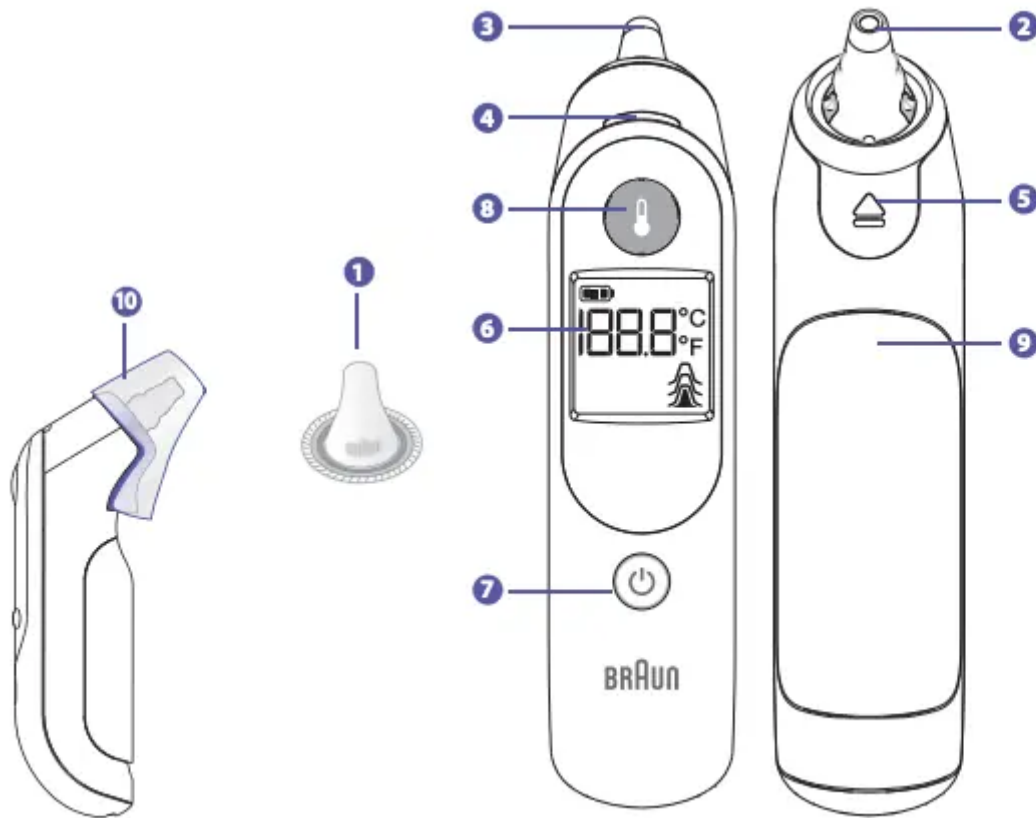


## Product description



1. Lens filter (Box of 20)
2. Probe tip
3. Probe
4. ExacTemp light
5. Lens filter ejector
6. Display
7. Power button
8. Start button
9. Battery door
10. Protective cap

The Braun ThermoScan thermometer has been carefully developed for accurate, safe and fast temperature measurements in the ear.

The shape of the thermometer probe prevents it from being inserted too far into the ear canal, which can hurt the eardrum.

However, as with any thermometer, proper technique is critical to obtaining accurate temperatures. Therefore, read the instructions carefully and thoroughly.

The Braun ThermoScan thermometer is indicated for intermittent measurement and monitoring of human body temperature for people of all ages. It is intended for household use only.

Use of IRT 6520 along with Age Precision™ feature is not intended as a substitute for consultation with your physician.

## WARNINGS AND PRECAUTIONS

- Please consult your doctor if you see symptoms such as unexplained irritability, vomiting, diarrhea, dehydration, changes in appetite or activity, seizure, muscle pain, shivering, stiff neck, pain when urinating, etc. in spite of any color of the background light or absence of fever.
- Please consult your doctor if the thermometer shows elevated temperature (yellow or red background lights for IRT 6520).

The operating ambient temperature range for this thermometer is 10 – 40 °C (50 – 104 °F). Do not expose the thermometer to temperature extremes (below -25 °C / -13 °F or over 55 °C / 131 °F) or excessive humidity (>95% RH). This thermometer must only be used with genuine Braun ThermoScan lens filters (LF 40).

To avoid inaccurate measurements always use this thermometer with a new, clean lens filter attached.

If the thermometer is accidentally used without a lens filter attached, clean the lens (see «Care and cleaning» section). Keep lens filters out of reach of children.

This thermometer is intended for household use only. This product is not intended to diagnose any disease, but is a useful screening tool for temperature. Use of this thermometer is not intended as a substitute for consultation with your physician.

The Age Precision™ feature is not intended for pre-term babies or small-for-gestational age babies.

The Age Precision™ feature is not intended to interpret hypothermic temperatures. Do not allow children under 12 to take their temperatures unattended.

Do not modify this equipment without authorization of the manufacturer.

Parents/guardians should call the pediatrician upon noticing any unusual sign(s) or symptom(s). For example, a child who exhibits irritability, vomiting, diarrhea, dehydration, seizure, changes in appetite or activity, even in the absence of fever, or who exhibits a low temperature, may still need to receive medical attention.

Children who are on antibiotics, analgesics, or antipyretics should not be assessed solely on temperature readings to determine the severity of their illness.

Temperature elevation as indicated by Age Precision™ may signal a serious illness, especially in adults who are old, frail, have a weakened immune system, or neonates and infants. Please seek professional advice immediately when there is a temperature elevation and if you are taking temperature on:

- neonates and infants under 3 months (consult your physician immediately if the temperature exceeds 37.4 °C or 99.4 °F)
- patients over 60 years of age
- patients having diabetes mellitus or a weakened immune system (e.g. HIV positive, cancer chemotherapy, chronic steroid treatment, splenectomy)
- patients who are bedridden (e.g. nursing home patient, stroke, chronic illness, recovering from surgery)
- a transplant patient (e.g. liver, heart, lung, kidney) Fever may be blunted or even absent in elderly patients.

This thermometer contains small parts that can be swallowed or produce a choking hazard to children. Always keep the thermometer out of children's reach.

## Body temperature

Normal body temperature is a range. It varies by site of measurement, and it tends to decrease with age. It also varies from person to person and fluctuates throughout the day. Therefore, it is important to determine normal temperature ranges. This is easily done using Braun ThermoScan. Practice taking temperatures on yourself and healthy family members to determine the normal temperature range.

**Note:** When consulting your physician, communicate that the ThermoScan temperature is a temperature measured in the ear and if possible, note the individual's normal ThermoScan temperature range as additional reference.



## How does Braun ThermoScan work?

Braun ThermoScan measures the infrared heat generated by the eardrum and surrounding tissues. To help avoid inaccurate temperature measurements, the probe tip is warmed to a temperature close to that of the human body. When the Braun ThermoScan is placed in the ear, it continuously monitors the infrared energy. The measurement is finished and the result displayed when the thermometer detects that an accurate temperature measurement has been taken.



## Why measure in the ear?


The goal of thermometry is to measure core body temperature<sup>1</sup>, which is the temperature of the vital organs. Ear temperatures accurately reflect core body temperature<sup>2</sup>, since the eardrum shares blood supply with the temperature control center in the brain<sup>3</sup>, the hypothalamus. Therefore, changes in body temperature are reflected sooner in the ear than at other sites. Axillary temperatures measure skin temperature and may not be a reliable indicator of core body temperature. Oral temperatures are influenced by drinking, eating and mouth breathing. Rectal temperatures often lag behind changes in core body temperature and there is a risk of cross-contamination.



## How to use your Braun ThermoScan

1. Remove protective cap.



2. Push the Power button 

During an internal self-check, the display shows all segments. Then the last temperature taken will be displayed for 5 seconds.



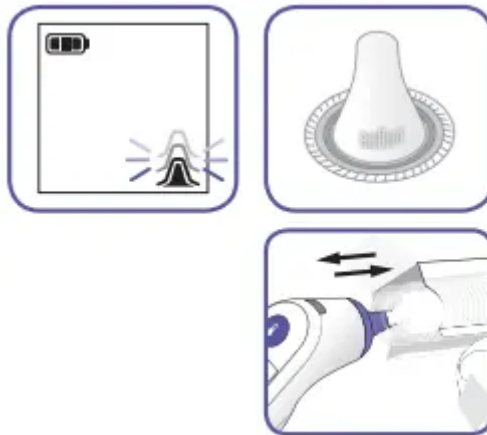
1. Guyton A C, Textbook of Medical Physiology, W.B. Saunders, Philadelphia, 1996, p 919.
2. Guyton A C, Textbook of Medical Physiology, W.B. Saunders, Philadelphia, 1996, pp 754-5.
3. Netter H F, Atlas of Human Anatomy, Novartis Medical Education, East Hanover, NJ, 1997, pp 63, 95.


3. The lens filter indicator will blink to signal one is needed.

To achieve accurate measurements, make sure a new, clean lens filter is in place before each measurement.

Attach a new lens filter by pushing the thermometer probe straight into the lens filter inside the box and then pulling out.

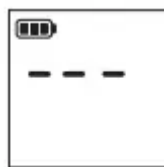
**Note:** The Braun ThermoScan will not work unless a lens filter is attached.




4. Select age with Age Precision™ button as shown below. Press  button to toggle through each age group.

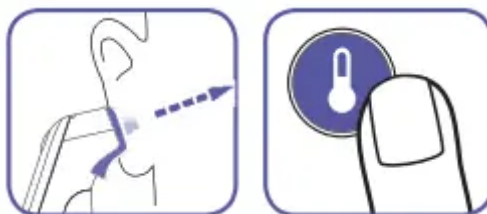
**NOTE:** You must select an age in order to take a measurement.

The thermometer is ready to take a temperature when the display looks like the images below.



6020

5. Fit the probe snugly into the ear canal, then push and release the Start button .



6. ExacTemp light will pulse while temperature measurement is in progress. The light will remain solid for 3 seconds to indicate that a successful temperature reading has been achieved.

**NOTE:** If the probe has been properly inserted into the ear canal during the measurement, a long beep will sound to signal the completed measurement.


If the probe has NOT been constantly placed in a stable position in the ear canal, a sequence of short beeps will sound, the ExacTemp light will go out and the display will show an error message (POS = position error).

See «Errors and troubleshooting» section for more information.




7. The confirmation beep indicates that an accurate temperature measurement has been taken. The result is shown on the display.  
Temperature displays.



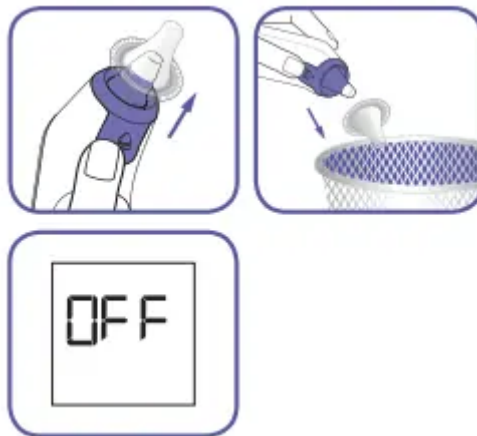
8. For the next measurement, press Eject  button to remove and discard used lens filter, and put on a new, clean lens filter.

**NOTE:** Defaults to last age setting used if you do not change.

The Braun ThermoScan ear thermometer turns off automatically after 60 seconds of inactivity.

The thermometer can also be turned off by pressing the Power button .

The display will briefly flash OFF and it will go blank.



## Temperature-taking hints

Always replace disposable lens filters to maintain accuracy and hygiene. The right ear measurement may differ from the measurement taken in the left ear. Therefore, always take the temperature in the same ear. The ear must be free from obstructions or excess earwax build-up to take an accurate reading.

External factors may influence ear temperatures, including when an individual has:

Factor	Affects
Poor probe placement	✓
Used lens filter	✓
Dirty lens	✓



In the cases below, wait 20 minutes prior to taking a temperature.

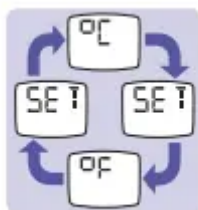
Factor	Affects
Extreme hot and cold room temperature	✓
Hearing aid	✓
Lying on pillow	✓

Use the untreated ear if ear drops or other ear medications have been placed in the ear canal.

## Changing the temperature scale

Your Braun ThermoScan is shipped with the Celsius (°C) temperature scale activated. If you wish to switch to Fahrenheit (°F) and/or back from Fahrenheit to Celsius, proceed as follows:

1. Make sure the thermometer is turned off.
2. Press and hold down the Power button . After about 3 seconds the display will show this sequence: °C / SET / °F / SET.
3. Release the Power button  when the desired temperature scale is shown. There will be a short beep to confirm the new setting, then the thermometer is turned off automatically.



## Care and cleaning



The probe tip is the most delicate part of the thermometer.

It must be clean and intact to ensure accurate readings.

If the thermometer is ever accidentally used without a lens filter, clean the probe tip as follows:

Very gently wipe the surface with a cotton swab or soft cloth moistened with alcohol. After the alcohol has completely dried out, you can put a new lens filter on and take a temperature measurement.

If the probe tip is damaged, please contact Consumer Relations.

Use a soft, dry cloth to clean the thermometer display and exterior. Do not use abrasive cleaners. Never submerge this thermometer in water or any other liquid. Store thermometer and lens filters in a dry location free from dust and contamination and away from direct sunlight.

Additional lens filters (LF 40) are available at most stores carrying Braun ThermoScan.



## Replacing the batteries

The thermometer is supplied with two 1.5 V type AA (LR 06) batteries. For best performance, we recommend Duracell® alkaline batteries.

1. Insert new batteries when the battery symbol appears on the display.
2. Open the battery compartment. Remove the batteries and replace with new batteries, making sure the poles are in the right direction.
3. Snap battery door into place.



Only discard empty batteries. To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites according to national or local regulations.

## Calibration

This device was designed and manufactured for a long service life, however it is generally recommended to have the device inspected once a year to ensure correct function and accuracy. Please contact the authorized service centre located in your country.

**Note:** The calibration checking is not a free service. Please contact the Authorized Service Centre to get a quotation before you send out the product.




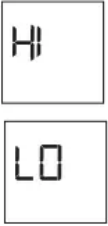

Manufacturing date is given by the LOT number located in the battery compartment.



The first three (3) digits after LOT represent the Julian date that the product was manufactured and the next two (2) digits represent the last two numbers of the calendar year the product was manufactured. The last identifiers are the letters that represent the manufacturer.

An example: LOT 11614k, this product has been manufactured on the 116th day of the year 2014.



## Errors and troubleshooting

Error Message	Situation	Solution
	No lens filter is attached.	Attach new, clean lens filter.
	The thermometer probe was not positioned securely in the ear.	Take care that the positioning of the probe is correct and remains stable.
	An accurate measurement was not possible.	
	POS = position error	Replace lens filter and reposition. Press Start button to begin a new measurement.
	Ambient temperature is not within the allowed operating range (10 – 40 °C or 50 – 104 °F).	Allow the thermometer to remain for 30 minutes in a room where the temperature is between 10 and 40 °C or 50 and 104 °F .
	Temperature taken is not within typical human temperature range (34 – 42.2 °C or 93.2 – 108 °F). HI = too high LO = too low	Make sure the probe tip and lens are clean and a new, clean lens filter is attached. Make sure the thermometer is properly inserted. Then, take a new temperature.
	System error – self-check display flashes continuously and will not be followed by the ready beep and the ready symbol.	Wait 1 minute until the thermometer turns off automatically, then turn on again.
	If error persists,	... reset the thermometer by removing the batteries and putting them back in.
	If error still persists,	... please contact the Service Centre.
		Insert new batteries.

	Battery is low, but thermometer will still operate correctly.	
	Battery is too low to take correct temperature measurement.	Insert new batteries.

## Product specifications

Displayed temperature range: 34 – 42.2 °C (93.2 – 108 °F)

Operating ambient temperature range: 10 – 40 °C (50 – 104 °F)

Storage temperature range: -25 – 55 °C (-13 – 131 °F)

Operating and storage relative humidity: 10-95% RH (non condensing)

Display resolution: 0.1 °C or °F

**Accuracy for displayed temperature range** Maximum Laboratory Error

35 – 42 °C (95 – 107.6 °F): ±0.2 °C (±0.4 °F)

Outside this range: ±0.3 °C. (±0.5 °F)

Clinical repeatability: ±0.14 °C. (±0.26 °F)

Battery life: 2 years / 600 measurements

Service life: 5 years

This thermometer is specified to operate at 1 atmospheric pressure or at altitudes with an atmospheric pressure up to 1 atmospheric pressure (700 - 1060 hPa).



Equipment with  
type BF applied parts



See Instruction for use



Operating temperature



Storage temperature



Keep it dry

Subject to change without notice.

This appliance conforms to the following standards:

Standard Reference Edition Title:

EN 12470-5: 2003 Clinical thermometers – Part 5: Performance of infra-red ear thermometers (with maximum device).

EN 60601-1: 2006 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance.

EN ISO 14971: 2012 Medical devices – Application of risk management to medical devices.

EN ISO 10993-1: 2009 Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process.

EN 60601-1-2: 2007 Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic compatibility – Requirements and tests.

EN 980: 2008 Symbols for use in labeling of medical devices.

EN 1041: 2008 Information supplied by the manufacturer of medical devices.

EN 60601-1-11: 2010 Medical electrical equipment – Part 1-11: General requirements for basic safety and essential performance – Collateral standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment.

This product conforms to the provisions of the EC directive 93/42/EEC.

MEDICAL ELECTRICAL EQUIPMENT needs special precautions regarding EMC. For detailed description of EMC requirements please contact your authorized local Service Centre (See guarantee card).

Portable and mobile RF communications equipment can affect MEDICAL ELECTRICAL EQUIPMENT.

**Warning**

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.

