

NISSEI Mini Ear Thermometer

Model: MT-30CPLB (blue) / MT-30CPLR (pink)

Instruction Manual / Warranty Card

Be sure to read this instruction manual thoroughly before use.
Keep this instruction manual at hand for your future reference.

Let's Use It!

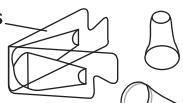
Please practice using the device in your ear when using at the first time.

1 Confirmation of the probe cover



- If the probe cover becomes dirty or broken, replace it with a new one.
- Be sure to attach the probe cover exclusive for this unit before taking measurement.
- ◆ A probe cover is already attached to the main unit.

Accessories



Three spare probe covers are attached in the package. Store the accessories carefully.

2 Press the power button



The measurement can be carried out after the rabbit icon has shown.

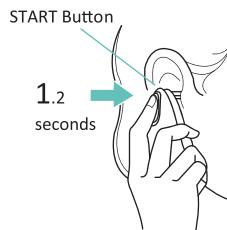
3 Insert the probe into the ear



Insert the probe into the ear as far as it comfortably goes in the direction of the eardrum.

- ◆ Insert the probe in a regular direction into the ear, aiming towards the membrane of the eardrum to obtain an accurate reading.

4 Press the START button



The Measurement is Complete with a beep or flash of light.

- ◆ The buzzer could be set to off (refer to the instruction on Page 2).

How to Correctly Take a Measurement

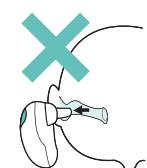
We recommend that you practice using the unit on yourself to confirm the measuring method by understanding the best way to insert the unit in the ear.

The external auditory canal is S shape.



Correct measurement result may not be obtained if the unit is not inserted deep enough in the ear.

Insert the probe into the ear as far as it comfortably goes in the direction of the eardrum.



Insert the Probe into the Ear

Gently pull the ear back to straighten the ear canal and snugly position the probe into the ear canal, aiming towards the membrane of the eardrum to obtain an accurate reading.



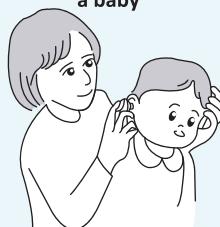
Required Skills in Measuring the Temperature of Infants and Young Children

Measuring on a lying baby



- Make sure the baby face toward you and ear upwards.
- Lightly support the baby's head with the other hand when you are measuring.

Measuring while holding a baby



- Lightly support the child's head to make the child keep still.
- While slightly pulling the ear back, cover the external auditory canal with the probe without forcibly trying to insert the probe.

Measuring on an older child



- While slightly pulling the ear back, cover the external auditory canal with the probe without forcibly trying to insert the probe.

Confirm the correct measuring method before measuring on others.

The length of the probe with the probe cover on it will not hurt the eardrum when inserting the unit into the ear (must apply probe cover).

Why the temperature indicated is rather high?

Why the temperature indicated is rather low?

Please refer to
Q & A of the temperature indicated on Page 3
if you have above questions.



Cleaning and Maintenance

1 Turn the power off



The power will be automatically turned off when no using more than 1 minute. (Power saving design)

Attention

Before store the unit in the storage case, be sure the probe cap has been put on.

Malfunction can be occurred easily if not do so.

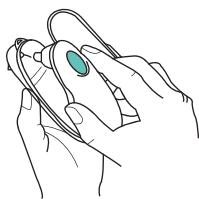
2 Wipe off dirt on the main unit with a soft dry cloth or tissue

Correct measurement result may not be obtained if dirty probe covers are used.



- Slightly wipe the probe cover by wet tissue paper.
- Gently wipe the probe cover.
- Use 75% alcohol to wipe the cover when it becomes dirty.

3 Store the unit in the storage case



The main unit is not waterproof. If the main unit is dirty, dip a soft cloth with cold or warm water, wring it out and wipe the unit slightly.

Set the Buzzer (to Mute Mode)



The mark of 2 grids indicates "Beeps & Flash light"



The mark of 1 grid indicates "Mute & Flash light"

You can switch to the mute mode with flash light when measuring on a sleeping child. (The default mode of a new purchased unit is "Beep & Flash light".)

1 Turn the power off



Switch the mode when the power is off. Press and hold the power button.

2 Press and hold the power button



The default mode "Beeps & flash light" will be indicated.

3 Wait until the mark of 1 grid appears with a beep



It has been switched to "Mute & Flash light"

To select the "Beep & Flash light" mode, start from step 1.

Replace the Probe Cover

When should you replace the probe cover?

If the probe cover becomes dirty or broken, replace it with a new one.

The probe cover might be used for 30 times under normal use.

Do not use a probe cover after someone else has used it.



Replace the probe cover for different people use. (3 probe covers are contained in the accessories.)

Additional probe covers can be purchased

Always use the probe cover exclusive for NISSEI Mini Ear Thermometer.

Caution



Do not let your children measure by themselves. It may cause damage to the ear.

1 Remove the probe cover fixed ring



Gently twist off the probe cover fixed ring with the direction of the arrow showed above in 90 degree.

2 Remove the probe cover



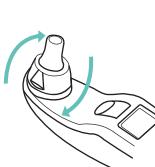
Remove the probe cover.

3 Place a new probe cover on



Do not place more than 1 probe cover on.

4 Fix the probe cover fixed ring



Fix the probe cover fixed ring by twisting it in the direction of the arrow showed above. Do not use when the probe is broken or damaged.

Attention

Do not touch or apply strong shock to the infrared sensor or the front part of the probe cover.

Correct measurement result may not be obtained if the probe cover becomes dirty with earwax or other substances.

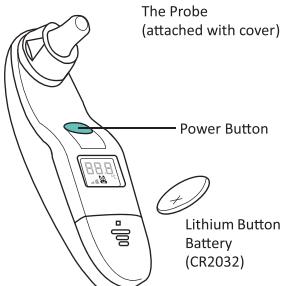
Always use the probe cover exclusive for this unit. Breakdown may occur or correct measurement result may not be obtained if not do so.

Please store the batteries, probe covers, the main unit, the probe cap and the storage case out of children's reach to avoid accidentally swallow or damage occurred.

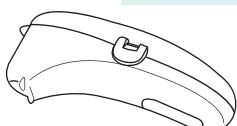
Confirmation of the Device

Please contact the local authorized representative if the main unit or accessories are missing.

Main Unit



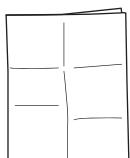
Storage Case



3 Probe Covers



Instruction for Use / Warranty Card



Forbid

Death or serious injury may occur if the use methods exceed its performance or inappropriate.

Caution

Death or serious injury may occur with incorrect use methods.

Attention

Serious injury or damage to the unit may occur with incorrect use methods.

Attention! Notes on Safety

Be sure to read this instruction manual thoroughly before use. Keep this instruction manual with warranty card at hand for your future reference.

Please store the batteries, probe covers, the main unit, the probe cap and the storage case out of children's reach to avoid accidentally swallow or damage occurred.

Conducting self-diagnosis and/or treatment based on the measurement results can be dangerous. Self-diagnosis may worsen the symptoms.

Do not use this unit other than for measuring the human temperature. Damage or breakdown may occur or correct measurement result may not be obtained.

Do not use this unit other than measuring the temperature in the human ear. Damage or breakdown may occur or correct measurement result may not be obtained.

Q & A of Measurements

Please check if the following conditions occur when you have questions with temperature measured.

The temperature indicated is **rather HIGH**

Attention

★ The probe cover may be faulty

The temperature indicated may be higher if the probe cover is not fixed correctly or becomes broken.



The temperature indicated is **rather LOW**

★ The thermometer is not inserted deep enough in the ear

Please retake the measurement by inserting the thermometer into the ear as far as it comfortably goes in the direction of the eardrum. Refer to Page 1 for the correct method of using the unit.



★ The unit is removed from the ear before the measurement is finished

The temperature measured may be lower if the unit is removed from the ear before finished. Please keep still until you hear beeps or see the flash of light.

(The measurement is finished with beeps and flash light. There will be only flash light if it's switched to the mute mode.)



★ Use more than 1 probe cover or the probe cover is dirty

A probe cover is already attached to the purchased main unit. Please do not use more than 1 probe cover. Please replace a new one when the probe cover is dirty.



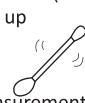
★ The probe cover is wet

Please wipe the probe cover and dry it before taking the measurement.



★ The ear is cooled (when you use an ice bag)

Wait for more than 30 minutes until the ear is warmed up before taking the measurement.



★ There's earwax in your ear

Please clean the ear with cotton swabs and retake the measurement.

★ Measure the temperature beside the heater

The measurement result may be higher if you measure the temperature beside a heater that blows warm air to the ears. Please retake the measurement away from the heater.



★ Holding the unit too long in the ear

The temperature around the probe may raise if you hold the unit in your ear too long, and the measurement taken at this time may be higher. Retake the measurement after cooling down the unit for 2~3 minutes.



★ The temperature measured under the arm is relatively lower

When measuring the temperature under the arm, it is necessary to measure for 10 minutes to obtain a correct value (for 5 minutes when measuring from the mouth). When the measuring time under the arm is short, the measured value tends to be low.

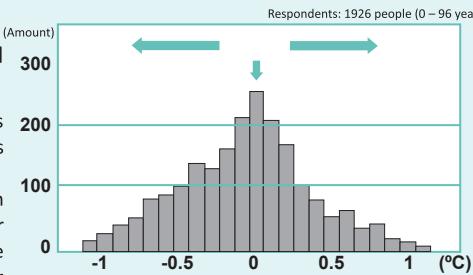


Q What's the difference between the temperature measured in the ear and under the arm?

Body temperature differs by the place it is measured (in the ear or under the arm) as shown in the figure below.

(Some people show higher temperature in the ear while some show higher temperature under the arm. For some the temperature difference between the ear and the arm is about 1°C)

Difference between temperatures measured in the ear and under the arm



Human temperature varies due to time of measuring, room temperature, quality of sleeping and emotion. It is important to learn your normal temperatures by measuring the temperatures in the ear when you are in good physical conditions.

When the temperatures measured are **UNSTABLE**

★ Incorrect direction

Please always insert the thermometer into the ear as far as it comfortably goes in the direction of the eardrum.



★ The probe cover is dirty

Please wipe the probe cover by using 75% alcohol if the probe cover is dirty.

★ The probe cover is crinkled or broken

Please change a new probe cover if the probe cover is crinkle or broken so that the temperature couldn't be correctly measured.



★ Measured in different ear

The temperature measured in the right ear may be different from which measured in the left ear since vascular distribution of two ears is different.



Q&A About the Ear Temperature

Q Why can the temperature be measured in the ear?

A The infrared heat can be given off by the eardrum and surrounding tissues. NISSEI Mini Thermometer which contains infrared sensor could detect the heat and converts this heat into an equivalent ear temperature.

Q Why can the measurement be taken in 1.2 seconds?

A NISSEI Mini Thermometer contains a high sensitive infrared sensor which could detect the heat within 1.2 seconds.

Q Why should the probe cover be used?

A The probe cover can protect the infrared sensor from dirt or damage. Please always use the thermometer with the probe cover.

(Correct measurement result may not be obtained if probe cover is not used.)

Technical Data

Product Name	NISSEI Mini Thermometer	Model	MT-30CPLB(Blue), MT-30CPLR(Pink)
Sensor	Infrared	Measurement part	Ear
Meas't Range	32.0~42.0°C	Display Resolution	0.1°C (LCD)
Operating Environment	5~35°C, 30~85% RH (without condensation of moisture)	Storage	-10~50°C, 30~95% RH (without condensation of moisture)
Power Supply	DC3V, 1 CR2032 Lithium Button Battery 1pc	Environment Protection	Internally powered ME equipment / Type BF
Outer Dim.	105mm(h) x 32mm(w) x 25mm(d)	Protection against electric shock	38g (without battery installed)
Additional Function	1. Standby Function: It will show that the unit is on standby after taking measurements. 2. Automatic shut-down function: The power will be turned off automatically when not using for more than 1 minute. 3. Beep Mode: The measurement is complete with a beep and flash of light. 4. Mute Mode: The buzzer could be set to off that only flash of light show completion of measurement.		
Warning Display	1. Low battery. 2. Exceeds measurement range. 3. Exceeds operation temperature. 0.1°C for 37°C to 39.1°C 0.2°C for 35.8°C to 37.0°C & 39.1°C to 41.1°C 0.3°C for 32.0°C to 35.8°C & 41.1°C to 42.0°C		
Accuracy	Test Battery (Lithium Button Battery CR2032), Storage case, instruction manual, guaranty, 4 probe covers (1 installed)		
Package Content	Probe cover exclusively for NISSEI (can be purchased from authorized dealer)		
Options	Probe cover model: MT-2020 (20pcs/box)		

Replacing the Battery

When should the battery be replaced?

- The mark of low battery shows.
- No displays when pressing the Power button.



Low battery mark

1 Lithium Button Battery (CR2032)
Please use the specified battery.



Battery Life

Approximately for 1 year under measuring 3 times one day with a new battery (about 10,000 measurements).

Life of the test battery which has contained in the purchased unit will be shorter than that of a new battery.

Attention

Always use the specified battery.

Failure to do so may cause breakdown.

Do not stack the batteries

while it may lead to heat generation or bursting.

1 Remove the battery cover



Insert a (wooden) toothpick into the battery cover pick hole. Slide and remove the cover.

2 Remove the old battery



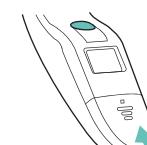
Be noted of battery popping out when removing it.

3 Insert the new battery



Make the front side of the battery upward. Insert the new battery by your finger.

4 Cover back the battery cover



It will be set to default mode (Beep & flash of light) once the battery replaced. Please refer to Page 2 "Set the buzzer" to reset.

Attention

Do not use metal tweezers or a screwdriver to remove the battery while it may cause breakdown.

Attention

Do not energetically press the battery while it may cause breakdown of the unit. Insert the battery in right direction according to indication. Incorrect installation may cause breakdown.

Trouble Shooting

Please check the following conditions for reasons of error messages. Contact the authorized dealer for more information or the warranty of conformity defects

Error Display	Cause	Remedy
Device can not be powered on.	The battery is not inserted or inserted in the incorrect direction. Battery is low.	Insert the battery in correct direction as shown. Replace the battery.
Buzzer notice	It is not set to "Mute Mode".	Refer to Page 2 to set the buzzer off to "Mute Mode".
E2	Incorrect operation.	Insert the battery in correct direction and follow the instructions to operate the device.
RL 0 RH 1	The ambient temperature is lower than the operation temperature range. The ambient temperature is higher than the operation temperature range.	Allow the thermometer to rest in a room for at least 30 minutes at room temperature: 5~35°C.
LO H 1	Temperature taken is lower than 32°C. Temperature taken is higher than 42°C.	Check the integrity of the probe cover and follow the instructions to take a new temperature measurement.

Warranty

The product is guaranteed against any conformity defect in normal conditions of use as stated in the instructions.

(1) Warranty Period: 2 years from the day purchased.

(2) The warranty does not apply in following cases:

- Malfunction caused by improper operation
- Malfunction caused by improper modification or repair by the user.
- Damage caused by irresistible natural disasters such as fires, floods, earthquakes, etc.
- Malfunction caused by external force.
- Breakdown of consumables.
- The warranty card is not available.
- The warranty card is not stamped or the content has been tampered.

(3) Please keep this warranty card since the warranty card will not be reissued if you lose it.

Device Name: **NISSEI Mini Thermometer**

User Name:

Address / TEL:

Distributor:

Purchased Date: / /

Product Name: Mini Ear Thermometer

Manufacturing Date: as shown on the package

Lot No.: as shown on the package

(Ex.: 17-01-19 refers to manufacturing on Jan. 19, 2017.)

Certificate No.:

Manufacturer: Q.S. Control Corp.

Address: No.39, Jing 3 Rd., C.E.P.Z Wuchi Dist., Taichung City 435, Taiwan, R.O.C.

Local Authorized Representative: Sunup Healthcare Sdn. Bhd.

Address: N-Tatt Building, No. 2, Jalan TP5, Taman Perindustrian UEP Subang Jaya, 47600 Subang Jaya, Selangor Darul Ehsan, Malaysia

Attention! Maintenance

Attention! Precautions for Use

Do not lick or bite the unit and the probe cover which may contribute to instrument failure.
Please check the device before use, and do not use if it's damaged. Using damaged device could result in incorrect measurements or injury.

Do not let liquid like water or alcohol get in the main unit since it's not waterproof. Doing so may contribute to instrument failure.

Do not use the unit in places where strong static electricity or electromagnetic fields are present from such as televisions, microwaves or mobile phones. Doing so may lead to inaccurate readings and may contribute to instrument failure.

Do not disassemble, repair, or modify the unit. Doing so may contribute to instrument failure.

Do not forcibly open the storage case. Doing so may contribute to damage of the case.

Do not apply a strong shock to, bite, drop, twist off, or pull the unit. Doing so may contribute to instrument failure.

Please stop using the device immediately if smoke, weird smell or weird sound comes out from the unit. Please turn off the power, take out the batteries, and sent it for repair.

Attention! Precautions for Storage

Please storage the unit with probe cover attached in the storage case. Failure to do so may contribute to instrument failure.

Please keep the main unit, storage case and the probe covers in the places where children cannot reach.

Do not storage the unit in the storage case if it's wet.

Do not get the unit wet. Do not store the unit under direct sunshine, beside the heater, in the car, in dusty places or where the humidity is high.

Do not place or store the unit in the place exposed to strong light such as sunlight or ultraviolet light. Failure to do so may result in discoloration and aging of the exterior.

Do not let liquid get into the unit. Failure to do so may result in discoloration, damage and aging of internal electrical parts.

Do not use or store the unit in a place fill with active gas such as disinfect gas. Failure to do so may result in discoloration, damage and aging of internal electrical parts.

Attention! Precautions for Maintenance

Do not wipe the unit with iodine tincture or organic solvents such as volatile agent. Using organic solvents may lead to instrument failure, and pigment may remained on the unit if using iodine tincture.

If the main unit is dirty, dip a soft cloth with cold or warm water, wring it out and wipe the unit slightly. Do not wash the unit in the water which may lead to instrument failure.

Do not dry the unit with a hair drier which may lead to instrument failure.

To protect the environment, discard the main unit or used batteries in accordance with the local regulations regarding waste disposal procedure.