battery away from children.
- Do not open the thermometer except to replace the battery
- Do not drop the thermometer, as this may ruin the unit.
- The manufacturer recommends verifying the accuracy by an authorized laboratory

## Parts and Assembly



## Specifications

Size:	5"L x 3/4"W x 3/8"H (12.7cm L x 1.905cm W x .9525cm H)
Weight:	0.388 oz (11 grams)
Display:	LCD, Liquid Crystal Display)
Battery:	1.55v (LR41) Alkaline
Battery Life:	Estimated 4,500 measurements
Measurement Time:	Oral 30* Seconds / Rectal 25-35 Seconds / Axillary 90 Seconds
Measurement Range:	90.0°F to 109.9°F / 32.0°C to 42.9°C
Accuracy:	+/- 0.2°F/0.1°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 +/- 0.4°F/0.2°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 42.9°C.
Measurement Mode:	Real measurement with peak-hold method
Audible Alarm:	1 beep at start-up. Continuous beep at measurement completion
Auto Turn Off:	In approximately 8 ±1 minutes
Memory Feature:	Stores last temperature taken
Operation Environment:	10 °C to 40 °C /50 °F to 104 °F, humidity of 15% to 95% (noncondensing)
Storage Environment:	-13°F to 140°F (-25°C to 60°C), humidity of 15 % to 95 % (noncondensing)
Expected Service Life:	5 Years
Standard:	IEC60601-1-11

\*30 second response time achieved in water bath test.

**WARRANTY:** This Thermometer is guaranteed for a period of 24 months from date of purchase. This warranty does not cover batteries, or damage resulting from improper handling or use. Specific legal rights stipulated in your state may guide this warranty. If you have a legitimate claim under this warranty, send item(s) postage paid to Service Center, 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., your return address and \$2.00 to cover shipping and handling.

Visit **[www.adctoday.com](http://www.adctoday.com)** to view this instruction booklet in other languages.



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 Read the instruction manual carefully before using this device, especially the safety instructions, and keep the instruction manual for future use.



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



Type BF applied part

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