



# RightTemp™

EAR THERMOMETER SYSTEM

MDS8700 User Manual



# INDEX

<b>INTRODUCTION .....</b>	<b>3</b>
<b>PARTS IDENTIFICATION .....</b>	<b>4</b>
<b>LOADING THE PROBE COVER BOX .....</b>	<b>6</b>
<b>INSTALLING AND EJECTING THE PROBE COVER .....</b>	<b>7</b>
<b>OPERATING THE THERMOMETER .....</b>	<b>8</b>
<b>SWITCHING BETWEEN °C &amp; °F .....</b>	<b>9</b>
<b>MEMORY STORAGE .....</b>	<b>9</b>
<b>BACKLIGHT USAGE AND INFORMATION .....</b>	<b>10</b>
<b>BATTERY REPLACEMENT AND INSTALLATION .....</b>	<b>10</b>
<b>CLEANING .....</b>	<b>11</b>
<b>STANDARDS .....</b>	<b>11</b>
<b>ERROR MESSAGES .....</b>	<b>12</b>
<b>SPECIFICATIONS .....</b>	<b>13</b>
<b>NORMAL BODY TEMPERATURE REFERENCE .....</b>	<b>14</b>
<b>WARNINGS .....</b>	<b>14</b>
<b>WARRANTY .....</b>	<b>15</b>
<b>SYMBOL/ICON IDENTIFICATION .....</b>	<b>15</b>

# INTRODUCTION

Thank you for purchasing Medline's RightTemp Infrared Ear Thermometer.

This thermometer features an all-in-one probe cover dispensing cradle and a probe cover ejection button for ultimate ease-of-use. It has been manufactured and calibrated against strict quality procedures and standards. It is simple to use and rapid; only taking one second to register an accurate ear temperature on the digital LCD screen.

## **Intended Use**

The RightTemp thermometer is intended to measure the body's temperature via the ear canal. It is intended for clinical use on patients of all ages in conjunction with the RightTemp probe covers.

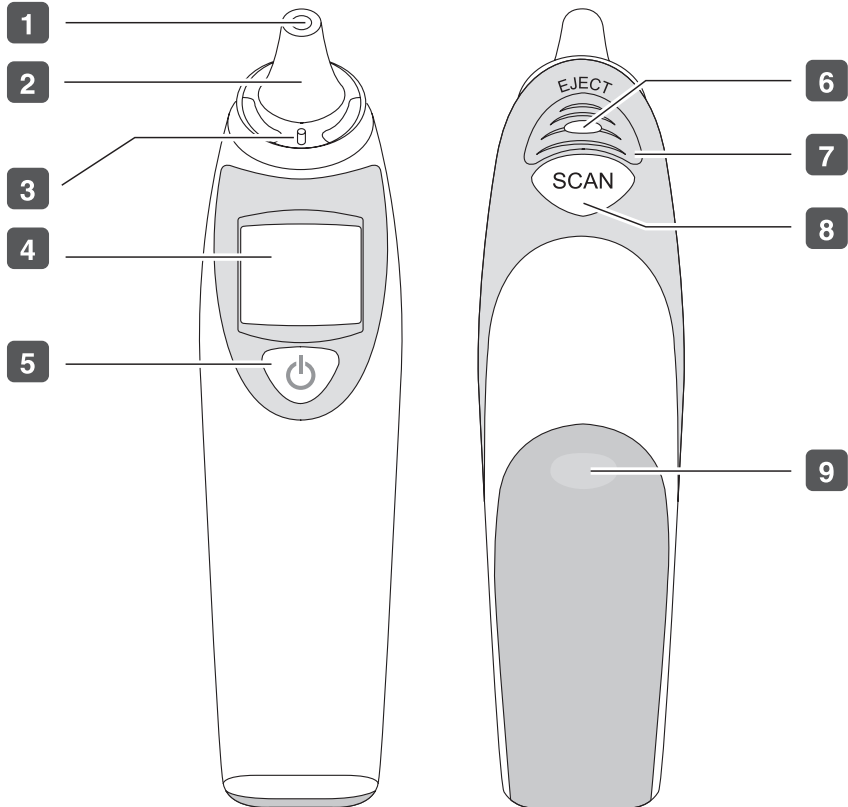
## **Please read this instruction manual before using or operating your thermometer**

- This product is not intended to diagnose or treat any health problem or disease and it should not be used as a substitute for the consultation and advice of a physician or other medical professionals.
- The RightTemp thermometer must be used with the RightTemp probe covers. To keep the probe head and lens of the thermometer clean and uncontaminated, never use your thermometer without a probe cover.
- Make sure to check the probe cover before using the device. If the probe cover is damaged, please replace it with a new one. Using probe covers other than the RightTemp covers and/or using damaged probe covers may cause inaccurate readings.
- The RightTemp probe covers are for single use only. Please use a new probe cover for each measurement. The reuse of probe covers may result in inaccurate measurements or cross-contamination.
- The RightTemp Probe Covers are only approved for use with the RightTemp Thermometer.
- Temperatures between the left and right ear can vary. It is recommended that measurements be taken from the same ear for consistency between measurements.
- Excessive build-up or cerumen on the probe lens may cause inaccurate results and damage the lens. Always use the RightTemp probe covers to avoid damaging or interfering with the thermometer probe head and lens.
- Please do not measure the ear's temperature if there is inflammation, infection, or medication in the ear.
- Avoid taking measurements 30 minutes after physical exercise, bathing, swimming, dining, or removing a hearing aid or ear plug.
- The RightTemp thermometer should only be used under the supervision of an adult.
- This product meets the electromagnetic immunity requirements. The chosen basis for electrostatic discharge immunity testing was basic standard IEC61000-4-2. In addition, it meets the electromagnetic emissions requirements as per EN60601-1. Its electromagnetic emission is thus low. Interference from other electrically driven equipment is not to be anticipated.

# PARTS IDENTIFICATION

MDS8700

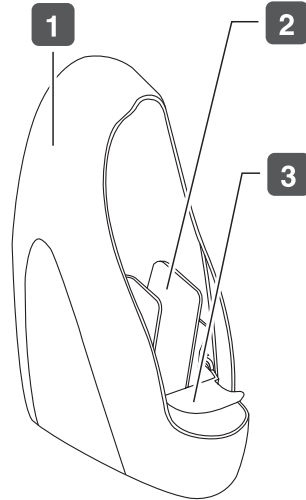
- 1** Probe Lens
- 2** Probe Head
- 3** Probe Cover Sensor
- 4** LCD Window
- 5** On/Off Button
- 6** Measuring Indicator Light
- 7** Probe Cover Eject Button
- 8** SCAN/Measurement Button
- 9** Battery Compartment Door



# PARTS IDENTIFICATION, CONT'D

## ACCESSORY- CRADLE

- 1** Cradle
- 2** Probe Cover Dispenser
- 3** Thermometer Support Base



The special design of the RightTemp cradle dispenser ensures that the next probe cover is always at the top of the box, ready for use. When pushing the thermometer probe head into the probe cover box to apply a new probe cover, the box will automatically slide down the brackets and simultaneously push up the next probe cover so that it is ready for the next measurement. Please see Page 6 for illustrated instructions on how to load the probe cover box into the probe cover dispenser and Page 7 for how to install a probe cover onto the RightTemp thermometer probe.

### REMOVING AND PLACING THE THERMOMETER INTO THE CRADLE

To remove the thermometer from the cradle, hold the thermometer and push down gently, moving the thermometer and the support base down. Then, gently pull and angle the probe-end of the thermometer away from the cradle so that it becomes free from the housing. Once the probe-end is clear of the cradle, the thermometer can be completely lifted and removed. The probe cover box angles out at the same time, ready for use.

To put the thermometer back into the cradle, slightly angle the bottom of the thermometer toward the cradle. Then place the thermometer on the thermometer support base and push down, gently tilting the probe-end into the cradle housing, and allow the thermometer support base to lift the thermometer into place.

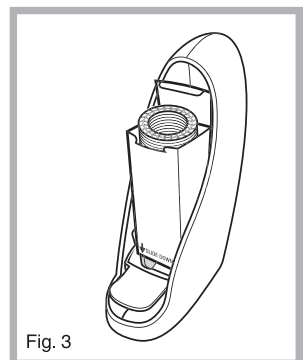
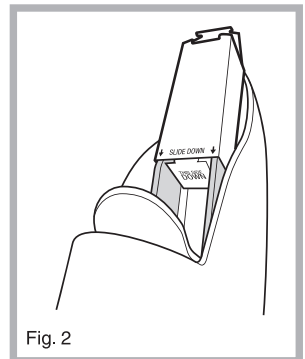
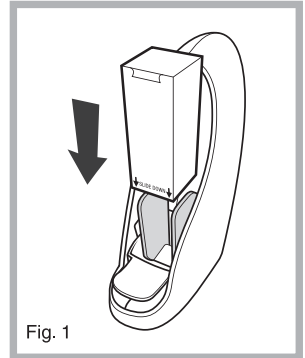
# LOADING THE PROBE COVER BOX

1. Orient the probe cover box so that “this side down” is facing the bottom of the cradle and “slide down” is facing the outside of the cradle (Fig. 1).

2. After the box is properly oriented, further line up the probe cover box so that the cradle brackets are touching the black bars on the bottom of the probe cover box. Then, push down on the box firmly to slide the box down the brackets (Fig. 2). The brackets should go inside, not outside, of the box.

3. Keep sliding the probe cover box slowly down the brackets until the lid of the probe cover box pops open (Fig.3). You’re now ready to install a probe cover onto your RightTemp thermometer (See Page 7).

4. Now that the probe cover box is properly loaded into the dispenser, each time you use the thermometer to install a new probe cover, the box will be pushed down, while the probe covers will be pushed up.



## INSTALLING A NEW PROBE COVER

After the probe cover box has been installed into the cradle dispenser (See Page 6), hold the thermometer probe perpendicular to the top-most probe cover (see Fig. 4). Gently but firmly push the thermometer probe into the first probe cover.

An audible “click” will be heard when the probe cover is secured onto the thermometer probe head. The thermometer is now ready for use.

## PROBE COVER DETECTION

The RightTemp thermometer has a probe cover sensor to ensure that the thermometer will not operate without the use of a probe cover (see Fig. 5). To make sure that the probe cover is correctly installed, turn the thermometer on and check the LCD screen. If a probe cover is not applied correctly, a flashing probe cover icon will appear on the display (see Fig. 6). If you see a unit of measure 'C' or 'F' flashing, then the thermometer is ready for use and the probe cover has been successfully installed (see Fig. 7).

## EJECTING USED PROBE COVER

After measurement, to avoid touching the contaminated probe cover during removal, press the EJECT button on the back of the thermometer (See Fig. 8).

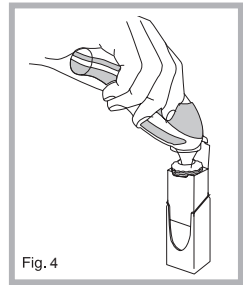


Fig. 4



Fig. 5

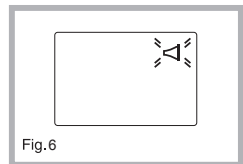


Fig. 6

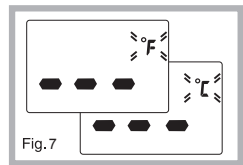


Fig. 7

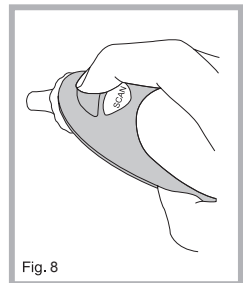


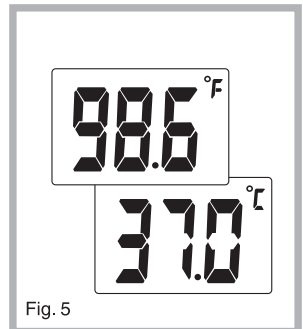
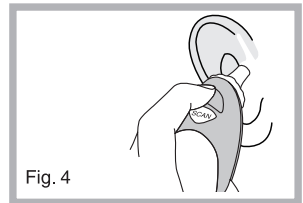
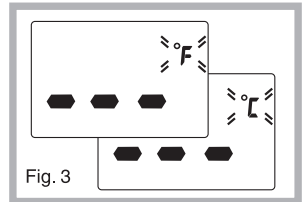
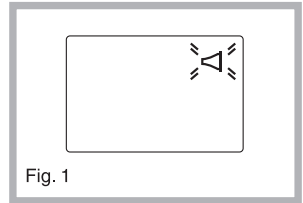


Fig. 8


# OPERATING THE THERMOMETER


1. Apply a probe cover to the thermometer (See Page 7 for instructions). The thermometer will not work without a probe cover.
2. Press and release the  on/off button. The thermometer will beep and perform a brief self-test, during which all indicators on the display will be shown, followed by 'ok' (See Fig. 2). If the probe cover is not installed correctly, the screen will show a flashing probe cover illustration (See Fig. 1). If you see this illustration, please check the probe cover and re-install another probe cover, if necessary.
3. If the probe cover is properly installed, the thermometer display will show three short dashes with a flashing °C or °F, indicating that the unit is ready for measurement (See Fig. 3).
4. Hold the outer ear and gently pull it toward the rear of the head to straighten the ear canal. Gently insert the probe into the ear canal and press the SCAN button. When the ear thermometer completes the measurement, the measured temperature will display on the LCD window with one long beep (approx. 1 second}. At the same time, the measuring indicator also lights for approximately one second (See Fig. 4).
5. The completed temperature reading will be shown on the display (See Fig. 5).
6. Press  on/off button to shut off the ear thermometer. If there is no temperature taken in the next minute, then it will shut off automatically.

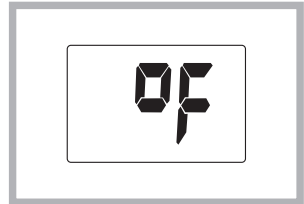
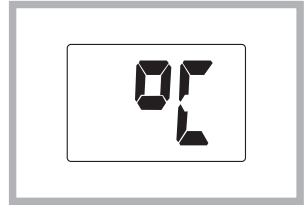


# SWITCHING BETWEEN °C & °F

The RightTemp Ear Thermometer can display results in either degrees Fahrenheit (°F) or degrees Celsius (°C).


To switch between Fahrenheit and Celsius, press the  on/off button 2 times, one right after another, and hold the second press down for more than 1.5 seconds until the C or F appears on the screen with a 'Beep.'

Release the  on/off button, and then the ear thermometer returns to measuring mode and is ready to take the next measurement in the unit selected.




# MEMORY STORAGE

The RightTemp stores 10 readings, with the most recent reading displaying first.

To view the RightTemp's memory, while the thermometer is off, press and hold down the  on/off button approximately 2 seconds.

A flashing '01' will appear with a small M in the lower right-hand side of the LCD screen (See Fig. 1).

This value will show on the display for about 2 seconds. To see additional past measurements before the thermometer turns off, keep pressing the  on/off button until you reach the desired measurement. Afterwards, the ear thermometer will return to measuring mode.

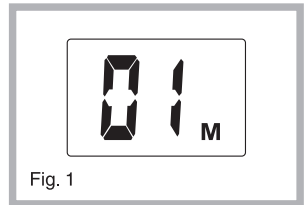


Fig. 1

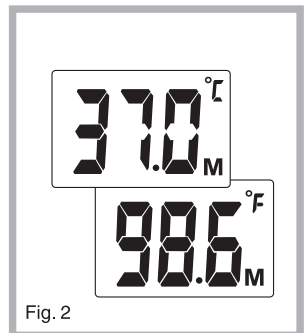



Fig. 2

# BACKLIGHT USAGE AND INFORMATION

The RightTemp has a backlight function. The backlight appears automatically when the unit turns on and remains lit until the unit is ready for measurement.

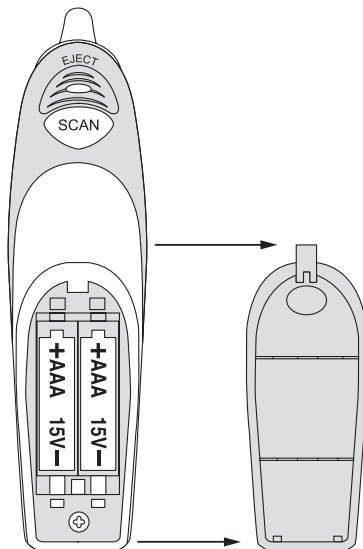
The backlight also appears when the thermometer switches between °C and °F and when viewing past readings in the Memory screens.

After a measurement is finished, if you would like to view the results with the backlight, press and hold the  on/off button for more than one second and do not release until you want the thermometer to turn off. Once you release the button, the thermometer will shut off. To view the measurement again, refer to the previous page on how to recall past measurements.

# BATTERY REPLACEMENT AND INSTALLATION

## REPLACE/ INSTALL THE BATTERIES

1. Slide the cover off by pushing on the notch at the top of the battery cover.
2. Remove the old batteries and insert 2 AAA batteries into the compartment, ensuring to match the indicated polarity symbols below. Please note that both batteries should face the same way. Then replace the battery cover.



# CLEANING

Clean the probe head, probe lens, LCD window, ear thermometer body, dispenser and base with a dry soft cloth or a soft cloth slightly moistened with 70% alcohol. Do not clean the ear thermometer with corrosive liquid.

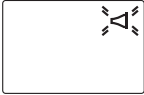


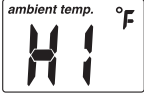
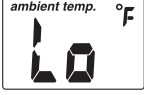
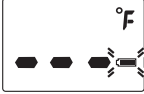




1. The ear thermometer is not waterproof. Do not submerge it in water or other liquids.
2. Keep the probe lens clean and intact to make sure the measurement is accurate. Please do not touch or wipe it unless it is necessary due to dirt or accidental use of the thermometer without a probe cover. If the ear thermometer is used accidentally without probe cover, please hold the ear thermometer with the probe head facing down. This will prevent liquid from entering the thermometer via the probe head. While holding the probe head so that the lens is facing down, gently clean the lens with a cotton swab or soft cloth moistened with 70% alcohol, waiting for the thermometer probe lens to dry before bringing the thermometer upright. Do not use the thermometer until the alcohol completely evaporates (approx. 10 mins).

# STANDARDS

This device conforms to the following standards:  
EN12470-5 and ASTM E1965-98.

Please follow the instruction manual when operating this product. Do not hit, drop or misuse the infrared ear thermometer.

# ERROR MESSAGES

Error Messages	Situation	Troubleshooting
	No probe cover is detected.	Please install a new and clean probe cover.
 	<p>The measured temperature is not within the measuring range.</p> <p>HI=Measured temperature is too high.</p> <p>Lo=Measured temperature is too low.</p>	Please make sure the probe head has a new, clean probe cover. Please also make sure the probe head lens is clean and free from oils and wax--if it is not, please follow the cleaning instructions on Page 11. Once it is determined that the probe lens is clean, and that the probe cover is new and undamaged, re-measure.
 	<p>The ambient temperature is not within the operating range.</p> <p>HI=Ambient temperature is too high.</p> <p>Lo=Ambient temperature is too low.</p>	Please put the thermometer in a room of 50°F ~ 104°F or 10°C ~ 40°C for approximately 30 minutes, and then re-measure.
 	The battery is low but the device will still operate normally for a short time.	Please replace the batteries as soon as possible.
	The battery is running low on power. Power is too low to function properly.	Please replace the batteries immediately.
	System error.	<p>Please press the  on/off button to turn the ear thermometer off, and then turn it on again.</p> <p>If the Err message appears again, please contact the manufacturer.</p>

**RE:** The temperature measuring unit is switchable between C and F. The unit of F is shown in the pictures above only for example purposes. Please see page [9] to learn how to switch between units.

# SPECIFICATIONS

Measuring Range	78.0°F ~ 111.9°F / 26.0°C ~ 43.9°C	
Accuracy	±0.4F (±0.2C)	within 95.9 F - 107.6 F (35.5 C - 42.0 C)
	or ±0.5F (±0.3C)	outside the conditions above
Operating Ambience	Ambient temperature: 50°F ~ 104°F or 10°C~ 40°C Relative humidity: 15% ~ 95% Atmospheric pressure : 70-106kPa	
Storage Ambience	Ambient temperature: -13°F ~ 131°F or -25°C~ 55°C Relative humidity: 15% ~ 95% Atmospheric pressure : 70-106kPa	
Atmospheric Pressure	70 kPa - 106k Pa	
Stored Temperature Memories	10 memories	
Battery	MDS8700 1.5V type AAA alkaline battery (LR03)*2	
Weight	ca.90g (Without batteries)	
Life Time	5 years	
Dimensions	15.5cm x 5.5cm x 3.5cm	

# NORMAL BODY TEMPERATURE REFERENCE

Measuring Site	Temperature range in Fahrenheit	Temperature range in Celsius
armpit :	95.0 °F ~ 98.6 °F	35.0 °C ~ 37.0 °C
forehead :	95.0 °F ~ 98.6 °F	35.0 °C ~ 37.0 °C
mouth :	95.9 °F ~ 99.3 °F	35.5 °C ~ 37.4 °C
rectum :	97.2 °F ~ 100.2 °F	36.2 °C ~ 37.9 °C
ear :	96.3 °F ~ 100.2 °F	35.7 °C ~ 37.9 °C

## WARNINGS

1. Do not disassemble, drop, twist or bend the ear thermometer.
2. Do not dispose of the thermometer or its batteries improperly and do not subject them to fire.
3. Do not use the device out of its environmental operating range, as it may result in inaccurate readings.
4. Always keep the ear thermometer and its accessories away from direct sunlight, moisture, dust and extreme temperature change while using, storing, or transporting the device.
5. This product is not disinfected and not sterilized. Before use, please follow the methods suggested in the section “Cleaning” on Page 11.
6. Please follow your government’s environment policy to recycle the ear thermometer, accessories and batteries.
7. Do not modify the ear thermometer without authorization of the manufacturer.

# WARRANTY

1. The warrantor guarantees that the infrared ear thermometer will be free from manufacturing defects under normal use for a period of one year from the date of purchase subject to the following terms and conditions.
2. This warranty covers only normal use. This warranty does not cover batteries of other power sources that may be provided with or used with the infrared ear thermometer. This warranty is voided if the infrared ear thermometer product is misused or abused in any manner.
3. This warranty does not cover the result or damage caused by improper use of thermometer and other expenses which are not specified here. This warranty is effective only by presenting the original dated purchase receipt stating the buyer's name and the distributor's name and address.
4. The infrared ear thermometer service or replacement will be carried out by manufacturer. Loss or damage in return shipment to Manufacturer shall be at purchaser's risk. Manufacturer reserves the right to replace a non-conforming product with the most comparable product currently available.

# ICON IDENTIFICATION



Type BF equipment. The insulation is required between the applied part (patient circuit) and all other parts of the equipment, which are earthed or could be earthed.



Refer to instruction manual.



Medline Industries, LP, One Medline Place, Northfield, IL 60093  
Medline United States  
**1-800-MEDLINE** (633-5463)  
medline.com | info@medline.com

Manufactured for Medline Industries, LP, Three Lakes Drive, Northfield, IL 60093 USA.  
©2020 Medline Industries, LP. All rights reserved. Medline is a registered trademark of  
Medline Industries, LP. V2 RH22FOC [www.medline.com](http://www.medline.com) **1-800-MEDLINE** (US only)

**RightTemp™**