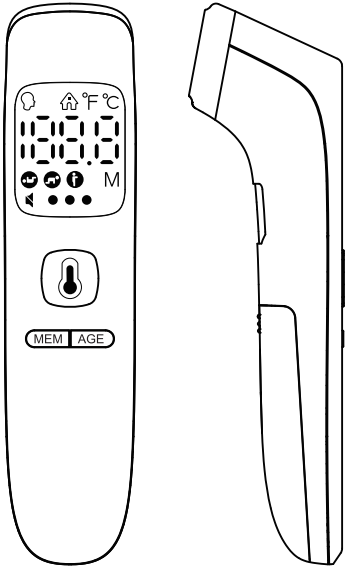
Non-contact Forehead Infrared Thermometer User Manual

Model: FC-IR202



CE 0123

Manual Ver.: V1.0
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Introduction

Thank you for purchasing this Non-contact forehead Infrared Thermometer. It is carefully developed for accurate, safe and fast temperature measurements in the forehead.

Please read these instructions carefully before using this product and keep the instructions and the thermometer in a safe place.

Package Contents

No.	Name	Quantity
1	Infrared Thermometer	1
2	Battery (AAA, optional)	2
3	User Manual	1
4	Pouch	1

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1. WARNINGS AND PRECAUTIONS

1) Keep out of reach of children under 12 years.
2) Never immerse the thermometer into water or other liquids (not waterproof). For cleaning and disinfecting please follow the instructions in the “Care and cleaning” section.
3) Never use the thermometer for purposes other than those it is intended for. Please follow the general safety precautions when using on children.
4) Keep the thermometer away from direct exposure to the sun and keep it in a dust- free, dry area, well-ventilated place at a temperature between 50°F (10°C)-104°F (40°C). Do not use the thermometer environment of high humidity. (＞95% RH)
5) Do not use the thermometer if there are signs of damage on the measuring sensor or on the instrument itself. If damaged, do not attempt to repair the instrument! Please contact dealer.
6) This thermometer consists of high-quality precision parts. Do not drop the instrument. Protect it from severe impact and shock. Do not twist the instrument or the measuring sensor.
7) Please consult your doctor if you are diagnosed with symptoms such as unexplained irritability, vomiting, diarrhea, dehydration, changes in appetite or activity, seizure, muscle pain, shivering, stiff neck, pain when urinating, etc., even in the absence of fever.
8) Even in the absence of fever, those who show a normal temperature may still need to receive medical attention. People who are on antibiotics, analgesics, or antipyretics should not be assessed solely on temperature readings to determine the severity of their illness.
9) Rise in temperature 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 rise in temperature and if you are taking temperature for whom are:

- Over 60 years of age (Fever may be blunted or even absent in elderly patients)
- Having diabetes mellitus or a weakened immune system (e.g., HIV positive, cancer, chemotherapy, chronic steroid treatment, splenectomy)
- Bedridden (e.g., nursing home patient, stroke, chronic illness)
- A patient has undergone organ transplantation (e.g., liver, heart, lung, kidney)

10) This thermometer is not intended for pre-term babies or small-for-gestational age babies. This thermometer is not intended to interpret hypothermic temperatures. Do not allow children to take their temperatures unattended.
11) Use of this thermometer is not intended as a substitute for consultation with your physician or pediatrician. It is for household use only.
12) Clean the thermometer probe after each use.
13) Do not use the thermometer on newborns or for continuous temperature monitoring purposes.
14) Do not take a measurement simultaneously or immediately after nursing a baby.
15) Patients should not drink, eat, or be physically active before/while taking the measurement.

2. Product Description

1) Overview

Infrared Thermometer measures the body temperature based on the infrared energy emitted from the forehead. Users can quickly get measurement results after properly scanning the forehead.

Normal body temperature is a range. The following tables show that this normal range also varies by site. Therefore, readings from different site should not be directly compared. Tell your doctor what type of thermometer you used to take your temperature and on which part of the body. Also bear this in mind if you are diagnosing yourself.

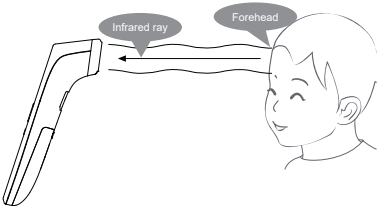
	Measurements
Forehead temperature	97.0°F to 99.5°F (36.1°C to 37.5°C)
Oral temperature	95.9°F to 99.5°F (35.5°C to 37.5°C)
Rectal temperature	97.9°F to 100.4°F (36.6°C to 38.0°C)
Axillary temperature	94.5°F to 99.1°F (34.7°C to 37.3°C)

2) Structure

The thermometer consists of a shell, a LED screen, a measure button, a beeper, an infrared temperature sensor, and a microprocessor.

3) Operating principle

The infrared temperature sensor collects infrared energy emitted by the skin surface. After being focused by a lens, the energy is converted into a temperature reading by the thermopiles and measurement circuits.



4) Intended for purpose

The Infrared Thermometer is intended for the measurement of human body temperatures in the home setting and medical institutes.

5) Intended User

Intended User: Both Healthcare Professional and Lay person Intended Use
Environment: Both Hospital/Healthcare Facility and Home

6) Indication

The infrared thermometer measures the infrared radiation exchange with the forehead surface and the appropriate correction value through the detector, and quickly outputs thebody temperature. It is suitable for the use of acutely ill patients, the elderly, infants andyoung children.

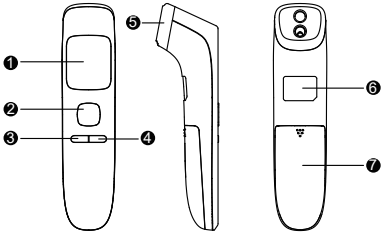
7) Contraindications

No Contraindications known.

3. Features

•Non-Contact Design, Safe and more hygienic to use.
•Quick measurement, less than 1 second
•Switchable baby mode
•Easy operation, one button design, measure forehead
•Multi-functional: can measure temperature of forehead, room, milk, water and object.
•35 sets of memories, easy to recall
•Switch between mute and un-mute mode
•Fever alarm function, displayed in orange and red light.
•Switch between ºF and ºC
•Auto shut-down and power-saving

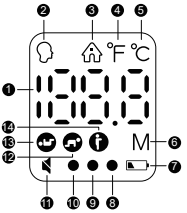
4. Product Structure



❶ LED display screen
❷ Measure button
❸ Mem (Memory Recall)
❹ AGE button
❺ Sensor
❻ Rating label
❼ Battery cover

5.Display description

1. Temperature value
2. Forehead temperature mode
3. Object temperature mode
4. Fahrenheit degree
5. Celsius degree
6. Memory recall
7. Battery icon
8. Green indicator light
9. Orange indicator light
10. Red indicator light
11. Mute /Un-mute
12. Baby mode
13. Neonate mode
14. Adult mode



6. How to use your thermometer

When using the thermometer for the first time, please install the batteries.

1) Select measure age mode

a. Neonate Mode(0-3 months baby)

When the thermometer is turned on, press age button into Neonate mode icon “”, screen will show “”, it turns to Neonate mode;

b. Baby Mode(3-36 months baby)

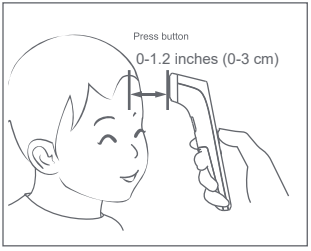
When the thermometer is turned on, press age button into Baby mode icon “”, screen will show “”, it turns to Baby mode;

c. Adult Mode(over 36 months age)

When the thermometer is turned on, press age button into Adult mode icon “”, screen will show “” , then it turns to Adult mode.

2) Take your forehead temperature

Hold the thermometer within 0-1.2 inches (0-3 cm) of the forehead and aim it at the center, start measuring with a short press of “Measure” button, the beep heard and you can read the value.



NOTE: The forehead measurement is an indicative reading. The measured forehead temperature can fluctuate up to 1 ºF/0.5 ºC from your actual body temperature. Please be aware of the factors that influence the accuracy as described in the section “Temperature taking tips” and “WARNINGS AND PRECAUTIONS”.

⚠ If the eyebrow area is covered with hair, sweat or dirt, please clean the area beforehand to improve the accuracy of the reading.

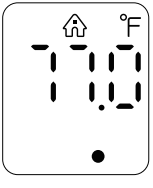
⚠ Always check if the lens is clean.

⚠ Always make sure the user and the thermometer will have been in the same room for at least 30 minutes prior to the measurement.

3) Take room/object temperature

When the thermometer is turned off, long press the “ MEM ” button for 6 seconds until it shows .

Then press the Measure button to measure. Keep the thermometer about 0.4-1.2 inches (1-3 cm) away from the object. Press and release the Measure button in 1 second, you can hear the beep and then read the value.



4) After the measurement

When the reading is completed, remove the thermometer away from the forehead and observe the temperature reading. After each measurement, you can enter the recall mode and check earlier temperature readings.

⚠ Do not hold the thermometer for a long time, because it is sensitive to the ambient temperature.

⚠ After each measurement, clean the temperature probe with a soft cloth, and put the thermometer in a dry and well-ventilated place.

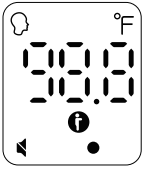
⚠ You should wait at least 10 seconds between each measurement.

⚠ It is dangerous to make a self-diagnosis or self-treatment based on the obtained measurement results. For above reasons, please consult a doctor.

5) Read your temperature

The confirmation beep indicates that an accurate temperature measurement has been taken, "T" indicates a temperature reading.

Age range	Green Light Normal temperature	Orange Light Fever	Red Light High Fever
0-3 Months	89.6ºF≦T≦99.4ºF (32.0ºC≦T≦37.4ºC)		99.5ºF≦T≦109.2ºF (37.5ºC≦T≦42.9ºC)
3-36 Months	89.6ºF≦T≦99.6ºF (32.0ºC≦T≦37.6ºC)	99.7ºF≦T≦101.3ºF (37.7ºC≦T≦38.5ºC)	101.4ºF≦T≦109.2ºF (38.6ºC≦T≦42.9ºC)
36+ Months	89.6ºF≦T≦99.9ºF (32.0ºC≦T≦37.7ºC)	100ºF≦T≦103ºF (37.8ºC≦T≦39.4ºC)	103.1ºF≦T≦109.2ºF (39.5ºC≦T≦42.9ºC



6) Switch between mute and un-mute

When the thermometer is turned on, long press the MEM button for 3 seconds can switch from unmute to mute.

7) Check 35 sets of memory data

When the thermometer is turned on or off, short press the " MEM " button to go to the memory mode in 1s, press this button again to check the 35 sets of memories one by one. If it shows no value, it will display "---M".

8) ºF/ºC conversion

When the thermometer is turned on, long press the " AGE " button for 3s to change the ºF/ºC.

9) Temperature compensation adjustment

When the thermometer is turned on, long press both the " MEM " button and " AGE " button for 5s, it display "00.0" , then go to the temperature compensation mode. By pressing the MEM button to increase and decrease the temperature between ±0.0ºC to ±2.0ºC (±0.0ºF to ±4.0ºF).

Note: All the future temperature you taking will automatically add the value you adjusted.

10) How to turn off

The unit will shut down automatically after 10±1 seconds without using. Keep pressing the Measure button for 10 seconds, it will shut down.

⚠ **Cautions**

1.All memory records will loss when the battery is removed or reinstalled.

2.All settings will come to default when uninstall the battery. If the settings need to be adjusted, please turn on and make the new settings.

11) Replace the battery

Slide the battery cover off along the marked direction. Put two AAA batteries correctly into the compartment.

⚠ Remove the batteries if the thermometer will not be used for more than two months.

Disposal:

● Environmentally, do not dispose the device in the household waste at the end of its service life. Dispose the unit at a suitable local collection or recycling point.

● Observe the local regulations for material disposal.

● Please dispose the device in accordance with EC Directive – WEEE (Waste Electrical and Electronic Equipment). If you have any questions, please contact the local authorities responsible for waste disposal.

● Batteries must not be disposed of with household waste. As a consumer, you are required by law to recycle used batteries. You can re-cycle your old batteries at public collection points in your community or wherever batteries of the relevant type are sold.

● The codes below are printed on batteries containing harmful substances: Pb = Battery contains lead, Cd = Battery contains cadmium, Hg = Battery contains mercury. The batteries in this device do not contain any pollutants.

7. Temperature taking tips

1) It is important to know each healthy individual's normal temperature. This is the only way to accurately diagnose a fever. Record readings twice a day (early morning and late afternoon). Take the average of the two temperatures to calculate normal equivalent temperature. Always take the temperature in the same location, since the temperature readings may vary from different locations on the forehead.

2) A child's normal temperature can be as high as 99.9°F (37.7ºC) or as low as 97.0°F (36.11ºC). Please note that this unit reads 0.9°F (0.5ºC) lower than a rectal digital thermometer.

3) Holding the thermometer for too long in the hand before taking a measurement can cause a rise in temperature of the device. This means the measurement could be incorrect.

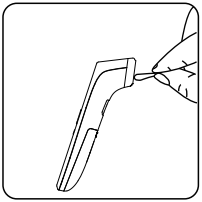
4) Patients and the thermometer should be maintained in a steady room condition for at least 30 minutes.

5) Before placing the thermometer sensor on the forehead, remove dirt, hair, or sweat from the forehead area. Wait 10 minutes after cleaning before taking measurement.

6) Use an alcohol swab to carefully clean the sensor and wait for 5 minutes before taking a measurement on another patient. Wiping the forehead with a warm or cool cloth may impact your reading. It is advised to wait 10 minutes before taking a reading.

7) In the following situations it is recommended that 3-5 temperatures in the same location be taken and take the highest one as the reading:
•Newborn infants in the first 100 days.
•Children under three years of age with a vulnerable immune system and for whom the presence or absence of fever is critical.
•When the user does not know how to use the thermometer for the first time until he/she has familiarized himself/herself with the instrument and obtains consistent readings.

8.Care and cleaning



1) Cleaning and user maintenance must not be performed by children unless supervised.

2) Cleaning the device use an alcohol swab or cotton swab moistened with 75% alcohol to clean the thermometer casing and the measuring probe.

3) After the alcohol is completely dried out, you can take a new measurement (minimum of 10 minutes).

4) Never use abrasive cleaning agents, thinners or benzene for cleaning and never immerse the instrument in water or other cleaning liquids.

5) Be careful not to scratch the surface of the LED screen.

6) Remove the batteries from the device before cleaning.

7) Clean the device after use with a soft, slightly damp cloth. If they are very dirty, you can also moisten the cloth with a mild soapy solution.

8) Ensure that no water enters the device. If this happens, only use the device again once it is fully dried out.

9. Error and Troubleshooting

Symptom	Possible Cause	Description & Solution
Failed to power on	The battery level is too low	Replace with a new battery
	Polarities of the batteries are reversed	Ensure the batteries are in the right position
	The thermometer is damaged	Contact dealer
The reading is too low	The lens of the probe is dirty	Clean the lens with a cotton swab
	The distance of the item and target is too far	Keep the thermometer in contact with forehead
	You just came from a cold environment	Stay in a warmer room for at least 30 minutes before taking a reading
The reading is too high	You just came from a hot environment	Stay in an adequately cool room for at least 30 minutes before taking a reading
	The ambient temperature is not in the range	3 short beeps and red indicator light 3 seconds. Take a measurement under an ambient temperature between 50.0°F(10°C) and 104°F (40°C)
	Memory Error	3 short beeps and red indicator light for 3 seconds. Contact dealer
	In forehead mode, T > 109.2°F (42.9°C)	3 short beeps and red indicator light for 3 seconds
	In forehead mode, T < 89.6ºF (32ºC)	3 short beeps and red indicator light for 3 seconds
	2.5V±3%≦power voltage ≦2.6V±3%	The battery level is low, it suggests you to replace the battery, but you can continue to use it
	The power voltage is lower than 2.5V± 3%	It will turn off automatically after 30 seconds. Please replace with a new battery

10. Specifications:

Product name	Infrared thermometer	
Model	FC-IR202	
Power supply	DC1.5V×2	
Measurement range	Forehead: 89.6°F–109.2°F (32.0°C–42.9°C)	
	Object: 32°F–212°F (0°C–100°C)	
Accuracy (Laboratory)	Forehead mode	±0.4°F/±0.2°C
	Object mode	±1.8°F/±1.0°C
Display resolution	0.1°F/0.1°C	
Measuring distance	0 -1.2 inches (0-3cm)	
Automatic shutdown	10s±1s	
Memory	35 groups of measured temperature.	
Battery	2*AAA, can be used for more than 3000 times	
Weight & Dimension	69g (without battery),151*36*42mm	
Operating Conditions	Operating environment: 10ºC-40ºC Relative Humidity: ≤85% RH Atmospheric pressure: 70kPa - 106kPa	
Storage Conditions	Storage Temperature: -20°C~55°C Relative Humidity: ≤95% RH Atmospheric pressure: 70kPa - 106kPa	
Service Life	5 Years	

11. Symbols:

Symbol	Description
	Type BF applied part.
	MANUFACTURER
	Refer to instruction manual/booklet
	The marking of electrical and electronics devices according to Directive 2002/96/EC. The device accessories and the packaging have to be disposed of waste correctly at the end of the usage. Please follow Local Ordinances or Regulations for disposal.
SN	SERIAL NUMBER
LOT	Batch number
	IMPORTANT Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

IP22	2 Protected against solid foreign objects of 12,5 mm Ø and greater; 2 If keep the thermometer in 15 degree angle, it still can prevent the water drop.
EC REP	AUTHORISED REPRESENTATIVE IN THE EUROPEAN COMMUNITY
	Transport package shall be kept away from rain.
	Keep away from sunlight
	Fragile, handle with care
UDI	Unique device identifier
	Date of manufacture
#	Model number
	Importer
	Made in China
MD	Medical device
CE 0123	CE mark

12. EMC information

IEC 60601-1-2:2014/AMD1:2020 ME EQUIPMENT and ME SYSTEMS identification, marking and documents for Class B product

Instructions for use

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.

Warning: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation."

Warning: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Infrared Thermometer, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

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).

Technical description

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 emissions	
Emissions test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	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 100 kHz repetition frequency	N/A
Surge IEC 61000-4-5	line(s) to line(s): ±1 kV.	N/A
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% 0.5 cycle At 0º, 45 º, 90 º, 135 º, 180 º, 25 º, 270 º and 315 º 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
Proximity magnetic fields IEC 61000-4-39	30 kHz: 8A/m 134.2 kHz: 65A/m 13.56 MHz: 7.5A/m	30 kHz: 8A/m 134.2 kHz: 65A/m 13.56 MHz: 7.5A/m
NOTE UT is the a.c. mians voltage prior to application of the test level. Remark: "*" : Only test for Patient Coupling line.		

Table 3

Guidance and manufacturer's declaration - electromagnetic Immunity								
	Test Frequency (MHz)	Band (MHz)	Service	Modulation	Maximum Power (W)	Distance (m)	IEC 606-01-1-2 Test level (V/m)	Compliance level (V/m)
Radiated RF IEC610-00-4-3 (Test specifications for ENCLOSURE PORTIMMUNITY to RF wireless communications equipment)	385	380–390	TETRA 400	Pulse modulation 18 Hz	1,8	0.3	27	27
	450	430–470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	2	0.3	28	28
	710	704–787	LTE Band 13, 17	Pulse modulation 217 Hz	0,2	0.3	9	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	28
	870							
	930							
	1720	1 700 – 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation 217 Hz	2	0.3	28	28
	1845							
	1970							

	2450	2 400 – 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28	28
	5240 5500 5785	5 100 – 5 800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0.2	0.3	9	9

Table 4

Guidance and manufacturer's declaration - electromagnetic Immunity		
Test frequency	Modulation	IMMUNITY TEST LEVEL (A/m)
30 kHz	CW	8
134,2 kHz	Pulse modulation [a] 2,1 kHz	65 [b]
13,56 MHz	Pulse modulation [a] 50 kHz	7,5 [b]
a) The carrier shall be modulated using a 50% duty cycle square wave signal. b) r.m.s., before modulation is applied.		

13. Warranty and After-Sale Service

The device is under warranty for 12 months from the purchase date.

The batteries, the packaging, and any damage caused by improper use are not covered by the warranty.

Excluding the following user-caused failures:

1.Failure resulting from unauthorized disassembly and modification.

2.Failure resulting from an unexpected dropping when using or transporting.

3.Failure resulting from not following the instructions in the operating manual.

Product Name: Infrared Thermometer
Model: FC-IR202

U.S. Agent:
CTI U.S. Inc.
Suite 230,1455 Cti U.S. Inc.
Lincoln Parkway, Atlanta, Ga, 30346

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SRN: ES-AR-000001202

Manufacturer:
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E-mail: info@finicare.com

Made in China