

Product Description d Cover	LCD Display Introduction
d Cover n on	Time and date
Cover d Button	Object mode sign Ear mode sign Forehead mode sign Memory Sign Memo
	4
Basic Functions	System Setting
	When using thermometer for the first time, please set the parameters
Please see the Temperature Scale Setting section to learn how to change between Celsius and Fahrenheit.	of the thermometer. 1. Press \oplus <i>BUTTON</i> to turn on the thermometer(See Figure 1).
The real time clock will be recorded with the memory function ar help you to recognize each measurement result. → Please see the System Setting section to learn how to setup the time in the first use.	 ^d 2. Press and hold the <i>S BUTTON</i> for 5 seconds to enter into unit changing mode. 3. Press and release <i>S BUTTON</i> to select the unit(See Figure 2).
The thermometer has been designed for practical use. It's not meant to replace a visit to the doctor. Please also remember to compare the measurement result to your regular body temperatu → Please see the Illustration For Use section to learn how to measure the body temperature.	4. When the preferred unit on the display, press <i>M BUTTON</i> to e. enter into the real time clock setting mode.
The object mode shows the actual, unadjusted surface temperatures, which is different from the body temperature. It can help you to monitor if the object temperature is suitable for the bi or patient, for example the baby's milk. → Please see the Illustration For Use section to learn how to measure the object temperature.	
There are 30 memories for ear/forehead/object measurements. Each memory also records the measurement date/time/mode icon.	Figure 1 Figure 2
The thermometer allows to turn on/off beep sound by touching S BUTTON.	(1) Set the time format The device can display the time
The thermometer allows to turn on/off the bluetooth function. The Bluetooth transmission starts after a measurement is taken (the screen displays neither Lo nor Hi)or after entering the memory mode for the first time.	in either an AM/PM (12-hour) or a 24:00(24-hour) format. Press and release <i>S BUTTON</i> to select the format. With the preferred time format on the display, press <i>M BUTTON</i> , the Hour figure is flashing automatically.
	Image: Second

System Setting System Setting 01-01 00:00 2 Set the year (6) Set the minute Press and release the SBUTTON to advance Press and release the S BUTTON to advance one year until the correct year appears. 20 15 20 (6 After the year is set, press M BUTTON, the Month one minute until the correct minute appears. figure is flashing automatically. 5. After the minute is set, press M BUTTON to enter into the 01-01) (3) Set the month Bluetooth control mode. Press and release S BUTTON to set Press and release the S BUTTON to advance the Bluetooth function on or off(See Figure 3). After the Bluetooth one month until the correct month appears. 20 15 After the month is set, press *M BUTTON*, the Date function is set, press M BUTTON to exit system setting mode. figure is flashing automatically. * 01-01 (4) Set the date Press and release the SBUTTON to advance one day until the correct day appears. 20 15 **Dn** After the day is set, press M BUTTON, the Hour figure will appear. Figure 3 00 00 (5) Set the hour Press and release the S BUTTON to advance one hour until the correct hour appears. After the hour is set, press M BUTTON, the Minute figure is flashing automatically. 8 7

Body Temperature

The temperature of a healthy person is affected by various factors: the person's individual metabolism, their age(body temperature is higher in babies and toddlers and decreases with age. Greater temperature fluctuations occur faster and more often in children, e.g. due to growth spurts), their clothing, the ambient temperature, the time of day(body temperature is lower in the morning and increases throughout the day towards evening), the preceding physical and, to a lesser extent, mental activity.

The temperature varies depending on the part of the body where the measurement is taken. The difference can be between $0.2^{\circ}(0.4^{\circ}F)$ and $1^{\circ}(1.8^{\circ}F)$ for a healthy person.

The normal temperature ranges are as follows:

- On the forehead: 35.8°C(96.4°F) to 37.6°C(99.7°F) , measured with a forehead thermometer
- \bullet In the ear: 36.0°C(96.8°F) to 37.8°C(100.0°F) , measured with an ear thermometer
- In the mouth: 36.0 $^\circ C(96.8^\circ F)\,$ to 37.4 $^\circ C(99.3^\circ F)$, measured with a conventional thermometer

In order to track temperature change, always take the measurements in the same part of the body.

Illustration For Use

Before measurement:

- Check before each use that the lens is intact. If it is damaged, contact your retailer or the service address.
- Bear in mind that the thermometer needs to have been in the room in which the measurement is taken for at least 30 minutes before use.
- Users and the thermometer should be in the same ambient temperature.
- Before each measurement, make sure that the device is in the appropriate mode for the measurement that you wish to take.

To measure forehead temperature: Note:

- Oils or cosmetics on the forehead may give a lower temperature reading than the actual one. Remove dirt from the forehead before taking a measurement. Wait at least 10 minutes after washing the forehead area before taking a reading.
- Do not use the thermometer on a perspiring or sweating forehead, as this may affect the reading.
- Remove hat and hair and wait 10 minutes before taking a reading.

Illustration For Use

- 1. Press the \oplus *BUTTON* to switch on the thermometer and the display is activated to show all segments.
- 2. After self-checking, the last measured temperature appears on the display screen with beeps, so you can start a new measurement. (See Figure 4)
- 3. Place the probe with the forehead cap fitted on the temple.
- 4. Press and hold the button on the left to start measurement.
- 5. Move the thermometer smoothly over the forehead to the other temple and back, the highest value appears on the display.
- 6. After releasing button, the result is shown and the end of the measuring is signalled by a short beep.
- 7. The thermometer will shut off automatically after 60 seconds of inactivity. To prolong battery life, press and hold the Φ *BUTTON* for 5 Seconds to turn the thermometer off.



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Illustration For Use

6. The measured value appears on the display and the end of the measuring is signalled by a short beep.

Note: A waiting period of 20 seconds between testing is recommended to avoid excessive cooling of the skin.

7. The thermometer will shut off automatically after 60 seconds of inactivity. To prolong battery life, press and hold the Φ *BUTTON* for 5 Seconds to turn the thermometer off.



Illustration For Use

► To measure ear temperature:

- Some people produce different readings in their left and right ear. In order to record temperature changes, always measure a person's temperature in the same ear.
- As ear wax can affect the measurement, you should clean the ear before measuring if necessary.
- 1. Remove the forehead cap.
- 2. Press the Φ *BUTTON* to switch on the thermometer and the display is activated to show all segments.
- 3. After self-checking, the last measurement (See Figure 5) appears on the screen with beeps, so you can start a new measurement.
- 4. Make sure that the sensor tip and the ear canal are clean. As the ear canal is slightly curved, you have to pull the ear slightly up and backwards before inserting the sensor tip.(See Figure 6)
 - When using the thermometer on infants under age 1, pull the ear up making sure the sensor faces the eardrum.(See Figure 7)
 - When using the thermometer on individuals over the age of 1, pull the ear back making sure the sensor faces the eardrum. (See Figure 8).
- 5. Press the \oplus *BUTTON* to start the measurement.

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Illustration For Use

► To measure object temperature:

- 1. Press the **()** *BUTTON* to switch on the thermometer.
- 2. Hold down the *M BUTTON* and then press the *S BUTTON* immediately for 3 seconds to switch to object temperature mode(≜ appears on the LCD display).
- 3. Aim the thermometer at the center of the object you want to measure with a distance of 1 to 2 cm.
- 4. Press the $\bigcirc BUTTON$ or the button on the left to start measurement.
- 5. The measured value appears on the display and the end of the measuring is signalled by a short beep.
- 6. To exit object temperature mode, hold down the *M BUTTON* and then press *S BUTTON* immediately again for 3 seconds.
- 7. The thermometer will shut off automatically after 60 seconds of inactivity. To prolong battery life, press and hold the Φ *BUTTON* for 5 Seconds to turn the thermometer off.

Remarks:

This mode shows the actual, unadjusted surface temperatures, which is different from the body temperature.

Illustration For Use	Temperature Taking Hints
 After measurement: Power off: Device will automatically shut off if left idle for more than 1 minute to extend battery life. Clean the probe after each use to ensure an accurate reading and avoid cross contamination. (See the section of Care and Cleaning for details.) Temperature indicator: In Ear/Forehead mode:	 To ensure that the reading always reflects the body temperature accurately, you need to take account of the following factors which may affect an accurate reading. 1. It is important to know each individual's normal temperature when they are well. This is the only way to accurately diagnose a fever. To determine normal temperature, take multiple readings when healthy. Re-measure with a standard digital thermometer for confirmation. 2. The probe window of the thermometer is the most delicate part of the device. Do not touch the probe window. The accuracy of the reading may be affected if the probe window is damaged or dirty. 3. Users should not drink, eat, or be physically active such as bathing, showering, shampooing and hair drying before/while taking the measurement. In these cases, wait 20 minutes prior to taking a temperature. 4. Holding a hand on the forehead for any length of time will affect the temperature reading.
Temperature Taking Hints	Memory Mode

1 0

5. Do not take temperature over scar tissue, open sores or abrasions.

- 6. Don't take a measurement while or immediately after nursing a baby.
- 7. Do not use this thermometer outdoors.
- 8. Do not take temperatures with this thermometer near places that are very hot, such as fireplaces and stoves.
- 9. If the thermometer is stored in a significantly different environment than testing location, place it in the testing location for approximately 30 minutes prior to use.
- 1. The Memory Mode can be accessed ether in ear mode, forehead mode or object mode:

When the thermometer has been turned on and followed by the last measured temperature or finished testing, press and release the *M BUTTON*, then the recent memory appears on the display.

- 2. The thermometer will automatically memorize the last 30 temperature readings. Each memory also records the measurement date/time/mode icon. Each time the *M BUTTON* is pressed, the memory number adds one and shown on the screen , After releasing the *M BUTTON*, the screen shows another memory. The number 1 reflects the most recent reading, while the number 30 reveals the oldest reading stored in memory. (See Figure 9)
- 3. The thermometer will transfer all the memories to your mobile phone via Bluetoothafter entering the memory mode for the first time.
- 4. In the memory mode, The user can press the $\oplus BUTTON$ or the button on the left to take new measurements.



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Care And Cleaning

- 1. The probe window must be kept clean, dry, and undamaged at all times to ensure accurate readings. The accuracy of temperature readings can be affected by damage to the probe window, or the presence of dirt and ear wax on the probe window.
- 2. Fingerprints, earwax, dust and other soiling compounds reduce transparency of the window and result in lower temperature readings.
- 3. The probe window is the most delicate part of the thermometer. To safely clean the window, gently wipe its surface with a cotton swab slightly moistened with isopropyl alcohol and immediately wipe dry with a clean cotton swab. After cleaning, allow at least 5 minutes drying time before taking temperatures.

Note: Do not use any chemical other than isopropyl alcohol to clean the probe window.

- 4. Use a soft, dry cloth to clean the thermometer display and exterior.
- 5. The thermometer is not waterproof. Do not submerge the unit in water when cleaning.
- 6. Store the thermometer in a dry location, free from dust and contamination and away from direct sunlight.

Care And Cleaning

7. Periodic cleaning and disinfection of the device following use to prevent patient cross infection.

-Use a soft cloth slightly moistened with a 75% isopropyl alcohol solution to disinfect the thermometer and probe. Do not use abrasive cleaners.

8. Ensure that children do not use the instrument unsupervised; some parts are small enough to be swallowed.

9. Do not remove or modify the equipment without permission.

- 10. Strong electromagnetic fields may interfere with the proper operation of the thermometer. The device needs special pre-cautions regarding EMC according to the EMC information.
- 11. It is not intended for use in the oxygen rich environment and presence of flammable anesthetic mixture with air, oxygen or nitrous oxide.
- 12. Put the thermometer back to the original packaging after using.

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Battery Replacement

- 1. Replace battery when " 🗩 " appears on LCD display. (See Figure 10)
- 2. Slide battery cover down as shown in Figure 11.
- 3. Remove battery and install 2 new AAA alkaline batteries as shown in Figure 12.
- 4. Slide battery cover back on.





Specifications

Measuring range	Ear/Forehead mode: 34.0°C~43.0°C(93.2°F~109.4°F) Object mode: 0°C~100°C(32°F~212°F)	
Measuring site	Ear canal(Ear Mode)、Forehead(Forehead Mode)	
Reference body site	Oral (This thermometer converts the ear temperature to display its "oral equivalent.")	
Operation mode	Ear/Forehead mode(Adjust mode), Object mode	
Laboratory accuracy	Ear/Forehead mode: $\pm 0.2^{\circ}$ (0.4°F) during 35.5°C~42.0°C (95.9°F~107.6°F) at 15°C~35°C (59.0°F~95.0°F) operating temperature range $\pm 0.3^{\circ}$ C (0.5°F) for other measuring and operating temperature range Object mode: $\pm 4\%$ or $\pm 2^{\circ}$ C(4°F) whichever is greater	
Display resolution	0.1°C or 0.1°F	
Measure time	Approx. one second	
Operating temperature range:	10°C~40°C(50°F~104°F), 15%~85%RH, non-condensing Atmospheric Pressure : 700hPa ~ 1060hPa	
Storage and transport temperature range	-25°C~55°C (-13°F~131°F), 15%~95%RH, non-condensing Atmospheric Pressure : 700hPa ~ 1060hPa	
Clinical accuracy	Clinical bias: 0.06°C (0.11°F) Clinical repeatability: 0.13°C (0.23°F) Limits of agreement:0.94°C (1.69°F)	
Shock	withstands drop of 3 feet	
Dimension	139 × 42.5 × 26.5mm	
Weight	Approx.72grams(with batteries)	
Battery	DC3V(2×AAA battery)	
Battery life	Approx. 1 year/6000 readings	
Expected service life	Three years	
Ingress protecting rating	IP22	

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Troubleshooting			
Error message	Problem	Solution	
Er l	The ambient temperature is not within the range between 10°C and 40°C (50°F~104°F).	Place the thermometer in a room for at least 30 minutes at room temperature between 10°C and 40°C (50°F~104°F)	
8-3	The thermometer is placed incorrectly or unsteady.	Read Illustration For Use thoroughly and take a new temperature measurement.	
8-3	Data transmission error.	Turn Bluetooth on your smartphone off and on again and start again the app, then try a new transmission.	
	The batery is getting weak.	Replace the battery as soon as possible.	

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Error message	Problem	Solution	
H,	In Ear/Forehead mode: Temperature taken is higher than 43.0 °C (109.4°F). In Object mode: Temperature taken is higher than 100 °C (212°F).	Read Temperature Taking Hints Thoroughly, then take a new temperature measurement.	
Lo	In Ear/Forehead mode: Temperature taken is lower than 34.0 °C (93.2°F). In Object mode: Temperature taken is lower than 0°C(32°F).	Read Temperature Taking Hints thoroughly, then make sure the lens filter are clean, then take a new temperature measurement.	
	The thermometer could not work due to low battery.	Replace two new alkaline batteries size AAA.	

Troubleshooting

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Calibration

The thermometer is initially calibrated at the time of manufacture. If the thermometer is used according to the use instruction, periodic readjustment is not required. However, We recommends checking calibration every two years or whenever clinical accuracy of the thermometer is in question. Please send the complete device to the dealers or manufacturer.

The above recommendations do not supersede the legal requirements. The user must always comply with legal requirements for the control of the measurement, functionality, and accuracy of the device which are required by the scope of relevant laws, directives or ordinances where the device is used.

A clinical summary and procedures for checking calibration are available upon request.(Turn on the thermometer and press the power button long time until entering into calibrate mode, software version will be displayed.)

ASTM laboratory accuracy requirements in the display range of $36.0 \text{ to } 39.0 ^{\circ}\text{C}$ ($96.8 \text{ to } 102.2 ^{\circ}\text{F}$) for IR thermometers is $\pm 0.2 ^{\circ}\text{C}(\pm 0.4 ^{\circ}\text{F})$, whereas formercury-in-glass and electronic thermometers, the requirement per ASTM Standards E 667-86 and E 1112-86 is $\pm 0.1 ^{\circ}\text{C}(\pm 0.2 ^{\circ}\text{F})$."

Type BF applied part _____ Direct Current

Disposal of this product and used batteries should be carried out in accordance with the national regulations for the disposal of electronic products

Consult Accompanying Documents

LOT Batch Code

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B

-25°C

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55℃ Storage and Transportation Temperature Limit: -13°F ~131°F (-25°C~55°C)

Service

The thermometer has a limited one year warranty. Do not attempt to disassemble or repair the thermometer by yourself. Should service be required during or after the warranty period you must contact the manufacturer. Repackage the thermometer carefully in its original packaging or securely pack to avoid damage during shipping. Include the original sales slip indicating the date of purchase, a note describing the problem, and your return address. Send the thermometer prepaid and insured.

The lay operator or lay responsible organization should contact the manufacturer or the manufacturer's representative:

- for assistance, if needed, in setting up, using or maintaining the thermometer; or

to report unexpected operation or events.



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Electromagnetic Compatibility Information Warranty The device satisfies the EMC requirements of the international This appliance conforms to the following standards: standard IEC 60601-1-2. The requirements are satisfied under ASTM E1965-98 Standard Specification for Infrared Thermometers the conditions described in the table below. The device is an for Intermittent Determination of Patient Temperature, electrical medical product and is subject to special precautionary ISO 80601-2-56 Medical electrical equipment —Part 2-56: measures with regard to EMC which must be published in the Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement, instructions for use. Portable and mobile HF communications equipment can affect the device. Use of the unit in conjunction IEC 60601-1-11 Medical electrical equipment —Part 1-11: General with non-approved accessories can affect the device negatively requirements for basic safety and essential performance -Collateral and alter the electromagnetic compatibility. The device should Standard: Requirements for medical electrical equipment and not be used directly adjacent to or between other medical electrical systems used in the home healthcare environment electrical equipment. and complies with the requirements of IEC 60601-1-2(EMC), AAMI/ANSI ES60601-1(Safety) standards. And the manufacturer is ISO 13485 certified.

Thermometer is warranted by manufacture to be free from defects in material and workmanship under normal use and service for a period of one year from the date of delivery to the first user who purchases the instrument. This warranty does not cover batteries, damage to the probe window, or damage to the instrument caused by misuse, negligence or accident, and extends to only to the first purchaser of the product.

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Electromagnetic Compatibility Information

Table 1		
Guidance a	nd declaration of	manufacturer-electromagnetic emissions
The device is intende The customer or the u	d for use in the e ser of the device	lectromagnetic environment specified below. should assure that it is used in such an environment.
Emissions test	Compliance	Electromagnetic environment-guidance
RF emissions CISPR 11	Group 1	The device uses RF energy only for its internal function. Therefore, its emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	N/A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	N/A	

G	uidance and declaration of n	nanufacturer-ele	ectromagnetic immunity
The devic The custor	e is intended for use in the el mer or the user of the device	ectromagnetic e should assure th	environment specified below. at it is used in such an environment.
IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environm entguidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact + 8 kV air	$\pm 6 \text{ kV}$ contact $\pm 8 \text{ kV}$ air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrostatic transient/burst IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/output lines	N/A	
Surge IEC 61000-4-5	\pm 1 kV differential mode \pm 2 kV common mode	N/A	
Voltage dips, short interrupti- ons and voltage variations on p- ower supply in- put lines IEC 61000-4-11	< 5% UT (>95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycle 70% UT (30% dip in UT) for 25 cycle <5% UT (>95% dip in UT) for 5 sec	N/A	
Power frequency (50/60 Hz) magnetic field	3 A/m	3 A/m	Power frequency magnetic fields should be at levels charactertic of a typical location in a typical comme- rcial or hospital environment.

Electromagnetic Compatibility Information

Electromagnetic Compatibility Information

Table 3				
C	Guidance and declaration of manufacturer-electromagnetic immunity			
The device The custom	The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environmentguidance	
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 Mhz	N/A	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.	
Radiated RF IEC 61000- 4-3	3 V/m 80 MHz to 2.5 Ghz	3 V/m	Recommended seperation distance $d = [\frac{3.5}{E_1}]\sqrt{P} 80 \text{ MHz to 800 MHz}$ $d = [\frac{7}{E_1}]\sqrt{P} 800 \text{ MHz to 2.5 Ghz}$ where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol: $\langle ((\mathbf{v})) \rangle$	

Electromagnetic Compatibility Information

Table 4

Recommended separation distances between portable and mobile RF communications equipment and the device

The device is intended for use in an electromagnetic environment in which radiated therefore disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the device as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter	Separation distance according to frequency of transmitter m		
W	80 MHz to 800 MHz $d = \left[\frac{3.5}{E_1}\right]\sqrt{P}$	800 MHz to 2.5 GHz $d = \left[\frac{7}{E_1}\right]\sqrt{P}$	
0.01	0.12	0.23	
0.1	0.38	0.73	
1	1.2	2.3	
10	3.8	7.3	
100	12	23	

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE1 At 80 MHz and 800 MHz, the separation distance for the higer frequency range applies.

NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

FCC INFORMATION

Caution: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.*Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
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