☐ 受控图纸 ☐ 打样图纸

300 mm

150 mm

Intended use

Thank you for purchasing our Non-contact Infrared Thermometer, type AET-R1D2. This Non-contact Infrared Thermometer is a non-sterile, reusable, handheld device. It can be used by consumers in homecare environment and doctors in clinic as reference. It is intended for measuring human body temperature of three months and above of people by detecting infrared heat from the center of the forehead.
-For safe and proper use of this product, be sure to read and fully understand Safety Precautions contained in this user manual.
- Keep this manual with you for a convenient reference.
- Keep this manual in a proper way and avoid any loss.
- If you need other information, please contact the manufacturer (See the PRODUCT INFORMATION).

Quick Start Guide

The correct measurement method to follow:
Measure the forehead.
Distance 15mm to 50mm

Correct measurement method

1. Turn the thermometer on by pressing the "SCAN" button. To choose mode press "SCAN" on the shutoff mode. A beep sound will be heard following which the screen will flash with---℃ indicating the unit is ready for use.

2. Place the thermometer probe point near the forehead and press "SCAN" and release after ~ 1 second and the thermometer will beep and display the accurate temperature. Whenever consecutive readings are required, please wait for the ---℃ to flash. The above procedure can be repeated as many times as required.

3. To turn off the device press and hold the "SCAN" switch for ~ 5 seconds and the thermometer will turn off automatically after ~ 60 seconds.

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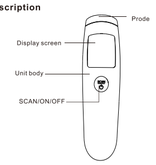
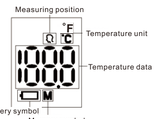
Unit description



Display information



Location indication: The icon flashes to indicate the correct measuring position when measuring.
Temperature data indication: The temperature reading is displayed after measuring.
Temperature unit indication: Unit of measuring temperature shows °C or °F.
Low battery symbol indication: the icon prompts you to replace the battery when the power is low.
Memory symbol indication: it shows in memory query mode currently.

Load and replace batteries

When the battery icon "▭" is flashing, please replace a new battery immediately. The steps as follow:
Press and hold the battery cover, and push it upward diagonally to push the cover away.
Install 2*AAA batteries as shown in the positive and negative pole.
Close the battery cover.

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Warning:
Please take out the battery if you do not use the thermometer for a long time.
Please refer to the relevant laws and regulations for the disposal of waste batteries.

Before take a measurement

1.It is suggested to try the device by yourself first, so as to know how to use it.
2.In order to avoid affecting accuracy of the device due to the external too cold or too hot environment, it must be placed in general environment of room temperature of 16℃-35℃ for at least 30 minutes before use to avoid incorrect measurement results.
3.The person measured should be kept at room temperature for at least 20 minutes to make body temperature balanced.
4.After strenuous exercise, you should rest for at least 30 minutes before taking measurement.
5.Wipe the skin dry and push aside hair strands before commencing.
6.When repeated measurements are made continuously, move away the probe between each measurement and rest for at least 5s before making the next to obtain the most correct result.
7.The normal reading value is about 35.5℃~37.8℃. The user should take more temperature to know his or her own health temperature. Pay attention to physical changes or consult your doctor if there is any abnormality.
8.Check the probe is clean before each measurement to ensure accuracy.

Correct posture to measure

Forehead temperature mode

The correct measurement method to follow:
Measure the forehead.
Distance 15mm to 50mm

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Instructions for Use

1.Turn the thermometer on by pressing "SCAN" switch.
2.A beep sound will be then heard and the screen will then flash ---℃. The unit is now ready for use. Place the thermometer's probe point to the forehead, press "SCAN" and release after ~ 1 second, the thermometer will beep and display the temperature. If a consecutive reading is required then please wait for the degree ℃ to flash. Repeat the above procedure as often as required.
3.Press the "SCAN" switch for 5 seconds to turn off the thermometer. Or the unit will switch off automatically after 60 seconds.
If a reading below 32℃ is recorded a "Lo" sign will be displayed followed by 2 consecutive beeps.
If a reading above 37.8℃is recorded there will be 6 consecutive beeps.
If a reading above 42.2℃ is recorded a "Hi" sign will be displayed followed by 2 consecutive beeps.

Recalling Readings from Memory

1.Ensure the thermometer is switched off.
2.Press the "SCAN" button for 4 seconds to put the device on memory mode. The last reading will be displayed.
3.Press and release the "SCAN" button again to display the next reading in a sequence from the last reading to the first reading.
4.The thermometer has the memory to recall the last 32 readings.
5.The thermometer will automatically turn off if it idles for more than 12 seconds.

Changing Temperature Scales

1.Ensure the thermometer is switched off.
2.Press the "SACN" button for 8 seconds to bring it into temperature mode. The current temperature unit will be displayed.
3.Release and press the "SCAN" button again to toggle and select between ℃ and ℉.
4.The thermometer will switch off automatically if it idles for more than 4 seconds and will display the last reading.

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【Explanation of Marks or Symbols】
The following symbols may appear on the manual, Infrared Thermometer and its accessories.

	MUST OBSERVE Means Obligatory with detailed items expressed in words or figures within or beside the mark. Left one means General Compulsory.
	Refer to instructions manual/booklet.
	IMPLICATION OF SYMBOL Type-BF applied part.
CE 2123	CE Mark: conforms to essential requirements of the Medical Device Directive 93/42/EEC.
	Caution: Consult accompanying documents.
	Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
	Transport package shall be kept away from rain.
	Transport package shall not be exposed to sunlight.
	Indicates correct upright position of the transport package.
	Contents of the transport package are fragile therefore it shall be handled with care.
	Indicates temperature limits within which the transport package shall be stored and handled.
	Non-ionizing electromagnetic radiation
	Do not roll
LOT	Lot number
	Production date
IP22	Protected against solid foreign objects of 12.5mm dianeter and greater. protected against vertically falling water drops when the device is tilted up to 15°.

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⚠ Warning

Do not use the thermometer under temperature extremes (below 16°C/60.8°F or over 35°C/95°F) or humidity extremes (below 15%RH or over 93%RH). * Failing to do so may cause inaccuracy.
Do not expose the thermometer to temperature extremes (below -20°C/-4°F or over 55°C/131°F) or humidity extremes (below 15%RH or over 93%RH). * Failing to do so may cause inaccuracy.
Temperature probe has been shocked and lax. *Contact your retailer immediately.
It is dangerous for patients to perform a self-evaluation and self-treatment based on the measuring results. Be sure to follow doctors' instruction. * A self-evaluation may cause deterioration of diseases.
Don't touch or blow infrared sensor. * A polluted or broken infrared sensor may cause inaccuracy.
Clean a polluted infrared sensor with a soft dry cloth in a gentle manner. * Clean with toilet tissue or paper towel may scratch the infrared sensor, causing inaccuracy.
Install the battery in the right position according to the manual. * Incorrect replacement will cause battery heat.
Do not immerse the thermometer in liquids. *This instrument is not waterproof.
Do not use a mobile phone nearby when the thermometer is working. *Portable and mobile RF communications equipment can affect MEDICAL ELECTICAL EQUIPMENT. Failing to do so may cause inaccuracy.
The probe glass is made from special material which is not easy broken. *If there is any damage, stop using it and contact the retailer immediately.
Do not modify this equipment without authorization of the manufacturer. *Contact the retailer immediately.
The device is not repairable and contains no user serviceable parts. *If there is any problem, contact the retailer immediately.
The device requires no calibration. *If there is any problem, contact the retailer immediately.
No modification of this equipment is allowed. *If there is any problem, contact the retailer immediately.
If this equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment. *If there is any problem, contact the retailer immediately.
The operator shall not touch the thermometer and the patient simultaneously. Keep the machine out of children's reach. * For accidental swallow of battery or protective film, please consult the doctor at once.
For temperature difference between storage area and measurement site, condition the thermometer for about 30minutes in room temperature (measurement site). * Failing to do so may cause inaccuracy.
Ensure that children do not use the instrument unsupervised. *some parts are small enough to be swallowed.

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Error Messages

Error Message	Problem	Solution
Hi	Temperature is higher than 42.2°C(108°F).	Operate the thermometer only between the specified temperature ranges. In the event of a repeated error message, contact your retailer or Customer Services
Lo	Temperature is lower than 32°C(89.6°F).	Operate the thermometer only between the specified temperature ranges. In the event of a repeated error message, contact your retailer or Customer Services
Err	Sensor not welded	Contact your retailer or Customer Services
ErE	EEPROM is abnormal	Contact your retailer or Customer Services
▭	Low power	Replace new batteries
ErH	The temperature of the measuring environment is too high.	Decrease the temperature of the environment,keep it within 16°C-35°C.
ErL	The temperature of the measuring environment is too low.	Increase the temperature of the environment,keep it within 16°C-35°C.

Maintenance, storage and calibration

Maintenance:
1.Remove any stains on the body with a soft and dry cloth.
2.Gently wipe the dirt on the body with a soft cloth, use a cotton swab or soft cloth stained with alcohol, and gently wipe the lens of the temperature measuring head.After using the product, the product can be sterilized with 75% medical alcohol on the soft towel or cotton sliver.
If the probe tip is damaged, please contact the maintenance center.
3.Don't wash with water or detergent containing abrasive or benzene.
4.Do not immerse in liquids.

Storage:
1.The device must not be stored or used at an excessively high or low temperature or humidity, in sunlight, in association with an electrical current or in dusty locations. Otherwise may occur inaccuracies.
2.Remove the battery if non-use for long time.

Calibration:
This thermometer is calibrated at the time of manufactured. If the thermometer is used according to the instruction, periodic recalibration is not required. If at any time you question the accuracy of the measurement, please contact the retailer immediately.
Don't attempt to modify or reassemble the thermometer.

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Technical Specifications

Parameter	Specification
Measurement Mode	Forehead mode
Measurement Units	Celsius(℃)and Fahrenheit(℉)
Operating Conditions	16℃-35℃(60.8℉ to 95 ℉) with a relative humidity of 15%-80%
Storage Conditions	-20℃-+55℃(-4℉to 131 ℉) with a relative humidity of 15%-93%
Measurement distance	15mm to 50mm from the measuring point
Forehead temperature measurement range and accuracy	Measurement range: 32.0℃-42.2℃ (89.6℉-108℉) Measurement accuracy: ±0.2℃ (35.0℃-42.0℃);±0.4℉(95.0℉-107.6℉); ±0.3℃(±0.5℉) other range.
Memories recall	32 measurements recall
Dimensions	40mmx 44mmx 164mm
Weight	61 g without batteries
Battery	2xAAA batteries (DC 3V)
Switch off	Automatically switches off after 1 minute
Product life	5 years
New battery life	1000 times

Guarantee

Two-year warranty is available from purchasing date, excluding user-caused failures listed below:
(1)Failure resulted in unauthorized disassemble and modification.
(2)Failure resulted in unexpected drop during application or transportation.
(3)Failure resulted in operation away from proper instruction in User's Manual.

Included in delivery

infrared thermometer
Instruction for use

Manufacturer information:
Manufacturer: Alicn Medical Shenzhen, Inc.
Address: 4/F, B Building, Shenfubao Modern Optical Factory, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China, 518122
Tel: 0086-0755-26501548 Fax: 0086-0755-26504849
Email: Infor@alicn-med.com
Website: http://www.alicn-med.com

Authorized EU Representative
Shanghai International Holding Corp. GmbH (Europe)
Address: Eiffestrasse 80, 20537 Hamburg, Germany
Tel: +49-40-2513175 Fax: +49-40-255726

Version:1.0
Date modified:2020-03-30

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Electromagnetic Compatibility

The ME EQUIPMENT or ME SYSTEM is suitable for home healthcare environments and so on.

Warning：Don't near active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high.

Warning： Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

If any：a list of all cables and maximum lengths of cables (if applicable), transducers and other ACCESSORIES that are replaceable by the RESPONSIBLE ORGANIZATION and that are likely to affect compliance of the ME EQUIPMENT or ME SYSTEM with the requirements of Clause 7 (EMISSIONS) and Clause 8 (IMMUNITY). ACCESSORIES may be specified either generically (e.g. shielded cable, load impedance) or specifically (e.g. by MANUFACTURER and EQUIPMENT OR TYPE REFERENCE).

If any：the performance of the ME EQUIPMENT or ME SYSTEM that was determined to be ESSENTIAL PERFORMANCE and a description of what the OPERATOR can expect if the ESSENTIAL PERFORMANCE is lost or degraded due to EM DISTURBANCES (the defined term "ESSENTIAL PERFORMANCE" need not be used).

1. All necessary instructions for maintaining BASIC SAFETY and ESSENTIAL PERFORMANCE with regard to electromagnetic disturbances for the excepted service life.

2. Guidance and manufacturer's declaration -electromagnetic emissions and Immunity.

Table 1

Guidance and manufacturer's declaration – electromagnetic emission	
Emissions test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR11	Class B
Harmonic emissions IEC 61000-3-2	N/A
Voltage fluctuations /flicker emissions IEC 61000-3-3	N/A

Table 2

Guidance and manufacturer's declaration - electromagnetic Immunity		
Immunity Test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	Power supply lines：±2 kV input/output lines：±1 kV	N/A
Surge IEC 61000-4-5	line(s) to line(s)：±1 kV, line(s) to earth：±2 kV. 100 kHz repetition frequency	N/A
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% 0.5 cycle At 0°, 45 °, 90 °, 135 °, 180 °, 225 °, 270 ° and 315 ° 0% 1 cycle And 70% 25/30 cycles Single phase: at 0 0% 300 cycle	N/A
Power frequency magnetic field IEC 61000-4-8	30 A/m 50Hz/60Hz	30 A/m 50Hz/60Hz
Conduced RF IEC61000-4-6	150KHz to 80MHz： 3Vrms 6Vrms (in ISM and amateur radio bands) 80% Am at 1kHz	N/A
Radiated RF IEC61000-4-3	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz

NOTE U_T is the a.c. mians voltage prior to application of the test level.

Table 3
Guidance and manufacturer's declaration - electromagnetic Immunity

	Test Frequency (MHz)	Band (MHz)	Service	Modulation	Modulation (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)
Radiated RF IEC61000-4-3 (Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment)	385	380 ~ 390	TETRA 400	Pulse modulation 18 Hz	1,8	0.3	27
	450	380 ~ 390	GMRS 460, FRS 460	FM ±5 kHz deviation 1 kHz sine	2	0.3	28
	710	704 ~ 787	LTE Band 12, 13, 17	Pulse modulation 217 Hz	0,2	0.3	9
	745						
	780						
	810	800 ~ 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation 18 Hz	2	0.3	28
	870						
	930						
	1720	1700 ~ 1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25 UMTS	Pulse modulation 217 Hz	2	0.3	28
	1845						
	1970						
	2450	2400 ~ 2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28
	5240	5100 ~ 5800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0,2	0.3	9
	5240						
	5785						

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备注： 300*150mm
正反面印

部门	签名栏
销售:	
法规:	
项目:	
研发:	
BOM:	

修改记录				文件编号	W-YF-02627	物料编号	40.R1D20C2R161
标记	修改内容	修改人	日期	图纸名称	爱立康-R1D2(L款)-说明书	型号	AET-R1D2
①				设计	罗雪莲	材料	80g书纸，双面印刷，折页
				审核		比例	1:1
				批准		单位	MM
				版本	A01		2020-04-03
				深圳市爱立康医疗股份有限公司			