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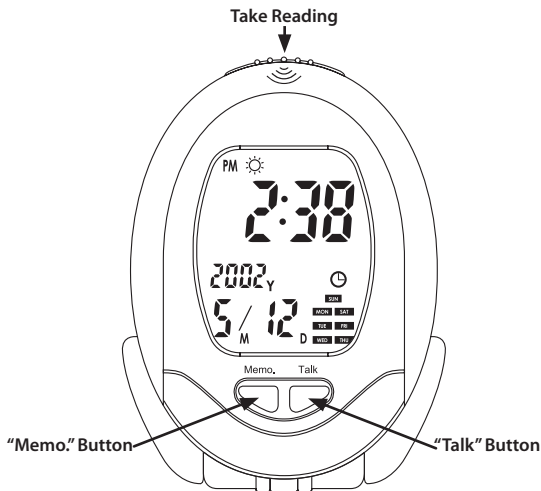
Model 2216 Talking Digital Ear Thermometer

Instruction Manual



Congratulations on purchasing the Lumiscope Model 2216 Talking Digital Ear Thermometer! Please be sure to read this manual carefully before using this new state-of-the-art device. Keep this manual handy for reference.

Parts Identification:



About Taking Temperature From The Ear:

What is Ear Temperature?

Body temperature means interior or core temperature, which is controlled by a lower thalamus subordinate to a hypophysis. The eardrum and

lower thalamus have a common blood vessel. Because of this shared vessel, ear temperature can accurately tell fluctuation of body temperature.

How to Use The Ear Thermometer Properly:

For children younger than one year, gently pull the ear in an inclined backward direction to straighten the auditory canal before inserting the temperature probe for measurement.

What is a Normal Ear Temperature?

Users' body temperatures vary by age, time, and ambient temperature. Clinical studies have shown few exceptions to the rule that the ear shows a higher temperature than the armpit (axillary method). For accurate fever identification, it is recommended to have an understanding, or baseline, of patients' temperatures in normal situations.

Preparation:

1. For the most accurate measurements, leave the thermometer in the room in which it will be used for 30 minutes prior to use, to acclimate the thermometer to ambient temperature.
2. Always use a clean, new probe cover.
3. Only take readings from a clean ear.
4. Only take measurements during periods of rest. A recent bath or exercise is likely to increase body temperature.

Taking Measurements:


1. Thoroughly clean ear, and apply a clean, new probe cover to thermometer.
2. Insert the temperature probe along the ear canal as deep as is comfortable into the ear, press the “” button once to start the measurement and you will hear a single beep. In about a second, the temperature reading



Figure 1

will be complete and you will hear a short melody. The 2216 will then speak the temperature reading aloud, and display it on the large digital display. (Fig. 1)

Note: If using the 2216 for the first time, it is recommended that 3 consecutive measurements are taken from the same ear. The maximum of the three readings will be recorded to memory as the readings will not likely be exactly the same. This will help you get a feeling of how to use the thermometer.

3. The reading will be stored into memory automatically. If 30 sets of memory are stored already, the first

reading will be overwritten, as will each existing memory with the new reading, as they are taken.

4. For the most accurate temperature readings, wait 10 minutes between consecutive uses.
5. If a measurement falls within measuring range (89.6°F ~ 109.3°F or 32.0°C ~ 42.9°C), the temperature will be displayed. If a measurement is above measuring range, "Hi" will be displayed. If below measuring range, "Lo" will be displayed.
6. The measurement will be displayed for approximately one minute, then the 2216 will return to clock mode.
7. The digital display will shut off automatically three minutes after the last key press.

Switching Between °F and °C

To switch between measuring in °F and °C, insert an unfolded paperclip or similar object in the button hole labeled °C/°F on the back of the thermometer. (Fig. 2)

Memory Recall

Recorded readings may be scrolled through while the thermometer is on. To scroll through readings, press the "Memo." button. If no reading is stored in any of the 30 available memories, the display will read "--". To scroll through the readings rapidly, press and hold "Memo". If no button is pressed for one minute, the 2216 will return to clock mode.

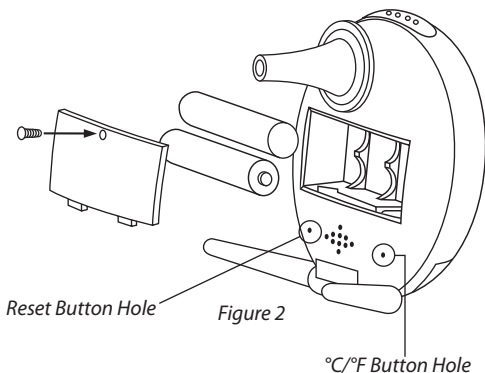
Clock Mode

1. The 2216 will enter clock mode when the thermometer is on and no key is pressed for more than one minute.
2. The time will be displayed in Year, Month, Date, Day, Hour and Minute, with a flashing ":" for seconds.
3. Press "Talk" to speak current time aloud.
4. Press and hold "Memo" for 2 seconds to enter setup mode and change the Date and Time.
 - Press "Talk" to switch between the hour, minute, year, month and day settings
 - Press "Memo" to advance numbers
 - System will automatically resume clock mode if no buttons are pressed for one minute.

Replacing The Battery

Tool needed: small screwdriver

Remove screw on underside of unit, and remove battery cover. Insert two new 'AAA' batteries as shown in figure 2. Replace battery cover, and reinstall screw.



Troubleshooting:

<i>Symptom:</i>	<i>Checklist:</i>	<i>Solution:</i>
No response	Is battery dead? Is battery in place properly?	Change battery. Check orientation of battery.
Battery symbol on screen	Low battery	Change battery.
"Lo" on screen (temperature is below 89.6°F or 32.0°C)	Has the thermometer been positioned correctly for a reading?	Follow instruction manual for correct positioning.
"Hi" on screen (temperature is above 109.3°F or 42.9°C)	Is probe cover new?	Change probe cover.
"ErrE" on screen	Thermometer is outside of operating temperature range.	Allow thermometer to acclimate to room temperature.
"ErrU"	Doesn't measure after pressing measure button.	Follow instruction manual for correct operating procedure.
"ErrH"	Errors detected during self-check.	Contact Repair Department at 1-800-672-8293

Specifications:

Model Number	2216
Power Supply	DC3V ('AAA' x 2)
Power Consumption	<0.05W for Talk Function
Temperature Sensor	IR Sensor
Measuring Range	89.6°F ~ 109.3°F (32.0°C ~ 42.9°C)
Measuring Accuracy	±0.4°F (±0.2°C) from 96.7°F to 102.2°F (36.0°C to 39.0°C)
	±0.5°F (±0.3°C) from 89.6°F to 96.6°F (32.0°C to 35.9°C)
	±0.5°F (±0.3°C) from 102.3°F to 109.3°F (39.1°C to 42.9°C)
Dimensions (LxWxH)	3.5" x 2.5" x 2.25" (90mm x 65mm x 55mm)
Weight	.18 lb (82g)
Operating Environment	50.0°F ~ 104.0°F (10.0°C ~ 40.0°C), 30% - 80% RH
Storage Environment	-4°F ~ 104.0°F (-20°C ~ 40°C) 30% - 80% RH
Accessories	10 probe covers, Instruction Manual

Notes:

[illegible]

Warranty

GF Health Products, Inc. guarantees this product free from defects in material and workmanship for a period of two years from the date of purchase, except as noted below:

This product warranty does not cover damage caused by misuse or abuse, the attachment of any unauthorized accessory, alteration to the product, or any other conditions whatsoever that are beyond the control of GF Health Products, Inc. GF Health Products, Inc. shall not be responsible for any type of incidental, consequential, or special damage. All implied warranties, including, but not limited to those implied warranties of fitness and merchantability, are limited to the total duration of two years from the original date of purchase.

To obtain warranty service on your Lumiscope Model 2216 Talking Digital Ear Thermometer, please contact the Lumiscope Repair Department at 1-800-672-8293. There is a \$15 fee for return shipping and handling. Please make checks payable to GF Health Products, Inc.

Upon receipt, we will repair or replace, as appropriate, the Talking Digital Ear Thermometer and return it to you. Warranty is solely through the Lumiscope Repair Department. Service of this product by anyone other than the Repair Department voids warranty.

Distributed By GF Health Products, Inc.

Atlanta, GA 30360

www.grahamfield.com

Repair Department: 1-800-672-8293

Made and Printed in China

