AIRSSENTIAL

LifeTemp®
Non-Contact Thermometer

Instruction
Manual

Read this manual
carefully before
use to understand all
operational and safety
information.

This manual contains
important information for the safe
and effective use of the LifeTemp
Non-Contact Thermometer. Keep
this manual in a safe place for future
reference.

If you do not understand any part of
these instructions, contact the Airssential
Customer Care Centre on (02) 9708 5560.

Model: FR200

V(2).20.08

Table of Contents

Introduction

Congratulations on the purchase of your new Airssential LifeTemp Non-Contact Thermometer. This thermometer integrates simplicity of use, advanced technology and ergonomic design to produce an efficient device for temperature monitoring that eliminates inconvenience, discomfort or the issue of unaccommodating patients.

This device is a precision non-contact infrared thermometer that hygienically and accurately records temperature, in a safe and non-invasive manner, without contact. Other thermometer features include:

Multiple Uses (Wide Range Measurement)

The thermometer has a wide measurement range from 0°C to 100.0°C (32.0 to 212.0°F). The device can measure body or object temperature including:
• Milk surface temperature in a baby's bottle
• Surface temperature of a baby's bath water
• Ambient temperature of a room

Accurate and Reliable

Tested to international standards, this LifeTemp Thermometer is clinically validated for accuracy providing fast and precise temperature readings. The thermometer performs a self-test each time it is activated to ensure the accuracy of measurements.

Auto-Display Memory and Multiple Reading Recall

The thermometer stores up to 30 measurements from memory enabling efficient tracking of temperature. When activated the thermometer will automatically display the last reading recorded for 2 seconds.

Fever Alarm

10 short beeps and a red LCD display alerts that a temperature above 37.5°C has been recorded.

Statement of Purpose

The LifeTemp Non-Contact Thermometer is intended for the measurement and monitoring of human body temperature and is suitable for either clinical or home use. This thermometer has been tested and proven to be safe to use on all patients, irrespective of age, when used in accordance with the directions in this instruction manual.

The LifeTemp Non-Contact Thermometer may also be used for the measurement of objects and ambient surface temperatures within the home.

Information on Non-Contact Thermometers

The LifeTemp Non-Contact Thermometer measures the infrared energy radiated from the human body as well as objects. The energy is collected through the thermometer's lens and converted to a temperature value which is hence displayed.

Notes:

• In the early stages of fever, a physiological effect called "vasoconstriction" occurs, restricting in circulation to skin's blood vessels resulting in a cooling effect on the body's extremities. Recorded temperatures, using an infrared thermometer, may therefore be unusually low.

  If the measurement result is inconsistent with the patient's condition or is unusually low, repeat the measurement in 15 minutes.

• Readings from different measuring sites should not be compared as the normal body temperature varies by measurement site and hence the type of thermometer used. Normal body temperature ranges by measurement site are:

  Axillar: 34.7 - 37.7°C (94.5 -99.9 °F)
  Oral: 35.5 - 37.5°C (95.9 - 99.5 °F)
  Rectal: 36.6 - 38.0 °C (97.9 - 100.4 °F)
  Non-Contact: 36.2 - 37.4°C (97.1 - 99.3 °F)

  Body temperature also varies by time of day, being highest in the evening and lowest about one hour before waking up.

• Doctors recommend rectal measurement for newborn infants within the first 6 months of birth, as all other measuring methods might lead to ambiguous results. If using a non-contact thermometer on a newborn infant, it is recommended to verify the readings with a rectal measurement.

LifeTemp Non-Contact Thermometer Components

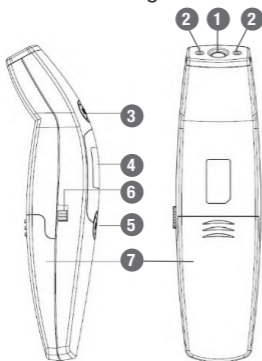## Unpacking Your LifeTemp Non-Contact Thermometer

Remove the thermometer from its carton and examine the contents (Non-Contact Thermometer, User manual and two AAA batteries) ensuring all items are present and undamaged. Report anything missing or damaged to the point of purchase.
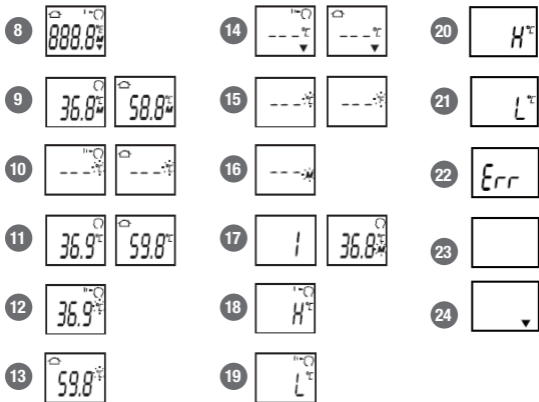
⚠️ Retain the packing for use in shipping or storing the unit.

Identification of the Thermometer's Parts

Essential parts of the thermometer and displays are described in Figure 1:

1. **Measuring Sensor**
2. **Tracking light**
3. **START Button**
4. **Display**
5. **ON/OFF Button**
6. **Mode Switch (body mode/object mode)**
7. **Battery Compartment Cover**
8. **All Segments displayed**
9. **Memory**

8 888.8		**14** ---°C ---°C		**20** H°C	
9 36.8 58.8		**15** ---°C ---°C		**21** L°C	
10 ---°C ---°C		**16** ---•M		**22** Err	
11 36.9 59.8		**17** 1 36.8		**23**	
12 36.9		**18** H°C		**24** ▾	
13 59.8		**19** L°C			

10 Ready for Measurement	**18** Measured Temperature too high
11 Measurement complete	**19** Measured Temperature too low
12 Body Mode	**20** Ambient Temperature too high
13 Object Mode	**21** Ambient Temperature too low
14 Low Battery Indication	**22** Error Function Display
15 Changing between Celsius and Fahrenheit	**23** Blank display
16 Recall Mode	**24** Flat Battery
17 Recall the last 30 Readings	

FIGURE 1: Essential parts of the thermometer and displays

Understanding Controls & Displays

All Segments Displayed (see ⑧ Figure 2): Ensures all segments in the display window are visible. To access this function, press the ON/OFF button (see ⑤ Figure 1) to turn on the unit and all segments will display for 2 seconds.

Last Reading (see ⑨ Figure 2): The last reading will automatically display for 2 seconds upon activation of the thermometer

Ready for Measurement (see ⑩ Figure 2): When the device is ready to measure, the "°C" (or "°F") icon will flash continuously and the mode icon (body or object) will be displayed.

Measurement Complete (see ⑪ Figure 2): The finished reading will be displayed with the "°C" (or "°F") and mode icons steady. The device is ready for the next measurement once the "°C" (or "°F") icons begin to flash again.

Low Battery Indication (see ⑭ Figure 2): When the device is ON, the battery icon will keep flashing when a battery replacement is required.

⑧ 888.8

⑨ 36.8 58.8

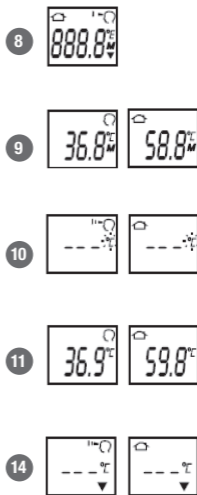⑩ -- --

⑪ 36.9 59.8

⑭ -- --

FIGURE 2:
Selected thermometer
display screens

8

Changing Measurement Modes

To change from body to object temperature mode, slide the switch to the HOUSE icon (see Figure 3). To return to body mode, slide the switch to the HEAD icon.
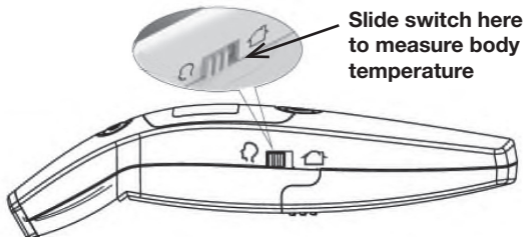

Slide switch here to measure body temperature

FIGURE 3: Mode Switch (body & object mode)

Safety Instructions

Note: This thermometer may only be used for the purposes described within this manual. The manufacturer or product distributors cannot be held liable for damage caused by incorrect usage.

Do not use the instrument if it is damaged or notice anything unusual. Contact the Airssential Customer Service Centre to arrange service.

User Precautions

1. To avoid any harmful situation, this device should not be operated unsupervised by disabled persons or young children

2. This thermometer is unsuitable for use in the presence of flammable anaesthetics or oxygen.

3. Store the thermometer at a temperature between 15°C-40°C (59°F-104°F) and protect it from direct sunlight, dust, pollutants and extreme temperatures. Refer to the "Technical Specifications" section for further information.

   Note: If the thermometer is not stored within the specified temperature range, allow the thermometer 30 minutes to equilibrate with room temperature before use.

4. The probe sensor is the most delicate part of this thermometer (see Figure 1, ❶) and must be kept clean and undamaged to ensure accuracy.

5. Do not insert any foreign objects inside the thermometer's probe sensor as this will cause a malfunction. Do not touch the probe's lens with your fingers.

6. Do not drop this instrument or subject it to any strong impact.

7. This instrument is NOT waterproof. Never splash, immerse or soak this device in any liquid including water.

8. Should a fault occur with the thermometer, do not disassemble or attempt to repair the device as this will void the warranty. Contact the Airssential Customer Service Centre to arrange service.

9. If the instrument will not be used for a prolonged period, the batteries should be removed to avoid corrosion to the thermometer's battery terminals.

⚠️ **Use of this thermometer is not intended as a substitute for a consultation with your physician.**

Directions for Use

Installing Batteries

The thermometer is supplied with 2 long-life 1.5V, AAA batteries. Slide the thermometer's battery cover (see Figure1, ⑦) and insert the batteries. Ensure the batteries are fitted according to their polarities as shown in the battery compartment.

Measuring in Body Mode

1. Remove any hair, sweat or dirt from the forehead before a measurement as these may affect the reading's accuracy.

2. Ensure the body measurement mode is selected and press the ON/OFF button (see Figure 1, ⑤). The LCD display will activate to show all segments on screen for 2 seconds.

3. The last reading will automatically display for 2 seconds together with the "M" icon (see Figure 1, ⑨).

4. When the "°C" (or "°F") icon is flashing, a beep sound is heard, and a measurement can now be performed.

   Note: The distance between forehead and thermometer should not exceed 5 cm during a measurement. Temperature readings obtained by scanning above the eyebrow provide the greatest accuracy (see Figure 4).
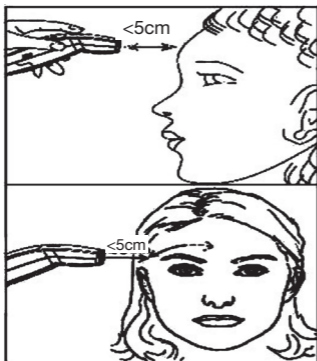

FIGURE 4:
The distance between forehead and thermometer should not exceed 5cm.

5. Position the thermometer about 1cm above the eyebrow. Press the START button (see Figure 1, ③). A blue tracking light will activate to indicate the measurement area.

   After 1-3 seconds a long beep will verify the completion of the measurement. The temperature will now display.

   To repeat any measurement you must wait for the back light of the display to dim and the "°C" (or "°F") to begin flashing, before pressing the START button again.

6. Read the recorded temperature from the LCD display.

Measuring in Object Mode

1. Repeat steps 1 to 3 from the previous section, ensuring that object mode is selected.

2. Point the thermometer at the center of the object at a distance not exceeding 5 cm and press the START button (see Figure 1, ③). After 3 seconds a long beep will verify the completion of the measurement.

3. Read the recorded temperature from the LCD display.

Notes:
- Ensure the patient and thermometer are both at room conditions for at least 30 minutes prior to measurement.

- Do not take a measurement while or immediately after nursing a baby.

- Patients should not drink, eat, or exercise before or during a measurement.

- Do not remove the thermometer from the measurement site before hearing the termination beep.

- Short beeps and a red LCD display alert the patient that a high temperature equal to or higher than 37.5 °C has been recorded.

- Always take the temperature at the same location, since temperature readings may vary according to the measurement site.

- In the following situations it is recommended that three temperatures are taken consecutively and the highest one is taken as the reading:

  i. Children under three years of age with a compromised immune system and for whom the presence or absence of fever is critical.

  ii. When the user is learning how to use the thermometer until becoming familiarised with the thermometer and obtains consistent readings.

  iii. If the measurement is surprisingly low.

Changing Between Celsius & Fahrenheit Scales

This thermometer can display measurements in either Fahrenheit or Celsius temperature scales. To switch between scales, turn the device OFF. Press and hold the START button (see Figure 1, ③) for 5 seconds and the current measurement scale ("°C" or "°F" icon) will begin to flash on the LCD display (see Figure 1, ⑮).

Now change the measurement scale by pressing the START button. When the desired scale has been chosen, wait for 5 seconds and the device will automatically enter the "ready for measuring" mode. This scale will now remain for future readings.

Recalling Readings from Memory Mode

This thermometer can recall up to 30 readings from memory. To review measurements:

- **With the thermometer OFF,** enter memory recall mode (see Figure 1, **16**) by pressing the START button (see Figure 1, **3**). The memory icon **"M"** will now flash on the LCD display.

- **Reading 1 - the last reading** (see Figure 1, **17**): To recall the last measurement press and release the START button. The reading together with the memory icon will display on the LCD screen.

- **Reading all stored readings in succession:** Press and release the START button consecutively to recall all stored readings in succession. Pressing and releasing the START button after all readings have been recalled will repeat the above sequence from reading 1.

Cleaning and Disinfecting Thermometer

To disinfect and clean the thermometer casing and measuring probe use a tissue moistened with 70% alcohol. Never use abrasive cleaning agents or organic solvents (turpentine, thinners, etc.) for cleaning purposes.

Take care not to scratch the probe lens surface or the LCD display during cleaning.

Never immerse the instrument in water or other cleaning liquids. Ensure that no liquid enters the interior of the thermometer during disinfection or cleaning.

Battery Replacement

The thermometer is supplied with 2 long-life 1.5V, size AAA batteries. The batteries need replacing when this "▼" icon is the only symbol shown on the LCD display. Slide the battery cover open and replace the batteries, ensuing their polarities are aligned with the symbols in the compartment.

Thermometer and Battery Disposal

Waste electrical products and used batteries should not be disposed of with household waste. If this thermometer is no longer required or it is no longer serviceable, dispose of the device and its accessories in compliance with local regulations. Please recycle where facilities exist.

Check with your local Council for recycling information.

LCD Display and Measurement Error Messages

The table below provides a summary of error messages, and their meanings, that may occur during the use of this thermometer.

Symbol Displayed	Interpretation of Symbol
H	The temperature measured is too high and out of device range i.e.: • higher than 42.2°C (108.0°F) in body mode, or • higher than 100°C (212°F) in object mode
L	The temperature measured is too low and out of device range i.e.: • lower than 34.0°C (93.2°F) in body mode or • lower than 0°C (32°F) in object mode.
H° **20**	If you turn the thermometer on, and the LCD display becomes red and the "H°c" is displayed, it means the actual thermometer is higher than 40.0°C (104.0°F). Try and cool the thermometer to below 40.0°C and it will then function correctly.

21 $L^{°C}$	If you turn the thermometer on, and the LCD display becomes red and the "L°C" is displayed, it means the actual thermometer is lower than 15.0°C (59.0°F). It is not faulty, it is too cold to function correctly. Try and warm the thermometer to above 15.0°C and it will then function correctly. Hold thermometer in hands or placing in a pocket is normally an efficient way of achieving this.
22 Err	**Error function display:** The thermometer has malfunctioned. Contact the Airssential Customer Care Service Centre to arrange service.
23	**Blank display:** Check if the batteries have been installed correctly according to their polarities as shown in the battery compartment.
24 ▼	**Flat battery indication:** If this icon "▼" is the only symbol shown on the display, the batteries require replacement.

Device Certifications

CE 0197 This thermometer is a Class IIa Medical Device. In compliance with the European standard, this device bears the CE conformity mark of the Medical Devices Directive and complies with the following reference standards:

ISO 80601-2-56:2017 Medical electrical equipment – Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement.

EN12470-5:2003 Medical electrical equipment – Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement.

IEC 60601-1:2005+A1:2012 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance

IEC 60601-1-2:2014 (EMC) Medical electrical equipment – Part 1 – 2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests.

Symbols Used In This Manual

The meaning of symbols used in this manual are defined in the table below.

	Waste electrical products and used batteries should not be disposed of with household waste. Recycling/Environment Protection applies.
	Manufacturer
	Caution, consult instruction Manual
CE 0197	Notified body CE marking. TUV Rhineland (Notified Body CE0197) is an independent organisation that audits and certifies product compliance against standards for safety and quality.
	Type BF equipment. Equipment that in normal use necessarily comes into physical contact with the patient to perform its function.

Warranty and Service

The LifeTemp Non-Contact Thermometer is covered by a warranty offered by Airssential Health Care ("Airssential"), a division of Boian Surgical Pty Ltd., to the original purchaser of the product. Proof of purchase is required to substantiate warranty claims.

Airssential warrants that for a period of two years from the date of purchase, this product will be free from defects in material and workmanship. Airssential, at its option, will repair or replace this device if found to be defective during the warranty period, provided the product has been used in accordance with the instructions.

If the product is no longer available, replacement may be made with a similar product. Airssential shall not be liable for any incidental or consequential damages caused by the breach of any express or implied warranty.

This warranty excludes the repair or replacement of parts due to normal wear, damage due to improper usage or accidental user damage. Freight costs associated with all warranty claims or service requests will be borne by the consumer.

Do not disassemble this device, as it cannot be serviced at home. Unauthorised disassembly of this device will void the warranty. If service is required, contact Airssential to arrange service on (02) 9708 5560. Send this device, together with proof of purchase and a cheque or money order for $9.90 to cover return shipping and insurance to Airssential, 122 Gow St., Padstow, NSW, 2211. Include your name, address and a contact telephone number.

Specifications

Specifications are subject to change without notice.

Model:	LifeTemp Non-Contact Thermometer FR200.
Measurement Range:	Body Mode: 34.0°C ~ 42.2.0°C (93.2°F ~ 108.0°F). Object Mode: 0-100.0°C (32-212.0°F).
Resolution:	0.1°C / °F.
Measurement Accuracy:	Laboratory: ± 0.2°C, (± 0.4°F) in the range 34.0°C ~ 42.2°C (93.2 ~ 108.0°F).
Operating Temperature:	Body Mode: 16-40.0 °C (60.8-104.0 °F). Object Mode: 5-40.0 °C (41-104.0 °F).
Storage Conditions:	-20°C to +50°C (-4 °F to 122 °F) in prolonged storage. 15°C-40°C (59°F-104°F) when required for regular use. 15-95 % relative maximum humidity.
Display:	Liquid Crystal Display, 4 digits plus special symbols.
Memory:	Auto-Displays the last measured temperature on start-up with a recall of up to 30 readings from Memory.

Acoustic:	When the thermometer is turned ON and ready for the measurement: 1 short beep will be heard.
	When the measurement is complete: 1 long beep (1 sec.) will be heard if the reading is less than 37.5°C (99.5°F),
	When the measurement is complete: 10 short beeps, will be heard if the reading is equal to or higher than 37.5°C (99.5°F).
	If a system error occurs 3 short beep sounds will be heard.
Backlight:	The display light will be GREEN for 4 seconds, when the unit is turned ON.
	The display light will be GREEN for 5 seconds, when a measurement is completed with a reading lower than 37.5 °C (99.5°F).
	The display light will be RED for 5 seconds, when a measurement is completed with a reading higher than 37.5°C (99.5°F).
Automatic Switch-off:	Approx. 1 minute after last measurement.
Battery:	2 x 1.5 V Batteries, size AAA.
Dimensions:	150 x 40 x 39 mm.
Weight:	81 g (with batteries), 56 g (without batteries).

AIRSSENTIAL

Airssential Health Care
122 Gow Street, Padstow NSW 2211
Phone (02) 9708 5560

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